



# Accessories Catalog





Ingersoll Rand Industrial Technologies provides products, services, and solutions to enhance the efficiency and productivity of our commercial, industrial, and process customers. Our innovative products include air compressors, air systems components, tools, pumps, material and fluid handling systems, and microturbines.

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## PROVEN POWER. PROVEN SOLUTIONS.

#### INGERSOLL RAND PRODUCTIVITY SOLUTIONS

For more than 100 years, the name Ingersoll Rand has been synonymous with quality and performance. With the creation of our first steam-powered rock drill more than a century ago, and continuing through countless innovations ever since, Ingersoll Rand has firmly positioned itself as a global leader for enhancing productivity in the workplace.





Ingersoll Rand Productivity Solutions is your customers' one source for ergonomics consulting, installation, preventive maintenance, system monitoring, repair service, aftermarket parts and accessories, and service in the following areas:

#### **VEHICLE SERVICE SOLUTIONS**

Whether your customers are professional auto mechanics or do-it-yourselfers, Ingersoll Rand provides a complete line of durable air tools, compressors, and lubrication equipment, as well as all the aftermarket accessories and servicing they need to keep things rolling along.

#### **ASSEMBLY SOLUTIONS**

At Ingersoll Rand, we take a 360-degree approach to enhancing your industrial customers' productivity. They can count on us before, during, and after the sale for support in these critical areas:

- Dispensing
- Engine Starting
- Ergonomic Handling
- Precision Fastening
- Tools & Systems

#### INDUSTRIAL PRODUCTIVITY SOLUTIONS

Today's most demanding industrial operations count on Ingersoll Rand to deliver the power and durability it takes to get the job done right. We provide the following solutions:

- Air Motors, Valves, & Cylinders
- Fluid Handling
- Hoists & Winches
- Tools

As you'll see in this catalog, Ingersoll Rand offers an extensive offering of aftermarket accessories designed to help your customers work more safely and comfortably, regardless of the industry or application.

# AT EVERY TURN, WE'RE COMMITTED TO YOUR CUSTOMERS

### MAXIMIZING PRODUCTIVITY THROUGH OUR TOTAL SOLUTIONS APPROACH

Any manufacturer can provide equipment or aftermarket accessories that people need in order to be productive on the job. At Ingersoll Rand, we believe productivity goes beyond product. That's why we take a 360-degree, total solutions approach to everything we do and provide.

To help you understand this total solutions approach, imagine a particular tool or its application as being like the hub, or center, of a wheel. Just as the spokes on that wheel support everything and keep things moving along smoothly, our total solutions approach enhances productivity by providing critical support and solutions when and where they're needed.

#### **HOW THE CATALOG WORKS**

As you'll see in the diagram below, Ingersoll Rand aftermarket parts, accessories, and services are grouped into five separate areas that signify where in a particular work environment they fit (e.g., user comfort) and how they support a particular tool's functionality and performance. Essentially, these groupings are the individual spokes in our total solutions wheel, if you will, with the tool being the "hub."

When you think in terms of what "spoke" a particular aftermarket part, accessory, or service happens to reside in relation to the "hub" (the tool) and the "wheel" (its use), this catalog will serve as an even more useful resource in servicing your customers' needs.



## **TABLE OF CONTENTS**

## POWER SUPPLY ACCESSORIES

Parts and accessories that help power the tool itself, including everything from the power source to the point where connection is made to the tool.





#### COMPRESSOR ACCESSORIES

Enhance the performance and productivity of your Ingersoll Rand air compressors and air delivery systems with our full line of specially engineered add-on equipment and accessories.



#### COUPLERS AND CONNECTORS

We offer a complete selection of threaded and hose barb couplers and connectors. You get unmatched durability and corrosion resistance — ideal for today's demanding shop environments.



#### SIMPLAIR PIPING

With push-in fittings and quality pipes, SimplAir systems provide ideal connections throughout your entire air distribution system. SimplAir systems are easy to install, modify, and expand.



#### FITTINGS AND HOSES

Ingersoll Rand swivels, hoses, and hose accessories are made of top-quality materials that can withstand the toughest workplace situations and applications.



#### **FRLs**

Ingersoll Rand / ARO brand filters, regulators, and lubricators (FRLs) are cost-effective solutions to increasing the life of your pneumatic equipment. They offer outstanding air preparation, mounting flexibility, and safety.



#### LIQUIDATOR $^{\intercal M}$ FILTERS

With Ingersoll Rand Liquidator™ filters in your air delivery system, rest assured you're getting clean, dry air to all your operations — reducing the risk of damage and increasing productivity and tool life, all while cutting maintenance costs.



## AIR LINE VALVES AND GAUGES

We offer a complete selection of valves, gauges, and accessories designed to keep your air lines performing at their peak.



## FLUID PRODUCTS AND ACCESSORIES

We offer a full range of lubrication accessories that will keep all types of fluids moving efficiently through your operation. They are designed to the same high standards of quality and performance as our tools and air compressors.



#### CORDLESS ACCESSORIES

Our cordless tools are powered by long-lasting 14.4-volt NiCad battery packs, which are as reliable and durable as the tools themselves.

On each right-hand page of the catalog you'll notice an icon indicating where in the "wheel" a particular part or accessory resides in relation to a specific tool.



## TABLE OF CONTENTS (CONTINUED)

### **WORK ACCESSORIES**

Parts and accessories mounted directly onto the tool itself and used to perform a particular job or application.





#### IMPACT SOCKETS

Our sockets are specifically designed for use with Ingersoll Rand power tools. They're durable, reliable, and are the perfect solution for your everyday tightening and loosening requirements.



## CONSTRUCTION TOOL STEELS AND ACCESSORIES

Ingersoll Rand offers a wide variety of high-quality chisels, retainers, and steels designed to enhance the performance of our tools. These accessories are available in the most popular shank configurations and lengths.



## SANDING AND POLISHING PADS

We offer a full range of sanding, backing, and polishing pads that deliver reliable results in every phase of your surface preparation process.



#### CARBIDE GRINDING BURS

By using our versatile, durable, high-precision burs, you'll get the most out of Ingersoll Rand grinders and finishing tools. These carbide burs set the industry standard for quality, and come in a variety of types, styles, and sizes.



## SAW BLADES AND ACCESSORIES

Today's high-strength steels, advanced plastics, and new composite materials are no match for Ingersoll Rand saw blades and accessories. They're designed to fit our air cutting tools, reciprocating saws, and circular saws.



#### COLLETS

Our collets are engineered to the highest level of performance and durability.



#### DRILL ACCESSORIES

Ingersoll Rand provides all of the accessories you need to tackle any drilling, reaming, honing, or brushing project.



## SCREWDRIVER AND NUTRUNNER ACCESSORIES

Want to get more from your Ingersoll Rand light assembly tools? Our screwdriver bits are available in the most common sizes to better satisfy your fastening requirements.

### **USER ACCESSORIES**

Accessories designed to make using the particular tool more comfortable, easier to use, and safer for the operator.





#### **GLOVES**

The Ingersoll Rand line of top-quality work gloves enables you to pair up the industry's toughest tools — ours — with gloves that offer the utmost in protection, comfort, and performance.



#### **ERGONOMIC ACCESSORIES**

We offer a superior line of ergonomic accessories designed to help you work safer and more comfortably. The line includes tool boots, comfort grips, and braces.



#### **BALANCERS**

With more than 50 models to choose from, there's an Ingersoll Rand balancer to satisfy virtually any balancing requirement.



#### POINT-OF-USE ACCESSORIES

Ingersoll Rand makes it easier for you to work more efficiently and safely with a complete line of job-specific parts and accessories.



## EXHAUST KITS AND ACCESSORIES

The Ingersoll Rand line of exhaust kits and accessories keeps the air moving efficiently and conveniently away from you, letting you focus on the job at hand.



## VACUUM KITS AND ACCESSORIES

Our Jet-Vac dust extraction system sucks up more air than it takes to actually run our tools. It's perfect for use with our sanders and grinders.



#### MUFFLERS

Ingersoll Rand tools make a lot of noise in the industry because they simply work harder than the competition. Our pavement breaker and digger mufflers have everybody talking, too.



## PRECISION FASTENING ACCESSORIES

Choose from a wide range of parts and accessories designed to enhance the performance of our assembly tools and maximize workstation efficiency and productivity.



The parts of the tool that over time need to be replaced or maintained for peak performance.





#### LUBRICANTS

Ingersoll Rand offers a complete selection of specialized oils and greases to complement our full line of air tools, helping prolong the life of tool motors, governors, impact mechanisms, and clutches.



#### REPAIR KITS AND PARTS

Keep your Ingersoll Rand tools running strong and reliably with our repair kits and replacement parts.

### **SERVICE**

**PAGE 268** 

## **PARTS INDEX**

PAGE 271

Notes	

	NOTES
-	

<b>VOTES</b>	



## **POWER SUPPLY ACCESSORIES**



For more than 65 years, Ingersoll Rand has been powering industrial performance and productivity. We've long been the world leader in air compressor technology and air system accessories.

You can count on our products to perform, not just because they're durable and reliable, but also because we understand the business demands you face and how your air system fits into your bottom line. Today's increasing energy costs and reduced margins require greater reliability and efficiency from your entire air system — from the compressor to the tool, and at every point in-between.

If you want to get the most out of your air system, choose Ingersoll Rand for all your parts and accessories.





## **POWER SUPPLY ACCESSORIES**







## **POWER SUPPLY ACCESSORIES**

Compressor Accessories 9

Couplers and Connectors 19

SimplAir Piping 31

Fittings and Hoses 51

Filters, Regulators, and

Lubricators (FRLs) 61

**Liquidator™ Filters** 131

Air Line Valves and Gauges 137

Fluid Product Accessories 143

Cordless Accessories 157

## **COMPRESSOR ACCESSORIES**



## **INGERSOLL RAND COMPRESSOR ACCESSORIES**

The air compressor is the foundation of every pneumatic system, and we've long been the leader in providing compressors of the highest durability and reliability. You can further enhance the performance of your pneumatic system by incorporating genuine lngersoll Rand accessories specifically engineered for our compressor units.

#### REFRIGERATED DRYERS

Ingersoll Rand refrigerated air dryers protect your tools, machinery, and equipment from harmful moisture while saving energy and reducing system downtime. The unique design improves dryer efficiency and minimizes maintenance through fewer moving parts. The easy-to-read diagnostic controls provide a constant indication of dryer performance. Units are compact, lightweight, and can be easily floor- or wallmounted. Ingersoll Rand refrigerated air dryers are ideal for paint spraying and coating operations or pneumatic instrumentation applications, and use environmentally friendly refrigerants - R134A or 407C.

#### REFRIGERATED DRYSTAR

#### Refrigerated DryStar



Part Number	Nominal Airflow cfm	Max Pressure psig	Max Absorbed Power kW	Air Connection NPT	Dimensions H x W x D	Approx Weight Ib
Refrigerat	ted DrySta	r				
42501551	5	232	.24	3/8"	17.9" x 7.8" x 17.7"	40
42493494	10	232	.24	3/8"	17.9" x 7.8" x 17.7"	40
42493502	15	232	.27	3/8"	17.9" x 7.8" x 17.7"	44
42493510	25	232	.36	1/2"	20.9" x 11.1" x 23.6"	70
42493528	35	232	.51	1/2"	20.9" x 11.1" x 23.6"	74
42493536	50	232	.69	3/4"	23.8" x 13.9" x 27.6"	100
42493544	75	232	.88	3/4"	23.8" x 13.9" x 27.6"	122
16542417	100	232	1.19	3/4"	23.8" x 13.9" x 27.6"	128

The economically priced DryStar cools compressed air by mechanical refrigeration to a 33 – 39° F pressure dewpoint. Condensed water is removed through an automatic drain valve. Featuring low power consumption, DryStar dryers are simple to install with a quick-fit electrical connection. Each DryStar dryer uses environmentally friendly R134A refrigerant.

Ratings are based on 100° F inlet air temperature and 100 psig inlet air pressure. Maximum inlet temperature is 140° F, maximum pressure is 232 psig.

### REFRIGERATED THERMOSTAR

#### Refrigerated ThermoStar



Part Number	Nominal Airflow cfm	Max Pressure psig	Max Absorbed Power kW	Electrical Supply	Dimensions H x W x D	Air Connection NPT	Approx Weight Ib
Refrigera	ted Therr	noStar					
42493155	100	175	0.73	115-1ph-60 Hz	24" x 22" x 31"	1-1/2"	143
42493163	150	175	0.83	208 / 230V- 1ph-60 Hz	24" x 22" x 31"	1-1/2"	146
42493171	200	175	1.19	208 / 230V- 1ph-60 Hz	24" x 22" x 31"	1-1/2"	154

ThermoStar refrigerated air dryers cool compressed air by mechanical refrigeration to a 33 - 39° F pressure dewpoint. Condensed water is removed through a timed solenoid automatic drain valve. A precooler maximizes the refrigeration efficiency, and a compact heat exchanger ensures the smallest possible footprint. Each ThermoStar dryer uses environmentally friendly R407C refrigerant and features a standard controller with on/off main switch (separate power on line and alarm lamps), and electric drain valve with adjustable operation set points.

Ratings are based on 100° F inlet air temperature and 100 psig inlet air pressure. Maximum inlet temperature is 122° F; maximum pressure is 175 psig.

## **START-UP KITS**

Start-up kits include all the parts needed to maintain your compressor for one year, plus the added protection of extended warranty coverage.

#### Kits Include:

- All-Season Select® lubricant a synthetic, all-temperature blend designed to increase efficiency, reduce wear, and prevent carbon build-up
- Replacement filter elements
- Engine oil and filters are also included in kits for gas-driven compressors
- Two-year extended warranty (pump only)



Compressor Model	Part Number
Electric Start-up Kits	
SS3 electric units	97338099
SS5 electric units	20100251
TS4/5/51 electric units	32332827
TS7 electric units	22180145
TS10 electric units	85582740
TS15 electric units	22180129
2000 electric units	20102877

#### Gas Start-up Kits



Compressor Model	Part Number
Gas Start-up Kits	
TS7F12.5G Kohler gas units	32312936
TS7F13GHG Honda gas units	32498511
TS7F11.5GKA Kawasaki gas units	32305872
SS3J5.5GB-WB Briggs & Stratton gas units	49816150
SS3J5.5GH-WB Honda gas units	97339501
SS3J5.5GH-AS Honda gas units	97339501

## **INSTALLATION KITS**

#### Installation Kits



Kit Number	Description	Part Number	Quantity				
1/2" Standard Installation Kits							
	Vibration pads	32321002	4				
	1/2" x 3' braided hose	38335295	1				
38335402*	1/2" JIC to NPT male adapter	38335337	2				
	1/2" x 4" foundation bolts	38335329	4				
	Instruction sheet	22256549	1				
3/4" Standard Insta	allation Kits						
	Vibration pads	32321002	4				
	3/4" x 3' braided hose	38335303	1				
38335410**	3/4" JIC to NPT male adapter	38335345	2				
	1/2" x 4" foundation bolts	38335329	4				
	Instruction sheet	22256549	1				
1" Standard Install	ation Kits						
	1" x 3' braided hose	38335311	1				
38335394***	1" JIC to NPT male adapter	38335352	2				
3033J3 <del>74</del>	1/2" x 4" foundation bolts	38335329	4				
	Instruction sheet	22256549	1				

<sup>\*</sup>For compressor models SS3, SS5, and TS4/5/51 electric units.

## **MAINTENANCE KITS**

Compressor Model	Valve / Gasket Kit	Ring / Gasket Kit	Bearing Kit	Air Filter	Overhaul Kit	Gasket Kit
Maintenance Kits						
SS3 Electric Units	97338107	97338115	N/A	70243712	N/A	N/A
TS4/5/51 Electric Units	85584316	85580470	85581445	32170979	85581486	85581478
TS7 Electric Units	22185078	22185052	22185094	32170979	22185110	22185136
TS7 Gas Units	85584316	85580470	85581445	32170979	85581486	85581478
TS10 Electric Units	85582385	85582393	85582401	54406640	85582427	85582419
TS15 Electric Units	22185086	22185060	22185102	32170979	22185128	22185144
SS5 Electric Units	20100277	20100285	N/A	32170979	N/A	N/A
2000 Electric Units	20103081	20103099	20103107	32170979	22222053	N/A

<sup>\*\*</sup>For compressor models TS7, TS10, and TS15 electric units.

<sup>\*\*\*</sup>For 2000 Series electric compressor models. The 1" kits do not have vibration pads due to pads being shipped as standard with the 2000 Series air compressor packages.

### **LUBRICANTS**

#### Lubricant



Coolant / Lubricant Lubricant	Base Stock	Viscosity Index	Hours	ISO Viscosity Grade	SAE Grade
All-Season Select®	Diester	128	2,000	68 / 150	20W40

All-Season Select	Quantity	Part Number
Box of quarts	(12) 1-qt	32318883
Box of 1/2 liter	(6) 1/2 liter	97338149

#### All-Season Select® Lubricant

All-Season Select® lubricant is a synthetic, all-temperature blend that is designed to increase efficiency, reduce wear, and prevent carbon build-up. It performs four times longer than petroleum-based lubricants. Recommended 2,000 hours of service between lubricant change-out under normal operating conditions.

## **ELECTRONIC DRAIN VALVES (EDV)**

#### Electronic Drain Valves (EDV)



#### **Benefits**

- Manual test button
- Two-year warranty
- Prevents rusting
- Delivers drier air to extend the life of tools and pneumatic equipment
- Eliminates manual draining

Voltage		Inlet Pipe	Outlet Pipe	Orifice		
110 / 120 V	230 / 240 V	Connection	Connection	Office		
Electronic Drain Valves (EDV)						
37995925	37995933	0.50 NPT	0.25 NPT	3/32"		
54410931	37995909	0.50 NPT	0.25 NPT	7/16"		
37995891	37995917	0.50 NPT	0.50 NPT	7/16"		
38000865	38000873	0.50 BSP	0.25 BSP	7/16"		
38000808	38000881	0.50 BSP	0.50 BSP	7/16"		
54579248*	97339402	JIC-14	0.25 NPT	3/32"		

Part Number	Description			
<b>Electronic Drain Valve</b>	Accessories			
54381090	1/2" x 1/4" male NPT valve connection			
37996337	1/2" x 1/4" male NPT valve connection			
38000154	Stainless steel filter screen			

<sup>\*</sup>JIC connection for field retrofits on T30 compressors.

#### **EDV-2000 Electronic Drain Valve**

The EDV-2000 is a full-feature, automatic electronic drain valve that cost-effectively removes condensate from compressors, receivers, dryers, aftercoolers, filters, and drip legs. Each EDV-2000 includes an electric drain, manual blowdown valve, and a strainer / ball valve, which prevents debris from clogging the drain valve. The maximum pressure is 250 psi.



### **PacE CONTROLLER**

#### PacE Controller



PacE air controllers provide total air system control through a single device, giving you the ability to see both upstream and downstream pressures from one convenient location.

Part Number	Description	Connection Size	Max Flow Rate cfm	Max Inlet Pressure psig	Control Range psig	Operating Temperature Range
PacE Control	ler					
38342119	PacE .5 unit	1/2" NPT Female	60	232	144 – 7	176° – -4° F
38342127	PacE .5 repair kit	1/2" NPT Female	60	232	144 – 7	176° – -4° F
38334314	PacE I unit	1" NPT Female	250	232	145 – 7	176° – -4° F
38036281	PacE I repair kit	1" NPT Female	250	232	145 – 7	176° – -4° F
38041166	PacE II unit	2" NPT Female	650	150	150 – 7	176° – -4° F
88317359	PacE II replacement control valve (no repair kit available)	2" NPT Female	650	150	150 – 7	176° – -4° F
88317375	PacE II tamper-proof cap	2" NPT Female	650	150	150 – 7	176° – -4° F
88317367	PacE II replacement pilot regulator (complete)	2" NPT Female	650	150	150 – 7	176° – -4° F

#### **Benefits**

- Energy savings of 7% for every 14 psi reduction in system pressure.
  - Reduces the pressure of the air leaking from a system. All systems can potentially have leaks, but losing air at 80 psi is better than losing it at 125 psi.
- Single-point control for your whole system.
- Eliminates the need to regulate airflow at every point in the system.
- Prolonged compressor and equipment life.
  - Protects all downstream equipment by preventing high pressure from feeding into the system and reducing the life expectancy of the equipment.
- Reduced maintenance costs.
  - It is possible in some installations to turn off the compressor, achieving power cost savings.
- Simple installation and operation.

### CMS 6 CONDENSATE CONTROLLER

#### CMS 6 Condensate Controller







Part Number	Description				
CMS 6 Condensate Controller					
38432621	125' of transparent polyurethane 1/4" tubing				
38432613	1/8" NPT check valve				

The CMS-6 Condensate Controller is the industry's most reliable and environmentally safe light industrial air system condensate management solution.

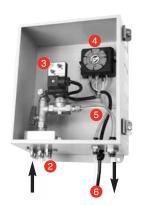
#### How the CMS-6 Controller works

The system's air and condensate discharge enters the CMS-6 through the six inlet check valves located on the bottom left-hand side of the unit. Each of these inlets can be connected to any system drain point using the included installation hardware and tubing. When the system's drain valve actuates, the entire condensate supply is relieved through the single discharge line on the bottom right-hand side of the unit. To optimize energy savings and condensate control, the CMS-6's integrated timer is set by the operator to enable condensate control based on the compressor's operating schedule.

#### **CMS-6 Major Components**

- 1. Installation hardware
- 2. (6) 1/4" x 1/8" NPT inlet check valves
- 3. Electric drain valve (w/ strainer and drain line)
- 4. Integrated 24/7 system timer
- 5. (1) 3/8" system condensate outlet and (1) 1/4" service drain line
- 6. (1) 115 V electrical connector

Represents condensate path.



#### **Benefits**

- Quick and easy system installation
- Installation kit includes all necessary tubing and hardware
- Single point control for up to six condensate drain points
- 115 V power supply
- Integrated 24/7 timer to match controller operation to air system demand
- Single system drain point, which can be routed to an Ingersoll Rand PolySep oil and water separator for the ultimate environmental system solution
- Integrated miniature check valves at system inlets to alleviate system back pressure
- Compact system design housed in a robust box providing reliable, unobtrusive condensate control for entire air system

#### Installation

- 1. Mount the CMS-6 cabinet in desired location (must be within 6' of 115 V receptacle).
- 2. Set the 24/7 timer based on the compressor's operating schedule.
- 3. Set the frequency and duration for the electric drain valve operation.
- 4. Using the included hardware kit, attach all system drain points to the six 1/4" inlets.
- 5. Attach the 3/8" tubing from the single CMS-6 outlet port to a suitable environmentally acceptable condensate drain point, preferably an appropriately sized Ingersoll Rand PolySep oil and water separator.
- 6. Plug the CMS-6's electrical cord into a 115 V receptacle to power the unit.



## **POLYSEP CONDENSATE SYSTEM**

#### PolySep Condensate Systems



PolySep Condensate Systems address the inability of traditional gravity separators to handle emulsions, such as polyglycol lubricant. The unique design of the PolySep system utilizes a proprietary adsorption module to break the chemical bond and entrain the emulsified lubricant within the adsorption module. The solids are collected in the adsorption module and the cleaned condensate is safely disposed of into the sanitary sewer.

#### Advantages of PolySep Condensate Separators

- Works with biodegradable (polyglycol) fluids and Ultra Coolant
- Also works with mineral oil, PAO's, polysolesters, and diesters
- No electricity rated for 250 psi
- Fully automatic
- Multiple capacities allows for systems that use multiple equipment with different lubricant to be sent to one location for separation
- Easy to maintain adsorption modules are sized to operate 8,000 hours or for one year under standard operating conditions; adsorption modules are self-contained and are easy to change and dispose
- One-year warranty

Part Number	Max Capacity cfm	Max hp	Adsorption Module Volume	Air Inlet NPT	Condensate Inlets	Oil Outlet	Water Outlet	Dimensions L x W x H	Weight lb	
PolySep Co	PolySep Condensate Systems									
38041596	30	10	1	N/A	1/2" (1)	1/2"	1/2"	N/A	15	
42528455	60	15	1	N/A	1/2"	N/A	3/4"	11.5" x 11.5" x 27.5"	25	
38339040	125	30	5	N/A	1/2"	N/A	3/4"	28.5" x 19.5" x 30.8"	N/A	

Model PolySep Replacement Adsorption Mo	Part Number
PS-030	38041604
PS-060	42528505
PS-125	38339057

Part Number PolySep Pump Rebuild Kits	Description
38336897	Diaphragm kit
38041752	Check valve kit
38041760	Spool kit



#### Kit Includes:

- (2) 2-way 1/4" manifolds
- (2) Reducing bushings
- (8) 1/4" plugs

## **INLINE AIR FILTERS**

#### Inline Air Filters



#### **Benefits**

- Proven to exceed ISO air quality
- . Quickest, simplest maintenance of any filter design
- Built-in safety protection
- Lowest pressure drop available
- Corrosion-resistant alocrom treatment
- 10-year housing guarantee

Part Number	Capacity cfm	Maximum Pressure psi	Inlet / Outlet NPT	Filter Rating Microns	Dimensions H x W	Replacement Element*	
General I	Purpose F	ilters					
42515809	19	232	1/4"	1	9.9" x 3.5"	88342977	
42515817	40	232	3/8"	1	10.4" x 3.5"	88342985	
42515825	64	232	1/2"	1	11.3" x 3.5"	88342993	
42515833	123	232	3/4"	1	13.9" x 5.1"	88343124	
42515841	216	232	1"	1	17.5" x 5.1"	88343132	
High Effic	High Efficiency Filters						
42515932	19	232	1/4"	0.01	9.9" x 3.5"	88343009	
42515940	40	232	3/8"	0.01	10.4" x 3.5"	88343017	
42515957	64	232	1/2"	0.01	11.3" x 3.5"	88343025	
42515973	123	232	3/4"	0.01	13.9" x 5.1"	88343157	
42515981	216	232	1"	0.01	17.5" x 5.1"	88343165	

\*See replacement filter table below.

#### **Inline Air Filters**

Ingersoll Rand coalescing filters save energy and protect your tools, machinery, and equipment from harmful contaminants by effectively removing solid particulates, liquid water, oil, and aerosols from compressed air.

Our General Purpose Filters remove particulates down to 1.0 micron, which meets general industry requirements for coarse filtration. Our High Efficiency Filters remove contaminants down to 0.1 micron, which meets difficult compressed air filtration requirements. The new filter design is easy to install and loaded with standard features to reduce maintenance and downtime. All filters feature a 10-year warranty on housing.

#### Replacement Filter Element



Part Number	Quantity						
General Purpose Replacement Filter Elements							
88342977	1						
88342985	1						
88342993	1						
88343124	1						
88343132	1						
High Efficiency Replacement Filter Ele	ements						
88343009	1						
88343017	1						
88343025	1						
88343157	1						
88343165	1						



## **POINT-OF-USE PROVIDER (PUP)**

#### Point-of-Use Providers (PUP)



PUP Models Point-of-Use Providers (PUP)	Part Number
NPT PUP (American market only)	42526707
BSP PUP	42526715
Replacement element	38027223
Automatic drain kit	88344171
Wall mounting bracket	38027249
0-ring kit	38032165

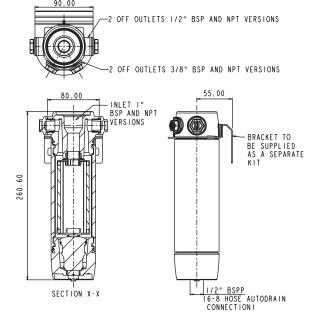
A Point-of-Use Provider (PUP) is a 3-in-1 solution for the bottom of a compressed air drop. In one compact unit, the PUP is a filter, automatic drain, and manifold for multiple distribution. PUP incorporates a high efficiency 1-micron coalescing filter, which will remove solid particles, moisture, and oil contamination leaving the air clean and your system protected. PUP's unique design provides the solution for condensate removal and multiple outlet connections all in one compact unit. From a 1" female top entry connection, up to four outlet connections can be made to PUP. Two 1/2" ports and two 3/8" ports are positioned around the head of the unit allowing for any piping configuration.

#### **TECHNICAL SPECIFICATIONS**

Particle removal down to 1 micron including coalesced liquid water and oil, providing a maximum remaining oil aerosol content of 0.6 mg/m³ (0.5 ppm) at 21° C (70° F).

#### **OPERATING LIMITATIONS**

Max Flow of Unit	1.70 m³/min (60 cfm)
Max Operating Pressure	232 psig (16 bar)
Max Recommended	150° F (66° C)
Operating Temp	
Min Recommended	34° F (1° C)
Operating Temp	
Recommended Filter	12 months or 6,000 hours
Element Change	



## **COUPLERS AND CONNECTORS**



## **INGERSOLL RAND COUPLERS AND CONNECTORS**

Ingersoll Rand is your link to enhanced productivity through our complete selection of threaded and hose barb couplers and connectors. The automatic push-to-connect feature that comes standard saves air line connection time and effort. Slim profiles and lightweight designs help minimize operator fatigue, as well as prevent snagging and accidental disconnection. Their unmatched durability and corrosion resistance make them ideal for today's demanding shop environments.

### **INGERSOLL RAND COUPLERS AND CONNECTORS**

The complete line of Ingersoll Rand couplers and connectors offers these advantages:

#### **Quality Assurance**

Every Ingersoll Rand coupler is individually leak tested to assure the highest standards of performance.

#### Push-to-connect Convenience

The smooth, automatic push-to-connect feature (no need to manually retract the coupler sleeve) is standard on all Ingersoll Rand couplers.

#### **Extra Durability**

All-steel construction with case-hardened wear points provides added reliability and service life.

#### Slim Profile and **Lightweight Design**

Ingersoll Rand couplers are smaller in size than most competitive models. Less bulk means less weight for reduced operator fatigue.

Slim profile helps prevent snagging and accidental disconnection.

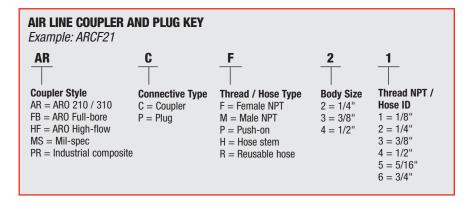
#### **Corrosion Resistance**

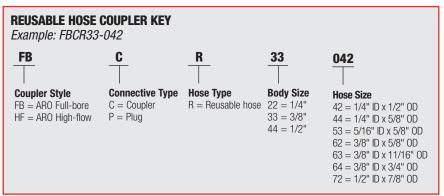
Bright zinc plating both internally and externally provides excellent corrosion protection. All valve springs are fatigueresistant stainless steel.

#### Complete Selection

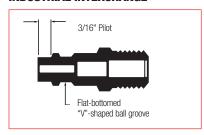
Couplers and connectors are available in a wide range of threaded and hose barb sizes to meet your requirements.

#### **HOW TO ORDER**



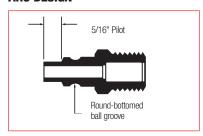


#### **INDUSTRIAL INTERCHANGE**



Includes MS, HF, and FB Series.

#### **ARO DESIGN**



### MS SERIES Industrial Interchange

- · Economical automatic-type, one-way shutoff coupler
- Easy, push-to-connect use

#### Female Couplers





Hose Stem ID

Automatic NPT



Manual NPT

Body Size	NPT Or Hose Stem ID			Automatic NPT Part Number			
Female Couplers							
1/4"	1/4"	36	N/A	MSCF22	MSCH22		
1/4"	3/8"	36	N/A	MSCF23	MSCH23		
3/8"	3/8"	67	420ATH	MSCF33	MSCH33		
3/8"	1/2"	67	440ATH	N/A	N/A		
1/2"	1/2"	126	N/A	MSCF44	MSCH44		

#### Female Plugs





Hose Stem ID

Female NPT



45ATH

Body Size	NPT Or Hose Stem ID	Average Flow cfm*	Female NPT Part Number	Hose Stem ID Part Number
Female Plugs				
1/4"	1/8"	36	MSPF21	N/A
1/4"	1/4"	36	MSPF22	MSPH22
1/4"	3/8"	36	MSPF23	MSPH23
3/8"	1/4"	67	MSPF32	N/A
3/8"	3/8"	67	MSPF33	MSPH33
3/8"	1/2"	67	45ATH	MSPH34
1/2"	3/8"	126	MSPF43	N/A
1/2"	1/2"	126	MSPF44	MSPH44
1/2"	3/4"	126	MSPF46	N/A

NPT Or Hose Average Flow Stem ID Automatic NPT Hose Stem ID Stem ID Part Number Part Number

N/A

N/A

N/A

430ATH

N/A

MSCM22

MSCM23

4100ATH

MSCM33

MSCM44

1/4"

3/8"

1/4"

3/8"

1/2"

36

36

67

67

126

**Body Size** 

1/4"

1/4"

3/8"

3/8"

1/2"

**Male Couplers** 

#### Male Couplers





**Automatic NPT** 







4100ATH

430ATH

#### Male Plugs





Male NPT

Hose Stem ID

Body Size	NPT Or Hose Stem ID	Average Flow cfm*	Male NPT Part Number	Hose Stem ID Part Number
Male Plugs				
1/4"	1/8"	36	MSPM21	N/A
1/4"	1/4"	36	MSPM22	MSPH22
1/4"	3/8"	36	MSPM23	MSPH23
3/8"	1/4"	67	MSPM32	N/A
3/8"	3/8"	67	PRPM33	MSPH33
3/8"	1/2"	67	MSPM34	MSPH34
1/2"	3/8"	126	MSPM43	N/A
1/2"	1/2"	126	MSPM44	MSPH44

<sup>\*</sup>At 90 psig inlet and 10 psig pressure drop.



MSCH22

MSCH23

N/A

MSCH33

MSCH44

<sup>\*</sup>At 90 psig inlet and 10 psig pressure drop.

### **HI-FLOW SERIES** Industrial Interchange

- · Premium automatic-type, one-way shutoff coupler
- Delivers high volume air with low pressure drop
- Features a protective drag collar that minimizes accidental disconnection

#### Female Couplers





Female NPT

Hose Stem ID

Body Size	NPT Or Hose Stem ID	Hose Stem OD	Average Flow cfm*	Female NPT Part Number	
Female C	ouplers				
1/4"	1/4"	5/8"	38	HFCF22	HFCH22
1/4"	3/8"	5/8"	38	HFCF23	HFCH23
3/8"	1/4"	1/2"	72	HFCF32	N/A
3/8"	3/8"	5/8"	72	HFCF33	HFCH33
3/8"	1/2"	-	72	HFCF34	HFCH34
1/2"	1/2"	7/8"	85	HFCF44	HFCH44

#### Female Plugs





Female NPT

Hose Stem ID



45ATH

Body Size	NPT or Hose Stem ID	Average Flow cfm*	Female NPT Part Number	Hose Stem ID Part Number
Female Plugs	3			
1/4"	1/8"	38	MSPF21	N/A
1/4"	1/4"	38	MSPF22	MSPH22
1/4"	3/8"	38	MSPF23	MSPH23
3/8"	1/4"	72	MSPF32	N/A
3/8"	3/8"	72	MSPF33	MSPH33
3/8"	1/2"	72	45ATH	MSPH34
1/2"	3/8"	85	MSPF43	N/A
1/2"	1/2"	85	MSPF44	MSPH44
1/2"	3/4"	85	MSPF46	N/A

\*At 90 psig inlet and 10 psig pressure drop.

#### Male Couplers





Male NPT

Hose Stem ID

Body Size	NPT Or Hose Stem ID	Hose Stem OD	Average Flow cfm*	Female NPT Part Number	
Male Cou	plers				
1/4"	1/4"	5/8"	38	HFCM22	HFCH22
1/4"	3/8"	5/8"	38	HFCM23	HFCH23
3/8"	1/4"	1/2"	72	HFCM32	N/A
3/8"	3/8"	5/8"	72	HFCM33	HFCH33
3/8"	1/2"	-	72	HFCM34	HFCH34
1/2"	1/2"	7/8"	85	HFCM44	HFCH44

#### Male Plugs





Male NPT

Hose Stem ID



PRPM33

Body Size	NPT Or Hose Stem ID	Average Flow cfm*	Male NPT Part Number	Hose Stem ID Part Number
Male Plugs				
1/4"	1/8"	38	MSPM21	N/A
1/4"	1/4"	38	MSPM22	MSPH22
1/4"	3/8"	38	MSPM23	MSPH23
3/8"	1/4"	72	MSPM32	N/A
3/8"	3/8"	72	PRPM33	MSPH33
3/8"	1/2"	72	MSPM34	MSPH34
1/2"	3/8"	85	MSPM43	N/A
1/2"	1/2"	85	MSPM44	MSPH44

\*At 90 psig inlet and 10 psig pressure drop.

### FULL BORE® SERIES Industrial Interchange

- Premium automatic-type, one-way shutoff coupler
- Pressure-relieving feature fully vents downstream air, making connection / disconnection fast and easy, and reducing hose whip
- Unique straight-through design eliminates restrictive springs and poppet valves, allowing unimpeded airflow
- Accidental uncoupling virtually eliminated

#### Female Couplers





Female NPT

Hose Stem ID

Body Size	NPT Or Hose Stem ID	Hose Stem OD	Average Flow cfm*		Hose Stem ID Part Number		
Female C	Female Couplers						
3/8"	3/8"	5/8"	95	FBCF33	FBCH33		
3/8"	1/2"	N/A	95	FBCF34	FBCH34		
1/2"	3/8"	3/4"	150	N/A	FBCH43		
1/2"	1/2"	7/8"	150	FBCF44	FBCH44		

#### Female Plugs





Female NPT

Hose Stem ID

Body Size	NPT Or Hose Stem ID	Average Flow cfm*	Female NPT Part Number	Hose Stem ID Part Number
Female Plugs				
3/8"	1/4"	95	MSPF32	N/A
3/8"	3/8"	95	MSPF33	MSPH33
3/8"	1/2"	95	45ATH	MSPH34
1/2"	3/8"	126	MSPF43	N/A
1/2"	1/2"	126	MSPF44	MSPH44
1/2"	3/4"	126	MSPF46	N/A

<sup>\*</sup>At 90 psig inlet and 10 psig pressure drop.

#### Male Couplers





Male NPT

Hose Stem ID

Body Size	NPT Or Hose Stem ID	Hose Stem OD	Average Flow cfm*		Hose Stem ID Part Number
Male Cou	plers				
3/8"	1/2"	N/A	N/A	FBCM34	FBCH34
1/2"	3/8"	3/4"	N/A	FBCM43	FBCH43
1/2"	1/2"	7/8"	150	FBCM44	FBCH44
1/2"	3/4"	N/A	150	FBCM46	N/A

#### Male Plugs





Male NPT

Hose Stem ID

Body Size	NPT Or Hose Stem ID	Average Flow cfm*	Male NPT Part Number	Hose Stem ID Part Number
Male Plugs				
3/8"	3/8"	95	MSPM22	MSPH33
3/8"	1/4"	95	MSPM32	N/A
3/8"	1/2"	95	MSPM34	MSPH34
1/2"	3/8"	150	MSPM43	N/A
1/2"	1/2"	150	MSPM44	MSPH44

<sup>\*</sup>At 90 psig inlet and 10 psig pressure drop.



### PR SERIES Quick Connect Double-action Composite Safety Couplers

#### Couplers

- Made of non-marring composite
- Safety coupler eliminates accidental disconnects
- Easy connect, disconnect

- Allows you to bleed hoses
- Shockproof and crush-resistant

#### Female Thread Couplers



Body Size	NPT	Average Flow cfm*	Part Number
Female Thread	d Couplers		
1/4"	1/4"	32	PRSGF22
1/4"	3/8"	32	PRSGF23
3/8"	3/8"	64	PRSGF33
3/8"	1/2"	64	PRSGF34
1/2"	3/8"	147	PRSGF43
1/2"	1/2"	147	PRSGF44
1/2"	3/4"	147	PRSGF46

#### Male Thread Couplers



Body Size	NPT	Average Flow cfm*	Part Number			
Male Thread C	Male Thread Couplers					
1/4"	1/4"	32	PRSGM22			
1/4"	3/8"	32	PRSGM23			
3/8"	3/8"	64	PRSGM33			
3/8"	1/2"	64	PRSGM34			
1/2"	3/8"	147	PRSGM43			
1/2"	1/2"	147	PRSGM44			
1/2"	3/4"	147	PRSGM46			

#### Hose Barb Couplers



Body Size	NPT	Average Flow cfm*	Part Number
Hose Barb Cou	plers		
1/4"	1/4"	32	PRSGH22
3/8"	1/4"	32	PRSGH23
3/8"	3/8"	64	PRSGH33
1/2"	3/8"	64	PRSGH34
3/8"	1/2"	147	PRSGH43
1/2"	1/2"	147	PRSGH44
5/8"	1/2"	147	PRSGH45
3/4"	1/2"	147	PRSGH46

<sup>\*</sup>At 90 psig inlet and 10 psig pressure drop.

## PR SERIES Quick Connect Double-action Composite Safety Couplers

### **Connector Plugs**

- Carbonitride steel with anti-corrosion protection
- Teflon coating on all male threads

#### Female Thread Connector Plugs



Body Size	NPT	Part Number
Female Thread Connec	tor Plugs	
1/4"	1/4"	PRPF22
1/4"	3/8"	PRPF23
3/8"	1/4"	PRPF32
3/8"	3/8"	PRPF33
1/2"	1/2"	PRPF44

#### Male Thread Connector Plugs



Body Size  Male Thread Connecto	NPT r <b>Plugs</b>	Part Number
1/4"	1/4"	PRPM22
1/4"	3/8"	PRPM23
3/8"	1/4"	PRPM32
3/8"	3/8"	PRPM33

#### Hose Barb Connector Plugs



Body Size	NPT	Average Flow cfm*	Part Number
Hose Barb Conne	ector Plugs		
1/4"	1/4"	32	PRPH22
3/8"	1/4"	32	PRPH23
3/8"	3/8"	64	PRPH33
1/2"	3/8"	64	PRPH34
1/2"	1/2"	147	PRPH44
5/8"	1/2"	147	PRPH45
3/4"	1/2"	147	PRPH46

<sup>\*</sup>At 90 psig inlet and 10 psig pressure drop.



### 210-310 SERIES

- Automatic, pin-type couplers
- Designed for one-way shutoff operation

#### Female Couplers





Female NPT

Hose Stem ID

Body Size	NPT Or Hose Stem ID	Average Flow cfm*	Female NPT Part Number	Hose Stem ID Part Number
Female Coup	Female Couplers			
1/4"	1/4"	18	ARCF22	N/A
3/8"	3/8"	60	ARCF33	ARCH33

#### Female Plugs





Female NPT

Hose Stem ID

Body Size	NPT Or Hose Stem ID	Average Flow cfm*	Female NPT Part Number	Hose Stem ID Part Number
Female Plugs				
1/4"	1/4"	18	ARPF22	ARPH22
1/4"	3/8"	18	N/A	ARPH23
1/4"	5/16"	18	N/A	ARPH25
3/8"	3/8"	60	ARPF33	ARPH33

<sup>\*</sup>At 90 psig inlet and 10 psig pressure drop.

#### Male Couplers





Male NPT

Hose Stem ID

Body Size	NPT Or Hose Stem ID	Average Flow cfm*	Female NPT Part Number	Hose Stem ID Part Number
Male Coupler	S			
1/4"	1/4"	18	ARCM22	N/A
1/4"	3/8"	18	ARCM23	ARCH23
3/8"	3/8"	60	ARCM33	ARCH33

#### Male Plugs





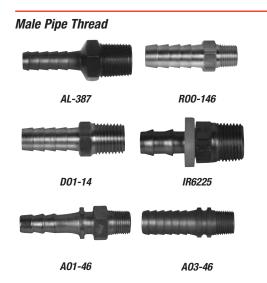
Male NPT

Hose Stem ID

Body Size	NPT Or Hose Stem ID	Average Flow cfm*	Female NPT Part Number	Hose Stem ID Part Number
Male Plugs				
1/4"	1/8"	18	ARPM21	N/A
1/4"	1/4"	18	ARPM22	ARPH22
1/4"	3/8"	18	N/A	ARPH23
1/4"	5/16"	18	N/A	ARPH25
3/8"	1/4"	60	ARPM32	N/A
3/8"	3/8"	60	ARPM33	ARPH33

<sup>\*</sup>At 90 psig inlet and 10 psig pressure drop.

## **AIR HOSE NIPPLES**



Part Number	Hose Size in (mm)	Pipe Thread
Male Pipe Thread		
IR78217	1/4" (6)	1/4"
IR30127	5/16" (8)	1/4"
AL-387	5/16" (8)	3/8"
R00-146	3/8" (10)	1/8"
D01-14	3/8" (10)	1/4"
IR6225	3/8" (10)	3/8"
A01-46	1/2" (13)	3/8"
D02-455	1/2" (13)	1/2"
A03-46	3/4" (19)	1/2"
J3-581	3/4" (19)	3/4"
P35-46	1" (25)	1"
CN-20-S	2" (51)	2"

## Female Pipe Thread



R00-147

Part Number	Hose Size in (mm)	Pipe Thread
Female Pipe Thread		
R1-47	5/16" (8)	3/8"
R00-147	3/8" (10)	3/8"



## **UNIVERSAL HOSE COUPLERS**

- Full-flow, non-shutoff couplers
- Gaskets and clips are included with all universal couplers

(Note: Turn off air supply before disconnecting.)

#### Universal Hose Ends



Part Number	Hose Size
Universal Hose Ends	
UH-50-M	1/2"
UH-75-M	3/4"
UH-100-M	1"

#### Universal Male Pipe Threaded Ends



Part Number Universal Male Pipe Threaded End	Hose Size
UM-37-M	3/8"
UM-50-M	1/2"
UM-75-M	3/4"
UM-100-M	1"

#### Universal Female Pipe Threaded Ends



Part Number	Hose Size
Universal Female Pipe Threaded Er	ıds
UF-50-M	1/2"
UF-75-M	3/4"
UF-100-M	1"

#### Universal 3-Way



Part Number Universal 3-Way	Hose Size
UW-300-B	1/4" to 1"

#### Universal Dead End



Part Number	Hose Size		
Universal Dead End			
UD-301-M	1/4" to 1"		

#### Universal Coupler Gasket



Part Number	Specifications		
Universal Coupler Gasket			
UG-100	For use in any universal coupler		

## **TYPE "A" HOSE COUPLERS**

- Full-flow, non-shutoff couplers
- Designed for heavy-duty services

- Simple, sturdy, and able to withstand hard usage and abuse
- Couplers and plugs are compatible within the same "Body" size

(Note: Turn off air supply before disconnecting.)

#### **Hose Plugs**



Part Number	Body Size	Max Flow Opening	"A" End Size
Hose Plugs			
MH-8-1/2	5/8"	3/8"	1/2" Hose
MH-8-3/4	5/8"	5/8"	3/4" Hose
MH-8A-1	5/8"	13/16"	1" Hose

#### Male NPT Plugs



Part Number	Body Size	Max Flow Opening	"A" End Size
Male NPT Plugs			
M0-8-1/2	5/8"	3/8"	1/2" MNPT
M0-8-3/4	5/8"	5/8"	3/4" MNPT
M0-8A-1	1"	13/16"	1" MNPT

#### **Hose Couplers**



Part Number Hose Couplers	Body Size	Max Flow Opening	"A" End Size
FH-8-1/2	5/8"	3/8"	1/2" Hose
FH-8-3/4	5/8"	9/16"	3/4" Hose
FH-8-1	1"	13/16"	1" Hose

#### Male NPT Couplers



Part Number  Male NPT Coupler	Body Size	Max Flow Opening	"A" End Size
F0-8-3/8	5/8"	3/8"	3/8" MNPT
F0-8-1/2	5/8"	1/2"	1/2" MNPT
F0-8-3/4	5/8"	5/8"	3/4" MNPT
F0-8-1	1"	15/16"	1" MNPT

#### Adapter



Part Number	Description	Body Size	Max Flow Opening	"A" End Size	"B" End Size
Adapter					
MDY-A8A-3/4	"Y" Shut-off valve	5/8"	1/2"	1/2" Female	1/2" Plug

#### O-rings for Type "A" Couplers



Part Number  O-rings for Type "A" Cou	Body Size	Used in Model
BU-948	5/8"	FH Series, FO Series, & MDY
R4-103	1"	FH Series, FO Series



## **SAFETY AIR FUSE VALVES**

- Valve designed to meet OSHA requirements
- · Provides automatic pressure reduction if a hose is cut, ruptures, or accidentally uncouples, thus preventing the hose from whipping
- · Constant bleed hole in the valve allows the flow check to automatically open, or reset, after repair to the hose is made
- Brass body and adapter; stainless steel spring; celcon valve
- All parts are corrosion-resistant
- Max temperature: 180° F
- Max allowable working pressure: 250 psig (17 bar)

#### Safety Air Fuse Valves



170-6

Female / Male NPT	Part Number	Length	Max Diameter in (mm)	Cut-off Flow Rate @ 90 psig
Safety Air Fuse	Valves			
3/4	170-6	3"	1-1/4" (31.8)	112 – 128
1	170-8	3-1/8"	1-1/2" (38.1)	220 – 260

Warning: Ingersoll Rand air fuse valves will function only on air lines having capacities equal to or exceeding the air fuse's respective closing capacity. Nominal sizes of air fuses, therefore, must be equal to, or less than, that of their supply lines and must be consistent with the connecting hose. For example, a 1/2" air fuse should be used with a 1/2" hose.

## **SIMPLAIR PIPING**



## **INGERSOLL RAND SIMPLAIR PIPING**

With push-in fittings and lightweight anodized aluminum pipe, a SimplAir system provides ideal connection throughout your entire air distribution system. A SimplAir EL or SL system can be installed quickly and easily, with no need for pipe threading or solvent application. And since they're so easy to disconnect, SimplAir systems are easy to alter or extend. Both lines feature a wide range of connectors to meet any air line configuration need.

### **TYPES OF SIMPLAIR PIPING**



#### **SIMPLAIR EASY LINE (EL)**

- Provides an efficient, low-cost method of installing compressed air piping systems
- Provides more efficient delivery of good-quality air, with higher flow rates and minimized pressure loss
- Available in 5/8" (15 mm), 1" (22 mm), and 1-1/4" (28 mm) sizes

#### **SIMPLAIR SPEED LINE (SL)**

- Features a unique, round extruded, aluminum tubing anodized to prevent corrosion
- · Offers impressive flexibility and reduces the number of fittings needed for installation
- Provides higher flow rates and reduced pressure losses common to conventional fitting methods
- Available in three sizes: 1/2" (14 mm), 1" (22 mm), and 1-1/4" (28 mm)

#### **GRIPPLE HANG-FAST SYSTEMS**

- · The fastest installed and most adaptable mechanical and engineering hanging systems in the world
- Systems come in five load-rated sizes, providing a minimum 5:1 safety factor regardless of length
- Three types of integral standard end fixings:

Loop-fast - loop anchor secures to an existing structure (e.g., truss)

Stud-fast - stud anchor secures to concrete structure

Toggle-fast - toggle anchor secures into pre-drilled or punched hole

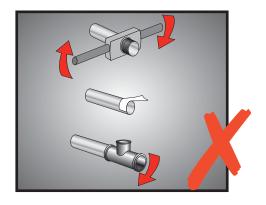


Gripple Hang-fast

## SIMPLAIR EL

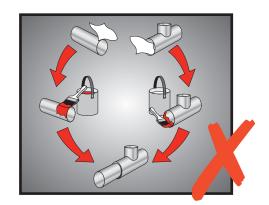
#### **Threaded Steel Tube**

A time-consuming and difficult process.



#### **Solvent Weld**

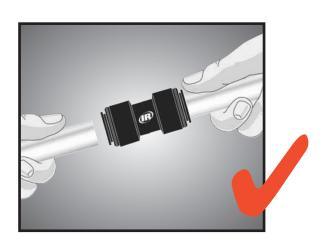
Long installation time; system needs to be shut down for drying.

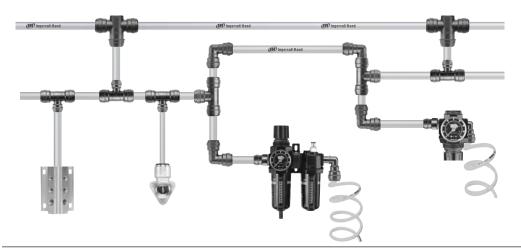


#### The SimplAir EL Way

One simple movement provides a secure connection and the system is immediately ready for use.

- Designed for piping system applications
- Safe, secure, and leakproof
- Easy to install
- Easy to disconnect and reconfigure
- Many millions of fittings in use
- Working pressures 0 − 10 bar
- Tested to ANSI B31.1







#### SIMPLAIR EL Installation

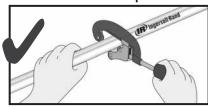
#### **EASY INSTALLATION**

- To make a connection, simply push the tube in by hand
- The unique, patented SimplAir EL collet locking system holds the tube firmly in place without deforming it or restricting flow

#### Pipe Cutting

- Cut the pipe cleanly to ensure it is free of score marks
- For SimplAir EL aluminum pipe we recommend a SimplAir EL pipe cutter
- · Do not use a hacksaw
- To avoid damage to the O-ring, make sure burs and sharp edges are removed

#### Use A SimPlair EL Pipe Cutter



#### Do Not Use a Hacksaw

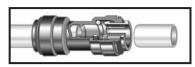




# 5/8" (15 MM) AND 1" (22 MM) FITTINGS

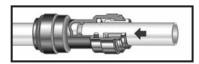
#### Making a Connection

1. Fittings and pipe should be clean and undamaged before use.



2. With the fitting clean and undamaged, and the pipe cut squarely as described on this page, you are now ready to make the connection.

#### **Push Up to Pipe Stop**



3. Push the pipe into the fitting to the pipe stop. The collet (gripper) has stainless steel teeth that will hold the pipe firmly in position while the O-ring provides a permanent leakproof seal.

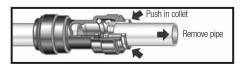
#### **Pull to Check if Secure**



4. Pull on the pipe to check that it is secure. It is critical to test the system prior to leaving the site or before use.

#### Disconnecting

1. Ensure the system is depressurized.



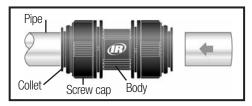
- 2. Push the collet in and remove the pipe.
- 3. Push in collet squarely against the face of the fitting.
- 4. With the collet held in this position, the pipe can be removed, and the fitting can be reused.

## SIMPLAIR EL Installation

# 1-1/4" (28 MM) FITTINGS

- These fittings have collets with stainless steel teeth and O-rings to provide unique grip-and-seal connections
- They can also be removed and used again without replacing parts

#### Making a Connection



- 1. The pipe should be properly prepared and fully inserted into the fitting.
- 2. Turn the screw cap approximately 1/4 turn (two clicks can be heard) and the collet will lock in place, further compressing the O-ring onto the pipe.
- 3. Notice that by locking the collet in place, lateral and sideways movement of the pipe is reduced.



### Disconnecting



- 1. To release the pipe from the locked position, turn the screw cap counterclockwise approximately 1/4 turn.
- 2. The pipe can be released by pushing the collet in and pulling the pipe out.



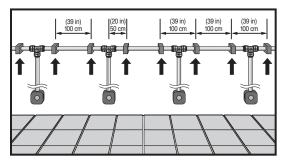


#### SIMPLAIR EL Installation

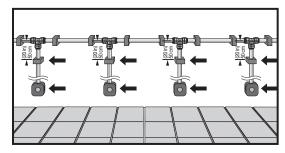
#### **INSTALLING A PIPING SYSTEM**

- 1. Attach only the horizontal pipe clips.
- 2. Only after a small amount of pressure has been applied to the system, attach the clips to the vertical pipes. This will ensure the vertical pipes have positioned themselves correctly before they are clipped.

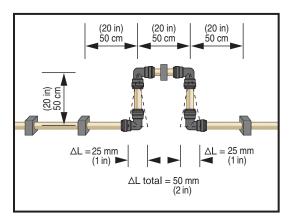
Phase 1: System without pressure.



Phase 2: System with pressure.



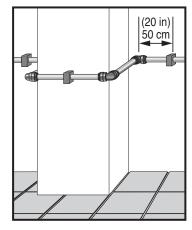
3. On long pipe runs, install an expansion bend, as shown in the diagram, every 75 ft (25 m).



## **INSTALLING A PIPING SYSTEM AROUND A COLUMN**

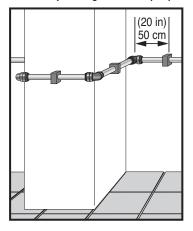
- 1. Maintain a distance of approximately 4" (10 cm) between the wall and the pipe.
- 2. Always maintain a distance of 20" (50 cm) between the fittings and the pipe clip.

#### Column or pillar smaller than 39" (1 m).





Column or pillar larger than 39" (1 m).





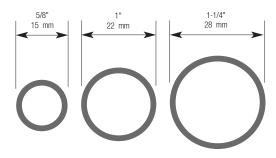
**Note:** All piping systems should be equipped with an air line water trap. We recommend our Water Trap Tee for this purpose.

# SIMPLAIR EL Aluminum Piping and Tubing

Part Number	Tube OD in (mm) ig	Tube Length ft (m)	Package Quantity	cfm @ 103 psig	cfm @ 118 psig	cfm @ 147 psig
22285282	5/8" (15)	10' (3 m)	10	36	38	42
38332540	1" (22)	10' (3 m)	10	75	86	111
38332656	1-1/4" (28)	10' (3 m)	10	126	148	175

#### **Aluminum Piping**





## SimplAir EL

SimplAir EL is designed to provide an efficient, low-cost method of installing compressed air piping systems. SimplAir EL is a unique, round aluminum extrusion, manufactured in line with SimplAir's advanced piping concept.

#### **Benefits**

- · Good-quality air
- More efficient air delivery
- Reduced pressure loss
- · Higher flow rates
- · Easy and fast installation



## Easy-to-use Push-in System for Piping Systems

- Provides ideal connection from the compressed air receiver throughout the entire distribution system, right to the point-of use
- A compressed air piping system can be installed quickly and easily, considerably reducing production downtime
- No need to prepare threaded pipe or apply solvent all the connections can be made with a simple push-in action
- Complex systems can be assembled much more rapidly than with traditional methods
- Since they also are easy to disconnect, systems can be altered or extended with little effort



#### **Equal Elbow**



Part Number	Tube OD in (mm)	Branch Line in (mm)	Stem OD in (mm)
<b>Equal Elbow</b>			
38039756	5/8" (15)	N/A	N/A
38332565	1" (22)	N/A	N/A
38332672	1-1/4" (28)	N/A	N/A

#### Straight Connector



Part Number	Tube OD in (mm)	Branch Line in (mm)	Stem OD in (mm)
Straight Connecto	r		
38039772	5/8" (15)	N/A	N/A
38332557	1" (22)	N/A	N/A
38332664	1-1/4" (28)	N/A	N/A

#### **Equal Tee**



Part Number	Tube OD in (mm)	Branch Line in (mm)	Stem OD in (mm)
Equal Tee			
38039764	5/8" (15)	N/A	N/A
38332573	1" (22)	N/A	N/A
38332680	1-1/4" (28)	N/A	N/A

#### Reducing Tee



Part Number	Tube OD in (mm)	Branch Line in (mm)	Stem OD in (mm)
Reducing Tee			
38039814	1" (22)	5/8" (15)	-

#### Stem Elbow



Part Number	Tube OD in (mm)	Branch Line in (mm)	Stem OD in (mm)
Stem Elbow			
38039780	5/8" (15)	N/A	N/A
38332623	1" (22)	N/A	N/A

#### Reducer



Part Number	Tube OD in (mm)	Branch Line in (mm)	Stem OD in (mm)
Reducer			
38039798	5/8" (15)	N/A	1" (22)
38039806	5/8" (15)	N/A	1-1/4" (28)
38332581	1" (22)	N/A	1-1/4" (28)

# SIMPLAIR EL Brass Fittings

#### **Brass Wing Back**



Part Number	Pipe OD in (mm)	Thread BSP	Thread NPT
Brass Wing Back			
38039855	5/8" (15)	1/2"	1/2"

#### Female Threaded Manifold



Part Number Female Threaded Mai	Thread BSP	Thread NPT
54742721	1"	N/A
38004339	N/A	1"

Manifolds are supplied with the following plugged outlets:

- 2" x 1/4"
- 2" x 3/8"
- 2" x 1/2"
- 1" x 1"

#### Male Brass Stem Adapter



Part Number	Stem OD in (mm)	Thread BSP	Thread NPT	
Male Brass Ste	Male Brass Stem Adapter			
38039822	5/8" (15)	1/2"	1/2"	
38332599	1" (22)	3/4"	N/A	
38332607	1" (22)	1"	N/A	
38332698	1-1/4" (28)	1"	N/A	
38332961	1" (22)	N/A	3/4"	
38332615	1" (22)	N/A	1"	
38332706	1-1/4" (28)	N/A	1"	



#### SIMPLAIR EL **Accessories**

**Plugs** 



Part Number	in (mm)	Color
Plugs		
38039830	5/8" (15)	Black
38332649	1" (22)	Black
38332722	1-1/4" (28)	Black



Part Number Pipe Cutter	Tube Sizes in (mm)
88162466	1" - 1-1/4" (22 - 28)

Pipe Clips and Spacers





Tube OD Color **Part Number** in (mm) **Pipe Clips** 38039848 5/8" (15) Black 38332730 1" (22) Black 38332755 1-1/4" (28) Black **Pipe Spacer** 38332748 1" - 1-1/4" (22 - 28) Black

**Ball Valves with Compressor Ends** 



Part Number	Tube Size in (mm)
Ball Valves with Compressor Ends	
88315635	5/8" (15)
88306139	1" (22)
88306402	1-1/4" (28)

Part Number	Tube Size in (mm)	
Spare Nuts for Ball Valves		
88315650	5/8" (15)	
88306410	1" (22)	
88306436	1-1/4" (28)	
Spare Ferrules for Ball Valves		
88315643	5/8" (15)	
88306428	1" (22)	
88306444	1-1/4" (28)	



Part Number	Max Working Length		
Hose Reel for 3/8" Hose			
38035424	25'		

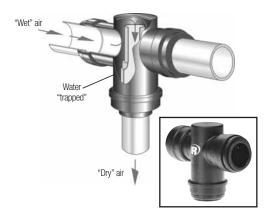
Loop-fast Hanging Systems



Part Number	Package Quantity	Length of Wire		
Loop-fast Hanging Systems				
38330643	10	5'		
38330650	10	10'		
38330668	10	15'		
38330676	10	30'		

# SIMPLAIR EL Water Trap Tee

#### Water Trap Tee



Part Number	Tube OD in (mm)
Water Trap Tee	
38332631	1" (22)

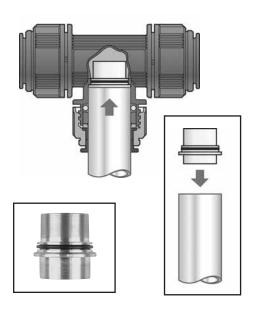
The unique water trap tee helps reduce continual moisture in a piping system and is an easy alternative to installing "swan and goose necks."

The innovative inside arrangement of the fitting allows air to flow with minimum head loss from the distribution system to take-off points without allowing water to follow. The moisture is retained in the line to be drawn off at a suitable location.

#### Installation

- 1. The piping system within which the tee is installed should be nearly horizontal.
- 2. The outlet port face should point vertically downward.
- 3. Markings indicating the correct orientation have been molded onto the body to assist installation.

#### Water Trap Tee Converter



Part Number	Size in (mm)
Water Trap Tee Converter	
38332714	1-1/4" (28)

The water trap tee convertor is a simple and convenient way to convert a standard 1-1/4" (28 mm) tee into a water trap tee. When fitted, it will stop condensed water within the piping system from entering the vertical take-off spurs.

It is important that the piping system be installed with the correct gradient, and that water drain points are properly vented.

#### To Assemble

- 1. Press the shorter spigot into the pipe.
- 2. Firmly insert the pipe and converter into the center port of the tee. Full insertion is required to correctly locate the converter and provide a watertight seal.
- 3. Turn the screw cap approximately 1/4 turn (2 clicks) to lock the collet in place and compress the O-ring onto the pipe.



#### SIMPLAIR EL **Details**

#### **Working Temperature Range**

- Minimum working temperature 4° F (-20° C)
- Maximum working temperature +140° F (+60° C)

The above working temperatures apply to compressed air applications only.

#### Working Pressure

• Maximum working pressure 150 psi (10 bar)

#### **Material Specification**

The fittings are made up of three components:

- **Bodies** are produced in strong engineered plastic or in brass
- 0-rings are made of nitrile rubber
- **Collets** are made of in acetal copolymer with stainless steel teeth

#### **Standards**

Tested to ANSI B31.1

#### **Applications**

These products are designed for use with compressed air. For other applications, please refer to our customer services department.

#### Installation Guide — Code of Practice

When installing a compressed air piping system, please refer to local "Approved Code of Practice — Safety of Pressure Systems."

#### Installations — Our Recommendations

- The pressure rating and installation guidelines of the tubing employed must also be considered during the design of any piping system
- Pipe should be supported at minimum 59" (1.5 m) to prevent excessive load being applied to the fitting
- Supports should be installed close to the fittings, but no more than 2" (50 mm) from the end of the fitting
- SimplAir EL and pipe should only be connected after the air receiver and not directly to a compressor
- It is required that all pipe and fitting installations are pressure-tested after installation

#### INSTALLATION TEST PROCEDURE



WARNING: BEFORE PRESSURIZING THE SYSTEM, THE FOLLOWING INSTRUCTIONS MUST BE FOLLOWED.

- 1. Check that all compression and push-in connections have been properly completed and are fully engaged.
- 2. Ensure that all wall mounting and hanging brackets are fixed
- 3. Ensure that an isolation valve is installed and closed between the compressed air supply and the pipework.
- 4. Ensure that a safety relief valve is properly installed and is fully functional. If a safety valve is not installed on the air receiver, one should be fitted within the piping system.
- 5. Close all outlet points in the system.

#### Pressurizing the system

It is best to evacuate the entire work area before pressurizing

- 6. Slowly open the main isolation valve while viewing the main pressure gauge in the pipework.
- 7. Allow the pressure in the system to increase to 14.5 psig (1 bar). **CLOSE THE VALVE** and hold for 15 minutes.
- 8. Visually inspect the system for integrity, loose or slipping joints, and leakage. If any faults are observed, depressurize the system completely and correct the problem. Repeat steps 6 through 8.
- 9. If the system is secure, repeat steps 6 through 8 in 14.5 psig (1 bar) increments until the maximum required working pressure is achieved.

**NOTE:** Maximum allowable working pressure for Simplair EL is 150 psig (10 bar). When using SimplAir EL with other SimplAir piping systems, do not exceed the maximum working pressure of the EL system, 150 psig (10 bar).

- 10. When full working pressure is achieved, hold the system pressure for one hour.
- 11. Re-examine the system for integrity, loose or slipping joints, and leakage.
- 12. If any faults are observed, depressurize the system completely and correct the problem. Repeat the process, beginning at step 6.

#### NOTICE - INSURANCE REQUIREMENTS

Insurance companies may require a test of the system to 1.5 times the required working pressure. If necessary, carry out the test procedure to the inspection requirement.

#### SIMPLAIR — SPEED LINE

SimplAir - Speed Line (SL) provides an efficient, low-cost method of installing compressed air systems.



SimplAir SL is a unique, round aluminum extrusion, anodized to prevent corrosion and manufactured in line with SimplAir's advanced piping concept.

SimplAir SL offers flexible tubing, reducing the number of fittings needed for installation. This gives you the ability to use large sweeping bends to eliminate high-pressure losses experienced when using conventional fitting methods.

#### **SPEED LINE TECHNICAL SPECIFICATIONS\***

Part Number	Pipe Diameter in (mm)	Standard Pipe Length	Weight lb-ft (kg/m)	Max Working Pressure psig (bar)	Max Temp	Min Temp
92455377	1/2" (14)	16' - 6" (5 m - 15 cm)	0.10 (0.160)	250 (17)	266° F (130° C)	-122° F (-30° C)
54521059	1" (22)	16' - 6" (5 m - 15 cm)	0.17 (0.260)	250 (17)	266° F (130° C)	-122° F (-30° C)
54539127	1-1/4" (28)	16' - 6" (5 m - 15 cm)	0.22 (0.309)	250 (17)	266° F (130° C)	-122º F (-30º C)

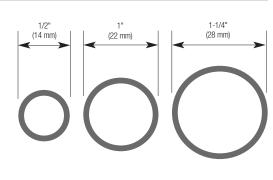
<sup>\*</sup>For mechanical and physical properties, please refer to manufacturer's installation manual.

#### AIRFLOW RATES THROUGH TUBING\*

Working Pressure psig (bar)	1/2" (14 mm) Pipe cfm (m³/min)	1" (22 mm) Pipe cfm (m³/min)	1-1/4" (28 mm) Pipe cfm (m³/min)
100 (7)	36 (1.02)	70 1.99	126 (3.58)
125 (8.5)	42 (1.19)	85 (2.24)	148 (4.21)
150 (10)	47 (1.33)	101 (2.87)	175 (4.98)
203 (14)	62 (1.75)	133 (3.78)	231 (6.57)
250 (17)	69 (1.96)	162 (4.61)	281 (8.00)

<sup>\*</sup>Airflows are based on a 1 psig pressure drop per 30 ft (10 m).







#### Union



Thread Size	1/2" (14 mm) Part Number	1" (22 mm) Part Number	1-1/4" (28 mm) Part Number
Union			
N/A	54563861	54589171	54589189

Elbow, 90° Union



Thread Size 1/2" (14 mm) Part Number		1" (22 mm) Part Number	1-1/4" (28 mm) Part Number
Elbow, 90° Union			
N/A	54563952	54589270	54589288

Elbow, 90° Male Street



Thread Size	1/2" (14 mm) Part Number	1" (22 mm) Part Number	1-1/4" (28 mm) Part Number
Elbow, 90° Male Street			
1/2" NPT	54563911	N/A	N/A
1/2" BSP	54563937	N/A	N/A
3/4" NPT	N/A	38004057	N/A
3/4" BSP	N/A	38004065	N/A
1" NPT	N/A	54589239	N/A
1" BSP	N/A	54589247	N/A
1-1/4" NPT	N/A	N/A	54589254
1-1/4" BSP	N/A	N/A	54589262

## Stud, Male Straight



Thread Size	1/2" (14 mm) Part Number	1" (22 mm) Part Number	1-1/4" (28 mm) Part Number
Stud, Male Straight			
1/2" NPT	54563895	N/A	N/A
1/2" BSP	54563903	N/A	N/A
3/4" NPT	N/A	38004073	N/A
3/4" BSP	N/A	38004081	N/A
1" NPT	N/A	54589197	54615828
1" BSP	N/A	54589247	36004107
1-1/4" NPT	N/A	N/A	54589213
1-1/4" BSP	N/A	N/A	54589221

#### Tee Union



Thread Size	1/2" (14 mm) Part Number	1" (22 mm) Part Number	1-1/4" (28 mm) Part Number
Tee Union			
N/A	54563960	54589296	54589304

## End Cap



Thread Size	1/2" (14 mm) Part Number	1" (22 mm) Part Number	1-1/4" (28 mm) Part Number
End Cap			
N/A	54600721	54599592	54599618

### Female Stem Adapter



Thread Size	1/2" (14 mm) Part Number	1" (22 mm) Part Number	1-1/4" (28 mm) Part Number
Female Stem Adapters			
1/4" NPT x 14 mm	38004123	N/A	N/A
1/4" BSP x 14 mm	38004123	N/A	N/A
3/8" NPT x 14 mm	38004131	N/A	N/A
3/8" BSP x 14 mm	38004149	N/A	N/A
1/4" NPT x 22 mm	N/A	38004156	N/A
1/4" BSP x 22 mm	N/A	38004164	N/A
3/8" NPT x 22 mm	N/A	38004172	N/A
3/8" BSP x 22 mm	N/A	38004180	N/A
1/2" NPT x 22 mm	N/A	38004198	N/A
1/2" BSP x 22 mm	N/A	38004206	N/A
1/4" NPT x 28 mm	N/A	N/A	38004214
1/4" BSP x 28mm	N/A	N/A	38004222
3/8" NPT x 28mm	N/A	N/A	38004230
3/8" BSP x 28 mm	N/A	N/A	38004248
1/2" NPT x 28 mm	N/A	N/A	38004255
1/2" BSP x 28 mm	N/A	N/A	38004263



#### 1" x 6" Way Outlet Manifolds



Thread Size	Part Number	Note			
1" x 6" Way Outlet Manifolds					
1/4", 3/8", 1/2" NPT outlets	38004339	All 6 ports are supplied plugged – remove plug to use			
1/4", 3/8", 1/2" NBSP outlets	38004347	All 6 ports are supplied plugged – remove plug to use			

#### Replacement Ferrules



Thread Size	1/2" (14 mm) Part Number	1" (22 mm) Part Number	1-1/4" (28 mm) Part Number
Replacement Ferrules			
N/A	38004297	N/A	N/A
N/A	N/A	38004313	N/A
N/A	N/A	N/A	38004321

#### Hanging / Mounting Brackets



Thread Size	1/2" (14 mm) Part Number	1" (22 mm) Part Number	1-1/4" (28 mm) Part Number			
Hanging / Mounting Bracket						
3/8" (10 m)	54593652	54593660	54593678			

#### Wall Mounting Back Plate



Thread Size	1/2" (14 mm) Part Number	1" (22 mm) Part Number	1-1/4" (28 mm) Part Number			
Wall Mounting Back Plates						
3/8" (10 m)	54593645	54593645	54593645			





Thread Size	1/2" (14 mm) Part Number	1" (22 mm) Part Number	1-1/4" (28 mm) Part Number
Former			
N/A	N/A*	54599527	54599543

\*NOTE: 1/2" (14 mm) tubing can be bent with a 1" (22 mm) former and guide.



Thread Size	1/2" (14 mm) Part Number	1" (22 mm) Part Number	1-1/4" (28 mm) Part Number
Guide			
N/A	N/A*	54599535	54599550

\*NOTE: 1/2" (14 mm) tubing can be bent with a 1" (22 mm) former and guide.





\*Pipe bender kit complete with both 1" (22 mm) formers and guides.



## **GRIPPLE HANG-FAST SYSTEM**

- The fastest and most adaptable mechanical and engineering hanging system in the world.
- A quick and safe replacement for threaded rod or chain due to its fast installation, ease of use, versatility, lightweight performance, and aesthetic appearance.
- Come in five load-rated sizes that are value-engineered to provide the most cost-effective solutions for hanging M & E services.
- Each size accommodates a specific range designated with a safe working load, which is common to the "loop," "stud," and "toggle" end
- The safe working load gives a minimum 5:1 safety factor in a vertical plane and is maintained regardless of length chosen for any designated model.
- . Contains a length of steel wire rope, with a choice of three integral standard end fixings, a gripple for height adjustment, and a setting key to unlock the gripple if required.

#### **LOOP-FAST**

- The "loop" anchor fixing secures the Gripple Hang-fast System to an existing structure.
- This method simply requires the loop end to be wrapped around the support (purlin or truss), then the tail end is fed through the loop and pulled tight.

#### Loop-fast





Туре	Size* Ib	Length	Package Quantity	Part Number
Loop-fast				
		5'	10	38330528
1	22	10'	10	38330536
1	22	15'	10	38330544
		30'	10	38330551
		5'	10	38330643
2	100	10'	10	38330650
2	100	15'	10	38330668
		30'	10	38330676
	200	5'	10	38330742
3		10'	10	38330759
ა		15'	10	38330767
		30'	5	38330775
		5'	10	38330866
4	495	10'	5	38330874
4	495	15'	5	38330882
		30'	5	38330890
		5'	2	38330908
5	715	10'	1	38330916
ິນ	/15	15'	1	38330924
		30'	1	38330932

\*Safe working load.

# **GRIPPLE HANG-FAST SYSTEM**

#### **STUD-FAST**

- The "stud" anchor fixing secures the Gripple Hang-fast System into a concrete structure.
- This method simply requires the "stud" end to be screwed directly into a drop-in anchor, which is supplied with the kit.

#### Stud-fast



Туре	Size* Ib	Length	Package Quantity	Part Number
Stud-fast				
		5'	10	38330569
1	22	10'	10	38330577
'	22	15'	10	38330585
		30'	10	38330593
		5'	10	38330684
2	100	10'	10	38330692
2	100	15'	10	38330700
		30'	10	38330718
		5'	10	38330783
3	200	10'	10	38330791
S	200	15'	10	38330809
		30'	5	38330817

\*Safe working load.

#### **TOGGLE-FAST**

- The "toggle" anchor fixing, which uses a restraining plate and end stop, secures the Gripple Hang-fast System into a pre-drilled or punched hole.
- This method is ideal for attachment into metal sheeting and pressed metal fabrications with a cavity on the restraining side.

Toggle-fast



Туре	Size* lb	Length	Package Quantity	Part Number
Toggle-Fast				
		5'	10	38330601
1	22	10'	10	38330619
'	22	15'	10	38330627
		30'	10	38330635
		5'	10	22128508
2	100	10'	10	22128516
2	100	15'	10	38330726
		30'	10	38330734
		5'	10	38330825
3	200	10'	10	38330833
3	3 200	15'	10	38330841
		30'	5	38330858

\*Safe working load.



Notes	

# **FITTINGS AND HOSES**



# **INGERSOLL RAND FITTINGS AND HOSES**

The Ingersoll Rand line of ruggedly convenient hose reels and recoil hoses are pressurerated for optimized pneumatic performance, even in the toughest shop environments and applications. Connecting them to your pneumatic system is quick and reliable thanks to our complete line of swivels and hose accessories.

# **SWIVELS**

#### Swivel-It Swivels



ASC-1/4

Part Number	Thread Size	Airflow cfm	Description
Swivel-It Swiv	els		
ASA-1/4	1/4"	0 – 25	Adjustable Swivel-It
ASC-1/4	1/4"	0 – 33	Non-marring composite Swivel-It
AS-3/8	3/8"	0 – 45	Standard Swivel-It
AS-1/2	1/2"	0 – 65	Standard Swivel-It

#### Swivels and Adapters





636077



635108



Part Number Size NPT Description **Swivels and Adapters** 636077 1/8" (M) x 1/8" (F) Z swivel 636086-B 1/4" (M) x 1/4" (F) Z swivel 636087-B 1/4" (M) x 1/4" (F) w/ filter element Z swivel 635106 1/2" (F) x 3/8" (M) Z swivel 636075 1/8" (M) x 1/8" (F) Straight swivel 636085 3/8" (M) x 3/8" (F) Straight swivel 635117 1/2" (M) x 1/2" (F) Straight swivel 3/4" (M) x 3/4" (F) Straight swivel 635108 635107 3/8" (M) x 1/2" (F) Straight swivel 3249 1/8" (F) x 1/8" (F) Female adapter Male adapter 676 1/8" (M) x 1/8" (M)

#### Swivel Inlets



Part Number	Description
Swivel Inlets	
HH1-A165	3/8" NPT x 1/2" hose barb (general-duty)
HH1-SW7/8	7/8" - 24" x 1/2" hose barb (general-duty)
HH1-VSW1/2	1/2" NPT x 1/2" hose barb (heavy-duty)
HH1-VSW7/8	7/8" – 24" x 1/2" hose barb (heavy-duty)

#### Inlet Bushings with Screens



H-382

Part Number Inlet Bushings with Screens	Description
R0B1J61-565	1/4" male pipe to 1/4" female pipe
H-382	3/8" male pipe to 1/4" female pipe

# **HOSE WHIPS** (250 psig max working pressure)

Consists of length of hose assembled with male hose nipple in one end and female hose nipple in the other end.





ROOH-130

Part Number	Hose Inside Diameter	Hose (national pipe thread) Length	Male End	Female End
Hose Whips				
R00H-130	1/4"	8'	1/8"	1/4"
R0-130	5/16"	8'	1/4"	3/8"
R1A-130	3/8"	8'	1/4"	3/8"
510-130	3/8"	8'	3/8"	3/8"

#### Assembled Construction Tool Hoses



Part Number	Hose Inside Diameter	Length	Description
Assembled Const	ruction Tool Ho	oses*	
22040687	1/2"	8'	Double-banded universal to 3/8" NPT straight male
22041453	1/2"	8'	Double-banded universal to 1/2" NPT straight male
22041461	1/2"	8'	Double-banded universal to 1/2" NPT swivel inlet
22041479	1/2"	8'	Double-banded universal to 7/8" – 24" NPT swivel inlet
22040679	3/4"	50'	Yellow with double banded universals on both ends. 300 psi max pressure rating

\*Hose whips with swivels use heavy-duty swivels.



# **NYLON RECOIL HOSES**

- Permanently coiled hoses automatically return to their original position, keeping them off the floor and out of your way as you work
- Made from abrasive-resistant and memory-resilient Nylon II
- For use with air, gases, water, and liquids compatible with Nylon II
- Certified to a maximum pressure of 200 psi
- Fittings and hose ends are protected by spring guards
- Available with diameters of 1/4", 3/8", 1/2", and 1-1/2"
- Available in bulk lengths of 12', 25', 50', and 100'

#### Swivel Both Ends



0.0	0.0.0.0	Hose	Length		Compact	M. L. NDT			
Part Number	Hose Inside Diameter	Max	Max Working Comp Length Siz		Outside Coil Diameter	Male NPT Fitting			
Swivel Bot	Swivel Both Ends								
N14-12B	1/4"	12'	10'	6"	3-1/2"	1/4"			
N14-25B	1/4"	25'	22'	10-1/2"	3-1/2"	1/4"			
N14-50B	1/4"	50'	45'	21"	3-1/2"	1/4"			
N38-124B	3/8"	12'	10'	5"	5-5/8"	1/4"			
N38-254B	3/8"	25'	21'	10-1/4"	5-5/8"	1/4"			
N38-504B	3/8"	50'	44'	21"	5-5/8"	1/4"			
N38-12B	3/8"	12'	10'	5"	5-5/8"	3/8"			
N38-25B	3/8"	25'	21'	10-1/4"	5-5/8"	3/8"			
N38-50B	3/8"	50'	44'	21"	5-5/8"	3/8"			
N12-12B	1/2"	12'	9'	5"	9"	1/2"			
N12-25B	1/2"	25'	18'	9"	9"	1/2"			
N12-50B	1/2"	50'	41'	18"	9"	1/2"			
N34-12B	3/4"	12'	10'	4-1/2"	12-1/2"	3/4"			
N34-25B	3/4"	25'	17'	9"	12-1/2"	3/4"			
N34-50B	3/4"	50'	35'	16"	12-1/2"	3/4"			

#### Swivel One End



Dort	Ugoo Ingido	Hose Inside Hose Le		ength		Mole NDT	
Part Number	Diameter	Max	Working Length	Compact Size	Outside Coil Diameter	Male NPT Fitting	
Swivel On	e End						
N14-12A	1/4"	12'	10'	6"	3-1/2"	1/4"	
N14-25A	1/4"	25'	22'	10-1/2"	3-1/2"	1/4"	
N14-50A	1/4"	50'	45'	21"	3-1/2"	1/4"	
N38-12A	3/8"	12'	10'	5"	5-5/8"	3/8"	
N38-25A	3/8"	25'	21'	10-1/4"	5-5/8"	3/8"	
N38-50A	3/8"	50'	44'	21"	5-5/8"	3/8"	
N12-12A	1/2"	12'	9'	5"	9"	1/2"	
N12-25A	1/2"	25'	18'	9"	9"	1/2"	
N12-50A	1/2"	50'	41'	18"	9"	1/2"	

# **NYLON RECOIL HOSES**

#### Rigid Couplings Both Ends



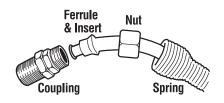
Dovt	Hana Insida	Hose Length		Compost	Compact	Mala NDT	
Number	Part Hose Inside Number Diameter		Working Length	Compact Size	Outside Coil Diameter	Male NPT Fitting	
Rigid Cou	plings Both Er	nds					
N14-12	1/4"	12'	10'	6"	3-1/2"	1/4"	
N14-25	1/4"	25'	22'	10-1/2"	3-1/2"	1/4"	
N14-50	1/4"	50'	45'	21"	3-1/2"	1/4"	
N38-12	3/8"	12'	10'	5"	5-5/8"	3/8"	
N38-25	3/8"	25'	21'	10-1/4"	5-5/8"	3/8"	
N38-50	3/8"	50'	44'	21"	5-5/8"	3/8	
N12-12	1/2"	12'	9'	5"	9"	1/2"	
N12-25	1/2"	25'	18'	9"	9"	1/2"	
N12-50	1/2"	50'	41'	18"	9"	1/2"	

#### **Bulk Hoses**



Don't Discontinuity	Hose Length		Compost	Compact	Mala NIDT			
Part Number	Hose Inside Diameter	Max	Working Length	Compact Size	Outside Coil Diameter	Male NPT Fitting		
<b>Bulk Hose</b>	Bulk Hoses							
N14-100	1/4"	100'	90'	45"	3-1/2"	N/A		
N38-100	3/8"	100'	85'	38"	5-5/8"	N/A		
N12-100	1/2"	100'	75'	35"	9"	N/A		
N34-100	3/4"	100'	70'	29"	12-1/2"	N/A		

#### Fittings for Nylon Recoil Hoses



Hose Inside	Male NPT	Fittings Pa	rt Number*	For Use				
Diameter	Fitting	Rigid Fitting	Swivel Fitting	w/ Bulk Hose				
Fittings for Nylon Recoil Hoses*								
1/4"	1/4"	RK090	RK092	N14-100				
3/8"	1/4"	N/A	RK114	N38-100				
3/8"	3/8"	RK110	RK112	N38-100				
1/2"	1/2"	RK118	RK119	N12-100				
3/4"	3/4"	N/A	CSM-1212	N34-100				

\*Order two fittings per hose.



# **COIL HOSES**

#### **Coil Hoses**



628004-12

Part Number	Thread Size Male NPT	Hose ID	Hose OD	Hose Length ft (mm)	Working Length ft (mm)	Outside Coil Diameter	Inside Diameter	Retracted Length ft (mm)
Coil Hos	es*							
628004-12	1/4"	1/4"	5/16"	12 (3.7)	11 (3.3)	3"	2-1/2"	6 (152)
628004-25	1/4"	1/4"	5/16"	25 (7.6)	23.5 (7.2)	3"	2-1/2"	12 (305)
628004-50	1/4"	1/4"	5/16"	50 (15.2)	47 (14.3)	3"	2-1/2"	23 (584)
628020-12	3/8"	3/8"	15/32"	12 (3.7)	10 (3.0)	5-1/2"	4-1/2"	5 (127)
628020-25	3/8"	3/8"	15/32"	25 (7.6)	22 (6.7)	5-1/2"	4-1/2"	10 (254)
628020-50	3/8"	3/8"	15/32"	50 (15.2)	44 (13.4)	5-1/2"	4-1/2"	20 (508)
628023-12	1/2"	1/2"	5/8"	12 (3.7)	8.5 (2.6)	8"	6-1/2"	5 (127)
628023-25	1/2"	1/2"	5/8"	25 (7.6)	19 (5.8)	8"	6-1/2"	9 (229)
628023-50	1/2"	1/2"	5/8"	50 (15.2)	38 (11.6)	8"	6-1/2"	18 (457)

\*Assemblies include swivel fittings at both ends.

#### **FEATURES**

1/4", 3/8", and 1/2" ID

- Self-retracting for easy storage in minimum space to reduce clutter
- Minimizes safety hazards from tripping or tangling
- A low-cost alternative to bulky, expensive hose reels
- Resistant to most chemicals, gasoline, oil, and grease
- Lightweight and highly flexible with 360° swivel fittings to reduce user strain and fatigue
- Abrasion and corrosion resistant
- Ideal for use with portable air tools, spray guns, moving air cylinders, and hoists
- Retractability is easily restored by reversing hose through its axis

#### PERFORMANCE SPECIFICATIONS

Max Operating Pressure	180 psi (12.4 bar)
<b>Operating Temp Range</b>	-20° – 170° F (-29° – 77° C)
Hose Material	Nylon II

#### Swivel Fitting Kits



Part Number Swivel Fitting Kits	Hose ID	Thread Size Male NPT
22800	1/4"	1/4"
22801	3/8"	3/8"

NOTE: Order one kit for each hose end.

# P-SERIES POLYURETHANE COILED HOSES

#### Polyurethane Coil Hoses



Part Number	Description
Polyurethan	e Coil Hoses
P14-10	1/4" x 10' polyurethane coil hose, (1) 1/4" rigid, (1) 1/4" swivel fitting
P14-20	1/4" x 20' polyurethane coil hose, (1) 1/4" rigid, (1) 1/4" swivel fitting
P14-30	1/4" x 30' polyurethane coil hose, (1) 1/4" rigid, (1) 1/4" swivel fitting
P38-10	3/8" x 10' polyurethane coil hose, (1) 3/8" rigid, (1) 3/8" swivel fitting
P38-20	3/8" x 20' polyurethane coil hose, (1) 3/8" rigid, (1) 3/8" swivel fitting
P38-30	3/8" x 30' polyurethane coil hose, (1) 3/8" rigid, (1) 3/8" swivel fitting
P12-10R	1/2" x 10' polyurethane coil hose, (2) 1/2" reusable swivel fittings
P12-20R	1/2" x 20' polyurethane coil hose, (2) 1/2" reusable swivel fittings
P12-30R	1/2" x 30' polyurethane coil hose, (2) 1/2" reusable swivel fittings

#### **Features**

- Superior elasticity and coil memory mean a cleaner work environment
- Outstanding flexibility increases operator comfort
- 25% lighter than rubber hose, reducing operator fatigue
- Abrasion and kink resistance increase lifetime
- Tight coil diameter allows easy entry into confined spaces
- Non-marring surface won't harm work pieces

- Broad chemical resistance makes hoses suitable for most environments
- Better than 80% working length extends your work space
- Straight tails on both ends eliminate workstation tangles
- Reusable MNPT fittings allow field retrofits
- Thread sealant on all fittings provides for leak-free joints

#### Fitting Kits



P38-RMS Male Swivel



P38-RMR Male Rigid



P12-RMS Male Rigid

Part Number	Description
Fitting Kits	
P14-RMS	1/4" NPT reusable male swivel fitting kit for 1/4" ID polyurethane hose
P38-RMS	3/8" NPT reusable male swivel fitting kit for 3/8" ID polyurethane hose
P14-RMR	1/4" NPT reusable male rigid fitting kit for 1/4" ID polyurethane hose
P38-RMR	3/8" NPT reusable male rigid fitting kit for 3/8" ID polyurethane hose
P12-RFR	1/2" NPT reusable female rigid fitting kit for 1/2" ID polyurethane hose
P12-RMS	1/2" NPT reusable male rigid fitting kit for 1/2" ID polyurethane hose



# **SPEED-LOK AIR HOSES**

- General-purpose hoses made of high-quality, durable synthetic
- Ideal for general industrial, maintenance, and automotive applications
- Blue shell, color-coded for "compressed air"
- Maximum temperature limit for these hoses is 158° F
- Working pressure is 250 psig and the burst pressure is 1,000 psig
- Vacuum rating is 28 in Hg
- Does not need to be crimped at the jobsite, but rather can be cut to the required length, and then fitted to the system
- Comes on a 250' roll, but can be sold by the foot

Part Number	Hose ID	Hose OD	Weight Ib	Radius
Speed-Lok A	ir Hoses			
38032249	3/8"	5/8"	0.11	3
38032926	1/2"	3/4"	0.18	5

#### Speed-Lok Air Hoses



## PREMIUM RUBBER HOSE

- Premium rubber air hose, specifically designed for heavy-duty applications, such as industrial, maintenance, automotive, and/or construction
- 3/8" x 50' red hose with black Ingersoll Rand logo
- Black hose restricters on each end provide a 300 psi working pressure and a 4:1 safety burst ratio

#### Premium Rubber Hose



Part Number	Size							
Premium Rubber Hose								
38016820	3/8" x 50'							

#### **Features**

- Six-year warranty
- · Longer life than PVC
- Reinforced innermost tube, resistant to the materials it is intended to convey
- Extended life bend restricters
- Increased flexibility in cold temperatures
- Designed to withstand the harshest jobsite conditions
- Extended service life due to number of threads, spirals, and thickness of rubber tube

# **BULK HOSE**

Part Number Bulk Hose	Hose Diameter	Description	Max Working Pressure psig
BH8A	1/2"	1 braid rayon	250
50923	1/4"	1 braid black rayon	250
BH6C	3/8"	1 braid rayon	250
BH12A	3/4"	1 braid rayon	200

# **HOSE CLAMPS**

Hose Clamps



MITT NION OF	_

Part Number	Hose Size	Description
Hose Clamps		
MT1-AL34-1/2	1/2" (13 mm)	1 braid rayon
MT1-AL34-3/4	3/4" (19 mm)	1 braid rayon

## **SPRING REWIND REELS**

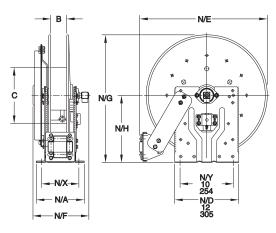
Spring Rewind Reels (for 3/8" or 1/2" Hose ID)



Part Number	Reel Dimensions umber in (mm)								
	N/A	В	N/X	N/G	N/D	N/E	N/H		
Spring Rewind Reels (for 3/8" or 1/2" ID Hose)									
38032934	10 (254)	4 (102)	8 (203)	17.62 (448)	11.25 (286)	16.12 (409)	9.12 (232)	52 (24)	87 (39)

Single hose spring rewind reels have a narrow frame and compact mounting base. A heavy-duty spring motor provides self-contained rewind power. A non-sparking ratchet assembly locks the reel when the desired length of hose has been paid out. A pull on the hose unlocks the reel and the spring motor retracts the hose. A declutching arbor is provided to prevent damage from reverse winding. Reels can be fitted with up to 50 feet of 3/8" or 1/2" hose.

The single hose spring rewind reel is perfect for lubrication, general industrial applications, air / water, air tools, assembly, and washdown.



**Inlet Connection:** Standard inlet is 90° swivel joint with 1/2" female NPT threads. Outlet Connection: Standard outlet is 1/2" female NPT thread.

**Operating Pressures & Temperatures:** These reels operate at pressures to 3000 psi (207 bar) and handle product temperatures from -20° F to +225° F (-29° C to +107° C).

Rollers: All models are supplied with a four-way roller assembly.

**Hose Stop:** A hose stop for 1/2" hose is supplied as standard with the reel to prevent damage to rollers and nozzles and to permit adjustment of free hose length. When using 3/8" hose, a 3/8" hose stop must be ordered as a separate item Part Number 38329298.

Required for Assembly: Two connections are required. (2) 3/8" connections (Part Number 38328381) or (2) 1/2" connections (Part Number 38328415) plus incoming hose to reel and outgoing hose.

Finish: Red paint.



# **HOSE REELS**

### Low Pressure, **Heavy-duty Reels**

These new composite hose reels provides excellent durability and great value. All composite reels are made of tough glass-filled composite material combined with a strong steel base.



#### Low Pressure, **Ultra-duty Reels**

Ultra-duty hose reels are ideal for the automotive shop. Increase safety and productivity around the garage while increasing hose life.



#### Medium Pressure, **Ultra-duty Reels**

Medium pressure hose reels come standard with a single braid hose suitable for distribution of oil in the automotive aftermarket. Add a control handle and a Thunder pump and you're ready to go!



#### High Pressure, **Ultra-duty Reels**

Great for the large multi-bay service center. High pressure reels come standard with a double braided hose for long distance distribution of grease and oil. Once the job is done, this reel will quickly rewind the hose to help maintain a clean and safe work environment.



Part Number	Performance Rating	Max Pressure psi	Hose Length	Hose ID	Inlet / Outlet NPT	Dimensions L x W x H	Height	Spool Material	Use		
Low Pressure Hose Reels											
6332	Heavy-duty	300	35'	1/2"	3/8" / 1/2"	17.75" x 7" x 20.37"	20.37"	Composite	Air, water, compatible solvents		
6338	Heavy-duty	300	35'	3/8"	3/8" / 3/8"	17.75" x 7" x 20.37"	20.37"	Composite	Air, water, compatible solvents		
6358	Heavy-duty	300	50'	3/8"	3/8" / 3/8"	17.75" x 7" x 20.37"	20.37"	Composite	Air, water, compatible solvents		
61332	Ultra-duty	300	35'	1/2"	3/8" / 1/2"	16.5" x 6" x 17.5"	17.5"	Steel	Air, water, compatible solvents		
61338	Ultra-duty	300	35'	3/8"	3/8" / 3/8"	13.5" x 6" x 14.5"	14.5"	Steel	Air, water, compatible solvents		
61352	Ultra-duty	300	50'	1/2"	1/2" / 1/2"	19" x 7" x 20.25"	20.25"	Steel	Air, water, compatible solvents		
61358	Ultra-duty	300	50'	3/8"	3/8" / 3/8"	16.5" x 6" x 17.5"	17.5"	Steel	Air, water, compatible solvents		
613108VS	Supreme-duty	300	100'	3/8"	1/2" / 3/8"	24" x 10.5" x 25.4"	25.4"	Steel	Air, water, compatible solvents		
61372VS	Supreme-duty	300	75'	1/2"	1/2" / 1/2"	24" x 10.5" x 25.4"	25.4"	Steel	Air, water, compatible solvents		
613102VS	Supreme-duty	300	100'	1/2"	1/2" / 1/2"	24" x 10.5" x 25.4"	25.4"	Steel	Air, water, compatible solvents		
61357VS	Supreme-duty	250	50'	3/4"	3/4" / 3/4"	24" x 10.5" x 25.4"	25.4"	Steel	Air, water, compatible solvents		
Low Pres	ssure Fuel Ho	se Reels									
61557VS	Supreme-duty	250	50'	3/4"	3/4" / 3/4"	24" x 10.5" x 25.4"	25.4"	Steel	Fuel UL330 / ULC approved		
Medium	<b>Pressure Fuel</b>	Hose Reels									
6432	Heavy-duty	2,000	35'	1/2"	1/2" / 1/2"	17.75" x 7" x 20.37"	20.37"	Composite	Oil, ATF		
61432	Ultra-duty	2,000	35'	1/2"	3/8" / 1/2"	16.5" x 6" x 17.5"	17.5"	Steel	Oil, ATF		
61452	Ultra-duty	2,000	50'	1/2"	1/2" / 1/2"	19" x 7" x 20.25"	20.25"	Steel	Oil, ATF		
61472VS	Supreme-duty	1,500	75'	1/2"	1/2" / 1/2"	24" x 10.5" x 25.4"	25.4"	Steel	Oil, ATF		
61457VS	Supreme-duty	1,250	50'	3/4"	3/4" / 3/4"	24" x 10.5" x 25.4"	25.4"	Steel	Oil, ATF		
	ssure Hose Re										
61634	Ultra-duty	5,000	35'	1/4"	1/4" / 1/4"	16.5" x 6" x 17.5"	17.5"	Steel	Grease		
61654	Ultra-duty	5,000	50'	1/4"	1/4" / 1/4"	19" x 7" x 20.25"	20.25"	Steel	Grease		
61678VS	Supreme-duty	4,000	75'	3/8"	3/8" / 3/8"	24" x 10.5" x 25.4"	25.4"	Steel	Grease		
616108VS	Supreme-duty	4,000	100'	3/8"	3/8" / 3/8"	24" x 10.5" x 25.4"	25.4"	Steel	Grease		

# FILTERS, REGULATORS, AND LUBRICATORS (FRLs)



# INGERSOLL RAND FILTERS, REGULATORS, AND LUBRICATORS (FRLs)

With Ingersoll Rand / ARO® brand filters, regulators, and lubricators (FRLs) in your operation, you get a cost-effective solution to increasing the life of your pneumatic equipment. You can save space, time, and piping costs. Our FRLS also give you greater mounting flexibility and convenience.

# FILTERS, REGULATORS, AND LUBRICATORS (FRLs)

#### **Air Preparation**

The compact design of our FRLs saves space and provides more design flexibility than larger drying systems. Set-up time and piping costs are also reduced thanks to the use of common outlets.

#### **Mounting Flexibility**

Our FRLs offer greater mounting flexibility thanks to their convenient modular design. Modular clamps allow the lines on individual units to be removed without disturbing the inlet piping. Each FRL has threaded ports to allow use of pipe nipples, as well as modular configurations to meet various piping needs. T-type wall mounting brackets provide excellent wall-to-unit clearance for filter bowl removal and regulator adjustment.

#### Safety

Safety is a top priority and that's why we provide lock-out valves designed to attach to the inlet of the FRL system. These valves meet OSHA regulations, and protect the operator from injury caused by unexpected start-up of a machine during service or maintenance.

For more detailed information on the features or specifications of specific FRL types and models, please refer to the following section of the catalog.

## FRL SERIES QUICK REFERENCE\*

Ingersoll Rand offers several FRL Series components with a range of flow rates, port sizes, and applications. Please note that this page only represents a portion of FRL products available.

Ingersoll Rand ARO® Mini Series



NPT Port		Pressure Range							
Size	Standard Filters	Coalescing Filters	Regulator	Piggyback	Lubricator	in Regulator psig (bar)			
Ingersoll Rand ARO Mini Series									
1/8"	28 (13)	15 (6)	13 (6)	13 (6)	41 (19)	5 - 125 (0.4 - 8.6)			
1/4"	38 (18)	17 (8)	13 (6)	13 (6)	60 (28)	5 – 125 (0.4 – 8.6)			

Ingersoll Rand ARO **Compact Series** 



NPT Port		Flov		Pressure Range			
Size	Standard Filters	Coalescing Regulator Pigg		Piggyback	Lubricator	in Regulator psig (bar)	
Ingersoll Ra	and ARO C	ompact Ser	ies				
1/4"	54 (25)	40 (17)	100 (47)	93 (44)	75 (35)	5 - 125 (0.4 - 8.6)	
3/8"	100 (47)	51 (24)	130 (61)	135 (64)	100 (47)	5 - 125 (0.4 - 8.6)	
1/2"	122 (58)	53 (25)	150 (71)	140 (66)	110 (52)	5 - 125 (0.4 - 8.6)	

Ingersoll Rand ARO Heavy-duty Series



NPT Port		Flo	Pressure Range			
Size	Standard Coalescir Filters Filters		Regulator	Piggyback	Lubricator	in Regulator psig (bar)
Ingersoll Ra	nd ARO F	leavy-duty	Series			
1/2"	82 (39)	N/A	256 (121)	N/A	65 (31)	5 - 125 (0.4 - 8.6)
3/4"	87 (41)	N/A	287 (135)	N/A	75 (35)	5 - 125 (0.4 - 8.6)
1"	88 (42)	N/A	293 (138)	N/A	75 (35)	5 - 125 (0.4 - 8.6)
Ingersoll Ra	nd Hi-Flo	w Heavy-d	uty Series			
3/4"	N/A	N/A	N/A	300	320	5 – 150 (0.5 – 10.4)
1"	N/A	N/A	N/A	300	320	5 – 150 (0.5 – 10.4)





NPT Port		Flov	Pressure Range					
Size	Standard Filters	Coalescing Filters	Regulator Piggyback Lubric		Lubricator	in Regulator psig (bar)		
Ingersoll Ra	Ingersoll Rand Jumbo Series							
3/4"	323 (152)	N/A	481 (227)	N/A	196 (92)	0 - 125 (0 - 8.6)		
1"	316 (149)	N/A	500 (236)	N/A	374 (176)	0 - 125 (0 - 8.6)		

Ingersoll Rand Super-duty Series



NPT Port	A = A	Flow – cfm (dm³/s)							
Size	Standard Filters	Coalescing Filters	Regulator	Piggyback	Lubricator	in Regulator psig (bar)			
Ingersoll R	and Super-	duty Series	5						
1-1/4"	N/A	N/A	800 (377)	N/A	927 (437)	0 – 180 (0 – 12.5)			
1-1/2"	1,280 (604)	445 (210)	1,200 (566)	N/A	927 (437)	0 – 180 (0 – 12.5)			
2"	1,628 (768)	860 (406)	1,200 (566)	N/A	1,186 (560)	0 – 180 (0 – 12.5)			

\*NOTE: This table only represents a portion of FRLs offered. Please continue through this section for complete product listings.



#### INGERSOLL RAND HAS THE RIGHT COMBINATION

Proper conditioning of compressed air is essential to ensure maximum performance and service life from pneumatic power tools and equipment. The small initial investment for installation of air preparation units in an air line system will pay long-term dividends in increased productivity, consistent quality, and decreased maintenance costs. Ingersoll Rand offers an extensive line of air line filters, regulators, and lubricators, including individual units, piggybacks, and combos, to meet your exact air preparation requirements.

#### **Filters**



#### **Filters**

Ingersoll Rand compressed air filters are designed to remove solid and liquid airborne contaminants that can plug small orifices and hinder performance, or cause excessive wear and premature equipment failure. Several filter elements are offered, including models with coalescing elements for removal of oil aerosols and particles down to .3 micron.

- Pipe sizes from 1/8" to 2" NPT
- Flows to 1.400 cfm (660 dm<sup>3</sup>/s)
- Maximum inlet pressures to 250 psig (17 bar)

#### Regulators



#### Regulators

Ingersoll Rand air line regulators provide controlled, consistent air pressure as required for specific pneumatic equipment connected to the air system. Standard relieving-type regulators are offered in a variety of adjustable pressure ranges, with convenient spring options for easy conversion should requirements change. Non-relieving models are also offered for applications where the venting of downstream overpressure is undesirable. A Mini Series regulator is available for fluid applications.

- Pipe sizes from 1/8" to 2" NPT
- Flows to 1,200 cfm (566 dm<sup>3</sup>/s)
- Maximum inlet pressures to 300 psig (21 bar)

## Lubricators



#### Lubricators

Ingersoll Rand fog-type lubricators help ensure that pneumatic devices receive the required lubrication to maintain operating performance, reduce wear, and prolong service life. They are designed to provide the correct amount of oil required for most general applications in a pneumatic system, delivering a constant ratio of oil to cfm. Precise oil feed adjustment allows the proper oil delivery rate. Lubricators should be installed close to the downstream application to ensure effective distribution of oil to pneumatic components.

- Pipe sizes from 1/8" to 2" NPT
- Flows to 1,186 cfm (560 dm<sup>3</sup>/s)
- Maximum inlet pressures to 250 psig (17 bar)

#### PRODUCT SELECTION

When selecting an FRL or individual filter, regulator, and lubricator units, the air consumption of the tools or equipment to be serviced should be correlated with the flow capacity of the FRL. Ingersoll Rand ARO filters, regulators, and lubricators are designed to flow in excess of that indicated in the maximum recommended flow table shown below. This table gives recommended flows for pipe sizes at listed pressures and should be used as a guide in sizing piping and equipment for compressed air systems.

#### MAXIMUM RECOMMENDED AIRFLOW (CFM) THROUGH A.N.S.I. STANDARD WEIGHT SCHEDULE 40 PIPE.\*

Applied					Nominal	Standard	Pipe Size				
Pressure psig	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
5	0.5	1.2	2.7	4.9	6.6	13	27	40	80	135	240
10	0.8	1.7	3.9	7.7	11	21	44	64	125	200	370
20	1.3	3	6.6	13	18.5	35	75	110	215	350	600
40	2.5	5.5	12	23	34	62	135	200	385	640	1100
60	3.5	8	18	34	50	93	195	290	560	900	1600
80	4.7	10.5	23	44	65	120	255	380	720	1200	2100
100	5.8	13	29	54	80	150	315	470	900	1450	2600
150	8.6	20	41	80	115	220	460	680	1350	2200	3900
200	11.5	26	58	108	155	290	620	910	1750	2800	5000
250	14.5	33	73	135	200	370	770	1150	2200	3500	6100

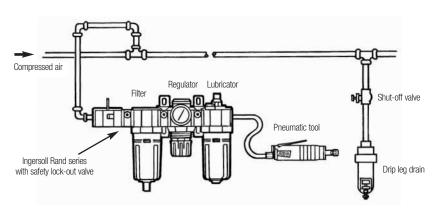
\*The flow values in the chart above are based upon a pressure drop (▲P) as set forth in the following schedule:

Pressure (▲) per 100' of Pipe	Pipe Size
10% of applied pressure	1/8", 1/4", 3/8", 1/2"
5% of applied pressure	3/4", 1, 1-1/4", 1-1/2", 2, 2-1/2", 3"

#### INSTALLATION

The filter, regulator, and lubricator should be installed in the order shown in the illustration below. If a coalescing filter is required, it should be installed downstream from a standard filter. Individual take-off lines to the FRL and air tool or equipment should be from the top of the compressed air line. Make sure that airflow markings are followed for proper flow direction through the FRL units.

To trap and expel water, sludge, and other contaminants which may collect on the bottom of the air line, a drip leg drain should be used. Drip leg drains should be installed at low points in the piping system and at the far end of the distribution system.



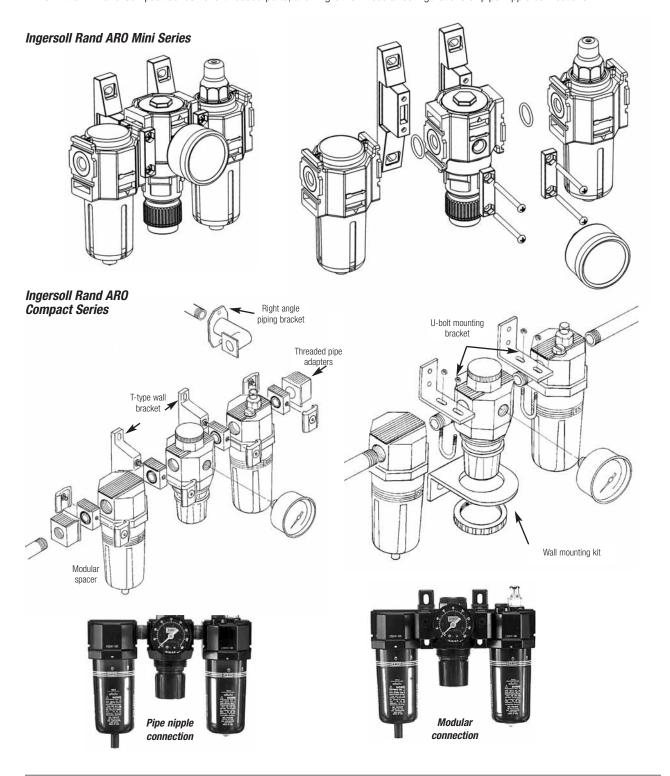


# **INGERSOLL RAND ARO® MINI AND COMPACT SERIES**

#### **MODULAR DESIGN**

## The Modular FRL with Pipe Nipple Capability

FRLs in the Mini and Compact Series have threaded ports, allowing either modular configurations or pipe nipple connections.



# **INGERSOLL RAND ARO® MINI SERIES**

#### **SERIES FEATURES**

- 1. T-type wall mounting bracket provides a rugged wall mount with excellent wall-to-unit clearance for installing connections.
- 2. Units have threaded ports in the housing allowing the user to mix pipe nipples and modular configurations to meet application requirements.
- 3. Modular clamp connects any two units together in a modular format. Screws are a combination of Phillips and slotted-head type.
- 4. Self-locking, non-rising regulator knob allows easy one-hand adjustment. Pull down to adjust, push up to lock.
- 5. Quick change bowl with 1/4 turn bayonet attachment. For safety, bowl cannot be removed when pressurized. Options provide the user with a bowl to fit any application.





Poly bowl w/ bowl quard

6. Lubricator / screwdriver adjustment slot has an optional tamper-resistant cap which prevents unauthorized adjustment of oil delivery.

• Safety lock-out valve meets OSHA regulation 1910.147 which requires protection from unexpected start-up of a machine during service or maintenance.



• Standard filter and coalescing filter provide 99.9% contaminant removal.



 Modular design permits removal of unit(s) from line. This allows for quick and easy repair and reduced downtime.



• Regulator flexibility allows the user to mount regulator up or down.



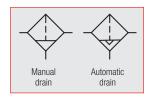


# INGERSOLL RAND ARO MINI SERIES FILTERS



Ingersoll Rand ARO® Mini Series Filters

#### 1/8" AND 1/4" PORT SIZES



#### PRODUCT FEATURES

Ingersoll Rand ARO Mini Series filters are designed to separate condensed water, rust, scale, and other debris from air lines that can cause wear and premature failure of air tools, valves, cylinders, air motors, and other air-driven equipment. Filter units should be installed upstream of the regulator or lubricator to protect them from contamination. These filters are ideal for OEM and MRO applications.

- · Glass-reinforced, composite bodies with threaded brass inserts are lightweight, corrosion-resistant, and have no paint to chip. Combination units can be pipe-nippled or clamped together in a modular configuration.
- Bowl guard has full-length slots for easy visual checking of liquid. A composite bowl is also available.
- Warning and technical information is printed in English, Spanish, French, and German on all bowl units.
- A quick-change bowl with bayonet attachment and line-up arrowheads provides easy bowl removal and filter element replacement.
- · Air inlet arrow is molded into base.
- 20 micron filter element is standard. Five micron element available at no extra charge.
- · Standard and automatic drain available.
- Bowl has external 1/8" NPT male thread, for piping away moisture.

#### PERFORMANCE SPECIFICATIONS

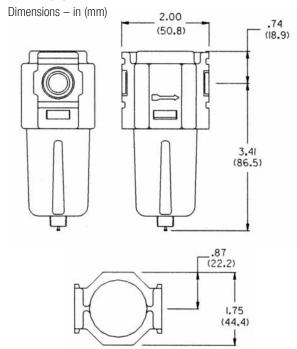
#### **Materials of Construction**

Body	Glass-reinforced, composite
	nylon
Bowl	Polycarbonate with bowl guard
	standard
<b>Bowl Guard</b>	Composite with sight windows
Seals	Buna-N
Drain	Push type
Filter Element	Porous polypropylene

#### **Operating Conditions**

Temp Range	0° – 125° F (-18° – 52° C)
<b>Max Inlet Pressure</b>	Polycarbonate bowl —
	150 psig (10.4 bar)
	Composite bowl —
	150 psig (10.4 bar)
Slump Capacity	.60 oz (18 ml)
Airflow	90 psig (6.2 bar) inlet and
	5 psig (0.4 bar) pressure drop
	1/8" — 28 cfm (13 dm³/s)
	1/4" — 38 cfm (18 dm³/s)

#### **DIMENSIONAL DATA**



# **INGERSOLL RAND ARO MINI SERIES FILTERS**

#### ORDERING\*

From the chart below, select the model number associated with the port size, bowl, and drain option required. If other options are needed, use the menu below the chart to select the proper model number. For BSP threads, consult our factory.

Note: Not all menu combinations are valid. See price book to verify.

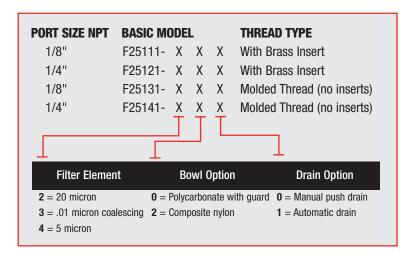
Port Size	Port Size Airflow Bowl Size NPT cfm oz (ml)		w Size Filter		Manı	al Push Drain	Automatic Drain			
			Element micron	Weight Ib (kg)	Composite Bowl	Polycarbonate Bowl with Guard	Composite Bowl	Polycarbonate Bowl with Guard		
Standa	rd Filte	'S								
1/8"	28	1.10 (33)	20	1.48 (.68)	F25111-220	F25111-200	F25111-221	F25111-201		
1/4"	38	1.10 (33)	20	1.46 (.66)	F25121-220	F25121-200	F25121-221	F25121-201		
Coalesc	cing Filt	ers								
1/8"	15	1.10 (33)	N/A	1.48 (.68)	F25111-320	F25111-300	F25111-321	F25111-301		
1/4"	17	1.10 (33)	N/A	1.46 (.68)	F25121-320	F25121-300	F25121-321	F25121-301		

<sup>\*</sup>Tables do not represent the complete offering. Refer to the model number key for additional combinations.

#### **COALESCING FILTERS**

These high efficiency filters are designed for applications where the delivered air must be free of oil and fine particles such as in paint spraying, instrumentation controls, and other compressed air applications. Use in conjunction with an upstream filter. (See example below.) Filter units should also be installed upstream of the regulator or lubricator to protect them from contamination. These filters are ideal for OEM and MRO applications.





Clamp Kit

T-type Wall Mount Bracket Kit





104262

Part Number	Description					
Filter Accessories						
104264	Automatic drain					
29660-2	20 Micron filter element					
29660-1 5 Micron filter element						
29586	.01 Micron filter element (coalescing)					
104259	Composite bayonet bowl					
104258	Polycarbonate bowl with guard					
104257	Service kit					
104262	T-type wall mounting bracket kit					
104263	Clamp kit					

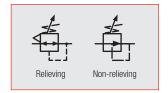


## **INGERSOLL RAND ARO** MINI SERIES REGULATORS



Ingersoll Rand ARO® Mini Series Regulators

## 1/8" AND 1/4" PORT SIZES



#### **PRODUCT FEATURES**

Ingersoll Rand ARO Mini Series regulators are designed to provide guick response and accurate pressure regulation over a wide range of applications. Two gauge ports allow for more versatility in mounting and usage of the unit. Three spring options provide high-range / low-range pressure capabilities.

- Glass-reinforced, composite bodies with threaded brass inserts are lightweight, corrosionresistant, and have no paint to chip. Combination units can be pipe-nippled or clamped together in a modular configuration.
- Non-rising, self-locking adjustment knob cannot be vibrated loose. Arrows on the knob allow for easy adjustment.
- Regulator can be mounted either up or down, increasing user flexibility.
- Regulator offers in-line repairability. Diaphragm can be replaced without removing unit from line.
- Regulator can be wall- or panel-mounted up to 3/16" thickness. Hole diameter is 1-3/16".
- A tamper-resistant knob is available.
- Order regulator with or without gauge.

### PERFORMANCE SPECIFICATIONS

### **Materials of Construction**

Body	Glass-reinforced composite		
Seals	Buna-N		
Diaphragm	Buna-N		
Valve Spring	Stainless steel		
<b>Spring Housing</b>	Glass-filled nylon		
Cap & Knob	High impact ABS		
Gauge Port	1/8" NPT		

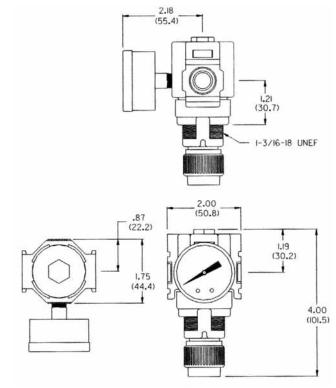
## **Operating Conditions**

Temp Range	0° – 125° F (-18° – 52° C)		
<b>Max Inlet Pressure</b>	e 250 psig (17 bar)		
Airflow	100 psig (6.9 bar) inlet and		
	90 psig (6.2 bar) outlet		
	1/8" — 13 cfm (6 dm³/s)		
	1/4" — 13 cfm (6 dm³/s)		

CAUTION: Outlet pressure adjustment ranges are not minimum or maximum outlet pressure limits. Regulators can be adjusted to zero psig secondary pressure and, generally, to pressures in excess of those specified. The use of these regulators to control pressures outside of the specified ranges is not recommended.

#### **DIMENSIONAL DATA**

Dimensions – in (mm)



## **INGERSOLL RAND ARO MINI SERIES REGULATORS**

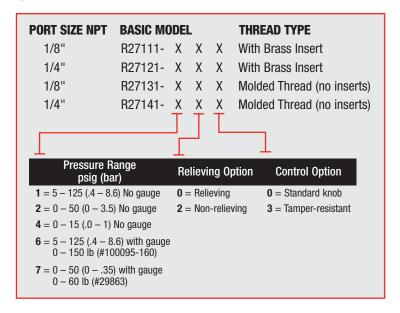
#### **ORDERING\***

From the chart below select the model number associated with the port size, pressure range, relieving, and control option required. If other options are needed, use the menu below the chart to select the proper model number. For BSP threads, consult our factory.

Note: Not all menu combinations are valid. See price book to verify.

Port Size NPT Airflow	rflow Weight	Withou	ut Gauge	With Gauge		
TOTE SIZE INT T	cfm	lb (kg)	5 – 125 psig	0 – 50 psig	5 – 125 psig	0 – 50 psig
Relieving Typ	e Regulat	ors				
1/8"	13	1.38 (.63)	R27111-100	R27111-200	R27111-600	R27111-700
1/4"	13	1.34 (.61)	R27121-100	R27121-200	R27121-600	R27121-700

<sup>\*</sup>Tables do not represent the complete offering. Refer to the model number key for additional combinations.



**Part** 

Number

29668

104094

104039

104255

104256

104109

Description

Mounting bracket

Panel mount nut

Stud mount

Service kit, relieving

Service kit, non-relieving

Tamper-resistant knob kit





104263

Gauge



100095-160

T-type Wall Mount Bracket Kit



29863	Gauge 0 – 60 psig
100095-160	Gauge 0 – 150 psig
29850	Gauge 0 – 160 psig
29846	Gauge 0 – 15 psig

**Regulator Accessories** 

Part Number	Description		
Regula	tor Accessories		
104265	Nut & bracket kit (includes 104094 nut & 29668 bracket)		
29539	Spring 5 – 125 lb (gold)		
29540	Spring 0 – 50 lb (green)		
29754-1	Spring 0 – 25 lb (blue)		
29622	Spring 0 – 15 lb (black)		
104262	T-type wall mounting bracket kit		
104263	Clamp kit		



## **INGERSOLL RAND ARO MINI SERIES** TER / REGULATOR PIGGYBACK





Ingersoll Rand ARO® Mini Series Filter / Regulator Piggyback

### 1/8" AND 1/4" PORT SIZES

#### **PRODUCT FEATURES**

Ingersoll Rand ARO Mini Series piggyback units are compact to save space, giving more design flexibility. These units have one common inlet / outlet for both the filter and regulator. This saves on space, set-up time, and piping costs.

- Glass-reinforced, composite bodies with threaded brass inserts are lightweight, corrosion-resistant, and have no paint to chip. Combination units can be pipe nippled or clamped together in a modular configuration.
- Non-rising, self-locking adjustment knob cannot be vibrated loose.
- · Arrows on the knob allow for easy adjustment.
- Regulator offers in-line repairability. Diaphragm can be replaced without removing unit from line.
- Bayonet bowl attachment with line-up arrowheads provides easy filter element removal. Arrowheads assure user of locked position.
- Standard and automatic drains available.
- Bowl has external 1/8" NPT thread, for piping away moisture.
- Polycarbonate bowl with guard or composite corrosion-resistant bowl available.
- · Air inlet arrow is molded into housing for easy air line hookup.

#### PERFORMANCE SPECIFICATIONS

### **Materials of Construction**

Body	Glass-reinforced bodies		
Bowl	Polycarbonate with bowl guard		
	standard		
Bowl Guard	Composite with sight windows		
Composite Bowl	Nylon		
Seals	Buna-N		
Drain	Push type		
Filter Element	Porous polypropylene		
Diaphragm	Buna-N		
Spring Housing	Glass-filled nylon		
Valve Spring	Stainless steel		

## **Operating Conditions**

**Airflow** 

Temp Range  $0^{\circ} - 125^{\circ} \text{ F (-18}^{\circ} - 52^{\circ} \text{ C)}$ 

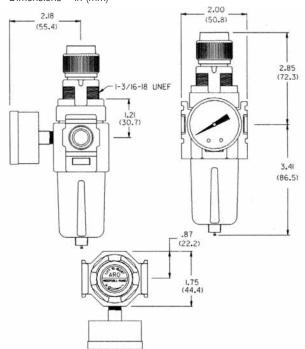
Max Inlet Pressure Poly bowl —

150 psig (10.4 bar) Composite bowl — 150 psig (10.4 bar) 90 psig (6.2 bar) inlet 5 psig (0.4 bar) pressure drop

1/8" — 13 cfm (6 dm<sup>3</sup>/s) 1/4" — 13 cfm (6 dm<sup>3</sup>/s)

## **DIMENSIONAL DATA**

Dimensions - in (mm)



CAUTION: Outlet pressure adjustment ranges are not minimum or maximum outlet pressure limits. Regulators can be adjusted to zero psig secondary pressure and, generally, to pressures in excess of those specified. The use of these regulators to control pressures outside of the specified ranges is not recommended.

## **INGERSOLL RAND ARO MINI SERIES** TER / REGULATOR PIGGYBACK

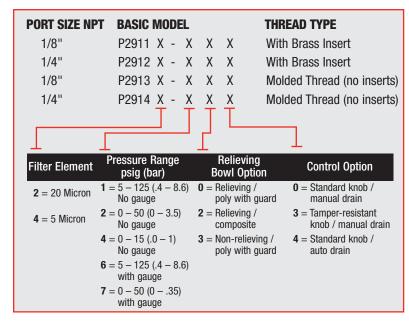
### **ORDERING\***

From the chart below, select the model number associated with the port size, pressure range, and drain option required. If other options are needed, use the menu below the chart to select the proper model number. For BSP threads, consult our factory.

Port Size	Airflow cfm	Weight lb (kg)	Filter Element	Pressure Range	Comp	osite Bowl	Poly Bowl w	vith Bowl Guard
NPT			micron	psig (bar)	Push Drain	Automatic Drain	Push Drain	Automatic Drain
1/8"	13	2.05 (.93)	20	5 – 125 (.4 – 8.6)	P29112-120	P29112-124	P29112-100	P29112-104
1/4"	13	2.03 (.92)	20	5 – 125 (.4 – 8.6)	P29122-120	P29122-124	P29122-100	P29122-104

Note: Not all menu combinations are valid. See price book to verify.

\*Tables do not represent the complete offering. Refer to the model number key for additional combinations







Kit includes screws and 0-ring



Gauge

100095-160

## T-type Wall Mount Bracket Kit



Kit includes T-bracket, clamp, screws, and O-ring

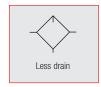
104262

Part Number	Description			
Piggyback Accessories				
29668	Mounting bracket			
104094	Panel mount nut			
104039	Stub mount			
104255	Service kit, relieving			
104256	Service kit, non-relieving			
104109	Tamper-resistant kit			
104263	Clamp kit			
104262	T-type wall mount bracket kit			
29863	Gauge 0 – 60 psig			
100095-160	Gauge 0 – 150 psig			
29846	Gauge 0 – 15 psig			
29850	Gauge 0 – 160 psig			

Part Number	Description		
Piggyba	ck Accessories		
104258	Poly bowl with guard		
104259	Composite bowl		
104265	Nut & bracket kit (includes 104094 nut & 29668 bracket)		
29660-1	5 Micron element		
29660-2	20 Micron element		
104264	Pulse drain kit		



## **INGERSOLL RAND ARO** MINI SERIES LUBRICATORS





Ingersoll Rand ARO® Mini Series Lubricators

#### 1/8" AND 1/4" PORT SIZES

#### **PRODUCT FEATURES**

Ingersoll Rand ARO Mini Series lubricators feature an adjustment needle on top of the transparent sight dome with finer threads and improved tolerances between the needle and seat. This allows for easy drip rate adjustment. The required amount of lubrication can be efficiently delivered for longer life of tools, cylinders, valves, pumps, air motors, and other air-operated equipment. Lightweight, non-detergent oils, like ARO pneumatic lubricating oil (part number 29665) is recommended.

- The oil adjustment feature has a tamper-resistant plug (part number 104027) which helps prevent unauthorized adjustment of oil.
- Transparent sight dome has 360° visibility.
- · Bayonet bowl provides easy removal to allow quick oil refill.
- Glass-reinforced, composite bodies with threaded brass inserts are lightweight, corrosion-resistant, and have no paint to chip. Combination units can be pipe nippled or clamped together in a modular configuration.

## PERFORMANCE SPECIFICATIONS

### **Materials of Construction**

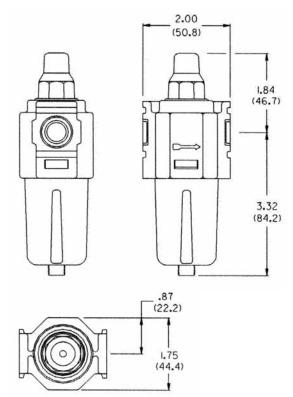
Body	Glass-reinforced bodies		
Bowl	Polycarbonate with bowl guard		
	standard		
<b>Bowl Guard</b>	Composite with sight windows		
Seals	Buna-N		
Sight Dome	Nylon		

## **Operating Conditions**

Temp Range	0° - 125° F (-18° - 52° C)		
<b>Max Inlet Pressure</b>	Polycarbonate bowl —		
	150 psig (10.4 bar)		
	Composite bowl —		
	150 psig (10.4 bar)		
Oil Capacity	1.10 oz (33 ml)		
Airflow	90 psig (6.2 bar) inlet		
	5 psig (0.4 bar) pressure drop		
	1/8" — 41 cfm (91 dm³/s)		
	1/4" — 60 cfm (28 dm³/s)		

## **DIMENSIONAL DATA**

Dimensions - in (mm)



## **INGERSOLL RAND ARO MINI SERIES LUBRICATORS**

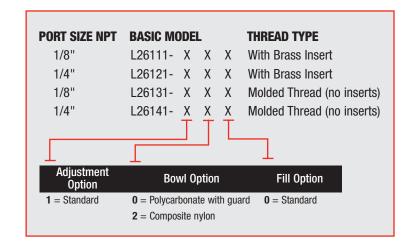
#### **ORDERING\***

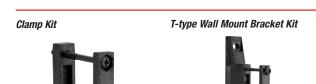
From the chart below, select the model number associated with the port size and bowl option required. If other options are needed, use the menu below the chart to select the proper model number. For BSP threads, consult our factory.

Note: Not all menu combinations are valid. See price book to verify.

Port Size NPT	Airflow cfm	Bowl Size oz (ml)	Weight lb (kg)	Composite Bowl	Poly Bowl with Bowl Guard
1/8"	41	1.10 (33)	1.50 (.68)	L26111-120	L26111-100
1/4"	60	2.03 (.92)	1.44 (.65)	L26121-120	L26121-100

<sup>\*</sup>Tables do not represent the complete offering. Refer to the model number key for additional combinations.





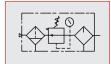
104262

104263





# INGERSOLL RAND ARO MINI SERIES COMBINATION UNITS

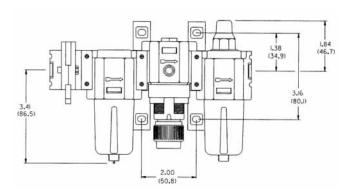




Ingersoll Rand ARO Mini Series **Combination Unit** 

#### **DIMENSIONAL DATA**

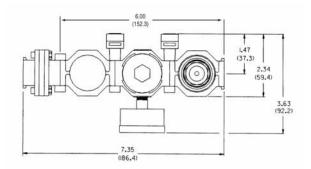
Dimensions – in (mm)



### FILTER / REGULATOR / LUBRICATOR COMBO

### PERFORMANCE SPECIFICATIONS

Max Inlet Pressure	150 psig (10.4 bar)
Temp Range	0° – 125° F (-18° – 52° C)
Filter Element	20 micron
Pressure Range In	5 – 125 psig
Regulator	(.4 - 8.6  bar)
Gauge	0 – 150 psi
Gauge Port	1/8" NPT



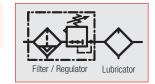
#### **ORDERING**

Select the basic model number which represents the port size and bowl option required. If other options are required, order each unit separately. Units are shipped assembled. For BSP threads, consult our factory.

Port Size NPT	N	<b>l</b> odels	Weight		Components	
		without T-mounts	lb (kg)	Filter	Regulator	Lubricator
Push Drair	– Polycarbon	ate Bowl with Bow	l Guard			
1/8"	C28111-800	C28112-800	5.54 (1.88)	F25111-200	R27111-600	L26111-100
1/4"	C28121-800	C28122-800	5.42 (2.46)	F25121-200	R27121-600	L26121-100
Automatic	Drain - Polyca	arbonate Bowl with	Bowl Guar	d		
1/8"	C28111-801	C28112-801	5.54 (1.88)	F25111-201	R27111-600	L26111-100
1/4"	C28121-801	C28122-801	5.42 (2.46)	F25121-201	R27121-600	L26121-100

Notes: Order lock-out valve separately and attach to filter inlet with clamp kit (104263). To order modular model with pipe nipples, place a "3" in the sixth position of the model number. Example: C28XX3-XXX.

# INGERSOLL RAND ARO MINI SERIES COMBINATION UNITS

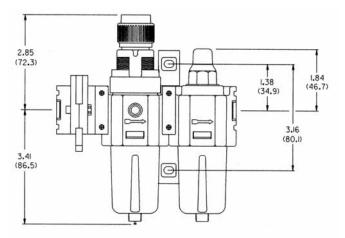




Ingersoll Rand ARO Mini Series Piggyback / Lubricator Combination Unit

### **DIMENSIONAL DATA**

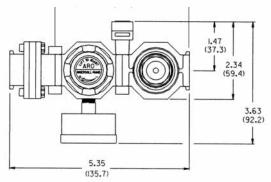
Dimensions – in (mm)





### PERFORMANCE SPECIFICATIONS

Max Inlet Pressure	150 psig (10.4 bar)
Temp Range	0° – 125° F (-18° – 52° C)
Filter Element	20 micron
Pressure Range in	5 – 125 psig
Regulator	(.4 - 8.6 bar)
Gauge	0 – 150 psi
Gauge Port	1/8" NPT



### **ORDERING\***

Select the basic model number which represents the port size and bowl option required. If other options are required, order each unit separately. Units are shipped assembled. For BSP threads, consult our factory.

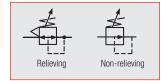
Port Size NPT	M	odels	Weight	Components	
T OF T SIZE IN T	w/ T-Mounts	w/o T-Mounts	lb (kg)	Filter / Regulator	Lubricator
Push Drain –	Polycarbonate Boy	vl w/ Bowl Guard			
1/8"	C28111-600	C28112-600	4.14 (1.88)	P29112-600	L26111-100
1/4"	C28121-600	C28122-600	4.06 (1.84)	P29122-600	L26121-100
Automatic Dr	ain – Polycarbonat	e Bowl w/ Bowl Guard	d		
1/8"	C28111-601	C28112-601	4.14 (1.88)	P29112-604	L26111-100
1/4"	C28121-601	C28122-601	4.06 (1.84)	P29122-604	L26121-100

Notes: Order lock-out valve separately and attach to filter inlet with clamp kit (104263). To order modular model with pipe nipples, place a "3" in the sixth position of the model number. Example: C28XX3-XXX.



<sup>\*</sup>Tables do not represent the complete offering. Refer to the model number key for additional combinations.

# INGERSOLL RAND ARO MINI SERIES COMPOSITE REGULATORS





Ingersoll Rand ARO® Mini Series Composite Regulators

127122-600 (shown with 29850 gauge)

#### 1/8" AND 1/4" PORT SIZES

#### **PRODUCT FEATURES**

Ingersoll Rand ARO Mini Series composite regulators are the ideal choice where a small, compact unit is required to provide accurate control of either airflow or waterflow. Its diaphragm design provides a durable, no-leak seal especially effective in water and low-flow applications. Offering exceptional repetition, the ARO Mini regulator quickly returns to within 1% of its initial setting after any change in downstream pressure, when used in the mid-range of its rated regulatory capability. This regulator is constructed of materials approved by the National Sanitation Foundation (NSF).

- · A corrosion-resistant, glass-reinforced composite body can be ordered with either molded threads or corrosion-resistant, zinc-plated steel inserts.
- A stainless steel valve spring is the only metallic part to come in contact with the regulated medium.
- Buna-N diaphragm is fabric-reinforced for superior sealing in water and low-flow applications.
- Regulator can be panel-mounted up to a thickness of 3/16" and a 1-3/16" 18-spring housing thread allows easy panel mounting.
- A non-rising, locking adjustment knob cannot be vibrated loose. Simply pull and rotate the knob to adjust the downstream pressure setting. A tamper-resistant adjustment knob is also available.

### PERFORMANCE SPECIFICATIONS

#### Materials of Construction

Body	Glass-reinforced composite
Seals	Buna-N
Diaphragm	Buna-N
Valve Seat	Acetal resin
<b>Spring Housing</b>	Glass-filled nylon
Knob	Acetal resin
Valve Spring	Stainless steel

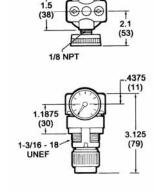
## **Performance Specifications**

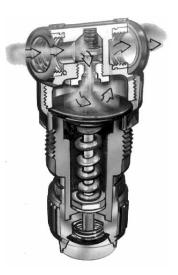
<b>Max Inlet Pressure</b>	250 psig (17 bar)
Pressure Range In	0 – 125 psig
Regulator	(0 - 8.6  bar)
Temp Range	0° – 150° F (-18° – 65° C)
Weight	1/8" — .25 lb (115 g)
	1/4" — .22 lb (100 g)
*Airflow	1/8" — 13 cfm (6 dm³/s)
	1/4" — 13 cfm (6 dm³/s)
**Waterflow	1/8" — 1.75 gpm (6.6 L/min)
	1/4" — 2 gpm (7.6 L/min)
Gauge Port	1/8" NPT

<sup>\*</sup>Airflow is at 125 psig (8.6 bar) inlet and 100 psig (6.9 bar) outlet. \*\*Waterflow is at 60 psig (4.1 bar) inlet and 40 psig (2.8 bar) outlet.

#### **DIMENSIONAL DATA**

Dimensions - in (mm)





CAUTION: Outlet pressure adjustment ranges are not minimum or maximum outlet pressure limits. Regulators can be adjusted to zero psig secondary pressure and, generally, to pressures in excess of those specified. The use of these regulators to control pressures outside of the specified ranges is not recommended.

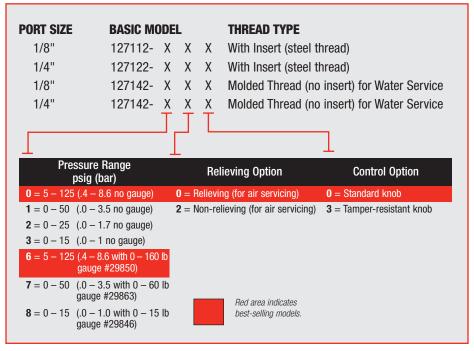
## **INGERSOLL RAND ARO MINI SERIES COMPOSITE REGULATORS**

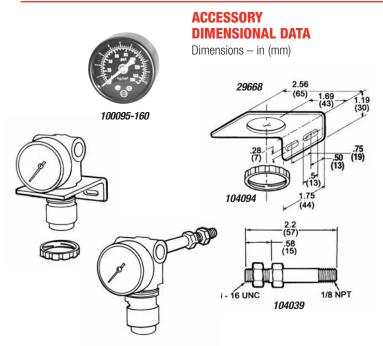
#### **ORDERING\***

Regulators with 1/8" and 1/4" port sizes are ideal for water and low-flow applications. Select the basic model number associated with the thread type and port size (1/8" or 1/4") desired from the table below. For BSP threads, consult our factory.

Note: Not all menu combinations are valid. See price book to verify.

\*Tables do not represent the complete offering. Refer to the model number key for additional combinations.





Part Number	Description
Regulator Acc	cessories
29846	Gauge 0 – 15 psig (0 – 1 bar)
29755-1	Gauge 0 – 30 psig (0 – 2 bar)
29863	Gauge 0 – 60 psig (0 – 4 bar)
29850	Gauge 0 - 160 psig (0 - 11 bar)
100095-160	Gauge 0 – 150 psig (0 – 10 bar)
29539	Spring 5 – 125 lb (gold)
29540	Spring 0 – 50 lb (green)
29754-1	Spring 0 – 25 lb (blue)
29622	Spring 0 – 15 lb (black)
29668	Mounting bracket
104094	Panel mounting nut
104039	Stud mount
104158	Service kit, relieving type
104159	Service kit, non-relieving type
104109	Tamper-resistant knob kit
104265	Nut & bracket kit (includes 104094 nut & 29668 bracket)



# INGERSOLL RAND ARO MINI SERIES ACCESSORY KITS

Kit Number	Description	Kit Contents
Filter Accessor	y Kits	
29586	Coalescing .01 micron element	(1) Element
29660-1	5 micron element	(1) Element
29660-2	20 micron element	(1) Element
104257	Service kit	(2) 0-rings
104258	Polycarbonate bowl with guard	(1) Polycarbonate bowl with guard, (1) valve, (1) 0-ring
104259	Composite bowl	(1) Composite bowl, (1) valve, (1) 0-ring
104264	Automatic drain kit	(1) Pulse drain, (1) 0-ring
Regulator Acce	ssory Kits	
104039	Stud mount	(1) Stud and mounting nut
104109	Tamper-resistant knob kit	(1) Knob
104255	Service kit (relieving)	(1) Spring, (1) washer, (1) diaphragm, (1) O-ring
104256	Service kit (non-relieving)	(1) Spring, (1) washer, (1) diaphragm, (1) 0-ring
104265	Mounting nut bracket kit	(1) Mounting nut, (1) wall bracket
Lubricator Acce	essory Kits	
104181	Service kit	(1) Compensating valve, (1) 0-ring
104260	Polycarbonate bowl with guard	(1) Polycarbonate bowl with guard, (1) O-ring
104261	Composite bowl	(1) Composite bowl, (1) O-ring
Modular Compo	onents Accessory Kits	
104253-1	Safety lock-out / tag-out	1/8" NPT threads
104253-2	Safety lock-out / tag-out	1/4" NPT threads
104253-1-B	Safety lock-out / tag-out	1/8" BSP threads
104253-2-B	Safety lock-out / tag-out	1/4" BSP threads
104254-1	Manifold	1/8" NPT manifold, (1) Pipe plug
104254-2	Manifold	1/4" NPT manifold, (1) Pipe plug
104254-1-B	Manifold	1/8" BSP manifold, (1) Pipe plug
104254-2-B	Manifold	1/4" BSP manifold, (1) Pipe plug
104262	T-bracket mounting kit	(1) Bracket, (1) O-ring, (2) screws
104263	Clamp kit	(2) Clamps, (1) 0-ring, (2) screws
Y237-2	Pipe nipple	1/8" NPT threads
Y27-2-C	Pipe nipple	1/4" NPT threads

# INGERSOLL RAND ARO MINI SERIES COMPONENTS AND ACCESSORIES



#### **MODULAR CLAMP KIT**

One clamp kit is required to connect any two units or accessories together in the modular format. Kit includes two clamps, one O-ring, and screws. To assemble, simply put the O-ring and clamp between the units and tighten screws for a secure seal.

Part Number	Description
104263	Clamp kit (fits all port sizes)



## T-TYPE WALL MOUNTING BRACKETS

These brackets provide easy wall mounting. They are excellent for mounting a single unit or multiple units in the modular arrangement. T-type mount gives good wall-to-unit clearance for installing fittings and other connections. Kit includes a bracket, clamp, two screws, and O-ring.

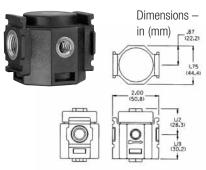
Part Number	Description
104262	T-type wall mounting bracket kit (fits all port sizes)

## 104262

#### MODULAR MANIFOLD KIT

The manifold block is an excellent way to provide circuit design flexibility. The manifold has two 1/8" NPT ports which allow for clean, regulated air to be sent to signal or run other equipment. Kit includes manifold only. Order 104263 clamp kits as needed.

Part Number	Description
104254-1	1/8" Modular manifold kit
104254-2	1/4" Modular manifold kit

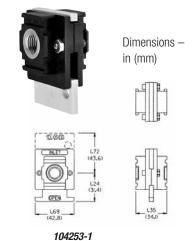


104254-1

### **LOCK-OUT, 3-WAY SHUT-OFF VALVE**

Meets OSHA regulation 1910.147. This lock-out valve provides a safety lock-out to prevent accidental machine start-up. When slider valve is shifted into the lock-out position, inlet air is blocked and downstream air is exhausted to the atmosphere. Unit has threaded ports for plumbing directly to an air line or can be mounted in the modular arrangement. Order 104263 clamp kits as needed.

Part Number	Description
104253-1	1/8" NPT ports lock-out, 3-way shut-off valve
104253-2	1/4" NPT ports lock-out, 3-way shut-off valve



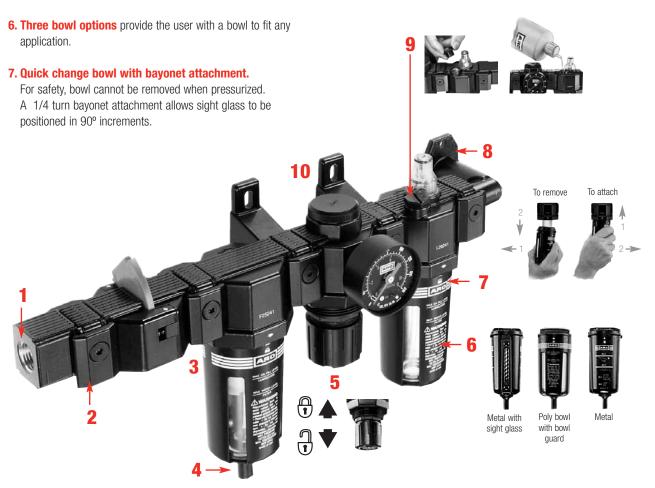


## **INGERSOLL RAND ARO® COMPACT SERIES**

### **SERIES FEATURES**

- 1. Units have threaded ports in the housing which allow the user to mix pipe nipples and modular configurations to meet specific application needs.
- 2. Modular spacer has retained O-rings and screws to prevent loss during routine maintenance and to simplify assembly. Screws are 5/32" or 4 mm Allen head type.
- 3. Durable black finish with silkscreened graphics (no labels), enhances the overall look of any machine or fixture.
- 4. Patented double seal push drain is easy to operate and requires no tools for service. Optional automatic drain eliminates manual draining.
- 5. Push / pull non-rising regulator knob allows easy one-hand adjustment. Pull down to adjust, push up to lock.

- 8. Right angle panel bracket provides for a cleaner installation and doubles as a mounting bracket. Flow enters from behind the panel through the panel brackets.
- 9. Lubricator has large fill port which can be serviced under pressure, simplifying routine maintenance. Screwdriver adjustment slot has an optional tamper-resistant cap which prevents unauthorized adjustment of oil delivery.
- 10. T-type wall mounting bracket provides a rugged heavyduty wall mount with excellent wall-to-unit clearance for installing connections.



## **INGERSOLL RAND ARO COMPACT SERIES**

### **SERIES FEATURES**

 Safety lock-out valve meets OSHA regulation 1910.147 which requires protection from unexpected start-up during service or maintenance.



• Pipe adapters are available in 1/4", 3/8", 1/2", and 3/4" pipe sizes.



• Filter / coalescing filter provides 99.9% contaminant removal.



• Totally modular design permits removal of unit(s) from line without disturbing the hard piping. This allows for quick, easy repair and reduced downtime.



• Mount regulator up or down for increased mounting flexibility.



• Filter with optional service life indicator shows when element is clogged and needs service.

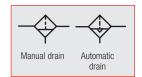


• Manifold block provides additional circuit design.





# INGERSOLL RAND ARO COMPACT SERIES FILTERS





Ingersoll Rand ARO Compact Series Filters

## 1/4", 3/8", AND 1/2" PORTS

#### **FEATURES**

Ingersoll Rand ARO Compact Series filters are designed to remove any rust, scale, condensed water, and other debris that can cause wear and premature failure of air tools, valves, cylinders, air motors, and other air-driven equipment. Filter units should be installed upstream of the regulator and lubricator to protect them from contamination. These filters are ideal for OEM and MRO applications.

- Units have threaded ports for direct connection to pipe plumbing or, when used with modular port adapter kits, a single unit or combination of units can be piped into the air system in a modular arrangement.
- Rugged zinc die-cast bowl guard has large, full-length slots for easy visual checking of liquid. Other bowl options include a metal bowl with sight glass and a plain metal bowl.
- · Warning and technical information is printed in English, Spanish, French, and German on standard units.
- · The quick change bowl with bayonet attachment provides easy bowl removal and filter element replacement. Bayonet attachment design allows sight gauge location at 90° increments.
- Optional filter service life indicator shows when element is clogged and needs changing.
- These compact units offer a 40-micron filter element with 12 percent more filter area.
- Automatic drain has 1/8" NPT connection for drain line; 10 psig minimum operating pressure.

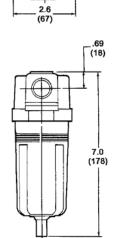
### PERFORMANCE SPECIFICATIONS

Body	Zinc die-cast			
Bowls	Polycarbonate or zinc die-cast			
<b>Bowl Guard</b>	Zinc die-cast			
Sight Glass	Polyimide-nylon 12			
Seals	Buna-N			
Drain	Brass and Buna-N			
Filter Element	Porous polypropylene			
Sump Capacity	2.87 oz (85 cc)			
Filter Area	8.24 sq in (5318 mm²)			
<b>Max Inlet Pressure</b>	e Polycarbonate bowl — 150 psig (10.4 ba			
	Metal bowl — 175 psig (12 bar)			
Operating	Polycarbonate bowl —			
Temp Range	0° - 125° F (-18° - 52° C)			
	Metal Bowl —			
	0° – 175° F (-18° – 79° C)			
*Airflow	1/4" — 54 cfm (25 dm³/s)			
	3/8" — 100 cfm (47 dm³/s)			
	1/2" — 122 cfm (58 dm³/s)			

<sup>\*</sup>Airflow is at 90 psig (6.2 bar) inlet and 5 psig (0.4 bar) pressure drop.

### **DIMENSIONAL DATA**

Dimensions – in (mm)





## **INGERSOLL RAND ARO COMPACT SERIES FILTERS**

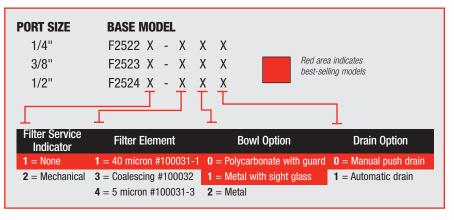
### **ORDERING**

From the chart below, select the model number associated with the port size, bowl, and drain option required. If other options are needed, use the menu at the bottom.

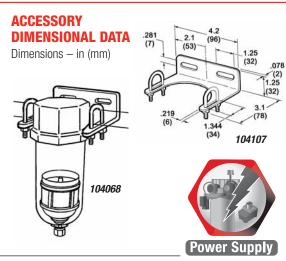
Port Size NPT in	Airflow cfm (dm³/s)	Model	Bowl Size oz (ml)	Filter Element micron	Weight Ib (kg)		
Flex Drain —	Metal Bowl with Sight Glass						
1/4"	54 (25)	F25221-110	6.0 (177)	40	1.48 (.68)		
3/8"	100 (47)	F25231-110	6.0 (177)	40	1.46 (.66)		
1/2"	122 (58)	F25241-110	6.0 (177)	40	1.43 (.65)		
Flex Drain —	Polycarbonate	Bowl with Bo	owl Guard				
1/4"	54 (25)	F25221-100	6.0 (177)	40	1.48 (.68)		
3/8"	100 (47)	F25231-100	6.0 (177)	40	1.46 (.66)		
1/2"	122 (58)	F25241-100	6.0 (177)	40	1.43 (.65)		
Automatic Dra	in — Metal B	owl with Sigh	t Glass				
1/4"	54 (25)	F25221-111	6.0 (177)	40	1.48 (.68)		
3/8"	100 (47)	F25231-111	6.0 (177)	40	1.46 (.66)		
1/2"	122 (58)	F25241-111	6.0 (177)	40	1.43 (.65)		
Automatic Dra	Automatic Drain — Polycarbonate Bowl with Bowl Guard						
1/4"	54 (25)	F25221-101	6.0 (177)	40	1.48 (.68)		
3/8"	100 (47)	F25231-101	6.0 (177)	40	1.46 (.66)		
1/2"	122 (58)	F25241-101	6.0 (177)	40	1.43 (.65)		

## **ADDITIONAL MODELS AVAILABLE**

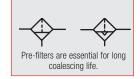
Select the basic model number associated with the port size desired. From the table below, select the numbers representing the filter options required. For BSP threads, add -B to end of model number.



Part Number	Description				
Filter Acces	Filter Accessories				
104068	Automatic drain for filter bowl				
104107	Mounting bracket for use with pipe nipples				
104149	Push drain kit for filter bowl				
104176	Filter service kit (includes 0-ring and manual drain)				
104182	Sight glass service kit (includes 2 0-rings and sight glass)				
100031-1	40 micron filter element				
100031-2	20 micron filter element				
100031-3	5 micron filter element				
100032	Coalescing filter element				
104202	Polycarbonate bowl with guard				
104204	Metal bowl with sight glass				
104206	Metal bowl				
104248	Activated charcoal element				



# INGERSOLL RAND ARO COMPACT SERIES





Ingersoll Rand ARO Compact Series Coalescing Filters

## 1/4", 3/8", AND 1/2" PORTS

### **PRODUCT FEATURES**

These high efficiency filters are designed for paint spraying, instrumentation controls, and other compressed air applications where the delivered air must be free of oil and fine particles. These filters are ideal for OEM and MRO applications.

- One-piece coalescing filter element removes 99.9 percent of oil aerosols and particles down to .3 micron.
- Units have threaded ports for direct connection to pipe plumbing.
- · Warning and technical information is printed in English, Spanish, French, and German on standard units.
- Bayonet bowl attachment provides easy bowl removal and filter element replacement.
- Optional filter service life indicator shows when element needs changing.

#### **ORDERING**

From the chart, select the model number associated with the port size, and bowl, and drain option required. If other options are needed, use the menu below.

Performance specifications (excluding Airflow), dimensions, and accessories are the same as standard filters.

#### RECOMMENDED INSTALLATION

Use in conjunction with an upstream filter. Filter units shoul installed upstream of the regulator or lubricator to protect tl from contamination.



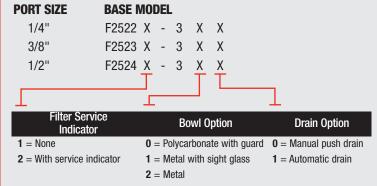
	1
ld be	3
hem	1
	Au
	1
1.3 (33)	3
,,	1
2.6	Au
(67)	1
1	3
-1	1
PORT SIZ	ZE

Port Size NPT	Airflow cfm (dm³/s)	Model	Bowl Size oz (ml)	Weight Ib (kg)
Push Drai	n — Metal Bo	wl with Sight	Glass	
1/4"	40 (17)	F25221-310	6.0 (177)	1.48 (.68)
3/8"	51 (24)	F25231-310	6.0 (177)	1.46 (.66)
1/2"	53 (25)	F25241-310	6.0 (177)	1.43 (.65)
Flex Drair	ı — Polycarbo	nate Bowl w	ith Bowl Gu	ard
1/4"	40 (17)	F25221-300	6.0 (177)	1.48 (.68)
3/8"	51 (24)	F25231-300	6.0 (177)	1.46 (.66)
1/2"	53 (25)	F25241-300	6.0 (177)	1.43 (.65)
Automatio	c Drain — Met	al Bowl with	Sight Glass	3
1/4"	54 (25)	F25221-311	6.0 (177)	1.48 (.68)
3/8"	100 (47)	F25231-311	6.0 (177)	1.46 (.66)
1/2"	122 (58)	F25241-311	6.0 (177)	1.43 (.65)
Automatio	Drain — Poly	carbonate B	owl with Bo	owl Guard
1/4"	54 (25)	F25221-301	6.0 (177)	1.48 (.68)
3/8"	100 (47)	F25231-301	6.0 (177)	1.46 (.66)
1/2"	122 (58)	F25241-301	6.0 (177)	1.43 (.65)

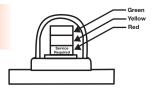
## ADDITIONAL MODELS AVAILABLE

Select the basic model number associated with the port size desired. From the table at the right, select the number representing the filter options required. For BSP threads, add -B to the end of model number.

NOTE: Not all menu combinations are valid. See price book to verify.



## **INGERSOLL RAND ARO COMPACT SERIES** FILTERS WITH SERVICE INDICATORS





## 1/4", 3/8" AND 1/2" PORTS

### **PRODUCT FEATURES**

Units equipped with the Filter Service Indicator are designed to indicate when the filter element is clogged and needs to be serviced. The highly visible rising collar can be seen from any angle. Pressure is monitored at two different points in a system (inlet and outlet) and acts on opposite sides of a diaphragm sensor. A change in pressure causes the collar to rise, indicating the element is clogged.

- Pop-up, three-color indicator provides visual monitoring of filter element efficiency.
- · Service life indicator changes from green to red when element is clogged and needs changing.
- The rising collar is visible from 360 degrees.

Flex Drain — Polycarbonate bowl with bowl guard F25242-300

### **ORDERING**

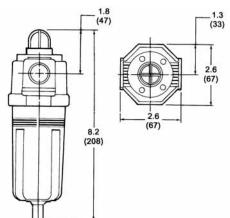
From the chart, select the model number associated with the port size, bowl, and drain option required. Specifications, options, and accessories are the same as standard filters.

Port Size NPT	Airflow cfm (dm³/s)	Model Cap with Standard Element	Airflow cfm (dm³/s)	Model Cap with Coalescing Element		
Push Drain	Push Drain — Metal Bowl with Sight Glass					
1/4"	54 (25)	F25222-110	40 (17)	F25222-310		
3/8"	100 (47)	F25232-110	51 (24)	F25232-310		
1/2"	122 (58)	F25242-110	53 (25)	F25242-310		
Flex Drain	— Polycarbon	ate Bowl with Bo	wl Guard			
1/4"	54 (25)	F25222-100	40 (17)	F25222-300		
3/8"	100 (47)	F25232-100	51 (24)	F25232-300		
1/2"	122 (58)	F25242-100	53 (25)	F25242-300		

NOTE: All model combinations are listed.

#### **DIMENSIONAL DATA**

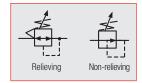
Dimensions – in (mm)



Part Number	Description				
Coalescin	Coalescing Filter Accessories				
104068	Automatic drain for filter bowl				
104107	Mounting bracket for use with pipe nipples				
104149	Push drain kit for filter bowl				
104176	Filter service kit (includes 0-ring and manual drain)				
104182	Sight glass service kit (includes 2 0-rings and sight glass)				
100032	Coalescing filter element				
104202	Polycarbonate bowl with guard				
104204	Metal bowl with sight glass				
104206	Metal bowl				



## INGERSOLL RAND ARO **OMPACT SERIES REGULATORS**





Ingersoll Rand ARO Compact Regulators R27241-600

## 1/4", 3/8", AND 1/2" PORTS

#### **FEATURES**

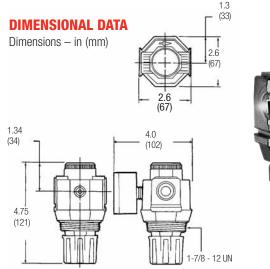
Ingersoll Rand ARO Compact Series regulators are designed to provide quick response and accurate pressure regulation over a wide range of applications. Two gauge ports allow for more versatility in mounting and usage of the unit. Three spring options allow for spring changes, instead of entire regulator changes, to meet most air pressure application requirements.

- Units have threaded ports for direct connection to pipe plumbing or, when used with modular port adapter kits, a single unit or combination of units can be piped into the air system in a modular arrangement.
- Push / pull, non-rising knob allows one-hand adjustment. Pull to adjust, push to lock. Arrows on the knob indicate direction of pressure increase / decrease.
- · Regulator can be mounted either up or down, increasing user flexibility.
- Balanced valve-type diaphragm regulation assures positive pressure adjustment and rapid response to inlet pressure changes.
- · Regulator offers in-line repairability. Valve and diaphragm can be replaced without removing unit from line.
- Regulator can be panel-mounted up to 1/4" thickness. Hole diameter is 1-7/8".
- Buna-N diaphragm and seals provide excellent elasticity and longer life.
- A tamper-resistant clamp is available. Units can be preset and locked to specific requirements.
- Order regulator with or without gauge.

### PERFORMANCE SPECIFICATIONS

Body	Zinc die-cast		
Seals	Buna-N		
Diaphragm	Buna-N		
Valve	Brass		
Spring Housing	Glass-filled nylon		
Cap and Knob	High impact ABS		
Max Inlet Pressure	200 psig (13.8 bar)		
Pressure Range	0 - 200 psig (0 - 13.8 bar)		
In Regulator			
Operating	0° – 180° F (-18° – 82° C)		
Temp Range			
Gauge Port	1/4" NPT		
*Airflow	1/4" — 100 cfm (47 dm <sup>3</sup> /s)		
	3/8" — 130 cfm (61 dm³/s)		
	1/2" — 150 cfm (71 dm³/s)		

<sup>\*</sup>Airflow is at 100 psig (6.9 bar) inlet and 90 psig (6.2 bar) outlet.





CAUTION: Outlet pressure adjustment ranges are not minimum or maximum outlet pressure limits. Regulators can be adjusted to zero psig secondary pressure and, generally, to pressures in excess of those specified. The use of these regulators to control pressures outside of the specified ranges is not recommended.

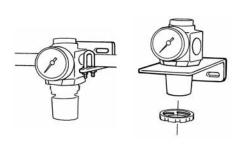
# INGERSOLL RAND ARO COMPACT SERIES REGULATORS

#### **ORDERING**

From the chart below, select the model number associated with port size, bowl, and drain option required. If other options are needed, use menu at bottom.

### **ADDITIONAL MODELS AVAILABLE**

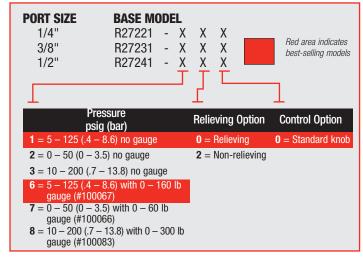
Select the basic model number associated with the port size desired. From the table to the right, select the numbers representing the regulator options required. For BSP threads, add -B to end of model number.





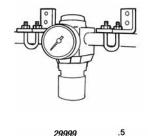
Part Number	Description				
Regulator I	Regulator Accessories				
100066	Gauge 0 – 60 psig				
100067	Gauge 0 – 160 psig				
100083	Gauge 0 – 300 psig				
104107	Mounting bracket				
104172	Wall mounting kit (includes panel nut & bracket)				
104173	Panel mount nut				
104175	Tamper-resistant kit				
104177	Service kit, relieving type				
104178	Service kit, non-relieving type				
104209	Knob repair kit				
29594	Spring, 5 – 125 lb (gold)				
29595	Spring, 0 – 50 lb (green)				
29596	Spring, 10 – 200 lb (silver)				
29623	Wall mounting bracket				
29999	U-bolt mounting bracket				

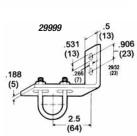
Port Size	Airflow	Model Sp	Weight	
NPT	cfm (dm $^3$ /s) 0 – 50 psig (0 – 3.5 bar)		5 – 125 psig (.4 – 8.6 bar)	lb (kg)
Relieving-ty	pe without (	Gauge		
1/4"	100 (47)	R27221-200	R27221-100	1.38 (.36)
3/8"	130 (61)	R27231-200	R27231-100	1.34 (.61)
1/2"	150 (71)	R27241-200	R27241-100	1.30 (.59)
Relieving-ty	pe with Gau	ige		
1/4"	100 (47)	R27221-700	R27221-600	1.38 (.36)
3/8"	130 (61)	R27231-700	R27231-600	1.34 (.61)
1/2"	150 (71)	R27241-700	R27241-600	1.30 (.59)

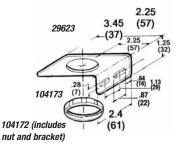


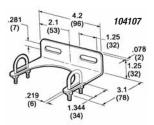
Notes: Not all menu combinations are valid. See price book to verify.

## **DIMENSIONAL DATA** Dimensions – in (mm)











# INGERSOLL RAND ARO COMPACT SERIES FILTER / REGULATOR PIGGYBACK





Ingersoll Rand ARO Compact Series Filter / Regulator Piggyback

P29221-600

## 1/4", 3/8", AND 1/2" PORTS

#### **FEATURES**

Ingersoll Rand ARO Compact Series piggyback units are compact to save space, giving more design flexibility. The filter and regulator have a common inlet and a common outlet. This saves on space, set-up time, and piping costs.

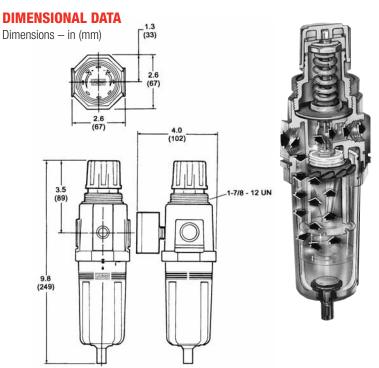
- · Units have threaded ports for direct connection to pipe plumbing or, when used with modular port adapter kits, a single unit or combination of units can be piped into the air system in a modular arrangement.
- Push / pull, non-rising knob allows one-hand adjustment. Pull to adjust, push to lock. Arrows on the knob indicate pressure increase and decrease.
- Balanced valve-type diaphragm regulation assures positive pressure adjustment and rapid response to inlet pressure changes.
- · Regulator offers in-line repairability. Valve and diaphragm can be replaced without removing unit from line.
- Bayonet bowl attachment provides easy filter element removal.
- Inlet / outlet is stamped into housing for easy air line hookup.
- Automatic drain has 1/8" NPT connection for draining away contaminants.
- 10 psig minimum operating pressure.

NOTE: See cautions on the use of polycarbonate bowls.

#### PERFORMANCE SPECIFICATIONS

Body	Zinc die-cast			
Bowls	Polycarbonate or zinc die-cast			
<b>Bowl Guard</b>	Zinc die-cast			
Sight Glass	Polyamide-nylon 12			
Seals	Buna-N			
Drain	Brass and Buna-N			
Filter Element	Porous polypropylene			
Diaphragm	Buna-N			
Valve	Brass			
<b>Spring Housing</b>	Glass-filled nylon			
<b>Max Inlet Pressure</b>	Polycarbonate bowl —			
	150 psig (10.4 bar)			
	Metal bowl — 175 psig (12 bar)			
Operating	Polycarbonate bowl —			
Temp Range	0° - 125° F (-18° - 52°C)			
	Metal bowl —			
	0° – 175° F (-18° – 79° C)			
Gauge Port	1/4" NPT			
*Airflow	1/4" — 93 cfm (44 dm³/s)			
	3/8" — 135 cfm (64 dm³/s)			
	1/2" — 140 cfm (66 dm³/s)			
+4' (1. '   400 '. (0.0				

\*Airflow is at 100 psig (6.9 bar) inlet and 90 psig (6.2 bar) outlet.



CAUTION: Outlet pressure adjustment ranges are not minimum or maximum outlet pressure limits. Regulators can be adjusted to zero psig secondary pressure and, generally, to pressures in excess of those specified. The use of these regulators to control pressures outside of the specified ranges is not recommended.

# INGERSOLL RAND ARO COMPACT SERIES FILTER / REGULATOR PIGGYBACKS

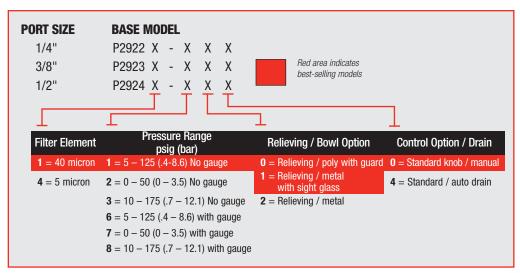
#### **ORDERING**

From the chart to the right, select the model number associated with port size, bowl, and drain option required. If other options are needed, use menu below.

#### **ADDITIONAL MODELS AVAILABLE**

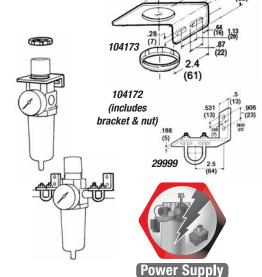
Select the basic model number associated with the port size desired. From the table, select the numbers representing the regulator options required. For BSP threads, add -B to the end of the model number.

Port Size	Airflow	Mo	del	Bowl Size	Filter Element	Weight	
NPT	cfm (dm³/s)	without Gauge	with Gauge	oz (ml)	(micron)	lb (kg)	
Push Drain	— Metal Bo	wl with Sight	Glass		`		
1/4"	93 (44)	P29221-110	P29221-610	6.0 (177)	40	2.05 (.93)	
3/8"	135 (64)	P29231-110	P29231-610	6.0 (177)	40	2.03 (.92)	
1/2"	140 (66)	P29241-110	P29241-610	6.0 (177)	40	2.00 (.91)	
Push Drain	- Polycarb	onate Bowl wi	th Bowl Guard	d			
1/4"	93 (44)	P29221-100	P29221-600	6.0 (177)	40	2.05 (.93)	
3/8"	135 (64)	P29231-100	P29231-600	6.0 (177)	40	2.03 (.92)	
1/2"	140 (66)	P29241-100	P29241-600	6.0 (177)	40	2.00 (.91)	
Automatic I	Automatic Drain — Metal Bowl with Sight Glass						
1/4"	93 (44)	P29221-114	P29221-614	6.0 (177)	40	2.05 (.93)	
3/8"	135 (64)	P29231-114	P29231-614	6.0 (177)	40	2.03 (.92)	
1/2"	140 (66)	P29241-114	P29241-614	6.0 (177)	40	2.00 (.91)	
Automatic I	Automatic Drain — Polycarbonate Bowl with Bowl Guard						
1/4"	93 (44)	P29221-104	P29221-604	6.0 (177)	40	2.05 (.93)	
3/8"	135 (64)	P29231-104	P29231-604	6.0 (177)	40	2.03 (.92)	
1/2"	140 (66)	P29241-104	P29241-604	6.0 (177)	40	2.00 (.91)	



Part Number	Description			
Piggyback	Accessories			
100066	Gauge 0 – 60 psig			
100067	Gauge 0 – 160 psig			
100083	Gauge 0 – 300 psig			
104107	Mounting bracket			
104149	Push drain kit			
104172	Wall mounting kit (includes panel nut & bracket)			
104173	Panel mount nut			
104175	Tamper-resistant kit			
104179	Service kit, relieving type			
104180	Service kit, non-relieving type			

Part Number	Description			
Piggyba	Piggyback Accessories			
104182	Sight glass service kit			
104202	Polycarbonate bowl with guard			
104204	Metal bowl with sight glass			
104206	Metal bowl			
29594	Spring, 5 – 125 lb (gold)			
29595	Spring, 0 – 50 lb (green)			
29596	Spring, 10 – 200 lb (silver)			
29623	Mounting bracket			
29999	U-bolt mounting bracket			
104068	Automatic drain			
104209	Knob repair kit			



104175

29623

(57)

3.45

## INGERSOLL RAND ARO COMPACT SERIES RECISION AIR REGULATORS



Ingersoll Rand ARO Compact Series **Precision Air Regulators** 

#### **APPLICATIONS**

- Air gauging
- Gas mixing
- Web tensioning
- Roll loading
- Air hoists

#### 1/4" AND 3/8" PORTS

#### **FEATURES**

Precision Air Regulators are high precision, multi-stage pressure regulators. The highest degree of regulation and repeatability are achievable by reacting to downstream pressure fluctuations as small as 0.01 psig (0.07 kPa) above set pressure. Action occurs as downstream pressure is piloted to the control chamber to act on a finely tuned stainlesssteel measuring capsule. A continuous bleed of less than 0.08 cfm (0.15 m/hr) works on the pilot diaphragm causing appropriate movement of the supply valve or the relief valve. Movements as small as 0.0001" (.0025 mm) will cause the main valve to correct to the proper position. Relief flows of up to 10 cfm can be achieved on the high relief model (-100 models). Exhaust is achieved through the exhaust vents located in the side of the body.

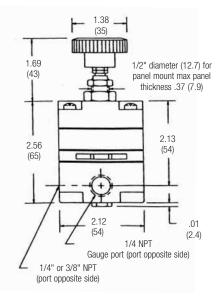
- The Precision Air Regulator controls output pressure with an accuracy of 0.1%, and has very low sensitivity to changes in supply pressure and flow.
- This regulator has been designed to eliminate the need for any readjustment of the regulated pressure after long downtime. At start-up, the regulated pressure will return to its output setting.
- The regulated pressure is held constant over substantial changes in flow due to the high-gain pneumatic servoamplifier. Particularly good from dead end to 203.4 m³/hr (12 cfm).
- The unit may be installed in any position. It can be panel mounted or supported by in-line plumbing.

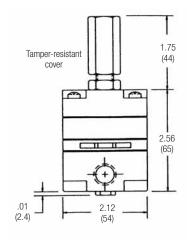
#### PERFORMANCE SPECIFICATIONS

Body	Zinc die-cast
Diaphragm	Buna-N
<b>Metering Capsule</b>	Stainless steel
Knob	Phenolic plastic
Flow Capacity	14 cfm (25 m³/hr)
<b>Exhaust Capacity</b>	Up to 10 cfm
Sensitivity	.125" (3.2 mm) water
	column
Total Air	6 scfh (.17 m³/hr)
Consumption	
Pilot Bleed Rate	0.08 cfm (0.15 m <sup>3</sup> /hr)
<b>Supply Pressure</b>	Less than .005 psig
Variation	(.03 kPa) @ 25 psig
	variance
Max Supply	150 psig (1050 kPa)
Pressure	A filter with 5 micron
	element should be installed
	ahead of unit
Operating	20° – 150° F
Temp Range	(-7° – 66° C)

#### **DIMENSIONAL DATA**

Dimensions - in (mm)





# INGERSOLL RAND ARO COMPACT SERIES PRECISION AIR REGULATORS

#### **ORDERING**

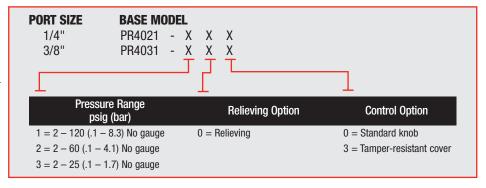
From the chart to the right, select the model number associated with port size, bowl, and drain option required. If other options are needed, use menu below.

Port Size NPT in	Airflow	Model Spri	Weight	
	2 – 120 psig (.4 – 8.6 bar)	2 – 60 psig (.4 – 4.1 bar)	2 – 25 psig (.4 – 1.7 bar)	lb (kg)
1/4"	PR4021-100	PR4021-200	PR4021-300	1.4 (.64)
3/8"	PR4031-100	PR4031-200	PR4031-300	1.4 (.64)

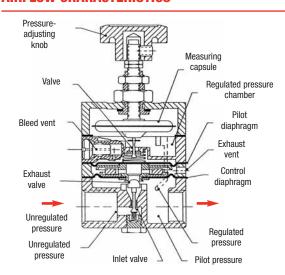
## **ADDITIONAL MODELS AVAILABLE**

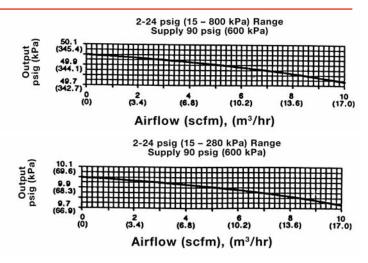
Select the basic model number associated with the port size desired. From the table, select the numbers representing the regulator options required. For BSP threads, add -B to the end of the model number.

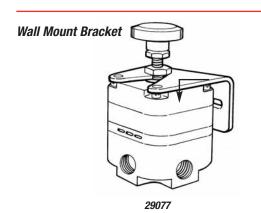
#### ADDITIONAL MODELS AVAILABLE



### **AIRFLOW CHARACTERISTICS**







Part Number	Description			
Precision Air Regulators Accessories				
29077	Wall mount bracket			
Service Kits				
100207-1	2-25 lb or $2-60$ lb spring range			
100207-2	2 – 120 lb spring range			



# INGERSOLL RAND ARO COMPACT SERIES STAINLESS STEEL PRECISION REGULATORS AND FILTER / REGULATORS

Regulator



## 1/4" AND 3/8" PORTS

#### **FEATURES**

- Stainless-steel construction is ideal for corrosive environments and sour gas.
- Excellent repeatability.
- Tapped vent for exhaust gas capture.
- Once set to a desired pressure, the ARO 316 stainless steel regulator will permanently maintain its settings through the use of a convoluted diaphragm. This diaphragm provides constant adjustment to downstream pressure drop, and downstream pressure increase.
- 1/4" and 3/8" NPT.
- Panel-mount nut is standard.

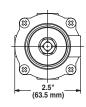
Filter / Regulator

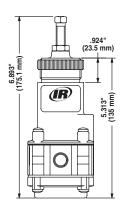


The Precision Regulator line is designed for service with a wide variety of corrosive gases and environments. Its corrosive-resistant materials are compatible with sour gas and for use in offshore environments. Applications include petrochemical processing, chemical plants, food processing and packaging, and paper / pulp mills. The regulator operates in pressure ranges up to 150 psig (10.3 bar). The filter on the filter / regulator unit has a built-in dripwell which traps water, oil, and other contaminants. The contaminants are easily flushed out via a convenient manual drain. The 5-micron filter element is made of 316 stainless steel and is easily removed for cleaning.

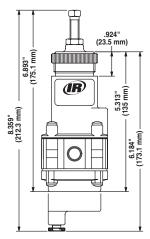
## **DIMENSIONAL DATA**

Dimensions – in (mm)









Filter / Regulator

### PERFORMANCE SPECIFICATIONS

Body	316 Stainless steel			
Seals	Fluorocarbon			
Filter Elements	5 Micron			
	(for use with PFRSX1-X00 units only)			
Temp Range	-20° – 180° F (-29° – 82° C)			
Max Pressure	250 psig (17.2 bar)			
Media	Compressed air			
Gauge Ports	1/4" – 18" NPTF			
	Airflow @ 100 psig (6.9 bar)			
	Supply 20 psig (1.4 bar)			
	Outlet 20 cfm (566 L/min)			

# INGERSOLL RAND ARO COMPACT SERIES STAINLESS STEEL PRECISION REGULATORS AND FILTER / REGULATORS

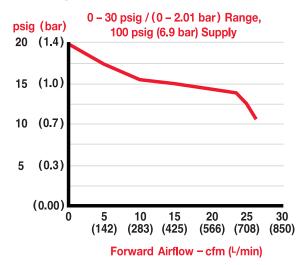
#### **ORDERING**

From the chart to the right, select the model number associated with port size, bowl, and drain option required.

Model	Description	Pressure Range
PRSS21-200	1/4" NPT Regulator	0 – 60 psig
PRSS21-400	1/4" NPT Regulator	0 – 30 psig
PRSS21-500	1/4" NPT Regulator	0 – 100 psig
PRSS21-600	1/4" NPT Regulator	2 – 150 psig
PRSS31-200	3/8" NPT Regulator	0 – 60 psig
PRSS31-400	3/8" NPT Regulator	0 – 30 psig
PRSS31-500	3/8" NPT Regulator	0 – 100 psig
PRSS31-600	3/8" NPT Regulator	2 – 150 psig
PFRS21-200	1/4" NPT Filter / Regulator	0 – 60 psig
PFRS21-400	1/4" NPT Filter / Regulator	0 – 30 psig
PFRS21-500	1/4" NPT Filter / Regulator	0 – 100 psig
PFRS21-600	1/4" NPT Filter / Regulator	2 – 150 psig
PFRS31-200	3/8" NPT Filter / Regulator	0 – 60 psig
PFRS31-400	3/8" NPT Filter / Regulator	0 – 30 psig
PFRS31-500	3/8" NPT Filter / Regulator	0 – 100 psig
PFRS31-600	3/8" NPT Filter / Regulator	2 – 150 psig

Part Number Stainless Steel Precision Accessori	Description
104267	316 stainless steel mounting bracket
104268	5 micron filter element
104269	40 micron filter element

## **Regulated Pressure vs. Airflow**





## INGERSOLL RAND ARO MPACT SERIES LUBRICATORS





Ingersoll Rand ARO Compact Series Lubricators

L26241-100

## 1/4", 3/8", AND 1/2" PORTS

#### **FEATURES**

Ingersoll Rand ARO Compact Series oil-fog lubricators feature an adjustment needle on top of the transparent sight dome. The adjustment needle features finer threads and improved tolerances between the needle and seat. Lubricator drip rate adjustment is easier to set. The required amount of lubrication can be efficiently delivered for longer life of tools, cylinders, valves, pumps, air motors, and other air-operated equipment.

- Lubricator can be filled while under pressure. This helps avoid system pressure shut-down and the resulting downtime.
- The oil adjustment screw has an optional tamper-resistant cap which helps prevent unauthorized adjustment of oil.
- Increase / decrease markings on castings show direction to turn adjustment screw for easy oil drip set-up.
- · Warning and technical information is printed in English, Spanish, French, and German on standard units.
- Bayonet bowl attachment provides easy removal.
- Units have threaded ports for direct connection to pipe plumbing. Or, when used with modular port adapter kits, a single unit, or combination of units can be piped into the air system in a modular arrangement.

(33)

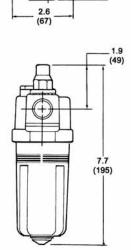
### PERFORMANCE SPECIFICATIONS

Body	Zinc die-cast		
Bowls	Polycarbonate or zinc die-cast		
<b>Bowl Guard</b>	Zinc die-cast		
Sight Glass	Polyamide-nylon 12		
Seals	Buna-N		
Sight Dome	Polycarbonate		
Oil Capacity	6 oz (177 ml)		
<b>Max Inlet Pressure</b>	Polycarbonate bowl —		
	150 psig (10.4 bar)		
	Metal bowl —		
	175 psig (12 bar)		
Operating	Polycarbonate bowl —		
Temp Range	0° - 125°F (-18° - 52° C)		
	Metal bowl —		
	0° – 175° F (-18° – 79° C)		
Airflow:	1/4" — 75 cfm (35 dm³/s)		
	3/8" — 100 cfm (47 dm <sup>3</sup> /s)		
	1/2" — 110 cfm (52 dm <sup>3</sup> /s)		
+41 (1 1 100 1 (001 )			

<sup>\*</sup>Airflow is at 90 psig (6.2 bar) inlet and 10 psig (0.7 bar) pressure drop.

### **DIMENSIONAL DATA**

Dimensions – in (mm)





# INGERSOLL RAND ARO COMPACT SERIES LUBRICATORS

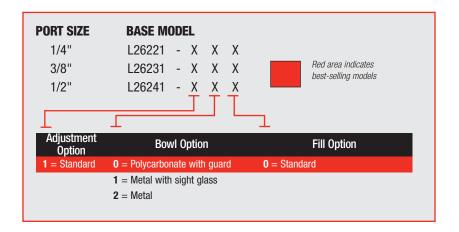
#### **ORDERING**

From the chart to the right, select the model number associated with the port size and bowl option required. If other options are preferred, use the menu below.

Port Size NPT	Airflow cfm (dm³/s)	Model	Bowl Size oz (ml)	Weight lb (kg)		
Metal Bowl v	vith Sight Glass					
1/4"	75 (35)	L26221-110	6.0 (177)	1.50 (.68)		
3/8"	100 (47)	L26231-110	6.0 (177)	1.44 (.65)		
1/2"	110 (52)	L26241-110	6.0 (177)	1.36 (.62)		
Polycarbonat	Polycarbonate Bowl with Bowl Guard					
1/4"	75 (35)	L26221-100	6.0 (177)	1.50 (.68)		
3/8"	100 (47)	L26231-100	6.0 (177)	1.44 (.65)		
1/2"	110 (52)	L26241-100	6.0 (177)	1.36 (.62)		

### **ADDITIONAL MODELS AVAILABLE**

Select the basic model number associated with the port size desired. From the table, select the numbers representing the lubricator options required. For BSP threads, add -B to the end of the model number.



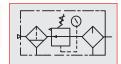


29665

Part Number	Description
Lubricator Accessor	ies
104027	Tamper-resistant plug
104107	Mounting bracket
104181	Service kit
104182	Sight glass service kit
104203	Polycarbonate bowl with guard
104205	Metal bowl with sight glass
104207	Metal bowl
104226	Sight dome service kit
29665	Lubrication (1 qt)



# INGERSOLL RAND ARO COMPACT SERIES COMBINATION UNITS





Ingersoll Rand ARO Compact Series **Combination Units** 

## 1/4", 3/8", AND 1/2" PORTS

#### **ORDERING**

Select the basic model number that represents the port size and bowl option required. Modular models listed include gauge and "T" brackets, and are shipped assembled. Pipe-nippled models include gauge and nipples, and are shipped unassembled. If other options are required, order each unit separately. For BSP threads, add -B to the end of the model number.

Port Size	Models		Weight	Component		
NPT	Modular	Nippled	lb (kg)	Filter	Regulator	Lubricator
Push Drain	— Metal B	owl with Si	ght Glass			
1/4"	C28221-810	C28223-810	5.5 (2.5)	F25221-110	R27221-600	L26221-110
3/8"	C28231-810	C28233-810	5.4 (2.4)	F25231-110	R27231-600	L26231-110
1/2"	C28241-810	C28243-810	5.3 (2.4)	F25241-110	R27241-600	L26241-110
Push Drain	— Polycar	bonate Bow	l with Bo	wl Guard		
1/4"	C28221-800	C28223-800	5.5 (2.5)	F25221-100	R27221-600	L26221-100
3/8"	C28231-800	C28233-800	5.4 (2.4)	F25231-100	R27231-600	L26231-100
1/2"	C28241-800	C28243-800	5.3 (2.4)	F25241-100	R27241-600	L26241-100
Automatic	Drain — M	etal Bowl w	ith Sight (	Glass		
1/4"	C28221-811	N/A	5.5 (2.5)	F25221-111	R27221-600	L26221-110
3/8"	C28231-811	N/A	5.4 (2.4)	F25231-111	R27231-600	L26231-110
1/2"	C28241-811	N/A	5.3 (2.4)	F25241-111	R27241-600	L26241-110
Automatic	Automatic Drain — Polycarbonate Bowl with Bowl Guard					
1/4"	C28221-801	N/A	5.5 (2.5)	F25221-101	R27221-600	L26221-100
3/8"	C28231-801	N/A	5.4 (2.4)	F25231-101	R27231-600	L26231-100
1/2"	C28241-801	N/A	5.3 (2.4)	F25241-101	R27241-600	L26241-100

NOTE: Three-piece modular models include (2) 104171 "T" brackets and (1) 100067 gauge. Pipe-nippled models include (1) 100067 gauge and (2) appropriate-size pipe nipples.

For pipe-nippled FRL combo units with automatic drain, order individual filter, regulator, lubricator components, and

To order modular models without "T" brackets, place a "2" in sixth position of model number. Example: CXXXX2-XXX.

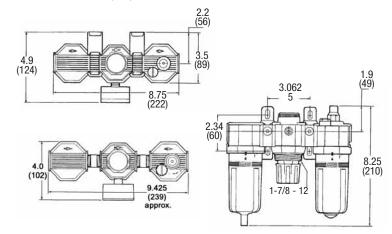
Not all menu combinations are valid. See price book to verify.

### PERFORMANCE SPECIFICATIONS

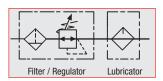
Max Inlet Pressure	Polycarbonate bowl — 150 psig (10.4 bar) Metal bowl — 175 psig (12 bar)	
Operating	Polycarbonate bowl —	
Temp Range	0° – 125° F (-18° – 52°C)	
	Metal bowl —	
	0° - 175°F (-18° - 79°C)	
Filter Element	40 micron	
Pressure Range	5 - 125  psig  (.3 - 8.6  bar)	
In Regulator		
Gauge	0 – 160 psi	
Gauge Port	1/4" NPT	
Filter Drain	Manual (standard); Automatic (optional)	

## **DIMENSIONAL DATA**

Dimensions - inches (mm)



# INGERSOLL RAND ARO COMPACT SERIES PIGGYBACK LUBRICATORS





1/4", 3/8", AND 1/2" PORTS

#### **ORDERING**

Select the basic model number that represents the port size and bowl option required. Modular models listed include gauges and "T" brackets, and are shipped assembled. Pipe-nippled models include gauge and nipple, and are shipped unassembled. If other options are required, order each unit separately.

For BSP threads, add -B to the end of the model number.

Port Size	Мо	dels	Weight	Compo	nents
NPT	Modular	Nippled	lb (kg)	Piggyback	Lubricator
Push Drain	— Metal Bowl	with Sight Glas	SS		
1/4"	C28221-610	C28223-610	4.1 (1.9)	P29221-610	L26221-110
3/8"	C28231-610	C28233-610	4.0 (1.8)	P29231-610	L26231-110
1/2"	C28241-610	C28243-610	3.9 (1.8)	P29241-610	L26241-110
Push Drain	— Polycarbon	ate Bowl with E	Bowl Guard		
1/4"	C28221-600	C28223-600	4.1 (1.9)	P29221-600	L26221-100
3/8"	C28231-600	C28233-600	4.0 (1.8)	P29231-600	L26231-100
1/2"	C28241-600	C28243-600	3.9 (1.8)	P29241-600	L26241-100
Automatic	Drain — Metal	Bowl with Sigh	t Glass		
1/4"	C28221-611	N/A	4.1 (1.9)	P29221-614	L26221-110
3/8"	C28231-611	N/A	4.0 (1.8)	P29231-614	L26231-110
1/2"	C28241-611	N/A	3.9 (1.8)	P29241-614	L26241-110
Automatic Drain — Polycarbonate Bowl with Bowl Guard					
1/4"	C28221-601	N/A	4.1 (1.9)	P29221-604	L26221-100
3/8"	C28231-601	N/A	4.0 (1.8)	P29231-604	L26231-100
1/2"	C28241-601	N/A	3.9 (1.8)	P29241-604	L26241-100

NOTE: Two-piece modular models include (1) 104171 "T" brackets and (1) 100067 gauge. Pipe-nippled models include (1) 100067 gauge and (1) appropriate-sized pipe nipple.

For pipe-nippled FRL combo units with automatic drain, order individual filter, regulator, lubricator components, and pipe nipples

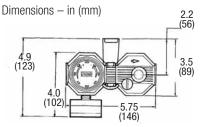
To order modular models without "T" brackets, place a "2" in sixth position of model number. Example: CXXXX2-XXX.

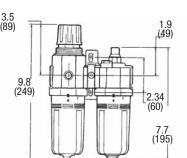
Not all menu combinations are valid. See price book to verify.

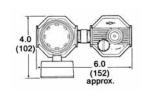
#### PERFORMANCE SPECIFICATIONS

FENFUNIVIANUE 3	of Edifications	
<b>Max Inlet Pressure</b>	Polycarbonate bowl —	
	150 psig (10.4 bar)	
	Metal bowl —	
	175 psig (12 bar)	
Operating	Polycarbonate bowl —	
Temp Range	0° – 125° F (-18° – 52° C)	
	Metal bowl —	
	0° – 175° F (-18° – 79° C)	
Filter Element	40 micron	
Pressure Range	5 - 125 psig (.3 - 8.6 bar)	
In Regulator		
Gauge	0 – 160 psi	
Gauge Port	1/4" NPT	
Filter Drain	Manual (standard);	
	Automatic (optional)	

### **DIMENSIONAL DATA**









# INGERSOLL RAND ARO COMPACT SERIES FILTERS / LUBRICATORS





C28241-700 (modular)

## 1/4", 3/8", AND 1/2" PORTS

#### **ORDERING**

Select the basic model number that represents the port size and bowl option required. Modular models listed include gauge and "T" brackets, and are shipped assembled. Pipe-nippled models include gauge and nipple, and are shipped unassembled. If other options are required, order each unit separately.

For BSP threads, add -B to the end of the model number.

Port Size	Models		Weight	Comp	onents
NPT	Modular	Nippled	lb (kg)	Filter	Lubricator
Push Drain	— Metal Bow	/I with Sight (	Glass		
1/4"	C28221-710	C28223-710	3.6 (1.6)	F25221-110	L26221-110
3/8"	C28231-710	C28233-710	3.5 (1.6)	F25231-110	L26231-110
1/2"	C28241-710	C28243-710	3.3 (1.5)	F25241-110	L26241-110
Push Drain	— Polycarbo	nate Bowl wit	th Bowl Guard	t	
1/4"	C28221-700	C28223-700	3.6 (1.6)	F25221-100	L26221-100
3/8"	C28231-700	C28233-700	3.5 (1.6)	F25231-100	L26231-100
1/2"	C28241-700	C28243-700	3.3 (1.5)	F25241-100	L26241-100
Automatic [	Orain — Meta	I Bowl with S	ight Glass		
1/4"	C28221-711	N/A	3.6 (1.6)	F25221-111	L26221-110
3/8"	C28231-711	N/A	3.5 (1.6)	F25231-111	L26231-110
1/2"	C28241-711	N/A	3.3 (1.5)	F25241-111	L26241-110
Automatic Drain — Polycarbonate Bowl with Bowl Guard					
1/4"	C28221-701	N/A	3.6 (1.6)	F25221-101	L26221-100
3/8"	C28231-701	N/A	3.5 (1.6)	F25231-101	L26231-100
1/2"	C28241-701	N/A	3.3 (1.5)	F25241-101	L26241-100

NOTE: Modular models include (1) 104171 "T" bracket. Pipe-nippled models include (1) appropriate-sized pipe nipple. For pipe-nippled FRL combo units with automatic drain, order individual filter, lubricator components, and pipe nipple.

To order modular models without "T" brackets, place a "2" in sixth position of model number. Example: CXXXX2-XXX.

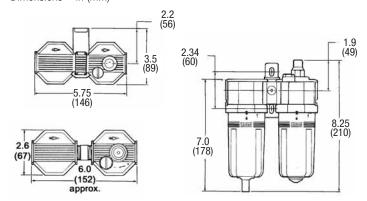
Not all menu combinations are valid. See price book to verify.

#### PERFORMANCE SPECIFICATIONS

I EIII OIIIIAIIOE C	EIII OIIIIIAIIOE OI EOII IOAI IOIIO	
Max Inlet Pressure Polycarbonate bowl —		
	150 psig (10.4 bar)	
	Metal bowl —	
	175 psig (12 bar)	
Operating	Polycarbonate bowl —	
Temp Range	0° – 125° F (-18° – 52° C)	
	Metal bowl —	
	0° – 175° F (-18° – 79° C)	
Filter Element	40 micron	
Filter Drain	Manual (standard); Automatic	
	(optional)	

### **DIMENSIONAL DATA**

Dimensions - in (mm)



## **INGERSOLL RAND ARO COMPACT SERIES MOUNTING COMPONENTS**

Mounting components include on-pipe port adapters, manifold kits, 3-way shut-off valves, and piping bracket kit. Threads are NPT.

# Modular Spacer Kit 104167 104167

#### Part Number Description Modular Spacer Kit 104167 Modular spacer kit

Spacer has retained O-rings and Allen head screws for ease of assembly and disassembly. One spacer kit is required to connect any two units or accessories together in the modular format. Kit includes the spacer block, two clamps, and two O-rings. Screws take a size 4 mm or 5/32" Allen head wrench. To assemble, put the spacer between the units and tighten screws for a secure seal. Fits all port sizes.

Part Number Threaded 1/4" –	Description - 3/4" NPT Pipe Adapters
104168-2	Threaded 1/4" NPT pipe adapter
104168-3	Threaded 3/8" NPT pipe adapter
104168-4	Threaded 1/2" NPT pipe adapter
104168-6	Threaded 3/4" NPT pipe adapter

Threaded pipe adapter blocks allow a single unit or multiple units to be plumbed into an air system in the modular arrangement. These pipe adapters allow for ease of service when removing a unit from the line. The adapters can also be used to pipe different diameters (in and out) in the plumbing set-up. Kit includes two adapters and two spacer kits (part number 104167).

# Threaded 1/4" - 3/4" NPT Pipe Adapters 104168-2 104168-2 104168-2

## T-type Wall Mounting Bracket

Right Angle Piping Bracket Kit



Part Number	Description	
T-Type Wall Mounting Bracket		
104171	T-type wall mounting bracket	

These brackets provide heavy-duty wall mounting. They are excellent for mounting a single unit or multiple units in the modular arrangement. T-type mount gives good wall-to-unit clearance for installing fittings and other connections. Kit includes a spacer, bracket, and clamp.

	104169	104169
104169		

Part Number	Description	
Right Angle Piping Bracket Kit		
104169	Right angle piping bracket kit	

These 90° elbow brackets provide for neater air installations by bringing air into the backside of units and hiding all pipe connections. Kit includes two  $90^{\circ}$  elbows and two spacer kits (part number 104167).



# INGERSOLL RAND ARO COMPACT SERIES



Part Number	Description
Wall Mounting K	it
104172	Wall mounting kit

May be used to mount FRL combo units which include a regulator, Piggyback Filter / Regulator units, or individual regulators. Kit includes part number 29623 bracket and part number 104173 panel mounting nut. Bracket and nut may be ordered individually.

Modular Manifold Block Kit	104170
1	Manifold creates four additional

1/4" NPT outlet ports

Part Number	Description	
Modular Manifold Block Kit		
104170	Modular manifold block kit	

This manifold can be installed before or after any unit in the modular arrangement, providing four additional 1/4" NPT ports for greater circuit design flexibility. When installed between the regulator and lubricator, clean, regulated air can be used to signal other equipment. Kit includes manifold, two spacers, three pipe plugs, four clamps, and O-rings.

# Safety Shut-off, Lock-out Valve Shown in modular arrangement with Module / Air 2000 FRL.

104170

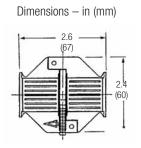
Part Number Safety Shut-of	Description ff, Lock-out Valves
104174-2	Threaded 1/4" NPT
104174-3	Threaded 3/8" NPT
104174-4	Threaded 1/2" NPT
100085	Lock-out hasp

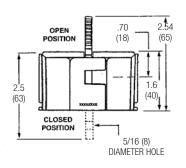
Valves meet OSHA Lock-out / Tag-out regulation 1910.147. Exhausttype safety shut-off valves can be used in the modular arrangement or in-line, depending on application requirements. The safety shut-off valve should be installed upstream from the FRL unit. It is excellent for isolating and depressurizing a downstream unit requiring maintenance. The valve operates by pushing the lever down (closed position), exhausting downstream air. The valve may be locked in the exhausted position. When using the valve in the modular format, it is secured to the unit with a modular spacer or T-type modular bracket.

#### PERFORMANCE SPECIFICATIONS

Max Inlet	175 psig (12 bar)
Max Temp	0° – 125° F (-18° – 52° C)
Body	Zinc die-cast
Seals	Buna-N
Slide	Delrin

#### **DIMENSIONAL DATA**







NOTE: ARO Safety Lock-out Valves meet OSHA Lock-out / Tag-out regulation 1910.147, which requires protection from unexpected start-up of a machine during service or maintenance.

# **INGERSOLL RAND ARO COMPACT SERIES**

### **Pressure Switches**







104196-CDW



104196 104196-CHW

104196-CSN

Pressure Switch Safety Shut-off, Lock-out valve			
104196	Switch only (without connector)		
Pressure Switch Coil Connectors			
104196-CHW	Switch with molded cable connector, 36" leads		
104196-CSN	Switch with strain relief connector		
104196-CDW	Switch with 1/2" conduit connector, 18" leads		

Description

### **PERFORMANCE SPECIFICATIONS**

Medium	Compressed air		
Max Operating	150 psi (10.4 bar)		
Pressure			
Adjustable	20 - 100 psi (1.4 - 6.9 bar)		
Pressure Range			
<b>Differential Pressure</b>	5 – 10 psi (0.3 – 0.9 bar)		
Operating	-40° – 300° F		
Temp Range			
Weight	11 oz		
Contact Type	N.O. / N.C.		
<b>Contact Ratings</b>	5 amps @ 125 VDC		
	5 amps @ 250 VAC		
Contact	Silver alloy wiping contact		
	with snap action		
Accuracy	20% accuracy or better;		
	Switch is ±2 or 5% of set		
	point (whichever is greater)		
Cycle Life	1,000,000 plus		
Thread	1/4" - 18" NPT male		

Pressure switch allows the sensing of high or low pressure thresholds. Use with part number 104170 manifold block. Features of the pressure switch include:

Water-resistant

Part Number

- External pressure adjustment with Allen screw
- Can be wired normally open or normally closed
- Computer-compatible allows electrical current to flow or to be stopped
- Meets NEMA 4 and 13 specifications



## INGERSOLL RAND ARO COMPACT SERIES **I-START VALVES**



#### **FEATURES**

1/4", 3/8", AND 1/2" PORTS

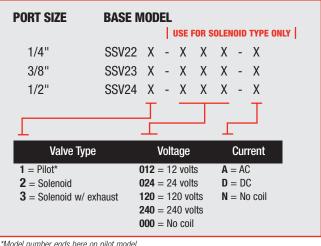
Machine system start-up and the related air surge it creates can both damage and reduce the operating efficiency of its pneumatic components. Over time, air surge component slamming takes an even heavier toll on the machine's overall productivity and on your maintenance schedule. With ARO's new Soft-start Valves, you can eliminate the surge at start-up. And with our quick-relief models, remove the hazard at shut-down ... all in one convenient, space-efficient package.

- **Big Space Savings** The Compact Series Solenoid Soft-start with exhaust puts the two critical features into one compact, easy-to-install package. Saving you operating space, time, and money.
- Three Distinct Styles
  - 1. Pilot Soft-start: When pressure is supplied to the inlet port, an internal pilot is actuated and slow pressurization of the system begins. Once downstream pressure reaches 60% of operating pressure, the valve opens to full-flow mode. An adjustable metering screw allows setting the time it takes to get up to full system pressure.
  - **2. Solenoid Soft-start without relief exhaust:** Contains the same capabilities as the pilot version only using a current-actuated solenoid with a DIN-style coil. The solenoid version also features an override that permits manual initiation of the "soft-start" sequence.
  - 3. Solenoid Soft-start with relief exhaust: Solenoid actuation and manual override features are coupled with an exhaust capability that releases pressure to the atmosphere through the bottom of the valve permitting system shut-down.
- Three Port Sizes Choose from 1/4", 3/8" or 1/2" ports
- Compact Series The ARO Soft-start Valves are designed for quick and easy in-line installation with our Compact Series air prep units for a clean, consistent appearance and impeccable performance.

Port Size	Operating	Pressure Gauge Port Size	Ambient and Fluid Temperature	Cv Factor		Woight
NPT	Pressure Range psig			P-A Output A	A-R Exhaust Valve Type 3	Weight Ib (kg)
SSV22						
1/4"	45 – 145	1/4"	0 – 180° F	2.5	2.3	2.4 (1.08)
SSV23						
3/8"	45 – 145	1/4"	0 – 180° F	4.0	2.3	2.4 (1.08)
SSV24						
1/2"	45 – 145	1/4"	0 – 180° F	5.0	2.3	2.4 (1.08)

### FLECTRICAL PERFORMANCE SPECIFICATIONS

LLLUTHIUAL I LIH	UNIMARUL SI LURI IDATIUNS		
<b>Max Inlet Pressure</b>	Polycarbonate bowl — 150 psig (10.4 ba		
	Metal bowl — 175 psig (12 bar)		
Operating	24, 120, 240 volts AC (50 / 60 Hx)		
<b>Coil Rated Voltage</b>	12, 24 volts DC		
Allowable Voltage	± 10% of rated voltage		
Fluctuation			
<b>Coil Insulation Type</b>	Class F rated,		
	100% duty cycle 311° F (155° C)		
<b>Apparent Power</b>	Inrush 8.5 VA (50 Hz) / 6.9 VA (60 Hz)		
(consumption) AC	Holding 8.4 VA / 50 Hz / 6.5 VA (60 Hz)		
<b>Power Consumption</b>	4.8 watts DC		
Electrical Entry	Strain relief, DIN connector		
Manual Override	Screwdriver slot — rotate CW to		
(solenoid only)	actuate, CCW to return		



\*Model number ends here on pilot model.

## **INGERSOLL RAND ARO® HEAVY-DUTY SERIES**

### **SERIES FEATURES**

#### **HEAVY-DUTY SERIES**

- 1. Two bowl options available: Polycarbonate with guard or metal bowl for harsh applications.
- 2. Balanced valve eliminates chatter and provides precise air pressure control for your air-powered equipment.
- 3. Units can be converted from drop-type to fog-type lubricators by rotating sight dome 180 degrees.



### **SERIES FEATURES**

## **HI-FLOW HEAVY-DUTY SERIES**

- 1. Self-locking, non-rising regulator knob allows easy one-hand adjustment. Pull up to adjust, push down to lock.
- 2. Large 7 oz bowl capacity on filter and 8 oz bowl capacity on lubricator provides greater time between service checks.
- 3. Flow rates up to 300 cfm make these units the perfect choice for large flow applications.





# **INGERSOLL RAND ARO HEAVY-DUTY SERIES**





Ingersoll Rand ARO Heavy Duty Filter

## 1/2", 3/4", AND 1" PORTS

#### **FEATURES**

These ARO Heavy-duty Series filters extend the life of air-operated equipment while reducing maintenance costs. These units efficiently remove solid particles from compressed air lines — making them the perfect choice for large flow applications.

- The baffle and filter assembly is completely encased, leaving the entire bowl for sump.
- Polycarbonate bowl and metal guard standard.
- Tie-rod filter assembly permits quick, easy service.
- Twist drain is brass construction with large passage area for draining.
- Optional automatic drain has 1/8" pipe outlet for draining away contaminants.

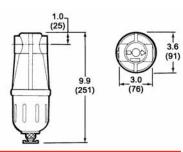
#### **ORDERING**

Select the basic model representing the port size desired. Add number representing filter options required.

PORT SIZE	BASE MODEL		
1/2"	25341 - X X X		
3/4"	25351 - X X X	Red area indicates	
1"	25361 - X X X	best-selling models	
<u>L</u>		l	
Filter Element	Bowl Option Drain Option		
<b>0</b> = 40 micron #29392	2 = Polycarbonate with guard #29397	0 = Manual	
1 = 20 micron #29391	<b>1</b> = Metal bowl #29967	1 = Auto drain #29969-2	
<b>2</b> = 5 micron #2939	0		

# **DIMENSIONAL DATA**

Dimensions - in (mm)





#### PERFORMANCE SPECIFICATIONS

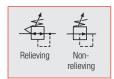
FENFORMANUE S	of Edifications		
Sump Capacity	10 oz (295 ml)		
Filter Area	9.1 in (5871 mm)		
Max Inlet Pressure	Polycarbonate bowl —		
	200 psig (13.8 bar)		
	Metal bowl —		
	250 psig (17 bar)		
Operating	Polycarbonate bowl —		
Temp Range	0° – 125° F (-18° – 52° C)		
	Metal bowl —		
	0° – 200° F (-18° – 93° C)		
Weight	1/2" — 3.62 lb (1.65 kg)		
	3/4" — 3.48 lb (1.58 kg)		
	1" — 3.26 lb (1.48 kg)		
*Airflow	1/2" — 82 cfm (39 dm <sup>3</sup> /s)		
	3/4" — 87 cfm (41 dm <sup>3</sup> /s)		
	1" — 88 cfm (42 dm <sup>3</sup> /s)		
Body	Zinc die-cast		
Bowls	Polycarbonate or steel		
<b>Bowl Guards</b>	Steel with E-coat finish		
Seals	Buna-N		
Drain	Brass twist type		
Element	Sintered bronze		
	5, 20, 40 micron		

\*Airflow is at 125 psig (8.6 bar) inlet and 100 psig (6.9 bar) outlet.

Part Number	Description		
Filter Accessories			
29397	Bowl guard		
29967	Metal bowl		
29969-2	Automatic drain		
29390	5 micron element		
29391	20 micron element		

Part Number	Description	
Filter Accessories		
29392	40-micron element	
104020	Service kit	
104069	Polycarbonate bowl	
Y57-1	Twist drain	

# **INGERSOLL RAND ARO HEAVY-DUTY** SERIES REGULATORS





Ingersoll Rand ARO Heavy-Duty Series Regulator

## 1/2", 3/4", AND 1" PORTS

#### **FEATURES**

The Ingersoll Rand ARO Heavy-duty Series regulators provide accurate and quick response to flow demands and line pressure changes, giving air-powered equipment the precise air pressure control needed.

- Zinc die-cast bodies are corrosion-resistant.
- Units can be panel-mounted.
- Balanced valve eliminates chatter and increases accuracy.
- Diaphragms and seals are nylon-reinforced for enhanced elasticity and seal life.
- Easy-turn adjustment knob provides precise regulation under any pressure.

## PERFORMANCE SPECIFICATIONS

PENFUNIVIAINUE S	PEGIFICATIONS	
<b>Max Inlet Pressure</b>	250 psig (17 bar)	
Pressure Range	0 - 250 psig (0 - 17 bar)	
In Reg Water		
Operating	0° – 200° F (-18° – 93° C)	
Temp Range		
Gauge Port	1/4" NPT	
Weight	1/2" — 3.30 lb (1.5 kg)	
	3/4" — 3.21 lb (1.45 kg)	
	1" — 2.82 lb (1.28 kg)	
*Airflow	1/2" — 256 cfm (121 dm <sup>3</sup> /s)	
	3/4" — 287 cfm (135 dm <sup>3</sup> /s)	
	1" — 293 cfm (138 dm <sup>3</sup> /s)	
<b>Spring Housing</b>	Zinc die-cast	
Body	Zinc die-cast	
Seals	Buna-N	
Diaphragm	Buna-N	
Valve	Brass	
Knob	High impact ABS	

<sup>\*</sup>Airflow is at 125 psig (8.6 bar) inlet and 100 psig (6.9 bar) outlet.

#### **ORDERING**

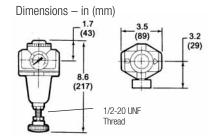
Select the basic model number that represents the port size desired. From the table below, select the number representing regulator options required. Order accessories separately.

PORT SIZE	BASE MODEL
1/2"	2734 X - X 0 X
3/4"	2735 X - X 0 X Red area indicates
1"	2736 X - X 0 X best-selling models
Ι Ι	
Relieving Option	Pressure Range Control Option psig (bar)
4 = Relieving	<b>0</b> = 5 – 125 (.4-8.6) <b>0</b> = Standard knob or panel mount
7 = Non-relieving	<b>6</b> = 5 - 125 with $0 - 160$ gauge $3 = Tamper-resistant$
	$1 = 0 - 50 \; (.0 - 3.5)$
	<b>2</b> = 10-250 (.7 – 17)

Part Number	Description	
Regulator Accessories		
100066	Gauge 0 – 60 psig (0 – 4 bar)	
100067	Gauge 0 – 160 psig (0 – 11 bar)	
100083	Gauge 0 – 300 psig (0 – 21 bar)	
29077	Mounting bracket, L-type	
29999	Mounting bracket (U-bolt type), 1/4", 3/8", and 1/2" pipe	

Part Number	Description		
Regulator Accessories			
29970	Mounting bracket (U-bolt type), 3/4" and 1" pipe		
29960	Service kit, relieving type		
29995	Service kit, non-relieving type		
29002	Spring, 5 – 125 lb (gold)		
29119	Spring, 0 – 50 lb (green)		
29120	Spring, 10 – 250 lb (silver)		

#### **DIMENSIONAL DATA**

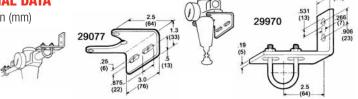


CAUTION: Outlet pressure adjustment ranges are not minimum or maximum outlet pressure limits. Regulators can be adjusted to zero psig secondary pressure and, generally, to pressures in excess of those specified. The use of these regulators to control pressures outside of the specified ranges is not recommended.



## **DIMENSIONAL DATA**

Dimensions – in (mm)



# INGERSOLL RAND ARO EAVY-DUTY SERIES LUBRICATORS





Ingersoll Rand ARO Heavy-duty Series Lubricator (26361-020 with tamper-resistant cap)

## 1/2", 3/4", AND 1" PORTS

#### **FEATURES**

The rugged Ingersoll Rand ARO Heavy-duty Series lubricators deliver the reliable lubrication needed for long service life of air line systems and equipment. Units are convertible from drop-type to fog-type by rotating sight dome 180 degrees. For best results, lubricator should be located as close as possible to equipment being lubricated.

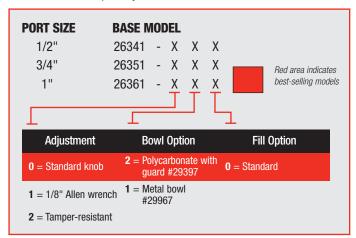
- Zinc die-cast bodies are corrosion-resistant.
- Tie-rod construction simplifies unit disassembly for guick and easy servicing.
- Two separate fill plugs allow unit to be filled from front or back. Lubricators can be filled under pressure. A quick-fill adapter is available for fast, easy filling.
- Polycarbonate bowl allows visual monitoring. Metallic bowl available for applications involving the use of harsh chemicals. Standard bowl guard protects polycarbonate bowl.

#### PERFORMANCE SPECIFICATIONS

I EIII OIIIIIAIIOE C	I EUN IUANIUNU	
<b>Max Inlet Pressure</b>	Polycarbonate bowl —	
	200 psig (13.8 bar)	
	Metal bowl —	
	250 psig (17 bar)	
Operating	Polycarbonate bowl —	
Temp Range	0° – 125° F (-18° – 52° C)	
	Metal bowl —	
	0° – 200° F (-18° – 93° C)	
Oil Capacity	10 oz (295 ml)	
Weight	1/2" — 2.98 lb (1.35 kg)	
	3/4" — 2.83 lb (1.28 kg)	
	1" — 2.70 lb (1.22 kg)	
*Airflow	1/2" — 65 cfm (31 dm <sup>3</sup> /s)	
	3/4" — 75 cfm (35 dm <sup>3</sup> /s)	
	1" — 75 cfm (35 dm <sup>3</sup> /s)	
Body	Zinc die-cast	
Bowls	Polycarbonate or steel	
<b>Bowl Guards</b>	Steel with E-coat finish	
Sight Glass	Polyamide nylon	
Seals	Buna-N	
*Airflow is at 90 psig (6.2 bar)	inlet and 5 psig (0.4 bar) pressure drop.	

**ORDERING** 

Select the basic model number that represents the port size desired. From the table below, select the number representing regulator options required. Order accessories separately.

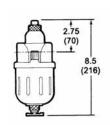






#### **DIMENSIONAL DATA**

Dimensions – in (mm)





# **INGERSOLL RAND ARO HEAVY-DUTY SERIES FILTER / REGULATOR / LUBRICATOR COMBINATIONS UNITS**



## 1/2", 3/4", AND 1" PORTS

## FILTER / REGULATOR / LUBRICATOR

## **Performance Specifications**

Max Inlet Pressure	200 psig (13.8 bar)		
Operating	0° – 125° F (-18° – 52° C)		
Temp Range			
Filter Element	40 micron		
Bowl	Polycarbonate with bowl guard		
Pressure Range	5 – 125 psi (.4 – 8.6 bar)		
In Regulator			
Gauge	0 – 160 psi		



Select the basic model that represents the port size desired. If other options are desired, order each component separately.

Port Size NPT Model	Weight lb (kg)	Components					
		Filter	Regulator	Lubricator	Gauge	Pipe Nipple	
Filter / Regulator / Lubricator Combinations							
1/2"	28343	10.16 (4.61)	25341-020	27344-000	26341-020	100067	Y27-54-C
3/4"	28353	10.12 (4.59)	25351-020	27354-000	26351-020	100067	Y27-55-C
1"	28363	9.37 (4.25)	25361-020	27364-000	26361-020	100067	Y27-56-C

NOTE: Shipped unassembled. For assembled unit, change the last digit from 3 to 7. Example: 28347.

Dimensional data on following page.

# RAND ARO HEAVY-DUTY SERIES **ATOR COMBINATION UNITS**



## 1/2", 3/4", AND 1" PORTS

## **FILTER / REGULATOR**

## **Performance Specifications**

Max Inlet Pressure	200 psig (13.8 bar)		
Operating	0° – 125° F (-18° – 52° C)		
Temp Range			
Filter Element	40-micron		
Bowl	Polycarbonate with bowl guard		
Pressure Range	5 - 125 psi (.4 - 8.6 bar)		
In Regulator			
Gauge	0 – 160 psi		

### **ORDERING**

Select the basic model that represents the port size desired. If other options are desired, order each component separately.

Port Size NPT	Medel Weight		Components				
	Model	lb (kg)	Filter	Regulator	Gauge	Pipe Nipple	
Filter / Regula	Filter / Regulator Combinations						
1/2"	28344	7.11 (3.22)	25341-020	27344-000	100067	Y27-54-C	
3/4"	28354	7.06 (3.20)	25351-020	27354-000	100067	Y27-55-C	
1"	28364	6.46 (2.93)	25361-020	27364-000	100067	Y27-56-C	

NOTE: Shipped unassembled. For assembled unit, change the last digit from 4 to 7. Example: 28347.

Dimensional data on following page.



# L RAND ARO HEAVY-DUTY SERIES **LUBRICATOR COMBINATION**





Ingersoll Rand ARO Heavy-duty Series Filter / Lubricator Combination

## 1/2", 3/4", AND 1" PORTS

## PERFORMANCE SPECIFICATIONS

Max Inlet Pressure	200 psig (13.8 bar)
Operating	0° – 125° F
Temp Range	(-18° – 52° C)
Filter Element	40 micron
Bowl	Polycarbonate with
	metal guard
Lubricator	Combination fog-type /
	drop-type

## **ORDERING**

Select the basic model that represents the port size desired. If other options are desired, order each component separately.

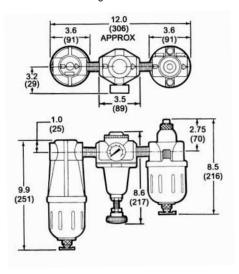
Port Size	t Size Bort Number	Weight	Components			
NPT	Part Number	lb (kg)	Filter	Lubricator	Pipe Nipple	
Filter / Lubric	ator Combinat	ion				
1/2"	28342	6.61 (3)	25341-020	26341-020	Y27-54-C	
3/4"	28352	6.52 (2.96)	25351-020	26351-020	Y27-55-C	
1"	28362	6.13 (2.78)	25361-020	26361-020	Y27-56-C	

NOTE: Shipped unassembled. For assembled unit, change the last digit from 2 to 7. Example: 28347.

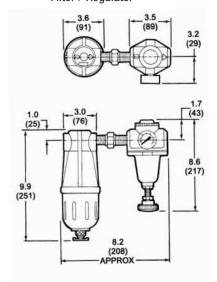
#### **DIMENSIONAL DATA**

Dimensions – in (mm)

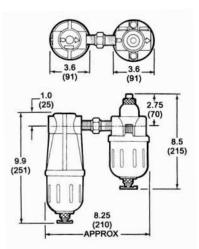
Filter / Regulator / Lubricator



Filter / Regulator



Filter / Lubricator



# **INGERSOLL RAND ARO HI-FLOW HEAVY-DUTY SERIES** PIGGYBACK AND PIGGYBACK / LUBRICATOR COMBINATION



Ingersoll Rand ARO Hi-Flow Heavy-duty Series Filter / Regulator Piggyback



Ingersoll Rand ARO Hi-Flow Heavy-duty Series Piggyback / Lubricator Combination

## 3/4" AND 1" PORTS

#### **FEATURES**

- The Ingersoll Rand ARO Hi-Flow Heavy-duty Series units extend the life of air operated equipment while reducing operating costs. These units efficiently remove solid particles from compressed air lines, making them the perfect choice for large flow applications.
- · Polycarbonate bowl with metal guard is standard.
- Automatic drain has pipe connection for draining away contaminants.
- Push-pull, non-rising adjustment knob.
- Bracket and gauge come standard with all units.

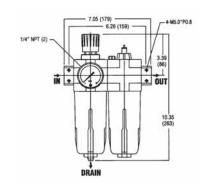
#### **ORDERING**

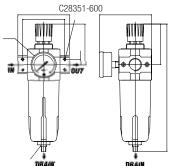
Port Size NPT	Model	Weight lb (g)
Filter / Regul	ator Piggyback	
3/4"	P29351-600	3 (1360)
1"	P29361-600	3 (1360)
Filter / Regul	ator Piggyback with	Auto Drain
3/4"	P29351-604	3 (1360)
1"	P29361-604	3 (1360)
Piggyback / I	Lubricator Combinati	on
3/4"	C28351-600	4.6 (2105)
1"	C28361-600	4.6 (2105)

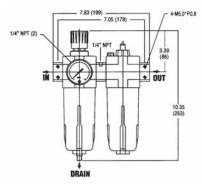
\*All models come with gauge and bracket.

#### **DIMENSIONAL DATA**

Dimensions - in (mm)







C28361-600

## PERFORMANCE SPECIFICATIONS

Construction	Piston-type regulation
Material	Body / aluminum die-cast
	Bowl / polycarbonate
Filter Element	40 micron (standard)
Temp Range	14° – 140° F (-10° – 60° C)
Pressure Range	5 - 150 psi (.4 - 10.4 bar)
Max Pressure	150 psi (10.4 bar)
Max Flow Rate	Piggyback, 300 cfm
	Lubricator, 320 cfm
Media	Compressed air
<b>Bowl Capacity</b>	Filter, 7 oz
	Lubricator, 8 oz
Seals	Buna-N
Weight	Piggyback lube, 4.6 lb (2105 g)
	Piggyback, 3 lb (1360 g)

Part Number	Description
Piggyback	/ Regulator Piggyback Accessories
100067	Gauge, 0 – 160 psi
104282	Bracket
104283	Auto drain
104284	Filter element, 40 micron (standard)
104285	Filter element, 5 micron
104286	Filter bowl
104287	Lubricator bowl



# **INGERSOLL RAND JUMBO SERIES**

## **SERIES FEATURES**

## **FILTERS**

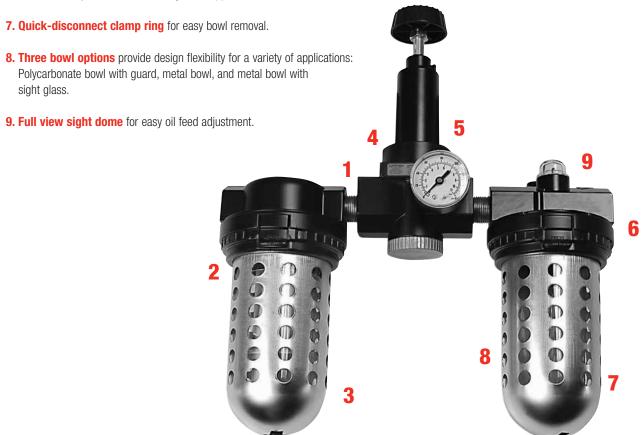
- 1. Flow rates up to 323 cfm for large flow applications.
- 2. Quick-disconnect clamp ring for easy bowl removal.
- **3. Three bowl options** provide design flexibility for a variety of applications: Polycarbonate bowl with guard, metal bowl, and metal bowl with sight glass.

#### **REGULATORS**

- 4. Balanced valve design for accurate pressure control.
- **5. Flow rates up to 500 cfm** for high flow applications.

#### **LUBRICATORS**

**6. Flow rates up to 374 cfm** for large flow applications.



# INGERSOLL RAND JUMBO SERIES FILTERS





Ingersoll Rand Jumbo Series Filter

## 3/4" AND 1" PORTS

## **FEATURES**

- Standard manual drain.
- Standard 5 micron rated element.
- Quick-disconnect clamp ring for easy bowl removal.
- Bowl guard.

## **ORDERING\***

Port Size NPT	Airflow cfm	Bowl Size oz	Filter Element micron	Weight lb	Poly Bowl with Bowl Guard	Metal Bowl with Sight Gauge
Filters						
3/4"	316	2.0	5	5.5	F30-06-000	F30-06-G00
1"	323	2.0	5	5.5	F30-08-000	N/A

<sup>\*</sup>All available models are in this table.

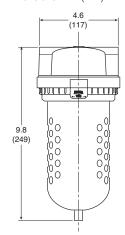
## **PERFORMANCE SPECIFICATIONS**

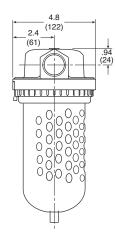
Flow Capacity*	3/4" — 316 cfm (149,1 dm <sup>3</sup> /s)
	1" — 323 cfm (152,4 dm³/s)
Operating	Plastic bowl — 32° – 125° F (0° – 52° C)
Temp	Metal bowl — 32° to 150° F (0° – 65.5° C)
Max Supply	Plastic bowl —150 psig (10.3 bar)
Pressure	Metal bowl — 200 psig (13.8 bar)
<b>Standard Filtration</b>	5 Micron
<b>Useful Retention**</b>	2.0 oz (59.8 cm³)
Port Size	NPT / BSPP-G — 3/4", 1"
Weight	5.5 lb (2.5 kg)
*Inlot proceure 150 peia (10.2	har) Proceure drop 5 peid (0.2 har)

<sup>\*</sup>Inlet pressure 150 psig (10.3 bar). Pressure drop 5 psid (0.3 bar).
\*\*Useful retention refers to volume below the quiet zone baffle.

## **DIMENSIONAL DATA**

Dimensions – in (mm)

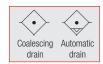




Part Number	Description			
Filter Accessories				
GRP-95-734	Wall mount pipe clamp			
FRP-95-593	Metal bowl with brass petcock drain			
GRP-95-676	Metal bowl with sight gauge & manual drain			
FRP-95-832	Polycarbonate bowl with bowl guard & manual drain			
GRP-95-182	Brass petcock manual drain replacement kit			
GRP-96-000-28	Manual override drain for autofloat drains with 1/8" NPT port			
FRP-95-209	Filter element, 5 micron			



# INGERSOLL RAND JUMBO SERIES COALESCING FILTER





Ingersoll Rand Jumbo Series Coalescing Filter

## 1" PORTS

## **FEATURES**

- Manual drain.
- 0.01 micron rated filter element.
- Quick-disconnect bowl guard with integral plastic bowl and safety latch.
- Differential pressure indicator.

## **ORDERING\***

Port Size NPT	Airflow cfm	Bowl Size oz	Filter Element micron	Weight lb	Poly Bowl	Metal Bowl with Sight Gauge
Coalescing	Filter					
1"	203	2.0	0.5	5.4	M30-08-FS0	N/A

<sup>\*</sup>All available models are in this table.

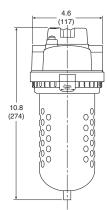
## PERFORMANCE SPECIFICATIONS

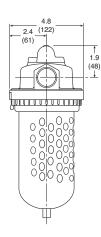
Flow Capacity*	1" — 203 cfm (96.0 dm <sup>3</sup> /s)
Operating Temp	Plastic bowl — 32° – 125° F (0° – 52° C)
	Metal bowl — 32° – 150° F (0° – 65.5° C)
Max Supply	Plastic bowl — 150 psig (10.3 bar)
Pressure	Metal bowl — 200 psig (13.8 bar)
Standard Filtration	Micron (B) 0.5, (C) 0.01, (D) 0.003 ppm / wt**
Useful Retention <sup>†</sup>	2.0 oz (59.8 cm³)
Port Size	NPT / BSPP-G 1/2, 3/4, 1
Weight	5.4 lb (2.4 kg)
*Inlet pressure 150 psia (10.3	har) Pressure drop of 3 PSID (0.2 har)

†Useful retention refers to volume below the quiet zone baffle.

## **DIMENSIONAL DATA**

Dimensions – in (mm)

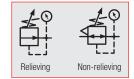




Part Number	Description				
Coalescing Fi	Iter Accessories				
GRP-95-734	Wall mount pipe clamp				
FRP-95-593	Metal bowl with brass petcock drain				
DP2-01-000-28	Differential pressure indicator				
GRP-95-182	Brass petcock manual drain replacement kit				
GRP-96-000-28	Manual override drain for autofloat drains with 1/8" NPT port				
MTP-95-551-28	Type C 0.01 micron coalescing element				

<sup>\*\*</sup>Filtration temperature of 70° F (21° C) @100 psig (6.9 bar) with typical compressor lubricating oil and protected by Type "C" filter.

# **INGERSOLL RAND JUMBO SERIES REGULATORS**





Ingersoll Rand Jumbo Series Regulator

## 3/4" AND 1" PORTS

## **FEATURES**

- Balanced valve design.
- Standard self-relieving.
- Two 1/4" NPT / BSPT-Rc gauge ports standard can be used for additional outlet ports.
- Piston-operated.
- High-flow capacity.

## **ORDERING\*\***

Port Size NPT Regulators	Airflow cfm	Weight Ib	Relieving Type 0 – 125 psig
3/4"	481	6	R30-06-000*
1"	500	6	R30-08-000*

<sup>\*</sup>Order gauge 100067 separately.

## **PERFORMANCE SPECIFICATIONS**

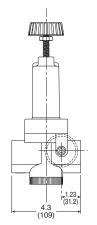
Flow Capacity*	3/4" — 481 cfm (227 dm³/s)
	1" — 500 cfm (236 dm³/s)
Operating Temp	32° to 150° F (0° to 65.5° C)
<b>Max Supply Pressure</b>	300 psig (20.7 bar)
Adjusting	0 - 125  psig  (0 - 8.6  bar)
Range Pressure	0 - 180 psig (0 - 12.4 bar)
Port Size	NPT / BSPP-G 3/4", 1", 1-1/4"
Gauge Port (2 ea.)	NPT / BSPT-Rc 1/4"
Weight	6 lb (2.7 kg)

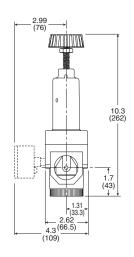
<sup>\*</sup>Inlet pressure 100 psig (6.9 bar). Secondary pressure 80 psig (5.5 bar).

Part Number	Description
Regulator Acce	ssones
29846	Gauge 0 – 15 psig
29863	Gauge 0 – 60 psig
29850	Gauge 0 – 160 psig
GRP-95-734	Wall mount pipe clamp

## **DIMENSIONAL DATA**

Dimensions - in (mm)







<sup>\*\*</sup>All available models are in this table.

# **INGERSOLL RAND JUMBO SERIES UBRICATORS**





Ingersoll Rand Jumbo Series Lubricator

## 3/4" AND 1" PORTS

## **FEATURES**

- Full view sight dome.
- Siphon tube filter provides clean lubricant downstream.
- Quick-disconnect clamp ring for easy bowl removal.
- Adjustable oil feed.

- Standard transparent bowl with metal bowl
- Optional petcock in polycarbonate bowl.
- Can be filled while under pressure.

## **ORDERING\***

Port Size NPT	Airflow cfm	Bowl Size oz	Weight Ib	Poly Bowl with Bowl Guard	Metal Bowl with Sight Gauge
Lubricators					
3/4"	196	26.0	5.6	L30-06-000	L30-06-G00
1"	374	26.0	5.6	L30-08-000	N/A

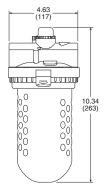
<sup>\*</sup>All available models are in this table.

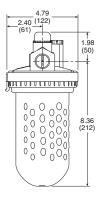
## PERFORMANCE SPECIFICATIONS

Flow Capacity*	3/4" — 196 cfm (92.4 dm <sup>3</sup> /s)
	1" — 374 cfm (176.4 dm <sup>3</sup> /s)
Operating Temp	Plastic bowl — 32° – 125° F (0° – 52° C)
	Metal bowl — 32° – 150° F (0° – 65.5° C)
<b>Max Supply Pressure</b>	Plastic bowl — 150 psig (10.3 bar)
	Metal bowl — 200 psig (13.8 bar)
Useful Retention**	26 oz (769 cm³)
Port Size	NPT / BSPP-G 3/4", 1"
Weight	5.6 lb (2.54 kg)
*Inlet pressure 120 psia (8.3 h:	ar) Pressure dron 5 nsid (0.3 har)

# **DIMENSIONAL DATA**

Dimensions - in (mm)





Part Number	Description
Lubricator Acc	essories
GRP-95-734	Wall mount pipe clamp
FRP-95-593	Metal bowl with brass petcock drain
GRP-95-676	Metal bowl with sight gauge & manual drain
FRP-95-832	Polycarbonate bowl with bowl guard & manual drain
GRP-95-182	Brass petcock manual drain replacement kit
GRP-96-000-28	Manual override drain for autofloat drains with 1/8" NPT port
LRP-95-058	Repair kit

<sup>\*\*</sup>Useful retention refers to usable volume.

# INGERSOLL RAND JUMBO SERIES COMBINATION UNITS



Ingersoll Rand Jumbo Series Filter / Regulator / Lubricator Combo Unit

## 3/4" AND 1" PORTS

## **ORDERING\***

Port Size	Airflow	Poly Bowl	Components		
NPT	cfm	with Bowl Guard	Filter	Regulator	Lubricator
Filter / Regu	Filter / Regulator / Lubricator (regulator includes gauge)				
3/4"	170	C31-06-G00	F30-06-000	R30-06-000	L30-06-000
1"	331	C31-08-G00	F30-08-000	R30-08-000	L30-08-000
Filter / Lubri	Filter / Lubricator				
3/4"	170	C36-06-000	F30-06-G00	N/A	L30-06-G00
1"	331	C36-06-000	F30-08-G00	N/A	L30-08-G00

<sup>\*</sup>All available models combinations are in this table.

## 3/4" PORT\*

## **PERFORMANCE SPECIFICATIONS**

Filter / Regulator / Lubricator			
Part Number	C31-06-G00		
Flow Capacity	170 cfm		
Pressure Range	0 – 125 psig		
<b>Useful Retention</b>	2.0 oz filter		
	26 oz lubricator		
Dimensions	Height 11.2"		
	Width 15.3"		
	Depth 5.7"		
Filter / Lubricator			
Part Number	C36-06-000		
Flow Capacity	170 cfm		
Pressure Range	N/A		
<b>Useful Retention</b>	2.0 oz filter		

26 oz lubricator

Height 11.2" Width 10.1" Depth 4.9"

**Dimensions** 

## 1" PORT\*

## **PERFORMANCE SPECIFICATIONS**

Filter / Regulator / Lubricator		
Part Number	C31-08-G00	
Flow Capacity	331 cfm	
Pressure Range	0 – 125 psig	
<b>Useful Retention</b>	2.0 oz filter	
	26 oz lubricator	
Dimensions	Height 11.2"	
	Width 15.3"	
	Depth 5.7"	
Filter / Lubricator		

Filter / Lubricator		
Part Number	C36-08-000	
Flow Capacity	331 cfm	
Pressure Range	N/A	
<b>Useful Retention</b>	2.0 oz filter	
	26 oz lubricator	
Dimensions	Height 11.2"	
	Width 10.1"	
	Depth 4.9"	

<sup>\*</sup>NPT female pipe sizes.



<sup>\*</sup>NPT female pipe sizes.

# **INGERSOLL RAND SUPER-DUTY SERIES**

## **SERIES FEATURES**

## **FILTERS**

- 1. Differential pressure indicator eliminates the guesswork of element replacement
- 2. Flow rates from 1,280 cfm to 1,400 cfm
- 3. Heavy-duty housings for operating pressures up to 300 psi

## **REGULATORS**

- 4. Balanced valve design for accurate pressure control
- 5. Flow rates up to 1,200 cfm

## **LUBRICATORS**

- 6. Flow rates up to 1,186 cfm
- 7. Quick disconnect clamp ring for easy bowl removal
- 8. Full view sight dome for easy oil feed adjustment

## **FILTERS**



## **REGULATORS**



## **LUBRICATORS**



# **INGERSOLL RAND SUPER-DUTY SERIES**





F35-0B-000

## 1-1/2" AND 2" PORTS

## **FEATURES**

- Heavy-duty cast aluminum housings to withstand operating pressures up to 300 psig
- Differential pressure indicator to eliminate the guesswork of element replacement
- Unique drain mounting plate design offers a troublefree method for interchanging and installing external drains

## **ORDERING**

Port Size NPT	Airflow cfm	Bowl Size oz	Filter Element micron	Weight lb		Metal Bowl with Sight Gauge
Filters						
1-1/2"	1,280	12.5	5	19.3	N/A	F35-0B-C28
2"	1,400	12.5	5	31.0	N/A	F37-0C-A28

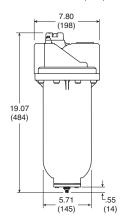
## PERFORMANCE SPECIFICATIONS

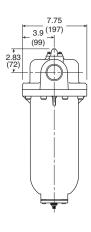
Flow Capacity*	1-1/2" — 1,280 cfm (604 dm³/s)
	2" — 1,400 cfm (660 dm <sup>3</sup> /s)
<b>Operating Temp</b>	32° - 150° F (0° - 65.5° C)
Max Supply	Without DP2 — 300 psig (20.7 bar)**
Pressure	With DP2 — 150 psig (10.3 bar)
<b>Standard Filtration</b>	5 micron
Useful Retention <sup>†</sup>	12.5 oz (370 cm³)
Port Size	NPT / BSPP-G — 1-1/4", 1-1/2", 2"
Weight	19.3 lb (8.7 kg)

<sup>\*</sup>Inlet pressure of 150 psig (10.3 bar). Pressure drop of 5 psig (0.3 bar).

#### **DIMENSIONAL DATA**

Dimensions - in (mm)





Part Number	Description		
Filter Accesso	ories		
GRP-95-734	Wall mount pipe clamp		
FRP-95-593	Metal bowl with brass petcock drain		
GRP-95-182	Brass petcock manual drain replacement kit		
GRP-96-000-28	Manual override drain for autofloat drains with 1/8" NPT port		



<sup>\*\*</sup>Without pressure indicator - Maximum supply pressure is 300 psig (20.7 bar).

<sup>†</sup>Useful retention refers to volume below the quiet zone baffle.

# **INGERSOLL RAND SUPER-DUTY SERIES** COALESCING FILTERS





M35-0B-000

## 1-1/2" AND 2" PORTS

# **FEATURES**

- Heavy-duty cast aluminum housings to withstand operating pressures up to 300 psig<sup>††</sup>
- Differential pressure indicator to eliminate the guesswork of element replacement
- · Unique drain mounting plate design offers trouble-free method for interchanging and installing external drains
- High-flow filter elements: coalescing, 1 micron and 0.01 micron

## **ORDERING**

Port Size NPT	Airflow cfm	Bowl Size oz	Filter Element micron	Weight Ib	Poly Bowl with Bowl Guard	Metal Bowl with Sight Gauge
Coalescing	Filters					
1-1/2"	710	13.9	1.0	19.3	N/A	M35-0B-C28
2"	860	13.9	1.0	31.0	N/A	M37-0C-A28

## PERFORMANCE SPECIFICATIONS

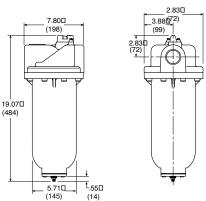
Flow Capacity*	1-1/2" — 710 cfm (335 dm³/s)			
	2" — 860 cfm (335 dm <sup>3</sup> /s)			
Operating Temp	32° - 150° F (0° - 65.5° C)			
<b>Maximum Supply</b>	Without DP2 — 300 psig (20.7 bar)**			
Pressure	With DP2 — 150 psig (10.3 bar)			
<b>Standard Filtration</b>	(B1) 1.0 micron, (C) 0.01 micron			
	(D) 0.003 micron ppm / wt**			
<b>Useful Retention</b>	(cm <sup>3</sup> ) 13.9 oz (411 cm <sup>3</sup> )			
Port Size	NPT / BSPP-G — 1-1/2", 2"			
Weight	19.3 lb (8.7 kg)			
*Inlot proceure 150 peia /10 2	har) Proceure drop of 2 peig (0.2 har)			

<sup>\*</sup>Inlet pressure 150 psig (10.3 bar). Pressure drop of 3 psig (0.2 bar).
\*\*Filtration temperature of 70° F (21° C) @ 100 psig (6.9 bar) with typical

## **DIMENSIONAL DATA**

Dimensions – in (mm)

M35-0B-000



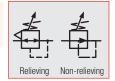
Part Number	Description	
Coalescing Filte	r Accessories	
GRP-95-734	Wall mount pipe clamp	
FRP-95-593	Metal bowl with brass petcock drain	
GRP-95-182	Brass petcock manual drain replacement kit	
GRP-96-000-28	Manual override drain for autofloat drains with 1/8" NPT port	
MTP-95-504-28	Type "C" 0.01 micron coalescing element	

compressor lubricating oil and protected by Type "C" filter.

<sup>†</sup>Useful retention refers to volume below the quiet zone baffle.

<sup>#</sup>Without Differential Pressure Indicator - Maximum supply pressure is 300 psig (20.7 bar).

# **INGERSOLL RAND SUPER-DUTY SERIES REGULATORS**





R40-0B-000

## 1-1/4", 1-1/2", AND 2" PORTS

## **FEATURES**

- Balanced valve design
- Standard self-relieving
- Two 1/4" NPT / BSPT-Rc gauge ports standard can be used for additional outlet ports
- Piston operated
- · High flow capacity

## **ORDERING**

Port Size NPT	Airflow cfm	Weight Ib	Relieving Type 0 – 125 psig
Regulators			
1-1/4"	800	6	R30-0A-000*
1-1/2"	1,200	10.8	R40-0B-000
2"	1,200	10.8	R40-0C-000

<sup>\*</sup>Order gauge 100067 separately.

#### PERFORMANCE SPECIFICATIONS

**Flow Capacity R30\*** 1-1/4" — 800 cfm (377 dm<sup>3</sup>/s) **Flow Capacity R40\*\*** 1-1/2", 2" - 1,200 cfm (566 dm<sup>3</sup>/s) **Operating Temp**  $32^{\circ} - 150^{\circ} \text{ F } (0^{\circ} - 65.5^{\circ} \text{ C})$ Max Supply Pressure 300 psig (20.7 bar) **Adjusting Range** 0 - 125 psig (0 - 8.6 bar)**Pressure** 0 - 180 psig (0 - 12.4 bar)**Port Size R30** NPT / BSPP-G — 3/4", 1", 1-1/4" Port Size R40 NPT / BSPP-G — 1-1/2", 2" Gauge Port (2 each) NPT / BSPT-Rc — 1/4" Weight R30 6 lb (2.7 kg) Weight R40 10.8 lb (4.9 kg)

### **CAUTION**

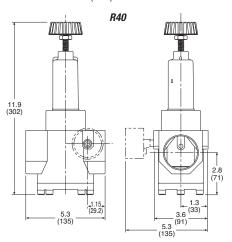
**Regulator Pressure Adjustment** — The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

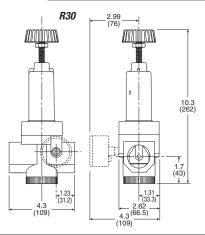
For best performance, regulated pressure should always be set by increasing the pressure to the desired setting.

Part Number Regulator Accessories	Description
29846	Gauge 0 – 15 psig
29863	Gauge 0 – 60 psig
29850	Gauge 0 – 160 psig
GRP-95-734	Wall mount pipe clamp

#### **DIMENSIONAL DATA**

Dimensions - in (mm)







<sup>\*</sup>Inlet pressure of 100 psig (6.9 bar). Secondary pressure of 80 psig (5.5 bar). \*\*Inlet pressure of 100 psig (6.9 bar). Secondary pressure of 85 psig (5.9 bar).

# **INGERSOLL RAND SUPER-DUTY SERIES**



L40-0A-000

## 1-1/4", 1-1/2" AND 2" PORTS

#### **FEATURES**

- Full view sight dome
- Siphon tube filter provides clean lubricant downstream
- Quick-disconnect clamp ring for easy bowl removal
- · Adjustable oil feed
- Standard transparent bowl with metal bowl guard
- Can be filled while under pressure

#### **ORDERING**

Port Size NPT	Airflow cfm	Bowl Size oz	Weight lb	Poly Bowl with Bowl Guard	Metal Bowl with Sight Gauge
Lubricators					
1-1/4"	927	26.0	9.4	L40-0A-000	L40-0A-G00
1-1/2"	927	26.0	9.4	L40-0B-000	L40-0B-G00
2"	1186	26.0	10.2	L50-0C-000	L50-0C-G00

### PERFORMANCE SPECIFICATIONS

Flow Capacity L40*	1-1/4", 1-1/2" — 927 cfm (437 dm <sup>3</sup> /s)
Flow Capacity L50*	2" — 1,186 cfm (560 dm <sup>3</sup> /s)
Operating Temp	Plastic bowl —
	32° – 125° F (0° – 52° C)
	Metal bowl (L50) —
	32° - 150° F (0° - 65.5° C)
<b>Initial Drip Flow L40</b>	.95 cfm
<b>Max Supply Pressure</b>	Plastic bowl — 150 psig (10.3 bar)
	Metal bowl (L50) — 200 psig (13.8 bar)
Min Flow for	1 cfm @ 100 psig
Lubrication	
<b>Useful Retention**</b>	26 oz (769 cm³)
Port Size L40	NPT / BSPP-G 1-1/4", 1-1/2"
Port Size L50	NPT / BSPP-G — 2"
Weight	9.4 lb (4.3 kg)

<sup>\*</sup>Inlet pressure of 120 psig (8.3 bar). Pressure drop of 5 psid (0.3 bar).

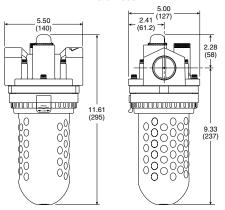
<sup>\*\*</sup>Useful retention refers to usable volume.

Part Number	Description
Lubricator Ac	cessories
GRP-95-734	Wall mount pipe clamp
FRP-95-593	Metal bowl with brass petcock drain
GRP-95-676	Metal bowl with sight gauge & manual drain
LRP-95-830	Polycarbonate bowl with bowl guard & manual drain
FRP-95-832	Polycarbonate bowl with bowl guard & manual drain
GRP-95-182	Brass petcock manual drain replacement kit
GRP-96-000-28	Manual override drain for autofloat drains with 1/8" NPT port
LRP-96-420	Force fill adapter
LRP-95-060	Repair kit

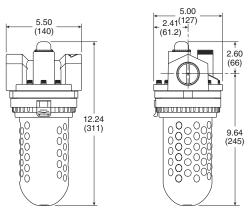
## **DIMENSIONAL DATA**

Dimensions – in (mm)

#### L40-0A-000



## L50-0C-000



# **INGERSOLL RAND INLINE SERIES**





F01-02-000

**PERFORMANCE SPECIFICATIONS** 

Max Supply Pressure 200 psig (13.8 bar)

Flow Capacity\*

**Operating Temp** 

**Port Size** 

Weight

Standard Filtration

## 1/4" PORTS

#### **FEATURES**

This small, aluminum inline filter is designed to provide protection for portable pneumatic hand tools. It weighs only 2 ounces with a throw-away filter element rated at 5 microns. Either port may be used as the inlet port. Flow is 22.0 cfm (10.3 dm<sup>3</sup>/s) at 150 psig (10.3 bar) inlet pressure with 5 psig (0.3 bar) pressure drop.

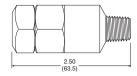
#### **ORDERING**

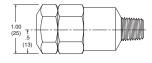
Port Size NPT	Airflow cfm	Filter Element micron	Weight Ib	Model
Filters				
1/4"	22	5	0.1	F01-02-000

## **DIMENSIONAL DATA**

Dimensions – in (mm)

F01-02-000





## \*Inlet pressure of 150 psig (10.3 bar). Pressure drop of 5 psid (0.3 bar).

# **ERSOLL RAND INLINE SERIES**

22.0 cfm (10.3 dm<sup>3</sup>/s)

NPT / BSPT-Rc — 1/4"

32° - 150° F

 $(0^{\circ} - 65.5^{\circ} \text{ C})$ 

0.13 lb (6 kg)

5 micron





L01-02-000

#### DEDECOMANCE ODECLEICATIONS

PENFUNIVIANUE S	PEUITIUAI IUNS
Flow Capacity*	1/4" — 36.0 cfm
	(17.0 dm <sup>3</sup> /s)
	3/8" — 38.1 cfm
	(18.0 dm <sup>3</sup> /s)
Operating Temp	32° – 150° F
	$(0^{\circ} - 65.5^{\circ} \text{ C})$
<b>Max Supply Pressur</b>	<b>e</b> 200 psig (13.8 bar)
<b>Useful Retention**</b>	0.25 oz (7.4 cm <sup>3</sup> )
Port Size	NPT / BSPT-Rc —
	1/4", 3/8"
Weight	0.2 lb (0.1 kg)

<sup>\*</sup>Inlet pressure of 150 psig (10.3 bar). Pressure drop of 5 psid (0.3 bar).

## 1/4" AND 3/8" PORTS

#### **FEATURES**

Inline lubricators assure proper lubrication for small pneumatic hand tools. These inline lubricators put the oil source right at the tool. Oil capacity is 1/4 oz. (1 ml) enough to last through an average 8-hour shift. This lubricator requires cyclical or intermittent airflow for proper operation, and consequently works best when installed at the tool inlet or on a short hose near the tool. The LO1 cannot be filled under pressure.

Port Size NPT (female)	Airflow cfm	Bowl Size oz	Weight lb	Poly Bowl with Bowl Guard
Inline Lubricate	ors			
1/4"	36	0.25	0.2	L01-02-000
3/8"	38.1	0.25	0.2	L01-03-000
1/2"	30	3	0.875	3LUB8
3/4"	45	5	1.5	6LUB12
3/4"	80	8	2	8LUB12

<sup>\*1&</sup>quot; Inline Lubricators available as well. Please contact Customer Service for details



<sup>\*\*</sup>Useful retention refers to usable volume.

# INGERSOLL RAND FRL FLOWCHARTS

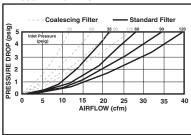
The following flow data is provided to further help in the sizing / selection of individual filters, regulators, and lubricators or combination units.

- 1. Determine the maximum system airflow requirements.
- 2. Determine the maximum allowable pressure drop at rated airflow in cfm.
- 3. Refer to the flowcharts to select the pipe size / series of FRL by choosing the curve that offers minimum pressure drop at the desired airflow in cfm.

## FILTER FLOWCHARTS

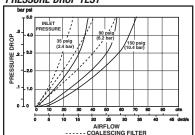
## **MINI SERIES FILTER**

PRESSURE DROP TEST



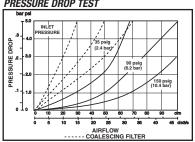
## **COMPACT SERIES 1/4" FILTER**

PRESSURE DROP TEST



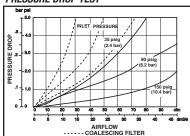
#### **COMPACT SERIES 3/8" FILTER**

PRESSURE DROP TEST



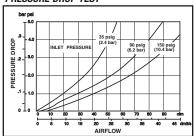
#### **COMPACT SERIES 1/2" FILTER**

PRESSURE DROP TEST



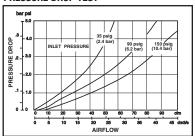
## **HEAVY-DUTY SERIES** 1/2" FILTER

PRESSURE DROP TEST



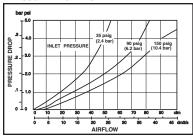
## **HEAVY-DUTY SERIES** 3/4" FILTER

PRESSURE DROP TEST



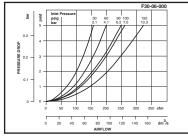
## **HEAVY-DUTY SERIES 1" FILTER**

PRESSURE DROP TEST

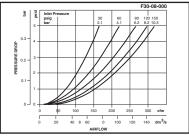


## **JUMBO SERIES** 3/4" STANDARD FILTER

PRESSURE DROP TEST



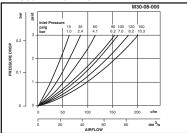
## **JUMBO SERIES** 1" STANDARD FILTER



## FILTER FLOWCHARTS

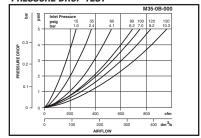
### **JUMBO SERIES** 1" COALESCING FILTER

PRESSURE DROP TEST



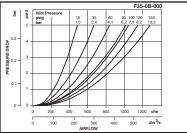
## **SUPER-DUTY SERIES** 1-1/2" COALESCING FILTER

PRESSURE DROP TEST



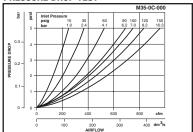
## **SUPER-DUTY SERIES** 1-1/2" STANDARD FILTER

PRESSURE DROP TEST



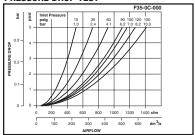
## SUPER-DUTY SERIES 2" COALESCING FILTER

PRESSURE DROP TEST



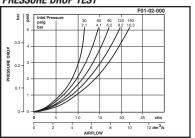
## SUPER-DUTY SERIES 2" STANDARD FILTER

PRESSURE DROP TEST



## **INLINE SERIES 1/4" FILTER**

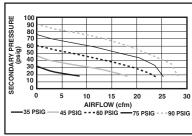
PRESSURE DROP TEST



# **REGULATOR FLOWCHARTS**

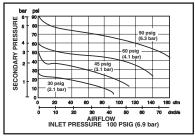
## **MINI SERIES REGULATOR**

PRESSURE DROP TEST



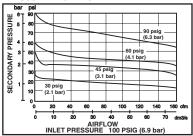
## **COMPACT SERIES** 1/4" REGULATOR

PRESSURE DROP TEST



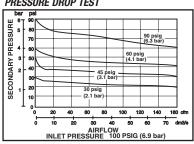
## **COMPACT SERIES** 3/8" REGULATOR

PRESSURE DROP TEST

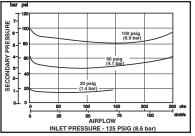


## **COMPACT SERIES** 1/2" REGULATOR

PRESSURE DROP TEST



## **HEAVY-DUTY SERIES** 1/2" REGULATOR

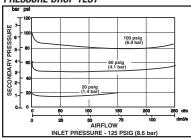




## REGULATOR FLOWCHARTS

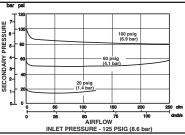
## **HEAVY-DUTY SERIES** 3/4" REGULATOR

PRESSURE DROP TEST



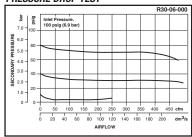
## **HEAVY-DUTY SERIES** 1" REGULATOR

PRESSURE DROP TEST



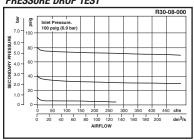
## **JUMBO SERIES** 3/4" REGULATOR

PRESSURE DROP TEST



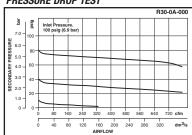
## **JUMBO SERIES 1" REGULATOR**

PRESSURE DROP TEST



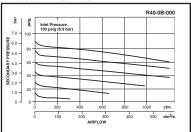
## **SUPER-DUTY SERIES** 1-1/4" REGULATOR

PRESSURE DROP TEST



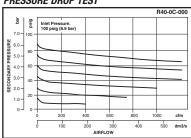
## **SUPER-DUTY SERIES** 1-1/2" REGULATOR

PRESSURE DROP TEST



## **SUPER-DUTY SERIES** 2" REGULATOR

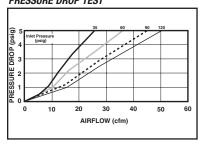
PRESSURE DROP TEST



# **LUBRICATOR FLOWCHARTS**

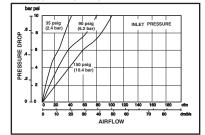
#### **MINI SERIES LUBRICATOR**

PRESSURE DROP TEST

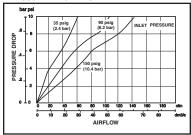


## **COMPACT SERIES** 1/4" LUBRICATOR

PRESSURE DROP TEST



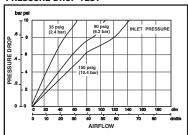
## **COMPACT SERIES** 3/8" LUBRICATOR



## **LUBRICATOR FLOWCHARTS**

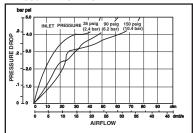
## **COMPACT SERIES** 1/2" LUBRICATOR

PRESSURE DROP TEST



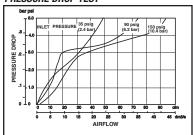
## **HEAVY-DUTY SERIES** 1/2" LUBRICATOR

PRESSURE DROP TEST



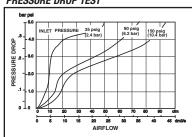
## **HEAVY-DUTY SERIES** 3/4" LUBRICATOR

PRESSURE DROP TEST



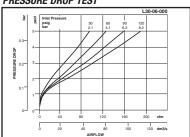
## **HEAVY-DUTY SERIES** 1" LUBRICATOR

PRESSURE DROP TEST



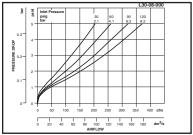
## **JUMBO SERIES** 3/4" LUBRICATOR

PRESSURE DROP TEST



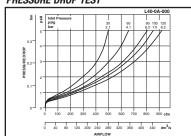
## **JUMBO SERIES** 1" LUBRICATOR

PRESSURE DROP TEST



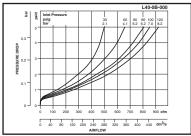
## **SUPER-DUTY SERIES** 1-1/4" LUBRICATOR

PRESSURE DROP TEST



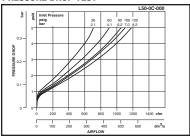
## **SUPER-DUTY SERIES** 1-1/2" LUBRICATOR

PRESSURE DROP TEST



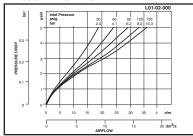
## **SUPER-DUTY SERIES** 2" LUBRICATOR

PRESSURE DROP TEST

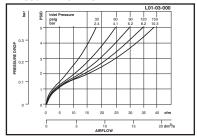


## **INLINE SERIES** 1/4" LUBRICATOR

PRESSURE DROP TEST



## **INLINE SERIES** 3/8" LUBRICATOR

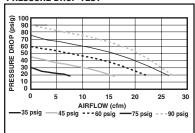




# FILTER / REGULATOR / LUBRICATOR COMBO FLOWCHARTS

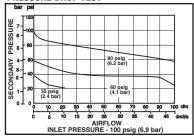
#### **MINI SERIES FRL COMBO**

PRESSURE DROP TEST



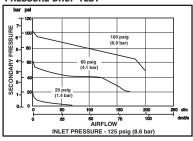
## **COMPACT SERIES** 1/2" FRL COMBO

PRESSURE DROP TEST



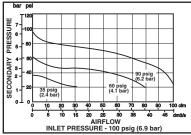
# **HEAVY-DUTY SERIES** 1" FRL COMBO

PRESSURE DROP TEST



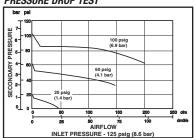
## **COMPACT SERIES** 1/4" FRL COMBO

PRESSURE DROP TEST



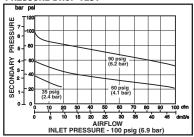
## **HEAVY-DUTY SERIES** 1/2" FRL COMBO

PRESSURE DROP TEST



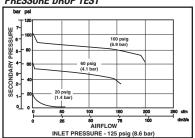
## **COMPACT SERIES** 3/8" FRL COMBO

PRESSURE DROP TEST



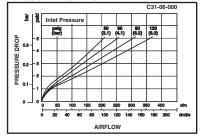
## **HEAVY-DUTY SERIES** 3/4" FRL COMBO

PRESSURE DROP TEST



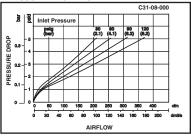
### **JUMBO SERIES 3/4" FRL COMBO**

PRESSURE DROP TEST



### JUMBO SERIES 1" FRL COMBO

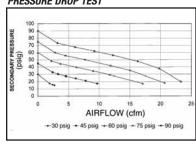
PRESSURE DROP TEST



# PIGGYBACK / LUBRICATOR COMBO FLOWCHARTS

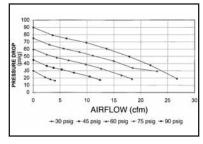
## **MINI SERIES 1/8" PIGGYBACK / LUBRICATOR COMBO**

PRESSURE DROP TEST

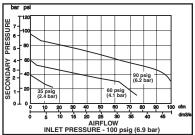


## MINI SERIES 1/4" PIGGYBACK / **LUBRICATOR COMBO**

PRESSURE DROP TEST



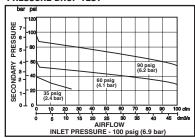
## **COMPACT SERIES** 1/4" PIGGYBACK / LUBRICATOR **COMBO**



## PIGGYBACK / LUBRICATOR COMBO FLOWCHARTS

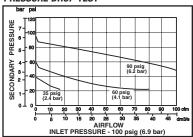
## **COMPACT SERIES** 3/8" PIGGYBACK / **LUBRICATOR COMBO**

PRESSURE DROP TEST



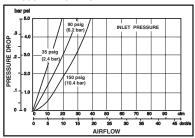
## **COMPACT SERIES** 1/2" PIGGYBACK / **LUBRICATOR COMBO**

PRESSURE DROP TEST



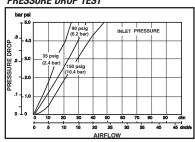
## **COMPACT SERIES** 1/4" FILTER / LUBRICATOR **COMBO**

PRESSURE DROP TEST



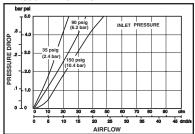
## **COMPACT SERIES 3/8" FILTER / LUBRICATOR COMBO**

PRESSURE DROP TEST



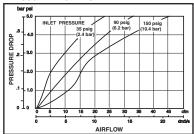
## **COMPACT SERIES 1/2" FILTER / LUBRICATOR COMBO**

PRESSURE DROP TEST



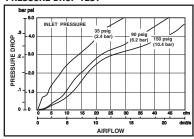
## **HEAVY-DUTY SERIES** 1/2" FILTER / LUBRICATOR **COMBO**

PRESSURE DROP TEST

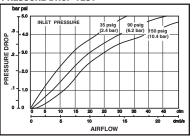


## **HEAVY-DUTY SERIES** 3/4" FILTER / LUBRICATOR **COMBO**

PRESSURE DROP TEST



## **HEAVY-DUTY SERIES 1" FILTER / LUBRICATOR COMBO**

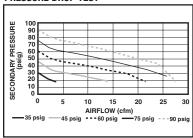




# FILTER / REGULATOR FLOWCHARTS

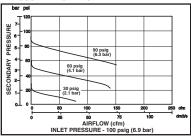
## **MINI SERIES PIGGYBACK / LUBRICATOR AND FILTER / REGULATOR**

PRESSURE DROP TEST



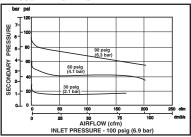
## **COMPACT SERIES 1/4" FILTER / REGULATOR**

PRESSURE DROP TEST



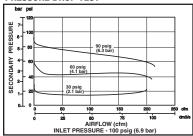
## **COMPACT SERIES** 3/8" FILTER / REGULATOR

PRESSURE DROP TEST

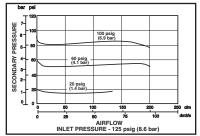


## **COMPACT SERIES 1/2" FILTER / REGULATOR**

PRESSURE DROP TEST



## **HEAVY-DUTY SERIES 1" FILTER / REGULATOR**





# INGERSOLL RAND LIQUIDATOR™ FILTERS

Ingersoll Rand Liquidator™ filters extract large volumes of liquid contaminants, foreign particles, and condensation from air lines to deliver clean dry air to all of your operations. With Liquidator filters protecting your lines, you'll increase productivity, increase tool life, and cut maintenance costs.

## **INGERSOLL RAND** LIQUIDATOR™ FILTERS

You can depend on Ingersoll Rand Liquidator™ filters to deliver clean, dry air to all of your operations. Liquidator filters are designed to extract large volumes of liquid contaminants, foreign particles, and condensation in air lines. They are ideal for critical applications in paint and body shops, food processing and packaging, hospital and dental equipment, process controls, printing plants, electronics clean rooms, sandblasting, and air tool operations.

#### **Features**

- Two-stage filtration cartridges remove 99% of liquid contaminants. One micron filter element removes 99% of all dirt particles one micron or larger.
- · Quick release bowls enable easy cartridge replacement.
- Automatic float drain with manual override.
- Clear polycarbonate bowl with metal guard provides quick inspection.

#### **Benefits**

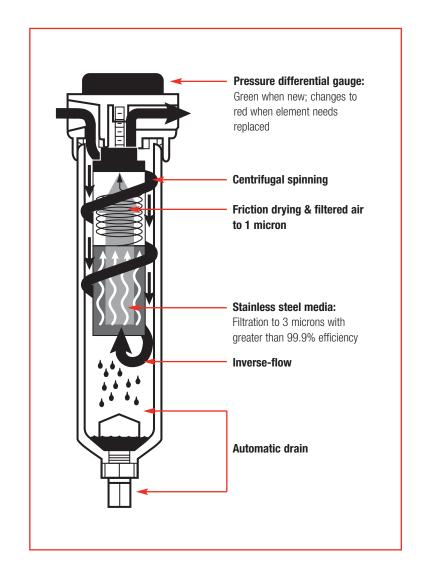
- · Reduce product damage caused by liquid contaminants.
- Increase productivity.
- Increase tool life.
- · Cut maintenance costs.

#### Sizina

The Liquidator requires a flow equal to or greater than 1/3 its rated cfm for efficient operation. Size accordingly. The filter should be within 50 feet of the application.

## Maximum working pressures

- 150 psig with polycarbonate bowl.
- 200 psig with metal bowl.



## Stacked Liquidators — Solutions to Air Line Contaminants

- Air quality safe enough for your most demanding applications.
- Instrument air quality as clean as 0.01 micron.
- Air-logic dewpoint suppressed desiccant drier system without the hassles.

## Stacked Liquidators with Polycarbonate Bowls



8844-W1-035

Part Number	Inlet Size NPT	Description	cfm
Stacked Liquid	lators with	Polycarbonate Bowls	
8842-W1-020	1/4"	Stacked Liquidator, indicator, & automatic drain	20
8842-W1-035	1/4"	Stacked Liquidator, indicator, & automatic drain	35
8843-W1-035	3/8"	Stacked Liquidator, indicator, & automatic drain	35
8844-W1-035	1/2"	Stacked Liquidator, indicator, & automatic drain	35
8844-W1-060	1/2"	Stacked Liquidator, indicator, & automatic drain	60
8844-W1-090	1/2"	Stacked Liquidator, indicator, & automatic drain	90
8846-W1-090	3/4"	Stacked Liquidator, indicator, & automatic drain	90
8848-W1-150	1"	Stacked Liquidator, indicator, & automatic drain	150

## Stacked Liquidators with Metal Bowls



8844-W1-M60

Part Number	Inlet Size NPT	Description	cfm
Stacked Liqu	idators wit	h Metal Bowls	
8844-W1-M60	1/2"	Stacked Liquidator, indicator, & automatic drain	60
8846-W1-M90	3/4"	Stacked Liquidator, indicator, & automatic drain	90
8848-W1-M150	1"	Stacked Liquidator, indicator, & automatic drain	150
8830-W1-000	1-1/4"	Stacked Liquidator & automatic drain	400
8852-W1-M300	1-1/2"	Stacked Liquidator, indicator, & automatic drain	300
8832-W1-000	1-1/2"	Stacked Liquidator & automatic drain	400
8854-W1-M300	2"	Stacked Liquidator, indicator, & automatic drain	300
8834-W1-000	2"	Stacked Liquidator & automatic drain	700



Part Number	Inlet Size NPT	Description	cfm
Side-by-side	Liquidators		
8828-W2-000	1"	Side-by-side Liquidators, polycarbonate bowl, & automatic drain	175
8828-W2-M00	1"	Side-by-side Liquidators, metal bowl, & automatic drain	175

Part Number	Inlet Size ASA	Description	cfm
ASA Flange L	iquidators		
8836-W1-M2500	3"	Flanged main line separator filter	2,500
8848-W1-M2500	4"	Flanged main line separator filter	2,500
8860-W1-M5500	6"	Flanged main line separator filter	5,500

## **Desiccant Driers and Prep Station**



PDS-2000

Part Number  Desiccant Dri	Inlet Size NPT ers and Pre	Description ep Station	cfm
PDS-2000	1/2"	Paint booth desiccant drier system with 1/4" regulator & gauge	25
EAD-6000	1/2"	Prep station air drier with 1/4" regulator & gauge	60

Hood With Corios		Part Numbe	Coalescing	Desiccant	
Used With Series	First Stage	Second Stage	First & Second Stage	Element	Cartridges
Replacement Cartridges and Elements					
8823	8823-5	8823-15	N/A	N/A	N/A
8824	8824-6	8824-16	N/A	N/A	N/A
8826	8826-7	8826-17	N/A	N/A	N/A
8828	8826-8	8826-18	N/A	N/A	N/A
8830, 8832	8828-9	8828-19	N/A	N/A	N/A
8834	8829-1	8829-10	N/A	N/A	N/A
8842-W1-035 / 8843-W1-035 / 8844-W1-035	N/A	N/A	8842-035	N/A	N/A
8844-W1-060 / EAD-6000	N/A	N/A	8844-060	N/A	N/A
8844-W1-090 / 8846-W1-090	N/A	N/A	8846-090	N/A	N/A
8848-W1-150	N/A	N/A	8848-150	N/A	N/A
PDS-2000	N/A	N/A	8844-460	N/A	8844-DES*
EAD-6000	N/A	N/A	8844-060	8844-060C	N/A

<sup>\*</sup>Available in package of six — order 8844-DES-6.

## Repair Kit Bowl O-rings



GRP-95-257

Used With Series	Part Number		
useu with series	First Stage	Second Stage	
Repair Kit Bowl O-rings			
8822-U2-009	GRP-95-264	GRP-95-264	
8822-W2-009	GRP-95-009	GRP-95-264	
8822-W2-020	GRP-95-009	GRP-95-009	
8822-W2-000, 8823, 8824	GRP-95-257	GRP-95-257	
8826, 8828	GRP-95-256	GRP-95-256	
8830, 8832, 8834	GRP-95-289	N/A	
8842-W1-035 / 8843-W1-035 / 8844-W1-035 8844-W1-060 / M60	GRP-95-257	N/A	
8844-W1-090 / 8846-W1-090 / 8848-W1-150 M90-M150	GRP-95-256	N/A	



# Replacement Polycarbonate Bowls



Hood With	First Stage			Second Stage	
Used With Series	Part Number	Capacity oz	Drain Type	Part Number	Capacity oz
Replacement Polycarbo	nate Bowls				
8822-U2-009	GRP-95-856**	1	Umbrella	GRP-95-856**	1
8822-W2-009	FRP-95-017**	5	Automatic	GRP-95-856**	1
8822-W2-020	FRP-95-017**	5	Automatic	GRP-95-856**	1
8822-W2-000, 8823-W2-000, 8824-W2-000	N/A	N/A	Automatic	FRP-95-831	11
8826-W2-000, 8828-W2-000	MRP-95-941	40	Automatic	FRP-95-832	25
8842-W1-035, 8843-W1-035, 8844-W1-035	FRP-95-772	18	N/A	N/A	N/A
8844-W1-060, 8846-W1-090, 8848-W1-150	MRP-95-941	40	N/A	N/A	N/A
X01-04-000 Automatic Drain Unit	XRP-95-746**	32	Automatic	N/A	N/A

<sup>\*\*</sup>Order drain and guard separately; other units listed are furnished with drain and guard.

## Drain Kits



Used With	Complete Auto	Drain Units	Replacement Drain Kits	
Series	Polycarbonate	Metal	Automatic	Manual
Drain Kits				
8822-U2-009	N/A	N/A	N/A	GRP-95-18
8822-W2-009, 020	N/A	N/A	XRP-95-978	GRP-95-18
8822-W2-000, 8823, 8824, 8826, 8828	N/A	N/A	XRP-95-978	FRP-95-610
8830, 8832, 8834	X01-04-000	X01-04-M00	XRP-96-244	N/A
Schraeder Check Valve Kit	N/A	N/A	N/A	GRP-96-10

# **AIR LINE VALVES AND GAUGES**



# **INGERSOLL RAND AIR LINE VALVES AND GAUGES**

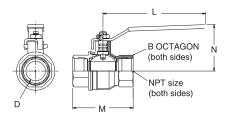
Maintaining consistent air pressure throughout the entire system is crucial for maximum performance and productivity. Ingersoll Rand carries a full line of durably built valves, strainers, and pressure gauges that ensure you've got the power you need when you need it.

## **BALL VALVES**



- Provide extended service life and resist failure caused by severe temperature applications
- Full-flow design assures maximum system efficiency
- Highly inert PTFE seats provide resistance to chemical corrosion
- Two Viton o-rings at the stem provide maximum safety with no maintenance
- Blow-out proof system, chrome-plated brass ball, and specifically designed handle enable increased turning leverage for easy opening and closing
- Available in female pipe sizes

## Ball Valves





54634431

Part Number	Size NPT	В	000	M	N	D
Ball Valve	S					
54634431	1/2"	0.98"	5.1"	2.32"	1.69"	0.59"
54634449	3/4"	1.22"	5.98"	2.52"	1.97"	0.75"
54634456	1"	1.57"	6.32"	3.19"	2.13"	0.945"
54634464	1-1/4"	1.93"	8.05"	3.66"	3.98"	1.18"
54634472	1-1/2"	2.13"	8.23"	4.02"	4.43"	1.5"
54634480	2"	2.69"	8.58"	4.76"	5.02"	1.89"
54634498	2-1/2"	3.35"	13.11"	6.14"	5.2"	2.52"
54634514	3"	3.89"	13.52"	6.97"	5.51"	3"

Please be aware that ball valves are intended for use in the fully open or closed positions. Depending on application conditions, throttling of the valve may result in premature seal failure and/or inability to turn the valve handle.

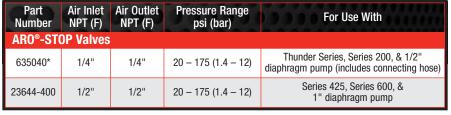
## **ARO-STOP® VALVE**

ARO-STOP® valves shut off air to pump when material containers are empty or fluid lines are broken. They also feature quick-set and reset capabilities.

#### ARO-STOP® Valves



635040



\*Maximum flow rate of 23 cfm @ 90 psi.



23644-400

## **Protect Your Investment**

Pump "runaway" results when your material container is depleted and the pump cycles fast and needlessly. Protect your pump investment with an ARO®-STOP valve.



## LOW LEVEL CUT-OFF

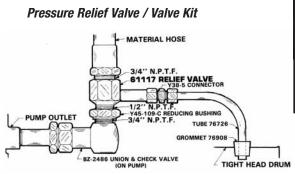
Low level cut-off prevents air from entering the fluid line by closing the pump intake when material supply is exhausted. Cut-off also threads to the bottom of siphon tube for immersion in fluid, and serves as a check valve.



Part Number  Low Level Cut-o	For Use With
640153	Series 200 and Series 425 pumps with 1-1/2" NPT (F) threads, Thunder Series 3" air motor pumps

\*Not for pumps that exceed 6 gpm.

# PRESSURE RELIEF VALVE / VALVE KIT



Part Number Pressure	Description  Relief Valve / Valve Kit
61117	Pressure relief valve is used on material outlet side of pump to automatically allow bleed-back of material to container in applications where thermal expansion is present
61118	Pressure relief valve kit includes 61117 relief valve reducing bushing, compression coupling, 3' of plastic drain tubing, & grommet



# **PIPE LINE VALVE**

A sturdy, quick-acting valve that goes from full flow to off with only a 1/4 turn.

Pipe Line Valve



Part Number	NPT	Description					
Pipe Line Valve							
C04-291	3/4"	4-way shut-off valve					

Our strong and efficient air strainers are designed to permit free passage of air. They can be cleaned quickly by removing the plug from the strainer cap and turning air on momentarily.

Pipe Line Air Strainers



Part Number	Female NPT			
Pipe Line Air Strainers				
EU-A267	3/4"			
HU-A267AT	1"			
K4U-A267AT	1-1/4"			
ST900-267-24	1-1/2"			
ST900-267-32	2"			

# **PRESSURE GAUGES**

#### Pressure Gauges



Part Number	Pressure Rating psi	kPa	Port Size	Dial Size	Mounting Type		
Pressure Ga	Pressure Gauges						
32245953	15	100	0.25"	2.5"	Center back mount		
32231177	30	200	0.25"	2.5"	Center back mount		
32270407	30	200	0.25"	2.5"	Center back mount		
32270415	60	400	0.25"	2.5"	Center back mount		
32029076	100	600	0.25"	2.5"	Center back mount		
38001814	100	600	0.25"	2.5"	Lower mount		
37997731	100	600	0.25"	4"	Lower mount		
32270316	160	1,000	0.25"	2.5"	Center back mount		
32299190	200	1,400	0.25"	2.5"	Center back mount		
38485454	200	1,400	0.25"	2.5"	Lower mount		
37993722	200	1,400	0.25"	4"	Lower mount		
32026361	300	2,000	0.25"	2.5"	Center back mount		
38485462	300	2,000	0.25"	2.5"	Lower mount		
37993730	300	2,000	0.25"	4"	Lower mount		
32121055	600	4,000	0.25"	2.5"	Center back mount		
37999000	600	4,000	0.25"	4"	Lower mount		
37998994	1,000	7,000	0.25"	2.5"	Center back mount		
37998986	1,000	7,000	0.25"	4"	Lower mount		
32270423	1,500	10,000	0.25"	2.5"	Center back mount		
32026379	2,000	14,000	0.25"	2.5"	Center back mount		
32024796	3,000	20,000	0.25"	2.5"	Center back mount		
32270324	10,000	60,000	0.25"	2.5"	Center back mount		

Pressure gauges are critical to any installation. Ingersoll Rand offers a full range (15 psi - 10,000 psi) of liquid-filled pressure gauges. Ingersoll Rand gauges are built in a durable stainless steel case with a vent plug and copper alloy fittings.

## **NEEDLE PRESSURE GAUGE**



Part Number	Description
Needle Pressure Gauge	
NPG-A1	Gauge kit
NPG-2	Needle & cleaning wire kit

Utilizing our needle pressure gauge is one of the simplest ways to check actual air pressure of the equipment while it is operating, determining whether or not the equipment is receiving adequate air pressure. The hypodermic needle easily pierces any size rubber air hose, and, if properly inserted, will not cause a leak when withdrawn.

The Ingersoll Rand needle pressure gauge kit consists of a convenient carrying pouch, an easy-to-read pressure gauge, a needle guard, two hypodermic needles, and two cleaning wires.



Notes		

# **FLUID PRODUCT ACCESSORIES**



# **INGERSOLL RAND FLUID PRODUCT ACCESSORIES**

All Ingersoll Rand lubrication equipment and accessories are designed to the same high standards of quality and performance as our tools and air compressors. We offer a full range of products and accessories that will keep all types of fluids moving efficiently through your operation.

# **OIL PUMP ACCESSORIES**

91020-1



65986

Part Number 5-gal Tube	Description	For Use With
65986	6' (1.8 m), 3/4" ID hose with 3/4" NPT (M) outlet; Neoprene over Thiokol; includes 91020-1 tube	Wall-mounted stub pumps



Part Number	Description	For Use With
55-gal Tubes		
65986-1	6' (1.8 m), 3/4" ID hose with 3/4" NPT (M) outlet; Neoprene over Thiokol; includes 91020-2 tube	Drum cover or closed drum with 2" bung opening
61601	Speeds 55-gal drum change-over; no need to handle pump; includes 622651-06 hose, Y45-24-C adapter bushing, Y43-5-C street elbow, and 65109 (36"), carbon steel suction tube; 3/4" NPT (F) fluid outlet	Wall-mounted stub pumps
66779	For pumping from 55-gal drum; PVC tube has foot valve for positive priming; includes 76193 bung adapter, adjustable NPT (F) fluid outlet	Stub pumps and diaphragm pumps
61409	For pumping from 55-gal drum; 90° PVC siphon tube, 35-1/2" (901.7 mm) long with 2" bung adapter for 55-gal drums; can easily be cut to desired length; 1/2" NPT (F) outlet	1/2" diaphragm pumps and stub pumps

Part Number 275-gal Contai	Description ners	For Use With
66779-2	For pumping from 275-gal tanks; PVC stub pumps and diaphragm tube has foot valve for positive pumps; includes 76193 bung adapter, adjustable to approximately 48-1/4"; 1" NPT (F) fluid outlet	275-gal bulk tanks with 2" bung mount; maximum tank depth 48"

#### Inlet Material Filters





Part Number	Description	For Use With
Inlet Materia	l Filters	
651830	Keeps foreign matter from entering lower pump end	Adapts to 91020-1 or -2 pipe extension
66480	Filter and check valve assembly constructed of 316 stainless steel, assembly has 1" NPT (F) connections and 40-mesh screen; 4-3/4" (121 mm) x 2-1/8" (54 mm) in diameter	Used with suction tubes when fluid is corrosive and viscosity requires a foot valve for positive priming

# **OIL PUMP ACCESSORIES**

#### Siphon Hoses



Part Number	Hose Size ID	Hose Length ft (m)	Hose Material	Fluid Inlet NPT (M)	Fluid Outlet (NPT)	For Use With
Siphon Ho	oses, Stair	iless Steel Fi	ittings			
622702-6	1"	6' (1.8)	Nylon tube with oil-resistant cover	1"	1"	Stainless steel siphon tube
622702-10	1"	10' (3)	Nylon tube with oil-resistant cover	1"	1"	Stainless steel siphon tube
Siphon Ho	Siphon Hose, Carbon Steel Fitting					
622701-6	1"	6' (1.8)	Nylon tube with oil-resistant cover	1"	1"	Carbon steel siphon tube

#### Wall Mount Bracket



Part Number Wall Mount Br	Description acket	For Use With
61113	2" NPT (F) opening for bung type pumps; bracket can slip over rim of open-head drum or wall-mounted	55-gal bung type pumps and Series 200, Thunder, and 425 stub pumps fitted with bung adapters
66100	Wall mount bracket with removable mounting plate	Series 425, 4" stroke pumps
66101	Wall mount bracket with removable mounting plate	Series 425, 6" stroke pumps

#### **Bung Adapters**





Part Number  Bung Adapters	Description	For Use With
60870	2" (M) for use with 2-1/8" siphon tube	Series 200, 1:1 ratio immersed pumps Series 425, 9:1 ratio immersed pumps
67145-3-B	2" (M)	Thunder Series, 3:1 oil pumps
67145-4-B	2" (M)	Thunder Series, 5:1 oil pumps

#### **Bung Adapter Seal Kits**



670	122_1

Part Number	Description	For Use With
<b>Bung Adapter</b>	Seal Kits	
67088	Water-tight seal for outdoor application	Thunder Series pumps
67088-3	Water-tight seal kit includes 67145-3 bung adapter and 67088 seal kit	Thunder Series, 3:1 oil pumps
67088-4	Water-tight seal kit includes 67145-4 bung adapter and 67088 seal kit	Thunder Series, 5:1 oil pumps

Part Number  Dispensing I	Description Hoses	For Use With
623501-6	Medium pressure (2,000 psi) material hose 6' 1/2" NPT	Thunder oil
623501-8	Medium pressure (2,000 psi) material hose 8' 1/2" NPT	Thunder oil



# **GREASE PUMP ACCESSORIES**

#### **Dollies for 16-gal Drums**



Part Number  Dollies for 16-ga	Description al Drums
640057	Platform-type dolly has four swivel casters and three drum clamps; or use with steel or fiber drums
640058-2	Band-type dolly has four rubber-wheeled casters and screw clamp; for use with steel or fiber drums

#### Hand Trucks for 16-gal Drum



Part Number  Hand Trucks for	Description 16-gal Drum	
640149	Three-wheel truck includes hinged handle, swivel-type front wheel, and two 6" rubber rear wheels	

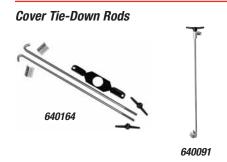
#### **Bung Adapters**



671	145-	1
6/1	145-	1

Part Number	Description	For Use With
<b>Bung Adapte</b>	rs	
4148	2" (M) for use with 1-7/8" siphon tube Series 425, 50:1 ratio grease	
67145-1	2" (M) Thunder Series, 60:1 grease pur	
67145-2	2" (M)	Thunder Series, 50:1 grease pumps

Part Number	Description	For Use With
Dispensing	Hoses	
624201-6	High pressure (5,000 psi) material hose 6' 1/8" NPT	Thunder grease
624401-8	High pressure (4,000 psi) material hose 8' 3/8" NPT	Thunder grease
624201-10	High pressure (5,000 psi) material hose 10' 1/8" NPT	Thunder grease



Part Number	Description	For Use With
Cover He-Dov	wn Rods For 16-gal / 120-lb Drums	
640164	Tie-down bracket kit fixes and holds down drum cover; includes brackets, rods, mounting hardware; use with 94421 cover	Thunder Series pumps
640091	Set of two tie-down rods and mounting brackets; use with 66492 cover	Series 200 and 425, 16-gal / 120-lb drum covers

# **DRUM COVERS**

5-gal / 35-lb Pail



94420

Part Number 5-gal / 35-lb P	Description Pail	For Use With
94420	2" NPT (F) bung opening and three hold-down screws; fits 10.23" – 12" OD drums	Thunder 5-gal bung pumps

#### 16-gal / 120-lb Drums



Part Number	Description Drums	For Use With
66492	Has bung opening, mounting holes, and tie-down brackets; order tie-down rods separately; fits 12.75" – 15" OD drums	Models 662402 and 662409
94421	2" NPT (F) bung opening and three hold-down screws; fits 13-1/8" – 14-7/8" OD drums	Thunder 16-gal / 120-lb bung pumps

#### 55-gal / 400-lb Drum



94422

Part Number 55-gal / 400-li	Description Drum	For Use With
94422	2" NPT (F) bung opening and three hold-down screws; fits 21-7/8" – 23-5/8" OD drums	Thunder 55-gal bung pumps

### **PUMP LIFTS**

#### Single-post Lifts



Part Number	Description	For Use With
Single-post Li	fts	
640225	Air-operated lift for 16-gal / 120-lb container size; extended height 62" (1.6 m); suggested drum cover 94421	Thunder Series, LM2250E-31, LM2350E-31, LM2305A-31
640067	Single-acting cylinder for easy 55-gal / 400-lb drum change-over; requires 71060 drum cover; extended height 92" (2.3 m)	Series 425, Thunder Series



### **FOLLOWER PLATES**

35-lb Tapered Pails (fit 10" - 11" ID drums)



Wiper Seal **OD of Pump Tube Part Number** For Use With Material To Be Fitted 35-lb Tapered Pails (fit 10" – 11" ID drums) 640095-1-B Rubber 1" Thunder 60:1 640095-2-B Rubber 1-1/2" 611406, Thunder 50:1 640095-3-B Rubber 2" Hand pumps

120-lb Drums (fit 13" - 14" ID drums)



640162

Wiper Seal **OD of Pump Tube Part Number** For Use With Material To Be Fitted 120-lb Drums (fit 13" - 14" ID drums) 2" 640027 Buna-N Hand pumps 1-7/8" 640152 Buna-N Series 425, 50:1 640152-1 Buna-N 2-1/8" Series 600, 100:1 640162 1" Thunder, 60:1 Buna-N Thunder, 50:1, fits 10.5" – 13-7/8" drums 640165 Buna-N 1-1/2"

400-lb Drums (fit 20" - 23" ID drums)



640015-1

Part Number	Wiper Seal Material	OD of Pump Tube To Be Fitted	For Use With
400-lb Drums (	fit 20" – 23" ID d	rums)	
640015-2	Buna-N	1-7/8"	Series 425, 50:1
640015-5	Buna-N	2-1/8"	Series 600, 100:1
640015-1	Buna-N	1-1/2"	Thunder 50:1

# **DIAPHRAGM PUMP ACCESSORIES**

#### 5-gal Suction Tube



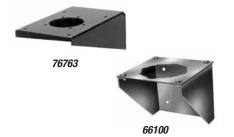
Part Number	Description	For Use With
5-gal Suction Tube		
91020-1	1/2" galvanized suction tube for 5-gal containers; 16" long	1/2" diaphragm pumps

#### 55-gal Suction Tubes



Part Number	Description	For Use With
55-gal Suction	on Tubes	
65986-1	6' (1.8 m); 3/4" ID hose with 3/4 NPT (m) outlet; Neoprene over Thiokol	Drum cover for closed drum with 2" bung opening
66779	For pumping from 55-gal drum; PVC tube has foot valve for positive priming; includes 76193 bung adapter, adjustable to 35-1/2"; 1" NPT (F) fluid outlet	Stub pumps and diaphragm pumps
61409	For pumping from 55-gal drum; 90° PVC tube, 35-1/2" (901.7 mm) with 2" bung adapter for 55-gal drums; can easily be cut to desired length; 1/2" NPT (F) outlet	1/2" diaphragm pumps and stub pumps
61412	For pumping from 55-gal drum; threads directly into pump inlet; includes 2" bung adapter 35-1/2" (901.7 mm) long; schedule 80 PVC pipe can easily be cut to desired length; 1/2" NPT (M) fluid outlet	1/2" diaphragm pumps

#### Wall Mount Bracket



Part Number Wall Mount E	Description Bracket	For Use With
76763	Wall mount bracket allows pump to be located convenient to container	1/2" diaphragm pumps
66100	Wall mount bracket has removable mounting plate	1" diaphragm pumps
62133	Wall mount bracket	1-1/2" diaphragm pumps

#### 55-gal Drum Bung Adapter Kits



Part	Base Material	Tube Material	Weather Seal	Base Seal	
55-gal Drum Bung Adapter Kits*					
67231	Polypropylene	Polypropylene	UHMW PE	Viton	
67231-6	Aluminum	Stainless steel	Viton	Viton	
67231-7	Stainless steel	Stainless steel	Viton	Viton	

\*Kit contains base, bung adapter, bung seal, siphon Tube, weather seal, and hardware. Fasteners are 300 Series stainless steel.



### **DIAPHRAGM PUMP ACCESSORIES**

#### **Bulk Tank Adapter Kits**



Part Number Bulk Tank A	Description dapter Kits*
67234	Polypropylene / Viton O-ring seal
67234-7	Stainless steel (300 Series)

\*Kit contains base, threaded adapter, and hardware. Fasteners are 300 Series stainless steel.



Part Number	Description
Foot Valves*	
637336	Polypropylene with Viton O-ring & ball; use with 67231
637337	Stainless steel with Viton 0-ring & ball; use with 67231-6 or 67231-7

\*Recommended for use with dispensing nozzle. Assembly includes housing, ball check, and O-ring.

#### Hoses With Swivel & Dispensing Nozzles



621514-10

#### Hoses With Non-drip Nozzles



Part Number	Material	Pump Used With	Fittings End / End	Dispensing Nozzle Used (Order Separately)
Hoses With	Swivel & Disp	ensing Nozzl	es*	
621517-10	Nitrile	Polypropylene	Cam / bare	N/A
621516-10	Nitrile	Polypropylene	Cam / brass 1/4" – 18" NPT Male (M)	635129
621523-10	Nitrile	Polypropylene	Cam / non-drip nozzle	N/A
621515-10	EPDM	Polypropylene	Cam / bare	N/A
621519-10	Vinyl	Polypropylene	Cam / bare	N/A
621514-10	EPDM	Polypropylene	Cam / 1" NPT	95199
622514-10	Nylon	Polypropylene	1/2" NPT / 1/2" NPT 316 stainless steel	N/A
621518-10	Nitrile	Aluminum	Cam / bare	N/A
621520-10	Nitrile	Aluminum	Cam / brass 1/4" - 18" NPTF	635129
621524-10	Nitrile	Aluminum	Cam / non-drip nozzle	N/A

<sup>\*1/2&</sup>quot; ID hose comes in 10' lengths; requires 95189 to adapt to 1/2" port.

#### Fluid Dispensing Nozzles



Part Number	Nozzle Type	Description
Fluid Dis	pensing Nozzles	
95199	Composite nozzle	High-flow nozzle works like gasoline nozzle; features tough composite (polypropylene) construction for caustic service
95200	Swivel	1" M x 1" NPTF polypropylene hose swivel attaches between hose and dispensing nozzle to rotate freely; use with 95199
95183	Oil tapper	Easy-pull tapper attaches directly to pump outlet port and provides even-flow dispensing; aluminum construction for oil service
77617-Z	Oil tapper fitting	Plated carbon steel 1/2" – 14" NPTF x 3/8" – 18" NPTF -1; used to attach 95183 oil tapper to 1/2" aluminum pump
635129	Bibb w/ trigger	1/4" NPTF inlet, zinc die casting with brass and nitrile seals for water or oil service; radiator-type bibb has 1/4" fluid inlet and non-drip tip

Part Number	Description
Pump Outlet	Adapters
95189	Composite fitting has 1/2" Male NPT x MaleCam adapter
95190	Aluminum fitting has 1/2" Male NPT x MaleCam adapter

# **LUBE SERVICE CONSOLES**

Description	Dimensions	Accessories
Floor-mounted Lube Service Consoles		
Designed for dispensing fluids from remote storage area; console accommodates up to six hoses and has windshield fluid containers at each side; unit is constructed of heavy-gauge steel with graphite impregnated polymer-molded hose guides; hoses, hose stops, and dispensing nozzles separately	40-11/16" length 26-1/4" width Approx 24-1/2" height	Use 61988-1 hose stops for oil controls and 5671 hose stops for air and water controls
Same as 614306 except without windshield fluid containers	Flat sides 10-9/16" width	Use 61988-1 hose stops for oil controls and 5671 hose stops for air and water controls
Same as 614306 except with windshield fluid container on one side only	Approx 18-3/8" width	Use 61988-1 hose stops for oil controls and 5671 hose stops for air and water controls





#### **Cabinet Labels**

AIR	30W OIL	W.WASHER FLUID	15W-40 OIL
WATER	50W OIL	SOLVENT	20W-40 OIL
ANTIFREEZE	10W-30 OIL	GREASE	5W-30 OIL
ANTIFREEZE/WATER	10W-40 OIL	MOTOR OIL	20W-50 OIL
(HYDRAULIC OIL)	DIESEL FUEL	GEAR LUBE	A.T.F.
T.S.I.	SYNTHETIC OIL	80-140 GEAR	#1 A.T.F.
TORQUE FLUID		90W GEAR	#2 A.T.F.
TURBINE OIL		140 W GEAR	DIESEL OIL

Part Number	Description	Dimensions				
Cabinet I	Cabinet Labels					
93188 Peel and stick labels 7/8" x 5-3/16" w/ 1/2" letter height						



#### **CONTROL HANDLES** Digital, Metered Fluid Control Handles

Our new metered control handles feature a patented oval gear wheel design for precise and reliable measurement. Its digital LCD read-out operates on two standard alkaline batteries.

- Lightweight
- Precise
- Fast Reset
- Totalizes

#### Metered (rigid nozzle models)



Part Number	Max Flow Rate gpm (L)	Meter / Totalizing Increments	Max Working Pressure psi (bar)	Fluid Inlet NPT (F)	Fluid Outlet
Metered (rigid nozzle models)					
635390-11	4 (15)	pt / gal	1,000 (69)	1/2"	Non-drip tip
635390-22	4 (15)	qt / gal	1,000 (69)	1/2"	Non-drip tip
635390-33	4 (15)	L/L	1,000 (69)	1/2"	Non-drip tip

#### Non-metered (rigid nozzle models)



Part Number	Max Flow Rate gpm (L)	Meter / Totalizing Increments	Max Working Pressure psi (bar)	Fluid Inlet NPT (F)	Fluid Outlet
Non-metered (rigid nozzle models)*					
635391-11	4 (15)	N/A	1,000 (69)	1/2"	Non-drip tip

<sup>\*</sup>Handle and nozzle only.

#### Metered (flexible nozzle models)



Part Number	Max Flow Rate gpm (L)	Meter / Totalizing Increments	Max Working Pressure psi (bar)	Fluid Inlet NPT (F)	Fluid Outlet	
Metered (flexible nozzle models)						
635390-1	4 (15)	pt / gal	1,000 (69)	1/2"	Non-drip tip	
635390-2	4 (15)	qt / gal	1,000 (69)	1/2"	Non-drip tip	
635390-3	4 (15)	L/L	1,000 (69)	1/2"	Non-drip tip	

#### Non-metered (flexible nozzle models)



Part Number	Max Flow Rate gpm (L)	Meter / Totalizing Increments	Max Working Pressure psi (bar)	Fluid Inlet NPT (F)	Fluid Outlet	
Non-metered	Non-metered (flexible nozzle models)*					
635391-1	4 (15)	N/A	1,000 (69)	1/2"	Non-drip tip	

<sup>\*</sup>Handle and nozzle only.

#### **Meter Only**



Part Number	Max Flow Rate gpm (L)	Meter / Totalizing Increments	Max Working Pressure psi (bar)	Fluid Inlet NPT (F)
Meter Only				
635190-1	4 (15)	pt / gal	1,000 (69)	1/2"
635190-2	4 (15)	qt / gal	1,000 (69)	1/2"
635190-3	4 (15)	L/L	1,000 (69)	1/2"

#### **CONTROL HANDLES** Non-metered Fluid Control Handles

For motor oil, gear oil, transmission fluid. Includes five-year warranty.

#### High-volume Control Handles



Part Number	Description	Max Working Pressure psi (bar)	Fluid Inlet NPT (F)	Fluid Outlet
High-vo	lume Control Handles			
635193	Flexible rubber hose with non-drip nozzle; use with 1:1 and 3:1 pumps; non-drip tip	600 (41)	3/4"	629226
635395-2	Flexible rubber hose with non-drip nozzle; use with 5:1 and 9:1 pumps; non-drip tip	900 (63)	3/4"	629226

#### Standard-volume Control Handles



Part Number	Description	Max Working Pressure psi (bar)	Fluid Inlet NPT (F)	Fluid Outlet
Standar	d-volume Control Handles			
635392	Has flexible rubber hose, built-in swivel and filter, and non-drip nozzle and tip	1,000 (69)	1/2"	629239
635399	Has flexible rubber hose, built-in swivel, and right-angle non-drip nozzle and tip	1,000 (69)	1/2"	629240

Water, Anti-freeze Control Handle



Part Number	Description	Max Working Pressure psi (bar)	Fluid Inlet NPT (F)	Fluid Outlet		
Water, A	Water, Anti-freeze Control Handle					
635129	Radiator bibb	300 (21)	1/4"	Non-drip tip		

#### **ES** Metered Fluid Control Handles

Preset units automatically shut off when set quantity of fluid is delivered and meter indicator returns to zero. Totalizer registers up to 9,999 units.





Part Number	Units of Measure	Totalizing Increments	Working Pressure	Inset Size	Fluid Outlet
Preset, M	etered Flow Cont	rol			
635364	Quarts (1 – 60)	Gallons	1,000 (69)	1/2"	Non-drip tip (9/16" diameter)
635365	Gallons (1 – 60)	Gallons	1,000 (69)	1/2"	Non-drip tip (9/16" diameter)
635367	Liters (1 – 60) auto shut-off	Liters	1,000 (69)	1/2"	Non-drip tip (9/16" diameter)

#### **HANDLES** Non-drip Nozzle / Hose

For motor oil, gear oil, and transmission fluid.

Nozzle (rigid tube w/ non-drip tip)



Part Number	Description	Fluid Inlet NPT	Length in (mm)	Max Working Pressure psi (bar)			
Nozzle (	Nozzle (flexible hose w/ non-drip tip)						
629245-1	Flexible hose, non-drip tip	1/2" (M)	15" (381)	1,000 (69)			
Nozzle (	Nozzle (rigid tube w/ non-drip tip)						
629245-2	Rigid tube, non-drip tip	1/2" (M)	13" (330)	1,000 (69)			



#### **CONTROL HANDLES** Non-drip Nozzle / Hose

For motor oil, gear oil, and transmission fluid.





Part Number	Description	Description Fluid Inlet Length NPT in (mm)		Max Working Pressure psi (bar)
Non-drip N	Nozzles / Hoses			
629212	Non-drip nozzle / hose	3/4" (M)	12" (305)	900 (62)
629226	Non-drip nozzle / hose	1/2" (M)	11" (279)	900 (62)
629516	Non-drip nozzle / hose	1/2" (M)	13" (330)	1,000 (69)

Right-angle Nozzle / Hose



Part Number	Description		Length in (mm)	Max Working Pressure psi (bar)			
Right-angl	Right-angle Nozzle / Hose						
629521	Right-angle nozzle / hose	1/2" (M)	15" (381)	1,000 (69)			

Right-angle, Rigid, Non-drip Nozzles



Part Number	Description	Fluid Inlet NPT	Length in (mm)	Max Working Pressure psi (bar)		
Right-angl	Right-angle, Rigid, Non-drip Nozzle					
6786	Right-angle, rigid, non-drip nozzle	1/4" (M)	6-1/2" (165)	1,000 (69)		
Rigid, Non	Rigid, Non-drip Nozzle					
60798	Rigid, non-drip nozzle	1/2" (M)	5-1/2" (133)	1,000 (69)		

### **CONTROL HANDLE ACCESSORIES**





Part Number	Description	Max Working Pressure psi (bar)	Fluid Inlet NPT (F)	Fluid Outlet
High-pr	essure Grease Control Handles			
636101	For lubricating grease fittings; does not include nozzle or hydraulic coupler; for applications requiring high flow capacity; remove 1/8" (M) x 3/8" (M) adapter for 3/8" (F) porting	7,500 (517)	3/8" (F)	11/16" – 16" (M) or 1/8" NPT (F)
636111	For lubricating grease fittings; includes inlet material filter and curved nozzle with hydraulic coupler; remove 1/8" (M) x 3/8" (M) adapter for 3/8" (F) porting	7,500 (517)	1/8" (M) or 3/8" (F)	Hydraulic coupler
636103	For normal lubrication; trigger booster delivers 10,000 psi (689 bar); includes curved nozzle with hydraulic coupler, inlet material filter, and manual pressure vent for easy disconnection;  Do not use with whip hose		1/8" (M) or 3/8" (F)	Hydraulic coupler

Whip Hoses for Grease Control Handles



Part Number	Description	Max Working Pressure psi (bar)	Fluid Inlet NPT (F)	Fluid Outlet
Whip H	oses for Grease Control Handles			
629742	Extra-long, wire braid (624201-02) whip hose with hydraulic coupler and swivel; overall length 29-1/2" (749 mm); for use with coupler 636111 high-pressure control handle;  Do not use with 636103 high-pressure booster handle	5,000 (345)	1/8" (F)	636046 hydraulic

Water, Anti-freeze, and Windshield Fluid



Part Number					
Water, Anti-freeze, and Windshield Fluid					
635129	Fluid dispensing nozzle bib with Trigger 1/4" NPTF inlet, zinc die casting with brass and nitrile seals for water or oil service; radiator-type bibb has 1/4" fluid inlet and non-drip tip				

# FLUID CONTROL VALVES Plug, Needle, Globe Valves

**Plug Valves** 



Part Number	Inlet / Outlet NPT	Body Material	Seat Material	Max Working Pressure psi (bar)
Plug Valve	es			
Y28-2	1/8" (F)	Brass	N/A	150 (10)
Y28-1	1/4" (F)	Brass	N/A	150 (10)

Needle Valves



Part Number	Inlet / Outlet NPT	Body Material	Seat Material	Max Working Pressure psi (bar)
Needle Va	ilves			
92818	1/4" (F) x 1/4" (M)	Brass	Leather	125 (9)
636042	1/2" (F)	Carbon steel	Leather	8,000 (552)
636043	1/2" (M) x 1/2" (F)	Carbon steel	Leather	8,000 (552)

**Globe Valve** 



Part Number	Inlet / Outlet NPT	Body Material	Seat Material	Max Working Pressure psi (bar)		
Globe Valve						
Y26-1	3/4" (F)	Brass	Graphite	125 (9)		

# **FLUID BALL CHECK UNIONS**

Fluid Ball Check Unions



Part Number	Inlet NPT	Outlet NPT	Body Material	Ball Material	Seat Material	Max Working Pressure psi (bar)	
Fluid Ball Check Unions							
65845	3/4" (M)	3/4" (M)	Carbon steel	440C SS	440 F SS	8,000 (552)	
66559	1" (M)	1" (F)	Carbon steel	440C SS	440 F SS	8,000 (552)	

Used to prevent back-flow of material.

Part Number	Inlet / Outlet NPT	Body Material	Seat Material	Pressure psi (bar)
Nickel Plate	d Brass Ball Valves			
104077-2	1/4" (F)	Nickel plated brass	Teflon	225 (16)
104077-3	3/8" (F)	Nickel plated brass	Teflon	225 (16)
104077-4	1/2" (F)	Nickel plated brass	Teflon	225 (16)
Bronze Ball	Valves			
61754	1/2" (F)	Bronze	Teflon	400 (28)
61124	3/4" (F at both ends)	Bronze	Buna-N	200 (14)
Carbon Stee	l Ball Valve			
66592	1/2" (F)	Carbon steel	Teflon	2,000 (138)
303 Stainles	s Steel Ball Valve			
66593	3/8" NPS (M) x 3/8" (M)	303 Stainless steel	Teflon	4,000 (276)







### **OIL DRAIN ACCESSORIES**

Ingersoll Rand oil drains are professional-grade drains featuring adjustable heights and large fluid capacities. All of our oil drain kits come with funnels, screens, drum covers, and dipsticks. Other kits include additional features such as dolly carts, siphon tubes, pump couplers, drums, and drains.

16-gal Oil Drain Kit



Part Number	Description	Height Range	Capacity gal	Included			
16-gal C	16-gal Oil Drain Kit						
615003-B	16-gal oil drain kit	39" – 67"	16	Funnel, screen, drum cover, dipstick			

Low-profile Oil Drain



Part Number	Description	Height Range	Capacity gal	Included		
Low-profile Oil Drain						
615028	Low-profile oil drain	10"	20	Dolly, funnel, screen, drum, drum cover, dipstick, drain		

#### Oil Drain Accessories



61580



640058-2



2502

Part Number	Description			
Oil Drain	Accessories			
61580	Transmission funnel			
640058-2	Dolly for 16-gal keg			
615014	16-gal drum with shut-off valve			
2502	Standard funnel			
76884	Funnel screen for 2502			

# **CORDLESS ACCESSORIES**



# **INGERSOLL RAND CORDLESS ACCESSORIES**

Our 2512K cordless impact wrench and 2575K cordless drill / driver deliver impressive power and durability, just as you'd expect from any Ingersoll Rand tool. These tools are powered by long-lasting 14.4-volt NiCad battery packs. The accompanying fast-charge recharger works with hot batteries and features convenient audio and visual cycle completion indicators. Both the battery and the charger are engineered to the same exacting standards as the tools themselves.

### **CORDLESS ACCESSORIES**

#### Battery



Part Number	Voltage	For Use With*
Battery		
2505K	14.4 V	2575K Cordless drill / driver
200N	14.4 V	2512K Cordless impact wrench

\*See tool features below.

#### **Battery Charger**



Part Number	Charge Time	For Use With*
Battery Charger		
2507K	1-hour	2575K Cordless drill / driver
2307 K	i-iloui	2512K Cordless impact wrench

\*See tool features below.

### **FOR USE WITH**

#### 2512K Cordless Impact Wrench



Voltage	Drive in (mm)	Impacts Per Minute bpm	No Load Speed rpm	Torque ft-lb (Nm)	Max Torque ft-lb (Nm)	Impact Weight Ib	Kit Weight Ib	Sound (Pressure / Power) dBA
2512K	2512K Cordless Impact Wrench							
14.4 V	3/8" (10)	3,000	0 – 2,200	25 - 130 (34 - 176)	150 (203)	3.33	11.33	90 / 101

- Performance-tuned twin cam mechanism
- Ergonomic textured grip

- No hose to restrict your mobility
- Contains impact, 2 batteries, 1-hour charger, and carrying case

#### 2575K Cordless Drill / Driver



Voltage	Chuck Capacity in (mm)	Gear Train	Clutch	Free Speed (High) rpm	Free Speed (Low) rpm	Max Torque in-lb (Nm)	Drill Weight Ib	Kit Weight Ib	Sound (Pressure / Power) dBA
2575K	2575K Cordless Drill / Driver								
14.4 V	3/8" (10) keyless	2-speed	17 positions	0 – 1,200	0 – 350	300 (34)	3	10.9	67 / 78

- Metal gear housing and gears
- Jacobs<sup>™</sup> brand keyless chuck
- Contoured variable speed trigger

- Ergonomic textured grip
- Contains drill, 2 batteries, 1-hour charger, and carrying case

Notes





# **WORK ACCESSORIES**



When there's a demanding job to do you need tools and accessories that are going to work as hard as you do. That's exactly what you get when you turn to Ingersoll Rand.

Our complete line of job-specific accessories reflects the same high standards of performance that you'd expect from Ingersoll Rand — the global leader for durable and reliable tools and equipment. Whether it's a big job or small, Ingersoll Rand has what you need to get it done right.

The following section features the complete line of job-specific accessories available from Ingersoll Rand.





# WORK ACCESSORIES



# **WORK ACCESSORIES**

Impact Sockets 161

Construction Tool Steels and Accessories 169

Sanding and Polishing Pads 181

Carbide Grinding Burs 187

Saw Blades and Accessories 191

Collets 193

Drill Accessories 197

Screwdriver and

Nutrunner Accessories 201

# **IMPACT SOCKETS**



# **INGERSOLL RAND IMPACT SOCKETS**

Genuine Ingersoll Rand impact sockets are built of top quality materials for performance and durability. Specifically designed for use with Ingersoll Rand power tools, our sockets are the perfect solution for your everyday bolting and unbolting applications.

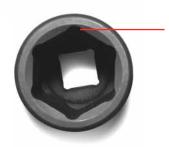
### **INGERSOLL RAND IMPACT SOCKET SETS**

The complete line of Ingersoll Rand socket sets offer these advantages:

- Our heavy-duty line of impact sockets, accessories, and attachments are designed specifically for use with our power tools.
- Our comprehensive line consists of only top quality chrome-molybdenum material for superior performance and durability.
- The variety in this line provides solutions to everyday bolting and unbolting applications.







Concave hex design grips side of fastener to prevent corner-rounding



8-piece 3/8" Drive SAE Deep Impact Socket Set

### 3/8" IMPACT SOCKET SETS

8-piece 3/8" Drive SAE Impact Socket Set



8-piece 3/8"	Drive	SAE	Deep	Impact
Socket Set				



7-piece 3/8" Drive SAE Universal Impact Socket Set



6262U

8-piece 3/8" Drive Metric Impact Socket Set



8-piece 3/8" Drive Metric Deep Impact Socket Set



7-piece 3/8" Drive Metric Universal Impact Socket Set



Part Number	Description	Socket Sizes Included		
8-piece 3/8" Drive SAE Impact Socket Set				
6260A	Packaged in metal tray	5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"		

Part Number	Description	Socket Sizes Included		
8-piece 3/8" Drive SAE Deep Impact Socket Set				
6261D	Packaged in metal tray	5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"		

Part Number	Description	Socket Sizes Included		
7-piece 3/8" Drive SAE Universal Impact Socket Set				
6262U	Packaged in metal box	3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"		

Part Number	Description	Socket Sizes Included		
8-piece 3/8" Drive Metric Impact Socket Set				
6270M	Packaged in metal tray	9 mm, 10 mm, 11 mm, 13 mm, 14 mm, 15 mm, 17 mm, 19 mm		

Part Number	Description	Socket Sizes Included		
8-piece 3/8" Drive Metric Deep Impact Socket Set				
6271MD	Packaged in metal tray	9 mm, 10 mm, 11 mm, 13 mm, 14 mm, 15 mm, 17 mm, 19 mm		

Part Number	Description	Socket Sizes Included		
7-piece 3/8" Drive Metric Universal Impact Socket Set				
6272MU	Packaged in metal box	10 mm, 12 mm, 13 mm, 14 mm, 15 mm, 17 mm, 19 mm		



### 1/2" IMPACT SOCKET SETS

13-piece 1/2" Drive SAE Impact Socket Set



13-piece 1/2" Drive SAE Deep Impact Socket Set



7-piece 1/2" Drive SAE Universal Impact Socket Set



14-piece 1/2" Drive Metric Impact Socket Set



14-piece 1/2" Drive Metric Deep Impact Socket Set



7-piece 1/2" Drive Metric Universal Impact Socket Set



Flip Impact Socket Lug Nut Service Set



Part Number	Description	Socket Sizes Included		
13-piece 1/2" Drive SAE Impact Socket Set				
6360A	Packaged in metal tray	7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1", 1-1/16", 1-1/8", 1-1/4"		

Part Number	Description	Socket Sizes Included
13-piece 1/2" Drive SAE Deep Impact Socket Set		
6361D	Packaged in metal box	7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1", 1-1/16", 1-1/8", 1-1/4"

Part Number	Description	Socket Sizes Included
7-piece 1/2" Drive SAE Universal Impact Socket Set		
6362U	Packaged in metal box	1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8"

Part Number	Description	Socket Sizes Included
14-piece 1/2" Drive Metric Impact Socket Set		
6370M	Packaged in metal tray	10 mm, 11 mm, 12 mm, 13 mm, 14 mm, 15 mm, 16 mm, 17 mm, 18 mm, 19 mm, 21 mm, 22 mm, 26 mm, 27 mm

Part Number	Description	Socket Sizes Included
14-piece 1/2" Drive Metric Deep Impact Socket Set		
6370MD	Packaged in metal box	10 mm, 11 mm, 12 mm, 13 mm, 14 mm, 15 mm, 16 mm, 17 mm, 18 mm, 19 mm, 21 mm, 22 mm, 26 mm, 27 mm

Part Number	Description	Socket Sizes Included
7-piece 1/2" Drive Metric Universal Impact Socket Set		
6371MU	Packaged in metal box	13 mm, 14 mm, 15 mm, 17 mm, 19 mm, 21 mm, 22 mm

Part Number	Description	Socket Sizes Included
Flip Impact Socket Lug Nut Service Set		
7400SMFE	Packaged in plastic mold	3/4" x 3/16", 19 mm x 21 mm, 3" extension

# 3/4" IMPACT SOCKET SETS

8-piece 3/4" Drive SAE Impact Socket Set



Part Number	Description	Socket Sizes Included
8-piece 3/4" Drive SAE Impact Socket Set		
6460A	Packaged in metal box	1", 1-1/16", 1-1/8", 1-1/4", 1-5/16", 1-3/8", 1-7/16", 1-1/2"

8-piece 3/4" Drive SAE Deep Impact Socket Set



Part Number	Description	Socket Sizes Included
8-piece 3/4" Drive SAE Deep Impact Socket Set		
6461D	Packaged in metal box	1", 1-1/16", 1-1/8", 1-1/4", 1-5/16", 1-3/8", 1-7/16", 1-1/2"

# **1" IMPACT SOCKET SETS**

8-piece 1" Drive SAE Impact Socket Set



Part Number	Description	Socket Sizes Included
8-piece 1" Drive SAE Impact Socket Set		
6560A	Packaged in metal box	7/8", 15/16", 1", 1-1/16", 1-1/8", 1-3/16", 1-1/4", 1-1/2"

8-piece 1" Drive SAE Deep Impact Socket Set



Part Number	Description	Socket Sizes Included
8-piece 1" Drive SAE Deep Impact Socket Set		
6561D	Packaged in metal box	7/8", 15/16", 1", 1-1/16", 1-1/8", 1-3/16", 1-1/4", 1-1/2"

9-piece 1" Drive SAE Truck Service Impact Socket Set



Part Number	Description	Socket Sizes Included
9-piece 1" Drive SAE Truck Service Impact Socket Set		
6562A	Packaged in metal box	13/16" square; 7/8", 15/16", 1", 1-3/16", 1-1/2" hex; 1-1/16", 1-1/8", 1-1/4" deep thin wall hex

5-piece 1" Drive SAE Deep Truck Service Impact Socket Set



Part Number	Description	Socket Sizes Included
5-piece 1" Drive SAE Deep Truck Service Impact Socket Set		
6563T	Packaged in metal box	13/16" square; 33 mm & 1-1/2" deep hex; 1-1/8" & 1-1/4" deep thin wall hex

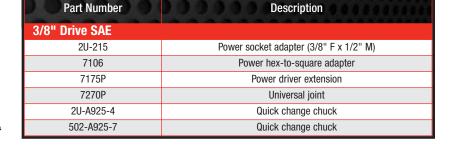


### **IMPACT SOCKET SET ACCESSORIES**

3/8" Drive SAE Socket Adapter



3/8" Drive SAE Socket Universal Joint





1/2" Drive SAE Power Hex to Square Adapter



Part Number	Description		
1/2" Drive SAE			
4UA9	Power angle attachment		
7181P	Power driver extension		
7121	Power hex-to-square adapter		
7470P	Universal joint		
4U-A925-7	Quick change chuck		

# 3/4" Drive SAE Power Driver Extension



07567

Part Number	Description
3/4" Drive SAE	
07655	Power socket adapter (3/4" F x 1" M)
2920A90	Power angle attachment
07567	Power driver extension
07570	Power universal joint
1" Drive SAE	
07565	Power socket adapter (1" F x 3/4" M)
2934A90	Power angle attachment
10607	Power driver extensions

# **IMPACT SOCKET SET ACCESSORIES**

# Non-adjustable Detachable Torsion Bars



5040TDQ-P535-1

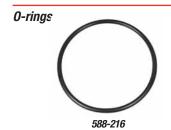
Part Number	Torque fl	Color Code	
00000	5020TDQ	5040TDQ	
Non-Adjustable Deta	chable Torsion Bar	rs*	
5040TDQ-P535-1	6 – 10	20 – 25	Red
5040TDQ-P535-2	8 – 2	22 – 30	Orange
5040TDQ-P535-3	10 – 14	25 – 35	Yellow
5040TDQ-P535-4	12 – 16	30 – 40	Green
5040TDQ-P535-5	14 – 18	35 – 45	Blue
5040TDQ-P535-6	16 – 20	40 - 50	Violet
5040TDQ-P535-7	18 – 22	45 – 55	Red
5040TDQ-P535-8	20 – 24	50 - 60	Orange
5040TDQ-P535-9	22 – 26	55 – 65	Yellow
5040TDQ-P535-10	24 – 28	60 – 75	Green
5040TDQ-P535-11	26 – 29	70 – 85	Violet
5040TDQ-P535-12	27 – 30	75 – 90	Blue

\*For use with impact models 5020TDQ & 5040TDQ.

#### Socket Retainers



Part Number	Drive Size	Inside Diameter in (mm)
Socket Retainers		
RR10005S	3/4"	1-1/4" (32)
RR10032S	3/4"	1-7/16" (37)
RR10034S	3/4"	1-5/8" (41)
RR10008S	1"	1-3/4" (45)
RR10010S	1"	1-15/16" (49)
RR10015S	1"	2-1/8" - 2-1/4" (54 - 57)
RR10017S	1"	2-1/2" (64)
RR10019S	1"	2-5/8" (67)
RR10020S	1"	2-7/8" - 3" (73 - 76)
RR10025S	1-1/2"	3-3/8" (86)
RR10030S	1-1/2"	3-7/8" (98)
RR10035S	1-1/2"	4-3/8" (111)



Part Number	Square Drive Size
0-rings	
588-216	2-1/2"
599-216	3-1/2"

#### **Retaining Pins**



Part Number	Square Drive Size
Retaining Pins	
588-215	2-1/2"
599-215	3-1/2"



Notes	

# **CONSTRUCTION TOOL STEELS AND ACCESSORIES**



# INGERSOLL RAND CONSTRUCTION TOOL STEELS AND ACCESSORIES

Ingersoll Rand has a rich heritage in the construction industry, dating back to our company founding in 1871. Today we offer the most comprehensive lines of construction tools on the market, as well as a wide variety of durable chisels, retainers, and steels that, when combined, provide the ultimate in productivity.

### STEEL PAVEMENT BREAKER AND DIGGER ACCESSORIES

# **Moil Points**

Under Collar	Part Number For Hex Shank Size			
Length	7/8" x 3-1/4"	1" x 4-1/4"	1-1/8" x 6"	1-1/4" x 6"
Moil Points —	- Standard-duty			
14"	50050269	50050368	50050475	50055680
18"	50050277	50050376	50055524	50055698
24"	50050285	50050392	50055540	50055714
36"	51305860	N/A	50055565	50055730
48"	N/A	N/A	50055573	50055748
60"	N/A	N/A	50055581	50055755
72"	N/A	N/A	50055599	50198993
Moil Points — Super-duty				
11-1/4"	22041495	22041057	22041073	22041099
14-1/4"	22041602	22041065	22041081	22041107

#### 1" Narrow Chisels

Used for general demolition.



Used for general demolition.

Under Collar	lar Part Number For Hex Shank Size				
Length	7/8" x 3-1/4"	1" x 4-1/4"	1-1/8" x 6"	1-1/4" x 6"	
1" Narrow Chi	isels — Standaı	rd-duty			
14"	50199207	50197805	50197904	50196385	
18"	50199215	50197821	50197912	50196401	
24"	50199223	N/A	50197938	50196419	
36"	N/A	N/A	N/A	51299477	
48"	N/A	N/A	50197979	51299485	
60"	N/A	N/A	50197987	51299048	
72"	N/A	N/A	50197995	51299493	
1" Narrow Chisels – Super-duty					
11-1/4"	22041503	22041115	22041131	22041156	
14-1/4"	22041610	22041123	22041149	22041164	

#### 1-1/2" Super Cut Chisel



Specially designed for breaking concrete.

0000	Part Number For	Hex Shank Size		
7/8" x 3-1/4"	1-1/8" x 6"	1-1/4" x 6"		
1-1/2" Super Cut Chisel				
N/A	22040463	22040471	22040489	
	ut Chisel	7/8" x 3-1/4" 1" x 4-1/4" ut Chisel	ut Chisel	

#### 3" Chisels



Used for concrete demolition and asphalt cutting.

Under Collar	Part Number For Hex Shank Size			
Length	7/8" x 3-1/4"	1" x 4-1/4"	1-1/8" x 6"	1-1/4" x 6"
3" Chisels				
14"	50195288	50195320	50114883	50193879
18"	50195296	50195338	50193754	50193887
24"	N/A	50195353	50193747	50193903
36"	N/A	50195361	N/A	N/A
48"	N/A	50195379	N/A	50193937
72"	N/A	51304574	N/A	50191790

#### 3" Digging Chisel



Used for digging and deeper asphalt cutting.

Under Collar	2000	Part Number For	Hex Shank Size	AAAAAA
Length	7/8" x 3-1/4"			
3" Digging Chisel				
16"	22040968	22040976	22040984	50186014

### STEEL PAVEMENT BREAKER AND DIGGER ACCESSORIES

#### 3-3/4" Combo Cutter



Great for manhole reconstruction.

#### 5" Asphalt Cutter



Asphalt cutting and removal.

#### 5-1/2" Clay Spade



#### **Pipe Drivers**



Driving steel pipe up to 1-1/2" OD.

#### **Ground Rod Driver**



Driving steel rod up to 1" OD.

#### Detachable Shank



To be used with tent stake drivers or tamping pad

#### Tent Stake Drivers



Used with detachable shank.

#### 8" Tamping Pad Square



Tamping and backfilling; used with detachable shank.

#### 3-piece Sign Post Driver



Includes shank, post block, and 3-1/2" IO driver.

Under Collar		Part Number For	Hex Shank Size	AAAAAAAA
Length	7/8" x 3-1/4"			
3-3/4" Combo	Cutter			
11-1/2"	N/A	N/A	22040612	22040620

Under Collar	Part Number For Hex Shank Size			
Length	7/8" x 3-1/4"			
5" Asphalt Cutter				
11"	22040935	50190404	50185982	50185990

Under Collar	0000	Part Number For	Hex Shank Size	
Length	7/8" x 3-1/4"			
5-1/2" Clay S	pade			
16"	50189596	50189554	50189562	50189570

Under Collar	0000	Part Number For Hex Shank Size		00000000	
Length	7/8" x 3-1/4"	7/8" x 3-1/4"			
1" Pipe Driver	1" Pipe Driver				
11"	N/A	N/A	22040505	22040513	
1-1/2" Pipe D	1-1/2" Pipe Driver				
11"	N/A	N/A	22040547	22040554	

Under Collar		Part Number For	Hex Shank Size	ALIAN DE LA COLOR
Length	7/8" x 3-1/4"			
<b>Ground Rod D</b>	river			
8"	N/A	22040588	22040596	22040604

Under Collar	Part Number For Hex Shank Size				
Length	7/8" x 3-1/4"				
Detachable Sh	ble Shank				
7-3/4"	22040927	50187830	50187848	50187855	

Under Collar	Part Number For Hex Shank Size				
Length	7/8" x 3-1/4"	1" x 4-1/4"	1-1/8" x 6"	1-1/4" x 6"	
2" Tent Stake	2" Tent Stake Driver				
N/A	22040638	22040638	22040638	22040638	
2-1/2" Tent St	2-1/2" Tent Stake Driver				
N/A	22040646	22040646	22040646	22040646	

Under Collar		Part Number For	Hex Shank Size	AAAAAAA
Length	7/8" x 3-1/4"			
8" Tamping Pa	Pad Square			
N/A	50187897	50187897	50187897	50187897

Under Collar	Part Number For Hex Shank Size				
Length	7/8" x 3-1/4"				
3-Piece Sign I	3-Piece Sign Post Driver				
7-3/4"	22040778	22040943	22041008	22041016	



# **DIGGER CHISELS**

#### Blanks



Under Collar	Par	t Number For Digger Mo	odel
Lengths	93A1	93LA1	95LA3
Blanks			
14"	N/A	N/A	59H-516H-14
14-1/4"	73H-16H-18	73H-16H-18	N/A
20-1/4"	73H-16H-24	73H-16H-24	N/A
26-1/4"	73H-16H-30	73H-16H-30	N/A
32-1/4"	73H-16H-36	73H-16H-36	N/A

#### Digging Chisel



Under Collar	odel		
Lengths	93A1	93LA1	95LA3
Digging Chisel			
16"	N/A	N/A	59H-580H

#### Flat Blades



Under Collar	Part Number For Digger Model			
Lengths	93A1	93LA1	95LA3	
Flat Blades				
14-1/4"	73H-16HF-18	73H-16HF-18	N/A	
20-1/4"	73H-16HF-24	73H-16HF-24	N/A	
26-1/4"	73H-16HF-30	73H-16HF-30	N/A	
32-1/4"	73H-16HF-36	73H-16HF-36	N/A	

#### Moil Points



Under Collar	Par	t Number For Digger M	odel
Lengths	93A1	93LA1	95LA3
Moil Points			
14-1/4"	73H-16HM-18	73H-16HM-18	N/A
20-1/4"	73H-16HM-24	73H-16HM-24	N/A
26-1/4"	73H-16HM-30	73H-16HM-30	N/A
32-1/4"	73H-16HM-36	73H-16HM-36	N/A

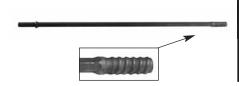
# **JACKHAMMER RODS AND BITS**

#### "H" Thread-jack Rods



Under Collar	Part Number For Hex Shank Size		c Size
Length	7/8" x 3-1/4"	7/8" x 4-1/4"	1" x 4-1/4"
"H" Thread-jack F	Rods		
12"	N/A	51242006	50713023
18"	50283266	51242014	50713031
24"	50283506	51233690	50354596
30"	51305639	51242030	51305704
36"	50712728	51234052	50713049
48"	50283555	51234060	50283183
60"	50712736	51242063	50713056
72"	50712744	50712975	50283696
96"	50712751	N/A	50283241
120"	N/A	N/A	50712132
144"	N/A	N/A	50712140

#### Rope Thread-jack Rods



Under Collar	Part Number
Length	Hex Shank Size 1-1/4"
Rope Thread-jack Rods	
24"	51365708
48"	51365716
72"	50187897

#### "H" Thread-carbide Bits



Dia cia		umber
Bit Size	Single Use	Multi-use
"H" Thread-carbide Bits		
1-3/8" (35 mm)	51248359	51307155
1-1/2" (38 mm)	51248367	51248326
1-5/8" (41 mm)	51248375	51248318
1-3/4" (44 mm)	51248383	51248326
1-7/8" (48 mm)	51248391	51248334
2" (52 mm)	51248409	51248342
2-1/4" (57 mm)	N/A	51356723
2-1/2" (64 mm)	N/A	51293017



# **RIVET BUSTER STEEL RODS**



Length	Part Number
Moil Point	
12" (305 mm)	9001-297-12



Length Chisels	Part Number
9-1/2" (241 mm)	9001-276-9-1/2
12" (305 mm)	9001-276-12
18" (457 mm)	9001-276-18



Length	Part Number
Side Cut Chisel	
9-1/2" (241 mm)	9001-277-9-1/2



Length	Part Number
Ripper Chisel	
9-1/2" (241 mm)	9001-295-9-1/2

# **BLACK-OUT PUNCHES**





Length	Rivet Diameter	Part Number
Black-out Punches		
	3/8" (10 mm)	9001-278
	1/2" (13 mm)	9001-279
	5/8" (16 mm)	9001-280
9-1/2"	3/4" (19 mm)	9001-281
	7/8" (22 mm)	9001-282
	1" (25 mm)	9001-283
	1-1/8" (29 mm)	9001-284

# **RIVET BUSTER ACCESSORIES**

#### Retainers





Barrel Threaded (9001, 11001) Part Number	Barrel Grooved (8001A, 9001A, 11001A) Part Number
Retainers	
N/A	89938443
9001-200	N/A

**Upper Sleeve** 

Lower Sleeve



9001-220

9001-201

Barrel Threaded (9001, 11001) Part Number	Barrel Grooved (8001A, 9001A, 11001A) Part Number
Upper Sleeve	
9001-220	9001-220
Lower Sleeve	
9001-201	9001-201

Bumper



9001-203

Barrel Threaded (9001, 11001) Part Number	Barrel Grooved (8001A, 9001A, 11001A) Part Number
Bumper	
9001-203	9001-203

Lock Clip



Spring Lock



9RB-207

89938450

Barrel Threaded (9001, 11001) Part Number Lock Clip	Barrel Grooved (8001A, 9001A, 11001A) Part Number
·	
9RB-207	N/A
Spring Lock	
N/A	89938450

Key



9001-208



FMD2-667

Pin

Barrel Threaded (9001, 11001) Part Number	Barrel Grooved (8001A, 9001A, 11001A) Part Number
Key	
9001-208	N/A
Pin	
FMD2-667	N/A



## **CHIPPING HAMMER STEELS**



		Part Number			
Under Collar Length	K, A, 8	D Series	WS	eries	
	.680 Round Shank Oval	.580 Hex Shank Oval	.680 Round Shank Round	.580 Hex Shank Round	
1" Flat Chisels					
12"	HH1-215F-12	HH1-214F-12	H3R-215F-12	H3R-214F-12	
18"	HH1-215F-18	HH1-214F-18	H3R-215F-18	H3R-214F-18	
24"	HH1-215F-24	HH1-214F-24	H3R-215F-24	H3R-214F-24	
36"	HH1-215F-36	HH1-214F-36	H3R-215F-36	H3R-214F-36	
60"	N/A	HH1-214F-60	N/A	N/A	





0000	Part Number				
Under Collar	K, A, 8	D Series	W S	eries	
Length	.680 Round Shank Oval	.580 Hex Shank Oval	.680 Round Shank Round	.580 Hex Shank Round	
Moil Points					
12"	HH1-215M-12	HH1-214M-12	H3R-215M-12	H3R-214M-12	
18"	HH1-215M-18	HH1-214M-18	N/A	H3R-214M-18	
24"	HH1-215M-24	HH1-214M-24	N/A	H3R-214M-24	
36"	HH1-215M-36	HH1-214M-36	N/A	H3R-214M-36	



1000	000	Part Number				
Under Collar Length	K, A, & D Series		WS	eries		
	.680 Round Shank Oval	.580 Hex Shank Oval	.680 Round Shank Round	.580 Hex Shank Round		
Blanks						
12"	HH1-215-12	HH1-214-12	H3R-215-12	H3R-214-12		
18"	HH1-215-18	HH1-214-18	H3R-215-18	H3R-214-18		
24"	HH1-215-24	HH1-214-24	H3R-215-24	H3R-214-24		
36"	HH1-215-36	HH1-214-36	H3R-215-36	H3R-214-36		





0000	Part Number				
Under Collar Length	K, A, & D Series		W Series		
	.680 Round Shank Oval	.580 Hex Shank Oval	.680 Round Shank Round	.580 Hex Shank Round	
1-1/2" Scaling	Chisel				
12"	HH1-215B-12	HH1-214B-12	H3R-215B-12	H3R-214B-12	
2" Scaling Chi	sel				
12"	HH1-323-12	HH1-324-12	HH1-423-12	HH1-424-12	





Under Collar Length	Part Number				
	K, A, & D Series		W Series		
	.680 Round Shank Oval	.580 Hex Shank Oval	.680 Round Shank Round	.580 Hex Shank Round	
<b>Bushing Tool</b>					
9"	HH1-215-9	HH1-214T-9	N/A	N/A	

#### **Diamond Point**



0000	Part Number				
Under Collar Length	K, A, & D Series		W Series		
	.680 Round Shank Oval	.580 Hex Shank Oval	.680 Round Shank Round	.580 Hex Shank Round	
Diamond Poin	t				
12"	HH1-215D-12	HH1-214D-12	H3R-215D-12	H3R-214D-12	

## **CHIPPING HAMMER STEELS**



Under Collar Length	Part Number				
	K, A, & D Series		W Series		
	.680 Round Shank Oval	.580 Hex Shank Oval	.680 Round Shank Round	.580 Hex Shank Round	
Gouge					
12"	HH1-215G-12	HH1-214G-12	H3R-215G-12	H3R-214G-12	



Under Collar Length	Part Number				
	K, A, & D Series		W Series		
	.680 Round Shank Oval	.580 Hex Shank Oval	.680 Round Shank Round	.580 Hex Shank Round	
<b>Round Nose</b>					
12"	HH1-215N-12	HH1-214N-12	H3R-215N-12	H3R-214N-12	



0000	Part Number				
Under Collar	K, A, & D Series		W Series		
Length	.680 Round Shank Oval	.580 Hex Shank Oval	.680 Round Shank Round	.580 Hex Shank Round	
Straight Fuller					
12"	HH1-215J-12	HH1-214J-12	H3R-215J-12	H3R-214J-12	



Under Collar Length	Part Number				
	K, A, & D Series		W Series		
	.680 Round Shank Oval	.580 Hex Shank Oval	.680 Round Shank Round	.580 Hex Shank Round	
Caulking					
12"	HH1-215E-12	HH1-214E-12	H3R-215E-12	H3R-214E-12	



0000	Part Number				
Under Collar Length	K, A, & D Series		W Series		
	.680 Round Shank Oval	.580 Hex Shank Oval	.680 Round Shank Round	.580 Hex Shank Round	
Ripper					
12"	HH1-215R-12	HH1-214R-12	H3R-215R-12	H3R-214R-12	



Under Collar Length	Part Number				
	K, A, & D Series		W Series		
	.680 Round Shank Oval	.580 Hex Shank Oval	.680 Round Shank Round	.580 Hex Shank Round	
Tooth					
12"	HH1-321-12	HH1-322-12	H3R-421-12	H3R-422-12	



## **CHIPPING HAMMER RETAINERS**

Standard Retainer (grooved)



Quick Change #1 (grooved)

Quick Change #2 (grooved)





Lock Spring (grooved)



Rubber Buffered (threaded)



Economy Type (threaded)



Quick Change (threaded)



Porrel Area Type	Part Number		
Barrel Area Type	K, A, & D Series	W Series	
Standard Retainer (standard on all chippers ending in "SA")			
Grooved	HH1-1190	N/A	

Barrel Area Type	Part Number	
Dairei Alea Type	K, A, & D Series	W Series
Quick Change #1		
Grooved	HH-1191	N/A
Quick Change #2		
Grooved	HH1-3400-3	N/A

Dorrel Area Tuna	Part Number	
Barrel Area Type	K, A, & D Series	W Series
Lock Spring (used wi	th all grooved retainers	listed above)
Grooved	HH1-1194	N/A

Barrel Area Type	Part Number	
Dairei Area Type	K, A, & D Series	W Series
Rubber Buffered (standard on all W Series chippers)		
Threaded	N/A	HHW1-A300

Barrel Area Type	Part Number	
Dailei Alea Type	K, A, & D Series	W Series
<b>Economy Type</b>		
Threaded	N/A	HHW2-200

Barrel Area Type	Part Number	
Dairei Aiea Type	K, A, & D Series	W Series
Quick Change		
Threaded	N/A	HHW1-3450

### **CHIPPING HAMMER ACCESSORIES**

Upper Buffer Washer Lower Buffer Washer





Description	Part Number
Buffer Washers	
Upper Buffer Washer (2 pieces)	H2R-31
Lower Buffer Washer (2 pieces)	HHW1-213

Lower Buffer Washer Ring



Description	Part Number
Buffer Washer Ring	
Lower Buffer Washer Ring	R000A2-103

Rubber Bumper



Description	Part Number
Rubber Bumper	
Rubber Bumper	H2R-203

Lock Clip



Description	Part Number
Lock Clip	
Lock Clip	24SR-207

## **BACKFILL TAMPER AND SAND RAMMER BUTTS**

#### Steel Butt



Part Number	Dimension	Description
Steel Butt		
34SR-383	3"	Steel butt for model 341A2M

#### **Moon Steel Butt**



Part Number	Dimension	Description
Moon Steel Butt		
44SR-HM183-5	5-1/4"	Moon steel butt for model 441A2
44SR-M183-5 3/4	5-3/4"	Moon steel butt for model 441A2

#### Malleable Butts



Part Number	Dimension	Description
Malleable Butts		
12SR-83	2-1/2"	Malleable butt for model 130A1M
22SR-83-3x3/4	3"	Malleable butt for model 241A1M

#### Rubber Tipped Butts



Part Number Rubber Tipped Butts	Dimension	Description
14SR-83R-23/8	2-3/8"	Rubber tipped butt
24SR-83R-3	3" Rubber tipped butt	
24SR-83R-5	5"	Rubber tipped butt

#### Rubber Topping-off Butt



Part Number	Dimension	Description			
Rubber Topping-off Butt					
14SR-83R-4	3-29/32"	Rubber topping-off butt			

#### Rubber Tipped Peen



Part Number	Dimension	Description			
Rubber Tipped Peen					
14SR-93R	N/A Rubber tipped peen				



## **TIE TAMPER STEELS**

#### Plain Face Tie Tamper Steel



Part	Dimensions		ns	Description	
Number	Α	В	C	Description	
Plain Face Tie Tamper Steels					
MT2-12-3/8	24"	3"	3/8"	Plain face for spot-tamping and low lifts	
MT2-12-5/8	24"	3"	5/8"	Plain face for rock ballast of 29 mesh or larger	
MT2-12-7/8	24"	3"	7/8"	Plain face for small rock ballast, gravel, & slag	
MT2-12-3/4	24"	3"	3/4"	Plain face for dirt, cinder, gravel, sand, or chat ballast	
MT2-12-1-1/8	24"	3"	1-1/8"	Plain face for dirt, cinder, gravel, sand, or chat ballast	

#### Tooth Face Tie Tamper Steel



Part	Di	mensio	ns	Description	
Number	Α	В	C	Description	
Tooth Face Tie Tamper Steel					
MT2-S12-5/8	24"	3"	5/8"	Tooth face for stone ballast	

## **SCALER / NEEDLE SCALER STEELS**

Part Number	Dimension	Description
Scaler Chisels		
WF-14B-11-1/2	1-3/8" x 6-1/8" or 11-1/2"	Straight scaling chisel
WF-14A-6-1/8	1-3/8" x 6-1/8"	Angle scaling chisel
WF-14G	5/8" x 6"	Gouge chisel
WF-14-7-1/8	1/2" x 7-1/8"	Chisel blank
WF-14-7	3/4" x 7"	Flat scaling chisel

Part Number	Dimension	
Round Needle Housings		
NS11A	With 5" (127 mm) steel needles	
NS11AS	With 5" (127 mm) stainless steel needles	
NS11A7	With 7" (178 mm) extended steel needles - optional	
Rectangular Needle Housi	ngs	
NS11BB	5" (127 mm) beryllum cooper needles	
NS11BS	With 5" (127 mm) stainless steel needles	
NS11B7	7" (178 mm) extended steel needles	
Replacement Needles — S	Set of 19 Needles	
NS11-22-19	5" (127 mm) steel needles - standard	
NS11-B22-19	5" (127 mm) beryllum cooper needles - optional	
NS11-S22-19	5" (127 mm) stainless steel needles - optional	
NS11-122-19	7" (178 mm) extended steel needles - optional	



## **INGERSOLL RAND SANDING AND POLISHING PADS**

Whatever your surface preparation needs happen to be, we offer a full range of sanding, backing, and polishing pads. Genuine Ingersoll Rand pads are specifically engineered to work at the tolerances of our powerful tools, ensuring you get the best finishes possible.

Firm Pads



Part Number	Description	For Use With
Firm Pads		
310-825-6	6" Firm pad for medium to heavy stock removal, cloth-backed, dual action backing pad, standard-duty	310, 311A

#### Vinyl Pads



_	
311-	825-6

Part Number Vinyl Pads	Description	For Use With
311-825-6	6" Vinyl pad, standard-duty	310, 311
311A-825-6	6" Vinyl pad, dual action backing pad, standard-duty	310, 311, 311A

#### Straight Line Pads



312-225

Part Number	Description	For Use With
Straight Line	Pads	
312-225	3-2/3" x 6-3/4" Straight line pad	312, 312A
315-39	Straight line sanding pad	315

#### Backing Pads



313A-	825-7
-------	-------



317A-825

Part Number	Description	For Use With
Backing Pads	<b>;</b>	
313A-825-7	7" Rigid backing pad, standard-duty	313, 313A, 314, 314A, 318, 318A, 319, & 319A
317A-825	3" & 5" backing pads	317, 317A

#### Pad Nut



313-226

Part Number	Description	For Use With
Pad Nut		
313-226	Pad nut	Cyclone T & H and G2 Series grinders
313A-226	Pad nut	Cyclone T & H and G2 Series grinders

#### Sanding and Polishing Pads



nnı		

Part Number	Description	For Use With
Sanding and P	olishing Pads	
D94SK-228A	6-1/2" Pad	328B
6135A	Polishing pad 8" diameter, 2" thick polyester foam	313, 313A, 314, 314A, 318, 318A, 319, & 319A

#### Soft Edge Pads



6123A

Part Number Soft Edge Pad	Description	For Use With
6123A	5" Soft edge for medium support, cloth-backed, dual action backing pad	310, 311A
6121A	6" Soft edge for medium support, cloth-backed, dual action backing pad	310, 311A

#### Firm Edge Pads



6122A

Part Number Firm Edge Pad	Description	For Use With
6122A	5" Firm edge for firm support, cloth-backed, dual action backing pad	310, 311A
6120A	6" Firm edge for firm support, cloth-backed, dual action backing pad, heavy-duty	310, 311A

#### **Wool Polishing Bonnet**



P500-850

Part Number Wool Polishing	Description Bonnet	For Use With
P500-850	7" Wool polishing bonnet	313, 313A, 314, 314A, 318, 318A, 319, & 319A

#### Flexible Backing Pad



6130A

Part Number	Description	For Use With
Flexible Backing Pad		
6130A	7" Flexible backing pad, heavy-duty	313, 313A, 314, 314A, 318, 318A, 319, & 319A

#### Sanding Pad Assembly



328A-826

Part Number	Description	For Use With
Sanding Pad Assembly  8" Sanding pad assembly, dual action backing pad, standard-duty		328B



#### Non-vacuum Pads



49094-1

Part Number	Description	For Use With
Non-vacuum P	ads	
49094-1	5" Non-vacuum vinyl pad	4151 & 4152 Series, Cyclone Standard, Cyclone Select, and CycloVAC
49879-1	6" Non-vacuum vinyl pad	4151 & 4152 Series, Cyclone Standard, Cyclone Select, and CycloVAC
49880-1	6" Non-vacuum duck pad	4151 & 4152 Series, Cyclone Standard, Cyclone Select, and CycloVAC

#### Vacuum Pads



49096-1

Part Number	Description	For Use With
Vacuum Pads		
49096-1	5" Vacuum petal pattern pad	4151 & 4152 Series, Cyclone Standard, Cyclone Select, and CycloVAC
49099-1	6" Vacuum petal pattern pad	4151 & 4152 Series, Cyclone Standard, Cyclone Select, and CycloVAC
49694	6" Vacuum hook and loop pattern pad	4151 & 4152 Series, Cyclone Standard, Cyclone Select, and CycloVAC

#### Sanding Pads



49095

Part Number	Description	For Use With
Sanding Pads		
49095	5" Sanding pad	4151 & 4152 Series, Cyclone Standard, Cyclone Select, and CycloVAC
49097	6" Sanding pad	4151 & 4152 Series, Cyclone Standard, Cyclone Select, and CycloVAC
49097-1	6" Sanding Pad	4151 & 4152 Series, Cyclone Standard, Cyclone Select, and CycloVAC

#### **Duck Face Pad**



49095-1

Part Number	Description	For Use With
Duck Face Pad		
49095-1	5" Duck face pad	4151 & 4152 Series, Cyclone Standard, Cyclone Select, and CycloVAC

## **SANDING AND POLISHING PACKS AND KITS**

#### Pad and Abrasive Kits



Part Number Pad and Abrasive	Description Description	For Use With
LG1-K2	Color-coded pad & abrasive kit; 2" with 1/4" shank	C Series, G1, 302A, 308A, 3102, & 3108 angle finishing tools
LG1-K3	Color-coded pad & abrasive kit; 3" with 1/4" shank	C Series, G1, 302A, 308A, 3102, & 3108 angle finishing tools

LG1-K2



Sanding Pad Assembly (medium)



77A-AM825-5

Part Number	Description	For Use With	
Sanding Pad Asso	embly (medium)		
77A-AM825-5	5" Sanding pad assembly (medium)	H Series, G2, ErgoPro Series, & Pro Series	
77A-AM825-7	7" Sanding pad assembly (medium)	H Series, G2, ErgoPro Series, & Pro Series	

#### Sanding Pad Assembly (firm)



77A-AM825-9

Part Number	For Use With				
Sanding Pad Assembly (firm)					
77A-AM825-9	H Series, G2, ErgoPro Series, & Pro Series				



## **SANDING BELTS**

Sanding Belts (1/4" x 18")



LG1-SB418-60-10

Part Number Sanding Belts (1/	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		For Use With
LG1-SB418-60-10	Pack of 10 sanding belts	60	CA120RS418, CA200RS418
LG1-SB418-80-10	Pack of 10 sanding belts	80	CA120RS418, CA200RS418
LG1-SB418-100-10	Pack of 10 sanding belts	100	CA120RS418, CA200RS418

#### Sanding Belts (1/2" x 12")



LG1-SB812-100-10

Part Number Sanding Belts (1/2	Description 2" x 12")	Grit	For Use With
LG1-SB812-60-10	Pack of 10 sanding belts	60	CA120RS812, CA200RS812
LG1-SB812-80-10	Pack of 10 sanding belts	80	CA120RS812, CA200RS812
LG1-SB812-100-10	Pack of 10 sanding belts	100	CA120RS812, CA200RS812

#### Sanding Belts (1/2" x 18")



LG1-SB818-60-10

Part Number	Description	Grit	For Use With
Sanding Belts (1/	2" X 10")		
LG1-SB818-60-10	Pack of 10 sanding belts	60	CA120RS818, CA200RS818
LG1-SB818-80-10	Pack of 10 sanding belts	80	CA120RS818, CA200RS818
LG1-SB818-100-10	Pack of 10 sanding belts	100	CA120RS818, CA200RS818

## **CARBIDE GRINDING BURS**



## **INGERSOLL RAND CARBIDE GRINDING BURS**

Ingersoll Rand carbide burs set the industry standard for quality and are the perfect complement to our innovative grinders and finishing tools. You'll find a complete range of versatile, durable, high-precision burs, in a variety of types, styles, and sizes.

## **CYLINDRICAL-SHAPED BURS**

#### 1/8" Cylindrical-shaped Burs



Part Number	Type Of Cut	Diameter Head	Shank	Length Of Cut		
1/8" Cylin	1/8" Cylindrical-shaped Burs*					
IRSA-11	Super cut	1/8"	1/4"	1/2"		

#### 1/4" Cylindrical-shaped Burs



Part Number	Type Of Cut	Diameter Head	Shank	Length Of Cut	
1/4" Cylindrical-shaped Burs*					
IRSA-1	Super cut	1/4"	1/4"	5/8"	
IRSA-1L	Super cut	1/4"	1/4"	1"	

#### 5/16" Cylindrical-shaped Burs



Part Number		Diameter Head	Shank	Length Of Cut	
5/16" Cylindrical-shaped Burs**					
IRSA-2	Super cut	5/16"	1/4"	3/4"	
IRSA-2F	Fine cut	5/16"	1/4"	3/4"	

#### 3/8" Cylindrical-shaped Burs



Part Number	Type Of Cut	Diameter Head	Shank	Length Of Cut		
3/8" Cylin	3/8" Cylindrical-shaped Burs**					
IRSA-3	Super cut	3/8"	1/4"	3/4"		
IRSA-3F	Fine cut	3/8"	1/4"	3/4"		

#### 1/2" Cylindrical-shaped Burs



Part Number 1/2" Cylin	Type Of Cut	Diameter Head	Shank	Length Of Cut
IRSA-5	Super cut	1/2"	1/4"	1"
IRSA-5EC	Super End cut	1/2"	1/4"	1"
IRSA-5F	Fine cut	1/2"	1/4"	1"

#### 1/4" Cylindrical-shaped Burs (radius nose)



Part Number	Type Of Cut	Diameter Head	Shank	Length Of Cut		
1/4" Cylir	1/4" Cylindrical-shaped Burs (radius nose)*					
IRSC-1	Super cut	1/4"	1/4"	1"		

<sup>\*</sup>Solid carbide bur.

### **BALL-SHAPED BURS**

**Ball-shaped Burs** 



Part Number Ball-shap		Diameter Head	Shank	Length Of Cut
IRSD-1	Super cut	1/4"	1/4"	1/4"
IRSD-3	Super cut	3/8"	1/4"	3/8"

\*Solid carbide bur.

#### **CONE-SHAPED BURS**

Cone-shaped Burs (radius nose)



Part Number Cone-sha	Type Of Cut	Diameter Head	Shank	Length Of Cut
IRSL-2	Super cut	5/16"	1/4"	3/4"
IRSL-3	Super cut	3/8"	1/4"	3/8"

\*Solid carbide with steel shank.

<sup>\*\*</sup>Solid carbide with steel shank.

## **TREE-SHAPED BURS**

#### 1/4" Tree-shaped (pointed nose)



Part Number	Type Of Cut	Diameter Head	Shank	Length Of Cut		
1/4" Tree-s	1/4" Tree-shaped (pointed nose)*					
IRSF-1	Super cut	1/4"	1/4"	5/8"		

#### 3/8" Tree-shaped (pointed nose)



Part Number	Type Of Cut	Diameter Head	Shank	Length Of Cut		
3/8" Tree-s	3/8" Tree-shaped (pointed nose)**					
IRSF-3	Super cut	3/8"	1/4"	3/4"		

#### 1/2" Tree-shaped (pointed nose)



Part Number	Type Of Cut	Diameter Head	Shank	Length Of Cut	
1/2" Tree-s	1/2" Tree-shaped (pointed nose)**				
IRSF-5	Super cut	1/2"	1/4"	1"	

#### 5/16" Tree-shaped (radius nose)



Part Number	Type Of Cut	Diameter Head	Shank	Length Of Cut
5/16" Tree-shaped (radius nose)**				
IRSG-2	Fine cut	5/16"	1/4"	3/4"

<sup>\*</sup>Solid carbide bur.

### **8-PIECE BUR KIT**

Eight of the most popular Ingersoll Rand burs, packaged in a wood case.

#### 8-Piece Bur Kit



Part Number	Type Of Cut	Includes	Shank
8-Piece Bur	Kit*		
	Cylindrical-shaped bur	IRSA-3	1/4"
	Cylindrical-shaped bur	IRSA-5	1/4"
	Cylindrical-shaped bur (radius nose)	IRSC-1	1/4"
014	Cylindrical-shaped bur (radius nose)	IRSC-3	1/4"
814	Ball-shaped bur	IRSD-1	1/4"
	Ball-shaped bur	IRSD-3	1/4"
	Tree-shaped bur	IRSF-3	1/4"
	Tree-shaped bur	IRSF-5	1/4"

<sup>\*</sup>Includes wood case.



<sup>\*\*</sup>Solid carbide with steel shank.

Votes	

## **SAW BLADES AND ACCESSORIES**

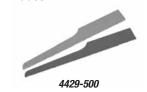


## **INGERSOLL RAND SAW BLADES AND ACCESSORIES**

Given today's high-strength steels, advanced plastics, and new composite materials, we at Ingersoll Rand strive to provide you with the best saw blades and accessories for the task at hand. Our line is designed to work specifically with Ingersoll Rand air reciprocating and circular saws.

## **SAW BLADES AND ACCESSORIES**

#### Saw Blades



Part Number	Description	Blade Type	For Use With
Saw Blades			
4429-500	1 fine blade (32 teeth per inch) and 1 coarse blade (24 teeth per inch)	Fine and coarse	IR4429
329-500	3 fine blades (32 teeth per inch) and 3 coarse blades (24 teeth per inch)	Fine and coarse	IR429 and IR4429
329-F500	6 blades (32 teeth per inch)	Fine	IR429 and IR4429
329-C500	6 blades (24 teeth per inch)	Coarse	IR429 and IR4429

#### Saw Blade Kit (7 blades)



Part Number	Description	For Use With
Saw Blade Kit (7	blades)	
205885	7 blade kit	SRA010A1

#### Circular Saw Blade



B12-257R

Part Number	Description	For Use With
Circular Saw Bla	ade	
B12-257R	Cross cut, ripping planer blade	S120

#### S120 Circular Saw Accessories



Part Number	Description	For Use With		
S120 Circular Saw Accessories				
S12-A86	Abrasive blade flange kit, used with B12-257R	S120		
S12-506	Depth gauge bracket	S120		

## **COLLETS**



## **INGERSOLL RAND COLLETS**

As you'd expect from any Ingersoll Rand part, tool, or accessory, our collets are engineered to the highest level of performance and durability. They're designed to perform to the exacting specifications of our world-class grinders.

### COLLETS

#### **Tapper Collets**



Part Number	Size	Where Used		
Tapper Collets				
2U-103-1/4	1/4"	Tappers		
4U-103-1/2	1/2"	Tappers		

#### Die Grinder Collets





DG110-700-6MM

DG110-700-G2





DG120-700-G6

G160HD-700-1/4

Part Number	Size	Where Used
Die Grinder Collets	,	
DG110-700-6MM	6 mm	Metric die grinder
DG110-700-G2	1/8"	Die grinder
DG110-700-G4	1/4"	Die grinder
DG120-700-G6	3/8"	Die grinder
G160HD-700-1/4	1/4"	Die and horizontal grinders

#### Horizontal Grinder Collet Body Assemblies



R0-A390-1/4



DG220-A290-G6

Part Number	Size	Description	Where Used
Horizontal Grind	ler Collet	<b>Body Assemblies</b>	S
R0-A390-1/4	1/4"	Collet adapter for wheel grinder	All grinders ending in H63 and H64
DG220-A290-G4	1/4"	Replacement collet body assembly	All grinder models ending in G4, except C Series and G1 Series
DG220-A290-G6	3/8"	Replacement collet body assembly	All grinder models ending in G6

#### **Collet Wrenches**



Part Number Collet Wrenches	Size
DG20-69A	11/16" x 7/16"
DG120-69	5/8" x 3/4"

Notes

Notes	

## **DRILL ACCESSORIES**



## **INGERSOLL RAND DRILL ACCESSORIES**

No matter what your drilling, reaming, honing, or brushing needs may be, count on Ingersoll Rand for a variety of versatile chucks, adapters, and all other drilling accessories you need to get the job done right.

## **DRILL ADAPTERS**

#### Square Drive Adapter



Part Number	Thread Size	Morse Taper Number	Drive Size
Square Drive Adapte	er		
R0H-P212-3/8	3/8" x 24	N/A	3/8"

#### Socket Adapters



R4J-214



R5SM-214

Part Number Socket Adapters	Morse Taper Number	Drive Size
R4J-214	3	3/4"
R5SM-214	5	1"

#### Quick Change Adapter



Part Number	Thread Size	Morse Taper Number	Drive Size
Quick Change Adapt	ter		
R0H-A925-4	3/8" x 24	N/A	1/4"

## **DRILL CHUCKS**

#### **Drill Chucks**



Part Number	Chuck Size	Thread Size	Corresponding Chuck Key
Drill Chucks			
7802-99	0 – 3/8"	3/8" x 24	R00B2J70-J253
7803-99	0 – 1/2"	3/8" x 24	R1T-J253
R1N-99A	0 – 1/2"	1/2" x 20	N/A
R2H-99	1/8" – 5/8"	45/64" x 16	N/A

#### Keyless Chucks



Part Number	Chuck Size	Thread Size	Corresponding Chuck Key
<b>Keyless Chuck</b>	S		
728-99-KC5	0 – 3/8" Keyless	3/8" x 24	N/A
728-99-KC8	0 – 1/2" Keyless	3/8" x 24	N/A

#### Standard-duty Chucks



Part Number	Chuck Size	Thread Size	Corresponding Chuck Key	
Standard-duty	Standard-duty Chucks			
7801-99-6	0 – 3/8" Standard-duty	3/8" x 24	728N-253	
7806-99-8	0 – 1/2" Standard-duty	3/8" x 24	728N-253	

#### Medium-duty Chucks



Part Number	Chuck Size	Thread Size	Corresponding Chuck Key
Medium-duty	Chucks		
R0H-99	0 – 1/4" Medium-duty	3/8" x 24	R1H-J253

#### Heavy-duty Chucks



Part Number	Chuck Size	Thread Size	Corresponding Chuck Key	
Heavy-duty Chucks				
6A-99	0 – 3/8" Heavy-duty	3/8" x 24	R0J-J253	
R00A-99	0 – 1/4" Heavy-duty	3/8" x 24	R00A-J253	
R0K-99	5/64" – 1/2" Heavy-duty	3/8" x 24	R1T-J253	



## **LARGE DRILL ACCESSORIES**

#### Square Drive Socket Adapter



Part Number	Description	For Use With		
Square Drive Socket Adapter				
DE-215A	1/2" Square drive socket adapter	Series 22		

Chucks & Nuts





DE-99C



T12-347

Part Number	Description	For Use With
Chucks & Nuts		
DE-99C	3-jaw key chuck	Series 22
T05-99A	3-jaw key chuck	Series 2X
T12-347	Chuck nut	Series 3S & 33S
TA-461	Nut	Series 551S

Morse Taper Socket



Part Number	Description	For Use With		
Morse Taper Socket				
DE-323A-2	#2 Morse taper socket	Series 22		

#### Wood Bit Chucks & Accessories





R33SW-151-1/2

Part Number	Description	For Use With		
Wood Bit Chucks & Accessories				
K-27	Wood bit chuck wrench	Series 2X & 22		
R33SW-151-1/2	Wood bit chuck	Series 3S		
TA-A291	Wood bit chuck assembly	Series 551S		

#### Large Drill Accessories



TC-365

Part Number	Description	For Use With			
Large Drill Accesso	Large Drill Accessories				
TC-365	Suspension ring	Series 3S & 33S			
TC-461	Feed screw cover	Series 3S & 33S			

## **SCREWDRIVER AND NUTRUNNER ACCESSORIES**



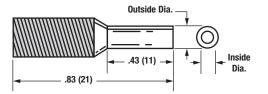
# INGERSOLL RAND SCREWDRIVER AND NUTRUNNER ACCESSORIES

Ingersoll Rand screwdriver bits and accessories are designed to enhance the productivity and performance of your light assembly tools. These rugged screwdriver bits are available in a variety of sizes to satisfy all your fastening needs.

## **VACUUM PICK-UP SLEEVES**

For use with DC electric screwdriver models EL0410BC and EL1007BC.

#### Vacuum Pick-up Sleeves



Part Number	Complementing Bit Part Number	Inside Diameter in (mm)	Outside Diameter in (mm)		
Vacuum Pick	Vacuum Pick-up Sleeves				
DLS2120	DLB2122-10	.079" (2.0)	.138" (3.5)		
DLS2122	DLB2122-10	.098" (2.5)	.138" (3.5)		
DLS2123	DLB2122-10	.106" (2.7)	.138" (3.5)		
DLS2124	DLB2122-10	.122" (3.1)	.138" (3.5)		
DLS2125	DLB2124-10	.130" (3.3)	.177" (4.5)		
DLS2126	DLB2124-10	.138" (3.5)	.177" (4.5)		
DLS2127	DLB2124-10	.146" (3.7)	.177" (4.5)		
DLS2128	DLB2126-10	.158" (4.0)	.177" (4.5)		
DLS2129	DLB2126-10	.165" (4.2)	.212" (5.5)		
DLS2130	DLB2126-10	.177" (4.5)	.212" (5.5)		
DLS2131	DLB2128-10, DLB2130-10, XP161, XPZ161, XRP161	.185" (4.7)	.212" (5.5)		
DLS2132	DLB2128-10, DLB2130-10, XP161, XPZ161, XRP161	.201" (5.1)	.212" (5.5)		
DLS2133	DLB2128-10, DLB2130-10, XP161, XPZ161, XRP161	.209" (5.3)	.256" (6.5)		
DLS2134	DLB2128-10, DLB2130-10, XP161, XPZ161, XRP161	.221" (5.6)	.256" (6.5)		
EL0410BC-53	DLB2128-10, DLB2130-10, XP161, XPZ161, XRP161	.240" (6.1)	.267" (7.0)		

## 1/4" HEX DETENTED SHANK BITS

For use with all screwdriver models.

#### Phillips Bits



Part Number	Bit Length	Point Size	Quantity
Phillips Bits			
XP161	1-15/16"	1	2
XP162	1-15/16"	2	2
XP221	2-3/4"	1	2
XP222	2-3/4"	2	2
XP223	2-3/4"	3	2
XP481	6"	1	2
XP483	6"	3	2

#### Pozidriv™ Bits



Part Number	Bit Length	Point Size	Quantity
Pozidriv™ Bits			
XPZ161	1-15/16"	1	2
XPZ163	1-15/16"	3	2

## 1/4" HEX DETENTED SHANK BITS

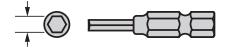
For use with all screwdriver models.

#### Reed and Prince Head Bit



Part Number	Bit Length	Point Size	Quantity				
Reed and Prince Head Bit							
XRP161	1-15/16"	1	1				

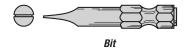
#### Hex Socket Head Bits

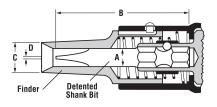


Part Number	Bit Length	Point Size	Quantity
Hex Socket Hea	d Bits		
HX135	1-15/16"	5/32" Hex	2
HX138	1-15/16"	1/4" Hex	2

### 1/4" HEX SHANK ACCESSORIES

#### **Detented Bits and Finders**



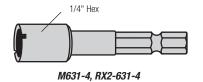


Part Number	Description
Detented Bits	
XF167	#5 slotted head bit 1-15/16"
XF1612	#12 slotted head bit 1-15/16"
<b>Detented Non-rotating Fir</b>	nders
F167F1	Non-rotating finder for XF167
F1612F1	Non-rotating finder for XF1612

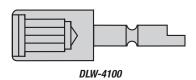


## 1/4" HEX SHANK ACCESSORIES

#### Insert Bit Holders



Part Number Insert Bit Holders	Description	For Use With
M631-4	Magnetic	All screwdriver models
RX2-631-4	Non-magnetic	All screwdriver models
DLW-4100	Slotted bit holder	EL0109B



#### Phillips Insert Bit Holder





Part Number	Description	Point Size	Quantity				
Phillips Insert Bit Holder							
XPB073	Phillips bits for 1/4" insert holders	3	5				

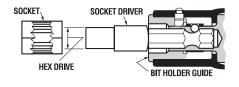
#### Pozidriv™ Insert Bit Holder





Part Number	Description	Point Size	Quantity			
Pozidriv™ Insert Bit Holder						
XPZB072	Pozidriv <sup>™</sup> bits for 1/4" insert holders	2	5			

#### Socket Driver and Socket

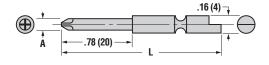


Part Number	Hex Drive	Socket Size
Socket Driver		
HD168	1/4"	N/A
Socket		
HS8	1/4"	7/16"

### **SLOTTED SCREWDRIVER BITS**

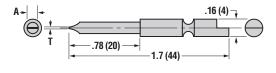
For use with screwdriver model EL0109B.

#### **Phillips Bits**



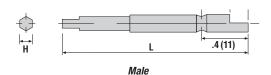
Part Number (quantity 10)	Point Size	"A" Diameter in (mm)	"L" Length	Screw Size Range	Quantity
Phillips Bits					
DLB2120-10	0	.069" (1.753)	1.7"	0 – 1	10
DLB2121-10	0	.069" (1.753)	2.5"	0 – 1	10
DLB2122-10	00	.074" (1.880)	1.7"	00 – 0	10
DLB2123-10	00	.077" (1.956)	2.5"	00 – 0	10
DLB2124-10	0	.096" (2.438)	1.7"	0 – 1	10
DLB2125-10	0	.096" (2.438)	2.5"	0 – 1	10
DLB2126-10	1	.117" (2.972)	1.7"	2 – 4	10
DLB2127-10	1	.118" (2.997)	2.5"	2 – 4	10
DLB2128-10	1	.156" (3.962)	1.7"	2 – 4	10
DLB2129-10	1	.157" (3.988)	2.5"	2 – 4	10
DLB2130-10	2	.156" (3.962)	1.7"	5 – 10	10
DLB2131-10	2	.157" (3.988)	2.5"	5 – 10	10
DLB2132-10	3	.235" (5.969)	1.7"	10 – 1/4	10

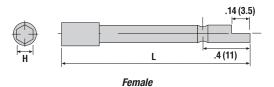
#### **Slot Bits**



Part Number	"T" Size	"A" Diameter in (mm)	"L" Length	Screw Size Range	Quantity
Slot Bits					
DLB2220-10	0.012	.078" (1.981)	1.7"	00 – 0	10
DLB2221-10	0.012	.097" (2.464)	1.7"	00 – 0	10
DLB2222-10	0.016	.116" (2.946)	1.7"	0 – 2	10
DLB2223-10	0.02	.157" (3.988)	1.7"	2 – 4	10
DLB2224-10	0.026	.196" (4.987)	1.7"	3 – 5	10

#### Hexagon, Male and Female





Part Number	Screw Size	"H" Hex Size in (mm)	"L" Length	Use Diagram	Quantity
Hexagon, Mal	e and Fen	nale			
DLB2321-10	0.12	.06" (1.5)	1.7"	Male	10
DLB2322-10	0.16	.08" (2)	1.7"	Male	10
DLB2323-10	0.24	.12" (3)	1.7"	Male	10
DLB2324-10	0.31	.16" (4)	1.7"	Male	10
DLB2420-10	N/A	.09" (2.3)	1.7"	Female	10
DLB2421-10	N/A	.10" (2.5)	1.7"	Female	10
DLB2422-10	N/A	.12" (3)	1.7"	Female	10
DLB2423-10	0.08	.16" (4)	1.7"	Female	10
DLB2424-10	0.09	.18" (4.5)	1.7"	Female	10
DLB2425-10	0.1	.20" (5)	1.7"	Female	10
DLB2426-10	0.12	.22" (5.5)	1.7"	Female	10



### **SCREWDRIVER BITS**

For use with screwdriver model EL0109B.

#### Torx5™ Head Screws



Part Number	Point Size	Length	Quantity
Torx5™ Head Screws			
DLBT825	8	2.5"	10

### **SCREWDRIVER AND NUTRUNNER ACCESSORIES**

#### Power Bits for Recessed Head Screws



Part Number	Description	Bit Size	Length
Power Bits fo	r Recessed Head Screws		
P283-7	Phillips	3 pt	3-1/2"
P284-7	Phillips	4 pt	3-1/2"
P363-7	Phillips	3 pt	4-1/2"
HX206-7	Allen head	3/16" Hex	3-1/2"
HX207-7	Allen head	7/32" Hex	3-1/2"
HX208-7	Allen head	1/4" Hex	3-1/2"
HX2010-7	Allen head	5/16" Hex	3-1/2"
HX2012-7	Allen head	3/8" Hex	3-1/2"

#### **Bit Guides**



Part Number Bit Guides*	Point Size
5RA-P730-1	1
5RA-P730-2	2
5RA-P730-3	3

\*For use with pistol and lever screwdriver models ending in 3.

#### Bits with Rotating Finders



Part Number	Description		
Bits with Rotating Find	ers*		
XR306	#6 slotted head bit		
XR308	#8 slotted head bit		
XR3010	#10 slotted head power bit		
XR3012	#12 slotted head power bit		

\*For use with all screwdriver models.



Part Number Shaker Boxes	Description	Size
DLW3400	Round metal box	3-15/16" diameter
DLW3600	Rectangular plastic box	5-1/2" x 3-7/8"
DLW3800	Rectangular plastic box	6-11/16" x 4-7/8"

## **SCREWDRIVER AND NUTRUNNER ACCESSORIES**

#### **Power Screwdriver Adapters**



Part Number Bit Size		Square Driver Size			
Power Screwdriver Adapters					
2U-812	5/16" Square	3/8"			
4U-812	5/16" Square	1/2"			

#### Power Square Insert Bits



Part Number	Description	Bit Size	Quantity	
Power Square Insert Bits*				
SPB082-5	Phillips bit	2	5	
SPB083-5	Phillips bit	3	5	
SPB084-5	Phillips bit	4	5	

\*Used with power screwdriver adapters.

#### **Power Driver Extensions**



Part Number Power Driver Ex	Drive Size	Length
7175P	3/8"	3"
7181P	1/2"	5"

#### **Power Quick Change Chucks**



Part Number	Drive Size (female)	Hex Chuck Size (female)			
Power Quick Char	Power Quick Change Chucks				
2U-A925-4	3/8"	1/4"			
502-A925-7	3/8"	7/16"			
4U-A925-7	1/2"	7/16"			

#### **Power Universal Joints**



Part Number	Drive Size	Length	Major Diameter	
Power Universal Joints				
7270P	3/8" Square	2-3/8"	15/16"	
7470P	1/2" Square	2-3/4"	1-1/8"	

#### Power Socket Adapter



Part Number Female End Male End			
Power Socket Adapter			
2U-215	3/8" 1/2"		



Notes		



## **USER ACCESSORIES**



For generations, the world has turned to Ingersoll Rand for tools, equipment, and accessories that withstand the rigors of the most demanding work environments. But productivity goes beyond product, and we stand as proudly behind our users as we do our products.

At Ingersoll Rand, we're a leader in designing tools with ergonomic features, as well as in providing parts and accessories that keep users working as safely and comfortably as possible.





## **USER ACCESSORIES**



### **USER ACCESSORIES**

Gloves 209

**Ergonomic Accessories** 211

Balancers 217

Point-of-Use Accessories 223

**Exhaust Kits and Accessories 233** 

**Vacuum Kits and Accessories 235** 

Mufflers 237

**Precision Fastening** 

Accessories 239

## **GLOVES**



## **INGERSOLL RAND GLOVES**

With the Ingersoll Rand line of durable work gloves, you can pair up the market's toughest tools — ours — with gloves that offer the utmost in protection, comfort, and performance.

# **GLOVES**

IR-G Series



Protection

Part Number	Description	Quantity	Size
IR-G Series			
IR-GM	Ingersoll Rand mechanic gloves	10	Medium
IR-GL	Ingersoll Rand mechanic gloves	10	Large
IR-GXL	Ingersoll Rand mechanic gloves	10	Extra large

### **IR-G Series**

- Provide protection during day-to-day jobs
- Machine washable Clarino® synthetic palm construction allows full finger dexterity and enhanced tool handling
- Spandex top ensures comfortable fit

TGSL-G Series



Protection, Comfort

Part Number	Description	Quantity	Size
TGSL-G Series	5		
TGSL-GM	ThunderGun impact gloves	10	Medium
TGSL-GL	ThunderGun impact gloves	10	Large
TGSL-GXL	ThunderGun impact gloves	10	Extra large

# **TGSL-G Series**

- Silicon gel palm padding reduces tool vibrations and minimizes fatigue
- Machine washable Clarino® synthetic palm construction allows full finger dexterity and enhanced tool handling
- Airprene knuckle panel provides greater protection, ventilation, and comfort
- Looks great with the ThunderGun impact wrench

### TNT-G Series



Protection, Comfort, Performance

Part Number	Description	Quantity	Size
TNT-G Series			
TNT-GM	Titanium impact gloves	10	Medium
TNT-GL	Titanium impact gloves	10	Large
TNT-GXL	Titanium impact gloves	10	Extra large

# **TNT-G Series**

- Silicon finger and thumb grippers enhance tool control
- Neoprene top offers impact protection while allowing increased comfort and dexterity
- 3 mm gel palm pads reduce hand fatigue
- Ideal for Ingersoll Rand titanium tools

# **ERGONOMIC ACCESSORIES**



# **INGERSOLL RAND ERGONOMIC ACCESSORIES**

Ingersoll Rand offers a handy line of ergonomic accessories that enable you to work safer and more comfortably. Our tool boots absorb vibrations and protect the tool from external damage. Ingersoll Rand comfort grips protect you from mechanical shocks and tool vibration, and our braces allow for more consistent torque output and eliminate the need for a dead handle.

# **PROTECTIVE TOOL BOOTS**

- Specifically designed for use with our air impact wrenches, ratchets, and drills
- Keep your tools clean and protected from external damage

#### Protective Tool Boots



104-P32



2112-P32



2130-P32

Part Number	Description	For Use With
Protective To	ol Boots	
100PQ-2	Rubber boot cover	100PQ1
104-P32	Ratchet head boot with IR logo printed on blue boot	104 MOD. A
106-P32	Ratchet head boot with IR logo printed on blue boot	107XP, 1077XP
109-P32	Ratchet head boot with IR logo printed on blue boot	109XP, 1099XP
1100P-2	Rubber boot cover	1100P
1410P-2	Rubber boot cover	1410P
180PQ-2	Rubber boot cover	180PQ1
180SQ-2	Rubber boot cover (screwdriver)	180SQ1
1900P-2	Rubber boot cover	1900P
1900PS4-2	Rubber boot cover	1900PS4
202-P32	3/8" Impact wrench boot with IR logo printed on blue boot	212
2112-P32	Impact wrench boot with white IR logo printed on black & gray boot	2112, 2125
2115-P32	Impact wrench boot	2115Ti, 2125QTi
211-P32	3/8" Impact wrench boot with IR logo printed on blue boot	211
2130-P32	Impact wrench boot	2130, 2130-2
2131-P32	Impact wrench boot with white IR logo printed on black & gray boot	2131A & 2131AS-2
2135-P32	Impact wrench boot	2135Ti, 2135Ti-2, 2135QTi, & 2135QTi-2
2141-P32	Impact wrench boot with white IR logo printed on black & gray boot	2141



2135-P32



# **PROTECTIVE TOOL BOOTS**

# **Protective Tool Boots**



215-P32



252-P32



232TGSL-P32



TGSL2-P32



7802-P32

Part Number	Description	For Use With
<b>Protective Tool</b>	Boots	
215-P32	Impact wrench boot	215
2161-P32	Impact wrench boot	2161XP, 2161XP-6
2190-P32	Impact wrench boot	2190Ti, 2190Ti-6
225-P32	Impact wrench boot	225
231-P32	Impact wrench boot	231K, 231HA, & 231HA-2
232TGSL-P32	ThunderGun "Street Legal" Impact wrench boot	232TGSL
235-P32	1/2" Impact wrench boot	235
244-P32	Impact wrench boot	244A, 244A-2, & 2707
252-P32	Impact wrench boot with IR logo printed on blue boot	252
255-P32	Impact wrench boot with IR logo printed on blue boot	258
261-P32	Impact wrench boot with IR logo printed on blue boot	261, 261-3, 261-6, 1720, & 2920
280PQ-2	Rubber boot cover	280P & 280PQ1
280SQ-2	Rubber boot cover (screwdriver)	280SQ1
285-P32	Impact wrench boot	285A, 285A-6, & 285A-S6
295-P32	Impact wrench boot	295, 295-S
3000P-2	Rubber boot cover	3000P
380PQ-2	Rubber boot cover	380P & 380PQ1
380SQ-2	Rubber boot cover (screwdriver)	380SQ1
500PQ-2	Rubber boot cover	500P & 500PQ1
500PS3-2	Rubber boot cover	500PS3
700P-2	Rubber boot cover	700P
7802-P32	3/8" Air drill cover, blue boot	7802A, 7802RA, & 7802RKC
900P-2	Rubber boot cover	900P
900PS4-2	Rubber boot cover	900PS4
TGSL2-P32	Titanium ThunderGun boot	232TGTi



# **COMFORT GRIPS**

- · Provide excellent energy adsorption and vibration dampening
- Reduced shock and fatigue



# Assembly Tool Grips



CG-6X8



CG-7RLD

Part Number	Description	For Use With
<b>Assembly Tool</b>	Grips	
CG-3RL	Straight lever screwdriver grip	3 Series
CG-3RP	Straight push-to-start screwdriver grip	3 Series
CG-3RT	Pistol & tapper grip	3 Series
CG-4RL	Straight lever grip	4 Series
CG-4RT	Pistol grip	4 Series
CG-5RA	Pistol grip	5 Series
CG-5RL	Straight lever grip	5 Series
CG-6A	Pistol grip	6 Series drill
CG-6WT	Angle wrench with non-reversible shut-off grip	6 Series
CG-6X8	Comfort grip – 6" x 8" sheet with tape	For all Series
CG-7A	Pistol grip	7 Series drills
CG-7RA	Pistol & tapper grip	7 Series
CG-7RL	Straight lever grip	7 Series
CG-7RLD	Reversible angle wrench grip	7 Series
CG-ST42	42" Roll of seam tape	For all Series

# Ratchet Grips



CG-106

Part Number  Ratchet Grips	Description	For Use With
CG-103	1/4" Drive air ratchet wrench comfort grip	103A, 1033A
CG-104	1/4" Drive air ratchet wrench comfort grip	104A
CG-106	3/8" Drive air ratchet wrench comfort grip	106 Series

# Impact Grips



CG-1702P

Part Number	Description	For Use With
Impact Grips		
CG-1702P	Comfort grip — Impact wrench	212
CG-1720P	Comfort grip — Impact wrench	261, 261-3, 261-6, 271, 1720, & 2920
CG-205	Comfort grip — Impact wrench	205
CG-2705	Comfort grip — Impact wrench	231C, 231HA, 231HA-2, & 2705
CG-2707	Comfort grip — Impact wrench	244A, 244A-2, & 2707
CG-2906	Comfort grip — Impact wrench	2906P1
CG-2920P	Comfort grip — Impact wrench	2920P1
CG-2934BA	Comfort grip — Impact wrench	280, 280-6, & 280-S6
CG-2940P	Comfort grip — Impact wrench	293, 293-S

# **COMFORT GRIPS**

# Surface Preparation Grips



CG-308

Part Number	Description	For Use With
Surface Prepara	tion Grips	
CG-302	Air angle die grinder	302
CG-308	Air angle die grinder	308
CG-310	Dual action air sander grip	310
CG-311	Dual action quiet sander grip	311A
CG-329	Reciprocating saw grip	429
CG-88V	Vertical grinder & sander grip (both handles)	88V - 88S
CG-99V	Vertical grinder grip (both handles)	99V
49798	Medium black grip rings	Cyclone Standard series
49799	Large blue grip rings	Cyclone Standard series
49801	Small grey grip Rings	Cyclone Standard series

# Hammer Grips



CG-72

Part Number  Hammer Grips	Description	For Use With
CG-72	Air hammer comfort grip	772
CG-AV10A	Grip for percussive tools	Percussive tools
CG-W1A	Grip for percussive tools	Percussive tools

# Drill Grips



CG-728

Part Number	Description	For Use With
Drill Grips CG-728	Pistol grip	Series 728 Drills
CG-7802	Shear, 3/8" & 1/2" drill (grip only)	Series 7802 & 7803



# **BIO BRACES**

#### **Bio Braces**





Part Number Bio Braces	Description	For Use With
SBB4-AR	Bio Brace (over 1,700 rpm)	ARO 50 Series
SBB4-IR	Bio Brace (over 1,200 rpm)	Ingersoll Rand 4 Series
SBB4-VS	Bio Brace	Ingersoll Rand Versatec Series
SEG3A-CGK	Replacement foam grip kit	SEG3A Series

- Ergonomically-designed Bio Brace<sup>™</sup> minimizes start-up and shut-off force to your arm
- Eliminates the need for a dead handle, freeing up your other hand

# **ERGO-GRIP**

Ergo-Grip





Part Number	Description	For Use With
Ergo-Grip		
SEG3AH-CL	Ergo-Grip (over 1,700 rpm)	Cleco
SEG3A-IR	Ergo-Grip (1,650 rpm or less)	Ingersoll Rand 3 Series
SEG3-AR	Ergo-Grip (1,500 rpm or less)	ARO 20 Series
SEG3H-AR	Ergo-Grip (over 1,500 rpm)	ARO 20 Series
SEG4-AR	Ergo-Grip (1,700 rpm or less)	ARO 50 Series
SEG4-CGK	Replacement foam grip kit	Series SEG4
SEG4-CL	Ergo-Grip (1,000 rpm or less)	Cleco
SEG4H-AR	Ergo-Grip (over 1,700 rpm)	ARO 50 Series
SEG4H-CL	Ergo-Grip (over 1,000 rpm)	Cleco
SEG4H-IR	Ergo-Grip (over 1,200 rpm)	Ingersoll Rand 4 Series
SEG4-IR	Ergo-Grip (1,200 rpm or less)	Ingersoll Rand 4 Series

- Ergo-Grip™ makes tool operation more comfortable with reduced grip pressure and vibration dampening
- Easy installation:
  - 1. Unscrew clutch housing.
  - 2. Slip on grip.
  - 3. Reattach housing.

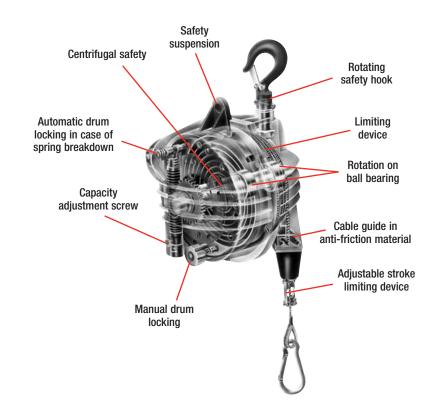


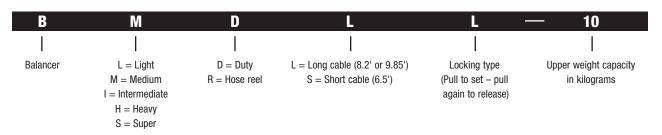
# **INGERSOLL RAND BALANCERS**

With more than 50 models to choose from, there's an Ingersoll Rand balancer to satisfy virtually any balancing requirement. These balancers are ruggedly built of die cast aluminum for strength and reduced weight. They feature easy-to-use controls that allow for accurate spring adjustment.

# **BALANCERS FROM INGERSOLL RAND**

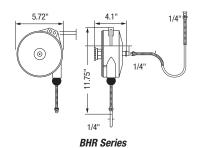
- 50 models to choose from
- Five different series to meet all balancing requirements
- Lifts ranging from five to nine feet
- Covers weight balancing needs from one to 363 pounds
- Made of rugged die cast aluminum
- · Safety locking device on medium, heavy, and super-duty models prevents dropping of the tool should the spring fail
- Easy-to-use controls allow for accurate spring adjustment





### Hose Reel Balancers

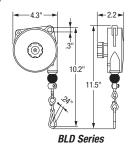




Part Number	Hose Nipple Size	cfm Extended	Capacity lb (kg)	Lift ft (mm)
Hose Re	el Balancers	— <b>0.875</b>	– 5.5 lb Capac	ity
BHR-8	1/4"	18.4	0.875 - 1.75 (0.397 - 0.794)	4.25 (1295)
BHR-15	1/4"	18.4	1.5 – 3.33 (0.68 – 1.51)	4.25 (1295)
BHR-25	1/4"	18.4	2.625 - 5.5 (1.191 - 2.495)	4.25 (1295)

# **Light-duty Balancers**





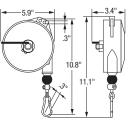
Part Number	Capacity lb (kg)	Weight of Balancer lb (net-kg)	Lift ft (mm)
Light-duty Balan	cers — 0.9 – 6.6 ll	Capacity	
BLD1	0.9 – 2.2 (0.4 – 1)	1.3 (0.6)	5.2 (1600)
BLD1/P (nylon cable)	0.9 - 2.2 (0.4 - 1)	1.3 (0.6)	5.2 (1600)
BLD2	2.2 - 4.4 (1 - 2)	1.3 (0.6)	5.2 (1600)
BLD3	4.4 - 6.6 (2 - 3)	1.3 (0.7)	5.2 (1600)

- Rotary hook
- Adjustable capacity and stroke limiting device
- Self-lubricating bushings
- Auxiliary safety suspension

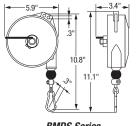
# **Medium-duty Balancers**





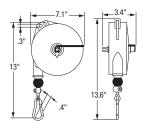


**BMDS Series** 





BMDLL-10



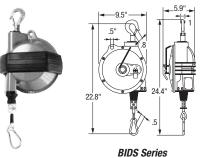
BMDL / BMDLL Series

Part Number	Capacity lb (kg)	Weight of Balancer lb (net-kg)	Lift ft (mm)
Medium-du	ty Balancers — 2.2	- 30 lb Capacity	
<b>Short Cable</b>			
BMDS-2	2.2 – 5.5 (1 – 2.5)	4.4 (2)	6.5 (2000)
BMDS-4	4.4 - 8.8 (2 - 4)	4.4 (2)	6.5 (2000)
BMDS-6	8.8 - 13.2 (4 - 6)	5.1 (2.3)	6.5 (2000)
BMDS-8	13.2 – 17.6 (6 – 8)	5.5 (2.5)	6.5 (2000)
<b>Long Cable</b>			
BMDL-4	4.4 - 8.8 (2 - 4)	6.4 (2.9)	8.2 (2500)
BMDL-6	8.8 - 13.2 (4 - 6)	7.1 (3.2)	8.2 (2500)
BMDL-8	13.2 – 17.6 (6 – 8)	7.7 (3.5)	8.2 (2500)
BMDL-10	17.6 – 22 (8 – 10)	8.2 (3.7)	8.2 (2500)
BMDL-12	22 – 26.5 (10 – 12)	8.8 (4)	8.2 (2500)
BMDL-14	22 – 30 (10 – 14)	5.6 (2.5)	8.2 (2500)
BMDL-14-Y (Yellow)	22 – 30 (10 – 14)	5.6 (2.5)	8.2 (2500)
Medium-du	ty Locking Balancer	s — 4.4 – 22 lb Cap	acity
Long Cable			
BMDLL-4	4.4 - 8.8 (2 - 4)	6.6 (3)	8.2 (2500)
BMDLL-6	8.8 - 13.2 (4 - 6)	7.3 (3.3)	8.2 (2500)
BMDLL-8	13.2 – 17.6 (6 – 8)	7.9 (3.6)	8.2 (2500)
BMDLL-10	17.6 – 22 (8 – 10)	8.4 (3.8)	8.2 (2500)

- Safety device prevents dropping of load due to spring breakage (except BMDS-2)
- Anti-friction cable guide
- Adjustable stroke limiting device



#### Intermediate-duty Balancers



	<ul> <li>Safety device prevents load dropping</li> </ul>
DS Series	due to spring breakage

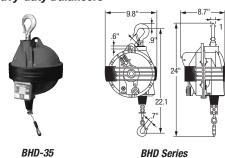
- Anti-friction cable guide
- Adjustable stroke limiting device

Capacity Weight of Balancer Lift **Part Number** lb (kg) lb (net-kg) ft (mm) Intermediate-duty Balancers – 8.8 - 55 lb Capacity BIDS-7 8.8 - 15.4 (4 - 7)5 (2.26) 6.5 (2000) BIDS-10 15.4 - 22 (7 - 10)5.5 (2.49) 6.5 (2000) 6.5 (2000) BIDS-14 22 - 30.8 (10 - 14) 5.5 (2.49) BIDS-18 30.8 - 39.6 (14 - 18) 6.5 (2000) 6.5 (2.95) BIDS-22 39.6 - 48.4 (18 - 22)6.5 (2.95) 6.5 (2000) BIDS-26 48.4 - 55 (22 - 25) 6.5 (2.95) 6.5 (2000)

- Upper rotary suspension
- Safety hook
- Auxiliary safety suspension

### Heavy-duty Balancers

BIDS-10

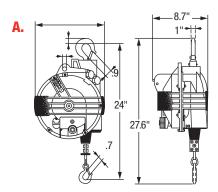


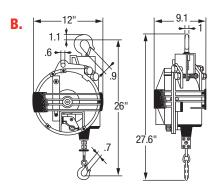
Part Number	Capacity lb (kg)	Weight of Balancer lb (net-kg)	Lift ft (mm)
Heavy-duty B	alancers — 22 – 14	3 lb Capacity	
BHD-15	22 – 33 (10 – 15)	22.7 (10.3)	6.5 (2000)
BHD-20	33 – 44 (15 – 20)	23.4 (10.6)	6.5 (2000)
BHD-25	44 – 55 (20 – 25)	24.7 (11.2)	6.5 (2000)
BHD-30	55 – 66 (25 – 30)	25.4 (11.5)	6.5 (2000)
BHD-35	66 – 77 (30 – 35)	26 (11.8)	6.5 (2000)
BHD-45	77 – 99 (35 – 45)	27.3 (12.4)	6.5 (2000)
BHD-55	99 – 121 (45 – 55)	27.6 (12.5)	6.5 (2000)
BHD-65	121 – 143 (55 – 65)	30 (13.6)	6.5 (2000)

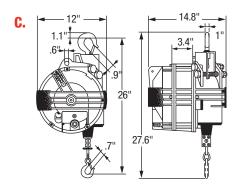
- Safety device prevents load dropping due to spring breakage
- Upper suspension with rotary safety hook
- Precision guided cable winding prevents jamming
- · Anti-friction cable guide
- Manual locking device for instant clamping or release
- Worm screw capacity adjustment
- Spring drum assembly
- Floor controlled locking device available (BIL-7343)

# Super-duty Balancers









Part Number	Capacity lb (kg)	Weight of Balancer lb (net-kg)	Lift ft (mm)	Diagram
Super-duty	Balancers — 33 – 3	63 lb Capacity		
BSD-20	33 – 44 (15 – 20)	41.9 (19)	8.2 (2500)	Α
BSD-30	44 - 66 (20 - 30)	43.7 (19.8)	8.2 (2500)	Α
BSD-40	66 - 88 (30 - 40)	45.9 (20.8)	8.2 (2500)	Α
BSD-50	88 – 110 (40 – 50)	52.7 (23.9)	8.2 (2500)	Α
BSD-60	110 - 132 (50 - 60)	56 (25.4)	8.2 (2500)	Α
BSD-70	132 – 154 (60 – 70)	59.1 (26.8)	8.2 (2500)	В
BSD-80	154 – 176 (70 – 80)	61.3 (27.8)	8.2 (2500)	В
BSD-90	176 – 198 (80 – 90)	63.5 (28.8)	8.2 (2500)	В
BSD-100	198 – 220 (90 – 100)	78.5 (35.6)	8.2 (2500)	С
BSD-120	220 – 265 (100 – 120)	85.3 (338.7)	8.2 (2500)	С
BSD-140	265 – 309 (120 – 140)	92.2 (41.8)	8.2 (2500)	С
BSD-150	287 – 330 (130 – 150)	98.1 (44.5)	8.2 (2500)	С
BSD-165	330 – 363 (150 – 165)	106.3 (48.2)	8.2 (2500)	С
Super-duty	Balancers — 33 – 3	30 lb Capacity		
Long Cable				
BSDL-20	33 – 44 (15 – 20)	42.1 (19.1)	9.85 (3000)	Α
BSDL-25	44 – 55 (20 – 25)	43.9 (19.9)	9.85 (3000)	Α
BSDL-35	55 – 77 (25 – 35)	46.1 (20.9)	9.85 (3000)	Α
BSDL-45	77 – 99 (35 – 45)	52.5 (23.8)	9.85 (3000)	В
BSDL-50	88 – 110 (40 – 50)	52.7 (23.9)	9.85 (3000)	В
BSDL-60	110 - 132 (550 - 60)	55.8 (25.3)	9.85 (3000)	В
BSDL-70	132 – 154 (60 – 70)	58.9 (26.7)	9.85 (3000)	В
BSDL-80	154 – 176 (70 – 80)	61.7 (28)	9.85 (3000)	В
BSDL-90	176 – 198 (80 – 90)	64 (29)	9.85 (3000)	В
BSDL-100	198 – 220 (90 – 100)	81.1 (36.8)	9.85 (3000)	С
BSDL-115	220 – 254 (100 – 115)	85.3 (38.7)	9.85 (3000)	С
BSDL-130	254 – 286 (115 – 130)	88 (39.9)	9.85 (3000)	С
BSDL-140	286 – 309 (130 – 140)	94.4 (42.8)	9.85 (3000)	С
BSDL-150	309 – 330 (140 – 150)	100.6 (45.6)	9.85 (3000)	С

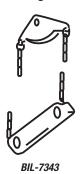
\*Higher capacities available upon request.

- · Safety device prevents load dropping
- Upper suspension with rotary safety hook
- Precision guided cable winding prevents jamming
- Anti-friction cable guide
- Manual locking device for instant clamping or release
- Worm screw capacity adjustment
- Alignable rotating upper hook
- Cable replacement without balancer disassembly
- Cable visible for inspection
- Floor controlled locking device available (BIL-3224)



# **BALANCER ACCESSORIES**

# Floor-controlled Locking Device



Part Number	Description	For Use With
Balancer Acce	ssories	
BIL-7343	Floor-controlled locking device	Heavy-duty (BHD)
BIL-3224	Floor-controlled locking device	Super-duty (BSD & BSDL)

# **POINT-OF-USE ACCESSORIES**

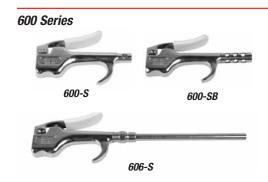


# **INGERSOLL RAND POINT-OF-USE ACCESSORIES**

Specialized work demands specialized parts and accessories. With our complete line of durable, top-quality blow guns, air jets and nozzles, shim sets, etc., Ingersoll Rand makes it easier for you to work more efficiently and productively.

# **BLOW GUNS**

- Engineered to the highest level of quality and durability.
- Available in standard 6" and 12" lengths.
- Cushioned thumb grips maximize operator comfort.



Part Number 600 Series	Description
600-S	Standard safety blow gun
600-SB	Booster safety blow gun
606-S	Safety blow gun with 6" extension
612-S	Safety blow gun with 12" extension

### 600 Series Accessories



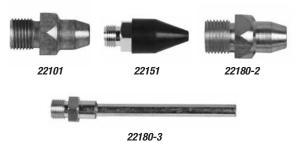
Part Number	Description	
600 Series S	Safety Extensions	
ST206	6" safety extension	
ST212	12" safety extension	
Blow Gun Ti	ps	
ST10	Standard safety tip	
ST11	Safety air booster tip	

### 8338 Series



Part Number	Description
8338	Standard tip gun; generates concentrated stream of air
8338-1	Safety blow gun generates cone of air
8338-2	Safety blow gun with rubber tip

### 8338 Series Accessories



Part Number	Description				
8338 Series	Accessories				
22101	Brass tip				
22151	Rubber tip				
22180-1	Standard tip				
22180-2	Air shield tip				
22180-3	3" extension tip				
33970	10" extension tip				

# **BLOW GUNS**

# 8440 Series



Part Number	Description
8440 Series	
8440	Safety yellow, lightweight, polyester blow gun

8451 Series



Part Number	Description
8451-1	Standard tip gun; generates concentrated stream of air
8451-2	Shield tip gun; generates cone of air for chip deflection

8451 Accessories



Part Number	Description sories
8451-3	3" (76 mm) extension tip
8451-6	6" (152 mm) extension tip

7444 Series



Part Number	Description	Max Inlet Pressure
7444-J	Safety blow gun	100 psi
7444-K	Safety blow gun	180 psi



# **AIR JETS AND AIR NOZZLES**

### **APPLICATIONS**

- Parts cleaning
- Chip removal
- Part drying
- Liquid blow-off
- Part cooling

- Material conveying
- Part ejection
- Fiber conveying
- Air assist

### **ADVANTAGES**

- Reduce compressed air cost
- 10 dBA average noise reduction
- Improve blow-off performance
- Compact
- Meet OSHA noise level requirements
- Meet OSHA pressure requirements



38038105

Part Number	Description	Air Consumption		Vacuum	
Nullibel		cfm	L/min	0Z	g
Air Jets					
38038089	High-velocity air jet, 1/2" outlet	16.5	467	14	396
38038097	Adjustable air jet, 1/2" outlet	18	509	16	453
38038105	Air jet shim set	N/A	N/A	N/A	N/A

### Air Nozzles





38038147

Part Number	Description		ir mption L/min	Vac oz	uum g
Air Nozzle	es	OIIII	<u>_</u> ,	OL.	9
38038113	Safety air nozzle, 1/8" NPTF	10	283	9	257
38038121	Safety air nozzle, 1/4" NPTF	17	481	16	453
38038139	Adjustable air nozzle, 1/8" NPTM	13	368	12	340
38038147	Air nozzle, 1/4" NPTF	14.7	416	13	368

# **SOFT-GRIP SAFETY AIR GUNS**

#### Soft-grip Safety Air Guns







Part Number	Description	Inlet NPT	Extension
Soft-grip Safe	ety Air Gun		
38435434	Soft-grip safety air gun with air nozzle	1/4"	N/A
38038154	Soft-grip safety air gun with air nozzle	1/4"	24" aluminum
38038162	Soft-grip safety air gun with air nozzle	1/4"	36" aluminum
38038170	Soft-grip safety air gun with air nozzle	1/4"	48" aluminum
38038188	Soft-grip safety air gun with air nozzle	1/4"	60" aluminum

- Ideal for hours of continuous use without fatigue.
- Ergonomic design keeps the hand in a comfortable position and incorporates a large trigger that permits operation with one or more fingers.
- Durable case aluminum body is suited for rugged industrial use and includes a convenient hanger hook for storage.
- Inlets are 1/4" NPT.

# **ADJUSTABLE SPOT COOLER**

#### Adjustable Spot Cooler



38037735

Part Number	Description					
Adjustable Spot C	Adjustable Spot Cooler					
38037735	Adjustable spot cooler (one cold outlet)					

### **APPLICATIONS**

- Adjusting thermostats
- Cooling solder
- Cooling machined plastics
- · Setting hot melts
- Cooling welding horns
- Cooling molded plastics
- Electronic component cooling
- Cooling gas samples
- Cooling environmental chambers

# **ADVANTAGES**

- No moving parts
- No electricity or chemicals
- Small, lightweight
- Low cost
- Maintenance-free
- · Instant cold air
- Quiet less than 75 dBA
- · Swivel magnetic base
- Interchangeable generators



# **AIR KNIVES AND SHIM SETS**

#### Air Knives and Shim Sets





Part Number	Description	Length
Air Knives and	Shim Sets	
38037602	Aluminum air knife	6"
38037610	Aluminum air knife	12"
38037628	Aluminum air knife	18"
38037636	Aluminum air knife	24"
38037644	Aluminum air knife shim set	6"
38037651	Aluminum air knife shim set	12"
38037669	Aluminum air knife shim set	18"
38037677	Aluminum air knife shim set	24"

# **APPLICATIONS**

- Parts drying after wash
- Sheet cleaning in strip mills
- Conveyor cleaning
- Part or component cooling
- Web drying or cleaning
- Environmental separation
- Pre-paint blow-off
- Bag opening and fill operations
- Scrap removal on converting operations

### **ADVANTAGES**

- Quiet 69 dBA for most applications
- Minimal air consumption
- 40:1 air application
- Uniform airflow across entire length
- Variable force and flow
- No moving parts

# EXAMPLE OF PERFORMANCE — 12" (30 CM) AIR KNIFE

Pressure Supply			umption Inch	Velocit	y @ 6"	Sound Level @ 3'	Force Inch	
psig	bar	cfm	L/min	fpm	m/s	dBA	0Z	g
20	1.4	1.1	31	5,000	25.4	57	0.6	17
40	2.8	1.7	48	7,000	35.6	61	1.1	31
60	4.7	2.3	65	9,600	48.8	65	1.8	51
80	5.5	2.9	82	11,800	57.9	69	2.5	71
100	6.9	3.5	99	13,500	66	72	3.2	91

# **AIR AMPLIFIERS AND SHIM SETS**

#### Air Amplifiers and Shim Sets



38038048



### **APPLICATIONS**



- · Cool hot parts
- Dry wet parts
- Clean machined parts
- Distribute heat in molds and ovens
- Ventilate confined areas
- Wipe hose, wire, fiber optics
- Exhaust tank fumes

#### **ADVANTAGES**

- Compact, lightweight, portable
- No electricity
- No moving parts no maintenance
- Ends are easily ducted
- Instant on/off
- Variable force and flow

# LINE VACUUMS

#### Line Vacuums



Part	Cina	Description	Air Consumption		Vacuum	
Number	Size	Description	cfm	L/min	inH20	kPa
Line Vacuums						
38037685	3/4" (19 mm)	Aluminum line vacuum	10.7	303	-72	-18
38037693	1" (25 mm)	Aluminum line vacuum	14.7	416	-42	-11
38037701	1-1/4" (32 mm)	Aluminum line vacuum	25.9	733	-42	-11
38037719	1-1/2" (38 mm)	Aluminum line vacuum	33	934	-36.8	-9
38037727	2" (51 mm)	Aluminum line vacuum	45	1274	-28.5	-7

### **APPLICATIONS**

- Hopper loading
- Fiber tensioning
- Material conveying
- Waste and trim removal
- · Chip removal
- Part transfer
- Filling operations

# **ADVANTAGES**

- Compact
- Quiet
- No moving parts
- Fits standard hose or tube
- Aluminum or stainless steel
- Fives sizes
- High throughput capability



# **POINT-OF-USE (PUP) FILTER AND ACCESSORIES**

- 3-in-1 solution (filter, automatic drain, and manifold for multiple distribution) for the bottom of a compressed air drop.
- 1" female inlet port on top of unit.
- Two 1/2" and two 3/8" outlet ports.

### **PUP Filter**







38027223

#### **Part Number** Description **PUP Filter** 1" Female inlet NPT PUP 42526707

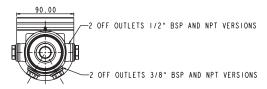
Part Number PUP Filter Access	Description ories
38027223	Filter element
38027249	Wall mounting bracket
88344171	Automatic drain assembly (Filter 2000 drain)
38032165	0-ring kit

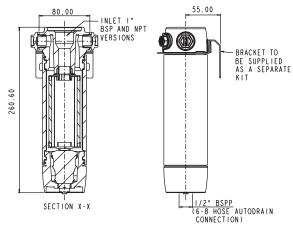
### **TECHNICAL SPECIFICATIONS**

Particle removal down to 1 micron including coalesced liquid water and oil, providing a maximum remaining oil aerosol content of 0.6 mg/m³ (0.5 ppm) at 21° C (70° F).

#### **OPERATING LIMITATIONS**

Max Flow of Unit	1.70 m³/min (60 cfm)
Max Operating Pressure	16 bar (232 psig)
<b>Max Recommended Operating Temp</b>	150° F (66° C)
Min Recommended Operating Temp	34° F (1° C)
<b>Recommended Filter Element Change</b>	12 months or 6,000 hours





# **PROVIDER MANIFOLD**

# **Provider Manifold**



Part Number	Description		
Provider Man	anifold		
38004339	Point-of-use provider manifold		

### **FEATURES THE FOLLOWING OUTLETS:**

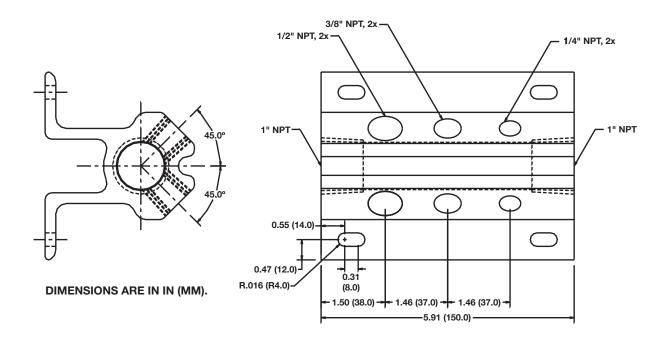
- (2) 1" NPT (top & bottom)
- (2) 3/8" NPT

• (2) 1/2" NPT

• (2) 1/4" NPT

# **ADVANTAGES**

- Simple, cost-effective solution to untidy array of tees and elbows
- Lightweight, durable anodized aluminum construction
- O-rings make pipe sealant unnecessary
- Can be used with SpeedLine SL, steel, copper, and other piping systems





<b>IOTES</b>	

# **EXHAUST KITS AND ACCESSORIES**



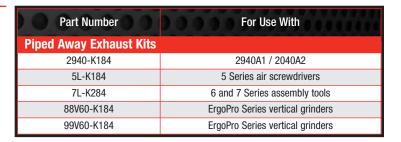
# **INGERSOLL RAND EXHAUST KITS AND ACCESSORIES**

Your comfort and safety are top priorities at Ingersoll Rand. Our flexible, customizable exhaust kits and accessories keep air moving efficiently and conveniently away from you and the work surface, letting you focus more on getting the job done right.

# **EXHAUST KITS AND ACCESSORIES**

# Piped Away Exhaust Kits







### Rear Exhaust Kits



LG1-K284

Part Number Rear Exhaust Kits	For Use With
LG1-K284	C, G1, and Q2 Series fastening tools
LG2-K284	T, H, and G2 Series
AG3-K284	G3 Series









Part Number	For Use With
3RL-284	Q2 Series fastening tools
46490	41 Series air screwdrivers

# **VACUUM KITS AND ACCESSORIES**



# **INGERSOLL RAND VACUUM KITS AND ACCESSORIES**

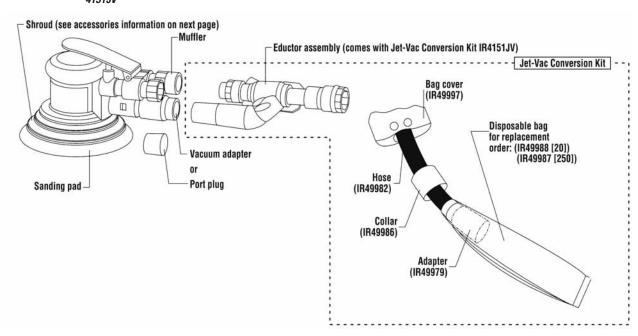
The Ingersoll Rand Jet-Vac dust extraction system is the perfect complement to our popular sanders and grinders. Not only does the system move more air than it takes to actually run the tool, it enables you to keep your work space cleaner so that you can work more efficiently.

# **VACUUM KITS AND ACCESSORIES**

### Jet-Vac Conversion Kits



Part Number	Description	For Use With
Jet-Vac Conversion Kits		
4151JV	Jet-Vac conversion kit	4151, 4152 Series, Cyclone Standard, Cyclone Select, and CycloVAC sanders
RSVK-5	5" Jet-Vac conversion kit	4151, 4152 Series, Cyclone Standard, Cyclone Select, and CycloVAC sanders
49978	6" Jet-Vac conversion kit	4151, 4152 Series, Cyclone Standard, Cyclone Select, and CycloVAC sanders









Part Number	Description	For Use With
Jet-Vac Acces	sories	
49600	6' (1.8 m) hose equipped with molded 1" ID cuffs at each end	4151, 4152 Series, Cyclone Standard, Cyclone Select, and CycloVAC sanders
49973	Disposable vacuum bag (single)	4151, 4152 Series, Cyclone Standard, Cyclone Select, and CycloVAC sanders
49997	Bag cover	4151, 4152 Series, Cyclone Standard, Cyclone Select, and CycloVAC sanders
48275-1	Dust collection bag	4151, 4152 Series, Cyclone Standard, Cyclone Select, and CycloVAC sanders
49979	Vacuum adapter	4151, 4152 Series, Cyclone Standard, Cyclone Select, and CycloVAC sanders
49982	Vacuum hose	4151, 4152 Series, Cyclone Standard, Cyclone Select, and CycloVAC sanders
49986	Vacuum hose collar	4151, 4152 Series, Cyclone Standard, Cyclone Select, and CycloVAC sanders
49987	Disposable vacuum bags (250 pack)	4151, 4152 Series, Cyclone Standard, Cyclone Select, and CycloVAC sanders
49988	Disposable vacuum bags (20 pack)	4151, 4152 Series, Cyclone Standard, Cyclone Select, and CycloVAC sanders

# **MUFFLERS**



# **INGERSOLL RAND MUFFLERS**

For generations, Ingersoll Rand tools have been making a lot of noise in the industry, so to speak, because they simply work harder than the competition. Our pavement breaker and digger mufflers ensure you'll have a better, more comfortable environment to work in.

# **CONSTRUCTION MUFFLERS**

Ingersoll Rand mufflers help protect tool users by reducing noise pollution.

# Pavement Breaker Mufflers





Part Number	For Use With
Pavement Breaker Mufflers	
04704862	MX60A & MX60B
51953453	MX90A & MX90B

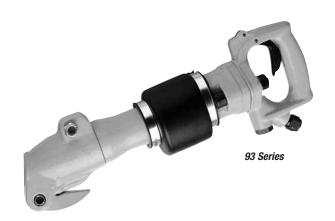


Digger Mufflers



95H-K674

Part Number Digger Mufflers	For Use With
93H-K674	93 Series
95H-K674	95 Series



# PRECISION FASTENING ACCESSORIES



# **INGERSOLL RAND PRECISION FASTENING ACCESSORIES**

At Ingersoll Rand, we'll not only provide you with the most durable, reliable, and powerful tools in the industry, our turn-key solutions provide everything you need for the entire workstation. In addition to designing and building workstations, we offer a wide assortment of fastening system calibration tools, such as our Expert<sup>TM</sup> Torque Analysis Systems, that help ensure you're performing at your peak.

# **AIR SCREWDRIVER ACCESSORIES**

# **Clutch Housing Adjustment Covers**



Part Number	Color
Clutch Housing Adjustment Cove	ers (for Q2 angle nutrunners)
TRL-415-1	Gold
TRL-415-2	Red
TRL-415-3	Blue
TRL-415-4	Green

# Pistol Buttplates



Part Number	Color	
Pistol Buttplates (for Q2 pistol fasteners)		
TRP-40-B-R	Orange	
TRP-40-B-G	Green	
TRP-40-B-B	Blue	

Flanged Adjustment Covers (for identification)



Part Number	Color	
Flanged Adjustment Covers (for Q2 in-line fasteners)		
TRH-40-23-R	Orange	
TRH-40-23-G Green		
TRH-40-23-Y	Light grey	

Non-flanged Adjustment Covers (for identification)



Part Number	Color		
Non-flanged Adjustment Covers (for Q2 in-line fasteners)			
TRH-40-24-R	Orange		
TRH-40-24-G	Green		
TRH-40-24-B	Blue		
TRH-40-24-Y	Light grey		

# **TORQUE ARMS**

#### Parallel Torque Arms



IRBP3-E30



\*Includes clamps to fit high torque Delvo (49380) and VersaTec (49380-1) tools.

#### **FEATURES AND BENEFITS**

#### Air Bias Support System

- Air adjustment by mini-regulator with air cylinder, for proper positioning of different size tools
- · Eliminates clumsy spring adjustment of competitive models
- Tool positioning is effortless

### Steel and Aluminum Construction

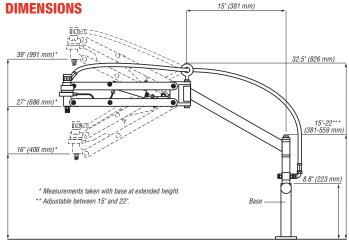
- Anodized finish
- Lightweight
- Heavy-duty for high volume production
- Corrosion-resistant

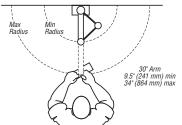
#### Parallel Arm Torque Absorber

- Absorbs torque reaction up to 120 in-lb
- Increases torque repeatability through shift changes by reducing operator influence on fastener
- · Keeps tools off the floor

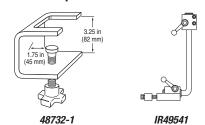
### **Auto-orientation System**

• Tool fixture is designed to allow constant perpendicular orientation of the tool, which ensures proper fastener alignment





# Parallel Torque Arm Accessories



Part Number	Description		
Parallel Torque Arm Accessories			
48732-1	Bench clamp for mounting arm in place		
IR49541	Swivel mount kit grip & angle tools (adapts pistol to the workstation)		



# **TORQUE ARMS**

#### Single Arm Workstations





IRBS3-N30 (hose, FRL, and balancer not included)

IRBS3-E0

#### **FEATURES AND BENEFITS**

**Single Arm Workstations** 

#### Steel Construction with E-Coat

• Lightweight but durable for continuous duty

Size

24"

24"

30"

30"

24"

24"

30'

30"

Corrosion-resistant

**Part Number** 

IRBS2-N0

IRBS2-N24

IRBS3-N0

IRBS3-N30

IRBS2-E0

IRBS2-E24

IRBS3-E0

IRBS3-E30

#### **Balancer Hanger**

• All arms are equipped with a roller-mounted balancer hanger for smooth motion of the tool

Torque

Absorber

No

Yes

No

Yes

No

Yes

No

Yes

**Max Weight** 

15 lb

Tool

Air

Air

Air

Air

Electric

Electric

Electric

Electric

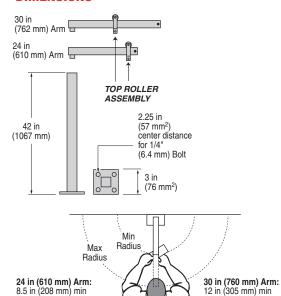
#### **Flexible**

• Your choice of 30" or 24" lengths for electric or air tools

#### **Electric Cord Clamp Kit**

• Standard with appropriate models

#### **DIMENSIONS**



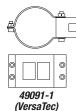
# Single Arm Workstation Accessories



25.5 in (625 mm) max

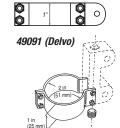


**ELECTRIC TOOL** CLAMP



# ELECTRIC TOOL CLAMP

32.5 in (825 mm) max



Part Number	Description		
Single Arm	Single Arm Workstation Accessories		
IR48723-2	Single arm torque absorber, this telescoping arm improves flexibility & eliminates torque reaction from the tool		
48732-1	Bench clamp for mounting arm in place		
49091	Electric tool clamp (Delvo)		
49091-1	Electric tool clamp (VersaTec)		

# **AIR NUTRUNNER ACCESSORIES**

# **Mounting Plate**



Part Number	For Use With
Mounting Plate	
DAM-K48	D Series

# **Exhaust Deflector**



DAA40-A23

Part Number	For Use With		
Exhaust Deflector			
DAA40-A23	D Series		
Backcap Kit			
DAM-K25	D Series		

# Swivel Hanger



Part Number	For Use With			
Swivel Hanger				
DAA40-K364	D Series			

# Flush Hex Sockets



8SA34-807M

Part Number	Description	For Use With
Flush Hex Sockets		
182A88-807	Flush hex sockets	9 Series, 83 angle head
8SA34-807M	Flush hex sockets	6 & 7 Series, 3D6 angle head; 8 & 9 Series, 32 angle head
8SA56-807M	Flush hex sockets	8 & 9 Series, 32 angle head
182A13MF-807	Flush hex sockets	8 & 9 Series, 32 angle head
182A15MF-807	Flush hex sockets	8 & 9 Series, 32 angle head



# **SPINDLES AND ANGLE HEAD ACCESSORIES**

# 1/4" Square Drive Spindles



141A9-A607-1/4

Part Number	Description	For Use With	
1/4" Square Drive Spindles			
TRL2-A607-S4	1/4" square drive spindle	Q2 Series	
48404-1 (assembly)	1/4" square drive spindle	41 Series	
141A9-A607-1/4	1/4" square drive spindle	5 Series, 7 Series	

# 3/8" Square Drive Spindles



6L2D-A607

Part Number 3/8" Square Driv	Description ve Spindles	For Use With
TRL2-A607-S6	3/8" square drive spindle	Q2 Series
48405-1 (assembly)	3/8" square drive spindle	41 Series
141A12-A607	3/8" square drive spindle	5 Series, 7 Series
6L2D-A607	3/8" square drive spindle	6 Series

# 1/4" Screwdriver Hex Bit Holder Spindles



5L2C3-B586

Part Number	Description	For Use With	
1/4" Screwdriver Hex Bit Holder Spindles			
TRL2-A607-Q4	1/4" screwdriver hex bit holder spindle	Q2 Series	
48402-1 (assembly)	1/4" screwdriver hex bit holder spindle	41 Series	
5L2C3-B586	1/4" screwdriver hex bit holder spindle	5 Series	

# 1/4" Screwdriver Hex Insert Bit Holder Spindles



5L2C4-B386

Part Number	Description	For Use With	
1/4" Screwdriver Hex Insert Bit Holder Spindles			
48403-1 (assembly)	1/4" screwdriver hex insert bit holder spindle	41 Series	
5L2C4-B386	1/4" screwdriver hex insert bit holder spindle	5 Series	

### Angle Head Extensions



8SL-A327-6

Part Number	Description	For Use With	
4" Angle Head Extension Assembly			
6WT-A327-4	4" angle head extension assembly	6 Series	
6" Angle Head Extension			
8SL-A327-6	6" angle head extension	8 Series, 9 Series	

# **ELECTRIC SCREWDRIVER ACCESSORIES**

# Extension Cable — For Low Torque Models



Part Number	Description	
Extension Cable — For Low Torque Models*		
ES40T-249-2	Extension cable — for low torque models	

\*For use on push and trigger start models ES60, ES70, ES80, and ES90 (standard on ES100).

# Attachable Pistol Grip Handle



Part Number	Description	
Attachable Pistol Grip Handle*		
DLW2100TP	Attachable pistol grip handle	

\*For use on push and trigger start models ES60, ES70, ES80, and ES90 (standard on ES100).

# Controller Mounting Bracket



Part Number  Controller Mounting Br	Description acket	
EC24-MB	Controller mounting bracket	

# **Torque Adjusting Wrench**



Part Number	Description			
Torque Adjusting Wrench				
EP4007N-516	Torque adjusting wrench			



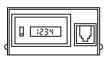
### **ELECTRIC SCREWDRIVER ACCESSORIES**

#### Calibration / Maintenance Labels



Part Number Description			
Calibration / Maintenance Labels			
EP4007N-302	Calibration / maintenance labels (52 labels per package)		

#### Digital Counter



Part Number	Description
Digital Counter	
EC24-DC	Digital counter

#### Low Profile Flange



Part Number	Description	
Low Profile Flange*		
EP4007N-123	Low profile flange	

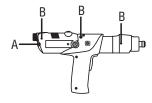
\*Standard for pistol and angle models.

#### Torque Adjustment Cover



Part Number Torque Adjustment Cov	Description ver		
ES60T-675	Torque adjustment cover		

#### Suspension Bails



Part Number Suspension Bails	Description	
EP4007N-365	A – Vertical suspension bail	
EP4007N-366	B – Horizontal suspension bail	
EL0109B-365	Low torque vertical suspension bail	

#### Additional Cords



EP4007N-239-C6A

Part Number Additional Cords	Description	
EP4007N-239-C6A	6' coiled additional cord (high torque)	
EP4007N-239-8A	8' straight additional cord (high torque)	
EP4007N-239-12A	12' straight additional cord (high torque)	
EP4007N-239-25	25' straight additional cord (high torque)	

### **SUSPENSION AND REACTION ACCESSORIES**

#### **Horizontal Hangers**



Part Number	Description	For Use With	
Horizontal Hanger	S		
48934	Horizontal hanger	41 Series	
6WS-366	Horizontal hanger	5 Series, 6 Series, 7 Series,	
8SL-366	Horizontal hanger	8 Series	
9SL-366	Horizontal hanger	9 Series	
TRP-A365	Horizontal hanger	Q2 Series	
7RA-A366	Horizontal hanger	5 Series, 7 Series	

#### Reaction Bar Holders



8SL-A60

Part Number Reaction Bar Hold	Description ers	For Use With
8SL-A60	Reaction bar holder	8 Series
9SL-A60	Reaction bar holder	9 Series

#### **Reaction Bars**



Part Number	Description	For Use With
Reaction Bars		
R1A-A48	Reaction bar (1/2" hex except for 6 Series)	6 Series
9SL-48	Reaction bar (1/2" hex except for 6 Series)	8 Series, 9 Series

#### Suspension Bails



Part Number  Suspension Bails	Description	For Use With
7L-365	Suspension bail	Q2 Series, 5 Series, 6 Series, 7 Series, 8 Series
46328	Suspension bail	41 Series
5RL-365	Suspension bail	5 Series

#### **Dead Handles**



Part Number	Description	For Use With
Dead Handles		
48931	Dead handle	41 Series
728N-A48	Dead handle*	5 Series
R1A-A48	Dead handle*	7 Series
Dead Handle Ada	pters	
5A-49	Dead handle adapter	5 Series
7A-49	Dead handle adapter	7 Series

<sup>\*</sup>For retrofitting add dead handle adapter.



### **DC ELECTRIC FASTENING TOOL ACCESSORIES**

#### **Cables**



GEA40-CORD-3M

Part Number	Description	Length	For Use With
Cables			
GEA40-EXT-10M	Extension cable	10 m	QE & QM Series
GEA40-EXT-20M	Extension cable	20 m	QE & QM Series
GEA40-EXT-40M	Extension cable	40 m	QE & QM Series
IC-4PIN-6M	4-pin, 6 m accessory cable	6 m	IC-PALM-RESET & IC-ESTOP
IC-4PIN-10M	4-pin, 10 m accessory cable	10 m	IC-PALM-RESET & IC-ESTOP
IC-10PIN-6M	10-pin, 6 m accessory cable	6 m	IC-SELECT-4, IC-SELECT-8, & IC-SOCKET-4
IC-10PIN-10M	10-pin, 10 m accessory cable	10 m	IC-SELECT-4, IC-SELECT-8, & IC-SOCKET-4
IC-19PIN-5M	19-pin, 5 m accessory cable	5 m	IC-SOCKET-8
IC-19PIN-10M	19-pin, 10 m accessory cable	10 m	IC-SOCKET-8

#### **DEA Extension Cables**



DEA40-CORD-10

Part Number DEA Extension Cables	Description	For Use With
DEA40-CORD-10	Tool extension cable	DEA Series
DEA40-CORD-20	Tool extension cable	DEA Series



Part Number	Description	For Use With
Lever Kits		
GEA40-K98SL	Short lever kit	QE Series
GEA40-K98EL	Extended lever kit	QE Series



Part Number	For Use With
Swivel Hanger Kit	
GEA40-K364	QE6 & QE8 Series

#### Suspension Bail



Part Number	For Use With
Suspension Bails	
7L-365	QE Series
GP15-7L-365	QE4 Pistol

### **DC ELECTRIC FASTENING TOOL ACCESSORIES**



Part Number	For Use With	
Reaction Bar Kits (for retrofitting add DAA4-27)		
GEA15-K48	QE4 Series	
DEA120-K48	QE6 & QE8 Series	

#### Flanged Mounting Kits



Part Number	For Use With		
Flanged Mounting Kits (for retrofitting add DAA4-27)			
15E4-K48	QE4 Series		
GEM120-K48	QE6 & QE8 Series		

#### **Mounting Plate Kits**



Part Number	For Use With		
Mounting Plate Kits (for retrofitting add DAA4-27)			
GEA4-K48	QE4 Series		
DAM120-K48	QE6 & QE8 Series		

#### Socket Trays



Part Number	Description
Socket Trays IC-SOCKET-4	4-position socket tray
IC-SOCKET-8	8-position socket tray

#### Selector Switches



Part Number	Description	
Selector Switches		
IC-SELECT-4	4-position remote selector switch	
IC-SELECT-8	8-position remote selector switch	

#### Palm Button Reset Station



Part Number	Description	
Palm Button Reset Station		
IC-PALM-RESET	Palm button reset station	



### **DC ELECTRIC FASTENING TOOL ACCESSORIES**

#### **Emergency Stop Button**



Part Number	Description	
Emergency Stop Button		
IC-ESTOP	Emergency stop button	

Light Tower



Part Number	Description	
Light Tower*		
IC-LIGHT-TOWER	Light tower	

<sup>\*</sup>Other options available upon request (number of lights, colors, and buzzer).

#### **Communication Hubs**



IC-SW-5

Part Number  Communication Hubs	Description	
IC-SW-5	Industrial-duty 5-port switch	
IC-SW-16	Industrial-duty 16-port switch	

#### Parameter Transfer Key





Part Number	Description
Parameter Transfer Key	
8015013	Parameter transfer key (for IC1D and IC1M controllers)

### ETT SERIES EXPERT™ TORQUE TESTER

#### ETT Series Expert™ Torque Tester



Part Number	Torque Range in-lb (Nm)	Accuracy FSD	Weight lb (kg)	Dimensions in (mm)	
ETT Series Expert™ Torque Tester					
ETT-1-US	0.88 - 8.8 (0.1 - 1)	0.5%	5.0 (2.7)	9-1/4" x 8-1/4" x 2-3/4" (213 x 238 x 70)	
ETT-4-US	3.50 – 35.0 (0.4 – 4)	0.5%	5.0 (2.7)	9-1/4" x 8-1/4" x 2-3/4" (213 x 238 x 70)	
ETT-12-US	10.60 - 106 (1.2 - 12)	0.5%	5.0 (2.7)	9-1/4" x 8-1/4" x 2-3/4" (213 x 238 x 70)	
ETT-30-US	26.50 - 265 (3.0 - 30)	0.5%	5.0 (2.7)	9-1/4" x 8-1/4" x 2-3/4" (213 x 238 x 70)	

#### FEATURES AND BENEFITS

- · Recommended for most hand screwdrivers, wrenches, or power tools
- Ideal for testing output torque of assembly tools in the calibration lab, repair crib, or on the production line
- Six different languages (English, French, German, Italian, Spanish, and Swedish) standard on all units
- Nine units of measurement for compatibility with global standards
- Charger is equipped with different adapters to make it easy to use in most of the world
- Four operation modes: Peak, Click, Impulse, and Track modes
- · High, pass, low LED's



- · Auto and manual reset function
- · Data transfer function to a PC or printer via the RS232 port
- Diagnostics keep track of past and future calibration dates and current software release
- 8 hours of battery time under normal use
- · Auto power down timer keeps unit charged longer
- · Quick-clamp mounts integrated into housing
- · Quick-disconnect plate available for convenient mounting structure
- Certificate of calibration from National Institute of Standards and Technology included with every unit

#### **ETT UNIT INCLUDES:**

_1	tem
٦	Torque analyzer
Е	Battery charger
F	Rundown adapter
(	Carrying case
(	Operating manual
(	Certificate of calibration

Part Number Description		
ETT Series Expert™ Torque Tester Accessories		
ETA2-P925	Printer connector cable	
ETT-QD	Quick-disconnect plate	
ETA2-PC99	PC connector (RS232)	



<b>VOTES</b>	

Notes



<b>VOTES</b>	

Notes



<b>VOTES</b>	



# COMPONENTS



As hardworking and durable as Ingersoll Rand tools are, it's easy to sometimes take them for granted. But even the toughest equipment needs preventive maintenance. Prolong the life and reliable performance of your tools with our line of repair kits, replacement parts, and specially engineered lubricants.





# COMPONENTS



## COMPONENTS

Lubricants

Repair Kits and Parts

261

257

## **LUBRICANTS**



### **INGERSOLL RAND LUBRICANTS**

It goes without saying that proper lubrication of any tool is essential if you want the tool to last. By lubricating your air tools, you'll prolong the life of tool motors, mechanisms, gearing, and other vital parts. Ingersoll Rand offers a complete line of specialized oils and greases that are engineered specifically for use with our air tools.

### **LUBRICATION KITS**





Part Number	Description	Quantity
Lubrication K	its	
LUB-POP	Point-of-purchase display includes (3) 10G, (5) 10P, (24) 10Z4, (6) 100-1LB, (8) 105-LBK1, (8) 115-LBK1, (1) case 10Z4, & (1) case hang tags	1
10Z4-MB24	Case of 10Z4 countertop display	24
10P-MB5	Case of 10P countertop display	5
10G-MB3	Case of 10G countertop display	3
100-MB6	Case of 100-1LB countertop display	6
105-LBK1-MB8	Case of 105-LBK1 countertop display	8
115-LBK1-MB8	Case of 115-LBK1 countertop display	8





Part Number	Description	
Air Care Kits		
67-LBK1	Angle grinder care kit includes 10Z4 oil, 4 oz 67 grease, & grease gun	
105-LBK1	Metallic housings impact wrench care kit includes 10Z4 oil, 4 oz 105 grease, & grease gun	
115-LBK1	Composite housings impact wrench care kit includes 10Z4 oil, 4 oz 115 grease, & grease gun	





10G

Part Number	Description	Size
Air Tool Oils		
63Z4	#63 oil for cyclone wick lubrication	4 oz
10Z4	Class 1 #10 oils for use with percussive, assembly, & impact wrenches	4 oz
10G	Class 1 #10 oils for use with percussive, assembly, & impact wrenches	1 gal
10P	Class 1 #10 oils for use with percussive, assembly, & impact wrenches	1 pt
10G55	Class 1 #10 oils for use with percussive, assembly, & impact wrenches	55 gal
10GW	Class 1 #10 oil / antifreeze for use with percussive, assembly, & impact wrenches	1 gal
50P	Class II lubricant, #50 oil for use with grinders, impact wrenches, hoists, & winches	1 pt
50G	Class II lubricant, #50 oil for use with grinders, impact wrenches, hoists, & winches	1 gal
62 1 Gal	Class II #62 oil for hoist & winch gear boxes	1 gal

### **GREASES**

#### Greases



100 1 LB



105-4T-6

Part Number	Description	Grease #	Size
Greases			
23-1 LB	For the gearing of drills	23	1 lb
28 1 LB	For screwdriver gearing and clutches; drills, grinders, saws; tie tampers grease	28	1 lb
66 1 LB	For slow speed, high torque angle heads	66	1 lb
66 8 LB	For slow speed, high torque angle heads	66	8 lb
67-4T	For high speed, high temp angle heads (green)	67	4 oz
67-1 LB	For high speed, high temp angle heads (green)	67	1 lb
67 8 LB	For high speed, high temp angle heads (green)	67	8 lb
70 1 LB	For large piston motors and gear cases	70	1 lb
70 8 LB	For large piston motors and gear cases	70	8 lb
77-1 LB	For grinder angle heads	77	1 lb
80 1 LB	For bearings on sump pumps	80	1 lb
80 8 LB	For bearings on sump pumps	80	8 lb
90-14 oz	For gear heads & tube nut wrenches	90	14 oz
100 1 LB	Standard-duty impact wrench grease	100	1 lb
100 8 LB	Standard-duty impact wrench grease	100	8 lb
105-4T-6	Metallic housing impact wrench grease	105	4 oz
105-1 LB	Metallic housing impact wrench grease	105	1 lb
105-8 LB	Metallic housing impact wrench grease	105	8 lb
115-4T-6	Composite housing impact wrench grease	115	4 oz
115-1LB	Composite housing impact wrench grease	115	1 lb
150-1 LB	For impact mechanisms with swinging weight	150	1 lb
150-8 LB	For impact mechanisms with swinging weight	150	8 lb
170-1LB	Premium impact grease for high temps, used with impact mechanisms	170	11 lb



### **GREASE GUNS AND ACCESSORIES**

#### Grease Guns



Part Number	Description	
<b>Grease Guns</b>		
P25-228	Push-type hand grease gun for hydraulic-type fittings, holds up to 3 oz of grease	
R000A2-228	Push-type hand grease gun for flush-type fittings, holds up to 3 oz of grease	

#### Grease Tube Head



Part Number  Grease Tube H	Description	
GTH-1	Grease gun used with Ingersoll Rand 4 oz tube of grease	

#### Grease Gun Coupler and Adapter



636024

Part Number	Description
Grease Gun Co	oupler and Adapter
636020	Grease gun coupler
636024	Grease gun adapter

## **REPAIR KITS AND PARTS**



### **INGERSOLL RAND REPAIR KITS AND PARTS**

Even the most durable and reliable tools need preventive maintenance. You'll keep things running strong and maximize your productivity with Ingersoll Rand repair kits and replacement parts. We've created these kits to help make tool repair and maintenance faster and more convenient for you.

### **RATCHET REPAIR KITS**

#### Air Ratchet Spring Repair Kit



Part Number	For Use With
Air Ratchet Spring Rep	pair Kits
103-SK	103
1033-SK	1033
1103-SK	1103 & 1133
107XP-SK	107XP
1077XP-SK	1077XP
1200-SK	1200 & 1210
110A-THK1	111 & 1111
1107-SK	1107 & 1177

#### Air Ratchet Motor Tune-up Kit



Part Number	For Use With
Air Ratchet Motor Tune-up Kit	
1200-TK1	1200 & 1210
110-TK1	111 & 1111
1107-TK1	1107 & 1177

#### Air Ratchet Head Repair Kit



Part Number	For Use With
Air Ratchet Head Repa	ir Kit
104-TK1	103 & 104
1103-TRK1	1103
1133-TRK1	1133
107XP-TRK1	107XP
1077XP-TRK1	1077XP
1200-TRK1	1200
1210-TRK1	1210
109XP-TRK1	109XP
1099XP-TRK1	1099XP
111-TRK1	111
1111-TRK1	1111
1107-TRK1	1107
1177-TRK1	1177

### **IMPACT WRENCH TUNE-UP KITS**

Part Number 3/8" Impact Wrench Tu	For Use With
215-THK1	215
2115-TK1	2115 Series & 2125QTi
2113-1K1 211-TK2	211
212-TK2	212
215-TK1	215
216-TK1	216
1702B-TK2	1702 B Series
1702P-TK2	1702 P Series
1702SB-TK2	1702 SB Series
1705P-TK2	1705 Series
1710B / 1710P-TK3	1710 Series
2112-TK2	2112
1/2" Impact Wrench Tu	=::=
223-TK2	223
235-TK2	235
2130-TK1	2130 & 2130-2
2131-TK2	2131A
2135-TK1	2135 Series
225-TK1	225
231HP-TK1	231HA & 231HA-2
231-TK2	231C, 231HA, 231HA-2
231-TK3	231C, 231HA, 231HA-2
231XP-TK1	231C, 231HA, 231HA-2
244-TK2	244A & 244A-2
2705-TK3	2705 Series
2706-TK3	2706 Series
2707-TK2	2707 Series
2903P-TK2	2903P1
2906P-TK1	2906 Series
5040-TK2	5040 Series

Part Number	For Use With	
3/4" Impact Wrench Tune-up Kits		
251-TK1	251	
255A-TK1	255A	
261-TK2	261	
2141-TK1	2141	
2161-TK2	2161XP	
252-TK2	252	
2905P-TK2	2905 Series	
2908P-TK2	2908 Series	
2910-TK4	2910 Series	
2921-TK2	2921 Series	
2920B-TK2	2920 Series	
2920P-TK2	2920 Series	
1" Impact Wrench	Tune-up Kits	
280-TK2	280	
281-TK1	281	
281-TK2	281	
295-TK2	295	
1712B / 1712P-TK3	1712 Series	
2190-TK1	2190Ti, 2190DTi-6, 2190Ti-6	
285A-6-TK2	285A	
285-TK1	285	
290-TK2	290	
2934-TK3	2934 Series	
2940-TK3	2940A1, 2940A2, B1, B2, & P2	
3940-TK1	3940	
3942-TK1	3942	

#### Impact Wrench Tune-up Kit





### **IMPACT WRENCH HAMMER AND ANVIL KITS**

#### Impact Wrench Hammer Kit



Impact Wrench Hammer and Anvil Kit



Part Number	For Use With	
3/8" Impact Wrench Hammer and Anvil Kits		
2112-THK1	235	
2115-THK1	2115Ti & 2115QTi	
215-THK2	215	
216-THK2	216	
1/2" Impact Wrenc	h Hammer and Anvil Kits	
2121-THK1	2121	
2125QTi-THK1	2125Ti	
2130-IMK1	2130	
2130-IMK2	2130-2	
2131-THK1	2131A	
2131-THK1-2	2131AS-2	
2135-THK1	2135Ti & 2135QTi	
2135-2-THK1	2135Ti-2 & 2135QTi-2	
223-THK1	223	
225-THK2	225	
231B-HK	231C, 231HA, & 231HA-2	
231B-THK1	231C, 231HA, & 231HA-2	
231B-THK2	231C, 231HA, & 231HA-2	
235-THK1	235	
3/4" Impact Wrench Hammer and Anvil Kits		
261-THK2	261	
2141-THK1	2141	
1" Impact Wrench Hammer and Anvil Kits		
2190-THK1	2190	
285A-6-THK1	285A	

### IMPACT WRENCH HAMMER THROTTLE VALVE BODY KIT

Impact Wrench Throttle Valve Body Kit



Part Number	For Use With					
Impact Wrench Throttle Valve Body Kit						
223-TVB1 223						



Part Number	For Use With
Pavement Breaker Tune	-up Kits
51299097	JH40
51310498	PB35A & PB50A
Circular Saw Tune-up K	its
S120-TK1	S120
SRA010-TK1	SRA010A1

#### **GRINDER TUNE-UP KITS**



Part Number	For Use With
Grinder Tune-up Kits	
61H-TK1	61H Series
66H-TK3	66H Series
77H/77A-TK3	77H / 77A Series
7S60-TK2	7S60L (Pro Series grinder)
88V/88H-TK3	88V / 88H Series
99V/99H-TK3	99V / 99H Series
AG1-TK1	G1 Series
AG2-TK1	G2 Series
AG3-TK1	G3 Series



#### **ENGRAVING PEN TUNE-UP KIT**

#### Engraving Pen Tune-up Kit



Part Number	For Use With			
Engraving Pen Tune-up	Kit			
EP50-TK1 EP50 Engraving Pen				

### **EXTENDED WARRANTY KITS**

#### Extended Warranty Impact Wrench Kit



Part Number	Description	For Use With
3900Ti Extended	Warranty Kits*	
3900-XW1-M	Kit includes hose whip with swivel, in-line lubricator, coupler, oil, grease, & medium titanium gloves; extends standard 1-year warranty to 2-year coverage	3900Ti Series
3900-XW1-L	Kit includes hose whip with swivel, in-line lubricator, coupler, oil, grease, & large titanium gloves; extends standard 1-year warranty to 2-year coverage	3900Ti Series
3900-XW1-XL	Kit includes hose whip with swivel, in-line lubricator, coupler, oil, grease, & extra large titanium gloves; extends standard 1-year warranty to 2-year coverage	3900Ti Series

\*Purchase a warranty kit with a 3900Ti Series impact wrench and receive a two-year warranty on the impact mechanism.

#### Extended Warranty Grinder Kit



Part Number	Description	For Use With
G-Series Grinder	s Extended Warranty Kits*	
AG1-XW1	Kit includes FRL, oil, grease, & tune-up kit; extends standard 1-year warranty to 2-year coverage	G1 Series
AG2-XW1	Kit includes FRL, oil, grease, & tune-up kit; extends standard 1-year warranty to 2-year coverage	G2 Series
AG3-XW1	Kit includes FRL, oil, grease, & tune-up kit; extends standard 1-year warranty to 2-year coverage	G3 Series

<sup>\*</sup>Purchase a warranty kit with a G-Series Grinder and receive a full two-year extended warranty.

### **ASSEMBLY TOOL REPAIR KITS**

#### Mechanism Tune-up Kit



Part Number	For Use With
Mechanism Tune-up Kit	s
1410P-K600	1410P Nutrunners & screwdrivers
180PQ-K600A	180PQ1 Nutrunners & screwdrivers
1900P-K600A	1900P Nutrunners & screwdrivers
380PQ-K600A	380PQ1 Nutrunners & screwdrivers
500P-K600	500P Nutrunners & screwdrivers
900P-K600A	900P Nutrunners & screwdrivers
Tune-up Kits	
5A / 5L-TK1	5A / 5L Series drills
5L-NS-TK1	5A / 5L Series drills
5RA / 5RL-TK1	5RA / 5RL Series drills
5RL-NS-TK1	5RA / 5RL Series drills
6-DRILLS-TK1	6A / 6L Series drills
6WT-TK1	6 Series angle wrenches
728-TK3	728 Series drills
7A-DRILLS-TK1	7A Series drills
7RA-S/D-TK1	7RA Series drills
7RL-S/D-A/T-TK1	7 Series assembly tools
AVC10-TK2	AVC10 Series riveters
AVC26-TK1	AVC26 Series riveters
48804-1	41 Series assembly tools



Part Number	For Use With
Motor Tune-up Kits	
180PQ-K500	180PQ1 Nutrunners & screwdrivers
1900P-K500	1900P Nutrunners & screwdrivers
280PQ-K500	280PQ1 Nutrunners & screwdrivers
3000P-K500	3000P Nutrunners & screwdrivers
380PQ-K500	380PQ1 Nutrunners & screwdrivers
500P-K500	500P Nutrunners & screwdrivers
700P-K500	700P Nutrunners & screwdrivers
900P-K500	900P Nutrunners & screwdrivers





## **SERVICE**



### THE BEST EQUIPMENT DESERVES THE BEST SERVICE

You know how important your equipment is to your livelihood. At Ingersoll Rand, we know it too. That's why for the past 100 years we've been setting the standard for not just powerful and durable products, but also for providing total solutions that help you get the job done right.

As tough as our equipment is, we also know that it needs to be maintained. If and when the time comes, let Ingersoll Rand meet your service and repair needs through our expansive Certified Service Network.

Each Certified Service provider has the specialized testing equipment, genuine parts, and skilled training to ensure you're back up and running at Original Equipment Manufacturer (OEM) specifications. Work with us and you'll enjoy these other benefits too.

- Reduced downtime through quick turnarounds and pre-authorized maximum repair costs
- Increased return on investment by preventing wear and tear and extending the life of your equipment
- Peace of mind knowing you're getting quality repairs using genuine Ingersoll Rand parts
- Convenient access to the expertise and resources of a full service center, no matter where you're located

Reliability of a minimum 90-day repair warranty or optional 180-day extended warranty. Keep your equipment working as hard as you do by using Ingersoll Rand Certified Service. Repairs done right; service made simple.





## **SERVICE**



### INGERSOLL-RAND SERVICES

- Field Service and Repair
- **Calibrations**
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- **Bench Service and Repair**
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- Refurbishing and Rebuilding Programs
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- Program Management
- Installation
- Consulting
- www.irtools.com/servicelocator

For more information on the Ingersoll Rand Service Network call or visit us online.

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<b>IOTES</b>	

Part Number	Description	Page	Part Number	Description	Page	Part Number	Description	Page
0			104256	Non-relieving Service Kit	71, 73, 80	1710B / 1710P-T	K3	
	Pavement Breaker Muffler	238		Service Kit			Impact Wrench Tune-up Kit	
_				Polycarbonate Bowl		1712B / 1712P-T	K3	
1				Composite Bowl		10000 2	Impact Wrench Tune-up Kit	
	Grease			Composite Bowl			Motor Tune-up Kit	
	Grease			T-type Wall Mount Bracket k			Mechanism Tune-up Kit	
	Compact Series Filter AccessoryCompact Series Filter Accessory						. Protective Tool Boot	
	Compact Series Filter Accessory		104263	Clamp Kit			Flush Hex Socket	
	Coalescing Filter Element			Automatic Drain Kit			Flush Hex Socket	
	Gauge 0 – 60 psig			Nut and Bracket Kit			Flush Hex Socket	
	Gauge 0 – 160 psig89, 91, 1			Compact Series Mounting B			Protective Tool Boot	
	Gauge 0 – 300 psig			Compact Series Filter Eleme			Motor Tune-up Kit	
	Compact Series Safety Valve			Compact Series Filter Eleme			Mechanism Tune-up Kit	
	Gauge 0 – 150 psig			Heavy-duty Series BracketHeavy-duty Series Auto Drai		1900/54-2	Protective Tool Boot	
	Compact Series Precision Servi			Heavy-duty Series Filter Eler		<b>2</b>		
	Compact Series Precision Servi			Heavy-duty Series Filter Eler			Electric Start-up Kit	11
	Lubrication Kit			Heavy-duty Series Filter Bov			Maintenance Kit	
	Protective Tool Boot			Heavy-duty Series Lubricato			Maintenance Kit	
	Ratchet Spring Repair Kit Ratchet Spring Repair Kit			Protective Tool Boot			Electric Start-up Kit	
	Heavy-duty Series Filter Access			Ratchet Head Repair Kit		20103081	Maintenance Kit	
			105-1 LB	Grease		20103099	Maintenance Kit	
.57020				Grease			Maintenance Kit	
104027	Tamper-resistant Plug			Grease			Protective Tool Boot	
	Stud Mount			Air Care Kit			Saw Blade Kit	
	Automatic Drain			Lubrication Kit			. Protective Tool Boot	
	Polycarbonate Bowl			1" Drive SAE			Impact Wrench Hammer/Anvil Ki	
	Nickel-plated Brass Ball Valve .			Protective Tool Boot			Impact Wrench Tune-up Kit	
104077-3	Nickel-plated Brass Ball Valve .			Ratchet Spring Repair Kit			Protective Tool Boot	
104077-4	Nickel-plated Brass Ball Valve .			Ratchet Head Repair Kit			Impact Wrench Hammer/Anvil Ki	
	Panel Mount Nut			Ratchet Spring Repair KitRatchet Head Repair Kit			Impact Wrench Tune-up Kit Protective Tool Boot	
	Mounting Bracket85, 8			Ratchet Head Repair Kit			Impact Wrench Tune-up Kit	
	Tamper-resistant Knob Kit7			Protective Tool Boot			Impact Wrench Hammer/Anvil Ki	
	Push Drain			Ratchet Head Repair Kit			Impact Wrench Hammer/Anvil Ki	
	Mini Series Composite Regulato			. Air Tool Oil			Impact Wrench Tune-up Kit	
	Mini Series Composite Regulato			Air Tool Oil			Impact Wrench Hammer/Anvil Ki	
	Compact Series Modular Space			. Lubrication Kit			Impact Wrench Hammer/Anvil Ki	
	Compact Series Threaded Adap Compact Series Threaded Adap			Air Tool Oil			. Protective Tool Boot	
	Compact Series Threaded Adap		10P	Air Tool Oil			Impact Wrench Tune-up Kit	
	Compact Series Threaded Adap			Lubrication Kit		2131-P32	Protective Tool Boot	212
	Compact Series Right Angle Bra			Air Tool Oil			Impact Wrench Hammer/Anvil Ki	
	Compact Series Modular Manifo			Lubrication Kit			Impact Wrench Hammer/Anvil Ki	
	Compact Series Wall Mount Bra			Protective Tool Boot			Impact Wrench Tune-up Kit	
104172	Wall Mount Kit	.89, 91, 102		Ratchet Spring Repair Kit			Impact Wrench Hammer/Anvil Ki	
104173	Panel Mount Nut	89, 91		Ratchet Head Repair Kit			Protective Tool Boot	
104174-2	Compact Series Safety Valve	102		Ratchet Spring Repair KitRatchet Motor Tune-up Kit .			Impact Wrench Hammer/Anvil Ki Impact Wrench Tune-up Kit	
	Compact Series Safety Valve			Ratchet Head Repair Kit			Protective Tool Boot	
	Compact Series Safety Valve			Ratchet Spring Repair Kit			Impact Wrench Hammer/Anvil Ki	
	Tamper-resistant Kit			Ratchet Motor Tune-up Kit .			Impact Wrench Tune-up Kit	
	Filter Service Kit			Ratchet Head Repair Kit			Protective Tool Boot	
	Compact Series Regulator Acce			Ratchet Head Repair Kit			Impact Wrench Tune-up Kit	
	Compact Series Regulator Acce			Ratchet Head Repair Kit			Impact Wrench Hammer/Anvil Ki	
	Compact Series Piggyback Acce		115-1LB	Grease			Impact Wrench Tune-up Kit	
	Service Kit			Grease		2161-P32	Protective Tool Boot	213
	Sight Glass Service Kit8		115-LBK1	Air Care Kit		2161-TK2	Impact Wrench Tune-up Kit	263
	Compact Series Pressure Switc			Lubrication Kit		216-THK2	Impact Wrench Hammer/Anvil Ki	it264
	Valve			Ratchet Head Repair Kit			Impact Wrench Tune-up Kit	
104196-CDW .	Compact Series Pressure Switc			Ratchet Spring Repair Kit			. Protective Tool Boot	
	Valve	103		Ratchet Motor Tune-up Kit .			Impact Wrench Hammer/Anvil Ki	
104196-CHW .	Compact Series Pressure Switc	h		Ratchet Head Repair Kit			Impact Wrench Tune-up Kit	
	Valve	103		Ratchet Head Repair Kit Malleable Butt			Super Cut Chisel	
104196-CSN	Compact Series Pressure Switc						Super Cut Chisel	
	Valve			Protective Tool Boot			Super Cut Chisel	
	Polycarbonate Bowl			Spindle			Pipe Driver	
	Compact Series Lubricator Acce			.Spindle			Pipe Driver	
	Metal Bowl			Rubber Tipped Butt			Pipe Driver	
	Compact Series Lubricator Acce			Rubber Topping-off Butt			Ground Rod Driver	
	Metal Bowl			Rubber Tipped Peen			Ground Rod Driver	
	Compact Series Lubricator Acce			Grease			Ground Rod Driver	
	Knob Repair Kit Sight Dome Repair Kit			Grease			Combo Cutter	
	Compact Series Filter Accesson			Flanged Mount Kit			Asphalt Cutter	
	Mini Series Modular Kit			Refrigerated DryStar			Tent Stake Driver	
	Mini Series Modular Kit			Grease			Tent Stake Driver	
	Mini Series Modular Kit			Impact Wrench Tune-up Kit			Hose Whip	
	Mini Series Modular Kit			Impact Wrench Tune-up Kit			Hose Whip	
	Modular Manifold Kit			Impact Wrench Tune-up Kit			3-pc Post Driver	
	Mini Series Modular Kit			Impact Wrench Tune-up Kit			Detachable Shank	
104254-2	Modular Manifold Kit	80, 81		Impact Wrench Tune-up Kit			Asphalt Cutter	
	Mini Series Modular Kit						3-pc Post Driver	
	Relieving Service Kit		17U-ŏ	Safety Air Fuse Valve		ZZU4U968	Digging Chisel	1/0

Part Number	Description	Page	Part Number	Description	Page	Part Number	Description	Page
22040976	Digging Chisel	170	255-P32	Protective Tool Boot	213	2U-A925-4	Power Quick Change Chuck	166 207
	Digging Chisel			2575K Cordless Drill/Driver		20 71020 1 111	The over query entange entack	
	3-pc Post Driver			Protective Tool Boot		3		
	3-pc Post Driver			Impact Wrench Hammer/Anvil K		_	Protective Tool Boot	210
	Super-duty Moil Point			Impact Wrench Tune-up Kit				
	Super-duty Moil Point			Heavy-duty Series Lubricator .			Motor Tune-up Kit	
							Firm Pad	
	Super-duty Moil Point			Heavy-duty Series Lubricator .			Vinyl Pad	
	Super-duty Moil Point			Heavy-duty Series Lubricator .			Vinyl Pad	
	Super-duty Moil Point			Impact Wrench Tune-up Kit			Straight Line Pad	
	Super-duty Moil Point			Impact Wrench Tune-up Kit			Pad Nut	
	Super-duty Chisel			Impact Wrench Tune-up Kit			Pad Nut	
22041123	Super-duty Chisel		27344-000	Heavy-duty Series Regulator		313A-825-7	Backing Pad	
			27354-000	Heavy-duty Series Regulator	109	315-39	Straight Line Pad	
22041149	Super-duty Chisel		27364-000	Heavy-duty Series Regulator	109	317A-825	Backing Pad	
	Super-duty Chisel		28 1 LB	Grease			Pressure Gauge	
	Super-duty Chisel			Protective Tool Boot			Pressure Gauge	
	Hose Whip			Motor Tune-up Kit			Pressure Gauge	
	Hose Whip			Protective Tool Boot			Pressure Gauge	
	Hose Whip			Impact Wrench Tune-up Kit			Pressure Gauge	
22041493	Super-duty Moil Point	170		Impact Wrench Tune-up Kit			Maintenance Kit	
	Super-duty Chisel			Impact Wrench Tune-up Kit			Pressure Gauge	
	Super-duty Moil Point						Pressure Gauge	
	Super-duty Chisel			Heavy-duty Series F-R-L			Pressure Gauge	
	8338 Series Blow Gun Acces			Heavy-duty Series Filter/Regulat			Pressure Gauge	
22128508	Gripple Hang-fast, Toggle-fas	st		Heavy-duty Series Filter/Lubrica		32270407	Pressure Gauge	141
22128516	Gripple Hang-fast, Toggle-fast	st49	28353	Heavy-duty Series F-R-L	109		Pressure Gauge	
	8339 Series Blow Gun Acces			Heavy-duty Series Filter/Regulat			Pressure Gauge	
	8340 Series Blow Gun Acces			Heavy-duty Series Filter/Lubrica			Pressure Gauge	
	Electric Start-up Kit		28363	Heavy-duty Series F-R-L	100		Gas Start-up Kit	
	Electric Start-up Kit			Heavy-duty Series Filter/Regulat			Gas Start-up Kit	
	8341 Series Blow Gun Acces			Impact Wrench Hammer/Anvil K			Lubricant	
	8342 Series Blow Gun Acces			Impact Wrench Tune-up Kit			Vibration Pad	
	Maintenance Kit			Protective Tool Boot			Electric Start-up Kit	
	Maintenance Kit		285-TK1	Impact Wrench Tune-up Kit		3249	Swivels and Adapter	
22185078	Maintenance Kit		29002	Heavy-duty Series Regulator Acc	cessory 107	32498511	Gas Start-up Kit	
22185086	Maintenance Kit		2903P-TK2	Impact Wrench Tune-up Kit			Sanding Pad Assembly	
22185094	Maintenance Kit			Impact Wrench Tune-up Kit			Saw Blade	
	Maintenance Kit			Impact Wrench Tune-up Kit			Saw Blade	
	Maintenance Kit			Wall Mount Bracket			Saw Blade	
	Maintenance Kit			Impact Wrench Tune-up Kit			8343 Series Blow Gun Accesso	
	Maintenance Kit			Impact Wrench Tune-up Kit			Steel Butt	
	Maintenance Kit							
			2910-114	Impact Wrench Tune-up Kit	203		SimplAir SL Stud, Male Straight	
	Maintenance Kit		29119	Heavy-duty Series Regulator Ac	cessory 107		Pressure Gauge	
	Standard Installation Kit						Pressure Gauge	
	SimplAir EL Aluminum Piping			3/4" Drive SAE			Electronic Drain Valve	
	Impact Wrench Hammer/Anv			Impact Wrench Tune-up Kit		37995909	Electronic Drain Valve	
223-TK2	Impact Wrench Tune-up Kit		2920P-TK2	Impact Wrench Tune-up Kit		37995917	Electronic Drain Valve	
223-TVB1	Impact Wrench Body Kit			Impact Wrench Tune-up Kit		37995925	Electronic Drain Valve	
225-P32	Protective Tool Boot		2934A90	1" Drive SAE	166	37995933	Electronic Drain Valve	
225-THK2	Impact Wrench Hammer/Anv	/il Kit 264	2934-TK3	Impact Wrench Tune-up Kit		37996337	Electronic Drain Valve	13
225-TK1	Impact Wrench Tune-up Kit		29390	Heavy-duty Series Filter Accesso	ory106		Pressure Gauge	
	Swivel Fitting Kit			Heavy-duty Series Filter Accesso			Pressure Gauge	
	Swivel Fitting Kit			Heavy-duty Series Filter Accesso			Pressure Gauge	
	Malleable Butt			Bowl Guard			Pressure Gauge	
	Grease			Exhaust Kit			Electronic Drain Valve	
	Impact Wrench Hammer/Anv			Impact Wrench Tune-up Kit			Electronic Drain Valve	
	Impact Wrench Hammer/Anv			Spring			Electronic Drain Valve	
	Impact Wrench Hammer/Anv			Spring			Electronic Drain Valve	
	Impact Wrench Tune-up Kit			Coalescing Filter Element			Electronic Drain Valve	
	Protective Tool Boot			Spring			Pressure Gauge	
	Impact Wrench Tune-up Kit			Spring			SimplAir SL Elbow, 90° Male St	
	Impact Wrench Tune-up Kit		29596	Spring	89, 91	38004065	SimplAir SL Elbow, 90° Male St	reet 44
231XP-TK1	Impact Wrench Tune-up Kit		295-P32	Protective Tool Boot			SimplAir SL Stud, Male Straight	
	Protective Tool Boot			Impact Wrench Tune-up Kit			SimplAir SL Stud, Male Straight	
	Protective Tool Boot			Spring			SimplAir SL Female Stem Adap	
	Impact Wrench Hammer/Anv			Wall Mount Bracket			SimplAir SL Female Stem Adap	
	Impact Wrench Tune-up Kit			Filter Element				
							SimplAir SL Female Stem Adap	
	ARO-STOP Valve			Filter Element			SimplAir SL Female Stem Adap	
	Protective Tool Boot			Lubricant			SimplAir SL Female Stem Adap	
	Impact Wrench Tune-up Kit			Mounting Bracket			SimplAir SL Female Stem Adap	
	Lock Clip			Spring			SimplAir SL Female Stem Adap	
	Rubber Tipped Butt			Gauge			SimplAir SL Female Stem Adap	
	Rubber Tipped Butt			Gauge71, 73, 7		38004206	SimplAir SL Female Stem Adap	ter 45
2502	Oil Drain Accessory		29850	Gauge71, 73, 7	79, 115, 121	38004214	SimplAir SL Female Stem Adap	ter 45
	Battery		29863	Gauge71, 73, 7	79, 115, 121		SimplAir SL Female Stem Adap	
	Battery Charger			Relieving Service Kit			SimplAir SL Female Stem Adap	
	2512K Cordless Impact			Metal Bowl			SimplAir SL Female Stem Adap	
	Impact Wrench Tune-up Kit							
							SimplAir SL Female Stem Adap	
	Protective Tool Boot			Heavy-duty Series Regulator Act			SimplAir SL Female Stem Adap	
	Impact Wrench Tune-up Kit			Heavy-duty Series Regulator Ac			SimplAir SL Ferrule	
	Heavy-duty Series Filter			U-bolt Mounting Bracket			SimplAir SL Ferrule	
	Heavy-duty Series Filter			Tapper Collet		38004321	SimplAir SL Ferrule	46
	Hoover duty Carion Filton	100 110	211-215	Power Socket Adapter	166 207	3800/1330	Manifold	30 46 231
	Heavy-duty Series Filter Impact Wrench Tune-up Kit			Power Screwdriver Adapter		3000 <del>1</del> 333	iviai iii oiu	33, 40, 231

Part Number	Description	Page	Part Number	Description	Page	Part Number	Description	Page
	Premium Rubber Hose			Gripple Hang-fast, Loop-fast			.General Purpose Filter	
	Filter Element			Gripple Hang-fast, Loop-fast Gripple Hang-fast, Stud-fast			.General Purpose Filter	
				Gripple Hang-fast, Stud-fast			High Efficiency Filter	
	Speed-Lok Air Hose			Gripple Hang-fast, Stud-fast			.High Efficiency Filter	
	Speed-Lok Air Hose			Gripple Hang-fast, Stud-fast			.High Efficiency Filter	
	Spring Rewind Reel			Gripple Hang-fast, Toggle-fast			.High Efficiency Filter	
	SimplAir EL Hose Reel			Gripple Hang-fast, Toggle-fast			.High Efficiency Filter	
	PacE Controller			Gripple Hang-fast, Toggle-fast			.Point-of-Use Provider (PUP) .	
3037602	Air Knives/Shim Set		38330858	Gripple Hang-fast, Toggle-fast	49		.Point-of-Use Provider (PUP) .	
3037610	Air Knives/Shim Set		38330866	Gripple Hang-fast, Loop-fast			.PolySep Condensate System	
	Air Knives/Shim Set		38330874	Gripple Hang-fast, Loop-fast		42528505	.PolySep Adsorption Module .	
	Air Knives/Shim Set			Gripple Hang-fast, Loop-fast			.MS Series Male Coupler	
	Air Knives/Shim Set		38330890	Gripple Hang-fast, Loop-fast			.MS Series Female Coupler	
	Air Knives/Shim Set		38330908	Gripple Hang-fast, Loop-fast			.Saw Blade	
	Air Knives/Shim Set		38330916	Gripple Hang-fast, Loop-fast			.Moon Steel Butt	
	Air Knives/Shim Set			Gripple Hang-fast, Loop-fast			Moon Steel Butt	
	Line Vacuum			Gripple Hang-fast, Loop-fast			.Female NPT Plug	
	Line Vacuum			SimplAir EL Aluminum Piping			.Suspension Bail	
	Line Vacuum			SimplAir EL Straight Connecto			.Exhaust Hose	
	Line Vacuum			SimplAir EL Equal Elbow			.Jet-Vac Accessory	
	Line Vacuum			SimplAir EL Equal Tee			.Bit Holder Spindle	
	Adjustable Spot Cooler			SimplAir EL Reducer			Insert Bit Holder Spindle	
	Air Amplifiers/Shim Set			SimplAir EL Male Stem Adapt			.Spindle	
	Air Amplifiers/Shim Set			SimplAir EL Male Stem Adapt			.Spindle	
	Air Amplifiers/Shim Set			SimplAir EL Male Stem Adapt			.Bench Clamp	
	Air Amplifiers/Shim Set			SimplAir EL Stem Elbow			.Tune-up Kit	
	Air Amplifiers/Shim Set			SimplAir EL Water Trap Tee .			.Dead Handle	
	Air Amplifiers/Shim Set			SimplAir EL Plug			.Horizontal Hanger	
	Air Jet		38332656	SimplAir EL Aluminum Piping			.Workstation Accessory	
	Air Jet		38332664	SimplAir EL Straight Connecto	ır38		.Workstation Accessory	
	Air Jet			SimplAir EL Equal Elbow			.Non-vacuum Pad	
	Air Nozzle			SimplAir EL Equal Tee			.Sanding Pad	
	Air Nozzle			SimplAir EL Male Stem Adapt			.Duck Face Pad	
	Air Nozzle			SimplAir EL Male Stem Adapt			.Vacuum Pad	
	Air Nozzle			SimplAir EL Water Tee Conver			.Sanding Pad	
	Soft-grip Safety Air Guns		38332722	SimplAir EL Plug	40		.Sanding Pad	
	Soft-grip Safety Air Guns		38332730	SimplAir EL Pipe Clip			.Vacuum Pad	
	Soft-grip Safety Air Guns			SimplAir EL Pipe Spacer			.Jet-Vac Accessory	
	Soft-grip Safety Air Guns			SimplAir EL Pipe Clip			.Vacuum Pad	
	SimplAir EL Equal Elbow			SimplAir EL Male Stem Adapt PacE Controller			.Surface Prep Grip	
	SimplAir EL Equal Tee			Standard Installation Kit			.Surface Prep Grip	
	SimplAir EL Straight Connect SimplAir EL Stem Elbow			Standard Installation Kit			.Surface Prep Grip	
2033700	SimplAir EL Reducer	30		Standard Installation Kit			.Non-vacuum Pad	
3033730 RN398N6	SimplAir EL Reducer	38		Bolts			.Non-vacuum Pad	
	SimplAir EL Reducing Tee .			Standard Installation Kit			.Jet-Vac Accessory	
	SimplAir EL Male Stem Adap			Standard Installation Kit			.Jet-Vac Conversion Kit	
	SimplAir EL Plug			Standard Installation Kit			.Jet-Vac Accessory	
	SimplAir EL Pipe Clip			PolySep Pump Rebuild Kit			.Jet-Vac Accessory	
	SimplAir EL Brass Wing Back		38339040	PolySep Condensate System	16	49986	.Jet-Vac Accessory	236
	PacE II Unit			PolySep Adsorption Module .		49987	.Jet-Vac Accessory	236
	PolySep Condensate System		38342119	PacE Controller		49988	.Jet-Vac Accessory	236
3041604	PolySep Adsorption Module		38342127	PacE Controller		49997	.Jet-Vac Accessory	236
3041752	PolySep Pump Rebuild Kit .		38432613	CMS 6 Condensate Controller		4U-103-1/2	.Tapper Collet	194
8041760	PolySep Pump Rebuild Kit .		38432621	CMS 6 Condensate Controller		4U-812	.Power Screwdriver Adapter .	20
0PQ-2	Protective Tool Boot		38435434	Soft-grip Safety Air Guns		4UA9	.1/2" Drive SAE	160
	Motor Tune-up Kit			Pressure Gauge			.1/2" Drive SAE	
	Mechanism Tune-up Kit			Pressure Gauge		4U-A925-7	.Power Quick Change Chuck	20
	Protective Tool Boot			3900Ti Extended Warranty Kit		_		
	Gripple Hang-fast, Loop-fast			3900Ti Extended Warranty Kit		<u>5</u>		
	Gripple Hang-fast, Loop-fast			3900Ti Extended Warranty Kit			.Standard-duty Moil Point	
	Gripple Hang-fast, Loop-fast			Impact Wrench Tune-up Kit .			.Standard-duty Moil Point	
	Gripple Hang-fast, Loop-fast			Impact Wrench Tune-up Kit .			.Standard-duty Moil Point	
	Gripple Hang-fast, Stud-fast			Poly Bowl			.Standard-duty Moil Point	
	Gripple Hang-fast, Stud-fast		3RL-284	Exhaust Hose			.Standard-duty Moil Point	
	Gripple Hang-fast, Stud-fast						.Standard-duty Moil Point	
	Gripple Hang-fast, Stud-fast		4				.Standard-duty Moil Point	
	Gripple Hang-fast, Toggle-fas			MS Series Male Coupler			.Standard-duty Moil Point	
	Gripple Hang-fast, Toggle-fas			Bung Adapter			.Standard-duty Moil Point	
	Gripple Hang-fast, Toggle-fas			Jet-Vac Conversion Kit			.Standard-duty Moil Point	
	Gripple Hang-fast, Toggle-fas			MS Series Female Coupler			.Standard-duty Moil Point	
	SimplAir EL Loop-fast Hang			Refrigerated ThermoStar			.Standard-duty Moil Point	
	SimplAir EL Loop-fast Hang			Refrigerated ThermoStar			.Standard-duty Moil Point	
	SimplAir EL Loop-fast Hang		42493171	Refrigerated ThermoStar			.Standard-duty Moil Point	
	SimplAir EL Loop-fast Hang		42493494	Refrigerated DryStar			.Standard-duty Moil Point	
	Gripple Hang-fast, Stud-fast			Refrigerated DryStar			.Standard-duty Moil Point	
	Gripple Hang-fast, Stud-fast			Refrigerated DryStar			.Standard-duty Moil Point	
	Gripple Hang-fast, Stud-fast			Refrigerated DryStar			.Standard-duty Moil Point	
	Gripple Hang-fast, Stud-fast			Refrigerated DryStar			.Standard-duty Moil Point	
	Gripple Hang-fast, Toggle-fast			Refrigerated DryStar			.Motor Tune-up Kit	
	Gripple Hang-fast, Toggle-fas			Refrigerated DryStar			.Mechanism Tune-up Kit	
	Gripple Hang-fast, Loop-fast Gripple Hang-fast, Loop-fast			General Purpose Filter			.Protective Tool Boot	
		40	40545047	General Purpose Filter	17	EUUDC3 3	.Protective Tool Boot	211

Part Number	Description	Page	Part Number	Description	Page	Part Number	Description	Page
	Chisel			"H" Thread-jack Rod "H" Thread-jack Rod		59H-516H-14 .	Blank Digging Chisel	
	Asphalt Cutter			"H" Thread-jack Rod				
	Digging Chisel			"H" Thread-jack Rod			Dead Handle Adapter	
50187830	Detachable Shank		51242030	"H" Thread-jack Rod		5L2C3-B586	Bit Holder Spindle	244
	Detachable Shank			"H" Thread-jack Rod			Insert Bit Holder Spindle	
	Detachable Shank			"H" Thread-carbide Bit			Exhaust Kit	
	Tamping Pad Square			"H" Thread-carbide Bit "H" Thread-carbide Bit			Tune-up Kit Tune-up Kit	
	Rope Thread-jack Rod Clay Spade			"H" Thread-carbide Bit			Bit Guide	
	Clay Spade			"H" Thread-carbide Bit			Bit Guide	
	Clay Spade			"H" Thread-carbide Bit			Bit Guide	
	Clay Spade		51248375	"H" Thread-carbide Bit		5RL-365	Suspension Bail	247
	Asphalt Cutter			"H" Thread-carbide Bit		5RL-NS-TK1 .	Tune-up Kit	267
	Chisel			"H" Thread-carbide Bit		6		
	Chisel			"H" Thread-carbide Bit "H" Thread-carbide Bit		-	COO Carica Plant Cup	224
				Standard-duty Chisel			600 Series Blow Gun 600 Series Blow Gun	
	Chisel			Pavement Breaker Tune-up F			600 Series Blow Gun	
	Chisel			Standard-duty Chisel			Control Handle Nozzle	
	Chisel			Standard-duty Chisel			Bung Adapter	
	Chisel		51299493	Standard-duty Chisel			Wall Mount Bracket	
	Chisel			Chisel			Pressure Relief Valve/Kit	
	Chisel			"H" Thread-jack Rod			Pressure Relief Valve/Kit	
	Chisel			"H" Thread-jack Rod			Bronze Ball Valve	
	Chisel		51305860	Standard-duty Moil Point	170		Firm Edge Pad	
	Chisel			"H" Thread-carbide Bit			Soft Edge Pad	
	Chisel			Pavement Breaker Tune-up F "H" Thread-carbide Bit			Firm Edge Pad Soft Edge Pad	
		170		Rope Thread-jack Rod			600 Series Blow Gun	
			51365716	Rope Thread-jack Rod	173		Flexible Backing Pad	
		170	51953453	Pavement Breaker Muffler			Low Pressure Hose Reel	
	Standard-duty Chisel			Electronic Drain Valve			Low Pressure Hose Reel	
50197904	Standard-duty Chisel		54406640	Maintenance Kit		61332	Low Pressure Hose Reel	60
				Electronic Drain Valve			Low Pressure Hose Reel	
				SimplAir Speed Line			Low Pressure Hose Reel	
		170		SimplAir Speed Line			Low Pressure Hose Reel	
	,	170		SimplAir SL Union			Low Pressure Hose Reel	
	Standard-duty Moil Point .	170		SimplAir SL Stud, Male Straig SimplAir SL Stud, Male Straig			Sanding/Polishing Pad Low Pressure Hose Reel	
		170		SimplAir SL Elbow, 90° Male			55-gal Suction Tube	
		170		SimplAir SL Elbow, 90° Male			55-gal Suction Tube	
				SimplAir SL Elbow, 90° Unior			Medium Pressure Hose Reel	
50283183	"H" Thread-jack Rod		54563960	SimplAir SL Tee Union		61452	Medium Pressure Hose Reel	60
	"H" Thread-jack Rod			Electronic Drain Valve			Medium Pressure Hose Reel	
	"H" Thread-jack Rod			SimplAir SL Union			Medium Pressure Hose Reel	
	"H" Thread-jack Rod			SimplAir SL Union			16-gal Oil Drain Kit	
	"H" Thread-jack Rod "H" Thread-jack Rod			SimplAir SL Stud, Male Straig SimplAir SL Stud, Male Straig			Oil Drain Accessory	
	Power Quick Change Chuc			SimplAir SL Stud, Male Straig			Low Pressure Fuel Hose Reel .	
	"H" Thread-jack Rod			SimplAir SL Elbow, 90° Male			Oil Drain Accessory	
	i-1 .Detachable Torsion Bar			SimplAir SL Elbow, 90° Male			55-gal Tube	
5040TDQ-P535	i-10			SimplAir SL Elbow, 90° Male			High Pressure Hose Reel	
	Detachable Torsion Bar			SimplAir SL Elbow, 90° Male		61634	High Pressure Hose Reel	60
5040TDQ-P535				SimplAir SL Elbow, 90° Unior			High Pressure Hose Reel	
0.40TD0 DE0E	Detachable Torsion Bar			SimplAir SL Elbow, 90° Unior			High Pressure Hose Reel	
5040TDQ-P535		167		SimplAir SL Tee Union			Bronze Ball Valve	
6040TDQ-P535	Detachable Torsion Bar	10/		SimplAir SL Tee Union			Grinder Tune-up Kit	
0401DQ 1 333	Detachable Torsion Bar	167		SimplAir SL Hang/Mount Bra			Wall Mount Bracket	
040TDQ-P535	i-3 .Detachable Torsion Bar			SimplAir SL Hang/Mount Bra			Hose, Swivel, & Nozzle	
5040TDQ-P535	i-4 .Detachable Torsion Bar			SimplAir SL Hang/Mount Bra			Hose, Swivel, & Nozzle	
5040TDQ-P535	i-5 .Detachable Torsion Bar		54599527	SimplAir SL Former			Hose, Swivel, & Nozzle	
	i-6 .Detachable Torsion Bar			SimplAir SL Guide			Hose, Swivel, & Nozzle	
	i-7 .Detachable Torsion Bar			SimplAir SL Former			Hose, Swivel, & Nozzle	
	5-8 .Detachable Torsion Bar			SimplAir SL Guide			Hose, Swivel, & Nozzle	
	i-9 .Detachable Torsion Bar			SimplAir SL Pipe Bender Kit SimplAir SL End Cap			Hose, Swivel, & Nozzle	
	Impact Wrench Tune-up Kii "H" Thread-jack Rod			SimplAir SL End Cap			Hose, Swivel, & Nozzle	
	"H" Thread-jack Rod			SimplAir SL End Cap			Hose, Swivel, & Nozzle	
	"H" Thread-jack Rod			SimplAir SL Stud, Male Straig			Siphon Hose	
0712736	"H" Thread-jack Rod			Ball Valve			Siphon Hose	
	"H" Thread-jack Rod		54634449	Ball Valve		622702-6	Siphon Hose	145
	"H" Thread-jack Rod			Ball Valve			Dispensing Hose	
	"H" Thread-jack Rod			Ball Valve			Dispensing Hose	
	"H" Thread-jack Rod			Ball Valve			Dispensing Hose	
	"H" Thread-jack Rod			Ball Valve			Dispensing Hose	
	"H" Thread-jack Rod "H" Thread-jack Rod			Ball Valve			Dispensing Hose	
	"H" Thread-jack Rod Bulk Hose			Ball Valve			8-pc Socket Set	
	Air Tool Oil			Retaining Pin			8-pc Deep Socket Set	
	Air Tool Oil			0-ring			8-pc Metric Socket Set	
	Hose Whip			Retaining Pin			8-pc Metric Deep Socket Set	
	"H" Thread-jack Rod			0-ring			7-pc Metric Universal Socket Se	

Part Number	Description	Page	Part Number	Description	Page	Part Number	Description	Page
	Coil Hose				60	7655	3/4" Drive SAE	
	Coil Hose			8-pc Socket Set			Wall Mount Bracket	
	Coil Hose			Inlet Material Filter			Grease	
	Coil Hose			8-pc Socket Set			Fluid Dispensing Nozzle	
	Coil Hose			8-pc Deep Socket Set			Sanding Pad Assembly	
	Coil Hose			9-pc Truck Socket Set			Sanding Pad Assembly	
	Coil Hose			5-pc Deep Truck Socket Set			Sanding Pad Assembly	
	Coil Hose			Fluid Ball Check Union			Grinder Tune-up Kit	
29212	Control Handle Nozzle/Hose	154	65986	5-gal Tube			Standard-duty Chuck	
29226	Control Handle Nozzle/Hose	154	65986-1	55-gal Suction Tube	144, 149	7802-99	Drill Chuck	199
	Control Handle Nozzle		66 1 LB	Grease		7802-P32	Protective Tool Boot	213
	Control Handle Nozzle			Grease			Drill Chuck	
	Control Handle Nozzle/Hose			Wall Mount Bracket			Standard-duty Chuck	
	Control Handle Nozzle/Hose			Wall Mount Bracket			Dead Handle Adapter	
	High-pressure Control Handle .			Inlet Material Filter			Tune-up Kit	
	Low Pressure Hose Reel			16-gal/120-lb Drum			Suspension Bail	
	Low Pressure Hose Reel			Fluid Ball Check Union			Exhaust Kit	
	ARO-STOP Valve			Carbon Steel Ball Valve			Horizontal Hanger	
	Swivels and Adapter			Stainless Steel Ball Valve			Tune-up Kit	
	Swivels and Adapter			55-gal Tube			.Tune-up Kit	
	Swivels and Adapter			55-gal Suction Tube		7S60-TK2	Grinder Tune-up Kit	265
	Swivels and Adapter			275-gal Container		0		
	Fluid Dispensing Nozzle 1			Grinder Tune-up Kit		<u>8</u>		
	Metered Control Handle			Grease			Grease	
	Metered Control Handle			Grease			Grease	
	Metered Control Handle			Bung Adapter Seal Kit			Parameter Transfer Key	
	High-volume Control Handle			Bung Adapter Seal Kit			8-pc Bur Kit	
	Preset, Metered-flow Control		67088-4	Bung Adapter Seal Kit	145		8338 Series Blow Gun	
	Preset, Metered-flow Control		67145-1	Bung Adapter			8338 Series Blow Gun	
	Preset, Metered-flow Control			Bung Adapter			8338 Series Blow Gun	
	Metered Control Handle			Bung Adapter			8440 Series Blow Gun	
	Metered Control Handle			Bung Adapter			8451 Series Blow Gun	
	Metered Control Handle			55-gal Drum Bung Adapter Ki			8451 Series Blow Gun	
	Metered Control Handle			55-gal Drum Bung Adapter Ki			8451 Blow Gun Accessory	
	Metered Control Handle			55-gal Drum Bung Adapter Ki			8451 Blow Gun Accessory	
	Metered Control Handle		67234	Bulk Tank Adapter Kit			Ring and Gasket Kit	
	Non-metered Control Handle			Bulk Tank Adapter Kit			Bearing Kit	
	Non-metered Control Handle			Grease			Gasket Kit	
	Standard-volume Control Handl			Swivels and Adapter			Overhaul Kit	
	High-volume Control Handle			Control Handle Right-angle No			Maintenance Kit	
	Standard-volume Control Handl			Air Care Kit			Maintenance Kit	
	Low Pressure Hose Reel			Heavy-duty Chuck			Maintenance Kit	
36020	Grease Gun Coupler/Adapter	260		Tune-up Kit			Maintenance Kit	
	Grease Gun Coupler/Adapter			Poly Bowl			Maintenance Kit	
	Needle Valve			Spindle			Electric Start-up Kit	
	Needle Valve			Horizontal Hanger			Valve and Gasket Kit	
	Swivels and Adapter			Angle Head Extension			SimplAir EL Pipe Cutter	
	Swivels and Adapter		OWI-IKI	une-up Kit			Liquidator Cartridge/Element Liquidator Cartridge/Element	
	Swivels and Adapter		7				Liquidator Cartridge/Element	
	Swivels and Adapter			Grease	250			
				Grease			Liquidator Cartridge/Element Liquidator Cartridge/Element	
	High-pressure Control Handle .			Protective Tool Boot			Liquidator Cartridge/Element	
36103	High-pressure Control Handle .	15/		Motor Tune-up Kit			Liquidator Cartridge/Element	
36111	High-pressure Control Handle .	15/		Maintenance Kit			Liquidator Cartridge/Element	
	13-pc Deep Socket Set			3/8" Drive SAE			Liquidator Cartridge/Element	
	7-pc Universal Socket Set			1/2" Drive SAE			Liquidator Cartridge/Element	
	14-pc Metric Socket Set			Power Driver Extension			Side-by-side Liquidator	
	14-pc Metric Deep Socket Set			Power Driver Extension			Side-by-side Liquidator	
	7-pc Metric Universal Socket Se			Power Universal Joint			Liquidator Cartridge/Element	
	Foot Valve			Keyless Chuck			Liquidator Cartridge/Element	
	Foot Valve		728-99-KC8	Keyless Chuck	199		SimplAir EL Ball Valves	
	Air Tool Oil			Dead Handle			SimplAir EL Ball Valves	
	400-lb Drum			Tune-up Kit			SimplAir EL Ball Valve Nut	
	400-lb Drum			Blank			SimplAir EL Ball Valve Ferrules	
	400-lb Drum			Blank			SimplAir EL Ball Valve Nut	
	120-lb Drum			Blank			SimplAir EL Ball Valve Ferrules	
	16-gal Drum Dolly			Blank			Stacked Metal Liquidators	
	16-gal Drum Dolly			Flat Blade			SimplAir EL Ball Valves	
	Oil Drain Accessory			Flat Blade			SimplAir EL Ball Valve Ferrules	
	Single-post Lift			Flat Blade			SimplAir EL Ball Valve Nut	
	Cover Tie-Down Rods			Flat Blade			PacE II Control Valve	
	35-lb Tapered Pail			Moil Point			PacE II Pilot Regulator	
	35-lb Tapered Pail			Moil Point			PacE II Cap	
	35-lb Tapered Pail			Moil Point			Stacked Metal Liquidators	
	16-gal Drum Hand Truck			Moil Point			General Purpose Filter Element	
	120-lb Drum			Lug Nut Service Set			General Purpose Filter Element	
	120-lb Drum			7444 Series Blow Gun			General Purpose Filter Element	
	Low Level Cut-off			7444 Series Blow Gun			High Efficiency Filter Element .	
				Power Universal Joint			High Efficiency Filter Element .	
	Cover Tie-Down Rods			1" Drive SAE			High Efficiency Filter Element .	
40164			1000	DIIVO UAL	100			17
	120-lb Drum		7567	3/4" Drive SAE	166	883/313/	General Purpose Filter Element	17

Part Number	Description	Page	Part Number	Description	Page	Part Number	Description	Page
	•	_		,			•	
	. High Efficiency Filter Element .			Exhaust Kit		BMDS-8		
	High Efficiency Filter Element .			Lock Clip			Super-duty Balancer	
38344171	Point-of-Use Provider (PUP) Drain			Horizontal Hanger			Super-duty Balancer	
2004 144 000	Ota-da-d Matel I invidetana			Reaction Bar			Super-duty Balancer	
	Stacked Metal Liquidators		95L-Abu	Reaction Bar Holder	247		Super-duty Balancer	
	.ASA Flange Liquidator		Α				Super-duty Balancer	
	Stacked Poly Liquidators			Air Hose Nipple Male Thread	27		Super-duty Balancer	
	Stacked Poly Liquidators			Air Hose Nipple Male Thread			Super-duty Balancer	
	Stacked Poly Liquidators			Grinder Tune-up Kit			Super-duty Balancer	
	First and Second Stage Filter			Extended Grinder Warranty Kit			Super-duty Balancer	
	Liquidator Cartridge/Element			Grinder Tune-up Kit			Super-duty Balancer	
	Liquidator Cartridge/Element			Extended Grinder Warranty Kit			Super-duty Balancer	
	Liquidator Cartridge/Element			Rear Exhaust Kit			Super-duty Balancer	
	Stacked Poly Liquidators			Grinder Tune-up Kit			Super-duty Balancer	
	Stacked Poly Liquidators			Extended Grinder Warranty Kit			Super-duty Balancer	
8844-W1-090	Stacked Poly Liquidators		AL-387	Air Hose Nipple Male Thread		BSDL-130	Super-duty Balancer	
8844-W1-M60	Stacked Metal Liquidators	133		Lubricant		BSDL-140	Super-duty Balancer	
8846-090	Liquidator Cartridge/Element	135		210-310 Series Female Coupler		BSDL-150	Super-duty Balancer	
8846-W1-090	Stacked Poly Liquidators		ARCF33	210-310 Series Female Coupler	26	BSDL-20	Super-duty Balancer	
8846-W1-M90	Stacked Metal Liquidators			210-310 Series Male Coupler		BSDL-25	Super-duty Balancer	
8848-150	Liquidator Cartridge/Element			210-310 Series Hose Stem ID		BSDL-35	Super-duty Balancer	
8848-W1-150	Stacked Poly Liquidators		ARCM22	210-310 Series Male Coupler	26		Super-duty Balancer	
8848-W1-M150 .	Stacked Metal Liquidators			210-310 Series Male Coupler		BSDL-50	Super-duty Balancer	
8848-W1-M2500	.ASA Flange Liquidator	134		210-310 Series Male Coupler			Super-duty Balancer	
8852-W1-M300 .	Stacked Metal Liquidators	133	ARPF22	210-310 Series Female Plug	26		Super-duty Balancer	
	Stacked Metal Liquidators		ARPF33	210-310 Series Female Plug	26	BSDL-80	Super-duty Balancer	22
8860-W1-M5500	.ASA Flange Liquidator		ARPH22	210-310 Series Hose Stem ID	26	BSDL-90	Super-duty Balancer	
88V/88H-TK3	Grinder Tune-up Kit		ARPH23	210-310 Series Hose Stem ID	26	BU-948	Type "A" Coupler O-rings .	
88V60-K184	Exhaust Kit		ARPH25	210-310 Series Hose Stem ID	26	_		
89938443	Retainer		ARPH33	210-310 Series Hose Stem ID	26	<b>C</b>		
89938450	Spring Lock		ARPM21	210-310 Series Male Plug	26	C04-291	Pipe Line Valve	
8LUB12	Poly Bowl		ARPM22	210-310 Series Male Plug	26	C28111-600 .	Mini Series Combo Drain	
8SA34-807M		243	ARPM32	210-310 Series Male Plug	26	C28111-601 .	Mini Series Combo Drain	
8SA56-807M	Flush Hex Socket		ARPM33	210-310 Series Male Plug	26	C28111-800 .	Mini Series Combo Drain	
8SL-366	Horizontal Hanger	247	AS-1/2	Swivel-It Swivel		C28111-801 .	Mini Series Combo Drain	
8SL-A327-6	Angle Head Extension		AS-3/8	Swivel-It Swivel	52	C28112-600 .	Mini Series Combo Drain	
8SL-A60	Reaction Bar Holder			Swivel-It Swivel		C28112-601 .	Mini Series Combo Drain	
				Swivel-It Swivel		C28112-800 .	Mini Series Combo Drain	
<b>9</b>				Tune-up Kit		C28112-801 .	Mini Series Combo Drain	
9001-200	Retainer	175		Tune-up Kit			Mini Series Combo Drain	
	Lower Sleeve			·			Mini Series Combo Drain	
	Bumper		В				Mini Series Combo Drain	
9001-208	Key		B12-257R	Circular Saw Blade	192	C28121-801 .	Mini Series Combo Drain	
9001-220	Upper Sleeve			Bulk Hose		C28122-600 .	Mini Series Combo Drain	
	Chisel		BH6C	Bulk Hose	58	C28122-601 .	Mini Series Combo Drain	
9001-276-18	Chisel			Bulk Hose		C28122-800 .	Mini Series Combo Drain	
9001-276-9-1/2 .	Chisel		BHD-15	Heavy-duty Balancer		C28122-801 .	Mini Series Combo Drain	
9001-277-9-1/2 .	Side Cut Chisel		BHD-20	Heavy-duty Balancer		C28221-600 .	Compact Series Piggyback/L	ubricator
	Black-out Punch		BHD-25	Heavy-duty Balancer			Drain	
	Black-out Punch		BHD-30	Heavy-duty Balancer		C28221-601 .	Compact Series Piggyback/L	ubricator
	Black-out Punch		BHD-35	Heavy-duty Balancer			Drain	
	Black-out Punch			Heavy-duty Balancer		C28221-610 .	Compact Series Piggyback/L	ubricator
9001-282	Black-out Punch		BHD-55	Heavy-duty Balancer			Drain	
	Black-out Punch			Heavy-duty Balancer		C28221-611 .	Compact Series Piggyback/L	ubricator
	Black-out Punch		BHR-15	Hose Reel Balancer	219		Drain	
	Ripper Chisel			Hose Reel Balancer			Compact Series Filter/Lubric	
	Moil Point			Hose Reel Balancer			Compact Series Filter/Lubric	
	Protective Tool Boot			Intermediate-duty Balancer			Compact Series Filter/Lubric	
	Motor Tune-up Kit			$\dots Intermediate\text{-duty Balancer}\ \dots$			Compact Series Filter/Lubric	
	Mechanism Tune-up Kit			Intermediate-duty Balancer			Compact Series Combo Drai	
	Protective Tool Boot			Intermediate-duty Balancer			Compact Series Combo Drai	
	Grease			Intermediate-duty Balancer			Compact Series Combo Drai	
	5-gal Suction Tube			Intermediate-duty Balancer			Compact Series Combo Drai	
	SimplAir Speed Line			Balancer Accessory		C28223-600 .	Compact Series Piggyback/L	
92818	Needle Valve		BIL-7343	Balancer Accessory	222		Drain	
	Cabinet Label			Light-duty Balancer		C28223-610 .	Compact Series Piggyback/L	
	Digger Muffler			Light-duty Balancer (nylon cable)			Drain	
	5-gal/35-lb Pail			Light-duty Balancer		C28223-700 .	Compact Series Filter/Lubric	
	16-gal/120-lb Drum			Light-duty Balancer				
	55-gal/400-lb Drum			Long Cable		C28223-710 .	Compact Series Filter/Lubric	
n=100	Fluid Dispensing Nozzle			Long Cable				
	Pump Outlet Adapter			Long Cable			Compact Series Combo Drai	
95189	Pump Outlet Adapter			Long Cable			Compact Series Combo Drai	
95189			BMDL-4	Long Cable		C28231-600 .	Compact Series Piggyback/L	
95189	Iluid Dispensing Nozzle				210		Drain	
95189 95190 95199 95200	Fluid Dispensing Nozzle	150	BMDL-6	Long Cable				
95189 95190 95199 95200 954-K674	Fluid Dispensing Nozzle	150 238	BMDL-6 BMDL-8	Long Cable	219	C28231-601 .	Compact Series Piggyback/L	
95189 95190 95199 95200 95H-K674	Fluid Dispensing Nozzle	150 238	BMDL-6 BMDL-8		219		Compact Series Piggyback/L Drain	9
95189	Fluid Dispensing Nozzle	150 238 11	BMDL-6 BMDL-8 BMDLL-10 BMDLL-4	Long Cable	219 219 219		Compact Series Piggyback/L	99
95189	. Fluid Dispensing Nozzle	150 238 11 12	BMDL-6 BMDL-8 BMDLL-10 BMDLL-4	Long Cable	219 219 219		Compact Series Piggyback/L Drain	99 .ubricator
95189	.Fluid Dispensing Nozzle .Fluid Dispensing Nozzle .Digger Muffler .Electric Start-up Kit .Maintenance Kit	150 238 11 12 12	BMDL-8 BMDLL-10 BMDLL-4 BMDLL-4 BMDLL-6	Long Cable	219 219 219 219	C28231-610 .	Compact Series Piggyback/L Drain	99 .ubricator 99
95189	.Fluid Dispensing Nozzle	150 238 11 12 12 13	BMDL-6 BMDL-8 BMDLL-10 BMDLL-4 BMDLL-6 BMDLL-8	Long Cable	219 219 219 219	C28231-610 .	Compact Series Piggyback/L Drain	
95189	.Fluid Dispensing Nozzle	150 238 11 12 12 13	BMDL-6 BMDL-8 BMDLL-10 BMDLL-4 BMDLL-6 BMDLL-8	Long Cable	219 219 219 219 219 219	C28231-610 .	Compact Series Piggyback/L Drain	

Part Number	Description	Page	Part Number	Description	Page	Part Number	Description	Page
C28231-701	Compact Series Filter/Lubricator Drai			Surface Prep Grip Surface Prep Grip		EAD-6000	Liquidator Desiccant Dryer/Prep S	
C28231-710	Compact Series Filter/Lubricator Drai	in	CG-AV10A	Hammer Grip	215		Digital Counter	246
C28231-711	Compact Series Filter/Lubricator Drai	in	CG-W1A	Assembly Tool Grip		EL0109B-365	Controller Mount Bracket	246
C28231_800				Air Hose Nipple Male Threa Fitting for Nylon Recoil Hose			Vacuum Pick-up Sleeve	
	Compact Series Combo Drain			I italig for Nylon necoli nost			2A Cord	
	Compact Series Combo Drain		D				5 .Cord	
				Air Hose Nipple Male Threa Air Hose Nipple Male Threa			A .Cord	
,20233-000	Drain			Sanding/Polishing Pad			Calibration/Maintenance Labels	
28233-610	Compact Series Piggyback/Lubricato		DAA40-A23	Exhaust Deflector	243		Suspension Bail	
28233-700	Drain			Swivel Hanger			Suspension Bail	
	Compact Series Filter/Lubricator Drai			Backcap Kit			Engraving Pen Tune-up Kit	
	Compact Series Combo Drain			Mounting Plate			Extension Cable	
	Compact Series Combo DrainCompact Series Piggyback/Lubricato			Square Drive Socket Adapte Morse Taper Socket			Torque Cover	
20211 000	Drain			Chuck			Expert Torque Tester Accessory	
28241-601	Compact Series Piggyback/Lubricato		DEA120-K48	Reaction Bar Kit	249		Expert Torque Tester	
28241_610	Drain			) .Extension Cable			Expert Torque Tester	
20241-010	Drain			M .Die Grinder Collet			Expert Torque Tester	
28241-611	Compact Series Piggyback/Lubricato	r	DG110-700-G2	Die Grinder Collet	194	ETT-QD	Expert Torque Tester Accessory	25
00044 700	Drain			Die Grinder Collet		EU-A267	Pipe Line Air Strainer	14
	Compact Series Filter/Lubricator Drai Compact Series Filter/Lubricator Drai			Collet Wrench		F		
	Compact Series Filter/Lubricator Drai			Collet Wrench		F01-02-000	Inline Series Filter	12
28241-711	Compact Series Filter/Lubricator Drai	in .100	DG220-A290-G4	Grinder Collet Body Assemb	ly194		Type "A" Male NPT Coupler	
				Grinder Collet Body Assemb			Type "A" Male NPT Coupler	
				Phillips Bit			Type "A" Male NPT CouplerType "A" Male NPT Coupler	
	Compact Series Combo Drain			Phillips Bit			Detented Non-rotating Finder	
28243-600	Compact Series Piggyback/Lubricato		DLB2123-10	Phillips Bit		F167F1	Detented Non-rotating Finder	20
20242 610	Drain			Phillips Bit			Mini Series Standard Filter	
20243-010	Compact Series Piggyback/Lubricato Drain			Phillips Bit			Mini Series Standard FilterMini Series Standard Filter	
28243-700	Compact Series Filter/Lubricator Drai			Phillips Bit			Mini Series Standard Filter	
	Compact Series Filter/Lubricator Drai			Phillips Bit			Mini Series Coalescing Filter	
				Phillips Bit			Mini Series Coalescing FilterMini Series Coalescing Filter	
	Heavy-duty Series Piggyback/Lubrica			Phillips Bit			Mini Series Coalescing Filter	
		111	DLB2132-10	Phillips Bit		F25121-200	Mini Series Standard Filter	69, 76
28361-600	Heavy-duty Series Piggyback/Lubrica			Slot Bit			Mini Series Standard Filter	
31-06-G00	Jumbo Series F-R-L			Slot Bit			Mini Series Standard FilterMini Series Standard Filter	
31-08-G00	Jumbo Series F-R-L	117		Slot Bit			Mini Series Coalescing Filter	
	Jumbo Series Filter/Lubricator			Slot Bit			Mini Series Coalescing Filter	
	Jumbo Series Filter/Lubricator Ratchet Grip			Male/Female Hexagon Male/Female Hexagon			Mini Series Coalescing FilterMini Series Coalescing Filter	
	Ratchet Grip			Male/Female Hexagon			Compact Series Filter8	
	Ratchet Grip			Male/Female Hexagon			Compact Series Filter8	
	lmpact Grip			Male/Female Hexagon			Compact Series Filter8	
	Impact Grip			Male/Female Hexagon Male/Female Hexagon			Compact Series Filter8 Compact Series Coalescing Filter	
G-2705	Impact Grip	214	DLB2423-10	Male/Female Hexagon	205	F25221-301	Compact Series Coalescing Filter	80
	Impact Grip			Male/Female Hexagon			Compact Series Coalescing Filter	
	lmpact Grip			Male/Female Hexagon Male/Female Hexagon			Compact Series Coalescing Filter Compact Series Filter	
	Impact Grip			Torx5 <sup>TM</sup> Head Screws			Compact Series Filter	
G-2940P	Impact Grip	214	DLS2120	Vacuum Pick-up Sleeve	202		Compact Series Filter	
	Surface Prep Grip			Vacuum Pick-up Sleeve			Compact Series Filter	
	Surface Prep Grip			Vacuum Pick-up Sleeve Vacuum Pick-up Sleeve			Compact Series Filter8Compact Series Filter8	
	Surface Prep Grip			Vacuum Pick-up Sleeve			Compact Series Filter8	
G-329	Surface Prep Grip	215	DLS2126	Vacuum Pick-up Sleeve	202	F25231-111	Compact Series Filter8	5, 98, 10
	Assembly Tool Grip			Vacuum Pick-up Sleeve			Compact Series Coalescing Filter	
	Assembly Tool Grip			Vacuum Pick-up Sleeve Vacuum Pick-up Sleeve			Compact Series Coalescing Filter Compact Series Coalescing Filter	
	Assembly Tool Grip			Vacuum Pick-up Sleeve			Compact Series Coalescing Filter	
	Assembly Tool Grip			Vacuum Pick-up Sleeve			Compact Series Filter	
	Assembly Tool Grip			Vacuum Pick-up Sleeve Vacuum Pick-up Sleeve			Compact Series Filter	
	Assembly Tool Grip			Vacuum Pick-up Sleeve Vacuum Pick-up Sleeve			Compact Series Filter	
G-6WT	Assembly Tool Grip	214	DLW2100TP	Pistol Grip Handle	245		Compact Series Filter8	
	Assembly Tool Grip			Shaker Box			Compact Series Filter8	
	Hammer Grip			Shaker Box			Compact Series Filter8	
	Drill Grip			Snaker Box			Compact Series Filter8 Compact Series Coalescing Filter	
G-7A	Assembly Tool Grip	214		Jumbo Series Coalescing Fi		F25241-301	Compact Series Coalescing Filter	8
	Assembly Tool Grip					F25241-310	Compact Series Coalescing Filter	86
	Assembly Tool Grip		F				Compact Series Coalescing Filter	
u-/ NLU	Assembly Tool Grip	214	E			rz5242-100	Compact Series Filter	

Part Number	Description	Page	Part Number	Description	Page	Part Number	Description	Page
F25242-110	Compact Series Filter	87	H3R-214M-36	Moil Point	176	HH1-323-12		176
	Compact Series Filter			Round Nose		HH1-3400-3	Quick Change #2	
	Compact Series Filter			Ripper				
	Jumbo Series Filter			Blank			Swivel Inlet	
	Jumbo Series Filter			Blank			Swivel Inlet	
	Jumbo Series Filter			Blank			Swivel Inlet	
	Jumbo Series Filter/Lubricator (			Blank			Buffer Washer	
130-00-000				Scaling Chisel			Quick Change	
EOE OD 000								
	Super-duty Filter			Diamond Point			Rubber Buffered	
	Super-duty Filter			Caulking			Economy Type	
FBCF33	FULL BORE Female Coupler	23		Flat Chisel			Socket	
FBCF34	FULL BORE Female Coupler			Flat Chisel			Pipe Line Air Strainer	
FBCF44	FULL BORE Female Coupler		H3R-215F-24 .	Flat Chisel	176		Hex Socket Head Bit	
	FULL BORE Female Coupler		H3R-215F-36 .	Flat Chisel	176		Hex Socket Head Bit	
FBCH34	FULL BORE Hose Stem ID	23	H3R-215G-12 .	Gouge		HX2010-7	Power Bit	206
	FULL BORE Hose Stem ID		H3R-215J-12 .	Straight Fuller	177	HX2012-7	Power Bit	206
FBCH44	FULL BORE Hose Stem ID			Moil Point		HX206-7	Power Bit	206
FBCM34	FULL BORE Male Coupler	23	H3R-215N-12 .	Round Nose	177	HX207-7	Power Bit	206
FBCM43	FULL BORE Male Coupler	23		Ripper			Power Bit	
FRCM44	FULL BORE Male Coupler	23		Tooth		10.200 7 1111111	00001 210 11111111111111111111111111	
ERCMA6	FULL BORE Male Coupler	23		Tooth		1		
TII 0 1	Type "A" Hose Coupler	20		Socket Driver		IO ADINI CM	A O-bl-	046
	Type "A" Hose Coupler						Accessory Cable	
	Type "A" Hose Coupler			HI-FLOW Female Coupler			Accessory Cable	
	Type "A" Hose Coupler			HI-FLOW Female Coupler			Accessory Cable	
	Pin			HI-FLOW Female Coupler			Accessory Cable	
	Liquidator Poly Bowl		HFCF33	HI-FLOW Female Coupler			Accessory Cable	
	Jumbo Series Filter Accessory .		HFCF34	HI-FLOW Female Coupler		IC-19PIN-10M	Accessory Cable	248
FRP-95-593	Metal Bowl		HFCF44	HI-FLOW Female Coupler			Emergency Stop Button	
		19, 120, 122	HFCH22	HI-FLOW Male Coupler		IC-LIGHT-TOWER	.Light Tower	250
FRP-95-610	Liquidator Drain Kit		HECH23	HI-FLOW Male Coupler	22		Palm Button Reset Station	
	Liquidator Poly Bowl			HI-FLOW Male Coupler			Selector Switch	
	Liquidator Poly Bowl			HI-FLOW Male Coupler			Selector Switch	
	Polycarbonate Replacement Bo			HI-FLOW Male Coupler				
rnr-90-032			HECMAN		20		Socket Tray	
	113, 1	10, 122, 130	HEOMAGO	HI-FLOW Male Coupler	22		Socket Tray	
C			HFCM23	HI-FLOW Male Coupler	22		Communication Hub	
<u>G</u>			HFCM32	HI-FLOW Male Coupler			Communication Hub	
	.Die Grinder Collet			HI-FLOW Male Coupler			Air Hose Nipple Male Thread	
GEA15-K48	Reaction Bar Kit	249	HFCM34	HI-FLOW Male Coupler		IR48723-2	Workstation Accessory	242
GEA40-EXT-10M.	Cable	248	HFCM44	HI-FLOW Male Coupler		IR49541	Parallel Torque Arm Accessory .	241
GEA40-EXT-20M .	Cable	248		Standard Retainer		IR6225	Air Hose Nipple Male Thread	
GEA40-EXT-40M .	Cable	248	HH1-1194	Lock Spring	178		Air Hose Nipple Male Thread	
	Swivel Hanger Kit			Quick Change #1			Workstation	
	Lever Kit			Blank			Workstation	
	Lever Kit			Blank			Workstation	
	Mounting Plate Kit			Blank			Workstation	
				Blank			Workstation	
	Flanged Mount Kit							
	Suspension Bail			Scaling Chisel			Workstation	
	Repair Kit Bowl O-ring			Diamond Point			Workstation	
	Replacement Drain Kit	136		Caulking			Workstation	
GRP-95-182	Manual Drain Replacement Kit			Flat Chisel			IR-G Series Gloves	
				Flat Chisel			IR-G Series Gloves	
GRP-95-256	Repair Kit Bowl O-ring		HH1-214F-24 .	Flat Chisel	176	IR-GXL	IR-G Series Gloves	210
GRP-95-257	Repair Kit Bowl O-ring	135	HH1-214F-36 .	Flat Chisel	176	IRPB3-E30	Parallel Torque Arm	241
	Repair Kit Bowl O-ring		HH1-214F-60 .	Flat Chisel	176	IRPB3-N30	Parallel Torque Arm	241
	Repair Kit Bowl O-ring		HH1-214G-12 .	Gouge	177	IRSA-1	Cylindrical Bur	188
	Metal Bowl1			Straight Fuller			Cylindrical Bur	
	Wall Mount Pipe Clamp	10, 110, 122		Moil Point			Cylindrical Bur	
55 107		20 121 122		Moil Point			Cylindrical Bur	
GRP_05_856				Moil Point			•	
	Replacement Polycarbonate Bo Manual Override Drain	*** I JU		Moil Point			Cylindrical Bur	
uiii -30-000-20 .		10 120 122		Round Nose				
CDD 06 10							Cylindrical Bur	
	Liquidator Drain Kit			Ripper			Cylindrical Bur	
ษเ <b>H-</b> 1	Grease Tube Head	260		Scaling Chisel			Cylindrical Bur	
				Blank			Cylindrical Bur	
H				Blank			Cylindrical Bur	
H2R-203	Rubber Bumper	178		Blank		IRSD-1	Ball-shaped Bur	
	Buffer Washer		HH1-215-36	Blank	176		Ball-shaped Bur	
	Inlet Bushings with Screen		HH1-215B-12 .	Scaling Chisel			Tree-shaped Bur	
	Blank			Diamond Point			Tree-shaped Bur	
	Blank			Caulking			Tree-shaped Bur	
	Blank			Flat Chisel			Tree-shaped Bur	
	Blank			Flat Chisel			Cone-shaped Bur	
	Scaling Chisel			Flat Chisel			Cone-shaped Bur	
						IIIOL-3	ооне-энареи вин	
	Diamond Point			Flat Chisel		1		
	Caulking			Gouge		J		
	Flat Chisel			Straight Fuller		J3-581	Air Hose Nipple Male Thread	
H3R-214F-18	Flat Chisel	176		Moil Point				
	Flat Chisel		HH1-215M-18	Moil Point	176	K		
	Flat Chisel			Moil Point			Wood Bit Chuck Wrench	200
	Gouge			Moil Point			Pipe Line Air Strainer	
	Straight Fuller			Round Nose		NTO-MADIAL	po Lino All Ottatilol	140
				Ripper		L		
	Moil Point					_	11: 0 : 1 : : :	
	Moil Point	1/6	ΠΠΙ-3∠I-I∠	Tooth		LU1-U2-000	Inline Series Lubricator	123
	Moil Point		11114 000 40	Tooth	4		Inline Series Lubricator	

Part Number	Description	Page	Part Number	Description	Page	Part Number	Description	Page
	Mini Series Lubricator			Hose Stem ID			Grease Gun Accessory	
	Mini Series Lubricator			Hose Stem ID			Power Bit	
	Mini Series Lubricator			Hose Stem ID			Power Bit	
	Mini Series Lubricator	/5		Male NPT Plug			Mini Series Piggyback	
6221-100 .	Compact Series Lubricator	07 08 00 100		Male NPT Plug			Mini Series Piggyback	
6221_110	Compact Series Lubricator	97, 90, 99, 100	MCDM22	Male NPT Plug	21 22 22		Mini Series Piggyback	
0221-110 .	oumpact series Lubricator	97 98 99 100	MSPM34	Male NPT Plug	21 22 23		Mini Series Combo Drain	
6231_100	Compact Series Lubricator	97, 90, 99, 100		Male NPT Plug			Mini Series Combo Drain	
0231-100 .	oumpact defies Eubricator	97 98 99 100		Male NPT Plug			Mini Series Combo Drain	
6231-110 .	Compact Series Lubricator	. 107, 00, 00, 100		Hose Clamp			Mini Series Piggyback	
0201 110 1		97. 98. 99. 100		Hose Clamp			Mini Series Piggyback	
6241-100 .	Compact Series Lubricator	, ,		Tie Tamper Steel			Mini Series Piggyback	
		97, 98, 99, 100		Tie Tamper Steel			Mini Series Combo Drain	
6241-110 .	Compact Series Lubricator		MT2-12-3/8	Tie Tamper Steel	180	P29122-604	Mini Series Combo Drain	
		97, 98, 99, 100		Tie Tamper Steel		P29221-100	Compact Series Piggyback	
0-06-000 .	Jumbo Series Lubricator		MT2-12-7/8	Tie Tamper Steel	180	P29221-104	Compact Series Piggyback	
	Jumbo Series Lubricator		MT2-S12-5/8 .	Tie Tamper Steel	180		Compact Series Piggyback	
0-08-000 .	Jumbo Series Lubricator			Super-duty Coalescing Filt		P29221-114	Compact Series Piggyback	9
	Jumbo Series Lubricator .		MTP-95-551-28	Jumbo Series Coalescing I	Filter Accessory		Compact Series Piggyback	
	Super-duty Lubricator				114	P29221-604	Compact Series Piggyback	
0-0A-G00 .	Super-duty Lubricator						Compact Series Piggyback	
	Super-duty Lubricator		N				Compact Series Piggyback	
	Super-duty Lubricator			Bulk Hose			Compact Series Piggyback	
	Super-duty Lubricator			Hose, Couplings Both Ends			Compact Series Piggyback	
	Super-duty Lubricator			Hose, Swivel One End			Compact Series Piggyback	
	Pad and Abrasive Kit			Hose, Swivel Both Ends			Compact Series Piggyback	
	Rear Exhaust Kit		N12-25	Hose, Couplings Both Ends	3		Compact Series Piggyback	
	Pad and Abrasive Kit			Hose, Swivel One End			Compact Series Piggyback	
1-SB418-10				Hose, Swivel Both Ends			Compact Series Piggyback	
	Sanding Belt		N12-50	Hose, Couplings Both Ends	3		Compact Series Piggyback	
i1-SB418-60				Hose, Swivel One End			Compact Series Piggyback	
	Sanding Belt			Hose, Swivel Both Ends			Compact Series Piggyback	
	0-10 Sanding Belt			Bulk Hose			Compact Series Piggyback	
1-SB812-10				Hose, Couplings Both Ends			Compact Series Piggyback	
	Sanding Belt			Hose, Swivel One End			Compact Series Piggyback	
	)-10 Sanding Belt		N14-12B	Hose, Swivel Both Ends	54		Compact Series Piggyback	
	0-10 Sanding Belt			Hose, Couplings Both Ends			Compact Series Piggyback	
1-SB818-10				Hose, Swivel One End			Compact Series Piggyback	
	Sanding Belt			Hose, Swivel Both Ends		P29351-600	Heavy-duty Series Piggyback/	
	)-10 Sanding Belt			Hose, Couplings Both Ends				
	)-10 Sanding Belt		N14-50A	Hose, Swivel One End	54	P29351-604	Heavy-duty Series Piggyback/	
	Rear Exhaust Kit			Hose, Swivel Both Ends				
	Jumbo Series Lubricator Ac			Bulk Hose		P29361-600	Heavy-duty Series Piggyback/	
	Super-duty Lubricator Acce			Hose, Swivel Both Ends				
	Super-duty Lubricator Acce			Hose, Swivel Both Ends		P29361-604	Heavy-duty Series Piggyback/	
	Super-duty Lubricator Acce			Hose, Swivel Both Ends		DOF 40	Air Hann Minnla Mala Thursd	
B-PUP	Lubrication Kit			Bulk Hose			Air Hose Nipple Male Thread .	
1				Hose, Couplings Both Ends Hose, Swivel Both Ends			Power Bit	
-	Type "A" Male NPT Plug	20		Hose, Swivel One End			Polyurethane Coil Hose	
				Hose, Swivel Both Ends			Polyurethane Coil Hose	
	Type "A" Male NPT PlugType "A" Male NPT Plug		N30-1∠D	Hose, Swiver Bour Ends Hose, Couplings Both Ends		D38-DMD	Fittina Kit	5
	Jumbo Series Coalescing F			Hose, Swivel Both Ends			Fitting Kit	
	Super-duty Coalescing Filte			Hose, Swivel One End			Wool Polishing Bonnet	
	Super-duty Coalescing Filte			Hose, Swivel Both Ends			Liquidator Desiccant Dryer/Pre	
	Insert Bit Holder			Hose, Couplings Both Ends		100 2000	Liquidator Dosiocant Dryot/110	
	Type "A" Adapter			Hose, Swivel Both Ends		PFRS21-200	Compact Series Precision Reg	
	Type "A" Hose Plug			Hose, Swivel One End		1111021 200		
	Type "A" Hose Plug			Hose, Swivel Both Ends		PFRS21-400	Compact Series Precision Reg	
	Type "A" Hose Plug			Needle Pressure Gauge			Compact Series Precision Req	
	Liquidator Poly Bowl			Needle Pressure Gauge			Compact Series Precision Reg	
	MS Series Female Coupler			Replacement Needle			Compact Series Precision Reg	
	MS Series Female Coupler			Replacement Needle			Compact Series Precision Reg	
	MS Series Female Coupler			Replacement Needle			Compact Series Precision Reg	
	MS Series Female Coupler			Replacement Needle			Compact Series Precision Reg	
	MS Series Hose Stem ID .			Round Needle Housing			Compact Series Precision Air F	
	MS Series Hose Stem ID .		NOTIA	Round Needle Housing	120		Compact Series Precision Air F	
	MS Series Hose Stem ID .			Round Needle Housing			Compact Series Precision Air F	
	MS Series Hose Stem ID .		NC11RO	Rectangular Needle Housir			Compact Series Precision Air F	
	MS Series Male Coupler .			Rectangular Needle Housii			Compact Series Precision Air F	
	MS Series Male Coupler .			Rectangular Needle Housir			Compact Series Precision Air F	
	MS Series Male Coupler .		NOTIDO		ig		PR Series Female Connector P	
	MS Series Male Coupler .		P				PR Series Female Connector P	
	Female NPT Plug		-	Polyurethane Coil Hose	57		PR Series Female Connector P	
	Female NPT Plug			Polyurethane Coil Hose			PR Series Female Connector P	
	Female NPT Plug			Polyurethane Coil Hose Polyurethane Coil Hose			PR Series Female Connector P	
	Female NPT Plug						PR Series Hose Barb Connecto	
				Fitting Kit			PR Series Hose Barb Connecto	
	Female NPT Plug			Fitting Kit				
	Female NPT Plug			Polyurethane Coil Hose			PR Series Hose Barb Connecto	
	Female NPT Plug			Polyurethane Coil Hose			PR Series Hose Barb Connecto	
	Female NPT Plug			Polyurethane Coil Hose			PR Series Hose Barb Connecto	
JTП44	Hose Stem ID			Fitting Kit			PR Series Hose Barb Connecto PR Series Hose Barb Connecto	
	Hose Stem ID							

Part Number	Description	Page	Part Number	Description	Page	Part Number	Description	Page
	PR Series Male Connector Plu			Super-duty Regulator			Spindle	
	PR Series Male Connector Plu			Wood Bit Chuck			Spindle	
	PR Series Male Connector Plu			Super-duty Regulator			Clutch Housing Cover	
	Male NPT Plug			Super-duty Regulator			Clutch Housing Cover	
	PR Series Female Thread Cou			Type "A" Coupler 0-rings			Clutch Housing Cover	
	PR Series Female Thread Cou			Socket Adapter			Clutch Housing Cover	
PRSGF33	PR Series Female Thread Cou	pler24	R5SM-214	Socket Adapter			Pistol Buttplate	
	PR Series Female Thread Cou			Fitting for Nylon Recoil Hose			Pistol Buttplate	
	PR Series Female Thread Cou			Fitting for Nylon Recoil Hose			Pistol Buttplate	
	PR Series Female Thread Cou			Fitting for Nylon Recoil Hose		TRP-A365	Horizontal Hanger	247
	PR Series Female Thread Cou			Fitting for Nylon Recoil Hose				
	PR Series Hose Barb Coupler			Fitting for Nylon Recoil Hose		U		
	PR Series Hose Barb Coupler			Fitting for Nylon Recoil Hose			Universal Dead End	
	PR Series Hose Barb Coupler			Fitting for Nylon Recoil Hose			Universal Female Threaded End .	
	PR Series Hose Barb Coupler			Grinder Collet Body Assembly .			Universal Female Threaded End .	
	$\ldots$ PR Series Hose Barb Coupler			Socket Retainer			Universal Female Threaded End .	
	PR Series Hose Barb Coupler			Socket Retainer			Universal Coupler Gasket	
	PR Series Hose Barb Coupler			Socket Retainer		UH-100-M	Universal Hose End	28
PRSGH46	PR Series Hose Barb Coupler			Socket Retainer		UH-50-M	Universal Hose End	28
PRSGM22	PR Series Male Thread Couple	er 24		Socket Retainer		UH-75-M	Universal Hose End	28
PRSGM23	PR Series Male Thread Couple	er 24	RR10019S	Socket Retainer	167	UM-100-M	Universal Male Threaded End	28
PRSGM33	PR Series Male Thread Couple	er 24	RR10020S	Socket Retainer	167	UM-37-M	Universal Male Threaded End	28
PRSGM34	PR Series Male Thread Couple	er 24		Socket Retainer			Universal Male Threaded End	
	PR Series Male Thread Couple		RR10030S	Socket Retainer	167		Universal Male Threaded End	
	PR Series Male Thread Couple			Socket Retainer			Universal 3-Way	
	PR Series Male Thread Couple			. Socket Retainer		2.7 000 D		
	Compact Series Precision Rec			Socket Retainer		W		
		,		Jet-Vac Conversion Kit			Scaler Chisel	180
PRSS21_400	Compact Series Precision Rec			Insert Bit Holder			Scaler Chisel	
110021 400			11/12 001 4		204		Scaler Chisel	
DDCC21_500	Compact Series Precision Rec		S				Scaler Chisel	
1110021-000	ouripact oches i recision neg			Circular Saw Tune-up Kit	265		Scaler Chisel	
DDCC31 600	Compact Series Precision Reg					WF-14G		100
rn3321-000	oumpact belies riecision net					X		
DDCC01 000	Compact Series Precision Rec			Circular Saw Accessory			1:	100
PRSSS1-200				Bio Brace			Liquidator Drain Kit	
DD0004 400	0			Bio Brace			Liquidator Drain Kit	
PRSS31-400	Compact Series Precision Reg			Bio Brace			Detented Bit	
				Bio Brace			Detented Bit	
PRSS31-500	Compact Series Precision Reg			Ergo-Grip			Phillips Bit	
				Ergo-Grip			Phillips Bit	
PRSS31-600	Compact Series Precision Reg			Ergo-Grip			Phillips Bit	
				Ergo-Grip			Phillips Bit	
				Ergo-Grip			Phillips Bit	
R				Ergo-Grip		XP481	Phillips Bit	202
	Buffer Washer Ring			Ergo-Grip		XP483	Phillips Bit	202
	Grease Gun Accessory			Ergo-Grip		XPB073	Phillips Insert Bit Holder	204
	Air Hose Nipple Male Thread			Ergo-Grip		XPZ161	Pozidriv™ Bit	202
R00-147	Air Hose Nipple Female Threa	d27	SEG4-IR	Ergo-Grip		XPZ163	Pozidriv™ Bit	202
R00A-99	Heavy-duty Chuck		SPB082-5	Power Square Insert Bit		XPZB072	Pozidriv™ Insert Bit Holder	204
R00H-130	Hose Whip		SPB083-5	Power Square Insert Bit		XR3010	Rotating Finder Bit	206
R0-130	Hose Whip		SPB084-5	Power Square Insert Bit		XR3012	Rotating Finder Bit	206
R0B1J61-565 .	Inlet Bushings with Screen .		SRA010-TK1	Circular Saw Tune-up Kit	265		Rotating Finder Bit	
	Medium-duty Chuck			Compact Series Soft-Start Valve			Rotating Finder Bit	
	Quick Change Adapter			Compact Series Soft-Start Valve			Reed and Prince Head Bit	
	Square Drive Adapter		SSV24	Compact Series Soft-Start Valve	104		Liquidator Poly Bowl	
	Heavy-duty Chuck			Blow Gun Tips			Liquidator Drain Kit	
	Air Hose Nipple Female Threa			Blow Gun Tips			Liquidator Drain Kit	
	Hose Whip			600 Series Blow Gun Extensions		AIII 30 244	quidatoi Diaiii Nt	100
	Reaction Bar			601 Series Blow Gun Extensions		Y		
	Dead Handle			Pipe Line Air Strainer		V227_2	Mini Series Modular Kit	80
	Drill Chuck			Pipe Line Air Strainer			Globe Valve	
	Mini Series Relieving Regulato		01300 207 32 .	Tipo Line All Ottaliloi				
	Mini Series Relieving Regulato		T				Mini Series Modular Kit	
	Mini Series Relieving Regulato			Chuck	200		Heavy-duty Series Pipe Nipple .	
				Chuck Nut			Heavy-duty Series Pipe Nipple .	
							Heavy-duty Series Pipe Nipple .	
	Mini Series Relieving Regulate			Nut			Plug Valve	
	Mini Series Relieving Regulato			Wood Bit Chuck Assembly			Plug Valve	
	Mini Series Relieving Regulato			Large Drill Accessory		Y5/-1	Heavy-duty Series Twist Drain	106, 108
	Mini Series Relieving Regulato			Large Drill Accessory				
	Compact Series Regulator			Protective Tool Boot				
	Compact Series Regulator			TGSL-G Series Gloves				
	Compact Series Regulator			TGSL-G Series Gloves				
	Compact Series Regulator			TGSL-G Series Gloves				
	$\ldots$ .Compact Series Regulator $\ldots$			TNT-G Series Gloves				
	$\ldots$ .Compact Series Regulator $\ldots$		TNT-GM	TNT-G Series Gloves				
	Compact Series Regulator			TNT-G Series Gloves				
	Compact Series Regulator			Flanged Cover				
	Compact Series Regulator			Flanged Cover				
	Compact Series Regulator			Flanged Cover				
				Non-flanged Covers				
	Compact Series Regulator							
				Non-flanged Covers				
	Drill Chuck			Non-flanged Covers				
	Jumbo Series Regulator	115, 117	IKH-40-24-Y		240			
	Jumbo Series Regulator	445 445	TDLO AGGE GO	Bit Holder Spindle	041			