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LUBRICATION EQUIPMENT

PUMPS AND ACCESSORIES

ARO® Lubrication Equipment.

For over 85 years, the ARO[®] Fluid Products business of Ingersoll Rand[®] has developed relationships with more than 200 original equipment manufacturers and distributors, enabling us to better focus on the unique pumping needs of many industries. It is a strategic merger of our customers' application expertise, along with our decades-long legacy of designing and building outstanding piston and diaphragm pumps.

ARO[®] delivers unmatched dependability and productivity with a full range of lubrication products built to a global quality standard to keep all types of fluids moving efficiently.

ARO[®] offers a versatile range of piston and diaphragm pumps capable of meeting the specific needs of your applications. Available in multiple sizes and configurations with a broad selection of pressure ratios and displacement rates, our pumps can help unlock superior performance and increase production across a number of unique applications.



Features

- Piston pumps for grease or for motor oil, gear oil, and transmission fluid
- No lubrication or complex controls required
- Digital / metered fluid control handles are precise and easy to use
- High-pressure grease control handles
- Full range of general lubrication fittings and accessories

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Application advantages of ARO[®] lubrication pumps:



Transfer & Supply: ARO[®] lubrication pumps are designed to move high volumes of fluids in order to minimize time spent filling or emptying large containers.



Lubrication: ARO[®] lubrication pumps offer a variety of flow rates and pressures to meet your need in moving oil and grease to lubricate equipment and machinery.

Used for:

- Material Transfer
- Vehicle Service
- Mining and Construction Equipment
- General Machinery





ARO[®] Piston Pumps and Packages for Oil and Grease

ARO[®] lubrication pumps deliver unmatched industrial-strength performance and are sized to fit any container – large (275-gal/400-lb, 1040.9 L / 181.4 kg) to small (5-gal/35-lb, 18.9 L/15.9 kg).

They pump motor and gear oils, transmission fluid, and standard and industrial greases. Pumps are offered from 3:1 to 100:1 ratios in order to meet the requirements of any application - commercial vehicle servicing to lubricating heavy mining equipment.

Saving You Time and Money

Our simple pump designs allow service by any owner or qualified technician.

- Reliable Performance:
 - Patented design improves flow, reduces pulsation and extends service life
 - Various size motors can produce the right pressure for any application

Durability:

- ARO[®] stand behind its pumps with a 5-year warranty
- Stall-free motor is contained in a rugged housing
- Low Maintenance Time and Cost:
 - Can service pumps in-line with no special tools required
 - Fewer parts than comparable pumps mean easier servicing, reduced service time
 - No air line lubrication required



Commercial Motor Oil, Gear Oil, Transmission Fluid

Oil Pumps and Packages

	3:1 Ratio	5:1 Ratio
Lower Pump Material	Carbon Steel	Carbon Steel
Air Motor Diameter	2″	3″
Air Inlet Pressure Range psi (bar)	0-150 (0-10.3)	0-150 (0-10.3)
Fluid Pressure Range psi (bar)	0-450 (0-31)	0 - 750 (0 - 51.7))
Stroke Length	3″	3″
Max.Recommended Cycles/Minute	125	120
Flow Rate gpm (Ipm)	3.4 (12.87)	4.3 (16.27)
Cycles Per Gallon (Liter)	37 (9.8)	28 (7.4)
Air Inlet Size	1/4″ (F)	1/4″ (F)
Fluid Outlet Size	1⁄2″ (F)	½″ (F)
Fluid Inlet Size	3⁄4″ (F)	1 ½ ″ (F)
Noise Level @ 100 psi – 124 cpm	80 db(A)	85 db(A)





3:1 Oil LM2203A-11-C

5:1 Oil LM2305A-11-B

Model		Container size gal (L)
3:1 PISTON PUM	IP	
LM2203A-11-C LM2203A-31-C LM2203A-41-C LM2203A-51-C	(-12-C = BSP Thread (-32-C = BSP Thread) (-42-C = BSP Thread) (-52-C = BSP Thread)	Stub 16 (60.6) 55 (208.2) 275 (1040.9)
5:1 PISTON PUM	IP	
LM2305A-11-B LM2305A-31-B LM2305A-41-B LM2305A-51-B	(-12-B = BSP Thread) (-32-B = BSP Thread) (-42-B = BSP Threads) (-52-B = BSP Threads)	Stub 16 (60.6) 55 (208.2) 275 (1040.9)

Piston Pump Packages

Model	Description	Pump model	Meter	Control handle	Dolly	Drum cover	Hose	Valve
	IP PACKAGES							
LP2100-1-B	16-gal (60.6 L) ortable pump package		635190-1 (pint)	635391-1	640058-2	94421	623501-6	67085
LP2101-1-B pc	16-gal (60.6 L) ortable pump package	LM2203A-31-C	635190-3 (L)	635391-1	640058-2	94421	623501-6	67085
5:1 OIL PUN	IP PACKAGES							
LP3100-1-B pc	16-gal (60.6 L) ortable pump package		635190-1 (pint)	635391-1	640058-2	94421	623501-6	N/A
LP3101-1-B pc	16-gal (60.6 L) ortable pump package	LM2305A-31-B e	635190-3 (L)	635391-1	640058-2	94421	623501-6	N/A

Common Accessories

Model	Description
61113	Wall Mount Bracket
66073-1	Air Line Connection
67145-3-B (3:1 Ratio)	2" Bung Adapters
67145-4-B (5:1 Ratio)	2" Bung Adapters
637224	LM2203A Service Kit
637226	LM2305A Service Kit



LP3100-1-B

Industrial Oil Pumps

	1:1 Ratio	9:1 Ratio
Lower Pump Material	Carbon Steel	Carbon Steel
Air Motor Diameter	2″	4 1/4″
Air Inlet Pressure Range psi (bar)	0-150 (0-10.3)	0-150 (0-10.3)
Fluid Pressure Range psi (bar)	0-150 (0-10.3)	0-1350 (0-93.1)
Stroke Length	6″	4″
Max. Recommended Cycles / Minute	75	75
Flow Rate gpm (Ipm)	9 (34)	3.9 (14.8)
Cycles Per Gallon (Liter)	12.3 (3.2)	19.2 (5.0)
Air Inlet Size	1/4″ (F)	1⁄2″ (F)
Fluid Outlet Size	3/4″ (F)	³ / ₄ ″ (F)
Fluid Inlet Size	Immersed	Immersed
Noise Level @ 60 psi – 40 cpm	77.8 db(A)	89.2 db(A)

Heavy-duty Piston Pumps (for oil service)

Model	Packing Material (Upper/Lower)	Container size gal (L)
PISTON PUMP 1:1 RATIO 2	" DIAMETER AIR MOTOR (200 S	ERIES)
612041-1	Nitrile/Nitrile	55 (208.2)
612041-3	PTFE/PTFE	55 (208.2)
612042-1	Nitrile/Nitrile	275 (1041)
PISTON PUMP 9:1 RATIO 4	-1/4" DIAMETER AIR MOTOR (A	F0409 SE
AF0409A13PFL1 P	Polyurethane/UHMW-PE	Stub
AF0409A43PFL1 P	Polyurethane/UHMW-PE	16 (60.6)
AF0409A53PFL1 P	Polyurethane/UHMW-PE	55 (208.2)

Common Accessories

Model	Description
67445-1*	Muffler Kit
635040 (1:1)	ARO-Stop Valve
23644-400 (9:1)	ARO-Stop Valve
F35341-400	Air Line Filter
67442*	Ball Valve Regulator
637489*	Universal Air Motor Kit
637081	Service Kit (612041-1, 612042-1)
637083	Service Kit (612041-3)
637486	Service Kit (AF0409A)

* Use with AF0409A

612041-1

1:1 ratio pump ideal for pumping motor oil, gear oil, and transmission fluid. This model fits a standard 55-gal (208.2 L) drum (including bung adaptor).

612042-1

1:1 ratio piston pumps are ideal for moving oils and fluids at high volumes. This model is designed for 275 obround tanks.

AF0409

AF0409 Series pumps are designed with a 9:1 pump ratio, 4-1/4" (108 mm) air motor, and are ideal for pumping heavy oils over long distances.



Piston Pump Accessories

Model	Description	For use with
5-GAL CON	TAINERS	
65986	Siphon tube has 6' (1.8 m) long, 3/4" (19 mm) ID hose with 3/4" (1.9 cm) NPT (M) outlet; hose is neoprene over Thiokol and includes 91020-1 tube.	Wall-mounted stub pumps
55-GAL CO	NTAINERS	
65986-1	Siphon tube has 6' (1.8 m) long, 3/4" (19 mm) ID hose with 3/4" (1.9 cm) NPT (M) outlet; hose is neoprene over Thiokol.	Drum cover for closed drum w/ 2″ (50.8 mm) bung opening
61601	Speeds 55-gal (208.2 L) 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" long, 914 mm) carbon steel suction tube; 3/4" (19 mm) NPT(F) fluid outlet.	Wall-mounted stub pumps
66779	For pumping from 55-gal (208.2 L) drum. PVC tube has foot valve for positive priming. Includes 76193 bung adapter, adjustable to approximately 35-1/2" (902 mm); 1" (25.4 mm) NPT (F) fluid outlet.	Stub pumps and diaphragm pumps
61409	For pumping from 55-gal (208.2 L) drum. 90° PVC siphon tube, 35-1/2" (902 mm) long with 2" bung adapter for 55-gal drums. Can easily be cut to desired length,on site; 1/2" (12.7 mm) NPT (F) outlet.	1/2″ diaphragm pumps and stub pumps
91020-2	1/2" (12.7 mm) galvanized suction tube for 55-gal (208.2 liter) containers; 36" long (914 mm).	
275-GAL C	ONTAINERS	
66779-2	For pumping from 275-gal (1040.9 L) tanks. PVC diaphragm tube has foot valve for positive priming. Includes 76193 bung adapter, adjustable to approximately 48-1/4" (1232 mm). 1" (25.4 mm) NPT (F) fluid outlet.	Stub pumps and pumps

Piston Pump Accessories

Fittings

Model SIPHON H	Hose size ID in (mm) OSE, CARBO	Hose length ft (m) DN STEEL FI	Hose material ITINGS	Fluid inlet NPT (M) in (mm)	Fluid outlet (NPT) in (mm)	Used with
622701-6	1″ (25.4)	6′ (1.8)	Nylon tube with oil-resistant cover	1″ (25.4)	1″ (25.4)	Carbon steel siphon tube
STAINLES	STAINLESS STEEL FITTINGS					
622702-6	1″ (25.4)	6′ (1.8)	Nylon tube with oil-resistant cover	1″ (25.4)	1″ (25.4)	Stainless steel siphon tube

Inlet Material Filters

Model	Description	For use with
651830	Filter element 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" (25.4 mm) NPT (F) connections and 40-mesh screen; 4-3/4" (121 mm) long 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.

Wall Mount Bracket

Model	Description	For use with
61113	2″ (50.8 mm) NPT (F) opening for bung-type pumps; bracket can slip over rim of open-head drum or be wall-mounted	55-gal (208.1 L) bung-type pumps and AFX Series, LM Series and 61204X-X Pumps fitted with bung adapters
66100	Wall-mount bracket has removable mounting plate	AFX Series, 4" (101.6 mm) stroke pumps
66101	Wall-mount bracket has removable mounting plate	AFX Series, 6" (152.4 mm) stroke pumps



66480



Bung Adapters

Model	Description	For use with
60870	2" (50.8 mm) (M) for use with 2-1/8" (57.1 mm) siphon tube	61204X-X, 1:1 ratio immersed pumps AFX Series, 9:1 ratio immersed pumps
67145-3-B	2″ (50.8 mm) (M)	LM Series, 3:1 oil pumps
67145-4-B	2" (50.8 mm) (M)	LM Series, 5:1 oil pumps
BUNG ADAF	PTER SEAL KITS	
67088-3	Water-tight seal kit includes 67145-3 adapter and 67088 seal kit	B bung LM Series 3:1 oil pumps
67088-4	Same as above, except includes 6714 bung adapter and 67088 seal kit	LM Series 5:1 oil pumps



67145-X



67145-X-B

Grease Pumps and Packages

50:1 Commercial Grease Pumps

Commercial

	2″ Motor LM2250E-XX-B	3"Motor LM2350E-XX-B
Lower Pump Material	Carbon Steel	Carbon Steel
Air Motor Diameter	2″	3″
Air Inlet Pressure Range psi (bar)	0-150 (0-10.3)	0-150 (0-10.3)
Fluid Pressure Range psi (bar)	0-7500 (0-517.2)	0-7350 (0-506.8)
Stroke Length	3″	3″
Max. Recommended Cycles/Minute	80	135
Flow Rate Ibs/min (kg/min)	2 (1)	4 (2)
Cycles Per Gallon (Liter)	12.3 (3.2)	19.2 (5.0)
Air Inlet Size	1/4″ (F)	1/4″ (F)
Fluid Outlet Size	3/8″ (F)	3/8″ (F)
Fluid Inlet Size	Immersed	Immersed
Noise Level @ 60 psi – 40 cpm	85 db(A)	85 db(A)

Grease Pumps

Model		Container size lb (kg)						
50:1 PISTON	50:1 PISTON PUMP							
2" DIAMETER	AIR MOTOR (3" STRO	DKE)						
LM2250E-21-B LM2250E-31-B LM2250E-41-B LM2250E-61-B	(-22 = BSP thread) (-32 = BSP thread) (-42 = BSP thread) (-61 = BSP thread)	35 (15.8) 120 (54.4) 400 (181.4) 60 (27.2)						
3" DIAMETER	AIR MOTOR (3" STRO	DKE)						
LM2350E-21-B LM2350E-31-B LM2350E-41-B LM2350E-61-B	(-22-B = BSP thread) (-32-B = BSP thread) (-42-B = BSP thread) 4 (2)	35 (132.4) 120 (454.2) 400 (1514.2) 60 (227.1)						

Service Kits

	Kit No.
LM2250E	637332
LM2350E	637227-В

Grease Pump Packages

Model	Size	Pump model	Control handle	Dolly	Drum cover	Fluid Hose	Follower plate	Handle	Adapter	Z-Swivel
	ER AIR MOTOR			,						
LP2001-1-B	35-lb (15.8 kg)	LM2250E-21-B	N/A	N/A	94420	N/A	640095-2-B	94334	N/A	N/A
LP2002-1-B	35-lb (15.8 kg)	LM2250E-21-B	636111	N/A	94420	624201-10	640095-2-B	94334	76493	636077
LP2003-1-B	120-lb (54.4 kg)	LM2250E-31-B	N/A	N/A	94421	N/A	640165	N/A	N/A	N/A
LP2004-1-B	120-lb (54.4 kg)	LM2250E-31-B	636111	N/A	94421	624201-10	640165	N/A	76493	636077
LP2006-1-B	120-lb (54.4 kg)	LM2250E-31-B	636111	640058-2	94421	624201-10	640165	N/A	76493	636077
LP2007-1-B	120-lb (54.4 kg)	LM2250E-31-B	636111	640062 (cart)	94421	624201-10	640165	N/A	76493	636077
3" DIAMETI	ER AIR MOTOR									
LP3001-1	35-lb (15.8 kg)	LM2350E-21-B	636103	N/A	94420	624201-10	640095-2-B	94334	76493	636077
LP3002-1	120-lb (54.4 kg)	LM2350E-31-B	N/A	N/A	94421	624401-4	640165	N/A	N/A	N/A
LP3003-1	120-lb (54.4 kg)	LM2350E-31-B	636103	640057	94421	624201-10	640165	N/A	76493	636077
LP3004-1	120-lb (54.4 kg)	LM2350E-31-B	636111	640058-2	94421	624201-10	640165	N/A	76493	636077
LP3005-1	400-lb (181.4 kg)	LM2350E-41-B	N/A	N/A	94422	624401-4	N/A	N/A	N/A	N/A
LP3006-1	120-lb (54.4 kg)	LM2350E-31-B	636103	640062 (cart)	94421	624201-10	640165	N/A	76493	636077
LP3007-1	60-lb (27.2 kg)	LM2350E-61-B	636111	N/A	71740-1	624401-4	N/A	N/A	N/A	636077
LP3008-1	35-lb (15.8 kg)	LM2350E-21-B	N/A	N/A	94420	624201-10	640095-2-B	94334	76493	N/A
LP3009-1	400-lb (181.4 kg)	LM2350E-41-B	N/A	N/A	94422	624401-4	640015-1	N/A	N/A	N/A



Grease Pumps and Packages

4-1/4" and 6" Air Motor Grease Pumps

50:1

75:1

100:1

Industrial

	50:1 Ratio	75:1 Ratio	100:1 Ratio
Stroke (double acting)	4" (10.2 cm)	4" (10.2 cm)	6" (15.2 cm)
Material Outlet	1/2" NPT(F)	1/2" -14 NPT	1/2" NPT(F)
Air Inlet (female)	1/2" NPT(F)	1/2" -14 NPT	1/2" NPT(F)
Air Inlet Pressure Range psi (bar)	30 - 150 (2 - 10.3)	30 -100 (2 - 6.9)	30 - 100 (2 - 6.9)
Fluid Pressure Range psi (bar)	1500 - 7500 (103 - 517)	0 - 7500 (0 - 517)	3000-10000 (207- 690)
Max Delivery/Minute @ 75 cycles	5.7 lbs (2.59)	5.5 lbs/min (2.5 kg)	5.7 lbs (2.59)
Material Inlet	Immersed	Immersed	Immersed
Noise Level @ 60 psi dBA	81.8	81.8	84.7

Pump Model *	Plunger Material	Upper Packings	Lower Packings	Lower Pump Model	Packaging Service Kit
Container Suitability - 1	6 GAL / 120 LB Dru				
AF0450L43PKL1	Carbon Steel	Polyurethane	Glass Filled PTFE	-	65130
AF0475L43PBL1	Carbon Steel	Polyurethane	Buna "N"	-	637512
AF060BL43PKL1**	Carbon Steel	Polyurethane	Glass Filled PTFE	-	65130
Container Suitability - 5	5 GAL / 400 LB Dru				
AF0450L53PKL1	Carbon Steel	Polyurethane	Glass Filled PTFE	-	65130
AF0475L53PBL1	Carbon Steel	Polyurethane	Buna "N"	-	637512
AF060BL53PKL1**	Carbon Steel	Polyurethane	Glass Filled PTFE	-	65130

AF0475

* Add "-1" to Model No. for Ball Valve Regulator

** WARNING: These 100:1 pumps deliver pressures up to 10,000 psi and can only be used in permanently installed systems where the pump is connected directly to piping with the proper rating for the application.

Grease Pump Packages

Model No.	Package Type	Pump Model	Drum Cover	Bung Adapter	Material Hose	Air Hose	Ball Valve Regulator	Follower
DC0450L53PKL1000	55 Gallon Drum Cover	AF0450L53PKL1	60898	4148	624401-8	621501-5	-	-
DM0450L53PKL1000	55 Gallon Drum Mount	AF0450L53PKL1	-	4148	624401-8	621501-5	-	-
DC0475L53PBL1C11	55 Gallon Drum Cover	AF0475L53PBL1	71060-1	4148	-	-	67442	640015-2
DM0475L53PBL1C11	55 Gallon Drum Mount	AF0475L53PBL1	-	4148	-	-	67442	640015-2
DC060BL43PKL1C11*	16 Gallon Drum Cover	AF060BL43PKL1-1	66715	-	-	-	-	640152-1
DC060BL53PKL1C11*	55 Gallon Drum Cover	AF060BL53PKL1-1	71060-1	60870	-	-	-	640015-5





High-pressure Wash and Tire-Fill Pump Package

High-power cleaning solutions

Perfect for cleaning:

- Cars and trucks
- Engines
- Construction equipment
- Aircraft
- Farm equipment
- Plant structures
- Railroad equipment
- Fleet vehicles

Wash Pumps

•	Degreasers
•	Detergents

With the application of:

- Cleaning solutions
- Water
- Metal brighteners
- Aluminum
- brighteners



Packings

TP6250-18 spray tip and L26241-010 Air Line

	9:1 Ratio
Lower Pump Material	Stainless Steel
Air Motor Diameter	4 1⁄4″
Air Inlet Pressure Range psi (bar)	0-150 (0-10.3)
Fluid Pressure Range psi (bar)	0-1500 (0-103)
Stroke Length	4″
Max. Recommended Cycles /	60
Flow Rate gpm (lpm)	2.9 (10.8)
Cycles Per Gallon (Liter)	21 (5.5)
Air Inlet Size	½″ (F)
Fluid Outlet Size	3⁄4″ (F)
Fluid Inlet Size	Barbed
Noise Level @ 60 psi – 40 cpm	89.2 db(A)

Model	type / mat upper	erial lower
BASIC PUMPS		
STUB 4-1/4" DIAME	FER AIR MOTOR / 4	″ STROKE
AF0409C81BBW2	Buna N	Buna N
Model	Description	
SPRAY WASH PUMP	PACKAGE - 55 GAL	LON CONTAINER
WP0409C81BBW2000	61139-1 55-gal su 622427-40 materia	

lubricator

Dollies, Hand Trucks

Model	Description			
DOLLIES				
16-GAL DR	UM			
640057	Platform-type dolly has four swivel casters and three drum clamps; for 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 TRU	СКЅ			
16-GAL DR	UM			
640062	Two-wheel truck has clamp rod and two base supports to hold drum; wheels are rubber			
640149	Three-wheel truck includes hinged handle, swivel-type front wheel, and two 6" (152 mm) rubber rear wheels			



640062

640149

9:1

Drum Covers

Model	Description	For use with
5 GAL / 3	35-LB PAIL	
94420	Has 2" (50.8 mm) NPT (F) bung opening and three hold-down screws (fits 10.23" – 12", 259.8 mm –	LM Series 5-gal (18.9 L) bung pumps 304.8 mm OD drums)
16 GAL /	120-LB DRUM	
66492	Has pump opening, mounting holes, and tie-down brackets; order tie-down rods separately (fits 12.75" – 15", 323.8 mm – 381 mm OD Drums)	Models 662402 and 662409
94421	Has 2" (50.8 mm) NPT (F) bung opening and three hold-down screws (fits 13-1/8" – 14-7/8", 333.3 mm – 377.8 mm OD drums)	LM Series 16-gal / 120 lb (60.6 L / 54.4 kg) bung pumps
55 GAL /	400-LB DRUM	
71060-1	Has 2" (50.8 mm) NPT (F) bung opening and tie-down brackets; order tie-down rods separately (fits 20" – 24-5/8", 508 mm – 625.5 mm OD drums)	AFX Series and 61204X-X Pumps, 55-gal / 400-lb (208.1 L / 181.4 kg) bung-type
94422	Has 2" (50.8 m) NPT (F) bung opening and three hold-down screws; bung pumps (fits 21-7/8" – 23-5/8", 555.6 mm – 600.1 mm OD drums)	55-gal (208.1 L) drum cover models LM2250E-41-B and LM2350E-41-B





71060-1



94422

Follower Plates

MODEL	Wiper seal MATERIAL	OD of pump tube to be fitted IN (MM)	FOR USE WITH
35-LB TAPERE	D PAIL (FITS 10" – 1	1" ID DRUMS)	
640095-1-B 640095-2-B 120-LB DRUM	Rubber Rubber (FITS 13" – 14" ID D	1″ (25) 1-1/2″ (38) DRUMS)	LM Series 60:1 LM2250E-21-B, LM2350E-21-B
640027 640152 640152-1 640165	Buna-N Buna-N Buna-N Buna-N	2" (51) 1-7/8" (48) 2-1/8" (54) 1-1/2" (38)	Hand pumps AFX Series, 50:1 AFX Series, 100:1 LM2250E-31-B, LM2350E-31-B
400-LB DRUM	(FITS 20" – 23" ID D	ORUMS)	
640015-2 640015-5 640015-1	Buna-N Buna-N Buna-N	1-7/8″ (48) 2-1/8″ (54) 1-1/2″ (38)	AFX Series, 50:1 AFX Series, 100:1 LM2250E-41-B, LM2350E-41-B





640015-1

Bung Adapters

Model	Description	For use with
BUNG ADAPTE	RS	
4148	2" (50.8 mm) (M) for use with 1-7/8" (47.6 mm) siphon tube	AFX Series, 50:1 ratio grease pumps
67145-2	2" (50.8 mm) (M)	LM, 50:1 grease pumps
BUNG ADAPTE	ER SEAL KITS	
67088	Water-tight seal for use outdoors	LM Series



Cover Tie-down Rods

Model	Description	For use with								
16-GAL /	16-GAL / 120-LB DRUM									
640164	Tie-down bracket kit fixes / holds down drum cover. Includes brackets, rods, mounting hardware. Use with 94421 Cover.	LM Series pumps.								
640091	Set of two tie-down rods and mounting brackets. Use with 66492 Cover.	AFX Series and 61204X-X Pumps, 16-gal / 120-lb (60.6 L / 54.4 kg) drum covers								
55-GAL /	400-LB DRUM									
71027-1	Set of two tie-down rods and mounting brackets. Use with 71060 cover.	LM Series, also AFX Series and 61204X-X Pumps 55-gal /400-lb (208.1 L / 181.4 kg) drum covers								



Pump Lifts

Model	Description	For use with	
SINGLE-PO	DST LIFT		
640067	Single-acting cylinder for easy 55-gal /400-lb (208.1 L / 181.4 kg) drum change-over. Requires 71060-1 drum cover. Extended height 92" (2.3 mm).	AFX Series, LM Series	



PRO Diaphragm Pumps

3/8" - 2" (9.5 MM - 50.8 MM) FLUID PORTS

Why ARO® diaphragm pumps?

3/8"-2'

Our diaphragm pumps are ideal for pumping oil or other light fluids such as antifreeze, water, windshield fluid, fuel (See UL 79 Approved Units), solvents, transmission fluid, and waste oil. Fluid ports for Ingersoll Rand / ARO[®] diaphragm pumps range in size from 3/8" to 2" (9.5 to 51 mm) to meet the requirements of any application.

- Safety Bolted fasteners prevent fluid leaks harmful to workers and the environment
- Reliability Unbalanced valve design eliminates valve centering and pump stall-outs, even under low air inlet pressure
- ▼ Flexibility Variety of body materials allow you to pump different fluids
- Commitment Ingersoll Rand / ARO[®] diaphragm pumps come with a five-year warranty

• Bolted construction for safe reliability and ease of assembly

All Ingersoll Rand / ARO[®] diaphragm pumps use bolted construction that process professionals demand. Ingersoll Rand / ARO[®] non-metallic diaphragm pumps also utilize fasteners that are constructed of 300 Series stainless steel for maximum chemical resistance.

- Bolted is safer Bolted construction reduces the risk of spills and environmental contamination, and the attendant, mandatory reports to regulatory agencies that spills can create.
- Bolted is reliable Bolted construction withstands the heavy loading that diaphragm pumps are subjected to, without concerns about breakage or loosening.
- Bolted is easier to assemble Our bolted design allows for easy positioning and alignment of parts during reassembly. This is a significant advantage over bandclamp style pump fasteners, which are difficult to align and hold together during reassembly.
- Bolted is less expensive This design uses standard bolts that cost significantly less to replace. Non-standard fastening devices (such as band clamps) are considered wear parts and are more expensive to replace.

Positive priming provides instant start-ups

Check valves are located close to the diaphragm chambers, ensuring a positive prime.

Ideal for abrasion and solids-handling

Because Ingersoll Rand / ARO® diaphragm pumps do not use the rotating, sliding seals found in rotary and centrifugal pumps, they're used by more process engineers to handle tough abrasion applications.

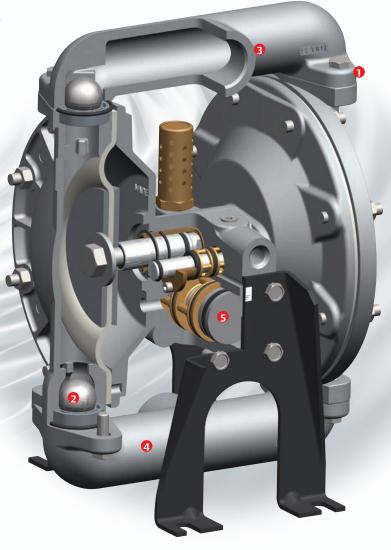
Output Description Output Description

Ingersoll Rand / ARO[®] offers a wide selection of materials, allowing your choice of the best possible wetted and non-wetted materials suited to your application.

G Ingersoll Rand / ARO[®] patented unbalanced air valve

Our unbalanced air valve design makes all Ingersoll Rand / ARO[®] diaphragm pumps unstallable. Because the unbalanced valve cannot settle in a neutral position when the pump is shut down, it can't become stuck, requiring the operator to hammer on the pump in order to start up again.

- Eliminates stalling
- Uses significantly less power than competition
- Does not require lubrication
- Forgiving in dirty air



Pro-Series Diaphragm Pumps

Model	Body materials (wetted)	Diaphragm / ball material	Air inlet NPT (F) in (mm)	Fluid inlet / outlet material in (mm)	Max flow gpm I/m	Compatible fluids	Replaces model
3/8" PORTS							
PD03P-ARS-PTT	Polypropylene	PTFE	1/4″ (6.3)	3/8″ (9.5)	10.6 (40.1)	Windshield fluid, motor / gear oil, transmission fluid, antifreeze	New
PD03P-ARS-PCC	Polypropylene	Hytrel	1/4″ (6.3)	3/8″ (9.5)	10.6 (40.1)	Windshield fluid, motor / gear oil, transmission fluid, antifreeze	New
PD03P-AES-DTT	Acetal (groundable)	PTFE	1/4″ (6.3)	3/8″ (9.5)	10.6 (40.1)	Solvents	New
PD03P-AES-DCC	Acetal (groundable)	Hytrel	1/4″ (6.3)	3/8″ (9.5)	10.6 (40.1)	Windshield fluid, motor / gear oil, transmission fluid, antifreeze	New
1/2" PORTS							
PD05P-ARS-PTT-B	Polypropylene	PTFE	1/4″ (6.3)	1/2″ (12.7)	14.4 (54.5)	Windshield fluid, motor / gear oil, transmission fluid, antifreeze	66605J-344
PD05P-ARS-PCC-B	Polypropylene	Hytrel	1/4″ (6.3)	1/2″ (12.7)	14.4 (54.5)	Windshield fluid, motor / gear oil, transmission fluid, antifreeze	66605J-322
PD05P-ARS-PAA-B	Polypropylene	Santoprene	1/4″ (6.3)	1/2″ (12.7)	14.4 (54.5)	Windshield fluid, antifreeze	66605J-388
PD05P-AES-DTT-B	Acetal	PTFE	1/4″ (6.3)	1/2″ (12.7)	14.4 (54.5)	Solvents	666056-6A4
PD05P-AES-DCC-B	Acetal	Hytrel	1/4″ (6.3)	1/2″ (12.7)	14.4 (54.5)	Windshield fluid, motor / gear oil, transmission fluid, antifreeze	66605H-622
1" PORTS							
666100-344-C	Aluminum	PTFE	1/4″ (6.3)	1″ (25.4)	35 (132.5)	Windshield fluid, motor / gear oil, transmission fluid, antifreeze, solvents	
666100-3C9-C	Aluminum	Hytrel	1/4″ (6.3)	1″ (25.4)	35 (132.5)	Windshield fluid, motor / gear oil, transmission fluid, antifreeze	
666100-322-C	Aluminum	Buna	1/4″ (6.3)	1″ (25.4)	35 (132.5)	Windshield fluid, motor / gear oil, transmission fluid, antifreeze	
1-1/2" PORTS							
666150-362-C	Aluminum	Nitrile / Acetal	1/2″ (12.7)	1-1/2″ (38.1)	90 (340.7)	Windshield fluid, motor / gear oil, transmission fluid, antifreeze	
2" PORTS							
666250-9C9-C	Aluminum	Hytrel	3/4″ (19.1)	2″ (50.8)	172 (651.1)	Windshield fluid, motor / gear oil, transmission fluid, antifreeze	

PRO Series Diaphragm Pumps

Pro-Series Specialty Application Diaphragm Pumps

Model	Body material (wetted)		ragm / aterial	Air inlet NPT (F) in (mm)	/ Fluid inlet outlet materia in (mm)			Compatible fluids
1/2" PORTS								
670042	Aluminum	Viton /	Acetal 1/	/4″ (6.3 mm)	1/4″ (6) / 1/2″ (13) 12 (45	5.4)	Fuel (UL 79 approved)
1" PORTS								
650717-C	Aluminum	Viton /	Acetal 1/	/4″ (6.3 mm)	1″ / 1″ (25.4 mi	m) 29 (10	9.8)	Fuel (UL 79 approved)
1-1/2" PORT	rs							
650718-C	Aluminum	Viton /	/ Acetal 1/	'2″ (127 mm)	1-1/2″ (38.1 mr	n) 75 (28	3.9)	Fuel (UL 79 approved)
2" PORTS								
650719-C	Aluminum	Viton /	' Acetal 3/	4″ (19.1 mm)	2″ (50.8 mm)	105 (39	97.5)	Fuel (UL 79 approved)
Model	Application	Manifold material	Diaphragm, O-ring material	Air inlet NPT / F in (mm)	Fluid outlet NPT / F in (mm)	Max gpm (L/min)	Packag include	
1/2" PORTS								
612999-5	Waste oil evacuation	Polypropylene	Nitrile	1/4″ (6)	1/2" (13)	11 (42)		unt, inlet and uid hoses
612999-6	Waste oil evacuation	Polypropylene	Nitrile	1/4″ (6)	1/2″ (13)	11 (42)	Hanging suction h	bracket and nose

1" PORTS							
650715-C	50 / 50 mix of antifreeze and water	Aluminum	Nitrile	1/4″ (6)	1″ (25.4)	35 (133)	Pump only
612999-3	50 / 50 mix of antifreeze and water	Aluminum	Nitrile	1/4″ (6)	1″ (25.4)	35 (133)	Wall mount, siphon tubes, material hoses
612999-4	Waste oil evacuation	Aluminum	Nitrile	1/4″ (6)	1″ (25.4)	35 (133)	Wall mount, inlet and outlet fluid hoses
613201-2-C	Calcium chloride tire filling	Aluminum	Neoprene	1/4″ (6)	1″ (25.4)	35 (133)	Inlet and outlet hoses, strainer, 8' suction hose, control handle, check valve



Specialty

650715-C Fuel AntiFreeze/Water Blending Pump (1", 25.4 mm NPTF Outlet)

This 1:1 ratio pump has dual inlets to allow simultaneous pumping and blending of antifreeze and water.



613201-2-C Calcium Chloride Tire-fill Pump Package

Designed for the purpose of evacuating and filling tires with calcium chloride ballast solution. Package includes a 666100-441-C, 1" (25.4 mm) port diaphragm pump. Aluminum construction with neoprene diaphragms and PTFE checks for compatibility with corrosive calcium chloride and 60154 hose / strainer / gun assembly. Also includes check valve and all required clamps and related hardware.



650717-C U.L. approved Fuel Pump

Designed specifically for high-volume transfer, bulk-unloading, or fueling applications. These pumps meet UL 79 specification code and are compatible with gasoline, aviation fuel, diesel fuel, fuel oil and kerosene.

Drum PRO Pumps Series

Diaphragm Pumps

Pro-Series Drum Diaphragm Pumps

Drum Pumps

ARO[®] Drum Pumps are available in three body materials for optimum fluid compatibility: choose from aluminum, stainless steel or polypropylene body construction.

Drum Pump Packages

Package Components Factory-Matched – ARO® Drum Pump package components contain pre-specified, matching materials of construction for complete fluid compatibility

Drum Pump Packages can be ordered in 3 styles:

- Basic: Pump, bung adapter, air safety shut-off, siphon tube, weather seal, and base
- Complete / Transfer: basic pump plus fluid hose or fluid hose with non-drip nozzle
- Complete / Dispensing: basic pump plus foot valve, hose and dispensing nozzle



Pump Features

- 11-gpm (13.4 l/m) flow capability: drum pumps offer plenty of capacity to satisfy a broad range of transfer application volume demands
- Stall-free operation: ARO[®] diaphragm drum pumps feature a patented unbalanced air valve design that avoids stall-out, even under low air-inlet pressures
- Bolted construction: ARO[®] diaphragm drum pumps utilize bolted fasteners for leak-tight integrity
- 5-year warranty

Ratio	Max flow gpm (L/min)	Displacement per cycle gal (L)	Air inlet NPT / F in (mm)	Fluid inlet NPT	Fluid outlet NPT / F	Max operating pressure psi (bar)	Suspended solids max diameter in (mm)	Shipping weight lb (kg)
1:1 R/	ATIO DRUM PL	JMP PERFORM	ANCE SPECI	FICATION	s			
1:1	11 (41.6)	.039 (.15)	1/4 (18)	Siphon tube for 55-gal Drum	1/2″ - 14	100 (6.8)	3/32″ (2.4)	22 (10) Polypropylene, basic package 26 (11.8) Aluminum, basic package 36 (16.3) Stainless, basic package

Model	Pump housing and seats	Pump dia. and balls	Lock out valve (P/N 104253-2)	Foot valve	10' (3.0 m) hose ASM	Dispense valve	Fluid service
DAB05-PPTT-2-A	Polypropylene	PTFE	Х	-	-	-	Some Acids & Caustics*
DAB05-PPCC-2-A	Polypropylene	Hytrel	Х	-	-	-	Oil
DAB05-PPUU-2-A	Polypropylene	Polyurethane	Х	-	-	-	Oil
DAB05-PPAA-2-A	Polypropylene	Santoprene	Х	-	-	-	Some Mild Acids / Mild Caustics*
DAB05-PPCC-2-N	Polypropylene	Hytrel	Х	-	Nitrile	-	Oil
DAB05-PPCC-B-M	Polypropylene	Hytrel	Х	Х	Nitrile	No-drip	Oil
DAB05-PPAA-2-B	Polypropylene	Santoprene	Х	-	EPDM	-	Some Mild Acids / Mild Caustics*
DAB05-PPUU-2-C	Polypropylene	Polyurethane	Х	-	Vinyl	-	Oil
DAB05-PPCC-B-J	Polypropylene	Hytrel	Х	Х	Reinforced Nitrile	Х	Oil
DAB05-PPAA-B-K	Polypropylene	Santoprene	Х	Х	EPDM	Х	Some Mild Acids / Mild Caustics*
DAB05-SSTT-2-A	Stainless Steel	PTFE	Х	-	-	-	Solvent
DAB05-ASTT-2-A	Alum / SS	PTFE	Х	-	-	-	Solvent
DAB05-APCC-2-A	Alum / Poly	Hytrel	Х	-	-	-	Oil / Service Fluids
DAB05-APCC-2-0	Alum / Poly	Hytrel	Х	-	Nitrile	-	Oil / Service Fluids
DAB05-APCC-B-P	Alum / Poly	Hytrel	Х	Х	Nitrile	No-drip	Oil / Service Fluids
DAB05-APCC-B-D	Alum / Poly	Hytrel	Х	Х	-	Х	Oil / Service Fluids
DAB05-APCC-B-L	Alum / Poly	Hytrel	Х	Х	Reinforced Nitrile	Х	Oil / Service Fluids
DAB05-ASAA-2-A	Alum / SS	Santoprene	Х	-	-	-	Water / Antifreeze

*Check compatability for suitability in service with material(s) being pumped



Diaphragm Pump Accessories

Hose

1/2" (12.7 mm) ID hose comes in 10' (3.0 m) lengths.

Model	Material	For use with	Fittings end / end	Dispensing nozzle used with (order separately)
621517-10	Nitrile	Polypropylene	Cam / bare	N/A
621516-10	Nitrile	Polypropylene	Cam / brass 1/4"-18 (6.3 mm) NPT male	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" (25.4) NPT	95199
622514-10	Nylon	Polypropylene	1/2" (12.7 mm) NPT / 1/2" (12.7 mm) NPT 316 stainless steel	
621518-10	Nitrile	Aluminum	Cam / bare	N/A
621520-10	Nitrile	Aluminum	Cam / brass 1/4"-18 (6.3 mm) NPTF	635129
621524-10	Nitrile	Aluminum	Cam / non-drip nozzle	N/A



621514-10, 95200, 95199 Hose, swivel, and dispensing nozzle



Note: Hose requires 95189 to adapt to 1/2" port.

Fluid Dispensing Nozzles

Model	Description		
95199	Composite Nozzle	High-flow nozzle works like gasoline nozzle; features tough composite (polypropylene) construction for caustic service	
95200	Swivel	$1^{\prime\prime}$ (25.4 mm) (M) X $1^{\prime\prime}$ (25.4) NPT (F) Polypropylene hose swivel attaches between hose and dispensing nozzle and allows operator to rotate freely; use with 95199	
77617	Oil Tapper Fitting	Plated carbon steel $1/2''-14$ (12.7 mm) NPTF x $3/8''-18$ (9.5 mm) NPTF -1; used to attach 95183 oil tapper to $1/2''$ aluminum pump	621523-10 Hose and non-drip nozzle
635129	Bibb with Trigger	1/4'' (6.3 mm) NPT(F) inlet, zinc die casting with brass, and nitrile seals for water or oil service; radiator-type bibb has $1/4''$ (6.3 mm) fluid inlet and non-drip tip	

Foot Valves

Recommended for use with dispensing nozzle. Assembly includes housing, ball check, and O-ring.



Model	Description
637336	Polypropylene with Viton O-ring and ball. Use with 67231
637337	Stainless steel with Viton O-ring and ball. Use with 67231-6 or 67231-7

Drum Bung Adapter Kits Kit contains base, bung adapter, bung seal, siphon tube, weather seal, and hardware for 55-gallon (208.1 L) drums.

Model	Base material	Tube material	Weather seal	Base seal
67231	Polypropylene	Polypropylene	UHMW PE	Viton
67231-6	Aluminum	Stainless Steel	Viton	Viton
67231-7	Stainless Steel	Stainless Steel	Viton	Viton

Note: Fasteners are 300 Series Stainless Steel

Bulk Tank Adapter Kits

Kit contains base, threaded adapter, and hardware.

Description	6	7234
Polypropylene / Viton O-ring seal 300 series stainless steel		Adapi
	Polypropylene / Viton O-ring seal	Polypropylene / Viton O-ring seal 67 Tank

Pump Outlet Adapter

Model	Description
95189	Composite Fitting - 1/2" (12.7 mm) NPT (in) x MaleCam adapter (polypropylene)
95190	Aluminum Fitting - 1/2" (12.7 mm) NPT (in) x MaleCam adapter (aluminum)

Suction Tubes

Model	Description	Pumps used with
SUCTION TU	JBES	
91020-1	1/2" (12.7 mm) galvanized suction tube for 5-gal containers; 16" (406.4 mm) long	1/2" (12.7 mm) diaphragm pumps
65986-1	Siphon tube has 6' (1.8 m) long, $3/4''$ (19.1 mm) ID hose with $3/4''$ (19.1 mm) NPT (M) outlet; hose is Neoprene over Thiokol	Drum cover for closed drum with 2" (50.8 mm) bung opening
66779	For pumping from 55-gal (208.1 L) drum; PVC tube has foot valve for positive priming; includes 76193 bung adapter, adjustable to approximately 35-1/2" (901.7 mm); 1" (25.4 mm) NPT (F) fluid outlet	Stub pumps and diaphragm pumps
61409	For pumping from 55-gal (208.1 L) drum; 90° PVC siphon tube, 35-1/2" (901.7 mm) long with 2" (50.8 mm) bung adapter for 55 gal (208.1 L) drums that can easily be cut to desired length on site; 1/2" (12.7 mm) NPT (F) outlet	1/2" (12.7 mm) diaphragm pumps and stub pumps
61412	For pumping from 55-gal (208 L) drum; Threads directly into pump inlet, includes 2" (50.8 mm) bung adapter 36-1/4" (.92 m) long; schedule 80 PVC pipe can easily be cut to desired length on site; 1/2" (12.7 mm) NPT (M) fluid outlet	1/2" (12.7 mm) diaphragm pump



Drum adapter kit

Wall-mount Bracket

Model	Description	Pumps used with	76763
DIAPHRAG	M PUMPS		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
76763	Wall-mount bracket allows pump to be located convenient to container	1/2" (12.7 mm) diaphragm pumps	
66100	Wall-mount bracket has removable mounting plate	1" (25.4 mm) diaphragm pumps	66100
62133	Wall-mount bracket	1-1/2" (38.1 mm) diaphragm pumps	

Non-metered Fluid Control Handles

Model	Description	Max working pressure psi (bar)	Fluid inlet NPT (F) in (mm)	Fluid outlet
	, GEAR OIL, TRANSMISSION FLUID			
HIGH-VOLU	IME			
635193	Has flexible rubber hose with non-drip nozzle; use with 1:1 and 3:1 pumps; Non-drip tip	600 (41)	3/4″ (19.1)	629212
635395-2	Has flexible rubber hose with non-drip nozzle; use with 5:1 and 9:1 pumps; non-drip tip	900 (63)	3/4" (19.1)	629212
STANDARD	-VOLUME			
635392	Has flexible rubber hose, built-in swivel and filter, and non-drip nozzle; non-drip tip	1,000 (69)	1/2″ (12.7)	60164
635399	Has flexible rubber hose, built-in swivel, and right-angle non-drip nozzle; non-drip tip	1,000 (69)	1/2″ (12.7)	70790
WATER, AN	TIFREEZE			
635129	Radiator bibb	300 (21)	1/4″ (6.3)	Non-drip tip

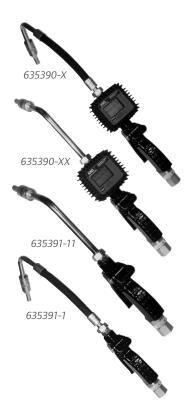


Digital, Metered Fluid Control Handles

Our metered control handle features a patented oval gear wheel design for precise and reliable measurement. Its digital LCD readout operates on two standard alkaline batteries.

- Lightweight
 Precise
- Fast reset
 · Totalizes

Model	Max flow rate gpm (L)	Meter / totalizing increments	Max working pressure psi (bar)	Fluid inlet NPT (F) in (mm)	Fluid outlet
METERED, RIC	ID NOZZLE MO	DELS			
635390-11 635390-22 635390-33	4 (15) 4 (15) 4 (15)	Pints / gallons Quarts / gallons Liters / liters	1,000 (69) 1,000 (69) 1,000 (69)	1/2″ (12.7) 1/2″ (12.7) 1/2″ (12.7)	Non-drip tip Non-drip tip Non-drip tip
NON-METERE	D, RIGID NOZZ	LE MODELS (HAND	LE AND NOZZLE O	NLY)	
635391-11	4 (15)	-	1,000 (69)	1/2″ (12.7)	Non-drip tip
METERED, FLE	EXIBLE NOZZLE	MODELS			
635390-1 635390-2 635390-3	4 (15) 4 (15) 4 (15)	Pints / gallons Quarts / gallons Liters / liters	1,000 (69) 1,000 (69) 1,000 (69)	1/2″ (12.7) 1/2″ (12.7) 1/2″ (12.7)	Non-drip tip Non-drip tip Non-drip tip
NON-METERE	D, FLEXIBLE NO	DZZLE MODELS (H4	ANDLE AND NOZZL	E ONLY)	
635391-1	4 (15)	-	1,000 (69)	1/2″ (12.7)	Non-drip tip



Digital, Metered Fluid Control Handles (continued)

Model	Max flow rate gpm (L)	Meter / totalizing increments	Max working pressure psi (bar)	Fluid NPT (F) in (mm)	inlet
METER ONLY					
635190-1	4 (15)	Pints / gallons	1,000 (69)	1/2" (12.7)	
635190-2	4 (15)	Quarts / gallons	1,000 (69)	1/2" (12.7)	
635190-3	4 (15)	Liters / liters	1,000 (69)	1/2" (12.7)	
METER, CONT	ROL HANDLES (WITHOUT NOZZLES)			
635390-30	4 (15)	Liters / liters	1,000 (69)	1/2″ (12.7)	



635190-X Order protective boot 74066 separately.

Metered Fluid Control Handles

Model	Units Of measure	Totalizing increments	Working pressure psi (bar)	Inlet size in (mm)	Fluid outlet	
PRESET	DIGITAL METERE	D FLOW CON	TROL			
Preset unit automatically shuts off when set quantity of fluid is delivered and meter indicator returns to zero. Totalizer registers up to 9,999 units.						
635360-2 635360-2	6	Gallons Gallons	1,000 (69) 1,000 (69)	1/2″ (12.7) 1/2″ (12.7)	Non-drip flex extension Non-drip rigid extension	
	it automatically shuts returns to zero. Totaliz		antity of fluid is delivered to 9,999 units.	l and meter		
635364	1 to 60 quarts	Gallons	1,000 (69)	1/2″ (12.7)	9/16" (14.3 mm) diameter non-drip tip	
635365	1 to 60 gallons	Gallons	1,000 (69)	1/2″ (12.7)	9/16" (14.3 mm) diameter non-drip tip	
635367	1 to 60 liters with auto shut-off	Liters	1,000 (69)	1/2″ (12.7)	9/16″ (14.3 mm) diameter non-drip tip	



Non-drip Nozzle / Hose

	Model	Description	Fluid inlet NPT in (mm)	Length in (mm)	Max working pressure psi (bar)	
	MOTOR OIL,	GEAR OIL, TRANSMISSION FLUID				
	629212 629226 629516 629521 6786 60798	Non-drip nozzle / hose Non-drip nozzle / hose Non-drip nozzle / hose Right-angle nozzle / hose Right-angle, rigid, non-drip nozzle Rigid, non-drip nozzle	3/4" (19.1) 1/2" (12.7) 1/2" (12.7) 1/2" (12.7) 1/4" (6.3) 1/2" (12.7)	12" (305) 11" (279) 13" (330) 15" (381) 6-1/2" (165) 5-1/2" (133)	900 62) 900 (62) 1,000 (69) 1,000 (69) 1,000 (69) 1,000 (69)	
NOZZLE, FLEXIBLE HOSE, WITH NON-DRIP TIP						
	629245-1	Flexhose, non-drip tip	1/2″ (12.7)	15″ (381)	1,000 (69)	
	NOZZLE, RIG	ID TUBE WITH NON-DRIP TIP				
	629245-2	Rigid tube, non-drip tip	1/2″ (12.7)	13″ (330)	1,000 (69)	





High-pressure Grease Control Handles

Model	Description	Max working pressure psi (bar)	Fluid inlet NPT (F) in (mm)	Fluid outlet in (mm)
GREASE	CONTROL HANDLES			
636101	Dispenses lubrication at line pressure for lubricating grease fittings; does not include nozzle or hydraulic coupler; for applications requiring high-flow capacity; remove the $1/8"$ (3.2 mm) (M) x 3/8" (9.5 mm) (M) adapter for 3/8" (9.5 mm) (F) porting	7,500 (517)	3/8″ (9.5) (F)	11/16" - 16 (17.5) (M) or 1/8" (3.2) NPT (F)
636111	Dispenses lubricant at line pressure for lubricating grease fittings; includes inlet material filter and curved nozzle with hydraulic coupler; remove the $1/8''$ (3.2 mm) (M) x $3/8''$ (9.5 mm) (M) adapter for $3/8''$ (9.5 mm) (F) porting	7,500 (517)	1/8" (3.2) (M) or 3/8" (9.5) (F)	Hydraulic coupler
636103	High-pressure booster handle delivers line pressure for normal lubrication; trigger booster feature delivers 10,000 psi (689 bar) to loose tougher fittings; includes curved nozzle with hydraulic coupler, inlet material filter and manual pressure vent for easy disconnection; do not use with whip hose	7,500 (517)	1/8" (3.2) (M) or 3/8" (9.5) (F)	Hydraulic coupler
WHIP HO	SES FOR GREASE CONTROL HANDLES*			
629742	Extra-long, wire braid (624201-02) whip hose with hydraulic coupler and swivel; overall length of 29-1/2" (749 mm); for use with coupler 636111 high-pressure control handle; allows operator to access hard-to-reach fittings	5,000 (345)	1/8″ (3.2) (F)	636046 hydraulic

*WARNING: Not for use with 636103 high-pressure booster handle.

Specialty Application Control Handle

Model	Description
WATER, ANTIF	REEZE, WINDSHIELD FLUID
635129	Fluid dispensing nozzle — 635129 bibb with trigger $1/4''$ (6.3 mm) NPT(F) inlet, zinc die casting with brass, and nitrile seals for water or oil service; radiator-type bibb has $1/4''$ (6.3 mm) fluid inlet and non-drip tip



Hand-operated Pumps

Motor Oil, Gear Oil, Transmission Fluid

Model	Description
5-GAL	
611170	Capable of high-volume delivery; includes 621597-5 hose / dispensing, 2:1, 4:1, 7:1 nozzle assembly with 5' (1.5 m), 1/2" (12.7 mm) ID hose and 72006 drum cover



611170 Container not included.

Accessories Fittings COUPLERS / SWIVELS / GREASE FITTINGS

Grease Gun Accessories

Button head coupler

636020

Standard button coupler. Can be converted to either push-on or pull-on.

636024

Standard button coupler. Can be converted to either push-on or pull-on.



636028

636046

Model	Inlet thread connection in (mm)	Length in (mm)	Max working pressure psi (bar)
636020	7/16″-27(11.1)(F)	-	8,000 (552)
636024	1/8" (3.2) NPT (F)	-	8,000 (552)
636027	1/8" (3.2) NPT (F)	1-5/8″ (41)	6,000 (414)
636028	1/8" (3.2) NPT (F)	1-5/8″ (41)	10,000 (689)
636046	1/8" (3.2) NPT (F)	1-7/16″ (37)	6,000 (414)

Standard Hydraulic Couplers



Small-diameter hydraulic coupler.

636028

Reversible jaw hydraulic coupler.



636046 Small-diameter hydraulic coupler with ball check.

Swivels

Model	Thread Size NPT x NPT in	Type of Seals	Max Working Pressure psi (bar)
STRAIGH	T SWIVEL		
636075 636085 635107 635117 635108	1/8" (M) x 1/8" (F) 3/8" (M) x 3/8" (F) 3/8" (M) x 1/2" (F) 1/2" (M) x 1/2" (F) 3/4" (M) x 3/4" (F)	Fabric with neoprene Fabric with neoprene Fabric with neoprene Fabric with neoprene Fabric with neoprene	10,000 (689.4) 10,000 (689.4) 2,000 (137.8) 2,000 (137.8) 1,000 (68.9)
Z 360° S	WIVEL		
636077 636083 636084 636086-B 636087-B	1/8" (M) x 1/8" (F) 1/8" (F) x 3/8" (F) 1/8" (F) x 1/4" (F) 1/4" (F) x 1/4" (M) 1/4" (F) x 1/4" (M)	Fabric with neoprene Fabric with neoprene Fabric with neoprene Fabric with neoprene Fabric with neoprene	10,000 (689.4) 10,000 (689.4) 10,000 (689.4) 6,700 (461.8) 6,700 (461.8)
	In	icludes 67176-5 edge-ty filter element	ре
636088 635106	3/8″ (M) x 3/8″ (F) 1/2″ (F) x 3/8″ (M)	Fabric with neoprene Fabric with neoprene	10,000 (689.4) 10,000 (689.4)



Grease Fitting Accessories

Model	Description	Thread size NPT in (mm)	Height in (mm)
STRAIGHT			
6000 6001 6026 6010	Straight Straight Straight Long straight	1/8" (3.2) (M) 1/8" (3.2) (M) 1/4" (6.3) (M) 1/4" - 28 (6.3)	21/32″ (16.7) 1-1/4″ (31.7) 7/8″ (22.2) 11/16″ (17.5)
ELBOW			
6005 6011	45° elbow 45° elbow (short)	1/8″ (3.2) (M) 1/4″ – 28 (6.3)	7/8″ (22.2) 13/16″ (20.6)
DRIVE TY	PE FITTINGS		
6060 6069	Straight Straight	5/16" (7.9) serrated 3/16" (4.8) serrated	5/8″ (15.9) 19/32″ (15.1)
ELBOW BO	DDIES		
6045	90° elbow	1/8″ (3.2) (M) x 1/8″ (3.2) (F)	1″ (25.4)

Model	Description
GREASE	FITTING EASY-OUT TOOLS
	Four-function tool • Easy-out for removing broken fittings • 1/8" (3.2 mm) NPT tap • 3/8" (9.5 mm) socket for removing hydraulic fittings • 7/16" (11.1 mm) socket for removing hydraulic fittings Four-function tool • Easy-out for removing broken fittings • 1/4"-28 (6.3 mm) tap • 5/16" (7.9 mm) socket for removing hydraulic fittings • 3/8" (9.5 mm) socket for removing hydraulic fittings



General Installation Accessories

Overrun Controls

Model	Air inlet NPT(F) in (mm)	Air outlet NPT(F) in (mm)	Pressure range psi (bar)	For use with
ARO-STOP [®] VA	LVES			
			ontainer is empty o	r fluid line is broken.
635040	1/4″ (6.3)	1/4″ (6.3)	20 – 175 (1.4 – 12.1)	LM Series and (1.4 - 12) 61204X-X Pumps and 1/2" (12.7 mm) diaphragm pump
(max flow rate of 2	23 scfm @ 90 psi)			(includes connecting hose)
23644-400	1/2″ (12.7)	1/2" (12.7) NPT (M)	20 – 175 (1.4 – 12.1)	AFX Series only (1.4 - 12) and 1″ (25.4 mm) diaphragm pump



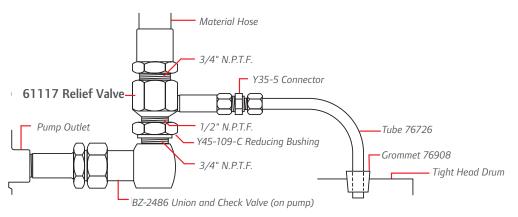
Protect your investment Pump run away happens when a material container is depleted and the pump cycles fast and needlessly. It's not good. So, protect your pump investment with an ARO-STOP® valve.





Pressure Relief Valve / Valve Kit

PRESSURE RELIEF VALVE / VALVE KITS 61117 Pressure relief valve is used on material outlet side of pump to automatically allow	
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' (0.9 m) of plastic drain tubing, and grommet (for drum attachment)	



General Installation Accessories

General Accessories

640058-2 Dolly for 16-gal (60.6 L) keg.

94421 Drum cover for 16-gal (60.6 L) keg.

640165

Follower plate for 3" (76.2 mm) LM Series and 120-lb (54.4 kg) container. For use with LM Series grease.

640015-1

Follower plate for 3" (76.2 mm) LM Series and 400-lb (181.4 kg) container. For use with LM Series grease.



640095-1-B

Follower plate for 2" (50.8 mm) Thunder Series and 35-lb (15.9 kg) container. For use with LM Series grease.





Follower plate for 3" (76.2 mm) LM Series and 35-lb (15.9 kg) container. For use with LM Series grease.

640095-2-B

67145-2

Bung adapter for 3" (76.2 mm) LM Series grease pump. For use with LM Series grease.

67145-3-B

Bung adapter for 2" (50.8 mm) LM Series oil pump. For use with LM Series oil.

67145-4-B

Bung adapter for 3" (76.2 mm) LM Series oil pump. For use with LM Series oil.



61118 Pressure relief valve kit.

77617

Oil tapper fitting (converts oil tapper to 1/2'', 12.7 mm inlet).

640164

Tie-down kit for 16-gal / 120-lb (60.6 L / 54.4 kg) containers.

71027-1 Tie-down kit for 55-gal / 400-lb (208.1 L / 181.4 kg) containers.

Dispensing Accessories

621516-10

10' (3.0 m) hose and dispensing bibb for use with diaphragm pump.



621516-10

Dispensing bibb for use with diaphragm pump.

621523-10

635129

10' (3.0 m) hose with no-drip nozzle. For use with diaphragm pump.



625123-10

95189 Poly cam coupler 1/2" (12.7 mm) NPT (M)

95190

Aluminum cam coupler 1/2" (12.7 mm) NPT (M)

Installation Accessories

65986-1

Siphon tube with 6' (1.8 m) hose for 55-gal (208.1 liter) drum with 2" (50.8 mm) bung. For use with LM Series and diaphragm pumps.

61601

61601

Siphon tube with 6' (1.8 m) hose for 55-gal (208.1 liter) drum for wall-mounted pump. For use with LM Series pump.

66779

Siphon tube for 55-gal (208.1 liter) drum. For use with LM Series and diaphragm pumps.

66779-1

Siphon tube for 55-gal (208.1 liter) drum. For use with LM Series and diaphragm pumps.

66779-2

Siphon tube with 6' (1.8 m) hose for AFX Series container. For use with LM Series and diaphragm pumps.

622701-6 6' (1.8 m) siphon hose. For use with LM Series and diaphragm pumps.

61113 Wall-mount for stub pumps. For use with LM Series pump.

61412 Siphon tube for 1/2" (12.7 mm) diaphragm pump.

76763 Wall-mount for 1/2" (12.7 mm) diaphragm pumps.

66100

Wall-mount for 1" (25.4 mm) diaphragm pumps.



67145-X

High-pressure Hose

Model	ID in (mm)	OD in (mm)	Fitting threads both ends in (mm)	Max pressure psi (bar)	Length ft (m)
BUNA-N TUB	e, neoprene (
1-WIRE BRAII	D				
623501-2	1/2″ (12.7)	29/32″ (23.0)	1/2" (12.7) NPT (M)	2,000 (138)	2′ (0.6)
623501-5	1/2″ (12.7)	29/32″ (23.0)	1/2" (12.7) NPT (M)	2,000 (138)	5′ (1.5)
623501-6	1/2″ (12.7)	29/32″ (23.0)	1/2" (12.7) NPT (M)	2,000 (138)	6′ (1.8)
623501-8	1/2″ (12.7)	29/32″ (23.0)	1/2" (12.7) NPT (M)	2,000 (138)	8′ (2.4)
2-WIRE BRAII	D				
624201-2	1/4″ (6.3)	11/16″ (17.5)	1/8" (3.2) NPT (F)	5,000 (345)	2′ (0.6)
624201-6	1/4″ (6.3)	11/16″ (17.5)	1/8" (3.2) NPT (F)	5,000 (345)	6′ (1.8)
624201-10	1/4″ (6.3)	11/16″ (17.5)	1/8" (3.2) NPT (F)	5,000 (345)	10′ (3)
624201-30	1/4″ (6.3)	11/16″ (17.5)	1/8" (3.2) NPT (F)	5,000 (345)	30′ (9.1)
624401-4	3/8″ (9.5)	27/32" (21.4)	3/8" (9.5) NPT (M)	4,000 (276)	4′ (1.2)
624401-8	3/8″ (9.5)	27/32" (21.4)	3/8" (9.5) NPT (M)	4,000 (276)	8′ (2.4)
624601-4	3/4″ (19.1	1-1/4″ (31.7)	3/4" (19.1) NPT (M)	2,250 (155)	4′ (1.2)
ELASTOMER	TUBE, POLYES	TER COVER			
1-WIRE BRAII	D				
628067-3	1″ (25.4)	1-1/4″ (31.7)	1" (25.4) NPT (M)	800 (55)	3′ (0.9)

In selecting a hose, be sure the hose material is compatible with the fluid being pumped and that the maximum working pressure will not be exceeded in the application. Only those hose length options listed with each model are available. Substitute -XX with -5, -15, -25, etc., to indicate length selection. (Example: Substitute -XX with length selection, such as -50. If length is single digit, use that digit only. Do not add zeros.)

*CAUTION: These hoses cannot be used with 100:1 ratio pumps.

Never use a hose with a maximum pressure rating lower than the highest pressure the pump can generate.

Low-pressure Hose

Model	ID in (mm)	OD in (mm)	Fitting threads both ends in (mm)	Max pressure psi (bar)	Length ft (m)
NEOPRENE T	UBE, NEOPREN	E COVER			
2-FABRIC BR	AID				
622651-5	3/4" (19.1)	1-3/16″ (30.2)	3/4" (19.1) NPT (M)	600 (41)	5′ (1.5)
622651-6	3/4" (19.1)	1-3/16″ (30.2)	3/4" (19.1) NPT (M)	600 (41)	6′ (1.8)
622651-10	3/4″ (19.1)	1-3/16″ (30.2)	3/4" (19.1) NPT (M)	600 (41)	10′ (3)
622651-15	3/4" (19.1)	1-3/16″ (30.2)	3/4" (19.1) NPT (M)	600 (41)	15′ (4.6)
BUNA-N TUE	BE, NEOPRENE	COVER			
2-FABRIC BR	AID				
622201-3	1/4″ (6.3)	5/8″ (15.9)	1/4" (6.3) NPT (M)	250 (17)	3′ (0.9)
622201-5	1/4″ (6.3)	5/8″ (15.9)	1/4" (6.3) NPT (M)	250 (17)	5′ (1.5)
622201-25	1/4″ (6.3)	5/8″ (15.9)	1/4" (6.3) NPT (M)	250 (17)	25′ (7.6)



Fluid Control Valves

Model	Inlet outlet NPT in (mm)	Body material	Seat material	Max working pressure psi (bar)
BALL VALVE		material	material	
	the on-off flow of fluid materia mpatibility for application.	al or air. Select proper workir	ng pressure	
66592	1/2″ (12.7) (F)	Carbon steel	PTFE	2,000 (138)
66593	3/8″ (9.5) NPS (M) x 3/8″ (9.5) (M)	303 stainless steel	PTFE	4,000 (276)
PLUG VALVE	S			
Y28-1 Y28-2	1/4″ (6.3) (F) 1/8″ (3.2) (F)	Brass Brass	N/A N/A	150 (10) 150 (10)
NEEDLE VAL	VES			
92818	1/4″ (6.3) (F) x 1/4″ (6.3) (M)	Brass	Leather	125 (9)
GLOBE VALV	'ES			
Y26-1	3/4″ (19.1) (F)	Brass	Graphite	125 (9)
BALL VALVE	S			
104077-2 104077-3 104077-4	1/4″ (6.3) (F) 3/8″ (9.5) (F) 1/2″ (12.7) (F)	Nickel-plated brass Nickel-plated brass Nickel-plated brass	PTFE PTFE PTFE	225 (16) 225 (16) 225 (16)



Fittings

Model	Thread size NPT in (mm)	Material of construction	
STRAIGHT COUPLIN	GS — 150 PSI (10 BAR) MAX		
6,750 PSI (446 BAR) MAX		
77617	3/8" (9.5) (M) x 1/2" (12.7) (M)	Zinc-plated steel	
5,000 PSI (345 BAR) MAX		
76751	1/4″ (6.3) (M) x 11/16″-16 (17.5) (M)	Steel	
8,000 PSI (552 BAR) MAX		
2722 73581 76493	1/8" (3.2) (M) x 11/16-16" (17.5) (M) 1/4" (6.3) (M) x 3/8" (9.5) (M) 1/8" (3.2) (M) x 3/8" (9.5) (M)	Steel Steel Steel	
REDUCING BUSHING	S — 150 PSI (10 BAR) MAX		
Y45-5-C Y45-9-C	1/4" (6.3) (F) x 1/2" (12.7) (M) 1/2" (12.7) (F) x 3/4" (19.1) ((M)	Iron Iron	



77617

Fittings (continued)

Model	Thread size NPT in (mm)	Material of construction
3,000 PSI (207 BAR		
Y45-102-C Y45-105-C Y45-106-C Y45-109-C	1/8" (3.2) (F) x 3/8" (9.5) (M) 1/4" (6.3) (F) x 1/2" (12.7) (M) 3/8" (9.5) (F) x 1/2" (12.7) (M) 1/2" (12.7) (F) x 3/4" (19.1) (M)	Steel Steel Steel Steel
10,000 PSI (690 BA	AR) MAX	
6788	1/4" (6.3) (F) x 1/2" (12.7) (M)	Steel
STREET ELBOWS —	150 PSI (10 BAR) MAX	
Y43-1-C Y43-2-C Y43-4-C Y43-5-C Y43-6-C	1/8" (3.2) (M) x 1/8" (3.2) (F) 1/4" (6.3) (M) x 1/4" (6.3) (F) 1/2" (12.7) (M) x 1/2" (12.7) (F) 3/4" (19.1) (M) x 3/4" (19.1) (F) 1" (25.4) (M) x 1" (25.4) (F) plated GS — 150 PSI (10 BAR) MAX	Iron Iron Iron Iron Iron
Y43-44	1/2" (12.7) (F) x 1/2" (12.7) (F)	Iron
Y43-48-C	1-1/2'' (38.1) (F) x $1-1/2''$ (38.1) (F)	Iron
REDUCING COUPLIN	IGS — 8,000 PSI (552 BAR) MAX	
4280	1/8″ (3.2) (F) x 3/8″ (9.5) (F)	Steel
SHORT NIPPLES —	150 PSI (10 BAR) MAX	
Y27-2-C Y27-52-C Y27-54-C Y27-55-C Y27-56-C Y27-58-C 8,000 PSI (552 BAR	$\begin{array}{c} 1/4'' \ (6.3) \ (M) \times 1/4'' \ (6.3) \ (M) \\ 1/4'' \ (6.3) \ (M) \times 1/4'' \ (6.3) \ (M) \\ 1/2'' \ (12.7) \ (M) \times 1/2'' \ (12.7) \ (M) \\ 3/4'' \ (19.1) \ (M) \times 3/4'' \ (19.1) \ (M) \\ 1'' \ (25.4) \ (M) \times 1'' \ (25.4) \ (M) \\ 1-1/2'' \ (38.1) \ (M) \times 1-1/2'' \ (38.1) \ (M) \end{array}$	Plated iron Plated iron Plated iron Plated iron Plated iron Plated iron
676		Steel
1950 70749	1/8" (3.2) (M) x 1/8" (3.2) (M) 1/4" (6.3) (M) x 1/4" (6.3) (M) 1/2" (12.7) (M) x 1/2" (12.7) (M)	Steel Steel
LONG NIPPLES — 1	50 PSI (10 BAR) MAX	
LENGTH — 2" (51 M	ИМ)	
Y44-11-C	1/4″ (6.3)	Plated iron
LENGTH — 2-1/2"	(63.5 MM)	
Y44-12-C	1/4″ (6.3)	Plated iron
ELBOWS — 150 PSI	(10 BAR) MAX	
Y43-12-C	1/4″ (6.3) (F) x 1/4″ (6.3) (F)	Iron
Y43-15-C	3/4" (19.1) (F) x 3/4" (19.1) (F)	Iron
3,000 PSI (207 BAR	R) MAX	
Y43-214-N Y43-215	1/2" (12.7) (F) x 1/2" (12.7) (F) 3/4" (19.1) (F) x 3/4" (19.1) (F)	Steel Steel



Y45-106-C





4280





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SWIVELS / COUPLERS / FLUID BALL CHECK UNIONS

Fittings (continued)

Fittings

Model	Thread size NPT in (mm)	Material of construction	Max pressure psi (bar)
SWIVEL UNI	DNS		
75364	1/4" (6.3) (M) x 1/4" (6.3) (F)	Steel	10,000 (690)
75366	1/2" (12.7) (M) x 1/2" (12.7) (F)	Steel	6,750 (466)
75367	3/4" (19.1) (M) x 3/4" (19.1) (F)	Steel	4,375 (302)
75368	1" (25.4) (M) x 1" (25.4) (F)	Steel	3,550 (245)
75369	1/4" (6.3) (F) x 1/4" (6.3) (F)	Steel	10,000 (690)
PLAIN TEE -	- FEMALE		
Y43-32-C	1/4" (6.3) x 1/4" (6.3) x 1/4" (6.3)	Iron	150 (10)
Y43-233-C	3/8″ (9.5) x 3/8″ (9.5) x 3/8″ (9.5)	Steel	3,000 (207)
PIPE PLUGS	– MALE		
Y17-50	1/8" (3.2) countersunk (hex)	Steel	10,000 (690)
Y17-51	1/4" (6.3) countersunk (hex)	Steel	10,000 (690)
FEMALE AD	APTER		
4280	3/8" (9.5) (F) x 1/8" (3.2) NPT (F)	Steel	8,000 (552)
ADAPTER UN	NIONS		
Y167-3	1/2" (12.7) (F) x 3/8" (9.5) NPT (M)	Steel	6,000 (414)
Y167-4	3/4" (19.1) (F) x 1/2" (12.7) NPT (M)	Steel	5,000 (345)
Y167-5	1/2" (12.7) (F) x 1/4" (6.3) NPT (M)	Steel	6,000 (414)
4295	1/8" (3.2) PTF SAE short (F)	Steel	8,000 (552)
	x 7/16″-27 (11.1) (M)		
4616	1/2" (12.7) (F) x 1-3/8"-18 (34.9) (M)	Steel	8,000 (552)





Y43-233-C



Y17-10

Fluid Couplers

Model	Description	
92021	Quick connect fluid coupler (female) $-$ 3/4″ (19.1) NPT (F) couples with 92022 fluid connector	9202

WARNING: To ensure safe operation, be sure the maximum working pressure of your fluid handling system does not exceed the maximum working pressure of the fittings.

Fluid Ball Check Unions

Model	Body material	Ball material	Seat material	Inlet NPT in (mm)	Outlet NPT in (mm)	Max working pressure psi (bar)
66559	Carbon steel	440C stainless steel	440 F stainless steel	1″ (25.4) (M)	1″ (25.4) (F)	8,000 (552)





66559 Used to prevent back flow of material. **FRL**

Accessories FILTERS / REGULATORS / LUBRICATORS



1/8" and 1/4" Ports **Max Inlet Press:** Poly bowl 150 psi Metal bowl 250 psi Series size: Miniature



1/4" and 3/8" Ports Max Inlet Press: Poly bowl 150 psi Metal bowl 250 psi Series size: Compact



3/8", 1/2" and 3/4" Ports Max Inlet Press: Poly bowl 150 psi Metal bowl 250 psi Series size: Standard



3/4" and 1" Ports Max Inlet Press: Metal bowl 250 psi

Series size: Heavy Duty



1", 1-1/4", 1-1/2", 2" and 3" Ports

Max Inlet Press: Filter Metal bowl 300 psi Lubricator Metal bowl 200 psi Series size: Super Duty

- **SAFETY:** Designed with locking bowls and clear multilingual markings
- BEST-IN-CLASS AIR FLOW **PERFORMANCE:**

38% better than the competition

- MODULARITY: All ARO-Flo products are designed to integrate with each other
- QUICK ASSEMBLY: Can be easily, safely and quickly assembled or disassembled with a minimum of tools – no fuss or complications

	1/8″ Port Size	1/4″ Port Size	3/8″ Port Size	1/2" Port Size	3/4″ Port Size	1″ Port Size	1-1/2" Port Size	2″ Port Size
1000 Series	46 s	cfm*						
1500 Series		85 s	cfm*					
2000 Series			150 scfm*					
3000 Series					215 :	scfm*		
Super Duty Series							1200 scfn	n
Specialty Regulators		Preci	sion, Stai	nless Ste	el and Bra	ass Regul	ators	

* Flow rates based off of Filter/Regulator/Lubricator combination unit. Individual units flow rates are higher.



1	Modular Pipe Adapter	7	Regulator
2	T-Brackets	8	ARO-Flo Check Valve
3	Modular Spacers	9	Manifold Port Block
4	Modular Lock-Out Valve	10	Pressure Switch
5	Soft-Start Valve	11	Lubricator
6	Filter w/indicator		

FRL

Piston Pump Selection Guide (Most popular)

Pump Motor Size	Filter Metal Bowl w/Sight Glass	Regulator	Piggyback, Poly Bowl w/Guard	Piggyback, Poly Bowl w/Guard, Auto Drain	Piggyback, Metal Bowl w/Sight Glass	Piggyback, Metal w/ Sight Glass, Auto Drain	FRL Combo (3 Piece) Metal Bowl w/Sight Glass	F/R-L Combo (2 Piece) Metal Bowl w/Sight Glass	FRL Port Size
2"	F35221-410	R37221-600	P39224-600	P39224-604	P39224-610	P39224-614	C38221-810	C38221-610	1/4" NPT
3"	F35221-410	R37221-600	P39224-600	P39224-604	P39224-610	P39224-614	C38221-810	C38221-610	1/4" NPT
4.25"	F35341-410	R37341-600	P39344-600	P39344-604	P39344-610	P39344-614	C38341-810	C38341-610	1/2" NPT
6"	F35341-410	R37341-600	P39344-600	P39344-604	P39344-610	P39344-614	C38341-810	C38341-610	1/2" NPT
8"	F35351-410	R37351-600	P39354-600	P39354-604	P39354-610	P39354-614	C38351-810	C38351-610	3/4" NPT
10"	F35451-410	R37451-600			P39454-610	P39454-614	C38451-810	C38451-610	3/4" NPT
12"	F35451-410	R37451-600			P39454-610	P39454-614	C38451-810	C38451-610	3/4" NPT
2"	525201 410	007001 000	D20204 C00	D20204 C04	020204 610	020204 614	C20201 010	620201 610	1 / 411 DCD
-	F352B1-410	R372B1-600	P392B4-600	P392B4-604	P392B4-610	P392B4-614	C382B1-810	C382B1-610	1/4" BSP
3"	F352B1-410	R372B1-600	P392B4-600	P392B4-604	P392B4-610	P392B4-614	C382B1-810	C382B1-610	1/4" BSP
4.25"	F353D1-410	R373D1-600	P393D4-600	P393D4-604	P393D4-610	P393D4-614	C383D1-810	C383D1-610	1/2" BSP
6"	F353D1-410	R373D1-600	P393D4-600	P393D4-604	P393D4-610	P393D4-614	C383D1-810	C383D1-610	1/2" BSP
8"	F353E1-410	R373E1-600	P393E4-600	P393E4-604	P393E4-610	P393E4-614	C383E1-810	C383E1-610	3/4" BSP
10"	F354E1-410	R374E1-600			P394E4-610	P394E4-614	C384E1-810	C384E1-610	3/4" BSP
12"	F354E1-410	R374E1-600			P394E4-610	P394E4-614	C384E1-810	C384E1-610	3/4" BSP

Diaphragm Pump Selection Guide (Most popular)

Pump Size	Coalescing Filter Metal Bowl w/Sight Glass	Regulator	Piggyback, Poly Bowl w/Guard	Piggyback, Poly Bowl w/Guard, Auto Drain	Piggyback, Metal Bowl w/Sight Glass	Piggyback Metal Bowl w/Sight Glass, Auto Drain	FRL Combo (3 Piece) Metal Bowl w/Sight Class	FRL Combo (2 Piece) Metal Bowl w/Sight Glass	FRL Port Size
1/4", 3/8", 1/2", 3/4"	F35121-320	R37121-600	P39124-600	P39124-604	P39124-620	P39124-624	C38121-820	C38121-620	1/4" NPT
1"	F35221-310	R37221-600	P39224-600	P39224-604	P39224-610	P39224-614	C38221-810	C38221-610	1/4" NPT
3:1 Ratio	F35341-310	R37341-600	P39344-600	P39344-604	P39344-610	P39344-614	C38341-810	C38341-610	1/2" NPT
1-1/2"	F35341-310	R37341-600	P39344-600	P39344-604	P39344-610	P39344-614	C38341-810	C38341-610	1/2" NPT
2"	F35351-310	R37351-600	P39354-600	P39354-604	P39354-610	P39354-614	C38351-810	C38351-610	3/4" NPT
3″	F35451-410	R37451-600			P39454-610	P39454-614	P39454-611	C38451-810	3/4" NPT
1/4", 3/8", 1/2", 3/4"	F351B1-420	R371B1-600	P391B4-600	P391B4-604	P391B4-620	P391B4-624	C381B1-820	C381B1-620	1/4" BSP
1"	F352B1-410	R372B1-600	P392B4-600	P392B4-604	P392B4-610	P392B4-614	C382B1-810	C382B1-610	1/4" BSP
3:1 Ratio	F353D1-410	R373D1-600	P393D4-600	P393D4-604	P393D4-610	P393D4-614	C383D1-810	C383D1-610	1/2" BSP
1-1/2"	F353D1-410	R373D1-600	P393D4-600	P393D4-604	P393D4-610	P393D4-614	C383D1-810	C383D1-610	1/2" BSP
2"	F353E1-410	R373E1-600	P393E4-600	P393E4-604	P393E4-610	P393E4-614	C383E1-810	C383E1-610	3/4" BSP
3"	F354E1-410	R374E1-600			P394E4-610	P394E4-614	P394E4-611	C384E1-810	3/4" BSP

Warranty AIR SYSTEMS COMPONENTS AND LUBRICATION EQUIPMENT

Air Systems Components Warranty

Ingersoll Rand[®] Fluid Products warrants to the original-use purchaser of the Ingersoll Rand[®] / ARO[®] air systems components depicted in this catalog that Ingersoll Rand[®] will repair or replace, free of charges, including return shipping costs within the continental United States of America, any such product that under normal use and service proves defective in material or workmanship, as determined by Ingersoll Rand inspection, two years from date of purchase, provided the claimed defective product, or part thereof, is promptly returned to the Ingersoll Rand[®] Service Repair Center or a factory-authorized service repair center, with transportation charges prepaid.

If Ingersoll Rand[®] inspection discloses no defect in material or workmanship, repair or replacement and return will be made at customary charges.

The foregoing warranty supersedes, voids, and is in lieu of all or any other warranties, expressed or implied, and no warranty of merchantability or fitness for particular purpose is intended or made. The sole obligation of Ingersoll Rand[®] and the sole remedy of the original-use purchaser is as stated above and in no event shall Ingersoll Rand[®] be liable for any special, direct, indirect, incidental, consequential; or other damages or expenses of any nature including, without limitation, loss of profits or production time incurred by the original-use purchaser or any other party.

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Ingersoll Rand[®] warrants to the original-use purchaser of the products depicted in this catalog that Ingersoll Rand[®] will repair or replace, free of charges, including return shipping costs within the continental United States of America, any such product that under normal use and service proves defective in material and workmanship, as determined by Ingersoll Rand[®] inspection, within (A) one year from date of purchase of said products, other than the following, (B) five years from date of purchase of LM and LP Series pumps, (C) five years from date of purchase of a diaphragm pump, and (D) five years from date of purchase of a numericatured swivels, non-metered control handles, 4-1/4", 6", 8" pumps, drains, follower plates, tie-downs, siphon tubes, and drum covers, provided the claimed defective product, or part thereof, is promptly returned to the Ingersoll Rand[®] factory or Customer Service Center with transportation charges prepaid.

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If Ingersoll Rand[®] inspection discloses no defect in material or workmanship, repair or replacement and return will be made at customary charges.

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