



ARO® Pro-Series Diaphragm Pumps

1 Inch Metallic Diaphragm Pumps



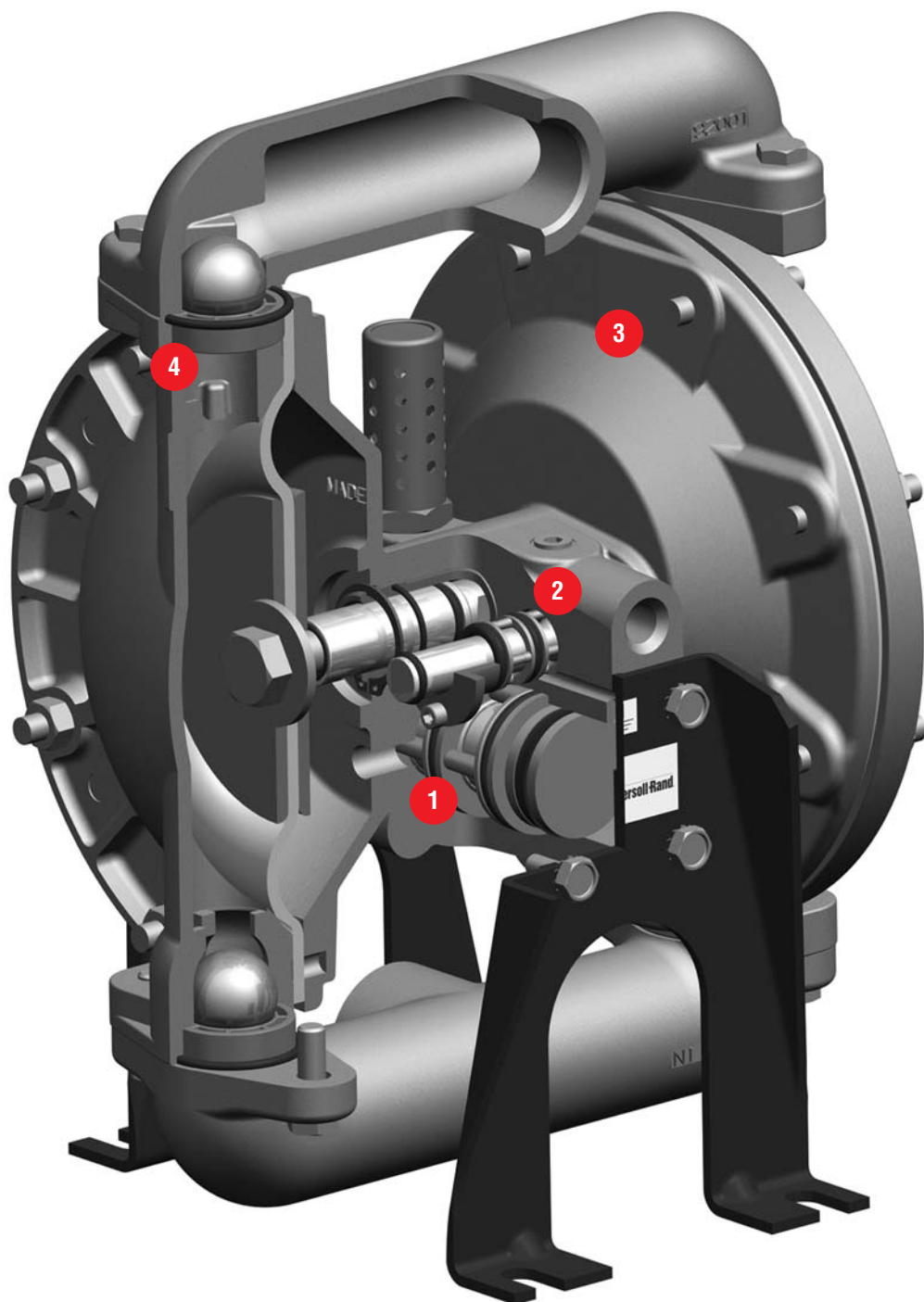
airpumping.co.uk

est. 1979

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***Ideal for General Industrial and
OEM installation applications.***

Value Proposition Pro-Series Pumps



Ingersoll Rand Diaphragm Pumps: Keys to ARO Air Motor Technology

[1] “Unbalanced” Major Air Valve

- Unbalanced valve design eliminates valve centering and pump stall-out, even under low air inlet pressures.
- “O” Ring seals prevent waste of expensive compressed air. Air flow stops when fluid flow stops.
- Maintenance is simple: just replace the worn “O” Rings and “U” Cups.

[2] Independent Pilot Rod

- Utilizes pneumatics and mechanical action to shift Pilot Rod. Ensures positive pilot signal, avoiding stall-out.

[3] Broad Material Selection

- Options allow you to optimize compatibility between the pump and fluid being moved.
- Non-Metallic Diaphragm Pumps are available in polypropylene, PVDF and groundable acetal. Check models for availability.
- Metallic Diaphragm Pumps are available in aluminum, stainless steel and cast iron. Check models for availability.

[4] Diaphragm/Ball Check Options

- Fit your pump with the diaphragms and ball checks needed to maximize fluid compatibility and abrasion resistance.

Introducing the New High-Performance Pro's: PD05, PD03: Aro's new Pro Series family has all new members at both ends of the delivery spectrum. In the low-to-medium flow range, we offer our new PD05 (1/2") and PD03 (3/8") models. Featuring our patented air valve technology, including Simul Shift and D-Valve designs, users are assured of stall-free operation, with optimum energy efficiency. These pumps also feature fluid deliveries previously unavailable in port sizes like these: 14.4 GPM (1/2") and 10.4 (3/8")...that's impressive delivery in a small package! ARO pioneered the 1/2", high-demand, low-maintenance diaphragm pump in the eighties - now its time to step it up-with the new Pro PD0s.

Introducing the New High-Flow Pro's: 666250 and 666300: At the far end of the fluid delivery spectrum, the new ARO Pro Series 2" and 3" port models feature Aro's patented “Unbalanced”, stall-free air valve design and bolted construction for leak-tight integrity. With maximum delivery rates of 172 GPM (2") and 237 GPM (3"), the new high-flow Pros are the ideal answer to big volume applications - where performance with economy are a must.

1" Metallic Models Pro-Series Pumps

1" Metallic Performance Specifications

Ratio:	1:1
Maximum Flow:	35-g.p.m. (133-l.p.m.)
Displacement per cycle:	0.16-Gallons (0.60-Liters)
Air Inlet: (Female)	1/4 - 18 N.P.T.F. - 1
Fluid Inlet:	1 - 11-1/2 N.P.T.F. - 1 Rp 1 (1-11 BSP parallel)
Fluid Outlet:	1 - 11-1/2 N.P.T.F. - 1 Rp 1 (1-11 BSP parallel)
Max. operating pressure:	120-psi (8.3-bar)
Suspended solids max. dia.:	1/8-in. (3.2-mm)
Weight: lbs (kg)	
	666100-X-C (aluminum) 19 (8.6)
	666101-X-C (stainless) 36 (16.3)
	666102-X-C (cast iron) 31 (14.1)

Note: Add 8-lbs (3.63-kg) for cast iron air motor section

Maximum dry suction lift: 20-ft (6.1-m) Rubber fitted



Ordering Menu

6661X	X	-	X	X	X	-	C
Center Body/ Threads	Fluid Caps/ Manifold Material		Seat Material	Ball Check Material	Diaphragm Material		
0 Aluminum, N.P.T.F.	0 Aluminum (steel hardware)		1 Aluminum	3 Viton	3 Viton		
1 Cast Iron, N.P.T.F.			2 316 Stainless	4 PTFE (Teflon)	4 PTFE (Teflon) /		
2 Aluminum, BSP	1 Stainless Steel (steel hardware)		3 Polypropylene	8 Polyurethane	Santoprene		
3 Cast Iron, BSP	2 Cast Iron (steel hardware)		4 PVDF	A Stainless Steel	9 Hytrel		
	9 Stainless Steel, dual outlet (steel hardware)		5 Carbon Steel	C Hytrel	B Santoprene		
	A Aluminum, (stainless hardware)		8 Hard 400 Stainless Steel	E Santoprene			
	B Stainless Steel (stainless hardware)						
	C Cast Iron (stainless hardware)						
	D Stainless Steel, dual outlet (stainless hardware)						

Accessories

Air Line Connection Kit* I Kit No. 66073-2

Kit includes Piggyback Filter/Regulator with gauge, pipe nipple and a 5-foot section of air hose.

ENGINEERING DATA

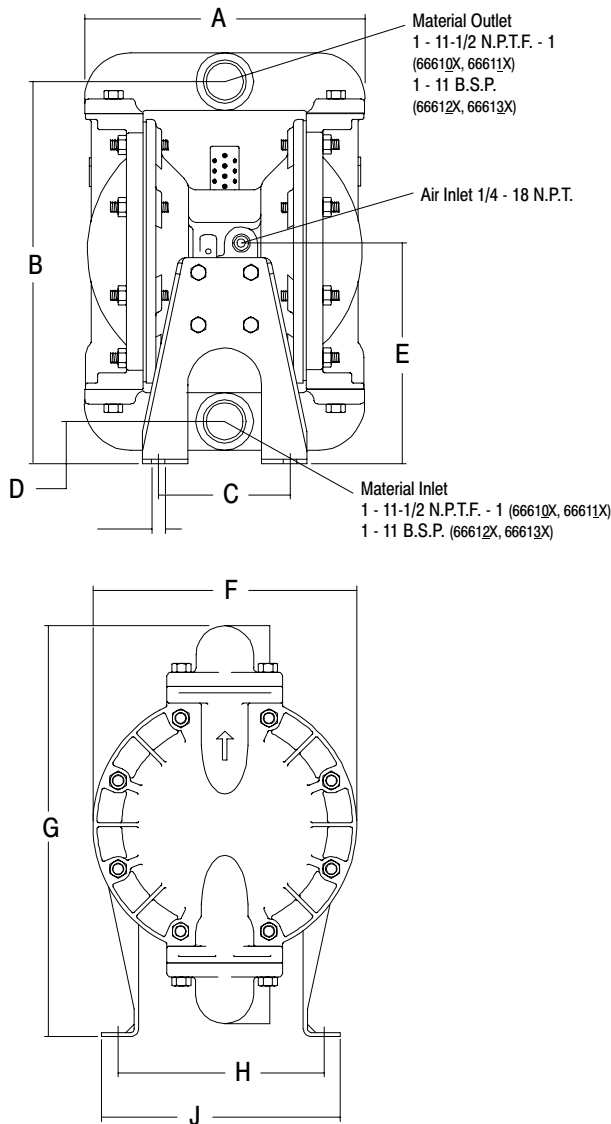
6661XX-XXX-C

1" METALLIC DIAPHRAGM PUMP

RATIO SERIES:	1:1
FLUID P.S.I. RANGE:	20 - 120

RELEASED: 12-20-96
REVISED: 6-15-01
S-878

DIMENSIONAL DATA



DIMENSIONS

A	8-9/16" (217 mm)	E	6-1/2" (165 mm)	H	6-1/4" (159 mm)
B	11-9/16" (294 mm)	F	8" (203 mm)	J	7-5/16" (186 mm)
C	4" (102 mm)	G	12-1/2" (318 mm)	K	7/16" (11 mm)
D	1-1/4" (32 mm)				

NOTE: Dimensions are shown in inches and (mm), supplied for reference only and are typically rounded up to the nearest 1/16 inch.

SPECIFICATIONS

CONSTRUCTION

Model Series	66610X-XXX-C
Pump Type	Metallic, Air Operated, Double Diaphragm
Ratio	1:1
Material Inlet / Outlet (female)	
66610X-X and 66611X-X	1 - 11-1/2 N.P.T.
66612X-X and 66613X-X	1 - 11 B.S.P.
Air Inlet (female)	1/4 - 18 N.P.T.
Air Exhaust (female)	3/8 - 18 N.P.T.F. - 1
Weight	Aluminum 19 lbs (8.62 kgs) Cast Iron 31 lbs (14.06 kg) Stainless Steel 36 lbs (16.33 kgs)
	(add 8 lbs (3.63 kgs) for cast iron air motor section)
Air Section Service Kit	637118-C
Fluid Section Service Kit	637119-XX-C

66610X - X X X -C

637119 - X X X -C

Diaphragm Material
Ball Material

EXAMPLE: Model 666100-361-C
Fluid Section Service Kit is 637119-61-C

PERFORMANCE

Air Inlet Pressure Range	20 - 120 p.s.i. (1 - 8.3 bar)
Maximum Material Inlet Pressure	10 p.s.i. (0.69 bar)
Fluid Pressure Range	20 - 120 p.s.i. (1 - 8.3 bar)
Maximum Flow Rate (flooded inlet)	35 g.p.m. (133 l.p.m.)
Maximum Particle Size	1/8" dia. (3.2 mm)
Maximum Temperature Limits	
Polypropylene seats	35° to 150°F (2° to 66°C)
Kynar (PVDF) seats	10° to 200°F (-12° to 93°C)
Displacement / Cycle @ 100 p.s.i.	0.16 gal. (.60 lit.)
Noise Level @ 70 p.s.i. - 60 c.p.m.①	64.5 db(A)②

① Tested with 93110 muffler installed.

② The pump sound pressure level has been updated to an Equivalent Continuous Sound Level (L_{Aeq}) to meet the intent of ANSI S1. 13-1971, CAGI-PNEUROP S5.1 using four microphone locations.

ACCESSORIES:

65010 Neoprene "O" Ring Air Motor Kit
65764 Viton "O" Ring Air Motor Kit
66073-1 Air Line Kit
637167 Abrasion Resistant Conversion Kit

PERFORMANCE CURVES

