

# ARO

Pumps for the Construction and Mining Industries



**INGERSOLL-RAND**  
**FLUID PRODUCTS**

# Air-Powered Submersible Pumps

For water removal on Construction and Mining Sites

*Water on site or down the hole?*

Need a submersible pump that can cope with mud, leaves, twigs, bilge, gunk and even sewage? The answer is the Ingersoll-Rand/Aro range of sump pumps.

Running on compressed air means there's no fuel tanks, electrical connections or burnt out motors to worry about.

Despite their compact size and light weight, their ultra-rugged construction can take plenty of abuse and still discharge over 750 l/min.

Try one on your toughest job and just see what a real pump can do.

- Simple design - few moving parts
- Handles a wide variety of debris-laden applications
- Can also be used for simple transfer requiring high flows (750 l/min. average) with high discharge head (20 metres average)
- Self-priming
- Adjustable Impeller and Impeller Cover help maintain peak performance
- Closed-type Impeller promotes greater efficiency when pumping against high heads
- Ultra-rugged body construction ensures durability
- Lightweight and extremely portable
- Pressurised lubrication of the Impeller Shaft Seals prolongs operational life and resists leakage
- Patented Speed Controller is guaranteed for the life of the pump
- Totally submersible

## TYPICAL APPLICATIONS

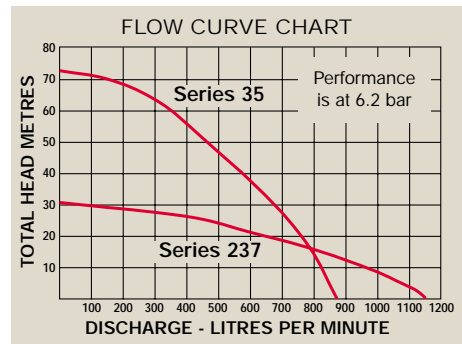
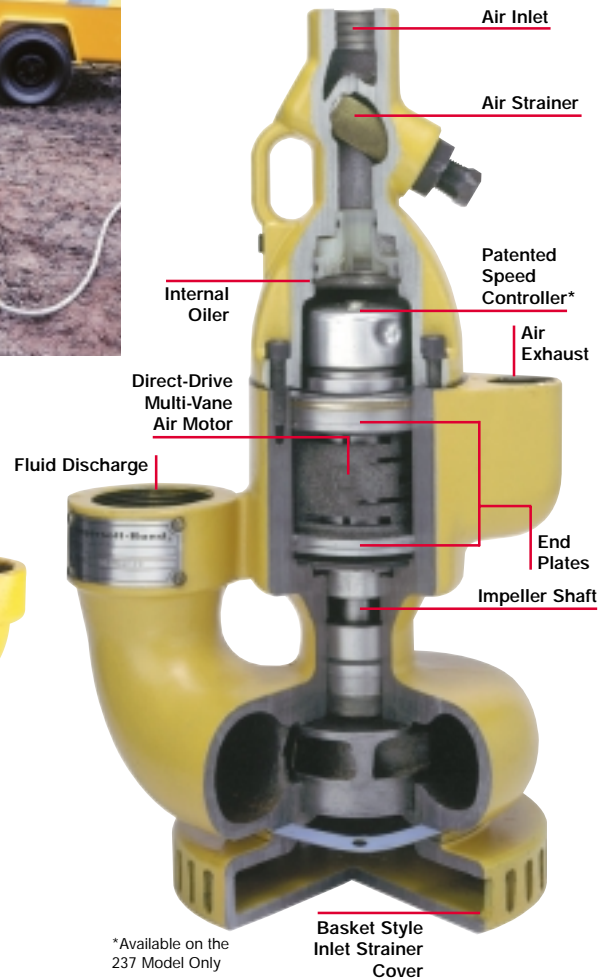
- Mining
- Construction
- Plant Machine Sumps



P237A1-EU



P35A3-EU



Specifications at 620 kPa air pressure.

Model	Pump housing material	Discharge pipe tap size		Weight	Height	Air consumption	Size of opening pump will pass through	Air inlet		Exhaust	
		NPT	BSP					Pipe tap size	Size hose recommended	Pipe tap size	Size hose recommended
		in	in	kg	mm	l/sec.	mm x mm	in	mm	in	mm
P237A1-EU	Iron	2½	-	21.8	448	50	222 x 222	¾	19	1¼	32
P237A3-EU	Iron	-	2½	21.8	448	50	222 x 222	¾	19	1¼	32
P35A1-EU	Iron	2	-	36.0	570	75	214 x 357	1	25	1¼	32
P35A3-EU	Iron	-	2	36.0	570	75	214 x 357	1	25	1¼	32

See Page 6 for Accessories and Service Kits

# Air-Powered Pumps

For water removal on Construction and Mining Sites

*Flooded Worksite?  
We'll pump away  
your problems!*

Known throughout industry as the "Unstallables", Ingersoll-Rand/Aro Diaphragm pumps have long been favourites with fluid handling professionals for their patented no-stall and ice-free operation, as well as a host of other design attributes.

To increase the range of applications, pre-assembled screen inlet pumps and retrofittable inlet kits are available to help tackle problems with unwanted and unavoidable debris.

- Stall-free, ice-free, debris-free fluid handling
- Available complete with screen or with extra retrofit screen kit
- Tough metallic construction in aluminium with stainless steel fasteners
- Screens constructed in carbon steel with e-coat finish
- No special manifold required - screen comes ready installed on pump making it ready for immediate service

### TYPICAL APPLICATIONS

- Construction
- Mining
- Chemical Process
- Industrial Maintenance
- Marine

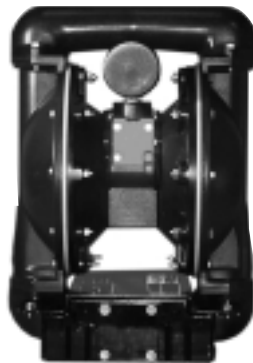


PS20A-AAS-AAA



PD20A

PS15A-AAS-PAA



PS30A-AAS-AAA

Specifications at 620 kPa air pressure.

Model	Weight	Body construction	Valve type	Max. performance	Air inlet	Air exhaust	Fluid inlet/outlet	Air consumption	Solids max. Ø
	kg			ltr/min.				l/sec.	mm
WITH SCREENED INLET									
PS15A-AAS-PAA	24	Aluminium	Ball	379	½" NPT	½" NPT	1½" NPT	65	6.4
PS15A-BAS-PAA	24	Aluminium	Ball	379	½" BSP	½" BSP	1½" BSP	65	6.4
PS20A-AAS-AAA	30	Aluminium	Ball	644	¾" NPT	¾" NPT	2" NPT	70	6.4
PS20A-BAS-AAA	30	Aluminium	Ball	644	¾" BSP	¾" BSP	2" BSP	70	6.4
PS30A-AAS-AAA	52	Aluminium	Ball	1041	¾" NPT	¾" NPT	3" NPT	80	9.5
PS30B-BAS-AAA	52	Aluminium	Ball	1041	¾" BSP	¾" BSP	3" BSP	80	9.5
WITHOUT SCREENED INLET									
666150-322-C	23	Aluminium	Ball	379	½" NPT	1½" NPT	1½" NPT	65	6.4
666170-322-C	23	Aluminium	Ball	379	½" BSP	1½" BSP	1½" BSP	65	6.4
PD20A-AAP-AAA	29	Aluminium	Ball	644	¾" NPT	1½" NPT	2" NPT	70	6.4
PD20A-BAP-AAA	29	Aluminium	Ball	644	¾" BSP	1½" BSP	2" BSP	70	6.4
PD30A-AAP-AAA	51	Aluminium	Ball	1041	¾" NPT	1½" NPT	3" NPT	80	9.5
PD30A-BAP-AAA	51	Aluminium	Ball	1041	¾" BSP	1½" BSP	3" BSP	80	9.5

See Page 6 for Accessories and Service Kits

# Air-Powered Lubrication Pump Packages

For Construction, Maintenance and Heavy Duty Lubrication

*Need to oil or grease your machinery?  
We have powerful stall-free,  
ice-free answers!*



**Gear Oil, 5:1 Ratio,  
3" Diameter Air Motor**  
**60litre (16 U.S. gallons)**  
**Portable Gear Oil Package**  
Includes:  
LM2305A-31 Basic Pump,  
635190-3 Meter  
635391-1 (flex) Control Handle,  
640058-2 Dolly,  
94421 Drum Cover  
623501-6 Material Hose (1.8m).

**Model No.** LP3100-2



**ARO-PAK®  
Self-Contained  
Lubricators**  
Holds 2.3kg (5lbs) medium  
pressure lubricant and 40 PSI air  
prime for portability. Air pressure  
helps dispense lubricant.  
Includes:  
1.2m of 1/2" I.D. hose.  
High pressure control handle  
(517 bar).

**Model No.** 640110



**54kg (120lbs) Filler Pump**  
2:1, 4:1, 7:1 Adjustable Ratio  
Used to fill grease gun and 640110  
ARO•PAK  
Includes:  
72096 Drum Cover, Dust Cap  
and Chain  
(640027 Follower Plate not included  
- order separately)

**Model No.** 611019-1

Containers and Air Connectors shown NOT included  
Except LP3007-1 (includes Container)

**IMPORTANT**  
The 50:1 ratio grease packages listed have a  
maximum air inlet pressure of 10 bar

See Page 7 for Accessories and Service Kits



**Grease, 50:1 Ratio,  
3" Diameter Air Motor**  
**18kg (35lbs) Grease Package**  
Includes:  
LM2350E-21-B Pump  
94420 Drum Cover with 94334 Handle  
640095-2-B Follower Plate  
624201-10 Material Hose (3m),  
636077 Z-Swivel  
76493 Adapter  
636103 Booster Gun

**Model No.** LP3001-1



**27kg (60lbs) Grease Package**  
Includes:  
LM2350E-61-B Pump  
71740-1 Drum with Cover and Tie  
Down Brackets  
Portable Hand Cart  
636111 Control handle  
624401-4 Material Hose (1.2m).

**Model No.** LP3007-1



**54kg (120lbs) Grease Package**  
Includes:  
LM2350E-31-B Pump  
94421 Cover  
624201-10 Material Hose (3m),  
636077 Z-Swivel  
640057 Dolly  
636103 Booster Gun  
640165 Follower Plate  
76493 Adapter.

**Model No.** LP3003-1



**181kg (400lbs) Grease Package**  
Includes:  
LM2305A-41-B Pump  
94422 Drum Cover  
624401-4 Material Hose (1.2m)  
622201-3 Air Line Hose (0.9m)  
Order Follower Plate 640015 - when  
required.

**Model No.** LP3005-1

# Air-powered High Pressure Cleaning Equipment

*Time to clean up  
your act?  
We've got the power!*

## Spray Wash Pump Packages



See Page 7 for Accessories and Service Kits



### 4 1/4" High Pressure Wall-Mounted Spray Package

- Includes:
- 613100-1 Pump
  - 61113 Wall Bracket
  - 61139-1 208 litre Suction Tube Assembly
  - 622427-40 Material Hose (12m)
  - 641523 Control Handle
  - 61133 Spray Wand
  - TP6250-18 Spray Tip
  - L26241-010 Airline Lubricator.

Model No. 613104



### 8" High Pressure Wall-Mounted Spray Package

- Includes:
- 613112-K36-B Pump
  - 92460 Muffler
  - 66554-3 Heavy Duty Cart
  - 622702-10 Suction Hose (3m)
  - 79198 Stainless Steel Inlet Strainer
  - 79196 Material Outlet Manifold
  - 622427-40 Material Hose (12m)
  - 641523 Control Handle
  - 61133-1 Spray Wand
  - TP8050-18 Spray Tip
  - 651728 Heavy-Duty Air Filter Regulator
  - Lubricator

Model No. 613117-B

## The High-Power Cleaning Solution

Perfect for cleaning:

- Cars and Trucks
- Engines
- Construction Equipment
- Aircraft
- Farm Equipment
- Plant Structures
- Railway Equipment
- Fleet Vehicles
- Mining Equipment

With the application of:

- Degreasers
- Detergents
- Cleaning Solutions
- Water
- Metal Brighteners
- Aluminium Brighteners

## Calcium Chloride Tyre-Fill Pump Package



Designed for the purpose of evacuating and filling tyres with calcium chloride ballast solution.

Package includes:

- 666100-441-C, 1" Ports Diaphragm Pump. (aluminium construction with neoprene diaphragms and Teflon® checks for compatibility with corrosive calcium chloride)
  - 60154 Hose/Strainer/Gun Assembly
- Also includes Check Valve and all required clamps and related hardware.

*Having trouble  
staying on the  
ground?  
We'll keep you  
down to earth!*

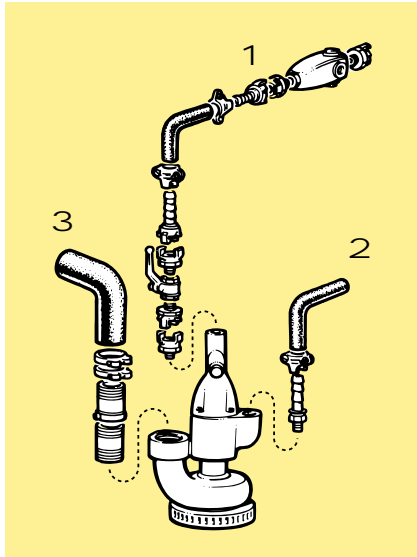
See Page 7 for Accessories and Service Kits

Model No. 613201-2-C

# Accessories and Service Kits Pumps

*Looking for pumping equipment  
to dry out your site?  
We're the single source supplier  
for all your needs!*

## Centrifugal Sump Pumps



Kit Part Nos.			
Series	Inlet	Exhaust	Discharge
P35	251-K1	251-K2	251-K3
P237	226-K1	251-K2	251-K3

### 1 Air Inlet Kits

Part No.	Description	Quantity
<b>251-K1</b>		
XM-26	Male Coupling 1"	3
X-25	Hose Coupling 25mm	2
G	Safety Collar 25mm	2
8LUB16CA3	Lubricator	1
XM-26	Male Coupling 1"	2
6126	Valve 1"	1
25-39	Hose 25mm	1
<b>226-K1</b>		
XM-20	Male Coupling ¾"	3
X-19	Hose Coupling 19mm	2
E	Safety Collar 19mm	2
8LUB16CA3	Lubricator	1
XM-26	Male Coupling 1"	2
6120	Valve ¾"	1
19-31	Hose 19mm	1

### 2 Exhaust Kits

Part No.	Description	Quantity
<b>251-K2</b>		
R-3326	Male Coupling for Hose	1
PDA125-SHC	Safety Collar	1
40-58-5M	Hose 40mm	1

### 3 Discharge Kits

Part No.	Description	Quantity
<b>251-K3</b>		
SF-CD	Fitting	1
251-KSBF	Female Hose Connector	1
251-SHC	Safety Collar	2
251-DH20	Discharge Hose 2"	1

For Sump Pump Repair Kits please refer to Operation and Maintenance Manuals

## Diaphragm Pumps

### ARO-STOP Valve



Description	Used With	Model No.
Pump overrun control shuts off air to pump when material container is empty or line is broken. Quick set and reset feature included.	1½" & 2" Pumps	23644-400
	3" Pumps	635043

### Air Line Connection Kit



Description	Used With	Model No.
Kit includes Piggyback Filter/Regulator with gauge, pipe nipple and 1.5m section of air hose.	1½", 2" (Non-Metallic)	66084-1
	2" Metallic (Ball & Flap)	66312
	3"	66109

### High Flow Pump Air Motor Mufflers



Description	Used With	Model No.
Muffler helps reduce pump sound levels and assures ice-free operation. Model 94810 is recommended in continuous duty operations. Model 94117 is used in intermittent duty operations.	2", 3" Metallic Pumps	94810 (Cont. Duty)
	(All other pump sizes, muffler included standard)	94117 (Interm. Duty)

### Screened Inlet Adapter Kits



Description	Used With	Model No.
Carbon steel, E-Coated screen prevents unwanted solids from entering pump. Kit includes hardware for easy, quick attachment to pump	1½" Ports Aluminium Pump	67174-15
	2" Ports Aluminium Pump	67174-20
	3" Ports Aluminium Pump	67174-30
	Aluminium Pump	

### Air Section Repair Kits

1½" Pumps	637118-2
2" & 3" Pumps	637302

### Fluid Section Repair Kits

1½" Pumps	637124-22
2" Pumps	637309-AA
3" Pumps	637303-AA

For complete Diaphragm Pump performance and dimensions, refer to catalogue no. 9333-P

# Accessories and Service Kits

For Lubrication and High Pressure Cleaning Equipment and Tyre-Fill Pump Packages

## High Pressure Grease Control Handles for LP3001, LP3007, LP3003 and LP3005



Description	Maximum Working Pressure bar	Fluid Inlet NPT	Fluid Outlet
For use with direct piping of product to wall station. Includes: 636111 high-pressure control handle 636077 "Z" swivel 624201-15 hose (4.6m)	345	1/8 (M)	Hydraulic Coupler

**Model No.** 615154

Dispenses lubricant at line pressure for lubricating grease fittings. Includes: Inlet material filter Curved nozzle with hydraulic coupler  Remove the 1/8 (M) x 3/8 (M) adapter for 3/8 (F) porting	517	1/8 (M) or 3/8 (F)	Hydraulic Coupler
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**Model No.** 636111

## For ARO-PAK 640110



High-pressure booster handle delivers line pressure for normal lubrication. Trigger booster feature delivers 689 bar to break loose tougher fittings. Includes: Curved nozzle with hydraulic coupler Inlet material filter Manual pressure vent for easy disconnection.	517	1/8 (M) or 3/8 (F)	Hydraulic Coupler
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Warning: Do not use with whip hose!

**Model No.** 636103

### Bung Adapter Seal Kit

Water tight seal kit makes Thunder usable in all working and weather conditions i.e. oil rigs. For oil package 67088-4

**Model No.** 67088

### Tie-Down Bracket Kit

Kit fixes/holds down cover on 60 litre/50kg. containers. Kit includes brackets, drum & tie rods and mounting hardware.

**Model No.** 640164

### Airline Connection Kit

Includes "mini" air filter/regulator assembly. Kit includes piggyback, filter/regulator with gauge, pipe nipple and 5ft section of hose

**Model No.** 66073-1

### Low Level Cutoff

For 2" 3:1 oil pump.

**Model No.** 67086

Part No.	Description	Inlet thread	Length mm	Maximum Working Pressure bar
<b>Hydraulic Adapters</b>				
629713	Extra capacity hydraulic extension adapter has flexible rubber hose. Use with standard hydraulic coupler	1/2 NPT (M)	304	345
636003	Hydraulic adapter has locking sleeve to fit standard diameter coupler	-	177	552
636039	Hydraulic adapter has locking sleeve for use on nozzle, hose or adapters with 1/2 NPT (M). Push on, pull off connector fits standard diameter hydraulic fitting	1/2 NPT (M)	-	552
636065	Needle point adapter has rubber tip	-	-	552
<b>Standard Hydraulic Couplers</b>				
636027	Small diameter hydraulic coupler	1/2 NPT (F)	41	414
636028	Reversible jaw hydraulic coupler	1/2 NPT (F)	41	689
636030	Hydraulic coupler and tube	1 1/16 - 16 NPT (F)	-	-
636037	Hydraulic coupler and tube	1/2 NPT (F)	159	-
636046	Small diameter hydraulic coupler with ball check	1/2 NPT (F)	37	414

## Repair Kits

Part No.	Description
<b>Gear Oil and Grease Pumps for complete pump</b>	
637226	For LP3100-2
637227-B	For LP3001-1, LP3003-1, LP3005-1, LP3007-1
<b>Tyre-Fill Pumps</b>	
637118-C	Air Motor
637119-41-C	Fluid Section
<b>Wash Pumps</b>	
61268	For Air Motor - 613104
637001	For Fluid Section - 613104
66614	For Air Motor - 613117-B
637211-K33	For Fluid Section - 613117-B

### High Pressure Cleaning



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### Air Operated Pumps for water removal



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### Submersible Pumps



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### Greasing and Oiling



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### Calcium Chloride Tyre-Fill



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### Portable Self-Contained Lubricators



PAGE 4

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