

118 Duhui Road, Minhang District, Shanghai 201109, China

© 20240402 Intradin (Shanghai) Machinery Co.,Ltd. Reproduction of this (or any part thereof)

without the permission of Intradin (Shanghai) Machinery is prohibited by law.

Tel: 86-21-64908190 Fax: 86-21-64856185

Website: www.intradin.com

E-mail: iti-fluid@intradinchina.com



Fluid Handling Equipment

For Vehicle Service



COMPANY PROFILE



Shanghai Facility



Huzhou Facility



Vietnam Facility

Intradin is a global supplier of tools and equipment, with products covering fluid handling equipment, outdoor power equipment, hydraulic components, and home improvement tools.

With a commitment to quality and reliability, Intradin provides exceptional products and services to customers in over 100 countries worldwide in automotive, outdoor, agriculture, and industrial markets.

Intradin has established four manufacturing facilities in Shanghai, Huzhou, Qingdao in China and Vietnam, which have a wide range of production equipments and comprehensive testing methods to ensure the high level compliant products.

As a certified company, Intradin's product design, manufacturing and service comply with GB/T ISO 9001: 2016/ISO 9001: 2015 standard, all products must surpass 100% quality test including dimension, chemical, metallurgical, mechanical, physical and endurance. With high social responsibility, the company also have passed environment management system GB/T 24001-2016/ ISO 4001: 2015 and Occupational Health & Safety management system ISO 45001:2018.

To optimize customer's profit, Intradin provides 1-5 years limited warranty and US\$2,000,000 Product Liability Insurance worldwide.







MANUFACTURING CAPABILITY













Contents



REELS

e Reel	
d/Cable Reel	The Reel Expert
d/Cable Reel	ORKS

FLUID & LUBRICATION EQUIPMENT

Oil Pump	17-23
Grease Pump	24-27
Oil Meter & Valve	28-31
Grease Meter & Valve	32
Oil Distribution Equipment	33-39
Grease Distribution Equipment	40-43
Water Oil Equipment	44-48
Drum Application	49
Hand Operated Equipment	50
Pressure Sprayer	



FUEL TRANSFER EQUIPMENT

Diaphragm Pump	52-54
UREA/DEF Transfer Solution	55-59



AAPENDIX

APPENDIX	60-61
----------	-------

Intradin provides solutions for managing all fluids used in vehicle service facilities: lubricants, antifreeze, coolant, windshield wash fluid, AdBlue/DEF, etc. Our products include complete portfolios for pumps, meters, reels, control valves, dispensing units and more.













Intradin develops reliable and efficient products to various needs in the maintenance service of passenger cars, vans, heavy trucks, buses, fleets and industrial vehicles.















HR815 | SPRING DRIVEN HOSE REEL

- Steel construction with corrosion resistant powder coating.
- Full flow solid swivel joint.
- Multi-position release ratchet spring fully enclosed.
- Four direction non-snog rollers reduce hose wear abrasion.
- Wall, ceiling or floor mount.





Four direction rollers reduce hose wear abrasion

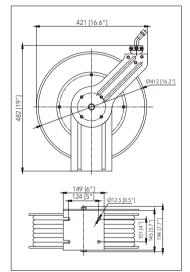
Reinforced Steel

The steel-stamped guide arm is reinforced to reduce any angular pull





Item No.: BR0103 140° Pivot Wall Bracket for Optional



LOW PRESSURE AIR/WATER REELS

Q'TY 20'CY: 620pcs

Item No.	Ref. No.	Hose I.D.	Hose Length	Working Pressure	Inlet/Outlet	Hose Material	Package	Weight
HR815.01	28157153	3/8"	50'	300psi	1/4"	Hybrid Polymer	16.9"x9.1"x19.7"	39.6lbs
HR815.04	28157153	3/8"	50'	300psi	1/4"	Rubber	16.9"x9.1"x19.7"	39.6lbs
HR815.02/HR815.03	28157153	3/8"	50'/15m	300psi/20bar	3/8"	Hybrid Polymer	16.9"x9.1"x19.7"/43x23x50cm	39.6lbs/18kgs
HR815.05	28157153	3/8"	50'	300psi	3/8"	Rubber	16.9"x9.1"x19.7"	39.6lbs
Hose maximum temperature 176°F (80°C). The hose length measurement is from the connection part.								



HR808 | WELDING HOSE REEL

- Heavy-duty steel construction with corrosion resistant powder coating.
- Swivel body and inlet are both permanently identified with machined grooves on the acetylene side to assure proper installation.
- Full flow swivel joint.





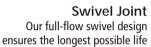
For Acetylene

For Oxygen



Reinforced Steel

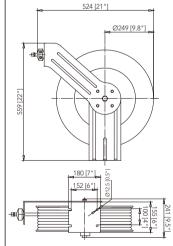
The steel-stamped guide arm is reinforced to reduce any angular pull

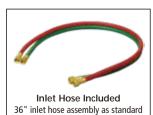


Double O-Ring Seal Double O-Ring seal design prevents leakage

Corrosion Resistant

Steel components are individually powder coated to virtually eliminate corrosion





OXYGEN-ACETYLENE REEL

Q'TY 20'CY: 390pcs

Item No.	Ref. No.	Hose I.D.	Hose Length	Working Pressure	Inlet/Outlet	Hose Material	Package	Weight
HR808.13	28087152	1/4"	50'	300psi	9/16"UNF	Rubber	20.7"x9.8"x23.0"	58.3lbs
HR808.33	28087152	1/4"	15m	20bar	1/4"BSP	Rubber	52x23.5x56.5cm	26kgs
HR808.34	28087202	1/4"	20m	20bar	1/4"BSP	Rubber	52x23.5x56.5cm	28kgs
Hose maximum tempera	ature 176°F (80°0	TI	ne hose length measurement is from the	connection part.				

3



HR860 | SPRING DRIVEN HOSE REEL

- Heavy ribbed steel plate to ensure strong support.
- Special swivel joint for easy maintenance and repair.
- Ball bearing swivel joint structure, largely reducing the friction between swivel spool and swivel body.





Corrosion-Resistant
Heavy-duty steel construction with
corrosion resistant powder coating

Adjustable Double Guide Arm Offers the greatest amount of stability and versatile adjustments

Robust Latch Strong latch mechanism assures long service life

Center-Located Spring Spring locates in the middle to ensure stability

Strengthened Frame Heavy duty structure for durable use in critical environment

Hybrid Design Wide profile combined with strong design assures maximum service life





HR860 | SPRING DRIVEN HOSE REEL

• The reels incorporate metal forms to ensure the greatest possible strength and functions equally well in both mobile and permanent mount application.





LOW PRESSURE AIR/WATER REELS

Q'TY 20'CY: 396pcs

Item No.	Ref. No.	Hose I.D.	Hose Length	Working Pressure	Inlet/Outlet	Hose Material	Package	Weight
HR860.05/HR860.15	28607154	1/2"	50'/15m	300psi/20bar	1/2"	NBR Rubber	20.1"x10.4"x20.3"/52x27x52cm	60.8lbs/25kgs
HR860.03/HR860.13	28607153	3/8"	50'/15m	300psi/20bar	3/8"	NBR Rubber	20.1"x10.4"x20.3"/52x27x52cm	58.6lbs/22.5kgs
Hose maximum temperature 176°F (80°C). The hose length measurement is from the connection pa								connection part.

MEDIUM PRESSURE WATER/OIL REELS

Q'TY 20'CY: 396pcs

Item No.	Ref. No.	Hose I.D.	Hose Length	Working Pressure	Inlet/Outlet	Hose Material	Package	Weight
HR860.08/HR860.18	28608154	1/2"	50'/15m	2320psi/160bar	1/2"	S.A.E.100R1 Wire Braid	20.1"x10.4"x20.3"/52x27x52cm	64.8lbs/25kgs
HR860.07	28608153	3/8"	50'	2610psi	3/8"	S.A.E.100R1 Wire Braid	20.1"x10.4"x20.3"	62.4lbs/24.5kgs
Hose maximum tempera	ture 210°F (100	°C).				The I	nose length measurement is from the co	onnection part.

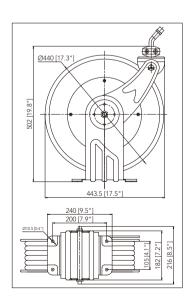
HIGH PRESSURE GREASE/HYDRAULIC OIL REELS

Q'TY 20'CY: 396pcs

Item No.	Ref. No.	Hose I.D.	Hose Length	Working Pressure	Inlet/Outlet	Hose Material	Package	Weight
HR860.09/HR860.19	28609152	1/4"	50'/15m	5800psi/400bar	1/4"	S.A.E.100R2 Wire Braid	20.1"x10.4"x20.3"/52x27x52cm	62.5lbs/24.5kgs
HR860.10/HR860.20	28609153	3/8"	50'/15m	4785psi/330bar	3/8"	S.A.E.100R2 Wire Braid	20.1"x10.4"x20.3"/52x27x52cm	68.6lbs/25kgs
Hose maximum temperature 210°F (100°C). The hose length measurement is from the connection part								









HR21X & HR22X SERIES | EXPLOSION PROOF HEAVY DUTY HOSE REEL

- Explosion proof
 - Explosion-proof equipment certified according to the European ATEX directives.
- Gasoline transferring
 - Specially designed and built to eliminate sources of ignition to allow gasoline dispensing.
- Corrosion fluids application
- Solutions for transferring corrosive fluids and chemical liquids.
- Stainless Steel model available
 Specially designed to provide reinforced safety for demanding industrial use in harsh environment applications.
- RoHS and REACH compliant

 Meet the environmental requirements of ROHS and REACH.





HR21X Carbon Steel

HR22X Stainless Steel



Double Arm Structure Offers the greatest amount of stability and versatile adjustments

Universal Hose Stopper Automatically stops retracting hose for safety

> Stainless Steel Material AISI 304 stainless steel included swivel joint

Reinforced Steel Flange

The steel-stamped flange is reinforced for strength

Structural Strength

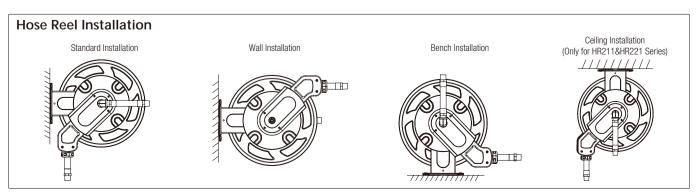
Heavy gauge steel frame included stiffening ribs for strength



Ex h IIB T4 Gb. Ta = -20°C to +60°C









HR211&HR212&HR213 | EXPLOSION PROOF HEAVY DUTY CARBON STEEL HOSE REEL

LOW PRESSURE AIR/WATER REELS

Item No.	Hose I.D.	Hose Length	Working Pressure	Inlet/Outlet	Hose Material	Package	Weight	Q'TY 20'CY
HR211.01/HR211.10	3/8"	82'/25m	300psi/20bar	3/8"	NBR Rubber	25.5"x12.2"x26"/65x31x66cm	78.5lbs/35.7kgs	200pcs
HR211.02/HR211.11	1/2"	82'/25m	300psi/20bar	1/2"	NBR Rubber	25.5"x12.2"x26"/65x31x66cm	91.5lbs/41.6kgs	200pcs
HR212.01/HR212.11	3/8"	100'/30m	300psi/20bar	3/8"	NBR Rubber	24.8"x15.0"x28.5"/63x38x72.5cm	118.0lbs/53.6kgs	170pcs
HR212.02/HR212.12	1/2"	100'/30m	300psi/20bar	1/2"	NBR Rubber	24.8"x15.0"x28.5"/63x38x72.5cm	127.6lbs/58kgs	170pcs
HR213.01/HR213.07	1/2"	165'/50m	300psi/20bar	1/2"	NBR Rubber	24.8"x21.6"x28.5"/63x55x72.5cm	188.1/85.5kgs	110pcs
Hose maximum tempera	ture 176°F (80°	°C)				The hose length measurem	ent is from the conn	ection part.

LOW PRESSURE AIR/OIL/WATER REELS

Item No.	Hose I.D.	Hose Length	Working Pressure	Inlet/Outlet	Hose Material	Package	Weight	Q'TY 20'CY		
HR211.03/HR211.12	3/4"	40'/12m	300psi/20bar	3/4"	NBR Rubber	25.5"x12.2"x26"/65x31x66cm	79.2lbs/36.0kgs	200pcs		
HR211.04/HR211.13	1"	26'/8m	300psi/20bar	1"	NBR Rubber	25.5"x12.2"x26"/65x31x66cm	88.22lbs/40.1kgs	200pcs		
HR212.03/HR212.13	3/4"	50'/15m	300psi/20bar	3/4"	NBR Rubber	24.8"x15.0"x28.5"/63x38x72.5cm	127.8lbs/58.1kgs	170pcs		
HR212.04/HR212.14	3/4"	65'/20m	300psi/20bar	3/4"	NBR Rubber	24.8"x15.0"x28.5"/63x38x72.5cm	133.3lbs/60.6kgs	170pcs		
HR212.05/HR212.15	1"	50'/15m	300psi/20bar	1"	NBR Rubber	24.8"x15.0"x28.5"/63x38x72.5cm	134.2lbs/61.0kgs	170pcs		
HR213.02/HR213.08	3/4"	130'/40m	300psi/20bar	3/4"	NBR Rubber	24.8"x21.6"x28.5"/63x55x72.5cm	191.6lbs/87.1kgs	110pcs		
HR213.03/HR213.09	1"	65'/20m	300psi/20bar	1"	NBR Rubber	24.8"x21.6"x28.5"/63x55x72.5cm	167.2lbs/76.0kgs	110pcs		
HR213.04/HR213.10	1"	100'/30m	300psi/20bar	1"	NBR Rubber	24.8"x21.6"x28.5"/63x55x72.5cm	180.4lbs/82.0kgs	110pcs		
Hose maximum tempera	Hose maximum temperature 176°F (80°C) The hose length measurement is from the connection part.									

LOW PRESSURE UREA/DEF REELS

Item No.	Hose I.D.	Hose Length	Working Pressure	Inlet/Outlet	Hose Material	Package	Weight	Q'TY 20'CY
HR211.05/HR211.14	3/4"	40'/12m	150psi/10bar	3/4"	EPDM Rubber	25.5"x12.2"x26"/65x31x66cm	79.2lbs/36kgs	200pcs
HR212.06/HR212.16	3/4"	50'/15m	150psi/10bar	3/4"	EPDM Rubber	24.8"x15.0"x28.5"/63x38x72.5cm	127.8lbs/58kgs	170pcs
HR212.07/HR212.17	3/4"	65'/20m	150psi/10bar	3/4"	EPDM Rubber	24.8"x15.0"x28.5"/63x38x72.5cm	133.3lbs/60.6kgs	170pcs
HR213.05/HR213.11	3/4"	130'/40m	150psi/10bar	3/4"	EPDM Rubber	24.8"x21.6"x28.5"/63x55x72.5cm	191.6lbs/87kgs	110pcs
Hose maximum tempera	ture 176°F (80°0	<u> </u>				The hose length measurem	ent is from the conn	ection part.

MEDIUM PRESSURE OIL AND SIMILAR MEDIA REELS

Item No.	Hose I.D.	Hose Length	Working Pressure	Inlet/Outlet	Hose Material	Package	Weight	Q'TY 20'CY			
HR211.06/HR211.15	3/8"	82'25m	2610psi/180bar	3/8"	S.A.E.100R1 Wire Braid	25.5"x12.2"x26"/65x31x66cm	88lbs/40.0kgs	200pcs			
HR211.07/HR211.16	1/2"	65'/20m	2320psi/160bar	1/2"	S.A.E.100R1 Wire Braid	25.5"x12.2"x26"/65x31x66cm	86.5lbs/39.3kgs	200pcs			
HR211.08/HR211.17	1/2"	82'25m	2320psi/160bar	1/2"	S.A.E.100R1 Wire Braid	25.5"x12.2"x26"/65x31x66cm	91.9lbs/41.8kgs	200pcs			
HR211.09/HR211.18	3/4"	40'/12m	1520psi/105bar	3/4"	S.A.E.100R1 Wire Braid	25.5"x12.2"x26"/65x31x66cm	84.5lbs/38.4kgs	200pcs			
HR211.21	1"	26'	1260psi	1"	S.A.E.100R1 Wire Braid	25.5"x12.2"x26"/65x31x66cm	94.6lbs/43kgs	200pcs			
HR212.08/HR212.18	3/8"	100'/30m	2610psi/180bar	3/8"	S.A.E.100R1 Wire Braid	24.8"x15.0"x28.5"/63x38x72.5cm	125.2lbs/57kgs	170pcs			
HR212.09/HR212.19	1/2"	100'/30m	2320psi/160bar	1/2"	S.A.E.100R1 Wire Braid	24.8"x15.0"x28.5"/63x38x72.5cm	132.8lbs/60.4kgs	170pcs			
HR212.21/HR212.23	3/4"	65'/20m	1520psi/105bar	3/4"	S.A.E.100R1 Wire Braid	24.8"x21.6"x28.5"/63x38x72.5cm	136.2lbs/61.9kgs	170pcs			
HR212.22/HR212.24	1"	50'/15m	1260psi/87bar	1"	S.A.E.100R1 Wire Braid	24.8"x21.6"x28.5"/63x38x72.5cm	143.2lbs/65.1kgs	170pcs			
HR213.06/HR213.12	1/2"	165'/50m	2320psi/160bar	1/2"	S.A.E.100R1 Wire Braid	24.8"x21.6"x28.5"/63x55x72.5cm	180.8lbs/82.2kgs	110pcs			
Hose maximum tempera	Hose maximum temperature 210°F (100°C) The hose length measurement is from the connection part.										

HIGH PRESSURE GREASE AND SIMILAR MEDIA REELS

Item No.	Hose I.D.	Hose Length	Working Pressure	Inlet/Outlet	Hose Material	Package	Weight	Q'TY 20'CY
HR211.20/HR211.19	3/8"	82'/25m	4785psi/330bar	3/8"	S.A.E.100R2 Wire Braid	25.5"x12.2"x26"/65x31x66cm	96.1lbs/43.7kgs	200pcs
HR212.10/HR212.20	3/8"	100'/30m	4785psi/330bar	3/8"	S.A.E.100R2 Wire Braid	24.8"x15.0"x28.5"/63x38x72.5cm	138.2lbs/62.8kgs	170pcs
Hose maximum tempera	ature 210°F (100°C)				The hose length measureme	nt is from the conn	ection part.



HR221&HR222&HR223 | EXPLOSION PROOF HEAVY DUTY STAINLESS STEEL HOSE REEL

LOW PRESSURE AIR/WATER REELS

Item No.	Hose I.D.	Hose Length	Working Pressure	Inlet/Outlet	Hose Material	Package	Weight	Q'TY 20'CY
HR221.01/HR221.12	3/8"	82'/25m	300psi/20bar	3/8"	NBR Rubber	25.5"x12.2"x26"/65x31x66cm	78.5lbs/35.7kgs	200pcs
HR221.02/HR221.13	1/2"	82'/25m	300psi/20bar	1/2"	NBR Rubber	25.5"x12.2"x26"/65x31x66cm	91.5lbs/41.6kgs	200pcs
HR222.01/HR222.11	3/8"	100'/30m	300psi/20bar	3/8"	NBR Rubber	24.8"x15.0"x28.5"/63x38x72.5cm	117.9lbs/53.6kgs	170pcs
HR222.02/HR222.12	1/2"	100'/30m	300psi/20bar	1/2"	NBR Rubber	24.8"x15.0"x28.5"/63x38x72.5cm	128.6lbs/58kgs	170pcs
Hose maximum tempera	ture 176°F (80	°C)				The hose length measurem	ent is from the conn	ection part.

LOW PRESSURE AIR/OIL/WATER REELS

Item No.	Hose I.D.	Hose Length	Working Pressure	Inlet/Outlet	Hose Material	Package	Weight	Q'TY 20'CY
HR221.03/HR221.14	3/4"	40'/12m	300psi/20bar	3/4"	NBR Rubber	25.5"x12.2"x26"/65x31x66cm	79.2lbs/36.0kgs	200pcs
HR221.04/HR221.15	1"	26'/8m	300psi/20bar	1"	NBR Rubber	25.5"x12.2"x26"/65x31x66cm	88.2lbs/40.1kgs	200pcs
HR222.03/HR222.13	3/4"	65'/20m	300psi/20bar	3/4"	NBR Rubber	24.8"x15.0"x28.5"/63x38x72.5cm	133.3lbs/60.6kgs	170pcs
HR222.04/HR222.14	1"	50'/15m	300psi/20bar	1"	NBR Rubber	24.8"x15.0"x28.5"/63x38x72.5cm	134.2lbs/61kgs	170pcs
HR223.01/HR223.05	3/4"	40'/12m	300psi/20bar	3/4"	NBR Rubber	24.8"x21.6"x28.5"/63x55x72.5cm	191.6lbs/87.1kgs	110pcs
HR223.02/HR223.06	1"	100'/30m	300psi/20bar	1"	NBR Rubber	24.8"x21.6"x28.5"/63x55x72.5cm	180.4lbs/82kgs	110pcs
Hose maximum tempera	ture 176°F (80°	C)				The hose length measureme	ent is from the conn	ection part.

LOW PRESSURE UREA/DEF REELS

Item No.	Hose I.D.	Hose Length	Working Pressure	Inlet/Outlet	Hose Material	Package	Weight	Q'TY 20'CY
HR221.05/HR221.16	3/4"	40'/12m	150psi/10bar	3/4"	EPDM Rubber	25.5"x12.2"x26"/65x31x66cm	79.2lbs/36kgs	200pcs
HR222.05/HR222.15	3/4"	65'/20m	150psi/10bar	3/4"	EPDM Rubber	24.8"x15.0"x28.5"/63x38x72.5cm	133.3lbs/60.6kgs	170pcs
HR223.03/HR223.07	3/4"	100'/30m	150psi/10bar	3/4"	EPDM Rubber	24.8"x21.6"x28.5"/63x55x72.5cm	182.8lbs/83.1kgs	110pcs
Hose maximum tempera	ture 176°F (80°0	<u> </u>			The hose length measurement	ent is from the conn	ection part.	

MEDIUM PRESSURE HOT WATER REELS

Item No.	Hose I.D.	Hose Length	Working Pressure	re Inlet/Outlet Hose Material Package		Package	Weight	Q'TY 20'CY
HR221.06/HR221.17	3/8"	82'/25m	2610psi/180bar	3/8"	S.A.E.100R1 Wire Braid	25.5"x12.2"x26"/65x31x66cm	88.0lbs/40.0kgs	200pcs
HR222.06/HR222.16	3/8"	100'/30m	2610psi/180bar	3/8"	S.A.E.100R1 Wire Braid	24.8"x15.0"x28.5"/63x38x72.5cm	125.2lbs/56.9kgs	170pcs
Hose maximum tempera	ature 210°F (1	100°C)				The hose length measureme	nt is from the conn	ection part.

MEDIUM PRESSURE OIL AND SIMILAR MEDIA REELS

Item No.	Hose I.D.	Hose Length	Working Pressure	Inlet/Outlet	Hose Material	Package	Weight	Q'TY 20'CY
HR221.07/HR221.18	3/8"	82'/25m	2610psi/180bar	3/8"	S.A.E.100R1 Wire Braid	25.5"x12.2"x26"/65x31x66cm	88.0lbs/40.0kgs	200pcs
HR221.08/HR221.19	1/2"	82'/25m	2320psi/160bar	1/2"	S.A.E.100R1 Wire Braid	25.5"x12.2"x26"/65x31x66cm	91.9lbs/41.8kgs	200pcs
HR221.09/HR221.20	3/4"	40'/12m	1520psi/105bar	3/4"	S.A.E.100R1 Wire Braid	25.5"x12.2"x26"/65x31x66cm	84.5lbs/38.4kgs	200pcs
HR221.10/HR221.21	1"	26'/8m	1260psi/87psi	1"	S.A.E.100R1 Wire Braid	25.5"x12.2"x26"/65x31x66cm	94.6lbs/43kgs	200pcs
HR222.07/HR222.17	3/8"	100'/30m	2610psi/180bar	3/8"	S.A.E.100R1 Wire Braid	25.5"x12.2"x26"/65x31x66cm	125.2lbs/56.9kgs	170pcs
HR222.08/HR222.18	1/2"	100'/30m	2320psi/160bar	1/2"	S.A.E.100R1 Wire Braid	24.8"x15.0"x28.5"/63x38x72.5cm	132.9lbs/60.4kgs	170pcs
HR222.21/HR222.22	3/4"	65'/20m	1520psi/105bar	3/4"	S.A.E.100R1 Wire Braid	24.8"x15.0"x28.5"/63x38x72.5cm	136.2lbs/61.9kgs	170pcs
HR222.23/HR222.24	1"	50'/15m	1260psi/87psi	1"	S.A.E.100R1 Wire Braid	24.8"x15.0"x28.5"/63x38x72.5cm	143.2lbs/65.1kgs	170pcs
HR223.04/HR223.08	1/2"	130'/40m	2320psi/160bar	1/2"	S.A.E.100R1 Wire Braid	24.8"x21.6"x28.5"/63x55x72.5cm	170.9lbs/77.7kgs	110pcs
Hose maximum tempera	ature 210°F (1	100°C)				The hose length measureme	nt is from the conn	ection part.

HIGH PRESSURE GREASE AND SIMILAR MEDIA REELS

Item No.	Hose I.D.	Hose Length	Working Pressure	Inlet/Outlet	Hose Material	Package	Weight	Q'TY 20'CY
HR221.11/HR221.22	3/8"	82'/25m	4785psi/330bar	3/8"	S.A.E.100R2 Wire Braid	25.5"x12.2"x26"/65x31x66cm	91.1lbs/43.7kgs	200pcs
HR222.10/HR222.19	3/8"	100'/30m	4785psi/330bar	3/8"	S.A.E.100R2 Wire Braid	24.8"x15.0"x28.5"/63x38x72.5cm	138.2lbs/62.8kgs	170pcs
Hose maximum tempera	ature 210°F (1	100°C)				The hose length measureme	nt is from the conn	ection part.

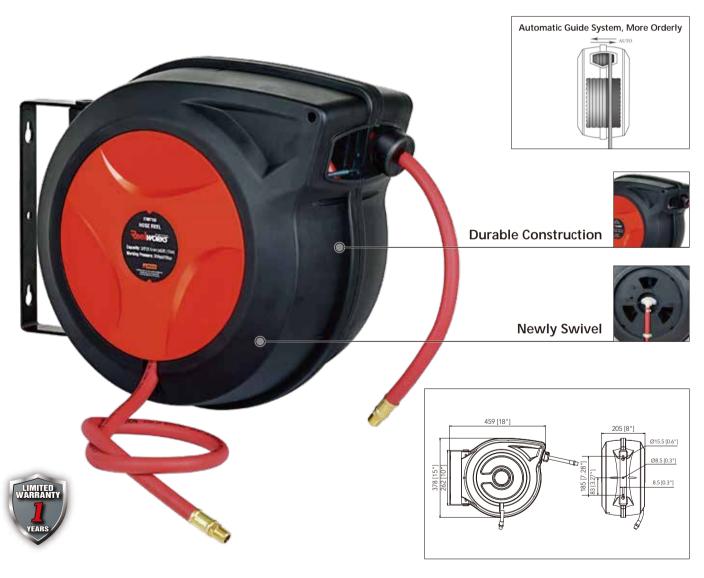


HR780 | SPRING DRIVEN HOSE REEL

- Automatic hose guiding system allows an automatic rewinding of hoses in an orderly way, without any pile up.
- Newly designed swivel and hose inlet connection seal against leaks.
- Durable construction made from high quality impact resistant polypropylene, light weight and more compact.
- Superior bend radius of hybrid polymer hose help eliminate kinks, no memory.
- Hose maximum temperature -15°F~149°F (-26°C~65°C).
- 36" / 0.9m lead-in hose is included.



Patented



LOW PRESSURE AIR/WATER REELS

Q'TY 20'CY: 690pcs

Item No.	Ref. No.	Hose I.D.	Hose Length	Working Pressure	Inlet/Outlet	Hose Material	Package	Weight
HR780.03	27807153	3/8"	50'	300psi	1/4"	Hybrid Polymer	18"x8.5"x15.7"	14.3lbs
HR780.04/HR780.05	27807153	3/8"	50'/15m	300psi/20bar	3/8"	Hybrid Polymer	18"x8.5"x15.7"/46.5x22x40cm	14.3lbs/6.5kgs
Hose maximum temperature 140°F (60°C). The hose length measurement is from the connection part.								



HR781&HR782&HR783 | MULTIFUNCTIONAL SPRING DRIVEN HOSE REEL

- Automatic hose guiding system is available on 2782 & 2783, allows an automatic rewinding of hoses in an orderly way, without any pile up.
- Speed control device makes an automatic rewinding of hoses in constant speed and safer way, keep the rewind speed under control all the time.
- Hose can be stopped at any point as your desired.
- Newly designed swivel and hose inlet connection seal against leaks.
- Durable construction made from high quality impact resistant. polypropylene, light weight and more compact.
- Superior bend radius of hybrid polymer hose help eliminate kinks, no memory.
- Hose maximum temperature -40°F~176°F (-40°C~80°C).
- 36" / 0.9m lead-in hose is included.

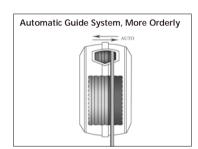


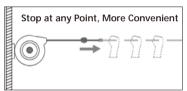


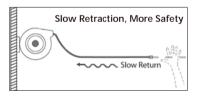


HF









Patented

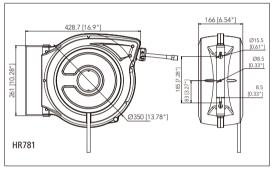
9

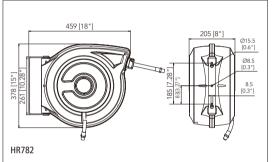


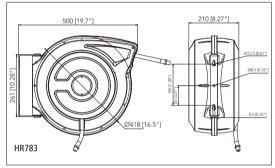
HR781&HR782&HR783 | MULTIFUNCTIONAL SPRING DRIVEN HOSE REEL

- Automatic hose guiding system is available on 2782 & 2783, allows an automatic rewinding of hoses in an orderly way, without any pile up.
- Speed control device makes an automatic rewinding of hoses in constant speed and safer way, keep the rewind speed under control all the time.
- Hose can be stopped at any point as your desired.
- Newly designed swivel and hose inlet connection seal against leaks.
- Durable construction made from high quality impact resistant polypropylene, light weight and more compact.
- Superior bend radius of hybrid polymer hose help eliminate kinks, no memory.
- Hose maximum temperature -40°F~176°F (-40°C~80°C).
- 36" / 0.9m lead-in hose is included.











LOW PRESSURE AIR/WATER REELS

Q'TY 20'CY" 1044pcs

Item No.	Ref. No.	Hose I.D.	Hose Length	Working Pressure	Inlet/Outlet	Hose Material	Package	Weight
HR781.01/HR781.04	27817152	1/4"	50'/15m	300psi/20bar	1/4"	Hybrid Polymer	15"x7.7"x15.5"/38x19.5x39.5cm	14.7lbs/6.7kgs
HR781.05	27817150	5/16"	15m	20bar	1/4"	Hybrid Polymer	38x19.5x39.5cm	6.6kgs
HR781.06	27817103	3/8"	10m	20bar	3/8"	Hybrid Polymer	38x19.5x39.5cm	6.5kgs
Hose maximum temperature 140°F (60°C). The hose length measurement is from the connection par								

LOW PRESSURE AIR/WATER REELS

Q'TY 20'CY: 690pcs

	Item No.	Ref. No.	Hose I.D.	Hose Length	Working Pressure	Inlet/Outlet	Hose Material	Package	Weight
	HR782.01	27827153	3/8"	50'	300psi	1/4"	Hybrid Polymer	18"x8.5"x15.7"	14.5lbs
	HR782.03/HR782.06	27827153	3/8"	15m/50'	20bar/300psi	3/8"	Hybrid Polymer	46.5x22x40cm/18"x8.5"x15.7"	6.6kgs/14.5lbs
i	Hose maximum temperature 140°F (60°C). The hose length measurement is from the connection part.								

LOW PRESSURE AIR/WATER REELS

Q'TY 20'CY: 600pcs

Item No.	Ref. No.	Hose I.D.	Hose Length	Working Pressure	Inlet/Outlet	Hose Material	Package	Weight	
HR783.01	27837203	3/8"	65'	300psi	1/4"	Hybrid Polymer	18.7"x9.2"x17.9"	22lbs	
HR783.03	27837154	1/2"	50'	300psi	3/8"	Hybrid Polymer	18.7"x9.2"x17.9"	20.9lbs	
HR783.05	27837203	3/8"	20m	20bar	3/8"	Hybrid Polymer	47.5x23.5x45.5cm	10kgs	
HR783.04/HR783.06	27837154	1/2"	50'/15m	300psi/20bar	1/2"	Hybrid Polymer	18.7"x9.2"x17.9"/47.5x23.5x45.5cm	20.9lbs/9.5kgs	
Hose maximum temperatu	Hose maximum temperature 140°F (60°C). The hose length measurement is from the connection part.								



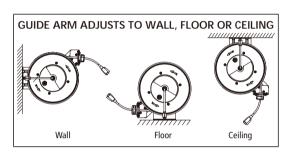
CR805/CR809 | METAL CORD REEL

- Heavy-duty steel construction with durable powder-coat finish.
- Spring-driven auto rewind wraps, stores and protects cord.
- Adjustable locking ratchet secures the cord at desired length.
- Comes with 12/3 SJTOW 15 Amp cord with three 125V outlets.
- Adjustable cord stop.
- Heavy-gauge steel base and support post.
- Cord temperature: -40°F to 221°F.



Patented

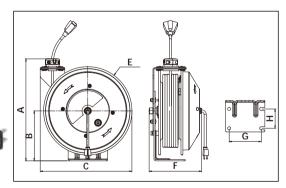




Triple Socket Triple outlet with grounded receptacles

Over Load's Breaker
Avaliable for protection

Cord Included 5ft. lead-in cord



Ite	m No.	Α	В	С	EØ	F	G	Н
CF	R805	16.53"	8.03"	14.21"	13.58"	8.46"	4.88"	3.03"
CF	R809	16.53"	8.15"	14.96"	14.4"	11.02"	5.23"	3.14"

CORD REELS

Intertek 4005190

Item No.	Туре	Number of Core	Cord Length	Volt	AWG	Ampere	Package	Weight	Q'TY 20'CY
CR805.01	SJTOW	3	30'	125V	12	15A	15.9"x11.4"x17.3"	23.8lbs	600pcs
CR805.02	SJTOW	3	50'	125V	12	15A	15.9"x11.4"x17.3"	26.2lbs	600pcs
CR809.01	SJTOW	3	75'	125V	12	15A	16.7"x11.4"x18.5"	37.0lbs	540pcs

Note: SJTOW is oil and weather-resistant.

CONFORMS TO UL STD.355 CERTIFIED TO CSA STD. C22.2#308

The cord length measurement is from the connection part.



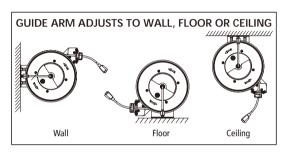
CR815 | METAL CORD REEL

- Heavy-duty steel construction with durable powder-coat finish.
- Spring-driven auto rewind wraps, stores and protects cord.
- Adjustable locking ratchet secures the cord at desired length.
- Comes with SJTOW cord with three 125V outlets.
- Adjustable cord stop.
- Heavy-gauge steel base and support post.
- Cord temperature: -40°F to 221°F.



Patented

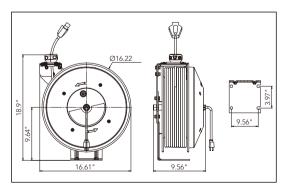




Triple Socket Triple outlet with grounded receptacles

Over Load's Breaker Avaliable for protection

> Cord Included 5ft. lead-in cord



US CUSTION OF THE PERSON OF TH

CONFORMS TO UL STD.355 CERTIFIED TO CSA STD. C22.2#308

CORD REELS

Item No.	Туре	Number of Core	Cord Length	Volt	AWG	Ampere	Package	Weight	Q'TY 20'CY
CR815.01	SJTOW	3	80'	125V	12	15A	19.1"x13.2"x21.1"	36.8lbs	316pcs

Note: SJTOW is oil and weather-resistant.

The cord length measurement is from the connection part.

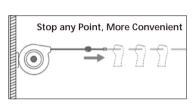


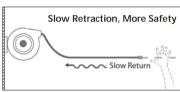
CR681 | CORD REEL

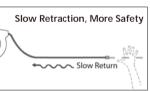
- Speed control device makes an automatic rewinding of cord in constant speed and safer way, keep the rewind speed under control all the time.
- Cord can be stopped at any point as your desired.
- Durable construction made from high quality impact resistant polypropylene, light weight and more compact.
- With a superior low temperature resistance of cord (-58°F~ 221°F) the better retraction performance in reel at low temperature.
- For indoor use only.

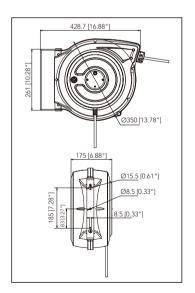


Patented











CORD REELS

Item No.	Ref. No.	Туре	Number of Core	Cord Length	Volt	AWG	Ampere	Outlet	Package	Weight	Q'TY 20'CY
CR681.01	26813156	SJTOW	3	50'	125V	16	10A	S 3	14.9"x7.7"x15.5"	12.5lbs	1044pcs
CR681.03	26813154	SJTOW	3	50'	125V	14	13A	S3	14.9"x7.7"x15.5"	14.7lbs	1044pcs
CR681.05	26813152	SJTOW	3	50'	125V	12	15A	S3	14.9"x7.7"x15.5"	19.1lbs	1044pcs
CR681.06	26813202	SJTOW	3	65'	125V	12	15A	S3	14.9"x7.7"x15.5"	21.3lbs	1044pcs
Note: SJTOW	is oil and weat	her-resistan	ıt.					T	he cord length measure	ment is from th	e connection part.

4005190 CONFORMS TO UL STD.355 CERTIFIED TO CSA STD. C22.2#308



CR681 | CABLE REEL

- Speed control device makes an automatic rewinding of cable in constant speed and safer way, keep the rewind speed under control all the time.
- Cable can be stopped at any point as your desired.
- Durable construction made from high quality impact resistant polypropylene, light weight and more compact.
- For indoor use only.





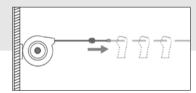












Slow Retraction, More Safety

Patented



Adjustable Cord Stopper Safety retracts and stops cord

> Over Load's Breaker Thermal Protector

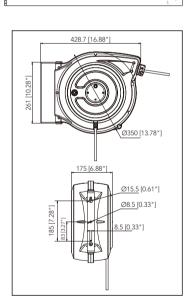
> > **LED Light**Electricity indicator for safety operation

Cable Included 1.5m Lead-in cable









CABLE REELS

							~ ▼						
Item No.	Ref. No.	Type	Sectional	Number of Core	Cable Length	Volt	Wound	O Unwound	Socket & Plug	CM	Package	Weight	Q'TY 20'CY
CR681.30	26813153	H05VV-F	1.5mm ²	3	15m	230V	1000W	2000W	German	BG	38x19.5x39.5	7.0kgs	1044pcs
CR681.34	26813153	H07RN-F	1.5mm ²	3	15m	230V	1000W	2000W	German	BG	38x19.5x39.5	7.0kgs	1044pcs
CR681.35	26813203	H07RN-F	1.5mm ²	3	20m	230V	1000W	2000W	German	BG	38x19.5x39.5	7.5kgs	1044pcs
CR681.36	26813151	H07RN-F	2.5mm ²	3	15m	230V	1600W	3200W	German	BG	38x19.5x39.5	8.2kgs	1044pcs
CR681.37	26813201	H07RN-F	2.5mm ²	3	20m	230V	1600W	3200W	German	BG	38x19.5x39.5	9.2kgs	1044pcs
CR681.44	/	H07RN-F	1.5mm ²	3	15m	230V	1000W	2000W	French	CE	38x19.5x39.5	9.9kgs	1044pcs
CR681.45	26813203	H07RN-F	1.5mm ²	3	20m	230V	1000W	2000W	French	CE	38x19.5x39.5	8.2kgs	1044pcs
CR681.47	/	H07RN-F	2.5mm ²	3	20m	230V	1600W	3200W	French	CE	38x19.5x39.5	9.9kgs	1044pcs
CR681.54	/	H07RN-F	1.5mm ²	3	15m	230V	1000W	2000W	England	UKCA	38x19.5x39.5	8.2kgs	1044pcs
CR681.65	/	H07RN-F	1.5mm ²	3	20m	230V	1000W	2000W	Australia	1	38x19.5x39.5	8.2kgs	1044pcs
CR681.67	/	H07RN-F	2.5mm ²	3	20m	230V	1600W	3200W	Australia	1	38x19.5x39.5	8.2kgs	1044pcs
CR681.70	/	H05VV-F	1.5mm ²	3	15m	230V	1600W	2000W	Industry	CE	38x19.5x39.5	8.2kgs	1044pcs

The cable length measurement is from the connection part.



SR100 | BARRIER REEL

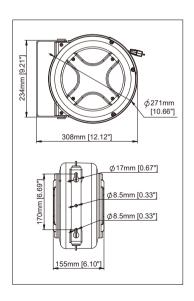
- Ideal used for isolation of construction section, dangerous section, traffic accident and emergency.
- The reel can be installed on the optional column with 47-1/4"(1.2m) high. Column for easy use.







The reel contains accessory package (Including magnet, screw eye and expansion tube)

















Tape Color: White Red
Item No.: SR100.10

Item No.	Tape Length	Thickness	Width	Package	Weight	Q'TY 20'CY
SR100.09	52' / 16m	26ga. / 0.5mm	1 7/8" / 48mm	11"x6.7"x11" / 28x17x28cm	6.38lbs / 2.9kgs	2350pcs
SR100.10	52' / 16m	26ga. / 0.5mm	1 7/8" / 48mm	11"x6.7"x11" / 28x17x28cm	6.38lbs / 2.9kgs	2350pcs

Reel Temp: -4°F to 122°F / -20°C to +50°C



SR101 | STATIC GROUNDING REEL

The industrial static grounding reels offer a solution for your grounding needs. With slow retraction, ratchet locking mechanism and auto-release during stretching, the grounding reel offers you superior safety.

Features:

- Compact design
- Slow retraction
- Ratch locking mechanism for stop-at-any-point
- Auto release during over stretching for dependable safety (Piercing clamp)
- Designed working temperature for harsh environment up to 52°C (126°F)
- Range: 50 ft and 75 ft cable length
- RoHS and REACH compliant
- Standard Jaw clip and grounding clamp options



Applications:

Static grounding reels are ideal for:

- Refueling stations
- Fuel tanks
- Fuel trucks
- Maintenance shops
- Airplane static grounding
- Utility vehicle static grounding
- Any hazardous areas with potentially dangerous static electricity







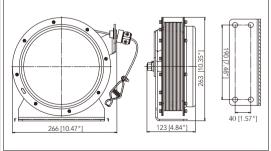




Alligator static grounding clamp







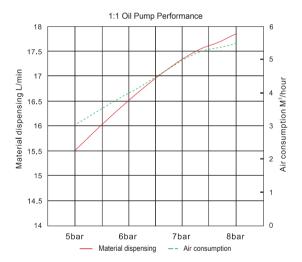
Item No.	Clamp	Cable Color	Diameter of steel cable	Diameter of outer coating	Length	Package	Weight
SR101.01	Alligator clamp	Orange	3/32" / 2.5mm	5/32" / 4.0mm	75' / 23m	13.98"x7.48"x14.37"/ 35.5x19x36.5cm	19.58lbs / 8.90kgs
SR101.02	Alligator clamp	Orange	3/32" / 2.5mm	5/32" / 4.0mm	50' / 15m	13.98"x7.48"x14.37"/ 35.5x19x36.5cm	17.38lbs / 7.90kgs
SR101.03	Piercing clamp	Orange	3/32" / 2.5mm	5/32" / 4.0mm	75' / 23m	13.98"x7.48"x14.37"/ 35.5x19x36.5cm	19.58lbs / 8.90kgs
SR101.04	Piercing clamp	Orange	3/32" / 2.5mm	5/32" / 4.0mm	50' / 15m	13.98"x7.48"x14.37"/ 35.5x19x36.5cm	17.38lbs / 7.90kgs
SR101.05	Alligator clamp	Transparent	3/32" / 2.5mm	5/32" / 4.0mm	75' / 23m	13.98"x7.48"x14.37"/ 35.5x19x36.5cm	19.58lbs / 8.90kgs
SR101.06	Alligator clamp	Transparent	3/32" / 2.5mm	5/32" / 4.0mm	50' / 15m	13.98"x7.48"x14.37"/ 35.5x19x36.5cm	17.38lbs / 7.90kgs
SR101.07	Piercing clamp	Transparent	3/32" / 2.5mm	5/32" / 4.0mm	75' / 23m	13.98"x7.48"x14.37"/ 35.5x19x36.5cm	19.58lbs / 8.90kgs
SR101.08	Piercing clamp	Transparent	3/32" / 2.5mm	5/32" / 4.0mm	50' / 15m	13.98"x7.48"x14.37"/ 35.5x19x36.5cm	17.38lbs / 7.90kgs



1:1 | AIR-OPERATED OIL PUMP

- Air operated for integration into transfer system.
- Smart design with fewer parts for less pump wear & tear.
- Differential air motor ensures smooth pumping.
- Typical fluids handled include motor oil, synthetic oil, hydraulic oil, gear oil and automatic transmission fluid.
- Supplied with adjustable 2" bung adapter.









Entire Usage: 540,000 Liters or 142,660Gl



Item No.	LP114.02	LP114.01	LP114.03	LP114.04	LP114.05	LP114.06
Ref. No.	1701001	1701002	1701003	1701001	1701002	1701003
Drum Application	Wall mounted	50-60L	180-220L	Wall mounted	13-16gallon	48-58gallon
Pressure Ratio	1:1			1:1		
Air Inlet Pressure	5-8bar			70-115psi		
Max. Fluid Pressure	8bar			115psi		
Air Motor Effective Diameter	63mm			2.5"		
Air Consumption (Per Minute)	100L @8bar			3.6CFM @115psi		
Max. Free Flow Rate (Per Minute)	18L			4.8gallon		
Suction Tube Diameter	42mm			1-5/8"		
Suction Tube Length	270mm	730 mm	940mm	10-5/8"	28-3/4"	37"
Air Inlet Connection	1/4"quick plug			1/4"NPT F		
Oil Outlet Connection	1/2"BSPT M			1/2"NPT M		
Weight	5kgs	5.5kgs	6kgs	11lbs	12lbs	13lbs
Packaging Dimension	13x13x73cm	13x13x117cm	13x13x137cm	5.1"x5.1"x28.7"	5.1"x5.1"x46.1"	5.1"x5.1"x53.9"

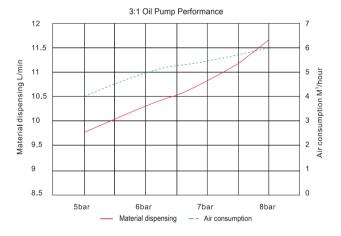
Test media: SAE30 oil , $+20^{\circ}\text{C}$, 2M hose length free outlet



3:1 | AIR-OPERATED OIL PUMP

- Air operated for integration into dispensing system.
- Smart design with fewer parts for less pump wear & tear.
- Differential air motor ensures smooth pumping.
- Typical fluids handled include motor oil, synthetic oil, hydraulic oil, gear oil and automatic transmission fluid.
- Double action.
- Supplied with adjustable 2" bung adapter.









Entire Usage: 360,000 Liters or 95,110Gl



Item No.	LP115.02	LP115.01	LP115.03	LP115.04	LP115.05	LP115.06
Ref. No.	1701031	1701032	1701033	1701031	1701032	1701033
Drum Application	Wall mounted	50-60L	180-220L	Wall mounted	13-16gallon	48-58gallon
Pressure Ratio	3:1			3:1		
Air Inlet Pressure	5-8bar			70-115psi		
Max. Fluid Pressure	24bar			350psi		
Air Motor Effective Diameter	63mm			2.5"		
Air Consumption (Per Minute)	110L @8bar			3.9CFM @115 psi		
Max. Free Flow Rate (Per Minute)	12 L			3.2gallon		
Suction Tube Diameter	42mm			1-5/8"		
Suction Tube Length	270mm	730mm	940mm	10-5/8"	28-3/4"	37"
Air Inlet Connection	1/4"quick plug			1/4"NPT F		
Oil Outlet Connection	1/2"BSPT M			1/2"NPT M		
Weight	5kgs	5.5kgs	6kgs	11lbs	12lbs	13lbs
Packaging Dimension	13x13x62cm	13x13x108cm	13x13x128cm	5.1"x5.1"x24.4"	5.1"x5.1"x42.5"	5.1"x5.1"x50.4"

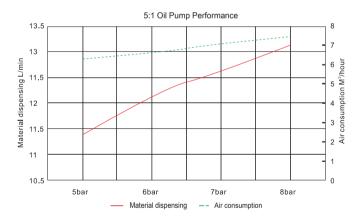
Test media: SAE30 oil , $+20^{\circ}\text{C}$, 2M hose length free outlet



5:1 | AIR-OPERATED OIL PUMP

- Air operated for integration into dispensing system.
- Smart design with fewer parts for less pump wear & tear.
- Differential air motor ensures smooth pumping.
- Typical fluids handled include motor oil, synthetic oil, hydraulic oil, gear oil and automatic transmission fluid.
- Double action.
- Supplied with adjustable 2" bung adapter.









Entire Usage: 420,000 Liters or 110,960Gl



Item No.	LP116.02	LP116.05	LP116.06	LP116.04	LP116.01	LP116.03
Ref. No.	1701051	1701052	1701053	1701051	1701052	1701053
Drum Application	Wall mounted	50-60L	180-220L	Wall mounted	13-16gallon	48-58gallon
Pressure Ratio	5:1			5:1		
Air Inlet Pressure	5-8bar			70-115psi		
Max. Fluid Pressure	40bar			580psi		
Air Motor Effective Diameter	63mm			2.5"		
Air Consumption (Per Minute)	125L @8bar			4.5CFM @115psi		
Max.free Flow Rate (Per Minute)	14L			14L		
Suction Tube Diameter	42mm			1-5/8"		
Suction Tube Length	270mm	730mm	940mm	10-5/8"	28-3/4"	37"
Air Inlet Connection	1/4"quick plug			1/4"NPT F		
Oil Outlet Connection	1/2"BSPT M			1/2"NPT M		
Weight	5kgs	5.5kgs	6kgs	11lbs	12lbs	13lbs
Packaging Dimension	13x13x62cm	13x13x108cm	13x13x128cm	5.1"x5.1"x24.4"	5.1"x5.1"x42.5"	5.1"x5.1"x50.4"

Test media: SAE30 oil , $+20^{\circ}\text{C}$, 2M hose length free outlet



AC | GEAR-TYPE OIL PUMP

- Internal gear electric pumps for the various requirements of pumping oils and lubricants.
- Die-cast aluminum pump body, Sintered steel gears.
- By-pass integrated into the pump body.
- Viscosity up to 10,000 SUS (Saybolt Universal Second)/2000Cst.
- Suction height: 2m/6.5ft.
- · Not for waste oil.



Item No.	LP601.03	LP601.01	LP601.04	LP602.01	LP602.02	LP602.03
Ref. No.	17320090	17320091	17320140	17320400	17320401	17320501
Flow Rate	9LPM	9LPM	14LPM	40LPM	40LPM	52QT/M
Voltage	230V	230V	230V	230V	380V	120V
Power	750W	1000W	1000W	1100W	1100W	1500W
Max. Pressure	12bar	25bar	12bar	10bar	10bar	145psi
Inlet/Outlet	1"BSP F					1"NPT F
Weight	14kgs			22kgs		48.5lbs
Package Dimension	42x26x32cm					16.5"x10.2"12.6"

DC | OIL PUMP

- Sintered steel gears, bypass valve incorporated in pump body.
- Battery connection cables with fuse available.
- Viscosity up to 3,000 SUS (Saybolt Universal Second)/500cst.
- Suction height: 2M/6.5ft.
- Not for waste oil.

Item No.	LP603.01	LP603.03	LP603.02	LP603.04
Ref. No.	17520100	17520101	17520100	17520101
Pump Rage	10LPM		11Q	
Voltage	12V	24V	12V	24V
Max. Pressure	4bar		60psi	
Inlet/outlet	3/4"BSP F		3/4"NPT F	
Weight	3.8kgs		8.4lbs	
Package Dimension	28x18x16cm		11"x7.1"x16.3"	



LP60.301/LP603.02 LP603.03/LP603.04

230V | MOBILE OIL DISPENSING KIT

- Ideal for delivering oil from a drum anywhere in the workshop.
- Come equipped with a self-priming gear pump and a digital oil control valve.
- Oil viscosity up to 2000Cst.
- Equipped with
- * Oil pump
- * Oil control valve
- * 4m/13ft. delivery oil hose
- * 2m/6.5ft. suction hose with filter

Item No.	XXXXXX.XX	XXXXXX.XX	XXXXXX.XX
Ref. No.	10300900	10300901	10301400
Pump Rage	9LPM	9LPM	14LPM
Voltage	230V		Ý
Model Of Pump	17320090	17320091	17320140
Max. Pressure	12bar	25bar	12bar
Trolley Packing Dimension	95x80x24cm		
Weight	50kgs	50kgs	51kgs
Pump Kit Packing Dimension	42x22x29cm		
-			



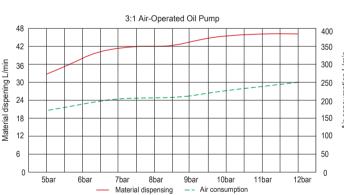


3:1 | HEAVY DUTY AIR-OPERATED OIL PUMP

- The 3:1 is perfect for fluid oil transfer in high volume and longer distance applications such as truck shop service fleet facilities and in-plant applications.
- Corrosion-resistant design utilizes liquid salt nitriding, nickel plating, stainless steel, aluminum and chrome on key components for longer life.
- Few moving parts in the air motor assembly means less downtime and low repair cost.
- Large air porting design provides efficient use of compressed air supply for continuous pump operation without icing.









Entire Usage: 1,200,000 Liters or 317,000Gl

Item No.	Carbon Steel	LP121.02	LP121.06	LP121.10	LP121.14	LP121.04	LP121.08	LP121.12	LP121.15		
	Stainless Steel	LP121.03	LP121.07	LP121.11	LP121.01	LP121.05	LP121.09	LP121.13	LP121.16		
Ref No.		17130301	17130331	17130361	17130371	17130303	17130333	17130363	17130373		
Drum Application	on	Pail	50-60L	180-220L	1040L	Pail	13-16gallon	48-58gallon	275gallon		
Pressure Ratio		3:1				3:1					
Air Inlet Pressur	е	3-12bar				43-175psi					
Max. Fluid Press	sure	36bar				520psi					
Air Motor Effect	tive Diameter	76mm				3"					
Air Consumption	n (Per Minute)	215L @8bar	215L @8bar				7.6CFM @115psi				
Max.free Flow R	Rate (Per Minute)	45L				11.9gallon					
Suction Tube Di	ameter	52mm				2"					
Suction Tube Le	ngth	270mm	730mm	940mm	1190mm	10-5/8"	28-3/4"	37"	46-3/4"		
Air Inlet Connec	tion	1/4"quick plug				1/4"NPT F					
Oil Outlet Conn	ection	3/4"BSP F				3/4"NPT F					
Accessory	·	3/4"BSP M - 1/2	"BSP F reducer			3/4"NPT M - 1/2	"NPT F reducer				
Weight		7.8kgs	9.7kgs	10.5kg	11.5kgs	17lbs	21lbs	23lbs	25.3lbs		
Packaging Dime	nsion	72x25x20cm	118x25x20cm	139x25x20cm	165x25x20cm	28.3"x9.8"x7.9"	46.5"x9.8"x7.9"	54.7"x9.8"x7.9"	65"x9.8"x7.9"		

Test media: SAE30 oil , $+20^{\circ}$ C, 2M hose length free outlet.

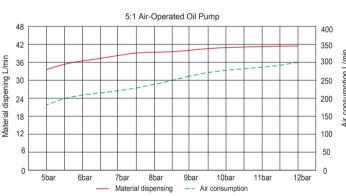


5:1 | HEAVY DUTY AIR-OPERATED OIL PUMP

- The 5:1 is perfect for fluid oil transfer in high volume and longer distance applications such as truck shop service fleet facilities and in-plant applications.
- Corrosion-resistant design utilizes liquid salt nitriding, nickel plating, stainless steel, aluminum and chrome on key components for longer life.
- Few moving parts in the air motor assembly means less downtime and low repair cost.
- Large air porting design provides efficient use of compressed air supply for continuous pump operation without icing.



High Flow up to 40 Liters up to 10.6GPM





Entire Usage: 1,050,000 Liters or 277,410Gl

Item No.	Carbon Steel	LP122.02	LP122.06	LP122.10	LP122.15	LP122.03	LP122.07	LP122.11	LP122.16	
	Stainless Steel	LP122.05	LP122.08	LP122.12	LP122.01	LP122.04	LP122.09	LP122.13	LP122.14	
Ref. No.		17130501	17130531	17130561	17130571	17130503	17130533	17130563	17130573	
Drum Application		Pail	50-60L	180-220L	1040L	Pail	13-16gallon	48-58gallon	275gallon	
Pressure Ratio		5:1				5:1				
Air Inlet Pressure		3-12bar				43-175psi				
Max. Fluid Pressu	re	60bar				870psi				
Air Motor Effective	e Diameter	76mm				3"				
Air Consumption	(Per Minute)	245L @8bar	5L @8bar							
Max.free Flow Ra	te (Per Minute)	40L				10.6gallon				
Suction Tube Diar	neter	52mm				2"				
Suction Tube Leng	gth	270mm	730mm	940mm	1190mm	10-5/8"	28-3/4"	37"	46-3/4"	
Air Inlet Connection	on	1/4"quick plug				1/4"NPT F				
Oil Outlet Connec	tion	3/4"BSP F				3/4"NPT F				
Accessory		3/4"BSP M - 1/2	"BSP F reducer			3/4"NPT M - 1/2	"NPT F reducer			
Weight		7.8kgs	9.7kgs	10.5kgs	11.5kgs	17lbs	21lbs	23lbs	25.3lbs	
Packaging Dimens	sion	72x25x20cm	118x25x20cm	139x25x20cm	165x25x20cm	28.3"x9.8"x7.9"	46.5"x9.8"x7.9"	54.7"x9.8"x7.9"	65"x9.8"x7.9"	

Test media: SAE30 oil , +20°C, 2M hose length free outlet.

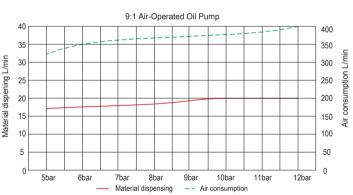


9:1 | HEAVY DUTY AIR-OPERATED OIL PUMP

- The 9:1 is perfect for fluid oil transfer in high volume and longer distance applications such as truck shop service fleet facilities and in-plant applications.
- Corrosion-resistant design utilizes liquid salt nitriding, nickel plating, stainless steel, aluminum and chrome on key components for longer life.
- Few moving parts in the air motor assembly means less downtime and low repair cost.
- Large air porting design provides efficient use of compressed air supply for continuous pump operation without icing.



up to
20Liters
up to 5.28GPM





Entire Usage: 540,000 Liters or 142,660Gl

Item No.	LP123.02	LP123.03	LP123.04	LP123.01	LP123.05	LP123.06	LP123.07	LP123.08	
Ref. No.	17130901	17130931	17130961	17130971	17130903	17130933	17130963	17130973	
Drum Application	Pail	50-60L	180-220L	1040L	Pail	13-16gallon	48-58gallon	275gallon	
Pressure Ratio	9:1				9:1				
Air Inlet Pressure	3-12bar				43-175psi				
Max. Fluid Pressure	108bar				1570psi				
Air Motor Effective Diameter	76mm				3"				
Air Consumption (Per Minute)	360L @8bar	60L @8bar				12.8CFM @115psi			
Max.free Flow Rate (Per Minute)	20L				5.8gallon				
Suction Tube Diameter	42mm				1-5/8"				
Suction Tube Length	270mm	730mm	940mm	1190mm	10-5/8"	28-3/4"	37"	46-3/4"	
Air Inlet Connection	1/4"quick plug				1/4"NPT F				
Oil Outlet Connection	3/4"BSP F				3/4"NPT F				
Accessory	3/4"BSP M - 1/2	"BSP F reducer			3/4"NPT M - 1/2	"NPT F reducer			
Weight	7.5kgs	8.4kgs	8.8kgs	9.3kgs	15.9lbs	18.5lbs	19.4lbs	20.5lbs	
Packaging Dimension	72x25x20cm	118x25x20cm	139x25x20cm	165x25x20cm	28.3"x9.8"x7.9"	46.5"x9.8"x7.9"	54.7"x9.8"x7.9"	65"x9.8"x7.9"	

Test media: SAE30 oil , +20°C, 2M hose length free outlet.

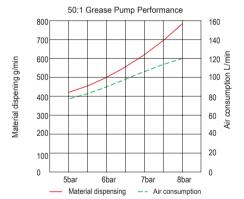


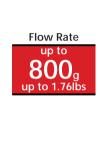
50:1 | AIR-OPERATED GREASE PUMP

- Typical Application: high pressure grease dispenser.
- 50:1 ratio allows grease to be pumped up to NLGI #2 (Refer to appendix 2).
- For dispensing grease of all types short and long distance at high pressure.
- Non-corrosive design for long time use.
- Compatible with integrated lubrication system.
- Compatible with different sizes of grease drum in the market.











Entire Usage: 24,000 kgs or 52,800 lbs



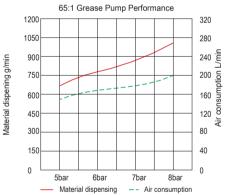
Item No.	LP108.10	LP108.11	LP108.12	LP108.13	LP108.14	LP108.15	LP108.16	LP108.17
Ref. No.	1701500	1701501	1701502	1701503	1701500	1701501	1701502	1701503
Drum Application	13kgs	20-30kgs	50-60kgs	180-220kgs	30 lbs	44-66lbs	110-132lbs	400-484lbs
Pressure Ratio	50:1				50:1			
Air Inlet Pressure	5-8bar				70-115psi			
Max. Fluid Pressure	400bar				5800psi			
Air Motor Effective Diameter	63mm				2-1/2"			
Air Consumption (Per Minute)	120L @8 bar				4.3CFM @115psi			
Max.free Flow Rate (Per Minute)	800g				1.76lbs			
Suction Tube Diameter	30mm				1-3/16"			
Suction Tube Length	370mm	480mm	740mm	940mm	14-1/2"	19"	29-1/8"	37"
Air Inlet Connection	1/4"quick plug				1/4"NPT (F)			
Oil Outlet Connection	1/4"BSP (M)				1/4"NPT (M)			
Weight	5kgs	5kgs	5.5kgs	6kgs	11lbs	11lbs	12lbs	13lbs
Packaging Dimension	13x13x73cm	13x13x81cm	13x13x108cm	13x13x128cm	5.1"x5.1"x28.7"	5.1"x5.1"x31.8"	5.1"x5.1"x/42.5"	5.1"x5.1"x50.3"
Grease NLGI 2#,+20°C. 2M hose length fre	e outlet.							



65:1 | AIR-OPERATED GREASE PUMP

- Ideal for transferring grease and high viscosity oil.
- 65:1 ratio allows grease to be pumped up to NLGI #2 (Refer to appendix 2).
- Anti corrosion treatments reduce internal friction & limit wear over time.
- Compatible with different sizes of grease drum in the market.
- Double action guarantees the delivery of continuos and constant flow.





Flow Rate up to





Item No.	17116500	17116530	17116550	17116560	17116502	17116532	17116552	17116562
Drum Application	13kgs	20-30kgs	50-60kgs	180-220kgs	30lbs	44-66lbs	110-132lbs	400-484lbs
Pressure Ratio	65:1				65:1			
Air Inlet Pressure	5-8bar				70-115psi			
Max. Fluid Pressure	520bar				7540psi			
Air Motor Effective Diameter	70mm				2-3/4"			
Air Consumption (Per Minute)	200L @ 8bar				7.1CFM @115psi			
Max.free Flow Rate (Per Minute)	1000g				2.2lbs			
Suction Tube Diameter	30mm				1-3/16"			
Suction Tube Length	370mm	480mm	740mm	940mm	14-1/2"	19"	29-1/8"	37"
Air Inlet Connection	1/ 4"quick plug				1/ 4"NPT Female			
Oil Outlet Connection	3/8"F				3/8"F			
Weight	4.75kgs	5.0kgs	5.5kgs	6.0kgs	10.5lbs	11.0lbs	12.0lbs	13.2lbs
Packaging Dimension	13x13x90cm	13x13x90cm	13x13x117cm	13x13x137cm	5.1"x5.1"x35.4"	5.1"x5.1"x35.4"	5.1"x5.1"x46"	5.1"x5.1"x54"
Grease NLGI 2#,+20°C. 2M hose length fre	e outlet.	-	-	-	-	-	-	-



50:1 | HEAVY DUTY AIR-OPERATED GREASE PUMP

Designed for manufacturing or automotive service facilities!

- 50:1 ratio allows grease to be pumped up to NLGI #2 (Refer to appendix 2).
- Double acting pump provides continous flow operation.
- Rugged inlet cage withstands demanding shop environments.
- Full line of stationary and portable package configurations.
- High flow capability, stable function.









Entire Usage: 45,000 kgs or 99,150 lbs



Item No.	LP112.02	LP112.03	LP112.04	LP112.05	LP112.06	LP112.07
Ref. No.	17125030	17125050	17125060	17125032	17125052	17125062
Drum Application	20-30kgs	50-60kgs	180-220kgs	60lbs	120lbs	400lbs
Pressure Ratio	50:1			50:1		
Air Inlet Pressure	5-12bar			70-175psi		
Max. Fluid Pressure	600bar			8700psi		
Air Motor Effective Diameter	76mm			3"		
Air Consumption (Per Minute)	230L @8bar			8.1CFM @115psi		
Max.free Flow Rate (Per Minute)	1800g			4lbs		
Suction Tube Diameter	32mm			1-1/4"		
Suction Tube Length	480mm	740mm	940mm	19"	29-1/8"	37"
Air Inlet Connection	1/4"quick plug			1/4" NPT (F)		
Oil Outlet Connection	1/4"BSP (F)			1/4" NPT (F)		
Weight	8kgs	9.4kgs	10.5kgs	8kgs	9.4kgs	10.5kgs
Packaging Dimension	92x25x20cm"	118x25x20cm	139x25x20cm	92x25x20cm	118x25x20cm"	139x25x20cm
Grease NLGL 2# +20°C 2m hose length free	e outlet					



75:1 | HEAVY DUTY AIR-OPERATED GREASE PUMP

Designed for manufacturing or automotive service facilities!

- 75:1 ratio allows grease to be pumped up to NLGI #2 (Refer to appendix 2).
- Double acting pump provides continous flow operation.
- Rugged inlet cage withstands demanding shop environments.
- Full line of stationary and portable package configurations.
- High flow capability, stable function.









Entire Usage: 42,000 kgs or 92,400 lbs

Item No.	LP113.01	LP113.02	LP113.03	LP113.04	LP113.05	LP113.06
Ref. No.	17127530	17127550	17127560	17127532	17127552	17127562
Drum Application	20-30kgs	50-60kgs	180-220kgs	60lbs	120lbs	400lbs
Pressure Ratio	75:1			75:1		
Air Inlet Pressure	5-12bar			70-175psi		
Max. Fluid Pressure	900bar			13050psi		
Air Motor Effective Diameter	76mm			3"		
Air Consumption (Per Minute)	330L @8bar			11.7CFM @115psi		
Max.free Flow Rate (Per Minute)	1600g			3.5lbs		
Suction Tube Diameter	32mm			1-1/4"		
Suction Tube Length	480mm	740mm	940mm	19"	29-1/8"	37"
Air Inlet Connection	1/4"quick plug			1/4"NPT (F)		
Oil Outlet Connection	3/8" BSP (F)	·	·	3/8"NPT (F)	·	
Weight	8.8kgs	9.8kgs	10.7kgs	19.4lbs	21.6lbs	23.5lbs
Packaging Dimension	92x25x20cm	118x25x20cm	139x25x20cm	36.2"x9.8"7.8"	46.4"x9.8"x7.8"	54.7"x9.8"x7.8"

Grease NLGI 2#,+20°C,2m hose length free outlet.

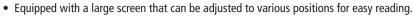


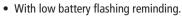
35L/10GAL. & 80L/21GAL. | EXPLOSION PROOF DIGITAL OIL METER



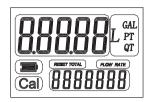
For FM005.01& FM006.01 & FM007.01

(€ IP65





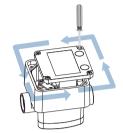
• Fluid type: Gear oil, Lubricating Oil, ATF Oil, Hydraulic Oil.



SCREEN:

- 5-digital present total with floatingpoint from 0.01 to 999.99
- 7-digit non-resettable total from 1 to 9999999





• Multi angle installation, easy read data.



2.6" LARGER SCREEN













LM007

Item No.	FM005.01/LM005.08	FM006.01/LM006.05	FM007.01/LM007.05	LM005.03	LM006.02	LM007.02
Ref. No.	FM005.01/FM005.08	FM006.01/FM006.05	FM007.01/FM007.05	FM005.03	FM006.02	FM007.02
Explosion-Proof	YES /	YES /	YES /			
Flow Rate	1-35L/min	6~80L/min	6~80L/min	0.3-9.25gallon/min	1.6~21gallon/min	1.6~21gallon/min
Inlet/Outlet	1/2"BSP F	3/4"BSP F	1"BSP F	1/2"NPT F	3/4"NPT F	1"NPT F
Pressure Range	0.5~100Bar			7-1500psi		
Precision	±0.5%			±0.5%		
Temperature	-10°C~+50°C			+14°F~+122°F		
Power Source	2×1.5V (2×AAA)			2×1.5V (2×AAA)		
Weight	0.61kgs	0.91kgs	0.88kgs	1.34lbs	2.00lbs	1.94lbs
Packaging Dimension	13x10.5x10cm			5.1"x4.1"x3.9"		

^{*} Not for commercial use. Impulse signal available.

35L/10GAL. | DIGITAL OIL METER

- Dispenses in liter, gallon, pint and quart.
- 5-digital easy to read LCD display powered by 3.6V battery.
- Made of aircraft aluminum to ensure the strength and quality.
- Waterproof and oil-proof design.





LM102.02 (BSP) LM102.03 (NPT)

LM104.01 (BSP) LM104.04 (NPT)

Item No.	LM102.02	LM104.01	LM102.03	LM104.04
Ref. No.	15220351	15210352	15220352	15210352
Fluid Range	1-35L/min		1-10gallon/min	
Inlet Connection	1/2"BSP F		1/2 "NPT F	
Pressure Range	0.5-100bar	0.5-50bar	7-1500psi	7-725psi
Precision	±0.5%		±0.5%	
Temperature	-10°C~60°C		14°F~140°F	
Power Source	ER 14250 3.6V	CR2 3.0V	ER 14250 3.6V	CR2 3.0V
Weight	0.6kgs	0.4kgs	1.3lbs	0.9lbs
Packaging Dimension	12x6.5x9.5cm		4.7"x2.5"x3.7"	
* Not for commercial use.				Impulse signal avail



35L/10GAL. DIGITAL OIL CONTROL VALVE

- Rubber protection to absorb shock prolonged lifetime in workshops.
- Dispenses in liter, gallon, pint and quart.
- 5-digital easy to read LCD display powered.
- Low battery indicator is equipped.
- Made of aircraft aluminum to ensure the strength and quality.
- Free selection of rigid spout and flex spout.
- Waterproof and oil-proof design.
- Nozzle is more easy to start and saving efforts.



Item No.	LN102.02	LN102.01	LN102.08	LN102.09	LN102.04	LN102.03	LN102.12	LN102.13
Ref. No.	18113541	18113543	18123521	18123523	18113542	18113544	18123522	18123524
Inlet Connection	1/2"BSP F				1/2"NPT F			
Fluid Range	1-35L/min				0.3-9.25gpm			
Pressure Range	5-100bar	0-100bar	5-100bar	0-100bar	72.5-1500psi	0-1500psi	72.5-1500psi	0-1500psi
Temperature	Max. 60°C				Max. 140°F			
Viscosity	8-5000mPas				8-5000mPas			
Digital Meter Precision	Without		±0.5%		Without		±0.5%	
Power Source	Without		1*3.6V ER14250 k	attery	Without	Without		attery
Spout	Flexible, Auto tip	Rigid, manual tip						
Weight	1kg	0.8kgs	1.4kgs	1.2kgs	2.2lbs	1.8lbs	3lbs	2.6lbs
Packaging Dimension	30.5x20.5x5.5cm	30.5x20.5x5.5cm	33x16x14.1cm	33x16x14.1cm	12"x8"x2.1"	12"x8"x2.1"	13"x6.3"x5.5"	13"x6.3"x5.5"
* Not for commercial use								

35L/10GAL. | DIGITAL OIL CONTROL VALVE

• Compact light weight, zero back-pressure, new designed control valve.

• Rubber protection to absorb shock prolonged lifetime in workshops.

- Dispenses in liter, gallon, pint and quart.
- 5-digital easy to read LCD display powered.
- Low battery indicator is equipped.
- Made of aircraft aluminum to ensure the strength and quality.
- Free selection of rigid spout and flex spout.
- Waterproof and oil-proof design.





Item No.	LN104.01	LN104.02	LN104.07	LN104.08	LN104.03	LN104.04	LN104.09	LN104.10
Ref. No.	18063526	18063536	18163526	18163536	18063521	18063531	18163521	18163531
Inlet Connection	1/2"BSP F				1/2"NPT F			
Fluid Range	1-35L/min				0.3-9.25gpm			
Pressure Range	0-100bar	5-50bar	0-50bar	5-50bar	0-1450psi	70-725psi	0-1450psi	70-725psi
Temperature	Max. 60°C				Max. 140°F			
Viscosity	8-5000mPas				8-5000mPas			
Digital Meter Precision	1		±0.5%		1		±0.5%	
Power Source	1		1x3V CR2 battery		1		1x3V CR2 battery	
Spout	Rigid, manual tip	Flexible, Auto tip						
Weight	0.7kgs	0.9kgs	1.1kgs	1.3kgs	1.54lbs	1.98lbs	2.42lbs	2.86lbs
Packaging Dimension	31x20x5.5cm				12.2"x7.8"x2.1"			
* Not for commercial use.								



80L/21GAL. | DIGITAL CONTROL VALVE

- Designed for heavy-duty work conditions such as: truck, fleet, maintenance, mining, marine etc.
- Made with an aluminum frame, exterior ergonomic oil and waterproof polypropylene shell, with shockproof rubber, to ensure strength and durability.
- The compact design has zero back pressure capability, delivering consistent measurements and smooth dispensing during operation.
- Equipped with or without screen.
- With larger easy to read screen, with low battery indicator to avoid sudden shut-off.
- 5-digital present total with floating point from 0.01 to 999.99.
- 7-digit non-resettable total from 1 to 9999999.
- Trigger operating force at 100bar: 8.5kgf.







Trigger position B







Item No.	LN110.12	LN110.13	LN110.15	LN110.16
Ref. No.	KT710.02	KT710.03	KT710.05	KT710.06
Inlet Connection	3/4"BSP F		3/4"NPT F	
Fluid Range	6-80L/min		0.3-21gal/min	
Pressure Range	5-100bar	5-100bar	70-1450psi	70-1450psi
Temperature	Max. 60°C		Max. 140°F	
Digital Meter Precision	±0.5%		±0.5%	
Viscosity	8-5000mPas		8-5000mPas	
Spout	Rigid tube with Auto tip	Flexible, Auto tip	Rigid tube with Auto tip	Flexible, Auto tip
Power Source	2x1.5V (2xAAA)		2x1.5V (2xAAA)	
Weight	2.3kgs	2.8kgs	5.06lbs	6.2lbs
Packaging Dimension	40x15.5x13.5cm		15.7"x6.1"x5.3"	

^{*} Not for commercial use.





Item No.	LN110.01	LN110.02	LN110.04	LN110.05
Ref No.	18118001	18118005	18118002	18118006
Inlet Connection	3/4"BSP F		3/4"NPT F	
Fluid Range	1-80L/min		0.3-21gpm	
Pressure Range	5-100bar		70-1450psi	
Temperature	Max. 60°C		Max. 140°F	
Viscosity	8-5000mPas		8-5000mPas	
Spout	Rigid with Auto tip	Flexible with Auto tip	Rigid with Auto tip	Flexible with Auto tip
Weight	1.6kgs		3.52lbs	
Packaging Dimension	32x18x5.5cm		12.5"x7"x2.1"	



LN120.07 (NPT)

35L/10GAL.& 55L/14.5GAL. DIGITAL OIL PRESET METER

• Powered by 4 AA batteries, and the replacement is more convenient. The working time are 2-4 times longer than the normal digital control valve.

Display screen 25% larger than normal one; Backlight design for easy viewing.

• With the function of view the historical data of the previous five dispensing.

- The newly design memory function, make the guick & equivalent filling possible.
- Maximum single dispense 999.99, Maximum preset dispense 999.



LN120.06 (NPT)



Easy Read-Out Digital Display (Dispense in Gallon/Pint/Quart/Liter)



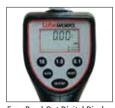
Item No.	LN120.02	LN120.03	LN120.04	LN120.01	LN120.08	LN120.09	LN120.05	LN120.06	LN120.07	LN120.11	LN120.10	LN120.12
Ref. No.	FN120.02	FN120.03	FN120.04	FN120.01	FN120.08	FN120.09	FN120.05	FN120.06	FN120.07	FN120.11	FN120.10	FN120.12
Inlet Connection	1/2"BSP F			3/4"BSP F			1/2"NPT F			3/4"NPT F		
Fluid Range	1-35L/min			1-55L/min			0.3-9.2GPM			0.3-14.5GPM		
Precision	±0.5%			±0.5%			±0.5%			±0.5%		
Pressure Range	0.5-70Bar	0.8-70Bar	0.8-70Bar	5-70Bar	0.5-70Bar	5-70Bar	7-1000Psi	12-1000Psi	12-1000Psi	72.5-1000Psi	7-1000Psi	72.5-1000Psi
Temperature	-20°C~70°C			-20°C~70°C			-4°F~158°F			-4°F~158°F		
Viscosity	0-2000mPas			0-2000mPas			0-2000mPas			0-2000mPas		
Spout	Rigid,	Rigid,	Flexible,	Rigid,	Rigid	Flexible,	Rigid,	Rigid,	Flexible,	Rigid,	Rigid	Flexible,
	manual tip	Auto tip	Auto tip	Auto tip	without tip	Auto tip	manual tip	Auto tip	Auto tip	Auto tip	without tip	Auto tip
Power Source	4x1.5V(AA)						4x1.5V(AA)					
Weight	1.5kgs						3.3lbs					
Packaging Dimension	32x19x13cm						12.6"x7.5"x	5.1"				

LN120.05 (NPT)

35L/10GAL. DIGITAL OIL PRESET METER

- The item is unique and indispensable tool for industry operators.
- With the pre-selected function, the nozzle automatically closes the valve and stops dispensing.
- The external structure consists of an ergonomic plastic shell with shockproof rubber and the trigger protection prevents accidental operation.

Item No.	LN105.01	LN105.02	LN105.06	LN105.04
Ref. No.	18133511	18133512	18133513	18133514
Inlet Connection	1/2"BSP F		1/2"NPT F	
Fluid Range	1-35L/min		0.3-9.2GPM	
Pressure Range	0-70bar	5-70bar	0-1000psi	72.5-1000psi
Temperature	-10°C~60°C		14°F~140°F	
Precision	±0.5%		±0.5%	
Viscosity	8-5000mPas		8-5000mPas	
Spout	Rigid, Manual tip	Flexible, Auto tip	Rigid, Manual tip	Flexible, Auto tip
Power Source	Alkaline Cell 9V		Alkaline Cell 9V	
Weight	1.5kgs		3.3lbs	
Packaging Dimension	35x13.5x16cm		13.8"x5.3"x6.3"	
* Not for commercial use.	•		•	



Easy Read-Out Digital Display





- 1. Indication of operation in AUTO mode.
- 2. Totals
- 3. Indication of the Total type (TOTAL / Resettable TOTAL)
- 4. Indication of the Unit of Measurement. 5. Batch total

Patent No.: 201320075053.0

^{*} Not for commercial use.



DIGITAL GREASE CONTROL VALVE

- This dispense valve provides positive control of high pressure lubricants.
- When supplied with air, the pump will start when the valve is triggered and will stall against pressure when the trigger is released.
- Dispenses in g,kg(BSP) or oz,lb(NPT).
- 4 digital easy to read LCD display powered by 3V (1.5V*2) battery.
- Low battery indicator is equipped.

Item No.	LN201.02	LN201.01
Ref. No.	18213010	18213030
Inlet Connection	1/4"BSP (F)	1/4"NPT (F)
Pressure Range	600bar	8700psi
Precision	±2%	±2%
Power Source	2*AA size (1.5V)	2*AA size (1.5V)
Weight	1.31kgs	2.86lbs
Packaging Dimension	25x15x7cm	9.8"x5.9"x2.7"



GREASE CONTROL VALVE

- This dispense valve provides positive control of high pressure lubricants.
- When supplied with air, the pump will start when the valve is triggered and will stall against pressure when the trigger is released.

Item No.	LN210.06	LN210.07
Ref. No.	18212050	18212070
Fitting Type	Flat	Flat
Inlet Connection	1/4"BSP (F)	1/4"NPT (F)
Pressure Range	600bar	8700psi
Weight	0.95kgs	2.09llbs
Packaging Dimension	25x20.5x5cm	9.8"x8.1"x1.9"





Rigid or flexible spout.



Item No.	LN215.01	LN215.06	LN215.03	LN215.07
Ref. No.	1785701 1785700		1785701	1785700
Fitting Type	Flat	Flat	Flat	Flat
Inlet Connection	1/4" BSP (F) Swivel	1/4" BSP (F) Z Swivel	1/4" NPT (F) Swivel	1/4" NPT (F) Z Swivel
Pressure Range	400bar		5800psi	
Weight	1.43kgs	2.53lbs	3.15lbs	2.53lbs
Packaging Dimension	30x23.5x5.8cm		11.8"x9.25"x2.28"	

COUPLER



Item No.	Description	Specification
1785701H	Flexible hose with coupler	6mm I.D.
1785701R	Rigid tube with coupler	1/8" NPT
1785701F	4 jaw grease coupler	M10*1 or 1/8" NPT

Z-SWIVEL

- 1/4"male * 1/4"female.
- 360° swivel, be accepted by grease gun.
- Item No.: 1785702



- 1/8"male * 1/4"female.
- 360° swivel, be accepted by grease gun.
- Item No.: 1785703



MOBILE LUBRICATING OIL DISPENSER





USER MANAGEMENT

Classification management (admin &user), password management.



7" TOUCH SCREEN

Human-computer interaction.



FILLING METHOD

Manual and preset dispensing.



DATA EXPORT

The Data between the equipment and computer can be transmit via the wireless network or U disk.



UNIT SETTING

The unit can be set L, gal, Pt, QT (four unit) according to need.



PRECISE FILLING

Through coefficient proof to ensure more accurate filling.



BUCKET SETTING

It can be used for different specifications of barrels, with fluid shortage warning function



Item No.	LMS403.01/LMS403.11	LMS403.02/LMS403.12	LMS403.03/LMS403.13	LMS403.04/LMS403.14	LMS404.01	LMS404.02	LMS404.03	LMS404.04	
Ref. No.	FS403.30/FS403.35	FS403.31/FS403.36	FS403.32/FS403.37	FS403.33/FS403.38	FS403.64	FS403.65	FS403.66	FS403.67	
Fluids	Engine Oil				Gear Oil				
Viscosity	≤500 CST				≤2000 CST				
Max. Flow Rate	1.59Gal	6L			2.4Gal	9L			
Max. Pressure	45Psi	3Bar			360Psi	25Bar			
Plug	American	European	England	Australia	American	European	England	Australia	
Power Supply Mode	Battery Charger/Plug-in	Battery Charger/Plug-in	Battery Charger/Plug-in	Battery Charger/Plug-in	Plug-in				
Voltage	120V	230V			120V	230V			
1/2"x13'/4m Oil Hose	Oil-Resistant Rubber Ho	ose							
Weight	41.8lbs/19kgs (Trolley)	41.8lbs/19kgs (Trolley) / 63.8/29kgs							
Packaging Dimension	42.1"x31.7"x7.3"/107>	x80.5x18.5cm(Trolley) / 3	3.5"x20.5"x16"/85x52x4	0.5cm					
0 0									

Note: Test media: ISO32 oil , +25°C



5L/1.3GAL | ELECTRIC BRAKE BLEEDER

- SINGLE PERSON OPERATION
 Oil change with one button, two wheels change together.
- 3-8 MINUTES
 Complete oil change, fast and efficient.
- EVACUATION WITH ONE BUTTON Easy to operate, safe and reliable.



• PERFORMANCE:

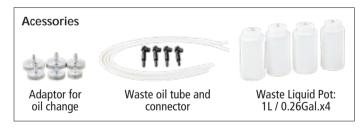
- The equipment is ideal for vehicle maintenance with strong sealing, professional & safe.
- The equipment is made of corrosion resistant material, more durable.
- More accurate pressure regulation, liquid shortage & full dispense indicator.
- The connecters meet the demand of more than 90% of the vehicle models in the market.
- With universal and directional wheels in approprite place, moving easier and flexible.
- With 3 liquid level indicators.
- Patent No.: ZL201930668626.3



Enlarged filling inlet makes oil filling more convenient.



Removable Tool Tray
Four adjustable positions
to meet the needs of
different conditions.



Item No.	OD502.04	OD502.01	OD502.02	OD502.06
Voltage	DC12V	AC 230V 50Hz		AC 120V 60Hz
Working Pressure	2Bar/30PSI	2Bar		30PSI
Max. Flow Rate/min.	2L/0.52Gal.	2L		0.52Gal.
Storage Capacity	5.2L/1.3Gal.	5.2L		1.3Gal.
Plug	12V Alligator clip	European	England	USA (NEMA 5-15P)
Work Noise	≤55dB	≤55dB		≤55dB
Waste Oilerx4pcs	1L/1.1QT	1L		1.1QT
Cord Length	5m/16ft.	5m		16ft.
Tube Length	4m/13ft.	4m		13ft.
Liquid Level Indicator	3	3		3
Weight	30.5kgs/67.1lbs	30.5kgs		67.1lbs
Packaging Dimension	94.5x50.5x42cm/37.2"x19.9"x16.5"	94.5x50.5x42cm		37.2"x19.9"x16.5"



1:1&3:1&5:1 WALL MOUNTED OIL TRANSFER KIT

- Wall Mounted Kits for empting reservoirs composed of pump, bracket, meter and hose.
- Suitable for dispensing oil for mobile installations.
- Supplied with all required fittings and accessories for connection of pump to the air and oil lines or directly to a hose reel.
- Rigid suction tube available.

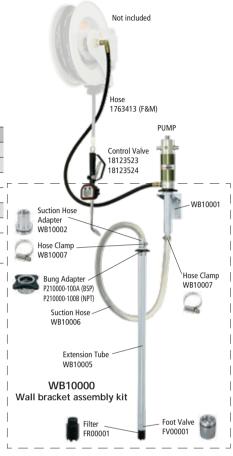
Regular Pump Kits

Item No.	1700111	1700211	1700311
Wall Mounted Pump	1701001	1701031	1701051
Pressure Ratio	1:1	3:1	5:1
Wall Bracket Assembly Kit	WB10000	WB10000	WB10000
1 /2" * 13' Connection Hose	1763413 (F&M)	1763413 (F&M)	1763413 (F&M)
Digital Control Valve	18123523/18123524	18123523/18123524	18123523/18123524
Weight	12kgs / 26.5lbs	12kgs / 26.5lbs	12kgs / 26.5lbs
Packaging Dimension	29x14.5x120cm /	29x14.5x120cm /	29x14.5x120cm /
	11.4"x5.7"x47.2"	11.4"x5.7"x47.2"	11.4"x5.7"x47.2"

Note: Standard control valve equipped is 18123523/18123524, other model is upon request.







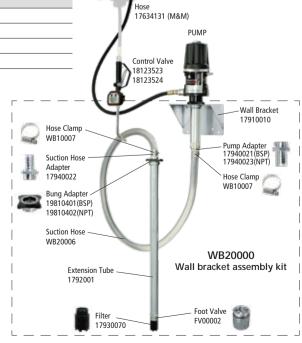
Heavy-duty Pump Kits

Item No.	10105151	10103151	10105153	10103153	
Wall Mounted Pump	17130501	17130301	17130503	17130303	
Pressure Ratio	5:1	3:1	5:1	3:1	
Wall Bracket Assembly Kit	WB20000		WB20000		
1 /2" * 13' Connection Hose	17634131 (M&M)		17634131 (M&M)		
Digital Control Valve	18123523/18123524		18123523/18123524		
Weight	21kgs		46.5lbs		
Packaging Dimension	25.5x20.5x165cm		10"x8.1"x65"		

Note: Standard control valve equipped is 18123523/18123524, other model is upon request.







Not included



DRUM TROLLEY







180-220L/48-58gallon LRP115.01





180-220L/48-58gallon LRP120.01

Item No.	LRP110.01	LRP115.01	LRP120.01	LRP125.01
Ref. No.	1708001	1708002	1708003	19222003A
Drums Capacity	20-60L/5.3-16gallon	180-220L/48-58gallon	180-220L/48-58gallon	220L/58gallon
	20-60kgs/44-132lbs	180-220kgs/400-484lbs	180-220kgs/400-484lbs	220kgs/484lbs
Drums Diameter	385mm/15.16"	600mm/24"	600mm/24"	600mm/24"
Trolley Size (WxD)	395x420mm/15.5"x16.5"	620x620mm/24.4"x24.4"	620x660mm/24.4"x26"	640x550mm/25.2"x21.6"
Weight	11kgs/24.2lbs	17kgs/37.4lbs	29kgs/63.8lbs	21.5kgs/47.3lbs
Packaging Dimension	44x11x50cm/17.3"x4.3"x20"	81.5x10.5x69cm/32"x4.1"x27.1"	98x15x68cm/38.6"x5.9"x6.8"	81x72x40cm/32"x28.3"x15.7"



3:1 | MOBILE OIL DISPENSING KIT

- Suitable for dispensing oil at medium/high viscosity for mobile installations and fixed system at medium distance.
- Multi-drum trolley ensures high mobility and high efficiency.
- More sophisticated solution system is available on your request.
- Mainly composed of pump, trolley, meter & connection hose.
- Supplied with adjustable 2" bung adapter.





180-220L 48-58gallon 1700233



180-220L 48-58gallon 1700232

Item No.	1700222	1700232	1700233	1700222	1700232	1700233
Drum Application	50-60L	180-220L	180-220L	13-16gallon	48-58gallon	48-58gallon
3:1 Ratio Pump	1701032	1701033	1701033	1701032	1701033	1701033
Digital Control Valve	18123521/18123522	18123521/18123522	18123521/18123522	18123521/18123522	18123521/18123522	18123521/18123522
1 /2" Connection Hose	1763413	1763413	19124050	1763413	1763413	19124050
Drum Trolley	LRP110.01	LRP115.01	LRP120.01	LRP110.01	LRP115.01	LRP120.01
1 /2" * 50'/15m Oil Hose Reel	***	***	M860154	***	***	M860154
Weight	20kgs	30.5kgs	74.5kgs	44lbs	67lbs	164lbs
Packaging Dimension	64x14.5x111cm	29x14.5x131cm	51.5x26.5x53cm	25.2"x5.7"x43.7"	11.4"x5.7"x51.6	20.3"x10.4"x20.9"
		81.5x10.5x69cm	29x14.5x131cm		32.1"x4.1"x27.2"	11.4"x5.7"x51.6"
			98x15x68cm			38.6"x5.9"x26.8

Note: standard control valve equipped is 18123521/18123522, other models are upon request.



5:1 | MOBILE OIL DISPENSING KIT

- Suitable for dispensing oil at medium/high viscosity for mobile installations and fixed system at long distance.
- Multi-drum trolley ensures high mobility and high efficiency.
- More sophisticated solution system is available on your request.
- Mainly composed of pump, trolley, meter & connection hose.
- Supplied with adjustable 2" bung adapter.



50-60L 13-16gallon 1700322







180-220L 48-58gallon 1700333

Item No.	1700322	1700332	1700333	1700322	1700332	1700333
Drum Application	50-60L	180-220L	180-220L	13-16gallon	48-58gallon	48-58gallon
5:1 Ratio Pump	1701052	1701053	1701053	1701052	1701053	1701053
Digital Control Valve	18123521/18123522	18123521/18123522	18123521/18123522	18123521/18123522	18123521/18123522	18123521/18123522
1 /2" Connection Hose	1763413	1763413	19124050	1763413	1763413	19124050
Drum Trolley	TH110.01	TH115.01	TH120.01	TH110.01	TH115.01	TH120.01
1 /2" * 50'/15m Oil Hose Reel	***	***	M860154	***	***	M860154
Weight	20kgs	30.5kgs	74.5kgs	44lbs	67lbs	164lbs
Packaging Dimension	64x14.5x111cm	29x14.5x131cm	51.5x26.5x53cm	25.2"x5.7"x43.7"	11.4"x5.7"x51.6	20.3"x10.4"x20.9"
		81.5x10.5x69cm	29x14.5x131cm		32.1"x4.1"x27.2"	11.4"x5.7"x51.6"
			98x15x68cm			38.6"x5.9"x26.8

Note: standard control valve equipped is 18123521/18123522, other models are upon request.

3:1&5:1 | OIL PUMP DISPENSING UNIT

- Practical and functional combination for dispensing.
- Ideal for garage, farming and industry work areas.
- Wheel-mounted tank ensures high mobility and high efficiency.
- Mainly composed of 65-liter tank, pump, connection hose and oil control valve.

Item No.	POP0653	POP0655	POP0653	POP0655		
Tank Capacity	65L		17gallon			
Length Delivery Hose	1/2"*4 m		1/2"*4 m			
Pump Delivery	1701032	1701052	1701032	1701052		
Compression Ratio	3:1	5:1	3:1	5:1		
Oil Density	SAE130	SA240	SAE130	SAE240		
Digital Oil Control Valve Delivery	18123521/18123522		18123521/181235	18123521/18123522		
Max. Working Pressure	8bar		8bar	8bar		
Max. Free Flow Rate (Min)	12L	14L	12L	14L		
Max. Air Consumption (Min)	@8bar 110 L		@115psi / 3.9 CFM	@115psi / 3.9 CFM		
Air Inlet Connection	1/4"quick plug		1/4"NPT Female	1/4"NPT Female		
Weight	31kgs		67lbs	67lbs		
Packaging Dimension	70x40x44cm		27.6"x15.7"x17.3			
	30x15x120cm		11.8"x5.9"x47.2"			







3:1&5:1 | HIGH FLOW MOBILE OIL DISPENSING KIT

- Ideal for transfer in high volume and long distance.
- Suitable for dispensing oil at medium/high viscosity for mobile installations and fixed system at medium distance.
- Multi-drum trolley ensures high mobility and high efficiency.
- More sophisticated solution system is available on your request.
- Mainly composed of pump, trolley, meter & connection hose.
- Supplied with adjustable 2" bung adapter.







180-220L 48-58gallon 10105322





180-220L 48-58gallon 10105332

Item No.	10103322	10103332	10105322	10105332	10103322	10103332	10105322	10105332
Drum Application	180-220L	180-220L	180-220L	180-220L	48-58gallon	48-58gallon	48-58gallon	48-58gallon
Pump Ratio	3:1	3:1	5:1	5:1	3:1	3:1	5:1	5:1
Pump	1701036	1701036	1701056	1701056	1701036	1701036	1701056	1701056
Digital Control Valve	18123521/18123	522	1763413		18123521/18123	522		
1 /2" Connection Hose	1763413	19124050		19124050	1763413	19124050	1763413	19124050
Adapter	3/4" F - 1/2" M				3/4" F - 1/2" M			
Drum Trolley	TH115.01	TH120.01	TH115.01	TH120.01	TH115.01	TH120.01	TH115.01	TH120.01
1 /2" * 50'/15m Oil Hose Reel	***	M860154	***	M860154	***	M860154	***	M860154
Weight	30.5kgs	74.5kgs	30.5kgs	74.5kgs	67lbs	164lbs	67lbs	164lbs
Packaging Dimension	29x14.5x150cm	51.5x26.5x53cm	29x14.5x140cm	51.5x26.5x53cm	11.4"x5.7"x59"	20.2"x10.4"20.8"	11.4"x5.7"x55.1"	20.2"x10.4"x20.8"
	81.5x10.5x69cm	29x14.5x140cm	81x10.5x69cm	29x14.5x140cm	32"x4.1"27.1"	11.4"x5.7"x55.1"	31.8"x4.1"x27.1"	11.4"x5.7"x55.1"
		98x15x68cm		98x15x68cm		38.5"x5.9"x26.7"		38.5"x5.9"x26.7"



50:1 | HEAVY DUTY GREASE DISTRIBUTION KITS

- Ideal for transfer in high volume and long distance.
- The most economical & convenient combination for dispensing grease.
- Complete set of fluid transfer accessories gives end user trouble-free using experience.
- The high efficiency of pump is ensured with the original selection of parts and accessories.







10250322

Item No.	10250212	10250322	10250332	10250212	10250322	10250332
50:1 Ratio Pump	17125050	17125060	17125060	17125052	17125062	17125062
Drum Application	50-60kgs	180-220kgs	180-220kgs	110-lbs	400-484lbs	400-484lbs
Drum Trolley	1708001	1708002	1708003	1708001	1708002	1708003
Drum Cover	19338502	19360002	19360002	19338502	19360002	19360002
Follower Plate	19437002	19458502	19458502	19437002	19458502	19458502
1/4" Connection Hose	17622131	17622131	***	17622131	17622131	***
Z-swivel	1785702	1785702	1785702	1785702	1785702	1785702
Control Valve	18212050	18212050	18212050	18212070	18212070	18212070
1/4"*50'/15m Grease Hose Reel	***	***	H860152	***	***	H860152
1/4"*5'/1.5m Connection Hose	***	***	19112051	***	***	19112051
Weight	27kgs	42.5kgs	85.5kgs	60lbs	93.5lbs	188lbs
Packaging Dimension	60x15x94cm	62x10x62cm	51x26.5x53cm	23.6"x5.9"x37"	24.4"x3.9"x24.4"	20"x10.4"x20.8"
	25x19x118cm	25x19x139cm	62x10x62cm	9.8"x7.4"x46.4"	9.8"x7.4"x54.7"	24.4"x3.9"x24.4"
		98x15x68cm	25x19x139cm		38.5"x5.9"x26.7"	9.8"x7.4"x54.7"
			98x15x68cm			38.5"x5.9"x26.7"

Note: standard control valve equipped is 18212050/18212070, other models are upon request.



50:1 | AIR-OPERATED GREASE DISTRIBUTION KITS

- The most economical & convenient combination for dispensing grease.
- Complete set of fluid transfer accessories gives end usert rouble-free using experience.
- The high efficiency of pump is ensured with the original selection of parts and accessories.





1700524





1700536R

Item No.	1700512	1700524	1700536	1700536R	1700512	1700524	1700536	1700536R
50:1 Ratio Pump	1701501	1701502	1701503	1701503	1701501	1701502	1701503	1701503
Drum Application	16-30kgs	50-60kgs	180-220kgs	180-220kgs	33-66lbs	110-132lbs	400-484lbs	400-484lbs
Drum Trolley	1708001	1708001	1708002	1708003	1708001	1708001	1708002	1708003
Drum Cover	1709002	1709004	1709006	1709006	1709002	1709004	1709006	1709006
Follower Plate	1709012	1709014	1709016	1709016	1709012	1709014	1709016	1709016
1/4" Connection Hose	1762213	1762213	1762213	***	1762213	1762213	1762213	***
Control Valve	1785700	1785700	1785700	1785700	1785700	1785700	1785700	1785700
1/4"*50'/15m Grease Hose Reel	***	***	***	H860152	***	***	***	H860152
1/4"*5'/1.5m Connection Hose	***	***	***	19112050	***	***	***	19112050
Weight	22.5kgs	24.5kgs	38kgs	81kgs	50lbs	54lbs	84lbs	178lbs
Packaging Dimension	59x14.5x94cm	62x14.5x111cm	13x13x128cm	13x13x128cm	23.2"x5.7"x37"	24.4"x5.7"x43.7"	5.1"x5.1"x50.4"	5.1"x5.1"x50.4"
			62x10x64cm	62x10x64cm			24.4"3.9"x25.1"	24.4"x3.9"x25.1"
			63.5x10x80cm	51.5x26.5x53cm			25"x3.9x31.5"	20.2"x10.4"x20.8"
				98x67x14.5cm				38.5"x26.3"x5.7"

Note: standard control valve equipped is 1785700, other models are upon request.



65:1 | AIR-OPERATED GREASE DISTRIBUTION KITS

- The most economical & convenient combination for dispensing grease.
- Complete set of fluid transfer accessories gives end usert rouble-free using experience
- The high efficiency of pump is ensured with the original selection of parts and accessories.







10265320

10265310 10265311

10265330

10265310	10265311	10265320	10265330	10265310	10265311	10265320	10265330
17116530	17116550	17116560	17116560	17116532	17116552	17116562	17116562
20-30kgs	50-60kgs	180-220kgs	180-220kgs	44-66lbs	110-132lbs	400-484lbs	400-484lbs
1708001	1708001	1708002	1708003	1708001	1708001	1708002	1708003
1709002	1709004	1709006	1709006	1709002	1709004	1709006	1709006
1709012	1709014	1709016	1709016	1709012	1709014	1709016	1709016
17622131	17622131	17622131	***	17622131	17622131	17622131	***
3/8"M - 1/4"F	3/8"M - 1/4"F	3/8"M - 1/4"F	3/8"M - 1/4"F	3/8"M - 1/4"F	3/8"M - 1/4"F	3/8"M - 1/4"F	3/8"M - 1/4"F
1785700	1785700	1785700	1785700	1785700	1785700	1785700	1785700
***	***	***	H860152	***	***	***	H860152
***	***	***	19112050	***	***	***	19112050
22.5kgs	24.5kgs	38kgs	81kgs	50lbs	54lbs	84lbs	81kgs / 178lbs
60x15x94cm	60x15x94cm	62x10x62cm	51x26.5x53cm	23.6"x5.9"x37"	23.6"x5.9"x37"	24.4"x3.9"x24.4"	20"x10.4"x20.8"
		13x13x117cm	62x10x62cm			5.1"x5.1"x46"	24.4"x3.9"x24.4"
		63.5x10x80cm	13x13x117cm			25"x3.9x31.5"	5.1"x5.1"x46"
			98x67x14.5cm				38.5"x26.3"x5.7"
	17116530 20-30kgs 1708001 1709002 1709012 17622131 3/8"M - 1/4"F 1785700 *** ***	17116530 17116550 20-30kgs 50-60kgs 1708001 1708001 1709002 1709004 1709012 1709014 17622131 17622131 3/8"M - 1/4"F 3/8"M - 1/4"F 1785700 1785700 *** *** *** 22.5kgs 24.5kgs	17116530 17116550 17116560 20-30kgs 50-60kgs 180-220kgs 1708001 1708001 1708002 1709002 1709004 1709016 1709012 1709014 1709016 17622131 17622131 17622131 3/8"M - 1/4"F 3/8"M - 1/4"F 3/8"M - 1/4"F 1785700 1785700 1785700 *** *** *** *** *** *** 22.5kgs 24.5kgs 38kgs 60x15x94cm 60x15x94cm 62x10x62cm 13x13x117cm 13x13x117cm	17116530 17116550 17116560 17116560 20-30kgs 50-60kgs 180-220kgs 180-220kgs 1708001 1708001 1708002 1708003 1709002 1709004 1709006 1709016 1709012 1709014 1709016 1709016 17622131 17622131 *** 3/8"M - 1/4"F 3/8"M - 1/4"F 3/8"M - 1/4"F 1785700 1785700 1785700 **** *** H860152 **** *** 19112050 22.5kgs 24.5kgs 38kgs 81kgs 60x15x94cm 60x15x94cm 62x10x62cm 51x26.5x53cm 13x13x117cm 62x10x62cm 13x13x117cm	17116530 17116550 17116560 17116560 17116532 20-30kgs 50-60kgs 180-220kgs 180-220kgs 44-66lbs 1708001 1708001 1708002 1708003 1708001 1709002 1709004 1709006 1709006 1709012 1709012 1709014 1709016 1709016 1709012 17622131 17622131 **** 17622131 3/8"M - 1/4"F 3/8"M - 1/4"F 3/8"M - 1/4"F 3/8"M - 1/4"F 1785700 1785700 1785700 1785700 1785700 1785700 1785700 1785700 1785700 1785700 1785700 1785700 23.5"x5.9"x37" 22.5kgs 24.5kgs 38kgs 81kgs 50lbs 60x15x94cm 60x15x94cm 62x10x62cm 51x26.5x53cm 23.6"x5.9"x37" 63.5x10x80cm 13x13x117cm 62x10x62cm 33x13x117cm	17116530 17116550 17116560 17116560 17116532 17116552 20-30kgs 50-60kgs 180-220kgs 180-220kgs 44-66lbs 110-132lbs 1708001 1708001 1708002 1708003 1708001 1708001 1709002 1709004 1709006 1709006 1709002 1709014 1709012 1709014 1709016 1709016 1709012 1709014 17622131 17622131 *** 17622131 17622131 17622131 3/8"M - 1/4"F 1785700 1785700 1785700 1785700 1785700 1785700 **** *** *** *** *** **** *** *** *** **** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** <tr< td=""><td>17116530 17116550 17116560 17116560 17116532 17116552 17116562 20-30kgs 50-60kgs 180-220kgs 180-220kgs 44-66lbs 110-132lbs 400-484lbs 1708001 1708002 1708003 1708001 1708001 1708002 1709002 1709004 1709006 1709002 1709014 1709016 1709012 1709014 1709016 1709016 1709012 1709014 1709016 17622131 17622131 *** 17622131 17622131 17622131 17622131 17622131 17622131 17622131 17622131 17622131 17622131 1785700 <t< td=""></t<></td></tr<>	17116530 17116550 17116560 17116560 17116532 17116552 17116562 20-30kgs 50-60kgs 180-220kgs 180-220kgs 44-66lbs 110-132lbs 400-484lbs 1708001 1708002 1708003 1708001 1708001 1708002 1709002 1709004 1709006 1709002 1709014 1709016 1709012 1709014 1709016 1709016 1709012 1709014 1709016 17622131 17622131 *** 17622131 17622131 17622131 17622131 17622131 17622131 17622131 17622131 17622131 17622131 1785700 <t< td=""></t<>

Note: standard control valve equipped is 1785700, other models are upon request.

50:1 | GREASE PUMP MOBILE UNIT

- Convenient to be used for maintenance on any motor vehicle or machinery
- Seamless pressed tank and follower plate equipped inside enable the efficiency
- Mainly composed of tank, grease pump, connection hose and grease control valve

Item No.	POP013	16402001	POP013	16402001
Tank Capacity	13kgs	20kgs	30lbs	44lbs
Length Delivery Hose	2m		6.5ft	
Pump Delivery	1701500		1701500	
Compression Ratio	50:1		50:1	
Noise Level	82Db		82Db	
Max. Working Pressure	8bar		115psi	
Max. Free Flow Rate (Min)	751g		1.65lbs	
Max. Air Consumption (Min)	116.6L		31gallon	
Air Inlet Connection	1/4"quick plug		1/4"NPT Female	
Weight	13.6kgs	16.8kgs	30lbs	37lbs
Packaging Dimension	32x38x87cm	33x35x82.5cm	12.6"x15"x34"	13"x13.7"x32.4"

Note: Pump equipped is 1701500 with 370mm suction tube. Pump equipped is 1701501 with 480mm suction tube.





DRUM COVER & FOLLOWER PLATE

- The drum cover keeps dust and impurities from contaminating the grease.
- It also keeps the pump in a vertical position for optimum operation.
- The follower plate, indispensable when using heavy grease, is pulled toward the bottom of the drum by the vacuum created by the pump.



Drum Cover

Drum	Cover	Follow	er Plate	Application	1
Item No.	Diameter	Item No.	Diameter	Drum Size	Barrel Application
1709001	280mm / 11"	1709011	265mm / 10.4"	240~260mm / 9.4~102"	12~20kgs / 26.4~44lbs
1709002	310mm / 12.2"	1709012	310mm / 12.2"	260~300mm / 10.6~11.8"	16~20kgs / 35.2~44lbs
1709003	350mm / 13.8"	1709013	340mm / 13.4"	300~330mm / 11.8~13"	20~30kgs / 44~66lbs
1709004	385mm / 15.2"	1709014	370mm / 14.6"	335~360mm / 13.2~14.2"	50~60kgs / 110~132lbs
1709005	420mm / 16.5"	1709015	410mm / 16.1"	360~400mm / 14.2~17.3"	50~60kgs / 110~132lbs
1709006	600mm / 23.6"	1709016	585mm / 23.0"	540~580mm / 21.3~22.8"	180~220kgs / 396~484lbs



Follower Plate

HEAVY-DUTY DRUM COVER & FOLLOWER PLATE

Drum	Cover	Follow	ver Plate	Application	1
Item No.	Diameter	Item No.	Diameter	Drum Size	Barrel Application
19328002	280mm / 11"	19426502	265mm / 10.4"	240~260mm / 9.4~102"	12~20kgs / 26.4~44lbs
19331002	310mm / 12.2"	19431002	310mm / 12.2"	270~300mm / 10.6~11.8"	16~30kgs / 35.2~66lbs
19335002	350mm / 13.8"	19434002	340mm / 13.4"	300~330mm / 11.8~13"	20~30kgs / 44~66lbs
19338502	385mm / 15.2"	19437002	370mm / 14.6"	335~360mm / 13.2~14.2"	50~60kgs / 110~132lbs
19342002	420mm / 16.5"	19441002	410mm / 16.1 "	360~400mm / 14.2~17.3"	50~60kgs / 110~132lbs
19360002	600mm / 23.6"	19458502	585mm / 23.0"	540~580mm / 21.3~22.8"	180~220kgs / 396~484lbs



Heavy-duty Drum Cover



Heavy-duty Follower Plate

GREASE HOSE

• SAE 100 R2, working pressure 400bar / 5800psi.

Item No.	I.D.	Length (m/ft)	Fitting Type
1762250	1/ 4''	15m / 50'	Male & Female
1762239	1/ 4''	12m / 39'	Male & Female
1762226	1/ 4''	8m / 26'	Male & Female
1762213	1/ 4''	4m / 13'	Male & Female
1762207	1/ 4''	2m / 7'	Male & Female
1762205	1/ 4''	1.5m / 5'	Male & Female
1762350	1/ 4''	15m / 50'	Female & Female
1762339	1/ 4''	12m / 39'	Female & Female
1762326	1/ 4''	8m / 26'	Female & Female
1762313	1/ 4''	4m / 13'	Female & Female
1762307	1/ 4''	2m / 7'	Female & Female
1762305	1/ 4''	1.5m / 5'	Female & Female
17622501	1/ 4''	15m / 50'	Male & Male
17622391	1/ 4''	12m / 39'	Male & Male
17622261	1/ 4''	8m / 26'	Male & Male
17622131	1/ 4''	4m / 13'	Male & Male
17622071	1/ 4''	2m / 7'	Male & Male
17622051	1/ 4''	1.5m / 5'	Male & Male
19112050	1/ 4''	1.5m / 5'	Female & Female (Elbow fitting)
19112051	1/ 4''	1.5m / 5'	Male & Female (Elbow fitting)



1762213



65L/90L | AIR OPERATED WASTE OIL DRAINER

- Suitable devices to drain, by gravity, waste oil from engines, gear boxes and differentials of all vehicles.
- Air operated oil drainer with center mounted adjustable collecting bowl.
- Adjustable collecting bowl height to work with jack lift or servicing cock.
- Be equipped with a valve for collecting bowl to inspect drained oil before it enters the reservoir.
- Can be equipped with a special support to allow filters to drain.

WARNING:

Do not use with corrosive or inflammable products.



Gravity
OD120.01/OD120.10
OD135.01/OD135.11
OD135.01/OD135.11
Quick plug/NPT(F)



Gravity+Suction OD120.05/OD120.13 OD135.04/OD135.14 Quick plug/NPT(F)



Gravity+Suction (10L/2.6Gallon Transparent Chamber) 0D120.06/0D120.14 0D135.06/0D135.15 Quick plug/NPT(F)

Product Features:

Air Pressure For Vacuum	7-8bar/, 1/4"quick plug / 100-115psi, 1	7-8bar/, 1/4"quick plug / 100-115psi, 1/4"NPT (F)					
Suction Speed	1.5-2LPm/0.4-0.5gpm, Temperature70	-80°C, inner diameter 6mm Suction pipe					
Max. Draining Pressure	1bar/15psi						
Suction Hose	2000mm/78.7"						
Draining Hose Length	2000mm/78.7"						
Collection Bowl Diameter	400mm/16"						
Extension Funnel Diameter	606mm/23.8"						
Collection Bowl Capacity	18L/4.8Gallon						
65L/17Gallon Series							
Item No.	OD120.01/OD120.10	OD120.05/OD120.13	OD120.06/OD120.14				
Ref. No.	16206507/16206508	16106511/16106512	16106531/16106532				
Recovery Mode	Gravity	Gravity+Suction	Gravity+Suction (with Transparent Chamber)				
Height of Oil Pan	1200-1700mm/47.2-67"	1200-1700mm/47.2-67"	1370-1700mm/54-67"				
Packaging Dimension	46x42x90cm/18.1"x16.5"x35.4"	46x42x90cm/18.1"x16.5"x35.4"	46x29x90cm/18.1"x16.5"x35.4" & 59x28x28cm/23.3"x11"x11"				
Weight	32kgs/70.5lbs	43kgs/94.6lbs	43kgs/94.6lbs				
Depressurization Time	120-150s	·	•				
Total Suctoin Capacity	42~45L/11-12gallon						
Max. Draining Capacity	45L/12gallon						
90L/24Gallon Series							
Item No.	OD135.01/OD135.11	OD135.04/OD135.14	OD135.06/OD135.15				
Ref. No.	16209011/16209012	16109011/16109012	16109031/16109032				
Recovery Mode	Gravity	Gravity+Suction	Gravity+Suction (with Transparent Chamber)				
Max. Draining Capacity	1350-1830mm/53.1-72"	1350-1830mm/53.1-72"	1500-1830mm/59-72"				
Packaging Dimension	48x44x105cm/18.9"x17.3"x41.3"	48x44x105cm/18.8"x17.3"x41.3"	48x44x105cm/18.8"x17.3"x41.3" & 59x28x28cm/23.3"x11"x11"				
Weight	37kgs/81.5lbs	47kgs/103.4lbs	47kgs/103.4lbs				
Depressurization Time	150~180s	•					
Height of Oil Pan	65~70L/17-18.5gallon						
Total Suctoin Capacity	70L/18.5gallon						



70L/100L/115L | AIR OPERATED WASTE OIL DRAINER

• Suitable devices to drain, by gravity, waste oil from engines, gear boxes and differentials of all vehicles.

• Air operated oil drainer with center mounted adjustable collecting bowl.

• Can be equipped with a special support to allow filters to drain.

• Hand wheel connecting seat easy to adjust the height of the oil collecting bowl.

WARNING: Do not use with corrosive or inflammable fluid.



Scale with protect cover to prevent damage.



Specially designed handle sleeve more comfortable



Be equipped with bottom outletperfect for fluid oil leakage empty.



Superior draining hose, which is oil, heat, ozone and abrasion resistant.



High quality caster make the moving more smoothly and noise-free.



Gravity

OD125.01/OD125.09



Gravity+Suction (10L/2.6Gallon Transparent Chamber) OD125.05/OD125.13 OD140.05/OD140.13 OD145.05/OD145.13 Quick plug/NPT(F)





Max. Draining Capacity

23.5gallon

Integrative tool tray more

convenient for place spare parts and tools

7-8bar/, 1/4"quick plug / 100-115psi, 1	/4"NPT (F)						
1.5-2LPm/0.4-0.5gpm, Temperature70-	-80°C, inner diameter 6mm Suction pipe						
1bar/15psi	1bar/15psi						
2000mm/78.7"							
1600mm/63"	1600mm/63"						
400mm/16"							
606mm/23.8"							
OD125.01/OD125.09	OD125.04/OD125.12	OD125.05/OD125.13					
16207005/16207006	16107005/16107006	16107027/16107028					
Gravity	Gravity+Suction	Gravity+Suction(with Transparent Chamber)					
1200-1700mm/47.2-67"	1250-1790mm/49.2-70.5"	1250-1700mm/49.2-70.5"					
46x46x100cm/18.1"x18.1"x40"	46x46x100cm/18.1"x18.1"x40"	46x46x100cm/18.1"x18.1"x40" & 59x28x28cm/3.3"x11"x11"					
35kgs/77lbs	37kgs/81lbs	40kgs/88lbs					
130-140s	•						
45-48L/11.8-12.7gallon							
48L/12.7gallon							
OD140.01/OD140.09	OD140.04/OD140.12	OD140.05/OD140.13					
16210009/16210010	16110005/16110006	16110027/16110028					
Gravity	Gravity+Suction	Gravity+Suction(with Transparent Chamber)					
1250-1790mm/49.2-70.5"	1250-1790mm/49.2-70.5"	1500-1790mm/59-70.5"					
52x49x105cm/20.4"x19.3"x41.3"	52x49x105cm/20.5"x19.3"x41.3"	52x49x105cm/20.5"x19.3"x41.3" & 59x28x28cm/23.3"x11"x11"					
40kgs/88lbs	42kgs/93lbs	45kgs/99lbs					
160-190s							
72-77L/19-20gallon							
77L/20gallon							
OD145.01/OD145.09	OD145.04/OD145.12	OD145.05/OD145.13					
16211505/16211506	16111505/16111506	16111527/16111528					
Gravity	Gravity+Suction	Gravity+Suction(with Transparent Chamber)					
1350-1890mm/53.1~74.4"	1350-1890mm/53.1-74.4"	1600-1890mm/63-74.4"					
52x49x114cm/20.5"x19.3"x44.9"	52x49x114cm/20.5"x19.3"x44.8"	52x49x114cm/20.5"x19.3"x44.8" & 59x28x28cm/23.3"x11"x11					
42kgs/92lbs	44kgs/97lbs	47kgs/103lbs					
180-200s							
83-89L/22-23.5gallon							
	1.5-2LPm/0.4-0.5gpm, Temperature70- 1bar/15psi 2000mm/78.7" 1600mm/63" 400mm/16" 606mm/23.8" OD125.01/OD125.09 16207005/16207006 Gravity 1200-1700mm/47.2-67" 46x46x100cm/18.1"x18.1"x40" 35kgs/77lbs 130-140s 45-48L/11.8-12.7gallon 48L/12.7gallon OD140.01/OD140.09 16210009/16210010 Gravity 1250-1790mm/49.2-70.5" 52x49x105cm/20.4"x19.3"x41.3" 40kgs/88lbs 160-190s 72-77L/19-20gallon 77L/20gallon OD145.01/OD145.09 16211505/16211506 Gravity 1350-1890mm/53.1~74.4" 52x49x114cm/20.5"x19.3"x44.9" 42kgs/92lbs 180-200s	2000mm/78.7" 1600mm/63" 400mm/16" 606mm/23.8" OD125.01/OD125.09 OD125.04/OD125.12 16207005/16207006 Gravity Gravity+Suction 1200-1700mm/47.2-67" 46x46x100cm/18.1"x18.1"x40" 35kgs/77lbs 37kgs/81lbs 130-140s 45-48L/11.8-12.7gallon 48L/12.7gallon OD140.01/OD140.09 OD140.04/OD140.12 16210009/16210010 Gravity Gravity+Suction 1250-1790mm/49.2-70.5" 52x49x105cm/20.4"x19.3"x41.3" 40kgs/88lbs 42kgs/93lbs 160-190s 72-77L/19-20gallon OD145.01/OD145.09 OD145.04/OD145.12 16211505/16211506 Gravity Gravity+Suction 1350-1890mm/53.1~74.4" 52x49x114cm/20.5"x19.3"x44.9" 52x49x114cm/20.5"x19.3"x44.8" 42kgs/92lbs 44kgs/97lbs 180-200s					



30L/65L/90L | AIR OPERATED OIL CHANGER (WITH CHAMBER)

• Extract used oil and other fluids from any vehicle using the venturi-vacuum extracting system.

• Great for cars, boats, motorcycles.

 Vacuum-charged unit is completely portable and easy to use.

 Includes six suction probes (metal and flexible) equipped with quick-disconnect couplers for fluid extraction.

 Adapters for BMW, Mercedes, Citröen and Volkswagen are also included.

• Self-evacuating feature makes emptying clean and easy.



Suction OD115.01/OD115.02 Quick plug/NPT(F)



Suction OD120.03/OD120.11 OD135.02/OD135.12 Quick plug/NPT(F)



Suction (with Transparent Chamber) (10L/2.6Gallon Transparent Chamber) 0D120.04/0D120.12 0D135.03/0D135.13 Quick plug/NPT(F)



Gravity+Suction (with Oil Bucket) 0D135.05/0D135.16 Quick plug/NPT(F)

Product Features:

Product reatures:			
Air Pressure For Vacuum	7-8bar/, 1/4" quick plug / 100-115psi,	1/4"NPT (F)	
Suction Speed	1.5-2LPm/0.4-0.5gpm, Temperature70	0-80°C, inner diameter 6mm Suction pipe	
Max. Draining Pressure	1bar/15psi		
Suction Hose	2000mm/78.7"		
Draining Hose Length	1600mm/63"		
Collection Bowl Diameter	400mm/16"		
Extension Funnel Diameter	606mm/23.8"		
Collection Bowl Capacity	18L/4.8Gallon		
30L/8Gallon Series			
Item No.	OD115.01/OD115.02		
Ref. No.	16303003/16303004		
Recovery Mode	Suction		
Packaging Dimension	70x39x35cm/27.6"x15.4"x13.8"		
Weight	17kgs/37lbs		
Depressurization Time	60~90s		
Total Suction Capacity	21-22L/5.5-5.8Gallon		
Max. Draining Capacity	22L/6gallon		
65L/17Gallon Series			
Item No.	OD120.03/OD120.11	OD120.04/OD120.12	
Ref. No.	16306505/16306506	16306525/16306526	
Recovery Mode	Suction	Suction (with Transparent Chamber)	
Packaging Dimension	72x40x46cm/27.6"x15.7"x18.1"	72xx40x46cm/27.6"x15.7"x18.1" & 59x28x28cm/23.3	"x11"x11"
Weight	32kgs/70.4lbs	32kgs/70.4lbs	
Depressurization Time	120~150s		
Total Suction Capacity	42-45L/11-12Gallon		
Max. Draining Capacity	45L/12gallon		
90L/24Gallon Series			
Item No.	OD135.02/OD135.12	OD135.03/OD135.13	OD135.05/OD135.16
Ref. No.	16309005/16309006	16309025/16309026	16209006/16209008
Recovery Mode	Suction	Suction (with Transparent Chamber)	Gravity+Suction (with Oil Bucket
Packaging Dimension	86x44x47cm/33.9"x17.3"x18.5"	86x44x47cm/33.9"x17.36"x18.5" &	85x69x30cm/33.4"x27.1"x11.8" &
		59x28x28cm/23.3"x11"x11"	7x15x132cm/2.7"x5.9"x51.9"
Weight	37kgs/81.4lbs	37kgs/81.4lbs	54.7kgs/120.3lbs
Depressurization Time	150~180s		
Total Suction Capacity	65-70L/17-18.5Gallon		
Max. Draining Capacity	70L/18.5gallon		
			-



70L/100L/115L | AIR OPERATED OIL CHANGER

• Extract used oil and other fluids from any vehicle using the venturi-vacuum extracting system.

- Great for cars, boats, motorcycles.
- Vacuum-charged unit is completely portable and easy to use.
- Includes six suction probes (metal and flexible) equipped with quick-disconnect couplers for fluid extraction.
- Adapters for BMW, Mercedes, Citröen and Volkswagen are also included.
- Self-evacuating feature makes emptying clean and easy.



Scale with protect cover to prevent damage.



Specially designed handle sleeve more comfortable



Superior draining hose, which is oil, heat, ozone



Integrative tool tray more convenient for place spare parts and tools.



Be equipped with bottom outletperfect for fluid oil leakage empty.



High quality caster make the moving more smoothly and noise-free.



Suction OD125.02/OD125.10 OD140.02/OD140.10 OD145.02/OD145.10 Quick plug/NPT(F)



Suction (10L/2.6Gallon Transparent Chamber) OD125.03/OD125.11 OD140.03/OD140.11 OD145.03/OD145.11 Quick plug/NPT(F)

Product Features:

roduct reatures.						
Air Pressure For Vacuum	7-8bar/, 1/4"quick plug / 100-115psi, 1/4"NPT (F)					
Suction Speed	1.5-2LPm/0.4-0.5gpm, Temperature70-80°C, inner dian	1.5-2LPm/0.4-0.5gpm, Temperature70-80°C, inner diameter 6mm Suction pipe				
Max. Draining Pressure	1bar/15psi					
Suction Hose	2000mm/78.7"					
Draining Hose Length	1600mm/63"					
70L/18.4Gallon Series						
Item No.	OD125.02/OD125.10	OD125.03/OD125.11				
Ref. No.	16307003/16307004	16307023/16307024				
Recovery Mode	Suction	Suction (with Transparent Chamber)				
Packaging Dimension	46x46x80cm/18.1"x18.1"x31.5"	46x46x80cm/18.1"x18.1"x31.5" & 59x28x28cm/23.2"x11"x11"				
Weight	30kgs/66lbs	33kgs/73lbs				
Depressurization Time	130-140s					
Max. Draining Capacity	48L/12.7gallon					
Total Suction Capacity	45-48L/11.8-12.7gallon					
100L/26.4Gallon Series						
Item No.	OD140.02/OD140.10	OD140.03/OD140.11				
Ref. No.	16310003/16310004	16310023/16310024				
Recovery Mode	Suction	Suction (with Transparent Chamber)				
Packaging Dimension	51x49x86cm/20"x19.3"x33.9"	51x49x86cm/20"x19.3"x33.9" & 59x28x28cm/23.2"x11"x11"				
Weight	35kgs/77lbs	38kgs/84lbs				
Depressurization Time	160-190s					
Max. Draining Capacity	77L/20gallon					
Total Suction Capacity	72-77L/19-20gallon					
115L/30Gallon Series						
Item No.	OD145.02/OD145.10	OD145.03/OD145.11				
Ref. No.	16311503/16311504	16311523/16311524				
Recovery Mode	Suction	Suction (with Transparent Chamber)				
Packaging Dimension	51x49x95cm/20"x19.3"x37.4"	51x49x95cm/20"x19.3"x37.4" & 59x28x28cm/23.2"x11"x11"				
Weight	37kgs/81lbs	40kgs/88lbs				
Depressurization Time	180-200s					
Max. Draining Capacity	89L/23.5gallon					
Total Suction Capacity	83-89L/22-23.5gallon					



LOW LEVEL OIL DRAINER

• Equipment suitable for collecting oil from engine, gear boxes and differentials of all vehicles. (All kinds of liquids in all vehicles except acidic, alkaline and corrosive liquids.)



Item No.	TFD003	TFD002	TFD006
Ref. No.	16211091	16211063	16207060
Capacity	110L/24gallon	110L/24gallon	70L/15gallon
Height	245mm/9.64"	205mm/8.07"	85mm/3.35"
LengthxWidth	800x700mm/31.5"x27.5"	1000x700mm/39.4"x27.5"	1250x825mm//49.2"x32.5"
Handle Length	Range of Slid Rod: 90~131.5cm/3.5"x5.2"	870mm/34-1/4"	1080mm/42-1/2"
Weight	40kgs/88lbs	41.5kgs/91.3lbs	40kgs/88lbs
Packaging Dimension	88x86x31cm/34.6"x34.6"x12.2"	126x88x23cm/49.6"x34.6"x9.1"	156x101x10cm/61.4"x39.7"x3.9"

LOW LEVEL OIL DRAINER

• Equipment suitable for collecting oil from engine, gear boxes and differentials of all vehicles. (All kinds of liquids in all vehicles except acidic, alkaline and corrosive liquids.)





OD201.01

Item No.	OD205.01	OD203.01	OD202.01	OD204.01	OD204.02	OD205.02	OD204.03	OD204.04
Ref. No.	16206561	16206590	16206560	1710001	1710002	16206562	1710001	1710002
Capacity	65L	65L	65L	37L	68L	17gallon	10gallon	18gallon
Connection	1/2"BSP	1"BSP	3/4"BSP	1/2"BSP	1/2"BSP	1/2"NPT	1/2"NPT	1/2 "NPT
Height	270mm	270mm	270mm	200mm	200mm	11"	8"	8"
Length x Width	800x700mm	800x700 mm	800x700mm	835x570mm	1200x645mm	31.5"x27.55"	32.87"x22.44	47.24"x25.39"
Handle Length	850mm	**	850mm	860mm	860mm	33.5"	34"	34"
Weight	29kgs	24kgs	24kgs	15kgs	22kgs	63.8lbs	33lbs	48.5lbs
Packaging Dimension	84.5x78.5x29.5cm	70x70x30cm	84.5x78.5x29.5cm	89x53x22cm	118.5x66x19.5cm	33.2"x30.9"x11.6"	35"x21"x8.6"	46.7"x26"x7.7"



BRACKET

Top Bracket

• Size: 11.8"Wx"1.8"Dx38.9~40"L (300x45x987~1033mm).

• Item No.: TFA004 • Ref. No.: 19808102

Side Bracket

• Size: 3.9"Wx"1.6"Dx21.9"H (100x40x556mm).

• Item No.: TFA003 • Ref. No.: 19808101



CONTAINMENT TANK

- Ideal for collecting oil from drums.
- Material for body: steel, powder coating.
- Material for grid: steel, zinc plated.
- With 4 feet in height 4" / 100mm, easy for forklift to move.











16222097 Storage metal tank for one 1000 It IBC tank, recovery capacity 1000 lt.

Item No.	16222090	16222091	16222092	16222093	16222097
Capacity	200kgs / 440lbs	500kgs / 1,100lbs	800kgs / 1,760lbs	1,000kgs / 2,200lbs	1,100kgs / 2,420lbs
Drum available	1pc	2pcs	3pcs	4pcs	1pc (IBC tank)
Tank capacity	146L / 38gallon	210L / 55gallon	270L / 71gallon	200L / 53gallon	1050L / 277gallon
Overall size	32.5"x32.5"x13.6"	32.5"x49.2"x13.6"	34.4"x77"x12.2"	52.4"x52.4"x9.4"	52.4"x52.4"x28"
	825x825x345mm	825x1250x345mm	875x1955x310mm	1330x1330x240mm	1330x1330x700mm
40' Q'ty (pcs)	252	207	130	144	70
Remark: Drum size 200L/50gallon					



HAND OPERATED BARREL OIL PUMP

- 20L / 5gallon powder coating container with 430mm handle.
- 1.5M *1/2" I.D. PVC hose and 3/8" I.D. metal pipe.
- Capacity approx.0.07L / stroke.
- Packing volume: 0.069cbm / 2.449cft.







Item No.	17211017	17211006	17211007	17211008	1702001	1702001W
Capacity	6L / 1.6gallon	8L / 2.1gallon	12L / 3.2gallon	16L / 4.2gallon	20L / 5.3gallon	20L / 5.3gallon
Accessory	*	*	*	*	*	with trolley
Weight	5kgs / 11lbs	6kgs / 13lbs	6.5kgs / 14lbs	7kgs / 15lbs	10kgs / 22lbs	11.5kgs / 23lbs

HAND OPERATED BARREL GREASE PUMP

- 20kgs / 44lbs powder coating container with 430mm handle.
- 1.8M *1/4" I.D. one steel wire rubber hose.
- Grease control valve with 4-jaw coupler.
- Capacity approx. 7.5g / stroke.
- Packing volume: 0.069cbm / 2.449cft.



17211016 & 17211009 & 17211010 & 17211011







1702002W

Item No.	17211016	17211009	17211010	17211011	1702002	1702002W
Capacity	6kgs / 13.2lbs	8kgs / 17.6lbs	12kgs / 26.5lbs	16kgs / 35.3lbs	20kgs / 44lbs	20kgs / 44lbs
Accessory	*	*	*	*	*	with trolley
Weight	5kgs / 11lbs	6kgs / 13lbs	6.5kgs / 14lbs	7kgs / 15lbs	10kgs / 22lbs	11.5kgs / 25.3lbs



PRESSURE SPRAYER

- Pressure sprayer is equipped with level gauge and sprayer gun.
- Pressure sprayers is suitable for the non-toxic spraying of detergent liquids, low density lubrication oils and similar, for washing motors vehicles, grafting, lubricating, distributing mould release oils, etc.
- Filled with liquid to 3/4 of its capacity, 3bar working pressure work autonomously without requiring continuous connection to the compressed air line.



Oil Dispenser is equipped with Anti-splash funnel







65L/17Gal OR602.06 (Quick Plug) OR602.03 (NPT Female)

Item No.	OD602.02	OD602.06	OD602.01	OD602.03
Ref. No.	16503001	16506501	16503002	16506502
Tank Capacity	30L	65L	8gallon	17gallon
Max. Working Pressure	3bar		43.5psi	
Flexible Hose Length	5000mm		197"	
Gun Length	690mm		27"	
Air Inlet Connection	1/4"quick plug		1/4"NPT (F)	
Weight	17kgs	29kgs	37lbs	64lbs
Packaging Dimension	93.5x41x35cm	86x40x44cm	36.8"x16.1"x13.8"	33.9"x15.7"x17.3"

OIL DISPENSER

- Pneumatic oil dispenser is equipped with level gauge and delivery gun with flexible end. Suitable for filling or topping-up oil.
- Filled with oil (to 4/5 their capacity) and pressurized with air at 3bar, they work autonomously anywhere and do not require continuous connection to the compressed air line.



Oil Dispenser is equipped with Anti-splash funnel



30L/8Gal OD603.03 (Quick Plug) OD603.05 (NPT Female)



OD603.04 (Quick Plug) OD603.06 (NPT Female)

Item No.	OD603.03	OD603.04	OD603.05	OD603.06
Ref. No.	16403001	16406501	16403002	16406502
Tank Capacity	30L	65L	8gallon	17gallon
Max. Working Pressure	3bar		43.5psi	
Flexible Hose Length	2000mm		79"	
Gun Length	478mm		18.7"	
Air Inlet Connection	1/4" quick plug		1/4"NPT (F)	
Weight	17kgs	29kgs	37lbs	64lbs
Packaging Dimension	93.5x41x35cm	86x40x44cm	36.8"x16.1"x13.8"	33.9"x15.7"x17.3"



90L(24GAL) AIR-OPERATED DOUBLE DIAPHRAGM PUMPS

• The diaphragm pump with convenient operating are widely used in various industries, such as petroleum, metallurgy, mining, coating material, printing, paper making, electronic, textile, furnishing, environmental protection, water treatment, automotive etc.



- Chemical referance (Appendix A).
- Different elastomer material for various fluid:

Nitrile: Diesel, Kerosene, Oil.

FPM: Common automtive and industry fluids, various of chemical.

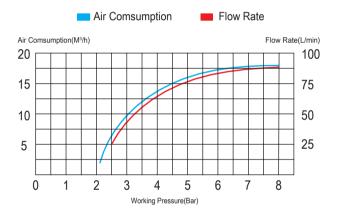
• Maximum head: 164FT/50M.

• Maximum suction height: 10FT/3M.

• Pump body material: Polypropylane.

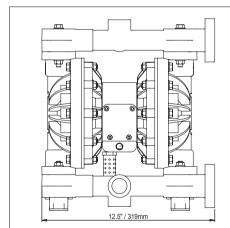
• Max. pressure: 115PSI/8BAR.

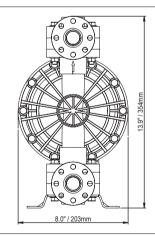
• Air inlet: 1/4".

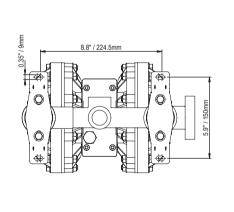












Item No.	FP202.04	FP202.02	FP202.03	FP202.01
Ref. No.	17151201	17151203	17151201	17151203
Flow Rate	90LPM		24GPM	
Inlet/Outlet	1"BSP (F)		1"NPT (F)	
Air Inlet Connection	1/4" Quick Plug (M)		1/4" NPT (F)	
Max. Dia. Solid	1/8"	FPM	1/8"	FPM
Elastomer	Nitrile		Nitrile	
Ball Valve	PTFE	FPM	PTFE	FPM
O-ring	Nitrile		Nitrile	
Weight	10kgs		22lbs	
Packaging Dimension	27x22x33cm		11"x8.7"x13"	



50L/60L(13BAL/16GAL) AIR-OPERATED DOUBLE DIAPHRAGM PUMPS

- The diaphragm pump with convenient operating are widely used in various industries, such as petroleum, metallurgy, mining, coating material, printing, paper making, water treatment, automotive etc.
- Features an externally serviceable air distribution system and all-bolted construction.
- Chemical referance (Appendix A).
- Different elastomer material for various fluid:

Nitrile: Diesel, Kerosene, Oil.

FPM: General transfer, Common automative and industry fluids.

• Maximum head: 164FT/50M.

• Maximum suction height: 10FT/3M.

• Pump body material: Aluminum.

• Max. pressure: 115PSI/8BAR.

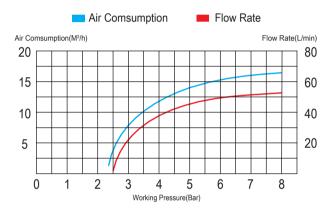
• Air inlet: 1/4".

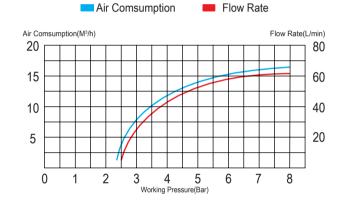


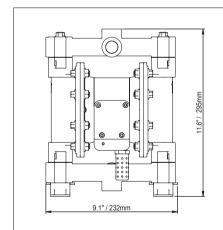


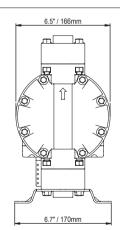
FP203.02/FP203.01 FP203.08/FP203.07

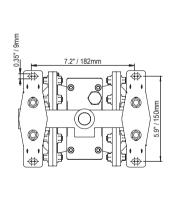
FP206.06/FP203.05 FP203.12/FP203.11











Item No.	FP203.02	FP203.08	FP203.06	FP203.12	FP203.01	FP203.07	FP203.05	FP203.11
Ref. No.	17150600	17150605	17150500	17150505	17150600	17150605	17150500	17150505
Flow Rate	60LPM		50LPM		16GPM		13.2GPM	
Inlet/Outlet	3/4"BSP (F)		1/2"BSP (F)		3/4"NPT (F)		1/2"NPT (F)	
Air Inlet Connection	1/4" Quick Plug	ι (M)	1/4" Quick Plug	ı (M)	1/4" NPT (F)		1/4" NPT (F)	
Max. Dia. Solid	1/8"	FPM	1/8"	FPM	1/8"	FPM	1/8"	FPM
Elastomer	Nitrile		Nitrile		Nitrile		Nitrile	
Ball Valve	PTFE	FPM	PTFE	FPM	PTFE	FPM	PTFE	FPM
O-ring	Nitrile		Nitrile		Nitrile		Nitrile	
Weight	6.6kgs		6.6kgs		14.5lbs		14.5lbs	
Packaging Dimension	27x19x33cm		27x19x33cm		11"x7.5"x13"		11"x7.5"x13"	



50L/60L(13BAL/16GAL)AIR-OPERATED DOUBLE DIAPHRAGM PUMPS

- The diaphragm pump with convenient operating are widely used in various industries, such as petroleum, metallurgy, mining, coating material, printing, paper making, electronic, textile, furnishing, environmental protection, water treatment, automotive etc.
- Features an externally serviceable air distribution system and all-bolted construction.
- Chemical referance (Appendix A).
- Different elastomer material for various fluid:

Nitrile: Diesel, Kerosene, Oil.

FPM: Common automtive and industry fluids, various of chemical.

• Maximum head: 164FT/50M.

• Maximum suction height: 10FT/3M.

• Pump body material: Polypropylane.

• Max. pressure: 115PSI/8BAR.

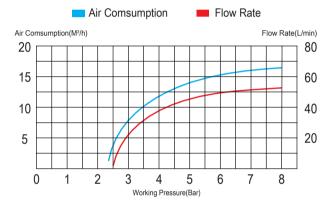
• Air inlet: 1/4".

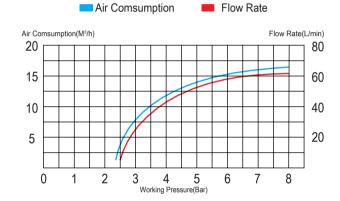


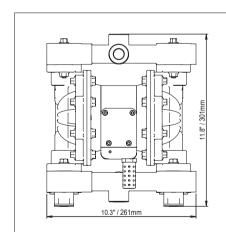


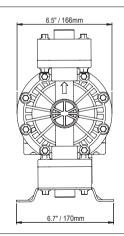
FP204.03/FP204.02 FP204.10/FP204.09

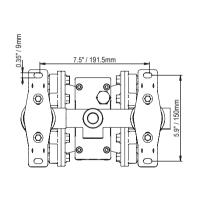
FP204.07/FP204.06 FP204.14/FP204.13











Item No.	FP204.03	FP204.10	FP204.07	FP204.14	FP204.02	FP204.09	FP204.06	FP204.13
Ref. No.	17150601	17150603	17150501	17150503	17150601	17150603	17150501	17150503
Flow Rate	60LPM		50LPM		16GPM		13.2GPM	
Inlet/Outlet	3/4"BSP (F)		1/2"BSP (F)		3/4"NPT (F)		1/2"NPT (F)	
Air Inlet Connection	1/4" Quick Plug	(M)	1/4" Quick Plug	(M)	1/4" NPT (F)		1/4" NPT (F)	
Max. Dia. Solid	1/8"	FPM	1/8"	FPM	1/8"	FPM	1/8"	FPM
Elastomer	Nitrile		Nitrile		Nitrile		Nitrile	
Ball Valve	PTFE	FPM	PTFE	FPM	PTFE	FPM	PTFE	FPM
O-ring	Nitrile		Nitrile		Nitrile		Nitrile	
Weight	6.6kgs		6.6kgs		14.5lbs		14.5lbs	
Packaging Dimension	27x19x33cm		27x19x33cm		11"x7.5"x13"		11"x7.5"x13"	



UREA/DEF DC PUMP KIT

 Portable UREA/DEF transfer pump, with membrane pump complete with 12/24V electric motor without dynamic seals.



Item No.	Item No.	Wire Type	Flow Rate	Pump Model	Voltage	Nozzle	Hose Tails & Clamp	Suction Hose	Delivery Hose	Package	Weight
FK202.01/FK202.02	10302506	US/Europe	6.6GPM/25LPM	17550250	12V	Manual FN500.01	Yes	1.5M	6M	15.7x15.7x12"/ 40x40x31cm	25.3lbs / 11.5kgs
FK202.05	10302507	Europe	25LPM	17550253	24V	Manual FN500.01	Yes	1.5M	6M	15.7x15.7x12"/ 40x40x31cm	25.3lbs / 11.5kgs



Item No.	Ref. No.	Plug	Voltage	Flow Rate	RPM	Power	Inlet/Outlet	Package Dimension	Weight
FP200.01/FP200.02/FP200.03/FP200.04/FP200.05	17350250	Germany/France/Brazil/Denmark/Australia	230V	25LPM	2800	200W	3/4"	11x8.7x9.5"/ 28x22x24cm	12.1lbs / 5.5kgs
FP200.06	17350251	US	120V	8GPM	3360	300W	3/4"	11x8.7x9.5"/ 28x22x24cm	12.1lbs / 5.5kgs
FP205.02/FP205.01	17550250	US/Europe	12V	6.6GPM/25LPM	2800	180W	3/4"	15.7x8.7x10.2"/ 40x22x26cm	12.7lbs / 5.8kgs
FP205.03	17550253	Europe	24V	25LPM	2800	180W	3/4"	15.7x8.7x10.2"/ 40x22x26cm	12.7lbs / 5.8kgs



UREA/DEF TRANSFER PUMP KIT

- This dispensing unit is design to be easily moved from an IBC tank to another, with powder coated steel wall mounted plate, easy to install, versatile and compact.
- The unit basically has installed a self priming membrane pump, a plastic manual nozzle and EPDM suction and delivery hose to make an easier filling operation.
- The turbine measuring meter, Auto shut off nozzle and SEC connection will be optional.







Equipped with



6M/20ft. Delivery Hose 1.5m/5ft. Suction Hose



Plastic Manual Nozzle

Plastic Automatic Nozzle

Item No. #15221005

Digital Meter

Item No. #17350250/251 UREA/DEF Transfer AC Pump

Item No.	Ref. No.	Pump Model	Voltage	Nozzle	Flow Meter	Plug	Flow Rate	Hose Tails & Clamp	Bracket	Package	Weight
FK200.01	10302500	17350250	AC230V	Manual FN500	-	Australia	25L	Yes	Yes	17.7x17.7x10.2" / 45x45x26cm	30.8lbs / 14kgs
FK200.02	10302500	17350250	AC230V	Manual FN500	-	France	25L	Yes	Yes	17.7x17.7x10.2" / 45x45x26cm	30.8lbs / 14kgs
FK200.03	10302500	17350250	AC230V	Manual FN500	-	England	25L	Yes	Yes	17.7x17.7x10.2" / 45x45x26cm	30.8lbs / 14kgs
FK200.04	10302501	17350251	AC120V	Manual FN500	-	US	8GAL	Yes	Yes	17.7x17.7x10.2" / 45x45x26cm	30.8lbs / 14kgs
FK200.05	10302502	17350250	AC230V	Manual FN500	FM204	Germany	25L	Yes	Yes	17.7x17.7x10.2" / 45x45x26cm	31.9lbs / 14.5kgs
FK200.06	10302502	17350250	AC230V	Manual FN500	FM204	Australia	25L	Yes	Yes	17.7x17.7x10.2" / 45x45x26cm	31.9lbs / 14.5kgs
FK200.07	10302503	17350251	AC120V	Manual FN500	FM204	US	8GAL	Yes	Yes	17.7x17.7x10.2" / 45x45x26cm	31.9lbs / 14.5kgs
FK200.08	10302504	17350250	AC230V	Auto FN501	FM204	Germany	25L	Yes	Yes	17.7x17.7x10.2" / 45x45x26cm	34.1lbs / 15.5kgs
FK200.09	10302504	17350250	AC230V	Auto FN501	FM204	Australia	25L	Yes	Yes	17.7x17.7x10.2" / 45x45x26cm	34.1lbs / 15.5kgs
FK200.10	10302504	17350250	AC230V	Auto FN501	FM204	England	25L	Yes	Yes	17.7x17.7x10.2" / 45x45x26cm	34.1lbs / 15.5kgs
FK200.11	10302504	17350250	AC230V	Auto FN501	FM204	France	25L	Yes	Yes	17.7x17.7x10.2" / 45x45x26cm	34.1lbs / 15.5kgs
FK200.12	10302505	17350251	AC120V	Auto FN501	FM204	US	8GAL	Yes	Yes	17.7x17.7x10.2" / 45x45x26cm	34.1lbs / 15.5kgs





Equipped with



6M/20ft. Delivery Hose 1.5M/5ft. Suction Hose

Item No. #15221005



Digital Meter

Item No. #17350250/251



UREA/DEF Transfer AC Pump

Item No. #17550250/253



UREA/DEF Transfer DC Pump

Item No. #FN500.01/FN501.01 FN500.01 Plastic Manual Nozzle FN501.01 Plastic Automatic Nozzle

Item No.	Ref. No.	Pump Model	Voltage	Plug & Wire Type	Flow Rate	Delivery Hose	Nozzle	Flow Meter	Trolley Package	Package	Weight
FK201.01/FK201.02	10302508	17350250	230V	England/France	25LPM	FN500.01	Manual	FM204	32x4x27"/81.5x10.5x69cm	15.7x15.7x10"/ 40x40x25xcm	95.7lbs / 43.5kgs
FK201.03	10302509	17350251	120V	US	30LPM	FN500.01	Manual	FM204	32x4x27"/81.5x10.5x69cm	15.7x15.7x10"/ 40x40x25xcm	95.7lbs / 43.5kgs
FK201.04/FK201.05	10302510	17550250	DC 12V	US/Europe Wire	25LPM	FN500.01	Manual	FM204	32x4x27"/81.5x10.5x69cm	15.7x15.7x10"/ 40x40x25xcm	96.8lbs / 44kgs
FK201.08/FK201.09	10302512	17350250	230V	England/France	25LPM	FN500.01	Auto	FM204	32x4x27"/81.5x10.5x69cm	15.7x15.7x10"/ 40x40x25xcm	100lbs / 45.5kgs
FK201.10	10302513	17350251	120V	US	30LPM	FN500.01	Auto	FM204	32x4x27"/81.5x10.5x69cm	15.7x15.7x10"/ 40x40x25xcm	100lbs / 45.5kgs
FK201.11	10302514	17550250	DC 12V	Europe Wire	25LPM	FN500.01	Auto	FM204	32x4x27"/81.5x10.5x69cm	15.7x15.7x10"/ 40x40x25xcm	101lbs / 46kgs



MOBILE WATER-BASED FLUID DISPENSING KIT

- The newly designed to transport DEF/UREA/ Window shield water/Anti-freeze safely into the vehicle and truck.
- Two models for panel operation: preset and manual, just push of the start button refills the car and truck.
- The whole refilling process is automatic.
- With 7" screen for operation, and check the quantity dispensed.
- The kits is made of a robust trolley on which can fit 208L/55G barrel maximum.
- The trolley is equipped with two 3" universal wheels (one with brake function) and two 6" directional wheels, convenient for mobile use.
- Trolley Packaging Dimension: 107x80.5x18.5cm, Weight: 19kgs 85x52x40.5cm, Weight: 29kgs



Data export via the wireless network or USB disk.







FMS403 For UREA/DEF

- 1/2" dispensing nozzle.
- Delivery EPDM hose length: 4m.

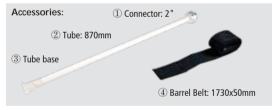
FMS404

For Window shield water/Anti-freeze

- Dispensing manual nozzle.
- Delivery NBR hose length: 4m.

Window shield water/Anti-freeze Equipped with







UREA/DEF Equipped with









Item No.	Power Supply Mode	Media	Max. Flow Rate	Max. Pressure	Voltage	Plug	Nozzle
FMS403.01	Battery Charger/Plug	UREA/DEF	3.5L	3Bar	220V	European	Auto FN501.01
FMS403.02	Battery Charger/Plug	UREA/DEF	8L	3Bar	220V	European	Manual FN500.01
FMS403.11	Plug	UREA/DEF	3.5L	3Bar	220V	European	Auto FN501.01
FMS403.12	Plug	UREA/DEF	8L	3Bar	220V	European	Manual FN500.01
FMS404.01	Battery Charger/Plug	Window shield water/Anti-freeze	5L	3Bar	220V	European	Manual 2.11.005.1013
FMS404.11	Plug	Window shield water/Anti-freeze	5L	3Bar	220V	European	Manual 2.11.005.1013



Anti-corrosion Rotary Pump

- With FPM seals.
- 3-piece dip tube. Fits from 60L-220L/ 16-58gallon drums.
- Pump manufactured from polypropylene
- Inner rotor made of PPS.
- Compatible fluids: water, AdBlue, diesel, bio diesel, heating oil.
- Item No.: 1703005



Anti-corrosion Lever Pump

- With PTFE seals.
- 3-piece dip tube. Fits from 60-220L /15-58gallon drums.
- Spout made of PP, and adjustable handle made of ABS.
- Pump manufactured from polypropylene, 201SS rod.
- Compatible fluids: water, diesel, bio diesel, kerosene,oil,weak acid weak alkali.
- Item No.: 1703008



Plastic Manual Nozzle

- Plastic nozzle with stainless steel spout.
- Flow rate: 16GPM/60LPM.
- Inlet: 3/4", Diameter of spout: 3/4".
- Item No.: FN500.01 • Ref. No.: 18321006



Plastic Automatic Nozzle

- Flow Rate: 2-14GPM/8-50LPM.
- Inlet: 3/4", Diameter of spout: 3/4".
- Item No.: FN501.01
- Ref. No.: 18311009



- **Delivery Hose** • EPDM rubber hose.
- Inner Dimension: 3/4".
- Hose Length: 6M/20FT.
- Item No.: 19136407



Digital Meter

- Turbine measuring system.
- Inlet/Outlet: 1".
- Flow Rate: 3-26GPM/10-100LPM.
- Item No.: FM204.19 Inlet/Outlet: 1"NPT(F)
- Item No.: FM204.51 Inlet/Outlet: 1"BSP(F)
- Item No.: FM204.60 Inlet/Outlet: 1"NPT(M)
- Ref. No.: 15221005



Plastic Fitting

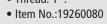
- Hose barb 3/4".
- Thread: 1".
- Item No.:19260070



Plastic Hose Tail • Hose barb 3/4".

- Connection: 1".
- Item No.:19260060







S/S Hose Clamp

• Item No.:19260090



S/S Automatic Nozzle

- Stainless steel structure with FPM seal.
- Flow Rate: 2-14GPM/8-50LPM.
- Item No.: FN501.01 Inlet: 3/4" BSP(F), Outlet: 3/4"
- Item No.: FN501.02
- Inlet: 3/4" NPT(F), Outlet: 3/4"
- Ref. No.: 18311008



SEC Connection

- Suction Connections.
- Inlet: 1" bar, outlet 3/4" bar.
- 2"BSP: #17940041.
- 2.5"x5 buttress: #17940040



Suction Tube

- 3-piece adjustable PP tube.
- Total length: 1010mm.
- I.D.: 1".
- Item No.:17920056





		Elast	omer		Body Material		
Chemical	Nitrile	EPDM	FPIM	PTFE	Alum.	<u>&</u>	
1-Nitropropane	С	A	Х	Α	Α	_	
Acetaldehyde (Ethanal)	Х	Α	Χ	Α	Α	С	
Acetamide (Acetic Acid Amide)	В	Α	В	Α	Α	Α	
Acetic Acid _ 20%	В	Α	С	Α	_	В	
Acetone (Dimethylketone)	Х	Α	Х	Α	В	Х	
Acrolein (Acrylaldehyde)	_	_	Α	Α	В	_	
Adipic Acid (1,4-Butanedicarboxylic Acid)	Х	_	Α	Α	В	Α	
Amines	В	_	Χ	_	Α	В	
Ammonia Liquors	Α	_	Х	Α	А	_	
Ammonium Acetate	Α	_	Α	Α	B 50%	_	
Ammonium Carbonate	В	Α	Α	Α	В	Α	
Ammonium Nitrate	В	Α	Α	Α	В	Α	
Ammonium Nitrite	Α	_	_	Α	_	A 70°F	
Ammonium Persulfate	Α	В	Α	Α	С	Α	
Ammonium Sulfate	A	A	A	A	Х	A	
Ammonium Sulfite	_	_	A	A	C	A	
Amyl (1-Pentanol)	В		В	A	В	В	
Amyl Acetate (Banana Oil)	X	Α	X	Α	A	Х	
Aniline (Aniline Oil) (Amino Benzene)	X	С	В	A	В	_	
Aniline Dyes	С	С	В	Α	В	_	
Animal Fats & Oils	С	В	A	A	A	_	
Anti-Freeze (Alcohol Base)	A	A	A	A	A	_	
Anti-Freeze (Glycol Base, Prestone etc)	В	A	A	A	A		
Aqua Regia (Nitric & Hydrochloric Acid)	Х	X	В	A	Х	С	
Aromatic Hydrocarbons	X	_	A	A	A	_	
Arsenic Acid	Α	Α	A	A	A	Α	
Asphalt	C	Х	A	A	A	A	
Brake Fluid (Non-Petroleum Base)	A	A		A	A	X	
Brine (Sodium Chloride)	В	A	Α	A	_	A	
Bunker Oil (Fuel) #5, #6 & C	В	X	A	A	Α	_	
Butadiene	С	C	C	A	A	Х	
Butane (LPG) (Butyl Hydride)	В	Х	A	A	A	X	
Butyl (Butanol)	A	_	A	A	В	В	
Butyl Stearate	Х	С	В	A	В	ь	
Butylene (Butene)	X	Х	В	A	A	X	
Butyraldehyde	X	C	Х	A	A	^	
Butyric Acid	X	С	C	A	A	— А	
Calcium Acetate Hydrate	C	A	Х	A	C	Α	
Calcium Bisulfite	A	Х	A	A	X	— А	
Calcium Chlorate	A	A	A	A			
Calcium Chloride (Brine)	A	A	A	A	B 30% A	A A	
Calcium Hydroxide (Slaked Lime)	A	A	A			A	
Calcium Nitrate	A	A	A	A	X		
Calcium Silicate	A	А			40% 212	°F A	
Carbolic Acid (see Phenol)		_	A	A	A	_	
Carbonic Acid (liquid)		С	A	A	В	C	
Cellosolve (Glycol Ethers)	A C	_	A B	A	A	A 1009	
Cellulube Hydraulic Fluids (Phosphate Esters)		C		A	A	A 100°	
Chloroacetic Acid (Monochloroacetic Acid)	X	A	В	A	A	-	
Chromic Acid _ To 25%	C	В	C	A	X	A	
Citric Oils	X	A	A	A	B 10%	X	
Clorox	X	В	A	A	_	A	
Copper Sulfate (Blue Copperas)	В	_	A	A	_	В	
	A	A	A	A	X	Α	
Creosote, Coal-Tar (Tar Oil)	С	X	Α	Α	В	Х	

	Elastomer			Body Material		
Chemical	<u>e</u>	Σ	_	ш	Ė	
	Nitrile	EPDM	FPM	PTFE	Alum.	윤
Cutting Oil (Sulfur Base)	С	_	_	А	Α	_
Cutting Oil (Water Soluble)	Χ	_	Α	Α	Α	_
Denatured Alcohol	В	Α	В	Α	В	Α
Detergent Solutions	Α	Α	Α	Α	В	Α
Dibenzyl Ether	Χ	С	С	Α	В	_
Dibutyl Phthalate (DBP)	Χ	Α	В	Α	Α	Χ
Diesel Oil (Fuel ASTM #2)	С	Χ	Α	Α	Α	В
Diester Synthetic Oils	Χ	Χ	Α	Α	Α	_
Dispersing Oil #10	Χ	Χ	С	Α	Α	_
Dry cleaning Fluids	Χ	_	Α	Α	Α	Χ
Dyes	С	_	Α	_	В	_
Epichlorohydrin	Χ	В	Χ	Α	Χ	Α
Ethyl Acrylate	Χ	С	Χ	Α	Α	В
Ethyl Alcohol (Ethanol)	Α	_	В	Α	Α	A 100°F
Ethyl Aluminum Dichloride	_	_	В	Α	В	_
Ethylene Oxide	Χ	Χ	С	Α	Α	С
Ethylhexyl Alcohol (Ethylhexanol)	_	_	В	Α	Α	_
Ferric Chloride	Α	Α	Α	Α	Х	Α
Ferric Nitrate	Α	Α	Α	Α	Х	Α
Ferric Sulfate	Α	Α	Α	Α	С	Α
Ferrous Chloride	Α	Α	Α	Α	Х	Α
Ferrous Sulfate	Α	Α	Α	Α	A 10%	Α
Fluorine (Liquid)	С	С	В	Α	Α	Χ
Fluorolube (Fluorocarbon Oils)	Α	Α	В	Α	Α	Χ
Formaldehyde (Formalin)	С	Α	Α	Α	Α	Α
Formamide	Α	Α	Χ	Α	Α	_
Formic Acid	В	В	С	Α	Х	A 70°F
Fuel Oils (ASTM #1 thru #9)	С	Χ	Α	Α	Α	С
Gasoline (Petrol)	С	Χ	Α	Α	Α	С
Gasoline (Unleaded)	Χ	Χ	Α	Α	Α	С
Gelatin	Α	Α	В	Α	Α	Α
Glue	Α	В	Α	Α	Α	Α
Glycerol (Glycerine)	Α	Α	Α	Α	Α	Α
Grease	Χ	_	Α	Α	Α	_
Hexylene Glycol (Brake fluid)	Α	С	Α	Α	Α	_
Hydraulic Oil (Petroleum base)	В	Χ	Α	Α	Α	Χ
Hydrochloric Acid 10% (Muratic)	В	Α	Α	Α	Х	Α
Hydrochloric Acid 20% (Muratic)	В	Α	Α	Α	Х	Α
Hydrochloric Acid 30% (Conc.)	С	Α	В	Α	Х	В
Hydrogen Peroxide _ 10%	С	В	Α	Α	Α	Α
Hydrogen Peroxide _ 3%	В	В	Α	Α	Α	Α
Hydrogen Peroxide _ 30%	Χ	В	Α	Α	Α	Α
Hydrogen Peroxide _ 90%	В	С	Α	Α	Α	_
Hydroquinone	Χ	_	С	Α	A 90%	_
Hypochlorous Acid	Χ	В	Α	Α	Х	Α
Ink	Α	_	Α	Α	С	_
lodine	В	В	Α	Α	Α	Α
Kerosine (Kerosene)	С	Χ	Α	Α	Α	Χ
Latex	Α	_	_	Α	Α	Α
Lead Chloride	В	_	_	Α	Х	Α
Lead Nitrate	Α	Α	Α	Α	Х	Α
Lead Sulfamate	Α	_	Α	А	_	Α
Lime Slurries	Α	_	В	Α	В	_
Lime Sulfur	Α	Α	Α	Α	Х	Α

Ratings:

A: minor effect B: minor to moderated effect C: moderate to severe effect X: not recommended -: insufficient information



		Elastomer				Body Material		
Chemical	Nitrile	EPDM	FPM	PTFE	Alum.	æ		
Linoleic Acid	Х	Х	В	Α	Α	А		
Linseed Oil (Flaxseed Oil)	Α	С	Α	Α	Α	Α		
Lubricating Oils (Petroleum)	B 150°	Х	Α	Α	Α	С		
Lye (Potassium Hydroxide)	В	_	В	Α	_	А		
Magnesium Carbonate	Α	С	Α	Α	Α	Α		
Magnesium Chloride	Α	Α	Α	Α	A 20%	Α		
Magnesium Nitrate	Α	Α	Α	Α	B 50%	Α		
Magnesium Oxide	Α	_	В	Α	A 10%	_		
Magnesium Sulfate (Epsom Salts)	А	Α	Α	Α	A 70%	Α		
Methane	В	Χ	Α	Α	Α	В		
Methyl (Methanol)	Α	Х	Х	Α	В	A 120°		
Methyl Alcohol (Methanol)	A	Α	В	Α	В	А		
Methyl Amine (Monomethylamine)	A	Α	A 90%	Α	В	Х		
Methyl Ethyl Ketone (Butanone)	X	A	χ	Α	A	X		
Methyl Formate	В	С	X	A	A	_		
Methylamine	A	A	A 90%	A	В	Α		
Mineral Oil (Petroleum)	В	X	A 3070	A	A	В		
Naphtha (Petroleum Spirits) (Thinner)	Х	X	A	A	A	Х		
Naphtha Coal Tar (Benzol)	X	X	A	A	A	_		
Naphthalene (Tar Camphor)	X	X	A	A	В	А		
Naphthoic Acid	_	X	A	A	В			
n-Hexane	В	X	A	A	A	C 140°		
Nickel Chloride	A	A	A	A	Х	Δ		
Nickel Nitrate	A	A	A	A	X	A		
Nickel Sulfate	A	A	A	A	X	A		
Nitric Acid (Conc.)	X	X	В	A	A	X		
Nitric Acid (Red Fuming)	X	X	В	A	A	X		
Nitric Acid _ 10%	В	В		A	A	A		
Nitric Acid _ 25%	С	В	A A	A	X	A		
Nitric Acid _ 35%	Х	С	A	A	X	В		
Nitric Acid _ 50%				A	X	С		
o-Dichlorobenzene	X	X	A A	A	X	В		
Ozone		X	**			_		
Petroleum (Crude Oil) (Sour)	В	A	A	A	A 10%	X		
Phenol (Carbolic Acid)	С	X	A	A	В	X		
Phosphoric Acid (Conc.)	С	С	A	A	В	C		
Phosphoric Acid _ 10%	В	В	A	A	X	A 120°		
Phosphoric Acid _ 20%	В	A	A	A	X	A 120°		
Phosphoric Acid _ 50%	В	A	Α	Α	X	A 120°		
Phosphorus Trichloride	В	В	Α	Α	X	A 120°		
	Х	Α	Α	Α	С	Χ		
Photographic Developer Picric Acid (Carbazotic Acid)	A	_	A	-	C	A		
Picric Acid (Carbazotic Acid) Pine Oil (Yarmor)	В	В	A	A	A	В		
Plating Solution Chrome	X	X	A	A	Α	_		
Potassium Hydroxide (Caustic Potash) (Lye)	Х	С	A	A	_	A 131°I		
	В	Α	В	A	X	A		
Potassium Nitrate (Saltpeter)	Α	Α	Α	Α	A 80%	Α		
Potassium Nitrite	Α	Α	Α	Α	В	Α		
Potassium Permanganate (Purple Salt)	С	Α	В	Α	A 10%	В		
Propane (LPG)	В	Х	Α	Α	Α	Х		
Propionic Acid (Methylacetic Acid)	Х	Α	Α	Α	Α	_		
Propylene	Х	Χ	Α	Α	Α	_		
Quench Oil	В	_	Α	Α	Α	_		
Rosin	С	_	_	Α	Α	Α		
Rubber Latex Emulsions			Α	Α	Α			

		Elastomer				Body Material		
Chemical	Nitrile	EPDM	FPM	PTFE	Alum.	•		
Rubber Solvents (Petroleum Distillate)		ш				<u>R</u>		
Rust Inhibitors	C	_	X	Α	Α	_		
Sal Ammoniac (Ammonium Chloride)	C	_	A	_		A		
Salt Water (Brine)	A B	A A	A	A	X	A		
Sea Water (Brine)	В		A	A	В	A		
Sewage	В	A C	A A	A A	A	A		
Silicone Oils (Versilube etc.)	С	A	A		B B	A		
Soap Solutions	В	A	A	A A	С	A		
Sodium Acetate	С	A	Х	A	A	A		
Sodium Aluminate	A	_	A	A		A		
Sodium Bicarbonate (Baking Soda)	A	Α	A	A	В	A		
Sodium Bisulfite (Cream of Tartar)	A	A	A	A	A	A		
Sodium Bisulfite (Niter Cake)	A	A	A	A	B 50%	A		
Sodium Chlorate	В	A	A		3 70% 212°F			
Sodium Chloride (Table Salt)	A	A	A	A	B 70% 212 F	A A		
Sodium Fluoride	A	A	A	A	В 30%	A		
Sodium Hydroxide (Caustic Soda) (Lye)	В	A	Х	A	X	A		
Sodium Thiosulfate (Antichlor)	A	A	A	A	A	A		
Stannic Chloride (Tin Chloride)	В	В	A	A	X	A		
Stannous Chloride (Tin Chloride)	A	В	A	A	X	A		
Stearic Acid	B 158°	В	A	A	C	A		
Stoddard Solvent	C C	X	_	A	A	A		
Styrene (Vinylbenzene)	Х	X	Α	A	A	_		
Sulfuric Acid (Fuming)	X	X	В	A	C			
Sulfuric Acid 10%	A	A	A	A	Х	Α		
Sulfuric Acid 25%	В	В	A	A	X	A		
Sulfuric Acid 50%	В	В	A	A	X	A		
Sulfuric Acid 60%	С	В	A	A	X	A		
Sulfuric Acid 75%	Х	С	A	A	X	A		
Sulfurous Acid	X	С	A	A	В	A		
Tall Oil (Liquid Rosin)	В	Х	A	A	Х	A		
Tallow	_	_	A	A	A	В		
Tanning Liquors	В	_	_	A	A	A		
Tar, Bituminous (Coal tar, pitch)	С	Χ	Α	A	A	A		
Terpineol (Terpilenol)	X	С	A	A	A	Х		
Titanium Tetrachloride	Х	Х	A	Α	X	В		
Toluene (Toluol)	Х	Х	В	A	A	Х		
Toluidine	_	_	В	A	A	_		
Transformer Oil (Petroleum)	С	Х	A	A	A	В		
Transmission Fluid (Type A)	С	Х	A	A	A	_		
Tung Oil (Wood Oil)	С	Х	Α	Α	A	Α		
Turpentine	Х	Х	A	A	A	X		
Urea (Carbamide)	В	_	A	A	В	A		
Valeric Acid	Х	Α		A	A			
Varnish (Oil, gum resins, oil of turpentine)	C	Х	Α	A	A	Α		
Waxes	С	X	_	A	A	_		
Xylene (Xylol)	Х	Х	Α	A	A	Х		
Zinc Acetate	В	A	Х	A	С	A		
Zinc Carbonate	_	_	A	A	В	_		
Zinc Chloride	В	Α	A	A	A 10%	A		
Zinc Sulfate	A	A	В	A	B 20%	A		
	A	А	U	и	D 2070	А		

Ratings:

A: minor effect B: minor to moderated effect C: moderate to severe effect X: not recommended -: insufficient information











