



Phoenix
HYDRAULICS
THE COMPLETE HYDRAULIC SERVICE

Product Catalogue



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Phoenix HYDRAULICS

THE COMPLETE HYDRAULIC SERVICE

Phoenix Hydraulics Ltd and Phoenix Marine Solutions are a UK company specialising in manufacturing bespoke hydraulic solutions and hydraulic component distribution.

We are a member company of the KCT Holdings Group, which has an annual turnover of over £20M and has been trading since 1981.

Industries that we currently supply products to include:

Automotive

Aerospace

Industrial

Renewable Energy

Oil & Gas

Agricultural

Marine

Shipping

Phoenix Hydraulics has been a Distributor of Parker Hannifin products for over 30 years. We also distribute products for other major manufacturers within the hydraulics industry. We hold over £500,000 rolling stock. Through our website you can get instant despatch, international shipping and next day delivery for mainland UK.

We specialise in the design and manufacturing of mechanical and electro-hydraulic systems and components we have also added stainless steel hydraulic cylinders to our range, all of which are fabricated, machined and tested onsite and backed by our world-wide support.

At our 20,000 square foot Peterborough Manufacturing Plant, we offer the following services:

Computer Aided Design

**Fabrication in Mild Steel, Aluminium
and Stainless Steel**

Three Dimensional Design

Power Unit Build

Full CNC Machining

Electronic Control Systems



 **PHOENIX**
MARINE SOLUTIONS

For any Marine based enquiries please visit www.phoenixmarinesolutions.co.uk specialising in luxury equipment manufactured and built in the U.K. for the Super Yacht Industry.

Power Units & Systems

Hydraulic Pump Motor Sets

Hydraulic Pump Motor Sets

Technical Information

A full range of IEC Electric Motor to Parker Gear Pump combinations. From fractional powers up to 250kW. Flows from 1 Ltr per minute to 500 Ltr per minute. Including Atex approved motors for hazardous environments.

We can build you from stock any combination of Electric Motor and Gear Pump at the RIGHT PRICE with FAST DELIVERY!



Part Number	Description	Max Bar	Speed	Voltage	Motor kW	Flow@1500rpm in l/min	Pump Displacement cc/rev	Phase	Special Feature
PHMP0.75KW43.75100	0.75kW 4 Pole 3.75 lpm@100bar	100	1450	400	0.75	3.75	2.5	3	
PHMP1.1KW43.15160	1.1kW 4 Pole 3.15 lpm@160bar	160	1450	400	4.4	3.15	2.1	3	
PHMP1.1KW43.75130	1.1kW 4 Pole 3.75m lpm@130bar	130	1450	400	1.1	3.75	2.5	3	
PHMP1.5KW46.2100	1.5kW 4 Pole 6.2 lpm@100bar	100	1450	400	1.5	6.2	6.21	3	
PHMP1.5KW44.95130	1.5kW 4 Pole 4.95 lpm@130bar	130	1450	400	1.5	4.95	3.3	3	
PHMP1.6KWATEX4.95140	1.6kW ATEX Set with 4.95 lpm@140-160bar	140	1450	400	1.6	4.95	3.3	3	ATEX approved
PHMP2.2KW46.0160	2.2kW 4 Pole 6 lpm@160bar	160	1450	400	2.2	6	4	3	
PHMP2.2KW49.0100	2.2kW 4 Pole 9 lpm@100bar	100	1450	400	2.2	9	6	3	
PHMP2.2KWATEX6186	2.2kW ATEX 3ph for 186bar, 6 lpm@	186	1450	400	2.2	6	4	3	ATEX approved
PHMP2.2KWATEX9125	2.2kW ATEX3ph for 124bar, 9 lpm	124	1450	400	2.2	9	6	3	
PHMP3.0KW411.5130 110V	3.0kW 4 Pole 11.5 lpm@130bar 110V	130	1440	110V AC	3	12	8	1	
PHMP3.0KW415100	3.0kW 4 Pole 15 lpm@100bar	100	1450	400	3	15	10	3	
PHMP3.0KW49160	3.0kW 4 pole 9 lpm@160bar	160	1450	400	3	9	6	3	
PHMP5.5KW416.5160	5.5kW 4 Pole 16.5 lpm@160bar	160	1450	400	5.5	16.5	11	3	
PHMP5.5KW421130	5.5kW 4 pPole 21 lpm@130bar	130	1450	400	5.5	21	14	3	
PHMP5.5KW424100	5.5kW 4 Pole 24 lpm@100bar	100	1450	400	5.5	24	16	3	
PHMP7.5KW424150	7.5kW 4 Pole 24 lpm@150bar	150	4500	400	7.5	24	16	3	
PHMP7.5KW428.5130	7.5kW 4 Pole 28.5 lpm@130bar	130	1450	400	7.5	28.5	19	3	
PHMP7.5KW434.5100	7.5kW 4 Pole 35.5 lpm@100bar	100	1450	400	7.5	34.5	23	3	
PHMP11.0KW434.5160	11.0kW 4 Pole 34.5 lpm@160bar	160	1450	400	11	34.5	23	3	
PHMP11.0KW440.5130	11.0kw 4 Pole 40.5 lpm@130bar	130	1450	400	11	40.5	27	3	
PHMP11.0KW446.5120	11.0kW 4 Pole 46.5 lpm@120bar	120	1450	400	11	46.5	31	3	
PHMP11.0KW449.5100	11.0kW 4 Pole 49.5 lpm@100bar	100	1450	400	11	49.5	33	3	

Power Packs

Phoenix Hydraulics have been power unit specialists since 1981. We can make any hydraulic power unit required usually from stock for fast delivery. Below is a range of standard packs, others can be configured.

Minicentraline DC Power Units

Technical Information

Minicentraline power units come with a choice of electric motors, quality gear pump, OMT central manifold and drive coupling, OMT breather and suction strainer and adjustable relief valve. Pressures of up to 250 bar, electric motor sizes up to 4kW, flows up to 22 l/m. Each power unit is supplied with operating and maintenance instructions, a test certificate and a circuit diagram all as recommended by the British Fluid Power Distributors Association.

Part Number	Description
PHMINIPU82.224DC1.2210	8ltr tank, 2.2kW,24vDC 1.2cc/rev up to 210 bar



Microcentraline AC Power Units

Technical Information

These power units come with:

- 415V 3 phase 50Hz, alternatively 230V 1 phase 50HZ or 12V DC or 24V DC motors
- Parker Gear Pump
- OMT Bell housing and Drive Coupling
- OMT 10 micron return line filter
- OMT breather and suction strainer
- Adjustable relief valve

Pressures of up to 210 bar, electric motor sizes up to 1.5kW AC, 3kW DC flows of up to 22 l/m.

Below are examples of Power Units for your information, however any configuration can be designed and manufactured quickly by Phoenix.

Part Number	Description
PHMICROPP1.5440035150	10ltr tank, 1.5kW, 4 Pole 400V 3PH 5 l/m @150bar



CCP10 Modular Power Units

Technical Information

Standard hydraulic power units are based on the OMP CP10 series of aluminium tank. They come complete with 415V 3 phase electric motor or a 240V single phase motor, Parker Gear Pump, OMT bell housing and drive coupling, OMT tank top 10 micron filter with visual clogging indicator. OMT filler breather, level gauge and suction strainer and adjustable relief valve. Pressures of up to 210 bar, electric motor sizes up to 1.5kW, flows up to 22 l/m.

Each power unit is supplied with operating and maintenance instructions, a test certificate and a circuit diagram all as recommended by the British Fluid Power Distributors Association.

For example

Part Number	Description
PHCP 10PU0.5545.450	10ltr tank, 0.55kW 4 pole motor 5.4 l/m@50 bar



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Power Packs

Standard Hydraulic Gear Pump Power Units



Technical Information

Standard Gear Pump Power units are based on the OMT CF series of tanks, 12-180 litre. They all come with 415V 3 phase 50 Hz electric motor, Parker gear pump, OMT bell housing and drive coupling, OMT tank top 10 micron filter complete with visual clogging indicator, OMT filler breather, level gauge and suction strainer and adjustable relief valve. Pressures of up to 250 bar, electric motor sizes up to 22 kW, flows up to 210 l/m. The power units are ready to receive the accessories you specify including directional control valves, pressure gauges etc. Each power unit is supplied with operating and maintenance instructions, a test certificate and a circuit diagram all as recommended by the British Fluid Power Distributors Association.

Please visit our website for more details or contact our sales team.

Oildyne 108 Series Hydraulic Power Units



Technical Information

Our compact 108 series power units let you put the power where you need it. They are completely self contained with an AC or DC motor, gear pump, reservoir, internal valving, load hold checks and relief valves. The 108 series are designed for intermittent service. 108 series units are available with single or bi-directional rotation.

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Stainless Steel Cylinders



Phoenix Hydraulics design, manufacture and supply hydraulic cylinders for many applications with Bore sizes from 25mm to 200mm.

Cylinders can be supplied in welded, threaded body and tie rod construction depending on application with pressure ratings up to 210 bar.

Depending on the position of the cylinders and the budget available cylinders can be supplied in many different materials from polished stainless steel to mild steel with chrome rods and corrosion resistant paint finish.

As all our cylinders are manufactured to order, sizes and mounting styles can be tailor made to suit your specific requirements.



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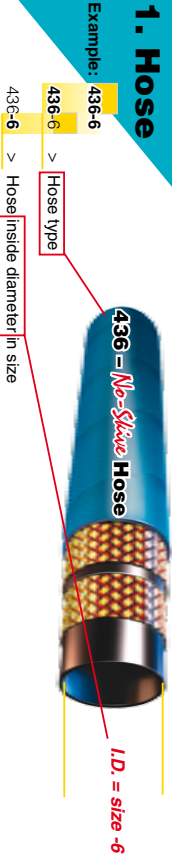


Hose & Fittings

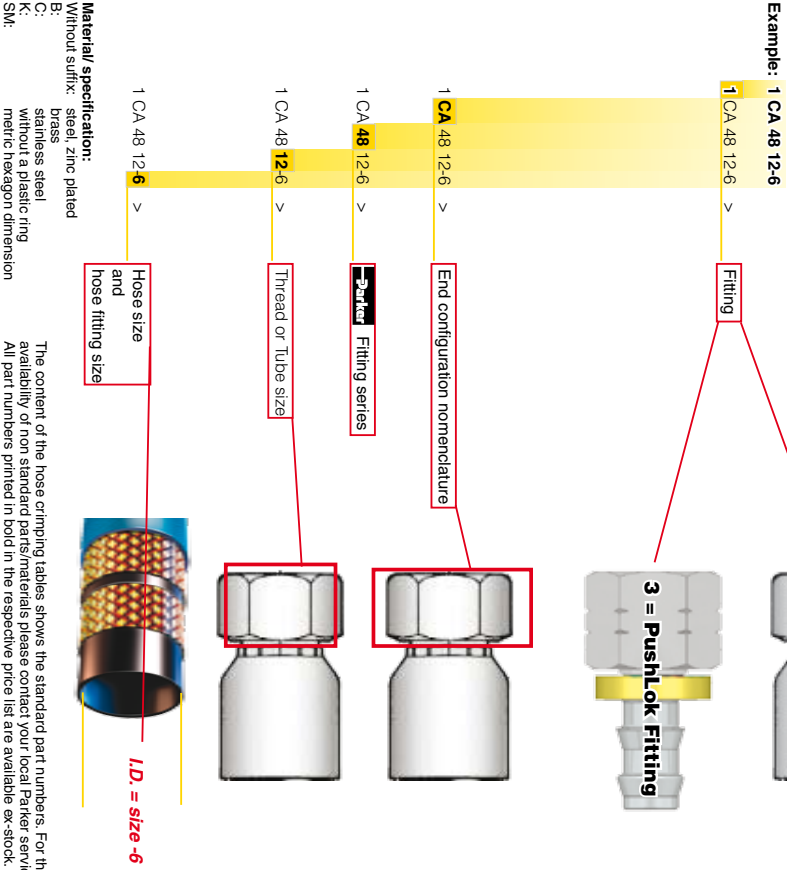
How To Order Parker Hoses

To make ordering Parker products easier, we have itemized the order numbers on this page. This will be especially helpful when you order hose assemblies.

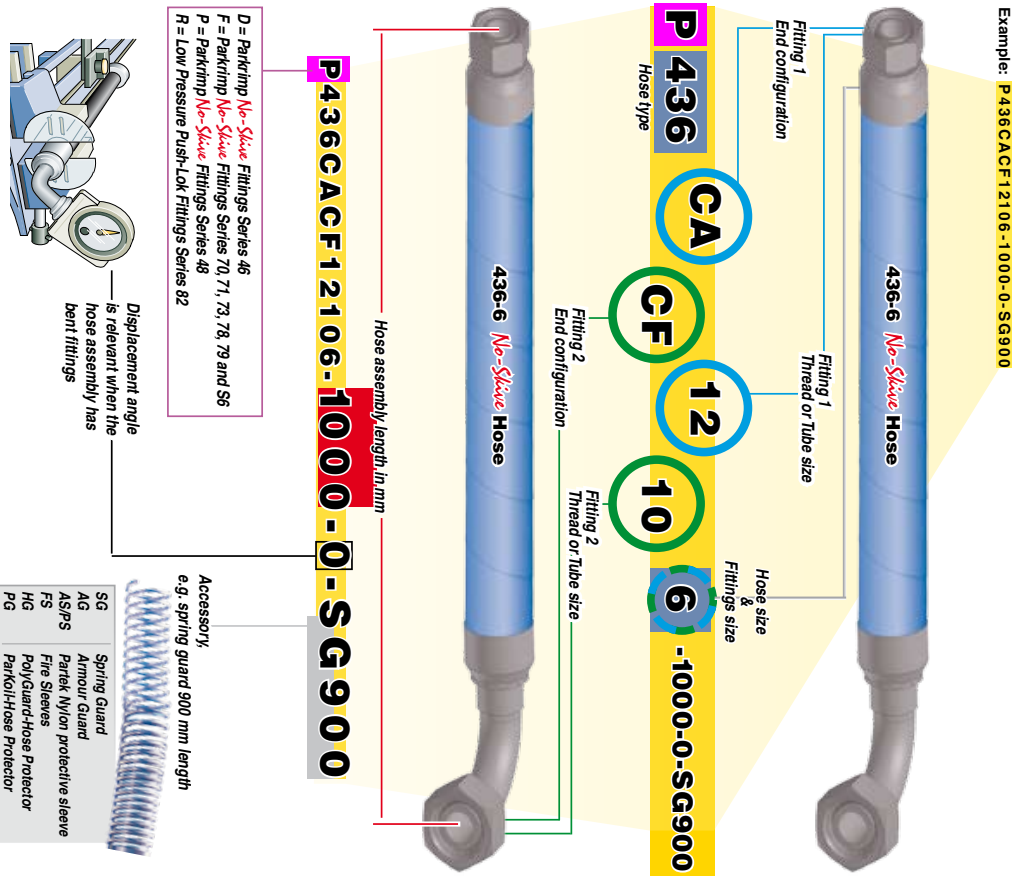
1. Hose



2. Hose Fittings



3. Hose Assemblies



Explanation of the example

Hose assembly with hose 436 in size -6 and fitting series 48. Hose assembly length 1000 mm.

Fitting 1: end configuration CA has a 12 mm pipe diameter and has a size -6 hose nipple

Fitting 2: end configuration CF has a 10 mm pipe diameter and has a size -6 hose nipple

The displacement angle for this combination is 0 degree. On request a displacement angle can be specified for the bent fitting in relation with the hose curvature. A protection sleeve as a Spring Guard in length 300 mm is on the hose assembly.

301SN - *No-Skive* Hose

EN 853 2SN-ISO 1436 Type 2

Technical Information

No-Skive thin cover hose construction . Nitrile (NBR) inner tube -extended fluid compatibility. Suitable with 48 series fittings. Type approved with DNV, GL, LR, RINA

Primary Applications/Restrictions General medium pressure hydraulic applications.

Applicable Specifications

EN 852 2SN-ISO 1436 Type 2-SAE 100 R2 AT

Hose Construction

Tube: Nitrile (NBR) Reinforcement: Two high tensile steel wire braids.

Cover: Synthetic rubber.

Temperature range: -40°C up to +100°C

Exception: Air max. +70°C

Water max. +85°C

Fittings Series: 48



Part number	Hose I.D. (inch)	Max. Dynamic working pressure (psi)
301SN-4	1/4	5800
301SN-5	5/16	5075
301SN-6	3/8	4775
301SN-8	1/2	4000
301SN-10	5/8	3600
301SN-12	3/4	3100
301SN-16	1	2400
301SN-20	1-1/4	1800
301SN-24	1-1/2	1300
301SN-32	2	1150

421SN - *No-Skive* Hose

EN 853 1SN-ISO 1436 Type 1

Technical Information

No-Skive thin cover hose construction . Nitrile (NBR) inner tube -extended fluid compatibility. Type approved with DNV, GL, LR, RINA

Primary Applications/Restrictions General medium pressure hydraulic applications.

Applicable Specifications

EN 853 1SN-ISO 1436 Type 1-SAE 100 R1 AT

Hose Construction

Tube: Nitrile (NBR) Reinforcement: One high tensile steel wire braid.

Cover: Synthetic rubber.

Temperature range: -40°C up to +100°C

Exception: Air max. +70°C

Water max. +85°C

Fittings Series: 48



Parker Hoses

421SN - *No-Skive* Hose (cont.)

Part number	Hose I.D. (inch)	Max. Dynamic working pressure (psi)
421SN-4	1/4	3250
421SN-5	5/16	3125
421SN-6	3/8	2600
421SN-8	1/2	2325
421SN-10	5/8	1875
421SN-12	3/4	1525
421SN-16	1	1275
421SN-20	1.1/4	900
421SN-24	1.1/2	725
421SN-32	2	575

The combination of high temp. and high pressure could reduce hose life.

462 - *Elite* Compact Hose EN 857 2SC/ISO11237 Type 2SC

Technical Information

No-Skive hose construction - compact design. Nitrile (NBR) inner tube -extended fluid compatibility. Exceeding EN/ISO specifications for pressure, bending radius and abrasion resistance.

Primary Applications/Restrictions

Demanding medium pressure hydraulic applications in all markets

Applicable Specifications

EN 857 2SC/ISO11237 Type 2SC

Hose Construction

Tube: Nitrile (NBR) Reinforcement: Two high tensile steel wire braids.

Cover: Synthetic rubber.

Temperature range: -40°C up to +100°C

Exception: Air max. +70°C

Water max. +85°C

Fittings Series: 46



Part number	Hose I.D. (inch)	Max. Dynamic working pressure (psi)
462-4	1/4	6160
462-5	5/16	5800
462-6	3/8	5075
462-8	1/2	4495
462-10	5/8	4060
462-12	3/4	4060
462-16	1	3045
462-4-WR	1/4	6160
462-5-WR	5/16	5800
462-6-WR	3/8	5075
462-8-WR	1/2	4495
462-10-WR	5/8	4060
462-12-WR	3/4	4060
462-16-WR	1	3045
462-20-WR	1.1/4	2495

The combination of high temp. And high pressure could reduce hose life.
Part Number without a suffix: the hose cover has a smooth appearance.
Part Number with a suffix (WR): the hose cover has a wrapped appearance

Parker Hoses

811 - *No-Skive* Suction and Return Line Hose SAE 100 R4

Technical Information

No-Skive hose construction. Small bend radii.

Primary Applications/Restrictions All markets: General applications.

Hose Construction

Tube: Synthetic rubber. Reinforcement: Two textile braids, combined with wire spiralled throughout the textile reinforcement to prevent collapse under vacuum.

Cover: Oil and weather resistant synthetic rubber cover.

Temperature range: -40 °C up to +100 °C

Exception: Air max. +70 °C

Water max. +85 °C

Fittings Series: 48



*1 = the vacuum values listed in the table are vacuum pressure values in kPa. For an absolute value subtract the table value from the 101 kPa.
Size 40 and 48 on request, with series 88 nipple plus clamp.
** size -12 and size -16= on Parkrimp 2 crimping press or adjustable crimpers only.

Part number	Hose I.D. (inch)	Max. Dynamic working pressure (psi)
811-12**	3/4	300
811-16**	1	250
811-20	1-1/4	200
811-24	1-1/2	150
811-32	2	100

801 - *Push-Lok* Hose For a variety of applications

Technical Information

Very flexible. Wide range of colours. Available up to size -16.

Primary Applications/Restrictions All markets: For light applications.
Paper and Pulp: For water/air applications. Recommended fluids: Air, dry, water, water-oil-emulsions.
Not permitted for use in air brake systems
Not suitable for high dynamic pulsation systems
Not recommended for motor fuels
(Mineral based hydraulic and lubricating oils with chemical and thermal (70 °C) restriction).

Hose Construction

Tube: Synthetic rubber Reinforcement: High tensile textile layer.

Cover: High performance synthetic rubber in different colours

Temperature range: -40 °C up to +100 °

Exception: Air: max. +70 °C Water: max. +85 °C

Fittings Series: 82



*1 : The vacuum values listed in the table are vacuum pressure values in kPa. For an absolute value subtract the table value from 101 kPa.
Note: When ordering specify Push-Lok hose number, followed by size, followed by colour.
Example: 801-4-XXX-RL
XXX : BLK black BLU blue RED red
GRN green GRA grey
Example: 801-4-GRN-RL (green) RL:
Only available on reels 801-16-XXX-RL
is only available in grey or black

Part number	Hose I.D. (inch)	Hose O.D. (mm)	Pressure Rating (psi)		Vacuum kilo Pascal*1 (kPa)	Min. Bend radius	Weight (kg/m)
			Max. dynamic work. pressure	Min. burst pressure			
801-4-XXX-RL	1/4	12,7	250	1000	95	65	0,13
801-6-XXX-RL	3/8	15,9	250	1000	95	75	0,16
801-8-XXX-RL	1/2	19,8	250	1000	95	130	0,27
801-10-XXX-RL	5/8	23,0	250	1000	51	150	0,28
801-12-XXX-RL	3/4	26,2	250	1000	51	180	0,36
801-16-XXX-RL	1	32,5	175	700	51	250	0,55

Parker Hoses

221FR - *No-Skive* Hose

Marine fuel and engine hose

Technical Information

Fire retardant hose cover. No-Skive hose construction. Marine approvals.

Primary Applications/Restrictions

Marine: fuel hose

General: Where fire retardance is an issue.

Applicable Specifications: SAE J1527 R3, USCG Type AI, SAE J1942, ISO 7840

Recommended Fluids: Petroleum based hydraulic fluids, water-glycol and water-oil emulsion hydraulic fluids, grease, lubricants, crude, fuel oils and water.

Hose Construction

Tube: Fuel and oil resistant rubber Reinforcement: High tensile steel wire braid.

Cover: A flame retardant special fiber outer cover.

Temperature range: -20°C up to +100° Exception: Air: max. +70°C Water: max. +85°C

Fittings Series: 26



*1: The vacuum values listed in the table are vacuum pressure values in kPa. For an absolute value subtract the table value from 101 kPa.

Part number	Hose I.D. (inch)	Hose O.D. (mm)	Pressure Rating (psi)		Vacuum kilo Pascal*1 (kPa)	Min. Bend radius	Weight (kg/m)
			Max. dynamic work. pressure	Min. burst pressure			
221FR-5	1/4	15	500	2000	81	25	0,28
221FR-6	5/16	17	500	2000	81	30	0,34
221FR-8	13/32	20	500	2000	81	45	0,42
221FR-10	1/2	23	500	2000	68	55	0,58
221FR-12	5/8	27	500	2000	68	70	0,61
221FR-16	7/8	31	500	2000	68	90	0,70

304 - *No-Skive* Hose

Phosphate ester resistant hose

Technical Information

No-Skive thin cover hose construction. EPDM hose resistant to phosphate ester fluids. SAE 100R2 pressure rating..

Primary Applications/Restrictions

Aerospace, foundries, steel mills: Medium pressure hydraulic applications with phosphate ester fluids.

Applicable Specifications: Parker specifications.

Hose Construction

Tube: EPDM synthetic rubber Reinforcement: Two high tensile steel wire braids.

Cover: Green EPDM synthetic rubber

Recommended fluids: Phosphate ester base hydraulic fluids, water-glycol based fluids, air, water.

Temperature range: -40°C up to +80° Exception: Air: max. +70°C Water: max. +85°C

Fittings Series: Parker 43* Series, Parker 48 Series for sizes -20 to -32



The combination of high temperature and high pressure could reduce the hose life. *Parker fitting series 43 is compatible with this hose type in all sizes and is available on request only.

Part number	Hose I.D. (inch)	Hose O.D. (mm)	Pressure Rating (psi)		Min. Bend radius	Weight (kg/m)
			Max. dynamic work. pressure	Min. burst pressure		
304-4	1/4	15,0	5000	20000	100	0,39
304-6	3/8	19,0	4000	16000	130	0,55
304-8	1/2	22,0	3500	14000	180	0,67
304-12	3/4	30,0	2250	9000	240	1,00
304-16	1	38,0	2000	8000	300	1,49
304-20	1 1/4	48,0	1625	6500	420	1,73
304-24	1 1/2	55,0	1250	5000	500	2,14
304-32	2	68,0	1125	4500	630	2,96

471TC/472TC - *No-Skive* Compact Hose EN 857 2SC/ISO11237 Type 2SC

Technical Information

No-Skive hose construction- compact design. 472TC: Nitrile (NBR) inner tube - extended fluid compatibility. Reduced bend radii. Highly abrasion resistant tough cover.

Primary Applications/Restrictions Small bending radii demanding medium pressure hydraulic applications.

Applicable Specifications: EN 857 2SC/ISO11237 Type 2SC

Recommended fluids: Petroleum and water-glycol fluids, lubricating oils, air and water. For air above 1,7 Mpa the hose cover must be pin pricked.

Hose Construction

Tube 471TC: Synthetic rubber

Tube 472TC: Nitrile (NBR)

Reinforcement: Two high tensile steel wire braids. Cover: Synthetic rubber.

Temperature range: -40°C up to +100°C

Exception: Air max. +70°C

Water and water-glycol fluids max. +85°C

Fittings Series: 48



Part number	Hose I.D. (inch)	Hose O.D. (mm)	Pressure Rating (psi)		Min. Bend radius	Weight (kg/m)
			Max. dynamic work. pressure	Min. burst pressure		
471TC-4	1/4	13	5800	23200	50	0,30
471TC-5	5/16	15	5250	21000	55	0,35
471TC-6	3/8	17	5000	20000	65	0,42
471TC-8	1/2	20	4250	17000	90	0,52
471TC-10	5/8	24	3625	14500	100	0,66
471TC-12	3/4	28	3125	12500	120	0,86
471TC-16	1	35	2500	10000	150	1,17
472TC-20	1 1/4	45	2250	9000	210	2,01
472TC-24	1 1/2	51	1800	7200	250	2,16
472TC-32	2	65	1300	5200	315	2,90

The combination of high temperature and high pressure could reduce hose life.

This is just a small selection of our range. Please visit our fast and efficient website for more details.

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731 - *No-Skive* Multispiral Hose EN 856 ISO 3862-1 Type 4SH

Technical Information

No-Skive hose construction. Reinforcement of four high tensile steel wires.

Primary Applications/Restrictions

Applicable Specifications: ISO 3862-1 Type 4SH, EN 856 Type 4SH

Recommended Fluids: Petroleum and water-glycol based fluids, lubricating oils, air and water.
For air above 1,7 Mpa the hose must be pin pricked.

Hose Construction

Tube: Synthetic rubber Reinforcement: High tensile textile layer.

Cover: High performance synthetic rubber in different colours

Temperature range: -40°C up to +100° Exception: Air: max. +70°C Water: max. 85°C

Fittings Series: 73



The combination of high temperature and high pressure could reduce hose life.

Part number	Hose I.D. (inch)	Hose O.D. (mm)	Pressure Rating (psi)		Min. Bend radius	Weight (kg/m)
			Max. dynamic work. pressure	Min. burst pressure		
731-12	3/4	32,0	6000	24000	280	1,72
731-16	1	39,0	5500	22000	340	2,14
731-20	1 1/4	45,0	4700	18800	460	2,96
731-24	1 1/2	53,0	4200	16800	560	3,20
731-32	2	68,0	3600	14400	700	5,30

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Order these products at www.phoenixhydraulics.co.uk

Parker Hoses

540 Series - Reinforced Hydraulic Hose

Pressure performance exceeds SAE 100 R7, DIN 24 951-2KT, BS 4983 Type 1, ISO 3949-1

Technical Information

Matte jacket for low coefficient of friction. Special order colours. Twin or multi-line available. Excellent chemical compatibility.

Primary Applications/Restrictions

Hydraulic and pneumatic systems, Agricultural spraying, Polyurethane foam mixers, Robotics, Fire-resistant fluid and hot water.

Applicable Specifications: Pressure performance exceeds SAE 100 R7, DIN 24 951-2KT, BS 4983 Type 1, ISO 3949-1.

Recommended Fluids: Petroleum or synthetic hydraulic fluids, some chemical fluids, fire resistant fluids.

Hose Construction

Tube: Polyamide Reinforcement: One braided layer of high tensile synthetic fibre.

Cover: Polyurethane

Temperature range: -40°C up to +100°C

Exception: Air max. +70°C Water and water-glycol fluids max. +85°C

Fittings Series: 56



Part number	Hose I.D. (Inch)	Hose O.D. (mm)	Pressure Rating (psi)		Min. Bend radius	Weight (kg/m)
			Max. dynamic work. pressure	Min. burst pressure		
540N-2	1/8	8,4	2500	10000	13	0,05
540N-3	3/16	10,5	3000	12000	19	0,08
540N-4	1/4	12,6	2750	11000	38	0,10
540N-5	5/16	14,1	2500	10000	44	0,12
540N-6	3/8	16,0	2250	9000	51	0,14
540N-8	1/2	20,1	2000	8000	76	0,21
540N-12	3/4	26,3	1250	5000	152	0,25

Change in length +/- 2% at working pressure.

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Parker Hoses

518C - Medium Pressure Hose - Electrically Non-Conductive Constant working pressure

Technical Information

51 series reusable. Twin or multi-line available. Excellent chemical compatibility.

Primary Applications/Restrictions

Hydraulic and pneumatic systems, Agricultural spraying, Polyurethane foam mixers, Robotics, Fire-resistant fluid and hot water.

Applicable Specifications: SAE J517

Recommended Fluids: Petroleum or synthetic hydraulic fluids, some chemical fluids, fire resistant fluids.

Hose Construction

Tube: Polyester Elastomer Reinforcement: One braided layer of high tensile synthetic fibre.

Cover: Special elastomer, orange.

Temperature range: -40°C up to +100°C

Exception: Air max. +70°C Water and water-glycol fluids max. +85°C

Fittings Series: 56



Change in length +/- 2% at working pressure.
*Special crimp dies 80C-P04J

Part number	Hose I.D. (inch)	Hose O.D. (mm)	Pressure Rating (psi)		Min. Bend radius	Weight (kg/m)
			Max. dynamic work. pressure	Min. burst pressure		
518C-3	3/16	10,7	3000	12000	19	0,07
518C-4	1/4	12,0	2750	11000	38	0,08
518C-5	5/16	14,5	2500	10000	44	0,11
518C-6	3/8	16,0	2250	9000	51	0,14
518C-8	1/2	20,6	2250	9000	76	0,22
518C-12	3/4	27,4	1250	5000	152	0,31
518C-16	1	33,5	1000	4000	203	0,40

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Hose Fittings Overview

Hose Fittings Overview

Flange	SAE	BSP	DIN
SFL 90 - long	Male 1/2" Pipe Swivel	DKS	DKOL
SFL 22.5	Male UC 37 - Rigid	DKS 45	DKOL 45°
SFL 45	Female NPT Pipe Rigid - Straight	DKS 90	DKOL 90°
SFL 45	AGU	DKS 90	BEL 45°
SFL 90	Male SAE 45° - Rigid	DKS 90 (Command)	DKML or DKLL
SFL 90	Strapipes	Male Bump	DKOL 90°
SFL 45	Male SAE Straight - Rigid	DKS	Female Metric Swivel L Swivel (Ball Nose)
SFL 45	Male SAE Straight - Rigid	DKS 45°	DKOL
SFL 45	DKOL 90° M	DKS 90°	DKOL 45°
SFL 90	Female UC 37 - Swivel (Block type)		

others
Female Metric Swivel - (30° Flare)
Female Metric Swivel - (30° Flare)
Male Metric L - Rigid Ballcock with Locknut (21 Cone)
Female Metric Swivel (60/270) O-Ring - Light Series
Metric-Lock Swivel Female
Male BSP Female Pipe Rigid - Straight (with O-Rings)
Male BSP Female Pipe - L Series - Rigid Straight - ED Seal
Male Strapipes - Rigid - Straight - A-Lok
BSP Swivel Female
Push-Lock Union
Male Metric Swivel Tee Male Stud
Metric-Lock Swivel Female
Male BSP Female Pipe - L Series - Rigid Straight - ED Seal
Male BSP Female Pipe - L Series - Rigid Straight - ED Seal
60° Cone Swivel Female - (21 Cone)
Female Tube Clamping Swivel - (30° Flare)
Female Tube Clamping Swivel - (45° Elbow)
Female Tube Clamping Swivel - (90° Elbow)
Male Tube Clamping Swivel - Long Pipe (59/270) O-Ring - (18°/71/158)
Female Tube Clamping Swivel - 90° Elbow Long Pipe (59/270) O-Ring - (18°/71/158)
60° Cone Swivel Female - 45° Elbow

High Pressure Cleaning	French Standard	JIS	ORFS
Male Right - (24 Cone) Power Cleaner Connection	Male Right - (24 Cone)	GU	ORFS - short
Male Kärcher Metric Cleaning Hose Fitting - Rigid	Female Swivel	GUO	ORFS - long
Female Kärcher Metric Cleaning Hose Fitting - (with Locking)	Female Swivel - (30° Flare) Cleaning Hose Fitting	Female Metric Swivel - (30° Flare)	ORFS 45°
	Female Metric Swivel - (30° Flare)	Female Metric Swivel - (30° Flare)	ORFS Female 90°
	Male BSP Female Pipe Rigid - (60° Cone)	Male BSP Female Pipe Rigid - (60° Cone)	ORFS - extra long
	Metric Male (for SAE/ANSI/Flares)		ORFS 90° - long
			ORFS Male

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Filtration

High Pressure Filters

18/28/38P Series

Technical Information

High pressure filters for heavy duty applications. This series features a range of head and bowl sizes and connection options. Microglass III glass fibre media is standard. A globally proven filter with optimized sizing for a wide range of industrial applications. Features a multiple bypass setting up to 7 bar.

Max. Pressure: 414 bar **Max. Flow:** 700 l/min



Ordering Code Information.

Box 1	Box 2	Box 3	Box 4	Box 5	Box 6	Box 7	Box 8
38P	1	10Q	B	M3	M	G20	1

Box 1		Box 2		Box 3				Box 4		
Code		Filter Type		Degree of filtration				Seal Type		
Model	Code	Length	Code	Element Media	Code			Seal Material	Code	
Small size high pressure filter, T-port	18P	Length 1	1	Micro glass III element	02Q	05Q	10Q	20Q	Nitrile	B
		Length 2	2		High collapse element	02QH	05QH	10QH	20QH	Fluoroelastomer
Medium size high pressure filter, T-port	28P									
Large size high pressure filter, T-port	38P									

Box 6		
Bypass and indicator settings		
Bypass valve	Indicator	Code
3.5 bar	2.5 bar	K
7.0 bar	5.0 bar	M
No bypass	5.0 bar	M
No bypass	No indicator	X

+ Box 8: Code 2
+ Box 8: Code 2

Box 7		
Filter Connection		
	Ports	Code
18P	Thread G 3/4	G12
	Thread SAE 12	S12
	Thread M27, ISO 6149	M27
	SAE flange 3/4" 6000-M	H12
	SAE flange 3/4" 6000-M	F12
28P	Thread G 1	G16
	Thread SAE 16	S16
	Thread M33, ISO 6149	M33
	SAE flange 1" 6000-M	H16
	SAE flange 1" 6000	F16
38P	Thread G 1 1/4	G20
	Thread G 1 1/2	G24
	Thread SAE 20	S20
	Thread SAE 24	S24
	Thread M42, ISO 6149	M42
	Thread M48, ISO 6149	M48
	SAE flange 1 1/4" 6000-M	H20
SAE flange 1 1/4" 6000	F20	

Box 5	
Indicator	Code
No indicator port	N
Visual indicator	M3
Electrical indicator	T1
Plugged with steel plug	P
Electronic 4 LED, PNP, N.O.	F1
Electronic 4 LED, NPN, N.O.	F2
Electronic 4 LED, PNP, N.C.	F3
Electronic 4 LED, NPN, N.C.	F4

Box 8	
Options	
Model	Code
Standard	1
No bypass	2

18/28/38P Series Seal Kits	
Part Number	Description
S04350	NITRILE SEAL KIT 18P
S04351	FLUOROELASTOMER SEAL KIT 18P
S04352	NITRILE SEAL KIT 28P
S04353	FLUOROELASTOMER SEAL KIT 28P
S04354	NITRILE SEAL KIT 38P
S04355	FLUOROELASTOMER SEAL KIT 38P

Degree of filtration						Code	
Average filtration beta ratio β (ISO 16889) / particle size μm [c]						Disposable Micro glass III	High collapse element
$\beta_{x(c)=2}$	$\beta_{x(c)=10}$	$\beta_{x(c)=75}$	$\beta_{x(c)=100}$	$\beta_{x(c)=200}$	$\beta_{x(c)=1000}$		
% efficiency, based on the above beta ratio (β_x)							
50.0%	90.0%	98.7%	99.0%	99.5%	99.9%		
N/A	N/A	N/A	N/A	N/A	4.5	02Q	02QH
N/A	N/A	4.5	5	6	7	05Q	05QH
N/A	6	8.5	9	10	12	10Q	10QH
6	11	17	18	20	22	20Q	20QH

Nominal flow (l/min) at viscosity 30 cSt				
Filter model	02Q	05Q	10Q	20Q
18P-1	35	60	80	100
18P-2	70	110	130	150
28P-1	80	100	120	150
28P-2	140	200	250	300
38P-1	140	220	340	420
38P-2	320	440	560	700

High Pressure Filters

Technical Information

420 bar high pressure filters made with cast iron head and steel bowl. The range is composed of 3 different sizes with nominal flows of up to 400 l/m. Available in 7 different micron ratings.

Part Number	Micron	Length	Ports	Flow	Replacement Elements
HPM281F10XNR	10	1	1/2" BSP	35 l/m	CHP281F10XN
HPM281F10XNR1	10	1	3/4" BSP	35 l/m	CHP281F10XN
HPM282F10XNR	10	2	1/2" BSP	55 l/m	CHP282F10XN
HPM282F10XNR1	10	2	3/4" BSP	55 l/m	CHP282F10XN
HPM283F10XNR	10	3	1/2" BSP	70 l/m	CHP283F10XN
HPM283F10XNR1	10	3	3/4" BSP	70 l/m	CHP283F10XN
HPM421F10XNR	10	1	3/4" BSP	80 l/m	CHP421F10XN
HPM421F10XNR1	10	1	1" BSP	80 l/m	CHP421F10XN
HPM422F10XNR	10	2	3/4" BSP	135 l/m	CHP422F10XN
HPM422F10XNR1	10	2	1" BSP	135 l/m	CHP422F10XN
HPM621F10XNR	10	1	1" BSP	145 l/m	CHP621F10XN
HPM621F10XNR1	10	1	1 1/4" BSP	145 l/m	CHP621F10XN
HPM621F10XNR2	10	1	1 1/2" BSP	145 l/m	CHP621F10XN
HPM622F10XNR	10	2	1" BSP	300 l/m	CHP622F10XN
HPM622F10XNR1	10	2	1 1/4" BSP	300 l/m	CHP622F10XN
HPM622F10XNR2	10	2	1 1/2" BSP	300 l/m	CHP622F10XN
HPM623F10XNR	10	3	1" BSP	330 l/m	CHP623F10XN
HPM623F10XNR1	10	3	1 1/4" BSP	330 l/m	CHP623F10XN
HPM623F10XNR2	10	3	1 1/2" BSP	330 l/m	CHP623F10XN
HPM624F10XNR	10	4	1" BSP	360 l/m	CHP624F10XN
HPM624F10XNR1	10	4	1 1/4" BSP	360 l/m	CHP624F10XN
HPM624F10XNR2	10	4	1 1/2" BSP	360 l/m	CHP624F10XN



Tank Top Filters

Technical Information

Return Line Aluminium Filter head with nylon bowl, available in 9 micron ratings with flows of 40 l/m up to 350 l/m 1.7 bar by pass.

Part Number	Length	Micron	Port	Flow	Spare Element
OMTF091C10NA	129mm	10	1/2" BSP	40 l/m	CR091C10R
OMTF091C25NA	129mm	25	1/2" BSP	40 l/m	CR091C25R
OMTF091R60NA	129 mm	60	1/2" BSP	40 l/m	CR091R60R
OMTF091F10NA	129mm	10 ABS	1/2" BSP	27 l/m	CR091F10R
OMTF111C10NA1	155 mm	10	3/4" BSP	81 l/m	CR111C10R
OMTF111C25NA1	155mm	25	3/4" BSP	81 l/m	CR111C25R
OMTF111R60NA1	155 mm	60	3/4" BSP	81 l/m	CR111R60R
OMTF111F10NA1	155 mm	10 ABS	3/4" BSP	39 l/m	CR111F10R
OMTF112C10NA2	200 mm	10	1" BSP	100 l/m	CR112C10R
OMTF112C25NA2	200 mm	25	1" BSP	100 l/m	CR112C25R
OMTF112R60NA2	200 mm	60	1" BSP	100 l/m	CR112R60R
OMTF112F10NA2	200 mm	10 ABS	1" BSP	55 l/m	CR112F10R
OMTF171C10NA1	324 mm	10	1 1/4" BSP	214 l/m	CR171C10R
OMTF171C25NA1	324 mm	25	1 1/4" BSP	214 l/m	CR171C25R
OMTF171R60NA1	324 mm	60	1 1/4" BSP	214 l/m	CR171R60R
OMTF171F10NA1	324 mm	10 ABS	1 1/4" BSP	157 l/m	CR171F10R
OMTF222C10NA1	322 mm	10	1 1/2" BSP	319 l/m	CR222C10R
OMTF222C25NA1	322 mm	25	1 1/2" BSP	350 l/m	CR222C25R
OMTF222R60NA1	322 mm	60	1 1/2" BSP	350 l/m	CR222R60R
OMTF222F10NA1	322 mm	10 ABS	1 1/2" BSP	250 l/m	CR222F10R





Spin On Filters

Technical Information

Inline Spin-On type hydraulic filters with disposable cartridge elements suitable for low pressure return lines and suction lines. Filter heads with port tappings from 3/4"-1 1/2" BSP are available.

Spin On Filters Return Line

Part Number	Micron	Ports	Flow	Spare Element	Max Pressure
OMT105ANR	10	3/4" BSP	55 l/m	CS05AN	10 bar
OMT105BNR	25	3/4" BSP	55 l/m	CS05BN	10 bar
OMT110ANR	10	1 1/4" BSP	130 l/m	CS10AN	10 bar
OMT110BNR	25	1 1/4" BSP	130 l/m	CS10BN	10 bar
OMT120ANR	10	1 1/2" BSP	270 l/m	CS10AN x 2	10 bar
OMT120BNR	25	1 1/2" BSP	270 l/m	CS10BN x 2	10 bar



Spin On Filters Suction Line

Part Number	Micron	Ports	Flow	Max Pressure
OMTI105ANA	10	3/4" BSP	16 l/m	10 bar
OMTI105BNA	10	3/4" BSP	16 l/m	25 bar
OMTI10ANA	10	1 1/4" BSP	35 l/m	10 bar
OMTI10BNA	25	1 1/4" BSP	35 l/m	10 bar
OMTI20ANA	10	1 1/2" BSP	100 l/m	10 bar
OMTI20BNA	25	1 1/2" BSP	100 l/m	10 bar

Indicators for Spin On Filters

Part Number	Description
PV1	Pressure gauge 0-12 bar for return line spin on filter
Filter Indicator Gauge	0-12 bar green/yellow/red face for OMTF and OMTI filters
PE1	Electrical pressure switch set @1.3 bar normally open
PE2	Electrical pressure switch set @1.3 bar normally closed
PE3	Electrical changeover switch set @1.3 bar



This is just a small range of filtration products that we have available. Please contact us for more including Parker Hannifin, Parker Parfit Elements, elements to replace other brands including Pall, Hydac, Argo, Donaldson, Mahle and many more.

We also stock Parker High Pressure Filtration, Parker UCC Filters and Elements and the world renowned Parker Racor range of products.

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Order these products at www.phoenixhydraulics.co.uk

Parker Inline Filters

Metal Inline Filters IL Series



Technical Information

Construction: Head: Zinc Bowl: Aluminium BS1470/1050A 1987
Element: Zintec/Stainless steel. 125 micron*
Max. Flow: 90 l/min
Max. Working pressure: 7 bar
Thread: G1
Working temp.: -30 °C to +80 °C **Flow direction:** From outside to inside **Seal:** Nitrile
Weight: 1.5 kg
Bowl tightening torque: 12Nm
 *Alternative media can be specified



Part number	Flow l/min	Thread BSP	Micron Rating	Replacement element
IL1115	90	G1	125	EIL1115

Non-Corrodible Inline Filter

Technical Information

Construction: Housing and bowl moulded in polyester
Element: Stainless steel mesh 125 micron*
Max. Flow: 120 l/min **Max. Working pressure:** 7 bar **Thread:** G1
Bowl tightening torque: 12Nm (A box or ring spanner is recommended.)
Working temp.: -30 °C to +80 °C **Seal:** Nitrile **Weight:** 0.5 kg

*Alternative media can be specified



Part number	Thread BSP	Appliance	Micron rating	Weight (kg)	Replacement element
IL761151	1	Oil	125	0.5	R.76115
IL761251	1	Water	125	0.5	R.76125

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OMTP Series

Technical Information

OMTP are a series of return line in-tank filters: Their range has two sizes with nominal flows up to 150 l/min. OMTP filters are flanged on the top of the reservoir and have a bypass valve and air breather (10µm and 40µm) as standard, aimed to filter the air exchanged with the environment. Filter elements are manufactured with the most advance materials, in order to grant a high filtration efficiency and duration. The OMTP modular manufacturing allows customers to choose the most proper configuration. The R&D of OMT makes a constant control of the performance of both filter assemblies and elements, through advanced quality test equipment.

Materials (housing)

Filter Head: Aluminium die-casting Filter Bowl: Glass reinforced nylon
 Cover: Glass reinforced nylon Seals:N:Nitrile (Buna-N) V:Fluoroelastomer (viton)
 By-pass valve: Nitrile (Buna-N)

Working Conditions

Filter Pressure: Max. working pressure: 1.000.000 Pa (10 bar)
 Test pressure: 2.000.000 Pa (20 bar)
 Bursting pressure: 3.000.000 Pa (30 bar)
 Working Temp. : -20 to + 90 °C Collapse Pressure: 5000.000 Pa (5 bar)
 By-pass valve setting pressure: 150.000.Pa (1.5 bar)

Compatibility with hydraulic fluids: Compatible with mineral oils type ISO 2943 (HH, HM, HR, HV, HG according to ISO 67 43/4)



Ordering Code Information

	Box 1	Box 2	Box 3	Box 4		Box 5
OMTP	101	C10	N	1	-	A

Box 1

Nominal size	Length
020	
101	1
102	2
103	3

Box 2

Filtration element		
C10	10µm	Resin treated cellulose βx≥2
C25	25µm	Resin treated cellulose βx≥2
F06	6µm	Inorganic fibre βx≥200
F10	10µm	Inorganic fibre βx≥200
F25	25µm	Inorganic fibre βx≥200
R60	60µm	Square mesh (Aisi304)
R90	90µm	Square mesh (Aisi304)
R125	125µm	Square mesh (Aisi304)
T25	25µm	Square mesh (Aisi304)

Box 3

Seals	
N	Nitrile/Buna-N
V	Viton

Box 4

Connections		
	OMTP20	OMTP100
	1/2" BSP	3/4" BSP
1	1/2" NPT	3/4" BSP
2	3/4" BSP	1" BSP
3	3/4" NPT	1" NPT
4	SAE8	SAE12

Box 5

Air Filter Element		
A	10µm	Resin treated cellulose
B	40µm	Resin treated cellulose

How to order the replacement element

	Box 1	Box 2	Box 3
OMTPR	101	F03	N

Parker Suction Elements



Technical Information

A high quality range of products designed to complete a reservoir installation including in-tank suction strainer and oil diffusers, metal and polyester in-line filters and drive couplings with nylon sleeve and sintered steel couplings. Inline check valves, single station gauge isolator valve and 63mm/100mm pressure gauges are also available.

Specification

Construction: Stainless steel media 30% glass filled nylon head. Zintec Centre tube. Epoxy adhesives.

Max. Working temperature: 90

Max. Clear element pressure drop: 0.03 bar

Filtration media: 125 micron*

Flow range: 15-500 l/min (for 30cSt)

Bypass rating: 0.17 bar

Mounting threads: G 1/2 up to G3

*Non-standard elements are available to order. Consult Parker Filtration.



Without Bypass Standard Products table					
Part number	Flow l/min	Ports BSP	Micron rating	Dimensions (mm)	
				Length	Width
SE75111110	15	½	125	105.5	46
SE75221110	25	¾	125	109.5	64
SE75231210	50	1	125	139.5	64
SE75351210	95	1½	125	140	86
SE75351310	130	1½	125	200	86
SE75361410	180	2	125	260	86
SE75361210	225	2	125	150	150
SE75471310	350	2½	125	212	150
SE75481410	500	3	125	272	150

Parker Diffusers

Technical Information

Specification

Construction: Zintec body. 30% glass-filled nylon head. Zintec end cap. Epoxy adhesives.

Flow range: 50 l/min up to 454 l/min (for 30cSt)

Mounting threads: G 3/4 up to G2

Temperature: +90 °C max.

Flow range: 15-500 l/min (for 30cSt)

Note: When installing a diffuser the plain area on the outside must be facing the pump inlet. For information relating to maximum differential pressure over the diffuser, consult Parker Filtration.



Part number	Flow l/min	Ports BSP	Dimensions (mm)	
			Length	Width
2201	114	1	127	86
2202	227	1½	178	86
2210	50	¾	120	62
2203	454	2	242	86

Flowline Oil & Water Calibrated Flowmeters (Brass version)

Technical Information



Works in any plane. Pressure up to 350 bar (5000 psi). Flows up to 360 l/min. Accuracy $\pm 5\%$ FSD. Repeatability $\pm 1\%$ FSD. Gives you a direct reading. Relatively insensitive to viscosity changes. Oil or water calibrated. *Optional reed switch upgrade.

Construction: Brass body to BS 287 CZ114 **Viscosity Range:** 10 to 200 cSt (oil)

Max. Working Pressure: Up to 350 bar **Accuracy:** $\pm 5\%$ FSD

Min. Working Pressure: 1 bar **Repeatability:** $\pm 1\%$ FSD

Temp. Range: Brass -20°C to $+90^{\circ}\text{C}$ **Min. Scale reading:** 10% FSD

Calibration: **Connections:** BSP parallel threads

Oil: Specific gravity 0.856 at 20°C **Wetted/Non-wetted Parts:**

Water: Specific gravity 1.0 at 20°C Consult Parker for information.

*Note: To add an electrically operated reed switch to your flowmeter please order B26307



Brass Flowmeter for oil.

Part Number	Supersedes	Ports BSP	Flow Range (l/min)	Max. Pressure	Dimensions (mm)						Weight
					A (A/F Hex)	B (A/F Hex)	C	D	E	F	
FM26122212	FM.26 122 212	1/4	0.5-4.5	350	32	29	19	123	7	32	0.4
FM26122312	FM.26 122 312	1/4	1-9	350	32	29	19	123	7	32	0.4
FM26222112	FM.26 222 112	1/2	2-20	350	41	38	32	165.5	12.5	46	0.9
FM26222212	FM.26 222 212	1/2	5-46	350	41	38	32	165.5	12.5	46	0.9
FM26322112	FM.26 322 112	3/4	5-55	350	58	46	43	190	15	58	1.75
FM26322212	FM.26 322 212	3/4	10-110	350	58	46	43	190	15	58	1.75
FM26122212	FM.26 122 222	1/4	0.2-2.0	350	32	29	19	123	7	32	0.4
FM26422112	FM.26 422 112	1 1/4	20-180	210	For installation details for 1 1/4 flowmeters please contact us.						8.0
FM26422212	FM.26 422 212	1 1/4	30-270	210							8.0
FM26422312	FM.26 422 312	1 1/4	40-360	210							8.0

Brass Flowmeter for water.

Part Number	Supersedes	Ports BSP	Flow Range (l/min)	Max. Pressure	Dimensions (mm)						Weight
					A (A/F Hex)	B (A/F Hex)	C	D	E	F	
FM26222122	FM.26 222 122	1/2	2-20	350	41	38	32	165.5	12.5	46	0.9
FM26222222	FM.26 222 222	1/2	5-46	350	41	38	32	165.5	12.5	46	0.9
FM26322122	FM.26 322 122	3/4	5-55	350	58	46	43	190	15	58	1.75
FM26322222	FM.26 322 222	3/4	10-110	350	58	46	43	190	15	58	1.75
FM26122212	FM.26 122 122	1/4	0.2-2.0	350	32	29	19	123	7	32	0.4
FM26122222	FM.26 122 222	1/4	0.5-4.5	350	32	29	19	123	7	32	0.4
FM26122322	FM.26 122 322	1/4	1-9	350	32	29	19	123	7	32	0.4
FM6422122	FM.26 422 122	1 1/4	20-180	210	For installation details for 1 1/4 flowmeters please contact us.						8.0
FM26422222	FM.26 422 222	1 1/4	30-270	210							8.0
FM26422322	FM.26 422 322	1 1/4	40-360	210							8.0

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Parker icountLaserCM20

Fluid Condition Monitoring

Portable Particle Counter

Technical Information

A 2-minute contamination test procedure: A portable particle counter designed to be used in the field. icountLaserCM20 is a proven answer to fluid system contamination monitoring offering a 2-minute test procedure. Multi- standard ISO and NAS cleanliness reporting, data entry, data graphing and integral printing are all standard on this world proven contamination monitor. 420 bar rated maximum pressure. Supported by the offline UBS and online SPS accessories.

Test time: 2 minutes **Max. working pressure:** 420 bar

Particle counts: MTD 4+, 6+, 14+, 21+, 38+ and 70+ microns(c).

ACFTD 2+, 5+, 15+, 25+, 50+ and 100+ microns.

International codes: ISO 7-22, NAS 0-12

Data retrieval: Memory access gives test search facility.

Max. flow rate: 400 l/min when used with system 20 sensors. Higher with single point sampler.

Working conditions: LaserCM will operate with the system working normally.

Computer compatibility: interface via RS232 connection @ 9600 baud rate.



Part Number	Description
LCM202022	icountLCM20 (MTD calibrated)
LCM202026	icountLCM20 'classic' (MTD calibrated)
ACC6NE015	Printer roll x 5
ACC6NE014	Printer ribbon
ACC6NE013	Re-chargeable battery pack
ACC6ND002	Weather protector cover
ACC6ND000	USB to RS232 Download Cable

Parker Oilcheck

Hand-held Oil Condition Monitor

Technical Information

Portable and battery powered for 'go-anywhere' monitoring. Hand-held condition monitoring provides a visual comparison between new and used oils. Parker Oilcheck has a numerical display that indicates positive or negative increase in dielectrics. Oilcheck gives an early warning of impending engine failure. Cost effective solution to save money and help increase engine life. Ideal for fleet owners, garages and DIY mechanics.

Using Oilcheck

Once a clean oil sample has been placed in the 'Sensor Well' and the 'TEST' button has been pressed the instrument will 'zero' on the sample. Once cleaned out with a degreaser and replaced by contaminated sample, a new reading is obtained on the LCD, which can be easily compared against the green/amber/red efficiency scale.

Specifications

Case construction: ABS **Circuitry:** Microprocessor control. **Battery:** 1 x 9V alkaline.

Display: LCD. **Suitable oil types:** Mineral and synthetic based oils. **Weight:** 0.4kg.

Repeatability: Better than 5% **Readout:** Green/amber/red grading, Numerical value (0-100).

Battery life: >150 hours or 3,000 tests.

Dimensions: 250mm x 95mm x 34mm (9.8" x 3.7" x 1.3").

Motors & Pumps

Hand Pumps



Technical Information

Our hydraulic hand pumps are available ex stock at a highly competitive price. We have a wide range of single and double acting hand pumps available with or without tanks.

A LEVER IS REQUIRED IN ADDITION FOR EACH HAND PUMP

In Line Mounted Hand Pumps No Tank to Operate Single Acting Cylinders

Part Number	Description
AEP-75-7020	20cc Single acting hand pump with release valve line mount
AEP-75-7050	40cc Single acting hand pump with release valve line mount
AEP-75-7070	70cc Single acting hand pump with release valve line mount

Hand Pump for Double acting Cylinder with Tank

Part Number	Description
AEP-53-7151	12cc Double acting hand pump with 1 litre steel tank
AEP-53-7152	12cc Double acting hand pump with 2 litre steel tank
AEP-53-7352	25cc Double acting hand pump with 2 litre steel tank
AEP-53-7353	25cc Double acting hand pump with 3 litre steel tank
AEP-53-7552	45cc Double acting hand pump with 2 litre steel tank
AEP-53-7553	45cc Double acting hand pump with 3 litre steel tank

Hand Pump to Operate Single Acting Cylinder with Tank

Part Number	Description
AEP-51-7151	12cc Single acting hand pump with 1 litre steel tank
AEP-51-7152	12cc Single acting hand pump with 2 litre steel tank
AEP-51-7352	25cc Single acting hand pump with 2 litre steel tank
AEP-51-7353	25cc Single acting hand pump with 3 litre steel tank
AEP-51-7552	45cc Single acting hand pump with 2 litre steel tank
AEP-51-7553	45cc Single acting hand pump with 3 litre steel tank

Hand Pump Lever

Technical Information

Required for all hand pumps.

Part Number	Description
AEP-K6-0600	Lever to suit all AEP hand pumps 600mm
AEP-K6-1000	Lever to suit all AEP hand pumps 1000mm



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Hydraulic Pumps

Gear Pumps

Group 1 Gear Pumps

Technical Information

Parker Group 1 Aluminium Hydraulic Gear Pumps PGP 500 offer superior performance, high efficiency and low noise at high operating pressures. They are produced in three frame sizes (PGP 503, PGP 511, PGP 517) with displacements ranging from 0.8 to 70 cm³/rev. A wide variety of options are available to meet specific application requirements.



Part Number	Displacement	Flow @ 1500rpm in l/m	Continuous Pressure	Rotation	Inlet Port	Outlet Port
3309111358	.8 cc/rev	1.2	275	Clockwise	12mm dia port 30mm PCD M6 square	8mm dia port 30mm PCD M6 square flange
3309111359	1.2 cc/rev	1.8	275	Clockwise	12mm dia port 30mm PCD M6 square	8mm dia port 30mm PCD M6 square flange
3309111360	1.6 cc/rev	2.4	275	Clockwise	12mm dia port 30mm PCD M6 square	8mm dia port 30mm PCD M6 square flange
3309111361	2.1 cc/rev	3.15	275	Clockwise	12mm dia port 30mm PCD M6 square	8mm dia port 30mm PCD M6 square flange
3309111362	2.5 cc/rev	3.75	275	Clockwise	12mm dia port 30mm PCD M6 square	8mm dia port 30mm PCD M6 square flange
3309111363	3.3 cc/rev	4.95	275	Clockwise	12mm dia port 30mm PCD M6 square	8mm dia port 30mm PCD M6 square flange
3309111364	3.6 cc/rev	5.4	275	Clockwise	12mm dia port 30mm PCD M6 square	8mm dia port 30mm PCD M6 square flange
3309111365	4.3 cc/rev	6.45	210	Clockwise	12mm dia port 30mm PCD M6 square	8mm dia port 30mm PCD M6 square flange
3309111366	4.8 cc/rev	7.2	180	Clockwise	12mm dia port 30mm PCD M6 square	8mm dia port 30mm PCD M6 square flange
3309111367	5.8 cc/rev	8.7	160	Clockwise	12mm dia port 30mm PCD M6 square	8mm dia port 30mm PCD M6 square flange
3309111368	6.2 cc/rev	9.3	150	Clockwise	12mm dia port 30mm PCD M6 square	8mm dia port 30mm PCD M6 square flange
3309111369	7.9 cc/rev	11.85	120	Clockwise	12mm dia port 30mm PCD M6 square	8mm dia port 30mm PCD M6 square flange

Group 1 Elbows

Technical Information

Gear Pump elbows to connect to standard European group 1 gear pumps.

Part Number	Pump Group	Fixing Holes	BSP	PCD	Fixings
RB 038-30-M	1	3	3/8"	30	M6 x 30
RB 012-30-M	1	3	1/2"	30	M6 x 30
RIA-30-038-M	1	3	3/8"	30	M6 x 20
RIA-30-012-M	1	3	1/2"	30	M6 x 20



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Hydraulic Pumps Gear Pumps

Group 2 Gear Pumps

Technical Information

Parker Group 2 Aluminium Hydraulic Gear Pumps PGP 500 offer superior performance, high efficiency and low noise at high operating pressures. They are produced in three frame sizes (PGP 503, PGP 511, PGP 517) with displacements ranging from 0.8 to 70 cm³/rev. A wide variety of options are available to meet specific application requirements.



Part Number	Displacement	Flow @ 1500rpm in l/m	Continuous Pressure	Rotation	Inlet Port	Outlet Port
3349111497	4.0 cc/rev	6	275	Clockwise	13mm dia port 30mm PCD M6 screws diamond flange	13mm dia port 30mm PCD M6 screws diamond flange
3349111498	6.0 cc/rev	9	275	Clockwise	13mm dia port 30mm PCD M6 screws diamond flange	13mm dia port 30mm PCD M6 screws diamond flange
3349111499	8.0 cc/rev	12	275	Clockwise	13mm dia port 30mm PCD M6 screws diamond flange	13mm dia port 30mm PCD M6 screws diamond flange
3349111500	10 cc/rev	15	275	Clockwise	19mm dia port 40mm PCD M6 screws diamond flange	13mm dia port 30mm PCD M6 screws diamond flange
3349111501	11 cc/rev	16.5	275	Clockwise	19mm dia port 40mm PCD M6 screws diamond flange	13mm dia port 30mm PCD M6 screws diamond flange
3346111502	14 cc/rev	21	275	Clockwise	19mm dia port 40mm PCD M6 screws diamond flange	13mm dia port 30mm PCD M6 screws diamond flange
3349111503	16 cc/rev	24	275	Clockwise	19mm dia port 40mm PCD M6 screws diamond flange	13mm dia port 30mm PCD M6 screws diamond flange
3349111262	19 cc/rev	28.5	250	Clockwise	19mm dia port 40mm PCD M6 screws diamond flange	13mm dia port 30mm PCD M6 screws diamond flange
3349111505	23 cc/rev	34.5	225	Clockwise	19mm dia port 40mm PCD M6 screws diamond flange	19mm dia port 40mm PCD M6 screws diamond flange
3349111506	27 cc/rev	40.5	190	Clockwise	19mm dia port 40mm PCD M6 screws diamond flange	19mm dia port 40mm PCD M6 screws diamond flange
3349111507	31 cc/rev	46.5	165	Clockwise	19mm dia port 40mm PCD M6 screws diamond flange	19mm dia port 40mm PCD M6 screws diamond flange
3349111508	33 cc/rev	49.5	155	Clockwise	19mm dia port 40mm PCD M6 screws diamond flange	19mm dia port 40mm PCD M6 screws diamond flange

Group 3 Gear Pumps

Technical Information

Parker Group 3 Aluminium Hydraulic Gear Pumps PGP 500 offer superior performance, high efficiency and low noise at high operating pressures. They are produced in three frame sizes (PGP 503, PGP 511, PGP 517) with displacements ranging from 0.8 to 70 cm³/rev. A wide variety of options are available to meet specific application requirements.



Part Number	Displacement	Flow @ 1500rpm in l/m	Continuous Pressure	Rotation	Inlet Port	Outlet Port
3339111329	23 cc/rev	34.5	250	Clockwise	27mm dia port 51mm PCD M10 screws diamond flange	19mm dia port 40mm PCD M8 screws diamond flange
3339111331	28 cc/rev	42	250	Clockwise	27mm dia port 51mm PCD M10 screws diamond flange	19mm dia port 40mm PCD M8 screws diamond flange
3339111332	33 cc/rev	49.5	250	Clockwise	27mm dia port 51mm PCD M10 screws diamond flange	19mm dia port 40mm PCD M8 screws diamond flange
3339111334	38 cc/rev	57	250	Clockwise	27mm dia port 51mm PCD M10 screws diamond flange	19mm dia port 40mm PCD M8 screws diamond flange
3339111335	44 cc/rev	66	220	Clockwise	27mm dia port 51mm PCD M10 screws diamond flange	19mm dia port 40mm PCD M8 screws diamond flange
3339111336	52 cc/rev	78	200	Clockwise	27mm dia port 51mm PCD M10 screws diamond flange	19mm dia port 40mm PCD M8 screws diamond flange
3339111337	58 cc/rev	87	160	Clockwise	27mm dia port 51mm PCD M10 screws diamond flange	19mm dia port 40mm PCD M8 screws diamond flange
333111325	70	105	160	Clockwise	27mm dia port 51mm PCD M10 screws diamond flange	27mm dia port 51mm PCD M10 screws diamond flange

If you require anticlockwise rotation please contact our sales team.

Hydraulic Pumps

Pump Elbows

Aluminium Pump Elbows

Technical Information

Gear Pump elbows to connect to standard European gear pumps. Made in aluminium with a maximum pressure of 180 bar. Supplied complete with O ring and bolt kit.

Part Number	Pump Group	Fixing Holes	BSP	PCD	Fixings
RP1-12	2	3	1/2"	30	M6 x 35
RP2-12	2	3	1/2"	40	M8 x 45
RP2-34	2	3	3/4"	40	M8 x 45
RP3-100	3	3	1"	51-56	M10 x 60
RP3-34	3	3	3/4"	51-56	M10 x 60
RP3-35-114	3.5	2	1 1/4"	62	M12 x 35



Steel Pump Elbows

Technical Information

Gear Pump elbows to connect standard European gear pumps. Made in zinc plated steel with a maximum pressure of 300 bar. Supplied complete with O ring and bolt kit.

Part number	Pump Group	Fixing Holes	BSP	PCD	Fixings
RPA1-38C	1	3	3/8"	30	M6 x 20
RPA1-12C	1	3	1/2"	30	M6 x 20
RPA2-12C	2	3	1/2"	40	M8 x 25
RPA2-34C	2	3	3/4"	40	M8 x 25
RPA3-34	3	3	3/4"	51	M10 x 30
RPA3-100A	3	3	1"	51	M10 x 30
RP3-35-114C	3.5	3	1 1/4"	62	M10 x 30



Aluminium Bosch Type Pump Elbows

Technical Information

Gear Pump elbows to connect to Bosch style pumps. Made in aluminium with a maximum pressure of 180 bar. Supplied complete with O ring and bolt kit.

Part Number	Pump Group	Fixing Holes	BSP	PCD	Fixings
RB38-35	Bosch Type	4	3/8"	35	M6 x 30/M6
RB12-35	Bosch Type	4	1/2"	35	M6 x 30/M6
RB12-40	Bosch Type	4	1/2"	40	M6 x 35/M6
RB34-40	Bosch Type	4	3/4"	40	M6 x 35/M6
RB100-55	Bosch Type	4	1"	55	M8 x 45/M8



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Hydraulic Motor Pumps F11-F12

Series F11/F12 SAE



Technical Information

F11 & F12 are bent axis. Fixed displacement heavy-duty motor/pump series. They can be used in numerous application in both open and closed loop circuits.

Series F11 is available in the following frame sizes and versions:

- F11 -5, -6, -10, -12, -14, -19 with CETOP mounting flange and shaft end.
- F11 -10, -12, -14 with ISO flange and shaft.
- F11 -10, -12 -14, -19, with SAE flange and shaft E6.

Series F12 conforms to current ISO and SAE mounting flange and shaft configurations. A very compact cartridge version is also available.

- F11/F12 motors can be used at unusually high shaft speeds.
- Operating pressure up to 480 bar.
- 40° angle between shaft and cylinder barrel.
- Laminated piston ring offers advantages such as low internal leakage and thermal shock resistance.
- The pump version has highly engineered valve plates for increased self priming speed and low noise, available with left and right hand rotation.
- Very high torque at start-up as well as at low speeds.
- Unique timing gear synchronizes shaft and cylinder barrel making the F11/F12 very tolerant to high 'G' forces and torsional vibrations.
- Heavy duty roller bearing permit substantial external axial and radial shaft loads.



Specifications														
Frame Size	F11 -10	-12	-14	-19	F12 -30	-40	-60	-80	-90	-110	-125	-150	-250	
Displacement [cm ³ /rev]	9.8	12.5	14.3	19.0	30.0	40.0	59.8	80.4	93.0	110.1	125.0	150	242	
Operating pressure														
Max. intermittent ¹⁾ [bar]	420				480				420	480	480	420		
Max. continuous [bar]	350				420				350	420	420	350		
Motor operating speed [rpm]														
Max. intermittent ¹⁾	11 200	10 300	9 900	8 900	7 300	6 700	5 800	5 300	5 000	4 800	4 600	3 500	3 000	
Max. continuous	10 200	9 400	9 000	8 100	6 700	6 100	5 300	4 800	4 600	4 400	4 200	3 200	2 700	
Min. continuous	50				50									
Max. pump self priming speed²⁾														
L or R function; Max.[rpm]	4 200	3 900	3 900	3 500	3150	2870	2500	2300	2 250	2200	2 100	1 700	1 500	
Motor input flow														
Max. intermittent ¹⁾ [l/min]	110	129	142	169	219	268	347	426	465	528	575	525	726	
Max. continuous [l/min]	100	118	129	154	201	244	317	386	428	484	525	480	653	
Main circuit temp. ³⁾ , Max. [°C]	80				80									
Min. [°C]	-40				-40									
Mass moment of inertia														
(x10 ⁻³) [kg m ²]	0.39	0.40	0.42	1.1	1.7	2.9	5	8.4	8.4	11.2	11.2	40	46	
Weight [kg]	7.5	8.2	8.3	11	12	16.5	21	26	26	36	36	70	77	

¹⁾ intermittent: max 6 seconds in any one minute. ²⁾ Self priming speed valid at sea level. ³⁾ See also installation information, operating temp.

Hydraulic Motor Pumps F11-F12

F11-SAE



Ordering Code Information.

	Box 1	Box 2	Box 3	Box 4	Box 5	Box 6	Box 7	Box 8	Box 9
F11	-		-		-		-		-

Box 1

Frame Size	
Code	Displacement (cm ³ /rev)
10	9.8
12	12.5
14	14.3
19	19.0

Box 2

Function					
Frame Size		10	12	14	19
Code	Function				
M	Motor	x	-	-	x
H	Motor, high pressure	x	x	x	x
S	Motor, high speed	(x)	-	-	(x)
R	Pump clockwise rot'n	(x)	(x)	(x)	(x)
L	Pump counter clockw.	(x)	(x)	(x)	(x)



Box 3

Main Ports					
Frame Size		10	12	14	19
Code	Main Ports				
U	SAE, UN threads	x	x	x	x
B	BSP threads	(x)	(x)	-	(x)

Box 4

Mounting flange					
Frame Size		10	12	14	19
Code	Mounting flange				
S	SAE flange	x	x	x	x

Box 5

Shaft Seal					
Frame Size		10	12	14	19
Code	Shaft Seal				
N	NBR ¹⁾ , low pressure	(x)	-	-	(x)
V	FPM ²⁾ , high pressure, high temp.	x	x	x	x
S	FPM ²⁾ , Saw motor	(x)	-	-	(x)

Box 6

Shaft					
Frame Size		10	12	14	19
Code	Shaft				
T	SAE key	-	-	x	x
S	SAE spline	(x)	(x)	(x)	(x)
K	Metric key	x	x	-	-
K	Metric key, 25 mm ³⁾	(x)	(x)	-	-

Box 7

Version Number
(assigned for special versions)

Box 8

Option					
Frame size		10	12	14	19
Code	Make-up valve				
MVR	clockwise rotation	(x)	(x)	(x)	(x)
MVL	ant-clockwise rotation	(x)	(x)	(x)	(x)

Box 9

Speed Sensor Option					
Frame Size		10	12	14	19
Code	Option				
P	Prepared for speed sensor	-	(x)	(x)	(x)

¹⁾ NBR - Nitrile rubber

²⁾ FPM- Fluor rubber

³⁾ Special version number 349

x : Available (x) : Optional - : Not available

Hydraulic Motor Pumps F11-F12

F12-SAE



Ordering Code Information.

	Box 1	Box 2	Box 3	Box 4	Box 5	Box 6	Box 7	Box 8	Box 9
F12	-	-	-	-	-	-	-	-	-

Box 1

Frame Size	
Code	Displacement (cm ³ /rev)
030	30.0
040	40.0
060	59.8
080	80.4
090	93.0
110	110.1
125	125.0
150	150.0
250	242.0

Box 2

		Function									
		Frame Size									
Code	Function	30	40	60	80	90	110	125	150	250	
M	Motor	x	x	x	x	x	x	x	x	-	
H	Motor, high pressure	-	-	-	-	-	-	-	(x)	-	
Q	Motor Pump:	-	-	-	-	-	-	-	-	x	
L	counter clockwise	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)	
R	clockwise	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)	



Box 3

		Main Ports									
		Frame Size									
Code	Main Ports	30	40	60	80	90	110	125	150	250	
S	SAE 6000 psi flange	x	x	x	x	x	x	x	-	-	
U	SAE, UN threads	(x)	(x)	(x)	(x)	(x)	(x)	(x)	-	-	
F	SAE 6000 psi flange*	-	-	-	-	-	-	-	x	x	

Box 4

		Mounting flange									
		Frame Size									
Code	Mounting flange	30	40	60	80	90	110	125	150	250	
S	SAE 4 bolt	x	x	x	x	x	x	x	x	x	
T	SAE 2 bolt	x	x	x	-	-	-	-	-	-	

Box 5

		Shaft Seal									
		Frame Size									
Code	Shaft Seal	30	40	60	80	90	110	125	150	250	
N	NBR ¹⁾ , low pressure	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)	-	
V	FPM ²⁾ , high pressure, high temp.	x	x	x	x	x	x	x	x	x	

Box 6

		Shaft									
		Frame Size									
Code	Shaft	30	40	60	80	90	110	125	150	250	
S	SAE spline Optional	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)	
U	" " Optional	-	-	-	(x)	(x)	-	-	-	-	
T	SAE key Standard	x	x	x	x	x	x	x	x	-	
K	Metric key	-	-	-	-	-	-	-	(x)	x	
F	SAE spline	-	-	-	-	-	-	-	-	(x)	
D	Spline, DIN 5480	-	-	-	-	-	-	-	-	(x)	

Box 7

Version Number
(assigned for special versions)

Box 8

		Integr Flushing Valve Option									
		Frame Size									
Code	Option	30	40	60	80	90	110	125	150	250	
LO1	Integr flushing valve	(x)	(x)	(x)	(x)	(x)	- ³⁾	- ³⁾	-	-	
MVR	Make-up valve clockwise rotation	(x)	-	-	-	-	-	-	-	-	
MVL	Make-up valve anti clockw. rotation	(x)	-	-	-	-	-	-	-	-	

Box 9

		Speed Sensor Option									
		Frame Size									
Code	Option	30	40	60	80	90	110	125	150	250	
P	Prepared for speed sensor	(x)	(x)	(x)	(x)	(x)	(x)	(x)	-	-	

1) NBR - Nitrile rubber
 2) FPM - Fluor rubber
 3) F12-110 and -125: Accessory valve block
 * Metric threads

x : Available (x) : Optional - : Not available

Axial Piston Pump

PV 016 to PV 360



An Introduction & Technical Information

With thru drive for single and multiple pumps. Swash plate type for open circuit.

Fluid recommendations: Premium quality hydraulic mineral fluid is recommended, like HLP oils to DIN 51524, part 2. Bruggen- value has to be 30 N/mm² minimum for general application and 50 N/mm² for heavily loaded hydraulic equipment and fast cycling machines and/or high dynamic loads, measured in accordance with DIN 51 347-2. See also Document HY30-3248/UK Parker Hydraulic Fluids.

Filtration: For maximum pump and system component functionality and life, the system should be protected from contamination by effective filtration. Fluid cleanliness should be in accordance with ISO classification ISO 4406: 1999. The quality of filter elements should be in accordance with ISO standards. Minimum requirement for filtration rate x (mm);

General hydraulic systems for satisfactory operation:

Class 20/18/15, according to ISO 4406: 1999.

Hydraulic systems with maximised component life and function ability:

Class 18/16/13, according to ISO 4406: 1999.

Viscosity: The normal operating viscosity should range between 16 and 100 mm²/s (cSt). Max. Start-up viscosity is 80 mm²/s (cSt).

Seals: Check hydraulic fluid specification for chemical resistance of seal material. Check temperature range of seal material and compare with max. System and ambient temperature.

N - Nitrile -40 ... +90°C

Note: The highest fluid temperature will be at the drain port of the pump up to 25°C higher than in the reservoir.



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Axial Piston Pump

	PV016	PV020	PV023	PV028	PV032	PV040	PV046
Frame size	1	1	1	1	2	2	2
Max. Displacement	16 cm ³ /rev	20 cm ³ /rev	23 cm ³ /rev	28 cm ³ /rev	32 cm ³ /rev	40 cm ³ /rev	46 cm ³ /rev
Output flow at 1500rpm	24 l/min	30 l/min	34.5 l/min	42 l/min	48 l/min	60 l/min	69 l/min
Nominal pressure pN	350 bar	350 bar	350 bar	350 bar	350 bar	350 bar	350 bar
Max. Pressure p _{max} at 20% working cycle *	420 bar	420 bar	420 bar	420 bar	420 bar	420 bar	420 bar
Case drain pressure, continuous	0,5 bar	0,5 bar	0,5 bar	0,5 bar	0,5 bar	0,5 bar	0,55 bar
Min. Inlet pressure, abs.	0,8 bar	0,8 bar	0,8 bar	0,8 bar	0,8 bar	0,8 bar	0,8 bar
Max Inlet pressure	16 bar	16 bar	16 bar	16 bar	16 bar	16 bar	16 bar
Input power at 1500 rpm and 350 bar	15,5 kW	19,5 kW	22,5 kW	27,5 kW	31 kW	39 kW	45 kW
Max speed at 1 bar, abs inlet pressure	3000 rpm	3000 rpm	3000 rpm	3000 rpm	2800 rpm	2800 rpm	2800 rpm
Moment of inertia	0,0017 kgm ²	0,0017 kgm ²	0,0017 kgm ²	0,0017 kgm ²	0,0043 kgm ²	0,0043 kgm ²	0,0043 kgm ²
Weight	19 kg	19 kg	19 kg	19 kg	30 kg	30 kg	30 kg

	PV063	PV080	PV092	PV140	PV180	PV270
Frame size	3	3	3	4	4	5
Max. Displacement	63 cm ³ /rev	80 cm ³ /rev	92 cm ³ /rev	140 cm ³ /rev	180 cm ³ /rev	270 cm ³ /rev
Output flow at 1500rpm	94.5 l/min	120 l/min	138 l/min	270 l/min	405 l/min	405 l/min
Nominal pressure pN	350 bar	350 bar	350 bar	350 bar	350 bar	350 bar
Max. Pressure p _{max} at 20% working cycle *	420 bar	420 bar	420 bar	420 bar	420 bar	420 bar
Case drain pressure, continuous	0.5 bar	0.5 bar	0.5 bar	0.5 bar	0.5 bar	0.5 bar
Min. Inlet pressure, abs.	0.8 bar	0.8 bar	0.8 bar	0.8 bar	0.8 bar	0.8 bar
Max Inlet pressure	16 bar	16 bar	16 bar	16 bar	16 bar	16 bar
Input power at 1500 rpm and 350 bar	61.5 kW	78 kW	89.5 kW	136 kW	175 kW	263 kW
Max speed at 1 bar, abs inlet pressure	2800 rpm	2500 rpm	2300 rpm	2400 rpm	2200 rpm	1800 rpm
Moment of inertia	0.018 kgm ²	0.018 kgm ²	0.018 kgm ²	0.018 kgm ²	0.030 kgm ²	0.098 kgm ²
Weight	59 kg	59 kg	59 kg	90 kg	90 kg	172 kg

*Special control options required

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Axial Piston Pump



Ordering Code Information.

PV 016 to 028

PV 036 to 046

	Box 1	Box 2	Box 3	Box 4	Box 5	Box 6	Box 7	Box 8	Box 9
PV	XXX	R	1	K	1	T	1	N	XXX

Axial piston pump
variable
displacement

Box 1

Size & Displacement		
Code	Displacement	Size
016	16 cm ³ /rev	1
020	20cm ³ /rev	1
023	23cm ³ /rev	1
028	28cm ³ /rev	1
032	32cm ³ /rev	2
040	40cm ³ /rev	2
046	46cm ³ /rev	2

Box 2

Rotation	
Code	Rotation*
R	Clockwise
L	Counter Clockwise

*When looked on shaft

Box 3

Variation	
Code	Variation
1	Standard
9	Special adjustment**

** requires Kxxxx no.

Box 4

Mounting interface		
Code	Mounting interface	Shaft
D	SAE	Cylindric, key Splined SAE
E	ISO 3019/1	
K	metr.ISO 3019/2	Cylindric, key Splined, DIN 5480
L	SAE	

Box 5

Thread Code		
Code	Port*	Threads**
1	BSPP	metric
3	UNF	UNC
7	ISO 6149	UNC
8	ISO 6149	metric

*Drain, gauge & flushing ports

**All mounting connecting threads

Box 6

Thru drive code	
Code	Thru drive option
	No adaptor for second pump
T	Single pump prepared for thru drive
016-028 & 032-046 Codes	
With adaptor for second pump	
A	SAE A, Ø82.55mm
B	SAE B, Ø101.6mm
G	metric, Ø63mm
H	metric, Ø80mm
J	metric, Ø100mm
only for 016-028 codes	
Y	SAE AA, Ø50.8mm
only for 032-046 codes	
C	SAE C, Ø127mm
K	metric, Ø125mm

*To be ordered separately as single part. x = Frame size, see displacement

Box 7

Coupling code		
1	Single pump, no coupling	
Code	Coupling for thru drive	As single part*
H	with coupling 25 x 1,5x15, DIN 5480	MK-PVBGxK01
J	with coupling 32 x 1,5x20, DIN 5480	MK-PVBGxK02
Y	SAE A 9T-16/32 DP	MK-PVBGxK11
A	SAE -11T-16/32 DP	MK-PVBGxK12
B	SAE B 13T-16/32 DP	MK-PVBGxK13
C	SAE B-B 15T-16/32 DP	MK-PVBGxK14
D	SAE C 14T-12/24 DP	MK-PVBGxK15

*To be ordered separately as single part. x = Frame size, see displacement

Box 8

Seals	
Code	Seals
N	NBR
V	FPM
W	NBR with PTFE shaft seal
P	FPM with PTFE shaft seal

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Axial Piston Pump

Box 9

Compensator				
Code	Compensator options			
0	0	1	No compensator	
1	0	0	With cover plate, no control function	
Remote compensator options				
M	M		Standard pressure compensator	
M	R		Remote pressure compensator	
M	F		Load sensing (flow) compensator	
M	T		Two-valve-LS compensator with elbow manifold	
Compensator variation				
		C	Standard variation, no interface top side for pilot valves*	*not for MT
		1	NG6 interface top side for pilot valves	
		W	With unloading function, 24VDC solenoid	
		K	Prop.-pilot valve type PVACRE...35 mounted	
		Z	Without integrated pilot valve, NG6 interface, for mounting of accessory code PVAC	
		P	MT1 with mounted pilot valve PVAC1P**	** only for MT
Horse power compensator				
Code	Compensator options			
			Nominal HP at 1.500 rpm	
016-028 & 032-046 codes				
D			5,5 kW	
E			7,5 kW	
G			11 kW	
H			15 kW	
K			18,5 kW	
only for 016-028 codes				
B			3 kW	
C			4 kW	
only for 032-046 codes				
M			22 kW	
S			30 kW	
Function				
	L		Horse power compensator	
	C		Horse power compensator and Load Sensing	
Compensator variation				
		C	Adjustable pressure compensation	
		1	NG 6 interface top side	
		W	Electrical unloading feature, 24 VDC	
		K	Prop-pilot valve type PVACRE..35 mounted	
		Z	Without integrated pilot valve, NG6 interface, for mounting of accessory code PVAC	
Electro hydraulic compensator				
Code	Compensator options			
F	P	V	Closed loop displacement control only, no pressure compensation.	
U	P		Closed loop proportional displacement control with pressure compensation.	
Compensator version				
		R	Balanced pressure control, NG6 interface	
		K	Version UPR, with proportional pilot valve type PVACRE..35 mounted	
		M	Version UPK, with pressure sensor for closed loop pressure and power control	

Note: Compensator differential Δp is factory pre-set to:

remote compensators, power control 15 ± 1 bar

load sensing comp. (not power control) 10 ± 1 bar

Axial Piston Pump

Ordering Code Information.

PV 063 to 092

PV 140 to 270



	Box 1	Box 2	Box 3	Box 4	Box 5	Box 6	Box 7	Box 8	Box 9
PV	XXX	R	1	K	1	T	1	N	XXX

Axial piston pump
variable
displacement

Box 1

Size & Displacement		
Code	Displacement	Size
063	63 cm ³ /rev	3
080	80cm ³ /rev	3
092	92cm ³ /rev	3
140	140cm ³ /rev	4
180	180cm ³ /rev	4
270	270cm ³ /rev	5

Box 2

Rotation	
Code	Rotation*
R	Clockwise
L	Counter Clockwise

*When looked on shaft

Box 3

Variation	
Code	Variation
1	Standard
9	Special adjustment**

** requires Kxxx no.

Box 4

Mounting interface			
Code	Mounting interface		Shaft
D	SAE ISO 3019/1	4 hole flange	Cylindric, key Splined SAE
E			
K	metr.ISO 3019/2		Cylindric, key Splined, DIN 5480
L			
only for PV 140/180 codes			
F	SAE ISO 3019/1	4 hole flange	Cylindric, key Splined SAE
G			

Box 5

Thread Code		
Code	Port*	Threads**
1	BSPP	metric
3	UNF	UNC
7	ISO 6149	UNC
8	ISO 6149	metric
only for PV 063, 080-180 codes pressure port 1 1/4"		
4	BSPP	metr. M14

*Drain, gauge & flushing ports

**All mounting connecting threads

Box 6

Thru drive code		
Code	Thru drive option	
	No adaptor for second pump	
T	Single pump prepared for thru drive	
063-092 & 140-270 Codes		
	With adaptor for second pump	As single part*
A	SAE A, Ø82.55mm	MK-PVBGxAMN
B	SAE B, Ø101.6mm	MK-PVBGxBMN
C	SAE C, Ø127mm	MK-PVBGxCMN
D	SAE D, Ø152,4mm	MK-PVBGxDMN
H	metric, Ø80mm	MK-PVBGxHMN
J	metric, Ø100mm	MK-PVBGxJMN
K	metric, Ø125mm	MK-PVBGxKMN
L	metric, Ø160mm	MK-PVBGxLMN
only for 063-092 codes		
G	metric, Ø63mm	MK-PVBGxGMN
only for PV 270		
E	SAE E, Ø165,1mm	MK-PVBGxEMN
M	metric, Ø200mm	MK-PVBGxMMN

*To be ordered separately as single part. x = Frame size, see displacement

Box 7

Coupling code	
1	Single pump, no coupling
Code	Coupling for thru drive
2	PV 140/180 mounted
3	PV pump mounted
4	Gear pump mounted

Option 2, 3 and 4 not available for single pump. Second pump must be specified with full model code.

Box 8

Seals	
Code	Seals
N	NBR
V	FPM
W	NBR with PTFE shaft seal
P	FPM with PTFE shaft seal

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Email: sales@phoenixhydraulics.co.uk

Website: www.phoenixhydraulics.co.uk

Axial Piston Pump

Box 9

Compensator			
Code	Compensator options		
0	0	1	No compensator
1	0	0	With cover plate, no control function
Remote compensator options			
F	D	S	10-140 bar, Spindle + lock nut
F	H	S	40-210 bar, Spindle + lock nut
F	W	S	70-350 bar, Spindle + lock nut
Compensator variation			
		C	External pressure pilot *
		1	NG6 interface top side for pilot valves
		2	Like 1 but with ext. pilot port **
		P	Pilot valve PVAC1P mounted
		K	Prop.-pilot valve type PVACRE..35 mounted
		L	Pilot valve with DIN lock mounted
		Z	Accessory mounted (Accessories not incl., please specify on order with full model code)

*not for two valve compensator
** Only codes FR and FT

Electro hydraulic compensator			
Code	Compensator options		
F	P	V	Closed loop displacement control only, no pressure compensation.
U	P		Closed loop proportional displacement control with pressure compensation.
Compensator version			
		R	pilot operated pressure control, NG6 interface
		K	Version UPR, with proportional pilot valve type PVACRE..35 mounted
		M	Version UPK, with pressure sensor for closed loop pressure and power control
		Z	Version R, accessories mounted (Accessories not incl., please specify on order)

Note: Compensator differential Δp is factory pre-set to:
remote compensators, power control 15 ± 1 bar
load sensing comp. (not power control) 10 ± 1 bar

Horse power compensator			
Code	Compensator options		
		Nom. HP at 1.500 rpm	Nom. torque
only for 063-100 codes			
G		11 kW	71 Nm
H		15 kW	97 Nm
only for 063-140 codes			
K		18,5 kW	120 Nm
only for 063-180 codes			
M		22 kW	142 Nm
S		30 kW	195 Nm
only for 063-270 codes			
T		37 kW	240 Nm
U		45 kW	290 Nm
W		55 kW	355 Nm
only for 140-270 codes			
Y		75 kW	485 Nm
Z		90 kW	585 Nm
only for 180-270 codes			
2		110 kW	715 Nm
for 270 only			
3		132 kW	850 Nm

(cont.)		
Function		
L		Horse power compensator
C		Horse power compensator and Load Sensing
Compensator variation		
	A	NG 6 interface top side
	B	No pressure compensation
	C	Adjustable pressure compensation
	K	Prop-pilot valve type PVACRE..35 mounted
	Z	Accessories mounted (Accessories not incl., please specify on order)

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Electric Motors

TECA Aluminium Series

Technical Information

The TECA three phase electric motor aluminium series, from 0.09kW to 18.5kW suits a wide range of industrial and commercial applications. These high quality motors are rugged and reliable of a light weight aluminium construction. They are suitable for wet and dusty environments and are dual European voltage. 50/60 Hz rated, inverter drive rated, Efficiency rated Eff 2 and manufactured to the latest mechanical and electrical standards.



Part Number	Frame Size	kW	HP	Mounting	Number of Poles	Speed
0.37KW4 POLE 71M4A FRAME	D71M	0.37	0.50	B35	4	1500rpm
0.55KW4 POLE MA80B FRAME	D80M	0.55	0.75	B35	4	1500rpm
0.75KW4 POLE MA80B FRAME	D80M	0.75	1.00	B35	4	1500rpm
1.1KW4 POLE MA90S FRAME	D90S	1.10	1.50	B35	4	1500rpm
1.5KW4 POLE MA90L FRAME	D90L	1.50	2.00	B35	4	1500rpm
2.2KW4 POLE MB100LA	100L	2.20	3.00	B35	4	1500rpm
3.0KW4 POLE MA100LBFRAME	100L	3.00	4.00	B35	4	1500rpm
4.0KW4 POLE MA112M FRAME	D112M	5.00	4.00	B35	4	1500rpm
5.5KW4 POLE MA132SA	D132S	5.50	7.50	B35	4	1500rpm
7.5KW4 POLE MA132MA	D132M	7.50	10.00	B35	4	1500rpm
11.0KW4 POLE A160M4B	D160M	11.00	15.00	B35	4	1500rpm
15.0KW4 POLE A4160L	D160L	15.00	20.00	B35	4	1500rpm
18.5KW4 POLE A4180M	D180M	18.50	25.00	B35	4	1500rpm

TECC Cast Iron Series

Technical Information

The TECC series of cast iron three phase electric motors are incredibly robust and inexpensive. They feature long lasting, quiet operation, low vibration levels and corrosion resistance as standard. Manufactured of high grade cast iron, efficiency rating EFF 2. are suitable for continuous duty S1 and are dual 50/60Hz rated.

Part Number	Frame size	kW	HP	Mounting	Number of Poles	Speed
22.0KW4 POLE A4180L	D180L	22	30	B35	4	1500rpm
30.0KW4 POLE A4200L	D200L	30	40	B35	4	1500rpm
37.0KW4 POLE A4225S	D225S	37	50	B35	4	1500rpm
45.0KW4 POLE A225M FRAME	D225M	45	60	B35	4	1500rpm
55.0KW4 POLE A250M FRAME	D250M	55	75	B35	4	1500rpm
75.0KW4 POLE A280S FRAME	D280S	75	100	B35	4	1500rpm
90.0KW4 POLE A280M	D280M	90	125	B35	4	1500rpm
110KW 315S FRAME	D315S	110	150	B35	4	1500rpm

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TE Series Torque Motors

TE Series

Technical Information

An Improved Medium Duty Low Speed, High Torque Motor.

This medium duty motor has higher pressure ratings than the TB motor, for applications requiring higher torque.

Robust roller bearing withstand higher side loads and are suitable for chain and sprocket shaft connections it uses high pressure shaft seals, robust roller bearings and high flow shaft seal cooling.

15 Displacements (2.2-24.0 in³/rev) 36...390 cm³/rev



Performance Data

Motor Series TE	Geometric Displacement	Max. Speed at Max. intermittent flow	Max oil flow		Max. Differential Pressure		Max. Supply Pressure	Max Torque		Max. Performance	Min. Starting Torque	
	cm ³ /rev	rev/min	Cont/Int* l/min		Cont/Int* bar psi		bar psi	Cont/Int* Nm		KW	Cont/Int* Nm lb-in	
TE 0036	36	1160	35	40	140 2030	190 2750	200 2900	55	71	9	44 389	52 460
TE 0045	41	1024	35	41	140 2030	190 2750	200 2900	70	100	10	44 411	64 565
TE 0050	50	1020	35	50	140 2030	190 2750	200 2900	90	127	13	72 637	98 871
TE 0065	66	940	45	60	140 2030	190 2750	200 2900	125	176	15	100 885	137 1211
TE 0080	82	750	45	60	140 2030	190 2750	200 2900	160	220	17	128 1133	171 1515
TE 0100	98	630	45	60	140 2030	190 2750	200 2900	190	264	17	152 1345	205 1819
TE0130	130	470	45	60	140 2030	190 2750	200 2900	255	352	17	204 1806	274 2423
TE 0165	163	375	45	60	140 2030	190 2750	200 2900	310	436	17	248 2195	338 2992
TE 0195	196	315	45	60	140 2030	190 2750	200 2900	390	528	17	312 2762	411 3637
TE 0230	228	330	60	75	120 1740	165 2400	200 2900	380	514	18	304 2691	411 3637
TE 0260	261	290	60	75	110 1595	155 2250	200 2900	400	550	17	320 2832	449 3977
TE 0295	293	255	60	75	100 1450	145 1950	200 2900	428	582	16	328 2903	445 3935
TE 0330	326	235	60	75	100 1450	135 1950	200 2900	443	600	15	344 3045	453 4014
TE 0365	370	200	60	75	95 1378	125 1895	200 2900	467	648	14	373 3301	477 4223
TE 0390	392	190	60	75	85 1233	120 1740	200 2900	445	628	13	348 3080	462 4090

Performance data based on testing using 10W40 oil with a viscosity of 43, 1 cSt. (200 SUS) at 54 °C (130 °F)

*Intermittent operation rating applies to 10% of every minute.

TE Series Torque Motors

Here is a small selection of our Parker TE Series Low Speed Hydraulic Torque Motors.

2 Bolt SAE A Mount
 25mm Parallel Shaft
 1/2" BSP Ports
 High Pressure Shaft Seal
 18kW Max.

There is a much wider variety available please contact our sales team for further details.



Part Number	Displacement	Max. Speed rev/min	Max Oil Flow l/min	Max Differential Pressure Bar	Max Supply Pressure Bar	Max Torque Nm	Max Performance Kw	Min Starting Torque Nm
TE0050CW261AAAB	50cc/rev	725 cont 1020 int	35 cont 50 int	140 cont 190 int	200	90 cont 127 int	13	72 cont 98 int
TE0065CW261AAAB	66cc/rev	705 cont 940 int	45 cont 60 int	140 cont 190 int	200	125 cont 176 int	15	100 cont 137 int
TE0080CW261AAAB	82cc/rev	560 cont 750 int	45 cont 60 int	140 cont 190 int	200	160 cont 220 int	17	128 cont 171 int
TE0100CW261AAAB	98cc/rev	470 cont 630 int	45 cont 60 int	140 cont 190 int	200	190 cont 264 int	17	152 cont 205 int
TE0130CW261AAAB	130cc/rev	350 cont 470 int	45 cont 60 int	140 cont 190 int	200	255 cont 352 int	17	204 cont 274 int
TE0165CW261AAAB	163cc/rev	280 cont 375 int	45 cont 60 int	140 cont 190 int	200	310 cont 436 int	17	248 cont 338 int
TE0195CW261AAAB	196cc/rev	235 cont 315 int	45 cont 60 int	140 cont 190 int	200	390 cont 528 int	17	312 cont 411 int
TE0230CW261AAAB	228cc/rev	265 cont 330 int	60 cont 75 int	120 cont 165 int	200	380 cont 514 int	18	304 cont 411 int
TE0260CW261AAAB	261cc/rev	230 cont 290 int	60 cont 75 int	110 cont 155 int	200	400 cont 550 int	17	320 cont 449 int
TE0295CW261AAAB	293cc/rev	200 cont 255 int	60 cont 75 int	100 cont 145 int	200	428 cont 582 int	16	328 cont 445 int
TE0330CW261AAAB	326cc/rev	185 cont 235 int	60 cont 75 int	100 cont 135 int	200	443 cont 600 int	15	344 cont 453 int

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TF Series Torque Motors

TF Series

Technical Information

Sturdy construction throughout makes Parkers TF Series motors suitable for the most severe applications.

The powertrain uses patented 60:40 spline geometry for strength. All splines are constantly flushed with cool fluid for durability. Roller vanes and sealed commutation assure high volumetric efficiency, smooth low speed operation and extended life. Shaft seals can withstand full system pressure and are washed in cool fluid for long life.

11 Displacements (4.9-29.1 in³/rev) 81...477 cm³/rev



Performance Data

Motor Series TF	Geometric Displacement	Max. Speed at Max. intermittent flow	Max oil flow		Max. Differential Pressure		Max. Supply Pressure	Max Torque		Max. Performance	Min. Starting Torque	
	cm ³ /rev in ³ /rev	rev/min	Cont/Int*	l/min	Cont/Int*	bari	bar psi	Cont/Int*	Nm	KW	Cont/Int*	Nm lb-in
TF 0080	81 4.9	730	45	60	210	280	300 4350	220	295	22	158 1401	205 1811
TF 0100	100 6.1	750	60	75	160	240	300 4350	200	320	25	148 1309	243 2155
TF 0130	128 7.8	580	60	75	140	210	300 4350	230	360	22	180 1596	278 2460
TF 0140	141 8.6	530	60	75	140	210	300 4350	250	390	22	196 1739	308 2728
TF 0170	169 10.3	440	60	75	140	210	300 4350	320	490	23	243 2152	385 3404
TF 0195	197 12.0	380	60	75	140	210	300 4350	365	560	22	302 2671	468 4142
TF 0240	238 14.5	420	75	100	140	210	300 4350	430	670	28	366 3242	572 5058
TF 0280	280 17.1	350	75	100	140	210	300 4350	550	800	28	438 3876	672 5946
TF 0360	364 22.2	260	75	100	130	190	300 4350	590	910	24	517 4575	779 6898
TF 0405	405 24.7	230	75	100	130	175	300 4350	660	920	22	575 5091	789 6978
TF 0475	477 29.1	200	75	100	115	140	300 4350	680	850	17	603 5334	740 6548

Performance data based on testing using 10W40 oil with a viscosity of 43, 1 cSt. (200 SUS) at 54 °C (130 °F)

*Intermittent operation rating applies to 10% of every minute.

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TF Series Torque Motors

Here is a small selection of our Parker TF Series Low Speed Hydraulic Torque Motors.

6 Bolt Mount

25mm Parallel Shaft

1/2" BSP Ports

High Pressure Shaft Seal

24kW Max.

There is a much wider variety available please contact our sales team for further details.



Part Number	Displacement	Max. Speed rev/min	Max Oil Flow l/min	Max Differential Pressure Bar	Max Supply Pressure Bar	Max Torque Nm	Max Performance Kw	Min Starting Torque Nm
TF0080EW260AAAB	81cc/rev	550 cont 730 int	45 cont 60 int	200 cont 280 int	300	220 cont 295 int	22	172 cont 236 int
TF0100EW260AAAB	100cc/rev	600 cont 750 int	60 cont 75 int	160 cont 240 int	300	200 cont 320 int	25	168 cont 252 int
TF0130EW260AAAB	128cc/rev	470 cont 580 int	60 cont 75 int	140 cont 210 int	300	230 cont 360 int	22	192 cont 280 int
TF0140EW260AAAB	141cc/rev	370 cont 530 int	60 cont 75 int	140 cont 210 int	300	250 cont 390 int	22	197 cont 308 int
TF0170EW260AAAB	169cc/rev	355 cont 440 int	60 cont 75 int	140 cont 210 int	300	320 conot 490 int	23	264 cont 388 int
TF0195EW260AAAB	197cc/rev	300 cont 380 int	60 cont 75 int	140 cont 210 int	300	365 cont 560 int	22	304 cont 448 int
TF0240EW260AAAB	238cc/rev	320 cont 420 int	75 cont 100 int	140 cont 210 int	300	430 cont 670 int	28	368 cont 548 int
TF0280EW260AAAB	280cc/rev	270 cont 350 int	75 cont 100 int	140 cont 210 int	300	550 cont 800 int	28	440 cont 640 int
TF0360EW260AAAB	364cc/rev	200 cont 260 int	75 cont 100 int	130 cont 190 int	300	590 cont 910 int	24	510 cnt 780 int
TF0405EW260AAAB	405cc/rev	170 cont 230 int	75 cont 100 int	130 cont 175 int	300	660 cont 920 int	22	575 cont 789 int
TF0475EW260AAAB	477cc/rev	150 cont 200 int	75 cont 100 int	115 cont 140 int	300	680 cont 850 int	17	603 cont 740 int

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TG Series Torque Motors

TG Series

Technical Information

Low Speed Gerotor Motor.

Zero leak commutation valve for greater more constant volumetric efficiency. Roller vane rotor set reduces friction and internal leakage maintaining efficiency throughout the life of the motor. A patented high-pressure shaft seal. No check valves needed, no extra plumbing. Wide choice of displacement range, flange and shaft options, greater efficiency in systems design to suit your application.



Performance Data

Motor Series TF	Geometric Displacement	Max. Speed		Max oil flow		Max. Differential Pressure		Max. Supply Pressure	Max Torque		Max. Performance	Min. Starting Torque	
	cm ³ /rev cm ³ /U	Cont/Int*	Cont/Int*	Cont/Int*	Cont/Int*	Cont/Int*	Cont/Int*	bar	Cont/Int*	Cont/Int*	KW	Cont/Int*	Cont/Int*
		rev/min	U/min	l/min	l/min	bar	bar		Nm	Nm		Nm	Nm
TG 140	141	530	710	75	100	210	280	300	400	545	33	320	436
TG 170	169	440	575	75	100	210	280	300	485	670	33	388	536
TG 195	195	380	510	75	100	210	280	300	560	770	33	448	616
TG 240	238	320	420	75	100	210	280	300	685	945	32	548	756
TG 280	280	270	350	75	100	210	280	300	800	1100	31	675	880
TG 335	337	225	290	75	100	210	280	300	980	1350	30	784	1080
TG 405	405	185	245	75	100	170	240	300	960	1350	27	791	1145
TG 475	477	160	240	75	115	140	210	300	960	1400	28	768	1120
TG 530	529	140	215	75	115	140	170	300	1050	1280	23	874	1091
TG 625	613	120	185	75	115	120	160	300	1040	1360	20	895	1165
TG 785	786	95	145	75	115	100	140	300	1150	1490	17	991	1341
TG 960	959	78	119	75	115	70	100	300	925	1390	12	763	177

Int: Intermittent operation rating applies to 10% of every minute.

* Pressure difference is Δp between input and output

Notice: Higher pressures are possible on request.

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TG Series Torque Motors

Here is a small selection of our Parker TG Series Low Speed Hydraulic Torque Motors.

6 Bolt Mount

32mm Parallel Shaft

1/2" BSP Ports

High Pressure Shaft Seal

33kW Max.

There is a much wider variety available please contact our sales team for further details.



Part Number	Displacement	Max. Speed rev/min	Max Oil Flow l/min	Max Differential Pressure Bar	Max Supply Pressure Bar	Max Torque Nm	Max Performance Kw	Min Starting Torque Nm
TG0140EW460AAAB	140cc/rev	530 cont 710 int	75 cont 100 int	200 cont 280 int	300	400 cont 545 int	33	320 cont 436 int
TG0170EW460AAAB	169cc/rev	440 cont 575 int	75 cont 100 int	200 cont 280 int	300	485 cont 670 int	33	388 cont 536 int
TG0195EW460AAAB	195cc/rev	380 cont 510 int	75 cont 100 int	200 cont 280 int	300	560 cont 770 int	33	448 cont 616 int
TG0240EW460AAAB	237cc/rev	320 cont 420 int	75 cont 100 int	200 cont 280 int	300	685 cont 945 int	32	548 cont 756 int
TG0335EW460AAAB	337cc/rev	225 cont 290 int	75 cont 100 int	200 cont 280 int	300	980 cnt 1350 int	30	784 cont 1080 int
TG0475EW460AAAB	476cc/rev	160 cont 240 int	75 cont 115 int	140 cont 200 int	300	960 cont 1400 int	28	768 cont 1120 int
TG0530EW460AAAB	529cc/rev	140 cont 215 int	75 cont 115 int	140 cont 170 int	300	1050 cont 1280 int	23	840 cont 1024 int
TG0625EW460AAAB	624cc/rev	120 cont 185 int	75 cont 115 int	120 cont 160 int	300	1040 cont 1360 int	20	832 cont 1088 int
TG0785EW460AAAB	786cc/rev	95 cont 145 int	75 cont 115 int	100 cont 140 int	300	1150 cont 1490 int	17	920 cont 1192 int
TG0960EW460AAAB	958cc/rev	78 cont 119 int	75 cont 115 int	70 cont 100 int	300	925 cont 1390 int	12	740 cont 1112 int

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Hydraulic Valves/ Control Valves

Hydraulic Valves

Double Pilot Operated Check Valves

Technical Information

Pilot check valves are used to block the cylinder in both directions. Flow is free in one direction and blocked in the reverse direction until pilot pressure is applied. The body is manufactured from zinc-plated steel, internal parts hardened and ground steel. The seal are Buna N Standard.



Part Number	Max Bar	Ports	Max Flow	Cracking Pressure	Pilot Ratio
VBPDE 1/4 L	350	1/4" BSP	20 l/m	4 bar	5.5:1
VBPDE 3/8 L	350	3/8" BSP	35 l/m	3 bar	5.5:1
VBPDE 1/2 L	350	1/2" BSP	50 l/m	6 bar	5:1
VBPDE 18	350	18mm	45 l/m	3.5 bar	5:1
VBPDE 3/8	350	3/8" BSP	45 l/m	8 bar	5:1
VBPDE 1/2	350	1/2" BSP	70 l/m	3.5 bar	4:1
VBPDE 3/4	300	3/4" BSP	100 l/m	2 bar	4:1
VBPDE 3/8 CYLINDRICAL	350	3/8" BSP	45 l/m	3 bar	5:1

Single Pilot Operated Check Valves

Technical Information

Pilot check valves are used to block the cylinder in one direction. Flow is free in one direction and blocked in the reverse direction until pilot pressure is applied. The body is manufactured from zinc-plated steel, internal parts hardened and ground steel. The seal are Buna N Standard.



Part Number	Max Bar	Ports	Max Flow	Cracking Pressure	Pilot Ratio
VBPSE 1/4 L 4 VIE	350	1/4" BSP	20 l/m	4 bar	5.5:1
VBPSE 3/8 L 4 VIE	350	3/8" BSP	35 l/m	3 bar	5.5:1
VBPSE 1/2 L 4 VIE	350	1/2" BSP	50 l/m	6 bar	5:1
VBPSE 3/8 4 VIE	350	3/8" BSP	45 l/m	8 bar	5:1
VBPSE 1/2 4 VIE	350	1/2" BSP	70 l/m	3.5 bar	4:1
VBPSE 3/4 4 VIE	350	3/4" BSP	100 l/m	2 bar	4:1

3 Way Single Pilot Operated Check Valve In Line

Technical Information

Pilot check valves are used to block the cylinder in one direction. Flow is free in one direction and blocked in the reverse direction until pilot pressure is applied. The body is manufactured from zinc-plated steel, internal parts are hardened and ground steel. The seals are Buna N Standard.



Part Number	Max Bar	Ports	Max Flow	Cracking Pressure	Pilot Ratio
VBPSL 1/4	350	1/4" BSP	15 l/m	2.5 bar	9.8:1
VBPSL 3/8	300	3/8" BSP	30 l/m	5 bar	6.5:1
VBPSL 1/2	300	1/2" BSP	45 l/m	3 bar	4.6:1
VBPSL 3/4	250	3/4" BSP	80 l/m	0.5 bar	4.4:1
VBPSL 1	220	1" BSP	120 l/m	1 bar	3.5:1

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Hydraulic Valves

Single Overcentre Valves

Technical Information

Single Over centre Valves USE AND OPERATION:

These valves are used to control actuator's movement and block in one direction in order to enable the following functions:

Under control descent of a load: load's weight doesn't carry it away as the valve prevents any cavitations of the actuator;

Body: Zinc-plated steel **Internal Parts:** Hardened and ground steel **Seals:** Buna N Standard

Connections: Connect V1 and V2 to the pressure flow, C1 to the free flow side of the actuator and C2 to the actuator's side you want the flow to be blocked. In-line mounting.



Part Number	Max Bar	Ports	Max Flow	Pilot Ratio
VBCD 38 SE	350	3/8" BSP	35 l/m	3.1:1
VBCD 12 SE	350	1/2" BSP	50 l/m	3.1:1
VBCD 34 SE	350	3/4" BSP	105 l/m	5.5:1

Double Overcentre Valves

Technical Information

Double Overcentre Valve USE AND OPERATION:

These valves are used to control actuator's movement and block in both directions in order to enable the following functions:

Under control descent of a load: load's weight doesn't carry it away, as the valve prevents any cavitations of the actuator;

Body: Zinc-plated steel **Internal Parts:** Hardened and ground steel

Seals: BUNA N Standard **Standard Setting:** 320 Bar

Valve setting must be at least 1.3 times more than load pressure in order to enable the valve to close.

APPLICATIONS: Connect V1 and V2 to the pressure flow, C1 and C2 to the actuator to be controlled. In-line mounting.



Part Number	Max Bar	Ports	Max Flow	Pilot Ratio
VBCD 38 DE	350	3/8" BSP	35 l/m	3.1:1
VBCD 12 DE	350	1/2" BSP	50 l/m	3.1:1
VBCD 34 DE	350	3/4" BSP	105 l/m	5.5:1

Relief Valves

Technical Information

Relief valves provide overload protection in a fast and accurate way: when the valve reaches the pressure it is set at, the poppet opens allowing the high pressure oil to return to tank.

Body: Plated Steel **Internal Parts:** Hardened and ground steel **Seals:** Buna N

Connect ports marked P to pressure and T to Tank

These valves can be supplied with alternative springs 10-50 Bar and 80-300 Bar



Part Number	Setting Range	Ports	Max Flow
VMP 1/4 L	10-180 Bar	1/4" BSP	30 l/m
VMP 3/8	10-180 Bar	3/8" BSP	45 l/m
VMP 1/2	10-180 Bar	1/2" BSP	70 l/m
VMP 3/4	10-180 Bar	3/4" BSP	120 l/m

Hydraulic Valves

Check Valves

Technical Information

Hydraulic Check valves function is to prevent flow in one direction and give free flow in the other.

Body: Steel **Internal:** Hardened and Ground Steel

Free flow is from port V to C checked flow is from port C to V

A wide range of cracking pressures can be supplied standard is 0.4/0.7 Bar but 1-3-5 and 8 bar springs are also available.



Part Number	Max Bar	Ports	Max Flow	Cracking Pressure
VU 1/8	350	1/8" BSP	3 l/m	0.4/0.7 bar
VU 1/4	350	1/4" BSP	20 l/m	0.4/0.7 bar
VU 3/8	350	3/8" BSP	45 l/m	0.4/0.7 bar
VU 1/2	350	1/2" BSP	70 l/m	0.4/0.7 bar
VU 3/4	350	3/4" BSP	110 l/m	0.4/0.7 bar
VU 1	350	1" BSP	160 l/m	0.4/0.7 bar
VU 1.1/4	350	1.1/4" BSP	200 l/m	0.4/1 bar
VU 1.1/2	350	1.1/2" BSP	300 l/m	0.4/1 bar

Shuttle Valves

Technical Information

Shuttle valves are used to select the higher pressure between two pressure lines.

Body: zinc plated steel **Seal:** BUNA N Standard **Tightness:** Ball type



Part Number	Max Bar	Max flow	Ports
VU2P 1/4	450	30 l/m	1/4" BSP
VU2P 3/8	450	45 l/m	3/8" BSP
VU2P 1/2	450	70 l/m	1/2" BSP
VU2P 3/4	350	110 l/m	3/4" BSP
VU2P 1	300	150 l/m	1" BSP

Hose Burst Valves and Cartridges

Technical Information

These valves are used to prevent the uncontrolled descent of a load in the event of a hose failure.

Body: Steel

Screw in the valve connecting V to the pressure flow and C to the actuator. Used in conjunction with a flow control is recommended.



Part Number	Max Bar	Ports	Max Flow
VUBA 1/4 + MMF	350	1/4" BSP	25 l/m
VUBA 3/8 + MMF	350	3/8" BSP	50 l/m
VUBA 1/2 + MMF	350	1/2" BSP	80 l/m
VUBA 3/4 + MMF	350	3/4" BSP	140 l/m
VUBA 1 + MMF	350	1" BSP	180 l/m
VUBA 1/4	350	1/4" BSP	25 l/m
VUBA 3/8	350	3/8" BSP	50 l/m
VUBA 1/2	350	1/2" BSP	80 l/m
VUBA 3/4	350	3/4" BSP	140 l/m
VUBA 1	350	1" BSP	180 l/m

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Hydraulic Valves

Barrel Flow Control Valves with Check

Technical Information

Body: Zinc-plated steel **Seals:** BUNA N Standard

Barrel Flow Control Valves with Check are used to adjust the speed of actuators in one direction flow in the opposite direction is free. These valves are not pressure compensated so the set flow will vary with pressure and temperature. The flow is adjustable when the oil is flowing from port V to port C. Free flow is from port C to V.



Part Number	Max Bar	Ports	Max Flow	Cracking Pressure
VRF 1/4	300	1/4" BSP	20 l/m	0.5 bar
VRF 3/8	300	3/8" BSP	45 l/m	0.5 bar
VRF 1/2	300	1/2" BSP	70 l/m	0.5 bar
VRF 3/4	250	3/4" BSP	110 l/m	0.5 bar
VRF 1	250	1" BSP	160 l/m	0.5 bar

Flow Regulator Valve One Direction

Technical Information

Flow regulator valve one direction are used to adjust the speed of actuators in one direction. Flow in the opposite direction is free. These valves are not pressure compensated so the set flow will vary with pressure and temperature. The flow is adjustable when the oil is flowing from port V to port C. Free flow is from port C to V.



Part Number	Max Bar	Ports	Max Flow	Cracking Pressure
VRFU 90 1/4	350	1/4" BSP	15 l/m	0.5 bar
VRFU 90 3/8	350	3/8" BSP	30 l/m	0.5 bar
VRFU 90 1/2	350	1/2" BSP	50 l/m	0.5 bar
VRFU 90 3/4	280	3/4" BSP	80 l/m	0.5 bar
VRFU 90 1	250	1" BSP	120 l/m	0.5 bar

Flow Regulator Valve Two Direction

Technical Information

This valve is used to adjust the flow speed of the actuators in both directions. As pressure compensation is not provided flow adjustment depends on pressure and viscosity. This valve has high adjustment sensitivity.



Part Number	Max Bar	Ports	Max Flow
VRFB 90 1/4	350	1/4" BSP	15 l/m
VRFB 90 3/8	350	3/8" BSP	30 l/m
VRFB 90 1/2	350	1/2" BSP	50 l/m
VRFB 90 3/4	280	3/4" BSP	80 l/m
VRFB 90 1	250	1" BSP	120 l/m

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Hydraulic Valves

Compensated 90 Degree Flow Regulator Valves

Technical Information

Body: Zinc-plated steel **Internal Parts:** Hardened and ground steel

Seals: BUNA N Standard **Valve:** Needle Type

This valve is used to adjust oil flow in one direction, flow is free in the reverse direction. The internal pressure compensation system keeps a constant speed even when the load varies. Connect A to the pressure flow and B to the actuator, flow is adjustable from B to A free flow in the reverse direction. Flow adjustment is made by rotating the plastic hand knob. There is a side locking screw to lock the handle. This valve will give accurate and sensitive adjustment of flow independent of pressure.



Part Number	Max Flow from A to B	Max Flow from B to A	Max Pressure
VRFU 90 14 compensated	15 l/m	25 l/m	250 bar
VRFU 90 38 compensated	15 l/m	25 l/m	250 bar
VRFU 90 12 compensated	30 l/m	45 l/m	250 bar

Two Way Flow Dividers

Technical Information

2 way flow dividers allow the division of inlet flow into two equal parts and they combine in the reverse direction, independent of changes in pressure and flow. These valves are used with two equally sized actuators.



Cast Iron

Part Number	Min Flow	Max Flow	Working Pressure	Peak Pressure
VEQ30 50:50	40 l/m	60 l/m	250 bar	300 bar

Steel

Part Number	Min Flow	Max Flow	Working Pressure	Peak Pressure
DFL 6-10	6 l/m	10 l/m	250 bar	300 bar
DFL 10-20	10 l/m	20 l/m	250 bar	300 bar
DFL 25-40	25 l/m	40 l/m	250 bar	300 bar



Sequence Valves

Technical Information

Body: Zinc plated steel **Internal parts:** hardened and ground steel

Seals: BUNA N Standard **Poppet type:** Minor leakage

Sequence valve is used to feed 2 cylinders in sequence. It provides flow to the secondary circuit when a primary circuit function has reached the pressure setting. There is a free flow check valve around the valve. These valves are not sensitive to back pressure. This allows them to be used to control both the actuators.



Part Number	Max Pressure	Max Flow
VSQAPP 3/8	250 bar	35 l/m

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Hydraulic Valves

Two Way Ball Valves

Technical Information

Body: zinc plated steel **Internal parts:** ground and chromium plated steel **Seal:** BUNA N
High pressure two way ball valves are used to block the oil flow in either direction even when subject to the full working pressure.

Part Number	Max Pressure	Port BSP	Max Flow
RS 2 VIE 1/4	500 bar	1/4"	25 l/m
RS 2 VIE 3/8	500 bar	3/8"	35 l/m
RS 2 VIE 1/2	500 bar	1/2"	60 l/m
RS 2 VIE 3/4	400 bar	3/4"	100 l/m



Three Way Diverter Valves

Technical Information

Body: Cast Iron **Internal parts:** hardened and ground steel **Seals:** BUNA N
Three way diverter valves are used to divert oil to one of two outlets. These are open centre valves, to specify closed centres put CC after the part no.

Part Number	Max Pressure	Max Flow
DF 3 VIE 3/8	250 bar	35 l/m
DF 3 VIE 1/2	250 bar	60 l/m
DF 3 VIE 3/4	250 bar	100 l/m



Six Way Diverter Valves

Technical Information

Body: Cast Iron **Internal parts:** hardened and ground steel **Seals:** BUNA N
6 way diverter valves are made up of two 3 way diverter valves coupled together.

Part Number	Max Pressure	Max Flow
DF 6 VIE 3/8	250 bar	35 l/m
DF 6 VIE 1/2	250 bar	60 l/m



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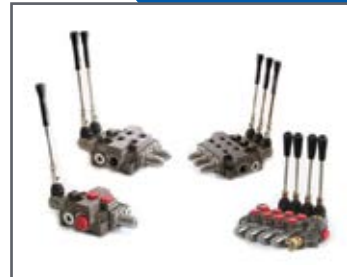
Hydraulic Mobile Lever Valves

MB25 Size 45 Litre Per Minute

Technical Information

Double Acting mono block lever control valves, spring centred for double acting hydraulic cylinders complete with adjustable relief valve. MB25 series of 1 to 6 bank monoblock mobile lever valves are designed for a maximum flow of 45 litres per minute with a maximum pressure of 250 bar on P, A and B, 40 on the tank port. The lever pivots are fully sealed and the internal mechanism is greased for further protection from corrosion.

Type	Spools	Ports	Flow	Pressure
MB/251-A1	1	A,B,P = 3/8" T=1/2"	45 L/min	250 bar
MB/252-A1A1	2	A,B,P = 3/8" T=1/2"	45 L/min	250 bar
MB/253-A1A1A1	3	A,B,P = 3/8" T=1/2"	45 L/min	250 bar
MB/254-A1A1A1A1	4	A,B,P = 3/8" T=1/2"	45 L/min	250 bar
MB/255-1A1A1A1A1	5	A,B,P = 3/8" T=1/2"	45 L/min	250 bar
MB/251-A1A1A1A1A1A1	6	A,B,P = 3/8" T=1/2"	45 L/min	250 bar



MB60 Size 78 Litre Per Minute

Technical Information

Double Acting mono block lever control valves, spring centred for double acting hydraulic cylinders complete with adjustable relief valve. MB60 series of 1 to 6 bank monoblock mobile lever valves are designed for a maximum flow rate of 78 litres per minute.

Type	Spools	Ports	Flow	Pressure
MB/601-A1	1	A,B,P = 1/2" T=3/4"	78 L/min	250 bar
MB/602-A1A1	2	A,B,P = 1/2" T=3/4"	78 L/min	250 bar
MB/603-A1A1A1	3	A,B,P = 1/2" T=3/4"	78 L/min	250 bar

CETOP Manifolds

CETOP 3 Manifolds without Relief

Technical Information

A complete range of CETOP 3 aluminium manifold blocks. Maximum working pressure 300 bar. Side ported with parallel connection.

Part Number	Length	Width	Stations	Height	Ports	Max Pressure
BSA06BL	110mm	70mm	1	44mm	3/8" BSP A, B, P & T	300
BMA 06 P2 L1	120mm	70mm	1	54mm	P+T=G1/2" A+B=G3/8"	300
BMA 06 P2 L2	170mm	70mm	2	54mm	P+T=G1/2" A+B=G3/8"	300
BMA 06 P2 L3	220mm	70mm	3	54mm	P+T=G1/2" A+B=G3/8"	300
BMA 06 P2 L4	270mm	70mm	4	54mm	P+T=G1/2" A+B=G3/8"	300
BMA 06 P2 L5	320mm	70mm	5	54mm	P+T=G1/2" A+B=G3/8"	300
BMA 06 P2 L6	370mm	70mm	6	54mm	P+T=G1/2" A+B=G3/8"	300
BMA 06 P2 L7	420mm	70mm	7	54mm	P+T=G1/2" A+B=G3/8"	300
BMA 06 P2 L8	470mm	70mm	8	54mm	P+T=G1/2" A+B=G3/8"	300



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CETOP Manifolds

CETOP 3 Manifolds with Relief

Technical Information

A complete range of CETOP 3 aluminium manifold blocks with relief valve. Maximum working pressure 300 bar. Side ported with parallel connection.

Part Number	Length	Width	Stations	Height	Ports	Max Pressure	Relief Valve Range
BMA 06 P2 L1 X-20	120mm	70mm	1	70mm	P+T=G1/2" A+B=G3/8"	300	30-210 bar
BMA 06 P2 L2 X-20	170mm	70mm	2	70mm	P+T=G1/2" A+B=G3/8"	300	30-210 bar
BMA 06 P2 L3 X-20	220mm	70mm	3	70mm	P+T=G1/2" A+B=G3/8"	300	30-210 bar
BMA 06 P2 L4 X-20	270mm	70mm	4	70mm	P+T=G1/2" A+B=G3/8"	300	30-210 bar
BMA 06 P2 L5 X-20	320mm	70mm	5	70mm	P+T=G1/2" A+B=G3/8"	300	30-210 bar
BMA 06 P2 L6 X-20	370mm	70mm	6	70mm	P+T=G1/2" A+B=G3/8"	300	30-210 bar
BMA 06 P2 L7 X-20	420mm	70mm	7	70mm	P+T=G1/2" A+B=G3/8"	300	30-210 bar
BMA 06 P2 L8 X-20	470mm	70mm	8	70mm	P+T=G1/2" A+B=G3/8"	300	30-210 bar



CETOP 5 Manifolds without Relief

Technical Information

A complete range of CETOP 5 aluminium manifold blocks. Maximum working pressure 300 bar. Side ported with parallel connection.

Part Number	Length	Width	Stations	Height	Ports	Max Pressure
BMA 10 P3 L1	100mm	95mm	1	95mm	P+T=G3/4" A+B=G1/2"	300 bar
BMA 10 P3 L2	175mm	95mm	2	95mm	P+T=G3/4" A+B=G1/2"	300 bar
BMA 10 P3 L3	250mm	95mm	3	95mm	P+T=G3/4" A+B=G1/2"	300 bar
BMA 10 P3 L4	325mm	95mm	4	95mm	P+T=G3/4" A+B=G1/2"	300 bar
BMA 10 P3 L5	400mm	95mm	5	95mm	P+T=G3/4" A+B=G1/2"	300 bar
BMA 10 P3 L6	475mm	95mm	6	95mm	P+T=G3/4" A+B=G1/2"	300 bar
BMA 10 P3 L7	550mm	95mm	7	95mm	P+T=G3/4" A+B=G1/2"	300 bar
BMA 10 P3 L8	625mm	95mm	8	95mm	P+T=G3/4" A+B=G1/2"	300 bar



CETOP 5 Manifolds with Relief

Technical Information

A complete range of CETOP 5 aluminium manifold blocks with relief valve. Maximum working pressure 300 bar. Side ported with parallel connection.

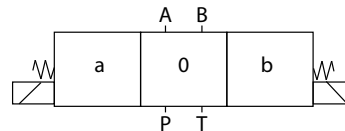
Part Number	Length	Width	Stations	Height	Ports	Max Pressure	Relief Valve Range
BMA 10 P3 L1 X-20	100mm	95mm	1	95mm	P+T=G3/4" A+B=G1/2"	300 bar	80-250 bar
BMA 10 P3 L2 X-20	175mm	95mm	2	95mm	P+T=G3/4" A+B=G1/2"	300 bar	80-250 bar
BMA 10 P3 L3 X-20	250mm	95mm	3	95mm	P+T=G3/4" A+B=G1/2"	300 bar	80-250 bar
BMA 10 P3 L4 X-20	325mm	95mm	4	95mm	P+T=G3/4" A+B=G1/2"	300 bar	80-250 bar
BMA 10 P3 L5 X-20	400mm	95mm	5	95mm	P+T=G3/4" A+B=G1/2"	300 bar	80-250 bar
BMA 10 P3 L6 X-20	475mm	95mm	6	95mm	P+T=G3/4" A+B=G1/2"	300 bar	80-250 bar
BMA 10 P3 L7 X-20	550mm	95mm	7	95mm	P+T=G3/4" A+B=G1/2"	300 bar	80-250 bar
BMA 10 P3 L8 X-20	625mm	95mm	8	95mm	P+T=G3/4" A+B=G1/2"	300 bar	80-250 bar



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Directional Control Valve D1VW



Technical Information

The D1Vw is a 3 chamber, electrically controlled 4/3 of 4/2 way directional control valve. It is activated directly by solenoids with screwed in wet pin armature. The coils can be exchanged for various input voltages, however a change between alternating (AC) and direct current (DC) is not possible.

General

Design: Directional spool valve.

Size: DIN NG6/CETOP 03/NFPA D03

Mounting position: Unrestricted, preferably horizontal.

Environmental temp. : -25 °C to + 50 °C

Weight: Valve with 1 solenoid - 1.5kg

Valve with 2 solenoids - 2.1kg

Interface: DIN 24340 A6/ISO 4401/CETOP RP 121-H/NFPA D03

Mounting bolts: 4x DIN 912 M5x30-12.9; torque 8.1 Nm \pm 10%; ordering code BK375

Hydraulics

Fluids: Hydraulic oil, in accordance with DIN 51524/51525

Fluid temp. : -25 °C to + 70 °C

Viscosity range: 2.8 to 400 mm²/s (2.8 to 400 cSt)

Working pressure: **P,A and B - 350 bar**

T - DC: 210 bar AC: Standard: 105 bar Code 'H': 210 bar

Leakage $\Delta p = 50$ bar; $v = 35$ mm²/s: Up to 10 ml/min per flow path, depending on spool

Max. flow: 80 l/min **Max. contamination level:** NAS 1638 class 7-9, to be achieved with $\beta > 75$

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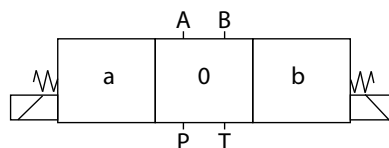
CETOP 3 Directional Control Valves		
Part Number	Description	Voltage
D1VW001CNJW	3 Position Control Valve, All ports blocked in neutral	24VDC
D1VW002CNJW	3 Position Control Valve, All ports connected in neutral	24VDC
D1VW004CNJW	3 Position Control Valve, P blocked, A,B,T connected in neutral	24VDC
D1VW008CNJW	3 Position Control Valve, P to T, A, B blocked in neutral	24VDC
D1VW001CNYW	3 Position Control Valve, All ports blocked in neutral	110VAC
D1VW002CNYW	3 Position Control Valve, All ports connected in neutral	110VAC
D1VW004CNYW	3 Position Control Valve, P blocked, A,B,T connected in neutral	110VAC
D1VW008CNYW	3 Position Control Valve, P to T, A, B blocked in neutral	110VAC
D1VW001CNTW	3 Position Control Valve, All ports blocked in neutral	230VAC
D1VW002CNTW	3 Position Control Valve, All ports connected in neutral	230VAC
D1VW004CNTW	3 Position Control Valve, P blocked, A,B,T connected in neutral	230VAC
D1VW008CNTW	3 Position Control Valve, P to T, A, B blocked in neutral	230VAC
D1VW001CNKW	3 Position Control Valve, All ports blocked in neutral	12VDC
D1VW002CNKW	3 Position Control Valve, All ports connected in neutral	12VDC
D1VW004CNKW	3 Position Control Valve, P blocked, A,B,T connected in neutral	12VDC
D1VW008CNKW	3 Position Control Valve, P to T, A, B blocked in neutral	12VDC

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Directional Control Valve

Series D3W (Parker)



Technical Information

The direct operated directional control valve size NG10 is available with both Parker (series D3W) model codes.

Both series are available with a soft shift option for smooth operation. An additional orifice in the solenoid anchor dampens the shifting time for D3W. For the 4D02 the orifice is located in the valve body.

General

Design: Directional spool valve.

Actuation: Solenoid

Size: DIN NG10 / CETOP O5 / NFPA D05

Mounting position: Unrestricted, preferably horizontal.

Ambient temp. : -25°C to + 50°C

Weight: Valve with 1 solenoid - 4.8kg

Valve with 2 solenoids - 6.3kg

Mounting Interface: DIN 24340 A10 / ISO 4401 / CETOP RP 121-H / NFPA D05

Hydraulics

Fluids: Hydraulic oil, in accordance with DIN 51524/51525

Fluid temp. : -25°C to + 70°C

Viscosity range: 2.8 to 400 mm²/s (2.8 to 400 cSt)

Viscosity recommended: 30 to 80 mm²/s (30 to 80 cSt)

Working pressure:

P.A and B - 350 bar

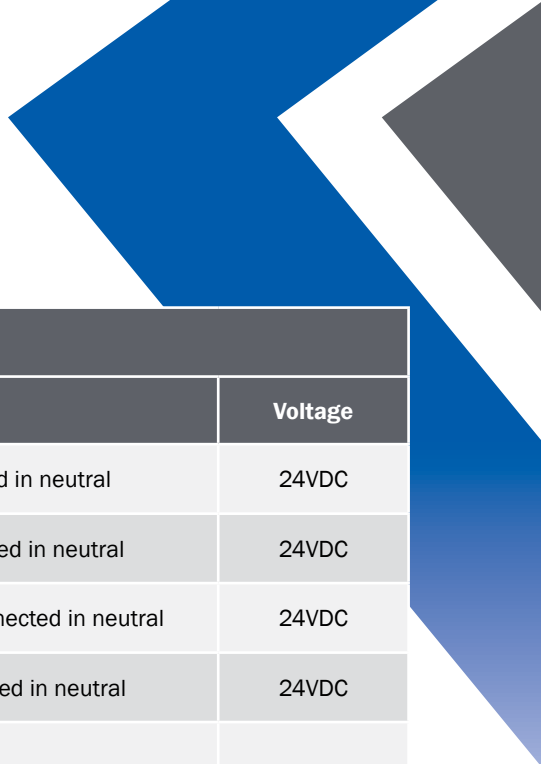
T - DC: 210 bar AC: Standard: 105 bar Code 'H': 210 bar

Leakage $\Delta p = 50$ bar; $v = 35$ mm²/s: Up to 20 ml/min per flow path, depending on spool

Max. flow: DC: 150 l/min AC: 115 l/min

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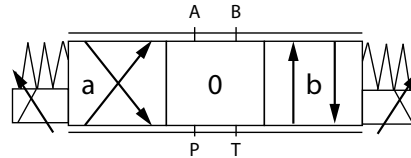


CETOP 3 Directional Control Valves		
Part Number	Description	Voltage
D3W001CNJW	3 Position Control Valve, All ports blocked in neutral	24VDC
D3W002CNJW	3 Position Control Valve, All ports connected in neutral	24VDC
D3W004CNJW	3 Position Control Valve, P blocked, A,B,T connected in neutral	24VDC
D3W008CNJW	3 Position Control Valve, P to T, A, B blocked in neutral	24VDC
D3W001CNYW	3 Position Control Valve, All ports blocked in neutral	110/120VAC
D3W002CNYW	3 Position Control Valve, All ports connected in neutral	110/120VAC
D3W004CNYW	3 Position Control Valve, P blocked, A,B,T connected in neutral	110/120VAC
D3W008CNYW	3 Position Control Valve, P to T, A, B blocked in neutral	110/120VAC
D3W001CNTW	3 Position Control Valve, All ports blocked in neutral	230/240VAC
D3W002CNTW	3 Position Control Valve, All ports connected in neutral	230/240VAC
D3W004CNTW	3 Position Control Valve, P blocked, A,B,T connected in neutral	230/240VAC
D3W008CNTW	3 Position Control Valve, P to T, A, B blocked in neutral	230/240VAC
D3W001CNKW	3 Position Control Valve, All ports blocked in neutral	12VDC
D3W002CNKW	3 Position Control Valve, All ports connected in neutral	12VDC
D3W004CNKW	3 Position Control Valve, P blocked, A,B,T connected in neutral	12VDC
D3W008CNKW	3 Position Control Valve, P to T, A, B blocked in neutral	12VDC

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Parker Direct Operated Proportional DC Valve Series D1FB



Technical Information

The D1FB directional control valve of the nominal size NG6 (CETOP3) provides variable flow rates. Due to a spool and sleeve combination with wire EDM window geometry and a special manufacturing adjustment, the valve achieves excellent repeatability from valve to valve and high precision. The DFB is suited for standard applications particularly with regard to the functions on identical machines, which need only to be adjusted once. In combination with the digital power amplifier PWD00A-400, the valve parameters can be saved, changed and duplicated. Features high repeatability from valve to valve, low hysteresis, manual override and fail-safe centre position.

General

Design: Direct operated proportional DC valve **Actuation:** Proportional solenoid

Size: NG06/CETOP 03/NFPA D03

Mounting interface: DIN 24340/ISO 4401/CETOP RP121/NFPA

Mounting Position: unrestricted **Ambient temperature:** -20...+60 °C **Weight:** 2.2kg **Vibration resistance:** 25 acc. DIN IEC68, part 2-6

Hydraulic

Max. operating pressure: **Ports P, A, B:** 350 bar **Port T:** 210 bar

Fluid: Hydraulic oil as per DIN 51524...535, other on request

Fluid temperature: -20...+60 °C **Viscosity permitted:** 20...380

Viscosity recommended: 30...80

Filtration: ISO 4406(1999) 18/16/13 (ACC. Nas 1638:7)

Nominal flow at $\Delta p=5\text{bar}$

per control edge*: 6/12/20 l/min **Leakage at 100 bar:** <50 ml/min

Static/Dynamic

Hysteresis: <4%

Electrical Characteristics

Duty ratio: 100%

Protection class: IP65 in accordance with EN 60529 (plugged and mounted)

Solenoid: Code 'M' **Supply voltage:** 9 V **Current consumption:** 2.7 A

Resistance: 2.7 Ohm **Coil insulation class:** F (155 °C)

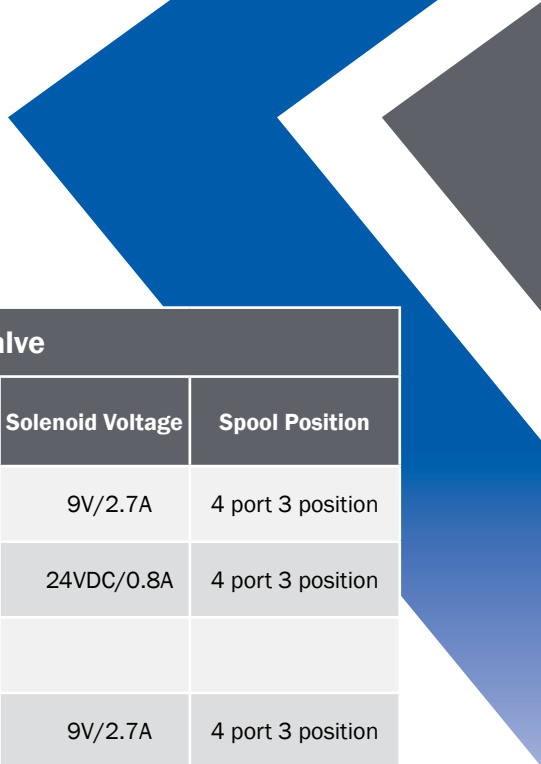
Solenoid connection: Connector as per EN 175301-803

Wiring min.: 3 x 1.5 (AWG 16) overall braid shield **Wiring max. length:** 50m

* Flow rate for different Δp per control edge: $Q_x = Q_{Nom} \cdot \sqrt{\Delta p / \Delta p_{Nom}}$.

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D1FB Direct Operated Proportional DC Valve				
Part Number	Flow (l/min) At Δp 5 Bar per Metering Edge	Spool type	Solenoid Voltage	Spool Position
D1FBE01CCONMWO	6 l/min	All Ports Blocked in Neutral	9V/2.7A	4 port 3 position
D1FBE01CCONJWO	6 l/min	All Ports Blocked in Neutral	24VDC/0.8A	4 port 3 position
D1FBE01CFONMWO	12 l/min	All Ports Blocked in Neutral	9V/2.7A	4 port 3 position
D1FBE01CFONJWO	12 l/min	All Ports Blocked in Neutral	24VDC/0.8A	4 port 3 position
D1FBE01HCONMWO	20 l/min	All Ports Blocked in Neutral	9V/2.7A	4 port 3 position
D1FBE01HCONJWO	20 l/min	All Ports Blocked in Neutral	24VDC/0.8A	4 port 3 position
D1FBE02CCONMWO	6 l/min	P Blocked A,B,T Connected	9V/2.7A	4 port 3 position
D1FBE02CCONJWO	6 l/min	P Blocked A,B,T Connected	24VDC/0.8A	4 port 3 position
D1FBE02FCONMWO	12 l/min	P Blocked A,B,T Connected	9V/2.7A	4 port 3 position
D1FBE02FCONJWO	12 l/min	P Blocked A,B,T Connected	24VDC/0.8A	4 port 3 position
D1FBE02HCONMWO	20 l/min	P Blocked A,B,T Connected	9V/2.7A	4 port 3 position
D1FBE02HCONJWO	20 l/min	P Blocked A,B,T Connected	24VDC/0.8A	4 port 3 position

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Parker E-Module for Proportional Valves Series PWD00A-400



Technical Information

Parker electronic modules **PWD00A-400** for rail mounting are compact, easy to install and provide time-saving wiring by disconnectable terminals. The digital design of the circuit results in good accuracy and optimal adaption for proportional directional control valves by a comfortable interface program.

General

Model: Module package for snap-on mounting on EN 50022 rail **Package material:** Polycarbonate

Inflammability class: V2...V0 acc. UL 94

Installation position: Any

Ambient temperature: -20...+60 °C **Protection class:** IP 20 acc. EN 60529

Weight: 160g

Electrical

Duty ratio: 100% **Supply voltage:** 18...30 VDC, ripple < 5% eff., surge free*

Switch-on current typ.: 22 A for 0.2 ms **Max. current consumption:** 2 A **Pre-fusing:** 2.5 A medium lag

Command signal: +10...0...-10, ripple < 0.01% eff., surge free, Ri=150kOhm

Input signal resolution: 0.025% **Max. differential input voltage :** 30V for terminals 5 und 6 against PE (terminal 8)

Enable signal: 0...5.0:Off/8,5...30:On/Ri=30 kOhm

Channel recall signal: 0...5.0:Off/8,5...30:On/Ri=30 kOhm **Status signal:** 0...0.5:Off/Us: On/ rated max. 15 mA

Adjustment ranges

Min: 0...50% preset 0...100%

Max: 50...100% preset 0...100%

Ramp: 0...32.5s preset 0...32.5s

Zero offset: +75...-75% preset +100...-100%

Current: 0.8/1.3/1.8/2.7/3.5 A preset 0/4/3/2/1 A

Interface: RS 232C,Dsub 9p. Male for null modem cable

EMC: EN 50081-2, EN 50082-2' **Connection:** Screw terminal 0.2...2.5 mm² **Cable specification:** 16 AWG

overall braid shield for supply voltage and solenoids

20 overall braid shield for sensor and signal

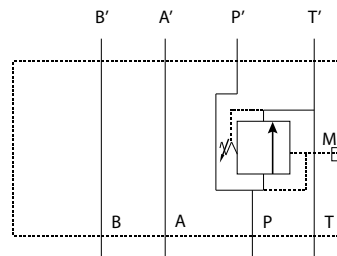
Cable length: 50m

*If solenoids with a nominal voltage of 24V are connected, the supply voltage has to be raised to 29V.

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Parker Direct Operated Pressure Relief Valve Series RDM



Technical Information

Pressure relief valves series RDM are direct operated piston type valves with low hysteresis. They can be used as P-T relief or as T-T controlled counter balance valve. The valve body is equipped with a pressure gauge port.

PT: Pressure is relieved from P to T at the adjusted value.

TT: Pressure is relieved from T to T at the adjusted pressure.

The direct operated cushioned piston design results in fast response, low leakage and minimal hysteresis. Up to 5 pressure adjustment ranges are available with maximum pressure settings of:

bar 25, 64, 160, 210, 350 for RDM2

bar 19, 50, 100, 150, 210 for RDM3

Adjustment modes: Slotted head with lock nut

Key lock

Turning knob

RDM2-NG06 (CETOP3)

RDM3-NG10 (CETOP5)

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Series	RDM2	RDM3
Port size	NG06	NG10
Mounting Pattern	ISO4401	
Max. Operating Pressure		
P, A, B	350 bar	315 bar
T	50 bar	10 bar
Max. Flow	40 l/min	80 l/min
Weight	1.3kg	2.6kg
Viscosity range (cSt) (mm ² /s)	12...230	
Filtration	ISO 4406: 1999; 18/16/13	

Max. Leakage P-A: 5 ml/min

Ordering Code Information.

RD	M	Box 1	Box 2	Box 3	Box 4	V	Box 5	Box 6
Pressure relief valve, direct operated.	Manapak					Seal FPM		Design Series (Not required for ordering.)

Box 1

Size	
Code	Size
2	NG06
3	NG10

Box 2

Pressure Relief	
Code	Pressure relief
PT	P
TT*	T

*NG06 only, max. 160 bar

Box 3

Pressure Range			
Code	RDM2	Code	RDM3
2	1.5 to 25 bar	01	1.5 to 19 bar
6	1.5 to 64 bar	05	1.5 to 50 bar
16	3 to 160 bar	10	3 to 100 bar
21	3 to 210 bar	15	3 to 150 bar
35	5 to 350 bar	21	3 to 210 bar

Box 4

Adjustment	
Code	Adjustment
S	Slotted head screw with lock nut
L	Key lock
K	Turning knob **

**NG06 only

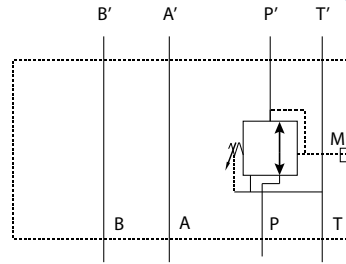
Box 5

Gauge port	
Code	Gauge port
G***	G 1/4
C	Coupling M16

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Parker Direct Operated Pressure Reducing Valve Series PRDM



Technical Information

These valves are “normally open” devices that allow fluid to flow through the controlled port during their non-actuated or “at rest” condition. When downstream pressure exceeds the value set by the spring force, the control piston moves off its seat, closing off the flow path and thus reducing the fluid passing through from the main system the cushioned piston modulates to maintain the preset pressure in this branch of the hydraulic circuit. If, due to external forces the pressure continues to rise in the branch circuit the piston will keep moving against the spring force allowing fluid to be drained to the tank, thereby limiting maximum pressure to the valve setting.

PRDM Manapak sandwich valves may be selected to reduce pressure in the P, A or B port. Up to 5 pressure adjustment ranges are available with max pressure settings of:

bar 25, 70, 160, 210, 350, for PRDM2

bar 19, 50, 100, 150, 210 for PRDM3

Adjustment modes: Slotted head with lock nut

Key Lock

Turning knob

PRDM2-NG06 (CETOP 3)

PRDM3-NG10 (CETOP 5)

Series	PRDM2	PRDM3
Port size	NG06	NG10
Mounting Pattern	ISO4401	
Max. Operating Pressure		
P, A, B	350 bar	315 bar
T	50 bar	50 bar
Weight	1.3kg	2.6kg
Viscosity range (cSt) (mm ² /s)	12...230	
Filtration	ISO 4406 (1999) 18/16/13	

Max. Leakage P-A: 5 ml/min

Ordering Code Information.

PRD	M	Box 1	Box 2	Box 3	Box 4	Box 5	Box 6
Pressure reducing valve, direct operated.	Manapak				V		
					Seal FPM		Design Series (Not required for ordering.)

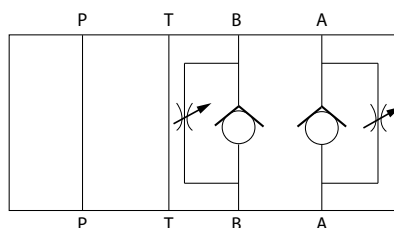
Box 1		Box 2		Box 3				Box 4	
Size		Port Reduction		Pressure Range*				Adjustment	
Code	Size	Code	Connection	Code	PRDM2	Code	PRDM3	Code	Adjustment
2	NG06	PP	P	02	1.5 to 25 bar	01	1.5 to 19 bar	S	Slotted head screw with lock nut
3	NG10	AA	A	06	up to 64 bar	05	up to 50 bar	L	Key lock
		BB	B	16	up to 160 bar	10	up to 100 bar	K	Turning knob **
				21	up to 210 bar	15	up to 150 bar		
				35	up to 350 bar	21	up to 210 bar		

Box 5	
Gauge port	
Code	Gauge port
G	G 1/4
C	Coupling M16

*For optimum performance it is recommended to use the appropriate pressure stage, e.g. Fr 150 bar reduced pressure use code 16-160 bar.

**NG06 only

Parker Throttle Check Valve Series FM



Technical Information

Double-throttle check valves from the Parker Manapak series FM are in sandwich design for easy configuration of stack systems. Throttle and check valves are located in ports A and B. FM2 and FM3 can be used as meter-in or meter-out throttle. FM6 is only available as meter-out control. The throttle check valve can also be used to influence the switching time of pilot operated directional valves. In this case the valve is positioned between the pilot stage (CETOP03, NG06) and the main stage (CETOP05, NG10 up to CETOP10, NG32).

Three types of metering need design can be selected when ordering FM2 and FM3 valves to achieve the throttle characteristics required to suit the application. Large bypass check valves allow high flow at low pressure drop.

Sizes: NG06/CETOP 3 FM2
 NG10/CETOP 5 FM3
 NG16/CETOP 7 FM4
 NG25/CETOP 8 FM6

Series	FM2	FM3	FM4	FM6
Size	NG06	NG10	NG16	NG25
Mounting pattern	NFPA D03	NFPA D05	NFPA D07	NFPA D08
	CETOP 03	CETOP 05	CETOP07	CETOP 08
Max. Operating pressure	350 bar	350 bar	350 bar	210 bar
Max. flow	53LPM	76LPM	200LPM	341LPM
Opening pressure (bar)	0.3	0.3	0.3	0.3
Meter-in throttle	▪	▪	▪	▪
Meter-out throttle	▪	▪	▪	▪
Mounting position	unrestricted	unrestricted	unrestricted	unrestricted
Ambient temperature (°C)	max. +50	max. +50	max. +50	max. +50
Fluid temperature (°C)	max. +70	max. +70	max. +70	max. +70
Weight (kg)	1.3	2.4	5.4	7.9

Ordering Code Information.

Box 1	Box 2	Box 3	Box 4
FM	DD	V	[]
Throttle Valve	Throttle check valve in the working port A and B	Seal FPM	Design Series (Not required for ordering.)

Box 1	Box 2	Box 3
Size	Needle design	Adjustment
Code Size	Code Connection	Code Adjustment
2 NG06	omit Standard conical	K Knob
3 NG10	D Fine, cylindrical hollow bored with V notch	S Hex. Socket

Box 1	Box 1	Box 1	Box 1
FM	4	DD	V
Throttle Valve	Valve size NG16	Throttle check valve in the working port A and B	Seal FPM
			HT
			Design Series

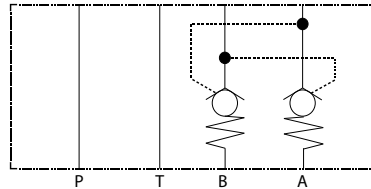
Box 1
Size
Code Size
T Meter-in
F Meter-out

Box 1	Box 1	Box 1	Box 1	Box 1
FM	6	DD	K	V
Throttle Valve	Valve size NG25	Throttle check valve in the working port A and B	Adjusting knob	Seal FPM
				[]
				Design Series (Not required for ordering.)

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Parker Pilot Operated Check Valve Series CPOM



Technical Information

Pilot operated check valves from the Parker Manapak series CPOM are in sandwich design for easy configuration of stack systems. Depending on the function require, one of two pilot operated check valves are arranged in the ports A and/or B. The free flow direction is always from the valve side to the manifold side.

The check valves open when flowing to the consumer side, where the opposing check valve is hydraulically-mechanically pilot operated simultaneously by a control spool, and this the return flow is enabled from other consumer sides.

The valve bodies are made of steel. The valve poppet is precisely guided into the steel sleeve and ensures a good seal on the seat. When the valve poppet is open, the large cross-section allows high flow rates at low differential pressure. Different control ratios can be chosen with the NG6 and NG10 valves. Pre-opening for CPOM*HT to achieve smooth opening.

Series	DIN	NG06	NG10	NG16	NG25
Mounting pattern		ISO 4401			
Series		CPOM2	CPOM3	CPOM5	CPOM6
Working pressure		350 bar	350 bar	350 bar	210 bar
Opening pressure		1.0 bar	0.8 bar	2.0 bar	0.4 bar
Control ratio		1 : 3 or 1:7	1 : 3 or 1:6.5	1:13	1:3
Weight		1.8kg	4kg	7.65kg	9.5kg

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Ordering Code Information.

Without pre-opening

Box 1 Box 2 Box 3 Box 4 Box 5
 CPOM Design Series
 Hydraulically operated check valve pilot ratio 3:1 (Not required for ordering.)

Box 1		Box 2		Box 3		
Size		Poppet style		Cracking Pressure		
Code	Size	Code	Connection	Code	Pressure	Size
2	NG06	AA	only A	omit	1.0 bar	2, 3, 6
3	NG10	BB	only B	25	2.5 bar	2
6	NG25	DD	A and B	50	5.0 bar	2
				70	7.0 bar	2

Box 4	
Seal	
Code	Seal
N	NBR
V	FPM

With pre-opening

Box 1 Box 2 Box 3 Box 4 Box 5
 CPOM HT Design Series
 Hydraulically operated check valve pilot ratio 3:1 (Not required for ordering.)

Box 1		Box 2		Box 3		
Size		Poppet style		Pilot Ratio		
Code	Size	Code	Connection	Code	Pressure	Size
2	NG06	AA	only A	HT	2	7:1
3	NG10	BB	only B		3	6.5:1
4	NG16	DD	A and B		4	13:1

Box 4	
Seal	
Code	Seal
N	NBR
V	FPM

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Tank & Power Unit Accessories

Tank Accessories

Level Gauges Steel Body

Technical Information

Steel body and "trogamid" protection glass. Galvanised steel fixing screws and BUNA seal.

Part Number	Hole Centres	Bolt Size	Length	Width	Description
LG1	76	M10	116	39	Fluid Level
LG1T	76	M10	116	39	Fluid Level/Temp
LG2	127	M12	177	48	Fluid Level
LG2T	127	M12	177	48	Fluid Level/Temp



Level Gauges Plastic Body

Technical Information

Techno polymer body and transparent polymer glass. Galvanised steel fixing screws and BUNA seal.

Part Number	Hole Centres	Bolt Size	Length	Width	Description
LT1P	76	M10	118	35	Fluid Level
LT1TP	76	M10	118	35	Fluid Level/Temp
LT2P	127	M12	166	35	Fluid Level
LT2TP	127	M12	166	35	Fluid Level/Temp



Visual Electric Level Gauges

Technical Information

Reinforced nylon body and perbex glass. Galvanised steel fixing screws and BUNA seal.

Part Number	Hole Centres	Bolt Size	Length	Width	Description
LV1	76	M10	100	33	Fluid Level
LV2	127	M12	157	33	Fluid Level
LV3	254	M12	283	33	Fluid Level
LV2S	127	M12	157	33	Fluid Level/Electrical
LV2E	127	M12	157	33	Fluid Level/Electrical



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Tank Accessories

Suction Strainers

Technical Information

A complete range of suction strainers to protect the pump and system components. Made in zinc plated steel end caps with Aisi 304 stainless square mesh.



Part Number	Litres /min	Bsp Thread	Length	Width	Micron
SF46A-14GR125	10	1/4"	90mm	46mm	125
SF46A-38GR125	16	3/8"	90mm	46mm	125
SF46B-12GR125	22	1/2"	105mm	46mm	125
SF64A-34GR125	56	3/4"	109mm	64mm	125
SF64B-100GR125	100	1"	139mm	64mm	125
SF86A-100GR125	100	1"	139mm	86mm	125
SF86A-114GR125	140	1.1/4"	139mm	86mm	125
SF86B-112GR125	200	1.1/2"	200mm	86mm	125
SF86C-200GR125	340	2"	260mm	86mm	125
SF150A-200GR125	340	2"	151mm	150mm	125
SF150B-212GR125	660	2.1/2"	211mm	150mm	125
SF150C-300GR125	760	3"	272mm	150mm	125

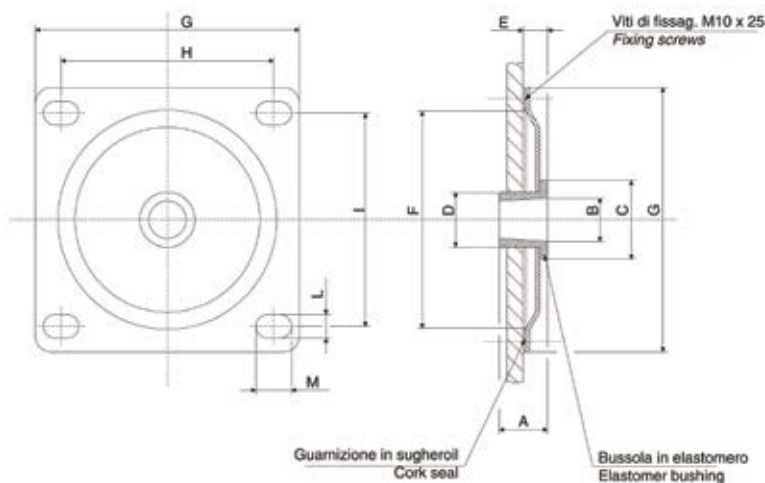
Suction Flanges

Technical Information

Oil tank flanges for inlet and outlet tubes. Made in black plated steel complete with rubber bush, gasket and fixing screws.



Type	Spare Bush	A	TUBE SIZE	C	D	E	F	G	H	I	L	M
FFS 15	BPT-15	24	15	40	28	12.5	110	134	108	108	12	18
FFS 18	BPT-18	24	18	40	28	12.5	110	134	108	108	12	18
FFS 22	BPT-22	24	22	40	28	12.5	110	134	108	108	12	18
FFS 28	BPT-28	24	28	55	42	12.5	110	134	108	108	12	18
FFS 35	BPT-35	24	35	55	42	12.5	110	134	108	108	12	18
FFS 44	BPT-44	24	44	70	58	12.5	110	134	108	108	12	18
FFS 45	BPT-44	24	44	70	58	12.5	164	190	159	159	12	18
FFS 50	BPT-50	24	50	70	58	12.5	164	190	159	159	12	18
FFS 61	BPT-61	24	61	80	68	12.5	164	190	159	159	12	18
FFS 77	BPT-77	24	77	110	95	12.5	164	190	159	159	12	18
FFS 89	BPT-89	24	89	110	95	12.5	164	190	159	159	12	18



Tank Accessories

Filler Breathers

Technical Information

Chrome Plated Steel bayonet filler breathers complete with gaskets, fixing screws and steel basket for TR1 and TR3, thermoplastic for TR2. Filler breathers permit clean and easy filling of the hydraulic tank.

Part Number	Fixing Holes	Micron Rating	Recommended Flow
TR-1	3	40mic	250 dm ³ /min
TR-2	6	40 mic	700 dm ³ /min
TR-3	6	40mic	700 dm ³ /min



Air Breather Caps

Technical Information

Compact chrome plated steel cap with galvanised male BSP thread. 40 micron standard, also available in 10 micron.

Part Number	Fixing Holes	Micron Rating	Recommended Flow
TRM1-14	1/4" bsp	40mic	250 dm ³ /min
TRM1-38	3/8" bsp	40mic	250 dm ³ /min
TRM1-12	1/2" bsp	40mic	250 dm ³ /min
TRM2-34	3/4" bsp	40mic	700 dm ³ /min
TRM2-100	1" bsp	40mic	1000 dm ³ /min



Parker UCC Plastic Filler Breathers

Technical Information

IP65 Nylon filler breathers complete with strainers.

Part Number	Cap	Micron Rating	Mount
AB68118	50.5mm	10mic	3 Hole
AB98210011	101mm	10mic	1 hole
AB98810011	101mm	10mic	6 hole
AB98610101	101mm	10mic	1/2" bsp
AB98410101	101mm	10mic	3/4" bsp



Weld Sleeve Filler Breathers

Technical Information

Chrome plated steel bayonet filler breathers complete with weld sleeve and steel basket.

Part Number	Cap	Micron Rating	Recommended Flow
TRBS-SV	75mm	10mic Paper	700 dm ³ /min



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Parker Adjustable Float Switch FL Series

Technical Information

The FL Series is a range of vertically mounted, single float level switches operating on the proven reed switch and magnet principle.

The FL Series float switch can be tailored by the user for a particular application, by adjusting the length of the float switch tube. It is also possible for the user to select the switching configuration by inverting the float, giving either open on rise or close on rise operation.

The unit is supplied part assembled, with detailed instructions for the user to complete assembly to the specifications of the application and to install the unit.

The FL Series is designed to be adjusted by the user to fit their tank. The unit consists of a stem with the reed switch and float already set in position. The customer can cut the stem to fit their tank, and assemble it to the header. The unit is then ready to be fitted to the tank.

Note: FL Series switches supplied as loose parts so no IP class applies. If assembled correctly by the customer, the IP class is IP67.

Mounting: 1" BSP threaded header **Gasket:** 2.0mm thick sealing washer

Length: Adjustable up to 1500mm

Electrical Spec.

Supply Voltage: 240 Vac max.
300 Vdc max.

Switching current: 0.5 A

Material Spec.

Header: Brass **Float:** Polypropylene **Stem:** Brass

Gasket: Klingersil grade C4324

Fluid types: Any liquids compatible with brass and polypropylene.



Part number	Description
FL050010R	500mm long float level switch
FL100010R	1000mm long float level switch
FL150010R	1500mm long float level switch

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Parker Fluid Level Measurement

Fluid Level/Temperature Gauges.

Technical Information

A proven solution for tank oil level measurement. Universal fixing designed for front or rear tank mounting. Fluid level/temperature gauges are available in 3 sizes each with 2-hole mounting centres. The high-visibility viewing lens is a one-piece design for added security, moulded in shatterproof transparent polyamide.

76mm, 127mm and 254mm mounting centres.

Specification

Lens: Transparent polyamide **Lens base:** Nylon 66 **Bolts:** Steel **Seals:** Nitrile

Shroud: High impact polystyrene. No aluminium content.

Note: A 500mm model with metal shroud finished in black available.

Max. working pressure: 1 bar **Working temp. :** -30°C to +90°C

Fluid compatibility: Mineral and petroleum based oils. **Temp. indicator:** Blue alcohol

Recommended bolt tightening torque: 10Nm max. **Thermometer scale range:** -30°C to +90°C

Note: 1: Locate seals in mounting recess before fitting.

2: Select the size required by studying the installation details to determine a part number.



Size 1

Part Number	Description	Centres	Thread	Max. temp.	Weight
FL69121	Fluid level/temp	76mm	M10	90°C	0.13Kg
FL69123	Fluid level/temp	76mm	M12	90°C	0.13Kg
FL69111	Fluid level	76mm	M10	90°C	0.13Kg
FL69113	Fluid level	76mm	M12	90°C	0.13Kg

Size 2

Part Number	Description	Centres	Thread	Max. temp.	Weight
FL69221	Fluid level/temp	127mm	M10	90°C	0.15Kg
FL69223	Fluid level/temp	127mm	M12	90°C	0.15Kg
FL69211	Fluid level	127mm	M10	90°C	0.15Kg
FL69213	Fluid level	127mm	M12	90°C	0.15Kg

Size 3

Part Number	Description	Centres	Thread	Max. temp.	Weight
FL69321	Fluid level/temp	254mm	M10	90°C	0.23Kg
FL69323	Fluid level/temp	254mm	M12	90°C	0.23Kg
FL69311	Fluid level	254mm	M10	90°C	0.23Kg
FL69313	Fluid level	254mm	M12	90°C	0.23Kg

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Parker Pressure Gauges

63mm Dial Pressure Gauges

Technical Information

99.7% liquid glycerine filled pressure gauges. Natural finish stainless steel case with a non-splintering clear acrylic glass window. White plastic dial with black plastic pointer stop pin. With a maximum working pressure of 75% of the full scale value.

Movement: Cu alloy **Accuracy:** 1.6% FSD **Wetted parts connector:** Copper alloy

Bourdon tube: <60 bar = Cu alloy, C-type, soft soldered.

>60 bar = Cu alloy, helical type, soft soldered.

Process temp. range: 0°C to 60°C max.

IP Class: IP65



Note: It is recommended that all glycerine gauges should be mounted in the vertical position with gauge case relief valve uppermost. Pressure range up to 1000 bar available.

Bottom Connection

Part Number	Pressure range	Connector Type
PGB0631010	0-10 bar	G 1/4 Bottom
PGB0631016	0-16 bar	G 1/4 Bottom
PGB0631025	0-25 bar	G 1/4 Bottom
PGB0631040	0-40 bar	G 1/4 Bottom
PGB0631060	0-60 bar	G 1/4 Bottom
PGB0631100	0-100 bar	G 1/4 Bottom
PGB0631160	0-160 bar	G 1/4 Bottom
PGB0631250	0-250 bar	G 1/4 Bottom
PGB0631400	0-400 bar	G 1/4 Bottom
PGB0631600	0-600 bar	G 1/4 Bottom
PGB0631004	0-4 bar	G 1/4 Bottom



Panel Mounting

Part Number	Pressure range	Connector Type
PGC0631010	0-10 bar	G 1/4 Panel
PGC0631016	0-16 bar	G 1/4 Panel
PGC0631025	0-25 bar	G 1/4 Panel
PGC0631040	0-40 bar	G 1/4 Panel
PGC0631060	0-60 bar	G 1/4 Panel
PGC0631100	0-100 bar	G 1/4 Panel
PGC0631160	0-160 bar	G 1/4 Panel
PGC0631250	0-250 bar	G 1/4 Panel
PGC0631400	0-400 bar	G 1/4 Panel
PGC0631004	0-4 bar	G 1/4 Panel
PGC0631600	0-600 bar	G 1/4 Panel



Panel Mounted (3-hole flange)

Part Number	Pressure range	Connector Type
PGF0631060	0-60 bar	G 1/4 Panel flange
PGF0631100	0-100 bar	G 1/4 Panel flange
PGF0631160	0-160 bar	G 1/4 Panel flange
PGF0631250	0-250 bar	G 1/4 Panel flange
PGF0631400	0-400 bar	G 1/4 Panel flange
PGF0631004	0-4 bar	G 1/4 Panel flange
PGF0631010	0-10 bar	G 1/4 Panel flange
PGF0631016	0-16 bar	G 1/4 Panel flange
PGF0631025	0-25 bar	G 1/4 Panel flange
PGF0631040	0-40 bar	G 1/4 Panel flange
PGF0631600	0-600 bar	G 1/4 Panel flange

Parker Pressure Gauges

100mm Dial Pressure Gauges

Technical Information

98% liquid glycerine filled pressure gauges. BS 304 S15 stainless steel case with a clear acrylic window. White aluminium dial with black plastic pointer. With a maximum working pressure of 100% of the full scale value.

Movement: Brass **Process temp. range:** -20°C to 60°C max. **Accuracy:** 1.0% FSD

Wetted parts connector: Copper alloy

Bourdon tube: <100 bar = Cu alloy, C-type, soft soldered.

>100 bar = Stainless steel 1.4571, helical type, brazed

IP Class: IP65



Note: It is recommended that all glycerine gauges should be mounted in the vertical position with gauge case relief valve uppermost. Pressure range up to 1000 bar available.

Bottom Connection

Part Number	Pressure range	Connector Type
PGB1001250	0-250 bar	G 1/2 Bottom
PGB1001400	0-400 bar	G 1/2 Bottom
PGB1001010	0-10 bar	G 1/2 Bottom
PGB1001016	0-16 bar	G 1/2 Bottom
PGB1001025	0-25 bar	G 1/2 Bottom
PGB1001040	0-40 bar	G 1/2 Bottom
PGB1001060	0-60 bar	G 1/2 Bottom
PGB1001100	0-100 bar	G 1/2 Bottom
PGB1001160	0-160 bar	G 1/2 Bottom
PGB1001600	0-600 bar	G 1/2 Bottom
PGB10011000	0-1000 bar	G 1/2 Bottom

Panel Mounting

Part Number	Pressure range	Connector Type
PGE1001010	0-10 bar	G 1/2 Panel
PGE1001016	0-16 bar	G 1/2 Panel
PGE1001025	0-25 bar	G 1/2 Panel
PGE1001040	0-40 bar	G 1/2 Panel
PGE1001060	0-60 bar	G 1/2 Panel
PGE1001100	0-100 bar	G 1/2 Panel
PGE1001160	0-160 bar	G 1/2 Panel
PGE1001250	0-250 bar	G 1/2 Panel
PGE1001400	0-400 bar	G 1/2 Panel
PGE1001600	0-600 bar	G 1/2 Panel
PGE10011000	0-1000 bar	G 1/2 Panel

Panel Mounted (3-hole flange)

Part Number	Pressure range	Connector Type
PG. 1001250	0-250 bar	G 1/2 Panel flange
PGF1001400	0-400 bar	G 1/2 Panel flange
PGF1001010	0-10 bar	G 1/2 Panel flange
PGF1001016	0-16 bar	G 1/2 Panel flange
PGF1001025	0-25 bar	G 1/2 Panel flange
PGF1001040	0-40 bar	G 1/2 Panel flange
PGF1001060	0-60 bar	G 1/2 Panel flange
PGF1001100	0-100 bar	G 1/2 Panel flange
PGF1001160	0-160 bar	G 1/2 Panel flange
PGF1001600	0-600 bar	G 1/2 Panel flange
PGF10011000	0-1000 bar	G 1/2 Panel flange

Bell Housings & Couplings

Bell Housing Gear Pumps to Electric Motors

Technical Information

Aluminium bell housings for the connection of European standard gear pumps to electric motors conforming to the UNEL-I.E.C. Norm. In addition we have provided the gasket part number for ease of ordering.

Bell Housing Part Number	Motor Frame Size	Pump Group	Bell Housing Gasket Part Number
LS140	63	Group ½ pump	GL140
LS141	63	Group 1 pump	GL140
LS160	71	Group ½ pump	GL160
LS161	71	Group 1 pump	GL160
LS200	80	Group ½ pump	GL200
LS201	80	Group 1 pump	GL200
LS203	80	Group 2 pump	GL200
LS201	90	Group 1 pump	GL200
LS203	90	Group 2 pump	GL200
LS250	100/112	Group 1 pump	GL250
LS252	100/112	Group 2 pump	GL250
LS256	100/112	Group 3 pump	GL250
LS310	132	Group 1 pump	GL300
LS300	132	Group 2 pump	GL300
LS302	132	Group 3 pump	GL300
LS306	132	Group 3.5 pump	GL300
LS350	160/180	Group 2 pump	GL350
LS353	160/180	Group 3 pump	GL350
LSE402	200	Group 3 pump	GL400
LSE405	200	Group 3.5 pump	GL400
LSE407	200	Group 4 pump	GL400
LSE451	225	Group 3.5 pump	N/A
LSE453	225	Group 4 pump	N/A
LSE456	225	Group 3 pump	N/A



Bell Housing Gear Pumps to Engines

Technical Information

A range of aluminium bell housings and couplings to connect standard European gear pumps to standard petrol engines. In addition we have provided the correct drive coupling part number for these bell housings for ease of ordering.

Bell Housing Part Number	Description	PCD of Bolts in Engine mm	Spigot Diameter of Engine mm	Length mm	Drive Coupling Part Number	
LMH151	Bell housing group 1 pump to Honda engines GX120, GX160, GX200	92	78.5	98	ND500 18mm	ND510 ¾"
LMH401	Bell housing group 1 pump to Honda engines GX240, GX340, GX390	127	110	134	ND600 25mm	ND610 1"
LMH402	Bell housing Cassappa group 1 pump to Honda engines GX240, GX340, GX390	127	110	134	ND601 25mm	ND611 1"
LMH403	Bell housing group 2 pump to Honda engines GX240, GX340, GX390	127	110	134	ND603 25mm	ND613 1"



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Bell Housings & Couplings

Drive Coupling Gear Pumps to Electric Motors

Technical Information

Flexible aluminium shaft couplings for standard European taper shaft gear pumps to standard European electric motors conforming to the UNELI.E.C. Norm. In addition we have provided the gasket and spider part numbers for ease of ordering.

Drive Coupling Part Number	Motor Frame Size	Pump Group	Pump Gasket Part Number	Spider Part Number
ND01	63	Group ½ pump	GP05	R42
ND03	63	Group 1 pump	GP1P	R42
ND1	71	Group ½ pump	GP05	R42
ND2	71	Group 1 pump	GP1P	R42
ND4	80	Group ½ pump	GP05	R42
ND5	80	Group 1 pump	GP1P	R42
ND7	80	Group 2 pump	GP2	R62
ND8	90	Group 1 pump	GP1P	R62
ND10	90	Group 2 pump	GP2	R62
ND11	100/112	Group 1 pump	GP1P	R62
ND13	100/112	Group 2 pump	GP2	R62
ND15	100/112	Group 3 pump	GP3	R82
ND900	132	Group 1 pump	GP1	R82
ND16	132	Group 2 pump	GP2	R82
ND17	132	Group 3 pump	GP3	R82
ND18C	132	Group 3.5 pump	GP35	R103
ND43A	160	Group 2 pump	GP2	R103
ND43C	160	Group 3 pump	GP3	R103
ND44A	180	Group 2 pump	GP2	R103
ND44C	180	Group 3 pump	GP3	R103
ND40	200	Group 3 pump	GP3	R103
ND41	200	Group 3.5 pump	GP35	R103
ND42	200	Group 4 pump	GP4	R103
ND32	225	Group 3 pump	GP3	R132
ND30	225	Group 3.5 pump	GP35	R132
ND31	225	Group 4 pump	GP4	R132



Parker UCC Drive Coupling Sleeves

Technical Information

Two drive hubs engage in a sleeve. Cost effective and easy to assemble.

Part Number	Description
DC.28.S	Drive coupling sleeve for DC.28
DC.42.S	Drive coupling sleeve for DC.42
DC.55.S	Drive coupling sleeve for DC.55



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Drive Couplings

Technical Information

Coupling halves: Sintered Steel **Sleeve:** Nylon 66 **Max. temp. sleeve:** 83 °C

To select coupling model check application to establish running load condition. Check chart for factor (F) and apply factory (F) to *Rating of coupling formulae. This answer you now apply to *Rating/100 rev/min below. It is advisable always to check shaft sizes being used on application and check the dimension 'H'.



Application	Electric Motor	Petrol/Diesel Engine
Uniform load	1.00	1.2
Medium shock	1.25	1.5
Heavy shock	1.75	2

Part Number	Max. Speed rev/min	*Rating/ 100 rev/min		Weight kg	A mm	B mm	C mm	D mm	E mm	F mm	G mm	-H-		J Pilot Bore
		kW	hp									Max. Bore	Min. Bore	
DC.28	5000	0.75	1.00	0.40	40	66	44.50	38.00	4.00	104.00	84.00	28.00	10.00	7.00
DC.42	5000	1.32	1.75	0.75	42.00	90.00	60.00	52.00	4.00	115.00	88.00	42.00	14.00	10.50
DC.55	4000	6.00	8.00	2.05	59.00	125.00	83.00	65.00	4.00	138.00	122.0	55.00	19.00	16.0 min 38.1 max.

Model DC.28

Part Number	Supersedes	Bore (mm)	Keyway		Weight
			Width (mm)	Height (mm)	
DC28M16	DC.28.M16	16.0mm	5.0mm	18.4mm	Range from 0.259kg to 0.411kg
DC28M19	DC.28.M19	19.0mm	6.0mm	21.9mm	
DC28M20	DC.28.M20	20.0mm	6.0mm	22.9mm	
DC28M22	DC.28.M22	22.0mm	6.0mm	24.9mm	
DC28M24	DC.28.M24	24.0mm	8.0mm	27.5mm	
DC28M25	DC.28.M25	25.0mm	8.0mm	28.5mm	
DC28M28	DC.28.M28	28.0mm	8.0mm	31.5mm	
DCR28PB	DCR.28.PB	8.0mm	N/A	N/A	
DC28S	DC.28.S	N/A	N/A	N/A	
DC28M10	DC.28.M10	10.0mm	3.0mm	11.5mm	
DC28M11	DC.28.M11	11.0mm	4.0mm	12.9mm	
DC28M14	DC.28.M14	14.0mm	5.0mm	16.4mm	
DC28M18	DC.28.M18	18.0mm	6.0mm	20.9mm	
DC28B03K	DC.28.B03K	7/16	0.125 ins	0.50 ins	
DC28B04K	DC.28.B04K	1/2	0.125 ins	0.57 ins	
DC28B05K	DC.28.B05K	5/8	0.188 ins	0.72 ins	
DC28B06K	DC.28.B06K	3/4	0.188 ins	0.84 ins	
DC28B07K	DC.28.B07K	7/8	0.250 ins	0.99 ins	
DC28B08K	DC.28.B08K	1	0.250 ins	1.12 ins	
DC28B09K	DC.28.B09K	1 1/8	0.313 ins	1.24 ins	

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Drive Couplings

Model DC.42

Part Number	Supersedes	Bore (mm)	Keyway		Weight
			Width (mm)	Height (mm)	
DC42M25	DC.42.M25	25.0mm	8.0mm	28.5mm	Range from 0.436kg to 0.753kg
DC42M28	DC.42.M28	28.0mm	8.0mm	31.5mm	
DC42M30	DC.42.M30	30.0mm	8.0mm	33.5mm	
DC42M35	DC.42.M35	35.0mm	10.0mm	38.5mm	
DC42M38	DC.42.M38	38.0mm	10.0mm	41.5mm	
DC42M42	DC.42.M42	42.0mm	12.0mm	45.5mm	
DC42PB	DCR.42.PB	12.0mm	N/A	N/A	
DC42S	DC.42.S	N/A	N/A	N/A	
DC42M18	DC.42.M18	18.0mm	6.0mm	20.9mm	
DC42M19	DC.42.M19	19.0mm	6.0mm	21.9mm	
DC42M20	DC.42.M20	20.0mm	6.0mm	22.9mm	
DC42M22	DC.42.M22	22.0mm	6.0mm	24.9mm	
DC42M24	DC.42.M24	24.0mm	8.0mm	27.5mm	
DC42M32	DC.42.M32	32.0mm	10.0mm	35.5mm	
DC42B05K	DC.42.B05K	5/8	0.188 ins	0.72 ins	
DC42B06K	DC.42.B06K	3/4	0.188 ins	0.84 ins	
DC42B07K	DC.42.B07K	7/8	0.250 ins	0.99 ins	
DC42B08K	DC.42.B08K	1	0.250 ins	1.12 ins	
DC42B09K	DC.42.B09K	1 1/8	0.313 ins	1.24 ins	
DC42B10K	DC.42.B10K	1 1/4	0.313 ins	1.37 ins	
DC42B11K	DC.42.B11K	1 3/8	0.375 ins	1.49 ins	
DC42B12K	DC.42.B12K	1 1/2	0.375 ins	1.61 ins	
DC42B13K	DC.42.B13K	1 5/8	0.439 ins	1.76 ins	

Model DC.55

Part Number	Supersedes	Bore (mm)	Keyway		Weight
			Width (mm)	Height (mm)	
DCR55PB	DCR.55.PB	16.0mm	N/A	N/A	Range from 1.249kg to 2.046kg
DC55S	DC.55.S	N/A	N/A	N/A	
DC55M25	DC.55.M25	25.0mm	8.0mm	28.5mm	
DC55M28	DC.55.M28	28.0mm	8.0mm	33.5mm	
DC55M30	DC.55.M30	30.0mm	8.0mm	33.5mm	
DC55M32	DC.55.M32	32.0mm	10.0mm	35.5mm	
DC55M35	DC.55.M35	35.0mm	10.0mm	38.5mm	
DC55M38	DC.55.M38	38.0mm	10.0mm	41.5mm	
DC55M42	DC.55.M42	42.0mm	12.0mm	45.5mm	
DC55M55	DC.55.M55	55.0mm	16.0mm	59.5mm	
DC55B09K	DC.55.B09K	1 1/8	0.313 ins	1.24 ins	
DC55B10K	DC.55.B10K	1 1/4	0.313 ins	1.37 ins	
DC55B11K	DC.55.B11K	1 3/8	0.375 ins	1.49 ins	
DC55B12K	DC.55.B12K	1 1/2	0.375 ins	1.61 ins	
DC55B13K	DC.55.B13K	1 5/8	0.439 ins	1.76 ins	
DC55B14K	DC.55.B14K	1 3/4	0.439 ins	1.89 ins	
DC55B15K	DC.55.B15K	1 7/8	0.501 ins	2.01 ins	
DC55B16K	DC.55.B16K	2	0.501 ins	2.13 ins	
DC55B17K	DC.55.B17K	2 1/8	0.626 ins	2.31 ins	

Foot Mount Brackets for Bell Housing

Technical Information

Manufactured in high resistance aluminium alloy, these brackets are used to support our bell housings with a standard B5 flange up to an external diameter of the motor of 350mm. From 44mm upwards these foot brackets are made of steel.

Part Number	Description
P160	Bracket for 71 frame motor
P200	Bracket for 80/90 frame motor
P250	Bracket for 100/112 frame motor
P300	Bracket for 132 frame motor
P350	Bracket for 160/180 frame motor



Damping Rings & Rods

Damping Rings

Technical Information

These anti-vibration rings are made of steel and vulcanised rubber and are designed to fit between the bell housing and the tank cover. They can reduce the noise created by the power transmission by 3-5 dB.

Part Number	Description
A200	Fits 80/90 frame motors
A250	Fits 100/112 frame motors
A300	Fits 132 frame motors
A350	Fits 160/180 frame motors
A400	Fits 200 frame motors



Damping Rods

Technical Information

These anti-vibration mounts are made of steel and vulcanised rubber and are suitable to fit standard electric motor frame sizes. They can reduce the noise created by the power transmission by 3-5 dB. These rods are sold as pairs.

Part Number	Description
BMA-71-F	Fits D71 frame motors
BMA-80-F	Fits D80 frame motors
BMA-90L-F	Fits D90L frame motors
BMA-90S-F	Fits D90S frame motors
BMA-100L-F	Fits D100L frame motors
BMA-112M-F	Fits D112M frame motors
BMA-132M-F	Fits D132M frame motors
BMA-132S-F	Fits D132S frame motors
BMA-160L-F	Fits D160L frame motors
BMA 160M-F	Fits D160M frame motors
BMA-180L-F	Fits D180L frame motors
BMA-180M-F	Fits D180M frame motors



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Clutches & Gearboxes

Reversible Mechanical Clutches

Technical Information

These clutches can be used as uni or bi directional units. We recommend that the clutch is only engaged and disengaged when the hydraulic system is unloaded and when the speed is less than 1800 RPM.

Lubrication: Use SAE90 oil. Change oil every 12 months. Max working temperature +80 degrees C. Min working temperature -10 degrees C.

Part Number	Max Torque daNm	Max Speed RPM	Max Power HP	Axial Load	Mounting Flange	Spline Adaptor to Suit
30100-RV	9	2000	48	120 daN	Group 1 or 2 pumps	10003 Gp1, 10005 Gp2
30300-RV	18.5	2700	58	160 daN	Group 2 or 3 pumps	10044 Gp2, 10014 Gp3
30500-RV	58	2700	100	260 daN	Group 3 or 3.5 pumps	10020 Gp3.5, 10019 Gp3



PTO (Speed Up) Gearboxes for Gear Pumps

Technical Information

PTO or Speed Up gear boxes are primarily used on agricultural tractors where more hydraulic power is required than the system on the tractor can provide. The quick release coupling on the gear box attaches to the tractor PTO shaft and steps up the PTO speed to one much more suited to the efficient speed of a hydraulic pump. A gear pump is fitted to the other site of the gearbox.

Part Number	Max Input Speed RPM	Max Output Speed RPM	Max Input Torque daNm	Max Output Torque daNm	Mounting Flange	Spline Adaptor to Suit
60004-5-3.5	540	1836	18.6	5.8	Group 2 pump	10005 Gp2
70004-5-3.5	540	1836	46	13	Group 2 & 3 pumps	10044 Gp2, 10014 Gp3
70004-6-3.8	540	2057	43.7	11.5	Group 2 & 3 pumps	10044 Gp2, 10014 Gp3
70008-4-3.1	540	1620	49	16	Group 3 pump	10014 Gp3



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Clutches & Gearboxes

Speed Reduction Gearboxes

Technical Information

These gear boxes are used predominantly for installing hydraulic motors on self propelled farm machinery, earth moving equipment and marine applications. Reduction Gear Boxes are used in conjunction with standard Gerotor or Geroller motors with 25mm shaft and 2 bolt flange, increasing the torque and decreasing the speed by the stated ratio. Gearboxes are aluminium, shafts are steel and the gears are keyed to it. Torque values state are for continuous duty, they can be increased by 20% for intermittent duty.

Part Number	Ratio	Max Input Speed RPM	Max Output Speed RPM	Max Input Torque daNm	Max Output Torque daNm
95001-5	3.5:1	700	200	6.3	21.4
96001-4	3:1	600	200	19	57
96001-5	3.5:1	680	200	15.1	53
96001-6	3.8:1	760	200	13.8	52.5



Electromagnetic Clutches

Technical Information

These electromagnetic clutches require running in to obtain the rated torque values. The run the unit in you should engage and disengage the clutch several times at high speed but with the hydraulic system unloaded. When fitting the clutch please clean the pulley carefully to ensure that no oil or grease is left on it. When fitting clutches with front driving flange please check for correct coupling alignment. **Do not exceed the maximum rated torque as this would cause the clutch to slip and if this lasts for more than 5 seconds the coils will burn out!**

Part Number	Max Torque daNm	Max Speed RPM	Mounting Flange	Pulley Diameter mm	Voltage	Spline Adaptor to Suit
30901-P-12	10	5000	Group 1 or 2 pump	153	12V DC	10044 Gp2, 10010 Gp1
30929-P-12	14	5000	Group 1 or 2 pump	153	12V DC	10044 Gp2, 10010 Gp1
30930-P-24	14	5000	Group 1 or 2 pump	153	24V DC	10044 Gp2, 10010 Gp1



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Oil Coolers

Air Blast Hydraulic Oil Coolers

Technical Information

These air/oil heat exchangers are made to be used in the return line of the hydraulic system. The cooler element is made from alu-alloy, which is a highly conductive material. The braze welding process of the matrix gives a high thermic exchange and a good pressure rating.



Part Number	Ports	Weight kg	Frequency Hz	Voltage V	Fan Speed rpm	Motor power kW	Noise dB(A)	IP Rating	Thermostat Included	Motor Type	Oil flow l/m
SS10-01-08-A-P	1/2" BSP	6	50/60	230	2650/3100	0.050/0.046	63	44	T08	1	5-40
SS15-03-00-A-P	1" BSP	7	50/60	230/400	2600/2900	0.068/0.070	67	44	Not inc	3	20-80
SS20-03-00-A-P	1" BSP	8	50/60	230/400	2600/2900	0.068/0.070	67	44	Not inc	3	30-100
SS24-03-00-A-P	1" BSP	11	50/60	230/400	2500/2650	0.10/0.14	68	44	Not inc	3	40-120
SS30-03-00-A-P	1" BSP	15	50/60	230/400	2600/2850	0.19/0.27	69	44	Not inc	3	35-140
SS40-03-00-A-P	1 1/4" BSP	21	50/60	230/400	1450/1690	0.13/0.18	71	44	Not inc	3	40-160
SS50-03-00-A-P	1 1/4" BSP	27	50/60	230/400	1380/1840	0.20/0.28	73	44	Not inc	3	50-180

2 Pass Air Blast Coolers

Technical Information

These air/oil heat exchangers are made to be used in the return line of the hydraulic system. The cooler element is made from alu-alloy, which is a highly conductive material. The braze welding process of the matrix gives a high thermic exchange and a good pressure rating.



Part Number	Ports	Weight kg	Frequency Hz	Voltage V	Fan Speed rpm	Motor Power kW	Noise dB(A)	IP Rating	Thermostat Included	Motor Type	Oil flow l/m
SS215-03-00-A-P	1/2" BSP	7	50/60	230/400	2600/2900	0.068/0.070	67	44	Not inc	3	5-40
SS220-03-00-A-P	3/4" BSP	8	50/60	230/400	2600/2900	0.068/0.070	67	44	Not inc	3	5-40
SS224-03-00-A-P	1" BSP	11	50/60	230/400	2500/2650	0.10/0.14	67	44	Not inc	3	10-60
SS224-03-03-A-P	1" BSP	11	50/60	230/400	2500/2650	0.10/0.14	67	44	T03	3	10-60
SS230-03-03-A-P	1" BSP	15	50/60	230/400	2600/2850	0.19/0.27	69	44	T03	3	15-60
SS240-14-00-A-P	1" BSP	25	50/60	230/400	1430	0.55	71	55	Not inc	14	20-80
SS230-03-00-A-P	1" BSP	15	50/60	230/400	2600/2850	0.19/0.27	69	44	Not inc	3	15-60

Double Fan Air Blast Coolers

Technical Information

These air/oil heat exchangers are made to be used in the return line of the hydraulic system. The cooler element is made from alu-alloy, which is a highly conductive material. The braze welding process of the matrix gives a high thermic exchange and a good pressure rating.



Part Number	Ports	Weight kg	Frequency Hz	Voltage V	Fan Speed rpm	Motor Power kW	Noise dB(A)	IP Rating	Thermostat Included	Motor Type	Oil flow l/m
SD20-03-00-A-P	1 1/4" BSP	17	50/60	230/400	2600/2900	0.068/0.070 x 2	67	44	Not inc	3	60-180
SD24-03-00-A-P	1 1/2" BSP	23	50/60	230/400	2500/2650	0.10/0.14 x 2	68	44	Not inc	3	80-220
SD30-03-00-A-P	1 1/2" BSP	31	50/60	230/400	2600/2850	0.19/0.27 x 2	69	44	Not inc		80-260
SD40-03-00-A-P	1 1/2" BSP	42	50/60	230/400	1450/1690	0.13/0.18 x 2	71	44	Not inc	3	80-300

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Hydraulic Tanks

Vehicle Mounted Tanks

Vehicle Side Mounted Hydraulic Tanks

Technical Information

Sealed hydraulic steel tanks suitable for mounting on vehicles and many other applications. Supplied complete with filler breather, sight level gauge, tank top return filter and drain valve.

Part Number	Capacity	Micron	Length	Width	Height
FC-INT20-091C10NA	20 Litres	10 mic	440mm	260mm	260mm
FC-INT20-111C10NA	20 Litres	10 mic	440mm	260mm	260mm
FC-INT40-111C10NA1	40 Litres	10 mic	600mm	280mm	280mm
FC-INT40-112C10NA1	40 Litres	10 mic	600mm	280mm	280mm
FC-INT55-171C10NA	55 Litres	10 mic	680mm	300mm	300mm
FC-INT55-171C10NA1	55 Litres	10 mic	680mm	300mm	300mm
FC-INT75-221C10NA	75 Litres	10 mic	800mm	320mm	320mm
FC-INT75-222C10NA1	75 Litres	10 mic	800mm	320mm	320mm



Vehicle Foot Mounted Hydraulic Tanks

Technical Information

Foot mounted sealed hydraulic steel tanks suitable for mounting on vehicles and many other applications. Supplied complete with filler breather, sight level gauge, tank top return filter and drain valve.

Part Number	Capacity	Micron	Length	Width	Height
FC20-091C10NA	20 Litres	10 mic	440mm	260mm	260mm
FC20-111C10NA	20 Litres	10 mic	440mm	260mm	260mm
FC40-111C10NA1	40 Litres	10 mic	600mm	280mm	280mm
FC40-112C10NA1	40 Litres	10 mic	600mm	280mm	280mm
FC55-171C10NA	55 Litres	10 mic	680mm	300mm	300mm
FC55-171C10NA1	55 Litres	10 mic	680mm	300mm	300mm
FC75-221C10NA	75 Litres	10 mic	800mm	320mm	320mm
FC75-222C10NA1	75 Litres	10 mic	800mm	320mm	320mm



Vehicle Bracket Mounted Hydraulic Tanks

Technical Information

Slim bracket mounted sealed hydraulic steel tanks suitable for mounting on vehicles and many other applications. Supplied complete with filler breather, sight level gauge, tank top return filter and drain valve.

Part Number	Capacity	Micron	Length	Width	Height
FD27-112C10NA2	27 Litres	10 mic	565mm	170mm	345mm
FD45-112C10NA2	45 Litres	10 mic	650mm	190mm	420mm
FD75-112C10NA2	75 Litres	10 mic	765mm	210mm	520mm
FD130-112C10NA2	130 Litres	10 mic	890mm	280mm	570mm



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Hydraulic Tanks

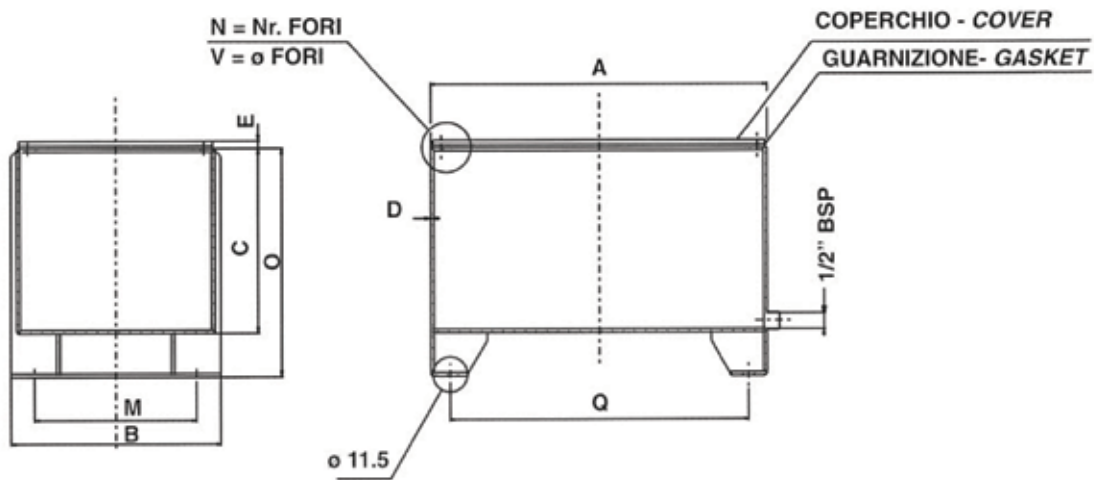
Steel Tanks

Technical Information

Hydraulic Oil tanks made from steel plate and etch primed. Supplied complete with steel lid, gasket and drain plug. Nominal capacity corresponds to 2/3 of the total volume.



Part Number	Nominal Capacity	A	B	C	D	E	M	O	Q	N	V
CF12GC	14 litres	335	270	235	3	4	208	290	285	6	M8
CF16GC	22 litres	410	325	250	3	4	270	305	364	6	M8
CF30GC	39 litres	470	375	280	3	4	312	335	428	8	M8
CF55GC	58 litres	600	470	310	3	4	401	365	548	10	M8
CF75GC	75 litres	600	470	400	3	4	401	455	548	10	M8
CF100GC	100 litres	675	520	450	3	4	455	505	625	10	M8
CF180GC	165 litres	805	620	500	3	4	555	555	755	10	M8
CFP225GC	205 litres	900	600	585	4	6	510	640	820	10	M8
CFP300GC	245 litres	900	700	600	4	8	610	700	820	10	M10
CFP400GC	390 litres	1260	765	620	5	8	650	720	1160	14	M10



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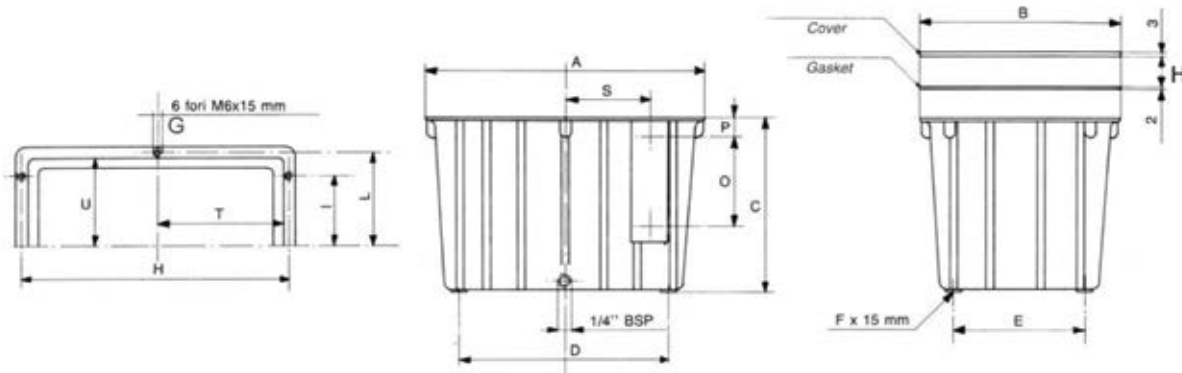
Hydraulic Tanks

Aluminium Tanks

Technical Information

Hydraulic Oil tanks made in Die Cast Aluminium. Supplied complete with steel lid, gasket and drain plug. Nominal capacity corresponds to 3/4 of the total volume.

Part Number	Nominal Capacity	A	B	C	D	E	F	G	H	I
CP3GC	3 litres	220	160	150	165	105	M6	M6	3	1/4"
CP6GC	6 litres	280	200	176	210	130	M8	M6	3	1/4"
CP10GC	10 litres	340	247	220	250	170	M8	M6	3	3/8"
CP16GC	16 litres	368	290	243	270	192	M8	M8	5	1/2"
CP25MGC	25 litres	490	340	285	326	176	M10	M8	5	1/2"
CP55GC	55 litres	595	450	345	400	276	M12	M8	6	3/4"
CP75GC	75 litres	595	450	465	400	276	M12	M8	6	3/4"

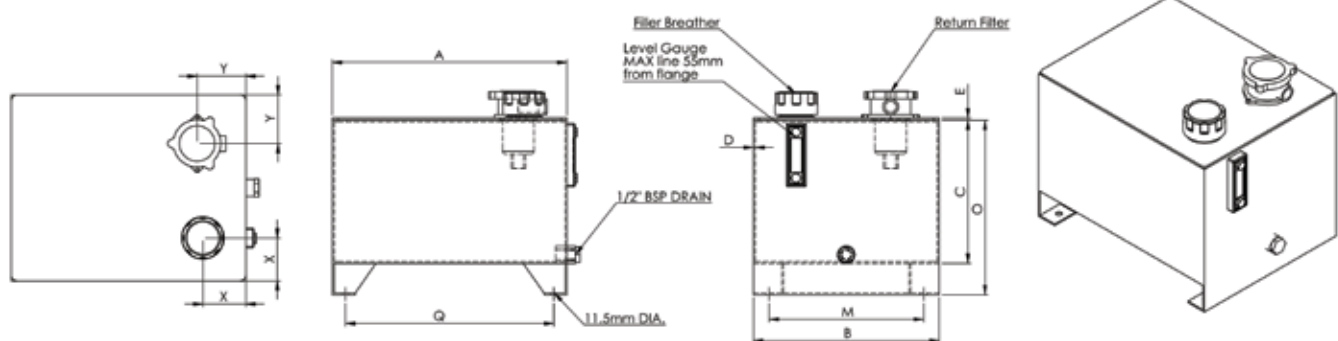


Hydraulic Tank Kits with Accessories

Technical Information

This range of OMT CF hydraulic tanks fitted with standard accessories to save you time and money. Each of these tanks are fitted with tank top return line filter, level gauge, filler breather and filter clogging indicator for tank top return line filter. We supply them in grey as standard but any other RAL colour you require can be provided at extra cost.

Part Number	Nominal Capacity	Length mm	Width mm	Height mm	Level Gauge	Filler Breather	Tank Top Return Line Filter	Filter Clogging Indicator
CF12KIT	14 litres	335	270	290	FL.69111	TR-1	OMTF091C10NA	PV1
CF16KIT	22 litres	410	325	305	FL.69111	TR-1	OMTF091C10NA	PV1
CF30KIT	39 litres	470	375	335	FL.69213	TR-2	OMTF091C10NA	PV1
CF55KIT	58 litres	600	470	365	FL.69213	TR-2	OMTF111C10NA1	PV1
CF75KIT	75 litres	600	470	455	FL.69213	TR-2	OMTF112C10NA1	PV1
CF100KIT	100 litres	675	520	505	FL.69313	TR-2	OMTF112C10NA2	PV1
CF180KIT	165 litres	805	620	555	FL.69313	TR-2	OMTF112C10NA2	PV1



Hydraulic Oil

Technical Information

We stock quality hydraulic oils and supply HM and HV ISO classification oils in viscosity classification 15,22,32 and 46 centistokes grades in 5, 25 and 200 litre containers for next day delivery.

Part Number	Description
HM15-OIL-5LTR	HM15 5ltr Hydraulic Mineral Oil to BS ISO 6743-4
HM32-OIL-5LTR	HM32 5ltr Hydraulic mineral Oil to BS ISO 6743-4
HM32-OIL-25LTR	HM32 25ltr Hydraulic mineral Oil to BS ISO 6743-4
HM32-OIL-200LTR	HM32 200ltr Hydraulic Mineral Oil to BS ISO 6743-4
HM46-OIL-5LTR	HM46 5ltr Hydraulic Mineral Oil to BS ISO 6743-4
HM46-OIL-25LTR	HM46 25ltr Hydraulic Mineral Oil to BS ISO 6743-4
HM46-OIL-200LTR	HM46 200ltr Hydraulic Mineral Oil to BS ISO 6743-4
HM68-OIL-25LTR	HM68 25ltr Hydraulic Mineral Oil to BS ISO 6743-4
HV46-OIL-200LTR	HV46 25 ltr Hydraulic Mineral Oil to BS ISO 6743-4
HV46-OIL-200LTR	HV46 200 ltr Hydraulic Mineral Oil to BS ISO 6743-4
VACTRA NO.1 20LTR	20ltr replaces Vacuoline Oil 1405
VACTRA NO.1 208LTR	208ltr replaces Vacuoline Oil 1405
SHELL TELLUS 37	Shell 20ltr Hydraulic Mineral Oil
SAE90 GEAR OIL	1ltr of SAE90 Gear Oil
21334	1ltr VG22 Hydraulic Steering Oil



Thermostats for Air Blast Coolers

Technical Information

Thermostats for use with SS Type Air Blast Coolers. These switches/thermostats fit into the 1/2" BSP thermostat port in the cooler.



Part Number	Electric Conn	IP Rating	Working Temp C	Max Volt	Max Current	Tolerance	Max Fixed Hysteresis	Max Temp C	Adjustable Temp Range	Max Head Temp	Max Sensing Bulb Temp
T01	DIN43650	65	36-26	250	16A	+ - 5C	15C	130C	n/a	n/a	n/a
T02	DIN43650	65	43-33	250	16A	+ - 5C	15C	130C	n/a	n/a	n/a
T03	DIN43650	65	52-40	250	16A	+ - 5C	15C	130C	n/a	n/a	n/a
T04	DIN43650	65	65-55	250	16A	+ - 5C	15C	130C	n/a	n/a	n/a
T06	DIN43650	65	85-75	250	16A	+ - 5C	15C	130C	n/a	n/a	n/a
T07	DIN43650	65	95-80	250	16A	+ - 5C	15C	130C	n/a	n/a	n/a
T08	Fair Lead Type M20x1.5	40	0-90	250	2.5A	+ - 5C	6C	125C	0-90C	80C	125C

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We are expert Power Pack builders and can configure power units to any requirement, usually from stock for fast delivery. We hold massive stocks of all hydraulic components.

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