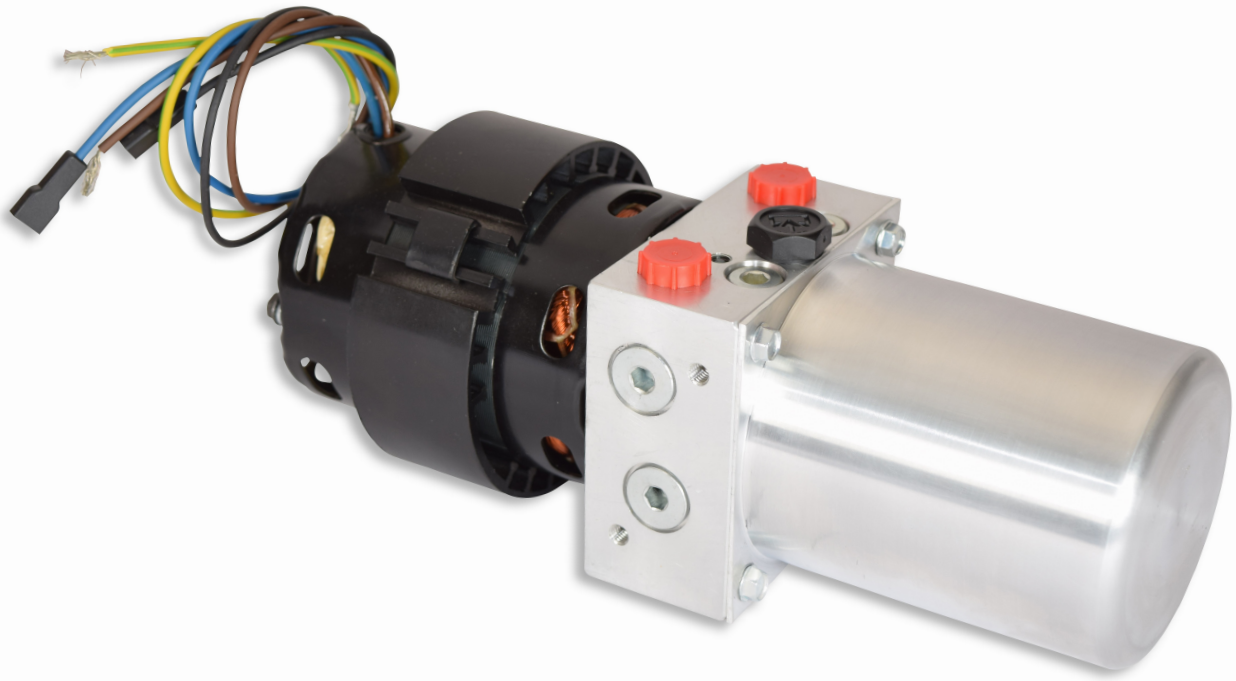


HPR Micro Pack

The HPR Reversible Hydraulic Power Pack offers the flexibility to operate double acting hydraulic functions within a very compact space and without the need for further control valves. With 150W to 800W DC Motors and 0.15 to 0.37kW AC Motors the gear pump can produce pressures up to 200bar. Dual Pilot Check Valves give leak free control for cylinders. Dual Relief valves give control in both directions whilst dual pilot suction check valves prevent induced pressures and noise when excess full bore cylinder flow returns to the tank.

Micro Pack applications include:

- Wheelchair Lifts
- Brakes
- Bath Lifts
- Clamping System

Hydraproducts have a proven record of performance.

- 100% testing
- Wide application knowledge
- Fast deliveries
- Product support
- 3D Solid Modelling facilities

HPR Micro Pack

Die HPR reversierbare Hydraulik Aggregate bieten sich an, doppelt wirkende Funktionen in engen Raum an realisieren.
Die Notwendigkeit weiter Ventile entfällt.
Mit 150W bis 800W DC-Motoren und 0,15 bis 0,37 Drehstrommotoren. Können die zahnradpumpen Drück bis zu 200bar erzeugen.
Doppelt Entsperrbare Rückschlagventile gewährleisten dass die last beidseitig gehalten wird.
Mit zwei Druckbegrenzungsventile wird der systemdruck eingestellt.

Typische Anwendungen sind

- Rollstuhl Aufzüge
- Bremsen
- Spannsystem
- Patientenheber

Hydraproducts haben eine nachgewiesene reputation.

- Erfahrung in vielen Anwendungen bereiche
- Kurze Lieferzeiten
- Großes Teilelager
- Kundenservice
- Kundenspezifische Produkte
- 3D Produkt design

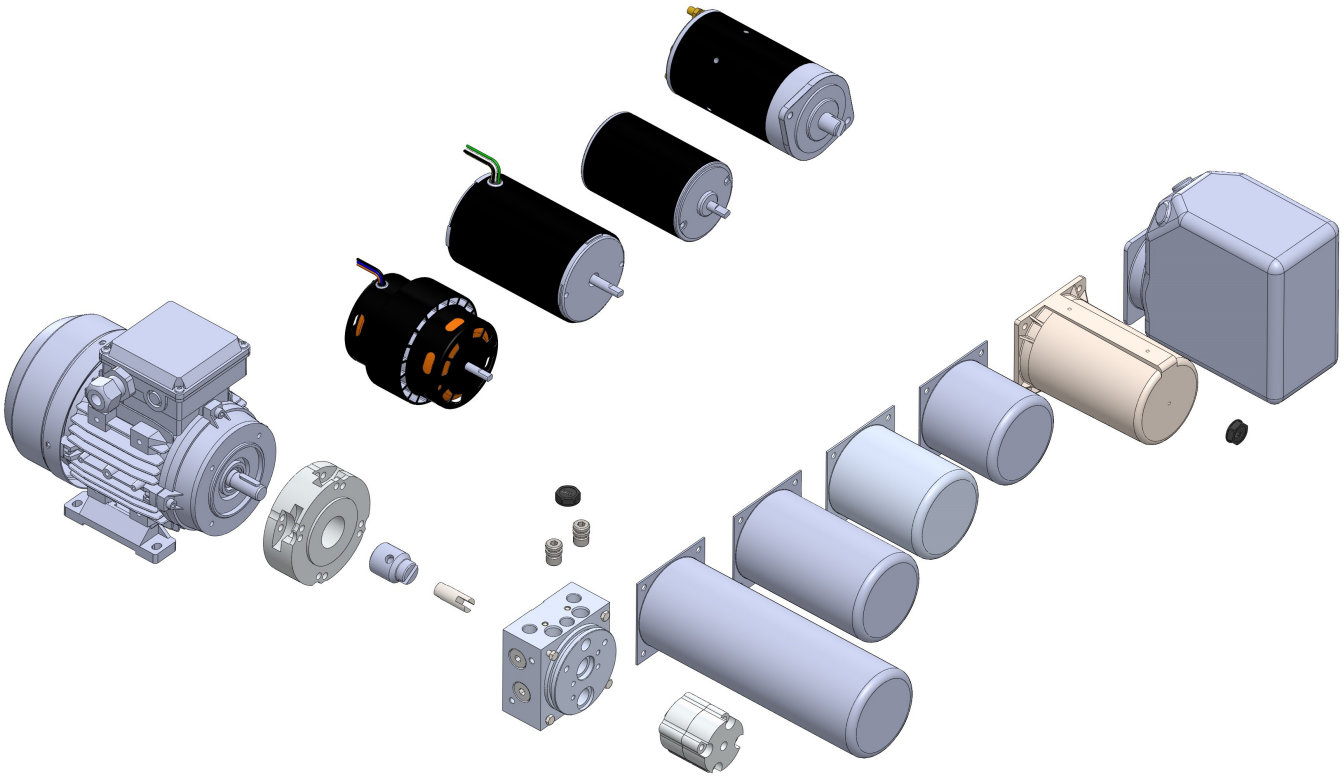
HPR Micro Pack

La HPR Reversible Unidad de potencia hidráulica ofrece la flexibilidad de operar de doble efecto funciones hidráulicas dentro de un espacio muy reducido y sin la necesidad de válvulas de control adicionales. Con 150W a 800W DC Motors y de 0,15 a 0,37 kW Motores de CA de la bomba de engranajes puede producir presiones de hasta 200 bar. Dos válvulas pilotadas
dar fugas control libre de cilindros. Dos válvulas de alivio dar el control en ambas direcciones, mientras que las válvulas de retención de doble piloto de succión evitar presiones inducidas y el ruido cuando el exceso de flujo completo vuelve ánima de cilindro al depósito.

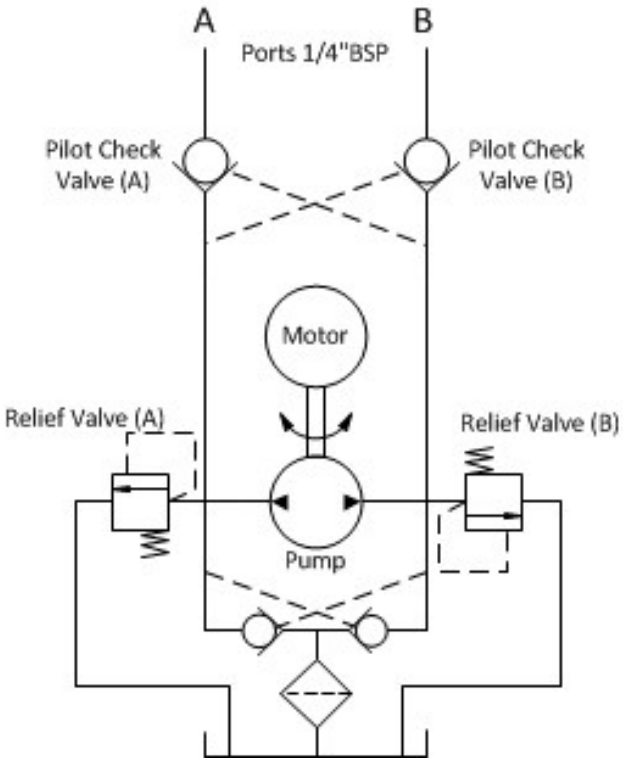
Aplicaciones incluyen:

- Ascensores para sillas de ruedas
- frenos
- sistema de sujeción

Hydraproducts tienen un historial comprobado de desempeño.



PRNS Circuit shown here— refer to page 6 for URNS & NRMS circuits.



Specifications

Pump

Type	Reversible gear pump
Size	0.16 to 1.5 cc/rev

Motors

12 & 24VDC	150, 250, 500 and 800 Watt
240VAC	0.15, 0.25, 0.37 & 0.55kW
415VAC	0.37 & 0.55kW

Hydraulic circuit

Reversible circuits for double acting actuators.

Reservoirs

Plastic	0.5 and 1.5Litre
Aluminium	0.1 to 1Litre

Performance

Pressure	to 200bar
Flow	to 5lpm

Hydraulic oil

Recommended—Mineral Oil HLP HV 6743/4 DIN 51519

Viscosity ISO3448/VG32 (20-100 permissible)

Operating Temperature -15 to 70°C

Example of coding

HPR Micro Reversible Hydraulic Power pack range

HPR

DC Motor Range
AC Motor
Motor connection flanges and drive couplings — 11

Gear Pumps — 04

Mounting orientation — H

Hydraulic circuits — PRNS

Filler Position
Tank — S01

HPR	1	1	04	H	P	R	N	S	S	01

MOTORS		
1		12 Volt DC
2		24 Volt DC
S		240VAC
T		415VAC
	1	150Watt
	2	250Watt
	5	500Watt
	8	800Watt
M	1	150W 240VAC
M	2	200W 240VAC
	C2	0.37kW 2pole
	D2	0.55kW 2pole

PUMP	
01	0.16cc/rev
02	0.24
04	0.45
05	0.56
07	0.75
10	0.98
12	1.27
15	1.48

MOUNTING	
H	Horizontal
V	Vertical

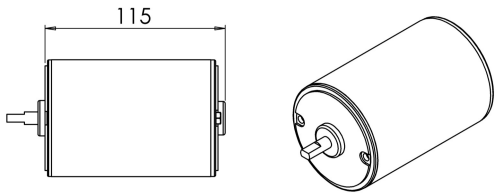
CIRCUIT				
U				Motor Spools
P				Pilot Check Valve
	R	S		Relief Valve
		M		Manual Release
			S	Standard Body
N	N	N	N	Not Fitted

TANK		
B		Body Filler
E		End Filler
N		No Filler
S		Side Filler
	01	0.1 Litre Alloy
	02	0.2 Litre Alloy
	05	0.5 Litre Alloy
	10	1.0 Litre Alloy
	05P	0.5 Litre Plastic
	15P	1.5 Litre Plastic

MOTORS

DC Motors— 150W and 250W IP44

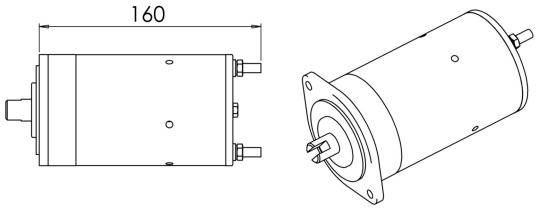
HP4129 12V 150W	11
HP4028 12V 250W	12
HP4135 24V 150W	21
HP029 24V 250W	22



for performance data see page 7

DC Motors— 500W and 800W IP44

HP4143 12V 500W	15
HP4145 12V 800W	18
HP4144 24V 500W	25
HP4146 24V 800W	28

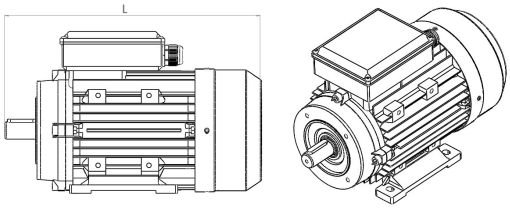


for performance data see page 8

AC Motors - 1 phase 240V 50Hz B34 IEC IP55

0.37kW 2pole 71 frame	L = 180	SC2
0.55kW 2pole 71 frame	180	SD2

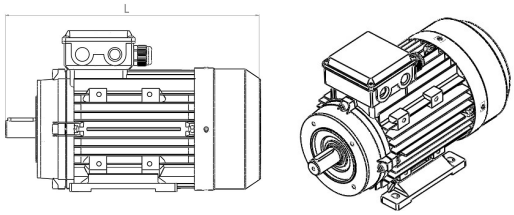
Permanent capacitor motors are preferred with a 0.5-0.9 FLT starting torque.



AC Motors - 3 phase 380/415V 50Hz B34 IEC IP55

0.37kW 2pole 71 frame	L=211	TC2
0.55kW 2pole 71 frame *	225	TD2

Dual European voltages, up to 3kW 230/400 above 400/690V. Dual 50/60Hz rated. S1 Continuous Duty S1. Thermistors PTC.

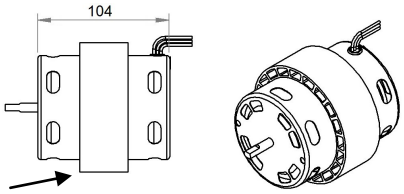


AC Motor - 150Watt 240V 50Hz S2 duty IP20

AF1H6912K 240V 150W	M1

for performance data see page 9

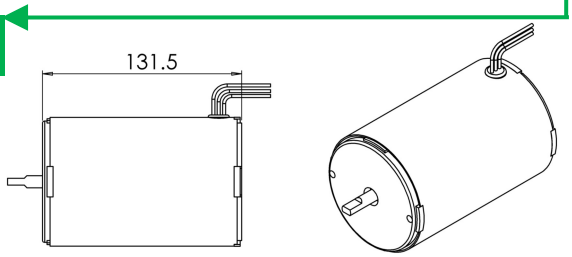
Heat sink is optional



AC Motor - 250Watt 240V 50Hz S2 duty IP44

JF1L7008K 240V 250W	M2

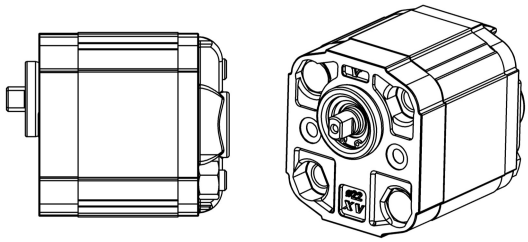
for performance data see page 9



HYDRAULIC PUMPS

Gear Pump group 0

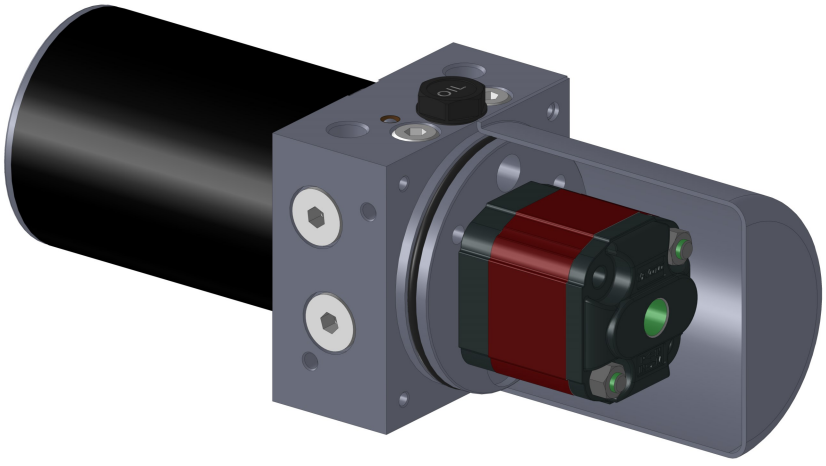
Size cm^3/rev	P max.	Type
0.16	250	01
0.24	180	02
0.45	250	04
0.56	180	05
0.75	250	07
0.98	180	10
1.20	250	12
1.48	180	15

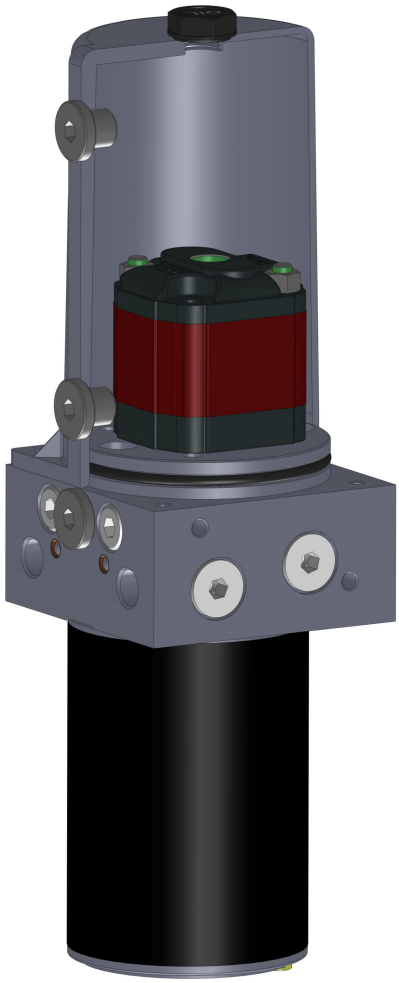


MOUNTING

Orientation

Position	Type
Horizontal	H
Vertical—Tank uppermost	V

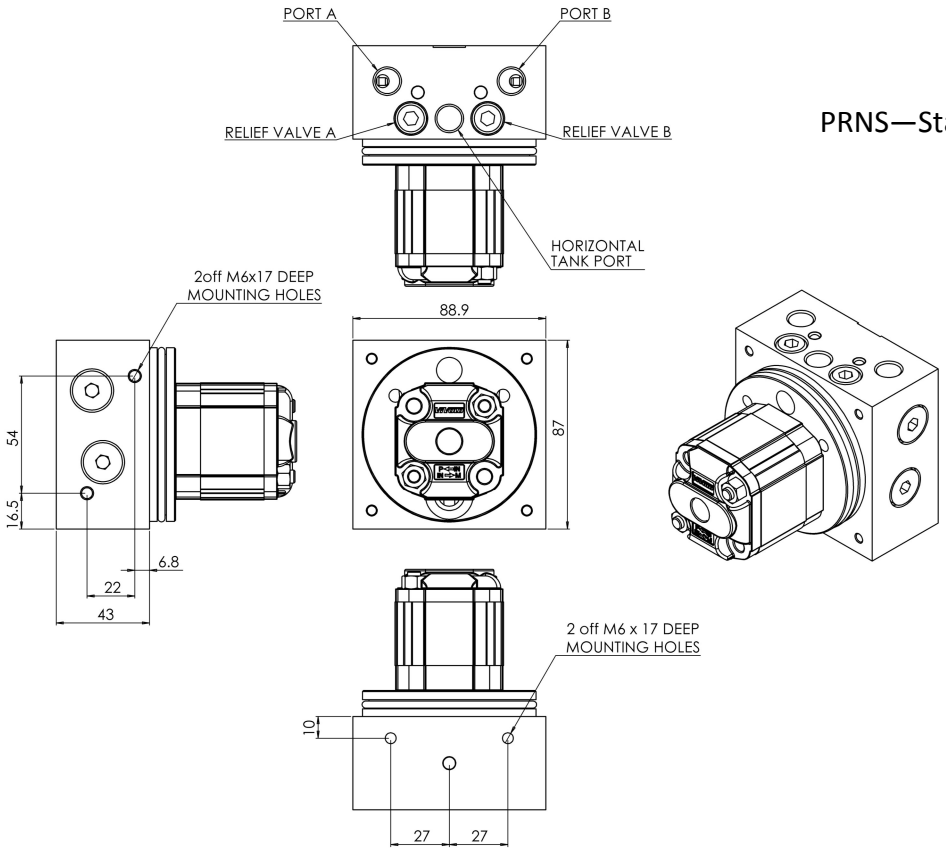




CENTRAL MANIFOLD

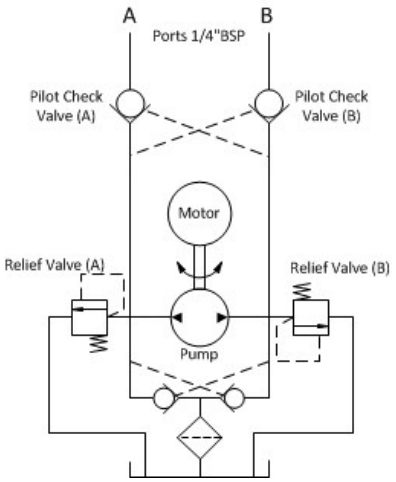
Hydraulic circuit

Manifold				
Motor Spools with Unloading	U			
Pilot Check Valve	P			
Relief Valve		R		
Manual Release - Not preferred			M	
Standard Body				S
Not Fitted	N	N	N	N

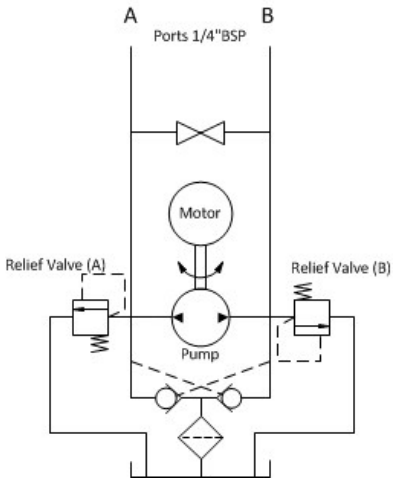


PRNS—Standard Manifold

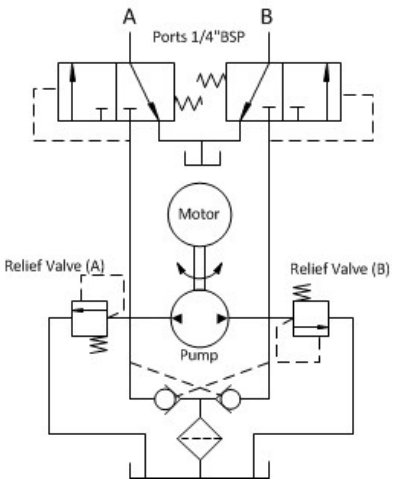
PRNS Circuit—Standard



NRMS Circuit



URNS Circuit



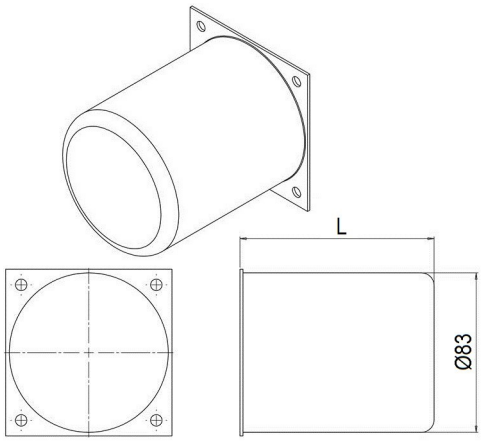
Filler/Breather Positions

Description	Type
Body Filler - in manifold, horizontal only	B
Side Filler - in tank, horizontal only	S
End Filler - in tank end, vertical only	E
No Filler - consult techincal sales for this option	N

Aluminium Oil Tank

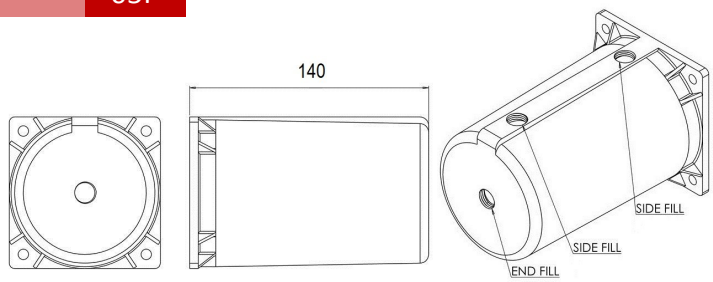
Cylindrical

Description	L=Length	Type
0.1 Litre	80	01
0.2 Litre	100	02
0.5 Litre	140	05
1 Litre	240	10

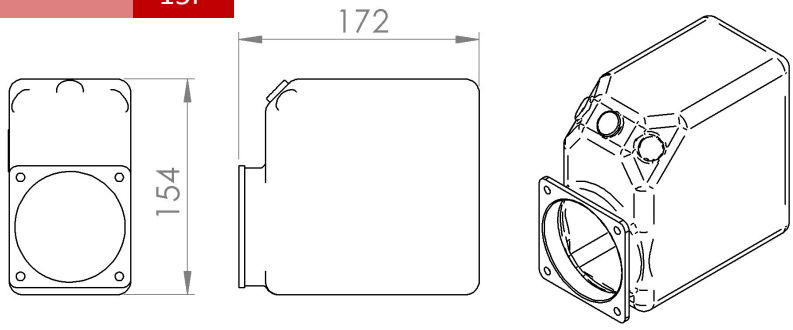


Plastic Oil Tank

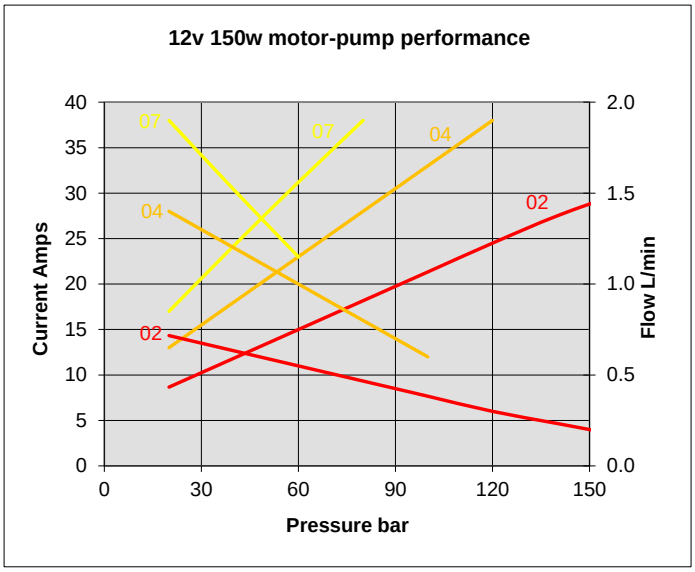
0.5 Litre Plastic	05P

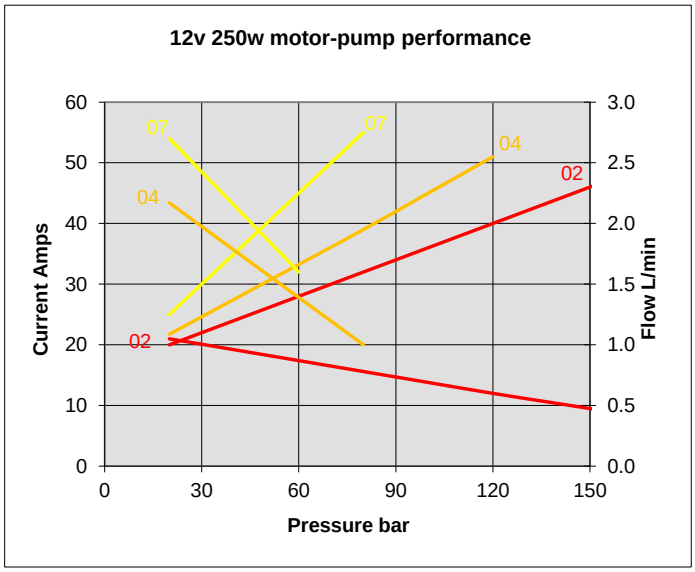


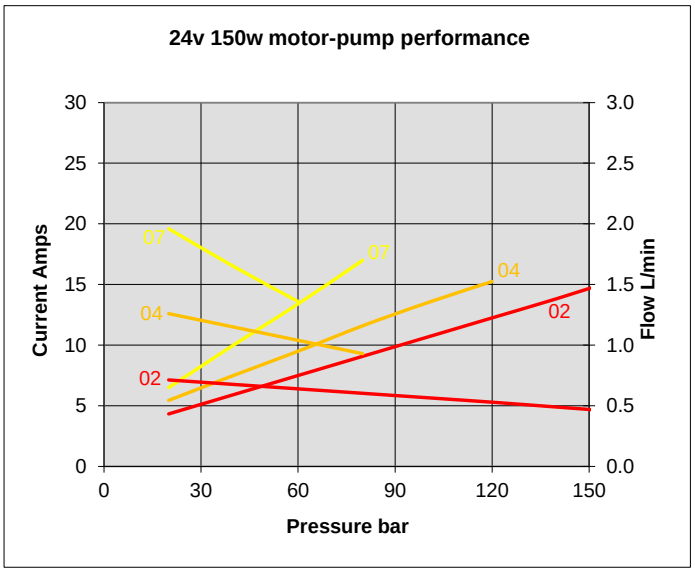
1.5 Litre Plastic	15P

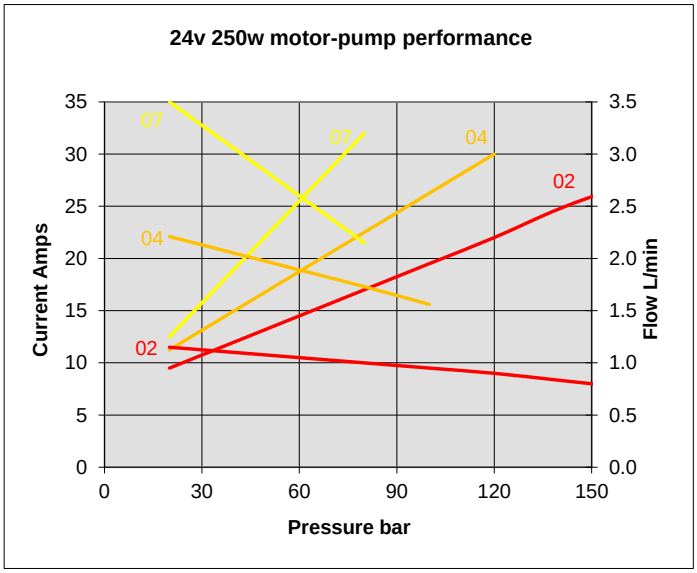


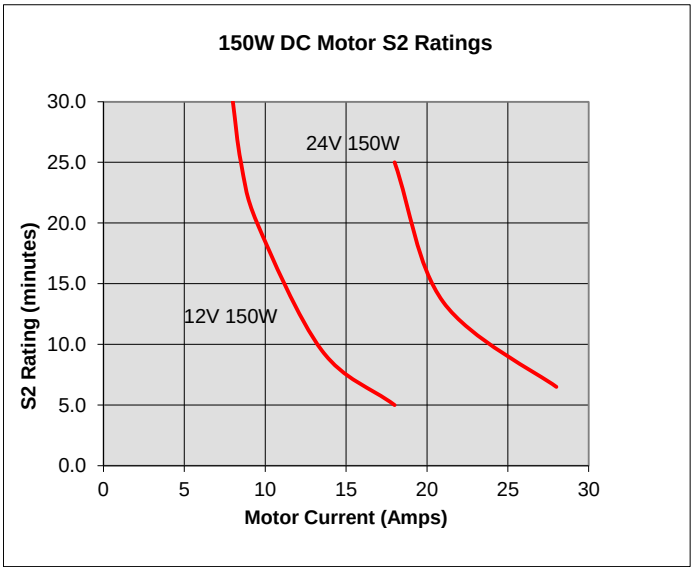
Nominal motor-pump performance at constant voltage and at nominal 20-25° C with ISO 3448/VG22

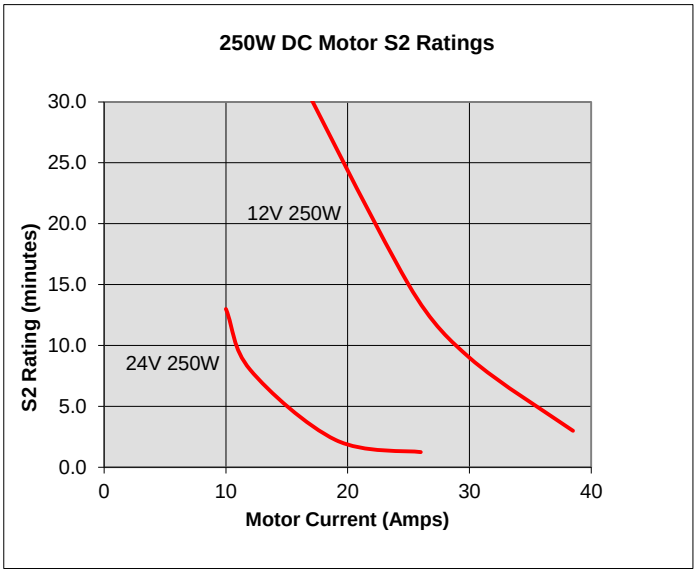






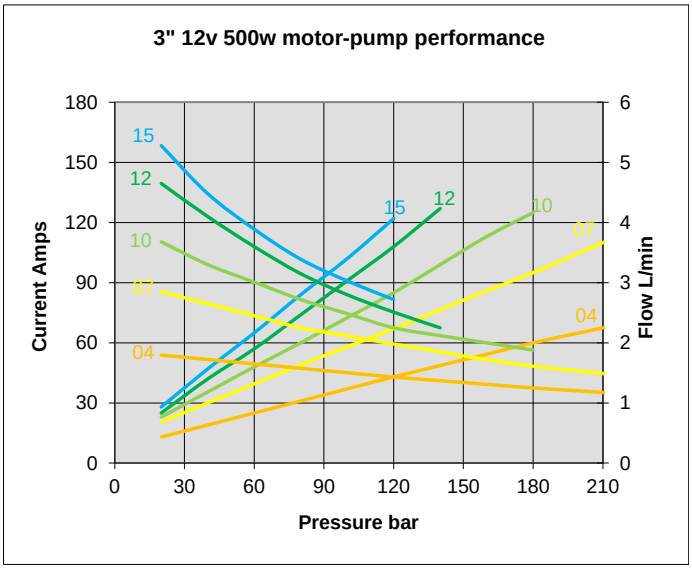


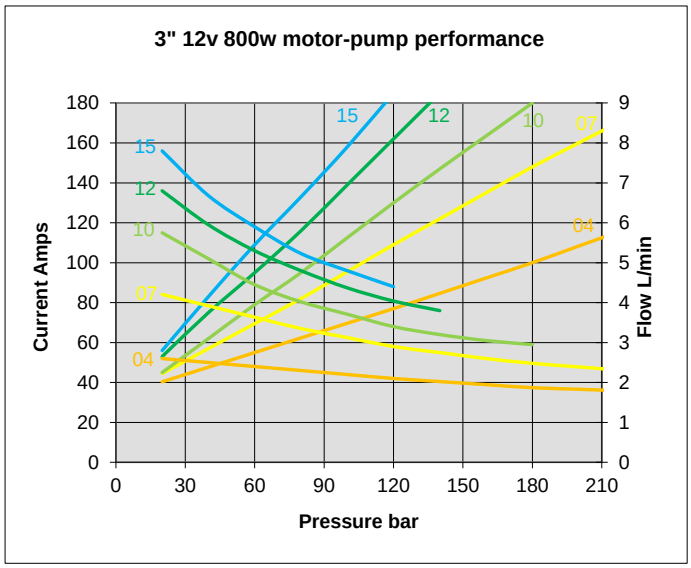


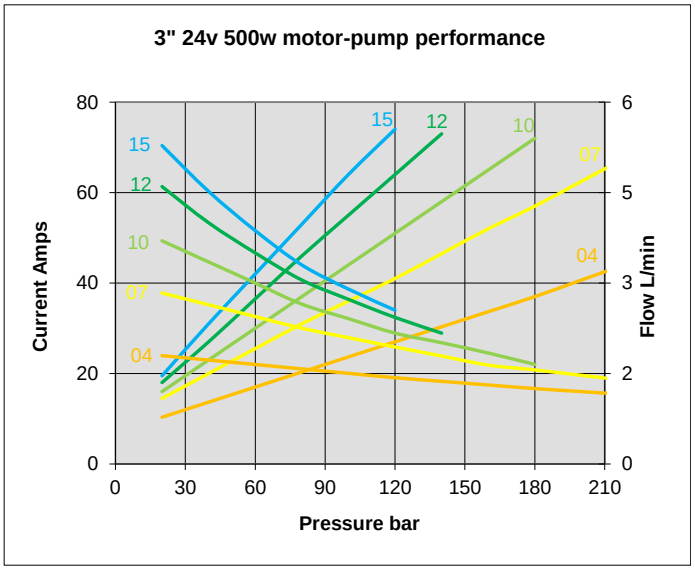


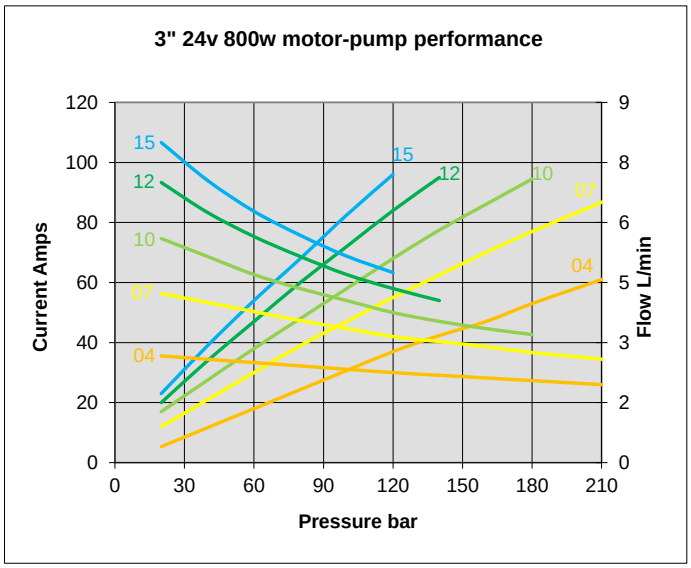
S2—Short time Duty— Maximum run time at load, followed by a time of rest to re-establish ambient temperature.

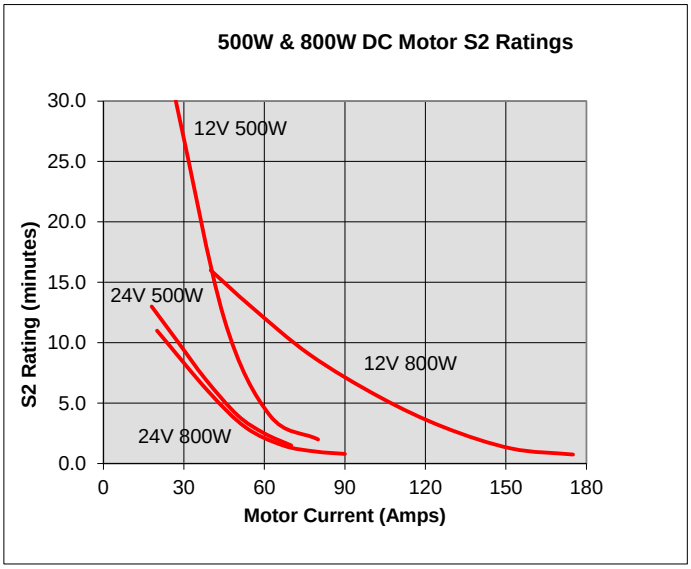
Nominal motor-pump performance at constant voltage and at nominal 20-25° C with ISO 3448/VG22











S2—Short time Duty— Maximum run time at load, followed by a time of rest to re-establish ambient temperature.

Nominal motor-pump performance at constant voltage and at nominal 20-25° C with ISO 3448/VG22