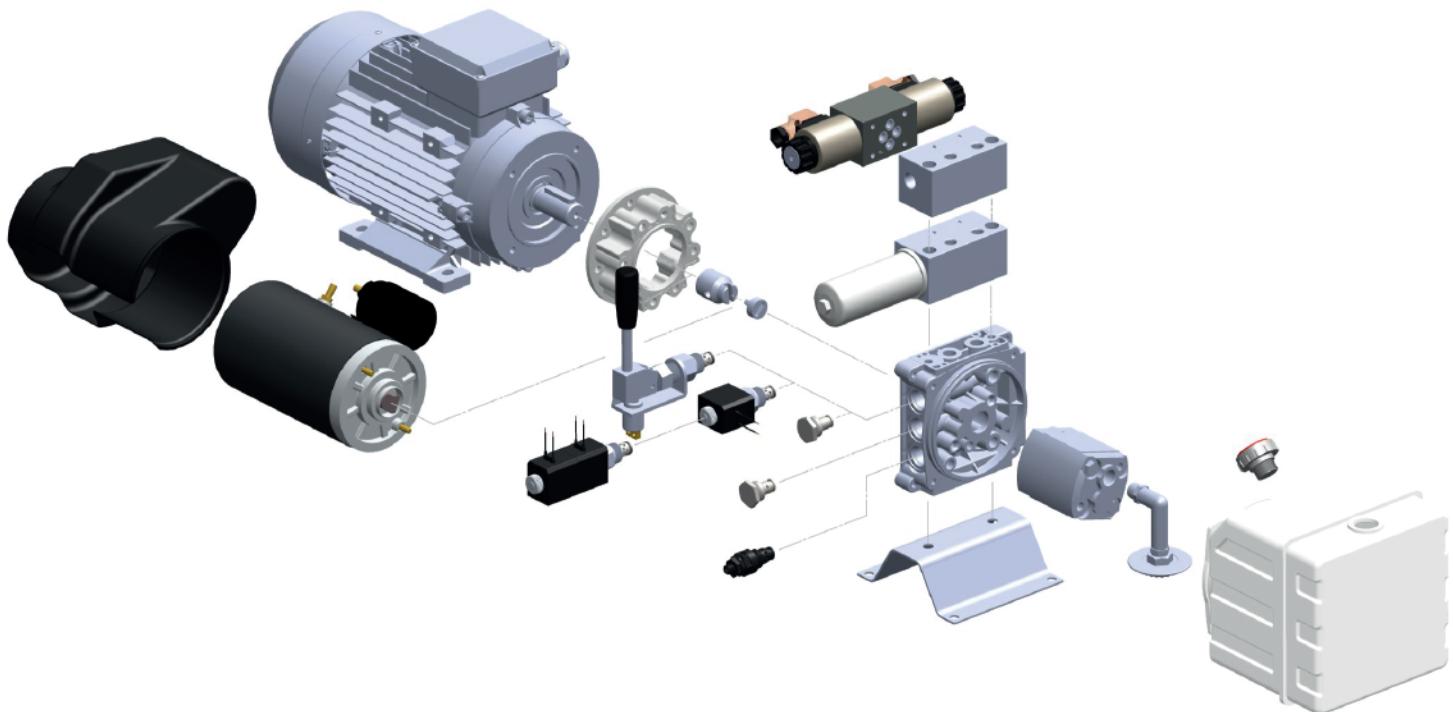




HYDRA
Mini Power Packs **PART**



Mini Power Packs

Hydra Part Mini Packs modular design offers a flexible basis for a wide range of mobile and industrial hydraulic systems. Available for AC or DC power from 0.18 to 5.5 kW in single and doubleacting formats with flows up to 30 litres/minute and pressures of 250 bar.

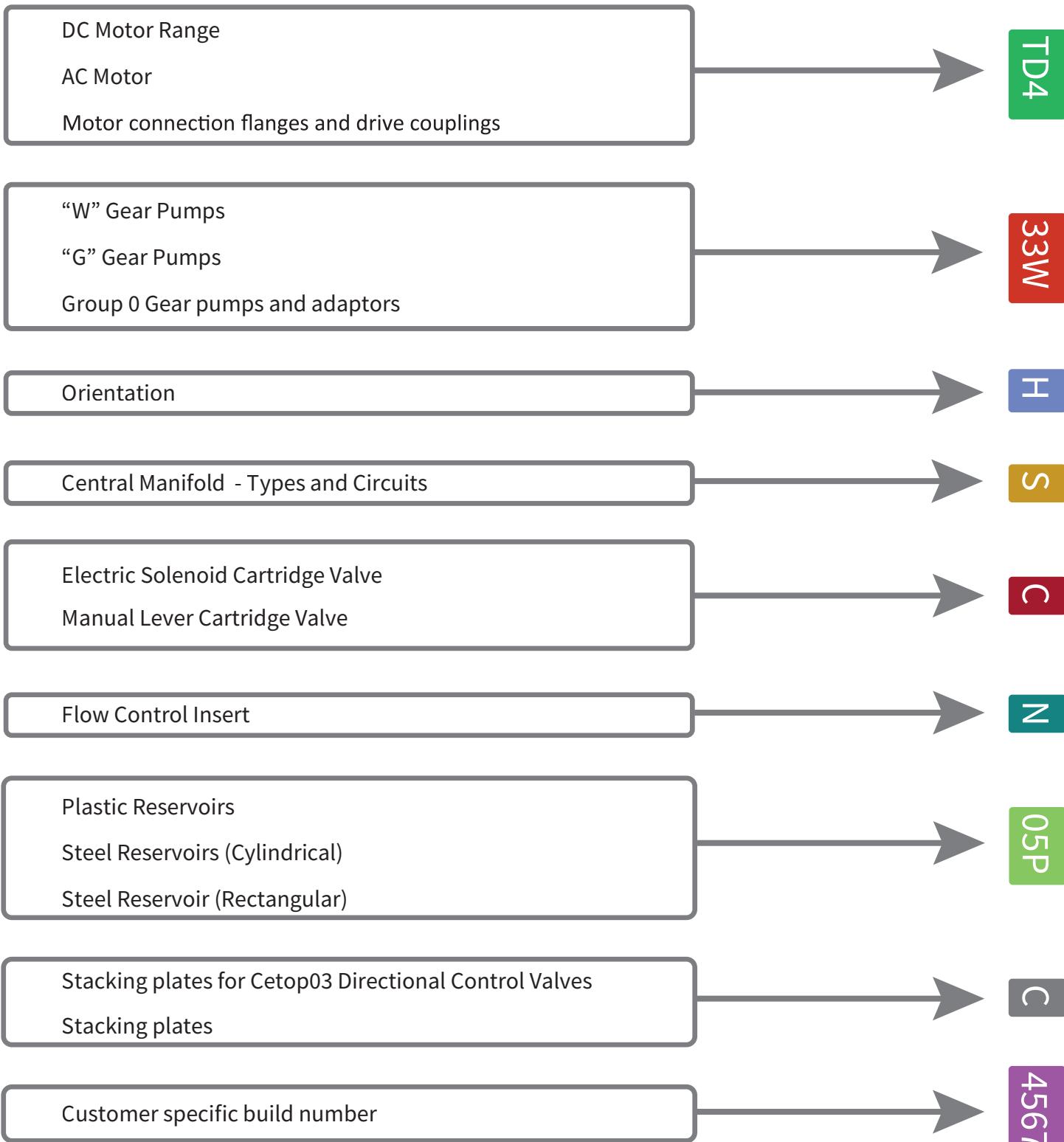
Mini Power Packs Typical Applications

- Waste Compactor/Balers
- Tipping Trucks and Trailers
- Lifts (Direct and Scissor)
- Road Blockers and Bollards
- Industrial Machines



Example of coding

HP-MINI





HYDRA
PART

DC MOTORS

HP-MINI

TD4

33W

H

S

C

N

05P

C

4567

DC Motors— 0.5kW and 0.8kW IP44

HP4143 12V 0.5kW

HP145 12V 0.8kW

HP4144 24V 0.5kW

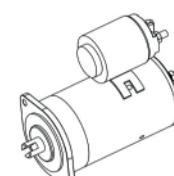
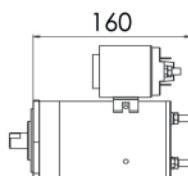
HP4146 24V 0.8kW

105

108

205

208



for performance data see page 14

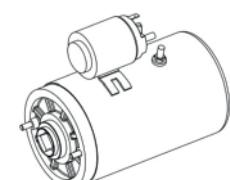
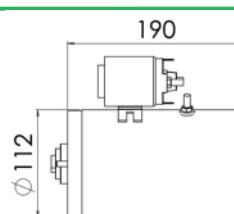
DC Motors— 1.8kW and 2kW with start switch and thermal protection IP54

HP4421-12V 1.8kW

HP4421-24V 2kW

120

220

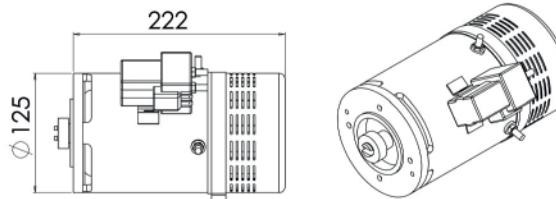


for performance data see page 15

DC Motors — 3kW Fan Cooled with heavy duty start switch IP24

EC3/2.4/35.15 + SW80

23F

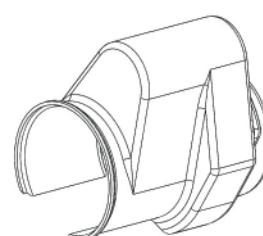


for performance data see page 16

DC MOTOR ACCESSORIES

DC Motors— Protection Cover

UP9 Clip-on Motor cover (1.8 and 2kW Motors only)

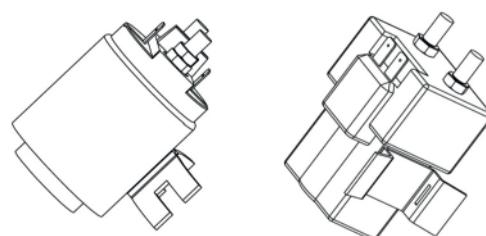


DC Motors— Start Switch

HP4454-12 12V 200Amp Start switch

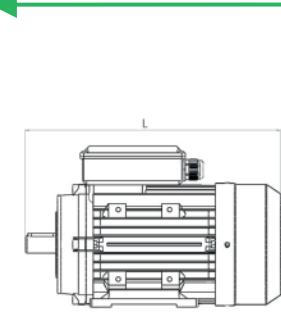
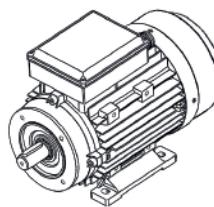
HP4454-24 24V 150 Amp Start switch

SW80 24V 250 Amp Heavy Duty Start Switch

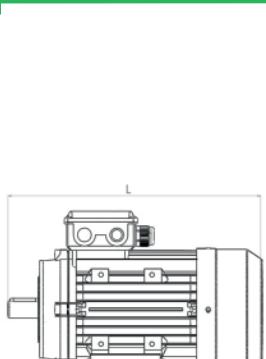
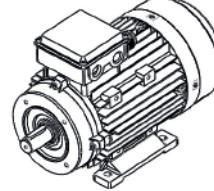


MOTOR TYPE

AC Motors — 1 phase 240V 50Hz B34 IEC

0.37kW 2pole 71 frame	L = 180	SC2	  <p>Permanent capacitor motors are preferred with a 0.5-0.9 <i>FLT starting torque</i>.</p> <p><i>Capacitor start/run motors have a high starting torque.</i></p> <p><i>All motors are aluminium body with a multi-mount feet. Insulation Class F, IP55 protection.</i></p> <p><i>IP65 options available</i></p>
0.55kW 2pole 71 frame	180	SD2	
0.75kW 2pole 80 frame	250	SE2	
1.1kW 2pole 80 frame	250	SF2	
1.5kW 2pole 80 frame *	250	SG2	
2.2kW 2pole 90 frame	285	SH2	
3.0kW 2pole 100 frame	315	SI2	
0.37kW 4pole 71 frame	180	SC4	
0.55kW 4pole 80 frame	180	SD4	
0.75kW 4pole 80 frame	250	SE4	
1.1kW 4pole 90 frame	285	SF4	
1.5kW 4pole 90 frame	285	SG4	
2.2kW 4pole 100 frame	285	SH4	
3.0kW 4pole 100 frame	285	SI4	

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

0.37kW 2pole 71 frame	L=211	TC2	  <p>Dual European voltages, up to 3kW 230/400 above 400/690V. Dual 50/60Hz rated.</p> <p><i>S1 Continuous Duty S1. Thermistors PTC.</i></p> <p><i>All motors are aluminium body with a multi-mount feet. Insulation Class F, IP55 protection.</i></p> <p><i>IP65 and Explosion proof options available</i></p>
0.55kW 2pole 71 frame *	225	TD2	
0.75kW 2pole 80 frame *	250	TE2	
1.1kW 2pole 80 frame	250	TF2	
1.5kW 2pole 80 frame *	250	TG2	
2.2kW 2pole 90 frame	317	TH2	
3kW 2pole 100 frame	309	TI2	
4kW 2pole 100 frame *	327	TJ2	
5.5kW 2pole 112 frame	335	TK2	
0.37kW 4pole 71 frame	180	TC4	
0.55kW 4pole 71 frame *	225	TD4	
0.75kW 4pole 80 frame	250	TE4	
1.1kW 4pole 80 frame	250	TF4	
1.5kW 4pole 90 frame	287	TG4	
2.2kW 4pole 90 frame *	317	TH4	
3.0kW 4pole 100 frame	285	TI4	
4.0kW 4pole 100 frame *	285	TJ4	
5.5kW 4pole 112 frame	335	TK4	

* High Output motors in a “reduced” frame size

H
P-MIN

TD4

33W

H

S

C

N

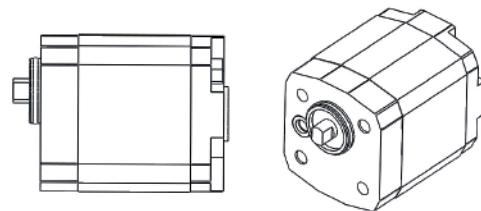
05P

C

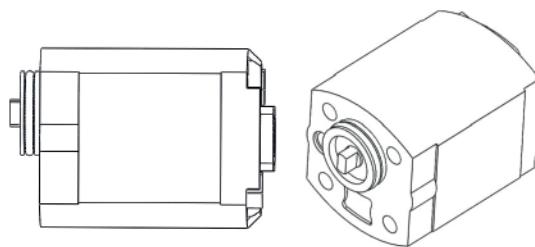
4567

HYDRAULIC PUMPS
Gear Pump group 0

Size cm ³	PMax	Type
0.25	180	02C
0.50	180	05C
0.75	250	07C


Gear Pump group 1

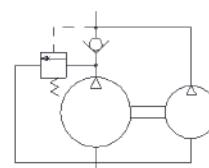
Size cm ³	P(nom)	Type	P(nom)	Type	P(peak)	Type
0.7	210	07W				
1.0	210	10W	250	10C	300	11G
1.3	210	13W	250	12C		13G
1.6	210	16W	250	16C	300	16G
2.0	210	20W	250	21C	300	21G
2.5	210	25W	250	25C	300	25G
3.3	210	33W	250	36C	280	32G
4.2	210	42W	250	42C		
4.8	210	48W	250	50C		
5.8	180	58W	210	58C		
7.8			180	78C		
8.8			150	88C		
9.8			230	98V		



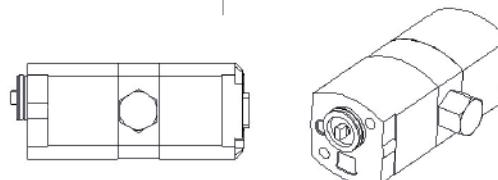
Group 1 pumps are available in three types, "W" is the standard option. Type C give higher pressures and larger displacements. Type "G" is a cast iron flanged pump for extended life in extreme applications.

Tandem Gear Pump group 1—Hi-Lo Pump

Size cm ³	Type
0.7cc+4.2cc with built-in unloading valve	4207W

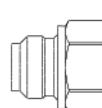


W pumps have a built-in valve to unload the rear pump at low pressure, the high pressure front pump is set by the power pack relief valve.


HYDRAULIC PUMP ACCESORIES
Pump Accessories
Buffer Valve

By-pass valve enables the pump to start offload when using a Permanent capacitor motor. 3/8" BSP

www.hydrapart.com



4567

C

05P

H

S

C

N

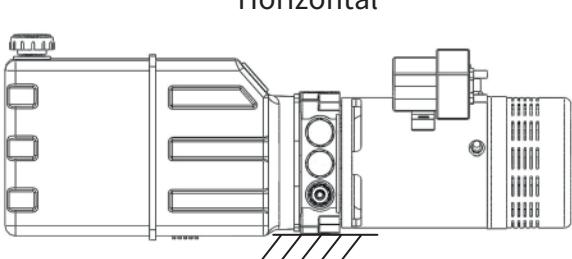
TD4

HP-MINI

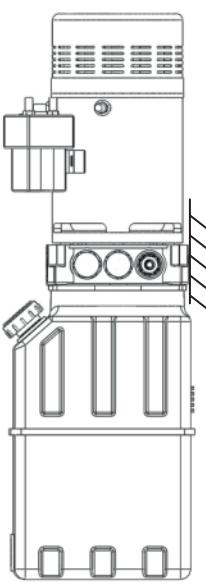
MOUNTING

Orientation

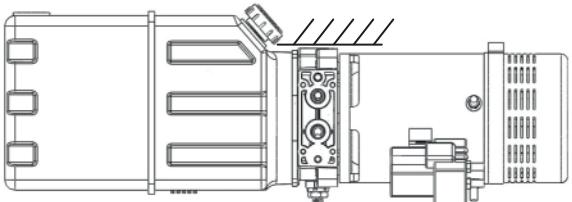
Position	Type			
Horizontal	H			
Vertical	V			
Bulkhead	B			
Underneath	U			



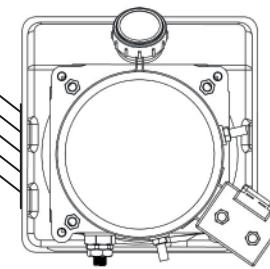
Horizontal



Vertical



Underneath

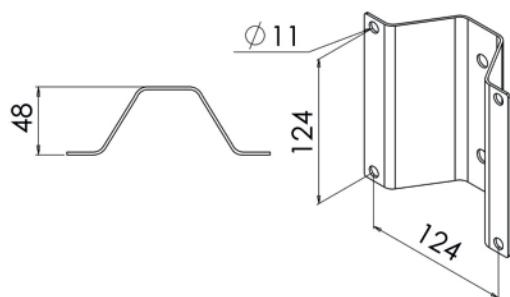


Bulkhead

ACCESORIES

Mounting Bracket

HP150015 Mounting Bracket



Orientation

Manifold

- | | |
|--|--------|
| 1/4" BSP with Group1 Pump | Type S |
| 1/4" BSP with Group0 Pump | Type P |
| 3/8" BSP with Group1 Pump | Type R |
| 1/4" BSP Double Acting for Cartridge Valve | Type D |


 Type

HP-MINI

TD4

33W

H

S

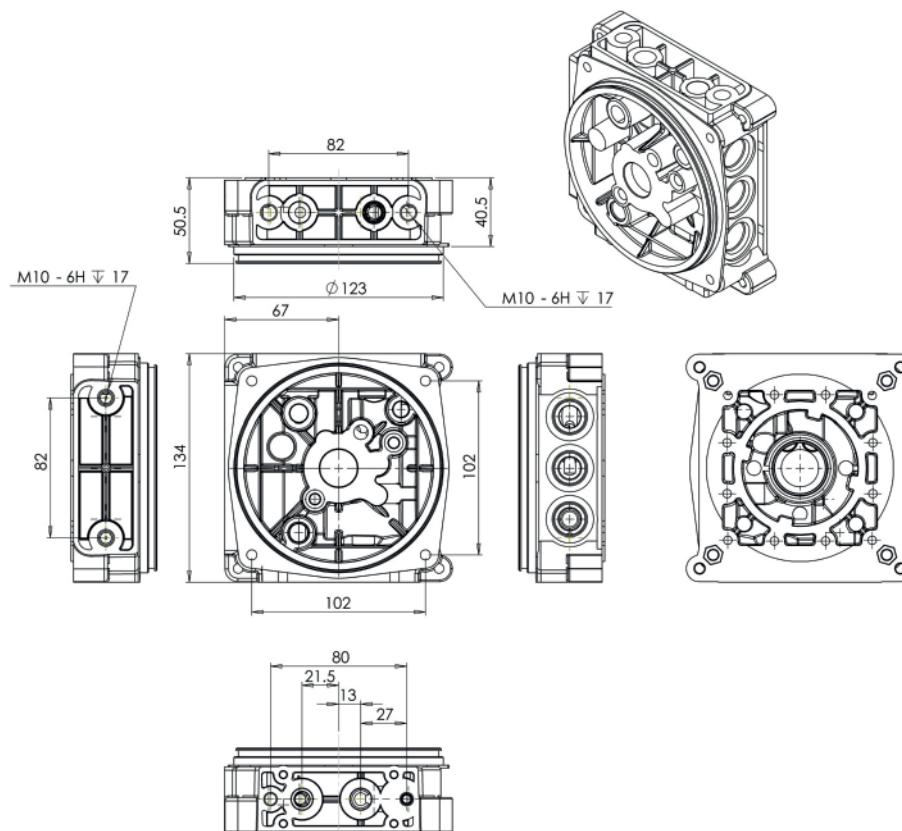
C

N

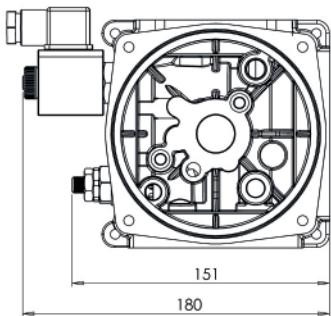
05P

C

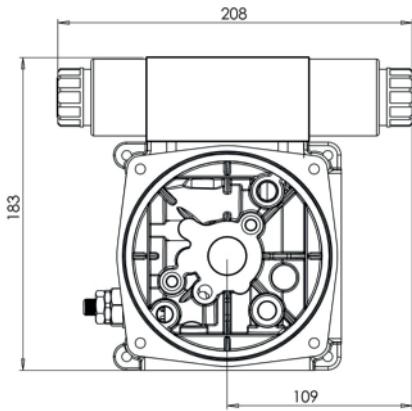
4567



Single Acting Solenoid Valve

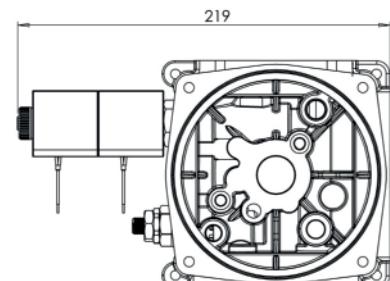


Double Acting with NG6 Valve



Double Acting with Solenoid

Cartridge Valve



Single Acting Cartridge Valve

HP-MINI

TD4

33W

H

S

C

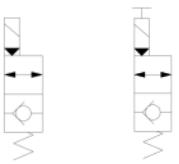
N

05P

C

4567

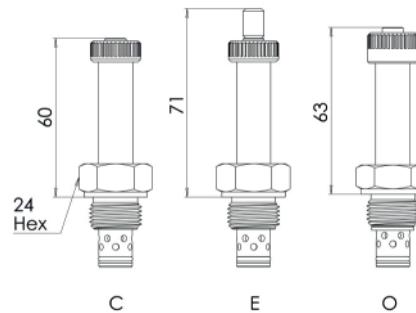
Solenoid Operated



Description

Normally Closed Poppet	Type C
Normally Closed Poppet with Emergency Override	Type E
Normally Open Poppet—use 22Watt coils only	Type O

Type



Solenoid Coils

Description

18W with Flying leads

18Watt with DIN connector

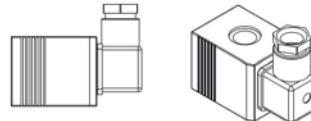
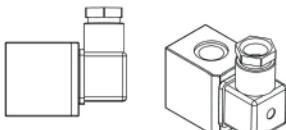
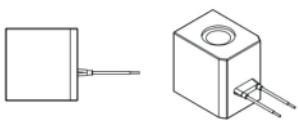
22Watt with DIN connector

Voltages

12VDC, 24VDC

12VDC, 24VDC, 24VAC, 110VAC, 240VAC

12VDC, 24VDC, 24VAC, 110VAC, 240VAC

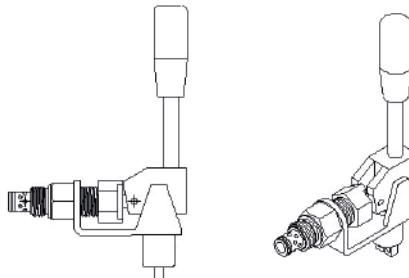


Lever Operated

Description

Normally Closed with Microswitch

Type



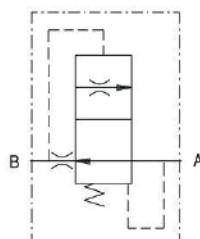
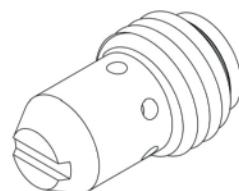
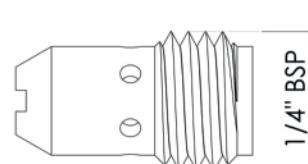
Flow Control Insert

Pressure Compensated Fixed Flow Insert

Description

VSCF01— 1 l/min	1
VSCF02— 2 l/min	2
VSCF03— 3 l/min	3
VSCF04— 4 l/min	4
VSCF05— 5 l/min	5
VSCF06— 6 l/min	6
VSCF07— 7 l/min	7
VSCF08— 8 l/min	8
VSCF09— 9 l/min	9
VSCF010— 10 l/min	10

Type



Steel Oil Tank

Cylindrical

HP-MINI

TD4

33W

H

S

C

N

05P

C

4567

Description	Length	Type
1 Litre Steel	139	01S
2 Litre Steel	218	02S

4 Litre Steel	235	04S
5 Litre Steel	270	05S
8 Litre Steel	380	08S

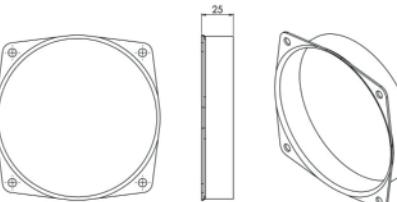
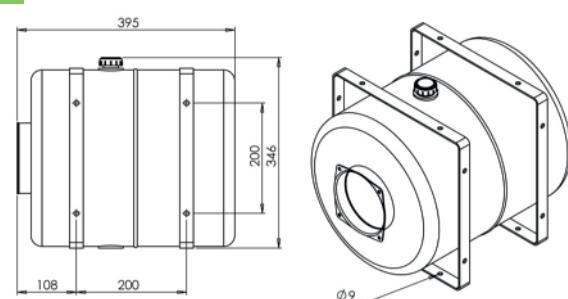
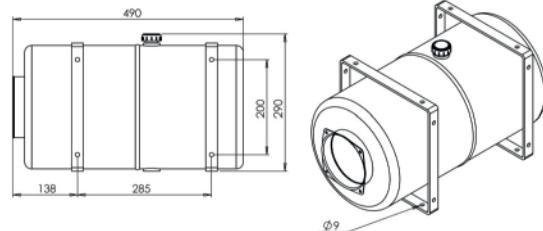
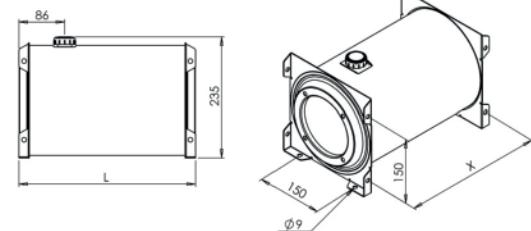
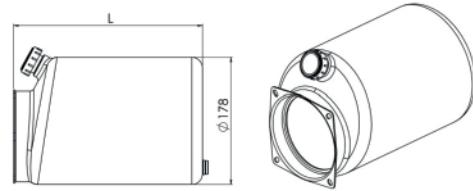
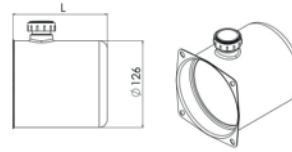
10 Litre Steel	X=322	340	10S
15 Litre Steel	X=472	490	15S

23 Litre Steel	23S
----------------	-----

30 Litre Steel	30S
----------------	-----

Weld Collar	NWC
-------------	-----

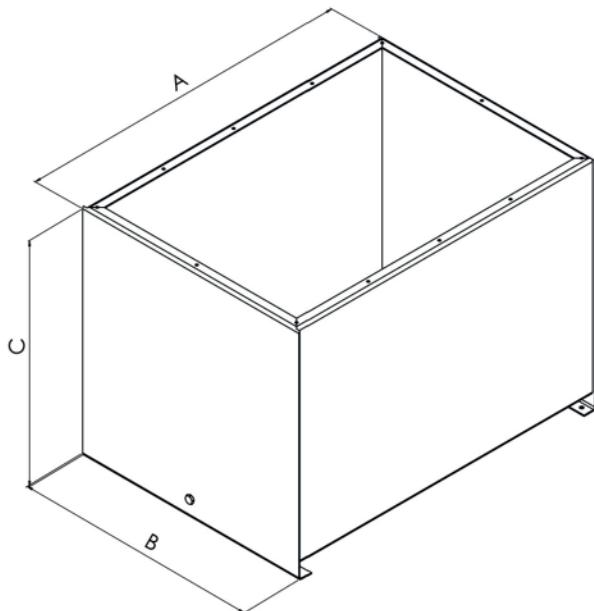
Accessories



Steel Oil Tank

Rectangular

Description	A	B	C	Type
12 Litre	335	270	290	12C
16 Litre	410	325	305	16C
30 Litre	470	375	335	30C
55 Litre	600	470	365	55C

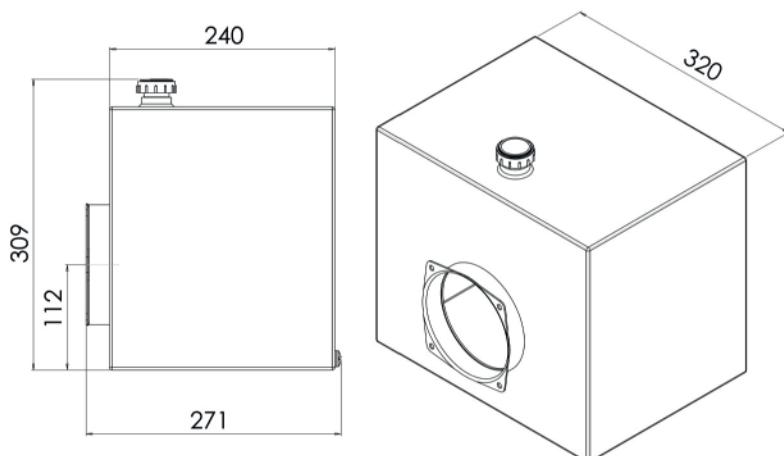


*Powerpacks are fitted to the lid of these tanks.
For details on the position and orientation
please contact our sales team.*

These tanks are finished in zinc rich primer as standard.

18 Litre Steel

18S



HP-MINI

TD4

33W

H

S

C

N

05P

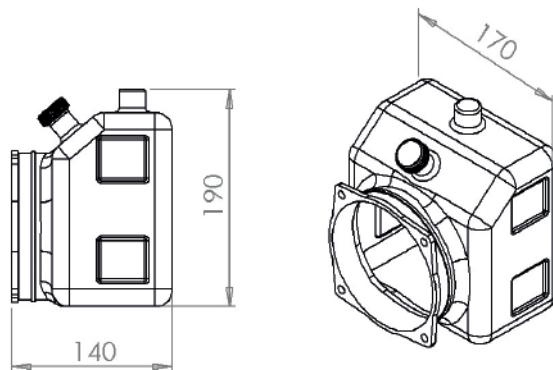
C

4567

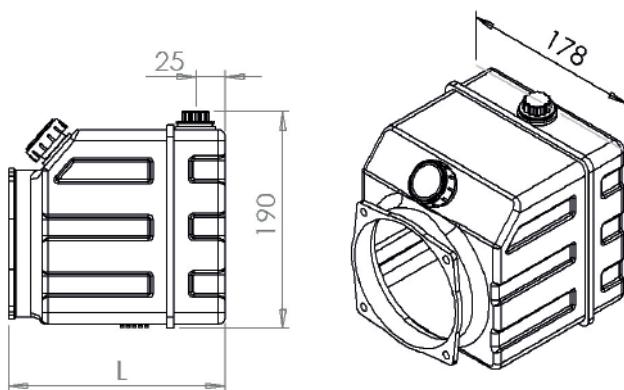
Plastic Oil Tank

Rectangular

Description	Length	Type
1.5 Litre Plastic		01P



3 Litre Plastic	190	03P
5 Litre Plastic	285	05P
8 Litre Plastic	432	08P



Accessories

HP-MINI

TD4

33W

H

S

C

N

05P

C

4567



Stacking Plates

For any additional valve stacking plates, use "C" in part code

Cetop03 (NG6) Directional Control Valve Plates

Description

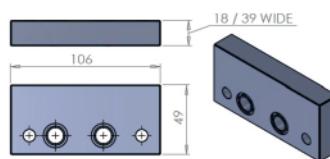
Part Number

Spacer plate 18mm

HP050040-1

Spacer plate 39mm

HP050040-2



Parallel connection Cetop03 with 1/4"BSP ports

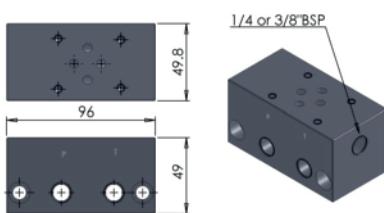
HP050015

Parallel connection Cetop03 with 3/8"BSP ports

HP050016

Series connection Cetop03 with 1/4"BSP ports

HP050128



Pilot Check Valve on A&B with 3/8"BSP ports

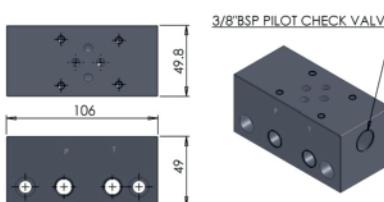
HP150014-AB

Pilot Check Valve on A only with 3/8"BSP ports

HP150014-A

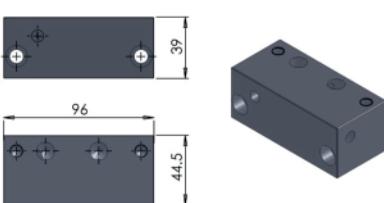
Pilot Check Valve on B only with 3/8"BSP ports

HP150014-B

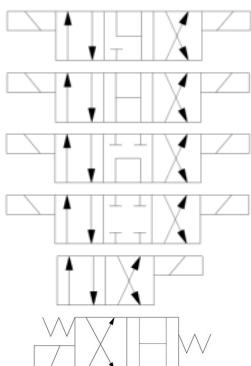


Vertical to Horizontal Conversion block

HP050129



Valve diagram



Code

HP-4-DWG-6-J

HP-4-DWG-6-H

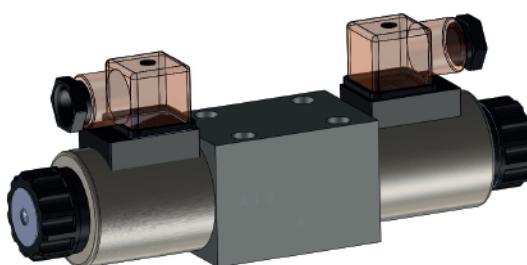
HP-4-DWG-6-G

HP-4-DWG-6-E

HP-4-DWG-6-D

HP-4-DWG-6-HA

C3 Valves



Voltages available 12VDC, 24VDC, 24VAC, 110VAC, 220VAC
Push and Twist Manual Overrides also available

Working pressure (Max)

315bar

Flow (Max)

40l/min

HP-MINI

TD4

33W

H

S

C

N

05P

C

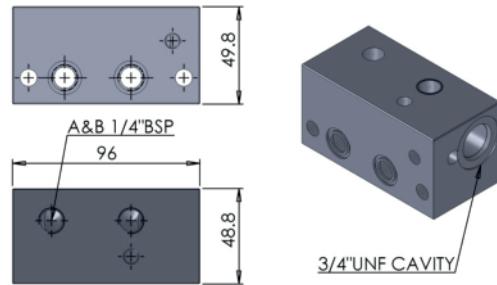
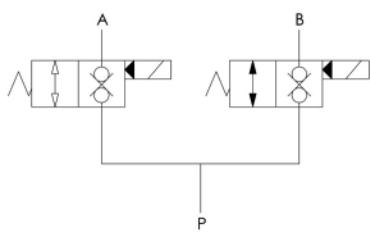
4567

Stacking Plates

For any additional valve stacking plates, use "C" in part code

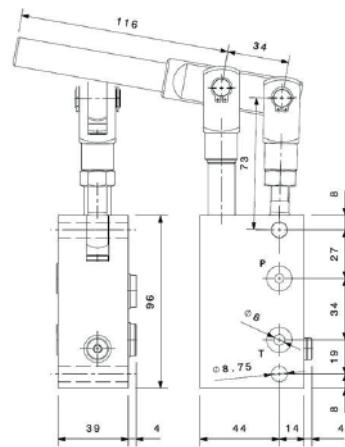
Plates with Solenoid Directional Control Valve Cartridges

Description	Part Number
Manifold for dual—Single Acting circuits	HP150126



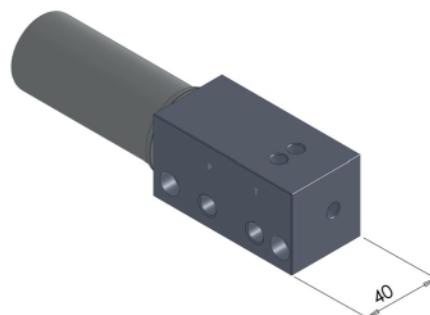
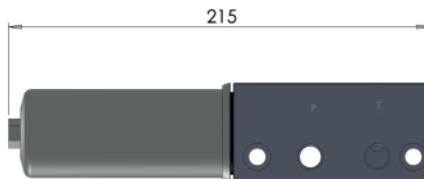
Hand Pump 8cc

BMO07200



Return Filter - 15 lpm max

HPV5281



HP-MINI

TD4

33W

H

S

C

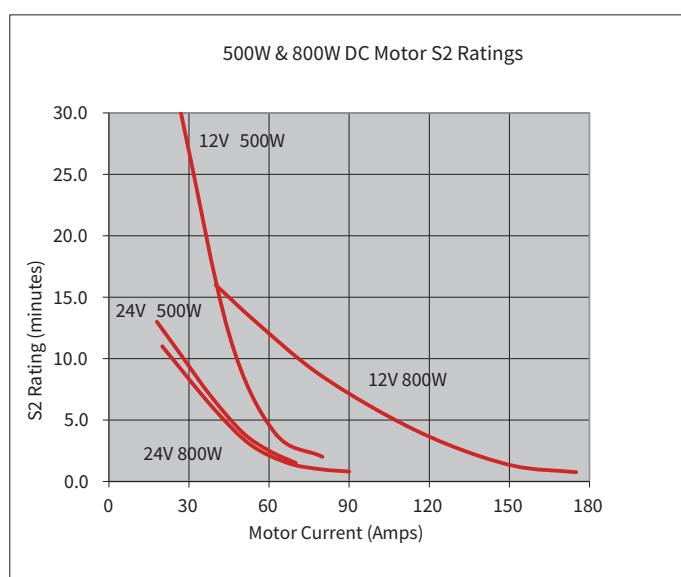
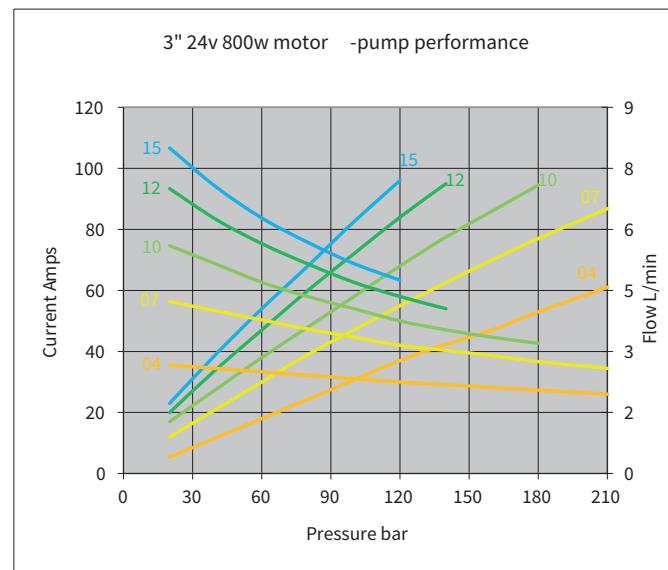
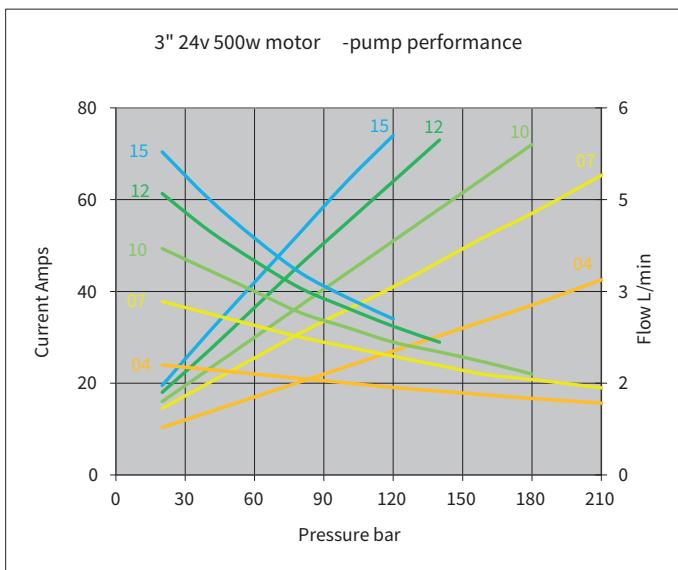
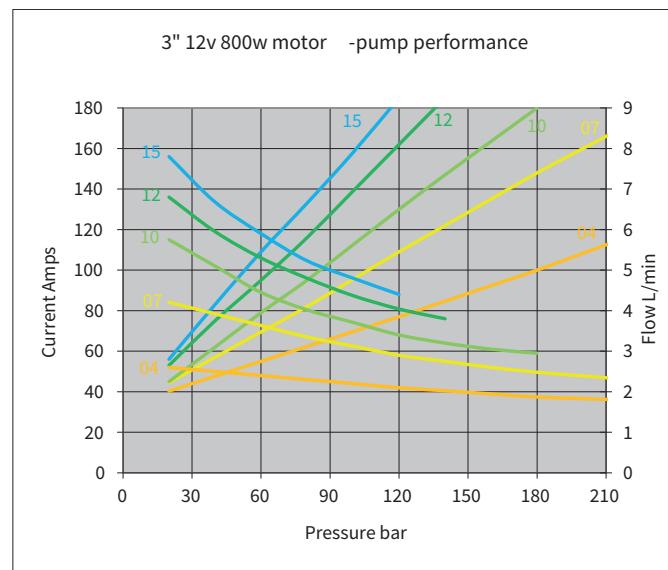
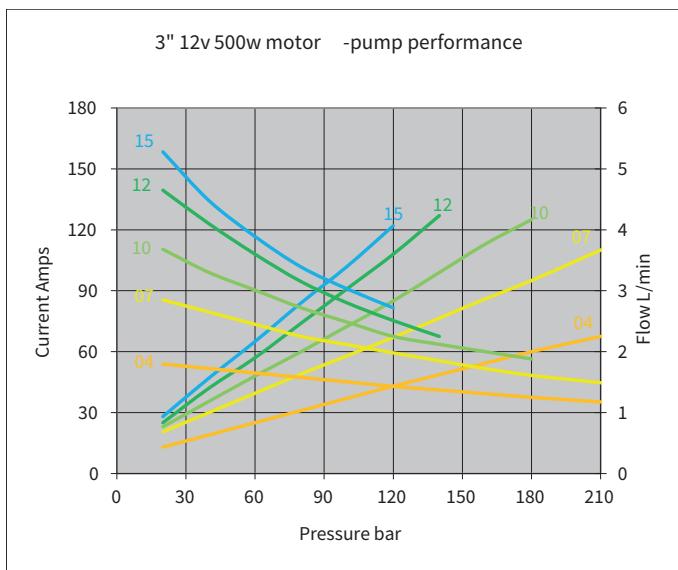
N

05P

C

4567

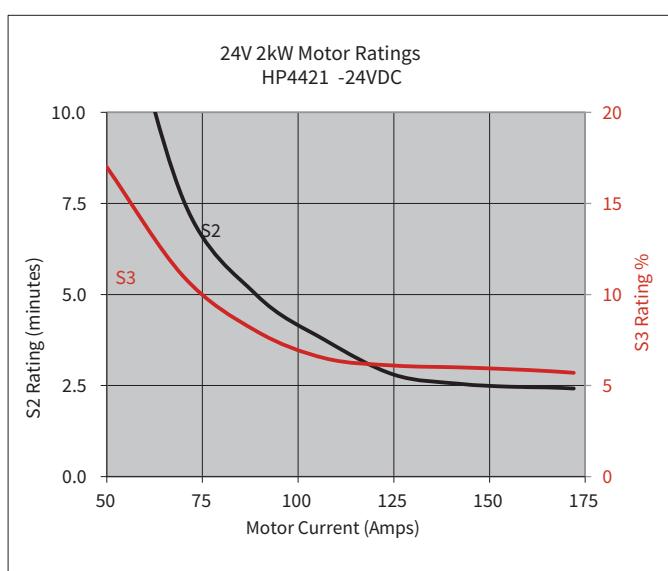
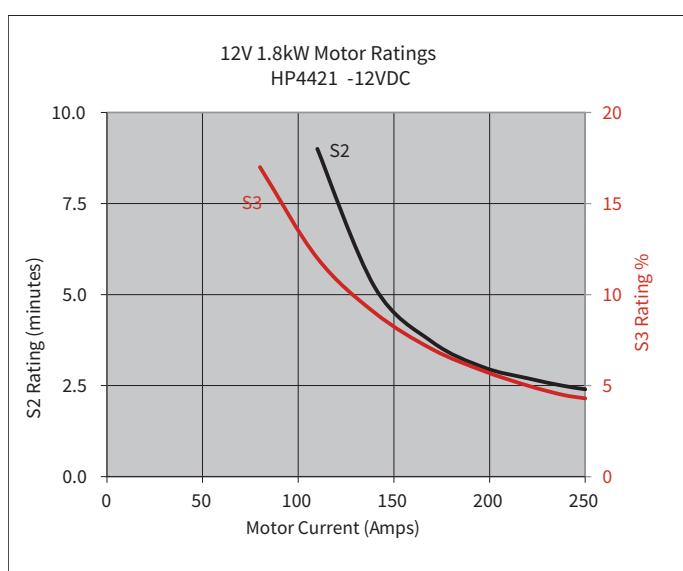
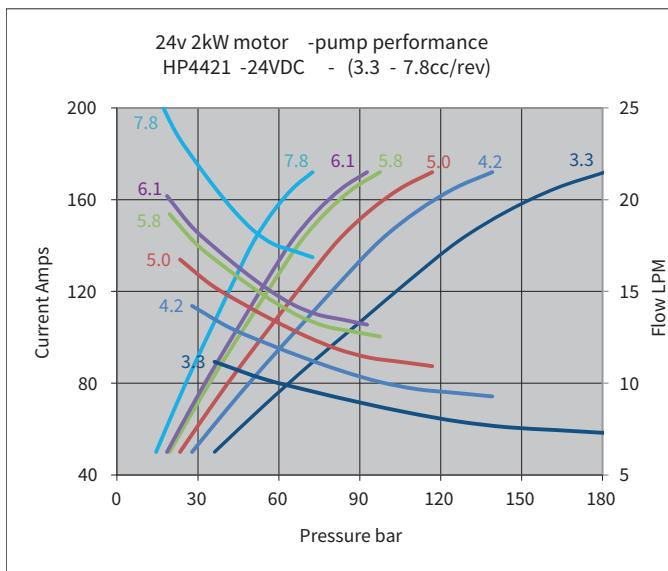
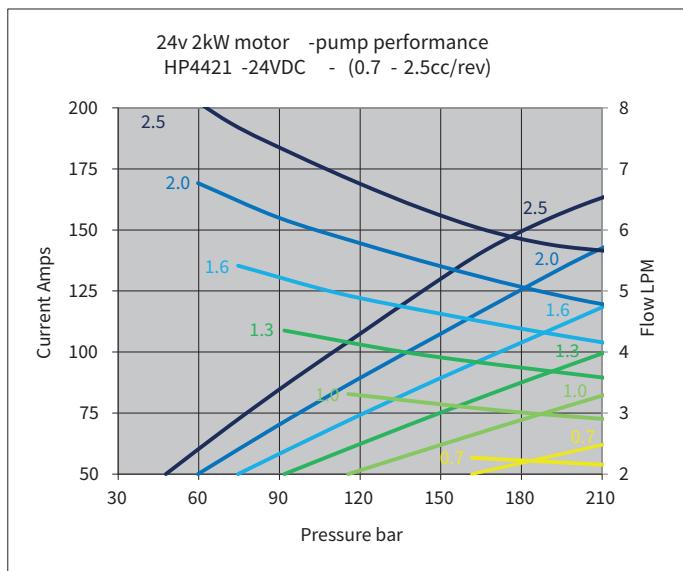
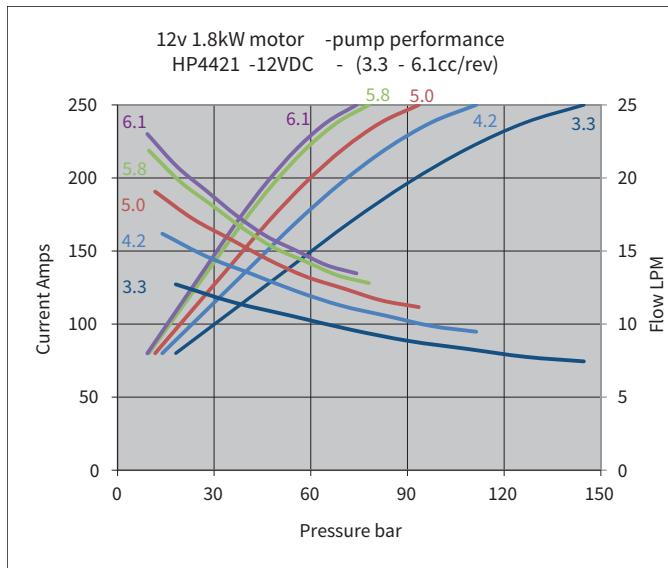
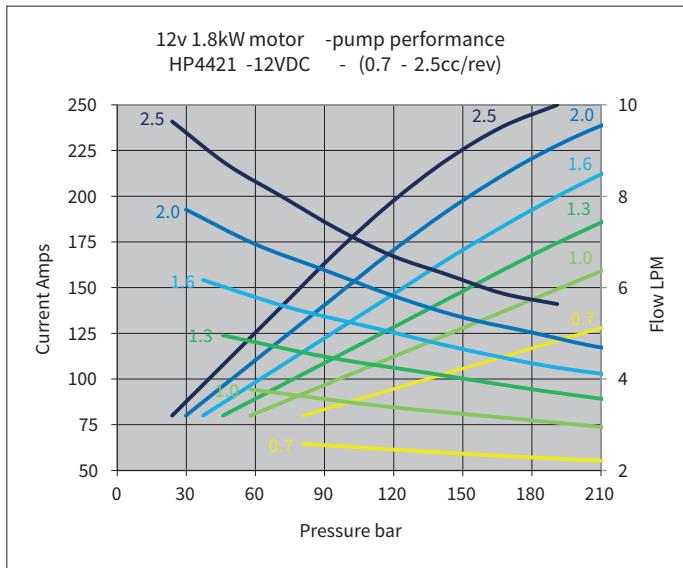
Nominal motor-pump performance at constant voltage and at nominal 20 - 25° C with ISO 3448/VG22





Hydra Part Mini Powerpacks

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



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

