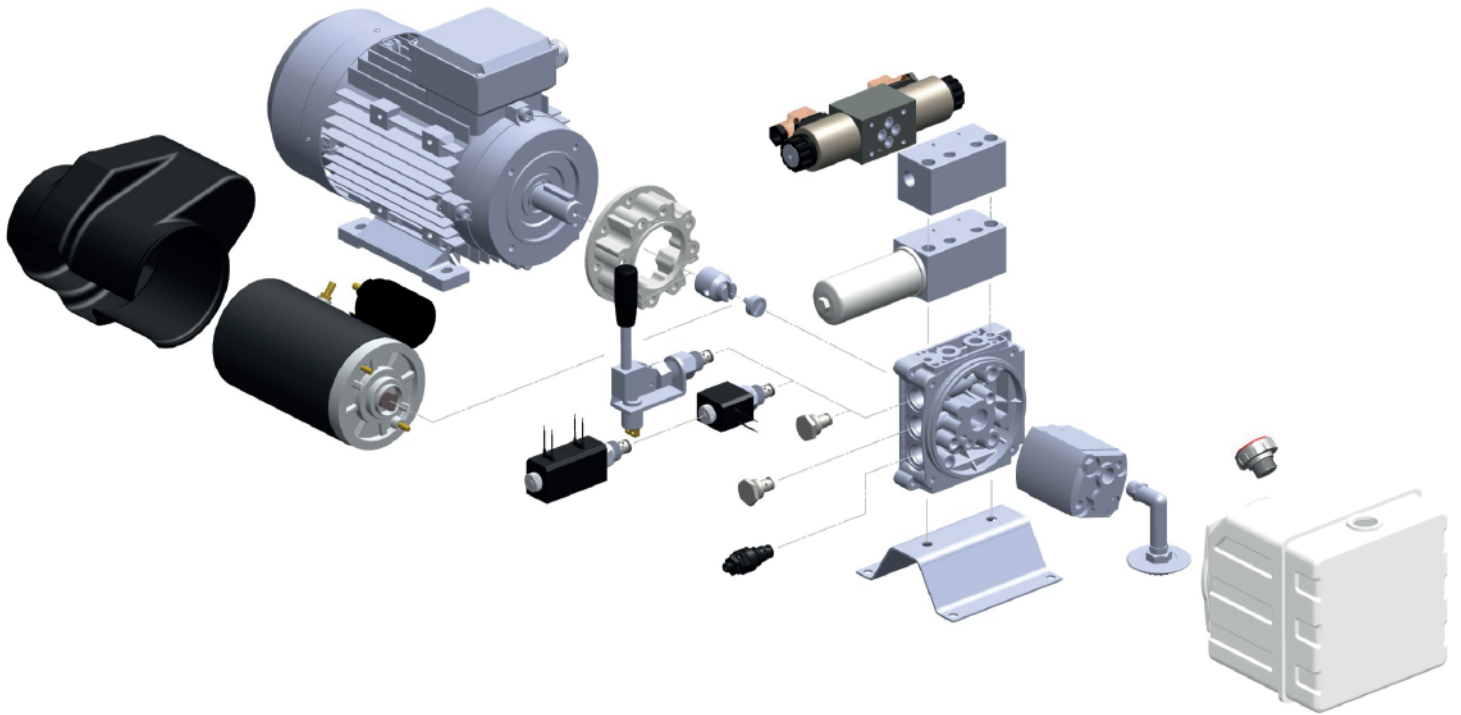




HYDRA

Mini Power Packs

PART



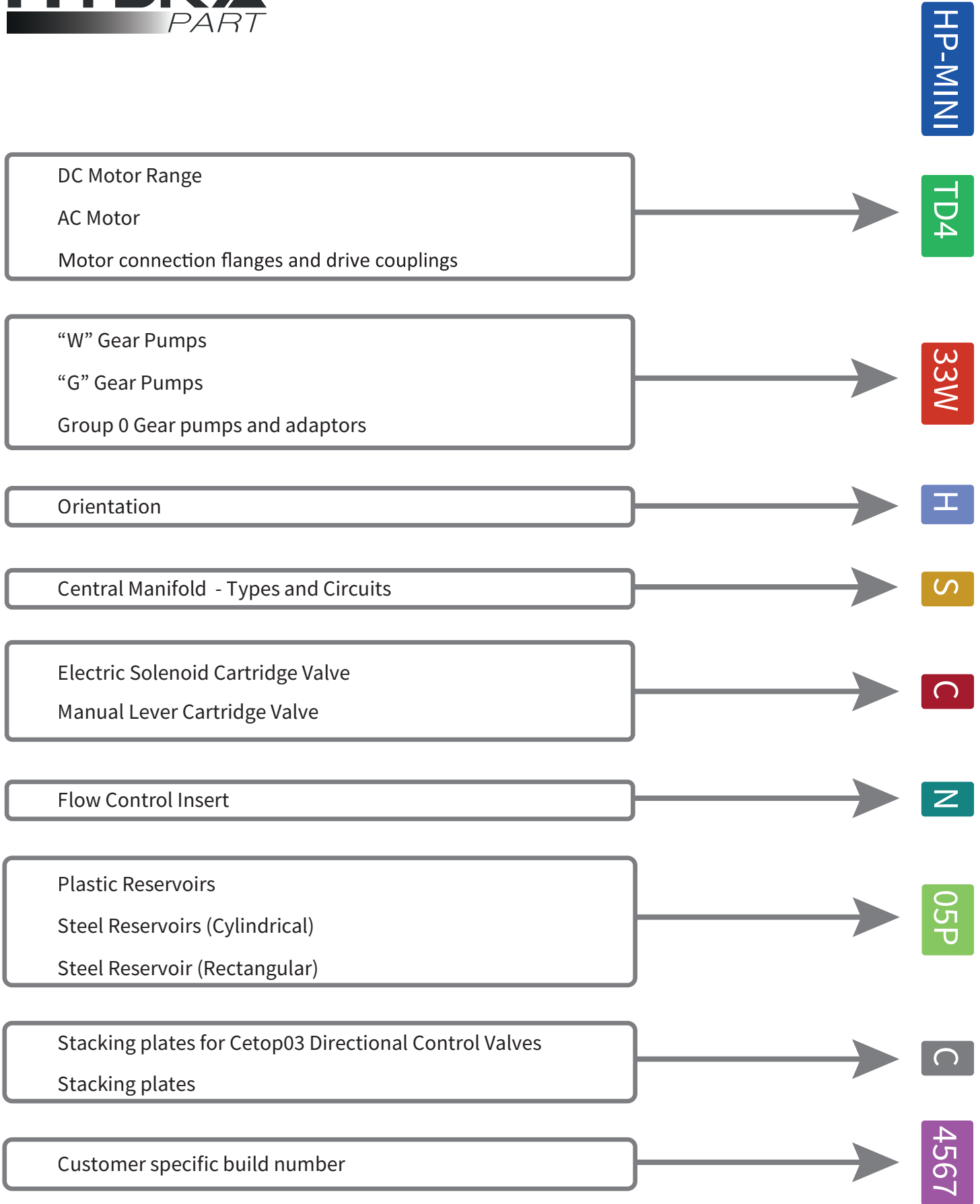
Mini Power Packs

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

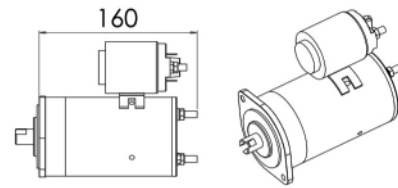
- Waste Compactor/Balers
- Tipping Trucks and Trailers
- Lifts (Direct and Scissor)
- Road Blockers and Bollards
- Industrial Machines

Example of coding



DC Motors— 0.5kW and 0.8kW IP44

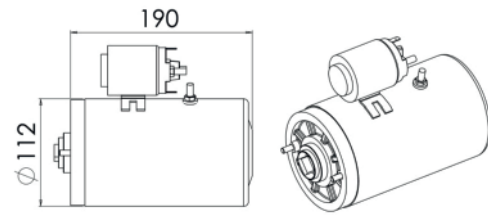
HP4143 12V 0.5kW	105
HP145 12V 0.8kW	108
HP4144 24V 0.5kW	205
HP4146 24V 0.8kW	208



for performance data see page 14

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

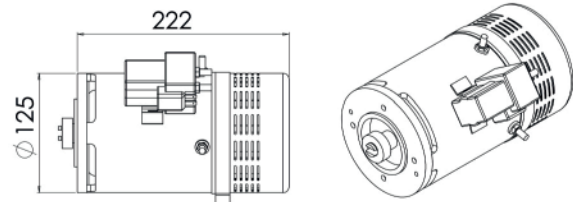
HP4421-12V 1.8kW	120
HP4421-24V 2kW	220



for performance data see page 15

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

EC3/2.4/35.15 + SW80	23F
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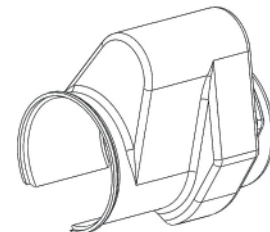


for performance data see page 16

DC MOTOR ACCESSORIES

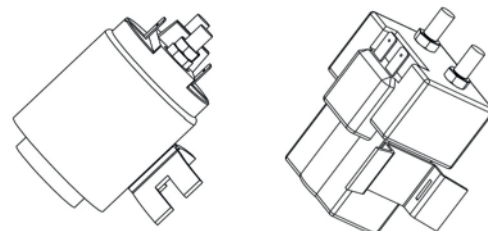
DC Motors— Protection Cover

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



DC Motors— Start Switch

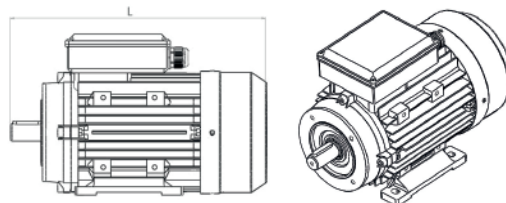
HP4454-12 12V 200Amp Start switch
HP4454-24 24V 150 Amp Start switch
SW80 24V 250 Amp Heavy Duty Start Switch



MOTOR TYPE

AC Motors — 1 phase 240V 50Hz B34 IEC

0.37kW 2pole 71 frame	L = 180	SC2
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



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

Capacitor start/run motors have a high starting torque.

All motors are aluminium body with a multi-mount feet. Insulation Class F, IP55 protection.

IP65 options available

HP-MINI

TD4

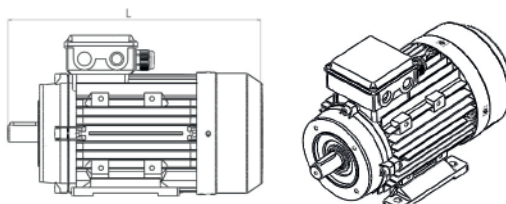
33W

H

S

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

0.37kW 2pole 71 frame	L=211	TC2
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



Dual European voltages, up to 3kW 230/400 above 400/690V. Dual 50/60Hz rated.

S1 Continuous Duty S1. Thermistors PTC.

All motors are aluminium body with a multi-mount feet. Insulation Class F, IP55 protection.

IP65 and Explosion proof options available

C

N

05P

C

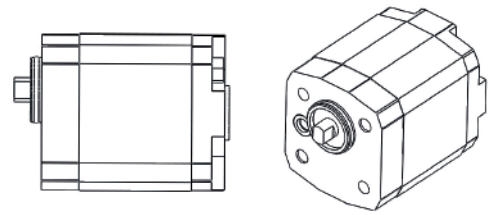
4567

* High Output motors in a “reduced” frame size

HYDRAULIC PUMPS

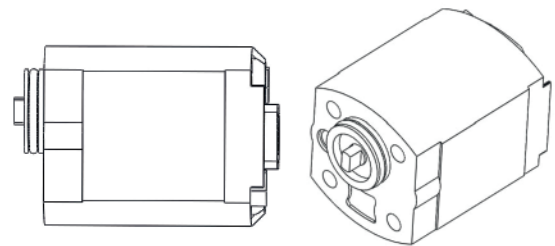
Gear Pump group 0

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		

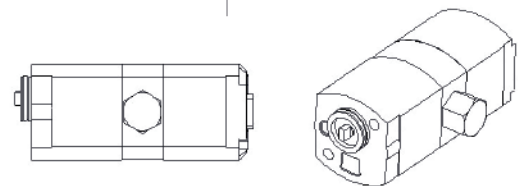
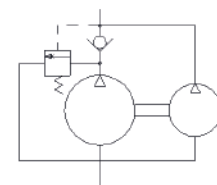


Group 1 pumps are available in three types, "W" is the standard option. Type C give higher pressures and larger displacements. Type "G" is a cast iron flanged pump for extended life in extreme applications.

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

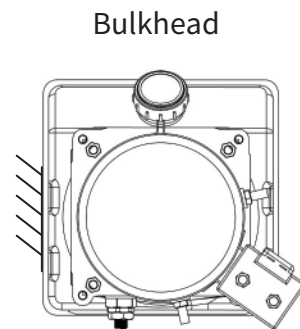
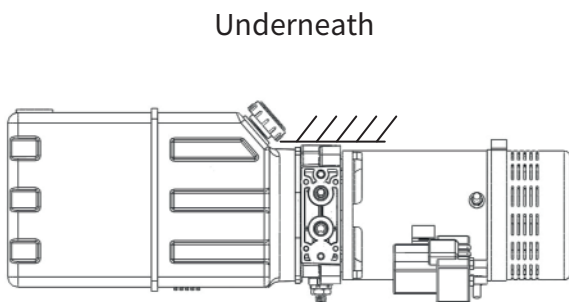
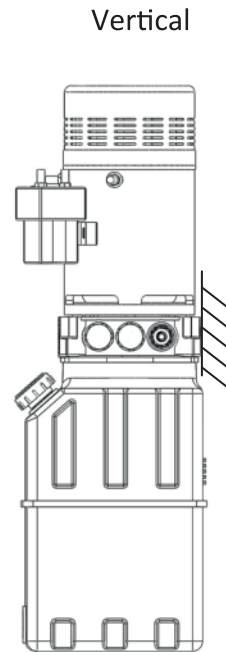
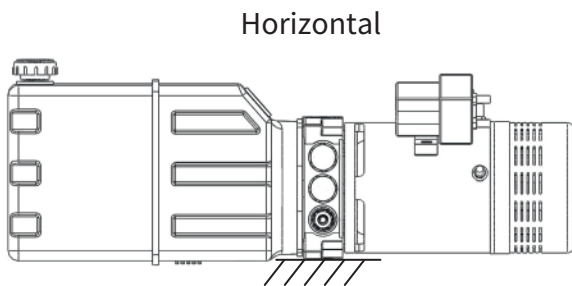


MOUNTING

Orientation

Position	Type
Horizontal	H
Vertical	V
Bulkhead	B
Underneath	U

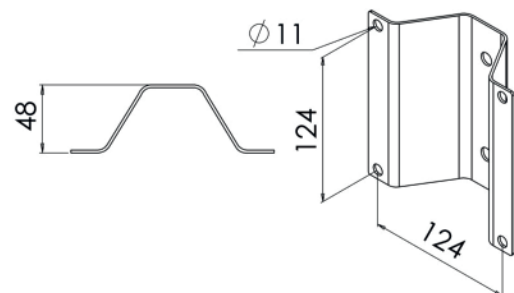
- HP-MINI
- TD4
- 33W
- H
- S
- C
- N
- 05P
- C
- 4567



ACCESORIES

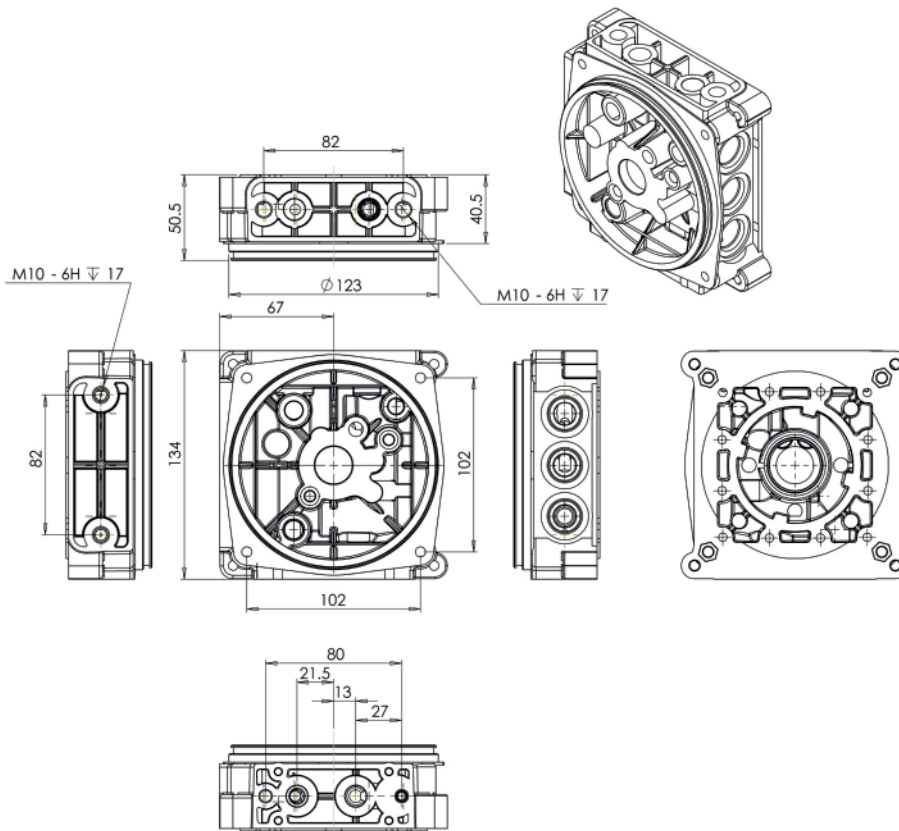
Mounting Bracket

HP150015 Mounting Bracket

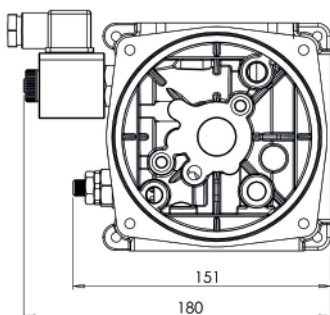


Orientation

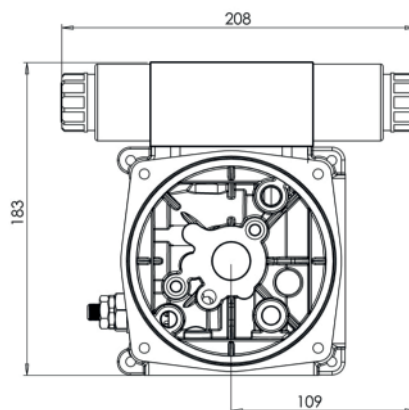
Manifold	Type
1/4" BSP with Group1 Pump	S
1/4" BSP with Group0 Pump	P
3/8" BSP with Group1 Pump	R
1/4" BSP Double Acting for Cartridge Valve	D



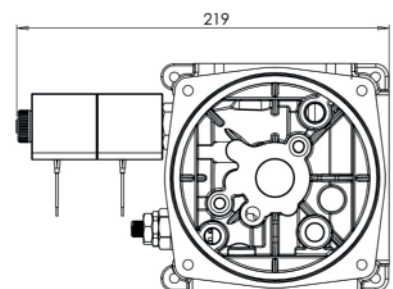
Single Acting Solenoid Valve



Double Acting with NG6 Valve



Double Acting with Solenoid Cartridge Valve



HP-MINI

TD4

33W

H

S

C

N

05P

C

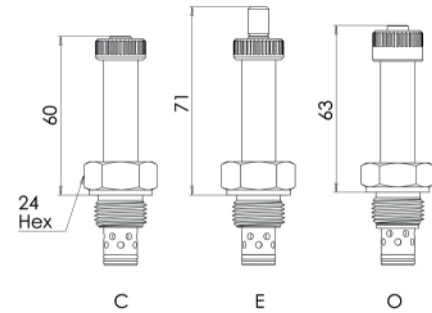
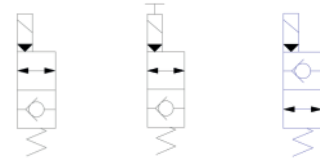
4567

Single Acting Cartridge Valve

Solenoid Operated

Description

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

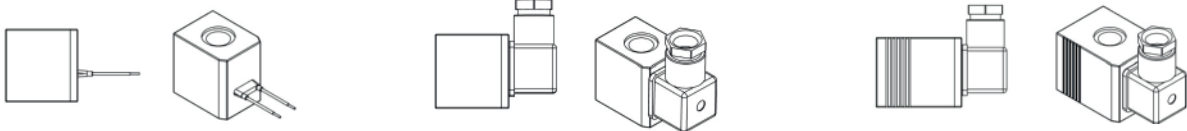


Solenoid Coils

Description

Voltages

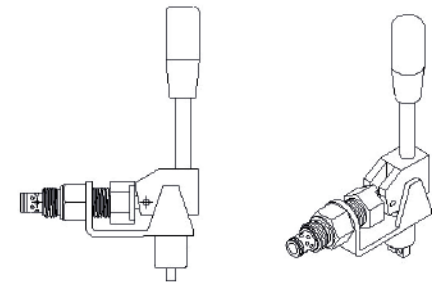
18W with Flying leads	12VDC, 24VDC
18Watt with DIN connector	12VDC, 24VDC, 24VAC, 110VAC, 240VAC
22Watt with DIN connector	12VDC, 24VDC, 24VAC, 110VAC, 240VAC



Lever Operated

Description

Description	Type
Normally Closed with Microswitch	L

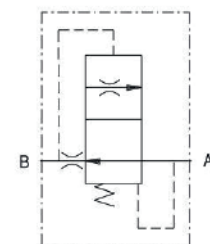
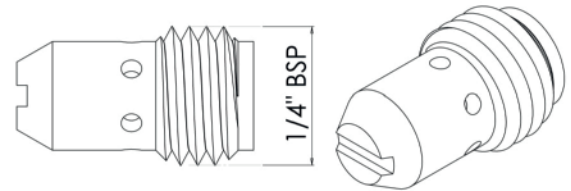


Flow Control Insert

Pressure Compensated Fixed Flow Insert

Description

Description	Type
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

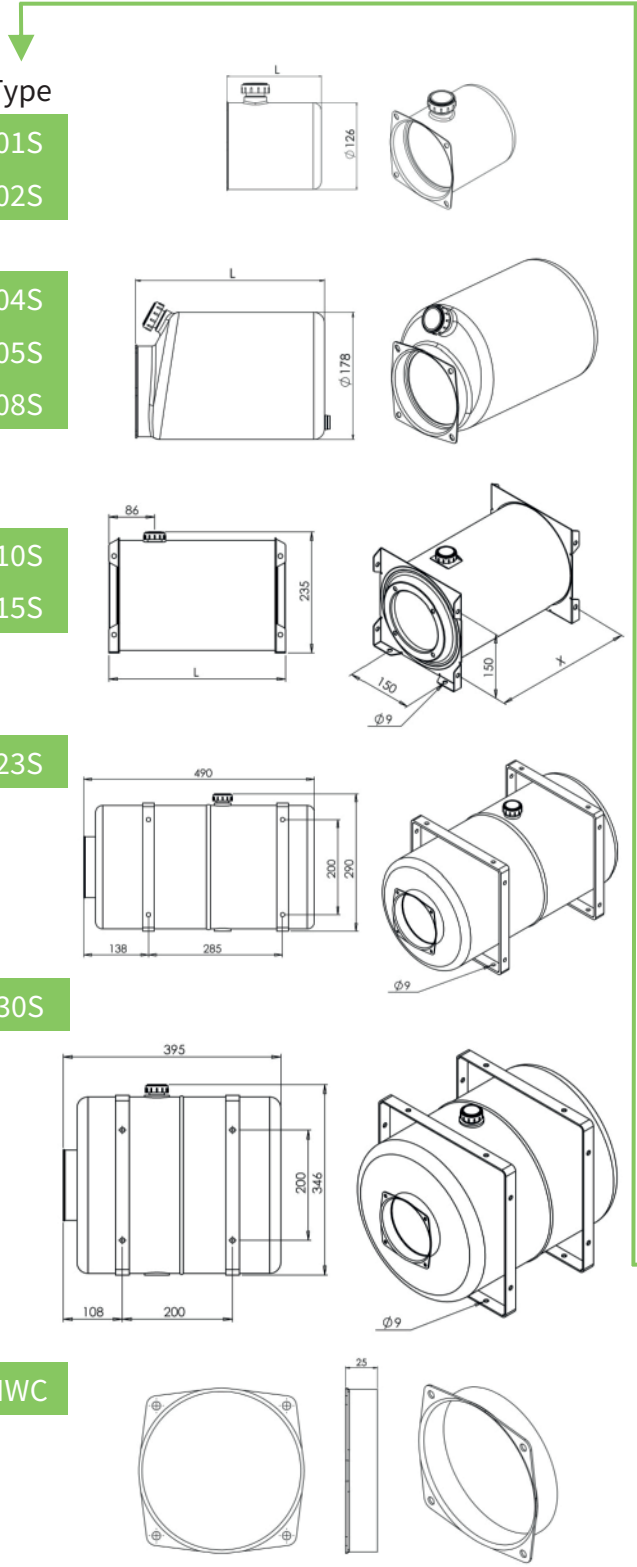


- HP-MINI
- TD4
- 33W
- H
- S
- C
- N
- 05P
- C
- 4567

Steel Oil Tank

Cylindrical

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



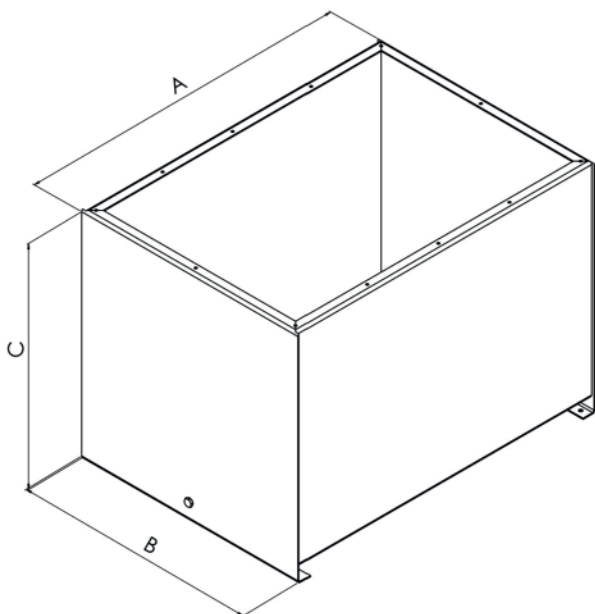
- HP-MINI
- TD4
- 33W
- H
- S
- C
- N
- 05P
- C
- 4567

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

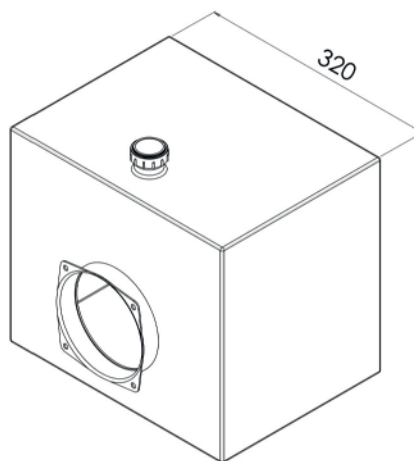
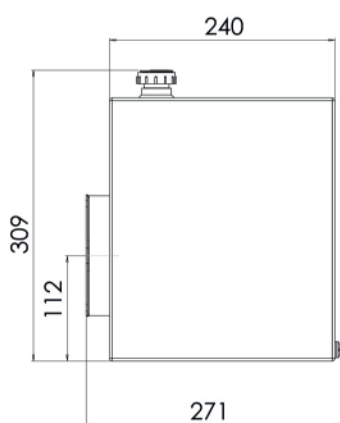


Powerpacks are fitted to the lid of these tanks. For details on the position and orientation please contact our sales team.

These tanks are finished in zinc rich primer as standard.

18 Litre Steel

18S



HP-MINI

TD4

33W

H

S

C

N

05P

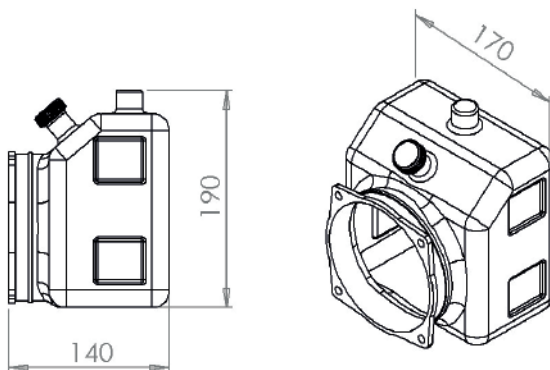
C

4567

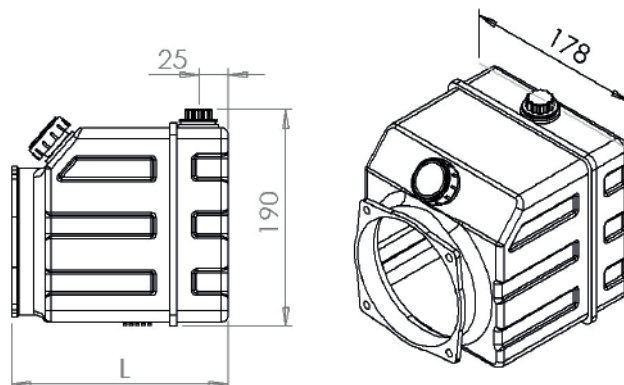
Plastic Oil Tank

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

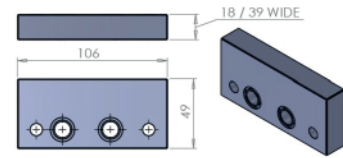
4567

Stacking Plates

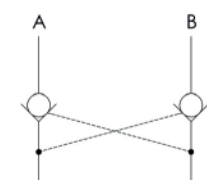
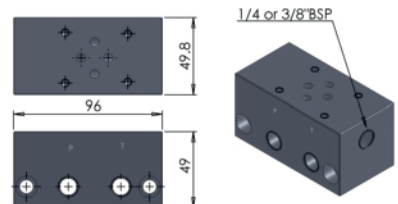
For any additional valve stacking plates, use "C" in part code

Cetop03 (NG6) Directional Control Valve Plates

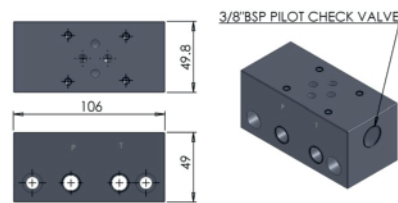
Description	Part Number
Spacer plate 18mm	HP050040-1
Spacer plate 39mm	HP050040-2



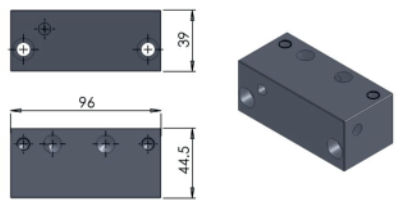
Parallel connection Cetop03 with 1/4" BSP ports	HP050015
Parallel connection Cetop03 with 3/8" BSP ports	HP050016
Series connection Cetop03 with 1/4" BSP ports	HP050128



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
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HP-MINI

TD4

33W

H

S

C

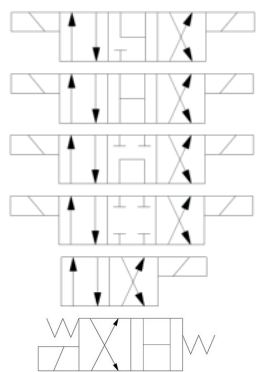
N

05P

C

4567

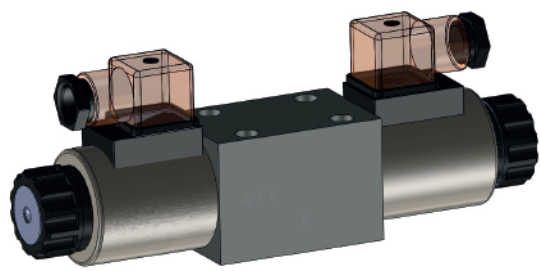
Valve diagram



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

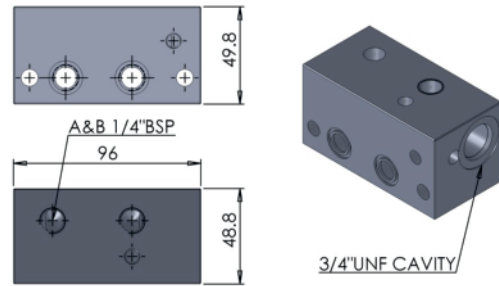
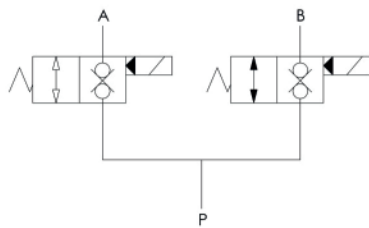
Working pressure (Max)	Flow (Max)
315bar	40l/min

Stacking Plates

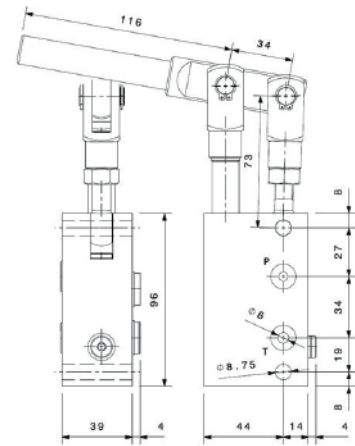
For any additional valve stacking plates, use "C" in part code

Plates with Solenoid Directional Control Valve Cartridges

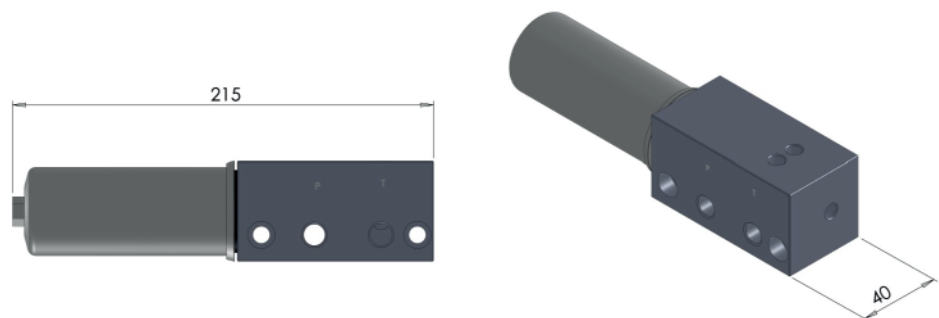
Description	Part Number
Manifold for dual— Single Acting circuits	HP150126



Hand Pump 8cc	BMO07200
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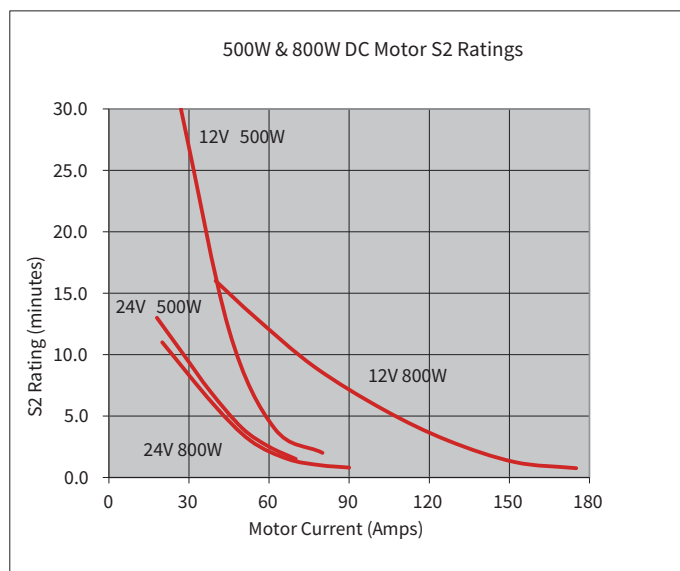
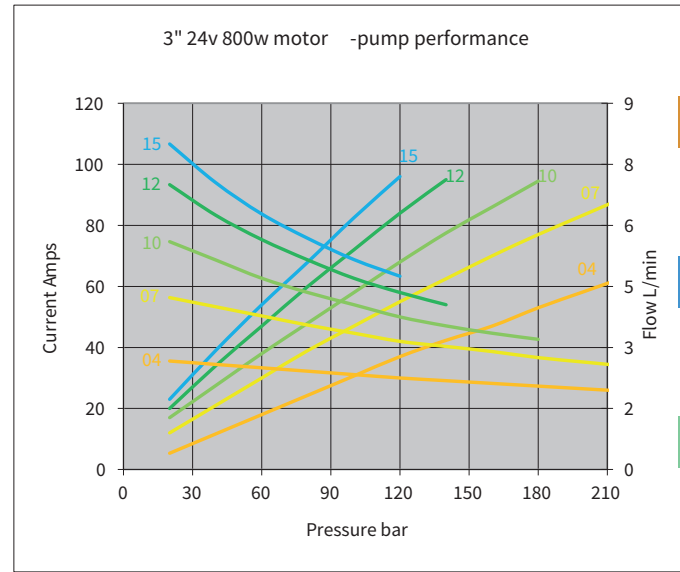
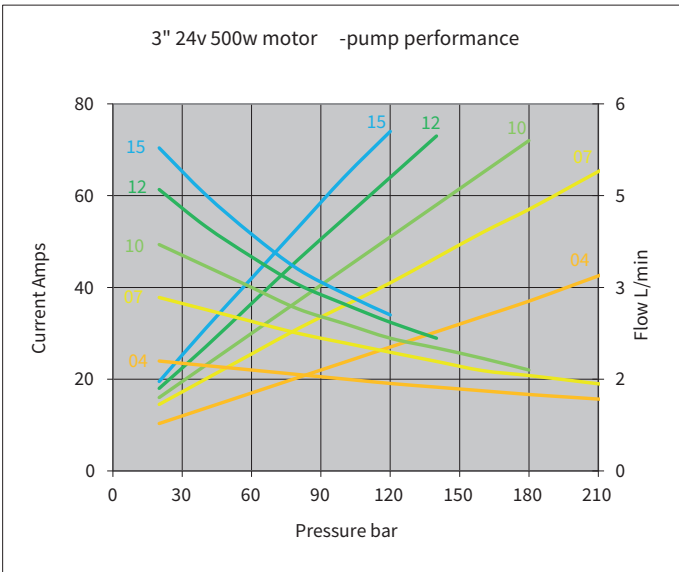
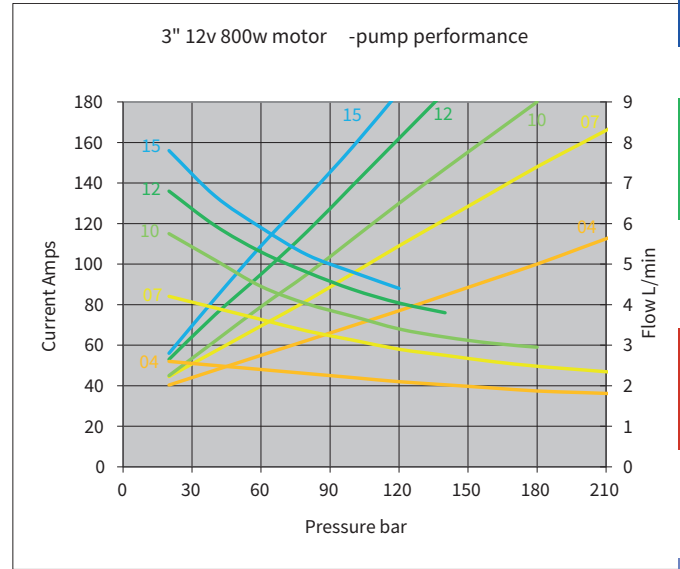
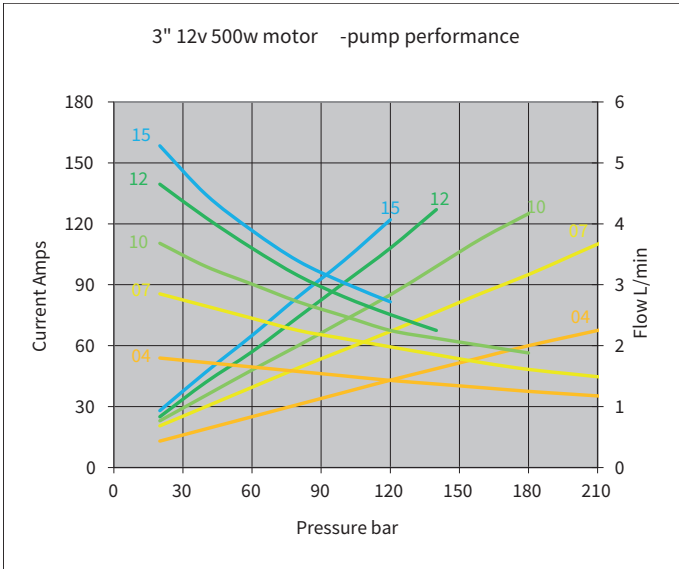
Return Filter - 15 lpm max	HPV5281
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- HP-MINI
- TD4
- 33W
- H
- S
- C
- N
- 05P
- C
- 4567

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

HP-MINI
TD4
33W
H
S
C
N
05P
C
4567

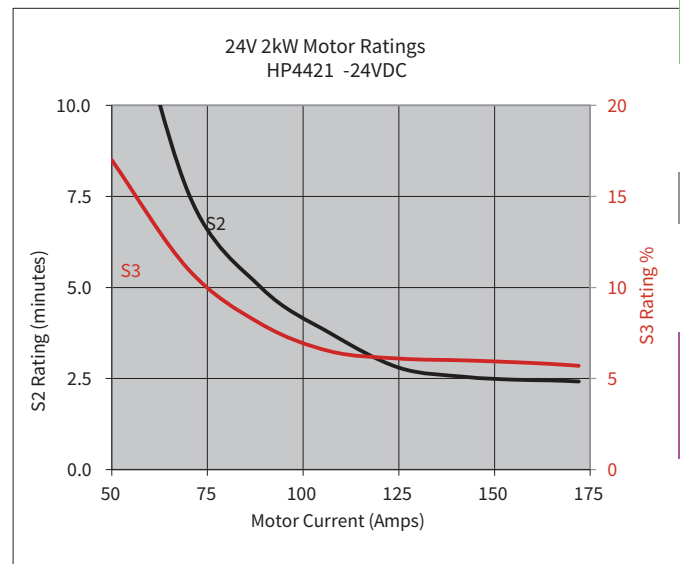
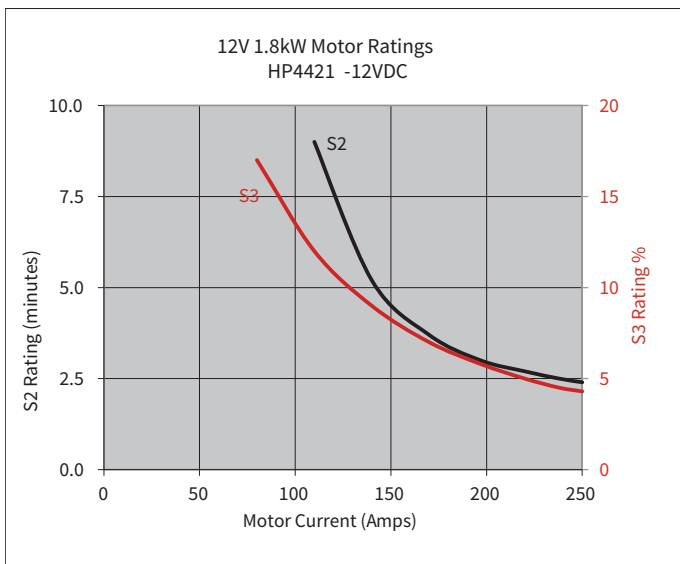
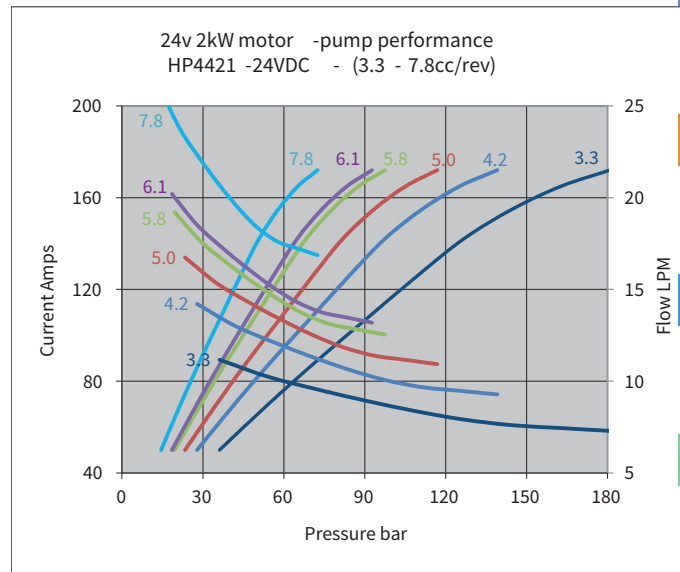
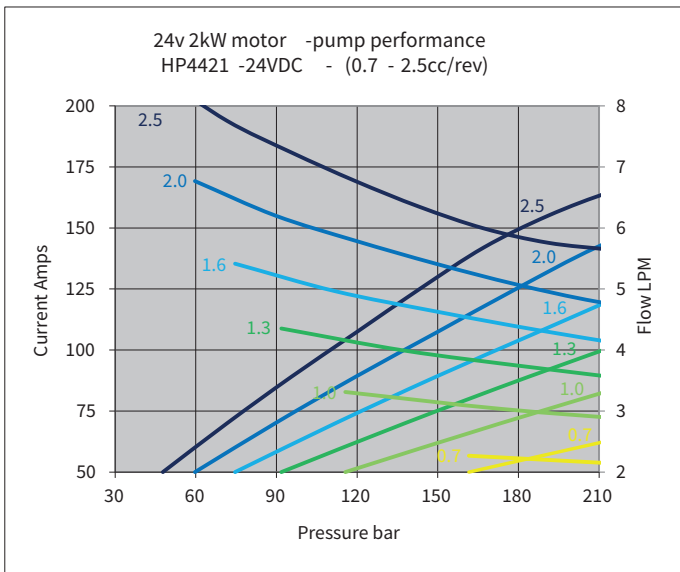
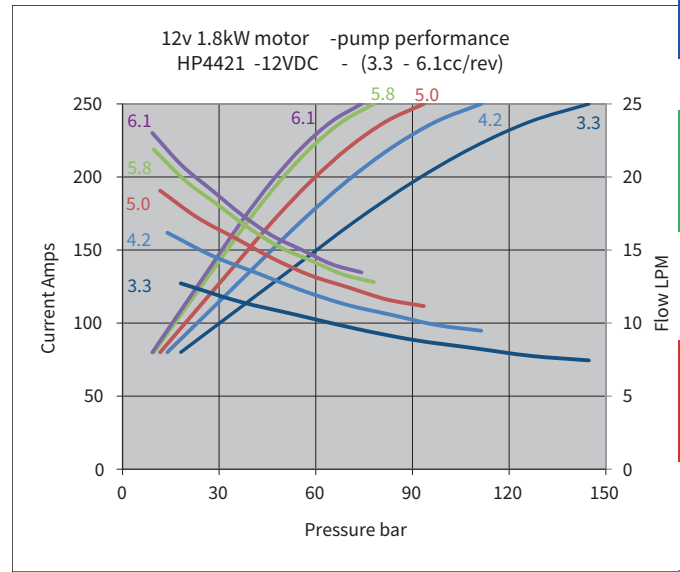
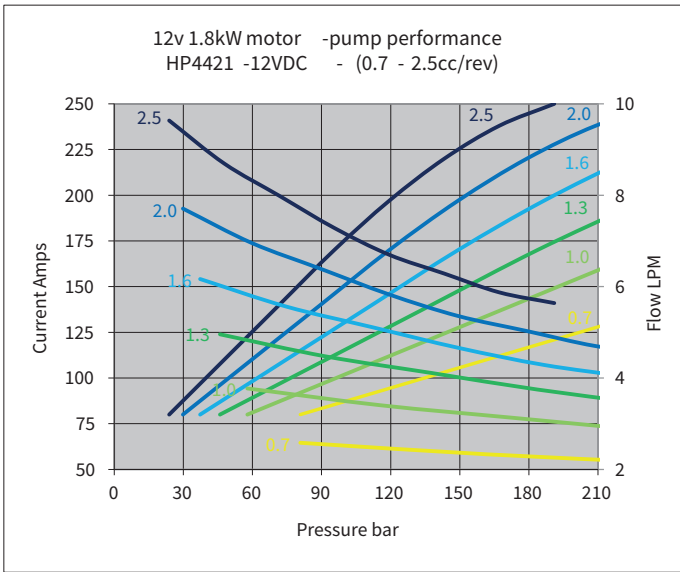




Hydra Part Mini Powerpacks

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

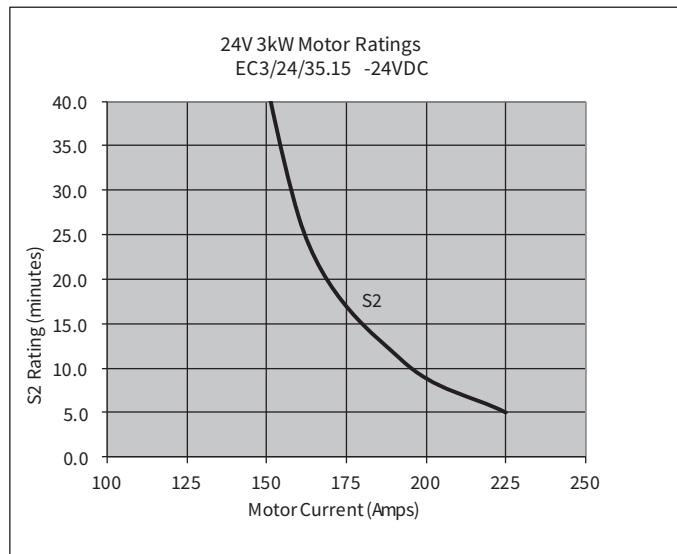
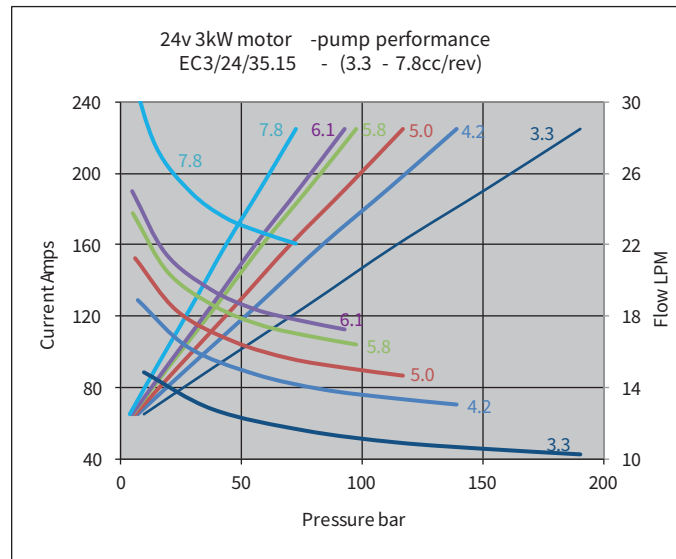
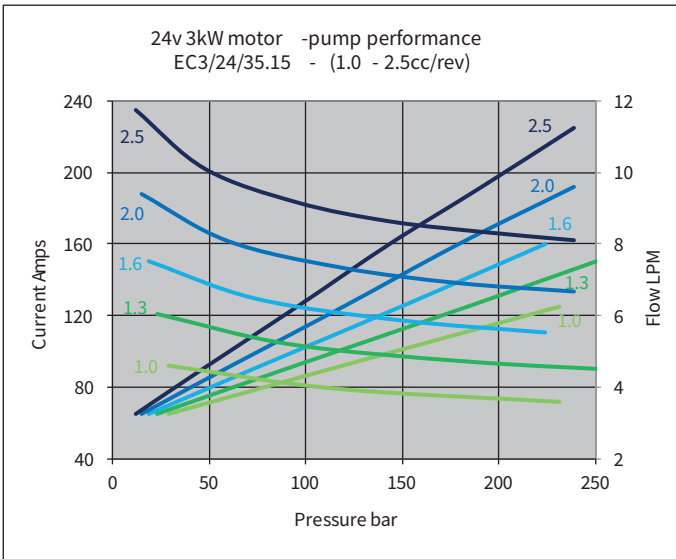
HP-MINI
TD4
33W
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05P
C
4567





Hydra Part Mini Powerpacks

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



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