



## Assembly Code

**PPC**

Power Pack type

**2,2 24DC\_T/S150**

Electric AC or DC motor or motor mounting kit

### Power Packs

#### Standard mounting positioning rules:

- Filler cap on P and T ports side
- AC motor electric box on cavity 2 side
- DC motor and solenoid poles on cavity 1 side
- For horizontal mounting units, suction filter on mounting foot holes side

In lack of specific request made by the customer, all power units are supplied assembled according to these basic rules.

This page contains only the most common codes and options.

For the full available range please check out next pages.



### DC motors / Motor mounting kits

code	description
0.15 12DC_T	12VDC 150W + thermal prot.
0.15 24DC_T	24VDC 150W + thermal prot.
0.3 12DC_T	12VDC 300W + thermal prot.
0.3 24DC_T	24VDC 300W + thermal prot.
0.5 12DC_T	12VDC 500W + thermal prot.
0.5 24DC_T	24VDC 500W + thermal prot.
0.8 12DC_T	12VDC 800W + thermal prot.
0.8 24DC_T	24VDC 800W + thermal prot.

code	description
1.6 12DC_T	12VDC 1600W + thermal pr.
2.1 12DC_T	12VDC 2100W + thermal pr.
2.2 24DC_T	24VDC 2200W + thermal pr.

code	description
1.6 12DC_F	12VDC 1600W + th.pr. + fan
2.1 12DC_F	12VDC 2100W + th. pr. + fan
2.2 24DC_F	24VDC 2200W + th. pr. + fan

code	description
3 24DC_T	24VDC 3000W + thermal pr.
4 24DC_T	24VDC 4000W + thermal pr.

code	description
3 24DC_F	24VDC 3000W + th.pr. + fan
4 24DC_F	24VDC 4000W + th.pr. + fan

code	description
2.5HD 12DC_T	12VDC 2500W heavy duty
3HD 24DC_T	24VDC 3000W heavy duty
4HD 24DC_T	24VDC 4000W heavy duty

DC motors options	
S150T	starting relay 150A
S200	starting relay 200A
R100	inverting / starting relay 100A

code	description
XB14 63-0	B14 frame 63 + pump group 0
XB14 63-1	B14 frame 63 + pump group 1
XB14 71-0	B14 frame 71 + pump group 0
XB14 71-1	B14 frame 71 + pump group 1
XB14 80-0	B14 frame 80 + pump group 0
XB14 80-1	B14 frame 80 + pump group 1
XB14 90-1	B14 frame 90 + pump group 1
XB14 100-1	B14 frame 100/112 +pump gr1
XB14E 90	B14 frame 90 kit + elastic coupling
XB14E 100	B14 frame 100 kit + elastic coupling
XB14E 6E	Mounting kit for gasoline engine

code	description
X56C-0	Nema 56C + pump group 0
X56C-1	Nema 56C + pump group 1
X184TC-1	Nema 184TC + pump group 1

code	description
KPU1401-0	belt pulley + pump group 0
KPU1401-1	belt pulley + pump group 1

### AC motors

code	description
E0.55AC 32 71	0,55kW S3 3ph 2 poles
E0.75AC 32 71	0,75kW S3 3ph 2 poles
E1.1AC 32 80	1,1kW S3 3ph 2 poles
E1.5AC 32 80	1,5kW S3 3ph 2 poles
E2.2AC 32 80	2,2kW S3 3ph 2 poles
E3.0AC 32 90	3kW S3 3ph 2 poles
E4.0AC 32 90	4kW S3 3ph 2 poles
E5.5AC 32 100	5,5kW S3 3ph 2 poles
B14 7.5AC 32 112	7,5kW S3 3ph 2 poles

code	description
E0.37AC 34 71	0,37kW S3 3ph 4 poles
E0.55AC 34 71	0,55kW S3 3ph 4 poles
E0.75AC 34 71	0,75kW S3 3ph 4 poles
E1.1AC 34 80	1,1kW S3 3ph 4 poles
E1.5AC 34 90	1,5kW S3 3ph 4 poles
E2.2AC 34 90	2,2kW S3 3ph 4 poles
E3.0AC 34 90	3kW S3 3ph 4 poles
E4.0AC 34 100	4kW S3 3ph 4 poles
E5.5AC 34 100	5,5kW S3 3ph 4 poles
B14 7.5AC 34 112	7,5kW S3 3ph 4 poles

code	description
E0.55AC S2 71	0,55kW S3 1ph 2 poles
E0.75AC S2 71	0,75kW S3 1ph 2 poles
E1.1AC S2 80	1,1kW S3 1ph 2 poles
E1.5AC S2 80	1,5kW S3 1ph 2 poles
E2.2AC S2 90	2,2kW S3 1ph 2 poles

code	description
E0.37AC S4 71	0,37kW S3 1ph 4 poles
E0.55AC S4 71	0,55kW S3 1ph 4 poles
E0.75AC S4 80	0,75kW S3 1ph 4 poles
E1.1AC S4 90	1,1kW S3 1ph 4 poles
E1.5AC S4 90	1,5kW S3 1ph 4 poles
E2.2AC S4 90	2,2kW S3 1ph 4 poles
E3.0AC S4 100	3kW S3 1ph 4 poles

code	description
M650	5kW Gasoline engine



**UB**

Central manifold

**Central manifolds**

code	description
<b>UA</b>	Compact A type with 3 lateral cavities
<b>UB</b>	Compact B type with 5 lateral cavities
<b>U4</b>	Compact 4 type for 4 way cartridge valves
<b>UR</b>	Compact R type for reversible pumps

**Central manifolds options**

<b>US</b>	SAE06 exit ports for North America market
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**G1,1**

Gear pump

**Gear pumps**

code	description
<b>RM0,2</b>	0,26 cc/rev reversible gr0
<b>RM0,3</b>	0,32 cc/rev reversible gr0
<b>RM0,4</b>	0,38 cc/rev reversible gr0
<b>RM0,5</b>	0,49 cc/rev reversible gr0
<b>RM0,7</b>	0,64 cc/rev reversible gr0
<b>RM0,9</b>	0,88 cc/rev reversible gr0
<b>RM1,3</b>	1,25 cc/rev reversible gr0
<b>RM1,5</b>	1,5 cc/rev reversible gr0
<b>R2,1</b>	2,1 cc/rev reversible gr1
<b>R2,6</b>	2,6 cc/rev reversible gr1
<b>R3,2</b>	3,2 cc/rev reversible gr1
<b>R4,3</b>	4,3 cc/rev reversible gr1
<b>R6,5</b>	6,5 cc/rev reversible gr1



code	description
<b>GM0,1</b>	0,19 cc/rev gr0
<b>GM0,2</b>	0,26 cc/rev gr0
<b>GM0,4</b>	0,38 cc/rev gr0
<b>GM0,6</b>	0,64 cc/rev gr0
<b>GM0,8</b>	0,85 cc/rev gr1
<b>G1,1</b>	1,15 cc/rev gr1
<b>G1,6</b>	1,6 cc/rev gr1
<b>G2,1</b>	2,1 cc/rev gr1
<b>G2,6</b>	2,6 cc/rev gr1
<b>G3,2</b>	3,2 cc/rev gr1
<b>G3,7</b>	3,7 cc/rev gr1
<b>G4,2</b>	4,2 cc/rev gr1
<b>G4,9</b>	4,9 cc/rev gr1
<b>G6,0</b>	6,0 cc/rev gr1
<b>G7,9</b>	7,9 cc/rev gr1
<b>G9,6</b>	9,8 cc/rev gr1



code	description
<b>HM0,1</b>	0,2 cc/rev high P gr0
<b>HM0,2</b>	0,26 cc/rev high P gr0
<b>HM0,4</b>	0,38 cc/rev high P gr0
<b>HM0,6</b>	0,64 cc/rev high P gr0
<b>HM0,8</b>	0,8 cc/rev high P gr0
<b>H1,2</b>	1,2 cc/rev high P gr1
<b>H1,7</b>	1,7 cc/rev high P gr1
<b>H2,2</b>	2,2 cc/rev high P gr1
<b>H2,6</b>	2,6 cc/rev high P gr1
<b>H3,2</b>	3,2 cc/rev high P gr1
<b>H3,8</b>	3,8 cc/rev high P gr1
<b>H4,3</b>	4,3 cc/rev high P gr1
<b>H4,7</b>	4,7 cc/rev high P gr1
<b>H6,0</b>	6,0 cc/rev high P gr1
<b>H7,4</b>	7,4 cc/rev high P gr1



code	description
<b>S2,2</b>	2,2 cc/rev low noise gr1
<b>S3,2</b>	3,2 cc/rev low noise gr1
<b>S4,3</b>	4,3 cc/rev low noise gr1
<b>S5</b>	5 cc/rev low noise gr1
<b>S6</b>	6 cc/rev low noise gr1
<b>S8,3</b>	8,3 cc/rev low noise gr1
<b>S10</b>	10,2 cc/rev low noise gr1
<b>S13</b>	12,9 cc/rev low noise gr1

**Gear pumps options**

<b>NL</b>	double pump with hi-lo circuit
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**J**

Cavity 0

**Hydraulic valves cavity 0-1**

code	description
<b>J</b>	check valve 3/4-16UNF
<b>JF</b>	check valve 3/4-16UNF with exit port
<b>S</b>	flow control valve
<b>L</b>	plug 3/4-16UNF
<b>N</b>	plug 3/4-16UNF with exit port

**Cavity 0 options**

<b>MIR63'EM</b>	pressure gauge (*=bar max) + shut-off
<b>PSL01S0100</b>	pressure switch 10+100bar
<b>PSL01S030</b>	pressure switch 50+300bar
<b>PSH01S010</b>	pressure switch 10+100bar high perf.
<b>PSH01S030</b>	pressure switch 50+300bar high perf.
<b>MINIMESS01</b>	minimess with plastic cap
<b>US</b>	SAE exit port

**code description**

<b>V60</b>	relief valve 3+60 bar for PPC
<b>V120</b>	relief valve 40+120 bar for PPC
<b>V250</b>	relief valve 80+250 bar for PPC
<b>V350</b>	relief valve 150+350 bar for PPC
<b>XP</b>	closed plug for relief valve cavity



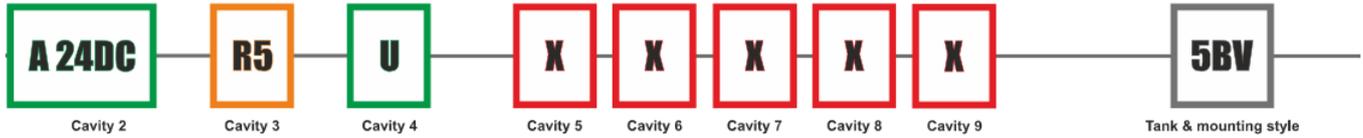
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### Hydraulic valves cavity 2-3-4

code	description
A	NC 2/2 way poppet valve
B	NC 2/2 way poppet valve + emergency
Q	NO 2/2 way poppet valve
C	NO 2/2 way poppet valve + emergency
D	NC 2/2 way double poppet valve + emerg.
M	NO 2/2 way double poppet valve + emerg.
E	lever operated 2/2 valve
EM	lever operated 2/2 valve with microswitch
Z	2 way emergency button
S	flow control valve
T	proportional flow control valve (*=VDC)
U	hand pump 2cc/stroke
G	closed plug
H	closed plug with 1/4"BSPP exit port
N	open plug with 1/4"BSPP exit port
P	plug passing through 1/4"BSPP exit port
L	basic plug
J	check valve
JF	check valve with 1/4"BSPP exit port

code	description (M4&U4 manifolds only)
4VA11C	4/2 way directional valve
4VA2	4/3 way directional valve, center P to T
4VB2	4/3 way directional valve, closed center
4VC2	4/3 way directional valve, H center
4VE2	4/3 way directional valve, center A-B to T

code	description
F	pressure comp. flow control (*=l/min)
R	adj. pressure comp. flow control (*=l/min)
S	adjustable flow control valve
Z	2 way emergency button
AR	NC 2/2 way poppet valve reverse flow
BR	NC 2/2 way poppet v. reverse flow + emer.
CR	NO 2/2 way poppet v. reverse flow + emer.
D	NC 2/2 way double poppet valve + emerg.
P	proportional relief valve (*= bar max)
V	relief valve (*= bar max)
G	closed plug
H	closed plug with 1/4"BSPP exit port
N	open plug with 1/4"BSPP exit port
P	plug passing through 1/4"BSPP exit port
L	basic plug
J	check valve

### Hydraulic valves cavity 5-6-7-8-9

code	description
1(04)	1 l/min pressure comp. flow control
15(04)	1.5 l/min press. comp. flow control
2(04)	2 l/min pressure comp. flow control
3(04)	3 l/min pressure comp. flow control
5(04)	5 l/min pressure comp. flow control
7(04)	7 l/min pressure comp. flow control
10(04)	10 l/min pressure comp. flow control
13(04)	13 l/min pressure comp. flow control
17(04)	17 l/min pressure comp. flow control
22(04)	22 l/min pressure comp. flow control
1(01)	1 l/min 1/4"BSPP p. comp. flow ctrl
15(01)	1.5 l/min 1/4"BSPP p.comp. flow ctrl
2(01)	2 l/min 1/4"BSPP p. comp. flow ctrl
3(01)	3 l/min 1/4"BSPP p. comp. flow ctrl
5(01)	5 l/min 1/4"BSPP p. comp. flow ctrl
7(01)	7 l/min 1/4"BSPP p. comp. flow ctrl
10(01)	10 l/min 1/4"BSPP p. comp. flow ctrl
13(01)	13 l/min 1/4"BSPP p. comp. flow ctrl
17(01)	17 l/min 1/4"BSPP p. comp. flow ctrl
22(01)	22 l/min 1/4"BSPP p. comp. flow ctrl
PD1	1/4"BSPP plug
RETURN-KIT	suction/return line pipe
PP01370	suction/return line pipe
RF01	return line immersed filter
S01Z	start-up 2+4l/min for 1ph AC mot.
S01W	start-up 3+6l/min for 1ph AC mot.
S01A	start-up 5+10l/min for 1ph AC mot.
S01C	start-up 6+14l/min for 1ph AC mot.
S01F	start-up 11+22l/min for 1ph AC mot.

### Tanks & mounting style

code	description
15L	1,5l square plastic
3L	3l square plastic
6L	6l square plastic
5M	5l square plastic
8M	8l square plastic
5P	5l round plastic
7P	7l round plastic
9P	9l round plastic
11P	11l round plastic
15NW	15l square plastic

code	description
15A	1,5l cylindrical steel
25A	2,5l cylindrical steel
5B	5l cylindrical steel
10B	10l cylindrical steel
12B	12l cylindrical steel
F80000001	steel tank adapter - to be welded

code	description
10C	10l square steel
22C	22l square steel
3EV	3l square steel vertical mounting
7EV	7l square steel vertical mounting
8EV	8l square steel vertical mounting
15EV	15l square steel vertical mounting
20EV	20l square steel vertical mounting
30EV	30l square steel vertical mounting

code	description
10HD	10l square aluminum tank
25HD	25l square aluminum tank

Tanks options	
V	vertical mounting



# E60403010

External Manifolds

# SD03A2 24DC

External Valves

# E60543006

Accessories

## External Manifolds & Accessories

code	description
<b>N50403007DN</b>	base manifold for SD02 stackable valves
<b>M60403004</b>	23mm spacer subplate
<b>M60403005</b>	90° rotation manifold
<b>M60403039</b>	additional single acting manifold
<b>M60403010</b>	NG3 MICRO parallel block lateral ports
<b>M60413001</b>	NG3 MICRO manifold with p.o. check valves
<b>PM04M</b>	hand pump 4 cc/stroke
<b>PM09M</b>	hand pump 8,8 cc/stroke

code	description
<b>E60403006DN</b>	base manifold for SD02 stackable valves
<b>E60403008M</b>	PPC to PPM base converter
<b>E60403004</b>	28mm spacer subplate
<b>E60403004CV</b>	28mm spacer subplate + check valve
<b>E60403002</b>	49mm 90° rotation manifold
<b>E60403005DF</b>	90° rotation manifold double face
<b>E60403039</b>	additional single acting manifold
<b>E60403001</b>	NG6 (Cetop3) parallel block rear ports
<b>E60403010</b>	NG6 (Cetop3) parallel block lateral ports
<b>E60403011</b>	NG6 (Cetop3) series block lateral ports
<b>E60413001</b>	NG6 (Cetop3) manifold with p.o. check valves
<b>E60403020</b>	spin-on return line filter manifold
<b>E60403025</b>	pressure line filter manifold
<b>PM04</b>	hand pump 4 cc/stroke
<b>PM09</b>	hand pump 8,8 cc/stroke
<b>E60403030</b>	SAE08 2-way cartridge manifold block
<b>E60403031</b>	SAE08 3-way cartridge manifold block

Manifold blocks option	
<b>US</b>	SAE08 exit ports for North America market

code	description
<b>MIR6360EM</b>	pressure gauge 60bar
<b>MIR63160EM</b>	pressure gauge 160bar
<b>MIR63250EM</b>	pressure gauge 250bar
<b>MIR63315EM</b>	pressure gauge 315bar
<b>PSL01S0100</b>	pressure switch 10+100bar
<b>PSL01S0300</b>	pressure switch 50+300bar
<b>PSH01S0100</b>	pressure switch 10+100bar high performance
<b>PSH01S0300</b>	pressure switch 50+300bar high performance

code	description
<b>P0201</b>	remote 2 buttons control box
<b>P0202</b>	remote 4 buttons control box
<b>VPC00</b>	PWM driver for proportional valves
<b>E60543003</b>	foot mounting support PPM
<b>E60543006</b>	foot mounting support PPC/EPB
<b>E60543007</b>	foot mounting support PPC/EPB - tall type

code	description
<b>VUR01C</b>	in-line check valve 1/4" BSPP
<b>VUR02C</b>	in-line check valve 3/8" BSPP
<b>VURSAE06C</b>	in-line check valve 9/16-18UNF
<b>STU01</b>	in-line unidirectional flow valve 1/4" BSPP
<b>STU02</b>	in-line unidirectional flow valve 3/8" BSPP
<b>STUSAE06</b>	in-line unidirectional flow valve 9/16-18UNF
<b>STB01</b>	in-line bidirectional flow valve 1/4" BSPP
<b>STB02</b>	in-line bidirectional flow valve 3/8" BSPP
<b>STBSAE06</b>	in-line bidirectional flow valve 9/16-18UNF
<b>BFCSAE001</b>	in-line mounting SAE08 manifold 1/4"BSPP
<b>BFCSAE002</b>	in-line mounting SAE08 manifold 3/8"BSPP
<b>BMPPC02</b>	base for Hydronit modular blocks

## External Valves

code	description
<b>SD00A11C</b>	NG3 MICRO directional valve 4/2
<b>SD00A2</b>	NG3 MICRO directional valve 4/3 center P to T
<b>SD00B2</b>	NG3 MICRO directional valve 4/3 closed center
<b>SD00C2</b>	NG3 MICRO directional valve 4/3 H center
<b>SD00E2</b>	NG3 MICRO directional valve 4/3 center A-B + T
<b>SD02C2RP</b>	stackable directional valve 4/3 H center + p. o. check valves
<b>SD02E2RP</b>	stackable directional valve 4/3 center A-B to T + p. o. check valves
<b>SD02A2TP</b>	stackable dir. v. 4/3 center P to T + cav. SAE08 for additional valves
<b>SD02B2TP</b>	stackable dir. v. 4/3 closed center + cav. SAE08 for additional valves
<b>SD02C2TP</b>	stackable dir. v. 4/3 H center + cav. SAE08 for additional valves
<b>SD02E2TP</b>	stackable dir. v. 4/3 center A-B to T + SAE08 for additional valves

code	description
<b>SD03A11C</b>	NG6 (cetop3) directional valve 4/2
<b>SD03A2</b>	NG6 (cetop3) directional valve 4/3 center P to T
<b>SD03B2</b>	NG6 (cetop3) directional valve 4/3 closed center
<b>SD03C2</b>	NG6 (cetop3) directional valve 4/3 H center
<b>SD03E2</b>	NG6 (cetop3) directional valve 4/3 center A-B to T

code	description
<b>HD03A1</b>	NG6 (cetop3) manual directional valve spring centred P to T
<b>HD03A2</b>	NG6 (cetop3) manual directional valve spring centred closed centre
<b>HD03A3</b>	NG6 (cetop3) manual directional valve spring centred H centre
<b>HD03A4</b>	NG6 (cetop3) manual directional valve spring centred A-B to T
<b>HD03D1</b>	NG6 (cetop3) manual directional valve with detent, centre P to T
<b>HD03D2</b>	NG6 (cetop3) manual directional valve with detent, closed centre
<b>HD03D3</b>	NG6 (cetop3) manual directional valve with detent, H centre
<b>HD03D4</b>	NG6 (cetop3) manual directional valve with detent, centre A-B to T
<b>E60424001</b>	NG6 (cetop3) sandwich type modular relief valve on A & B
<b>E60424002</b>	NG6 (cetop3) sandwich type modular relief valve on A
<b>E60424003</b>	NG6 (cetop3) sandwich type modular relief valve on B
<b>E60433001</b>	NG6 (cetop3) sandwich type modular throttle valve on A & B
<b>E60433002</b>	NG6 (cetop3) sandwich type modular throttle valve on A
<b>E60433003</b>	NG6 (cetop3) sandwich type modular throttle valve on B
<b>E60453001</b>	NG6 (cetop3) sandwich type modular overcentre valve on A & B
<b>E60483001</b>	NG6 (cetop3) sandwich type pressure reducing valve on P
<b>E60483002</b>	NG6 (cetop3) sandwich type pressure reducing valve on A
<b>E60483003</b>	NG6 (cetop3) sandwich type pressure reducing valve on B

Solenoid valves coils voltages	
<b>12DC</b>	12V direct current
<b>24DC</b>	24V direct current
<b>24AC</b>	24V alternate current 50 or 60Hz
<b>115AC</b>	115V alternate current 50 or 60Hz
<b>230AC</b>	230V alternate current 50 or 60Hz

Note: not all the voltages are available on some valves codes



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