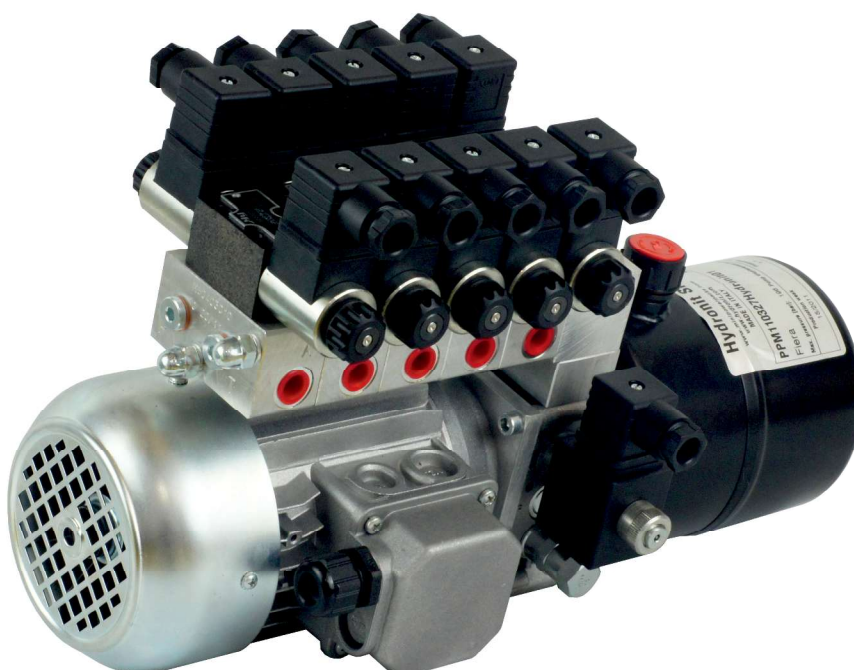
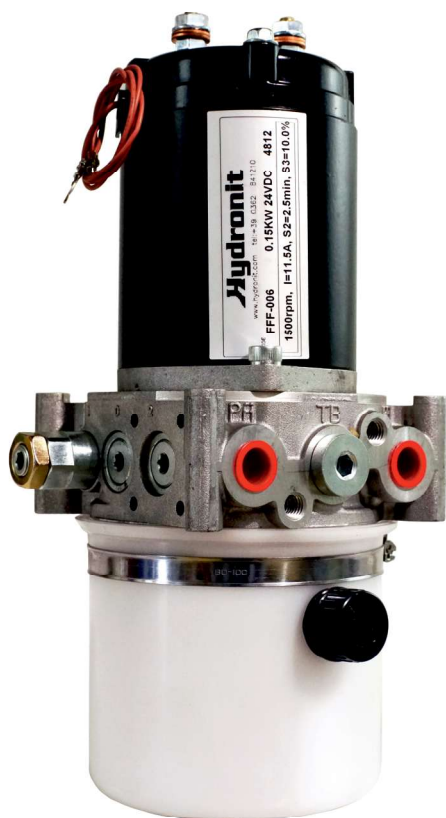




Extremely compact and lightweight

Flow: 0,2 ~ 6 l/min

Pressure up to 250 bar

DC motors up to 3 kW

AC motors up to 1,8 kW

High modularity: single & double acting & reversible circuits from the same micro central manifold

Main valves on one side in most configurations for enhanced positioning in small machines

AC & DC Micro series Hydraulic Power Packs

POWER PACKS MICRO speaking code

PPM

Power Pack type

2,2 24DC_T/S150

Electric AC or DC motor or motor mounting kit

Power Packs

Standard mounting positioning:

- Filler cap on P and T ports side
- AC motor electric box on cavity 0-1-2 side
- DC motor and solenoid poles on cavity 0-1-2 side
- For horizontal mounting units, suction filter on mounting foot holes side

In lack of specific request 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.
0,8 48DC_T	48VDC 800W + thermal prot.
1,2 12DC_T	12VDC 1200W + thermal prot.
1,2 24DC_T	24VDC1200W + thermal prot.

code	description
1,6 12DC_TM	12VDC 1600W + thermal pr.
2,1 12DC_TM	12VDC 2100W + thermal pr.
2,2 24DC_TM	24VDC 2200W + thermal pr.
2,2 48DC_TM	48VDC 2200W + thermal pr.
3 24DC_TM	24VDC 3000W + thermal pr.

DC motors options	
S150T	starting relay 150A
S300	starting relay 200A
R100	inverting / starting relay 100A

code	description
NB14 63-0	B14 frame 63
NB14 71-1	B14 frame 71

AC motors

code	description
NO,37AC 34 71	0,37kW S3 3 ph 4 poles
NO,55AC 34 71	0,55kW S3 3 ph 4 poles
NO,75AC 34 71	0,75kW S3 3 ph 4 poles
NO,55AC 32 71	0,55kW S3 3 ph 2 poles
NO,75AC 32 71	0,75kW S3 3 ph 2 poles
NO,37AC S4 71	0,37kW S3 1 ph 4 poles
NO,55AC S4 71	0,75kW S3 1 ph 4 poles
NO,55AC S2 71	0,75kW S3 1 ph 2 poles
NO,75AC S2 71	0,75kW S3 1 ph 2 poles
NO,55AC 34 71	0,55kW S3 3 ph 4 poles
NO,75AC 34 71	0,75kW S3 3 ph 4 poles

POWER PACKS MICRO speaking code

MB

Central manifold

Central manifolds



code	description
MB	Micro B type with 4 lateral cavities
MR	Micro R type for reversible pump
M4	Micro 4 type for 4 way cartridge valves

Central manifolds options	
US	SAE06 exit ports for North America market

GM0,4

Gear pump

Gear pumps



code	description
GM0,1	0,19 cc/rev G type gr0
GM0,2	0,26 cc/rev G type gr0
GM0,4	0,38 cc/rev G type gr0
GM0,6	0,64 cc/rev G type gr0



code	description
KM0,1	0,20 cc/rev K type gr0
KM0,2	0,26 cc/rev K type gr0
KM0,4	0,38 cc/rev K type gr0
KM0,6	0,64 cc/rev K type gr0
KM0,9	0,8 cc/rev K type gr0
KM1,3	1,2 cc/rev K type gr0
KM1,5	1,5 cc/rev K type gr0



code	description
HM0,1	0,20 cc/rev high P gr0
HM0,2	0,26 cc/rev high P gr0
HM0,4	0,38 cc/rev high P gr0
HM0,6	0,64 cc/rev high P gr0
HM0,8	0,88 cc/rev high P gr0
HM1,2	1,20 cc/rev high P gr0
HM1,5	1,50 cc/rev high P gr0



code	description
RM0,1	0,19 cc/rev reversible gr0
RM0,2	0,26 cc/rev reversible gr0
RM0,3	0,32 cc/rev reversible gr0
RM0,4	0,38 cc/rev reversible gr0
RM0,5	0,49 cc/rev reversible gr0
RM0,7	0,64 cc/rev reversible gr0
RM0,9	0,88 cc/rev reversible gr0
RM1,3	1,25 cc/rev reversible gr0
RM1,5	1,50 cc/rev reversible gr0

JM

Cavity 0

DM_280

Cavity 1

Hydraulic valves cavity 0



code	description
JM	check valve 5/8-18UNF
ML	plug 5/8-18UNF

Hydraulic valves cavity 1



code	description
DM_*	relief valve P (*= bar max)
KM	closed plug for relief valve cavity

POWER PACKS MICRO speaking code

A 24DC

Cavity 2

R5

Cavity 3

U

Cavity 4

X

Cavity 5

X

Cavity 7

X

Cavity 8

1,2R

Tank & mounting style

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"BSP exit port
N	open plug with 1/4"BSP exit port
P	plug passing through 1/4"BSP exit port
L	basic plug
J	check valve
JF	check valve with 1/4"BSP exit port

code	description (M4 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 valve (*=l/min)
R*	adj. pressure comp. flow control valve (*=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)
G	closed plug
H	closed plug with 1/4"BSP exit port
N	open plug with 1/4"BSP exit port
P	plug passing through 1/4"BSP exit port
L	basic plug
J	check valve

code	description (MR manifolds only)
DM_*	relief valve P (*= bar max)
KM	closed plug for relief valve cavity

code	description (MR manifolds)
MG	closed plug
JP	check valve 5/8-18UNF poppet type

Hydraulic valves cavity 5-7-8

code	description
1(04)	1 l/min pressure comp. flow control
1,5(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
1,5(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
P01	1/4"BSPP plug
RETURN-KIT	suction/return line pipe
PP01370	suction/return line pipe
TADPH00001	Plastic pipe 90 degrees elbow 1/4 BSPP 126mm
TADPH00002	Plastic pipe 90 degrees elbow 1/4 BSPP 150 mm
TADPH00003	Plastic pipe 90 degrees elbow 1/4 BSPP 207mm

Tanks & mounting style

code	description
0,4R	0,4l cylindrical plastic
0,7R	0,7l cylindrical plastic
1,2R	1,2l cylindrical plastic
1T	1l square plastic
1,5T	1,5l square plastic
2T	2l square plastic
2,7T	2,7l square plastic
3,5T	3,5l square plastic

code	description
0,7F	0,7l cylindrical steel
1,2F	1,2l cylindrical steel
1,7F	1,7l cylindrical steel
2,4F	2,4l cylindrical steel
F80000012	steel tank adapter - to be welded

Tanks options	
V	vertical mounting

POWER PACKS MICRO speaking code

M60403010

External Manifolds

SD00A2 24DC

External Valves

E60543003

Accessories

External Manifolds & Accessories

code	description
M50403007DN	base manifold for SD02 stackable valves
M60403004	23mm spacer subplate
M60403005	90° rotation manifold
M60403039	additional single acting manifold
M60403010	NG3 MICRO parallel block lateral ports
M60413001	NG3 MICRO parallel block lateral ports
PM04M	hand pump 4 cc/stroke
PM09M	hand pump 8,8 cc/stroke
M60403008E	PPM to PPC base converter

code	description
E60403006DN	base manifold for SD02 stackable valves
E60403008M	PPC to PPM base converter
E60403004	28mm spacer subplate
E60403004CV	28mm spacer subplate + check valve
E60403002	49mm 90° rotation manifold
E60403005DF	90° rotation manifold double face
E60403039	additional single acting manifold
E60403001	NG6 (cetop3) parallel block rear ports
E60403010	NG6 (cetop3) parallel block lateral ports
E60403011	NG6 (cetop3) series block lateral ports
E60413001	NG6 (cetop3) manifold with p.o. check valves
E60403020	spin-on return line filter manifold
E60403025	pressure line filter manifold
PM04	hand pump 4 cc/stroke
PM09	hand pump 8,8 cc/stroke
E60403030	SAE08 2-way cartridge manifold block
E60403031	SAE08 3-way cartridge manifold block

Manifold blocks option	
US	SAE06 exit ports for North America market

code	description
MIR6360	pressure gauge 60bar
MIR63160	pressure gauge 160bar
MIR63250	pressure gauge 250bar
MIR63315	pressure gauge 315bar
PSL01S0100	pressure switch 10÷100bar
PSL01S0300	pressure switch 50÷300bar
PSH01S0100	pressure switch 10÷100bar high performance
PSH01S0300	pressure switch 50÷300bar high performance

code	description
P0201	remote 2 buttons control box
P0202	remote 4 buttons control box
VPC00	PWM driver for proportional valves
E60543003	foot mounting support PPM

code	description
VU001C	in-line check valve 1/4" BSPP
VU002C	in-line check valve 3/8" BSPP
VURSAE06C	in-line check valve 9/16-18UNF
STU01	in-line unidirectional flow valve 1/4" BSPP
STU02	in-line unidirectional flow valve 3/8" BSPP
STUSAE06	in-line unidirectional flow valve 9/16-18UNF
STB01	in-line bidirectional flow valve 1/4" BSPP
STB02	in-line bidirectional flow valve 3/8" BSPP
STBSAE06	in-line bidirectional flow valve 9/16-18UNF
BFCSAE0801	in-line mounting SAE08 manifold 1/4"BSPP
BFCSAE0802	in-line mounting SAE08 manifold 3/8"BSPP

External Valves

code	description
SD02C2RP	stackable directional valve 4/3 H center + p. o. check valves
SD02E2RP	stackable directional valve 4/3 center A-B to T + p. o. check valves
SD02A2TP	stackable dir. v. 4/3 center P to T + cav. SAE08 for additional valves
SD02B2TP	stackable dir. v. 4/3 closed center + cav. SAE08 for additional valves
SD02C2TP	stackable dir. v. 4/3 H center + cav. SAE08 for additional valves
SD02E2TP	stackable dir. v. 4/3 center A-B to T + SAE08 for additional valves

code	description
SD03ALC11	NG6 (cetop3) directional valve 4/2
SD03LCA2	NG6 (cetop3) directional valve 4/3 center P to T
SD03LCB2	NG6 (cetop3) directional valve 4/3 closed center
SD03LCC2	NG6 (cetop3) directional valve 4/3 H center
SD03LCE2	NG6 (cetop3) directional valve 4/3 center A-B to T

code	description
HD03LCA1	NG6 (cetop3) manual directional valve spring centred P to T
HD03LCA2	NG6 (cetop3) manual directional valve spring centred closed centre
HD03LCA3	NG6 (cetop3) manual directional valve spring centred H centre
HD03LCA4	NG6 (cetop3) manual directional valve spring centred A-B to T
HD03LCB1	NG6 (cetop3) manual directional valve with detent, centre P to T
HD03LCB2	NG6 (cetop3) manual directional valve with detent, closed centre
HD03LCB3	NG6 (cetop3) manual directional valve with detent, H centre
HD03LCB4	NG6 (cetop3) manual directional valve with detent, centre A-B to T
E60424001	NG6 (cetop3) sandwich type modular relief valve on A & B
E60424002	NG6 (cetop3) sandwich type modular relief valve on A
E60424003	NG6 (cetop3) sandwich type modular relief valve on B
E60433001	NG6 (cetop3) sandwich type modular throttle valve on A & B
E60433002	NG6 (cetop3) sandwich type modular throttle valve on A
E60433003	NG6 (cetop3) sandwich type modular throttle valve on B
E60453001	NG6 (cetop3) sandwich type modular overcentre valve on A & B
E60483001	NG6 (cetop3) sandwich type pressure reducing valve on P
E60483002	NG6 (cetop3) sandwich type pressure reducing valve on A
E60483003	NG6 (cetop3) sandwich type pressure reducing valve on B

Solenoid valves coils voltages	
12DC	12V direct current
24DC	24V direct current
24AC	24V alternate current 50 or 60Hz
48DC	24V direct current
115AC	115V alternate current 50 or 60Hz
230AC	230V alternate current 50 or 60Hz

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