EXTERNAL MANIFOLDS & ACCESSORIES

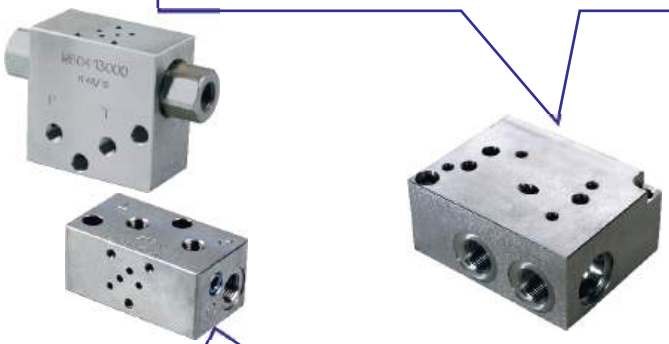
Standard NG6 (Cetop 3) base modular manifold blocks with parallel or series connections, rear or lateral ports. They can be stacked one upon the other. Top manifold P and T ports can be plugged with simple 1/4" or 1/8" BSP plugs

Pilot operated check valves can be integrated within modular manifold blocks for NG6 (Cetop 3) valves, thus avoiding the extra modular Cetop 3 sandwich type valve between the base block and the spool valve

External hand pumps with 4 cc or 8,8 cc/stroke can be mounted between the central manifold and the Cetop 3 modular block. The lever may be rotated 360°

The **pressure line** or **return line filters** are mounted in a modular manifold which can be stacked under NG6 (Cetop 3) modular manifolds

BMPPC02 base block for stackable manifolds and valves allows you mount our full range of **modular stackable valves** on your conventional units, by connecting the threaded P-T ports from the main pumping station.



A full set of **accessories** is available to complete the power pack configuration

The **NG3 MICRO** set of blocks and valves is an **ultracompact and cost effective alternative** to NG6 (Cetop3), up to 15 l/min. They can be mounted thanks to the PPC-to-PPM adaptor

Q & A

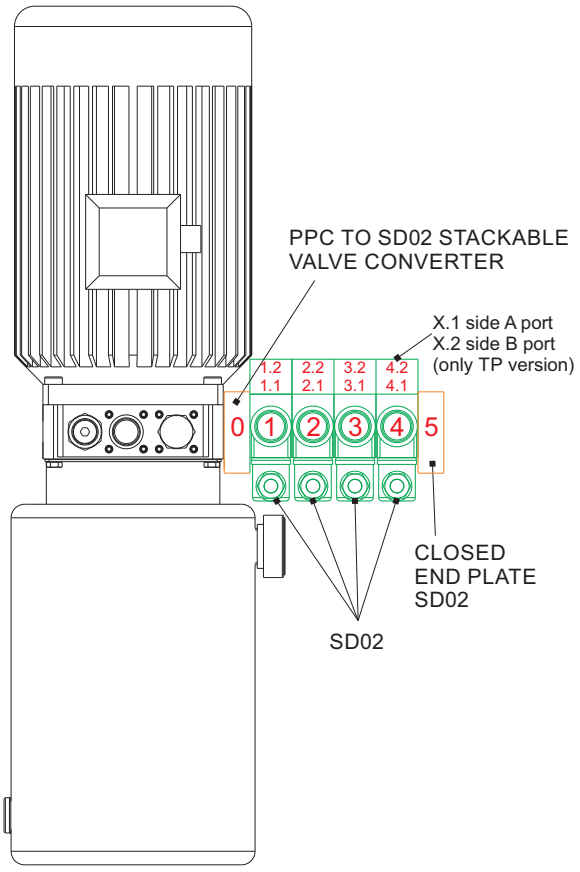
How many types of external manifold blocks can be mounted?
The central manifold exit face allows the mounting of two different block systems, fixed by 2x M8 bolts (normally used for NG6 Cetop 3 modular manifolds stacks) or 4x M6 bolts (for additional or special manifolds). The two types of bolt systems cannot be mixed on the same stack. To mount stackable directional valves or NG3 MICRO directional valves an adaptor plate is required. See section G for the relevant valve details.

When do I need to mount the 28mm spacer block?
Whenever a big motor is mounted on the power pack. Normally the E60403004 spacer must be mounted below the stack of NG6 (Cetop 3) blocks with AC motors with frame 80 or higher and with DC motors frame 125 or higher.

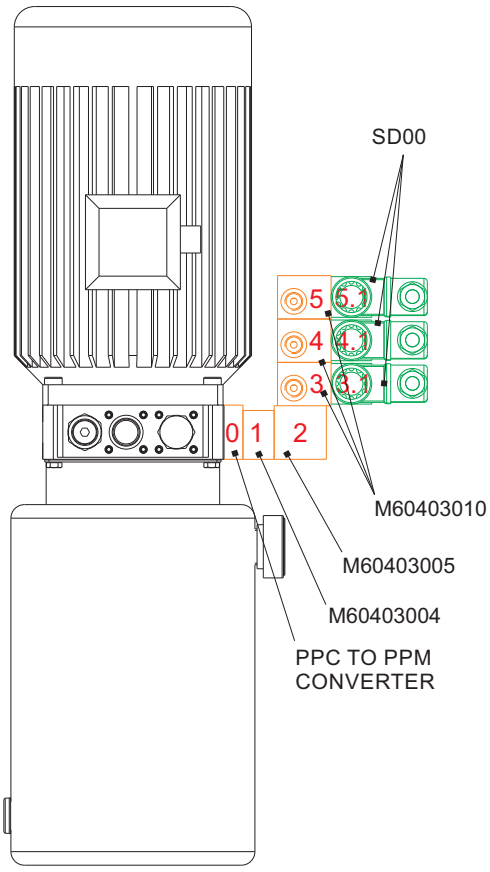
When are the modular manifolds for differential area cylinders used?
With UR (reversible pump circuits) central manifold, the exit ports are directly A and B instead of P and T. With differential area cylinders, when the bidirectional pump flow is outputting to the rod side port (let's say it is B port), there will be more flow returning to A port, connected to the piston side of the cylinder, due to the cylinder differential area ratio. The function of this manifold is to discharge the extra flow to tank at nearly zero pressure, as this cannot be absorbed by the pump itself and should otherwise flow throught the relief valve causing overheating and counterpressures.

EXTERNAL MANIFOLDS & VALVE MOUNTING EXAMPLES PPC MANIFOLDS

PPC + SD02 STACKABLE VALVES

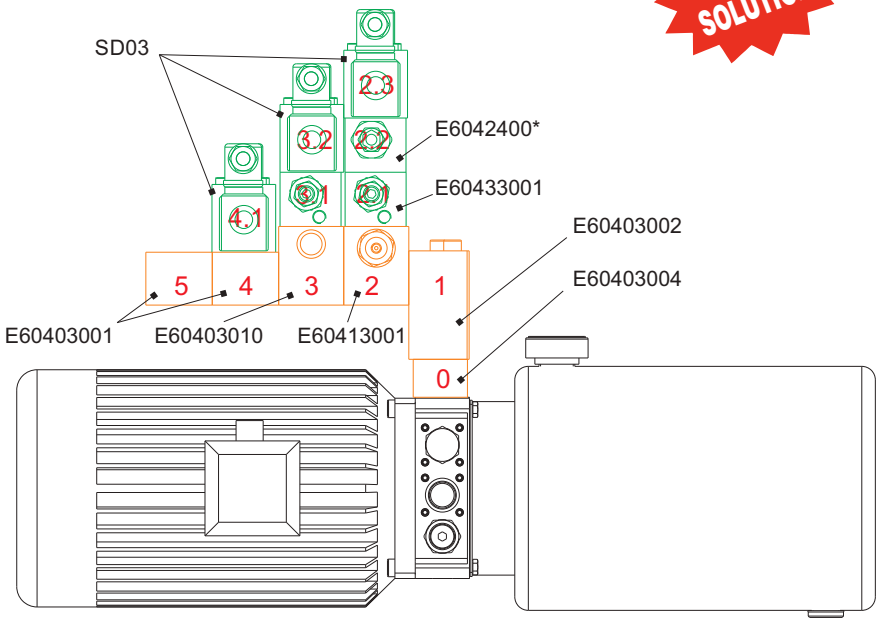


PPC + NG3 MICRO BLOCKS & VALVES



PPC + NG6 (CETOP 3) BLOCKS & VALVES

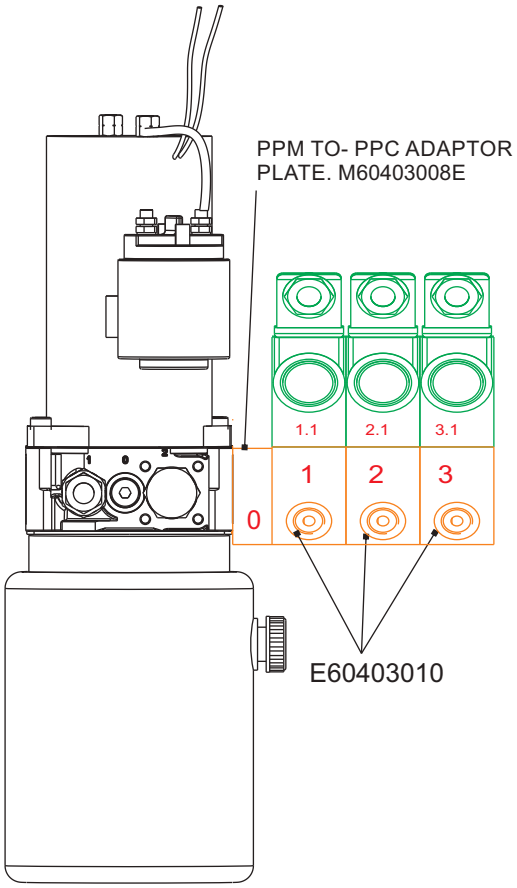
LEGACY SOLUTION



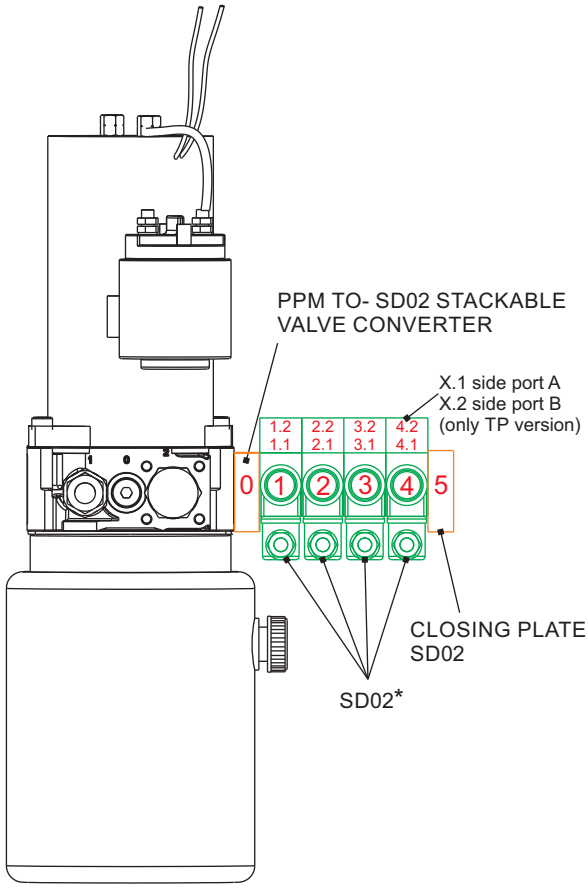
The mini powerpack external manifolds and valves are arranged following a stack level logic. Each stack is numbered eg. n, n.1, n.2, n.3,... where n is the basic manifold stack number, n.1 is the first valve mounted on top of manifold n; n.2 is the second one mounted on top of n.1,... See above self-explanatory drawings where manifolds are coloured in orange and valves in green. Stack levels are numbered in red.

EXTERNAL MANIFOLDS & VALVE MOUNTING EXAMPLES PPM MANIDOLFS

PPM + PPC MODULAR BLOCKS

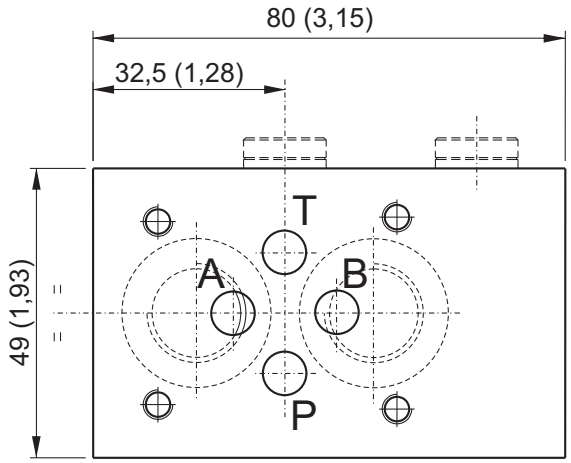


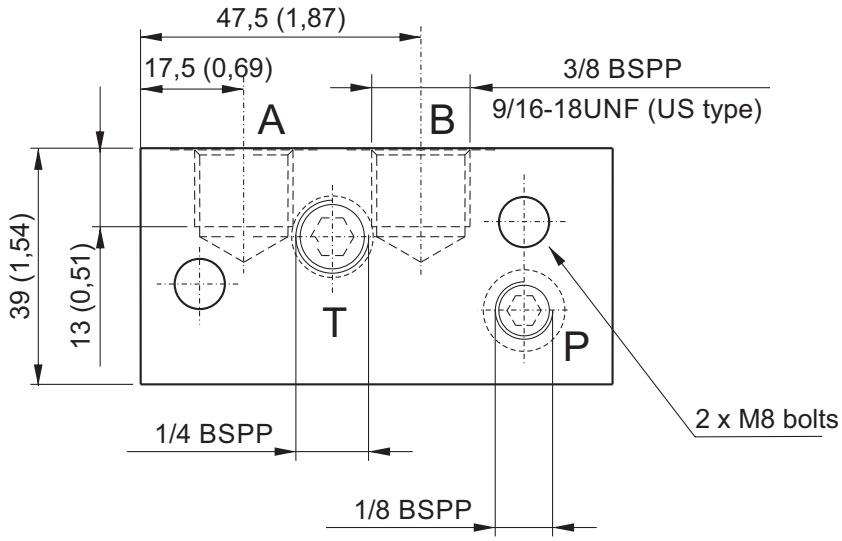
PPM + SD02 STACKABLE VALVES



MODULAR MANIFOLDS NG6 (CETOP 3), REAR PORTS

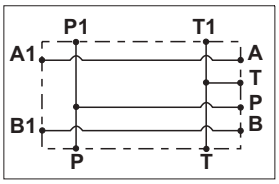
Dimensions in mm (inches)





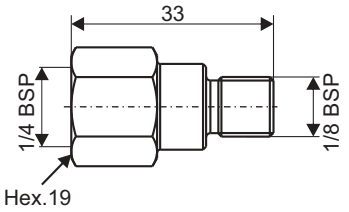
Main features

Max pressure	350 bar
Weight	0,37 Kg (0,82lb)
Fixing bolts	2 M8 tie - rods steel class 8.8 or above



Parallel connection	Spare part code
Rear ports	E60403001
Rear ports US execution	E60403001US

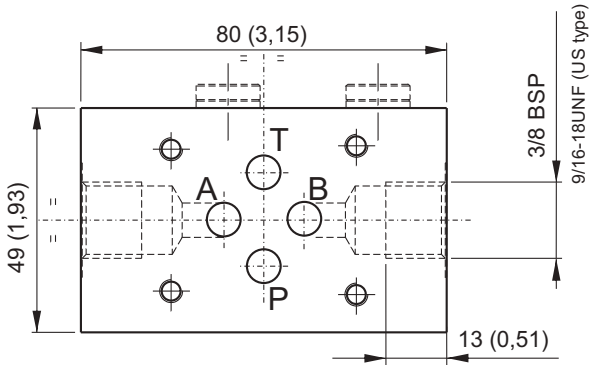
Option 1/4"BSP P port:

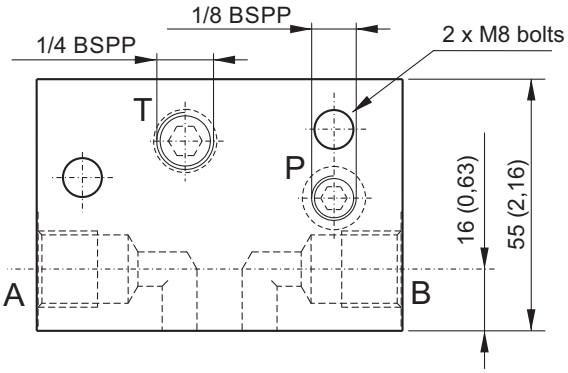


Spare part code
PORTMF0001

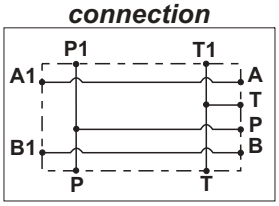
Note: Recommended tightening torque for M8 bolts: 16 Nm. Attention! Do not use tie-rods less than 8.8.
*: US execution with 9/16-18UNF SAE06 exit ports
To add external manifolds to a PPC assembly code, just add their spare part codes at the end of the PPC code. eg: PPC-0,8 12DC-MB-J-K0,6-V200-G-RETURN KIT-1,5L+**E60403004**+**E60403001.**
The Cetop attachment is on motor side. With AC motor frames bigger than 71 and DC motors bigger than dia. 125mm, always add a spacer manifold (see E60403004 code in F section) below the Cetop manifold to avoid interference between the valve and the motor.
Code does not include the Cetop solenoid valve. See NG6 (Cetop 3) valves table in section G.

MODULAR MANIFOLDS NG6 (CETOP 3), 3/8 G LATERAL PORTS

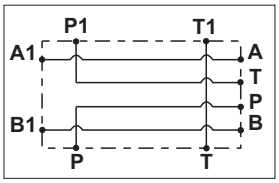




Parallel connection



Series connection

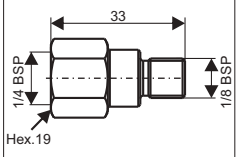


Dimensions in mm (inches)

Main features

Max pressure	350 bar
Weight	0,56 Kg (1,2lb)
Fixing bolts	2 M8 tie - rods steel class 8.8 or above

Option 1/4"BSP P port:



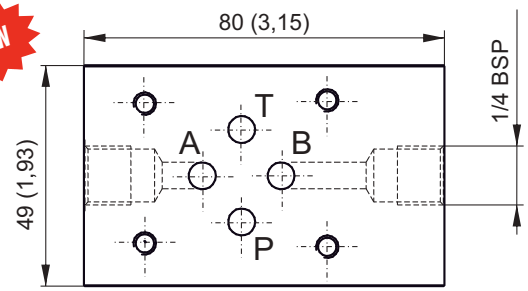
Spare part code
PORTMF0001

Parallel connection	Spare part code
Lateral ports	E60403010
Lateral port US execution	E60403010US

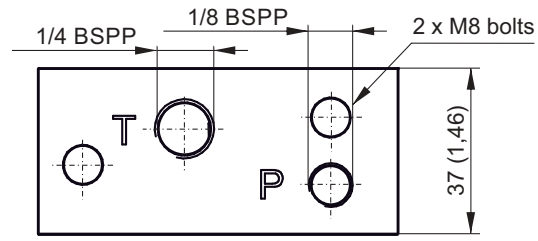
Series connection	Spare part code
Lateral ports	E60403011
Lateral port US execution	E60403011US

MODULAR MANIFOLDS NG6 (CETOP 3), 1/4 G LATERAL PORTS

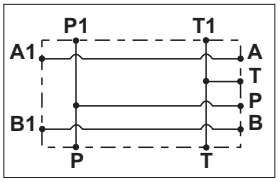
NEW



Parallel connection	Spare part code
Lateral ports	E60403012



Parallel connection



Dimensions in mm (inches)

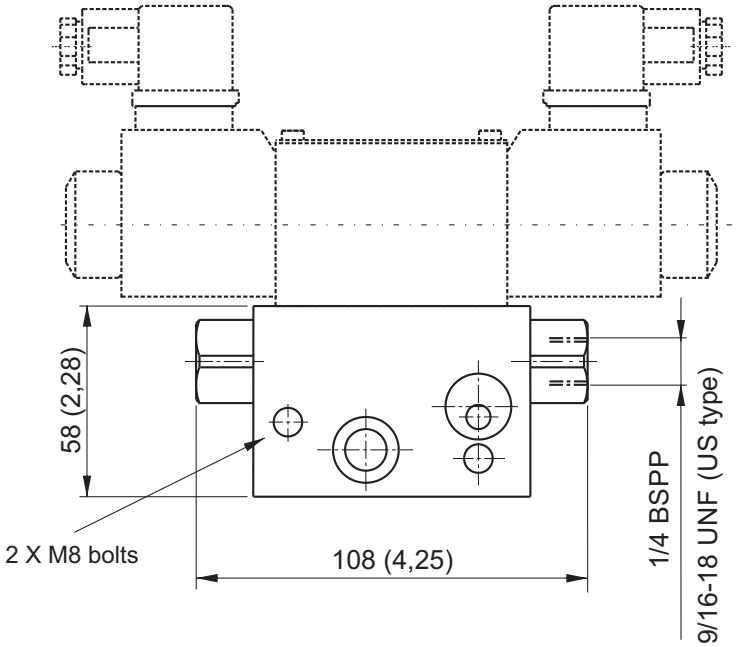
Main features

Max pressure	350 bar
Weight	0,334 Kg (0,74lb)
Fixing bolts	2 M8 tie - rods steel class 8.8 or above

Note: Recommended tightening torque for M8 bolts: 16 Nm. Attention! Do not use tie-rods less than 8.8.
*: US execution with 9/16-18UNF SAE06 exit ports
To add external manifolds to a PPC assembly code, just add their spare part codes at the end of the PPC code. eg: PPC-0,8 12DC-MB-J-K0,6-V200-G-RETURN KIT-1,5L+**E60403004**+**E60403010.**
The Cetop attachment is on motor side. With AC motor frames bigger than 71 and DC motors bigger than dia. 125mm, always add a spacer manifold (see E60403004 code in F section) below the Cetop manifold to avoid interference between the valve and the motor.
Code does not include the Cetop solenoid valve. See NG6 (Cetop 3) valves table in section G.

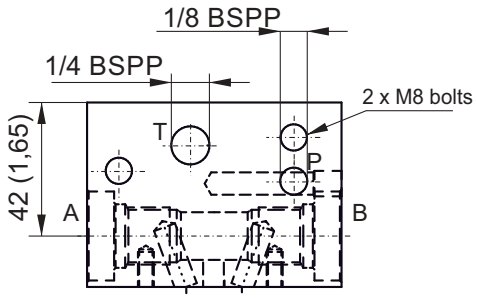
MODULAR MANIFOLDS NG6 (CETOP 3) WITH INTEGRAL PILOT OPERATED CHECK VALVES

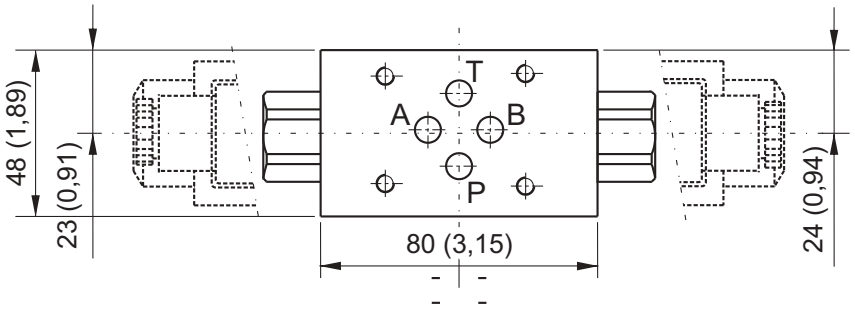
Dimensions in mm (inches)

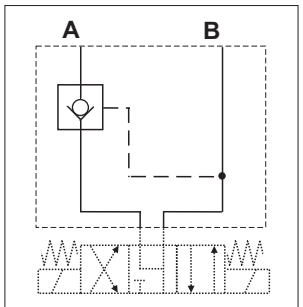


Main features

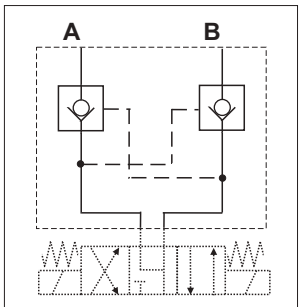
Max pressure	350 bar
Pilot ratio	1:5,6
Weight	0,71 Kg (1,56lb)
Fixing bolts	2 M8 tie - rods steel class 8.8 or above



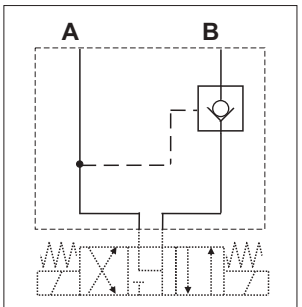




Spare part code
E60413002
E60413002US*

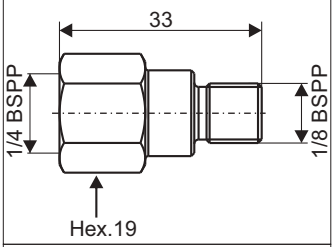


Spare part code
E60413001
E60413001US*



Spare part code
E60413003
E60413003US*

Option 1/4"BSP P port:



Spare part code
PORTMF0001

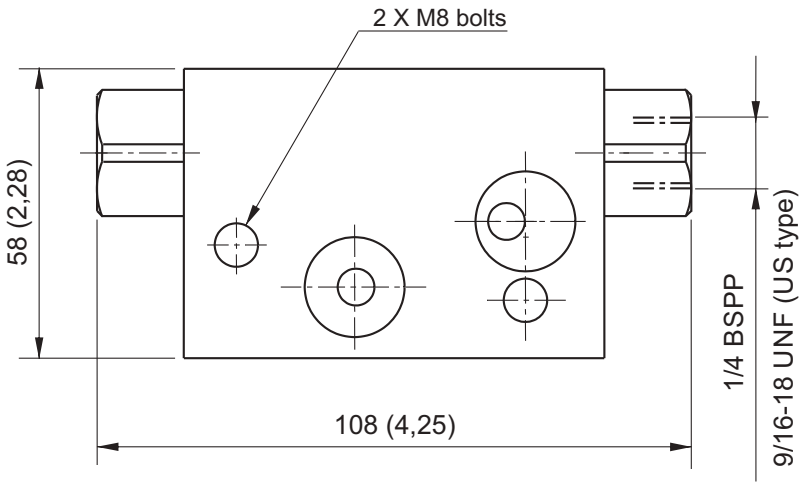
Note: Recommended tightening torque for M8 bolts: 16 Nm. Attention! Do not use tie-rods less than 8.8.
*: US execution with 9/16-18UNF SAE06 exit ports
To add external manifolds to a PPC assembly code, just add their spare part codes at the end of the PPC code. eg: PPC-0,8 12DC-MB-J-K0,6-V200-G-RETURN KIT-1,5L+**E60403004**+**E60413001.**
Code does not include the Cetop solenoid valve. See NG6 (Cetop 3) valves table in section G.

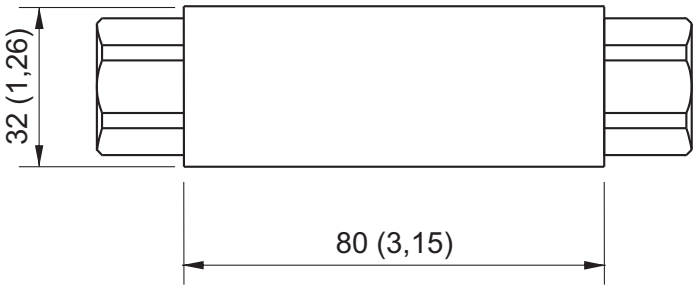
MODULAR MANIFOLDS WITH PILOT OPERATED CHECK VALVES

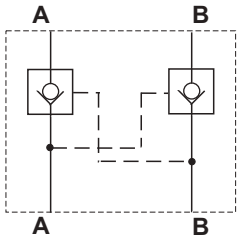
Dimensions in mm (inches)
Suitable for:
- central manifold U4
- central manifold UR

Main features

Max pressure	350 bar
Pilot ratio	1:5,6
Weight	0,5 Kg (1,1lb)
Fixing bolts	2 M8 tie - rods steel class 8.8 or above





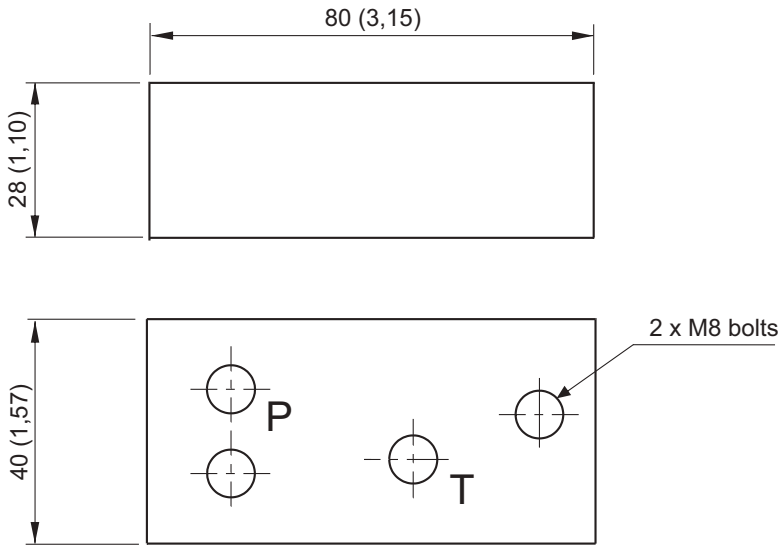


Spare part code
E60403027
E60403027US*

Note: Recommended tightening torque for M8 bolts: 16 Nm. Attention! Do not use tie-rods less than 8.8.
*: US execution with 9/16-18UNF SAE06 exit ports

SPACER ELEMENTS

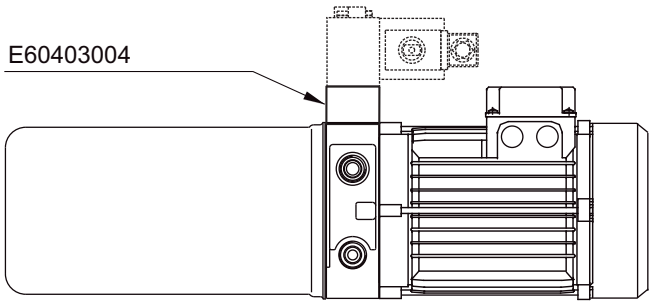
Dimensions in mm (inches)

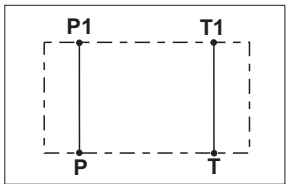


Main features

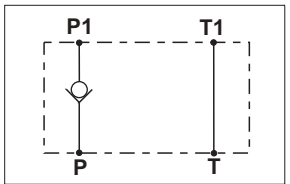
Max pressure	350 bar
Weight	0,23 Kg (0,5lb)
Fixing bolts	2 M8 tie - rods steel class 8.8 or above

Mounting example





Spare part code
E60403004

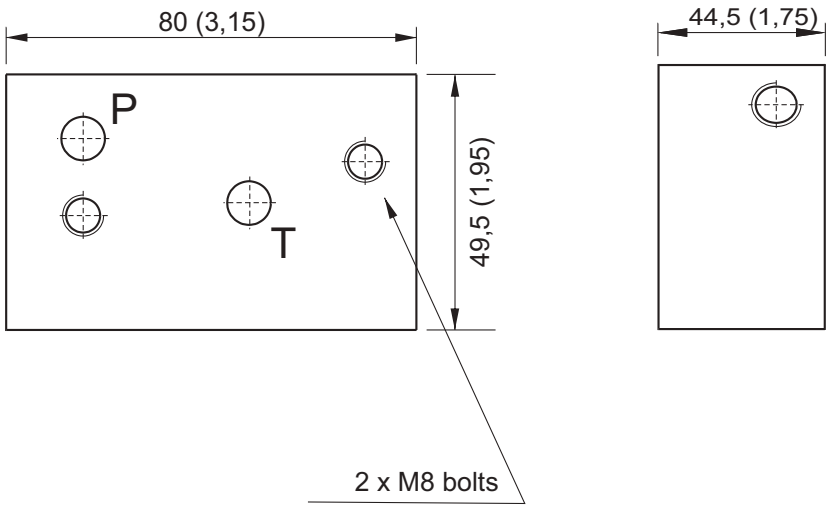


Spare part code
E60403004CV

Note: Recommended tightening torque for M8 bolts: 16 Nm. Attention! Do not use tie-rods less than 8.8.
Suitable with AC motor frames bigger than 71 and DC motors bigger than dia. 125, to avoid interference between the valves and the motor.

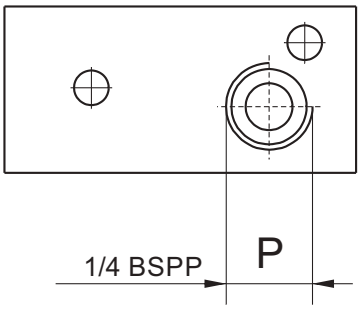
90° ROTATION MANIFOLDS - BLOCKS ON MOTOR SIDE

Dimensions in mm (inches)

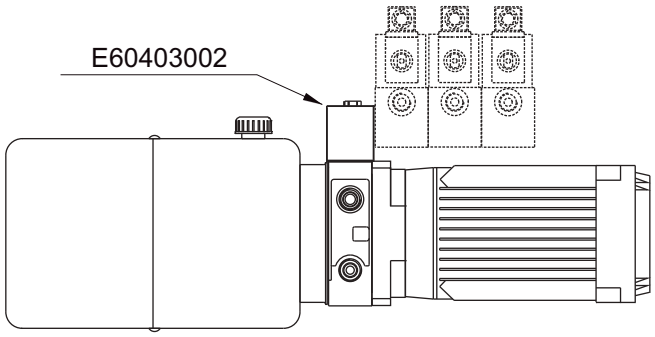


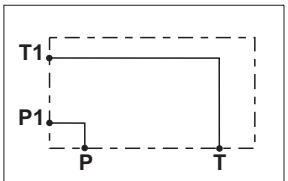
Main features

Max pressure	350 bar
Weight	0,72 Kg (1,59lb)
Fixing bolts	2 M8 tie - rods steel class 8.8 or above



Mounting example

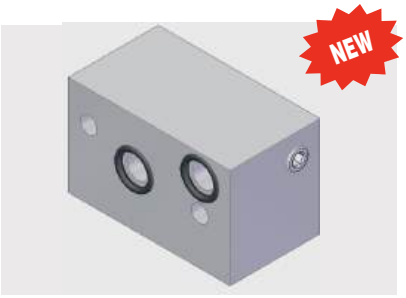


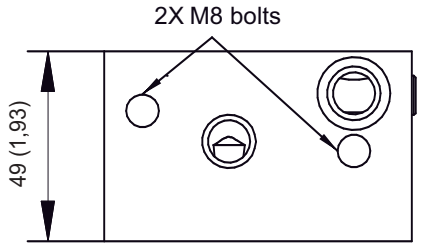


Spare part code
E60403002

Note: Recommended tightening torque for M8 bolts: 16 Nm. Attention! Do not use tie-rods less than 8.8.
With AC motor frames bigger than 90 and DC motors bigger than dia. 151, always add a spacer manifold (see E60403004 code in F section) below the modular block to avoid interference between the valve and the motor.

90° ROTATION MANIFOLD - BLOCKS ON TANK SIDE

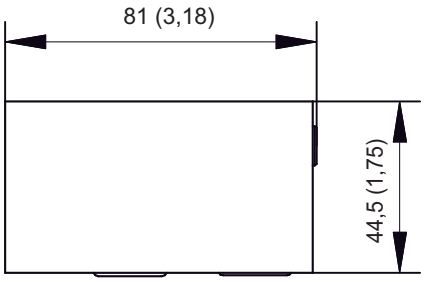




Dimensions in in mm (inches)

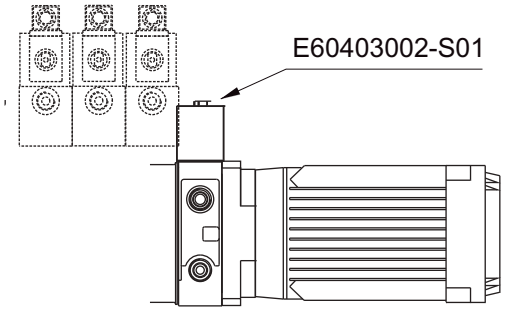
Main features

Max pressure	350 bar
Weight	0,45 Kg (0,99lb)
Fixing bolts	2 M8 tie - rods steel class 8.8 or above



Spare part code
E60403002-S01

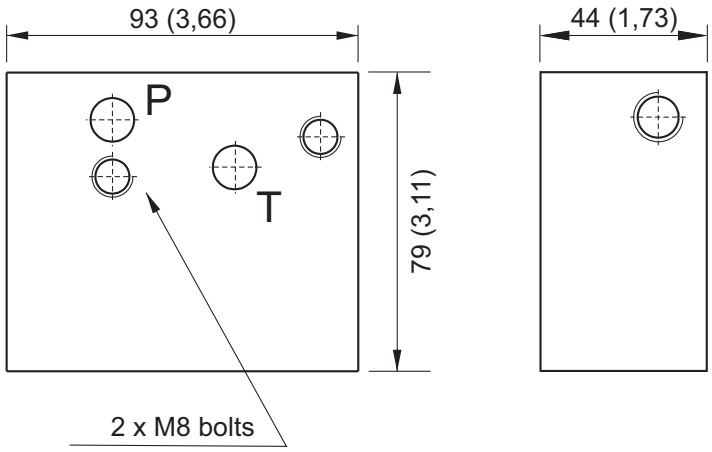
Mounting example



Note: Recommended tightening torque for M8 bolts: 16 Nm. Attention! Do not use tie-rods less than 8.8.
To add NG3 MICRO external manifolds to a PPC assembly code, just add the converter PPC to PPM first, then the additional manifolds spare part codes at the end of the PPC code. eg: PPC-0,8 12DC-MB-J-K0,6-V200-G-RETURN KIT-1,5L+**EMASH00001+M60403004+M60403010.**

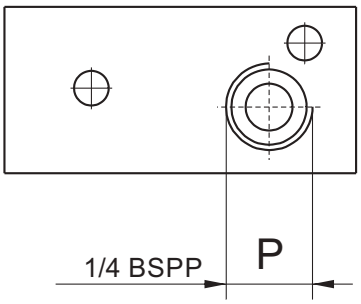
90° ROTATION MANIFOLDS WITH DOUBLE-SIDED ATTACHMENT P & T 79MM

Dimensions in mm (inches)

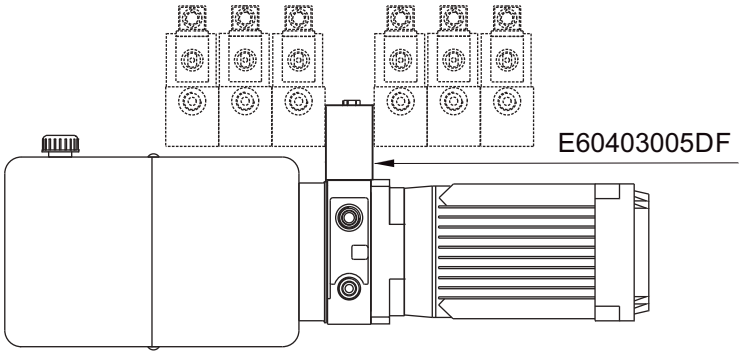


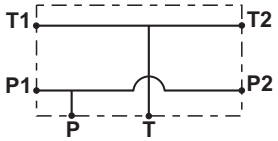
Main features

Max pressure	350 bar
Weight	0,72 Kg (1,59lb)
Fixing bolts	2 M8 tie - rods steel class 8.8 or above



Mounting example



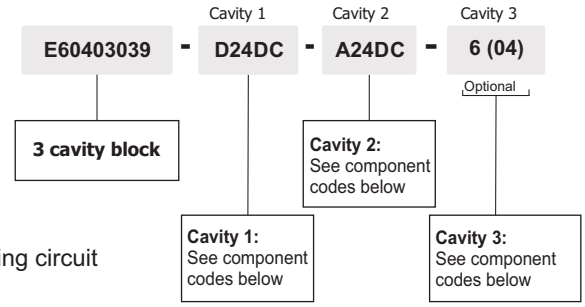


Spare part code
E60403005DF

Note: Recommended tightening torque for M8 bolts: 16 Nm. Attention! Do not use tie-rods less than 8.8.
With AC motor frames bigger than 90 and DC motors bigger than dia. 151, always add a spacer manifold (see E60403004 code in F section) below the modular block to avoid interference between the valve and the motor.

MANIFOLD FOR ADDITIONAL SINGLE ACTING CIRCUIT

ASSEMBLY CODE - example



Dimensions in mm (inches)

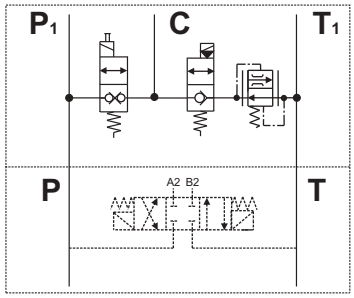
Typically used to create a single acting circuit in parallel with a double acting circuit

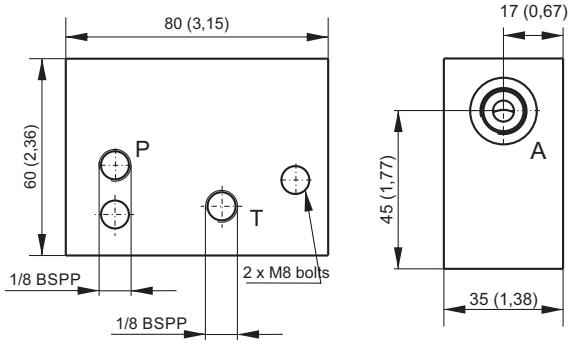
Main features

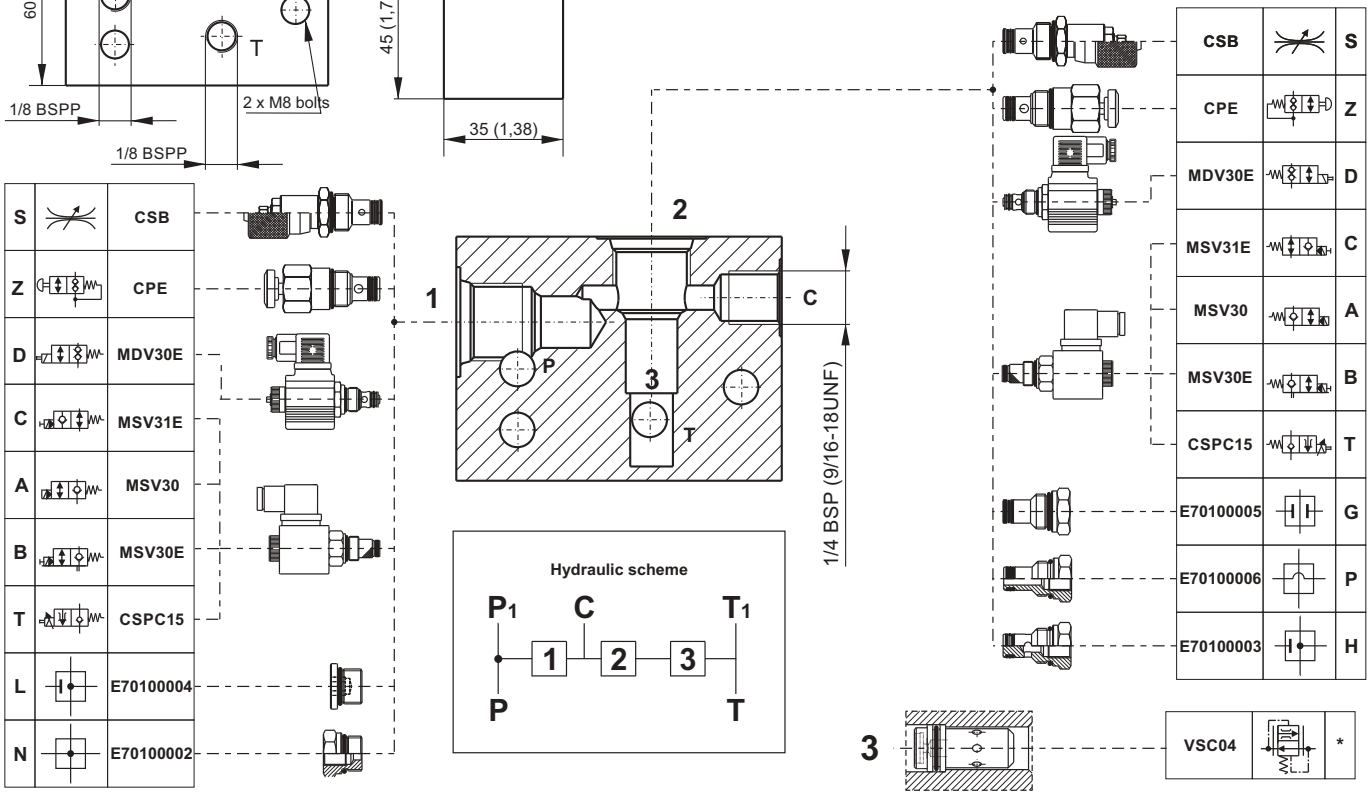
Max pressure	350 bar
Weight	0,39 Kg (0,88lb)
Fixing bolts	2 M8 tie - rods steel class 8.8 or above

Spare part code
E60403039
E60403039US*

Application example

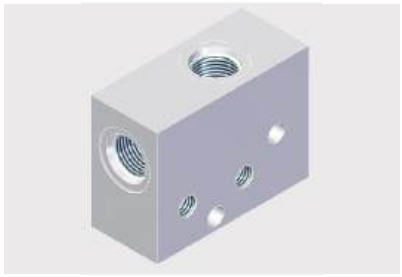




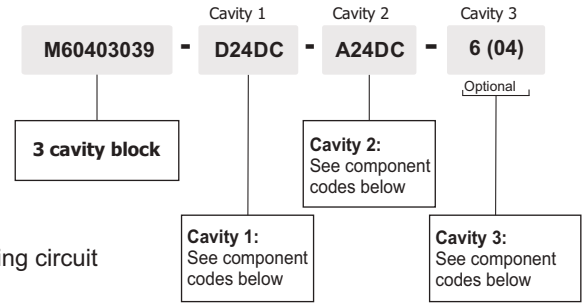


Note: to add external manifolds to PPC assembly code, just add their spare part codes at the end of the PPC code.
Example: PPC-0,8 12DC-UA-J-G1,1-V200-G-RETURN KIT-G-1,5L+**E60403039-D24DC-A24DC-6(04).**
The valve attachment is on the motor side. With AC motor frames bigger than 71 and DC motors bigger than dia. 125, always add a spacer manifold (see E60403004 code in F section) below the modular block to avoid interference between the valve and the motor.
Recommended tightening torque for M8 bolts: 16 Nm. Attention! Do not use tie-rods less than 8.8.

MANIFOLD FOR ADDITIONAL SINGLE ACTING CIRCUIT



ASSEMBLY CODE - example



Dimensions in mm (inches)

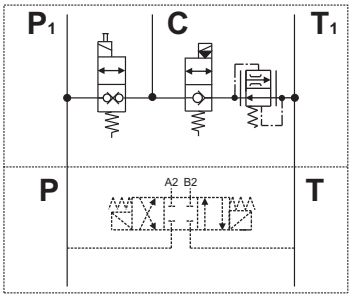
Typically used to create a single acting circuit in parallel with a double acting circuit

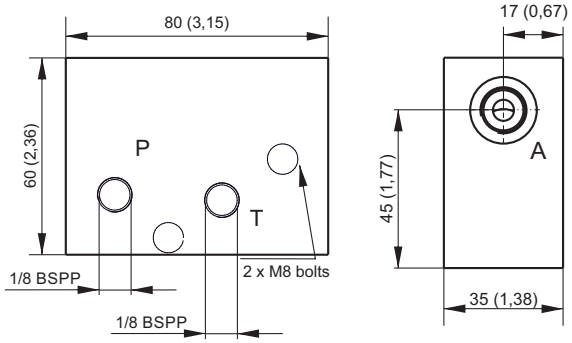
Main features

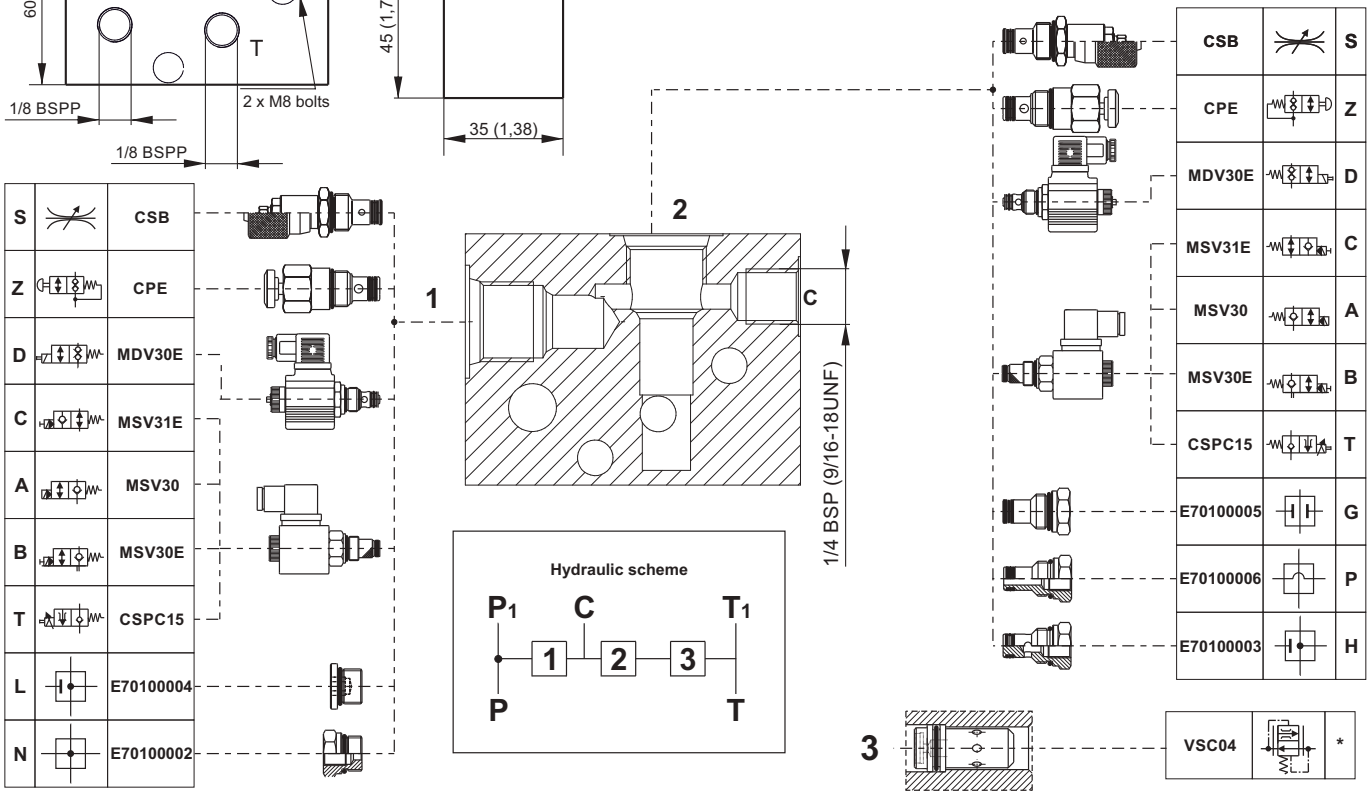
Max pressure	350 bar
Weight	0,39 Kg (0,88lb)
Fixing bolts	2 M8 tie - rods steel class 8.8 or above

Spare part code
M60403039
M60403039US*

Application example





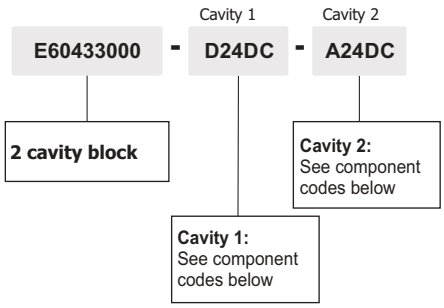


Note: to add external manifolds to PPC assembly code, just add their spare part codes at the end of the PPC code.
Example: PPM-0,8 12DC-MB-JM-G0,1-DM_280-G-RETURN KIT-G-1,5L+**M60403039-D24DC-A24DC-6(04).**
The valve attachment is on the motor side. With AC motor frames bigger than 71 and DC motors bigger than dia. 125, always add a spacer manifold (see E60403004 code in F section) below the modular block to avoid interference between the valve and the motor.
Recommended tightening torque for M8 bolts: 16 Nm. Attention! Do not use tie-rods less than 8.8.

NG6 (CETOP 3) SANDWICH MODULAR MANIFOLD FOR SAE08 CARTRIDGE VALVES

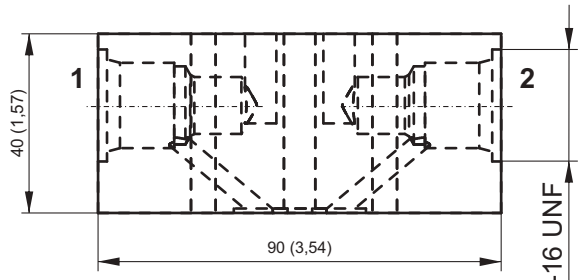
Dimensions in mm (inches)

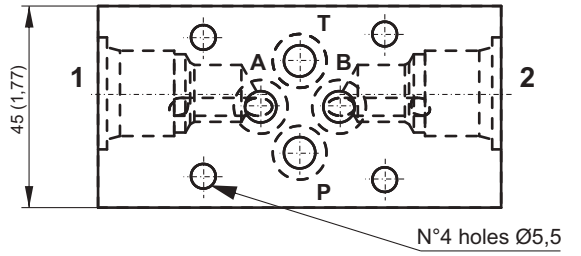
ASSEMBLY CODE - example



Main features

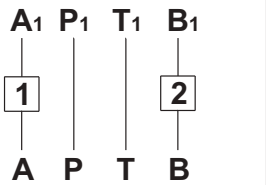
Max pressure	300 bar
Max flow	up to 40 l/min
Weight	0,4 Kg (0,88lb)
Fixing bolts	4 M5x** bolts. 5Nm torque 10,9 class steel or above
Fluid temperature	-20 ÷ +80°C
Filtration degree	25 ÷ 50 µ



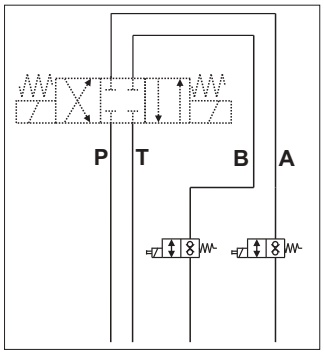


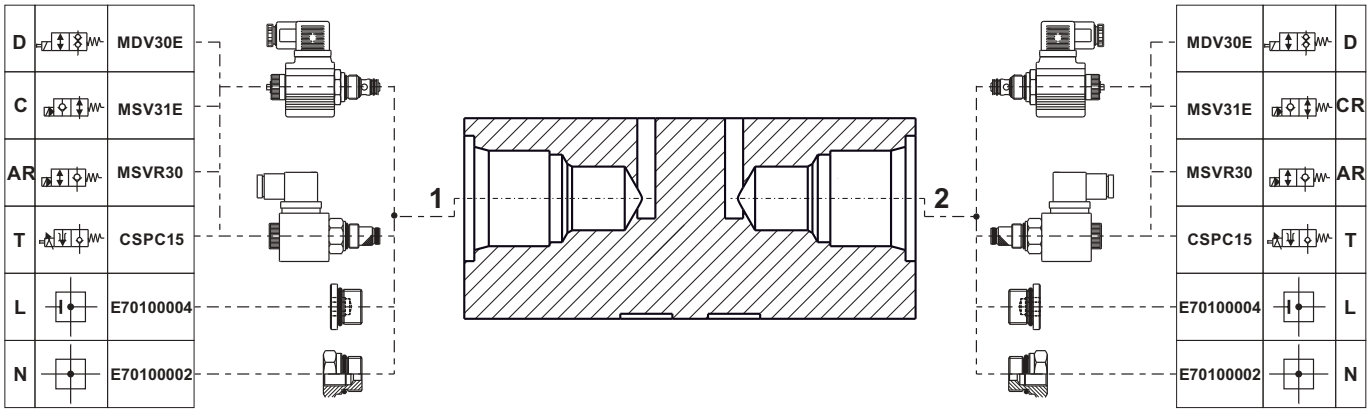
Spare part code
E60433000

Hydraulic scheme



Application example





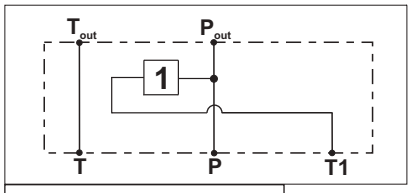
Note: to add external manifolds to PPC assembly code, just add their spare part codes at the end of the PPC code.
Example: PPC-0,8 12DC-UA-G1,1-J-V200-G-RETURN KIT-1,5L+E60403010+**E60433000+MDV30E000+24DC_M630+MSV300000+24DC_M630+SD03C2 +2x24DC_M160.**

For more info and for a mounting example, please see E60433001 code (NG6 CETOP 3 flow control sandwich valve) in G section.
The Cetop valve attachment is on the motor side. With AC motor frames bigger than 71 and DC motors bigger than dia. 125, always add a spacer manifold (see E60403004 code in F section) below the modular block to avoid interference between the valve and the motor.

EXTERNAL MANIFOLD FOR 2/2 SAE08 VALVE PRESSURE LINE TO T1 RETURN LINE

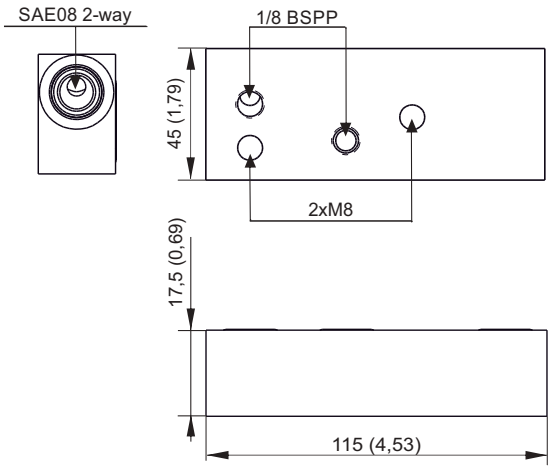
Main features

Max pressure	350 bar
Weight	0,37 kg (0,81 lb)
Fixing bolts	2xM8 tie-rods steel class 8.8 or above

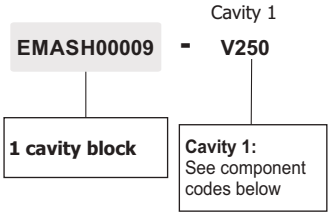


Spare part code
EMASH00009

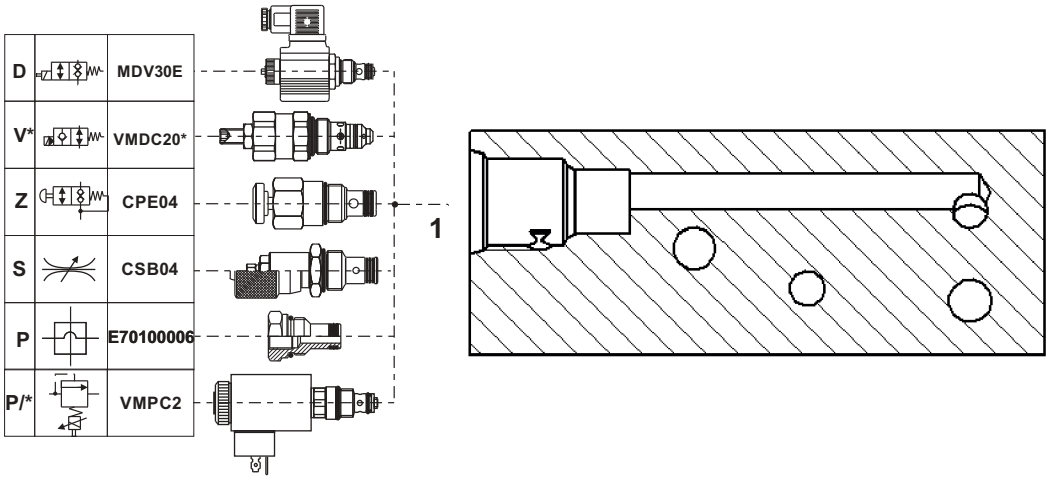
Dimensions in mm (inches)



ASSEMBLY CODE - example

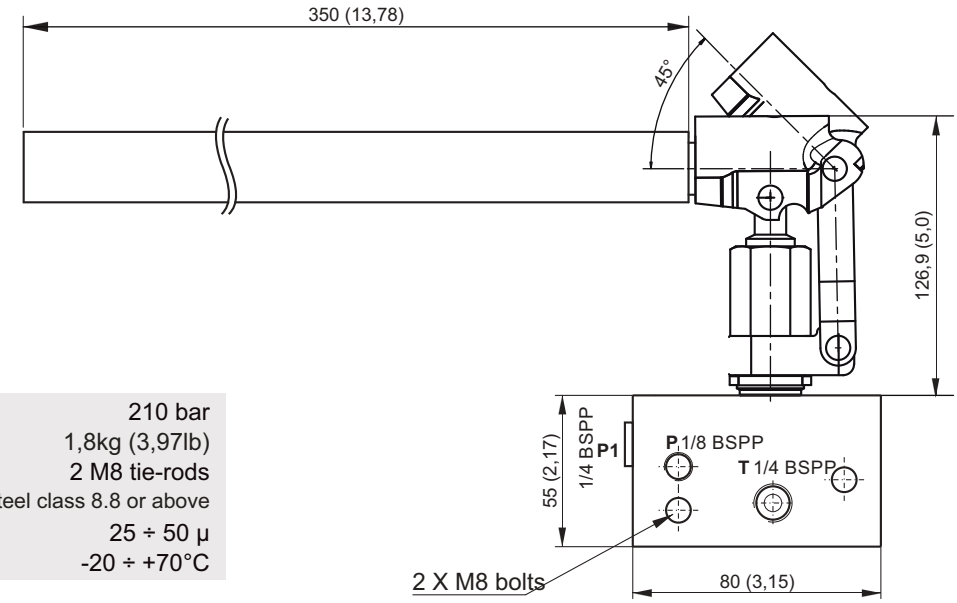


Mounting example



Note: to add external manifolds to PPC assembly code, just add their spare part codes at the end of the PPC code.
Example: PPC-0,8 12DC-UA-G1,1-J-V200-G-RETURN KIT-1,5L+E60403010+**EMASH00009+E60433000+MDV30E000+24DC_M630+MSV300000+24DC_M630+SD03C2 +2x24DC_M160.**
For more info and for a mounting example, please see EMASH00009 code (NG6 CETOP 3 flow control sandwich valve) in G section.
The Cetop valve attachment is on the motor side. With AC motor frames bigger than 71 and DC motors bigger than dia. 125, always add a spacer manifold (see E60403004 code in F section) below the modular block to avoid interference between the valve and the motor.

HAND PUMP MODULAR MANIFOLD



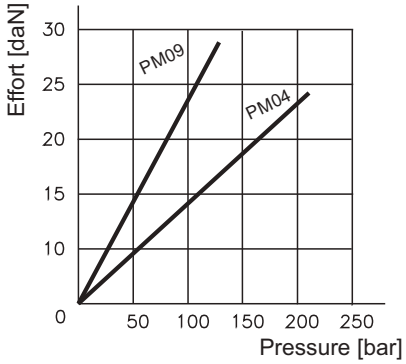
Dimensions in mm (inches)

Main features

Max pressure	210 bar
Weight	1,8kg (3,97lb)
Fixing bolts	2 M8 tie-rods steel class 8.8 or above
Filtration grade	25 ÷ 50 µ
Fluid temperature	-20 ÷ +70°C

Block thickness: 39mm (1,54)

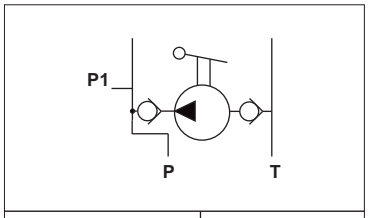
Effort (daN)
operating on the top of the lever



Note: Values are measured only on the valve (no cavity) with oil viscosity of 46 cSt at 50 °C. The drop of the pressure can change by the fluid viscosity and fluid temperature.

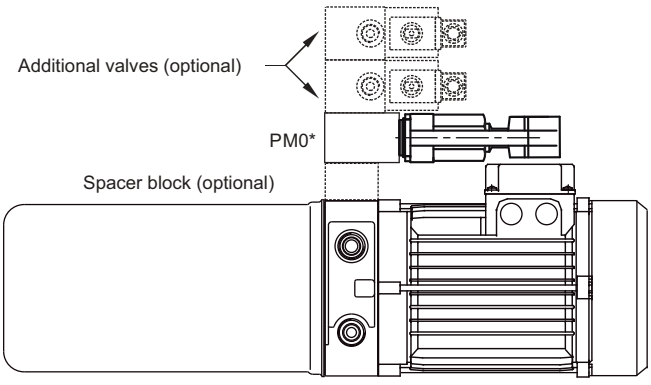
Spare part codes - cartridges only

Description	Spare part code
4cc hand pump 7/8-14UNF cartridge + lever	**CARTPM04L**
8,8cc hand pump 7/8-14UNF cartridge + lever	**CARTPM09L**



Assembly code	Displacement cc/stroke
PM04	**4**
PM09	**8,8**

Mounting example



Note: Recommended tightening torque for M8 bolts: 16 Nm. Attention! Do not use tie-rods less than 8.8.

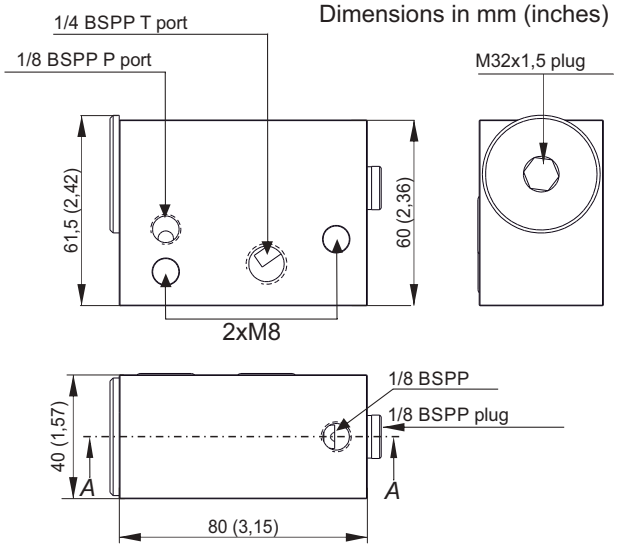
Commissioning: the pump must be bled by opening the plug of the unused pressure port (P or P1), pumping a few times until all air bubbles and then clean oil come out, then tightening the plug again.

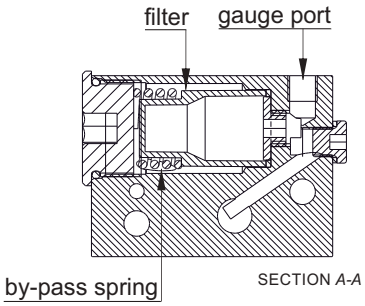
COMPACT RETURN LINE MODULAR MANIFOLD FILTER

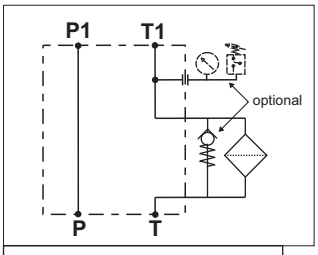
Main features

Max pressure	350 bar
Weight	0,55 kg (1,21 lb)
Fixing bolts	2xM8 tie-rods steel class 8.8 or above
Filtration degree	10 micron 25 micron
By-pass option	Opening: ≃10 bar max flow: 6 l/min
Pressure gauge option	full-scale: 25 bar

Dimensions in mm (inches)





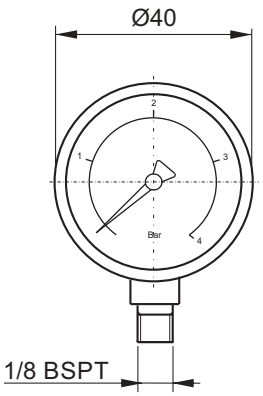


Spare part code
EMASH000**

**	Type:
	13: 10 micron + bypass
	14: 25 micron + bypass
	18: 10 micron
	19: 25 micron

OPTIONS

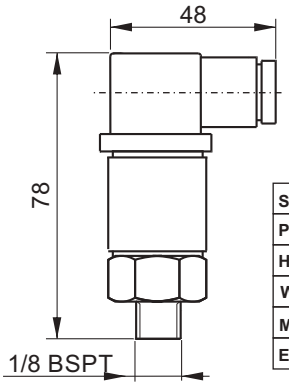
Pressure gauge for return filter manifold



Weight: 0,1 Kg

Spare part code
MIR40025

Pressure switch for return filter manifold



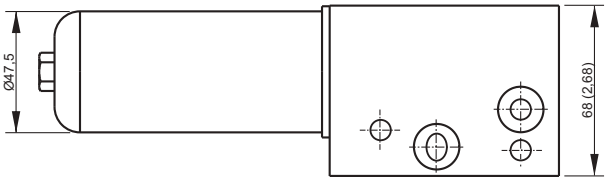
Setting range	0,2 ÷ 2,5 bar
Protection degree	IP 65
Hysteresis	10 ÷ 15 %
Weight	0,05 Kg
Max load	0,5 A a 250 VAC
Electric switch	NO/NC

Spare part code
F4R0M3

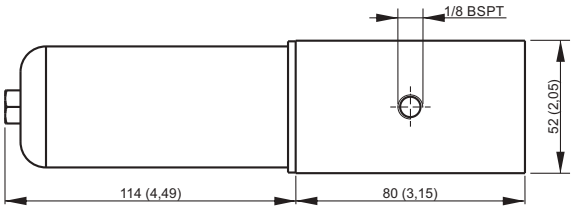
Spare	Cartridge code
10 micron	EAFTH00001
25 micron	EAFTH00002

Note: to add external manifolds to PPC assembly code, just add their spare part codes at the end of the PPC code.
Example: PPC-0,8 12DC-UA-G1,1-J-V200-G-RETURN KIT-1,5L+**EMASH000****+E60433000+...**
This block must be mounted as first among the external ones.
For more info and for a mounting example, please see E60433001 code (NG6 CETOP 3 flow control sandwich valve) in G section.
The Cetop valve attachment is on the motor side. With AC motor frames bigger than 71 and DC motors bigger than dia. 125, always add a spacer manifold (see E60403004 code in F section) below the modular block to avoid interference between the valve and the motor.

RETURN LINE FILTER MODULAR MANIFOLD



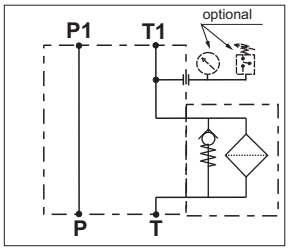
Dimensions in mm (inches)



Main features

Open by-pass valve press.	2 bar
Max flow	15 l/min
Filtration grade	15 µ
Fluid temperature	-30 ÷ + 80 °C
Weight	0,87 kg
Fixing bolts	2 M8 bolts steel class 8.8 or above

Hydraulic scheme



Note: standard code does not include the MIR40 pressure gauge or F4 pressure switch

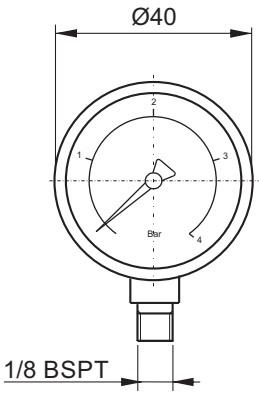
Spare part code

E60403020	**Modular manifold with return filter on T**
FO201385	**15 micron replacement cartridge part number**

Note: Recommended tightening torque for M8 bolts: 16 Nm.
Attention! Do not use tie-rods less than 8.8.
Recommended tightening torque for spin on cartridge: 10Nm
This filter cannot be used on U4 and UR manifolds, since both these central manifolds outlet ports are pressurized. You may choose C34200001 in-tank return filter.

OPTIONS

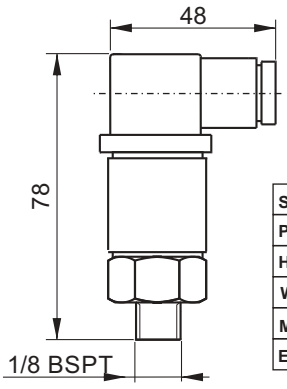
Pressure gauge for return filter manifold



Weight: 0,1 Kg

Spare part code
MIR4004

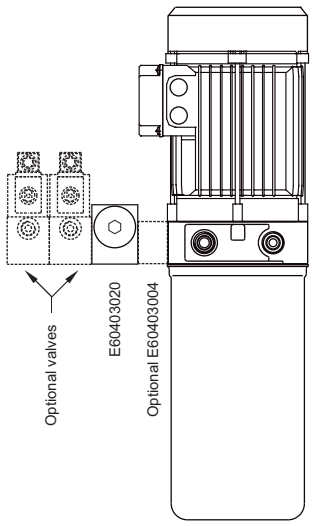
Pressure switch for return filter manifold



Setting range	0,2 ÷ 2,5 bar
Protection degree	IP 65
Hysteresis	10 ÷ 15 %
Weight	0,05 Kg
Max load	0,5 A a 250 VAC
Electric switch	NO/NC

Spare part code
F4R0M3

Mounting example

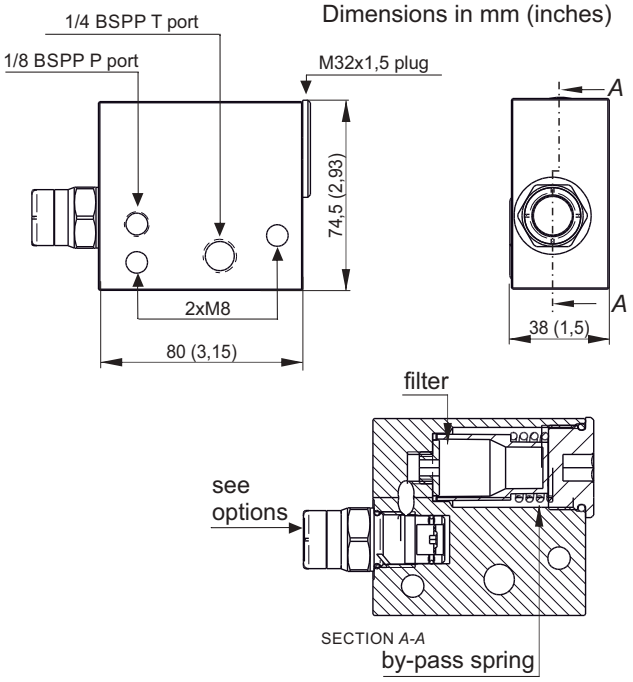


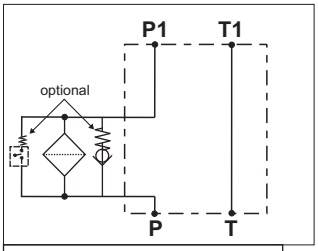
COMPACT PRESSURE LINE MODULAR MANIFOLD FILTER

Main features

Max pressure	350 bar
Weight	0,65 kg (1,42 lb)
Fixing bolts	2xM8 tie-rods steel class 8.8 or above
Filtration degree	10 micron 25 micron
By-pass option	Opening: ≃10 bar max flow: 6 l/min

Dimensions in mm (inches)



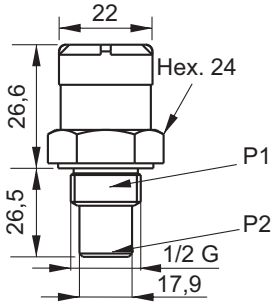


Spare part code
EMASH000**

**

Type:
15: 10 micron + bypass
16: 25 micron + bypass
20: 10 micron
21: 25 micron

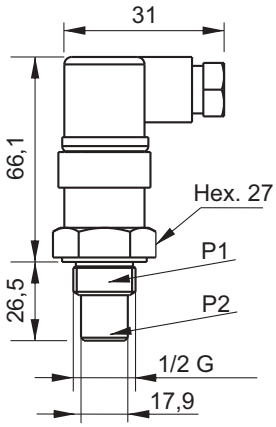
Differential pressure visual indicator



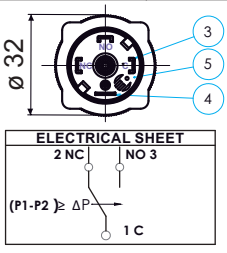
Switching contacts	Red/Green
Ambient temperature	-25 ÷ +80°C
Torque	50 Nm
Proof pressure	675 bar
Max pressure (P1=P2)	400 bar
Pressure rate for set.	10 bar/15 sec
Max different pressure (P1-P2)	200 bar
Diff. pressure setting (horizontal position)	5 bar ± 15%

Spare part code
DPV03400

Differential pressure switch



Diff. pressure setting	8 bar ±15%
Protection degree	IP 65
Switching contacts	SPDT
Weight	0,16 Kg
Max different pressure (P1-P2)	200 bar
Proof pressure	675 bar
Max pressure (P1=P2)	450 bar
Torque	50 Nm
Pressure rate for set.	10 bar/15 sec
Ambient temperature	-25 ÷ +85°C
Voltage 14 Vdc	5 (4) A
Voltage 30 Vdc	4 (3) A
Voltage 125 Vdc	5 (3) A
Voltage 250 Vdc	3 (2) A



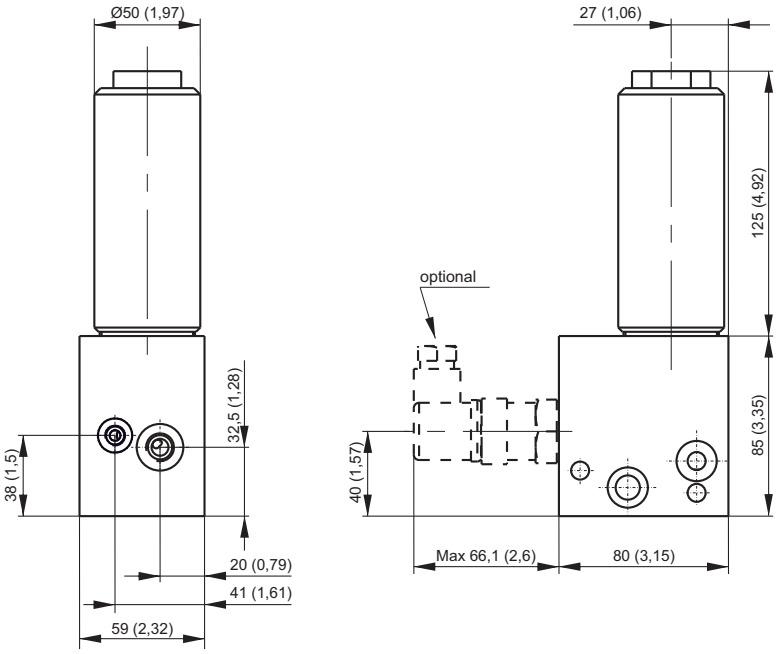
Spare part code
DPE03400

Spare	Cartridge code
10 micron	EAFTH00001
25 micron	EAFTH00002

Note: to add external manifolds to PPC assembly code, just add their spare part codes at the end of the PPC code.
Example: PPC-0,8 12DC-UA-G1,1-J-V200-G-RETURN KIT-1,5L+**EMASH000****+E60433000+...
This block must be mounted as first among the external ones.
For more info and for a mounting example, please see E60433001 code (NG6 CETOP 3 flow control sandwich valve) in G section.
The Cetop valve attachment is on the motor side. With AC motor frames bigger than 71 and DC motors bigger than dia. 125, always add a spacer manifold (see E60403004 code in F section) below the modular block to avoid interference between the valve and the motor.

PRESSURE LINE MODULAR MANIFOLD FILTER FOR HIGH FLOW

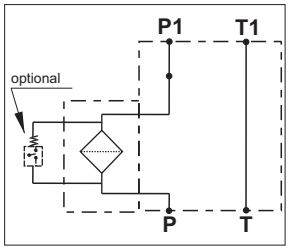
Dimensions in mm (inches)



Main features

Backpressure allowable	21 bar
Max pressure	400 bar
Max flow	32 l/min
Filtration grade	5-15-25 µ
Fluid temperature	-30 ÷ + 80 °C
Weight	2,3 kg
Fixing bolts	2xM8 steel 8.8 or better

Hydraulic scheme



Note: standard code does not include the differential electric or visual pressure switch

Spare part code

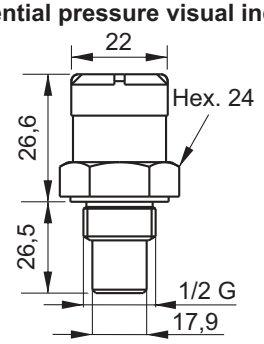
E60403025* — **Modular manifold with pressure filter**

B — **Cartridge filter:**
A = 5 micron fiber reinforced cartridge filter (cartridge spare part code: HPFEHY05)
B = 15 micron fiber reinforced cartridge filter (cartridge spare part code: HPFEHY15)
C = 25 micron fiber reinforced cartridge filter (cartridge spare part code: HPFEHY25)

Note:other filtration grades cartridges available on request
Recommended tightening torque for M8 bolts: 16 Nm.
Attention! Do not use tie-rods less than 8.8
Recommended tightening torque for spin on cartridge: 45Nm

OPTIONS

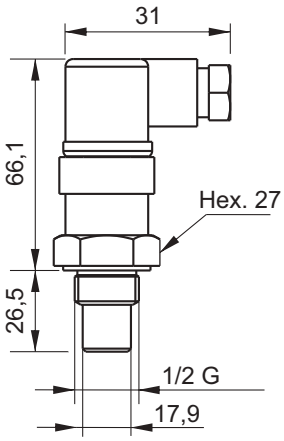
Differential pressure visual indicator



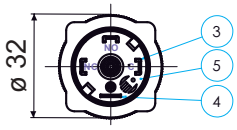
Switching contacts	Red/Green
Ambient temperature	-25 ÷ +80°C
Torque	50 Nm
Proof pressure	675 bar
Max pressure (P1=P2)	400 bar
Pressure rate for set.	10 bar/15 sec
Max different pressure (P1-P2)	200 bar
Diff. pressure setting (horizontal position)	5 bar ± 15%

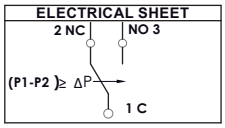
Spare part code
DPV03400

Differential pressure switch



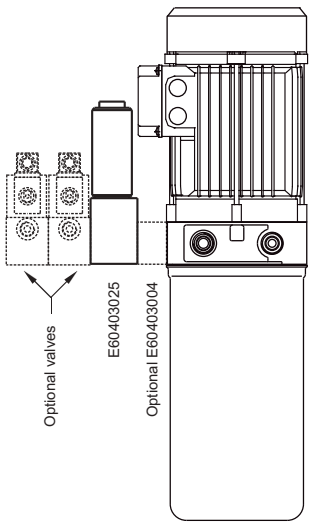
Diff. pressure setting	8 bar ±15%
Protection degree	IP 65
Switching contacts	SPDT
Weight	0,16 Kg
Max different pressure (P1-P2)	200 bar
Proof pressure	675 bar
Max pressure (P1=P2)	450 bar
Torque	50 Nm
Pressure rate for set.	10 bar/15 sec
Ambient temperature	-25 ÷ +85°C
Voltage 14 Vdc	5 (4) A
Voltage 30 Vdc	4 (3) A
Voltage 125 Vdc	5 (3) A
Voltage 250 Vdc	3 (2) A





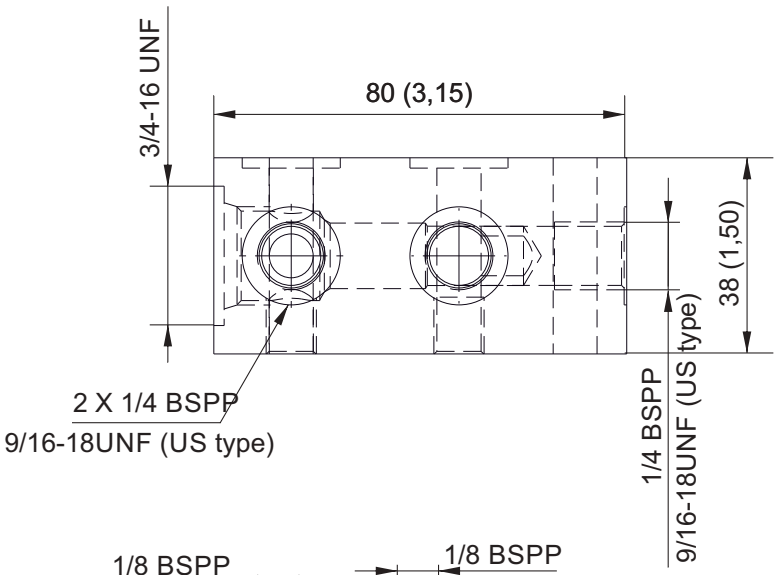
Spare part code
DPE3400

Mounting example



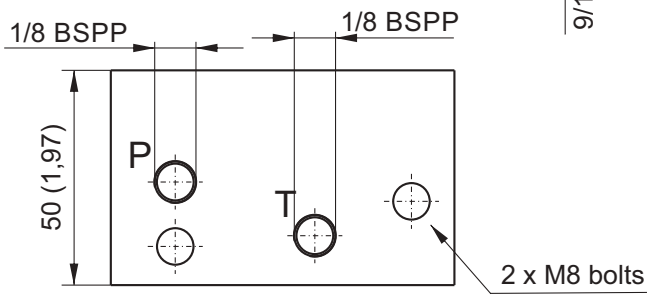
MODULAR MANIFOLD FOR 3/4-16 UNF CARTRIDGES, TWO WAY

Dimensions in mm (inches)

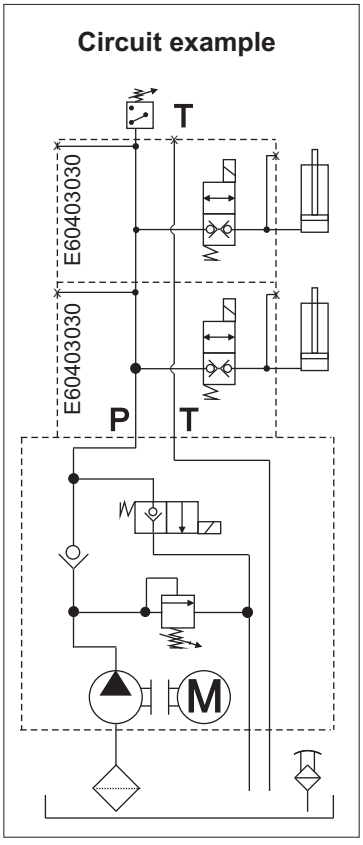


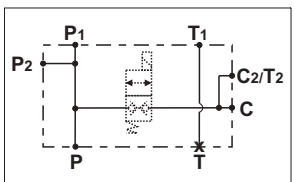
Main features

Max pressure	350 bar
Weight	0,35 Kg (0,78lb)
Fixing bolts	2 M8 tie - rods steel class 8.8 or above



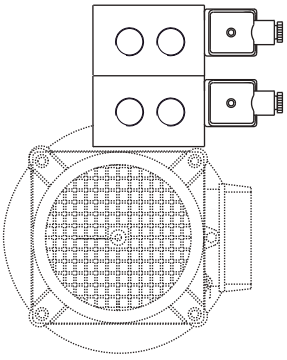
Circuit example





Spare part code
E60403030
E60403030US*

Mounting example

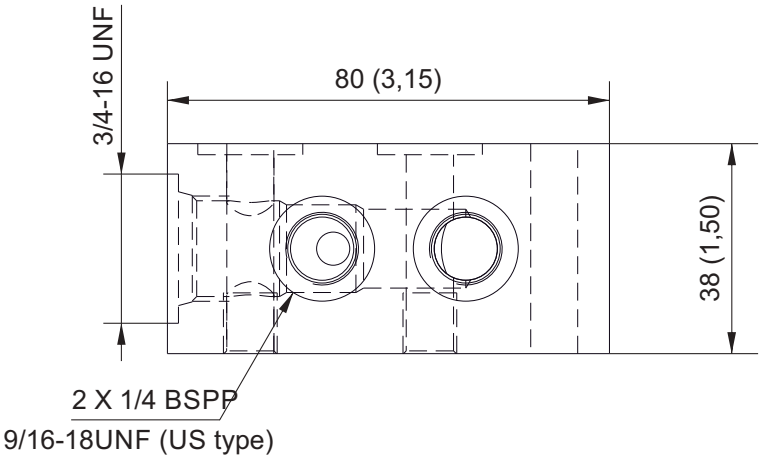


Note: code does not include the MSV or MDV solenoid valves. See valves tables in section D.

Note: Recommended tightening torque for M8 bolts: 16 Nm. Attention! Do not use tie-rods less than 8.8.
*: US execution with 9/16-18 UNF SAE06 exit ports.
Not for MSVR valves.

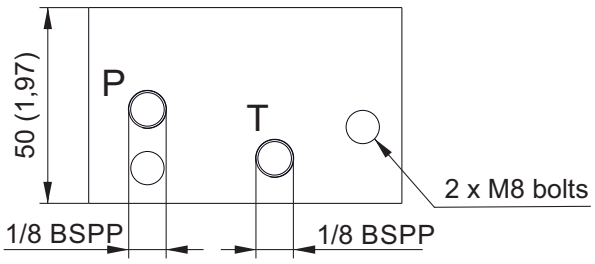
MODULAR MANIFOLD FOR 3/4-16 UNF CARTRIDGES, THREE WAY

Dimensions in mm (inches)

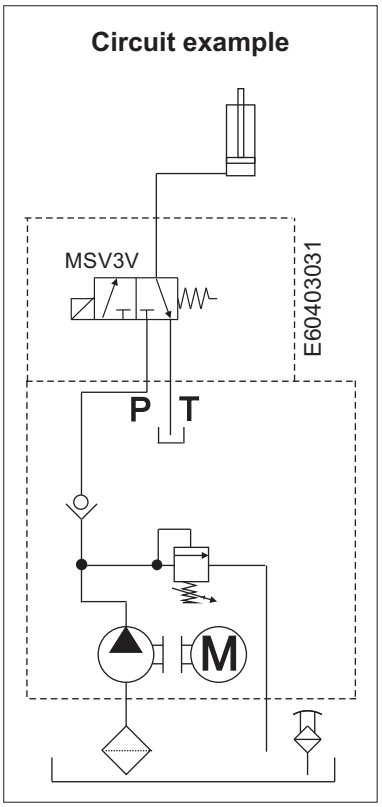


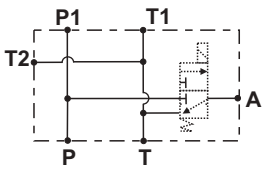
Main features

Max pressure	350 bar
Weight	0,32 Kg (0,7lb)
Fixing bolts	2 M8 tie - rods steel class 8.8 or above



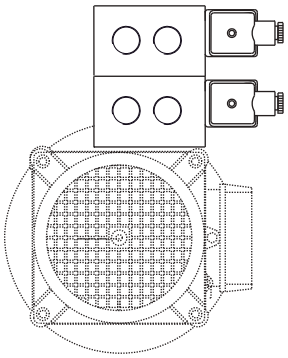
Circuit example





Spare part code
E60403031
E60403031US*

Mounting example



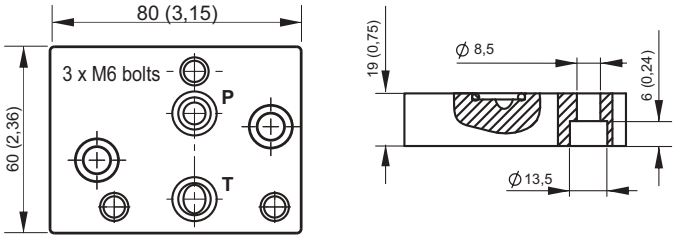
Note: code does not include the MSV3V solenoid valve.
See MSV3V table in section G

Note: Recommended tightening torque for M8 bolts: 16 Nm. Attention! Do not use tie-rods less than 8.8.
The three way block is not compatible with square vertical tanks.
*: US execution with 9/16-18 UNF SAE06 exit ports.

BASE MANIFOLD CONVERTERS

Dimensions in mm (inches)

PPC TO SD02 STACKABLE VALVE CONVERTER
(needed to mount SD02 stackable valves)

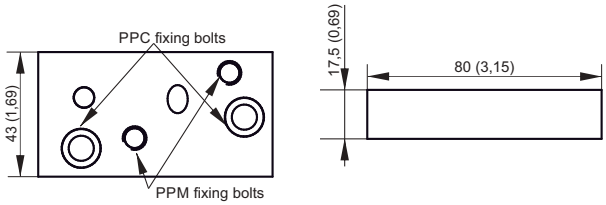


Fixing system: 2 M8x20 bolts steel class 8.8 or above
Weight: 0,22 Kg

Spare part code
E60403006DN

Dimensions in mm (inches)

PPC TO PPM BASE CONVERTER
(needed to mount PPM NG3 MICRO blocks range)



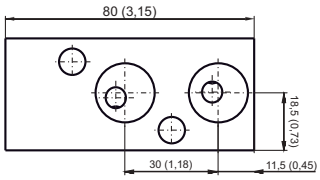
Fixing system: 2 M8x20 bolts steel class 8.8 or above
Weight: 0,175 Kg

Spare part code
EMASH00001

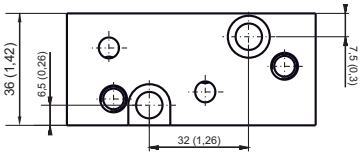
Dimensions in mm (inches)

PPM TO PPC BASE CONVERTER

PPM INTERFACE



PPC INTERFACE



Fixing system: 2 X M8 bolts steel class 8.8 or above
Weight: 0,14 Kg

Spare part code
M60403008E

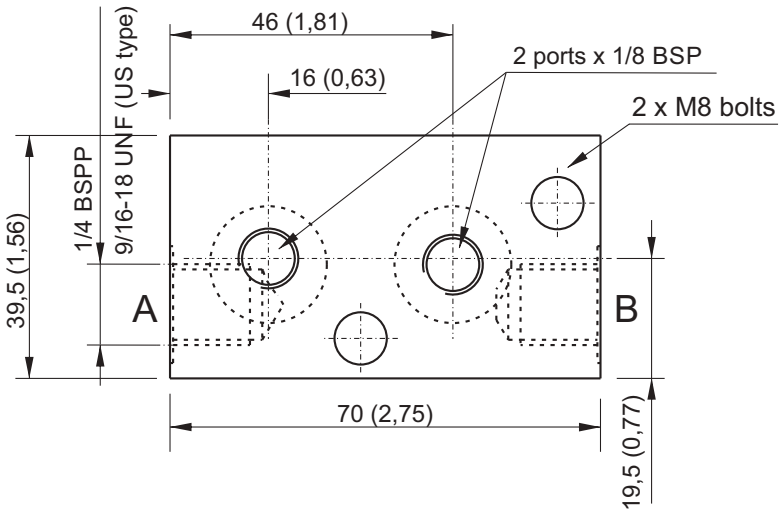
Note: Recommended tightening torque for M8 bolts: 16 Nm. Attention! Do not use tie-rods less than 8.8.

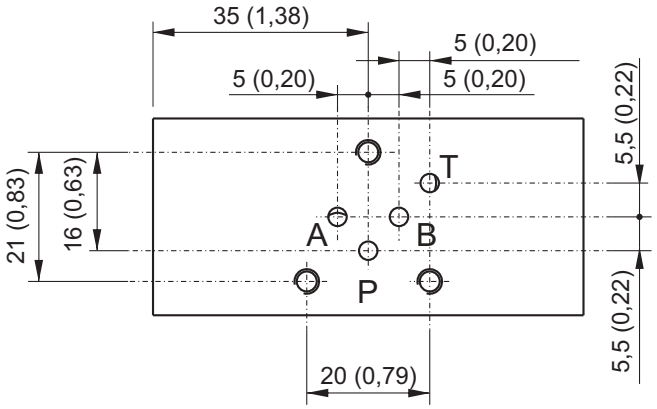
NG3 MICRO MODULAR MANIFOLDS, LATERAL PORTS

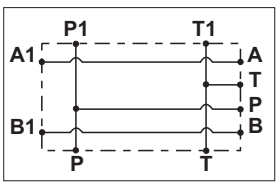
Dimensions in mm (inches)

Main features

Max pressure	350 bar
Weight	0,21 Kg (0,46lb)
Fixing bolts	2 M8 tie - rods steel class 8.8 or above





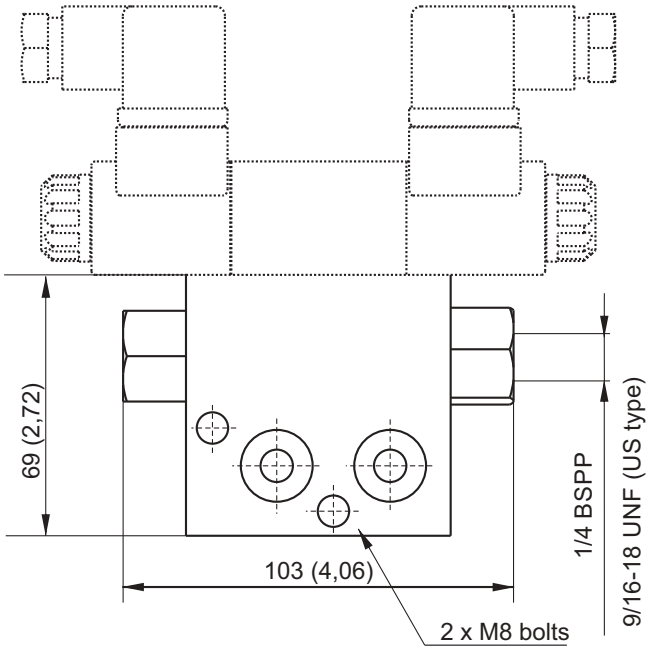


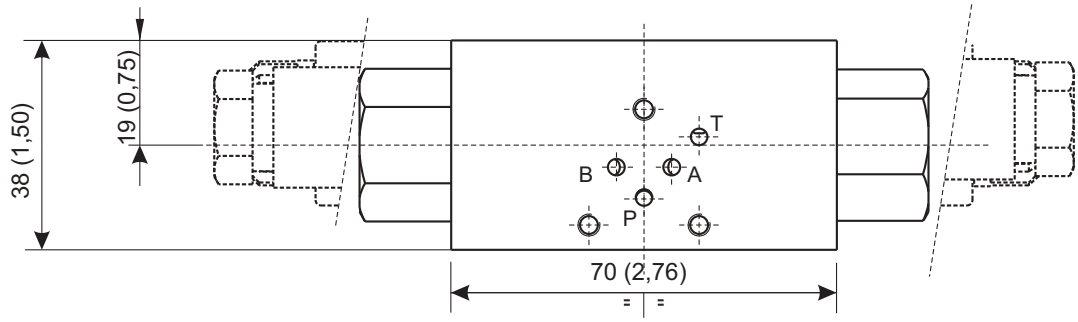
Parallel connection	Spare part code
Lateral ports	**M60403010**
Lateral ports US execution	**M60403010US**

Note: Recommended tightening torque for M8 bolts: 16 Nm. Attention! Do not use tie-rods less than 8.8.
To add NG3 MICRO external manifolds to a PPC assembly code, just add the converter PPC to PPM first, then the additional manifolds spare part codes at the end of the PPC code. eg: PPC-0,8 12DC-MB-J-K0,6-V200-G-RETURN KIT-1,5L+**EMASH00001+M60403004+M60403010.**
The NG3 micro valve attachment is on motor side.

NG3 MODULAR MANIFOLD WITH INTEGRAL PILOT OPERATED CHECK VALVES

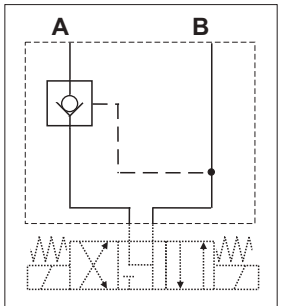
Dimensions in mm (inches)



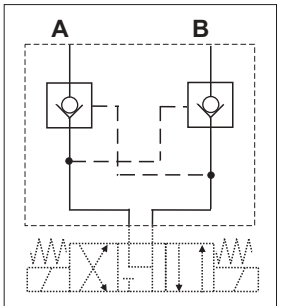


Main features

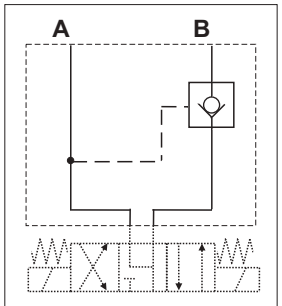
Max pressure	350 bar
Weight	0,26 Kg (0,57lb)
Fixing bolts	2 M8 tie - rods steel class 8.8 or above



Spare part code
M60413002
M60413002US*



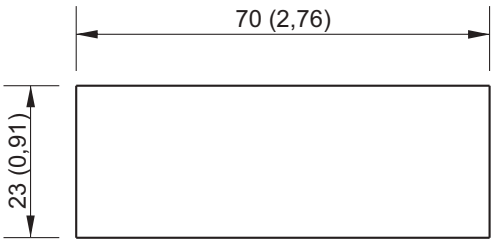
Spare part code
M60413001
M60413001US*



Spare part code
M60413003
M60413003US*

Note: Recommended tightening torque for M8 bolts: 16 Nm. Attention! Do not use tie-rods less than 8.8.
*: US execution with 9/16-18UNF SAE06 exit ports
To add NG3 MICRO external manifolds to a PPC assembly code, just add the converter PPC to PPM first, then the additional manifolds spare part codes at the end of the PPC code. eg: PPC-0,8 12DC-MB-J-K0,6-V200-G-RETURN KIT-1,5L+**EMASH00001+M60403004+M60403010.**
Code does not include the NG3 valve. See SD00 NG3 valves table in section G.

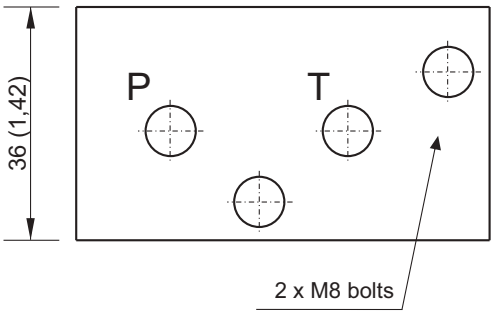
PPM SPACER ELEMENT 23MM

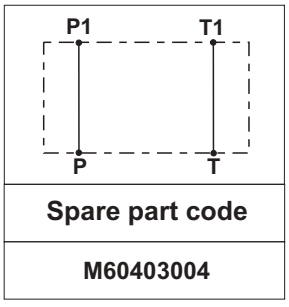


Dimensions in mm (inches)

Main features

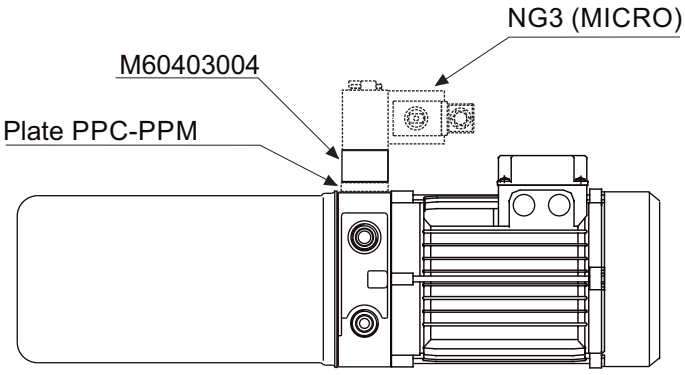
Max pressure	350 bar
Weight	0,14 Kg (0,3lb)
Fixing bolts	2 M8 tie - rods steel class 8.8 or above





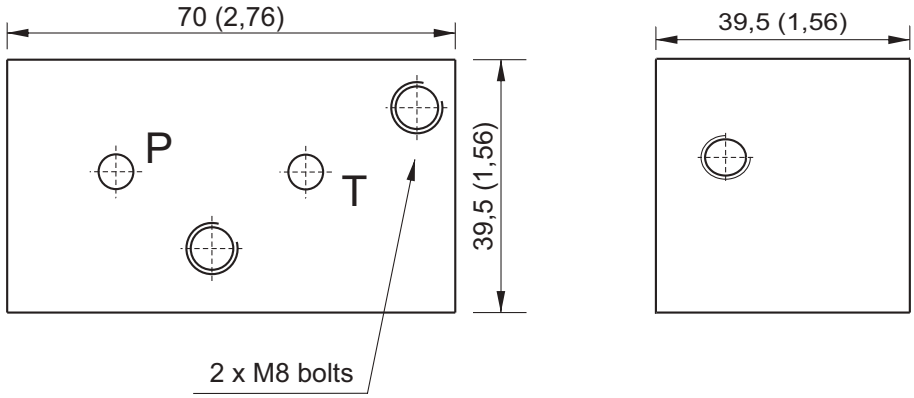
Spare part code
M60403004

Mounting example



Note: Recommended tightening torque for M8 bolts: 16 Nm. Attention! Do not use tie-rods less than 8.8.
To add NG3 MICRO external manifolds to a PPC assembly code, just add the converter PPC to PPM first, then the additional manifolds spare part codes at the end of the PPC code. eg: PPC-0,8 12DC-MB-J-K0,6-V200-G-RETURN KIT-1,5L+**EMASH00001+M60403004+M60403010.**

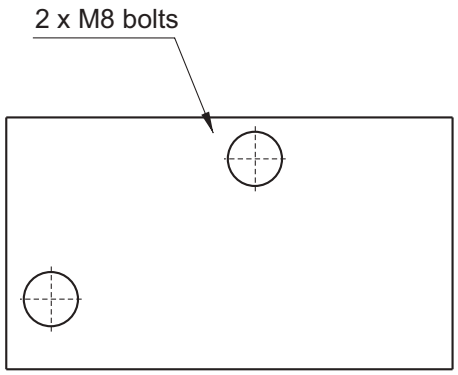
PPM 90° ROTATION MANIFOLD



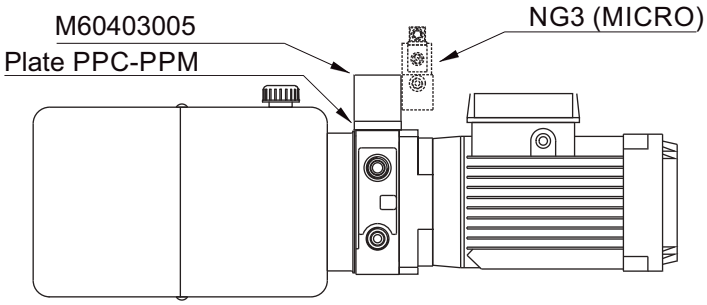
Dimensions in in mm (inches)

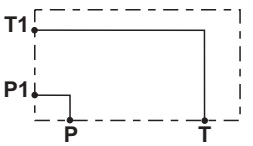
Main features

Max pressure	350 bar
Weight	0,26 Kg (0,57lb)
Fixing bolts	2 M8 tie - rods steel class 8.8 or above



Mounting example





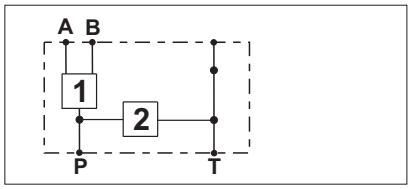
Spare part code
M60403005

Note: Recommended tightening torque for M8 bolts: 16 Nm. Attention! Do not use tie-rods less than 8.8.
To add NG3 MICRO external manifolds to a PPC assembly code, just add the converter PPC to PPM first, then the additional manifolds spare part codes at the end of the PPC code. eg: PPC-0,8 12DC-MB-J-K0,6-V200-G-RETURN KIT-1,5L+**EMASH00001+M60403004+M60403010.**

PPM - DIVERTER BLOCK WITH LOWERING OPTION

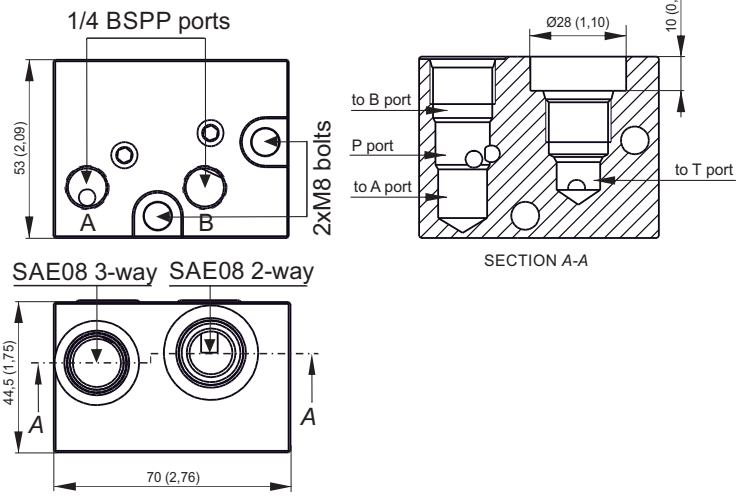
Main features

Max pressure	350 bar
Weight	0,39 kg (0,86 lb)
Fixing bolts	2xM8 tie-rods steel class 8.8 or above

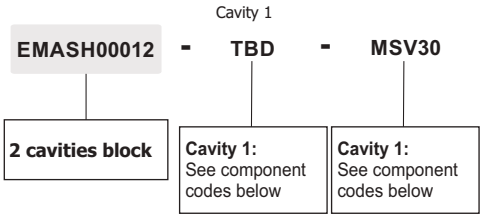


Spare part code
EMASH00012

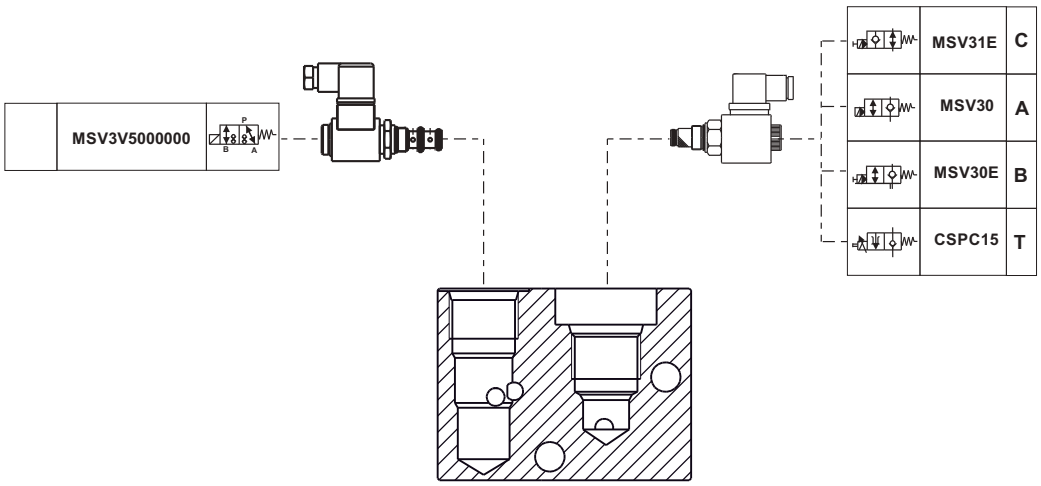
Dimensions in mm (inches)



ASSEMBLY CODE - example



Mounting example



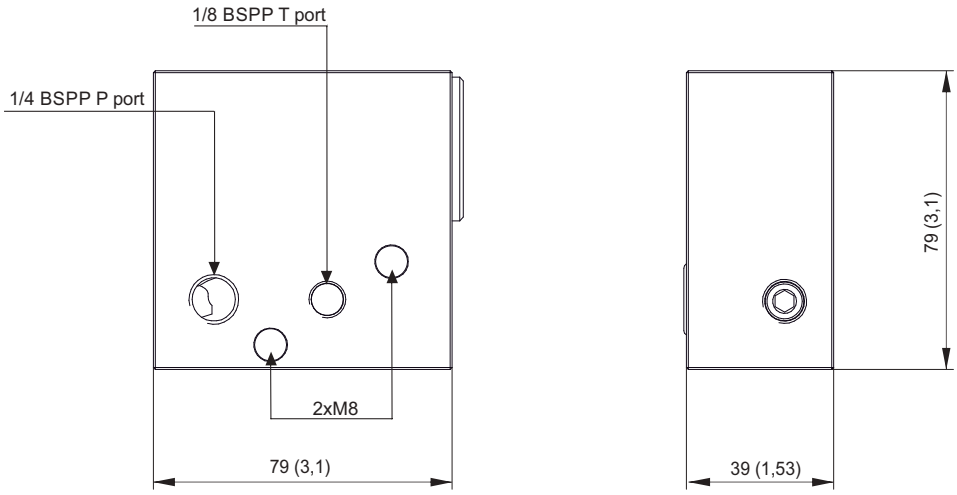
Note: to add external manifolds to PPM assembly code, just add their spare part codes at the end of the PPM code.
Example: PPM-0,8 12DC-MB-GM1,1-JM-D280-G-L-RETURN KIT-1,5L+M60403010+...**+EMASH00011**
This block must be mounted as last among the external ones.

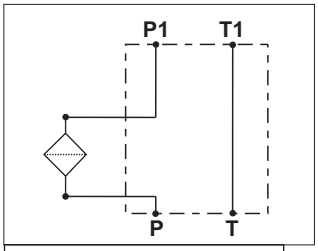
COMPACT PRESSURE LINE MODULAR MANIFOLD FILTER

Main features

Max pressure	350 bar
Weight	0,65 kg (1,42 lb)
Fixing bolts	2xM8 tie-rods steel class 8.8 or above
Filtration degree	10 micron 25 micron

Dimensions in mm (inches)





Spare part code
EMASH000**

**

Type:
38: 10 micron
39: 25 micron

Spare	Cartridge code
10 micron	EAFTH00001
25 micron	EAFTH00002

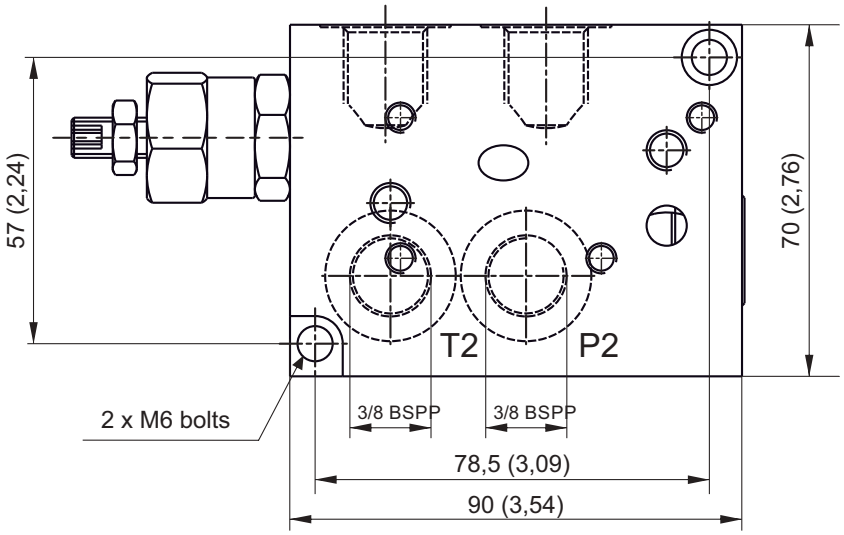
Note: to add external manifolds to PPC assembly code, just add their spare part codes at the end of the PPC code.
Example: PPM-0,8 12DC-MB-JM-G0,1-DM_280-G-RETURN KIT-G-1,5L+**EMASH00038-39....**
This block must be mounted as first among the external ones.
For more info and for a mounting example, please see E60433001 code (NG6 CETOP 3 flow control sandwich valve) in G section.
The Cetop valve attachment is on the motor side. With AC motor frames bigger than 71 and DC motors bigger than dia. 125, always add a spacer manifold (see E60403004 code in F section) below the modular block to avoid interference between the valve and the motor.

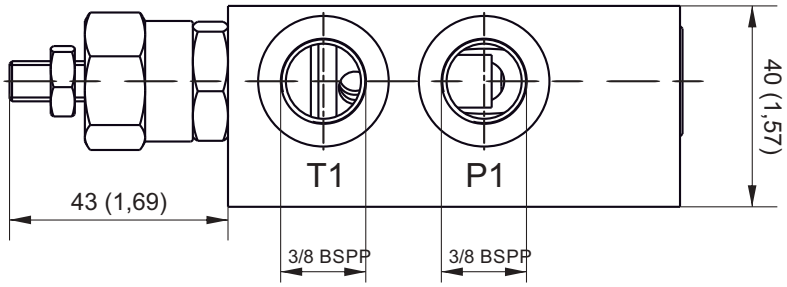
IN-LINE MOUNTING BASE PLATE FOR MODULAR BLOCKS

Dimensions in mm (inches)

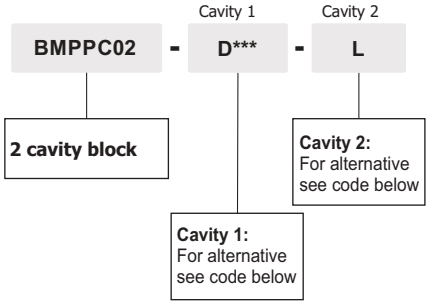
Main features

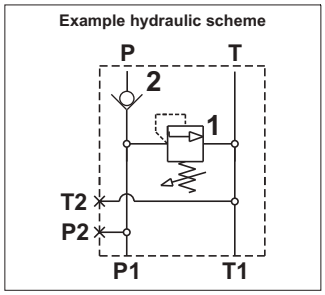
Max flow	40 l/min
Max pressure	350 bar
Weight	0,58 Kg (1,28 lb)
Fixing bolts	2 M8 or 4xM6 tie - rods steel class 8.8 or above



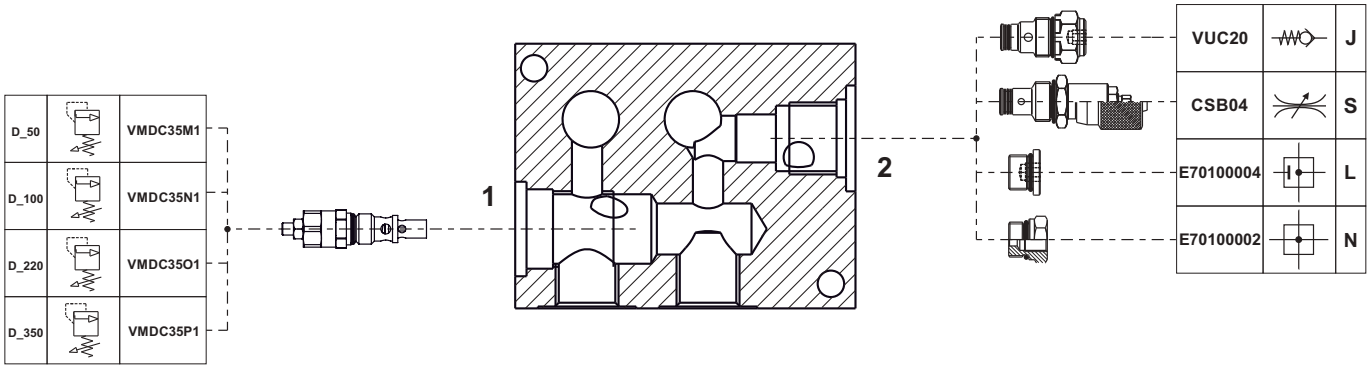


ASSEMBLY CODE - example





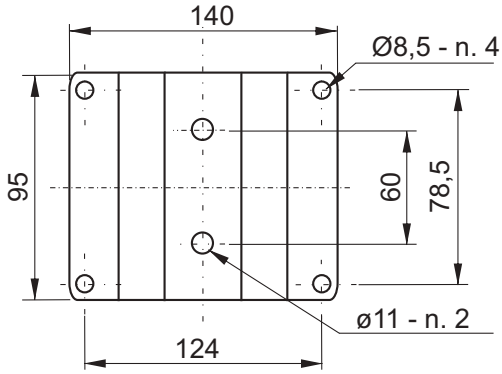
BMPPC02 allows you to mount off-line the entire system of Hydronit modular blocks and valves.
A typical application is to use it on a conventional powerpack, where the control block and the valve are separated from the engine driven pump.
P1 and T1 ports are closed by 3/8" BSP plugs in standard configuration.
You can use these ports dismounting the plugs and using the same to close P2 and T2 ports.
See cavity 1 VMDC35 table in section G.
See cavity 2 components and plugs tables in section D.



FOOT MOUNTING SUPPORT

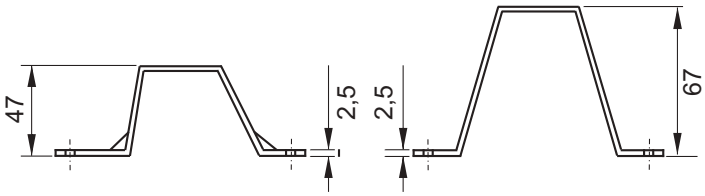
Foot mounting support PPM MANIFOLDS

Weight: 0,35 Kg
Color: Black



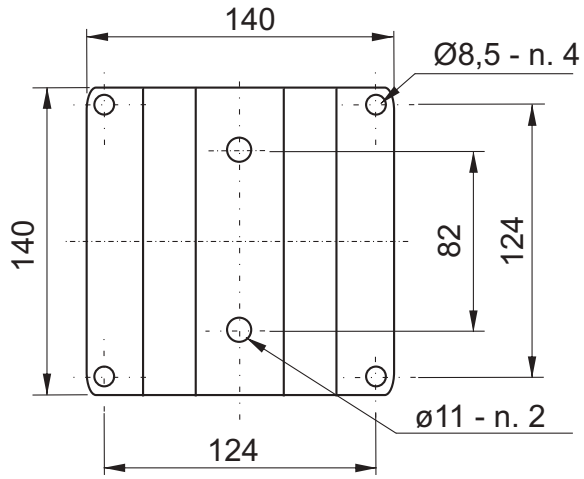
Spare part code
E60543003

Foot mounting support PPC MANIFOLDS



E60543006
Weight: 0,5 Kg
Color: Black

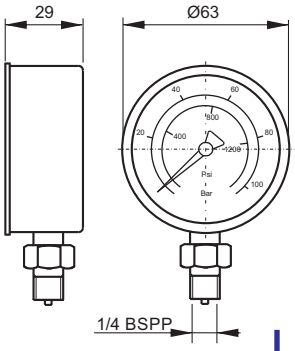
E60543007
Weight: 0,6 Kg
Color: Grey



E60543006: suitable for all tanks except for E60303044

Spare part code	
E60543006	E60543007
E60543006US	E60543007US

ACCESSORIES

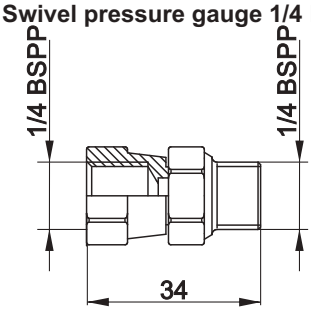


Pressure gauge

Protection degree	IP 65
Thermal drift	±0,04%/1K a 20°C
Weight	0,206 Kg
Static working pressure	75% end of scale
Peak working pressure	end of scale
Fluid temperature	-10 ÷ +60°C
Precision class	cl. 1.6 EN837-1

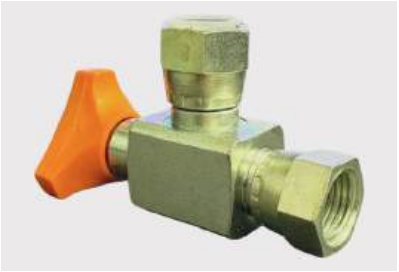
Spare part code
MIR63* ***: max pressure in bar (60, 160, 250, 315 bar)**

Swivel pressure gauge 1/4 BSP



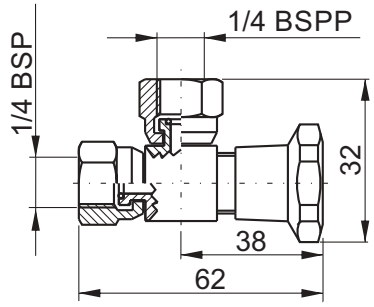
Weight: 0,04 Kg. Max working pressure: 400 bar

Spare part code
RACMIL01



Gauge isolator 90° F-F

EM9001C

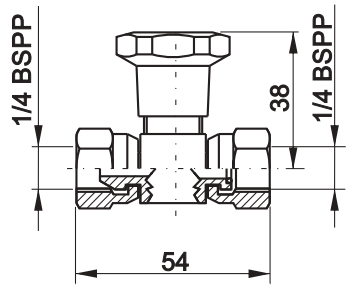


Weight: 0,14 Kg. Max working pressure: 400 bar

Spare part code
EM9001C

Gauge isolator F-F

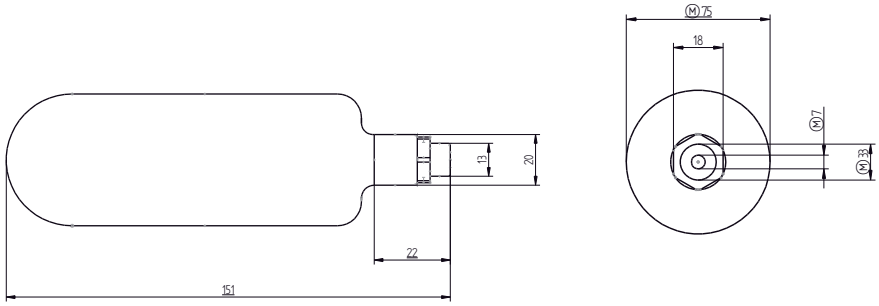
EMIL01C



Weight: 0,14 Kg. Max working pressure: 400 bar

Spare part code
EMIL01C

FLUID ACCUMULATOR



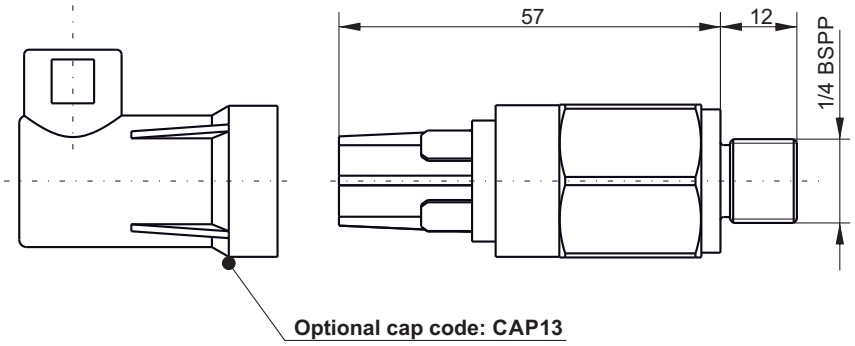
Main features

Max. pressure	300 bar
Material	carbon steel
Max. flow	45 Lt/min
Max. N2 precharge	210 bar
Working temperature	-20°C ÷ +80°C
Weight	1,9 Kg

Spare part code	Hydraulic connect
EAACH00001	M18X1.5-F

PRESSURE SWITCHES

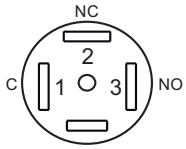
Dimensions in mm (inches)



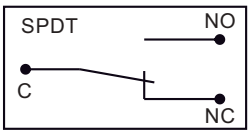
Main features

Switch rating resistive	6A / 250 Vca
Switch rating resistive	2A / 24 Vdc
Switch rating inductive	2A / 250 Vca
Switch rating inductive	1A / 24 Vdc
Fluid temperature	-25°C ÷ +80°C
Weight	0,1 Kg
Tightening torque	20 Nm
Hysteresis	~ 15%
Max. pressure	300 bar
Contact	SPDT C/O
Protection (terminals)	IP 00
Protection with connector	IP 65

Pin out scheme

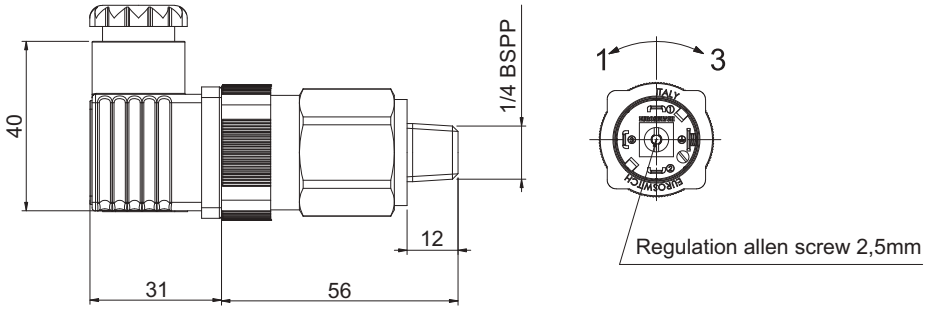


Electrical scheme



Assembly code (including cap)	Spare part code	Pressure (bar)	Tolerance (bar)
PSL01100W	PSL01S0100	10÷100	±3
PSL01300W	PSL01S0300	50÷300	±15

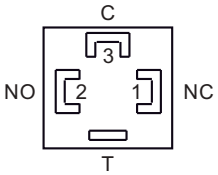
Dimensions in mm (inches)



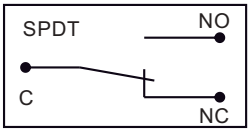
Main features

Max. voltage	250 Vca
Current resistive load	6 A
Current inductive load	2 A
Fluid temperature	-25°C ÷ +80°C
Weight	0,1 Kg
Tightening torque	20 Nm
Hysteresis	adjustable 10% ÷ 30%
Max. pressure	300 bar
Contact	SPDT C/O
Protection with connector	IP 65

Pin out scheme



Electrical scheme



Spare part code	Pressure (bar)	Tolerance (bar)
EAPSH00001	10 ÷ 100	±3
EAPSH00002	100 ÷ 400	±15

NOTES