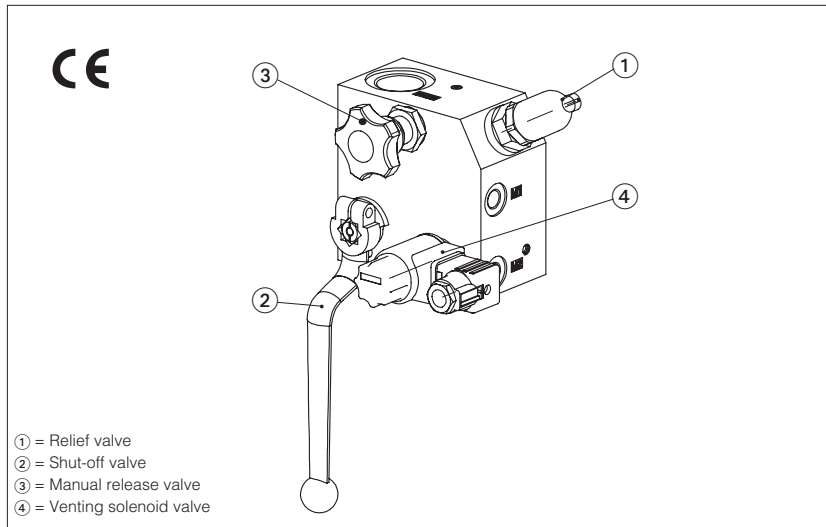


# PED safety manifolds for accumulators type **BSA**

In line mounting - G 1/2" and G 3/4" threaded ports



PED safety manifolds for accumulators type BSA are equipped with relief valves conforming to PED Directive 2014/68/EU (see tab. SP004).

The safety function is ensured by discharging the excess flow across the relief valve ①.

They are equipped with manual shut-off valves ②, manual release valve ③ and venting valve with electric driving as optional ④.

These manifolds are suitable for any hydraulic circuit where there are one or more accumulators.

The manifolds are designed to work in hydraulic systems with oil or synthetic fluids having similar lubricating characteristics..

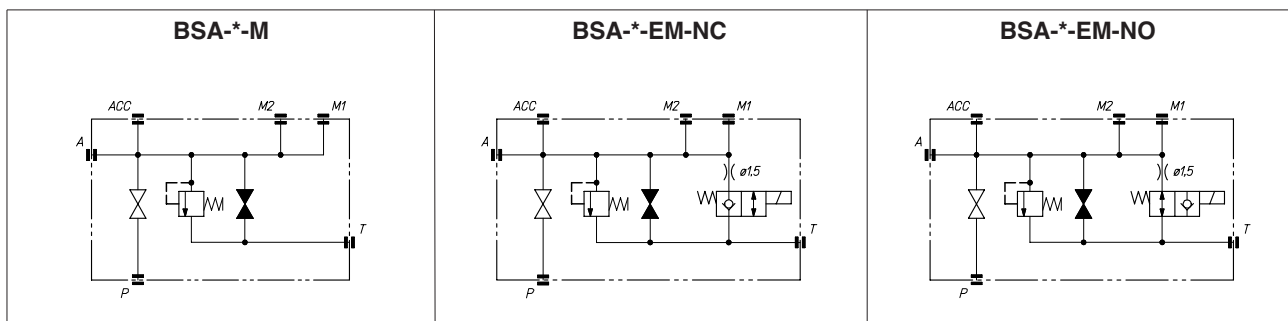
Max flow: 70, 200 lt/min respectively

Pressure up to 350 bar

## 1 MODEL CODE

<b>BSA</b>	-	<b>10</b>	-	<b>EM</b>	-	<b>NO</b>	-	<b>24DC</b>	/	<b>235</b>	/	<b>PED</b>	<b>**</b>	<b>/*</b>
Safety manifold														
Size: <b>05</b> = G 1/2" <b>10</b> = G 3/4" Other sizes are available on request														
Release mode: <b>EM</b> = electric/manual <b>M</b> = manual														
Venting solenoid valve: <b>NO</b> = normally open <b>NC</b> = normally closed														
Electric voltage: - = manual version <b>12 DC</b> = 12 V <sub>DC</sub> <b>24 DC</b> = 24 V <sub>DC</sub> <b>110 AC</b> = 110 V <sub>AC</sub> <b>220 AC</b> = 220 V <sub>AC</sub>														
Required setting pressure /*** = setting @ 50 l/min														
Synthetic fluids <b>WG</b> = water glycol <b>PE</b> = phosphate ester Design number <b>PED</b> = Conforming to 2014/68/EU (tab. C010 - www.atos.com)														

## 2 HYDRAULIC CHARACTERISTICS

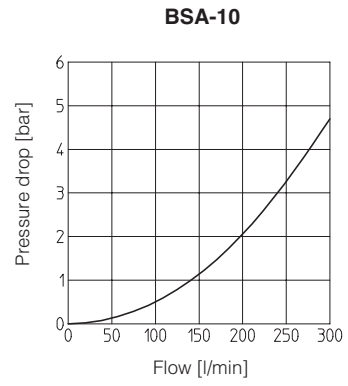
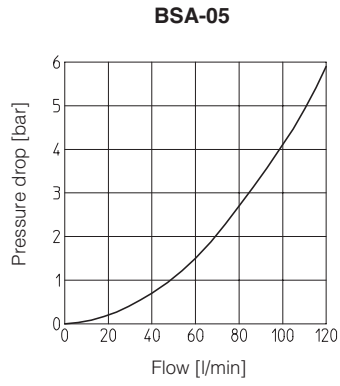


Model		05	10
Pressure range of safety valve	[bar]	25 ÷ 350	
Max flow of safety valve	[l/min]	60	100
Max flow recommended P←→ACC	[l/min]	70	200
Max pressure	[bar]	350	

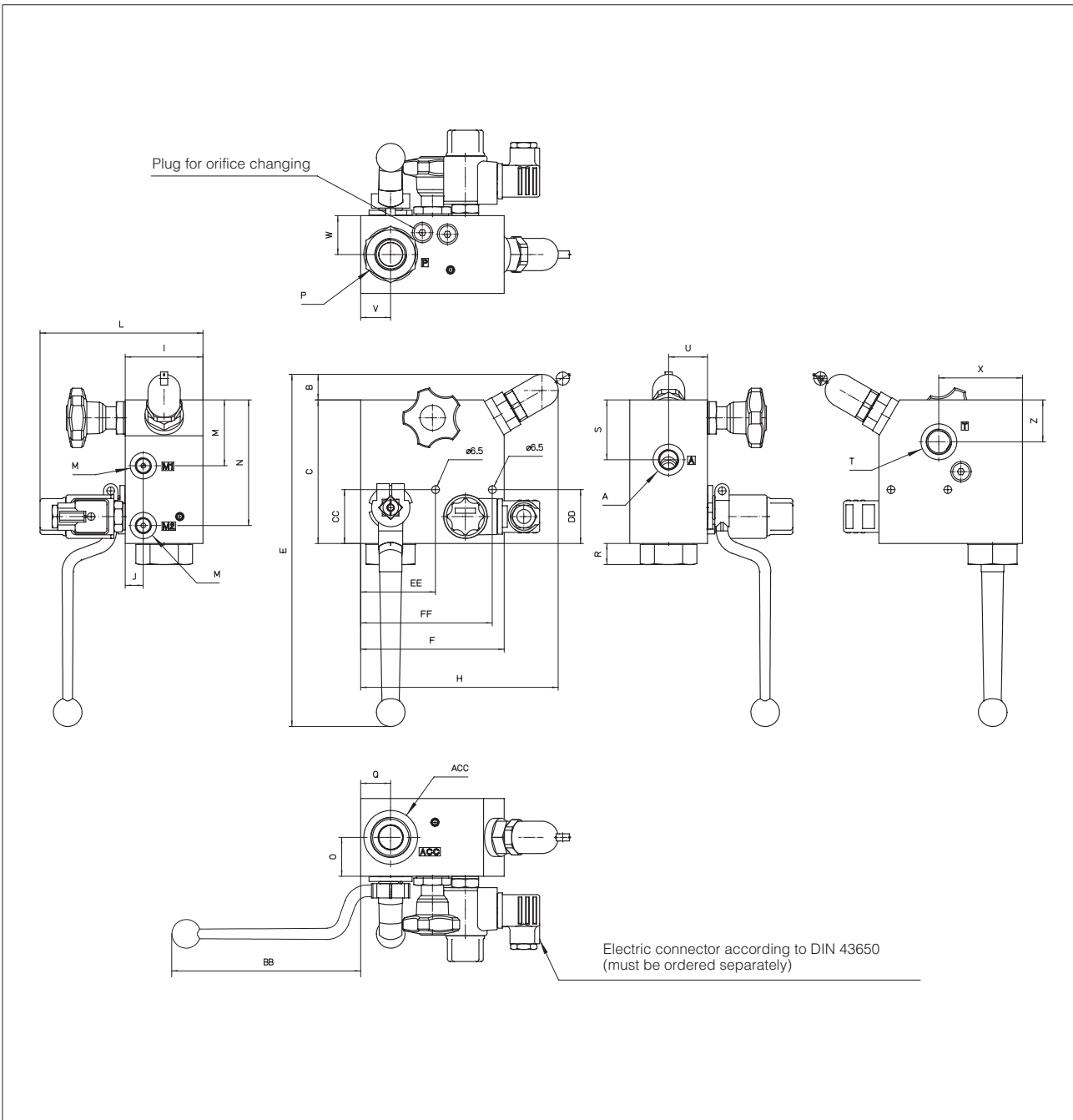
## 3 MAIN CHARACTERISTICS

Installation position	Any position.
Hydraulic connection	<b>BSA-05</b> : P = G 1/2" T = G 3/8" A = G 3/8" ACC = G 1/2" M* = G 1/4" <b>BSA-10</b> : P = G 3/4" T = G 1/2" A = G 3/8" ACC = G 1" M* = G 1/4"
Fluid	Hydraulic oil as per DIN 51524...535; for other fluids contact our technical office
Recommended viscosity	15 ÷ 100 mm <sup>2</sup> /s at 40°C (ISO VG 15 ÷ 100)
Fluid contamination class	ISO 19/16, achieved with in line filters at 25 µm and β <sub>25</sub> ≥ 75 (recommended)
Fluid temperature	-20°C +60°C (standard and /WG seals) -20°C +80°C (/PE seals)
Ambient temperature	from -15°C to +70°C

4 FLOW VERSUS PRESSURE DROP DIAGRAMS based on mineral oil ISO VG 46 at 50°C



5 DIMENSIONS [mm]



Model	B	C	E	F	H	I	J	L	M	N	O	Q	R	S	U	V	W	X	Z	BB	CC	DD	EE	FF	ACC	A	P	T	M*	Mass [Kg]
<b>BSA-05</b>	60	95	240	100	123	55	15	87	30	80	23	20	18,7	47,5	30	20	23	80	70	88	65	45	5	95	G 1/2"	G 3/8"	G 1/2"	G 3/8"	G 1/4"	4,6
<b>BSA-10</b>	27	120	300	120	170	65	15	137	55	105	32,5	25	17,6	50	32,5	25	32,5	70	35	158	45	45	62,5	110	G 1"	G 3/8"	G 3/4"	G 1/2"	G 1/4"	7,5

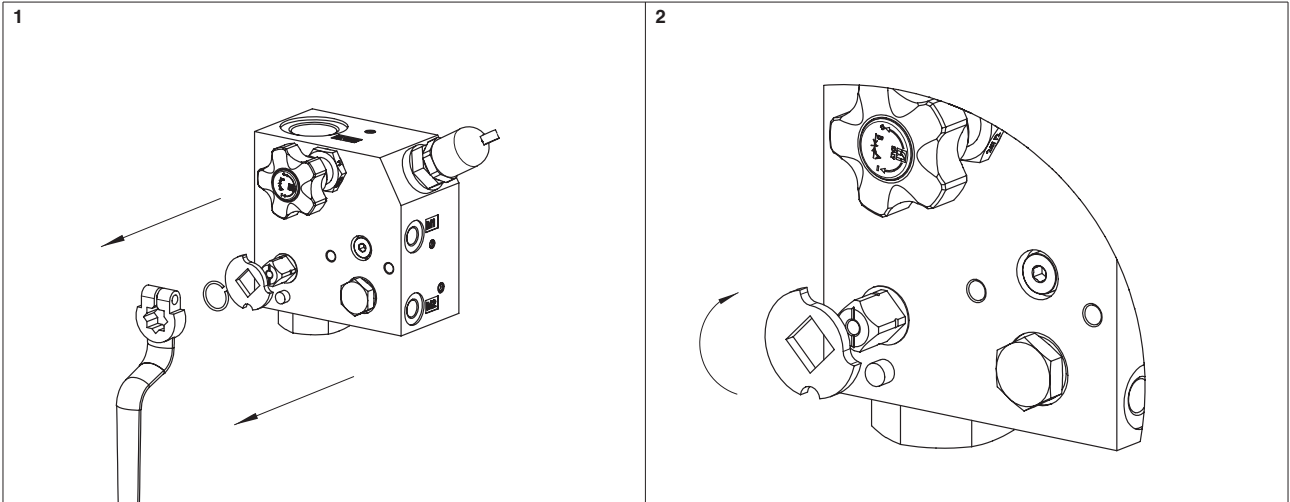
## 2 MAINTENANCE ISTRUCTIONS

For safety reasons BSA manifold is provided with clamping lever locked in the open position. In case you need to unlock the lever, follow the following instructions



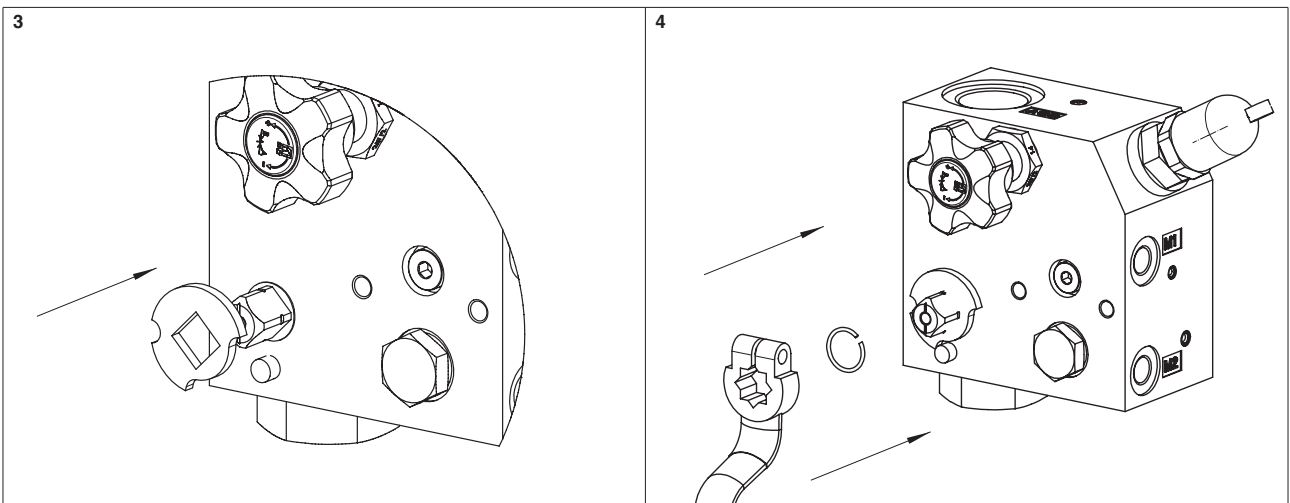
### ATTENTION:

- System under pressure before performing any operation turn off and discharge the pressure of the circuit.

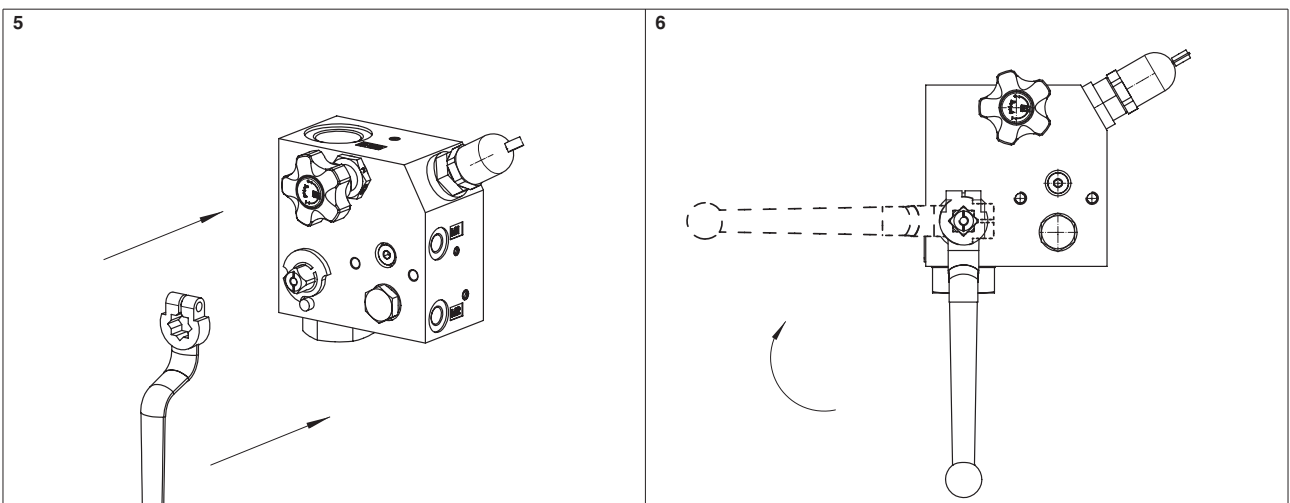


Pull out the clamping lever, the elastic ring and the pressure washer

Rotate 90° clockwise the pressure washer



Reinsert the pressure washer



Reinsert the elastic ring and the clamping lever