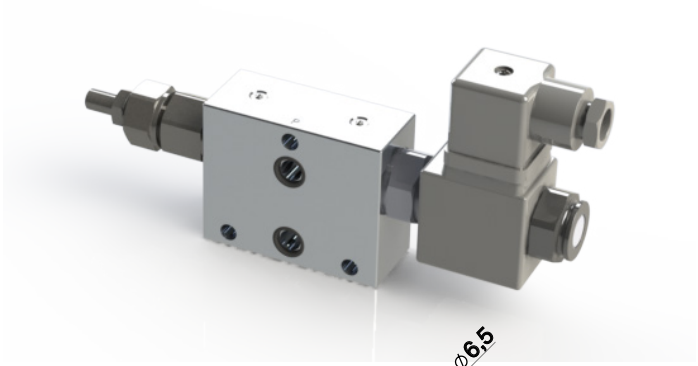
AMF PRESSURE RELIEF COMBINED WITH ELECTRIC BY-PASS

AMF-MOP/*-EV2*

20 l/min - 25 MPa (250 bar)

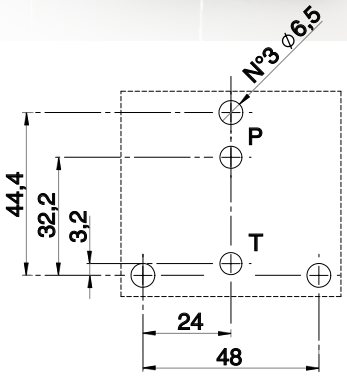
1 DESCRIPTION

With this module it is possible to have the pressure relief function combined with the by-pass of the main HDF system. The by-pass valve can be normally open or normally closed. As standard the valve is a spool type valve. For specific requirments, a poppet valve with a standard SAE08 cavity can be installed in the main body.



2 ORDERING CODE

(1)		(2)		(3)		(4)	(5)		(6)		(7)		(8)
AMF	-	MOP	/		-	EV2		-		-		/	10



(1) AMF: module stackable with 4 way solenoid valve HDF-ES

(2) MOP: pressure relief on P line

(3) Pressure adjustment ranges:
- 10 : from 32 to 100 bar
- 16 : from 63 to 160 bar
- 25 : from 100 to 250 bar

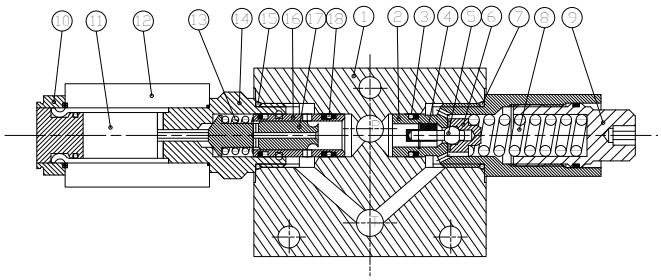
(4) EV2 : spool type 2/2 by-pass solenoid operated valve

(5) Variants:
- O: normally open
- C: normally close

(6) Code reserved for option and variants

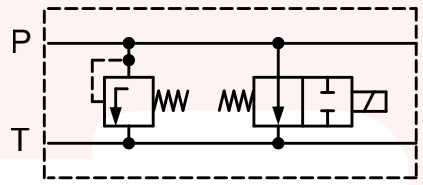
(7) Electric voltage and solenoid coils:
- 0000 : no coils
- 012C : coils for V12DC
- 024C : coils for V24DC
- 220R : coils for V220-230 RAC

(8) Design number (progressive) of the valves

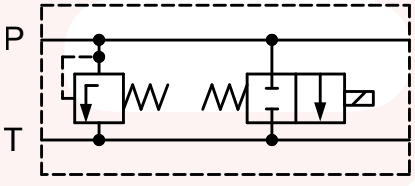


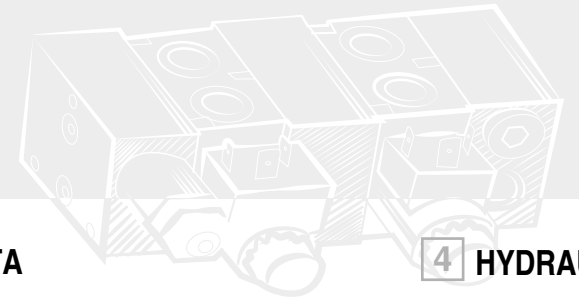
Fluid flows freely from P line to T line The spool 17 is normally kept open by spring 13. When the solenoid 12 is energized, the mobile armature 11 overcomes the force of spring 13 and moves spool 17 thus closing passage between P and T. When on line P the pressure exceeds the settled value, the piston 5 is pushed by axial hydraulic forces, overcomes the force of spring 8 and shifts in its cylindrical seat and opens to the pressurized fluid annular passage to T, thus keeping the pressure level at the requested value.

AMF-MOP/(*)-EV2O



AMF-MOP/(*)-EV2C





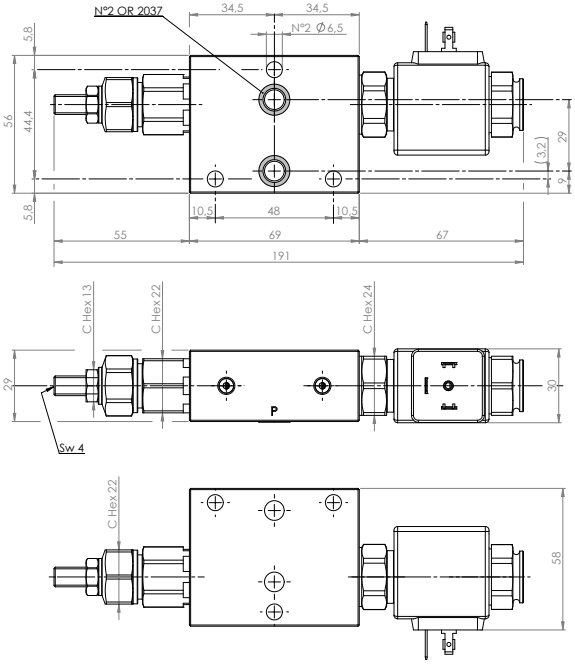
3 TECHNICAL DATA

Maximum rec. flow rate	20 l/min
Maximum flow rate	20 l/min
Maximum nominal pressure	25 MPa (250 bar)

4 HYDRAULIC FLUIDS

Seals and materials used on standard valve AMF are fully compatible with hydraulic fluids of mineral base, upgraded with antifoaming anti antioxidizing agents. The hydraulic fluid must be kept clean and filtered to ISO 4406 class 21/18/15, or better, and used in a recommended viscosity range from 10 cSt to 60

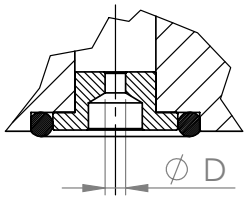
5 INSTALLATION DIMENSIONS (mm)



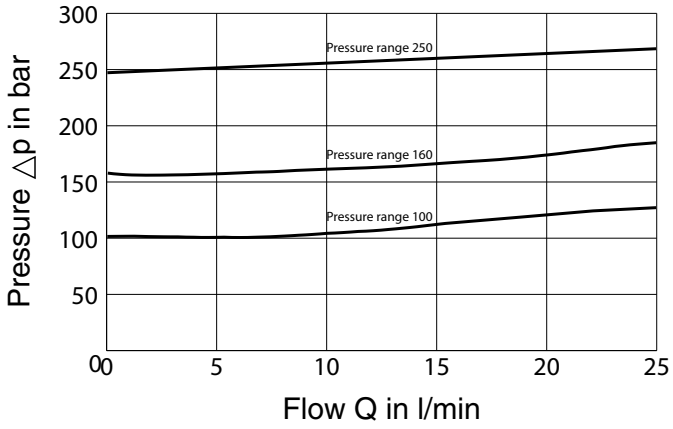
6 OPTIONS

Available for P and T lines "section reducer" or "stop" with O ring

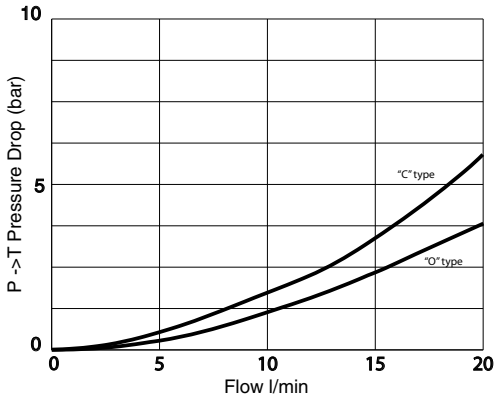
D (mm)	CODE
0	3S-00
1,0	3S-10
1,5	3S-15
2,0	3S-20
2,5	3S-25



7 TYPICAL DIAGRAMS of PRESSURE RELIEF VALVE



ELECTRIC BY-PASS VALVE



Relief pressure is reached when the axial hydraulic forces on piston 5 equal the force on spring 8; the value of the relief pressure can be therefore changed, within the range, by changing the compression of spring 8. To increase the relief pressure, turn clock wise the adjustment nut 9