

FLOW RESTRICTOR VALVES

AM3-FO-*

60 l/min - 32 MPa (320 bar)

1 DESCRIPTION

Stackable valve CETOP 3 with flow restrictor function. It is possible to control the lines A, B or AB simply turning the side screws.
On demand it is possible to have also the fine control option.



2 ORDERING CODE

(1)	(2)	(3)	(4)	(5)	(6)
AM3	-	FO	-	-	/ 10

(1) AM3: stackable valve CETOP 03 - Pressure 32 MPa (320 bar)

(2) FO: flow restrictor valves with two-way control

(3) Service lines where the controls operates:

AB: controls on A and B. Fluid flows restricted A <-> A, and B <-> B

A : flow is restricted A<-> A; free on B, P and T

B : flow is restricted B<-> B; free on A, P and T

(4) Flow control characteristics

no designation: standard control

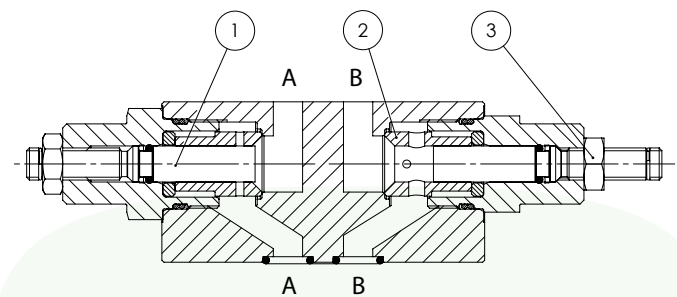
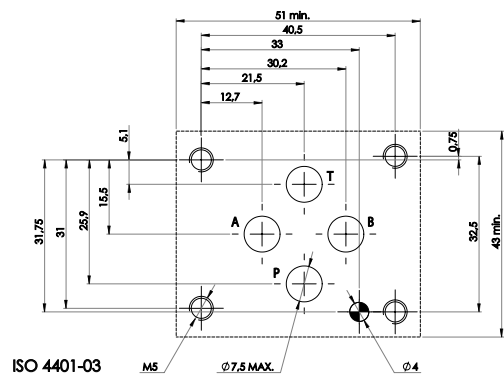
F: fine control

(5) Code reserved for option and variants

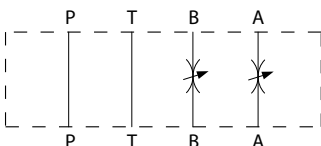
M: hand knob

V: viton seals

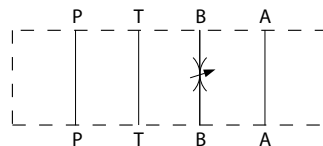
(7) Design number (progressive) of the valves



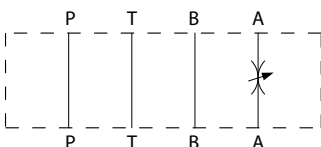
AM3-FO-AB



AM3-FO-B



AM3-FO-A

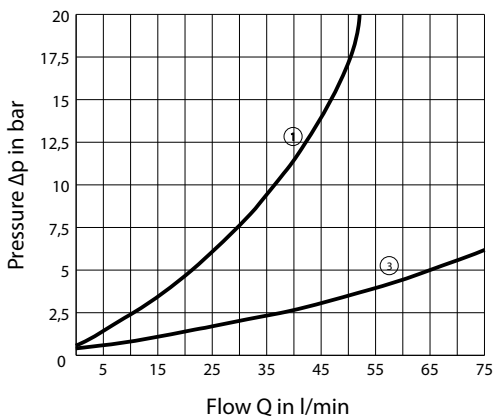


3 TECHNICAL DATA

Maximum nominal flow		Control of the flow:
Maximum rec. flow rate	60 l/min	The control is made by throttling from through variable orifices obtained on sleeve and partially obstructed by throttling axis. Depending on the various sleeve/axis combination, the control adjustment is:
Maximum nominal pressure	32 MPa (320 bar)	- (standard): orifices area is reduced from 100% (*) to 0% with 6 complete turns of the adjustment screw.
Pressure drops	see [4]	- F (fine): from 100% (**) to 0% with 5 complete turns of the adjustment screw.
Installation and dimensions	see [5]	(*) 100% approx Q=60 l/min at p=20 bar
Mass	approx 1,2 kg	(**) 100% approx Q=30 l/min at p=20 bar
		The axis is shifted to increase throttling by unlocking its nut and turning clock wise the adjustment screw.
		Suitable mechanical stops prevent dangerous manoeuvring.

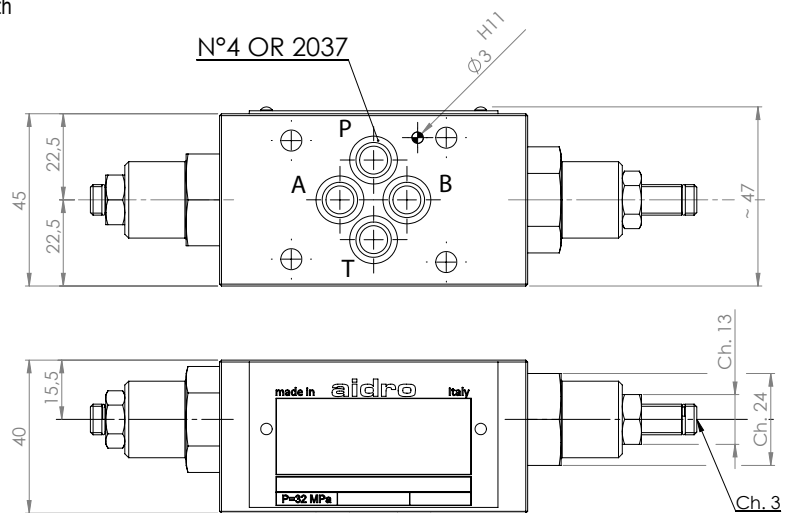
4 TYPICAL DIAGRAMS

Typical Δp -Q curves for valves AM3-FO-* in standard configuration, with mineral oil at 36 cSt and at 50°C with throttling axis at full retraction.



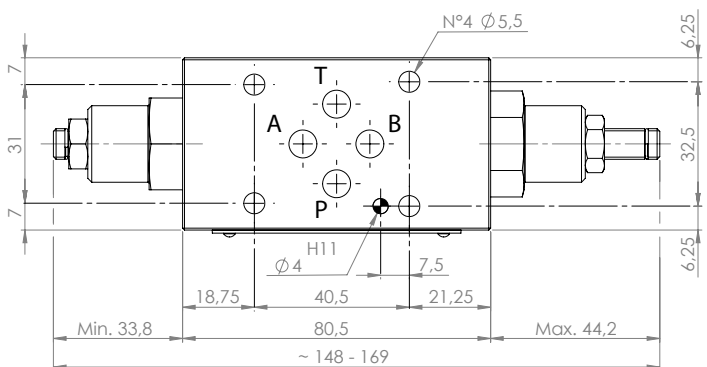
① controlled channels ③ controlled channels

5 INSTALLATION DIMENSIONS (mm)



6 HYDRAULIC FLUIDS

Seals and materials used on standard valves AM3-* are fully compatible with hydraulic fluids of mineral oil base, upgraded with antifoaming and antioxidantizing agents. The hydraulic fluid must be kept clean and filtered to ISO 4406 class 19/17/14, or better, and used in a recommended viscosity range from 10 cSt to 60 cSt.



All stackable valves AM3-FO-* conform with ISO and CETOP specifications for mounting surface dimensions. Valves height 40 mm.

Leakage between valve and mounting surface is prevented by the positive compression on their seats of 4 seals of OR type. All valves have on their "mounting" surface a ϕ 4 mm cylindrical hole and have on their "seals" surface a ϕ 3 mm cylindrical hole, conform with ISO and CETOP norms.