2 CETOP 02

STACKABLE VALVES FLOW CONTROL

AM2-FX-*

30 l/min - 32 MPa (320 bar)

1 DESCRIPTION

Stackable valve CETOP 2 with meter in control (referred to the hydraulic actuator). 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)
AM2	-	FX	-		-		-		/	10

(1) AM2: stackable valve CETOP 02- Pressure 32MPa (320bar)

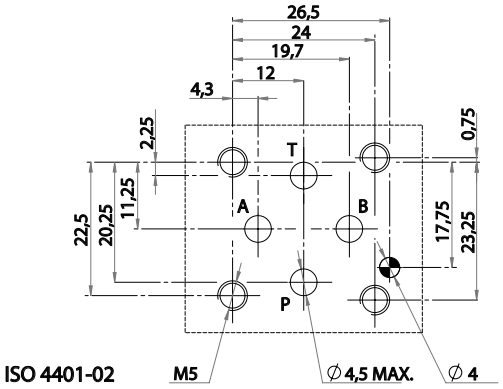
(2) FX: one-way flow control valves with meter-in control
(referred to the hydraulic actuator)

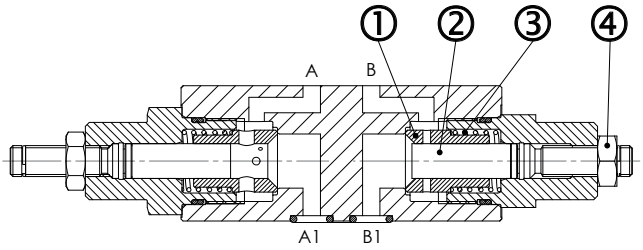
(3) Service lines where the controls operate:
AB: controls on A and B. Fluid flows unrestricted A1 -> A, and B1 -> B and flow is controlled from A -> A1 and B -> B1
A : flow is controlled from A -> A1; free on B, P and T
B : flow is controlled from B -> B1; free on A, P and T

(4) Flow control characteristics for A -> A1 and B -> B1 and check valve opening pressure (Pm) for flow A1-> A and B1 -> B
no designation : standard control and Pm approx 0.04 MPa (0.4 bar)
W: fine and sensitive control
4 : Pm approx 0.4 MPa (4 bar)

(5) Code reserved for special variants (materials, seals, surface treatments etc.).

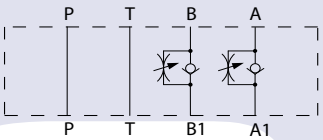
(6) Design number (progressive) of the valves



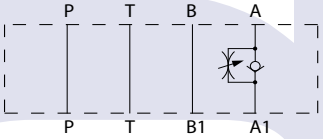


Fluid flows freely on P and T lines; on service lines A and/or B with controls, fluid flows from A-> A1 (and/or B -> B1) overcoming the force of spring acting on sleeve; fluid flows from A1 -> A (and/or B1-> B) through orifices of sleeve which is pushed against its seat; the throtling axis which is shifted by screwing it and locked by its nut , partially obstructs the control orifices, thus making the flow rate entirely dependent upon the available pressure drop.

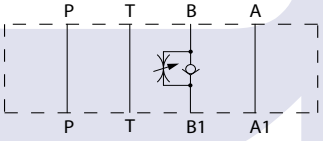
AM2-FX-AB

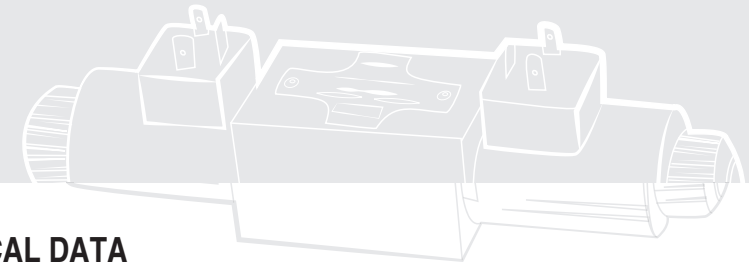


AM2-FX-A



AM2-FX-B





3 TECHNICAL DATA

Maximum nominal flow	32 l/min
Maximum rec. flow rate	30 l/min
maximum nominal pressure	32 MPa (320 bar)
Pressure drops	see 4
installation and dimensions	see 5
Mass	approx 0,8 kg

Control of the flow:

The control is made by throttling from A1 -> A (and/or B1 ->B) through variable orifices. Depending on the various sleeve/axis combination, the control adjustement is:

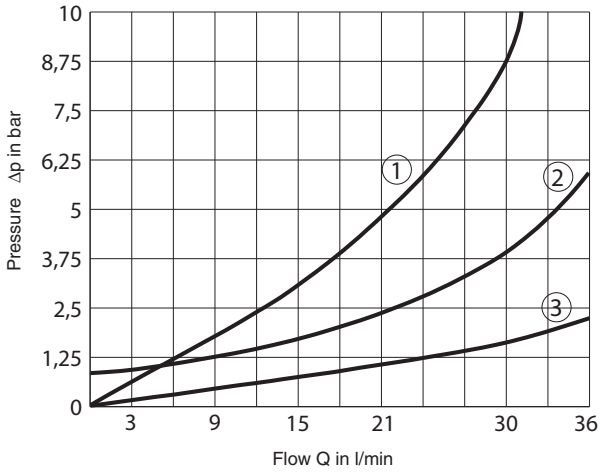
no designation: standard, orifices area is reduced from 100% (*) to 0% with 6 complete turns of the adjustement screw

W (fine and sensitive): from 100% (*) to 0% with 8 complete turns - special variant

(*)100 approx: Q=0,5dm³/s (30l/min) at Δp= 1MPa (10bar)

4 TYPICAL DIAGRAMS

Typical Δp-Q curves for valves AM2 -FX-AB in standard configuration, with mineral oil at 36 cSt and at 50°C with throttling axis at full retraction.

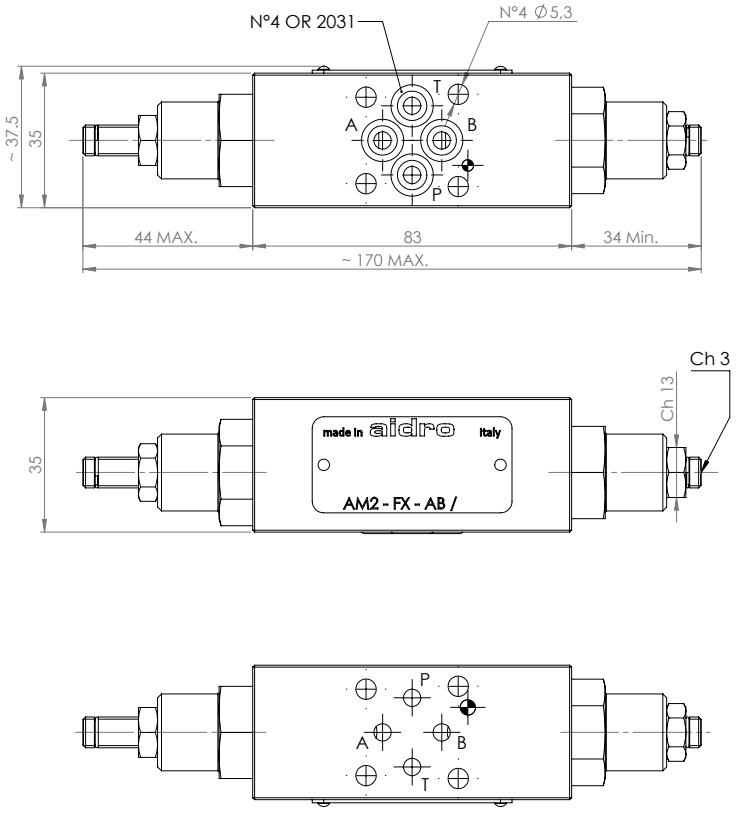


①A -> A1
B -> B1

②A1 -> A
B1 -> B

③P <-> P
T <-> T

5 INSTALLATION DIMENSIONS (mm)



All stackable valves AM2-FX-* conform with ISO and CETOP specifications for mounting surface dimensions. Valves height 35 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 ø 4 mm cylindrical hole and are equipped on their "seals" surface by a ø 3 mm locating pin conform with ISO and CETOP norms. In case of necessity, the pin can be easily removed.

6 HYDRAULIC FLUIDS

Seals and materials used on standard valves AM2-* are fully compatible with hydraulic fluids of mineral oil base, upgraded with antifoaming and antioxidizing 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.