

AM3RD / AM3SD...

SCREWS AND STUDS

CH. IV PAGE 21

AM3RD... / AM3SD... MODULAR PRESSURE

REDUCING / PRESSURE SEQUENCING VALVES CETOP 3

AM3RD and AM3SD valves are direct acting spool type pressure reducing and sequencing units, respectively, with one end pre-loaded by means of a spring on the other end exposed to the hydraulic pressure.

The drainage is drained within the valve to port T. Pressure is adjustable by means of a screw and locknut, or of a handwheel. Three types of springs allow adjustment within the range 2÷250 bar. The pressure reducing valves are available in two versions: with positive overlap (suitable with low flow rate) and with negative overlap to obtain a greater pressure reinstatement speed.

Max. operating pressure: port P	350 bar
Max. pressure adjustable	250 bar
Setting ranges:	spring 1 2 ÷ 30 bar
spring 2	10 ÷ 120 bar
spring 3	60 ÷ 250 bar
Max. flow	40 l/min
Internal drainage RD:	
Positive overlap version	0,5 l/min
Negative overlap version	2 l/min
Hydraulic fluids	Mineral oils DIN 51524
Fluid viscosity	10 ÷ 500 mm ² /s
Fluid temperature	-25°C ÷ 75°C
Ambient temperature	-25°C ÷ 60°C
Max. contamination level	class 10 in accordance with NAS 1638 with filter $\beta_{25} \geq 75$
Weight	1,3 Kg

ORDERING CODE

AM

Modular valve

3

CETOP 3/NG6

**

RD = Direct pressure reducing valve

SD = Direct pressure sequencing valve

*

Control on lines

AM3RD version = A / P

AM3SD version = P

*

1 = Positive overlap

2 = Negative overlap

Omit for version AM3SD

*

Type of adjustment

C = Grub screw

V = Handwheel

*

Setting ranges

1 = max. 2 ÷ 30 bar (white spring)

2 = max. 10 ÷ 120 bar (yellow spring)

3 = max. 60 ÷ 250 bar (green spring)

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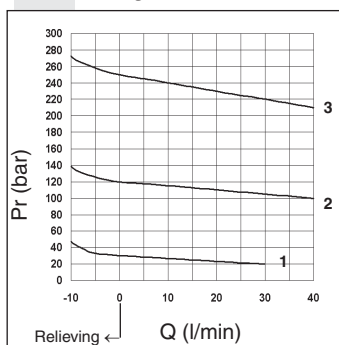
00 = No variant

V1 = Viton

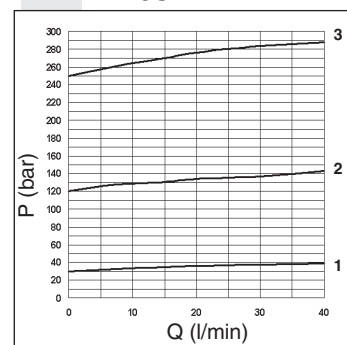
4

Serial No.

PRESSURE - FLOW RATE
AM3RD

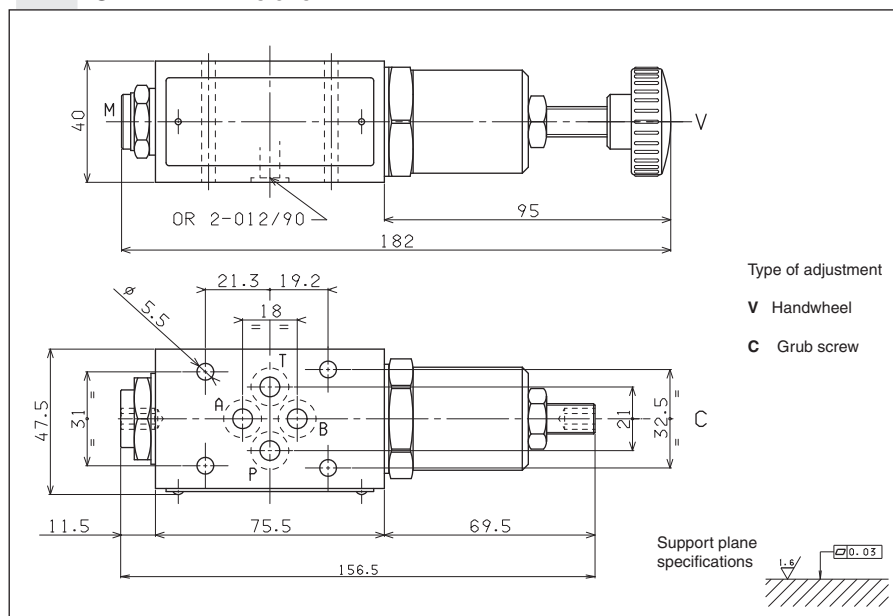


PRESSURE - FLOW RATE
AM3SD



The fluid used is a mineral based oil with a viscosity of 46 mm²/sec at 40 degrees C. The tests have been carried out at with a fluid temperature of 40 degrees C.

OVERALL DIMENSIONS

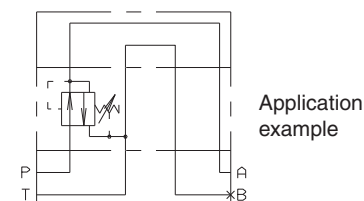
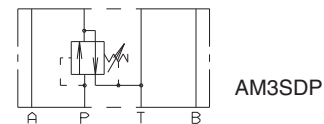
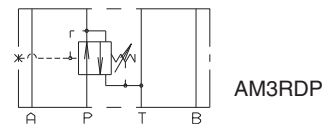
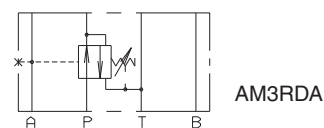


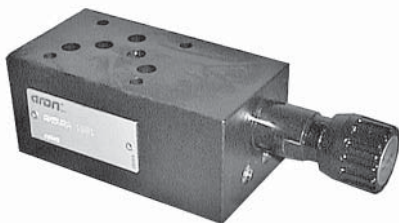
Type of adjustment

V Handwheel

C Grub screw

HYDRAULIC SYMBOLS





AM5VR...

CVR.20... BFP CARTRIDGE CATALOGUE
SCREWS AND STUDS CH. IV PAGE 36

AM5VR... MODULAR PRESSURE REDUCING VALVES WITH RELIEVING - PILOT OPERATED CETOP 5



These pressure reducing valves ensure a minimum pressure variation on the P or A port with changing flow rate up to 90 l/min.

Three spring types allow adjustment with the range 7 ÷ 250 bar. Manual adjustment is available by a grub screw or plastic knob.

The RELIEVING SYSTEM inside the valve AM.5.VR allows the passage from the setting pressure line to T line of the flow through the valve to avoid the increasing of pressure in the reduced-pressure line by diverting exceeding flow to reservoir.

A by pass module with check valve for free flow from A to AR port (see hydraulic symbol) is available.

Max. operating pressure	350 bar
Setting ranges:	spring 1 60 bar
	spring 2 120 bar
	spring 3 250 bar

Maximum allowed Δp pressure between the inlet and outlet pressure 150 bar

Max. flow	90 l/min
Draining on port T	0,5 ÷ 0,7 l/min
Hydraulic fluids	Mineral oils DIN 51524
Fluid viscosity	10 ÷ 500 mm ² /s
Fluid temperature	-25°C ÷ 75°C
Ambient temperature	-25°C ÷ 60°C
Max. contamination level	class 10 in accordance with NAS 1638 with filter $\beta_{25} \geq 75$
Weight	3,73 Kg
Weight by-pass version	6,56 Kg

ORDERING CODE

AM

Modular valve

5

CETOP 5/NG10

VR

Pilot operated pressure reducing valve with relieving

*

Control on lines

P = Drain on T

A = Drain on T

D = Drain on B reduct pressure on A

*

Drain connection

E = External (only for control on the P line)

I = Internal (Standard)

B

Version with by-pass on line A only

Omit if not required

*

Type of adjustment

M = Plastic knob

C = Grub screw

*

Setting ranges

1 = max. 60 bar (white spring)

2 = max. 120 bar (yellow spring)

3 = max. 250 bar (green spring)

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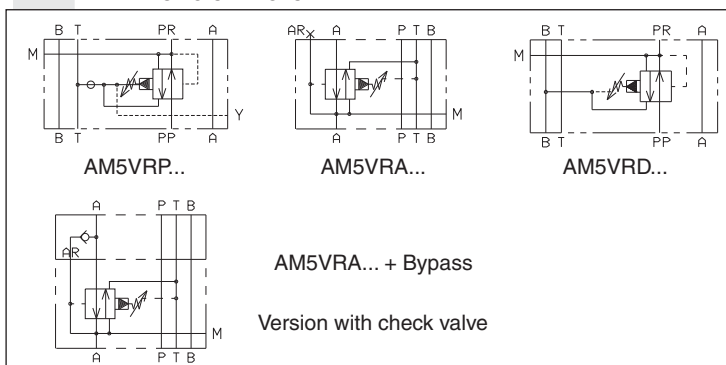
00 = No variant

V1 = Viton

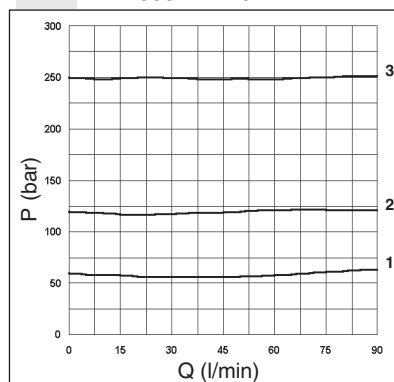
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Serial No.

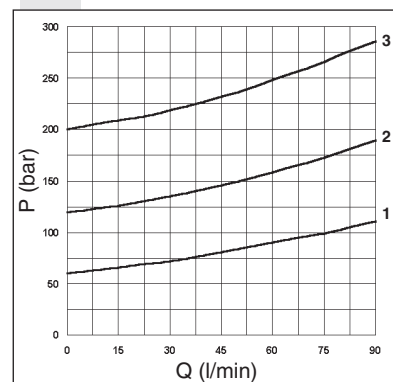
HYDRAULIC SYMBOLS



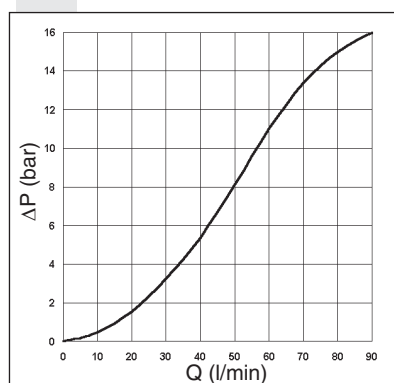
PRESSURE-FLOW RATE



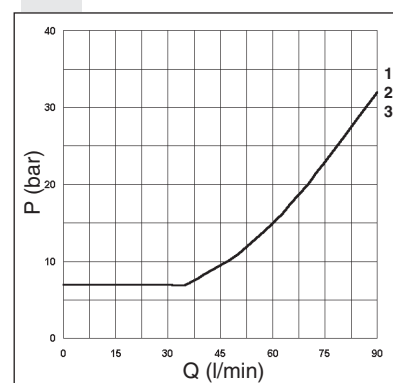
PRESSURE-FLOW OF RELIEVING



ΔP AM.5.VR... + BY-PASS



MINIMUM SETTING PRESSURE



To change valves AM.5.VR.P... from internal to external drainage it is necessary:

- screw out the plug on the Y port
- screw out the plug T.C.E.I. M8x1 from the body
- screw in a screw S.T.E.I. M6
- rescrew the T.C.E.I. M8x1 plug on the body

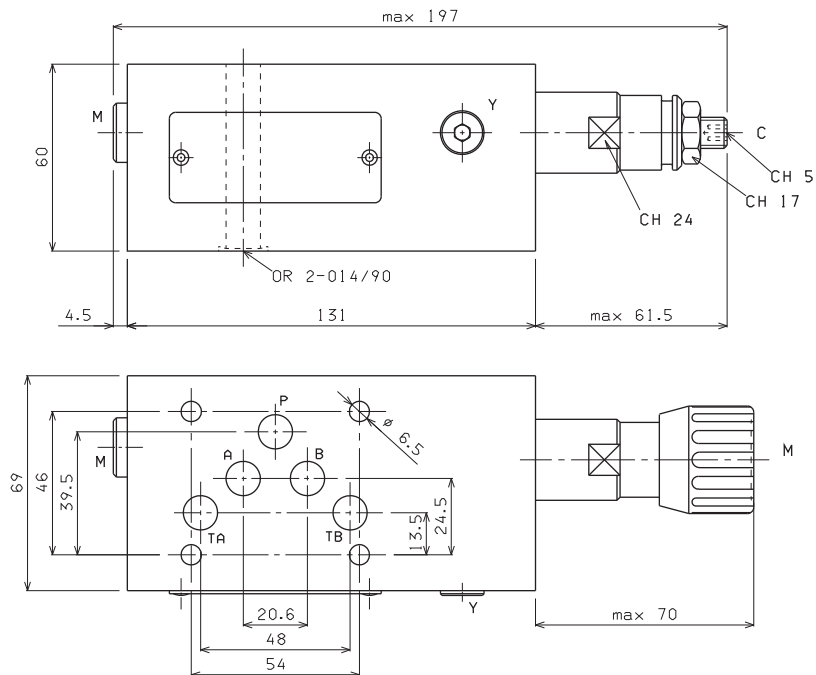
NOTE: the external draining can be used as a piloting line (please, contact our Technical Service for other informations)

Curves n° 1 - 2 - 3 = setting ranges

The fluid used is a mineral oil with a viscosity of 46 mm²/s at 40°C. The tests have been carried out at a fluid temperature of 50°C.

OVERALL DIMENSIONS

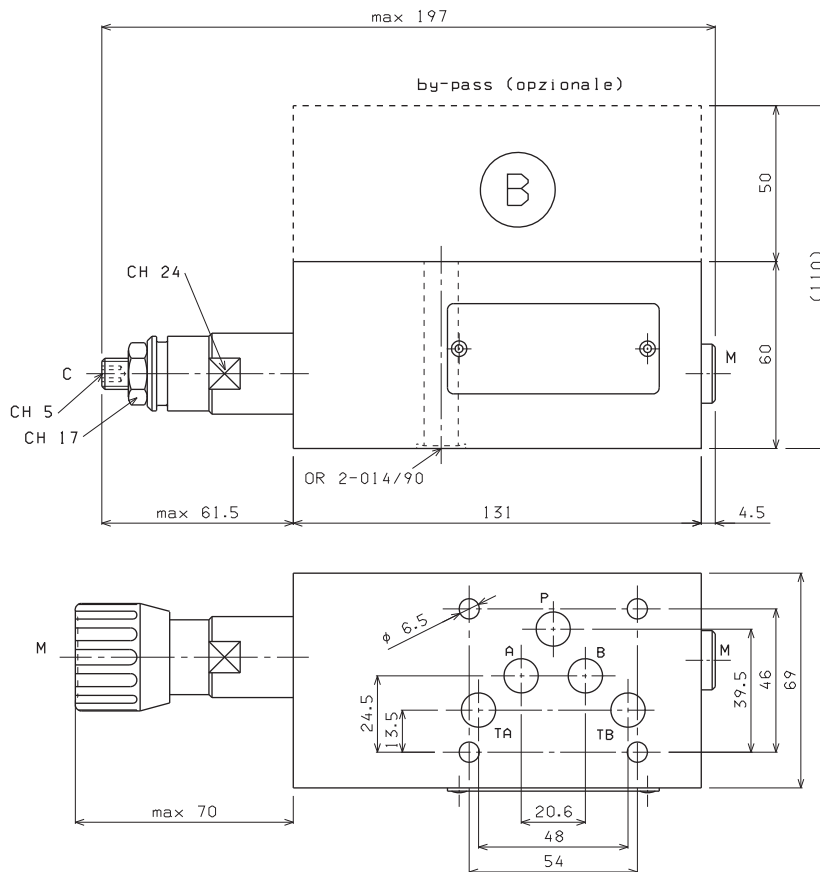
AM5VRP... / AM5VRD...



AM5VRA... + Bypass

(B) By-pass (optional)

Ordering code:
V89.46.0000
(if ordered separately)



Type of adjustment

M Plastic knob

C Grub screw

Support plane
specifications

