

AM.3.UD... MODULAR DIRECT CHECK VALVES CETOP 3



AM.3.UD...

SCREWS AND STUDS

CH. IV PAGE 21

AM.3.UD type modular check valves allow one way free flow, while flow in the opposite direction is prevented by means of a conical seated poppet.

They are available on single A, B, P and T lines, and on double A and B, P and T lines (see hydraulic symbols).

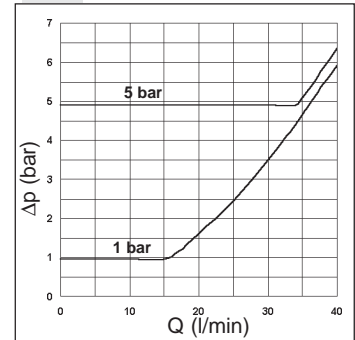
1 bar spring is standard, while a 5 bar rated spring is available on request.

| | |
|-----------------------------------|---|
| Max. operating pressure | 350 bar |
| Minimum opening pressure spring 1 | 1 bar |
| Minimum opening pressure spring 5 | 5 bar |
| Max. flow | 40 l/min |
| Hydraulic fluids | Mineral oils DIN 51524 |
| Fluid viscosity | 10 ÷ 50 mm ² /s a 50° |
| 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 | 0,8 Kg |

ORDERING CODE

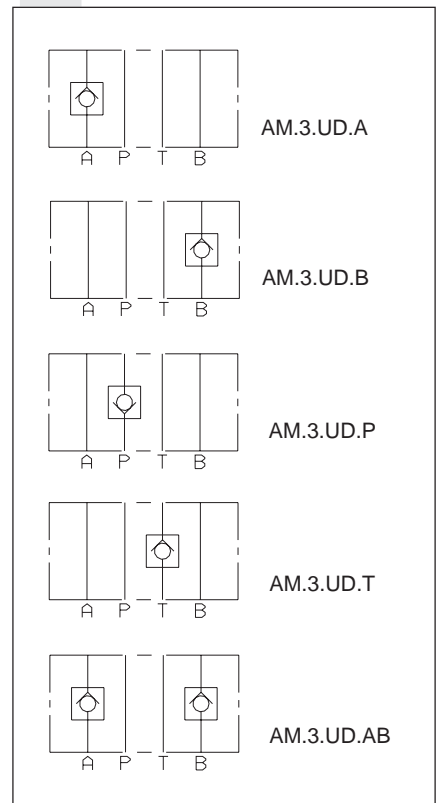
| | |
|-----------|--|
| AM | Modular valve |
| 3 | CETOP 3/NG6 |
| UD | Direct check valve |
| ** | Control on lines A / B / P / T / AB |
| * | Minimum opening pressure 1 = 1 bar 5 = 5 bar |
| ** | 00 = No variant V1 = Viton |
| 2 | Serial No. |

PRESSURE DROPS

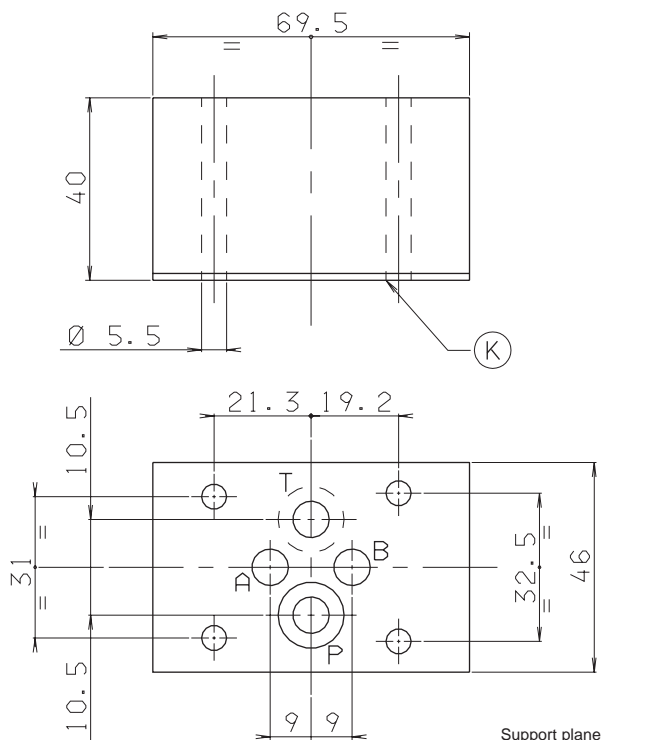


4

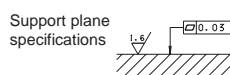
HYDRAULIC SYMBOLS



OVERALL DIMENSIONS



K = OR plate





AM.3.UP / AM.3.UP1...

SCREWS AND STUDS

CH. IV PAGE 21

AM.3.UP... / AM.3.UP1... MODULAR PILOT OPERATED CHECK VALVES CETOP 3



AM.3.UP type modular check valves allow free flow in one direction by raising a conical seated poppet valve, while in the opposite direction the fluid can return by means of a small piston piloted by the other line pressure (piloted side).

They are available on single A or B lines, and double A and B lines (see hydraulic symbols).

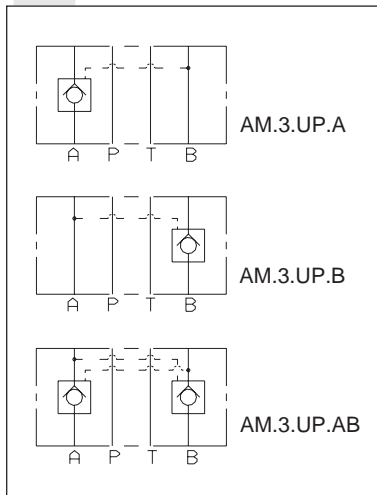
A pre-opening version is also available (AM3UP1..).

| | |
|-----------------------------------|---|
| Max. operating pressure | 350 bar |
| Minimum opening pressure spring 1 | 1 bar |
| Minimum opening pressure spring 5 | 5 bar |
| Piloting ratio AM.3.UP | 1:4 |
| Piloting ratio AM.3.UP1 | 1:12,5 |
| Max. flow | 40 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 Kg |

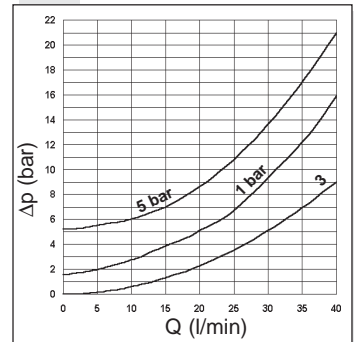
ORDERING CODE

- AM** Modular valve
- 3** CETOP 3/NG6
- **** **UP** = Piloted check valve
UP1 = With pre-opening
- **** Control on lines **A / B / AB**
- *** Minimum opening pressure
1 = 1 bar
5 = 5 bar
- **** **00** = No variant
V1 = Viton
- 3** Serial No.

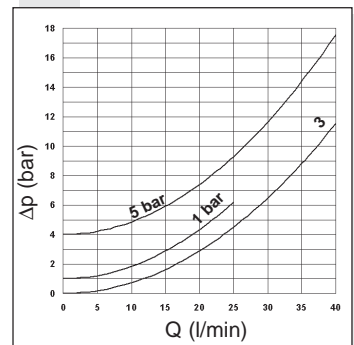
HYDRAULIC SYMBOLS



PRESSURE DROPS AM3UP

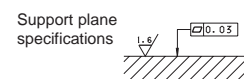
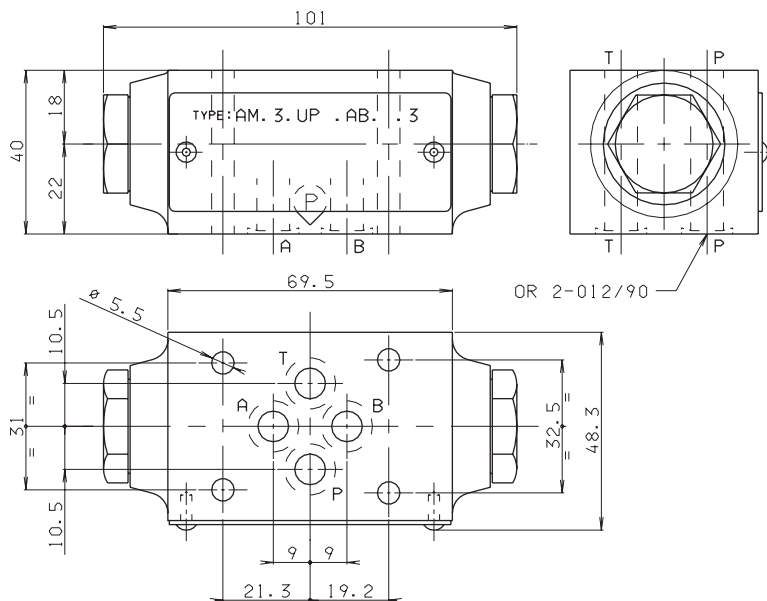


PRESSURE DROPS AM3UP1



3 = Piloted side flow

OVERALL DIMENSIONS



AM.3.VM... / AM.3.VI... MODULAR MAX. PRESSURE VALVES CETOP 3



AM.3.VM / AM.3.VI...

CMP.10... CH. V PAGE 19
SCREWS AND STUDS CH. IV PAGE 21

AM.3.VM type pressure regulating valves are available with a pressure range of 2 ÷ 320 bar.

Adjustment is by means of a grub screw or a plastic knob.

Three basic versions are available:

- AM3VM on single A or B lines, and on A and B lines, with drainage to T;
 - AM3VMP on single P line, with drainage to T;
 - AM3VI on single A or B lines, and on A and B lines, with crossed drainage on A or B (see hydraulic symbols).
- All versions can accept three types of springs with calibrated ranges as shown in the specifications.

The cartridge, which is the same for all versions, is the direct acting type CMP10.

For the minimum permissible setting pressure depending on the spring, see minimum pressure setting curve.

| | |
|--------------------------|---|
| Max. operating pressure | 320 bar |
| Setting ranges: | spring 1 max. 50 bar |
| | spring 2 max. 150 bar |
| | spring 3 max. 320 bar |
| Max. flow | 40 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 β ₂₅ ≥ 75 |
| Weight AM.3.VM.A/B/P... | 1,2 Kg |
| Weight AM.3.VM.AB... | 1,3 Kg |
| Weight AM.3.VI.A/B... | 2 Kg |
| Weight AM.3.VI.AB... | 2,2 Kg |

ORDERING CODE

AM

Modular valve

3

CETOP 3/NG6

VM = Maximum pressure
VI = Maximum pressure crossline

Adjustment on the lines
AM.3.VM Version = **A / B / P / AB**
AM.3.VI Version = **A / B / AB**

Type of adjustment
M = Plastic knob
C = Grub screw

Setting ranges at port A/B/P
1 = max. 50 bar (**white spring**)
2 = max. 150 bar (**yellow spring**)
3 = max. 320 bar (**green spring**)

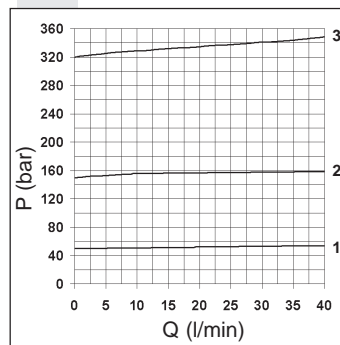
Setting ranges at port B
(Omit if the setting is same as that at port A)
1 = max. 50 bar (**white spring**)
2 = max. 150 bar (**yellow spring**)
3 = max. 320 bar (**green spring**)

00 = No variant
V1 = Viton

3

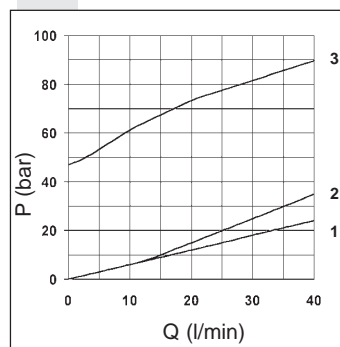
Serial No.

PRESSURE - FLOW RATE

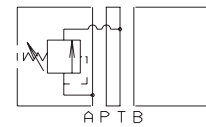


Curves n° 1 - 2 - 3 = setting ranges

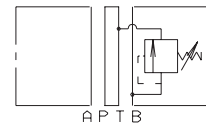
MINIMUM SETTING PRESSURE



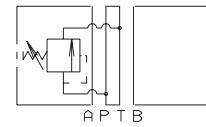
HYDRAULIC SYMBOLS



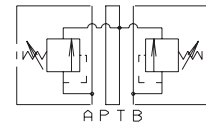
AM.3.VM.A



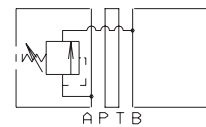
AM.3.VM.B



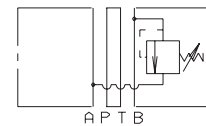
AM.3.VM.P



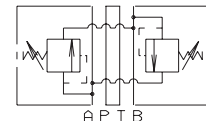
AM.3.VM.AB



AM.3.VI.A



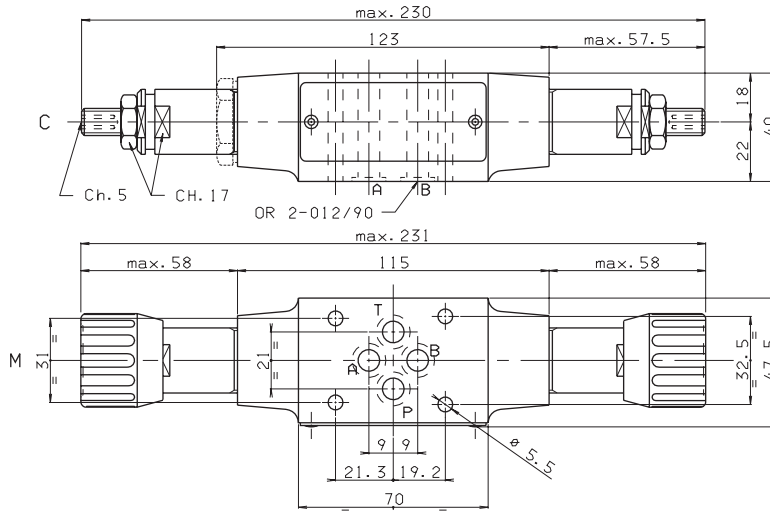
AM.3.VI.B



AM.3.VI.AB

OVERALL DIMENSIONS

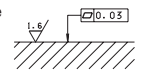
AM.3.VM.AB...



Type of adjustment

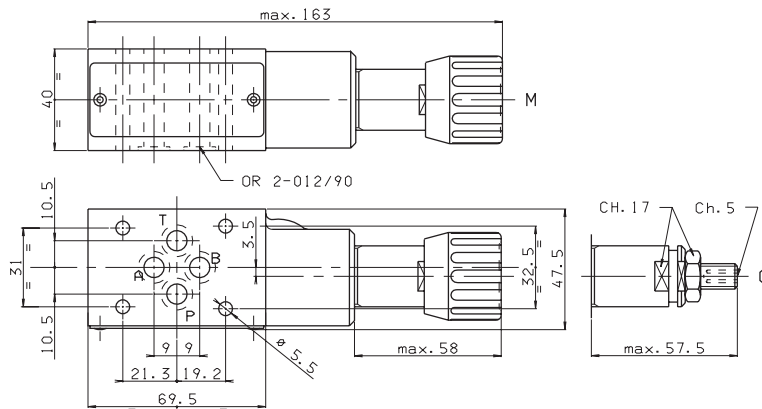
- M Plastic knob
- C Grub screw

Support plane specifications



4

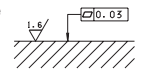
AM.3.VM.P...



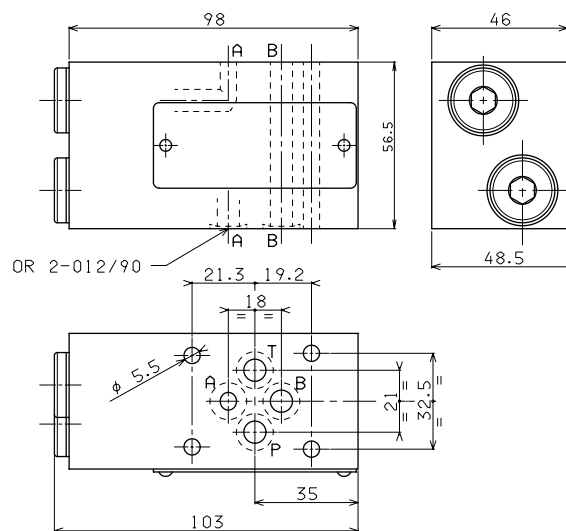
Type of adjustment

- M Plastic knob
- C Grub screw

Support plane specifications



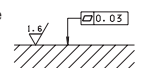
AM.3.VI.AB...



Type of adjustment

- M Plastic knob
- C Grub screw

Support plane specifications



AM.3.CP... MODULAR BACK PRESSURE VALVE CETOP 3



| | |
|-------------------|----------------|
| AM.3.CP... | |
| CMP.10... | CH. V PAGE 19 |
| SCREWS AND STUDS | CH. IV PAGE 21 |

AM3CP type back pressure valves are damped in-line direct acting pressure relief valves fitted with bypass non-return valves.

Adjustment within the range 2 ÷ 320 bar is by means of a grub screw or a plastic knob, on ports A or B (single) or AB (double).

The cartridge is the direct acting type CMP10.

These valves are especially used on vertically working cylinders with dragging loads.

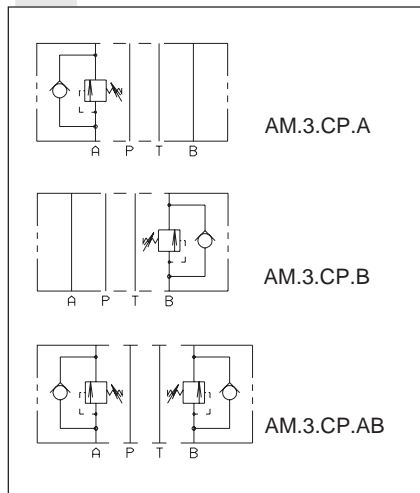
| | |
|--------------------------|---|
| Max. operating pressure | 350 bar |
| Setting ranges: | spring 1 max. 50 bar |
| | spring 2 max. 150 bar |
| | spring 3 max. 320 bar |
| Max. flow | 40 l/min |
| Hydraulic fluids | Mineral oils DIN 51524 |
| Fluid viscosity | 10 ÷ 500 mm ² /s |
| Fluid temperature | -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 AM.3.CP.A/B... | 2 Kg |
| Weight AM.3.CP.AB... | 2,7 Kg |

ORDERING CODE

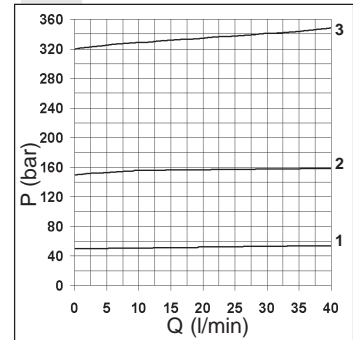
| | |
|-----------|---|
| AM | Modular valve |
| 3 | CETOP 3/NG6 |
| CP | Back pressure valve |
| ** | Control on lines A / B / AB |
| * | Type of adjustment M = Plastic knob C = Grub screw |
| * | Setting ranges 1 = max. 50 bar (white spring) 2 = max. 150 bar (yellow spring) 3 = max. 320 bar (green spring) |
| ** | 00 = No variant V1 = Viton |
| 3 | Serial No. |

For the minimum permissible setting pressure depending on the spring, see minimum pressure setting curve.

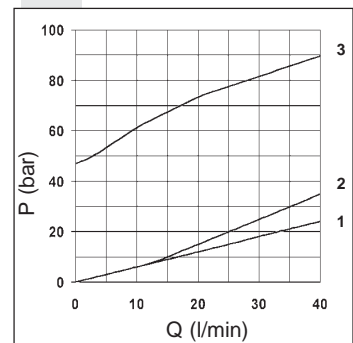
HYDRAULIC SYMBOLS



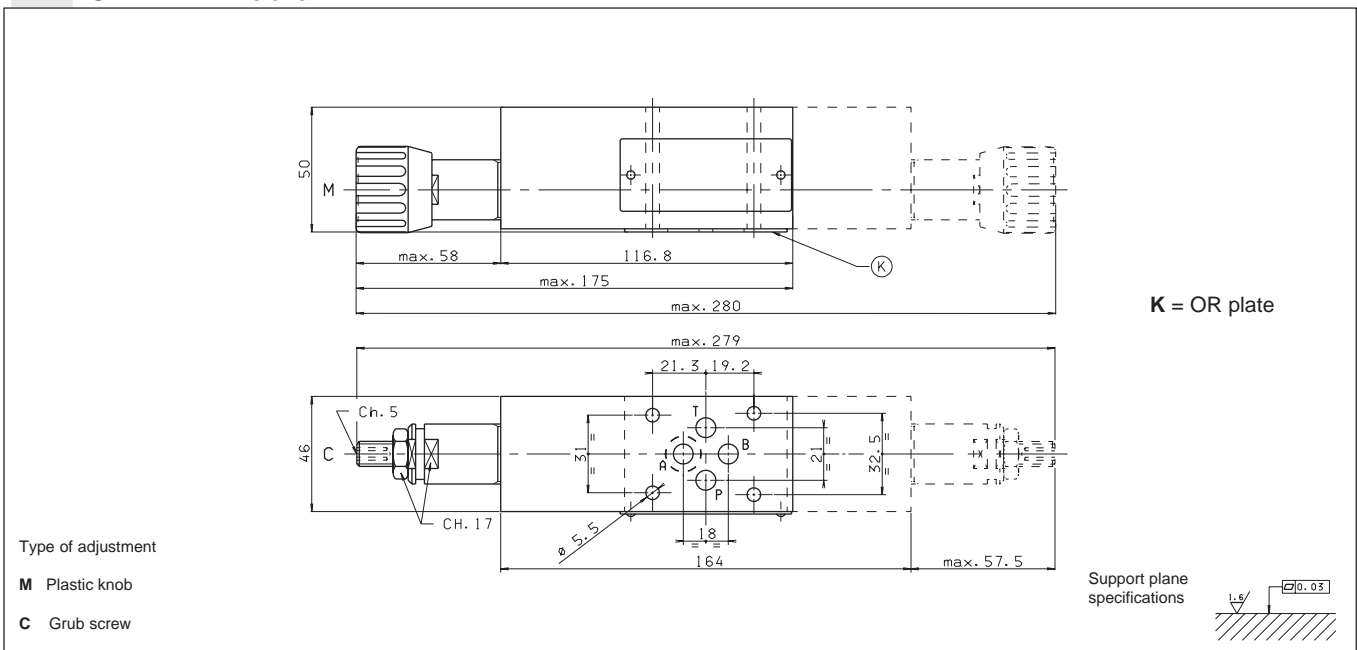
PRESSURE - FLOW RATE



MINIMUM SETTING PRESSURE



OVERALL DIMENSIONS



Type of adjustment
M Plastic knob
C Grub screw

AM.3.RD... /AM.3.SD... MODULAR PRESSURE REDUCING / PRESSURE SEQUENCING VALVES CETOP 3



AM.3.RD / AM.3.SD...

SCREWS AND STUDS

CH. IV PAGE 21

ORDERING CODE

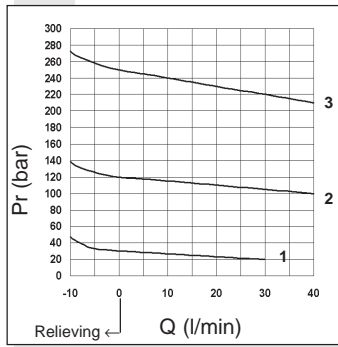
- AM** Modular valve
- 3** CETOP 3/NG6
- **** **RD** = Direct pressure reducing valve
SD = Direct pressure sequencing valve
- *** Control on lines
AM.3.RD version = **A / P**
AM.3.SD version = **P**
- *** **1** = Positive overlap
2 = Negative overlap
Omit for version AM3SD
- *** Type of adjustment
C = 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**)
- **** **00** = No variant
V1 = Viton
- 4** Serial No.

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 at the other end exposed to the hydraulic pressure.

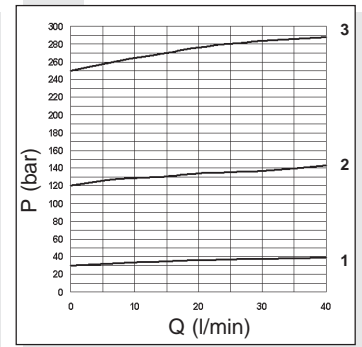
The drainage is drained within the valve to port T. Pressure is adjustable by means of a screw and locknut, or of a handwheel. Three types of springs allow adjustment within the range 2÷250 bar. The pressure reducing valves are available in two versions: with positive overlap (suitable with low flow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

PRESSURE - FLOW RATE AM3RD

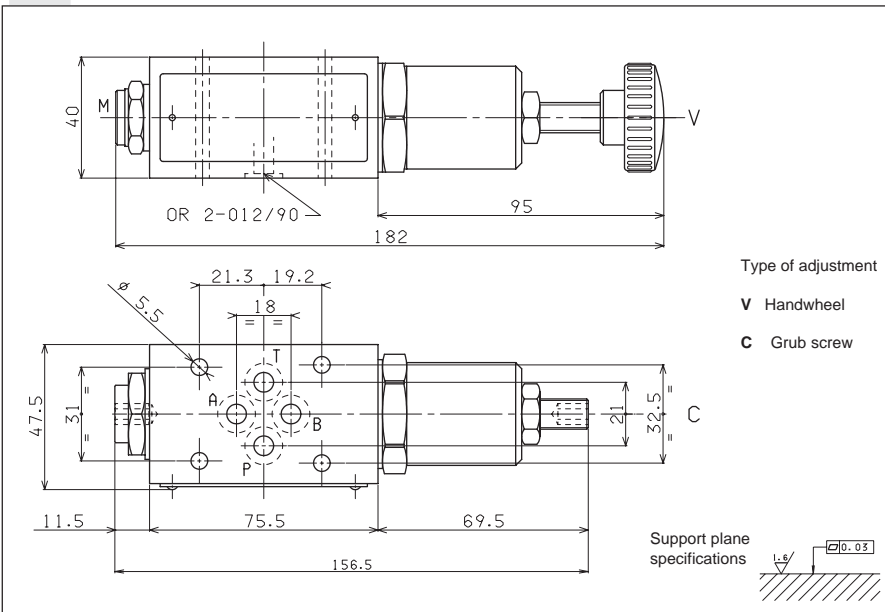


PRESSURE - FLOW RATE AM3SD



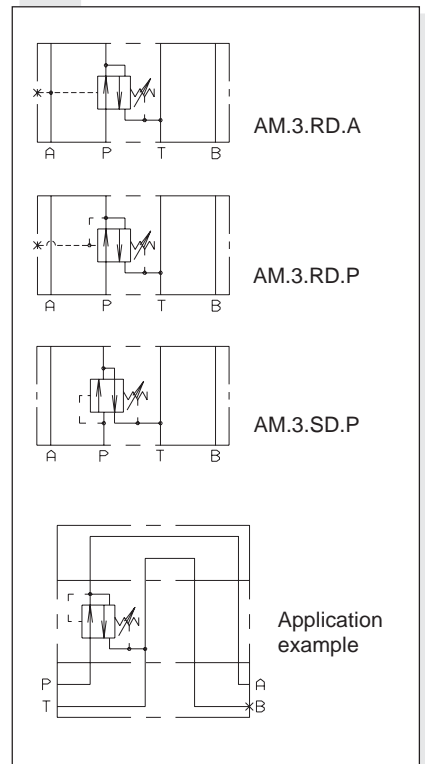
The fluid used is a mineral based oil with a viscosity of 46 mm²/sec at 40 degrees C. The tests have been carried out at with a fluid temperature of 40 degrees C.

OVERALL DIMENSIONS



Type of adjustment
V Handwheel
C Grub screw

HYDRAULIC SYMBOLS



AM.3.VR... MODULAR REDUCING VALVES WITH RELIEVING - PILOT OPERATED CETOP 3



| | |
|-------------------|----------------|
| AM.3.VR... | |
| CVR.20... | CH. V PAGE 23 |
| SCREWS AND STUDS | CH. IV PAGE 21 |

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 within the range 7 ÷ 250 bar. Manual adjustment is available by a grub screw or plastic knob.

The RELIEVING SYSTEM inside the valve AM3VR 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 bypass module with check valve for free flow from A to AR port (see hydraulic symbol) is available..

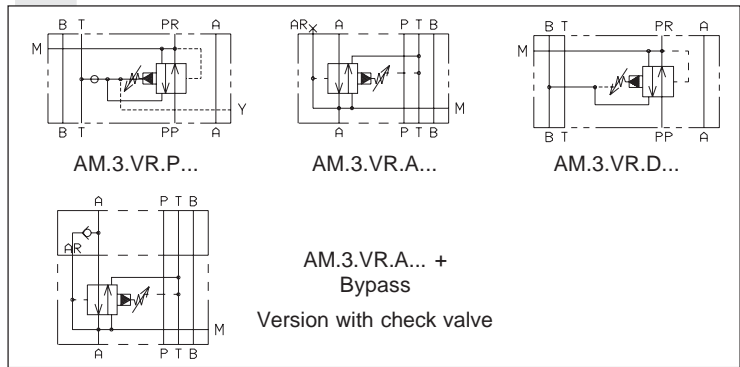
| | |
|-------------------------|-----------------------|
| Max. operating pressure | 350 bar |
| Setting ranges: | spring 1 max. 60 bar |
| | spring 2 max. 120 bar |
| | spring 3 max. 250 bar |

| | |
|--|---|
| Maximum allowed Δp pressure between the inlet an outlet pressure | 150 bar |
| Max. flow | 40 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 | 1,36 Kg |
| Weight bypass version | 2 Kg |

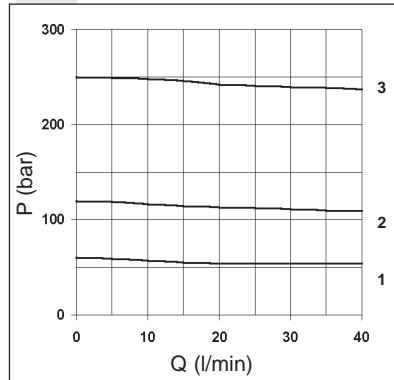
ORDERING CODE

| | |
|-----------|--|
| AM | Modular valve |
| 3 | CETOP 3/NG6 |
| 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 bypass 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) |
| ** | 00 = No variant V1 = Viton |
| 1 | Serial No |

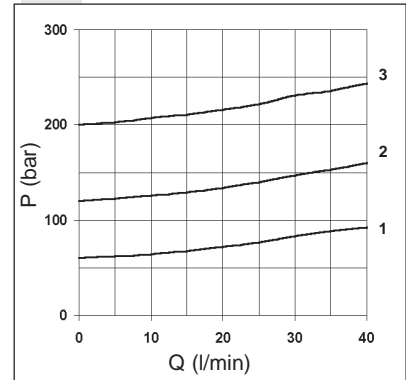
HYDRAULIC SYMBOLS



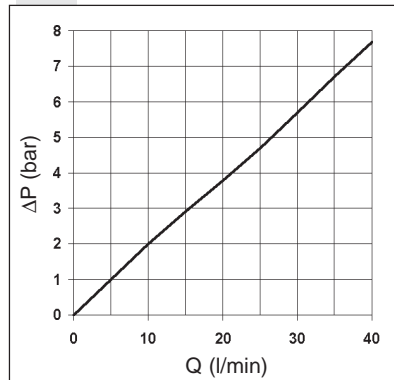
PRESSURE-FLOW RATE



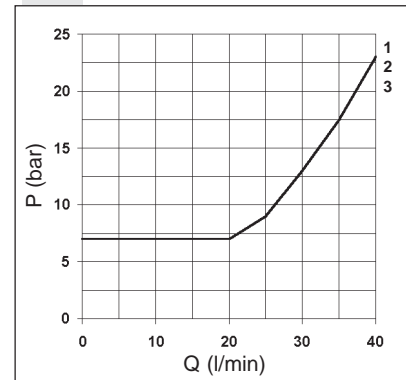
PRESSURE-FLOW OF RELIEVING



ΔP AM.3.VR... + BYPASS



MINIMUM SETTING PRESSURE



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 a fluid temperature of 50°C.

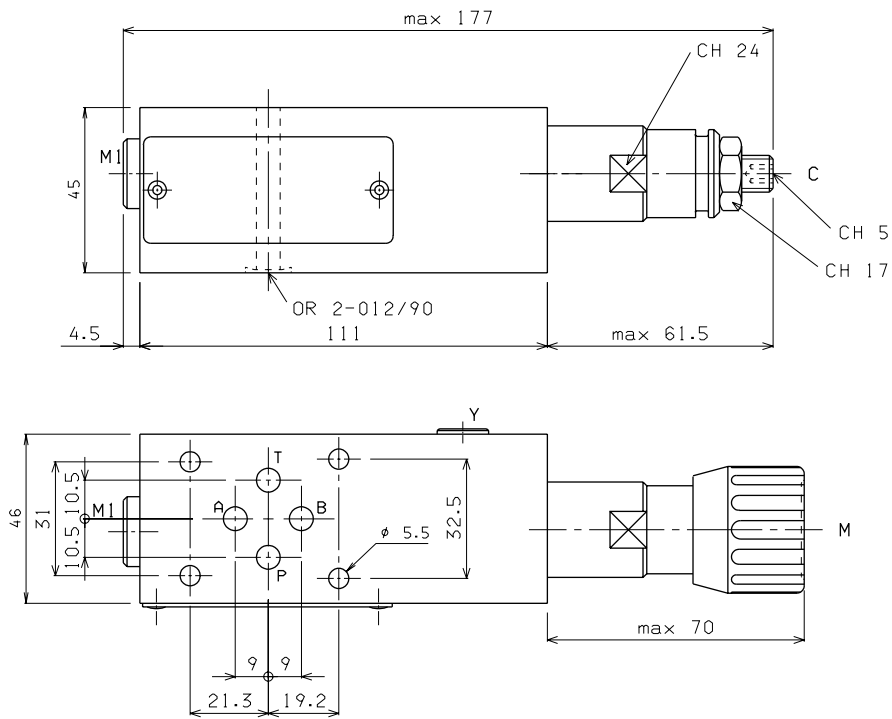
To changes valves AM.3.VR.P... from internal to external drainage it is necessary:

- 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)

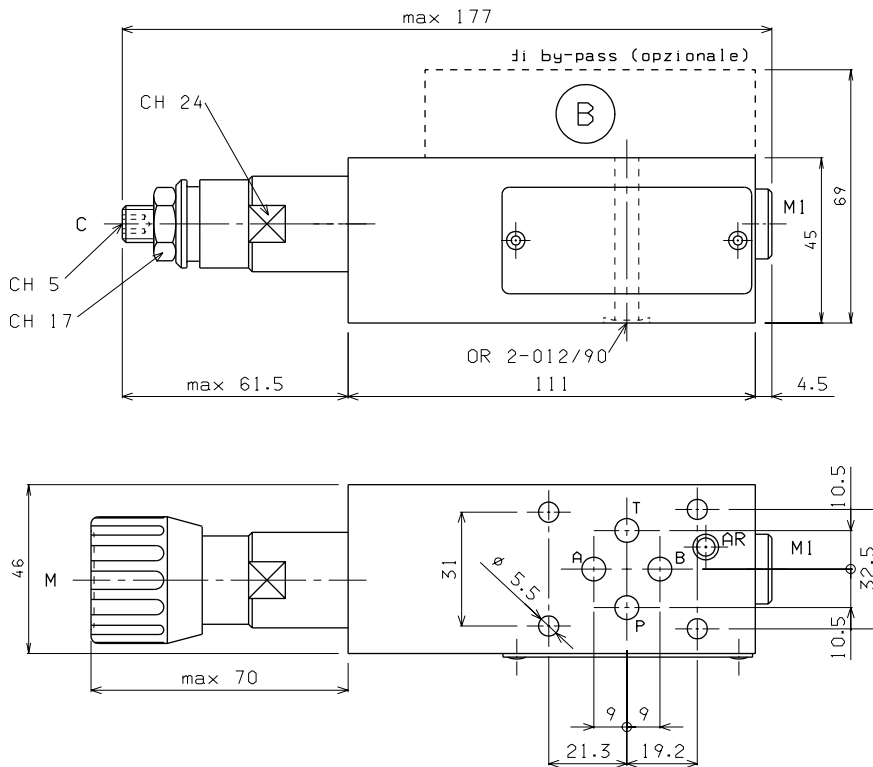
OVERALL DIMENSIONS

AM.3.VR.P... / AM.3.VR.D...



AM.3.VR.A... + BYPASS

Ⓑ Bypass (optional)
Ordering code:
V89.45.000
(if ordered separately)

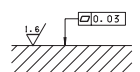


Type of adjustment

M Plastic knob

C Grub screw

Support plane specifications



AM.3.VS... MODULAR SEQUENCING VALVES CETOP 3



| | |
|-------------------|----------------|
| AM.3.VS... | |
| CVS.20... | CH. V PAGE 24 |
| SCREWS AND STUDS | CH. IV PAGE 21 |

The sequence valve are used to assure that a secondary circuit is pressurized when the setting pressure is reached.

These valves grant a minimum variation of the setting pressure with a changing flow up to 40 l/min (see diagram).

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

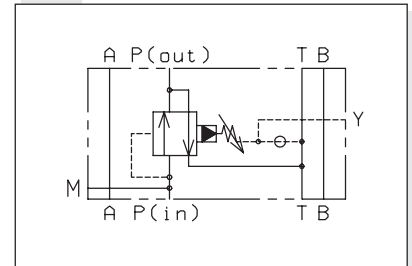
The cartridge used is the "CVS" type.

| | |
|--------------------------|---|
| Max. operating pressure | 350 bar |
| Setting ranges: | Spring 1 max. 60 bar |
| | Spring 2 max. 120 bar |
| | Spring 3 max. 250 bar |
| Max. flow | 40 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 β ₂₅ ≥ 75 |
| Weight | 1,36 Kg |

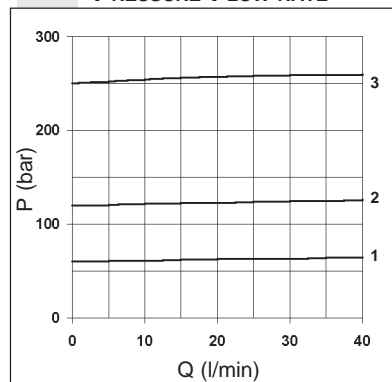
ORDERING CODE

| | |
|-----------|---|
| AM | Modular valve |
| 3 | CETOP 3/NG6 |
| VS | Sequencing valve |
| * | Drain connection E = External I = Internal (Standard) |
| * | 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) |
| ** | 00 = No variant V1 = Viton |
| 1 | Serial No |

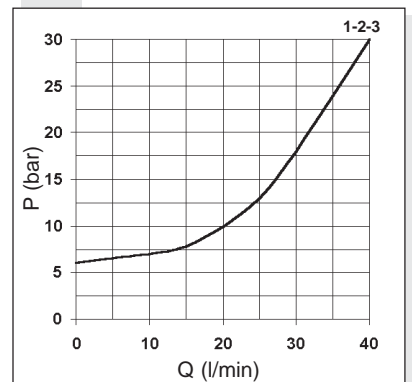
HYDRAULIC SYMBOL



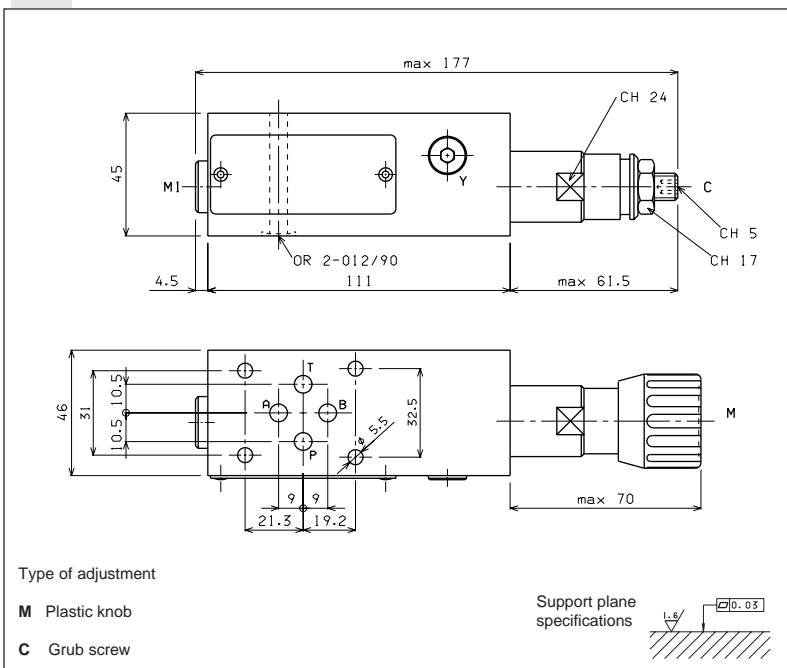
PRESSURE-FLOW RATE



MINIMUM SETTING PRESSURE



OVERALL DIMENSIONS



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.

To changes valves AM.3.VS... 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)

AM.3.SH... MODULAR SHUTTLE VALVES CETOP 3



AM.3.SH...

SH.03... CH. V PAGE 16

SCREWS AND STUDS CH. IV PAGE 21

Modular valves type AM.3.SH are actuator load pressure selecting units, as they are fitted with an integral shuttle valve cartridge which allows taking of the highest pressure signal to the external port via displacement of a ball. They are usually employed to signal the actuator load to the pressure compensator of load sensing pump, or for the command of fail-safe brakes.

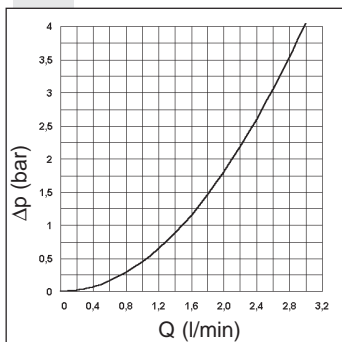
For seat overall dimensions see cartridge shuttle SH.03 type.

| | |
|-----------------------------|---|
| Max. operating pressure | 350 bar |
| Max. flow at the cartridge | 3 l/min |
| Max. flow at ports A/B/P/T | 40 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 β ₂₅ ≥ 75 |
| Weight | 1 Kg |
| Cartridge tightening torque | 20÷30 Nm/2÷3 Kgm |

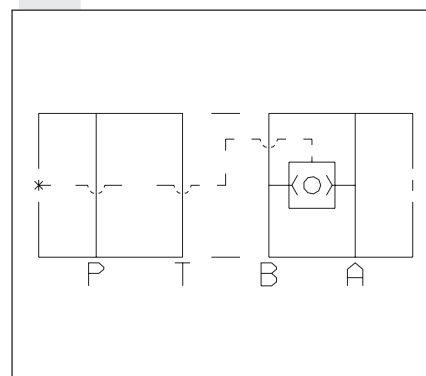
ORDERING CODE

- AM** Modular valve
- 3** CETOP 3/NG6
- SH** Cartridge shuttle
- **** **00** = No variant
V1 = Viton
- 1** Serial No.

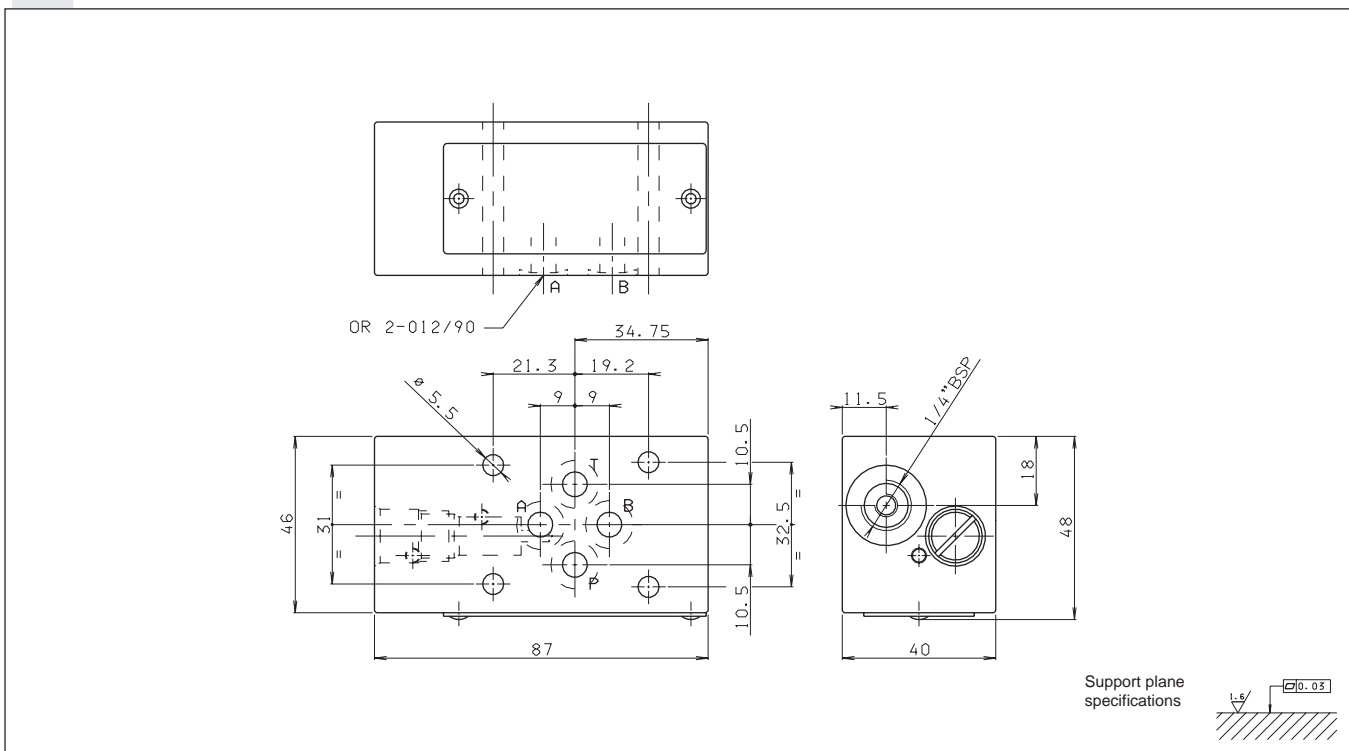
PRESSURE DROPS ON THE SHUTTLE VALVE



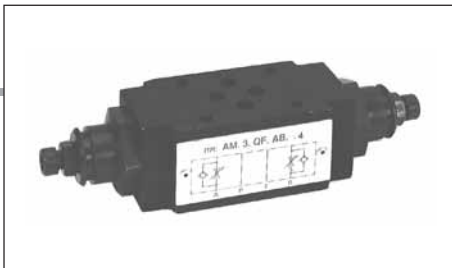
HYDRAULIC SYMBOL



OVERALL DIMENSIONS



AM.3.QF... MODULAR FLOW REGULATOR CETOP 3



AM.3.QF...

SCREWS AND STUDS

CH. IV PAGE 21

AM.3.QF type one way non-compensated throttle valve are fitted with an O-Ring mounting plate which allows its assembly for either input or output regulation. Adjustment is obtained by means of a grub screw or a plastic knob. They are available in the four regulating configurations shown in the hydraulic diagrams.

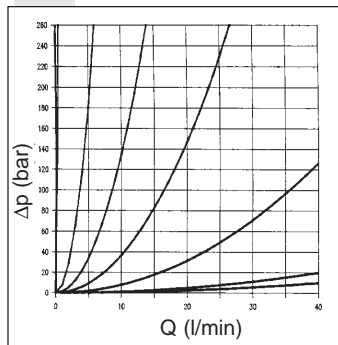
The standard valve configuration allows "meter in" regulation, while it is possible to obtain "meter out" regulation by turning the valve by 180° along its longitudinal axis.

| | |
|--------------------------|---|
| Max. operating pressure | 350 bar |
| Max. pressure adjustable | 250 bar |
| Flow rate regulation | on 8 screw turns |
| Max. flow | 40 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 | 1,5 Kg |

ORDERING CODE

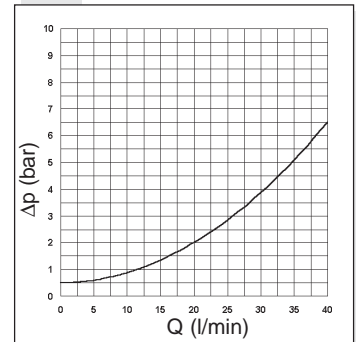
| | |
|-----------|--|
| AM | Modular valve |
| 3 | CETOP 3/NG6 |
| QF | Non compensated throttle valve |
| ** | Control on lines A / B / P / AB |
| * | Type of adjustment M = Plastic knob C = Grub screw |
| ** | 00 = No variant V1 = Viton |
| 4 | Serial No. |

FLOW REGULATION

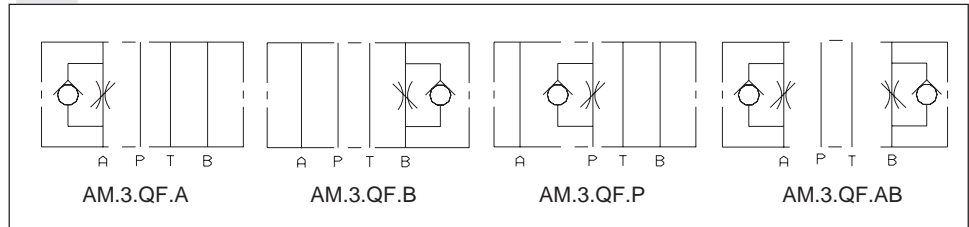


FREE FLOW

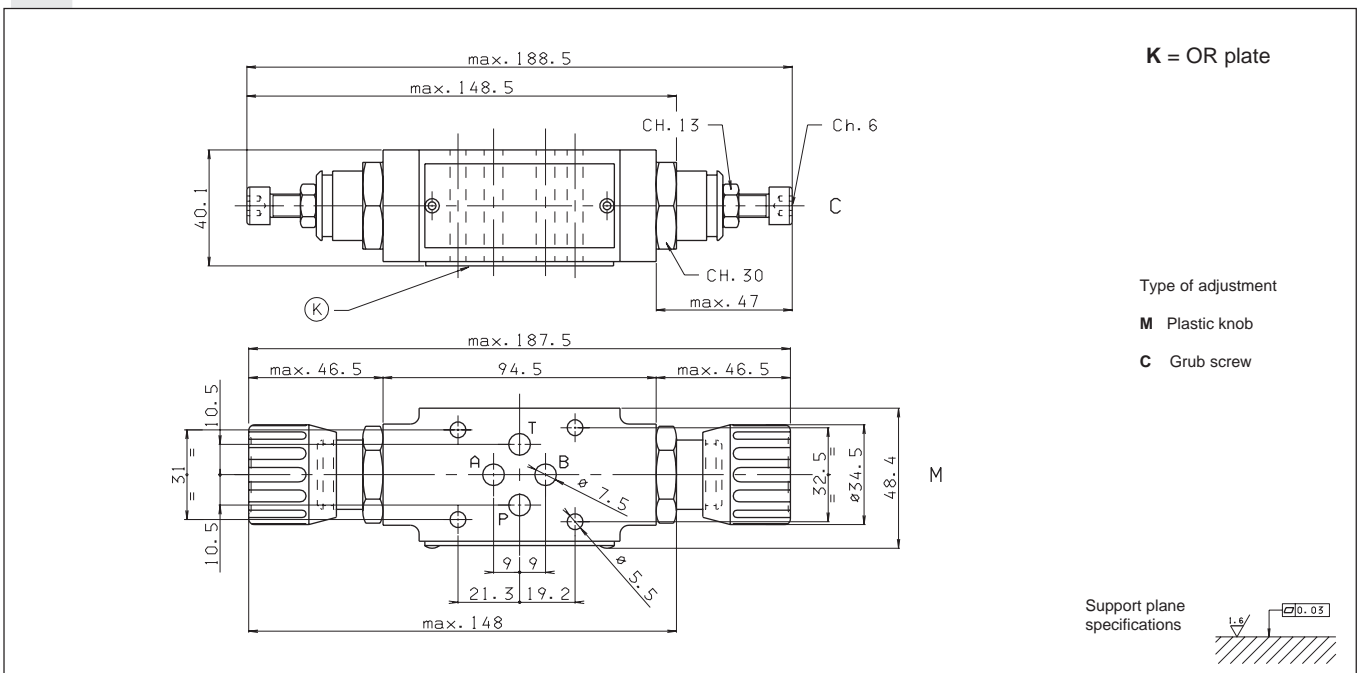
TOWARDS CHECK VALVE



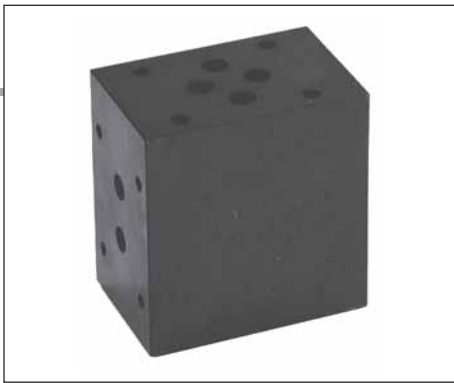
HYDRAULIC SYMBOLS



OVERALL DIMENSIONS



AM.66... MODULAR COMPENSATED FLOW CONTROL ASSEMBLY CETOP 3



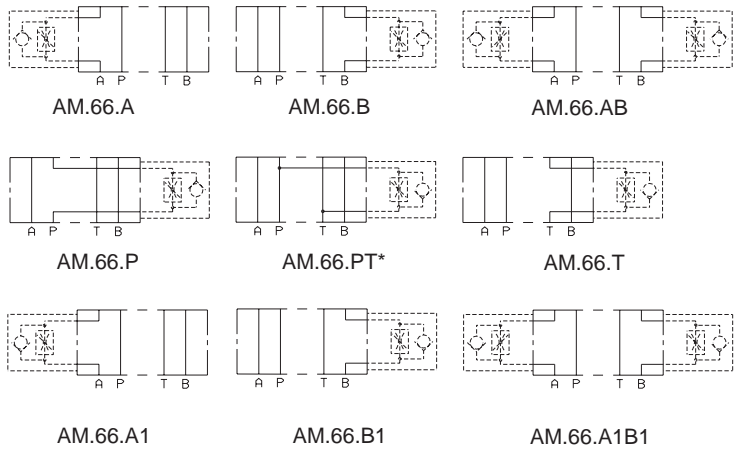
This is an intermediate block (AM.66) for modular mounting of one or two flow rate regulators type QC.3...

The flow regulator type QC.3.2... must be ordered separately.

| | |
|--------------------------|---|
| Max. operating pressure | 320 bar |
| 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 |

| | |
|------------------|----------------|
| AM.66... | |
| QC.3.2... | CH. III PAGE 2 |
| SCREWS AND STUDS | CH. IV PAGE 21 |

HYDRAULIC SYMBOLS



PT * = From line towards exhaust (**P**→**T** drain)

• In order to obtain versions with regulation on **T**, the AM.66.P regulator carrying block should be turned by 180°.

• In order to obtain versions **A1**, **B1** and **A1B1** the AM.66.B, AM.66.A or AM.66.AB regulators carrying block should be turned by 180°.

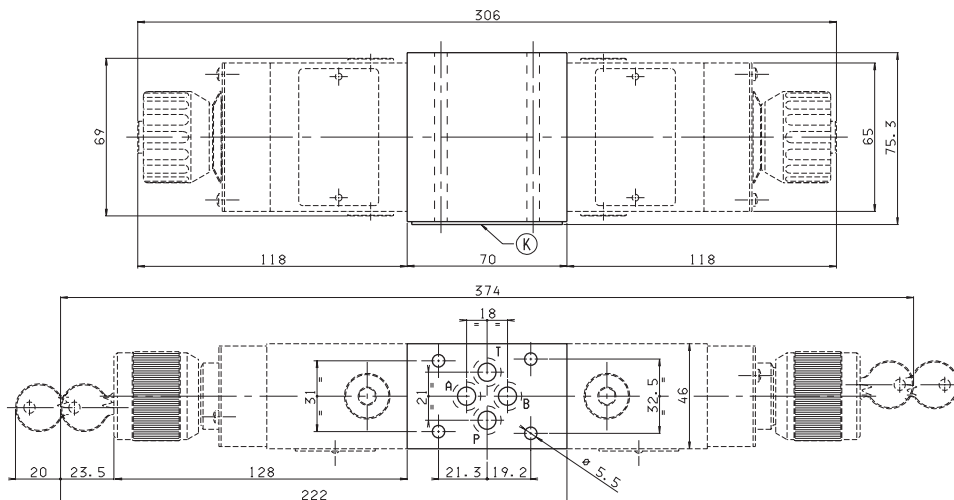
4

ORDERING CODE

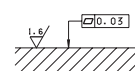
| | |
|-----------|--|
| AM | Modular valve |
| 66 | Size |
| ** | Control on lines A / B / P / PT* / AB For T / A1 / B1 / A1B1 versions see table "Hydraulic symbols" |
| ** | 00 = No variant V1 = Viton |
| 3 | Serial No. |

OVERALL DIMENSIONS

K = OR plate

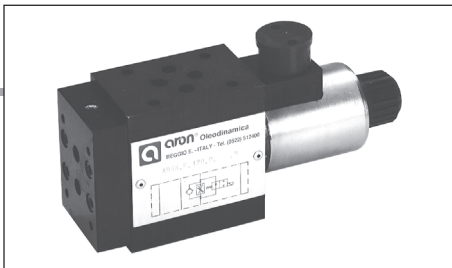


Support plane specifications



A.66... MODULAR FLOW CONTROL VALVES

FAST / SLOW ASSEMBLY CETOP 3



| A.66... | |
|---------------------|----------------|
| D15 DC / K12 AC | CH. I PAGE 18 |
| STANDARD CONNECTORS | CH. I PAGE 19 |
| QC.3.2... | CH. III PAGE 2 |
| SCREWS AND STUDS | CH. IV PAGE 21 |

ORDERING CODE

| | |
|------------|---|
| A | Speed control valve |
| 66 | Size |
| E | Electrical operator |
| *** | 120 = Normally open 121 = Normally closed See table hydraulic symbols |
| * | Control on lines A/B/P/T (see symbols) The interface holder "H" must be turned by 180° in order to obtain the A1 and B1 versions. |
| * | Voltage: see tab.1 |
| ** | Variants: see tab.2 |
| * | 3 = Serial No. for AC voltage |

TAB.1 "E" OPERATOR TYPE

| AC VOLTAGE | |
|------------|-----------------------|
| A | 24V/50Hz |
| B | 48V/50Hz* |
| J | 115V/50Hz - 120V/60Hz |
| Y | 230V/50Hz - 240V/60Hz |
| E | 240V/50Hz* |
| F | 24V/60Hz* |
| K | AC without coils |

| DC VOLTAGE | |
|------------|------------------|
| L | 12V |
| M | 24V |
| V | 28V* |
| N | 48V* |
| Z | 102V* |
| P | 110V* |
| X | 205V* |
| W | DC without coils |

Voltage codes are not stamped on the plate, they are readable on the coils.

(*) Special voltage

TAB.2 - VARIANTS

| | |
|--------------------------------|----|
| No variant | 00 |
| (connectors as in the drawing) | |
| Viton | V1 |
| Indicator light | X1 |
| Rectifier | R1 |
| Cable gland "PG11" | S1 |
| Valve without connector (coil) | S1 |
| Indicator light + rectifier | XR |

This is modular assembly ON/OFF solenoid valve which, by fitting suitable 2 way regulator, allows two speed operation in the same system via an electrical changeover command.

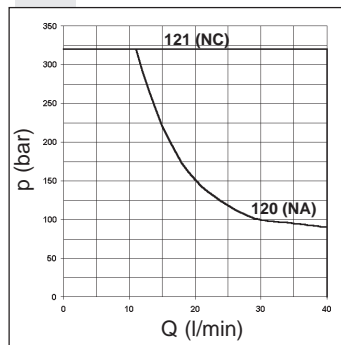
The flow rate regulator type QC.3.2... must be ordered separately. The operational limit curves have been obtained with the regulator fully closed, and those same limits improve gradually with the opening of the regulator

• Solenoids used are standard type D15 for DC voltage and K12 for AC voltage.

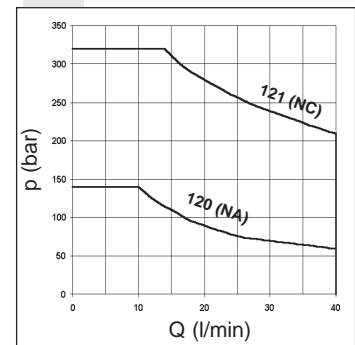
| | |
|----------------------------|---|
| Max. operating pressure | 320 bar |
| Hydraulic fluids | Mineral oils DIN 51524 |
| Fluid viscosity | 10 ÷ 500 mm ² /s |
| Fluid temperature | -25°C ÷ 75°C |
| Ambient temperature | -25°C ÷ 60°C |
| Max. contamination level | class 10 in accordance with NAS 1638 with filter β ₂₅ ≥ 75 |
| Weight with an AC solenoid | 2,2 Kg |
| Weight with a DC solenoid | 2,4 Kg |

The test have been carried out at operating temperature, with a voltage 10% lower than rated voltage and with a fluid temperature of 50 degrees C. The fluid used was a mineral based oil with a viscosity of 46 mm²/s at 40 degrees C.

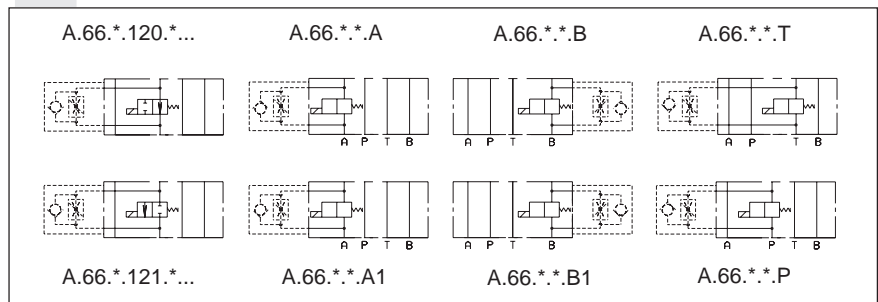
LIMITS OF USE DC SOLENOID



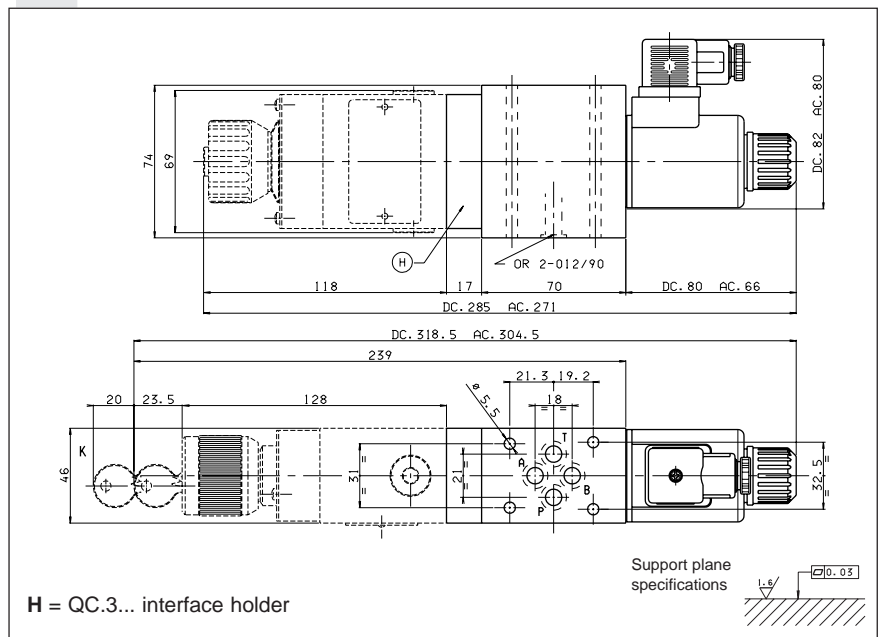
LIMITS OF USE AC SOLENOID



HYDRAULIC SYMBOLS



OVERALL DIMENSIONS



AM.3.RGT... MODULAR VALVES FOR REGENERATIVE CIRCUIT CETOP 3



AM.3.RGT...

SCREWS AND STUDS

CH. IV PAGE 21

This modular valve produces a regenerative system to increase the actuator (differential cylinder) exit speed as shown in the diagram.

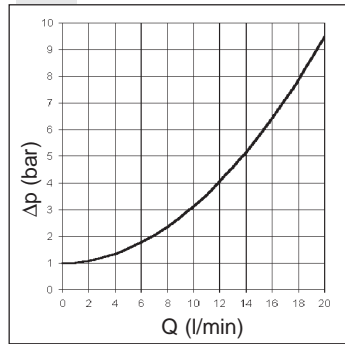
In particular, if a cylinder is used with a 2:1 ratio for the operating surfaces, the exit and re-entry speeds are the same.

| | |
|---------------------------|---|
| Max. operating pressure | 350 bar |
| Max. flow at port A/B/P/T | 20 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 | 1,7 Kg |

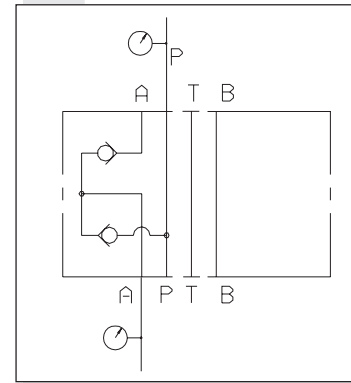
ORDERING CODE

| | |
|------------|---|
| AM | Modular valve |
| 3 | CETOP 3/NG6 |
| RGT | For regenerative circuit |
| A | Size of check valves 3/8"BSP |
| 1 | Opening pressure 1 bar |
| ** | 00 = No variant V1 = Viton |
| 1 | Serial No. |

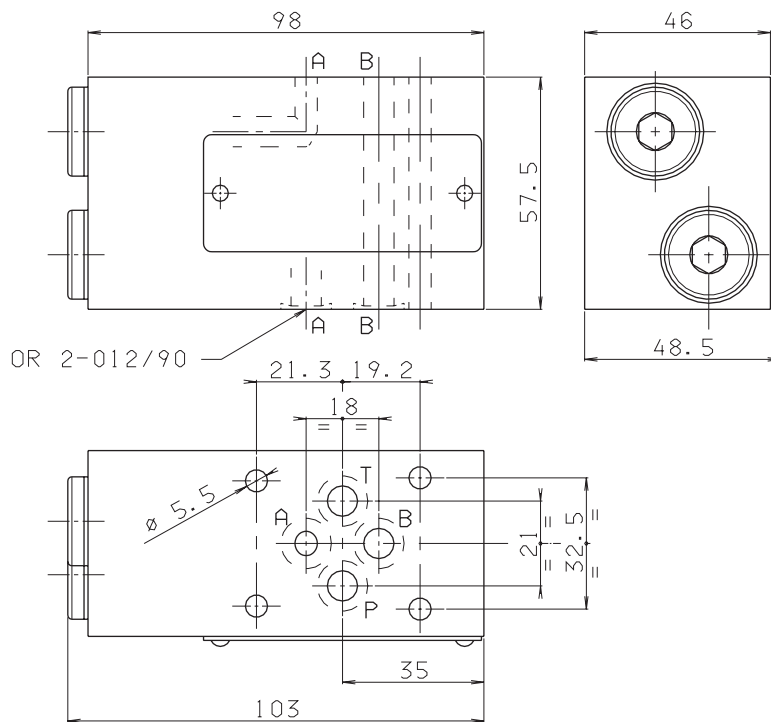
PRESSURE DROPS A→P



HYDRAULIC SYMBOL

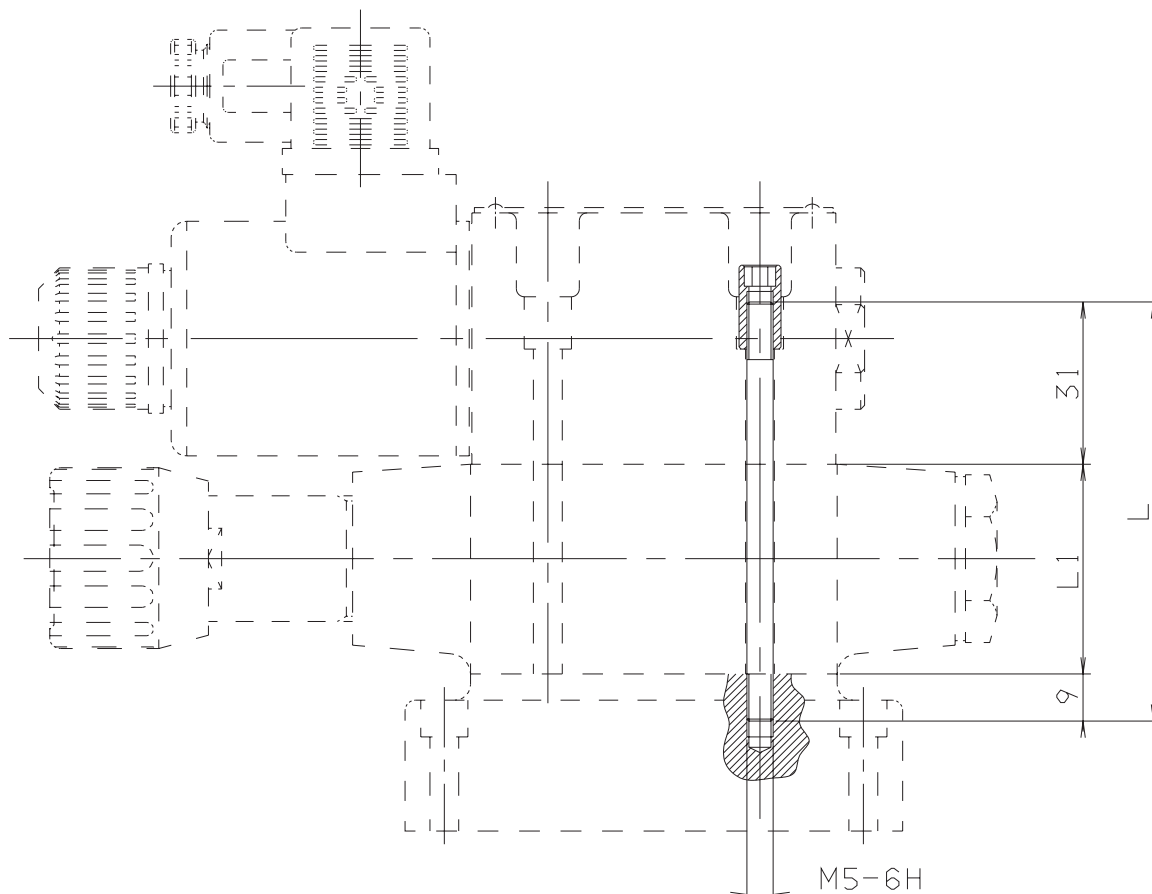


OVERALL DIMENSIONS



OVERALL DIMENSIONS

Tighten M27.05.0001 to a torque of 5 Nm / 0.5 Kgm max.



4

| SCREWS CODE T.C.E.I | L | L1 | COMPOSITION | Qty. | |
|---------------------|-----|------|----------------------------------|-------------------|------|
| Q26.07.4068 | 30 | | AD3... | 4 | |
| Q26.07.4075 | 70 | 40 | AD3... + 1 AM3... (ISO) | 4 | |
| Q26.07.4076 | 75 | 45 | AD3... + AM3VR | 4 | |
| STUDS CODE | L | L1 | COMPOSITION | SPECIAL NUTS CODE | Qty. |
| M80.10.0015 | 97 | 57,5 | AD3... + AM3VI... | M27.05.0001 | 4 |
| M80.10.0007 | 115 | 74 | AD3... + A66 o AM66... | M27.05.0001 | 4 |
| M80.10.0003 | 120 | 80 | AD3... + 2 AM3... (ISO) | M27.05.0001 | 4 |
| M80.10.0013 | 125 | 85 | AD3... + AM3VR... + AM3... (ISO) | M27.05.0001 | 4 |
| M80.10.0011 | 155 | 114 | AD3... + A66... + AM3... (ISO) | M27.05.0001 | 4 |
| M80.10.0005 | 160 | 119 | AD3... + A66... + AM3VR | M27.05.0001 | 4 |
| M80.10.0005 | 160 | 120 | AD3... + 3 AM3... (ISO) | M27.05.0001 | 4 |
| M80.10.0020 | 165 | 125 | AD3 + AM3VR + 2 AM3... (ISO) | M27.05.0001 | 4 |
| M80.10.0017 | 170 | 130 | AD3 + AM3CP + 2 AM3... (ISO) | M27.05.0001 | 4 |
| M80.10.0023 | 195 | 154 | A66... + 2 AM3... (ISO) | M27.05.0001 | 4 |