![Duplomatic Motion Solutions logo]

MVR-RS/P
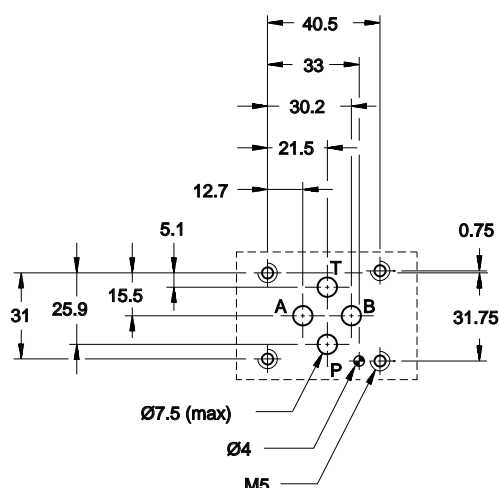## DIRECT CHECK VALVE WITH FLOW RESTRICTOR
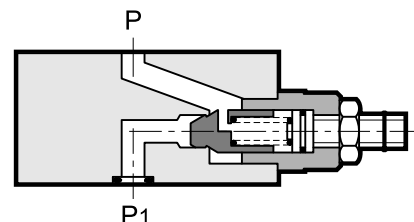### SERIES 50

MODULAR VERSION
ISO 4401-03

p max **350** bar
Q max (see table of performances)

MOUNTING INTERFACE

ISO 4401-03-02-0-05
(CETOP 4.2-4-03-350)

40.5
33
30.2
21.5
12.7
5.1
0.75
31 25.9 15.5
A B
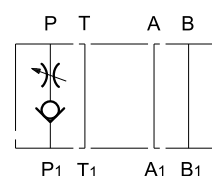31.75
Ø7.5 (max)
Ø4
M5
T
P

OPERATING PRINCIPLE

P
P1

— The MVR-RS/P valve is a check valve that incorporates also the function of flow restriction.

— It is made as a modular version with mounting surface according to the ISO 4401-03 standards.

— It can be quickly assembled under the ISO 4401-03 directional solenoid valves and modular valves, without use of pipes and using suitable tie-rods or bolts.

— It is used when it is necessary to control the flow in a direction and to avoid backflows or the self-emptying of the lines in the opposite direction.

— Control of the flow is obtained with a socket hex screw with locking nut.

PERFORMANCES (measured with mineral oil of viscosity 36cSt at 50°C)

Maximum operating pressure Check valve cracking pressure	bar	350 1
Maximum flow rate in controlled lines Maximum flow rate in the free lines	l/min	50 75
Ambient temperature range	°C	-20 / +60
Fluid temperature range	°C	-20 / +80
Fluid viscosity range	cSt	10 ÷ 400
Fluid contamination degree	According to ISO 4406:1999 class 20/18/15	
Recommended viscosity	cSt	25
Mass	kg	1,1

HYDRAULIC SYMBOL

P T   A B

P1 T1   A1 B1

1 - IDENTIFICATION CODE

| M | V | R | - | R | S | / | P | / | 50 | / | |

- ISO 4401-03 size Modular version
- Check valve
- Flow restrictor valve on line P
- Check valve on line P
- Seals: omit for mineral oils **V** = viton for special fluids
- Series No. (the overall and mounting dimensions remain unchanged from 50 to 59)

2 - CHARACTERISTIC CURVES (values obtained with viscosity of 36 cSt at 50°C)

Δp[bar] vs Q [l/min]

1) pressure drops $P_1 \rightarrow P$

2) pressure drops on free lines (ex. $A \rightarrow A_1$)
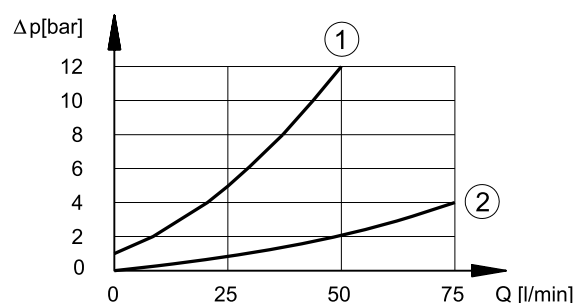
3 - HYDRAULIC FLUIDS

Use mineral oil-based hydraulic fluids HL or HM type, according to ISO 6743-4. For these fluids, use NBR seals. For fluids HFDR type (phosphate esters) use FPM seals (code V). For the use of other kinds of fluid such as HFA, HFB, HFC, please consult our technical department. Using fluids at temperatures higher than 80 °C causes a faster degradation of the fluid and of the seals characteristics.
The fluid must be preserved in its physical and chemical characteristics.

4 - OVERALL AND MOUNTING DIMENSIONS

dimensions in mm

1	Locking nut: spanner 17
2	Socket hex adjustment screw: spanner 5 Rotate anticlockwise to increase flow
3	Mounting surface with sealing rings: 4 OR type 2037 (9.25x1.78) - 90 Shore