



**DIPLOMATIC**  
HYDRAULICS

64 200/104 ED



# MERS

## FLOW RESTRICTOR VALVE

### SERIES 50

#### MODULAR VERSION

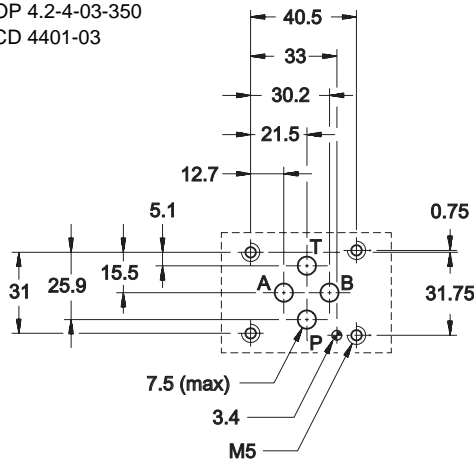
#### CETOP 03

p max 350 bar

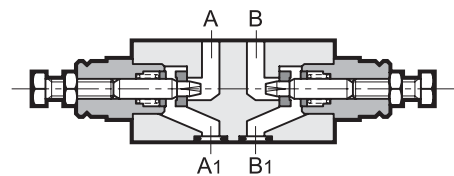
Q max (see performance ratings table)

#### MOUNTING INTERFACE

CETOP 4.2-4-03-350  
ISO/CD 4401-03



#### OPERATING PRINCIPLE



- This is a noncompensated flow control valve with a check valve for reverse free flow. It is made in the modular version and with mounting surface according to the CETOP and ISO standards.
- It can be assembled quickly under all CETOP 03 valves without use of pipes, but using only suitable tie-rods or bolts, thus forming compact modular groups.
- It is normally supplied with a hexagonal head adjustment screw.

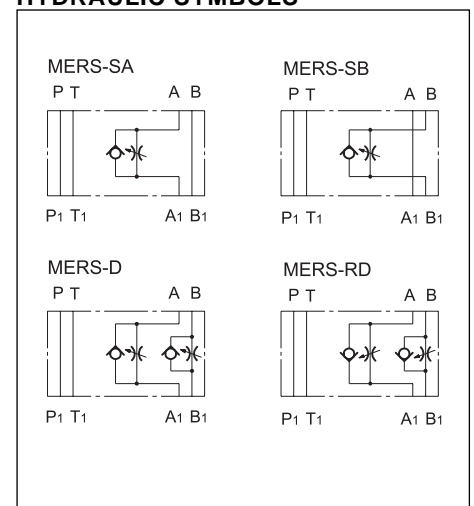
#### CONFIGURATIONS (see Hydraulic symbols table)

- Configuration "SA": is utilized in cases in which control of the flow exiting from the actuator on line A is desired.
- Configuration "SB": is utilized in cases in which control of the flow exiting from the actuator on line B is desired.
- Configuration "D": independently controls the flow exiting the two chambers of the actuator.
- Configuration "RD": independently controls the flow entering the two chambers of the actuator.
- All the configurations have an incorporated check valve that allows reverse free flow (cracking pressure of 0,5 bar).

#### PERFORMANCE RATINGS (measured with mineral oil of viscosity 36cSt at 50°C)

Maximum operating pressure	bar	350
Check valve cracking pressure	bar	0,5
Maximum flow rate in the controlled lines	l/min	50
Maximum flow rate in the free lines	l/min	75
Minimum controlled flow rate with $\Delta p$ 10 bar	l/min	$\leq 0,060$
Ambient temperature range	°C	-20 ÷ +50
Fluid temperature range	°C	-20 ÷ +80
Fluid viscosity range	cSt	10 ÷ 400
Recommended viscosity	cSt	25
Degree of fluid contamination	According to NAS 1638 class 10	
Mass:	kg	1,3

#### HYDRAULIC SYMBOLS

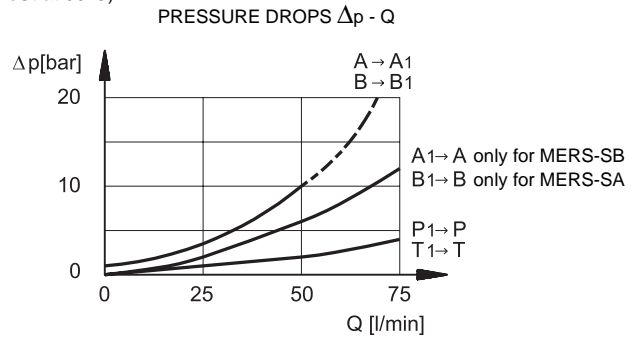
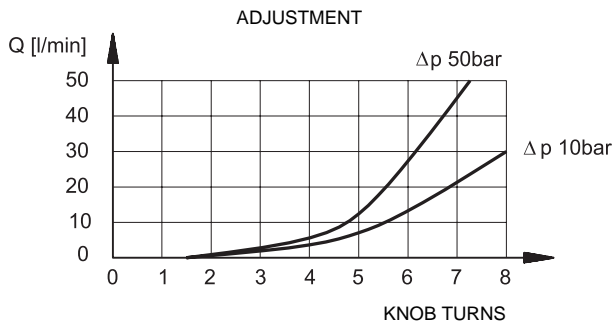




## 1 - IDENTIFICATION CODE

	M E R S - / / 50 /		
<p>CETOP 03 size Modular version</p> <p>Flow restrictor valve with check valve for reverse free flow</p> <p>Configurations: <b>SA:</b> meter out control on line A <b>SB:</b> meter out control on line B <b>D:</b> meter out control on lines A and B <b>RD:</b> meter in control on lines A and B</p>	<p>Seals: omit for mineral oils <b>V</b> = viton for special fluids</p> <p>Series No. (the overall and mounting dimensions remain unchanged from 50 to 59)</p> <p><b>M</b> = Adjustment with SICBLOC knob (omit for adjustment with hexagonal head adjustment screw)</p>		

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



## 3 - HYDRAULIC FLUIDS

Use mineral oil-based hydraulic fluids, with the addition of suitable anti-frothing and anti-oxidizing agents. For the use of other types (water glycol, phosphate esters and others), please consult our technical department.

## 4 - OVERALL AND MOUNTING DIMENSIONS

①

dimensions in mm

MERS-\*/M

③

1	Mounting surface with sealing rings: 4 OR type 2037
2	Hexagonal head adjustment screw. Spanner 13 Rotate anticlockwise to increase flow
3	SICBLOC adjustment knob, upon request. To operate, push and rotate at the same time.

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