



CBM3

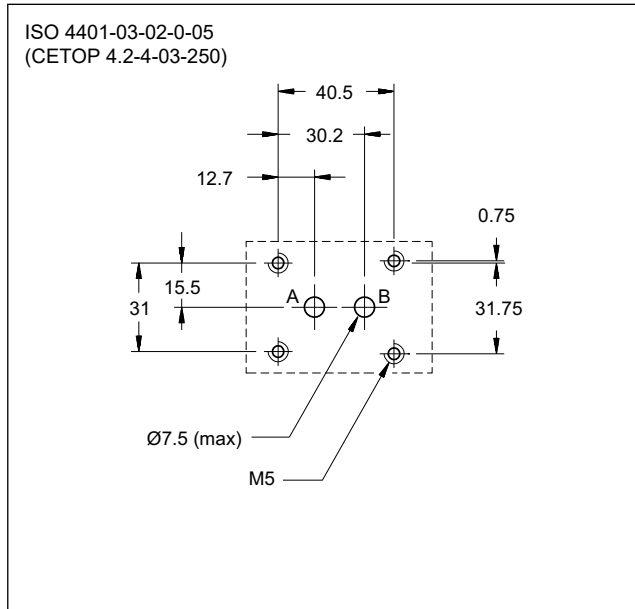
RECTIFIER PLATE

SERIES 20

MODULAR VERSION ISO 4401-03

p max **250** bar
Q max **20** l/min

MOUNTING INTERFACE



OPERATING PRINCIPLE

The diagram shows a cross-section of the valve with two inlet ports, A1 and B1, and two outlet ports, A and B. Arrows indicate the flow direction: A1 and B1 flow into the valve, and the flow is directed to outlet A. The internal structure consists of four non-return valves forming a bridge.

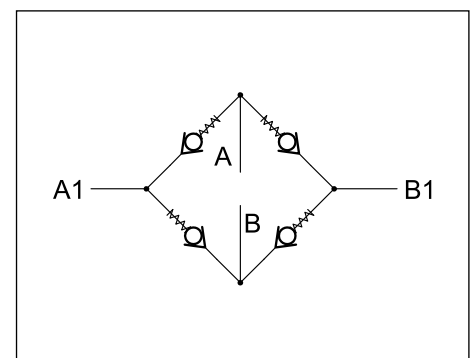
- The CBM3 is a non-compensated flow control valve operating according to the hydraulic Graetz-bridge principle. It provides a constant unidirectional flow to outlet port A. Port B is the inlet for return flow, regardless of whether the main supply flow comes from port A1 or B1.
- The bolt hole pattern and port locations comply with ISO 4401-03 standard, while the overall dimensions are larger than the ISO footprint to accommodate the four non-return valves that form the internal bridge.
- The CBM3 is typically installed beneath compensated flow control valves, such as RPC1 (catalogue 32 200) and RPCED1 (catalogue 82 200), to ensure a stable, unidirectional flow condition at their inlets, in circuits where actuator motion or load conditions may reverse the flow direction.

PERFORMANCES

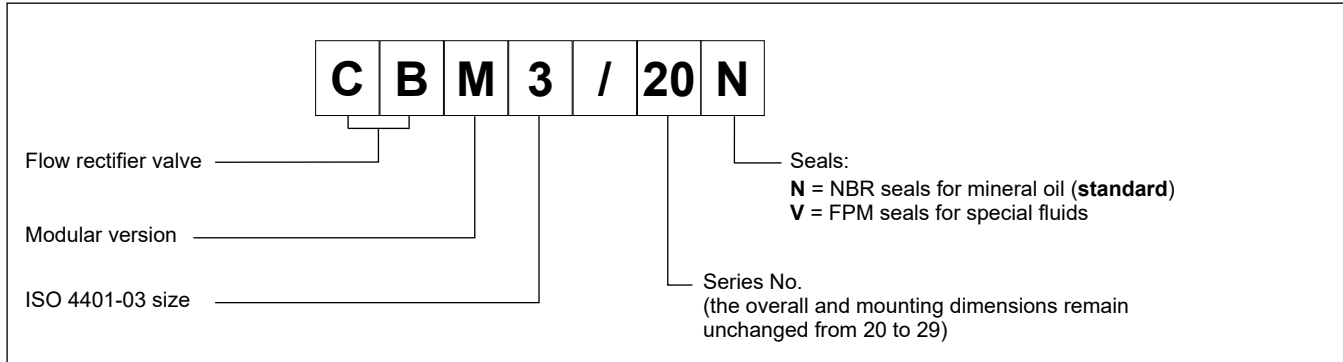
(measured with mineral oil of viscosity 36 cSt at 50 °C)

Maximum operating pressure	bar	250
Check valve cracking pressure	bar	0.5
Ambient temperature range	°C	-20 / +50
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	1.2

HYDRAULIC SYMBOL

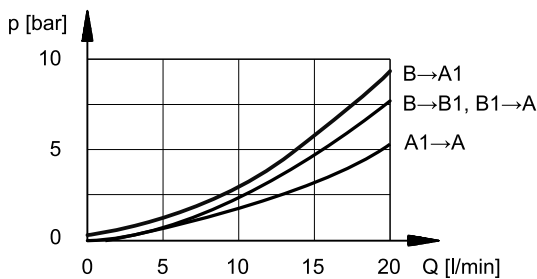


1 - IDENTIFICATION CODE



2 - CHARACTERISTIC CURVES

(values obtained with viscosity of 36 cSt at 50 °C)



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

