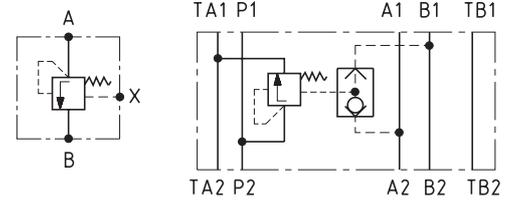


- Cartridge design
- Sandwich plate design for use in vertical stacking assemblies
- With integrated logic valve
- Installation dimensions to ISO 4401 and DIN 24 340-A10

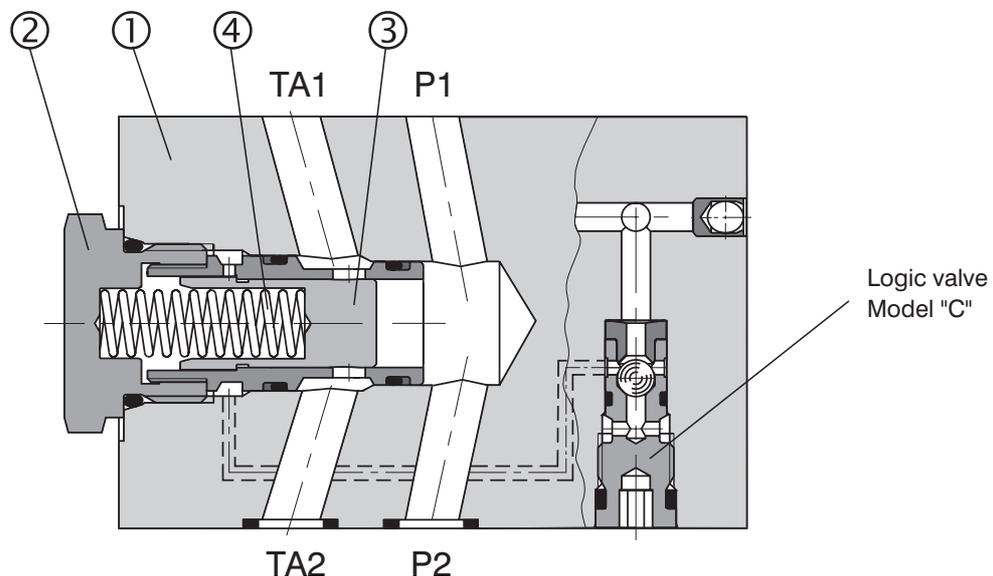


Functional Description

The valve TV2-103 is designed as a sandwich and cartridge plate. Sandwich design consist of a body (1), cartridge pressure compensator (2) with control spool (3) and logic valve in model "C" - where the ports A and B are always connected through the logic valve seat with the spring side of spool. The higher pressure pushes the ball onto the seat that is affected by lower pressure. This always causes the channel with the higher pressure to be connected with the control spool spring room (4). The required pressure difference between port P and the spring room is adjusted. When the pressure difference

between P and the spring room exceeds the value set, the control spool shifts, causing the part of pressure fluid to pass from P to T until the desired pressure difference has been restored.

Usually, this pressure compensator is used in connection with a proportional directional valve. In this case, each value of the control signal a particular constant flow rate can be assigned, this being independent of load. The valve body is phosphated, all other parts are zinc coated.



Ordering Code

TV2 - 10 3/

Pressure compensator

Nominal size

3-Way pressure compensator

Design

Cartridge
Sandwich plate

S
M

without designation

V

Seals

NBR
FPM (Viton)

Model

A
B
C

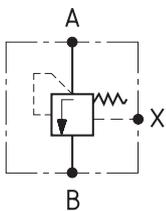
function in channel A
function in channel B
function in channels A and B

Technical Data

Nominal size	mm	10
Maximum flow	L/min	80
Max. operating pressure	bar	320
Pressure drop on valve Δp	bar	10
Hydraulic fluid	Hydraulic oils of power classes HM, HV to CETOP-RP 91H in viscosity classes ISO VG 32, 46 and 68.	
Maximum degree of fluid contamination	Class 21/18/15 to ISO 4406 (1999).	
Weight TV2-103/MA (MB, MC) TV2-103/S	kg	3.70 0.15
Valve tightening torque for design S	Nm	70
Mounting position	optional	

Functional Symbols

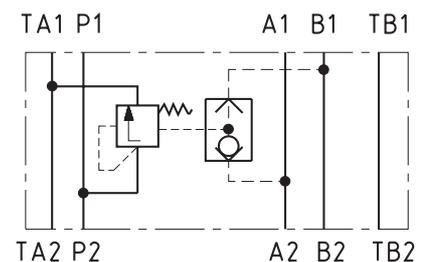
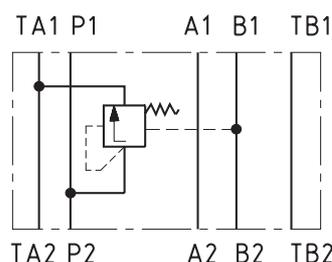
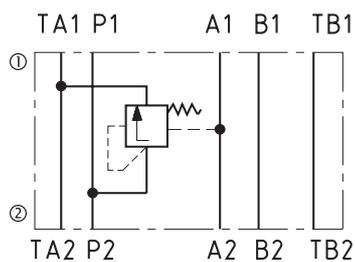
Model S



Model MA

Model MB

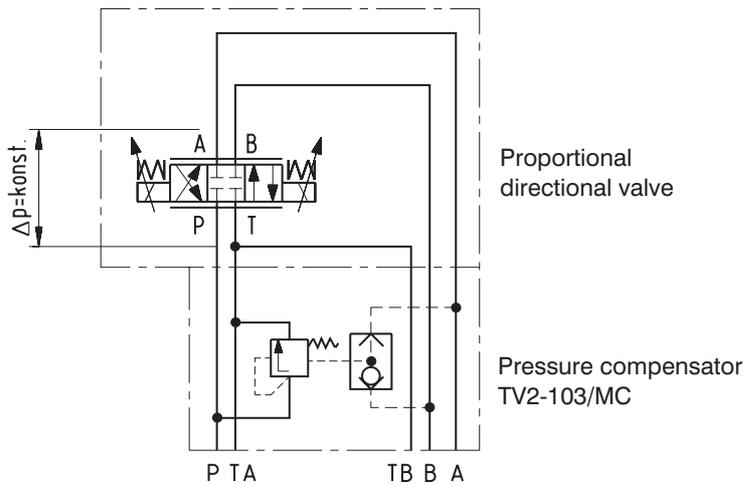
Model MC



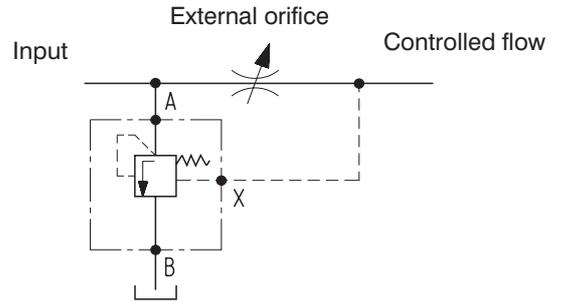
- ① valve side
- ② plate side

Typical applications

TV2-103/MC



TV2-103/S



Characteristic

Measured at $v = 35 \text{ mm}^2/\text{s}$ and $t = 40 \text{ }^\circ\text{C}$

The characteristic of the pressure compensator corresponds with the flow rate of a PRM2-103Z11/60 proportional directional valve.

