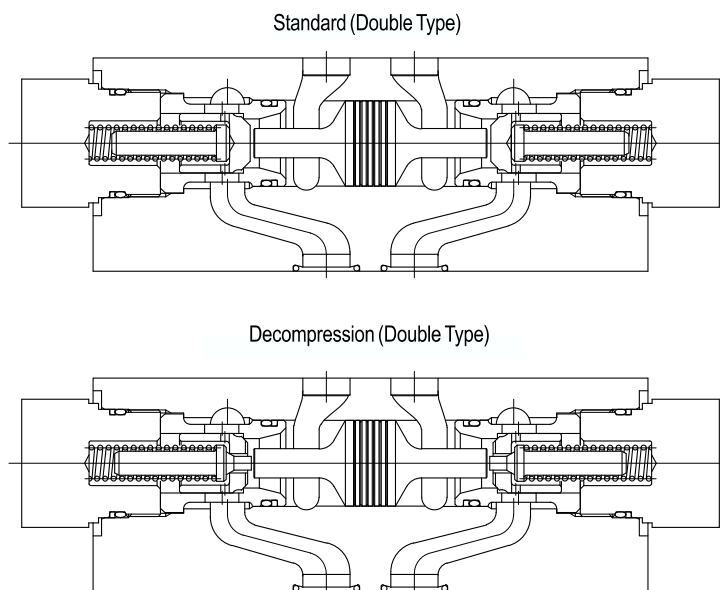
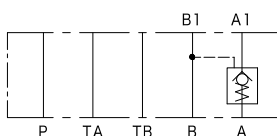


Pilot operated check modules TGMPC-5

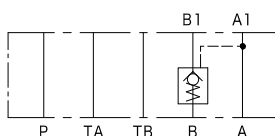


Functional Symbols

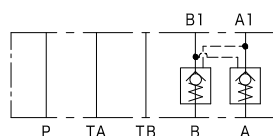
TGMPC-5-(D)AB*



TGMPC-5-(D)BA*



TGMPC-5-(D)AB*-(D)BA*



Model Code

(F3) - TGMPC - 5 - (D) AB * -[(D) BA *] -50

1 2 3 4 5 6 7 8 9 10

1 Fluid

Omit for mineral oil, water glycol
F3: phosphate ester

2 Pilot operated check valve

3 Mounting

5: ISO 4401-05

4 Decompression function

Omit for no decompression function
D: with decompression function

5 Control line

AB: control of A line check valve by B line pilot pressure
BA: control of B line check valve by A line pilot pressure

6 Cracking pressure

K: 0.1 MPa
M: 0.25 MPa
N: 0.5 MPa

7 Decompression function

See 4 (however if 'D' is specified under 4, 'D' must also be specified under 7)

8 Control line

BA: control of B line check valve by A line pilot pressure

9 Cracking pressure

Same as 6

10 Design no.

for double type check valve

Specifications

- Max. working pressure 31.5 MPa
- Max. flow 120 L/min
- Piston: seat area
 - Standard 3:1
 - Decompression type 20:1
- Decompression type is used to reduce shock generated by oil contained in the check valve when the compression volume is large.

Specifications

- Pressure required to open valve (P_{B1} , P_{A1})

To open A line check valve

$$P_{B1} \text{ (B1 line pressure)} > (P_A + P_C - P_{A1})/f_a + P_{A1}$$

To open B line check valve

$$P_{A1} \text{ (A1 line pressure)} > (P_B + P_C - P_{B1})/f_a + P_{B1}$$

- P_A : A pressure
- P_B : B pressure
- P_{A1} : A1 pressure
- P_{B1} : B1 pressure
- P_C : cracking pressure
- f_a : area ratio

(standard type: $f_a = 3$, decompression type: $f_a = 20$)

Performance Curve (at 20mm²/s, 50°C)

Pressure Drop Characteristics

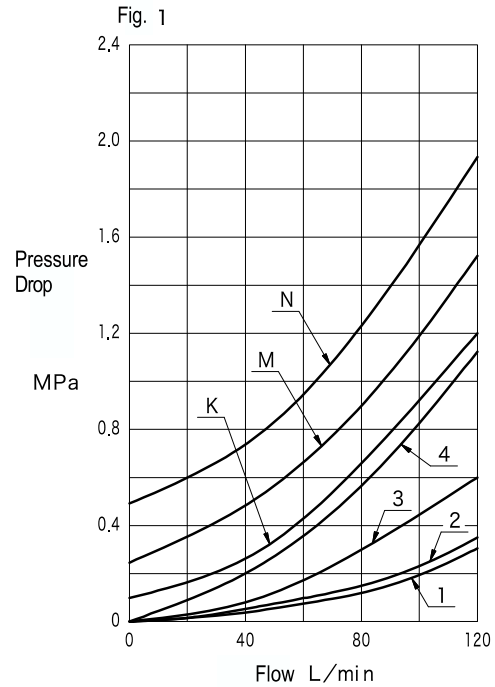
Overall valve pressure loss is the total of pressure losses through each port - P, T, A, and B - as shown in Table 1.

Seek values from Fig. 1

Table 1

Model	Flow Port							
	P	T	A		B			
TGMPC-5-(D) AB*-50	1	2	-	4	▲	3	-	-
TGMPC-5-(D) BA*-50	1	2	3	-	-	-	4	▲
TGMPC-5-(D) AB*-(D) BA*-50	1	2	-	4	▲	-	4	▲

▲: Select K, M, N curve according to cracking pressure.

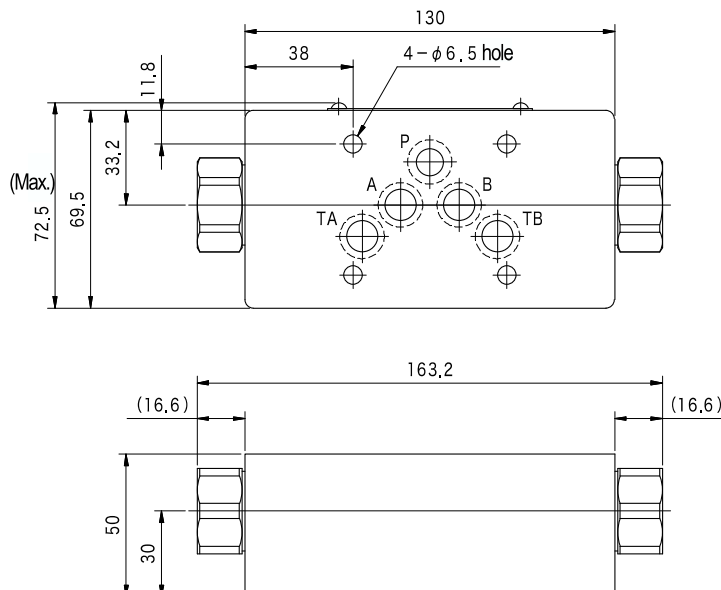


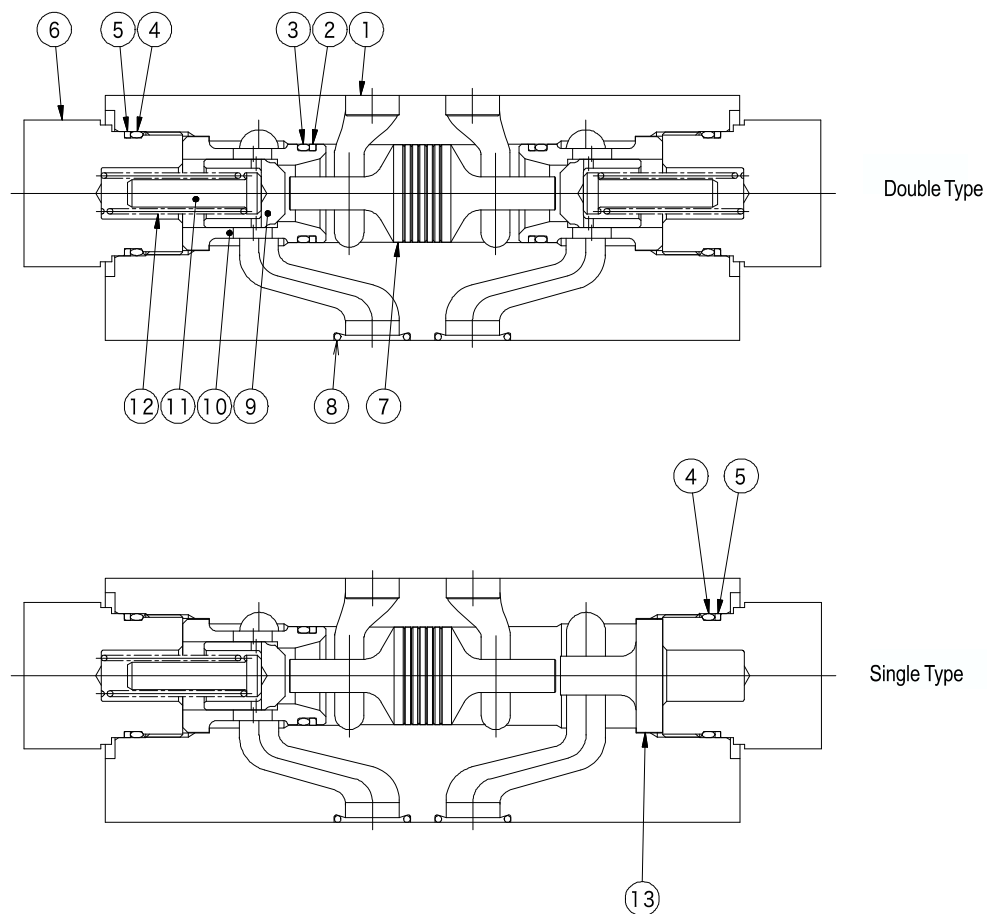
Dimensions

TGMPC-5-(D) AB*- [(D) BA*1 - 50 (single, double type pilot operated check valve)

Weight : 2.9 kg

TGMPC-5-(D) BA*-50 (single type pilot operated check valve)





No.	Description	Part No.	Standard	Quantity	
				Single	Double
2	Backup ring	40025925	MS28774-017	1	2
3	O-ring	007901717	AS568-017 (NBR, Hs70)	1	2
4	O-ring	007902017	AS568-020 (NBR, Hs70)	2	2
5	Backup ring	40025055	—	2	2
8	O-ring	007901419	AS568-014 (NBR, Hs90)	5	5

12 Springs

Code	Part No.
K	40025929
M	40025930
N	40025931