



Throttle and throttle check valve type MG/MK

RE:27219/12.2004

Sizes 6 to 30

up to 31.5MPa

up to 400 L/min

Replaces:
RE27219/5.2001

Features:

- Suitable for direct in-line mounting
- Pressure and viscosity dependent



Functional description

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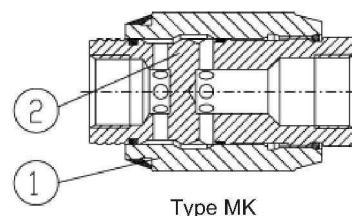
Valve types MG and Mk are pressure and viscosity dependent throttle and throttle check valves.

Type MG (throttle valve)

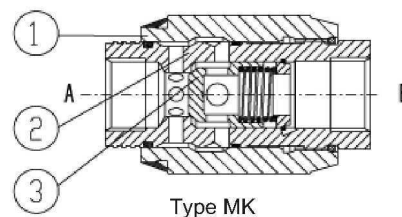
This valve throttles in both flow directions. Fluid flows through side drillings to the throttling point. This is formed between the housing (2) and the adjustable sleeve (1). The throttle cross-section may be steplessly varied by rotating the adjustable sleeve (1).

Type MK (throttle check valve)

With flow passing through the valve in throttling direction, the spring and the fluid presses the poppet onto its seat, thus blocking the flow. Fluid flows via the side drillings to the throttling point, which is formed between the housing (2) and the adjustable sleeve (1). In the opposite direction, fluid pressure acts on the face of the poppet, thus lifting it from its seat and allowing fluid to flow freely, unthrottled, through the valve. At the same time, part of the fluid flowing through the annular clearance produces the desired self-cleaning effect.

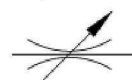


Type MK



Type MK

Symbols



Type MG



Type Mk

Ordering details

Throttle valve = MG
Throttle check valve = MK

Size
Nominal size 6 = 6
Nominal size 8 = 8
Nominal size 10 = 10
Nominal size 15 = 15
Nominal size 20 = 20
Nominal size 25 = 25
Nominal size 30 = 30

G 1.2 *

Further details in clear text

No code= Mineral oil
V= Phosphate ester

No code= British
2 = Metric

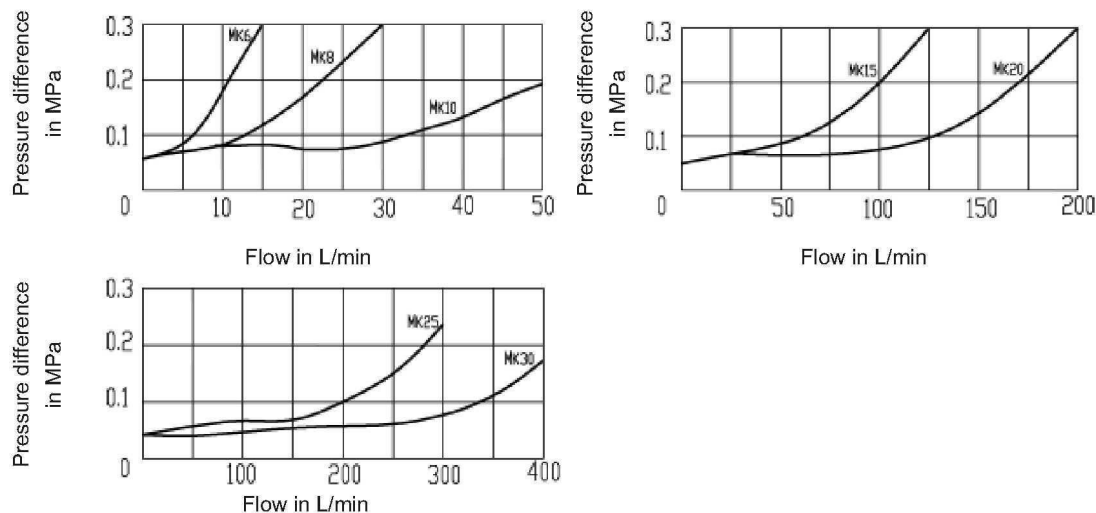
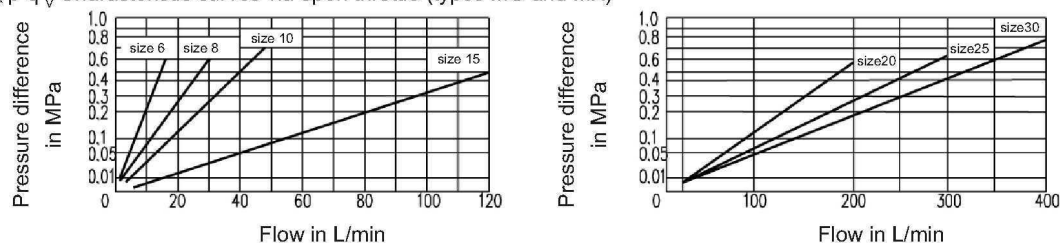
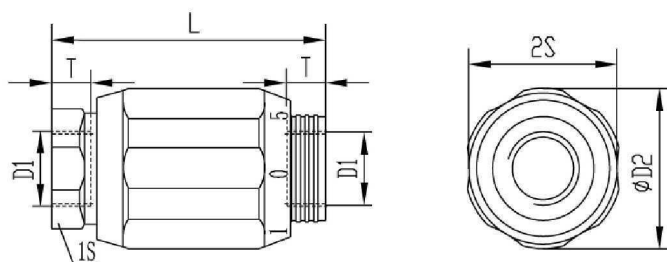
1.2= Series 1.2
(1.0 to 1.9: unchanged installation and connection dimensions)

G = For threaded connections

Technical data (for applications outside these parameters, please consult us!)

Size	6	8	10	15	20	25	30
Maximum flow (L/min)	15	30	50	140	200	300	400
Pressure (MPa)	up to 31.5						
Cracking pressure (MPa)	0.05 (Type MK)						
Pressure fluid	Mineral oil or Phosphate ester						
Viscosity range (mm ² /s)	10 to 800						
Pressure fluid temperature range (°C)	-30 to +80						

Characteristic curves (measured at $v = 41 \text{ mm}^2/\text{s}$ and $t = 50 \text{ °C}$)

 Δp - q_v Characteristic curves via open check valve with closed throttle (type MK)

 Δp - q_v Characteristic curves via open throttle (types MG and MK)

Unit dimensions
(Dimensions in mm)


Size	D1		Ø D2	L	1S	2S	T	Weight (kg)
6	M14x1.5	G1/4"	34	65	22	32	12	0.3
8	M18x1.5	G3/8"	38	65	24	36	12	0.4
10	M22x1.5	G1/2"	48	80	30	46	14	0.7
15	M27x2	G3/4"	58	100	41	55	16	1.1
20	M33x2	G1"	72	110	46	70	18	1.9
25	M42x2	G1 1/4"	87	130	55	85	20	3.2
30	M48x2	G1 1/2"	93	150	60	90	22	4.1

Notice

1. The fluid must be filtered. Minimum filter fineness is 20 μm .
2. The tank must be sealing up and an air filter must be installed on air entrance.
3. Products without subplate when leaving factory, if need them, please ordering specially.
4. Valve fixing screws must be high intensity level (class 10.9). Please select and use them according to the parameter listed in the sample book.
5. Roughness of surface linked with the valve is required to $\sqrt{0.8}$.
6. Surface finish of mating piece is required to 0.01/100mm.