Service

**Rexroth Bosch Group** 

# Throttle and throttle check valve

RE 27219/01.09 Replaces: 03.06 1/6

**Types MG and MK** 

Size 6 to 30 Component series 1X Maximum operating pressure 315 bar Maximum flow 400 l/min



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#### **Features**

- Suitable for direct in-line installation

- Pressure and viscosity-dependent

### Ordering code



Standard types and components are contained in the
EPS (standard price list).

## Symbols









#### Function, section

The valve types MG and MK are pressure- and viscosity-dependent throttle and throttle check valves.

#### Type MG (throttle valve)

Throttling occurrs in both flow directions. The pressure fluid reaches the throttling point (4) via the lateral bores (3). The throttling point is formed between the housing (2) and the adjustable sleeve (1). By rotating the sleeve (1), the cross-section of the throttling point (4) can be changed infinitely.

#### Type MK (throttle check valve)

When fluid flows through the valve in throttling direction, spring (6) and the pressure fluid press the poppet (5) onto the seat, thus blocking the connection. The pressure fluid uses the lateral bores (3) to reach the throttling point (4), which is formed between the housing (2) and the adjustable sleeve (1).

In the opposite direction, the pressure acts on the front face of the poppet (5), lifts the same from the seat, and allows the fluid to flow The pressure fluid flows through the valve without being throttled. At the same time, a part of the pressure fluid flows through the annular gap, which results in the desired self cleaning effect.



Throttle valve type MG



Throttle check valve type MK

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

general							
Size	6	8	10	15	20	25	30
Weight kg	0.3	0.4	0.7	1.1	1.9	3.2	4.1
Installation position	Any						
Ambient temperature range °C	-30 to +80 (NBR seals) -20 to +80 (FKM seals)						

## hydraulic

Maximum operating pressure bar	315
Cracking pressure (type MK) bar	0.5
Maximum volume flow L/min	See characteristic curves page 5
Pressure fluid	Mineral oil (HL, HLP) according to DIN51524, other hydraulic fluids upon request
Pressure fluid temperature range °C	-30 to +80 (NBR seals) -20 to +80 (FKM seals)
Viscosity range mm <sup>2</sup> /s	10 to 800
Maximum permitted degree of contamination of the pressure fluid - cleanliness class according to ISO 4406 (c)	Class 20/18/15 1)

<sup>1)</sup> The cleanliness classes specified for the components must be adhered to in hydraulic systems. Efficient filtration prevents malfunctions and at the same time prolongs the service life of components.

For the selection of the filters, see data sheets RE 50070, RE 50076, RE 50081, RE 50086, RE 50087 und RE 50088.

# **Characteristic curves** (measured with HLP46, $\vartheta_{oil} = 40 \text{ °C} \pm 5 \text{ °C}$ )



 $\Delta p$ - $q_{\rm V}$  characteristic curves with open throttle (types MK and MG)

 $\Delta p$ - $q_{\rm V}$  characteristic curves with open check valve and closed throttle (type MK)



## Unit dimensions (dimensions in mm)





Size	D1	ØD2	L	SW1	SW2	Т
6	G1/4	34	65	22	32	12
8	G3/8	38	65	24	36	12
10	G1/2	48	80	30	46	14
15	G3/4	58	100	41	55	16
20	G1	72	110	46	70	18
25	G1 1/4	87	130	55	85	20
30	G1 1/2	93	150	60	90	22

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