

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



K3564-1

Table of contents

Contents	Page
Features	1
Ordering code	2
Standard types	2
Symbols	2
Function, section	3
Technical data	4
Characteristic curves	5
Unit dimensions	6

Features

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

Information on available spare parts:
www.boschrexroth.com/spc

Ordering code

		G	1X/	*	
Throttle valve	= MG				Further details in the clear text
Throttle check valve	= MK				
Size 6	= 6				Seal material NBR seals FKM seals (other seals upon request) Attention! Observe compatibility of seals with hydraulic fluid used!
Size 8	= 8				
Size 10	= 10				
Size 15	= 15				
Size 20	= 20				
Size 25	= 25				
Size 30	= 30				
For threaded connection		= G			No code = V = 1X = Component series 10 to 19 (10 to 19: unchanged installation and connection dimensions)

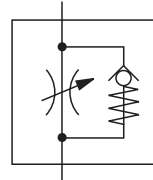
Standard types and components are contained in the EPS (standard price list).

Symbols

Type MG



Type MK

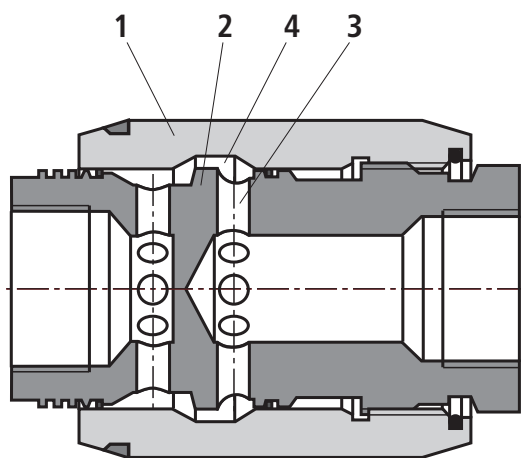


Function, section

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

Type MG (throttle valve)

Throttling occurs 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.

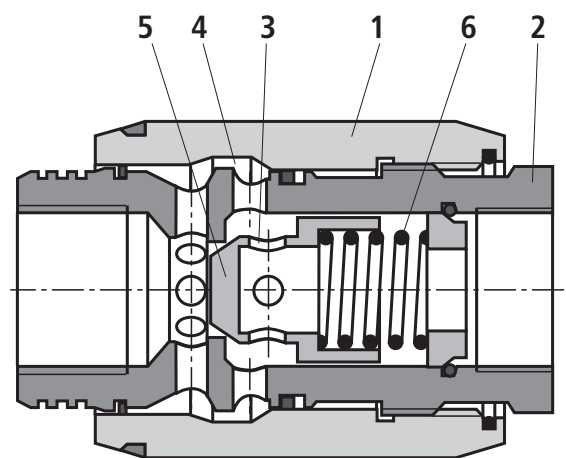


Throttle valve type MG

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 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

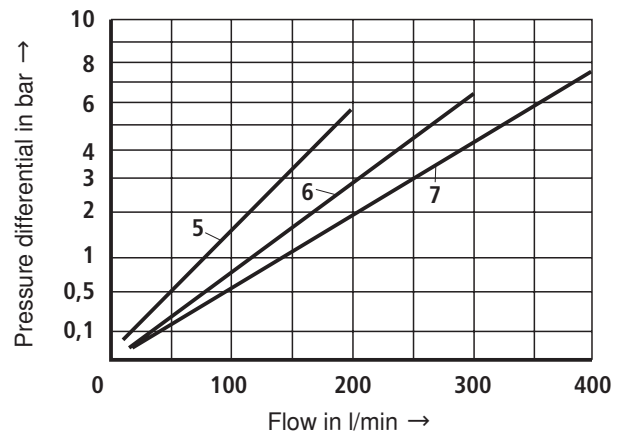
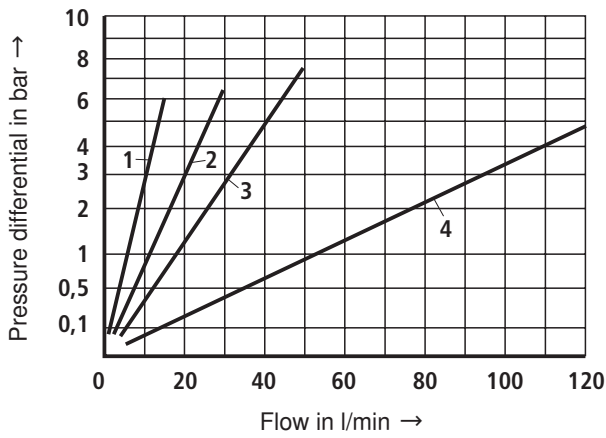
Maximum operating pressure	bar	315
Cracking pressure (type MK)	bar	0.5
Maximum volume flow	L/min	See characteristic curves page 5
Pressure fluid		Mineral oil (HL, HLP) according to DIN51524, other hydraulic fluids upon request
Pressure fluid temperature range	°C	-30 to +80 (NBR seals) -20 to +80 (FKM seals)
Viscosity range	mm ² /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⁾

¹⁾ 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.

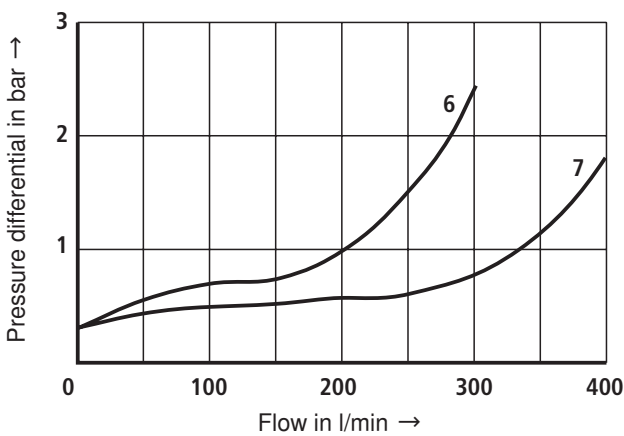
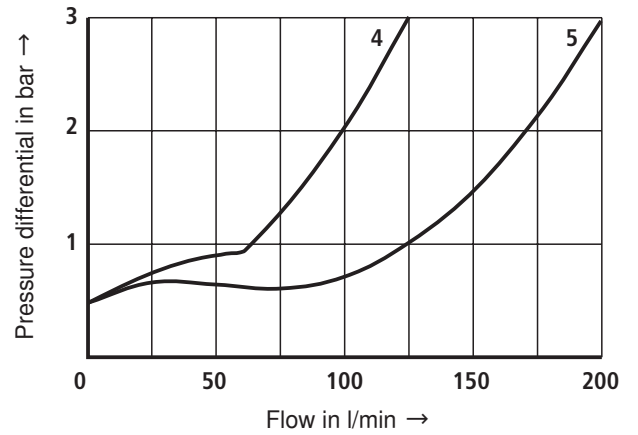
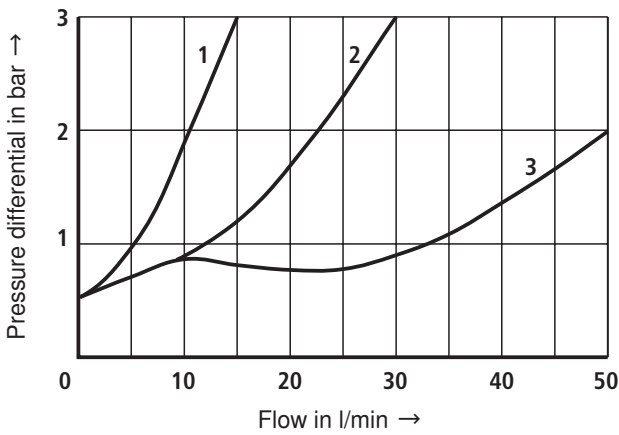
For the selection of the filters, see data sheets RE 50070, RE 50076, RE 50081, RE 50086, RE 50087 und RE 50088.

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

Δp - q_v characteristic curves with open throttle (types MK and MG)

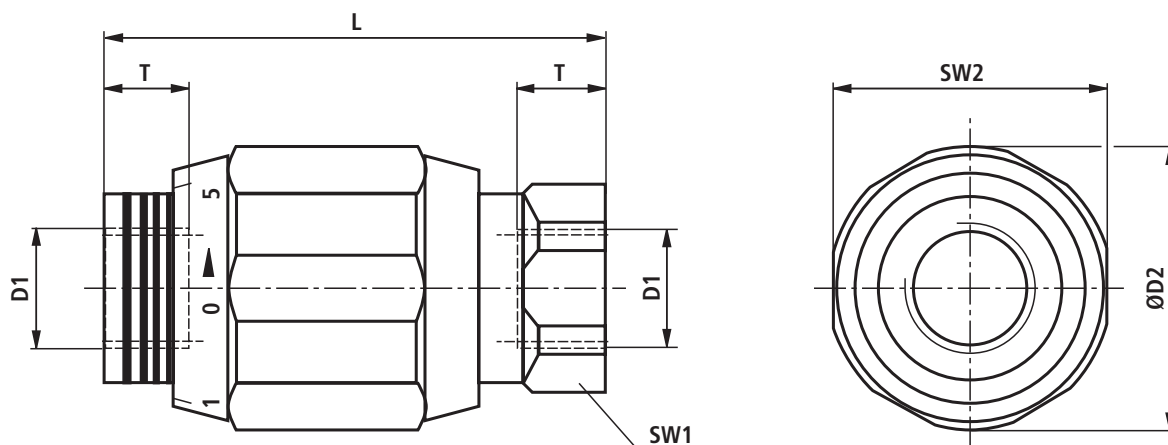


Δp - q_v characteristic curves with open check valve and closed throttle (type MK)



- 1 NG6
- 2 NG8
- 3 NG10
- 4 NG15
- 5 NG20
- 6 NG25
- 7 NG30

Unit dimensions (dimensions in mm)



Size	D1	ØD2	L	SW1	SW2	T
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

Notes

Bosch Rexroth AG
Hydraulics
Zum Eisengießer 1
97816 Lohr am Main, Germany
Phone +49 (0) 93 52 / 18-0
Fax +49 (0) 93 52 / 18-23 58
documentation@boschrexroth.de
www.boschrexroth.de

© This document, as well as the data, specifications and other information set forth in it, are the exclusive property of Bosch Rexroth AG. It may not be reproduced or given to third parties without its consent. The data specified above only serve to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. It must be remembered that our products are subject to a natural process of wear and aging.

Notes

Bosch Rexroth AG
Hydraulics
Zum Eisengießer 1
97816 Lohr am Main, Germany
Phone +49 (0) 93 52 / 18-0
Fax +49 (0) 93 52 / 18-23 58
documentation@boschrexroth.de
www.boschrexroth.de

© This document, as well as the data, specifications and other information set forth in it, are the exclusive property of Bosch Rexroth AG. It may not be reproduced or given to third parties without its consent. The data specified above only serve to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. It must be remembered that our products are subject to a natural process of wear and aging.