RE 27 219/12.02

Replaces: 07.97

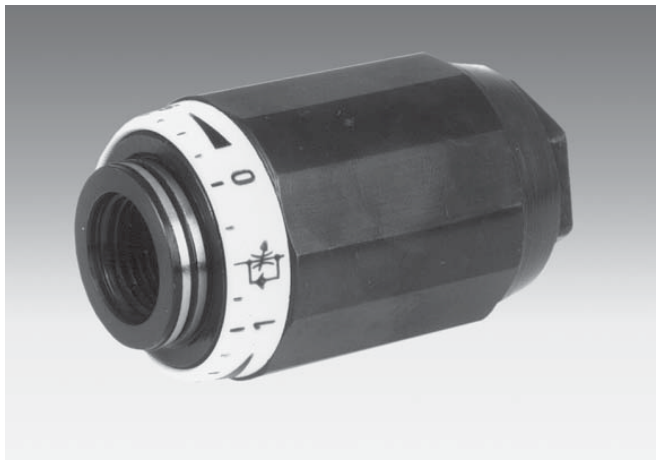
Throttle and throttle check valve Types MG / MK

Nominal sizes 6 to 30

Series 1X

Maximum operating pressure 315 bar

Maximum flow 400 L/min



K 3564-1

Type MK . G1X/V

Overview of contents

Features

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

Ordering details

		G	1X / V	*		

Throttle valve = **MG**
Throttle check valve = **MK**

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**

For threaded connections = **G**

1X = Series 10 to 19
(10 to 19: unchanged installation and connection dimensions)

V = FKM seals
(other seals on request)

⚠ Attention!
The compatibility of the seals and pressure fluid has to be taken into account!

Further details in clear text

Preferred types, see page 2, are readily available!

Preferred types (readily available)

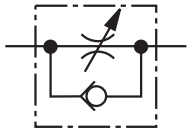
Type MG	Material No.
MG 6 G1X/V	**R900437338**
MG 8 G1X/V	**R900438885**
MG 10 G1X/V	**R900422145**
MG 15 G1X/V	**R900437653**
MG 20 G1X/V	**R900422150**
MG 25 G1X/V	**R900413979**
MG 30 G1X/V	**R900422153**

Type MK	Material No.
MK 6 G1X/V	**R900423340**
MK 8 G1X/V	**R900423343**
MK 10 G1X/V	**R900424579**
MK 15 G1X/V	**R900423326**
MK 20 G1X/V	**R900423328**
MK 25 G1X/V	**R900423330**
MK 30 G1X/V	**R900423333**

Further preferred types and standard units can be found in the EPS (Standard Price List).

Symbols

Type MG



Type MK

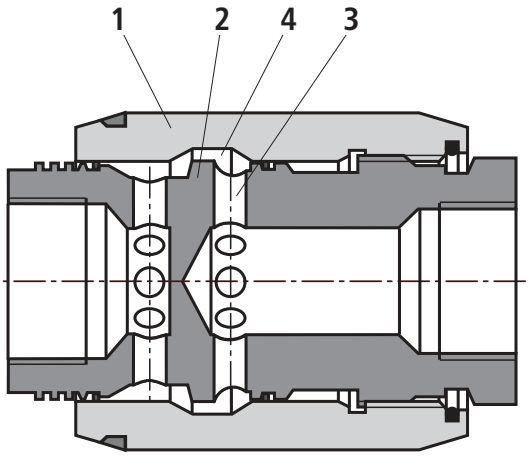
Function, section

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

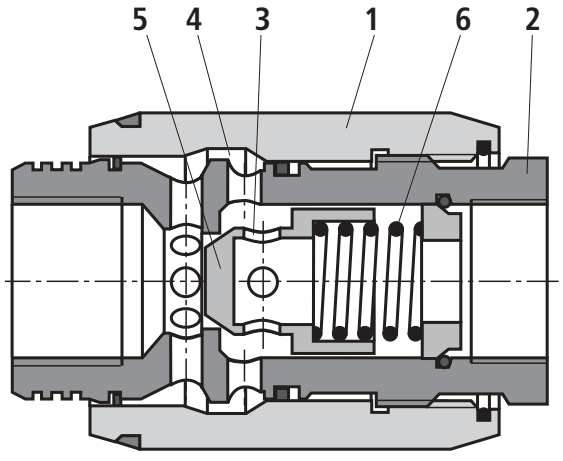
Type MG (throttle valve)
This valve throttles in both flow directions. The pressure fluid flows through side drillings (3) to the throttling point (4). This is formed between the housing (2) and the adjustable sleeve (1). The throttle cross-section (4) may be steplessly varied by rotating the sleeve (1).

Type MK (throttle check valve)
With flow passing through the valve in throttling direction, the spring (6) and the pressure fluid presses the poppet (5) onto it seat, thus blocking the flow. Pressure fluid flows via the side drillings (3) to the throttling point (4), which is formed between the housing (2) and the adjustable sleeve (1).

In the opposite direction, the fluid pressure acts on the face of the poppet (5), thus lifting it from its seat and allowing fluid to flow freely, unthrottled, through the valve. At the same time, part of the pressure fluid flowing through the annular clearance produces 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

Installation		Optional						
Ambient temperature range	°C	– 20 to + 80						
Weight	NS	6	8	10	15	20	25	30
	kg	0.3	0.4	0.7	1.1	1.9	3.2	4.1

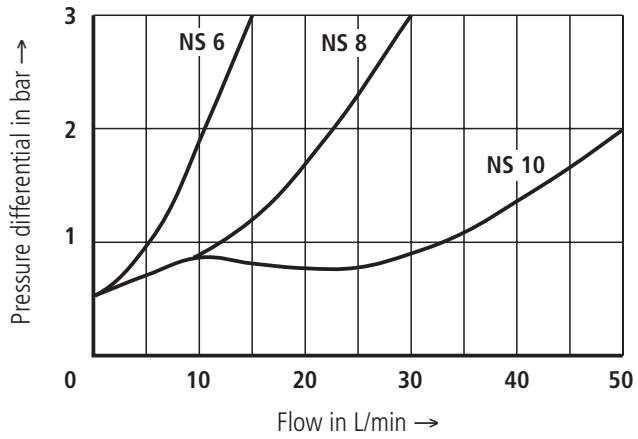
Hydraulic

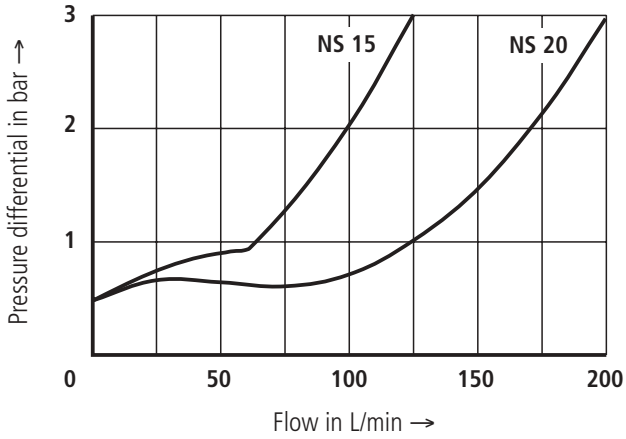
Maximum operating pressure	bar	315
Opening pressure for type MK	bar	0.5
Maximum flow	L/min	400
Pressure fluid		Mineral oil (HL, HLP) to DIN 51 524; Fast bio-degradable pressure fluids to VDMA 24 568 (also see RE 90 221); HETG (rape seed oil); HEPG (polyglycols); HEES (synthetic ester); Other pressure fluids on request
Pressure fluid temperature range	°C	– 20 … + 80
Viscosity range	mm^2/s	10 … 800
Cleanliness class to ISO code		Maximum permissible degree of contamination of the pressure fluid is to ISO 4406 (C) class 20/18/15 [1]

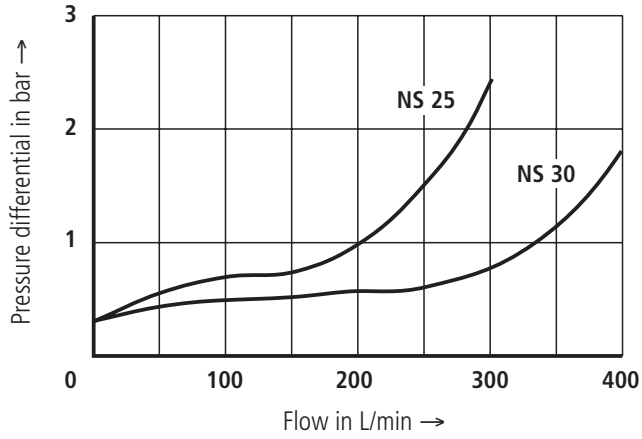
[1] The cleanliness class stated for the components must be adhered too in hydraulic systems. Effective filtration prevents faults from occurring and at the same time increases the component service life.
For the selection of filters see catalogue sheets RE 50 070, RE 50 076 and RE 50 081.

Characteristic curves (measured with HLP46, ϑ_{oil} = 40 °C ± 5 °C)

Δp-q_V-characteristic curves via the open check valve with the throttle closed (type MK)

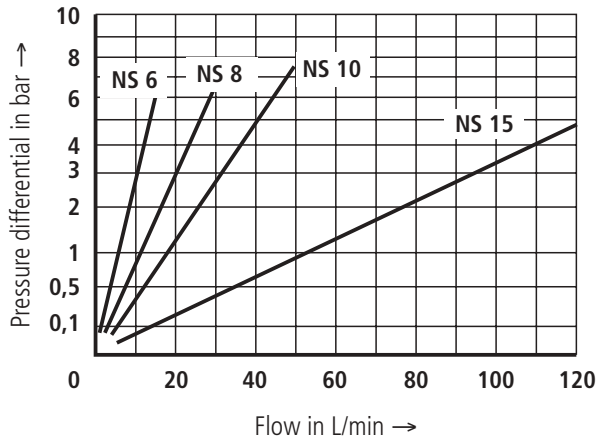


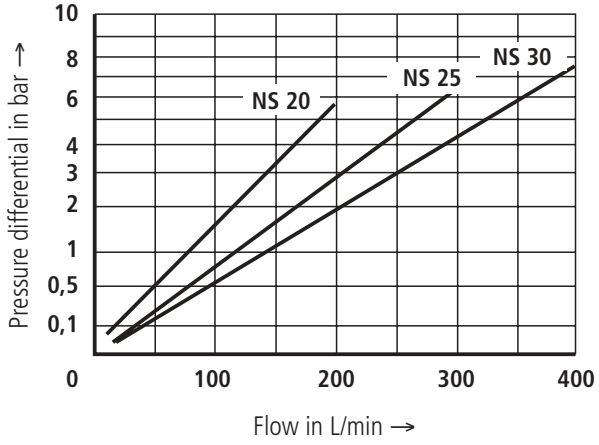




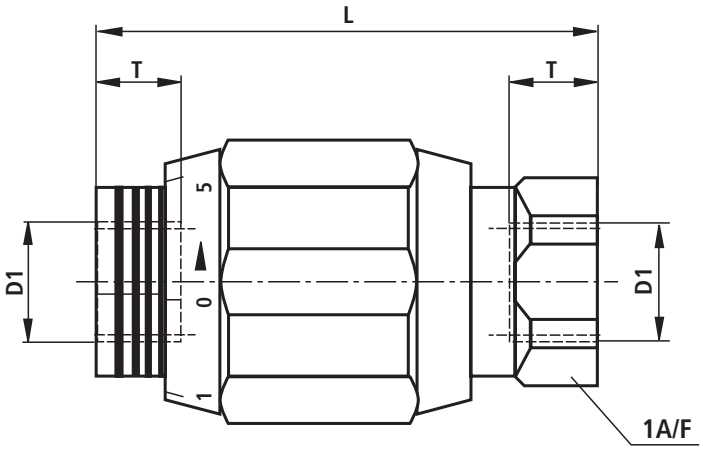
Characteristic curves (measured with HLP46, ϑ_{oil} = 40 °C ± 5 °C)

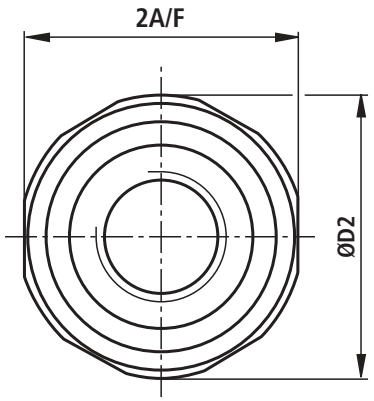
Δp-q_V-characteristic curves via the open throttle (types MG and MK)





Unit dimensions (dimensions in mm)





NS	D1	Ø D2	L	1A/F	2A/F	T
6	G 1/4	34	65	22	32	12
8	G 3/8	38	65	24	36	12
10	G 1/2	48	80	30	46	14
15	G 3/4	58	100	41	55	16
20	G 1	72	110	46	70	18
25	G 1 1/4	87	130	55	85	20
30	G 1 1/2	93	150	60	90	22

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