

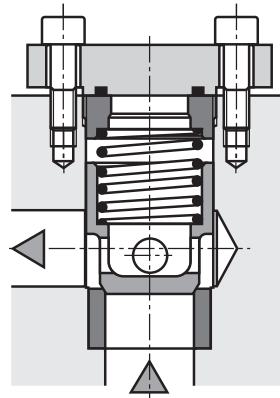
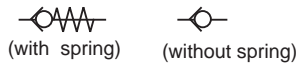
RE 20 395/12.95

MANNESMANN REXROTH	Check valve cartridge Type M-SR, Series 1X			RE 20 395/12.95
	Sizes 52 to 150	up to 315 bar	up to 15000 L/min	Replaces: 08.86

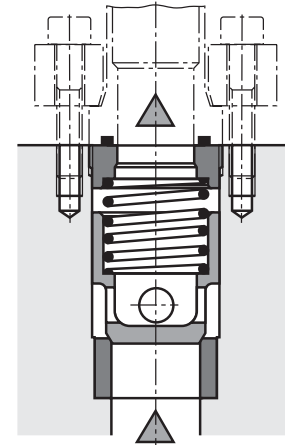
Characteristics:

- For installation in manifold blocks
 - as right angled check valve cartridge
 - as flow valve cartridge
- Leakage-free closure in one direction
- Various opening pressures, optional (see ordering code)

Symbols



Right angled check valve cartridge
Type M-SR..KE...-1X/.



Straight valve cartridge
Type M-SR..KD...-1X/.

Ordering code

M-SR		-1X/		*
Check valve	= M-SR			Further details in clear text
Size 52	= 52			no code = NBR-seals
Size 62	= 62			V = FPM-seals
Size 82	= 82			(other seals on request)
Size 102	= 102			Warning!
Size 125	= 125			Observe sealing suitability of pressure fluid used!
Size 150	= 150			
Right angled check valve cartridge	= KE			
Straight valve cartridge	= KD			
1) not for sizes 125 and 150				1X = Series 10 to 19
2) not for sizes 102, 125 and 150				(10 to 19: unchanged installation and connection dimensions)
				00 = without spring
				05 = 0,5 bar opening pressure
				15 ¹⁾ = 1,5 bar opening pressure
				30 ²⁾ = 3,0 bar opening pressure

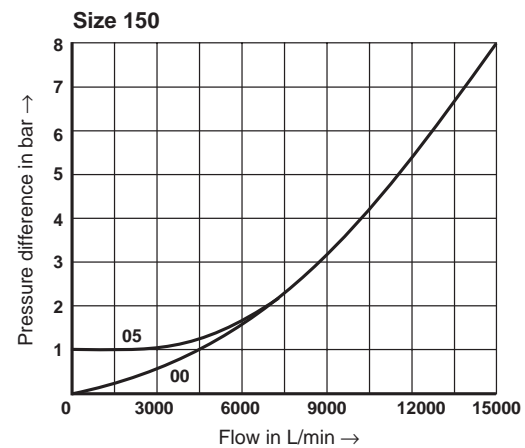
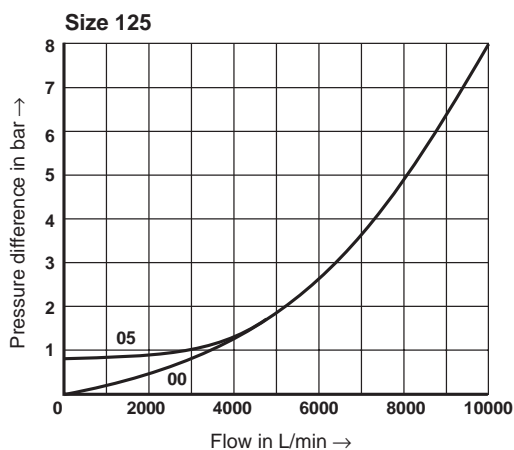
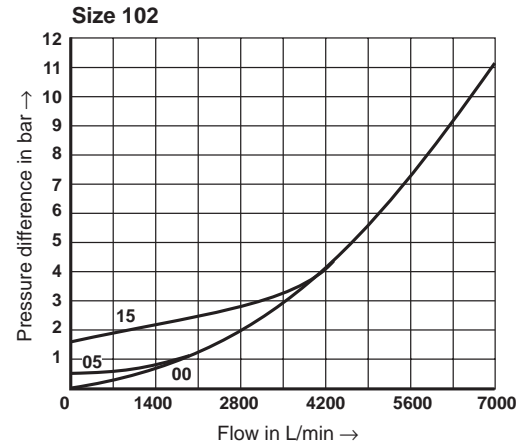
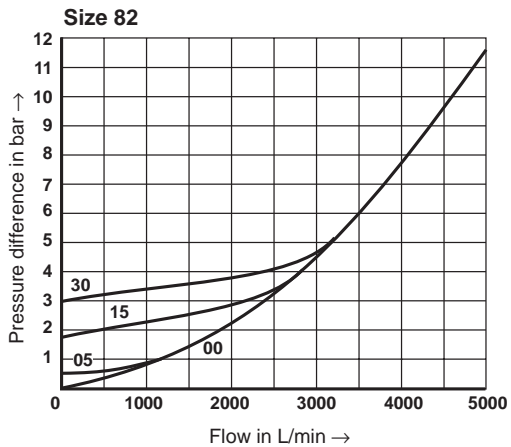
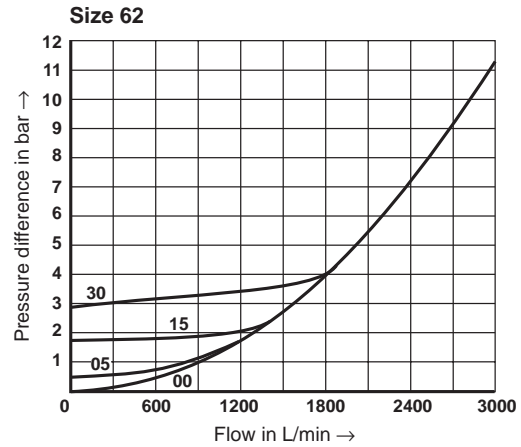
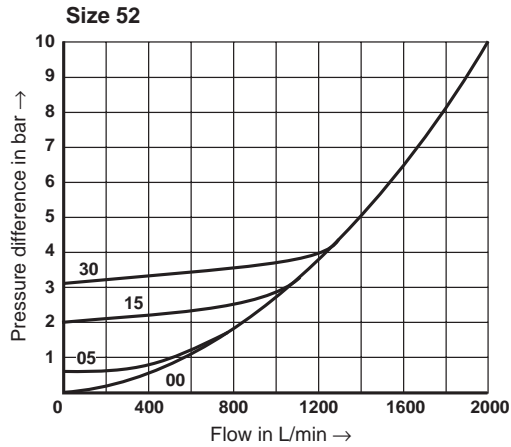
Technical data (For application outside these parameters please consult us!)

Hydraulic		
Pressure fluid temperature range	°C	- 30 to +80 (NBR-seals)
	°C	- 20 to +80 (FPM-seals)
Viscosity range	mm ² /s	2,8 to 380
Operating pressure, max.	bar	up to 315
Opening pressure, max.	bar	see operating curves
Flow, max.	L/min	see operating curves
Pressure fluid		Mineral oil (HL, HLP) to DIN 51 524 ¹⁾ ; Fast bio-degradable pressure fluids to VDMA 24 568 (also see RE 90 221); HETG (rape seed oil) ¹⁾ ; HEPG (polyglycols) ²⁾ ; HEES (synthetic ester) ²⁾ ; other pressure fluids on request
Fluid cleanliness		Maximum permissible degree of contamination of pressure fluid to NAS 1638 Class 9. We therefore recommend a filter with a minimum retention rate of $\beta_{10} \geq 75$

RE 20 395/07.85

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

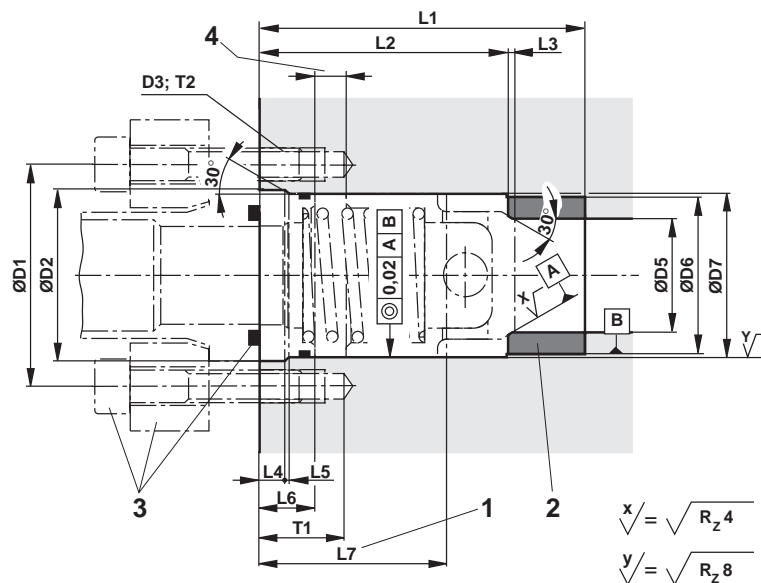
Pressure difference Δp dependent on flow q_v at opening pressure



RE 20 395/08.86

Installation bore: Straight valve cartridge, sizes 52 to 150

(Dimensions in mm)



- 1 Fitting depth
- 2 Seat shrunk with -60 °C
- 3 Flange, fixing screws and O-ring are **not included in delivery** and must be ordered separately:

- **Sizes 52 to 102:**
Data sheet RE 45 501
- **Sizes 125 and 150:**
Data sheet RE 45 502

- 4 Stroke

Warning!

The valve seats ØD6 in sizes 62 to 150 are only pre-ground. The valve seats must be shrunk by 60 µm oversize in sizes 62 and 82 and in sizes 102 to 150 by 80 µm oversize!

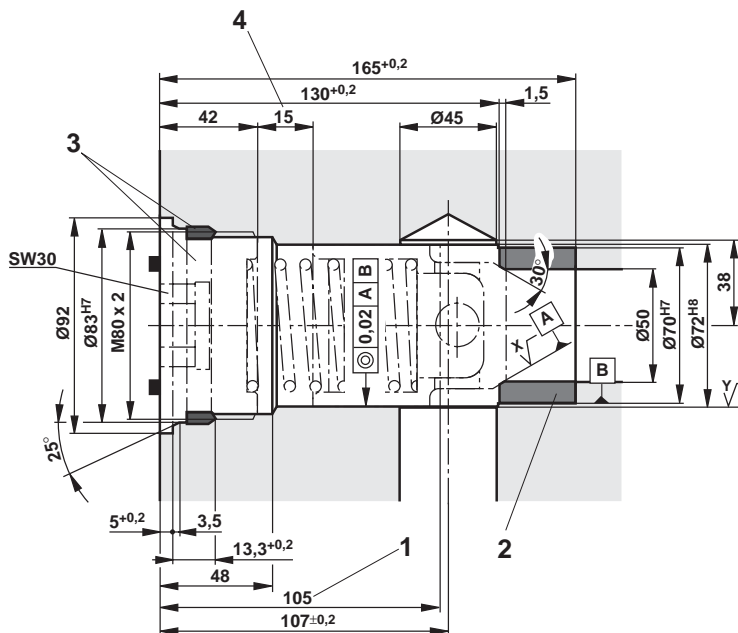
$$x = \sqrt{R_z 4}$$

$$y = \sqrt{R_z 8}$$

Size	ØD1±0,2	ØD2+0,1	D3	ØD5 ^{H7}	ØD6 ^{H7} _{s6}	ØD7 ^{H8}	L1	L2	L3	L4	L5	L6	L7	T1	T2	Stroke
52	98	77	M16	50	70	72	146	111	1,5	12	1,5	23	90	36	26	15
62	118	93	M20	63	85	86	175	135	1,5	12	1,5	24,5	110	42	32	18
82	145	115	M24	72	100	106	210	165	1,5	15	2	29	135	50	36	25
102	175	140	M30	90	125	132	260	210	2	18	2	31,5	160	60	45	28
125	245	205	M30	122	180	190	360	295	3	30	2,5	51,5	230	70	56	35
150	290	240	M36	150	220	230	510	430	5	32	2,5	81	320	80	64	38

Installation bore: Right-angled check valve cartridge, size 52

(Dimensions in mm)



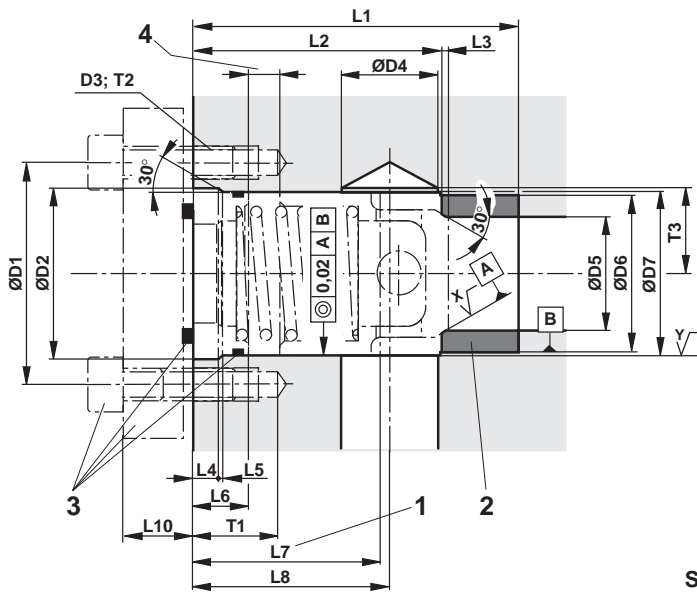
- 1 Fitting depth
- 2 Seat shrunk with -60 °C
- 3 Locking screw and seal are included in delivery
- 4 Stroke

$$x = \sqrt{R_z 4}$$

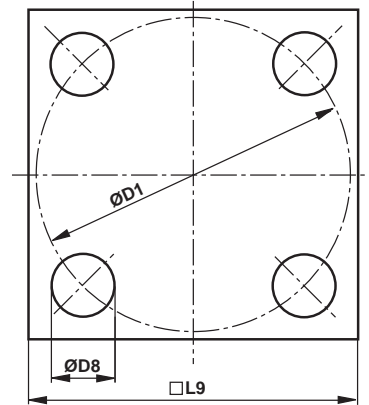
$$y = \sqrt{R_z 8}$$

RE 20 395/08.86

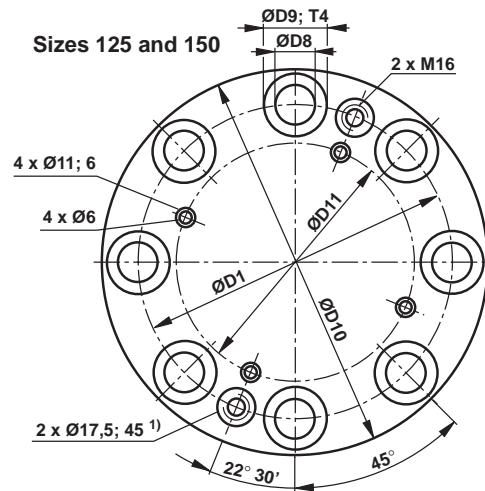
Installation bore: right-angled check valve cartridge, sizes 62 to 150 (Dimensions in mm)



Sizes 62 to 102



Sizes 125 and 150



- 1 Fitting depth
- 2 Seat shrunk with -60 °C
- 3 Flange, fixing screws and O-ring are included in delivery.
- 4 Stroke

Warning!

The valve seats ØD6 in sizes 62 to 150 are only pre-ground.

The valve seats must be shrunk with 60 µm oversize in sizes 62 and 82 and in sizes 102 to 150 with 80 µm oversize!

1) only in size 150

$$x/\sqrt{R_z} = 4$$

$$y/\sqrt{R_z} = 8$$

Size	ØD1±0,2	ØD2+0,1	D3	ØD4	ØD5 ^{H7}	ØD6 ^{H7} _{s6}	ØD7 ^{H8}	ØD8	ØD9	ØD10	ØD11	T1	T2	T3	T4
62	118	93	M20	55	63	85	86	21	-	-	-	42	32	45	-
82	145	115	M24	72	72	100	106	25	-	-	-	50	36	55	-
102	175	140	M30	90	90	125	132	33	-	-	-	60	45	68	-
125	245	205	M30	122	122	180	190	33	48	300	192	70	56	98	13
150	290	240	M36	150	150	220	230	39	57	355	230	80	64	118	10

Size	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Stroke	Flange fixing screws		M _A in Nm
62	175	135	1,5	12	1,5	24,5	110	106	120	30	18	4 off M20 x 60 DIN 912-10.9		550
82	210	165	1,5	15	2	29	135	128	150	45	25	4 off M24 x 80 DIN 912-10.9		940
102	260	210	2	18	2	31,5	160	164	180	55	28	4 off M30 x 100 DIN 912-10.9		1900
125	360	295	3	30	2,5	51,5	230	233	-	78	35	8 off M30 x 120 DIN 912-10.9		1900
150	510	430	5	32	2,5	81	320	354	-	88	38	8 off M36 x 140 DIN 912-10.9		3250

**MANNESMANN
REXROTH**

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