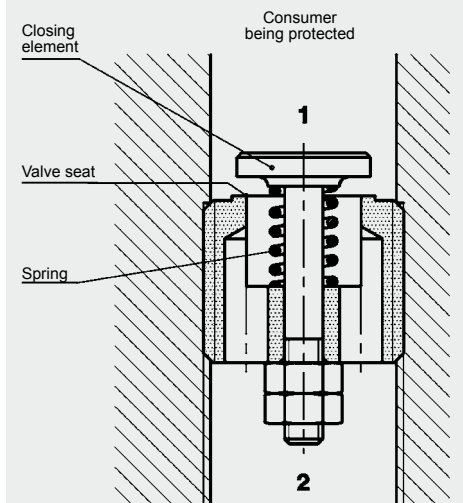


Hose Burst Valve Direct-Acting Flat Seat Valve, Cartridge – 350 bar RBE 1/4 to 3/4

FUNCTION



The hose burst valve RBE is a flow operated flat seat valve which prevents uncontrolled movement in the consumer in the event of a hose burst. The hose burst valve is open in the normal position and allows flow in both directions. If the pre-set actuating flow rate is exceeded as a result of a hose burst, for example, the valve quickly closes and blocks the flow from port 1 to port 2.

Caution:

The actuating flow rate should be at least 20% higher than the highest flow rate in the system, to prevent the valve reacting too sensitively! Due to the effects of acceleration and inertia, the valve should be replaced after a hose burst.

FEATURES

- Hose burst valves for direct installation in cylinders, lines and control blocks
- Highly reliable thanks to fast response
- Unauthorized adjustment not possible once installed
- Choice of four sizes for optimum adaptability to the system
- Different flow rate settings available as an option

SPECIFICATIONS

Operating pressure:	max. 350 bar
Nominal flow:	RBE1/4 up to max.25 l/min RBE3/8 up to max.50 l/min RBE1/2 up to max.75 l/min RBE3/4 up to max.150 l/min
Media operating temperature range:	min. -20 °C to max. +100 °C
Ambient temperature range:	min. -20 °C to max. +100 °C
Operating fluid:	Hydraulic oil to DIN 51524 Part 1 and 2
Viscosity range:	min. 2.8 mm ² /s to max. 800 mm ² /s
Filtration:	Class 21/19/16 according to ISO 4406 or cleaner
MTTF _d :	150 years (see "Conditions and instructions for valves" in brochure 5.300)
Installation:	No orientation restrictions, preferably horizontal
Materials:	Valve body: steel
Weight:	RBE1/4 = 0.009 kg RBE3/8 = 0.016 kg RBE1/2 = 0.031 kg RBE3/4 = 0.057 kg

MODEL CODE

RBE - R 1/2 - X - 75

Basic model _____
Hose burst valve

Size of connection _____

R 1/4 = RBE R1/4
R 3/8 = RBE R3/8
R 1/2 = RBE R1/2
R 3/4 = RBE R3/4

Series _____
(determined by manufacturer)

Actuating flow rate _____

3 - 25 l/min = RBE R1/4
6 - 50 l/min = RBE R3/8
12 - 75 l/min = RBE R1/2
25 - 150 l/min = RBE R3/4
Setting value = max. flow rate
Other pre-set flow rates on request

Standard models

Model code	Part No.
RBE-R1/4-X-25	710025
RBE-R3/8-X-50	710026
RBE-R1/2-X-75	710028
RBE-R3/4-X-150	710029

Other models on request

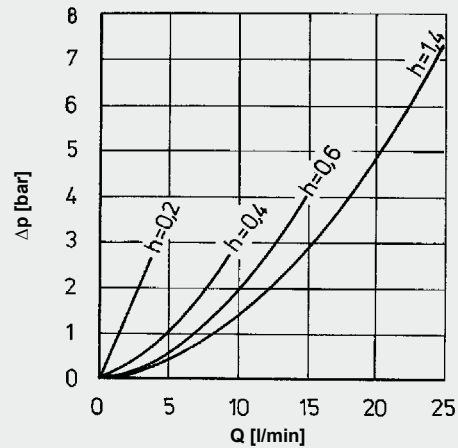
Standard in-line bodies

Code	Part No.	Material	Ports	Pressure
Ports: 1x female thread, 1x male thread				
XB05520-01X	393215	Steel	G1/4	350 bar
XB08520-01X	393217	Steel	G3/8	350 bar
XB10520-01X	393219	Steel	G1/2	350 bar
XB12520-01X	395061	Steel	G3/4	350 bar
Ports: 2x female thread:				
XX05520-01X	393224	Steel	G1/4	350 bar
XX08520-01X	393226	Steel	G3/8	350 bar
XX10520-01X	393228	Steel	G1/2	350 bar
XX12520-01X	395063	Steel	G3/4	350 bar

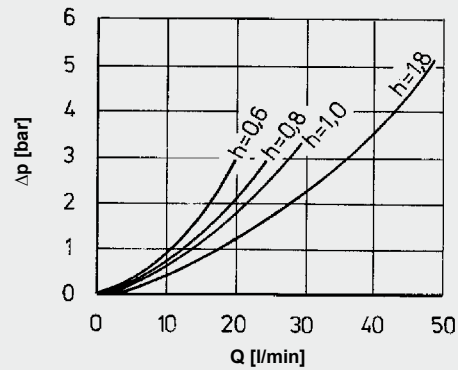
PERFORMANCE

Pressure drops, dependent on flow rate at various setting values, measured at $v = 34 \text{ mm}^2/\text{s}$ and $T_{\text{oil}} = 46 \text{ }^\circ\text{C}$

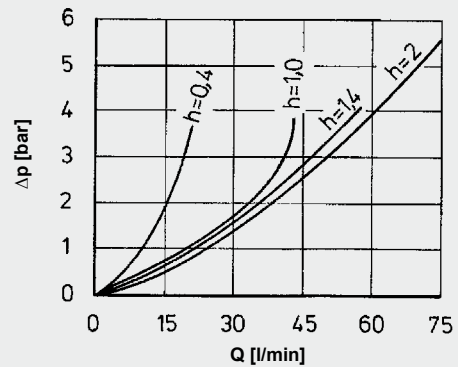
RBE-R1/4



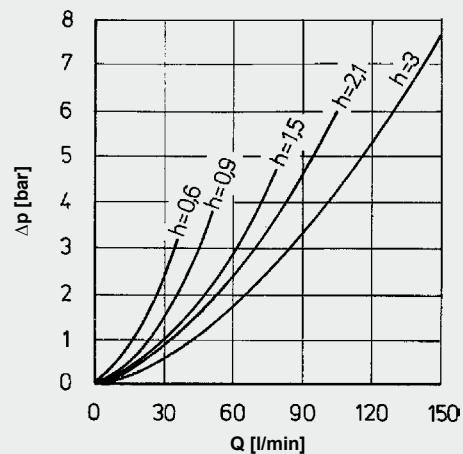
RBE-R3/8



RBE-R1/2

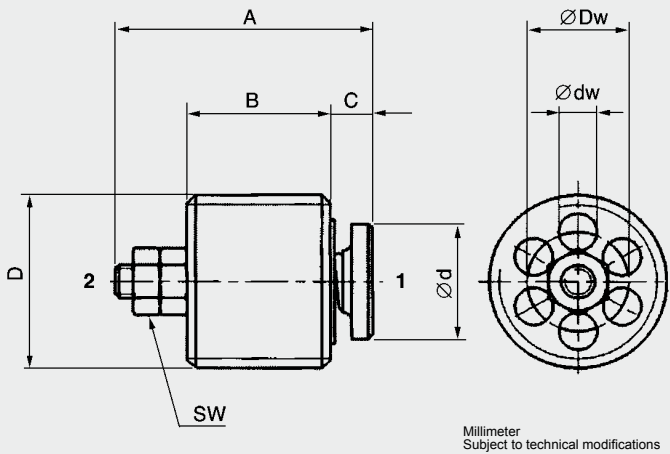


RBE-R3/4



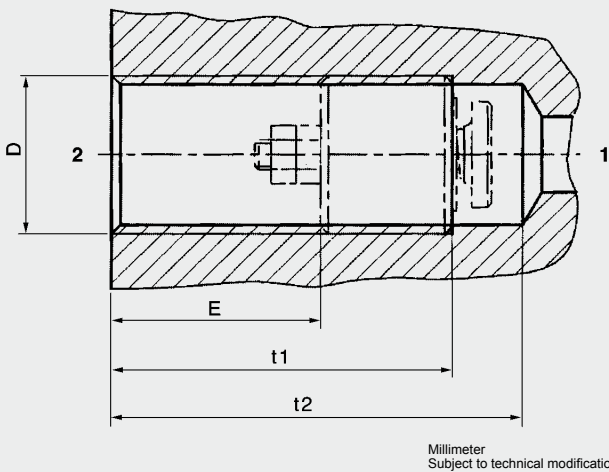
DIMENSIONS

Cartridge



Type	D	A	B	C	Ød	SW	ØDw	Ødw
RBE R1/4-X-...	R1/4"	21	11.5	3.5	9.5	5	8	2.5/5
RBE R3/8-X-...	R3/8"	23.5	13.5	5	12	5.5	10	3.5/6
RBE R1/2-X-...	R1/2"	30.5	17	5.5	14	7	12	4.5/8
RBE R3/4-X-...	R3/4"	38	23.5	6.5	18	7	16	6.5/9

Cavity

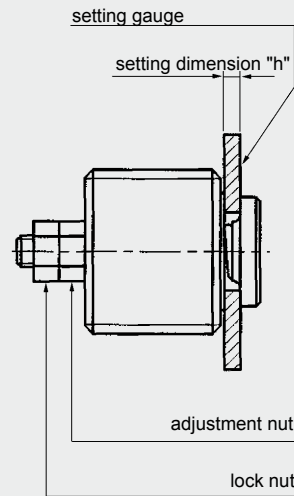


Type	D	E	t1 ±0.5	t2 _{min.}
RBE R1/4-X-...	R1/4"	20.5	32	38
RBE R3/8-X-...	R3/8"	22.5	36	44
RBE R1/2-X-...	R1/2"	27	44	53
RBE R3/4-X-...	R3/4"	27.5	51	61

The installation dimensions (in mm) shown in the tables are minimum values for threaded pipe connections and male adapters to DIN 3852.

Note

The valves are set to the max. actuating flow rate as standard and can be adjusted by the user. Equally, valves with fixed settings are also available. The valve is set according to the setting curves by varying the gap "h" (see diagrams).

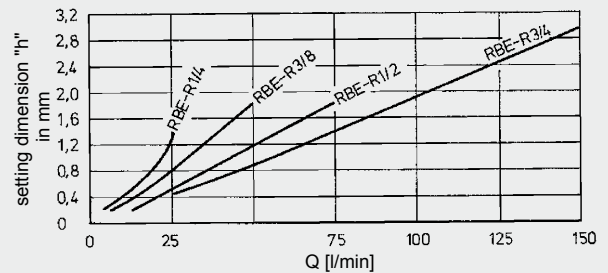


RBE-R1/4 and 3/8:
Torque 0.8 Nm
RBE-R1/2 and 3/4:
Torque 1.8 nM

To change the setting, loosen the lock nut, measure the gap using setting gauges, or similar, and then re-tighten lock nut.

Setting curves

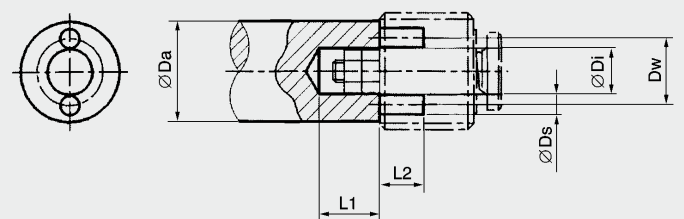
measured at $v = 34 \text{ mm}^2/\text{s}$



Form tools

Tool	Part No. / Cavity			
	05520	08520	10520	12520
Tap	1002670	1002668	1002667	1002663
Assembly tool	161421	160561	160560	164180

Assembly tool

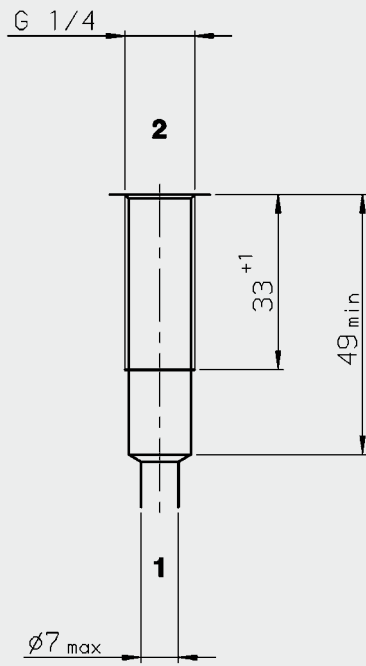


Type	Da max.	Dw	Di	Ds	L1 min.	L2 max.
RBE R1/4-X-...	11.5	8	5.8	2	9	5
RBE R3/8-X-...	15	10	6.5	3	9	6
RBE R1/2-X-...	18	12	8.2	3.5	11	8
RBE R3/4-X-...	24	16	8.5	6	12	8

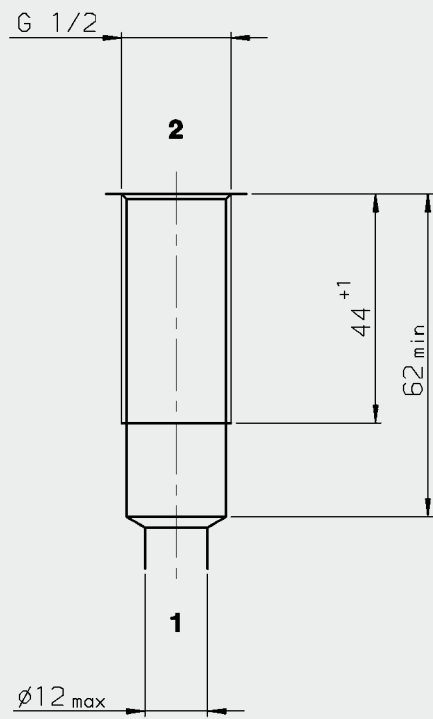
All dimensions in mm.

CAVITY

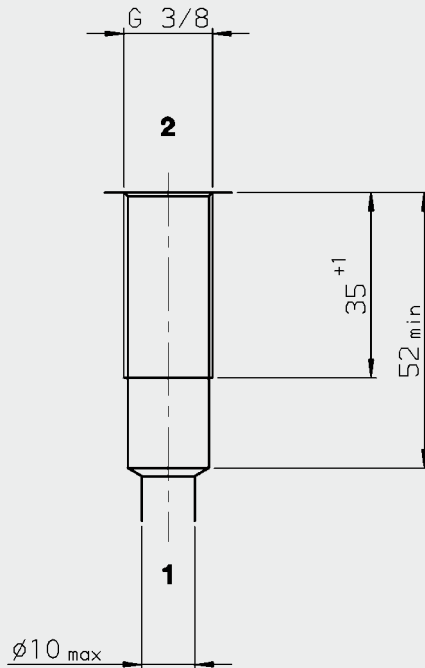
05520



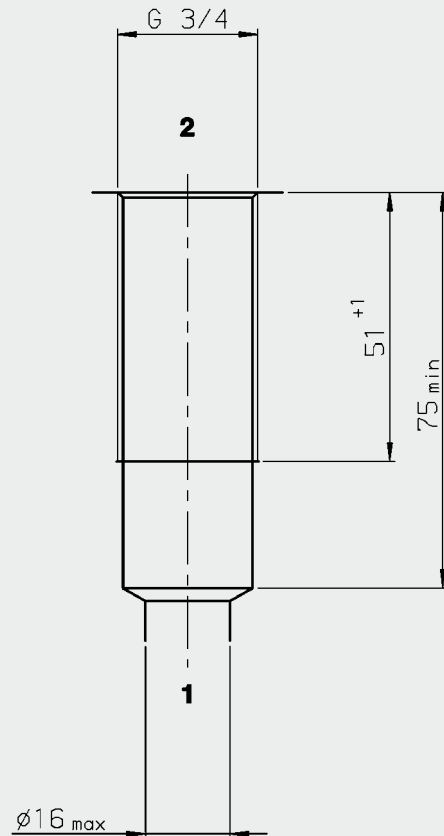
10520



08520



12520



NOTE

The information in this brochure relates to the operating conditions and applications described.
For applications or operating conditions not described, please contact the relevant technical department.
Subject to technical modifications.

HYDAC Fluidtechnik GmbH
Justus-von-Liebig-Str.
D-66280 Sulzbach/Saar
Tel: 0 68 97 /509-01
Fax: 0 68 97 /509-598
E-Mail: flutec@hydac.com

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