RSE and RSG Pipe rupture valves

1. General description

- prevents uncontrolled movement of the cylinder if a pipe or hose burst occurs.
- settable closing flow

2. Advantages of Beringer's pipe rupture valve

- simple adjustment of flow rates
- minimal spatial requirement thanks to compact design.

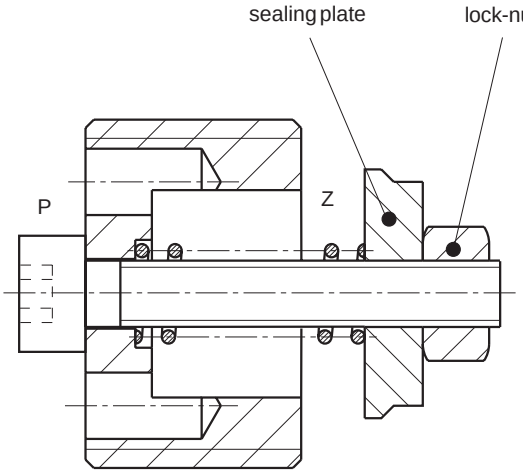
3. Application

- for protecting hydraulic consumers
- for direct installation in cylinders

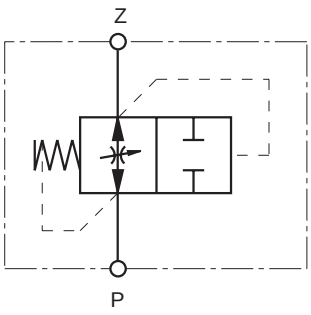
4. Functional description, sectional view

4.1 If, when the oil is flowing from Z to P, the pressure difference in the valve exceeds a value that corresponds to the preloading pressure (approx. 1 bar), the plate is forced against the valve seat and seals the opening passage leakfree.

4.2 The pipe rupture valve is opened again automatically when the pressure at port P is higher than that at port Z.



5. Symbol



6. Characteristics

(Please contact Beringer if machinery is required for use beyond these tolerances)

6.1 General:

• Type:	plate valve
• Mounting method:	screw-type cartridge
• Ports:	P, Z see point 10
• Mounting position:	any
• Weight:	see point 10

6.2 Hydraulic characteristics:

• Size:	1/4, 3/8, 1/2, 18x1,5
• Min. settable closing flow:	3 l/min (G1/4")
• Max. settable closing flow:	75 l/min (G1/2")
• Max. working pressure:	400 bar
• Hydraulic medium:	mineral oil per DIN 51524 and DIN 51525 (HL/HLP), inquire about other media
• Hydraulic medium temperature range:	-20°C...+80°C, inquire about other temperatures
• Viscosity range:	2.8 mm^2/s up to 380 mm^2/s
• Filtering:	NAS 1638 class 9, $\beta 10 \geq 75$.

7. Safety instructions

- This valve must only be used for the purpose for which it has been designed.
- It must only be adjusted by trained staff.
- The hydraulic system must be depressurized and checked before the valve is dissasembled.
- The valve must not be opened without the express permission of the manufacturer.

8. Assembly instructions

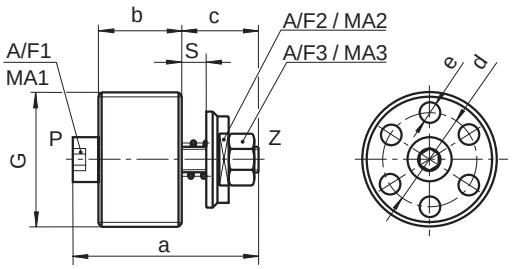
- Observe all port designations.
- Observe the tightening torques (see dimension diagram).
- Bleed the hydraulic system before putting it into operation.

9. Adjustment instructions

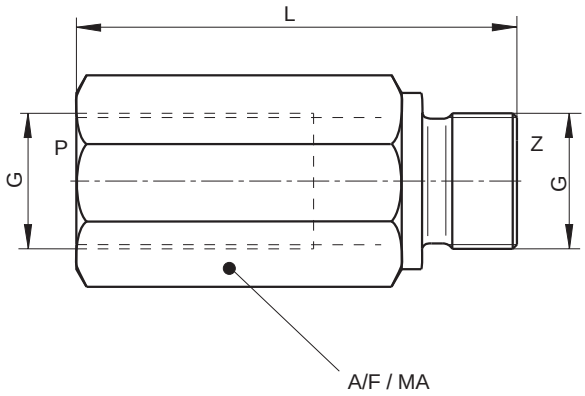
1. Screw in the sealing plate until it sits on the seat.
2. Set the flow acc. to the setting diagrams (see section 11).
3. Tighten the lock-nut to the specified torque (see section 10).

10. Dimension diagram

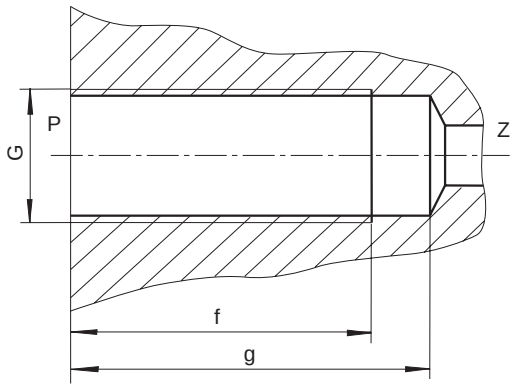
10.1 RSE



10.2 RSG



10.3 Location hole

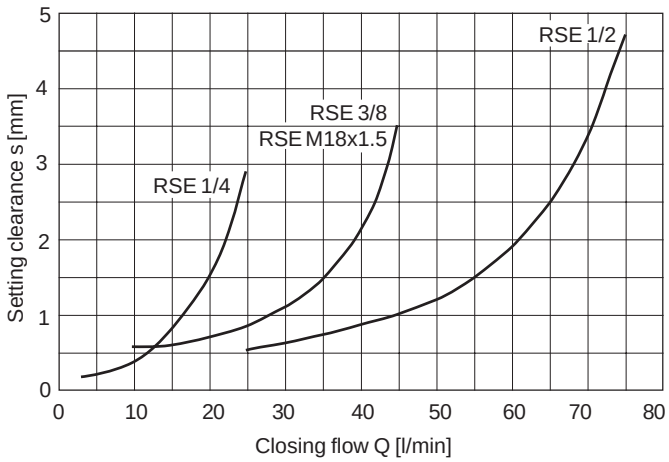


Size	A/F	A/F1	A/F2	A/F3	MA (Nm)	MA1 (Nm)	MA2 (Nm)	MA3 (Nm)
1/4	19	2.5	8	5.5	20	2.1	1.5	1.5
3/8	22	2.5	10	5.5	35	2.1	1.5	1.5
1/2	27	3	12	7	60	4.9	3.5	3.5
M18x1.5	22	2.5	10	5.5	40	2.1	1.5	1.5

Size	G	a	b	c	d	e	f	g	L	Weight (kg) RSE	Weight (kg) RSG
1/4	G1/4	21	9	9	8.2	2.5	30	36	58	0.006	0.080
3/8	G3/8	23	11	9	10	3.5	32	40	58	0.013	0.115
1/2	G1/2	29	13	12	13.5	4	35	45	65	0.022	0.195
18x1.5	M18x1.5	23	11	9	10	3.5	32	40	58	0.013	0.115

11. Setting diagram

measured at 70 mm^2/s



12. Type code

RS | | **/** | | **/** | |

Pipe rupture valve

RS	**RS**

Type

E	**E**
G	**G**

Size

1/4	**1/4**
3/8	**3/8**
1/2	**1/2**
M18x1.5	**M18x1.5**

Settable closing flow

up to 75 l/min (must be min. 40% above max. working flow)	**....**