

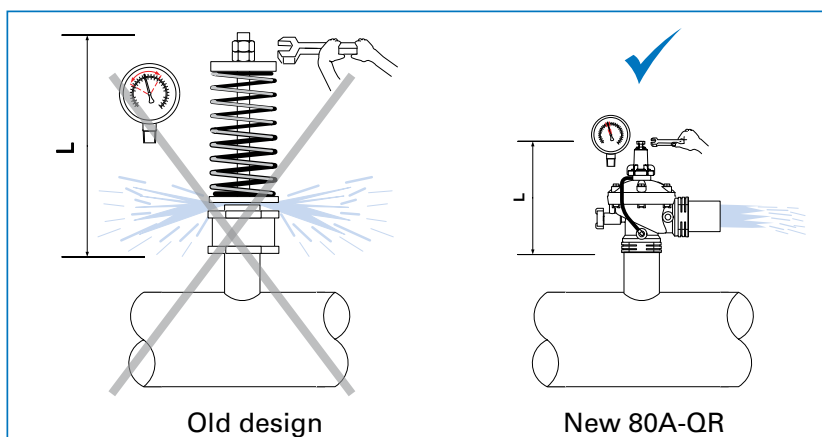
80A-QR Quick Pressure Relief Valve

The 80A-QR is a pilot-operated, quick-acting pressure-relief valve, that is designed for the pressure-surge protection of pumps, filtration-systems and pipelines in mining (corrosive fluid) and agricultural-irrigation applications.

The valve continuously senses the pressure in the system and keeps a drip-tight closed position as long as the pressure is low. The valve instantly opens in case the system's pressure has reached a pre-set, critical value, allowing surplus flow out of the system. The closing-speed is regulated so to allow smooth and quiet attenuation of the pressure-surges.

Features

- Dependable, moderately-priced, pilot-operated valve
- Eliminates most of the drawbacks of spring-loaded relief valves
- Fast opening and slow, regulated closure - prevents shuttering and secondary surges
- The relief-flow can be directed away or can be connected to a collector
- Extremely accurate: will open and close at the same pressure setting
- Leak-proof design
- Constructed from rugged, corrosion-proof composite materials
- May be ordered factory set and sealed under actual hydrostatic conditions, or can be shipped to you for final field adjustment
- Small, light-weight and easy to adjust with just a small key and applying small torque
- Provides relief setting-range from 1 to 9 bar / 15-130 psi



Dimensions

Dimension		35mm 1½"	50mm 2"	80mm 3"
L1	mm / inch	88 / 3 ³ / ₈	88 / 3 ³ / ₈	160 / 6 ³ / ₁₆
L2	mm / inch	70 / 2 ¹¹ / ₁₆	70 / 2 ¹¹ / ₁₆	129 / 5
H1	mm / inch	180 / 7	180 / 7	220 / 8 ⁵ / ₈
Df	mm / inch	163 / 6 ³ / ₈	163 / 6 ³ / ₈	-
Df 3"	mm / inch	-	-	194 / 7 ⁵ / ₈
Df 4"	mm / inch	-	-	230 / 9
Weight	kg / lbs	1.1 / 2.4	1.1 / 2.4	4 / 8.82

Hydraulic Data

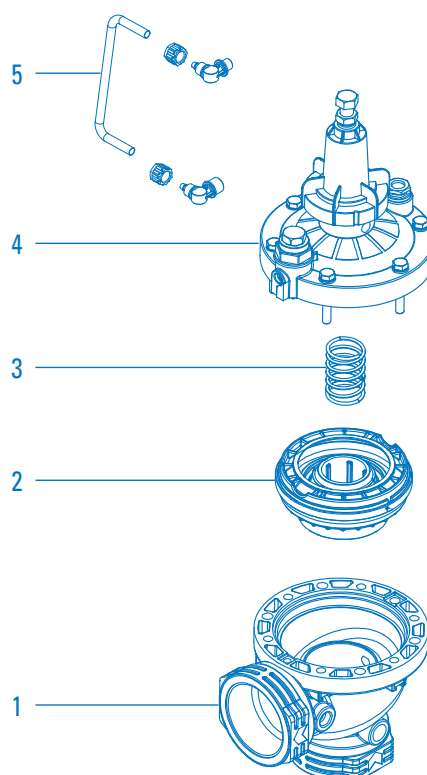
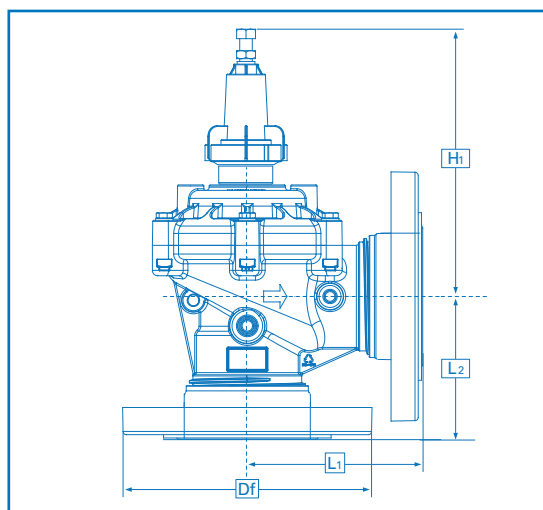
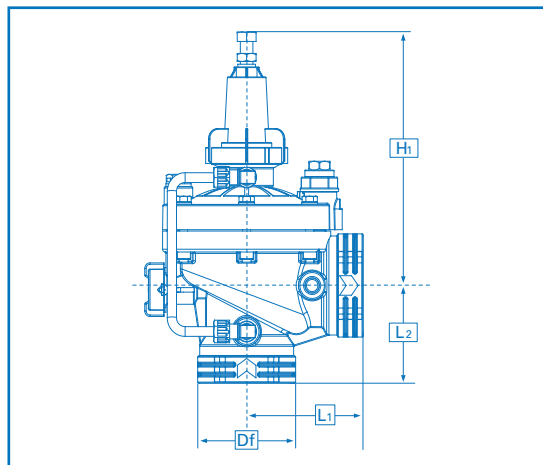
		Metric	US
Max. Flow	1½"	65 m ³ /h	285 gpm
	2"	100 m ³ /h	465 gpm
	3"	200 m ³ /h	880 gpm
Min. Pressure		1 bar	14.5 psi
Max. Pressure		10 bar	145 psi
Max. Temperature		60°C	140°F
Kv / Cv	1½"	46	54
	2"	58	68
	3"	150	175

Spring Adjustment Range

Spring number	Color	bar	psi
72	Yellow	1-8	15-115
54	Green	1-10	15-150

Materials

	Part	Material
1	Body	GRP
2	Diaphragm assembly	GRP+NR
3	Main Spring	SST
4	Pilot-valve bonnet	GRP
5	Control tube	PP



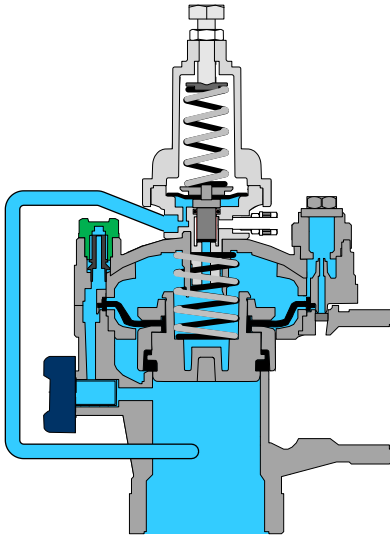
Flow rate (m³/h)

Valve diameter	ΔP (bar)									
	0	1	2	3	4	5	6	7	8	9
1½"	0	37	52	64	74	82	90	97	104	110
2"	0	46	66	80	93	104	114	123	131	139
3"	0	120	170	208	240	268	294	317	339	360

Principle Of Operation

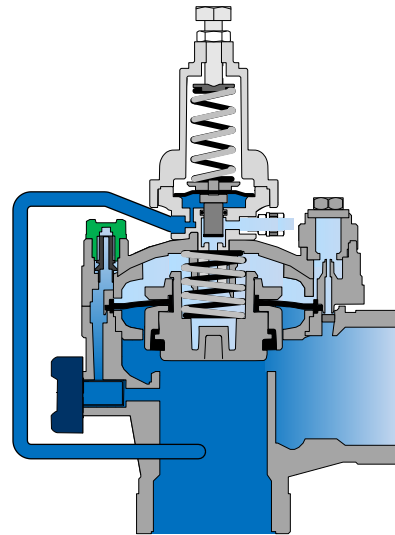
Normal System Pressure

The valve maintains a closed position as long as the system pressure is lower than the pre-set value



High Pressure

The valve instantly opens once the pressure reaches the pre-set value. The valve then re-closes at a slow, adjustable rate.



Ordering guide:

Ordering data	Ordering code					Ordering data
	80A	□	QR	□□□	□□	
Diameter						Additional Features
1½" / 40 mm *	→	1.5			-	None
2" / 50 mm *	→	2			HP	High Pressure
3" / 80 mm	→	3				End Connections
4"R	→	4		BSP	←	BSP
				NPT	←	NPT
				UNF	←	Universal Flanged**

* For 1½" and 2" valve only- can be supplied in horizontal configuration

** For 3" and 4"R only

Example:

80A	2	QR	BSP
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 Quick Pressure Relief Valve, 2", BSP: 80A-2-QR-BSP



Innovation
Innovation

Expertise
Expertise

Reliability
Reliability



Hundreds of companies in the industrial, civil engineering, municipal and agricultural sectors around the world have chosen DOROT's innovative and field-proven technologies. Since its establishment in 1946, DOROT leads the valves market with continued innovation, uncompromising excellence and firm commitment to its customers, consulting and supporting them through all stages of a project and overcoming challenges in R&D, design, implementation, and maintenance.



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