URACA

Valve line
for high-pressure technology

High Pressure Technology

Functions

S Safety valves
Open when exceeding the operating pressure and prevent impermissible rise in pressure. Close tight again after the pressure has been lowered.

B Bypass valves
Open the pressure line in direction of the suction line and allow the pressureless start of the pump as well as switch-over to pressureless circulation.

V Consumer shut-off valves
Used to add and switch off consumer lines against high pressure.

F Overflow valves
Keep the operating pressure in the system constant and allow the excess volumes to be discharged without pressure.

Z Holding valves
Used to keep consumer lines closed against the suction or circulation pressure.

D Pressure maintaining valves
Maintain the system pressure constant in multiple consumer operation when adding individual consumers.

R Check valves
Prevent the delivery medium from flowing back.

U Unloading valves
Used for the alternating selection of two consumers (3/2-way valve).

Properties

Ex-protection
Suitable for operation in potentially explosive atmospheres (ATEX).

Cascading capability
Allows cascading several valves to make up a complete valve station.

Demineralized water
Suitable for operation with demineralized water.

Sea water
Suitable for operation with sea water

Silicone-free
Do not contain any substances hazardous to paint wetting.

Gap seal
Serves the exact reproducibility of the response pressure.

Electro-pneumatic control
Assumes the switching command and the pressure setting of the valve.

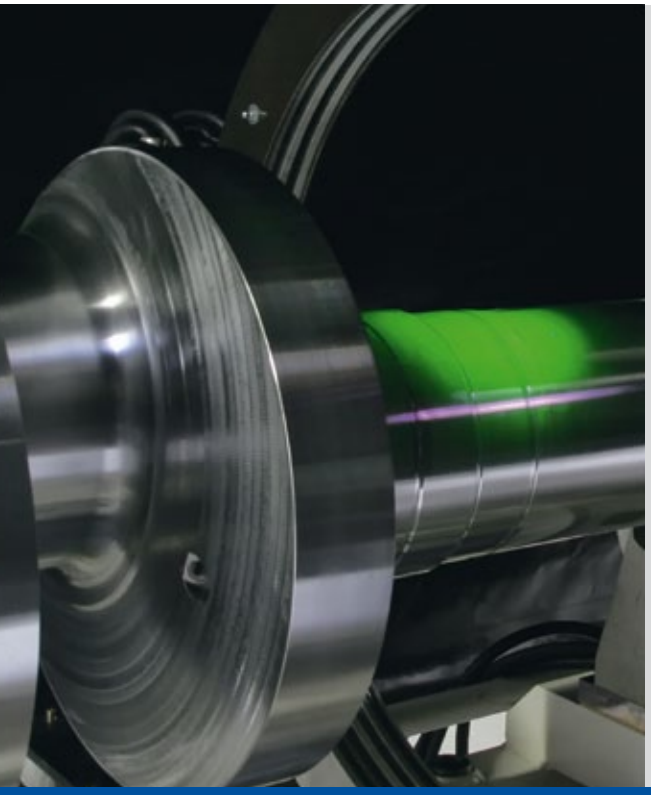
Position sensor
Continuously detects the current position of the valve.

K	Chamber seal	G	Basic seal
O	O-ring seal	D	Cone seal
IG	Internal thread	AG	External thread

Valve line

Design may be subject to modification. Dimensions, weights, illustrations and technical data are without engagement.
1 bar = 14.5038 psi, 1 l/min = 0.26417 USGPM = 0.22 IPGPM,
1 kW = 1.3410 HP, 1 mm = 0.03937 inch

Our philosophy: the most reliable products in the market.



Built for professionals

Design intelligence, the best plunger pumps as a basis, vertical integration up to crank shafts completely manufactured in-house, precise machining and careful assembling by qualified employees as well as extensive test procedures ensure the reliable functioning of our products. This offers the best possible economic efficiency and lasting value. Every day. For many years.

Indestructible pumps with high-quality components allow efficient running costs for the units.

Proven under the toughest conditions

URACA valves are in operation worldwide under the toughest conditions. URACA products easily withstand dirt and dust, extremely high and low temperatures and especially heavy duty conditions that such machines are subject to. Countless testimonials from enthusiastic users confirm the durability of URACA valves. You also can work with the best valves available.

URACA valves are used in the toughest industrial operation - here we are at home.

Top performance requires a strong heart and powerful components

Developed for the future

As a leading manufacturer in the field of high pressure technology URACA offers with its valve lines a wide range perfectly matched system components for professional applications in industry and services. We do not invent superlatives on paper, but develop control and regulation elements for practice. URACA valves are controlled pneumatically, hydraulically or electrically. They are designed according to customer requirements and for persistence.

Industry standard
URACA plunger pumps are designed for uninterrupted heavy duty operation 24 hours a day – for decades.

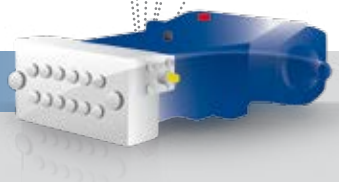
Quality
URACA high pressure plunger pumps are manufactured in-house considering the highest quality standards.

Know-how
Since more than 120 years, URACA is manufacturing high pressure pumps.

Variety
The optimum pump of URACA's product family for each unit.

Performance
Maximum pressure level and maximum flow rate. Not only on paper.

Energy efficiency
URACA products achieve highest efficiency. Cost-effective – year in and year out.



Our philosophy

- Over 120 years of experience
- Production "Made in Germany"
- Highest vertical integration
- Comprehensive engineering know-how
- In-house testing operation
- Customised solutions
- Excellent price-performance ratio
- Highest energy efficiency

Quality without compromises

The daily, professional use is a tough challenge for a pump unit. Most important for top performance, endurance and highest economic efficiency of the URACA pump units is the strong heart: The URACA high pressure plunger pump.

Reliably controlling and regulating – with high-pressure valves from URACA

High-pressure displacement pumps require valves

Control and regulating valves in systems with displacement pumps (plunger pumps) are absolutely required for reliable and efficient operation. While with the centrifugal pump the flow rate adjusts itself according to the counterpressure prevailing in the system, the displacement pump because of the delivery rate determined by its displacement and speed delivers permanently regardless of the system's counterpressure. If the required delivery rate changes, e.g. by shutting off a consumer (closing a spray gun), the system pressure would suddenly rise without appropriate valves causing the system to shut down or even sustain defects. To reliably prevent this, each high-pressure plunger pump system needs safety and working valves.

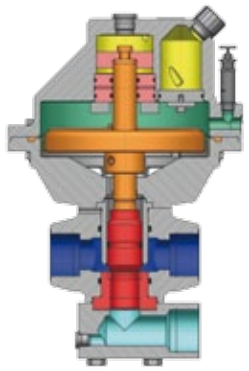
Functions and valve types

The operation of displacement pumps requires valves

- to ensure the maximum pressure or as variable alternative to the bursting disk.
- to open the bypass to allow the pump to deliver without pressure.
- to shut off the delivery flow before a consumer.
- to adjust the delivery flow to the consumer. The surplus delivery flow is diverted bypassing the consumer.
- to activate and deactivate individual consumers if several of them are working in alternating fashion (diverter valve).
- for special tasks which cannot be realized with the functions listed above.

Diaphragm actuated dual-switching safety valve MDSV, built into an URACA electrical unit RS716 E for maximum pressure deburring with 3000 bar.

The complexity resulting from the combination of several functions in one valve can well be seen by the example of the diaphragm actuated, overflow safety and switching valve MSÜV. The MSÜV combines a safety valve, bypass valve and overflow valve in one unit.



Why valves from URACA?

URACA has been known for decades for top quality with the construction of high-pressure displacement pumps. We achieve this level with high-quality components and best materials. However, this is most of all achieved with uncompromising professional engineering and a very high level of vertical integration at our facilities – made in Bad Urach, Germany.
To consistently meet this demand URACA develops and manufactures high-quality valves. On the one hand, this allows us servicing many necessary and useful individual functions, on the other hand, the unique broad range of valve types also covers many function combinations. Systems and equipment can therefore be built much more compact, efficient and economically.

Above all, however, this ensures that the best pump systems are equipped with the best valves – without compromise.

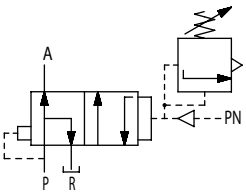
Of course, our valves are available as single components for any conceivable purpose.

MSÜV Diaphragm actuated unloading, overflow safety valves

	MSÜV 20/150	MSÜV 29/300	MSÜV 29/450	MSÜV 16/700	MSÜV 10/1200	MSÜV 6/1000
Permissible positive operating pressure	40 – 150 bar	80 – 300 bar	120 – 450 bar	200 – 700 bar	350 – 1,200 bar	100 – 1,000 bar
Recommended flow rate	0 – 650 l/min	0 – 1,000 l/min	0 – 1,000 l/min	0 – 350 l/min	0 – 150 l/min	0 – 50 l/min
Dimensions H x W x D	370 x ø 250 mm	370 x ø 250 mm	370 x ø 250 mm	370 x ø 250 mm	370 x ø 250 mm	370 x ø 250 mm
Weight	23.0 kg	23.0 kg	26.0 kg	24.0 kg	25.0 kg	25.0 kg
Without operating energy (open/closed)	X / –	X / –	X / –	X / –	X / –	X / –
Pressure inlet P (connecting thread, seals)	G1½ IG, K	G1½ IG, K	G1¼ IG,K	Lens	Lens	Lens
Pressure output A (connecting thread, seals)	G1½ IG, K	G1½ IG, K	–	–	–	–
Return outlet R (connecting thread, seals)	G1½ IG, K	G1½ IG, K	G1½ IG, K	G1 IG, K	G1 IG, K	G1 IG, K

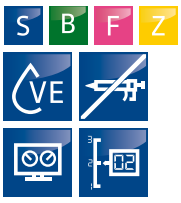
The universal regulating valve combines the key functions of high-pressure technology in a single component. The pneumatic control provides soft switching.

Special features: Designed for frequent switching operations, available in different materials according to the flow medium, usable for recycling water, large pressure adjustment range.



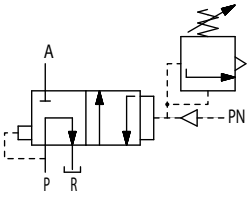
MDSV Diaphragm actuated dual-switching safety valves

	MDSV 15/800	MDSV 12/1200	MDSV 10/2000	MDSV 7/3000
Permissible positive operating pressure	200 – 800 bar	300 – 1,200 bar	500 – 2,000 bar	800 – 3,000 bar
Recommended flow rate	0 – 350 l/min	0 – 220 l/min	0 – 150 l/min	0 – 80 l/min
Dimensions H x W x D	400 x ø 250 mm	400 x ø 250 mm	395 x ø 250 mm	395 x ø 250 mm
Weight	28.0 kg	28.0 kg	22.2 kg	22.2 kg
Without operating energy (open/closed)	X / –	X / –	X / –	X / –
Pressure inlet P (connecting thread, seals)	Lens	Lens	Lens	Lens
Pressure output A (connecting thread, seals)	Lens	Lens	Lens	Lens
Return outlet R (connecting thread, seals)	G1 IG, K	G1 IG, K	G1 IG, K	G1 IG, K



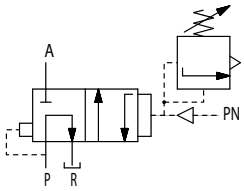
The universal regulating valve combines all relevant functions of high-pressure technology in a single component. The pneumatic control provides soft switching.

Special features: Designed for frequent switching operations, large pressure adjustment range, integrated holding valve, prepared for electrical position sensor.

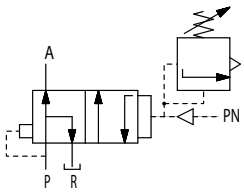


MSSV Diaphragm actuated switching safety valves

	MSSV 13/100	MSSV 11/250	MSSV 32/150	MSSV 24/250	MSSV 16/400
Permissible positive operating pressure	10 – 100 bar	50 – 250 bar	25 – 150 bar	50 – 250 bar	100 – 400 bar
Recommended flow rate	0 – 150 l/min	0 – 150 l/min	0 – 1,000 l/min	0 – 500 l/min	0 – 250 l/min
Dimensions H x W x D	320 x ø 116 mm	320 x ø 116 mm	450 x ø 250 mm	430 x ø 250 mm	450 x ø 250 mm
Weight	9.0 kg	9.0 kg	23.6 kg	23.0 kg	29.0 kg
Without operating energy (open/closed)	X / –	X / –	X / –	X / –	X / –
Pressure inlet P (connecting thread, seals)	G¾ IG, K	G¾ IG, K	G1½ IG, K	G1¼ IG, K	Lens
Pressure output A (connecting thread, seals)	G¾ IG, K	G¾ IG, K	G1½ IG, K	G1¼ IG, K	G1 IG, G
Return outlet R (connecting thread, seals)	G¾ IG, K	G¾ IG, K	G1½ IG, K	G1¼ IG, K	G1 IG



with holding function



without holding function

	MSSV 13/800	MSSV 5/2000	MSSV 7/2000	MSSV 5/2800
Permissible positive operating pressure	200 – 800 bar	700 – 2,000 bar	900 – 2,000 bar	1,000 – 2,800bar
Recommended flow rate	0 – 200 l/min	0 – 50 l/min	0 – 80 l/min	0 – 50 l/min
Dimensions H x W x D	450 x ø250 mm	280 x ø 198 mm	330 x ø 250 mm	330 x ø 250mm
Weight	29.0 kg	13.3 kg	18.5 kg	18,5kg
Without operating energy (open/closed)	X / –	X / –	X / –	X / –
Pressure inlet P (connecting thread, seals)	Lens	Lens	Lens	Lens
Pressure output A (connecting thread, seals)	G1 IG, G	Lens	–	–
Return outlet R (connecting thread, seals)	G1 IG	M30 x 2 IG, D	M30 x 2 IG, D	M30 x 2 IG, D

The classic air-controlled safety valve with integrated bypass function. The pneumatic control provides soft switching. Optionally with integrated holding valve.

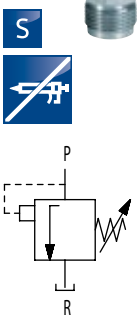
Special features: Designed for frequent switching operations, large pressure adjustment range.

HHV High-lift safety valves

	HHV 5 (series)
Permissible positive operating pressure	5–1,000 bar
Recommended flow rate	0,5–550 l/min
Dimensions H x W x D	320 x ø 85 mm
Weight	4,2–4.6 kg
Without operating energy (open/closed)	– / X
Pressure inlet P (connecting thread, seals)	G¾ AG / G1 AG, G
Pressure output A (connecting thread, seals)	–
Return outlet R (connecting thread, seals)	G1 IG

The classic spring-loaded safety valve. The complete HHV5 series comprises a large type selection and covers a comprehensive flow range. The operating pressure can be individually adjusted.

Special features: In ductile cast iron of stainless steel design, also nonferrous metal-free.

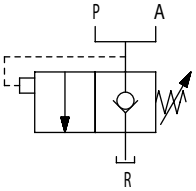


VSV Full stroke safety valves

	VSV 10/300	VSV 12/300
Permissible positive operating pressure	150 – 300 bar	150 – 300 bar
Recommended flow rate	100 – 500 l/min	250 – 650 l/min
Dimensions H x W x D	460 x 160 x 110 mm	460 x 160 x 110mm
Weight	13.8 kg	13.8 kg
Without operating energy (open/closed)	– / X	– / X
Pressure inlet P (connecting thread, seals)	G1½ IG, K	G1½ IG, K
Pressure output A (connecting thread, seals)	G1½ IG, K	G1½ IG, K
Return outlet R (connecting thread, seals)	Rp1½ IG	Rp1½ IG

The „circuit breaker“. A large cross-section is immediately provided when responding (full-lift characteristics). This prevents wear at the sealing faces.

Special features: For frequent responses, high response reproducibility, suitable for recycling water, large pressure adjustment range, designed for large flow volumes.



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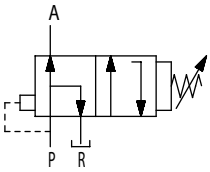

FSÜV Spring-loaded safety overflow valves

	FSÜV 20/150	FSÜV 29/300	FSÜV 29/450	FSÜV 16/700	FSÜV 10/1200
Permissible positive operating pressure	30 – 150 bar	60 – 300 bar	90 – 450 bar	140 – 700 bar	240 – 1,200 bar
Recommended flow rate	0 – 650 l/min	0 – 1,000 l/min	0 – 1,000 l/min	0 – 350 l/min	0 – 150 l/min
Dimensions H x W x D	870 x ø 200 mm	870 x ø 200 mm	870 x ø 200 mm	870 x ø 200 mm	870 x ø 200 mm
Weight	41.0 kg	41.0 kg	44.0 kg	43.0 kg	43.5 kg
Without operating energy (open/closed)	– / X	– / X	– / X	– / X	– / X
Pressure inlet P (connecting thread, seals)	G1½ IG, K	G1½ IG, K	G1¼ IG, K	Lens	Lens
Pressure output A (connecting thread, seals)	G1½ IG, K	G1½ IG, K	–	–	–
Return outlet R (connecting thread, seals)	G1½ IG, K	G1½ IG, K	G1½ IG, K	G1 IG, K	G1 IG, K

Specifically suitable for pressure testing applications with individually lockable test pressure.

Special features: Little pressure increase, long service life also in overflow operation. The preload path of the pressure spring can be read directly.

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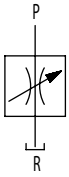


KÜV Cone overflow valves

	KÜV 8/200	KÜV 8/1200
Permissible positive operating pressure	200 bar	1,200 bar
Recommended flow rate	20 – 150 l/min	5 – 60 l/min
Dimensions H x W x D	180 x ø 54 mm	180 x ø 54 mm
Weight	1.3 kg	1.3 kg
Without operating energy (open/closed)	X / X	X / X
Pressure inlet P (connecting thread, seals)	G½ AG, G	G½ AG, G
Pressure output A (connecting thread, seals)	–	–
Return outlet R (connecting thread, seals)	G½ IG, K	G½ IG, K

The infinitely variably „adjustable release nozzle“ to divert a partial volume under operating pressure.

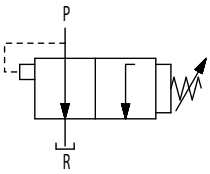
Special features: Very long service life through patented URACA construction.

FÜV Spring loaded overflow valves

	FÜV 13/250	FÜV 10/400	FÜV 8/630	FÜV 6/1000
Permissible positive operating pressure	0 – 250 bar	0 – 400 bar	0 – 630 bar	0 – 1,000 bar
Recommended flow rate	0 – 125 l/min	0 – 100 l/min	0 – 75 l/min	0 – 50 l/min
Dimensions H x W x D	443 x ø 125 mm	443 x ø 125 mm	443 x ø 125 mm	443 x ø 125 mm
Weight	7.6 kg	7.6 kg	7.6 kg	7.6 kg
Without operating energy (open/closed)	– / X	– / X	– / X	– / X
Pressure inlet P (connecting thread, seals)	G1 AG, G	G1 AG, G	G1 AG, G	G1 AG, G
Pressure output A (connecting thread, seals)	–	–	–	–
Return outlet R (connecting thread, seals)	G¾ IG	G¾ IG	G¾ IG	G¾ IG

	FÜV 13/200	FÜV 10/300	FÜV 8/500	FÜV 6/800
Permissible positive operating pressure	0 – 200 bar	0 – 300 bar	0 – 500 bar	0 – 800 bar
Recommended flow rate	0 – 200 l/min	0 – 150 l/min	0 – 125 l/min	0 – 100 l/min
Dimensions H x W x D	443 x ø 125 mm	443 x ø 125 mm	443 x ø 125 mm	443 x ø 125 mm
Weight	7.3 kg	7.3 kg	7.3 kg	7.3 kg
Without operating energy (open/closed)	– / X	– / X	– / X	– / X
Pressure inlet P (connecting thread, seals)	G1 AG, G	G1 AG, G	G1 AG, G	G1 AG, G
Pressure output A (connecting thread, seals)	–	–	–	–
Return outlet R (connecting thread, seals)	G¾ IG	G¾ IG	G¾ IG	G¾ IG

	FÜV 13/160	FÜV 10/250	FÜV 8/400	FÜV 6/630
Permissible positive operating pressure	0 – 160 bar	0 – 250 bar	0 – 400 bar	0 – 630 bar
Recommended flow rate	0 – 200 l/min	0 – 150 l/min	0 – 125 l/min	0 – 100 l/min
Dimensions H x W x D	479 x ø 125 mm	479 x ø 125 mm	479 x ø 125 mm	479 x ø 125 mm
Weight	8.2 kg	8.2 kg	8.2 kg	8.2 kg
Without operating energy (open/closed)	– / X	– / X	– / X	– / X
Pressure inlet P (connecting thread, seals)	G1 AG, G	G1 AG, G	G1 AG, G	G1 AG, G
Pressure output A (connecting thread, seals)	–	–	–	–
Return outlet R (connecting thread, seals)	G¾ IG	G¾ IG	G¾ IG	G¾ IG



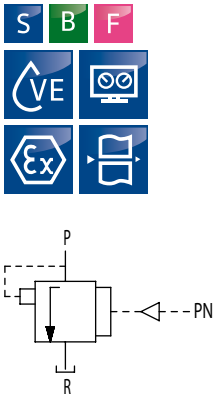
Keeps the operating pressure constant regardless of the flow rate. The spring can be discharged completely, thus the medium can pass the valve without pressure (manual bypass function).

Special features: The preload path of the pressure spring can be read from outside.

PÜV Pneumatic overflow valves (single stage)

	PÜV 8/200	PÜV 16/200	PÜV 8/400	PÜV 11/500
Permissible positive operating pressure	50 – 200 bar	50 – 200 bar	100 – 400 bar	100 – 500 bar
Recommended flow rate	10 – 125 l/min	10 – 500 l/min	10 – 125 l/min	15 – 175 l/min
Dimensions H x W x D	263 x 92 x 92 mm	285 x 105 x 105 mm	323 x 92 x 92 mm	263 x 92 x 92 mm
Weight	10.5 kg	13.5 kg	11.6 kg	10.5 kg
Without operating energy (open/closed)	X / –	X / –	X / –	X / –
Pressure inlet P (connecting thread, seals)	Lens	G1 IG, K	Lens	Lens
Pressure output A (connecting thread, seals)	–	G1 IG, K	–	–
Return outlet R (connecting thread, seals)	G¾ IG, K	G1 IG, K	G¾ IG, K	G¾ IG, K

	PÜV 11/1000	PÜV 11/1500	PÜV 11/2000	PÜV 9/2800
Permissible positive operating pressure	250 – 1,000 bar	400 – 1,500 bar	500 – 2,000 bar	700 – 2,800 bar
Recommended flow rate	15 – 175 l/min	20 – 200 l/min	20 – 200 l/min	20 – 200 l/min
Dimensions H x W x D	323 x 92 x 92 mm	380 x 92 x 92 mm	438 x 92 x 92 mm	438 x 92 x 92 mm
Weight	11.6 kg	12.3 kg	12.9 kg	12.9 kg
Without operating energy (open/closed)	X / –	X / –	X / –	X / –
Pressure inlet P (connecting thread, seals)	Lens	Lens	Lens	Lens
Pressure output A (connecting thread, seals)	–	–	–	–
Return outlet R (connecting thread, seals)	G¾ IG, K	G¾ IG, K	G¾ IG, K	G¾ IG, K



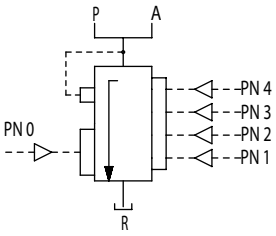
Keeps the operating pressure constant regardless of the nozzle equipment. Suitable for long-term overflow operation. Excellent dynamic characteristics at quick flow changes.

Special features: Very high response reproducibility, high response dynamics, valve cone can be used double sided.

PÜV Pneumatic overflow valves (multistage)

	PÜV 8/5-45	PÜV 8/5-135	PÜV 8/5-400
Permissible positive operating pressure	5 – 45 bar	5 – 135 bar	5 – 400 bar
Recommended flow rate	10 – 150 l/min	10 – 150 l/min	10 – 150 l/min
Dimensions H x W x D	315 x 92 x 92 mm	370 x ø 105 mm	425 x ø 166 mm
Weight	12.0 kg	15.8 kg	24.7 kg
Without operating energy (open/closed)	X / –	X / –	X / –
Pressure inlet P (connecting thread, seals)	G¾ IG, K	G¾ IG, K	G¾ IG, K
Pressure output A (connecting thread, seals)	G¾ IG, K	G¾ IG, K	G¾ IG, K
Return outlet R (connecting thread, seals)	G¾ IG, K	G¾ IG, K	G¾ IG, K

	PÜV 11/45-400	PÜV 11/45-1200
Permissible positive operating pressure	45 – 400 bar	45 – 1,200 bar
Recommended flow rate	20 – 200 l/min	20 – 200 l/min
Dimensions H x W x D	315 x 92 x 92 mm	370 x ø 105 mm
Weight	11.9 kg	15.7 kg
Without operating energy (open/closed)	X / –	X / –
Pressure inlet P (connecting thread, seals)	G¾ IG, G	G¾ IG, G
Pressure output A (connecting thread, seals)	G¾ IG, G	G¾ IG, G
Return outlet R (connecting thread, seals)	G¾ IG, K	G¾ IG, K



Keeps the operating pressure constant regardless of the nozzle equipment. Suitable for long-term overflow operation. Excellent dynamic characteristics at quick flow changes. The valves have a very high response reproducibility and high response dynamics. The valve cone can be used double sided.

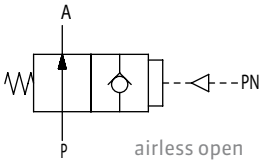
Special features: Due to the multiple stages a very large control range can be covered with one single pressure control valve. Optionally, a special air control panel is offered which enables to actuate the individual stages easily.

PSV Pneumatic switching valves

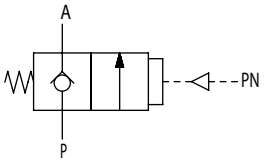
	PSV 10/400	PSV 10/400	PSV 8/600	PSV 10/600	PSV 8/800
Permissible positive operating pressure	400 bar	400 bar	600 bar	600 bar	800 bar
Recommended flow rate	0 – 100 l/min	0 – 100 l/min	0 – 80 l/min	0 – 100 l/min	0 – 80 l/min
Dimensions H x W x D	240 x 70 x 70 mm	240 x 70 x 70 mm	250 x 70 x 70 mm	217 x 94 x 121 mm	250 x 70 x 70 mm
Weight	2.5 kg	2.5 kg	2.9 kg	9.5 kg	2.9 kg
Without operating energy (open/closed)	X / –	– / X	X / –	X / –	– / X
Pressure inlet P (connecting thread, seals)	G½ IG, O	G½ IG, O	G½ IG, K	G¾ IG, G	G½ IG, K
Pressure output A (connecting thread, seals)	G½ IG, K	G½ IG, K	G½ IG, K	G½ IG, G	G½ IG, K
Return outlet R (connecting thread, seals)	–	–	–	–	–

	PSV 20/900	PSV 20/900	PSV 10/1200	PSV 10/1200	PSV 18/1200
Permissible positive operating pressure	900 bar	900 bar	1,200 bar	1,200 bar	1,200 bar
Recommended flow rate	0 – 650 l/min	0 – 650 l/min	0 – 100 l/min	0 – 100 l/min	0 – 500 l/min
Dimensions H x W x D	430 x ø 195 mm	480 x 195 x 165 mm	230 x 165 x 125 mm	217 x 94 x 121 mm	265 x110 x 110 mm
Weight	23.0 kg	34.0 kg	11.0 kg	9.5 kg	14.0 kg
Without operating energy (open/closed)	– / X	– / X	– / X	– / X	X / –
Pressure inlet P (connecting thread, seals)	G1 IG, G	Lens	G¾ IG, G	G¾ IG, G	G1 IG, G
Pressure output A (connecting thread, seals)	G1 IG, G	Lens	G½ IG, G	G½ IG, G	–
Return outlet R (connecting thread, seals)	–	–	G¼ IG, K	–	G1 IG, G

	PSV 18/1200	PSV 6/2000	PSV 6/2000	PSV 6/2800	PSV 6/2800
Permissible positive operating pressure	1,200 bar	2,000 bar	2,000 bar	2,800 bar	2,800 bar
Recommended flow rate	0 – 500 l/min	0 – 50 l/min	0 – 50 l/min	0 – 50 l/min	0 – 50 l/min
Dimensions H x W x D	265 x110 x 110 mm	315 x 100 x 90 mm	315 x 100 x 90 mm	315 x 100 x 90 mm	315 x 100 x 90 mm
Weight	14.0 kg	11.5 kg	11.5 kg	11.5 kg	11.5 kg
Without operating energy (open/closed)	X / –	X / –	– / X	X / –	– / X
Pressure inlet P (connecting thread, seals)	Lens	Lens	Lens	Lens	Lens
Pressure output A (connecting thread, seals)	–	M26 x 1.5 IG, D	M26 x 1.5 IG, D	M26 x 1.5 IG, D	M26 x 1.5 IG, D
Return outlet R (connecting thread, seals)	G1 IG, G	–	–	–	–



airless open



airless closed

The reliable switching valve for diverse requirements. Available open or closed without operating energy.

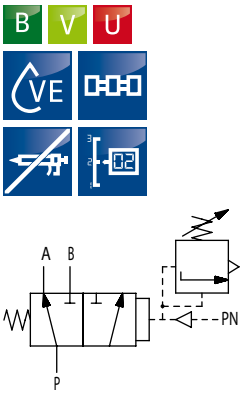
Special features: Can be switched under operating pressure, compact design, easy maintenance while installed.

PUSV Pneumatic unloading valves

	PUSV 10/1200	PUSV 5/3000	PUSV 6/3000
Permissible positive operating pressure	1,200 bar	3,000 bar	3,000 bar
Recommended flow rate	0 – 100 l/min	0 – 30 l/min	0 – 25 l/min
Dimensions H x W x D	245 x 105 x 95 mm	389 x ø 195 mm	250 x 170 x 130 mm
Weight	11.2 kg	23.3 kg	9.5 kg
Without operating energy (open/closed)	X / X	X / X	X / X
Pressure inlet P (connecting thread, seals)	G¾ IG, G	UNF 9/16 – 18 LH, D	UNF 9/16 – 18 LH, D
Pressure output A (connecting thread, seals)	G½ IG, G	UNF 9/16 – 18 LH, D	UNF 9/16 – 18 LH, D
Pressure output B (connecting thread, seals)	G½ IG, G	UNF 9/16 – 18 LH, D	UNF 9/16 – 18 LH, D

The pneumatically selected 3/2-way valve for quick switching between two high-pressure consumers without interruption.

Special features: Defined rest position when operating energy fails, can be switched under operating pressure, easy maintenance while installed.



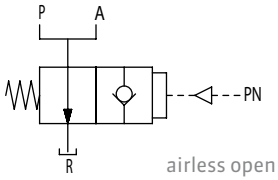
ESV Electrical switching valves

	ESV 18/1200	ESV 18/1200
Permissible positive operating pressure	1,200 bar	1,200 bar
Recommended flow rate	0 – 500 l/min	0 – 500 l/min
Dimensions H x W x D	321 x 110 x 110 mm	321 x 110 x 110 mm
Weight	17.8 kg	17.8 kg
Without operating energy (open/closed)	X / –	X / –
Pressure inlet P (connecting thread, seals)	G1 IG, G	Lens
Pressure output A (connecting thread, seals)	G1 IG, G	Lens
Return outlet R (connecting thread, seals)	G1 IG, G	G1 IG, G

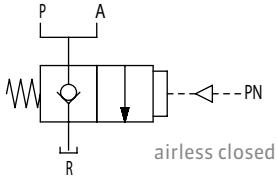
The electric high-pressure switching valve for the rapid shut-off of bypass or consumer lines. Available with different operating voltages.

Special features: Very fast cycle time, easy maintenance while installed, only one dynamic sealing point.

B



airless open



airless closed

LSV Pneumatically actuated switching valves

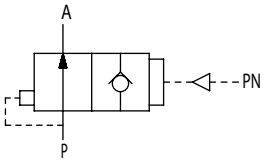
	LSV 16/400	LSV 25/400	LSV 32/400	LSV 25/600
Permissible positive operating pressure	400 bar	400 bar	400 bar	600 bar
Recommended flow rate	0 – 250 l/min	0 – 500 l/min	0 – 800 l/min	0 – 500 l/min
Dimensions H x W x D	480 x 144 x 140 mm	485 x 180 x 180 mm	495 x 190 x 190 mm	485 x 180 x 180 mm
Weight	15.1 kg	30.4 kg	48.6 kg	32.1 kg
Without operating energy (open/closed)	X / X	X / X	X / X	X / X
Pressure inlet P (connecting thread, seals)	G¾ IG, K	G1¼ IG, K	G1½ IG, K	G1¼ IG, G
Pressure output A (connecting thread, seals)	G¾ IG, K	G1¼ IG, K	G1½ IG, K	G1¼ IG, G
Return outlet R (connecting thread, seals)	G1 IG, K	G½ IG, K	G2 IG, K	G1½ IG, G

The proven switching valve for diverse requirements. The pneumatic control provides soft switching (switching speed can be adjusted). Conversion from airless open to airless closed possible.

Special features: Can be switched under operating pressure, easy maintenance while installed.

Z V

VE



MSV Diaphragm actuated switching valves

	MSV 6/2000	MSV 5/2500
Permissible positive operating pressure	2,000 bar	2,500 bar
Recommended flow rate	0 – 100 l/min	0 – 60 l/min
Dimensions H x W x D	330 x ø 250 mm	330 x ø 250 mm
Weight	18.6 kg	18.6 kg
Without operating energy (open/closed)	X / –	X / –
Pressure inlet P (connecting thread, seals)	Lens	Lens
Pressure output A (connecting thread, seals)	UNF 9/16 – 18 LH, D	UNF 9/16 – 18 LH, D
Return outlet R (connecting thread, seals)	–	–

The proven switching valve for diverse requirements. The pneumatic control provides soft switching.

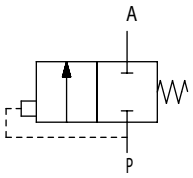
Special features: Can be switched under operating pressure, only one dynamic switching point.

ZV Closure valves

	ZV 29/300
Permissible positive operating pressure	300 bar
Recommended flow rate	0 – 1,000 l/min
Dimensions H x W x D	126 x SW80 mm
Weight	3.7 kg
Without operating energy (open/closed)	– / X
Pressure inlet P (connecting thread, seals)	G1½ IG, K
Pressure output A (connecting thread, seals)	G1½ IG, K
Return outlet R (connecting thread, seals)	–

The „flow stopper“ for low closing pressures: Reliably prevents the escape of delivery medium during the bypass operation of the pump (up to approx. 3 bar). Required for consumers without their own shut-off valve (e.g. TWK).

Special features: No external operating energy required, compact design, low pressure loss, nonferrous metal-free.

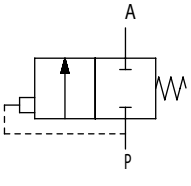


VZV Full stroke closure valves

	VZV 25/400	VZV 7/2000
Permissible positive operating pressure	400 bar	2,000 bar
Recommended flow rate	0 – 650 l/min	0 – 80 l/min
Dimensions H x W x D	85 x 190 x 60 mm	100 x 110 x 90 mm
Weight	4.8 kg	5.7 kg
Without operating energy (open/closed)	– / X	– / X
Pressure inlet P (connecting thread, seals)	M42 x 2 IG DKO–S	Lens
Pressure output A (connecting thread, seals)	G1¼ IG, K	Lens
Return outlet R (connecting thread, seals)	–	–

The „flow stopper“ for medium closing pressures: Reliably prevents the escape of delivery medium during the bypass operation of the pump (up to approx. 15 bar). Required for consumers without their own shut-off valve (e.g. TWK).

Special features: The closing function does not create additional pressure loss during high-pressure operation, no external operating energy required, compact design, low pressure loss, also nonferrous metal-free.

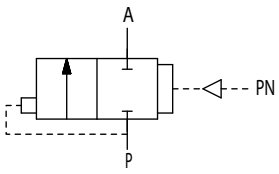


PZV Pneumatic closure valves

	PZV 23/800	PZV 12/1200
Permissible positive operating pressure	800 bar	1,200 bar
Recommended flow rate	0 – 800 l/min	0 – 250 l/min
Dimensions H x W x D	160 x 110 x 105 mm	175 x 110 x 105 mm
Weight	12.0 kg	10.3 kg
Without operating energy (open/closed)	X / –	X / –
Pressure inlet P (connecting thread, seals)	G1¼ IG, G	Lens
Pressure output A (connecting thread, seals)	G1¼ IG, G	Lens
Return outlet R (connecting thread, seals)	–	–

Z

VE



The „flow stopper“ for higher closing pressures: Reliably prevents the escape of delivery medium during the bypass operation of the pump (up to approx. 75 bar). Required for consumers without their own shut-off valve (e.g. TWK).

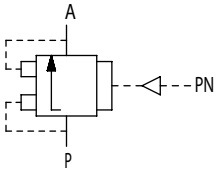
Special features: The closing function does not create additional pressure loss during high-pressure operation, compact design, low pressure loss.

PDV Pneumatic pressure maintaining valves

	PDV 11/1200	PDV 11/2000	PDV 9/2800
Permissible positive operating pressure	350 – 1,200 bar	500 – 2,000 bar	700 – 2,800 bar
Recommended flow rate	10 – 100 l/min	10 – 100 l/min	10 – 100 l/min
Dimensions H x W x D	370 x ø 113 mm	425 x ø 113 mm	425 x ø 113 mm
Weight	13.0 kg	13.9 kg	14.0 kg
Without operating energy (open/closed)	X / –	X / –	X / –
Pressure inlet P (connecting thread, seals)	Lens	Lens	Lens
Pressure output A (connecting thread, seals)	Lens	Lens	Lens
Return outlet R (connecting thread, seals)	–	–	–

D

VE



Preferred in multiple consumer systems. Maintains a constant system operating pressure when adding additional consumers and prevents pressure drops. Excellent dynamic characteristics at quick flow changes.

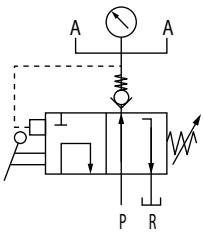
Special features: High response reproducibility, high response dynamics, minimum throttle resistance after opening, easy maintenance while installed.

DA Automatic pressure control units

	DA 630	DA 1000
Permissible positive operating pressure	250 – 630 bar	400 – 1,000 bar
Recommended flow rate	30 – 180 l/min	30 – 150 l/min
Dimensions H x W x D	480 x225 x 80 mm	480 x 360 x 80 mm
Weight	15.1 kg	17.3 kg
Without operating energy (open/closed)	X / X	X / X
Pressure inlet P (connecting thread, seals)	G¾ IG, K	G¾ IG, G
Pressure output A (connecting thread, seals)	G½ IG, K	G½ IG, G
Return outlet R (connecting thread, seals)	Rp1 IG	Rp1 IG

S B F R

VE



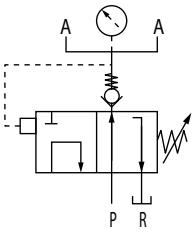
Valve works as proportional overflow valve when exceeding the set operating pressure. Several consumers (e.g. spray guns) can be operated simultaneously (multiple consumer operation). After the last consumer has been closed the valve switches to pressureless bypass operation.

Special features: Combines all relevant functions of high-pressure technology in a single component.

DRV Pressure control valves

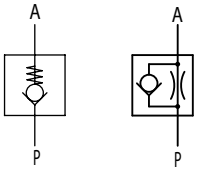
	DRV 150	DRV 250	DRV 630
Permissible positive operating pressure	15 – 150 bar	25 – 250 bar	100 – 630 bar
Recommended flow rate	20 – 100 l/min	20 – 100 l/min	15 – 80 l/min
Dimensions H x W x D	221 x 205 x 48 mm	221 x 205 x 48 mm	250 x 141 x 56 mm
Weight	2.9 kg	2.9 kg	2.6 kg
Without operating energy (open/closed)	X / X	X / X	X / X
Pressure inlet P (connecting thread, seals)	G½ IG, K	G½ IG, K	G½ IG, K
Pressure output A (connecting thread, seals)	M24x1.5 DKO-S	M24x1.5 DKO-S	G½ IG, K
Return outlet R (connecting thread, seals)	G½ IG	G½ IG	G½ IG

B F R



Valve works as proportional overflow valve when exceeding the set operating pressure. Several consumers (e.g. spray guns) can be operated simultaneously (multiple consumer operation). After the last consumer has been closed the valve switches to pressureless bypass operation.

Special features: Compact design.



RV Check valves / throttle check valves

	RV 36/300	RV 10/1200	RV16/1200	RV 5/3200	DRV 5/1200
Permissible positive operating pressure	300 bar	1,200 bar	1,200 bar	3,200 bar	1,200 bar
Recommended flow rate	0 – 1,000 l/min	0 – 125 l/min	0 – 300 l/min	0 – 50 l/min	0 – 50 l/min
Dimensions H x W x D	126 x SW80	135 x SW46	185 x SW60	98 x SW32	120 x SW60
Weight	3.3 kg	1.2 kg	2.8 kg	0.5 kg	1.7 kg
Without operating energy (open/closed)	– / X	– / X	– / X	– / X	– / X
Pressure inlet P (connecting thread, seals)	G1½ AG, K	M24x1.5 DKO-S*	M36x2 DKO-S*	UNF 9/16 – 18 LH, D	G1 AG, G
Pressure output A (connecting thread, seals)	G1½ IG, K	G1 AG, G*	G1¼ AG, G*	M26 x 1.5 AG, D	G1¼ IG, G
Return outlet R (connecting thread, seals)	–	–	–	–	–

Check valves:
Prevents the reversal of the specified direction of flow and thus a return of the delivery medium.

Special features: Stainless steel design, compact design.

* other connections on request

Throttle check valve:
For the direction-dependent restriction of the delivery medium. The valve restricts the medium in one direction and allows it to flow unrestricted in the opposite direction.

Special features: Flexible throttle strength selection through exchangeable nozzle.

URACA – professional high pressure system supplier

Products and services

Pump units

Unit assembly and drives at your convenience in stationary or mobile design. Whether in container, on skid or on trailer.

- Electrically driven units
- Engine driven units
- Hydraulically driven units
- Tailor made pump control systems

Pumps

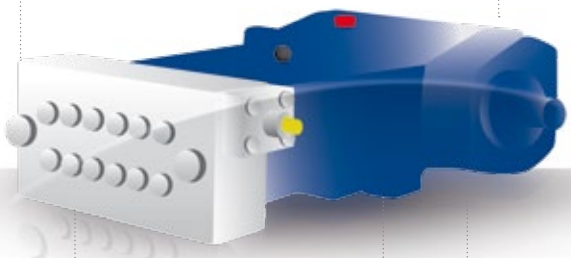
The core of the URACA technology: Superior quality, powerful high pressure positive displacement pumps, also for high-demanding continuous use. URACA pumps are designed acc. to API 674 on demand.

- Process and industrial pumps – reciprocating plunger pump or diaphragm design
- Test pumps
- High pressure water jetting pumps
- Sewer cleaning pumps

High pressure water jetting systems

URACA gathered a lot of experience and engineering competence in the field of water jetting. URACA designs and manufactures complete systems, from simple cleaning head positioning devices up to semi-automatic and automatic operated systems for

- Reactor and vessel cleaning
- Pipe and tube cleaning
- Surface conditioning
- And others – just give us your request!



Tools

URACA manufactures a wide range of cleaning tools for any application.

- Spray guns
- Tank cleaning heads
- Sewer cleaning nozzles
- Rotating nozzles
- Floor cleaners

Accessories and components

URACA's pump range is completed with a wide range of high pressure accessories and components, like

- Nozzles
- Remote controls
- Hoses
- **High pressure valves**
- 90 degree rotary joint
- Multi-consumer systems
- Resonators and pulsation dampers

Service

After sales service is URACA's top priority. The qualified and specially trained personnel and technicians are prepared to support you at any time, whether for

- Spare parts
- Revamps
- Upgrades in case of changed process conditions
- Training
- Supervising
- Or answers to any questions you may have in terms of URACA equipment

Please do not hesitate to contact us!

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Ventile.e 03.15