

SWING CHECK VALVES WITH HYDRAULIC IMPACT DAMPER

DN 700 (28"), 1000 (40") mm,

PN 8,0 (80); 10,0 (100) MPa (bar) Class 600

APPLICATION

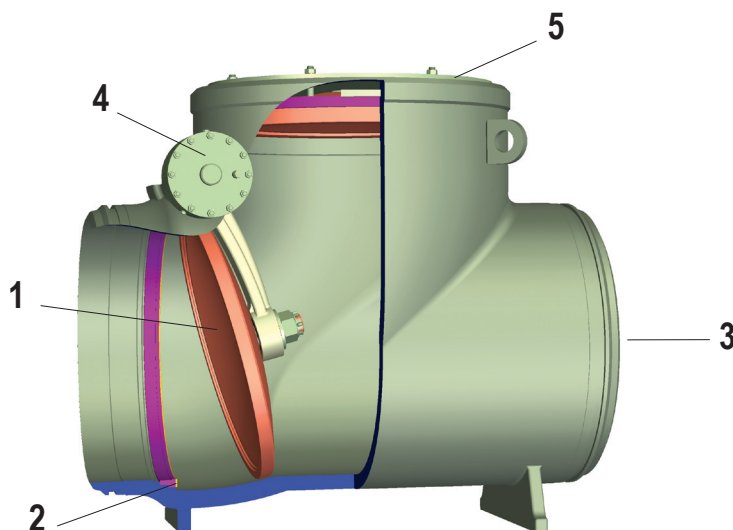
Used as stop valves for pipelines transporting:

- water, vapor and other nonflammable, non-explosive and non-toxic media (Water);
- oil, petrochemical products, synthetic oil and other explosive flammable liquids (Oil).

CONSTRUCTIONS RANGE TABLE

DN, MM (inch)	PN, MPa (bar)	Designation	Operating medium, temperature, °C	Connection to the pipeline	Allowable leakage rate
700 (24)	8,0 (80)	PT44016-700	Oil ≤ 100	Welded	20 dm ³ /min
	10,0 (100)				
1000 (40)	8,0 (80)	PT44016-1000			
	10,0 (100)				40 dm ³ /min

DESIGN FEATURES



1. The check valves are operated by the line fluid: pressure drop or counter medium flow causes the disc to move on the pivot transversely to the axis of the pipeline until it is pressed against the seats thus blocking the flow. Valve design features self adjustable disc that significantly increases seal life and tightness consistency, facilitates maintainability in real field conditions.

2. Corrosion-resistant overlay on the sealing surfaces of the body and the disc increases reliability and extends service life of the valve.

3. Full bore body design enables maintenance and diagnostic equipment to pass through. If requested by the Customer, swing check valves may be completed with special devices to hold the disc in open position.

4. The swing check valves are equipped with hydraulic impact damper that enables shock-free closing under the effort of reverse direction flow. Depending on operation conditions, the valves may be completed with 2 types of impact damper: rotary or pivot-piston. Both impact damper designs allow to set operating time on the fly and do not require special maintenance during their service life.

5. Self-sealing valve cover design significantly facilitates assembly and disassembly of the valves during the repair works and reduce weight and dimensions of the valves.

TIGHTNESS

The closure sealing is metal-to-metal type.

Valve tightness to the external environment in body-to-flange connection (along the pivot) is provided by a flat gasket.

MOUNTING IN THE PIPELINE

Mounting in the pipeline – on horizontal pipelines – valve base downwards; on sloping pipelines (also in vertical position) – inlet pipe downwards with disk pivot in horizontal position.

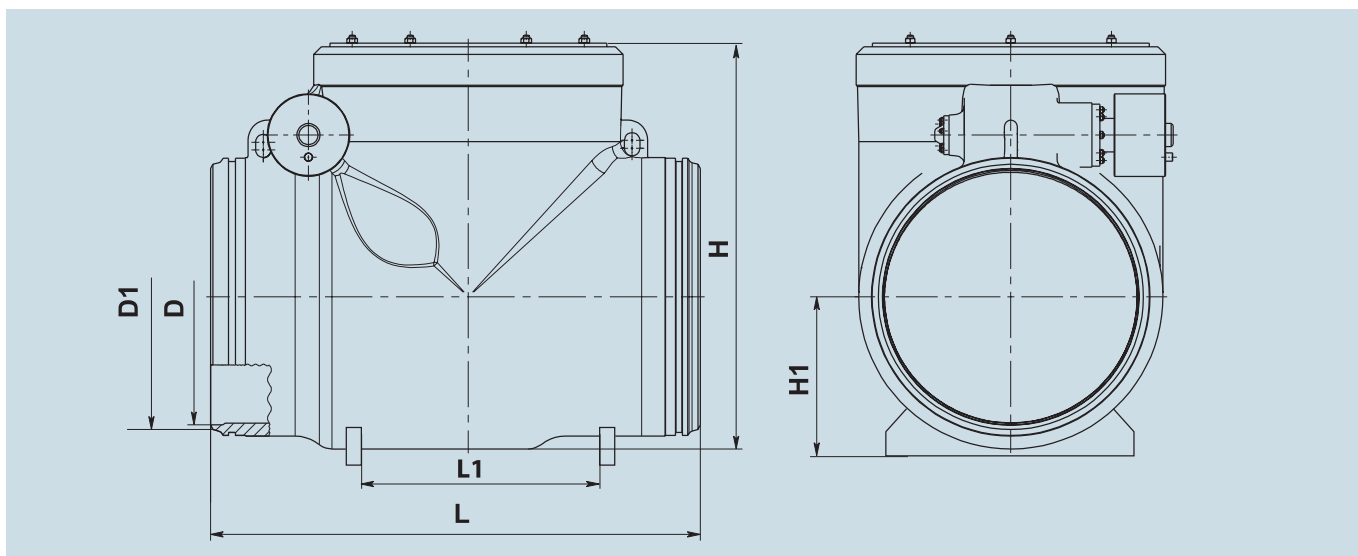
Connection to the pipeline – welded.

Line medium flow – under disc.

CLIMATIC SERVICE CONDITIONS

Ambient temperature range: – 60 °C to + 50 °C.

DIMENSIONS AND DRAWING



DN, mm (inch)	Designation	Dimensions, mm						Weight, kg
		D	D1	L	L1	H	H1	
700 (28)	PT44016-700	695	726	1400	800	1304	500	2230
1000 (40)	PT44016-1000	992	1028	1900	1325	1703	680	4880

MATERIALS

Cadmium or zinc coating is available for tropical versions.

Part name	Material	
	DIN	ASTM
Body	C22, 13Mn6	A556, AISI 1020, A350LF2
Disc	C22, 13Mn6	A556, AISI 1020, A350LF2
Axle	X20Cr13	A473, A580, AISI 420
Flange	C22, 13Mn6	A556, AISI 1020, A350LF2
Nut	C35, 41CrS4	A915, AISI 1035, A331, AISI 5140
Pin	C35, 24CrMo5, 1.7218	A915, AISI 1035, A507, A519
Body overlay	Corrosion resistant over-welding	
Disc overlay	Corrosion resistant over-welding	

COMPLETE SET OF SUPPLY

Complete set of supply includes: valve, valve certificate, technical manual and service guide.