SWING CHECK VALVES

DN 150 (6″)...1000 (40″) мм, PN 2,5 (25)...8,0 (80) MPa (bar)

APPLICATION

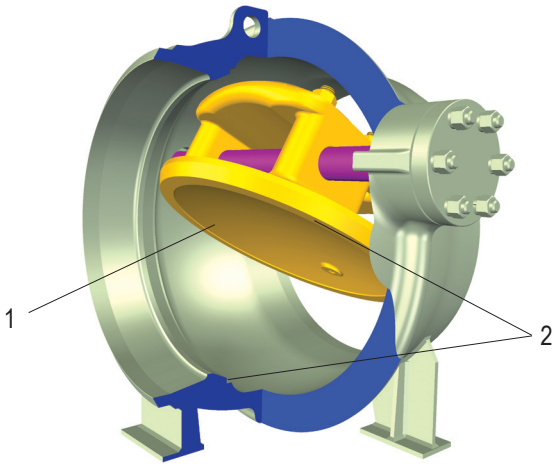
Used as stop valves for pipelines transporting:

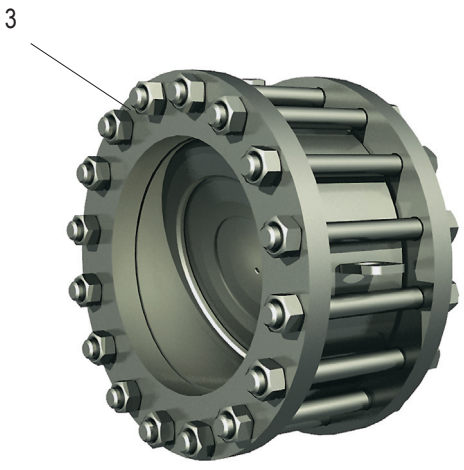
- water, vapor and other nonflammable, non-explosive and non-toxic media (Water);
- oil, petrochemical products, synthetic oil and other explosive flammable liquids (Oil).

CONSTRUCTIONS RANGE TABLE

DN, mm (inch)	PN, MPa (bar)	Designation	Operating medium, temperature, °C	Connection to the pipeline	Allowable leakage rate
150 (6)	4,0(40)	PT44152-150	Water ≤ 300 Oil ≤ 425	Wafer type (between pipeline flanges)	5 cm³/min
	6,4(64)				
200 (8)	4,0(40)	PT44152-200	Water ≤ 300		7 cm³/min
	6,4(64)				
	4,0(40)		Oil ≤ 425		7 dm³/min
	6,4(64)				
300 (12)	2,5(25)	PT44151-300	Water ≤ 300		12 cm³/min
			Oil ≤ 300		12 dm³/min
	4,0(40)		Water ≤ 300		25 cm³/min
			Oil ≤ 425		25 dm³/min
	6,4(64)		Water ≤ 300		25 cm³/min
			Oil ≤ 425		25 dm³/min
400 (16)	4,0(40)	PT44072-400	Water ≤ 300	Welded	12 cm³/min
			Oil ≤ 300		25 dm³/min
	6,4(64)		Water ≤ 300		12 cm³/min
500 (20)	2,5(25)	PT44070-500	Water ≤ 425		45 cm³/min
			Oil ≤ 300		45 dm³/min
	8,0(80)	PT44107-500	Oil ≤ 90		20 dm³/min
600 (24)	2,5(25)	PT44070-600	Water ≤ 425		45 cm³/min
			Oil ≤ 300		45 dm³/min
800 (32)	2,5(25)	PT44070-800	Water ≤ 425		80 cm³/min
			Oil ≤ 300		80 dm³/min
1000 (40)	2,5(25)	PT44070-1000	Water ≤ 425		80 cm³/min
			Oil ≤ 300		80 dm³/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.

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

3. Wafer connection of check valves PT44151-300 and PT44152-150, 200 provides high level of maintainability and serviceability of industrial valves.

TIGHTNESS

The valve closure 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 or wafer type (tightening between pipeline flanges for PT44152 and PT44151). When required by Customer, flanged valves may be supplied complete with connection accessories (flanges, gaskets, fasteners).

Line medium flow – under disc.

CLIMATIC SERVICE CONDITIONS

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

COMPLETE SET OF SUPPLY

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

PT44152-200

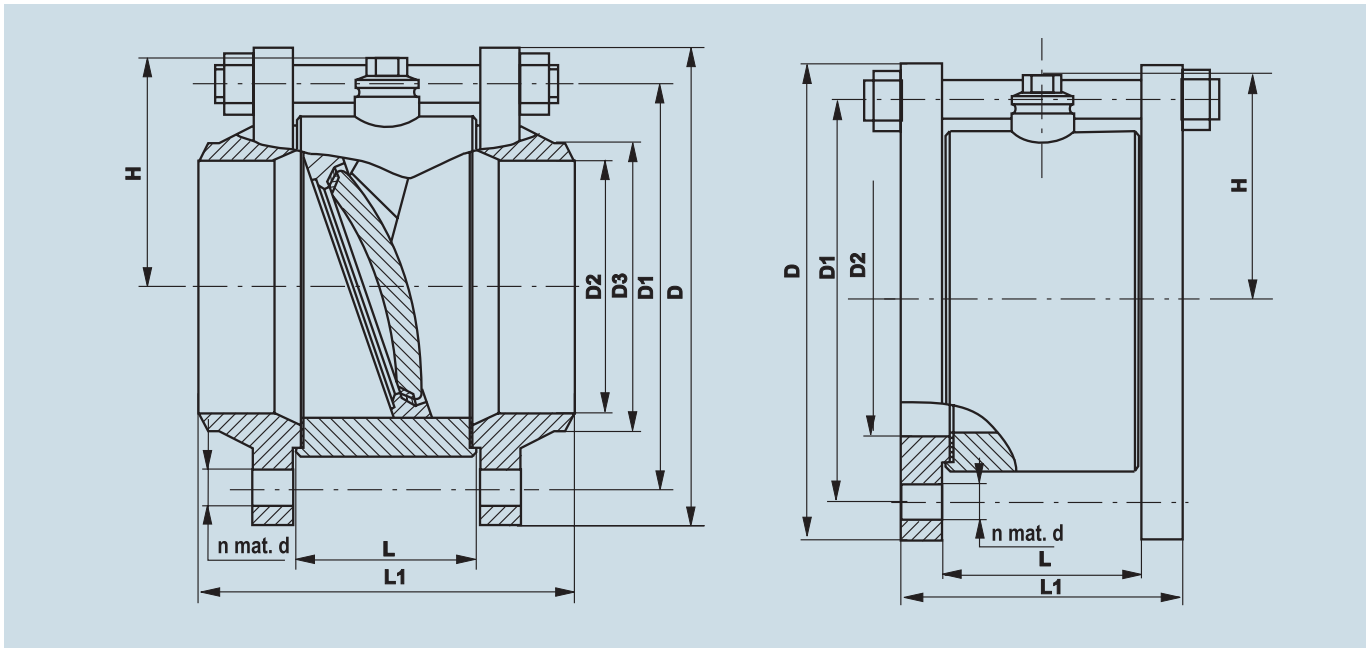
RATED PRESSURE PN 2,5 (25); 4,0 (40); 6,4 (64) MPA (BAR)
INTERNAL DIAMETERS DN 150 (6″), 200 (8″), 300 (12″) MM

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
Gasket	Paronite PON-A	Paronite PON-B
Bolt	C22, X20Cr13	A556, AISI 1020, A473, A580, AISI 420
Clevis	X20Cr13	A473, A580, AISI 420
Pivot	X20Cr13, X20CrNi 17.2	A473, A580, AISI 420, A176, A479, AISI 431
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	

DIMENSIONS AND DRAWING



DN, mm (inch)	PN, MPa (bar)	Designation	Dimensions, mm									Weight, kg	
			D	D1	D2	D3	n	d	L	L1	H	Without mating parts	With mating parts
150 (6)	4,0(40)	PT44152-150	300	250	145	161	8	26	110	252	152	50	16
	6,4(64)		340	280				33		327		82	
200 (8)	4,0(40)	PT44152-200	375	320	200	222	12	30	140	316	183	100	32
	6,4(64)		405	345	198			33		366		135	
300 (12)	2,5(25)	PT44151-300	485	430	325	-	16	30	160	230	251	140	72
	4,0(40)		510	450	301	330		33		390		209	
	6,4(64)		530	460	294			39		406		273	

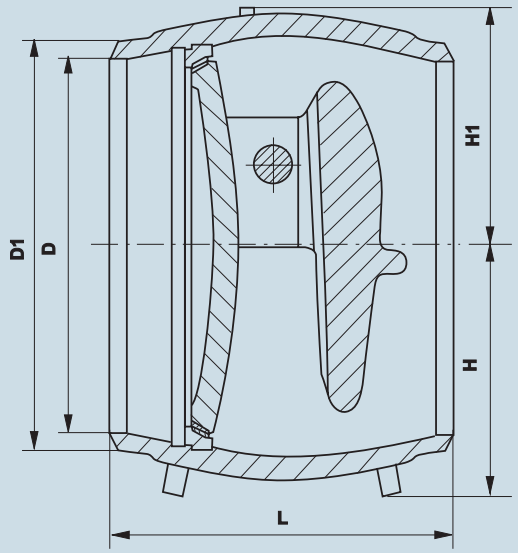
RATED PRESSURE PN 2,5 (25); 4,0 (40); 6,4 (64) MPA (BAR)
INTERNAL DIAMETERS DN 400 (16″), 500 (20″), 600 (24″), 800 (32″), 1000 (40″) MM

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, GS-16Mn5,GS-20Mn5	A556, AISI 1020, A350LF2, A216 Gr WCC
Gasket	Paronite PON	Paronite PON
Axle	X20Cr13, X20CrNi 17.2	A473, A580, AISI 420, A176, A479, AISI 431
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	

DIMENSIONS AND DRAWING



DN, mm (inch)	PN, MPa (bar)	Designation	Dimensions, mm					Weight, kg
			D	D1	L	H	H1	
400 (16)	4,0 (40)	PT44072-400M	432	398	400	310	310	195
	6,4 (64)							200
500 (20)	2,5 (25)	PT44070-500M	535	500	450	330	315	400
600 (24)		PT44070-600M	640	600	500	385	415	616
800 (32)		PT44070-800M2	826	790	600	465	425	790
1000 (40)		PT44070-1000M2	1028	992		560	520	926

If requested by the Customer, swing check valves may be completed with damper.

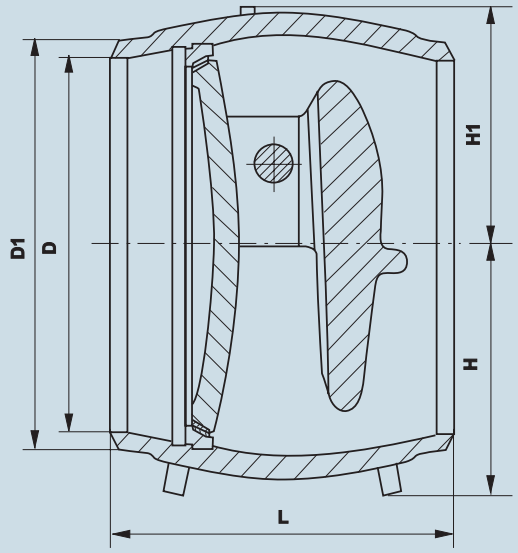
RATED PRESSURE PN 8,0 (80) MPA (BAR)
INTERNAL DIAMETERS DN 500 (20˝) MM

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	C 35, 41CrS4	A915, AISI 1035, A331, AISI 5140
Pin	C 35, 24CrMo5, 1.7218	A915, AISI 1035, A507, A519
Body overlay	Corrosion resistant over-welding	
Disc overlay	Corrosion resistant over-welding	

DIMENSIONS AND DRAWING



DN, mm (inch)	Designation	Dimensions, mm					Weight, kg
		D	D1	L	H	H1	
500 (20)	PT44107-500	500	540	450	330	315	380

If requested by the Customer, swing check valves may be completed with damper.