

FORGED STEEL

HORIZONTAL LIFT CHECK VALVE (Class-800, 1500)

INTRODUCTION

Leader forged steel check valve is to provide with single disc. With the force of medium, the disc will automatically open or close. When the media stops the flow, the disc will be closed under its own force. No manual intervention is involved in the whole process. Check valve is mainly to prevent the media reverse flow and ensure one-way flow of media channels only. It prevents accidents while a sudden loss of power in the pipeline medium such as the power equipment like pump damages, and the medium reverse flow against power source.

PRINCIPAL FEATURES

- Design Std.: BSEN ISO 15761, ASME B16.34.
- Pressure Temperature Rating as per ASME B16.34, BSEN ISO 15761.
- Sturdy design for high pressure & temperature service.
- Bolted body-cover design, Valves with welded cover also available on request.
- Bolted body-cover joints provided with spiral-wound stainless steel gasket and graphite filler for protection against leaks.
- Piston / Disc is guided in the Cover assuring accurate return to seating to achieve leak tightness.
- Spring-loaded disc on check valves suitable for non horizontal applications too available on request.
- Minimum differential pressure of 1 bar required for operating the valve.
- Socket welded ends as per ASME B16.11.
- Screwed Female Taper ends as per ASME B1.20.1 (NPT) / BS 21 & Screwed Female Parallel ends as per ISO 228 / BS 21 available on request.
- Socket-weld Class 800 Reduced Bore valves confirm to Class 3000 (or Sch.80 / Sch. XS) fittings of ASME B16.11.
- Socket-weld Class 800 Full Bore valves confirm to Class 6000 (or Sch.160) fittings of ASME B16.11.
- Butt weld ends as per ASME B 16.25 available on request.
- Low Temperature Carbon Steel & Austenitic SS forging for body and cover design qualified as per BS 6364 for Cryogenic service available on request.
- Valves can be offered to NACE MR-0175 and other special NACE requirements.
- Valves are available with IBR certification.

END CONNECTION

Socket Weld / Screwed ends / Butt Welded ends.

WORKING PRESSURE & TEMPERATURE LIMITS

Maximum working pressure 138 Bar (CL-800), 255 Bar (CL-1500).
Maximum working temperature 425°C.
See Pressure / Temperature chart at page No.38.



■ Item Code:	FCS012,	FCS013,	FCS014
■ Bore Type:	Reduced Bore	Full Bore	-----
■ Pressure Rating:	CL-800,	CL-800,	CL-1500
■ Testing Standard:	API-598, BSEN 12266 Part-1		
■ Size Range:	15mm to 50mm		
■ Product Standard:	BSEN ISO 15761, ASME B16.34		

SUITABLE FOR

Water	Oil	Air	Gases	Steam
✓	✓	✓ (#)	✓	✓

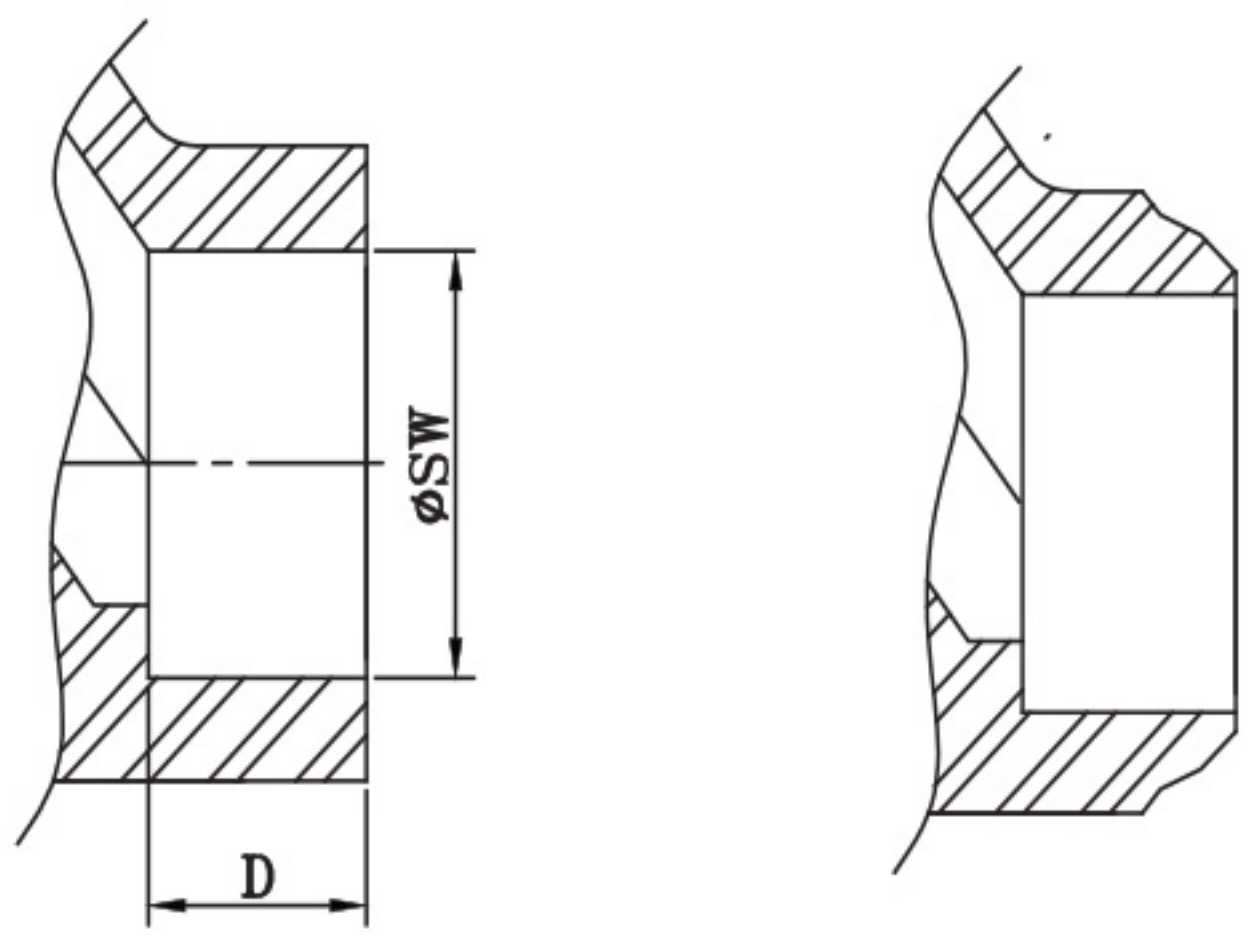
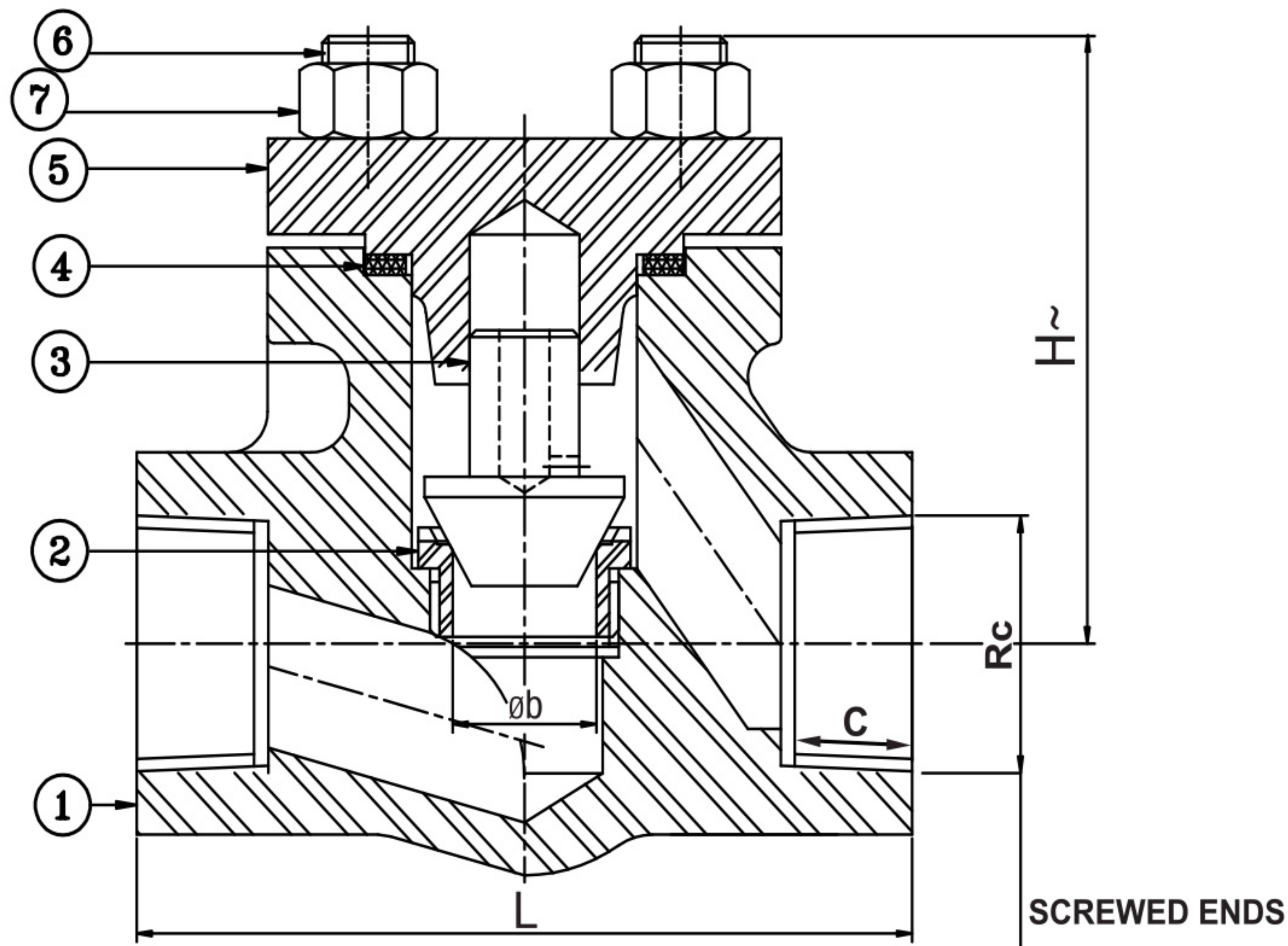
(#) Recommended with soft seating for tight sealing

TEST PRESSURE (Hydrostatic)

Rating	CL-800	CL-1500
Body (Hyd.)	207 Bar	384 Bar
Seat (Hyd.)	152 Bar	281 Bar

TRIM MATERIAL COMBINATION (ON REQUEST)

Trim No.	Seat Ring Face	Wedge Seat Face	Stem	Backseat Bush	Lantern Ring
2	F304	F304	F304/AISI304	F304/AISI304	F304/AISI304
5	STELLITE(#6)	STELLITE(#6)	F6a/AISI410	F6a/AISI410	F6a/AISI410
8	STELLITE(#6)	F6a/13%Cr.	F6a/AISI410	F6a/AISI410	F6a/AISI410
9	MONEL	MONEL	MONEL	MONEL	MONEL
10	F316	F316	F316/AISI316	F316/AISI316	F316/AISI316
12	316+Stellite(#6)	316	F316/AISI316	F316/AISI316	F316/AISI316
13	ALLOY 20	ALLOY 20	ALLOY 20	ALLOY 20	ALLOY 20



SOCKET WELD ENDS BUTT WELD ENDS

DIMENSIONAL DATA CLASS-800 (REDUCED BORE)

SIZE (mm)	15	20	25	32	40	50	
L	80	88	100	124	145	170	
Øb	10	12.7	18	23	30	35	
H~	55	60	78	89	97	120	
C	17	18	21	21	23	24	
Rc	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	
ØSW	AS PER ASME B16.11	22.2	27.6	34.3	43.1	49.2	61.7
		21.8	27.2	33.9	42.7	48.8	61.2
D	11	14	14	14	14	17	

DIMENSIONAL DATA CLASS-1500

SIZE (mm)	15	20	25	32	40	
L	100	124	145	170	170	
Øb	12	16	19	31	31	
H~	78	90	97	120	120	
C	21	23	23	24	24	
Rc	1/2"	3/4"	1"	1-1/4"	1-1/2"	
ØSW	AS PER ASME B16.11	22.2	27.6	34.3	43.1	49.2
		21.8	27.2	33.9	42.7	48.8
D	11	14	14	14	14	

DIMENSIONAL DATA CLASS-800 (FULL BORE)

SIZE (mm)	15	20	25	32	40	50	
L	88	100	124	145	170	228	
Øb	12.7	18	23	30	35	46	
H~	60	78	90	97	120	150	
C	18	21	23	23	24	27	
Rc	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	
ØSW	AS PER ASME B16.11	22.2	27.6	34.3	43.1	49.2	61.7
		21.8	27.2	33.9	42.7	48.8	61.2
D	11	14	14	14	14	17	

MATERIAL SPECIFICATION

P.No.	NAME OF PART	CARBON STEEL		ALLOY STEEL				STAINLESS STEEL			
		A105	A350 LF2	A182 F5	A182 F11	A182 F22	A182 F9	A182 F304	A182 F316	A182 F304L	A182 F316L
1	BODY	A105	A350 LF2	A182 F5	A182 F11	A182 F22	A182 F9	A182 F304	A182 F316	A182 F304L	A182 F316L
2	SEAT RING	ASTM A276 TYPE 410 SS 304		SS 410	SS 410	SS 410	SS 410	SS 304	SS 316	SS 304L	SS 316L
3	DISC	ASTM A217 Gr.CA15/ SS 304 ASTM 276 TYPE 410		CA15/ SS 410	CA15/ SS 410	CA15/ SS 410	CA15/ SS 410	SS 304	SS 316	SS 304L	SS 316L
4	GASKET	SPIRAL WOUND STAINLESS STEEL GRAPHOIL FILLER									
5	COVER	A105	A350 LF2	A182 F5	A182 F11	A182 F22	A182 F9	A182 F304	A182 F316	A182 F304L	A182 F316L
6	STUDS	A193 B7	A320 L7	A193 B7	A193 B7	A193 B16	A193 B16	A193 B8	A193 B8	A193 B8	A193 B8
7	NUTS	A194 2H	A194 GR.4	A194 2H	A194 GR.4	A194 GR.4	A194 GR.4	A194 GR.8	A194 GR.8	A194 GR.8	A194 GR.8