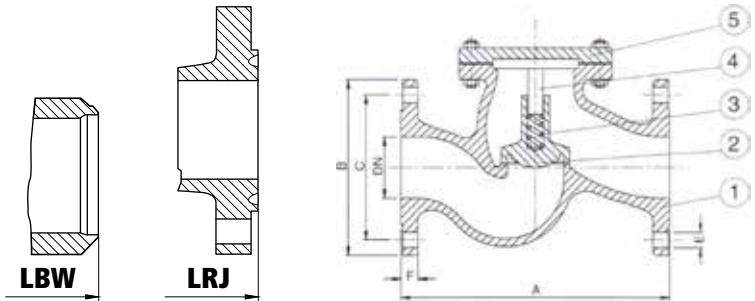


PISTON CHECK VALVE

OPTIONS

- Special paintings
- St or other materials trim covering
- Other tests on request



STANDARDS

- Sides distance according to DIN 3202
 - Design: DIN 3352
- Flanges according to UNI EN 1092-1 PN 16

FEATURES

- Bolted Bonnet
- RF, RTJ and BW flanges

DIMENSIONS (mm)

DN	15	20	25	32	40	50	65	80	100	125	150	200	250
A	130	150	160	180	200	230	290	310	350	400	580	600	730
B	95	105	115	140	150	165	185	200	220	250	285	340	405
C	65	75	85	100	110	125	145	160	180	210	240	295	350
F	14	16	16	16	18	18	18	20	20	22	22	24	26
E	14	14	14	18	18	18	18	18	18	18	23	23	23
N*	4	4	4	4	4	4	4	8	8	8	8	8/12	8/12
Peso (Kg)	4	5	6	8	10	14	17	22	32	51	83	132	205

* N° of holes

TRIM CONFIGURATIONS

API TRIM No	Nonimal Trim	Trim code	Disc/Wedge	Seat
1	F6	F6	F6 (13Cr)	410 (13Cr)
2	304	304	304 (18Cr-8Ni)	304 (18Cr-8Ni)
3	310	310	310 (25Cr-20Ni)	310 (25Cr-20Ni)
4	Hard 410	F6-H	F6 (13Cr)	F6 (13Cr)
5	410 Full Hard faced	F6-HF	F6+St Gr6 (CoCr Alloy)	410+St Gr6 (CoCr Alloy)
5A	410 Full hard Faced	F6-HF	F6+Hardf. NiCr Alloy	410+Hardf. NiCr Alloy
6	410 and Ni-Cu	F6-HFS	F6 (13Cr)	Monel 400 (NiCu Alloy)
7	410 and Full Hard	410	F6 (13Cr)	F6 (13Cr) (750HB)
8	410 and Hard Faced	F6-HFS	F6 (13Cr)	410+St Gr6 (CoCr Alloy)
8A	410 and Hard Faced	F6-HFS	F6 (13Cr)	410+Hardf. NiCr Alloy
9	Monel	Monel	Monel (NiCu Alloy)	Monel 400 (NiCu Alloy)
10	316	316	316 (18Cr-Ni-Mo)	316 (18Cr-8Ni-Mo)
11	Monel and Hard Faced	Monel-HFS	Monel (NiCu Alloy)	Monel 400 St Gr6
11A	Monel and Hard Faced	Monel-HFS	Monel (NiCu Alloy)	410 Hardf. NiCrA
12	316 and Hard Faced	316-HFS	316 (18Cr-Ni-Mo)	316+St Gr6
12A	316 and Hard Faced	316-HFS	316 (18Cr-Ni-Mo)	316 Hardf. NiCr Alloy
13	Alloy 20	Alloy 20	Alloy 20 (19Cr-29Ni)	Alloy 20 (19Cr-29Ni)
14	Aloy 20 and Hard Faced	Alloy 20-HFS	Alloy 20 (19Cr-29Ni)	Alloy 20 St Gr6
14A	Alloy 20 and Hard Faced	Alloy 20-HFS	Alloy 20 (19Cr-29Ni)	Alloy 20 Hardf. NiCr Alloy
15	304 Full Hard Faced	304-HF	304+St Gr6	304+St Gr6
16	316 Full Hard Faced	316-HF	316+St Gr6	316+St Gr6

GATE VALVE MATERIALS

Material Group	Common name	Material Type	Forging Spec	UNS	Casting Spec. Equivalent	DIN	DIN W. No	Application	
Carbon Steel	CS	C-Mn-Fe	A105N	K03504	A216-WCB	C22.8 DIN 17243	1.0460	General non-corrosive service from -29°C to 427°C	
Low temperature Carbon Steel	LTCS	C-Mn-Fe	A350-LF2	K03011	A352-LC1	TSTE 355 DIN 18103	1.0566	General non-corrosive service from -46°C to 340°C, LF2 to 427°C	
					A352-LCB				
					A352-LCC				
Low temperature alloy steel	Nickel Steel	3.1/2Ni	A350-LF	K32025	A352-LC3	10Ni14	1.5637	-101°) to 340°C	
Low Alloy Steel	Moly Steel	C-1/2Mo	A182-F1	K12822	A217-WC1	15Mo3	1.5415	Up to 468°C	
	Alloy Steel Chrome Moly	1.1/4Cr-1/2Mo	A182-F11 cl2	K11572	A217-WC6	13CrMo44	1.7335	Up to 593°C	
		2.1/4Cr-1Mo	A182-F22 cl3	K21590	A217-WC9	10CrMo910	1.7380	Up to 593°C, HP steam	
		5Cr-1/2Mo	A182-F5a	K41545	A217-C5	12CrMo195	1.7362	High temp. refinery service	
		9Cr-1Mo	A182-F9	K90941	A217-C12	X 12 CrMo 9 1	1.7386	High temp. erosive refinery service	
		9Cr-1Mo-V	A182-F91		A217-C12A	X 10 CrMoVNb 9 1	1.4903	High pressure steam	
Stainless Steel	Austenitic S.Steel 300 series S. Steel	304 : 18Cr-8N	A182-F304	S30400	A351-CF8	DIN X5CrNi 18 9	1.4301	0.04% min. carbon for temp. >538°C	
		304L : 18Cr-8Ni	A182-F304L	S30403	A351-CF3	X 2 CrNi 19 11	1.4306	Up to 427°C	
		304H	A182-F304H	S30409	A351-CF10	n/a	n/a		
		316 : 16Cr-12Ni-2Mo	A182-F316	S31600	A351-CF8M	DIN X5CrNiMo 18 10	1.4401	0.04% min. carbon for temp. >538°C	
		316L : 16Cr-12Ni-2Mo	A182-F316L	S31603	A351-CF3M	X 5 CrNiMo 17 12 2	1.4404	Up to 427°C	
		316H :	A182-F316H	S31609	A351-CF10M	n/a	n/a		
		316Ti :	A182-F316 Ti	S31635		X 6 CrNiMoTi 17 12 2 1.4571	1.4571	Special grade	
		321 : 18Cr-10Ni-Ti	A182-F321	S32100		X 6 CrNiTi 18 10	1.4541	0.04%min. carbon (grade F321H) and heat treat at 1100°C for service temps. >538°C	
		321H	A182-F321H	S32109		n/a	n/a		
		347 : 18Cr-10Ni-Cb(Nb)	A182-F347	S34700	A351-CF8C	DIN 8556	1.4550	0.04%min. carbon (grade F347H) and heat treat at 1100°C for service temps. >538°C	
	347H	A182-F347H	S34709		n/a	n/a			
		317L	A182-F317L	S31703	A351-CG3M*	X2CrNi-Mo18-16-4	1.4438		
		Alloy 20	28Ni-19Cr-Cu-Mo	A182-F20*	N08020	A351-CN7M†	DIN 1.4500	2.4660	Service to 316°C*
		Duplex 2205	22Cr-5Ni-3Mo-N	A182-F51	S31803	A351-CD3MN	X2CrNi-MoN22-5-3	1.4462	Service to 316°C – The original S31803 UNS designation has been supplemented by S32205 which has higher minimum N,CR, and Mo
					S32205	A890-J92205	DIN 10088-1 (95)		
		Super Duplex 2507	25Cr-7Ni-4Mo-N	A182-F53	S32750	A351-CD4MCu*	X2CrNi-MoN27-7-4	1.4501	Service to 316°C
						A890 5A*	DIN 10088-1 (95)		
		Super Duplex F55	25Cr-7Ni-3.5Mo-N-Cu-W	A182-F55	S32760	A995-CD3MW-CuN			Service to 316°C
		Super Austenitic 6Mo	20Cr-18Ni-6Mo	A182-F44	S31254	A351-CK3MCuN	X1CrNiMoC-uN20-18-7	1.4547	Service to 316°C
							DIN 10088-1 (95)		
Nickel-Iron Alloy	Incoloy 800	33Ni-42Fe-21Cr	B564-N08800	N08800		X10NiCrAl-Ti32-20	1.4876	Service to 538°C	
	Incoloy 825	42Ni-21.5Cr-3Mo-2.3Cu	B564-N08825	N08825	A494-CU5M-CuC*	DIN 17744	2.4858	Service to 316°C for N02200, 648°C for N02201	
Nickel	Nickel Steel	99/95Ni	B160-N02200 (bar)	N02200	A494-CZ-100*	NW2200	1.7740		
Nickel-Copper	Monel 400	67Ni-30Cu	B564-N04400	N04400	A494-M35-1	DIN 17730	2.4360		
	Monel 500		B564-N05500*	N05500			2.4375		
Nickel-Alloy	904L		904L*	N08904	n/a	Z2 NCDU 25-20	1.4539		
Nickel Super-alloys	Inconel 600	72Ni-15Cr-8Fe	B564-N06600	N06600	A494-CY40*	DIN 17742	2.4816		
	Inconel 625	60Ni-22Cr-9Mo-3.5Cb	B564-N06625	N06625	A494-CW-6MC*		2.4856		
	Hastelloy C-276	54Ni-15Cr-16Mo	B564-N10276	N10276	A494-CW-2M*	NiMo 16 Cr 15 W	2.4819		
Titanium	Titanium	98Ti	B381-Gr2	R50400	B367-C2*	Ti 2	3.7035	Special grade	