

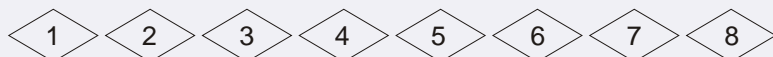
KOFLow

CHECK VALVE SERIES

43-71P

FIGURE NUMBER SYSTEM

Check Valve Figure Number System



1	Size	Xxin; xx, mm						
2	Operation type	Not suitable						
3	Valve Type	H-Check Valve						
4	Pressure	0-PN10	1-PN16 class150	2-PN25	3-class300	4-PN40 class400	6-PN64 class600	
		9-class900	10-PN100	15-class1500	16-PN160	20-PN200	25-class2500	
5	Connection Ends	RF-Raised Face	FF Flat Face	MFM Male and Female Face		TG Tongue and Groove face		
		RJ Ring Joint		BW Butt weld		WF-Wafer Type		
6	Structure Type	1-Lift Type		4-Single Disc Swing type		6-Double Disc Swing type		7-Tilting Disc Type
7	Basic Material	C-WCB	C-C5	C6-WC6	C9-WC9	BL-LCB		CL-LCC
		8-CF8	8M-CF8M	3-CF3	3M-CF3M	ML-MONEL		
8	Material of Seat face or Liner	H-Cr13 S.S		E-18-8 S.S		R-Mo2Ti S.S		
		D- nitriding steel		M- Monel Alloy		Y-Stellited		

Note:

- 1、 Use "W" to express seat sealing surface material which is processed directly by valve body.
- 2、 When the materials of sealing surface are different, use low hardness material symbol to express
- 3、 Special Requirements not shown ,should be indicated in the purchase order
- 4、 The models listed in the sample book have no reference to pressure、 sizes and valve material symbols, they are to be decided by users.

For example

8 " -H1RF4CH

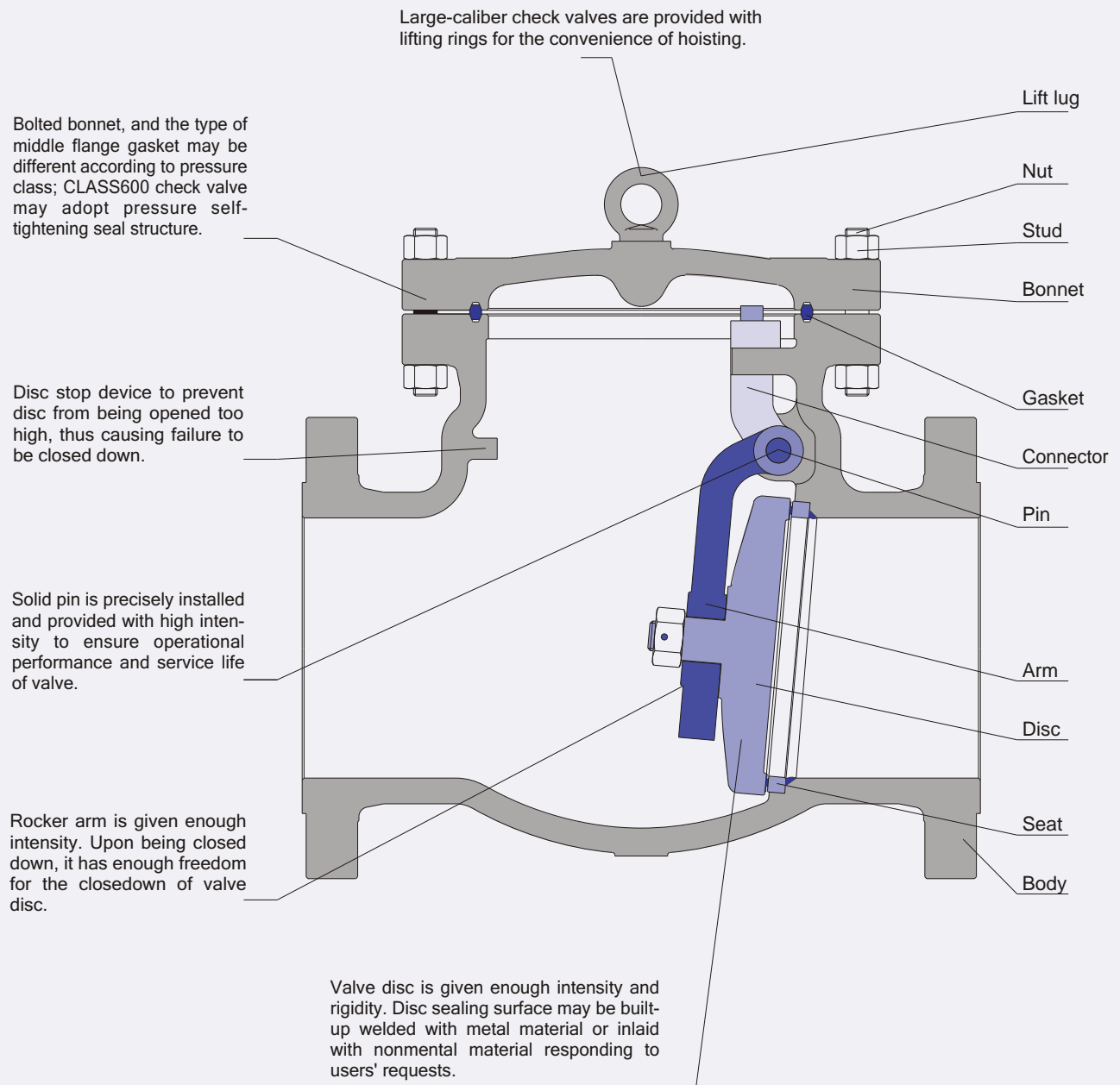
Check valve, 8 " ANSI CLASS150, Raised Face Ends, Single Disc Swing type, Body&Bonnet&Disc Cast Steel WCB, Seat sealing face material 13Cr

50-H2WF68W

Check valve, DN80 PN25, Wafer type, Double Disc Swing type, Body&Bonnet&Disc Stainless Steel CF8, Seat sealing face Body machined.

SWING TYPE CHECK VALVE

Structure of Cast Steel Swing Type check Valve



Remark:

1. Type of end connection referred to Appendix I
2. Type of body and seat connection referred to Appendix III
3. Type of body and bonnet connection referred to Appendix IV

SWING TYPE CHECK VALVE

Material List of Cast Steel Swing Type check Valve

ASTM Standard Material

No.	Part Name	Carbon Steel	Stainless Steel	Alloy Steel	Low Temperature Steel
1	Body	ASTM A216 GR WCB	ASTM A351 GR CF8	ASTM A217 GR WC6	ASTM A352 GR LCB
2	Seat	ASTM A105	ASTM A105	ASTM A182 GR F304	ASTM A182 GR F304
3	Disk	ASTM A216 GR WCB	ASTM A351 GR CF8	ASTM A217 GR WC6	ASTM A352 GR LCB
4	Arm	ASTM A216 GR WCB	ASTM A351 GR CF8	ASTM A217 GR WC6	ASTM A352 GR LCB
5	Pin	ASTM A182 GR F6a	ASTM A276 TYPE 304	ASTM A182 GR F304	ASTM A182 GR F304
6	Connector	ASTM A216 GR WCB	ASTM A351 GR CF8	ASTM A217 GR WC6	ASTM A352 GR LCB
7	Gasket	Ss304	Ss304	Ss304	Ss304
8	Bonnet	ASTM A216 GR WCB	ASTM A351 GR CF8	ASTM A217 GR WC6	ASTM A352 GR LCB
9	Stud	ASTM A193 GR B7	ASTM A194 GR B8	ASTM A193 GR B7	ASTM A194 GR B8
10	Nut	ASTM A194 GR 2H	ASTM A193 GR 8	ASTM A194 GR 4	ASTM A193 GR 8

GB Standard Material

No.	Part Name	Carbon Steel	Stainless Steel	Alloy Steel	Low Temperature Steel
1	Body	WCB	CF8	WC6	LCB
2	Seat	25#	0Cr18Ni9(304)	0Cr18Ni9(304)	0Cr18Ni9(304)
3	Disk	WCB	CF8	WC6	LCB
4	Arm	WCB	CF8	WC6	LCB
5	Pin	1Cr13	0Cr18Ni9(304)	0Cr18Ni9(304)	0Cr18Ni9(304)
6	Connector	WCB	CF8	WC6	LCB
7	Gasket	Ss304	Ss304	Ss304	Ss304
8	Bonnet	WCB	CF8	WC6	LCB
9	Stud	35CrMoA	0Cr18Ni9(304)	35CrMoA	0Cr18Ni9(304)
10	Nut	35#	0Cr18Ni9(304)	35CrMoA	0Cr18Ni9(304)

Remark:

- 1、 Select different materials for different working temperature and media
- 2、 Commonly-used trim materials and service temperature referred to Appendix VII

SWING TYPE CHECK VALVE

Cast steel swing Check valve Product Line

Size		Bolted bonnet								Pressure sealed bonnet					
		BS SERIES			GB SERIES					BS SERIES				GB SERIES	
DN	NPS	CL150	CL300	CL600	PN1.6	PN2.5	PN4.0	PN6.4	PN10.0	CL600	CL900	CL1500	CL2500	PN16.0	PN25.0
40	1-1/2	*	*	*	*	*	*	*	*					*	*
50	2	*	*	*	*	*	*	*	*	*	*	*	*	*	*
65	2-1/2	*	*	*	*	*	*	*	*	*	*	*	*	*	*
80	3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
100	4	*	*	*	*	*	*	*	*	*	*	*	*	*	*
125	5	*	*	*	*	*	*	*	*	*	*	*	*	*	*
150	6	*	*	*	*	*	*	*	*	*	*	*	*	*	*
200	8	*	*	*	*	*	*	*	*	*	*	*	*	*	*
250	10	*	*	*	*	*	*	*	*	*	*	*	*	*	*
300	12	*	*	*	*	*	*	*	*	*	*	*	*		
350	14	*	*	*	*	*	*	*	*	*	*	*			
400	16	*	*	*	*	*	*	*	*	*	*	*			
450	18	*	*	*	*	*	*	*	*	*	*	*			
500	20	*	*	*	*	*	*	*	*	*	*	*			
600	24	*	*	*						*	*	*			
650	26	*	*	*						*	*				
700	28	*	*	*						*	*				
750	30	*	*	*						*	*				
800	32	*	*												
900	36	*	*												

For sizes and classes not shown, please contact our Sales Department

Technical Specification

Design Standard	BS1868								GB/T 12236							
Pressure-Temperature Rating	ASME B16.34								GB/T 12224							
Face-Face	ASME B16.10								GB/T 12221、GB/T 15188.1							
Flange Ends	ASME B16.5、ASME B16.47								GB/T 9113、JB/T 79							
Buttwelding Ends	ASME B16.25								GB/T 12224							
Inspection & Test	API598								JB/T 9092、GB/T 13927							
Test Pressure	Nominal Pressure				CL150	CL300	CL400	CL600	CL900	CL1500	PN1.6	PN2.5	PN4.0	PN6.4	PN10.0	PN16.0
	Shell Test				2.93	7.58	10.0	15.0	22.4	37.5	2.4	3.75	6.0	9.6	15.0	24.0
	High Pressure Seal Test				2.07	5.52	7.31	11.03	16.54	27.5	1.76	2.75	4.4	7.04	11.0	17.6
	Low Pressure Seal Test				0.6											

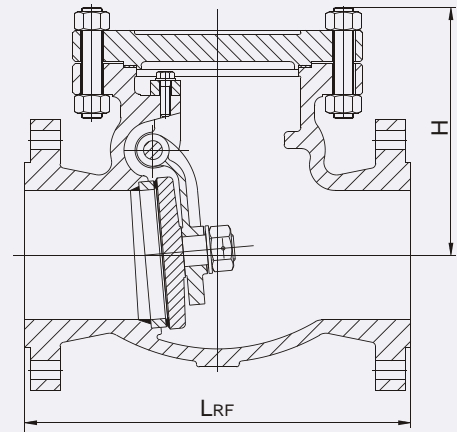
SWING TYPE CHECK VALVE

BS Pressure:Class150~600

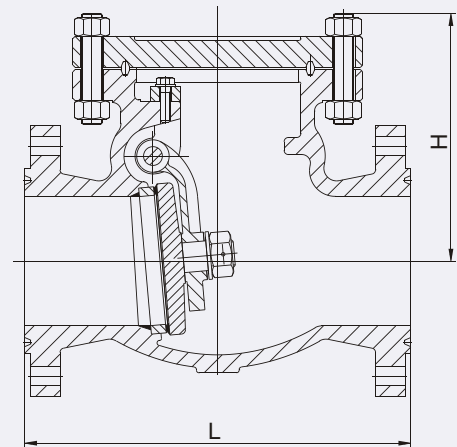
Main Dimension & Weight

CLASS	Size		Valve Main Dimension				Weight(kg)	
	mm	in.	L(RF)	L(BW)	L(RJ)	H	RF	BW
150	40	1-1/2	165	165	178	147	13	9
	50	2	203	203	216	151	17	12
	65	2-1/2	216	216	229	164	23	15
	80	3	241	241	254	178	29	19
	100	4	292	292	305	190	40	27
	150	6	356	356	368	228	78	56
	200	8	495	495	508	292	140	104
	250	10	622	622	635	304	215	178
	300	12	699	699	711	342	295	220
	350	14	787	787	800	406	408	308
	400	16	864	864	876	508	533	413
	450	18	978	978	991	584	670	530
	500	20	978	978	991	622	1000	830
	600	24	1295	1295	1308	711	1950	1710
	650	26	1295	1295	-	762	2300	2035
	700	28	1448	1448	-	838	2500	2190
750	30	1524	1524	-	889	2600	2244	
800	32	1727	1727	-	1016	2800	2345	
900	36	1955	1955	-	1092	3200	2613	
300	40	1-1/2	241	241	254	155	17	11
	50	2	267	267	283	161	20	12
	65	2-1/2	292	292	308	175	24	15
	80	3	318	318	333	203	45	29
	100	4	356	356	371	228	65	41
	150	6	445	445	460	279	115	75
	200	8	533	533	549	342	215	156
	250	10	622	622	638	381	310	220
	300	12	711	711	727	431	470	350
	350	14	838	838	854	482	550	386
	400	16	864	864	879	508	870	574
	450	18	978	978	994	584	1025	855
	500	20	1016	1016	1035	660	1500	1175
	600	24	1346	1346	1368	762	2500	2030
	650	26	1346	1346	1372	762	2800	2275
	700	28	1499	1499	1524	889	3000	2404
750	30	1594	1594	1619	977	3400	2710	
800	32	1727	1727	-	1016	3700	2897	
900	36	2083	2083	-	1143	4300	3330	
600	50	2	292	292	295	161	34	25
	65	2-1/2	330	330	333	175	45	33
	80	3	356	356	359	203	60	44
	100	4	432	432	435	228	95	64
	150	6	559	559	562	304	200	134
	200	8	660	660	664	406	275	175
	250	10	787	787	791	469	450	280
	300	12	838	838	841	533	615	415
	350	14	889	889	892	609	850	550
	400	16	991	991	994	660	1150	720
	450	18	1092	1092	1095	774	1620	1120
	500	20	1194	1194	1200	889	2000	1400
	600	24	1397	1397	1407	965	3100	2220
	650	26	1448	1448	1461	1016	3800	3010
	700	28	1600	1600	1613	1066	4600	3724
	750	30	1651	1651	1664	1168	5500	4528

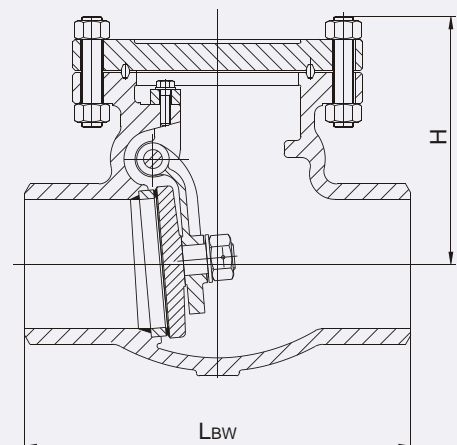
Bolted Bonnet



CLASS150~300 Fig.HRF4



CLASS600 Fig.HRJ4



CLASS600 Fig.HBW4

SWING TYPE CHECK VALVE

BS Pressure:Class600~2500

Main Dimension & Weight

CLASS	Size		Valve MainDimension				Weight(kg)		
	mm	in.	L(RF)	L(BW)	L(RJ)	H	RF	BW	
600	50	2	292	178	295	225	30	22	
	65	2-1/2	330	216	333	240	42	30	
	80	3	356	254	359	254	64	48	
	100	4	432	305	435	279	100	67	
	150	6	559	457	562	368	176	110	
	200	8	660	584	664	393	305	205	
	250	10	787	711	791	457	495	325	
	300	12	838	812	841	584	680	480	
	350	14	889	889	892	609	914	600	
	400	16	991	991	994	685	1236	800	
	450	18	1092	1092	1095	736	1994	1490	
	500	20	1194	1194	1200	762	2293	1675	
	600	24	1397	1397	1407	889	3180	2300	
	650	26	1448	1448	1461	1016	3500	2710	
	700	28	1600	1600	1613	1066	4001	3125	
750	30	1651	1651	1664	1168	4686	3710		
900	50	2	368	216	371	225	40	30	
	65	2-1/2	419	254	422	240	60	39	
	80	3	381	305	384	254	116	90	
	100	4	457	365	460	279	146	100	
	150	6	610	508	613	381	345	245	
	200	8	737	660	740	533	595	425	
	250	10	838	787	841	558	915	675	
	300	12	965	914	968	609	1230	900	
	350	14	1029	991	1038	736	1635	1125	
	400	16	1130	1092	1140	762	2220	1600	
	450	18	1219	1219	1232	863	2840	2000	
	500	20	1321	1321	1334	939	3756	2700	
	600	24	1549	1549	1568	1066	6000	4100	
	650	26	1701	1701	1723	1143	6375	5100	
	700	28	1828	1828	1850	1193	7229	5750	
750	30	2032	2032	2054	1270	8232	6510		
1500	50	2	368	216	371	225	68	48	
	65	2-1/2	419	254	422	240	97	65	
	80	3	470	305	473	254	112	90	
	100	4	546	405	549	279	177	115	
	150	6	705	559	711	405	395	250	
	200	8	832	711	841	567	710	470	
	250	10	991	864	1000	585	1210	800	
	300	12	1130	991	1146	630	1970	1350	
	350	14	1257	1067	1276	750	2600	1800	
	400	16	1384	1194	1407	787	3250	2200	
	450	18	1537	1537	1559	885	3960	2600	
	500	20	1664	1664	1686	960	4400	2700	
	600	24	1943	1943	1972	1120	6800	4100	
	2500	50	2	451	279	454	225	118	80
		65	2-1/2	508	330	514	249	150	102
80		3	578	368	584	254	204	120	
100		4	673	457	683	279	352	220	
150		6	914	610	927	420	880	540	
200		8	1022	762	1038	570	1440	920	
250		10	1270	914	1292	1010	2652	1692	
300	12	1422	1041	1445	1160	3756	2296		

Pressure Sealed Bonnet

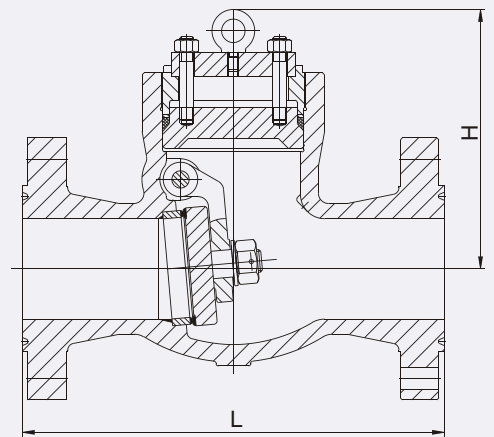


Fig.HRJ4

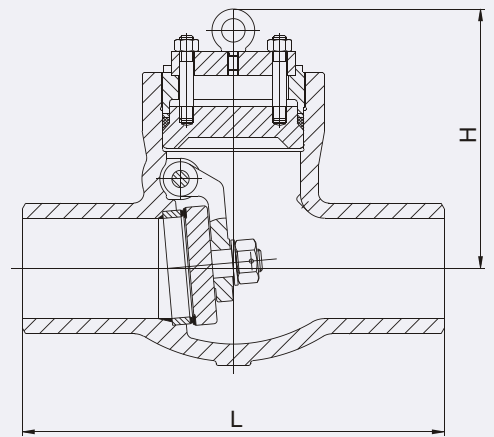
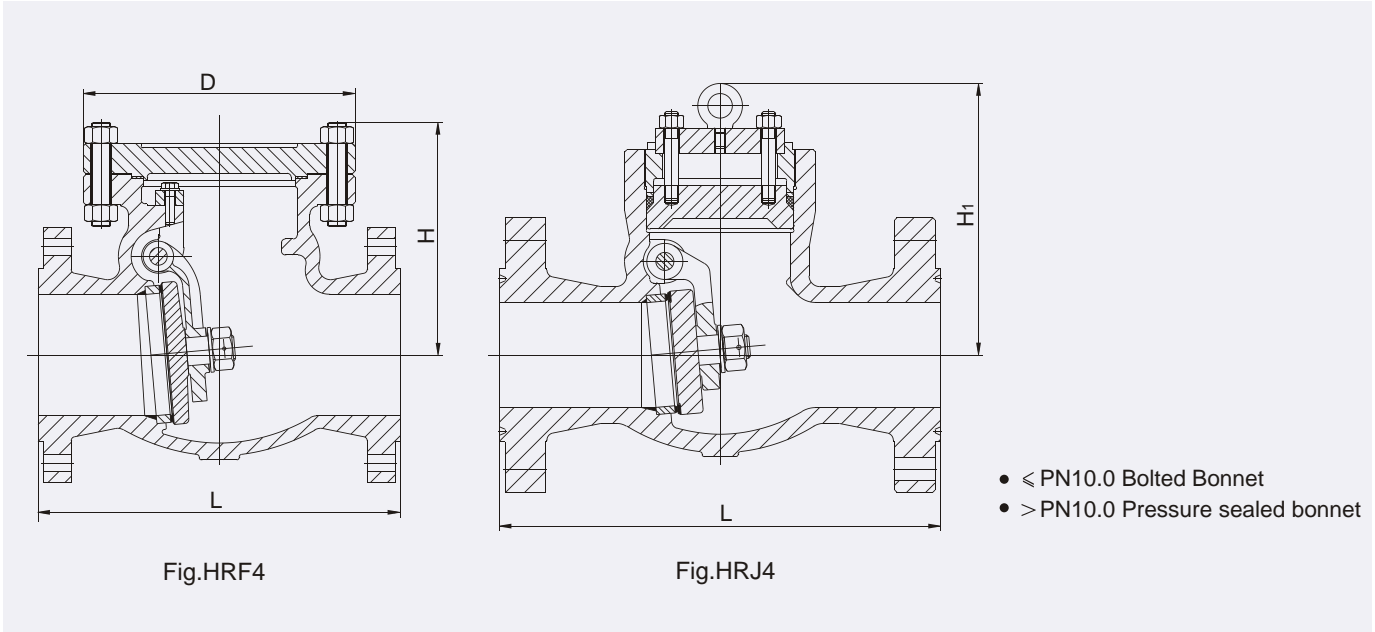


Fig.HBW4

SWING TYPE CHECK VALVE

GB Pressure:PN1.6~25.0



Main Dimensions & Weight

Pressure	Size	mm	50	65	80	100	125	150	200	250	300	350	400	500
PN1.6	Main Dimension	L	230	290	310	350	400	480	550	650	750	850	950	1150
		D	160	180	195	215	245	280	335	405	460	520	580	705
		H	160	177	187	202	227	263	293	330	382	430	480	560
	Weight(kg)		22	26	33	39	57	80	95	175	260	360	496	588
	Cv		-	-	300	510	-	1229	2246	3514	5248	6750	8859	14590
PN2.5	Main Dimension	L	230	290	310	350	400	480	550	650	750	850	950	1150
		D	160	180	195	215	245	300	360	425	485	550	610	730
		H	160	177	187	202	227	263	293	330	382	430	480	560
	Weight(kg)		22	30	35	52	73	103	135	196	286	389	495	641
	Cv		-	-	300	510	-	1229	2246	3514	5248	6750	8859	14590
PN4.0	Main Dimension	L	230	290	310	350	400	480	550	650	750	850	950	1150
		D	185	210	235	260	295	330	385	445	545	570	625	730
		H	177	192	192	217	259	270	340	401	423	460	490	618
	Weight(kg)		22	30	38	57	91	129	212	297	362	450	585	640
	Cv		-	-	300	510	-	1229	2246	3514	5248	6750	8859	14590
PN6.4	Main Dimension	L	300	340	380	430	500	550	650	775	900	1025	1150	1400
		D	200	225	250	315	365	410	480	565	600	615	675	735
		H	192	207	207	235	265	297	357	405	465	514	568	620
	Weight(kg)		30	41	48	72	108	155	217	341	472	627	882	1027
	Cv		-	-	300	510	-	1229	2246	3514	5248	6750	8859	14590
PN10.0	Main Dimension	L	300	340	380	430	500	550	650	775	-	-	-	-
		D	200	225	260	295	335	425	450	535	-	-	-	-
		H	192	207	235	265	313	360	420	480	-	-	-	-
	Weight(kg)		30	41	52	78	119	161	216	473	-	-	-	-
	Cv		-	-	300	510	-	1229	2246	3514	-	-	-	-
PN16.0	Main Dimension	L	300	340	380	430	500	550	650	750	-	-	-	-
		H ₁	250	283	320	356	362	430	470	515	-	-	-	-
	Weight(kg)		49	58	110	162	214	267	318	370	-	-	-	-
	Cv		-	-	300	510	-	1229	2246	3514	-	-	-	-
PN25.0	Main Dimension	L	368	419	470	546	673	705	832	991	-	-	-	-
		H ₁	310	346	385	406	534	560	618	673	-	-	-	-
	Weight(kg)		63	78	92	168	220	270	320	390	-	-	-	-
	Cv		-	-	300	510	-	1229	2246	3514	-	-	-	-