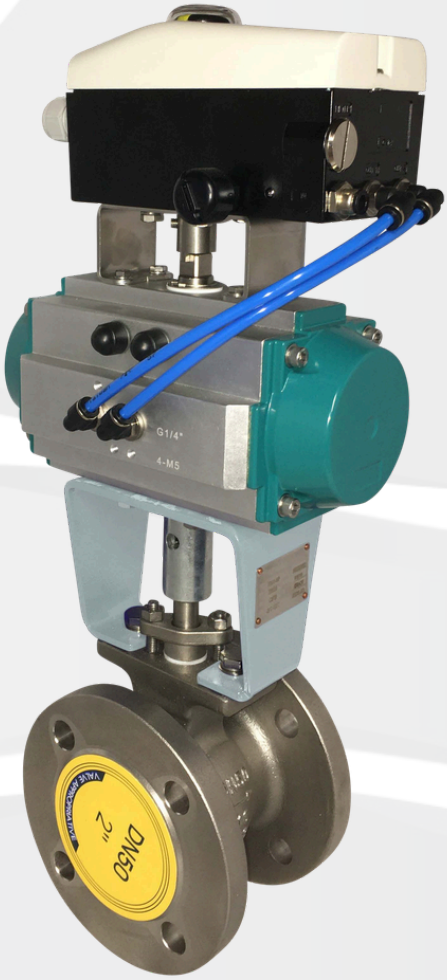
AHRENDT Industriearmaturen

V-port Segment Ball Valve

Fig.15J Flange/17J Wafer



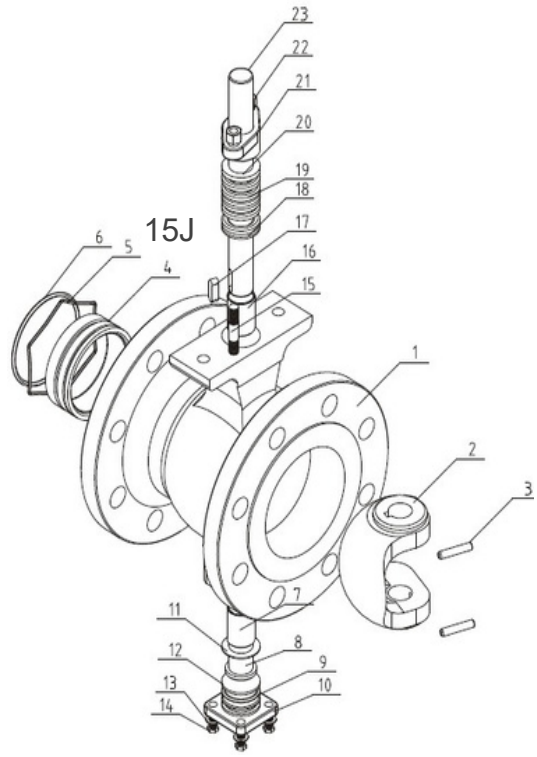
General information

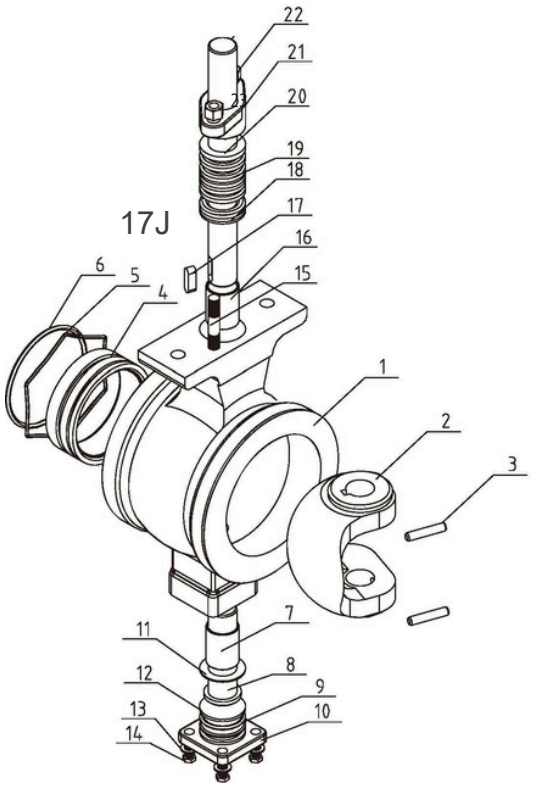
Overview

The 15J &17J series v-port segment ball valve is primarily designed for flow control, and it can also be used for shut-off operation. The notched port on the segment ball contributes to strong shear stress to cut through media with fibers and particles. Consequently, this v-port segment valve is a good general control valve for most pulp and paper process applications, or similar flow contains fibers and particles.

Application

Pulp and Paper/Waste Water Treatment/Food and Beverage/Chemical Plants/Power Plants/Steel Industry/Etc.





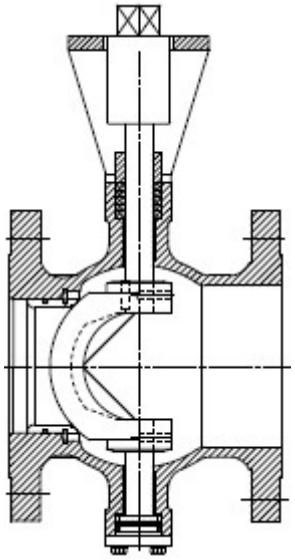
Design Features

STANDARD PART LIST				
1	Body	WCB	CF8	CF8M
2	V-port segment	CF8+HCr	CF8+HCr	CF8M+HCr
3	Pin	304	304	316
4	Seat	304+STL	304+STL	316+STL
5	Spring	316L		
6	O-Ring	VITON		
7	Bearing	304+PTFE	304+PTFE	316+PTFE
8	Lower stem	304	304	316
9	O-Ring	VITON		
10	Packing gland	WCB	CF8	CF8M
11-dec	Gasket		PTFE	
13	Washer	Q235	304	316
14/15	Bolt	25	304	304
16	Bearing	304+PTFE	304+PTFE	316+PTFE
17	Key	304	304	316
18/19/20	Packing gland	PTFE or GRAPHITE		
21	Packing gland	WCB	CF8	CF8M
22	Nut	Q235	304	304
23	Upper stem	304	304	316

General information

Body

- Single-piece body prevents leaks caused by separate flanges or locking rings.



Flow Direction ➡

V-port Segment Ball

- Specially designed V-notch ball provides strong cutting stress and tight sealing. Well ground notched ball surface ensures small operating torque and tight seal, especially for metal seated segment valve.

Seat

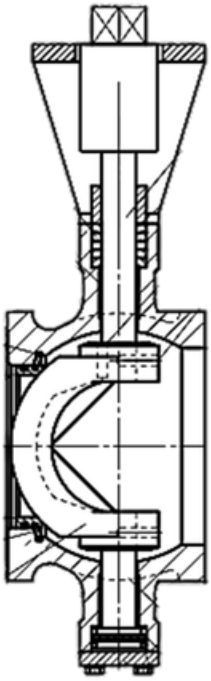
- Special seat design eliminates cavity between seat and valve body. This, consequently, prevents media from jamming between seat and body, ensure reliable sealing.

Seal Surface

- Nitriding/Tungsten Carbide/Satellite Alloy/Nickle Base Alloy plating are available for abrasive media.

Stem

- Stem is finely grounded to match actuator excellently, which prevents rocking motion and potential failure of the v-port segmented valve.
- Close-fit spline or pin-key are available for stem-segment ball connection to provide reliable transmission without motion lost or dead band.



Flow Direction ➡



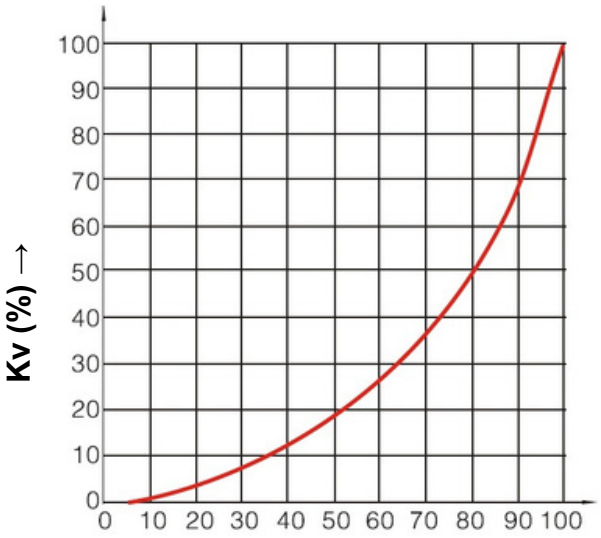
Seat Detail

TECHNICAL SPECIFICATION Fig.15J	
Size range	1" ~20" (DN25~DN500)
Pressure rate	DIN PN10, 16, 25, 40, 63; ANSI 150, 300, 600
Body material	WCB, CF8, CF8M, CF3M, etc.
	Ball/Seat
Metal seat	CF8+HCr/304+STL, CF8M+HCr/316+STL, CF3+HCr/304L+STL, ect.
Soft seat	Devlon/PEEK/PCTFE are available
End connection	Flange type
Face to face	ISA S75.04, IEC/DIN 534-3-2
Temp. Range	-29°C ~ 240°C with soft seat
Seal tightness	-29°C ~ 350°C with metal seat
Metal seat	Class V (standard), Class VI with tungsten Carbide coated trim)
Soft seat	Class VI
Valve trim rotation	Clockwise to close
Flow characteristic	Equal Percentage

TECHNICAL SPECIFICATION Fig.17J	
Size range	1" ~10" (DN25~DN250)
Pressure rate	DIN PN10, 16, 25; ANSI 150
Body material	WCB, CF8, CF8M, CF3M, etc.
	Ball/Seat
Metal seat only	CF8+HCr/304+STL, CF8M+HCr/316+STL, CF3+HCr/304L+STL, ect.
	Nitriding/Tungsten Carbide/Satelite Alloy/Nickle base alloy Plating are available for abrasive media
End connection	Wafer type
Face to face	Coreline Standard
Temp. Range	-29°C ~ 220°C
Seal tightness	
Metal seat	Class V (standard), Class VI with tungsten Carbide coated trim)
Valve trim rotation	Clockwise to close
Flow characteristic	Equal Percentage

Dimensions and Technical data

Fig.15J Flow Characteristic

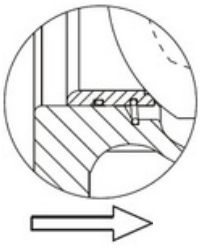


15J & 17J	
Size	Kv
DN25	31
DN32	48
DN40	81
DN50	131
DN65	226
DN80	309
DN100	466
DN125	783
DN150	1230
DN200	1880
DN250	3051
ONLY 15J	
DN300	4952
DN350	7123
DN400	9202
DN450	11126
DN500	14120

***The rated Kv value is for reference only.**

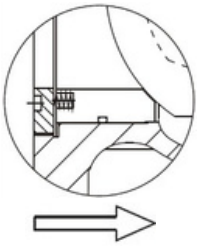
Seat Options 15J

Metal Seat A



Flow Direction

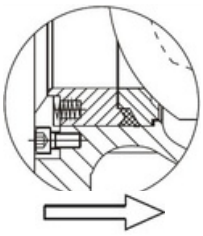
Metal Seat B



Flow Direction

Metal Seat A/ Metal Seat B		
Seat	304/316+STL	
Spring	17-7PH/316L	
O-ring	Viton	High temp. Viton
Packing	PTFE	Graphite
Temp. Range	-29°C ~ 150°C	-29°C ~ 220°C

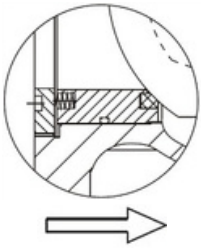
High Temp Metal Seat C.



Flow Direction

High Temp. Metal Seat C	
Seat	304/316+STL
Spring	17-7PH/316L
O-ring	Graphite
Packing	Graphite
Temp. Range	-29°C ~ 350°C

Soft Seat D



Flow Direction

Soft Seat D				
Seat	DEVLON	PCTFE	PEEK	
Spring	17-7PH/316L			
O-ring	Viton			
Packing	PTFE			Graphite
Temp. Range	-29°C ~ 120°C	-29°C ~ 120°C	-29°C ~ 150°C	-29°C ~ 240°C

Valve Torque - Nm Fig.15J - (Safety factor 1,3 included)

SIZE	PN10/PN16			ANSI150/PN25			ANSI300/PN40			FTF DIMENSION	
	Torque 30%SF(NM)	BRACKET	SQUARE	Torque 30%SF(NM)	BRACKET	SQUARE	Torque 30%SF(NM)	BRACKET	SQUARE	WAFER	FLANGE
DN25	50	F05/F07	14/17MM	50	F05/F07	14/17MM	70	F07	17MM	50	102
DN32	50	F05/F07	14/17MM	50	F05/F07	14/17MM	90	F07	17MM	60	102
DN40	60	F05/F07	14/17MM	60	F05/F07	14/17MM	140	F07/F10	17/22MM	60	114
DN50	80	F05/F07	17MM	80	F05/F07	14/17MM	150	F07/F10	17/22MM	75	124
DN65	90	F05/F07	17MM	90	F05/F07	14/17MM	300	F10/F12	22/27MM	85	145
DN80	100	F07/F10	17/22MM	100	F07/F10	17/22MM	300	F10/F12	22/27MM	100	165
DN100	120	F07/F10	17/22MM	140	F07/F10	17/22MM	420	F10/F12	22/27MM	115	194
DN125	180	F07/F10	17/22MM	220	F07/F10	17/22MM	600	F10/F12	22/27MM	129	194
DN150	300	F10/F12	22/27MM	360	F10/F12	22/27MM	950	F12/F14	36MM	160	229
DN200	500	F10/F12	22/27MM	590	F10/F12	22/27MM	1.500	F12/F14	36MM	200	243
DN250	900	F12/F14	36MM	1.100	F12/F14	36MM	2.300	F16	46MM	240	297
DN300	1400	F12/F14	36MM	1.500	F12/F14	36MM	3.500	F16	46MM		338
DN350	2000	F14/F16	46MM	2.500	F14/F16	46MM	6.200	F25	46MM		400
DN400	3200	F16	46MM	4.000	F16	46MM	7.200	F25	46MM		400
DN450	4500	F16	46MM	5.600	F16	46MM	11.000	F30	55MM		520
DN500	6500	F25	46MM	8.200	F25	46MM	12.500	F30	55MM		600

Overall dimension table of Wafer segment ball valve 17J

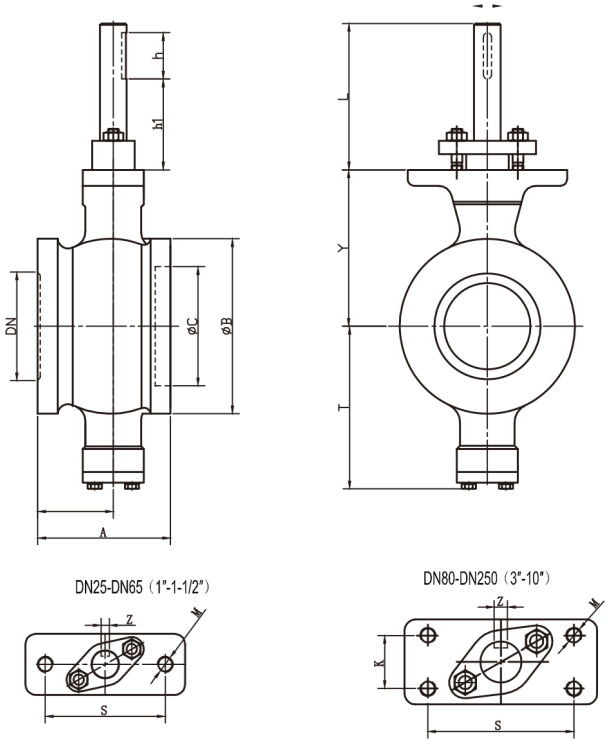
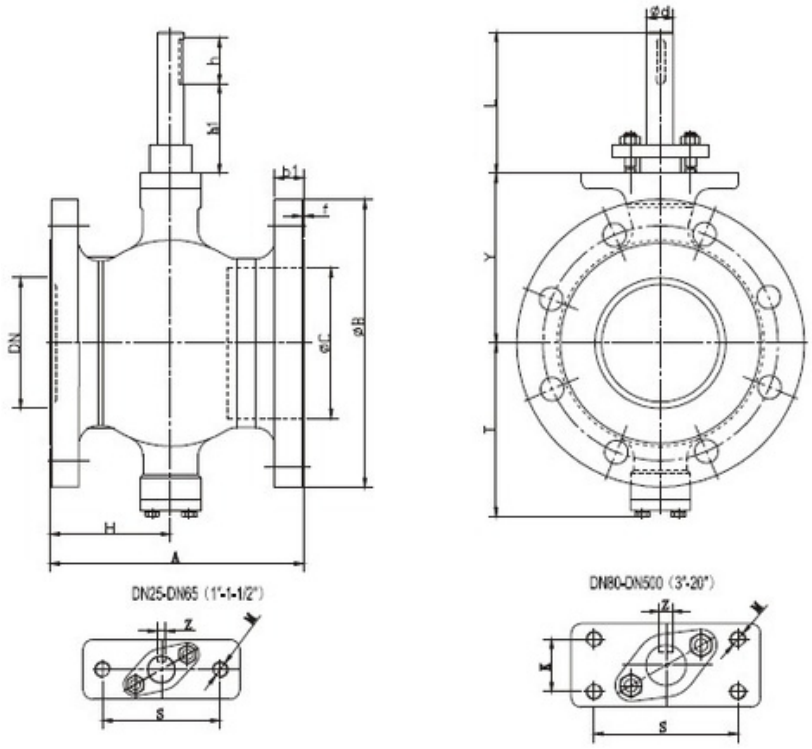


Fig.17J - DIN PN10/16/25

DN	A	B	C	T	Y	L	d	h	S	K	M	Z	Weight (kg)	
													PN10/16	PN25
DN25	50	68	38	81	73	75	16	35	75	-	2-M10	5	2,6	2,9
DN32	60	76	45	86	78	75	16	35	75	-	2-M10	5	3,7	3,3
DN40	60	84	50	90	80	75	16	35	75	-	2-M10	5	3,5	4
DN50	75	100	62	93	90	75	16	35	75	-	2-M10	5	4,5	5
DN65	100	118	73	108	105	75	16	35	75	-	2-M10	5	6	7
DN80	100	132	90	123	118	75	20	35	90	8	4-M10	6	8	9
DN100	115	158	115	138	130	75	20	35	90	28	4-M10	6	12	13
DN125	129	184	134	148	145	80	25	40	90	28	4-M10	8	19	20
DN150	160	216	164	170	170	94	30	50	110	40	4-M12	8	30	33
DN200	200	268	206	200	201	94	30	50	110	40	4-M12	8	47	51
DN250	240	326	260	240	237	98	40	60	135	40	4-M16	12	79	87

Dimensions and Technical data

Fig.15J Dimension

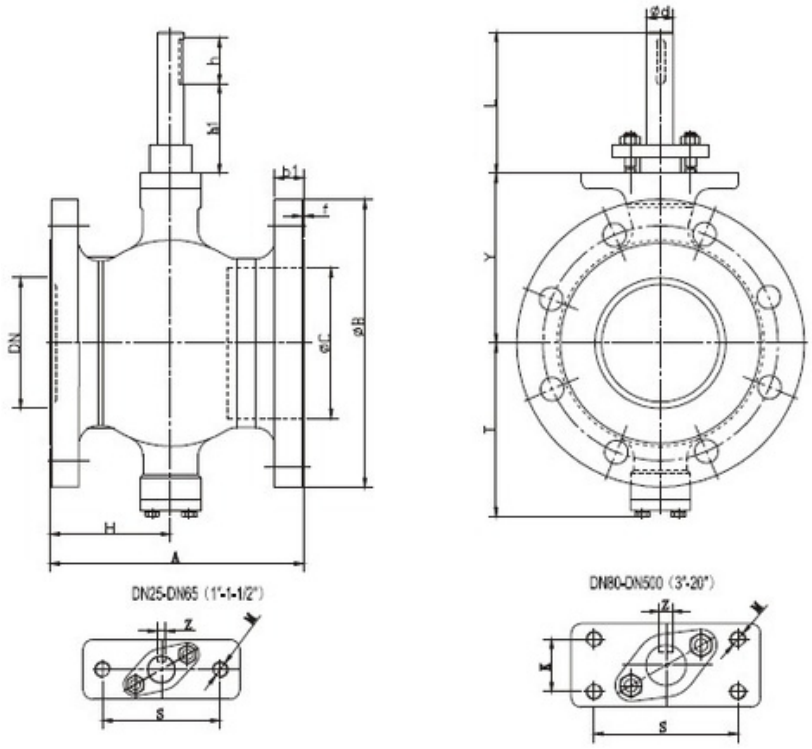


PN16

DN	A	B	b1	f	C	T	Y	L	d	H	S	K	M	Z	Weight (kg)
DN25	102	115	16	2	38	81	73	75	16	35	75	-	2-M10	5	4,9
DN32	102	140	18	2	45	86	78	75	16	35	75	-	2-M10	5	6,6
DN40	114	150	18	2	50	90	80	75	16	35	75	-	2-M10	5	7,6
DN50	124	165	20	2	62	93	90	75	16	35	75	-	2-M10	5	9,5
DN65	145	185	20	2	73	108	105	75	16	35	75	-	2-M10	5	12,4
DN80	165	200	20	2	90	123	118	75	20	35	90	28	4-M10	6	15,5
DN100	194	220	22	2	115	138	130	75	20	35	90	28	4-M10	6	20,6
DN125	194	250	22	2	134	148	145	80	25	40	90	28	4-M10	8	28,6
DN150	229	285	24	2	164	170	170	94	30	50	110	40	4-M12	8	42,5
DN200	243	340	24	2	206	200	201	94	30	50	110	40	4-M12	8	59,5
DN250	297	405	26	2	260	240	237	98	40	60	135	40	4-M16	12	99
DN300	338	460	28	2	316	286	282	98	40	60	135	40	4-M16	12	148
DN350	400	520	30	2	372	330	337	125	50	60	140	64	4-M16	14	216
DN400	400	580	32	2	420	367	372	172	60	80	170	80	4-M20	18	285
DN450	520	640	40	2	470	422	432	172	70	90	190	90	4-M24	20	370
DN500	600	715	44	2	516	490	498	180	80	100	190	90	4-M24	22	480

Dimensions and Technical data

Fig.15J Dimension

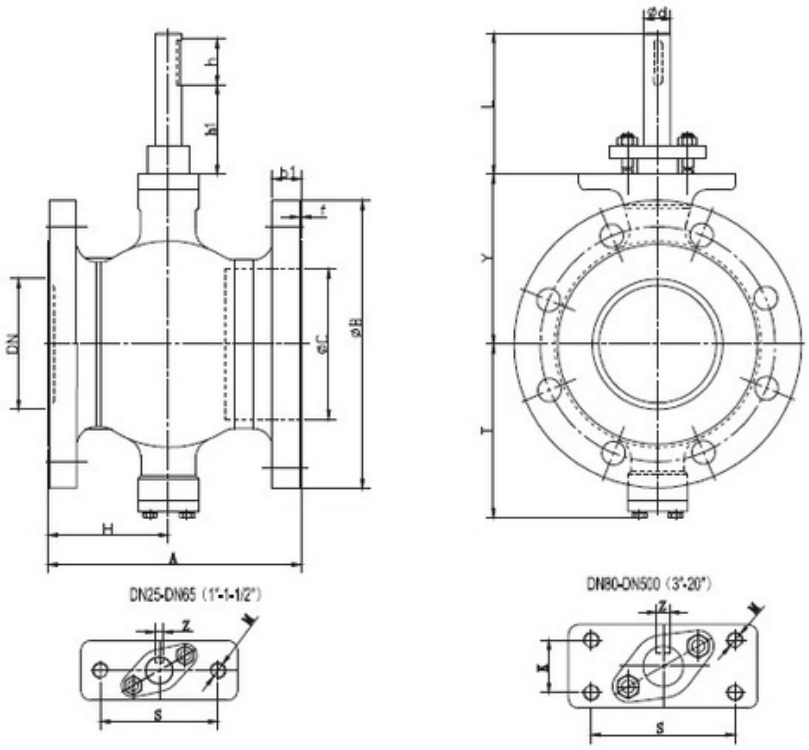


PN25

DN	A	B	b1	f	C	T	Y	L	d	h	S	K	M	Z	Weight (kg)
DN25	102	115	16	2	40	88	86	75	20	35	90	28	4-M10	6	5,4
DN32	102	140	18	2	48	90	90	75	20	35	90	28	4-M10	6	7,3
DN40	114	150	18	2	56	95	93	80	25	40	90	28	4-M10	8	8,4
DN50	124	165	20	2	65	98	98	80	25	40	90	28	4-M10	8	10,5
DN65	145	185	22	2	81	130	125	95	30	50	110	40	4-M12	8	13,2
DN80	165	200	24	2	95	128	128	95	30	50	110	40	4-M12	8	17,7
DN100	194	235	24	2	115	142	142	95	30	50	110	40	4-M12	8	24,7
DN125	194	270	26	2	138	175	170	100	40	60	135	40	4-M16	12	34,5
DN150	229	300	28	2	170	215	215	125	50	60	140	64	4-M16	14	50,7
DN200	243	360	30	2	208	228	228	125	50	60	140	64	4-M16	14	72,7
DN250	297	425	32	2	265	260	260	150	60	80	170	80	4-M20	18	116
DN300	338	485	34	2	320	310	310	150	60	80	170	80	4-M20	18	169

Dimensions and Technical data

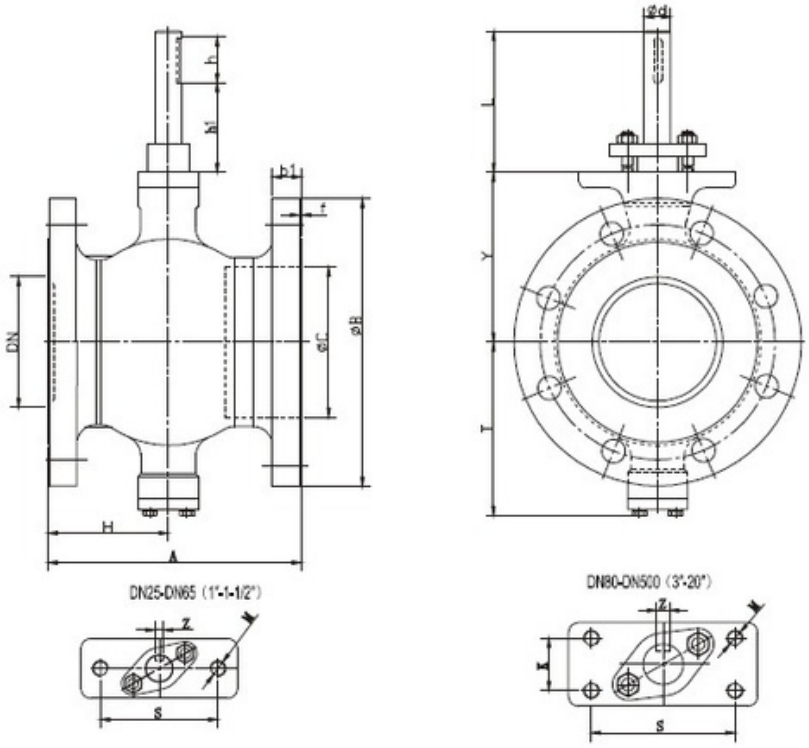
Fig.15J Dimension



PN40

DN	A	B	b1	f	C	T	Y	L	d	h	S	K	M	Z	Weight (kg)
DN25	102	115	16	2	40	88	86	75	20	35	90	28	4-M10	6	8,2
DN32	102	140	18	2	48	90	90	75	20	35	90	28	4-M10	6	10,5
DN40	114	150	18	2	56	95	93	80	25	40	90	28	4-M10	8	12,5
DN50	124	165	20	2	65	98	98	80	25	40	90	28	4-M10	8	14
DN65	145	185	22	2	81	130	125	95	30	50	110	40	4-M12	8	22
DN80	165	200	24	2	95	128	128	95	30	50	110	40	4-M12	8	34
DN100	194	235	24	2	115	142	142	95	30	50	110	40	4-M12	8	50
DN125	194	270	26	2	138	175	170	100	40	60	135	40	4-M16	12	71
DN150	229	300	28	2	170	215	215	125	50	60	140	64	4-M16	14	95
DN200	243	375	34	2	208	228	228	125	50	60	140	64	4-M16	14	140
DN250	297	450	38	2	265	260	260	150	60	80	170	80	4-M20	18	201
DN300	338	515	42	2	320	310	310	150	60	80	170	80	4-M20	18	304

Dimensions and Technical data



PN63

DN	A	B	b1	f	C	T	Y	L	d	h	S	K	M	Z	Weight (kg)
DN25	145	140	24	2	42	100	105	80	25	40	90	28	4-M10	8	
DN32	145	155	26	2	50	105	110	80	25	40	90	28	4-M10	8	
DN40	170	170	26	2	58	120	120	95	30	50	110	40	4-M12	8	
DN50	170	180	26	2	68	130	135	95	30	50	110	40	4-M12	8	
DN65	200	205	26	2	82	140	140	100	40	60	135	40	4-M16	12	
DN80	200	215	28	2	95	153	150	100	40	60	135	40	4-M16	12	
DN100	254	250	30	2	120	160	170	100	40	60	135	40	4-M16	12	
DN125	265	295	34	2	138	190	200	125	50	60	140	64	4-M16	14	
DN150	280	345	36	2	170	230	236	150	60	80	170	80	4-M20	18	
DN200	360	415	42	2	218	263	273	170	70	90	190	90	4-M24	20	
DN250	390	470	46	2	275	320	320	170	70	90	190	90	4-M24	20	
DN300	420	530	52	2	320	375	410	180	80	100	190	90	4-M24	22	

Actuator & Accessory Options

Manual Actuator

Handle Bar (DN25-DN100 Only) Worm Gear.

Automatic Actuator

Electric

Pneumatic (single & double-acting)

Accessories

ActuatorManualOverride
Limit Switches
Air Filter
Positioner
Solenoid Valve
ISO 5211 Mounting Bracket

***Note: for more options, please contact us for availability.**

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