



PNEUMATIC ACTUATOR AT SERIES



PNEUMATIC ACTUATOR CS SERIES



CAS specialises in actuators and flow control solutions. Our commitment to quality, innovation and service has made Kangtuo a supplier of choice for industry professionals around the globe. Our pneumatic/electric actuator and API/Sanitary valves, are specified in a wide range of applications.





Three Position Pneumatic Actuator



CS00015-05000 120° / 180°
Double Acting Actuators



CS Series Stainless Steel
Pneumatic Actuator

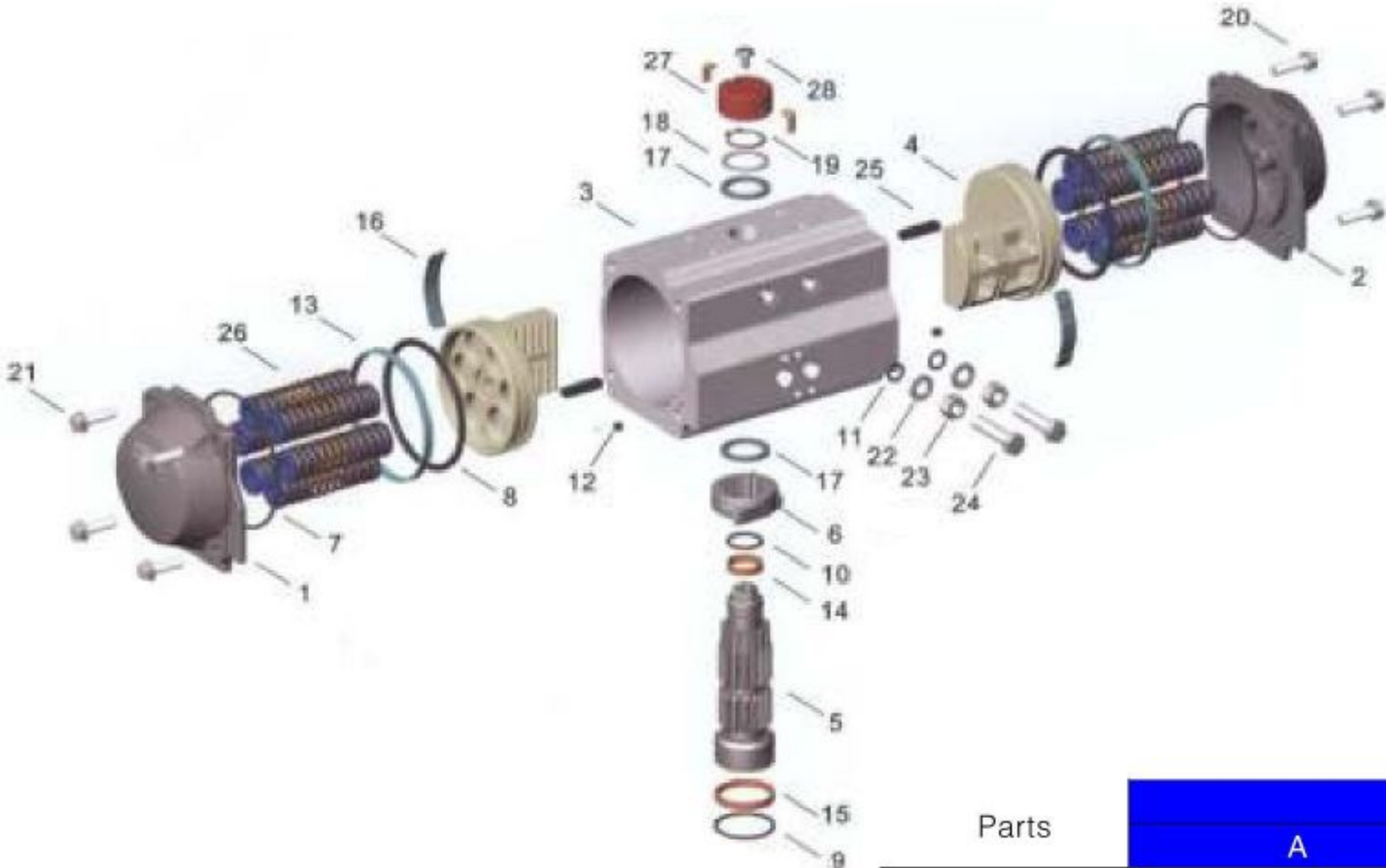


Can be equipped with a standard line
VID/VIE3845 Valve Positioner



Can be equipped with line VID/VDE3845,
NAMUR Standard Solenoid Valve

PNEUMATIC
ACTUATOR
CS SERIES



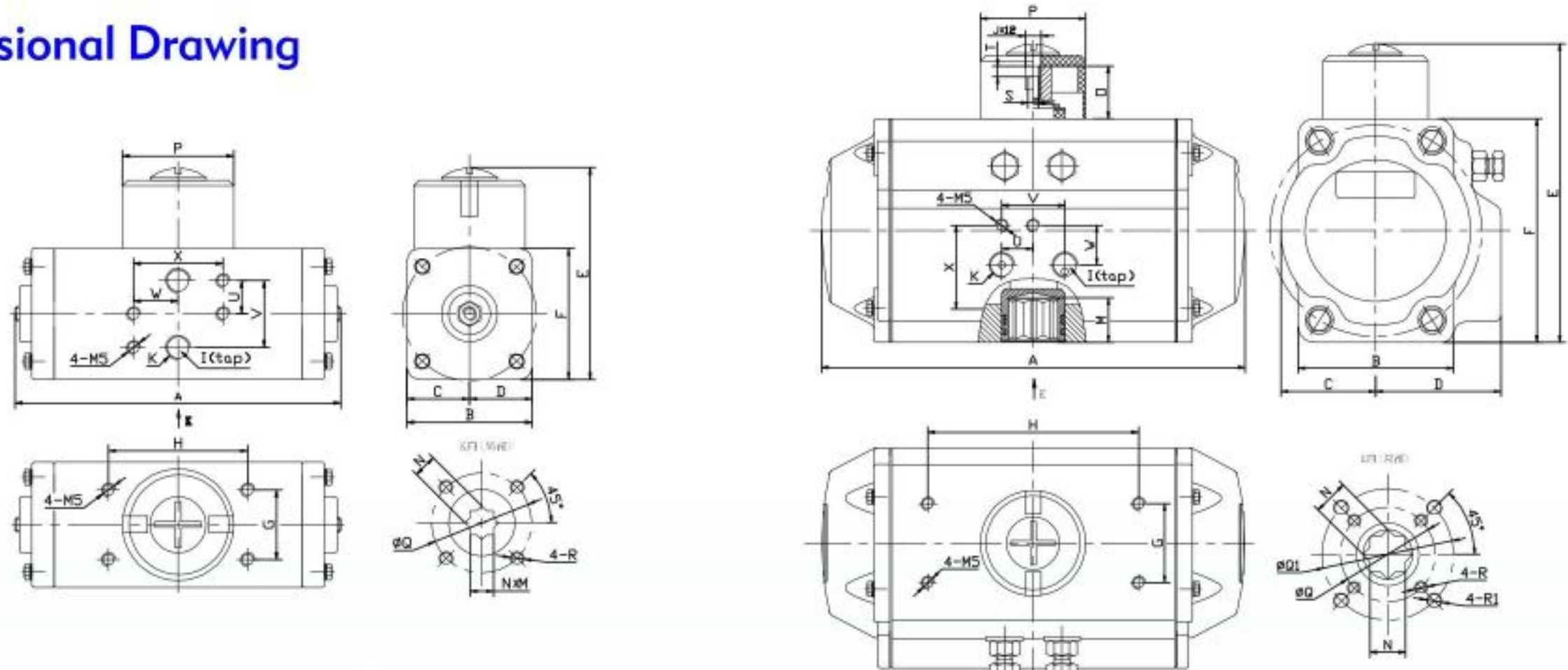
Parts		
	A	B
Cylinder	Hard anode Oxidation	Teflon coating+ Anode sclerosis
Cover	Polyester coated metal	Teflon coating
Output shaft	Carbon steel electroless Nickel plating	Electroless nickel plating or stainless steel
Use Occasion	General situation	General occasions or low concentrations of acidic environment

Part Number	Each number	Part Name	Standard Materials	Selected materials
01	1	Left Cover	Aluminum Die Casting	Stainless steel
02	1	Right Cover	Aluminum Die Casting	Stainless steel
03	1	Body	Aluminum Extrusion	Stainless steel
04	2	Piston	Aluminum Die Casting	-----
05	1	Output Shaft	Carbon Steel	Stainless steel
06	1	Cam Adjustment	Stainless steel	-----
07 *	2	O-ring (Cover)	NBR	Fluorine or silicone rubber
08 *	2	O-ring (Piston)	NBR	Fluorine or silicone rubber
09 *	1	O-ring (Output Shaft Bottom)	NBR	Fluorine or silicone rubber
10 *	1	O-ring (Output Shaft At The Top)	NBR	Fluorine or silicone rubber
11 *	2	O-ring (Adjusting Screw)	NBR	Fluorine or silicone rubber
12 *	2	Plug (Cylinder)	NBR	Fluorine or silicone rubber
13 *	2	Bearing (Piston)	Nylon 46 PVDF composites	-----
14 *	1	Bearing (Output Shaft At The Top)	Nylon 46	-----
15 *	1	Bearing (Output Shaft Bottom)	Nylon 46	-----
16 *	1	Guide with Bearing (Piston Back)	Nylon 46	-----
17 *	2	Thrust Bearings (Output Shaft)	Nylon 46	-----
18	2	Gasket (Output Shaft)	Stainless steel	-----
19	1	Flexible File Ring	Spring steel	-----
20	4	Cover Bolt	Stainless steel	-----
21	4	Cover Gasket	Stainless steel	-----
22	2	Gasket	Stainless steel	-----
23	2	Nut	Stainless steel	-----
24	2	Adjustment Bolt	Stainless steel	-----
25	2	Gnade-pad	Nylon 66 +30% FG	-----
26	5-12	Spring Components	Alloy spring steel	-----
27	1	Position Indicator	Polypropylene PP +30% GF	-----
28	1	Screw of Indicator	Plastic	-----

Double Acting Actuator Output Torque(Nm)

Model	Air supply in bar	Air supply pressure(Unit : Bar)									
		2.5bar	3bar	3.5bar	4bar	4.5 bar	5 bar	5.5 bar	6 bar	7 bar	8 bar
CS-32D		3.8	4.5	5.3	6.0	6.8	7.5	8.3	9.0	10.5	12.0
CS-50D		8.3	10.0	11.6	13.3	15.0	16.6	18.3	20.0	23.3	26.6
CS-63D		14.6	17.6	20.5	23.4	25.4	29.3	32.2	35.2	41.0	47.0
CS-75D		29.0	35.0	40.7	46.5	52.3	58.1	64	69.7	81.4	93.0
CS-88D		45.7	55.0	64.0	73.2	82.3	91.4	101	110	128	146
CS-100D		66.4	79.7	93.0	106	120	133	146	159	186	213
CS-115D		107	129	150	172	193	215	236	258	301	344
CS-125D		138	166	194	221	249	277	304	332	387	443
CS-145D		217	261	304	348	391	434	478	521	608	695
CS-160D		283	340	397	453	510	577	623	680	793	907
CS-190D		466	559	653	746	839	932	1026	1119	1305	1492
CS-210D		683	820	957	1093	1230	1367	1503	1640	1913	2187
CS-240D		1020	1224	1428	1632	1836	2040	2244	2448	2856	3264
CS-270D		1452	1743	2033	2324	2614	2905	3195	3486	4067	4648
CS-300D		1860	2231	2603	2975	3347	3719	4091	4463	5207	5950
CS-350D		2983	3580	4176	4773	5369	5966	6563	7159	8352	9546

Dimensional Drawing



Dimension

Model	FLANGE L (ISO 5211)		R																		
	Q	M/N (min)	A	B	C	D	E	F	G	H	I	J	K	O	P	S	T	U	V	W	X
CS-32	F03	M5	118	47	23.5	23.5	75	45	25	50	PF	M6	1/8"	20	40	4	4	12	24	16	32
	Φ36	10/9																			
CS-50	F03/F05	M5/M6	146	47	29	41.5	99	69	30	80	PF	M6	1/8"	20	40	4	4	12	24	16	32
	Φ36/Φ50	13/11																			
CS-63	F03/F05	M5/M6	163	59	36	47.5	115	85	30	80	PF	M6	1/8"	20	40	4	4	12	24	16	32
	Φ36/Φ50	16/14																			
CS-75	F05/F07	M6/M8	214	68	43	51	132	102	30	80	PF	M6	1/8"	20	40	4	4	12	24	16	32
	Φ50/Φ70	19/17																			
CS-88	F05/F07	M6/M8	252	68	49.5	55.5	145	115	30	80	PF	M6	1/8"	20	40	4	4	12	24	16	32
	Φ50/Φ70	20/17																			
CS-100	F07/F10	M8/M10	270	95	56	64	157	127	30	80	PF	M6	1/4"	20	40	4	4	12	24	16	32
	Φ70/Φ102	24/22																			
CS-115	F07/F10	M8/M10	316	97	64.5	74.5	185	145	30	80	PF	M6	1/4"	30	62	4	4	12	24	16	32
	Φ70/Φ102	24/22																			
CS-125	F07/F10	M8/M10	354	97	69	78.5	197	157	30	80	PF	M6	1/4"	30	62	4	4	12	24	16	32
	Φ70/Φ102	29/27																			
CS-145	F10/F12	M10/M12	418	115	80	87	218	178	30	80/130	PF	M6	1/4"	30	62	4	4	12	24	16	32
	Φ102/Φ125	30/27																			
CS-160	F10/F12	M10/M12	450	118	89	104	240	200	30	80/130	PF	M6	1/4"	30	80	4	4	12	24	16	32
	Φ102/Φ125	30/27																			
CS-190	F10/F12	M10/M12	518	139	103	105	272	232	30	80/130	PF	M6	1/4"	30	80	4	4	12	24	16	32
	Φ102/Φ125	40/36																			
CS-210	F14	M16	530	130	113	113	297	257	30	130	PF	M6	1/4"	30	90	4	4	12	24	16	32
	Φ140	40/36																			
CS-240	F16	M20	660	129	129	129	331	291	30	130	PF	M6	3/8"	30	90	4	4	20	40	22.5	45
	Φ165	50/46																			
CS-270	F16	M20	730	160	147	147	372	332	30	130	PF	M6	1/2"	30	90	4	4	20	40	22.5	45
	Φ165	50/46																			
CS-300	F16	M20	880	180	161	172	394	354	30	130	PF	M6	1/2"	30	90	4	4	20	40	22.5	45
	Φ165	50/46																			
CS-350	F16/F25	M20/M16	910	270	190	190	440	410	30	130	PF	M6	1/2"	30	90	4	4	20	40	22.5	45
	Φ165/Φ254	50/46																			

Single Acting Actuator Output Torque(Nm)

Model	Spring Q.ty	2.5		3.0		3.5		4.0		4.5		5.0		5.5		6.0		7.0		8.0		Spring's Output Torque	
		0° Start	90° End	0° Start	90° End	0° Start	90° End	0° Start	90° End	0° Start	90° End	0° Start	90° End	0° Start	90° End	0° Start	90° End	0° Start	90° End	0° Start	90° End	90° Start	0° End
CS50S	5																					6	3.7
	6	4.6	2.3	6.3	4	7.9	5.6	9.6	7.3	11.3	9	12.9	10.6									7.2	4.4
	7	3.9	1.1	5.6	2.8	7.2	4.4	8.9	6.1	10.6	7.8	12.2	9.4	13.9	11.1							8.4	5.2
	8			4.8	1.6	6.4	3.2	8.1	4.9	9.8	6.6	11.4	8.2	13.1	9.9	14.8	11.6					9.6	5.9
	9					5.7	2	7.4	3.7	9.1	5.4	10.7	7	12.4	8.7	14.1	10.4					12	7.4
	10							6.7	2.5	8.4	4.2	10	5.8	11.7	7.5	13.4	9.2	16.7	12.5			10.8	6.6
	11									7.6	3	9.2	4.6	10.9	6.3	12.6	8	15.9	11.3	19.2	14.6	12	7.4
	12										8.5	3.4	10.2	5.1	11.9	6.8	15.2	10.1	18.5	13.4	13.2	8.1	14.4
																						15.8	10.8
																						12	7.4
																						13.2	8.1
																						14.9	10.4
CS63S	5																					10.6	6.5
	6																					12.7	7.8
	7	8.1	4	11.1	7	14	9.9	16.9	12.8	19.9	15.8	22.8	18.7	24.4	19.5							14.8	9.1
	8	6.8	1.9	9.8	4.9	12.7	7.8	15.6	10.7	18.6	13.7	21.5	16.6	23.1	17.4	26.1	20.4					17	10.4
	9			8.5	2.8	11.4	5.7	14.3	8.6	17.3	11.6	20.2	14.5	23.1	17.4			30.6	24	22	35.3	28	19
	10					10.1	3.5	13	6.4	16	9.4	18.9	12.3	21.8	15.2	24.8	18.2					34	25.8
	11							11.7	4.4	14.7	7.4	17.6	10.3	20.5	13.2			26.7	17.7	32.7	23.7	23.3	13
	12									13.4	5.2	16.3	8.1	19.2	11	22.2	14	28	19.8	34	25.8	21.2	13
																						25.4	15.6
																						21	12.9
																						25.2	15.5
																						29.4	18
CS75S	5																					33.6	20.6
	6																					37.8	23.2
	7	16.1	8	22.1	14	27.8	19.7	33.6	25.5	39.4	31.3	45.2	37.1	42.6	32.9	48.5	38.8					42	25.8
	8	13.5	3.8	19.5	7	25.2	15.5	31	21.3	36.8	27.1	40.1	28.7	45	34.6	51.7	40.3					42	25.8
	9			17	5.6	22.7	11.3	28.5	17.1	34.3	22.9	40.1	28.7	45	34.6	51.7	40.3	60.8	47.8			37.8	23.2
	10					20.1	7.7	25.9	12.9	31.7	18.7	37.5	24.5	43.4	30.4	49.1	36.1					42	25.8
	11							23.3	8.7	29.1	14.5	34.9	20.3	40.8	26.2	46.5	31.9	58.2	43.6	69.8	55.2	37.8	23.2
	12									26.5	10.3	32.3	16.1	38.2	22	43.9	27.7	55.6	39.4	67.2	51	42	25.8
																						46.8	28.3
																						46.8	28.3
																						46.8	28.3
																						46.8	28.3
CS88S	5																					33	20.2
	6																					39.6	24.3
	7	25.5	12.7	34.8	22	43.8	31	53	40.2	62.1	49.3	71.2	58.4	72.7	58.5							46.3	28.3
	8	21.4	6.1	30.7	15.4	39.7	24.4	48.9	33.6	58	42.7	67.1	51.8	76.7	61.4							52.9	32.4
	9			26.7	8.7	35.7	17.7	44.9	26.9	54	36	63.1	45.1	72.7	54.7	81.7	63.7					59.5	36.4
	10					31.6	11.1	40.8	20.3	49.9	29.4	59	38.5	68.6	48.1	77.6	57.1	75.1				66	40.5
	11							36.8	13.7	45.9	22.8	55	31.9	64.6	41.5	73.6	50.5	91.6	68.5	110	86.5	72.7	44.5
	12									41.8	16.3	50.9	25.4	60.5	35	69.5	44	87.5	65.3	102	73.3	72.7	44.5
																						72.7	44.5
																						72.7	44.5
																						72.7	44.5
																						72.7	44.5
CS100S	5																					48	28.6
	6																					57.7	35.3
	7	37	18.4	50.3	31.7	63.6	45	76.6	58	90.6	72	103.6	85	111	88.3							67.3	41.2
	8	31.1	8.7	44.4	22	57.7	35.3	70.7	48.3	84.7	62.3	97.7	75.3	105	78.8	118	91.7					76.9	47
	9			38.5	12.4	51.8	25.7	64.8	38.7	78.8	52.7	91.8	65.7	105	78.8	118	91.7	139	109	160	127	86.5	53
	10					46	16.1	59	29.1	73	43.1	86	56.1	99	69.1	112	82.1					96	58.9
	11							53	19.5	67	33.5	80	46.5	93	59.5	106	72.5	133	99.5	154	117	106	64.7
	12									61.1	24	74.1	37	87.1	50	100	63	127	90	148	107	115	70.6
																						115	70.6
																						115	70.6
																						115	70.6
																						115	70.6
CS115S	5																					93.2	57.2
	6																					109	66.7
	7	59.4	29.3	81.4	51.3	102.4	72.3	124	94.3	145	115	167	137	179	143	191	149					124	76.2
	8	49.8	13.8	71.8	35.8	92.8	56.8	115	78.8	136	100	158	122	169	127	182	134	225	177			140	85.7
	9			62.3	20	73.8	26	95.8	48	117	69	139	91	160	112	182	134	215	161	258	204	149	155
	10							86.3	32	107	53	129	75	150	96	172	118	215	161			171	105
	11									98	38	120	60	141	81	163	103	206	146	249	189	155	95.3
	12											110	44	131	65	153	87	196	130	239	173	171	105
																						186	114
																						120	73.6
																						140	85.8
																						180	110
CS125S	5																					140	85.8
	6																					160	98
	7	76.7	38	104.7	66	132.7	94	160	121	188	149	216	177	230	184							180	110
	8	64.4	18	92.4	46	120.4	74	147	101	175	129	203	157	218	164	246	192					200	123
	9			80.2	26	108.2	54	135	81	163	109	191	137	218	164	246	192	289	227			200	123
	10					96	34	123	61	151	89	179	117	206	144	234	172					200	123
	11							111	41	139	69	167	97	194	124	222	152	277	207	333	263	200	123
	12									126	49	154	77	181	104	209	132	264	187	320	243	200	123
																						200	123
																						200	123
																						200	123
																						200	123
CS145S	5																					220	135
	6																					251	154
	7	120.7	60	164.7	104	207.7	147	252	191	295	234	338	277	362	290							283	173
	8	101	29	145	73	188	116																



Pneumatic 3PC Threaded Ball Valve

CS611F-16P/R

Medium Temp : -20°C ~+180°C
Ambient Temp : -20°C ~+60°C
Nominal Pressure : 1.0~4.0MPa
Control Air : Air
Air Supply Pressure :0.3~0.8MPa
Size :1/2" -4"
Valve Body :CF8 CF8M
Valve Seat :PTFE
Valve Stem :304
Sealing O Ring :NBR



Pneumatic 2PC Flanged Ball Valve

CS641F-16P/R

Medium Temp : -20°C ~+180°C
Ambient Temp : -20°C ~+60°C
Nominal Pressure : 1.0~1.6MPa
Control Air : Air
Air Supply Pressure :0.3~0.8MPa
Size :DN15-DN200
Valve Body :WCB CF8 CF8M
Valve Seat :PTFE
Valve Stem :304
Sealing O Ring :NBR



Pneumatic 3 Way Threaded Ball Valve

CS614(5)F-16P/R

Medium Temp : -20°C ~+180°C
Ambient Temp : -20°C ~+60°C
Nominal Pressure : 1.0~4.0MPa
Control Air : Air
Air Supply Pressure :0.3~0.8MPa
Size :1/2" -2"
Valve Body :CF8 CF8M
Valve Seat :PTFE
Valve Stem :304
Sealing O Ring :NBR



Pneumatic UPVC Wafer Butterfly Valve

CS671X-10UPVC

Medium Temp : -20°C ~+80°C
Ambient Temp : -20°C ~+60°C
Nominal Pressure : 1.0~1.0MPa
Control Air : Air
Air Supply Pressure :0.3~0.8MPa
Size :DN50-DN300
Valve Body :UPVC
Valve Disc :UPVC
Valve Seat :EPDM NBR
Valve Stem :304
Sealing O Ring :NBR



Pneumatic V Type Wafer Ball Valve(Segment)

CS671W-16P/R

Medium Temp : -20°C ~+180°C
Ambient Temp : -20°C ~+60°C
Nominal Pressure : 1.0~1.6MPa
Control Air : Air
Air Supply Pressure :0.3~0.8MPa
Size :DN25-DN250
Valve Body :CF8 CF8M
Ball : CF8 CF8M
Valve Seat :PTFE STL
Valve Stem :304
Sealing O Ring :NBR



Pneumatic Wafer Butterfly Valve

CS671X-16Q/C/P/R

Medium Temp : -20°C ~+150°C
Ambient Temp : -20°C ~+60°C
Nominal Pressure : 1.0~1.6MPa
Control Air : Air
Air Supply Pressure :0.3~0.8MPa
Size :DN40-DN300
Valve Body :Cast Iron
Valve Disc :WCB CF8 CF8M
Valve Seat :PTFE EPDM NBR FPM
Valve Stem :304
Sealing O Ring :NBR



Pneumatic UPVC Union Ball Valve

CS661F-10UPVC

Medium Temp : -20° ~+80°
Ambient Temp : -20° ~+60°
Nominal Pressure : 1.0~1.0MPa
Control Air : Air
Air Supply Pressure :0.3~0.8MPa
Size :DN15-DN100
Valve Body :UPVC
Valve Seat :PTFE
Valve Stem :UPVC
Sealing O Ring :NBR



Pneumatic 3-Way Clamped Ball Valve

CS688F-10P/R

Medium Temp : -20° ~+180°
Ambient Temp : -20° ~+60°
Nominal Pressure : 1.0~1.0MPa
Control Air : Air
Air Supply Pressure :0.3~0.8MPa
Size :Φ 19- Φ 102
Valve Body :CF8 CF8M
Ball :CF8M
Valve Seat :PTFE
Valve Stem :304
Sealing O Ring :NBR



Pneumatic 3PC Flanged Ball Valve

CS641H-16P/R

Medium Temp : -20°C ~+425°C
Ambient Temp : -20°C ~+60°C
Nominal Pressure : 1.0~42.0MPa
Control Air : Neutral Gas,Air
Air Supply Pressure :0.3~0.8MPa
Size :DN50-DN250
Valve Body : A105 F304 F316
Ball: 13Cr SS304/316
Valve Seat : STL
Valve Stem :F6a F304



Pneumatic Welded Butterfly Valve

CS661X-10P/R

Medium Temp : -20° ~+120°
Ambient Temp : -20° ~+60°
Nominal Pressure : 1.0~1.0MPa
Control Air : Air
Air Supply Pressure :0.3~0.8MPa
Size : Φ 19- Φ 1219
Valve Body :304 316
Valve Disc :CF8 CF8M
Valve Seat :EPDM NBR FPM
Valve Stem :304
Sealing O Ring :NBR



Pneumatic Flanged Butterfly Valve

CS643H-16rC/P/R

Medium Temp : -20°C ~+420°C
Ambient Temp : -20°C ~+60°C
Nominal Pressure : 1.6 MPa
Control Air : Neutral Gas Air
Air Supply Pressure :0.3~0.8MPa
Size :DN50-DN1000
Valve Body :WCB SS304 Cf8 CF8M
Valve Disc: Ss304 SS316
Valve Seat : EPDM PTFE
Valve Stem :F6a F304



Pneumatic Lined Butterfly Valve

CS671F46-16Q/C/P

Medium Temp : -20°C ~+150°C
Ambient Temp : -20°C ~+60°C
Nominal Pressure : 1.6MPa
Control Air : Neutral Gas,Air
Air Supply Pressure :0.3~0.8MPa
Size :DN40-DN300
Valve Body :Cast Iron Ductile Iron
Valve Disc: WCB CF8 CF8M
Valve Seat : EPDM PTFE FPM
Valve Stem :F6a F304
Control Features: Open/Closing Adjusting