



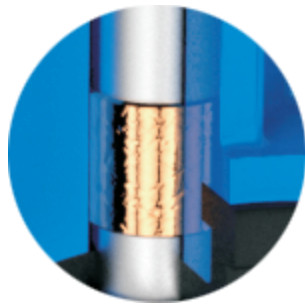
## Products Features

Mounting Pad ISO-5211  
according to international  
standard ISO-5211

Manual Lever  
Gear Box  
Pneumatic Actuator  
Motorized Actuator

Shafting is according to  
ISO522 standard.

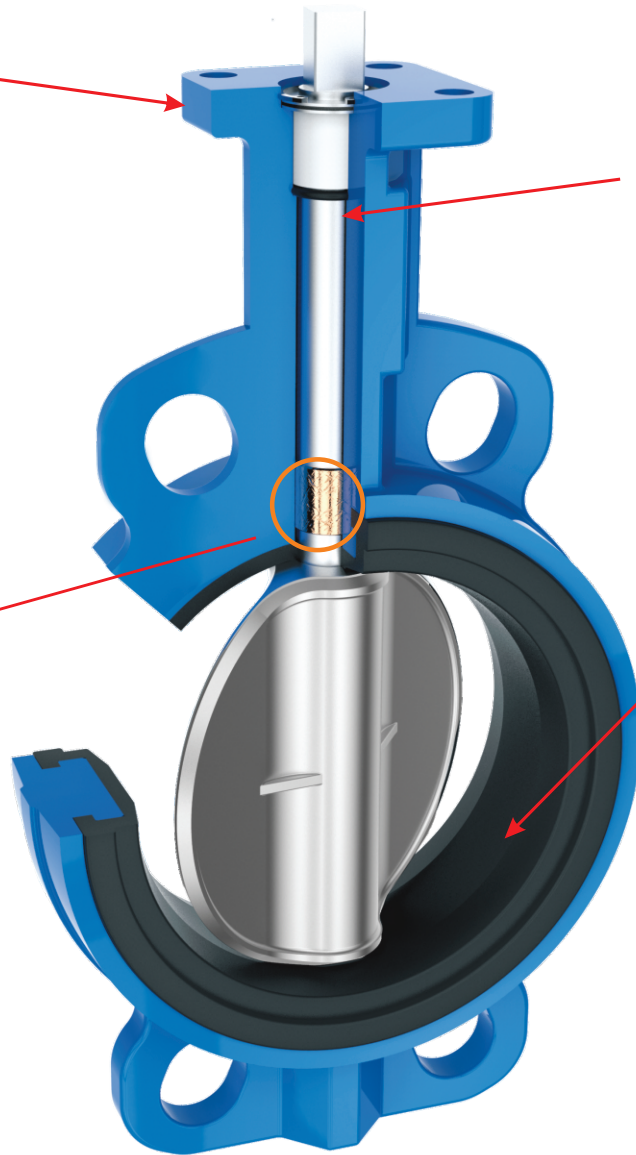
Single piece design shafting  
to enhance the accessibility  
on repair or replacement of  
seals and improved sealing  
capability to avoid leakage.



Self Lubricating guide  
Bushing, made of special  
stainless steel coated  
with PTFE ring to improve  
the workmanship.

Seal ring is made of soft  
high quality material to  
improve the sealing  
capability and flexibility  
resulting to less torque.

The design of butterfly valve  
is more cost effective, for the  
reason valve can be repaired  
by replacing the seat.



Butterfly disk with mirror finish  
surface, specifically designed  
to reduce torque and seals  
wear and tear.

Hexagonal middle hole, for  
easy maintenance procedure.



## Ordering Code

VD  710

### Operating Mode

- P - Pneumatic Actuated
- E - Motorized Actuated
- G - Gear Box Operated
- S - Lever Operated
- W - Bare Shaft

Butterfly valves

### Butterfly Valve Type

- 710 - Wafer Type
- 710B - Lug Type
- 410 - Flange Type

### Seal Material

- NBR - NBR
- EPDM - EPDM
- CR - Neoprene
- SI - Silicone
- VT - Viton
- PTFE - Teflon

### Butterfly Valve Size

- DN040 - 40mm; 1.5"
- DN050 - 50mm; 2"
- DN065 - 65mm; 2.5"
- DN080 - 80mm; 3"

### Body Material

- Z - Cast Iron
- Q - Ductile Iron
- C - Carbon Steel
- P - Stainless Steel 304
- R - Stainless Steel 316
- L - Cast Aluminum

### Disk Material

- N - Nylon Coated
- D - Nickel Coated
- 304 - Stainless Steel 304
- 316 - Stainless Steel 316
- T - Aluminum

### Working Pressure

- GB9113.1 PN10, PN16
- JIS10K JISB2238, 2239
- ASME150 ASMEB16.5

## Valve material selection guide

- Excellent
- Good
- Fair
- Poor

### Kinds of media and suitable guide

Sealing Material	Fresh water	Fresh water	Salt water	strong soda	light soda	strong acid	Light acid	Nature GAS	Alcohol	Air	Steam	Oil	Food	Suitable temperature
NBR	Excellent	Excellent	Excellent	Good	Excellent	Poor	Good	Excellent	Fair	Excellent	Poor	Excellent	Good	-10~100°C
EPDM	Excellent	Excellent	Excellent	Excellent	Excellent	Fair	Excellent	Good	Good	Excellent	Excellent	Poor	Excellent	-10~120°C
NR	Excellent	Excellent	Excellent	Excellent	Excellent	Fair	Good	Poor	Fair	Excellent	Poor	Poor	Poor	-20~80°C
CR	Excellent	Excellent	Good	Excellent	Excellent	Poor	Fair	Poor	Fair	Excellent	Poor	Poor	Good	-40~82°C
SI	Excellent	Excellent	Good	Poor	Good	Poor	Good	Excellent	Good	Excellent	Excellent	Fair	Fair	-10~150°C
FPM	Excellent	Excellent	Excellent	Fair	Excellent	Fair	Excellent	Excellent	Fair	Excellent	Excellent	Excellent	Excellent	-10~200°C
PTFE	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	-10~150°C
Nickel-plated ductile iron	Good	Poor	Fair	Poor	Fair	Poor	Fair	Good	Excellent	Good	Excellent	Excellent	Fair	-30~350°C
Nylon-coating ductile iron	Excellent	Excellent	Excellent	Excellent	Excellent	Poor	Excellent	Excellent	Fair	Excellent	Poor	Excellent	Excellent	-30~95°C
PCMO-coating ductile iron	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	-30~130°C
PTFE-coating ductile iron	Excellent	Excellent	Good	Excellent	Good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	-30~160°C
Alumium	Good	Fair	Poor	Fair	Poor	Good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Fair	-273~232°C
Stainless steel	Good	Fair	Fair	Good	Fair	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	-268~538°C
Nickel-plated carbon steel	Good	Poor	Fair	Poor	Fair	Fair	Fair	Good	Excellent	Good	Excellent	Excellent	Fair	-29~425°C

## KV

Size		Valve opening								
mm	inch	10°	20°	30°	40°	50°	60°	70°	80°	90°
DN40	1.5"	0.7	2.4	6.9	14.2	22	36	59	81	113
DN50	2"	1.1	3.8	10.2	22	38	60	100	132	193
DN65	2.5"	2	7.5	18.2	35	61	96	187	240	315
DN80	3"	2.5	9.8	26	48	83	126	214	338	425
DN100	4"	3.8	14.6	39	72	119	221	361	606	723
DN125	5"	6.5	24	62	118	217	394	599	1038	1243
DN150	6"	10	41	95	175	326	542	873	1260	1859
DN200	8"	19	64	165	306	573	995	1567	2310	3124
DN250	10"	28	101	245	451	836	1462	2253	3256	4757
DN300	12"	34	129	312	615	1137	2125	3248	4991	7058
DN350	14"	47	163	390	795	1498	2573	3980	5749	8319
DN400	16"	62	231	508	1077	1971	3381	5385	8099	11458
DN450	18"	75	256	621	1208	2315	3925	6331	9474	13612
DN500	20"	103	346	859	1692	3086	5348	8513	13109	18748
DN600	24"	139	494	1153	2389	4466	7561	11945	18088	25217
DN700	28"	191	659	1674	3224	5990	10659	17442	25194	36812
DN800	32"	257	973	2302	4533	8235	14123	23021	31613	45995
DN900	36"	329	1253	2950	5862	10810	18184	29756	42893	61044
DN1000	40"	510	1919	4456	7956	13494	21939	36000	54649	68874
DN1100	44"	617	2322	5392	9627	16328	26546	43560	66125	83338
DN1200	48"	734	2763	6417	11457	19431	31592	51840	78695	99179

KV value denotes the flow rate in m/hr for water at 20°C under a pressure differential 1kg/cm<sup>2</sup>. Cv=1.17kv

## Torque(Nm)

Size		lubricating(non-corrosive)ΔP(bar)			Non-lubricating ΔP(bar)	
mm	inch	6	10	16	6	10
DN40	1.5"	17	19	23	21	23
DN50	2"	17	19	23	21	23
DN65	2.5"	20	22	26	24	27
DN80	3"	31	34	41	38	42
DN100	4"	41	45	54	50	56
DN125	5"	68	76	91	84	93
DN150	6"	127	140	154	138	152
DN200	8"	190	211	253	235	260
DN250	10"	306	340	408	378	420
DN300	12"	423	470	565	522	580
DN350	14"	605	672	---	747	830
DN400	16"	809	899	---	999	1110
DN450	18"	1013	1126	---	1251	1390
DN500	20"	1261	1401	---	1557	1730
DN600	24"	1472	1636	---	1818	2021
DN700	28"	2599	2889	---	3209	3566
DN800	32"	3342	3713	---	4125	4583
DN900	36"	4253	4726	---	5251	5834
DN1000	40"	5680	7620	---	7010	9410
DN1100	44"	6872	9262	---	8481	11385
DN1200	48"	8178	11022	---	10093	13548

Including a 30% safety factor.

Item	Standard
Design	GB12238-89 ISO/DIN10631-91,AP1598
Face to face dimensions	GB12221-89 ISO5752-88
Flange connection	GB1724.6-1998 ANSI.B16.5, ISO7005 GB9113.1-2000 JIS B2238, 2239
Test	GB/T13927-92 ISO/DIN5208-87
Mark	GB12220-89 ISO5209-87 GB/T12252

## Pressure rating:

Bi-directional bubble-tight shut off to:  
16 bar (230PSI)----DN40~DN600mm  
16 bar (230PSI)----DN40~DN600mm

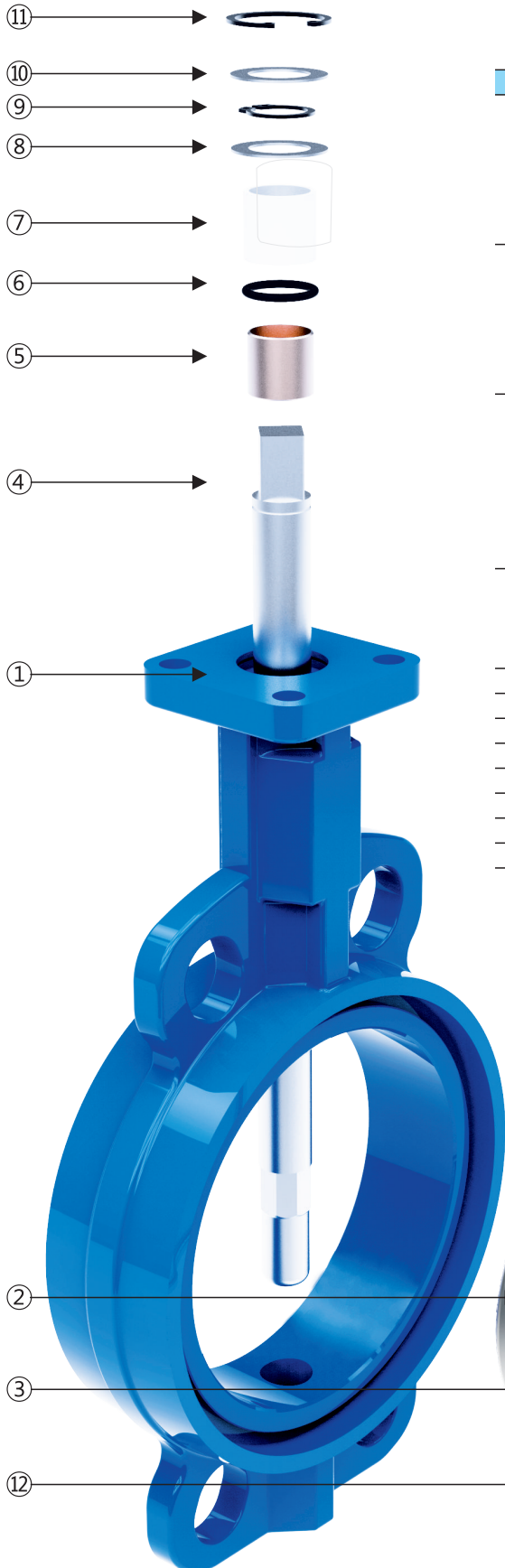
And tested to 110% of full rating:  
18 bar (260PSI)----DN40~DN600mm  
11 bar (160PSI)----DN650~DN1000mm

## Shell testing:

The body strength can stand 150% of full rating:  
24 bar (34PSI)----DN40~DN600mm  
15 bar (220PSI)----DN650~DN1000mm



## Assembly drawing



## Parts Material

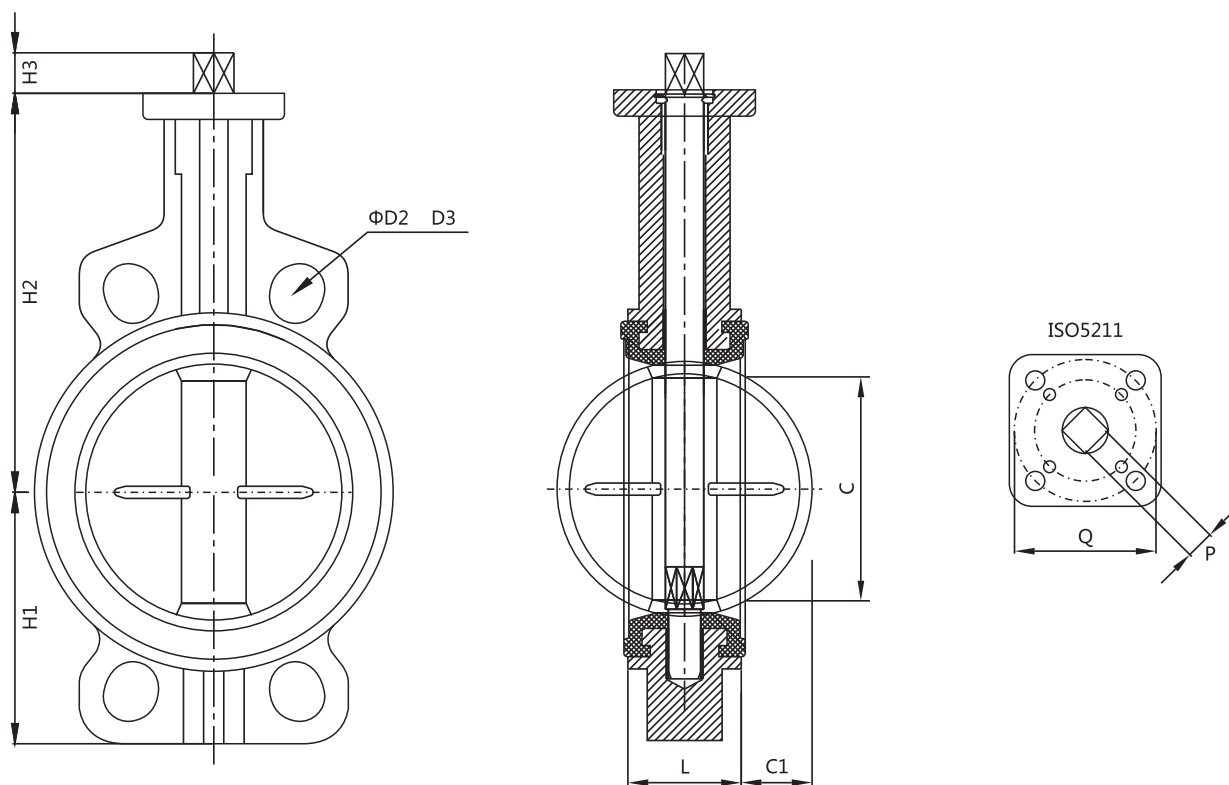
No.	Part	Material	Remarks
1	Body	Cast Iron	710- Wafer type 710B- Lug type
		Ductile Iron	
		Carbon Steel	
		Stainless Steel 304	
		Stainless Steel 316	
2	Disc	Cast Aluminum	
		Nylon Coated	
		Nickel Coated	
		Stainless Steel 304	
		Stainless Steel 316	
3	Seat	Duplex Steel	-10° ~ 80°C -20° ~ 120°C -20° ~ 140°C -0° ~ 80°C -20° ~ 180°C -18° ~ 204°C -250° ~ 250°C
		Aluminum	
		NBR	
		EPDM	
		PTFE	
4	Stem	Stainless Steel 410	
		Stainless Steel 304	
		Stainless Steel 316	
		Carbon Steel	
5	Bearing	PTFE + Stainless Steel	
6	O-ring	NBR	
7	Bush	Deirin	
8	Spacer	Stainless Steel	
9	Check ring	Manganese Steel	
10	Spacer	Stainless Steel	
11	Check ring	Manganese Steel	
12	Bearing	PTFE + Stainless Steel	

VD710.....





### VD710 dimension



### PN10/16/ANSI 150LB

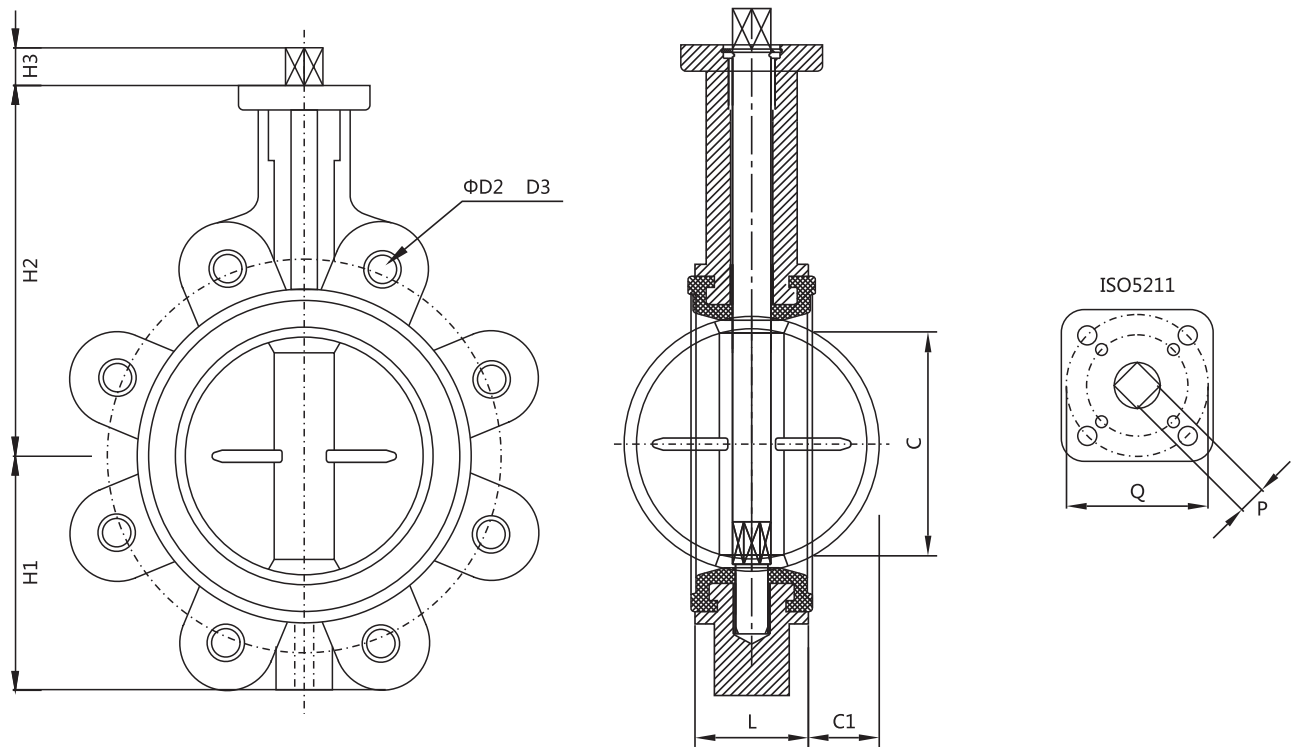
Size		H1	H2	H3	L	C	C1	D2	D3	P	Q	ISO5211
mm	inch											
DN40	1.5"	60	120	14	33	34	7	110	98.5	11	50/70	F05/F07
DN50	2"	65	143	14	43	39	8	125	120.5	11	50/70	F05/F07
DN65	2.5"	71	155	15	46	55	13	145	139.5	11	50/70	F05/F07
DN80	3"	77	162	15	46	69	19	160	152.5	11	50/70	F05/F07
DN100	4"	107	181	16	52	91	27	180	190.5	11	50/70	F05/F07
DN125	5"	122	197	19	56	115	36	210	216.0	14	70	F07
DN150	6"	150	210	19	56	140	47	240	241.5	14	70	F07
DN200	8"	165	240	22	60	186	68	295	298.5	17	102	F10
DN250	10"	201	286	22	68	239	90	355	362.0	19	102	F10
DN300	12"	234	309	25	78	288	111	410	432.0	22	102	F2
DN350	14"	302	329	30	78	325	128	470	476.5	27	125	F12
DN400	16"	335	361	30	102	375	143	525	540.0	27	125	F12
DN450	18"	363	393	38	114	423	162	585	578.0	36	140	F14
DN500	20"	398	427	38	130	473	182	650	635.0	36	140	F14
DN600	24"	457	492	48	154	560	214	770	749.5	46	165	F16
DN700	28"	510	563	112	165	655	255	840	863.5		165	F16
DN800	32"	592	630	112	190	736	285	950	978.0		254	F25
DN900	36"	632	660	118	203	841	331	1050	1086.0		254	F25

D2 is designed to meet GB9113.1  
D3 is designed to meet ANSI 150 B16.5

VD710B...



## VD710B Lug type dimension



### PN10/16/ANSI 150LB

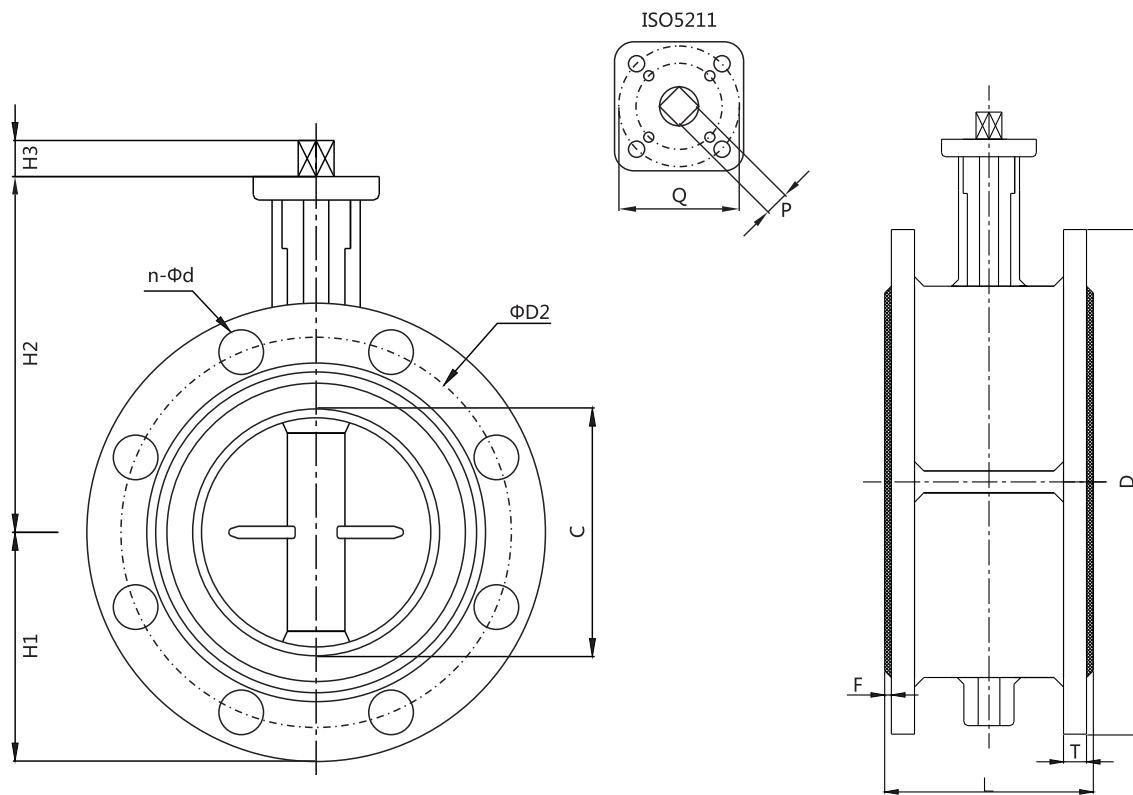
Size		H1	H2	H3	L	C	C1	D2	D3	P	Q	ISO5211
mm	inch											
DN50	2"	65	143	14	43	39	8	125	120.5	11	50	F05
DN65	2.5"	71	155	15	46	55	13	145	139.5	11	50	F05
DN80	3"	77	162	15	46	69	19	160	152.5	11	50	F05
DN100	4"	107	181	16	52	91	27	180	190.5	11	70	F07
DN125	5"	122	197	19	56	115	36	210	216.0	14	70	F07
DN150	6"	150	210	19	56	140	47	240	241.5	14	70	F07
DN200	8"	165	240	22	60	186	68	295	298.5	17	102	F10
DN250	10"	201	286	22	68	239	90	355	362.0	19	102	F10
DN300	12"	234	309	25	78	288	111	410	432.0	22	125	F12
DN350	14"	302	329	30	78	325	128	470	476.5	27	125	F12
DN400	16"	335	361	30	102	375	143	525	540.0	27	140	F14
DN450	18"	363	393	38	114	433	162	585	578.0	36	140	F14
DN500	20"	392	427	38	130	473	182	650	635.0	36	165	F16
DN600	24"	457	492	48	154	560	214	770	749.5	48	254	F25

D2 is designed to meet GB9113.1  
D3 is designed to meet ANSI 150 B16.5

VD410....



## VD410 Flange type dimension



## PN10/16

Size		H1	H2	H3	L	T	F	C	D	ΦD2		n-Φd		P	Q	ISO5211
mm	inch									PN10	PN16	PN10	PN16			
DN50	2"	62	130	14	108	20	2	39	164	125	125	4-Φ18	4-Φ18	11	50	F05
DN65	2.5"	73	145	15	112	20	2	55	181	145	145	4-Φ18	4-Φ18	11	50	F05
DN80	3"	85	155	15	114	20	2	69	195	160	160	4-Φ18	8-Φ18	11	50	F05
DN100	4"	102	172	16	127	22	2	91	215	180	180	8-Φ18	8-Φ18	11	70	F07
DN125	5"	116	190	19	140	22	2	115	245	210	210	8-Φ18	8-Φ18	14	70	F07
DN150	6"	130	210	19	140	24	2	140	280	240	240	8-Φ22	8-Φ22	14	70	F07
DN200	8"	160	243	22	152	24	2	186	337	295	295	8-Φ22	12-Φ23	17	102	F10
DN250	10"	193	282	22	165	26	2	239	405	350	355	12-Φ23	12-Φ26	19	102	F10
DN300	12"	230	310	25	178	28	2	288	455	400	410	12-Φ23	12-Φ26	22	125	F12
DN350	14"	256	345	30	190	30	2	325	525	460	470	12-Φ23	16-Φ26	27	125	F12
DN400	16"	283	377	30	216	32	2	375	580	515	525	12-Φ26	16-Φ30	27	140	F14
DN450	18"	317	392	38	222	40	2	423	640	565	585	12-Φ26	16-Φ30	36	140	F14
DN500	20"	355	430	38	229	44	2	473	705	620	650	20-Φ26	20-Φ33	36	165	F16
DN600	24"	410	500	48	267	54	2	560	825	725	770	20-Φ30	20-Φ36	46	254	F25

ΦD2 is designed to meet GB9113.1

## Product



Wafer Type Lever Operated



Flange Type Gear Box Operated



Lug Type Lever Operated



Wafer Type Gear Box Operated



Wafer Type Lever Operated



Wafer Type Gear Box Operated



Wafer Type Bare Shaft



Wafer Pneumatically Operated



Wafer Gear box w/ Limit Switch



Wafer Type Viton Seal  
Pneumatically Operated



Double Flange Type  
Pneumatically Operated



Wafer Type EPDM seal  
Pneumatically Operated



Lug Type  
Pneumatically Operated



Wafer Type  
Motorized Actuated



PVC Wafer Type  
Motorized Actuated



Aluminum Body Wafer Type  
Gear Box Operated



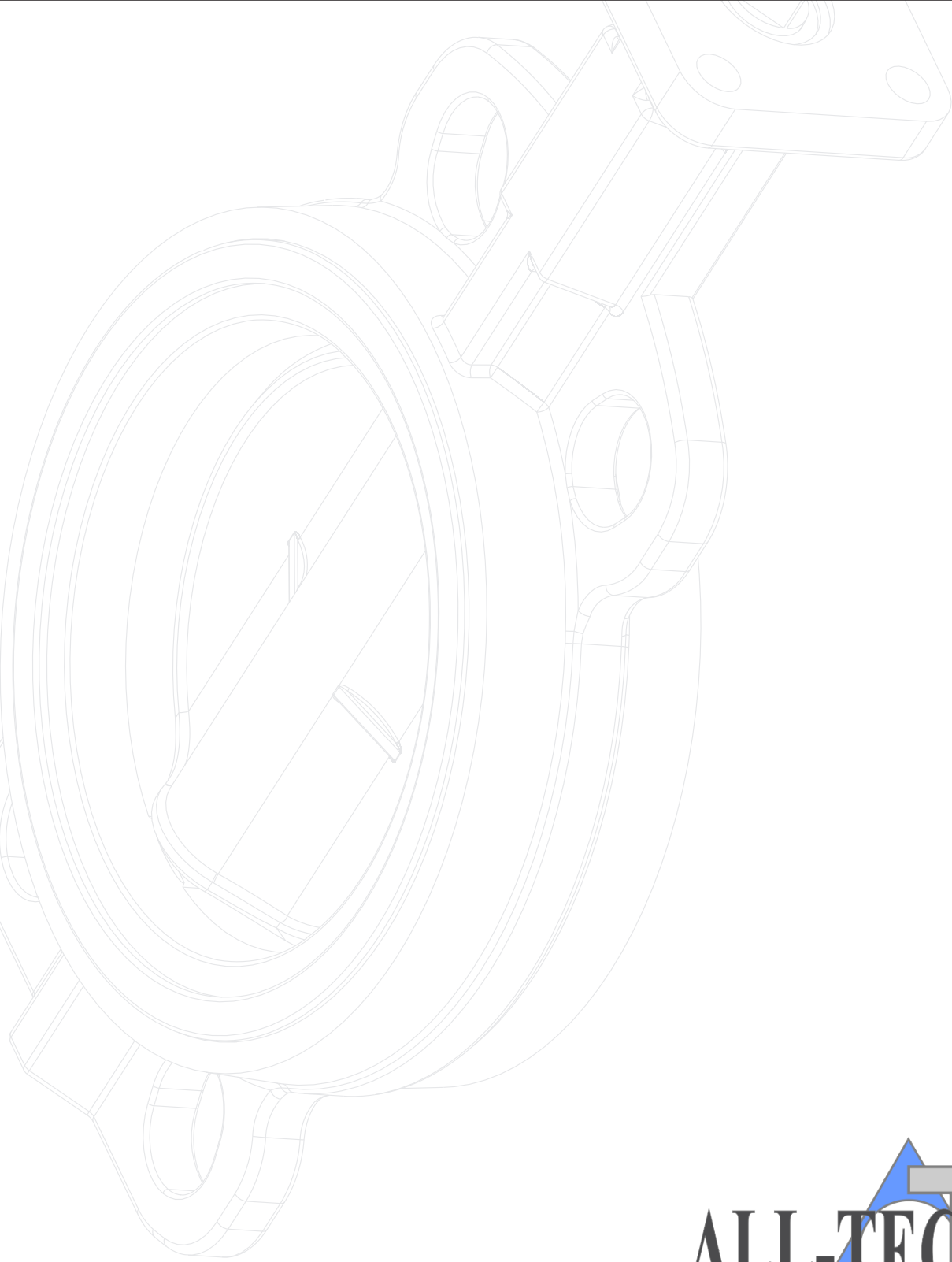
PVC Wafer Type  
Pneumatically Operated



Aluminum Body Wafer Type  
Lever Operated







**ALL-TECHNIK**  
**& Components, Incorporated**

All-Technik Bldg. Lot 11 Block 36 San Antonio Ave.  
San Antonio Valley 1 Sucat Parañaque City Philippines  
Tel. No.: (0632) 8829-4849 to 50; 8825-2533  
(+32) 0917-5657893; 0923-7014027  
[www.alltechnik.com](http://www.alltechnik.com) [www.atpneumatik.com](http://www.atpneumatik.com)  
[sales@alltechnik.com](mailto:sales@alltechnik.com) [sales@atpneumatik.com](mailto:sales@atpneumatik.com)