

PRODUCTOS Y SOLUCIONES
EN REDES DE FLUIDOS

PRODUCTS AND SOLUTIONS
IN FLOW SYSTEMS



VALVULAS DE MARIPOSA
BUTTERFLY VALVES

 **Fondon**
global

Contents

05	Features of Center Line Butterfly valve
06	Specification, Pressure test and Material list
07	Torque Sheet and Cv Value Sheet
08	M1100 Series center line butterfly valve
25	M1110 Series center line butterfly valve
32	M1120 Series center line butterfly valve
36	M1130 Series center line double flanged butterfly valve
39	M710 Series High Performance butterfly valve
47	M720 double or triple eccentric double flanged butterfly valve
50	M510 Series anticossion butterfly valve
52	M1140 Series grooved end butterfly valve
54	ISO5211 Mounting Pad
55	Flange Drilling Dimensions
56	Bolt Length Reference
57	Guide to Material Use

Qué ofrecemos

Las empresas que conforman Fondón Global cuentan con más de 35 años de experiencia en el campo de las redes de fluidos, especialmente en los sectores minero, petrolero, químico, aguas, energético, cementero, papelero, alimentario y siderúrgico.

Nuestra oferta abarca desde el diseño y fabricación de válvulas standard y especiales, la venta de productos de marca propia o de fabricantes líderes en sus mercados, integración de suministros, hasta contratos de llave en mano para proyectos de ingeniería en automatización industrial. Esta estructura ofrece el aval, desde hace años, de las certificaciones de calidad ISO 9001.

Modelo de Negocio

El modelo de negocio de Fondón Global se edifica sobre cuatro sólidos pilares, a partir de los cuales ofrecemos soluciones globales adaptadas a las necesidades de cada cliente:



Diseño

La división de diseño de equipos para control de fluidos, localizada en la empresa FCA, permite generar soluciones a medida para válvulas especiales del tipo guillotina, dampers, válvulas de chorro hueco, mariposa, retención, compuertas y otros equipos hidromecánicos.

La división de ingeniería en automatización industrial, localizada en Fondón Redes y Fluidos, desarrolla proyectos con cualquier protocolo de comunicación. Contamos con dilatada experiencia en el protocolo FF (FieldBus Foundation).

Fabricación

Las instalaciones de FCA sirven de sede a la gestión de los centros productivos de válvulas especiales. Desde ésta se gestiona una red de centros que producen los diferentes equipos.

What we offer

The companies comprising Fondón Global have more than 35 years experience in the field of industrial plumbing and pipeline services, specialising in mining development, oil companies, the chemical, water, energy, cement, paper and food industries and the iron and steel sector.

We offer services ranging from the design and manufacture of standard and specialised valves, the sale of our own brand products, or of leading market brands, full service supply capability, to turnkey contracts for engineering projects in industrial automation. The structure we offer gives the security of having been guaranteed for years by the ISO 9001 certificate of quality.

Business Model

The Fondon Global business model is based on four solid pillars from which we offer global solutions adapted to each client's needs:

Design

The department for the design of equipment for fluid control, found in FCA company, allows us to generate taylor made solutions for special valves such as knife gate, dampers, fixed cone, butterfly, check and gate valves along with other hydro mechanical equipment.

Our industrial automation engineering department, found in Fondón Redes y Fluidos, develops projects using all communication protocols. We have extensive experience with FF protocol (FieldBus Foundation).

Manufacture

The FCA premises is the base for the management and organisation of the production centres for specialised valves from which a network of centres dedicated to producing the equipment are controlled.

Representación

Fondón Global aporta a sus clientes una amplia gama de marcas y soluciones de fabricantes líderes o de gran prestigio en el mercado, así como una línea propia de calidad avalada.

Comercialización

Entendemos que la agilidad y la excelencia en el servicio son básicas para nuestro desarrollo futuro. En consecuencia, contamos con las mejores herramientas en aras de una eficiente gestión comercial con nuestros clientes, a través de sistemas ERP y gestores de conocimiento que nos permiten identificar cada día mejor las necesidades de nuestros clientes.



Diseño
Design



Fabricación
Manufacturing

Representation

Fondón Global offers its clients a wide range of brands and solutions from leading manufacturers and prestigious companies as well as our own quality guaranteed products.

Marketing

We understand that agility and excellence in the services we offer are basic for our future development. As a consequence we use the best systems available in order to achieve efficient marketing management with our clients, through ERP systems and knowledge management which allow us to improve, day by day, in the identification of the needs of our clients.



Representación
Representation



Comercialización
Marketing

Nuestra Misión

La transparencia y proximidad al cliente han sido siempre nuestras premisas. Sobre ellas se construye nuestra estrategia: "Ser referencia en la fabricación y prestación de servicios tecnológicos en el sector de la automatización industrial y redes de fluidos en especial en países emergentes, principalmente en el mercado latinoamericano, siendo al mismo tiempo conscientes de nuestra responsabilidad en el progreso de los países donde desarrollamos nuestra actividad."



001



Features

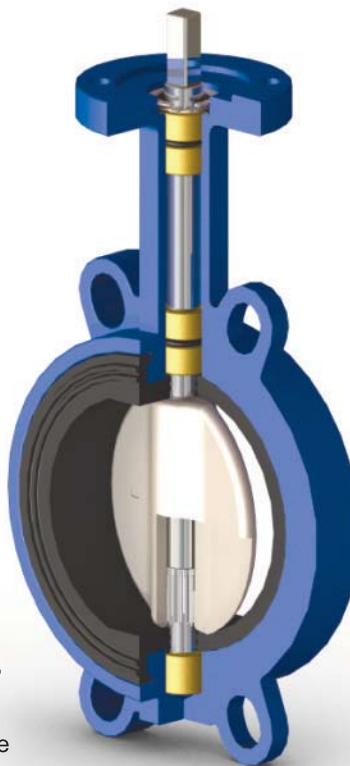
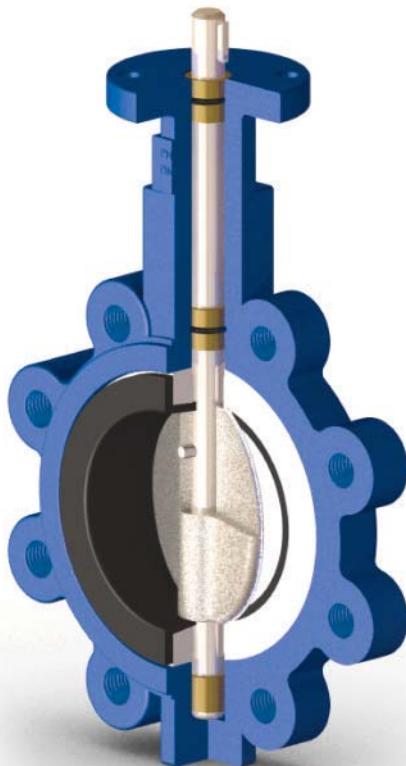
Concentric Line Resilient Butterfly Valve, as one of the most durable resilient seated valves in the industrial fields, has a wide variety of applications. Fondon Global butterfly valve is a one piece body for minimum weight and maximum strength. The unique stem hole design in the disc ensures a dry stem journal. Superior hard-backed and edge boot type seat allows easy of installation, reliable operation, and is field-replaceable without special tools. Fondon Global Butterfly Valves are available in sizes 1 inch to 48 inch.(DN25-DN1200)

Positive On-off, Bi-Directional Sealing

The valves provides bi-directional sealing at full rated pressure with identical flow from either direction.

Variety Seat Style:

Hiwa Butterfly Valve supply various seat style, include Hard-Backed Cartridge Seat, Cartridge seat with O lining, Edge Boot Seat, Mould in seat and other special seat style for you selection.



End of line service for lug style:

Lug style valves can be used in end of line service, with downstream piping removed. For upstream pressure is excluded between the flange and the seat face by the exclusive FG flange seal design, there is no effective force to slide the seat downstream.

Integral flange seal:

Molded into the edge of the seat is an integral flange seal which accommodates weld neck, slip-on, thread and socket flanges.

Teflon Bushing:

PTFE bushings reduce operating torque as well as provide maximum shaft support and alignment while isolating the stem from the valve body, preventing corrosion in the stem journal and ultimately stem seizure.

Wide Connection style between disc and stem:

Pin, Spline and square connection are the most popular connection of FG Butterfly Valve. Pin connection is the most economic style. Spline and rectangular connection made the orientation of the stem/disc better to enhance the drop tight sealing and prolongs service life.

◆ Specification

Std. Series No.	General Standard					Face to Face Standard					Mounting Pad	Pressure Test
	API609	MSS SP-67	MSS SP-68	ISO5752	EN1092	API609	ISO5752	DIN3202-K1	DIN3202-K2	DIN3202-F4	EN558	ISO 5211
B10 Series	●	●		●	●	●	●			●	●	●
B20 Series	●	●		●	●	●	●			●	●	●
B30 Series	●	●		●	●	●	●	●			●	●
B50 Series			●			●			●			●
B60 Series				●		●				●	●	●
B70 Series				●							●	●
B80 Series	●	●		●	●	●	●				●	●

◎ Flange drilling according to ASME B16.1, ASME B16.5, ASA 150 , DIN2501 PN6/PN10/PN16, BS 4504 PN10/PN16, BS10 Table D/E, EN1092 ,AS2129 Table D/E, JIS10K, ISO 7005 etc. Detail Data kindly refer to the attached Flange Drilling Dimensions.

◆ Pressure Test

Nominal Diameter	40(1.5")- 1200(48")	40(1.5")- 800 (32")	
Nominal Pressure	1.0Mpa	150 Psi	1.6 Mpa
Testing Pressure	1.1Mpa	225 Psi	1.76 Mpa
	1.5Mpa	165 Psi	2.4 Mpa
Working Temperature	-10°C to 200 °C according to the seat material		
Suitable Mediums	Water, Sea Water, Sewage, Fresh Water, Food, Vapour, Oil, Acid, Alkalies, Salts, etc.		
Actuators	Handle, Gear, Electric Actuator, Pneumatic Actuator and Fluid Drive.		

◆ Bill of Main Materials

No.	Name	Material	Specification				Remark
			ASTM	DIN	EN	JIS	
1	Body	Cast Iron Ductile Iron Carbon Steel Stainless Steel	ASTM A126B ASTM A536 A216 WCB A351 CF8M A351 CF8	GG25 GGG40 GS-C25 1.4408 1.4301	EN-GJS-250 EN-GJS-400 GP 240 GH+N BS970 304 S15 BS970 316 S15	FC200 FCD450 SCPH 2 SCS14 SCS13	
2	Disc	Plated Ductile Iron Aluminum Bronze Stainless Steel Carbon Steel	ASTM A536 B148-954 A351 CF8M A351 CF8 A216 WCB	GGG40 C954 1.4408 1.4301 GS-C25	EN-GJS-400 EN1982 CC491K BS970 304 S15 BS970 316 S15 GP 240 GH+N	FCD450 ABLC2 SCS14 SCS13 SCPH 2	PTFE or Nylon Coated Disc are all available
3	Stem	Carbon Steel	A216 WCB	GS-C25	GP 240 GH+N	SCPH 2	
		Stainless Steel	A276-410 A276-304 A276-316 A276-316L	1.4201 1.4301 1.4408 1.4401	BS 970 410-S21 BS970 304 S15 BS970 316 S15 BS970 316L	SUS410 SCS13 SCS14 SCS14A	
4	Seat	NBR(NITRILE) EPDM HEAT RESISTANT EPDM NEOPRENE(CR) HYPALON(CSM) VITON(FKM) NATURAL RUBBER(NR) PTFE COVER NBR FULL PTFE SILICON(Q)					-20°C~80°C -25°C~110°C -25°C~130°C -25°C~110°C -30°C~120°C -20°C~200°C -30°C~70°C -20°C~150°C -20°C~180°C -60°C~250°C
5	Pin	Stainless Steel	A182 F6A A182 F304 A182 F316	1.4201 1.4301 1.4408	BS 970 410-S21 BS970 304 S15 BS970 316 S15	SUS410 SCS13 SCS14	
6	Bushing	PTFE					
		Bronze	B62			BC62	
7	O-Ring	NBR EPDM VITON					-20°C~80°C -25°C~110°C -20°C~200°C

◎ Other special material requested kindly contact with Fondon Global directly.

◎ Detail Seat and Disc material recommendation kindly refer to the attached sheet of Guide to Material Use.

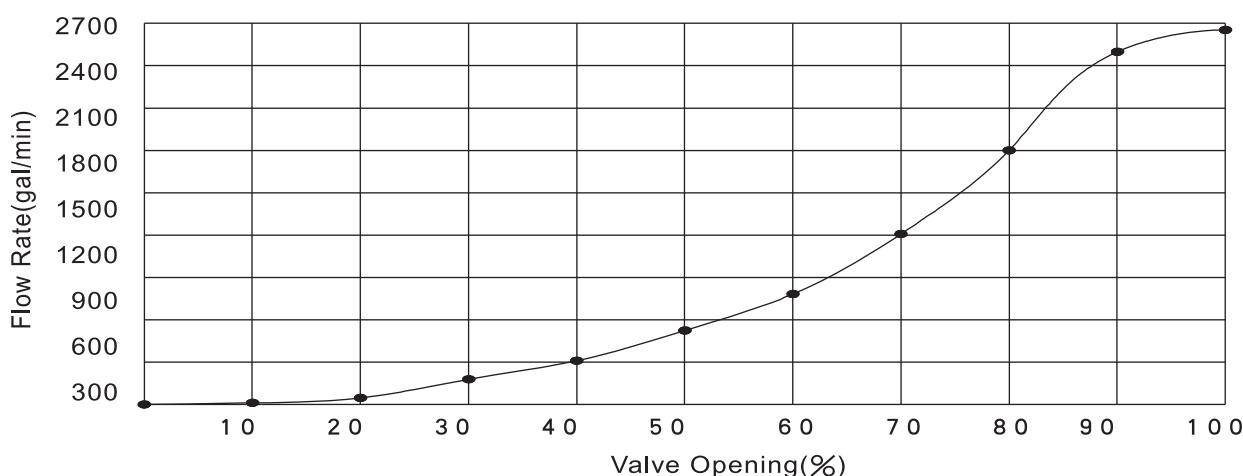
Valve Seating Torque(Nm)

Valve Size		Close-Off pressure				
mm	inch	$\Delta P = 2\text{bar}$	$\Delta P = 6\text{bar}$	$\Delta P = 10\text{bar}$	$\Delta P = 12\text{bar}$	$\Delta P = 16\text{bar}$
25	1"	4	5	6	6	8
32	1.2"	5	6	7	7	8
40	1.5"	6	7	8	8	9
50	2"	7	7	7	8	8
65	2.5"	8	8	8	11	11
80	3"	11	12	13	15	16
100	4"	18	20	22	26	29
125	5"	28	35	38	40	50
150	6"	50	55	61	67	74
200	8"	80	97	118	123	149
250	10"	190	210	232	258	285
300	12"	300	330	363	400	440
350	14"	410	450	494	520	571

* Note: All torque value in left chart were derived from the actual test data using water at 20°C. For torque using in other media, pls contact with Fondon Global directly. There is no safety factor included in the number shown on the left chart.

* For actuator selection, FG recommends: For EPDM, NBR, VITON, HYPOLEN seat, these values be multiplied by 1.35 to 1.5 for single valve applications. For PTFE seat, multiply the above numbers by 2.

* Kindly note under certain conditions, hydrodynamic torque can meet or exceed seating and unseating torques.



Cv Values-Valve Sizing Coefficients(US-GMP@1 PSID)

Aperture angle	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°
DN25	0.13	2.09	5.47	9.96	14.47	23.66	36.04	45.75	47.91	49.20
DN32	0.13	2.23	5.83	10.62	15.43	25.23	38.43	48.78	51.09	52.46
DN40	0.16	2.70	7.07	12.88	18.71	30.60	46.62	59.17	61.98	63.64
DN50	0.22	3.65	9.56	17.41	25.29	41.36	63.01	79.97	83.76	86.01
DN65	3.12	11.23	19.32	29.26	45.00	70.39	96.64	120.79	158.07	171.73
DN80	4.52	7.54	19.49	40.19	62.95	95.83	141.81	228.52	263.54	278.21
DN100	4.89	18.16	37.53	59.04	111.04	198.15	307.96	434.02	511.97	533.58
DN125	5.80	20.22	48.96	82.18	130.56	223.62	315.78	481.32	644.41	749.85
DN150	9.56	43.78	94.65	180.61	270.85	414.81	677.74	998.96	1467.20	1585.40
DN200	16.50	61.72	173.74	313.34	514.73	785.22	1217.30	1807.80	2500.70	2646.30
DN250	29.39	159.88	342.14	563.67	868.46	1337.90	1954.00	2654.90	3975.20	4021.90
DN300	42.36	110.61	418.37	711.74	1172.30	1603.00	2632.20	3984.80	6019.40	7355.90
DN350	46.00	278.00	621.00	1245.00	2212.00	3324.00	5189.00	7765.00	11000.00	11917.00

M1100 Series:

M1100 Series Butterfly Valve with hard phenolic seat, pin, splined or square connection between disc and stem, both wafer and lug style.

Top Flange:

Top flange as per ISO5211 standard can suit for all kinds of actuators such as handles, gear box, electric actuator and pneumatic actuators.

O ring:

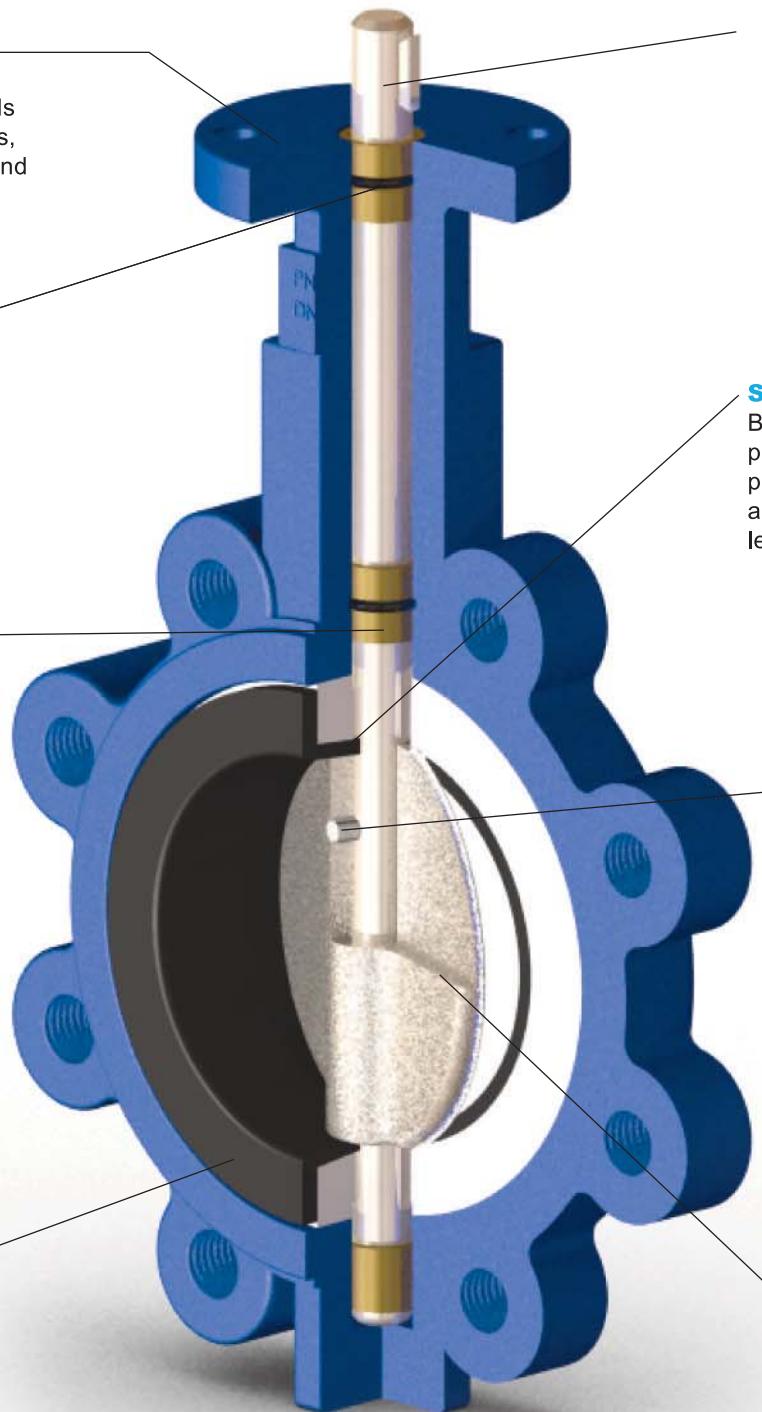
Prevent stem from leakage.

Bushing:

Stem bushing reduces valve torque, isolate the stem from the valve body, prevent the stem from corrosion. PTFE or Bronze material stem bushing for you selection.

Seat(Liner):

Phenolic back seat, non-collapsible type, with good stretch resistant, easy to replaceable.



Stem Configuration:

Round with key, Square, double "D" and 45° square for you selection.

Shaft Seal:

Bonding of elastomer to phenolic backing ring protects against distortion, a common cause of shaft leakage.

Connection between disc and shaft:

The pin, spline or square connection are all available. Spline or square eliminates shaft components being exposed to the line media, Maximum flow is achieved.

Disc:

Precision profile disc provides bubble-tight shut-off and assures minimum torque value and long seal lift.

M1100 Series:

◆ Technical Data

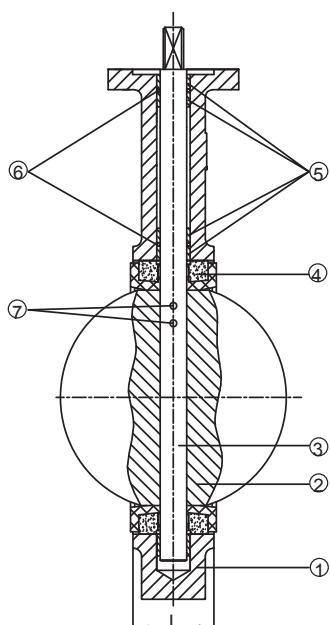
Size	DN40-DN1200
General Design	API609 *
Mounting Pad	ISO 5211
Face to Face	API609; EN558-1 20 series etc. *
Flange Drilling	DIN 2501 PN10/PN16 *
Inspection and Test	API598

* All available General Design and Face to Face Standard kindly refer to the Basic Specification of Fondon Global.

* All available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

◆ Product Features:

- Wafer,lug or U type flanged body style fit between FF or RF flanges
- PTFE bushing ensure the maximum shaft support and centralized alignment.
- 360° polished disc assures positive on-off
- Hard-Backed Cartridge Seat
- One piece shaft, pinned,splined and square connected disc.
- Universal ISO 5211 mounting Pad.

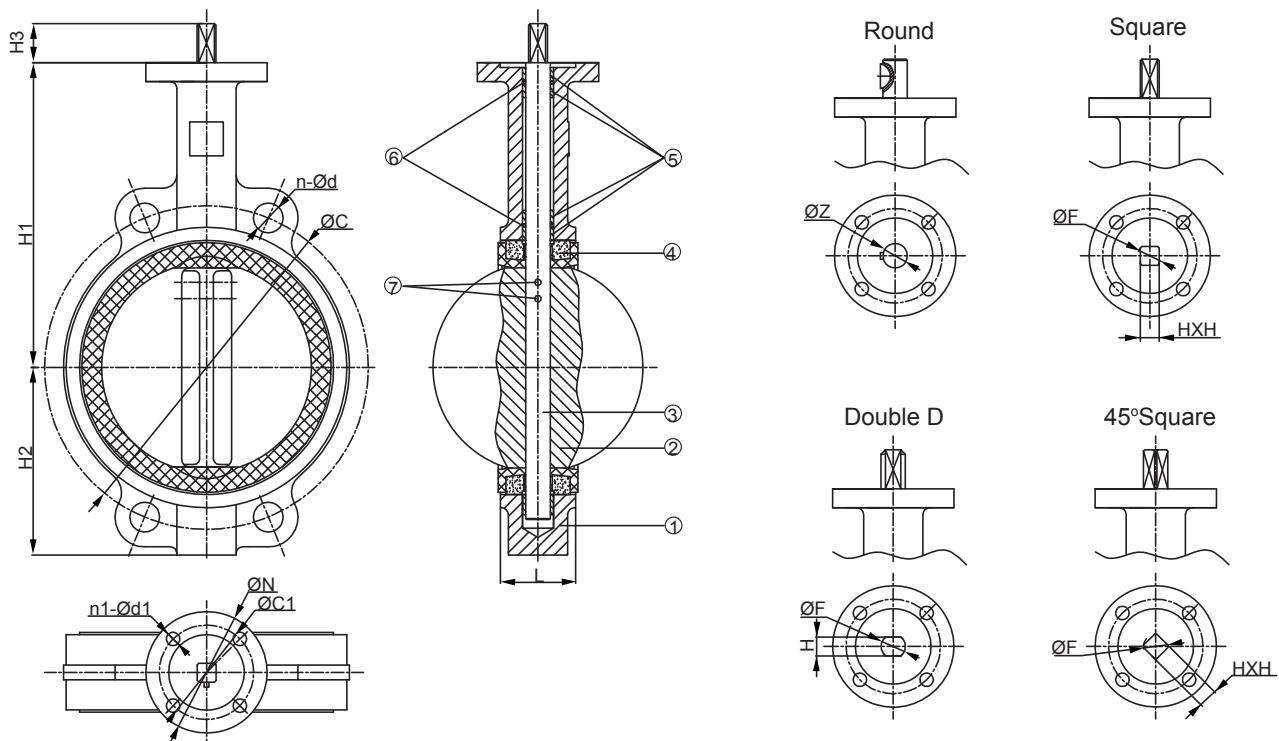


◆ Material of Construction

Parts	Description	Material	Specification
1	Body	Cast Iron	A126 Class B *
2	Disc	Stainless Steel	A351 CF8M *
3	Stem	Stainless Steel	AISI 316 *
4	Seat	EPDM	*
5	Bushing	PTFE	*
6	O Ring	EPDM	*
7	Pin	Stainless Steel	A351 CF8M *

* Other material request kindly refer to Bill of Main Materials of Fondon Global.

M1101



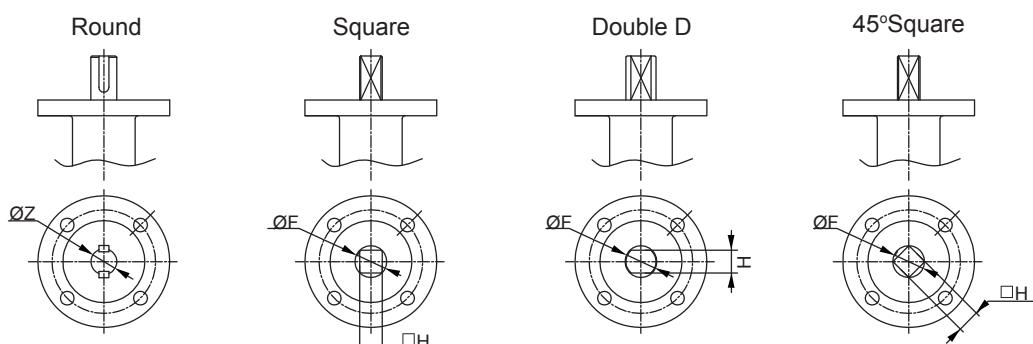
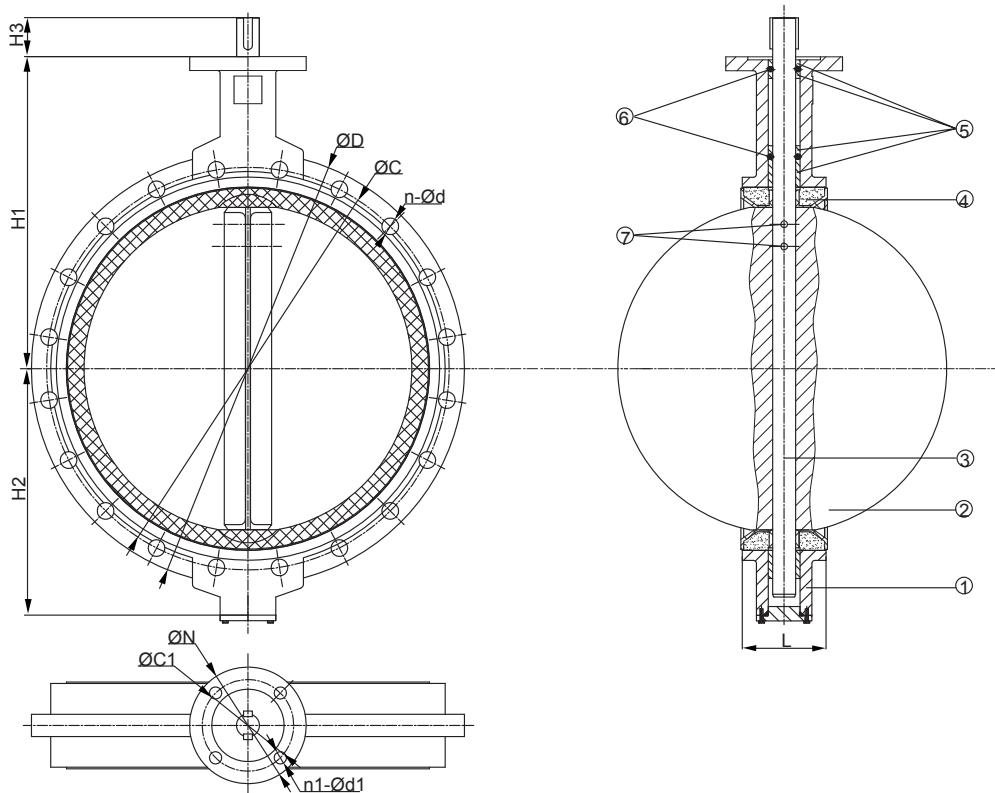
◆ Dimensions

SIZE		L	H1	H2	H3	ISO5211				DIN2501 PN16		$\emptyset Z$	$\emptyset F$	H
DN	NPS					No.	$\emptyset N$	$\emptyset C1$	$n1-\emptyset d1$	$\emptyset C$	$n-\emptyset d$			
40	1.5"	33	139	68	29	F05	65	50	4-Ø8	110	4-Ø18	12.6	12.1	9
50	2"	43	161	80	29	F05	65	50	4-Ø8	125	4-Ø18	12.6	12.1	9
65	2-1/2"	46	175	89	29	F05	65	50	4-Ø8	145	4-Ø18	12.6	12.1	9
80	3"	46	181	95	29	F05	65	50	4-Ø8	160	8-Ø18	12.6	12.1	9
100	4"	52	200	114	29	F07	90	70	4-Ø10	180	8-Ø18	15.77	14.1	11
125	5"	56	213	127	29	F07	90	70	4-Ø10	210	8-Ø18	18.92	18.1	14
150	6"	56	226	139	29	F07	90	70	4-Ø10	240	8-Ø22	18.92	18.1	14
200	8"	60	260	175	35	F10	125	102	4-Ø12	295	12-Ø22	22.1	22.1	17
250	10"	68	292	203	35	F10	125	102	4-Ø12	355	12-Ø26	28.45	28.1	22
300	12"	78	337	242	35	F10	125	102	4-Ø12	410	12-Ø26	31.6	28.1	22
350	14"	78	368	267	45	F10	125	102	4-Ø12	470	16-Ø26	31.6	28.2	22
400	16"	102	400	298.6	51.2	F14	175	140	4-Ø18	525	16-Ø30	33.15	28.2	22
450	18"	114	422	318	51.2	F14	175	140	4-Ø18	585	20-Ø30	38	36.2	27
500	20"	127	480	355	64.2	F14	175	140	4-Ø18	650	20-Ø33	41.15	36.2	27
600	24"	154	562	444	70.2	F16	210	165	4-Ø22	770	20-Ø36	50.65	48.2	36

* Other available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

* Special Stem head dimensions kindly contact with Fondon Global directly.

M1101



◆ Dimensions

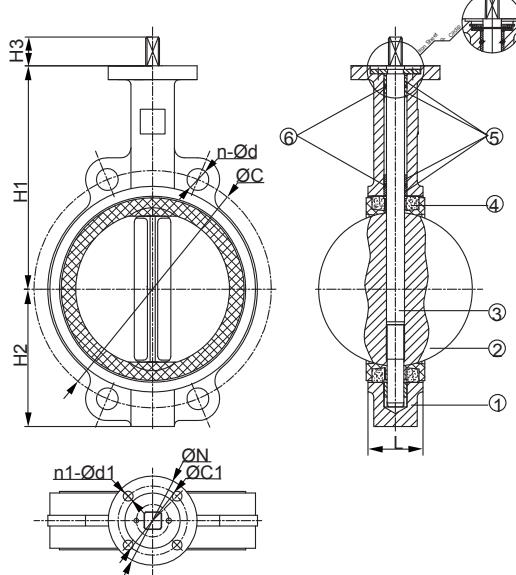
SIZE		L	H1	H2	H3	ISO5211				DIN2501 PN10			ØZ	ØF	H
DN	NPS					No.	ØN	ØC1	n1-Ød1	ØD	ØC	n-Ød			
700	28"	165	623.9	505.1	66	F25	300	254	8-Ø18	895	840	24-Ø30	55	60.2	46
750	30"	165	646	499	66	F25	300	254	8-Ø18	965	900	24-Ø33	55	60.2	46
800	32"	190	672	576	66	F25	300	254	8-Ø18	1015	950	24-Ø33	55	60.2	46
900	36"	203	720	637	118	F25	300	254	8-Ø18	1115	1050	28-Ø33	75	72.2	55
1000	40"	216	800	701	142	F25	300	254	8-Ø18	1230	1160	28-Ø36	85	72.2	55
1200	48"	254	940	844	160	F30	350	298	8-Ø22	1455	1380	32-Ø39	105	98.2	75

* Other available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

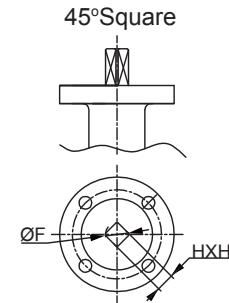
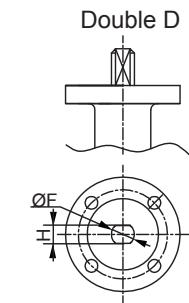
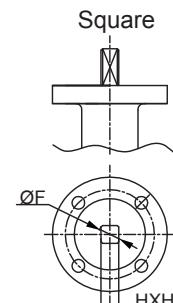
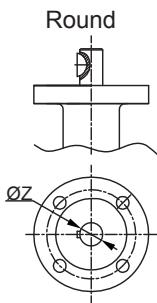
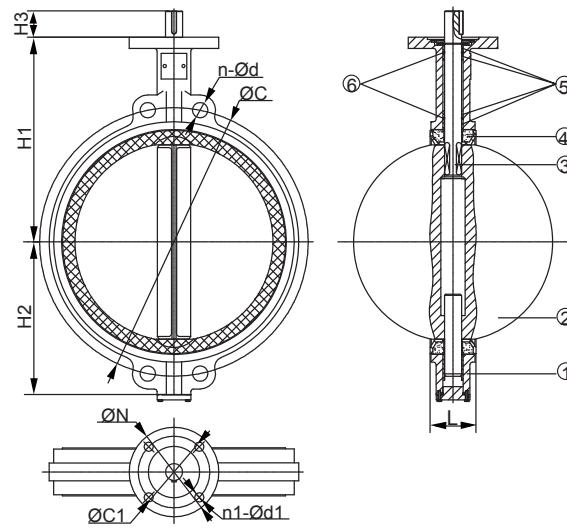
* Special Stem head dimensions kindly contact with Fondon Global directly.

M1101

DN40-DN300



DN350-DN600



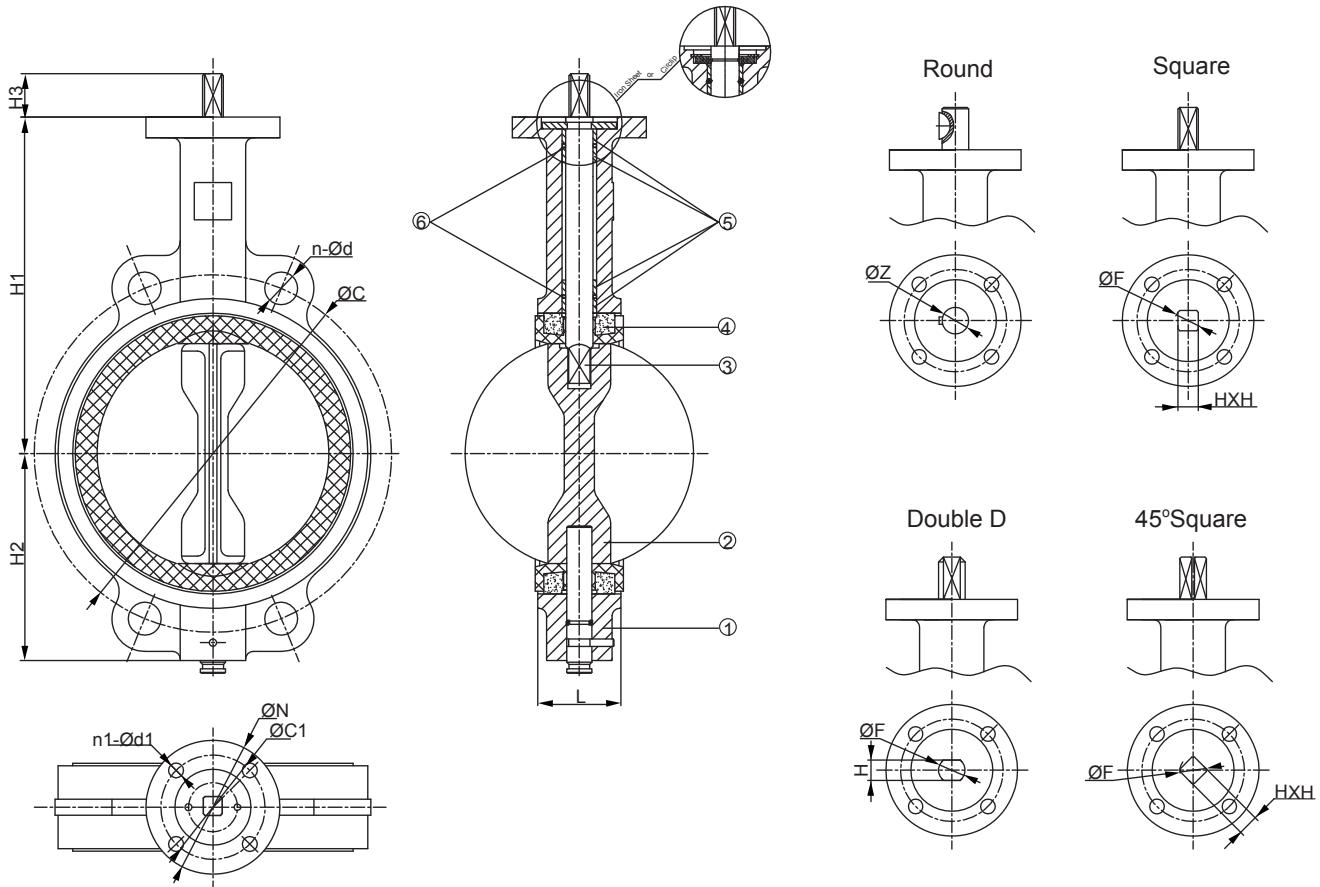
◆ Dimensions

SIZE		L	H1	H2	H3	ISO5211				DIN2501 PN16		ØZ	ØF	H
DN	NPS					No.	ØN	ØC1	n1-Ød1	ØC	n-Ød			
40	1.5"	33	139	68	29	F05	65	50	4-Ø8	110	4-Ø18	12.6	12.1	9
50	2"	43	161	80	29	F05	65	50	4-Ø8	125	4-Ø18	12.6	12.1	9
65	2-1/2"	46	175	89	29	F05	65	50	4-Ø8	145	4-Ø18	12.6	12.1	9
80	3"	46	181	95	29	F05	65	50	4-Ø8	160	8-Ø18	12.6	12.1	9
100	4"	52	200	114	29	F07	90	70	4-Ø10	180	8-Ø18	15.77	14.1	11
125	5"	56	213	127	29	F07	90	70	4-Ø10	210	8-Ø18	18.92	18.1	14
150	6"	56	226	139	29	F07	90	70	4-Ø10	240	8-Ø22	18.92	18.1	14
200	8"	60	260	175	35	F10	125	102	4-Ø12	295	12-Ø22	22.1	22.1	17
250	10"	68	292	203	35	F10	125	102	4-Ø12	355	12-Ø26	28.45	28.1	22
300	12"	78	337	242	35	F10	125	102	4-Ø12	410	12-Ø26	31.6	28.1	22
350	14"	78	368	267	45	F10	125	102	4-Ø12	470	16-Ø26	31.6	28.2	22
400	16"	102	400	298.6	51.2	F14	175	140	4-Ø18	525	16-Ø30	33.15	28.2	22
450	18"	114	422	318	51.2	F14	175	140	4-Ø18	585	20-Ø30	38	36.2	27
500	20"	127	480	355	64.2	F14	175	140	4-Ø18	650	20-Ø33	41.15	36.2	27
600	24"	154	562	444	70.2	F16	210	165	4-Ø22	770	20-Ø36	50.65	48.2	36

* Other available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

* Special Stem head dimensions kindly contact with Fondon Global directly.

M1101



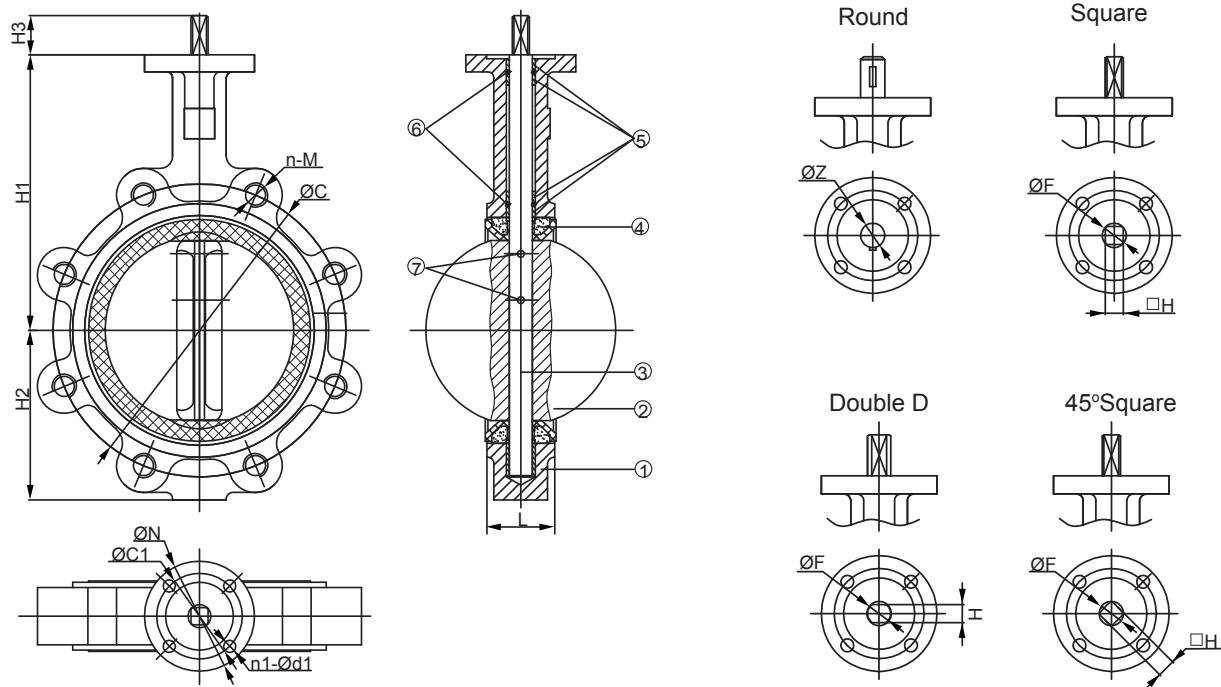
◆ Dimensions

SIZE		L	H1	H2	H3	ISO5211				DIN2501 PN16		ØZ	ØF	H
DN	NPS					No.	ØN	ØC1	n1-Ød1	ØC	n-Ød			
40	1.5"	33	139	68	29	F05	65	50	4-Ø8	110	4-Ø18	12.6	12.1	9
50	2"	43	161	80	29	F05	65	50	4-Ø8	125	4-Ø18	12.6	12.1	9
65	2-1/2"	46	175	89	29	F05	65	50	4-Ø8	145	4-Ø18	12.6	12.1	9
80	3"	46	181	95	29	F05	65	50	4-Ø8	160	8-Ø18	12.6	12.1	9
100	4"	52	200	114	29	F07	90	70	4-Ø10	180	8-Ø18	15.77	14.1	11
125	5"	56	213	127	29	F07	90	70	4-Ø10	210	8-Ø18	18.92	18.1	14
150	6"	56	226	139	29	F07	90	70	4-Ø10	240	8-Ø22	18.92	18.1	14
200	8"	60	260	175	35	F10	125	102	4-Ø12	295	12-Ø22	22.1	22.1	17
250	10"	68	292	203	35	F10	125	102	4-Ø12	355	12-Ø26	28.45	28.1	22
300	12"	78	337	242	35	F10	125	102	4-Ø12	410	12-Ø26	31.6	28.1	22

* Other available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

* Special Stem head dimensions kindly contact with Fondon Global directly.

M1102



◆ Dimensions

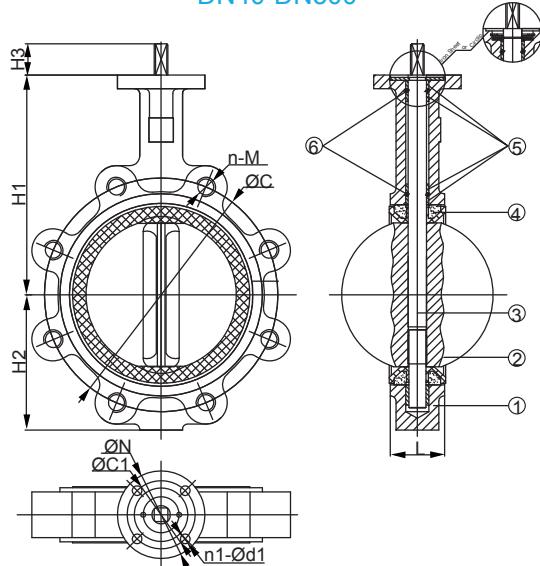
SIZE		L	H1	H2	H3	ISO5211				DIN2501 PN16		ØZ	ØF	H
DN	NPS					No.	ØN	ØC1	n1-Ød1	ØC	n-M			
40	1.5"	33	139	68	29	F05	65	50	4-Ø8	110	4-M16	12.6	12.1	9
50	2"	43	161	80	29	F05	65	50	4-Ø8	125	4-M16	12.6	12.1	9
65	2-1/2"	46	175	89	29	F05	65	50	4-Ø8	145	4-M16	12.6	12.1	9
80	3"	46	181	95	29	F05	65	50	4-Ø8	160	8-M16	12.6	12.1	9
100	4"	52	200	114	29	F07	90	70	4-Ø10	180	8-M16	15.77	14.1	11
125	5"	56	213	127	29	F07	90	70	4-Ø10	210	8-M16	18.92	18.1	14
150	6"	56	226	139	29	F07	90	70	4-Ø10	240	8-M20	18.92	18.1	14
200	8"	60	260	175	35	F10	125	102	4-Ø12	295	12-M20	22.2	22.2	17
250	10"	68	292	203	35	F10	125	102	4-Ø12	355	12-M24	28.45	28.2	22
300	12"	78	337	242	35	F10	125	102	4-Ø12	410	12-M24	31.6	28.2	22
350	14"	78	368	267	45	F10	125	102	4-Ø12	470	16-M24	31.6	28.2	22
400	16"	102	400	298.6	51.2	F14	175	140	4-Ø18	525	16-M27	33.15	28.2	22
450	18"	114	422	318	51.2	F14	175	140	4-Ø18	585	20-M27	38	36.2	27
500	20"	127	480	355	64.2	F14	175	140	4-Ø18	650	20-M30	41.15	36.2	27
600	24"	154	562	444	70.2	F16	210	165	4-Ø22	770	20-M33	50.65	48.2	36
700	28"	165	623.9	505.1	66	F25	300	254	8-Ø18	840	24-M33	55	60.2	46
750	30"	165	646	499	66	F25	300	254	8-Ø18	900	24-M33	55	60.2	46
800	32"	190	672	576	66	F25	300	254	8-Ø18	950	24-M36	55	60.2	46

* Other available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

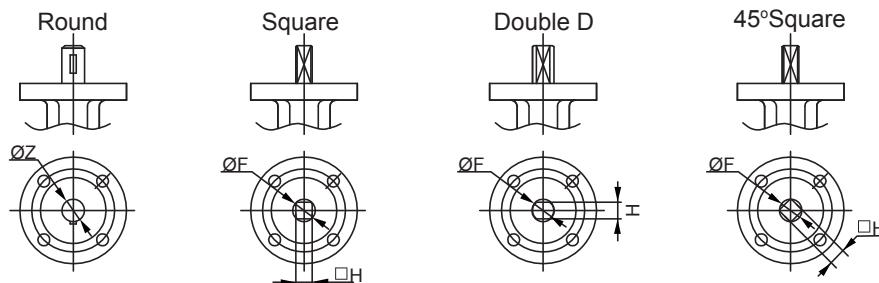
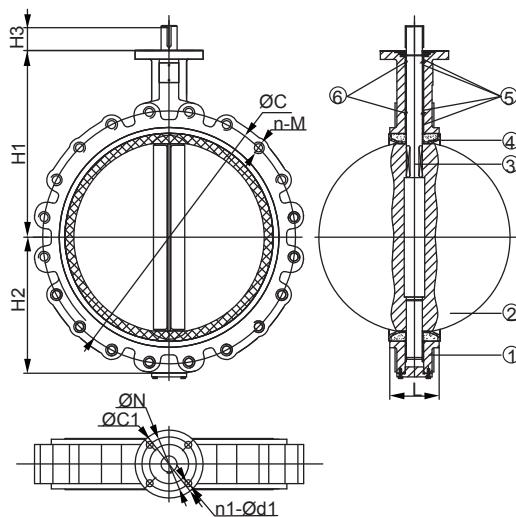
* Special Stem head dimensions kindly contact with Fondon Global directly.

M1102

DN40-DN300



DN350-DN800



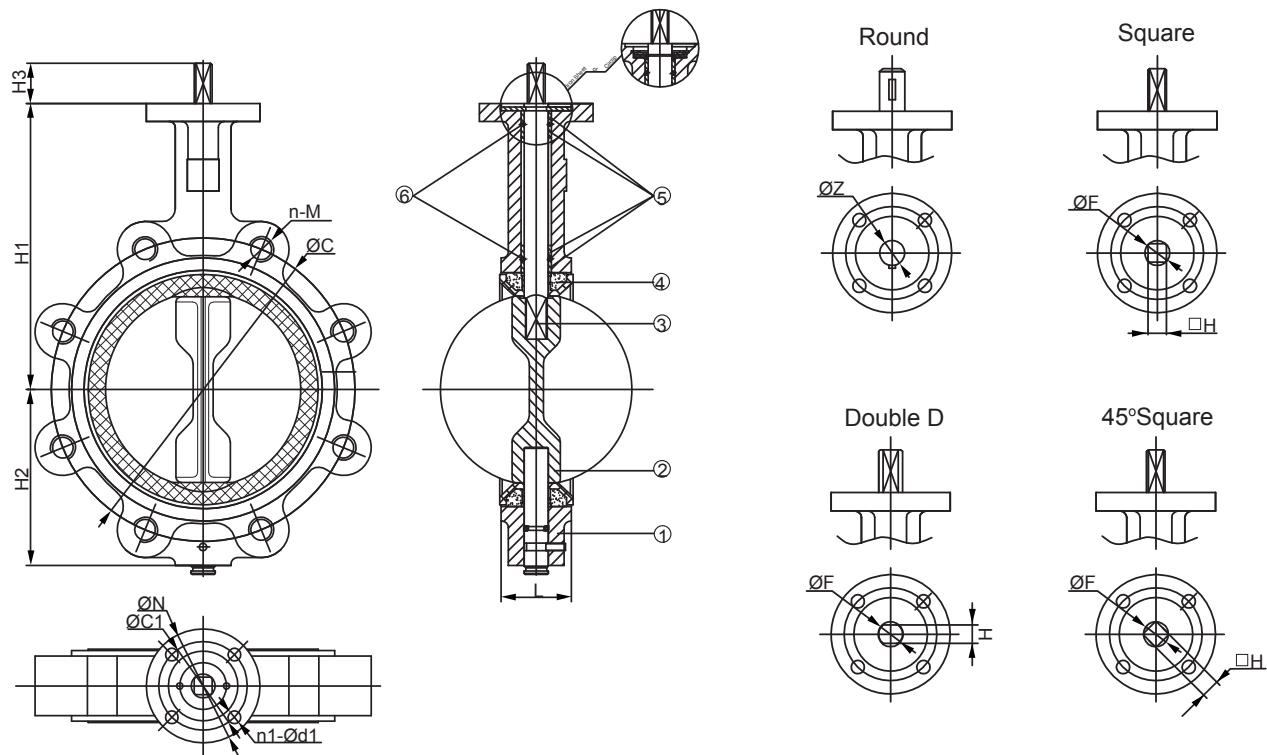
◆ Dimensions

SIZE		L	H1	H2	H3	ISO5211				DIN2501 PN16		ØZ	ØF	H
DN	NPS					No.	ØN	ØC1	n1-Ød1	ØC	n-M			
40	1.5"	33	139	68	29	F05	65	50	4-Ø8	110	4-M16	12.6	12.1	9
50	2"	43	161	80	29	F05	65	50	4-Ø8	125	4-M16	12.6	12.1	9
65	2-1/2"	46	175	89	29	F05	65	50	4-Ø8	145	4-M16	12.6	12.1	9
80	3"	46	181	95	29	F05	65	50	4-Ø8	160	8-M16	12.6	12.1	9
100	4"	52	200	114	29	F07	90	70	4-Ø10	180	8-M16	15.77	14.1	11
125	5"	56	213	127	29	F07	90	70	4-Ø10	210	8-M16	18.92	18.1	14
150	6"	56	226	139	29	F07	90	70	4-Ø10	240	8-M20	18.92	18.1	14
200	8"	60	260	175	35	F10	125	102	4-Ø12	295	12-M20	22.2	22.2	17
250	10"	68	292	203	35	F10	125	102	4-Ø12	355	12-M24	28.45	28.2	22
300	12"	78	337	242	35	F10	125	102	4-Ø12	410	12-M24	31.6	28.2	22
350	14"	78	368	267	45	F10	125	102	4-Ø12	470	16-M24	31.6	28.2	22
400	16"	102	400	298.6	51.2	F14	175	140	4-Ø18	525	16-M27	33.15	28.2	22
450	18"	114	422	318	51.2	F14	175	140	4-Ø18	585	20-M27	38	36.2	27
500	20"	127	480	355	64.2	F14	175	140	4-Ø18	650	20-M30	41.15	36.2	27
600	24"	154	562	444	70.2	F16	210	165	4-Ø22	770	20-M33	50.65	48.2	36
700	28"	165	623.9	505.1	66	F25	300	254	8-Ø18	840	24-M33	55	60.2	46
750	30"	165	646	499	66	F25	300	254	8-Ø18	900	24-M33	55	60.2	46
800	32"	190	672	576	66	F25	300	254	8-Ø18	950	24-M36	55	60.2	46

* Other available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

* Special Stem head dimensions kindly contact with Fondon Global directly.

M1102



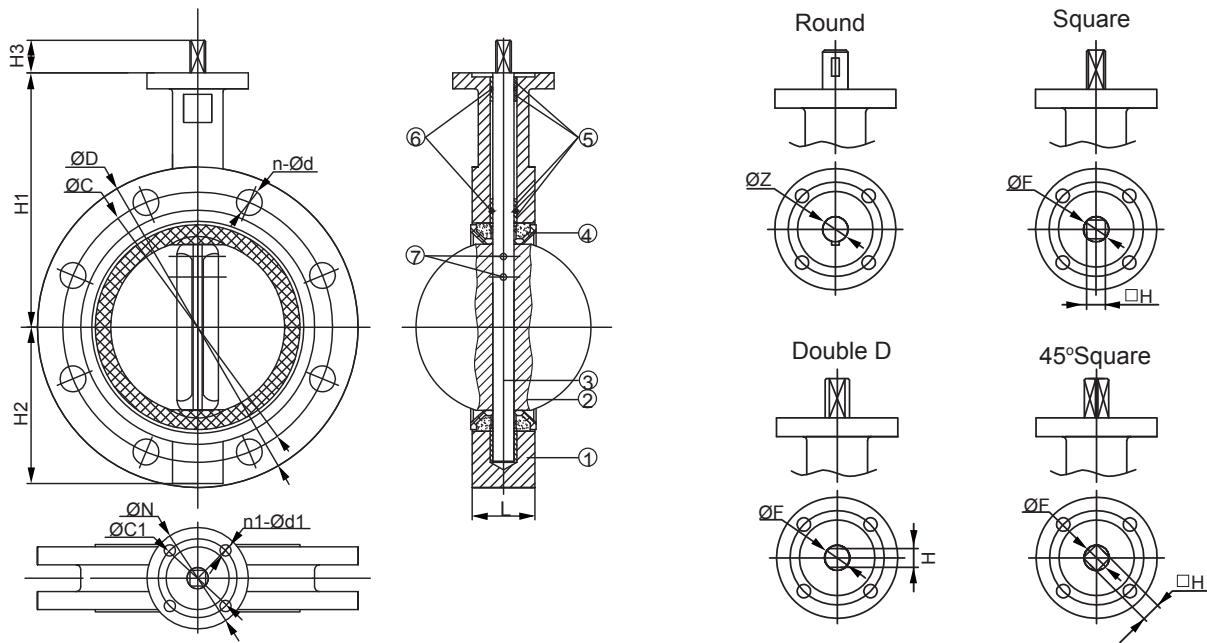
◆ Dimensions

SIZE		L	H1	H2	H3	ISO5211				DIN2501 PN16		ØZ	ØF	H
DN	NPS					No.	ØN	ØC1	n1-Ød1	ØC	n-M			
40	1.5"	33	139	68	29	F05	65	50	4-Ø8	110	4-M16	12.6	12.1	9
50	2"	43	161	80	29	F05	65	50	4-Ø8	125	4-M16	12.6	12.1	9
65	2-1/2"	46	175	89	29	F05	65	50	4-Ø8	145	4-M16	12.6	12.1	9
80	3"	46	181	95	29	F05	65	50	4-Ø8	160	8-M16	12.6	12.1	9
100	4"	52	200	114	29	F07	90	70	4-Ø10	180	8-M16	15.77	14.1	11
125	5"	56	213	127	29	F07	90	70	4-Ø10	210	8-M16	18.92	18.1	14
150	6"	56	226	139	29	F07	90	70	4-Ø10	240	8-M20	18.92	18.1	14
200	8"	60	260	175	35	F10	125	102	4-Ø12	295	12-M20	22.2	22.2	17
250	10"	68	292	203	35	F10	125	102	4-Ø12	355	12-M24	28.45	28.2	22
300	12"	78	337	242	35	F10	125	102	4-Ø12	410	12-M24	31.6	28.2	22

* Other available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

* Special Stem head dimensions kindly contact with Fondon Global directly.

M1103



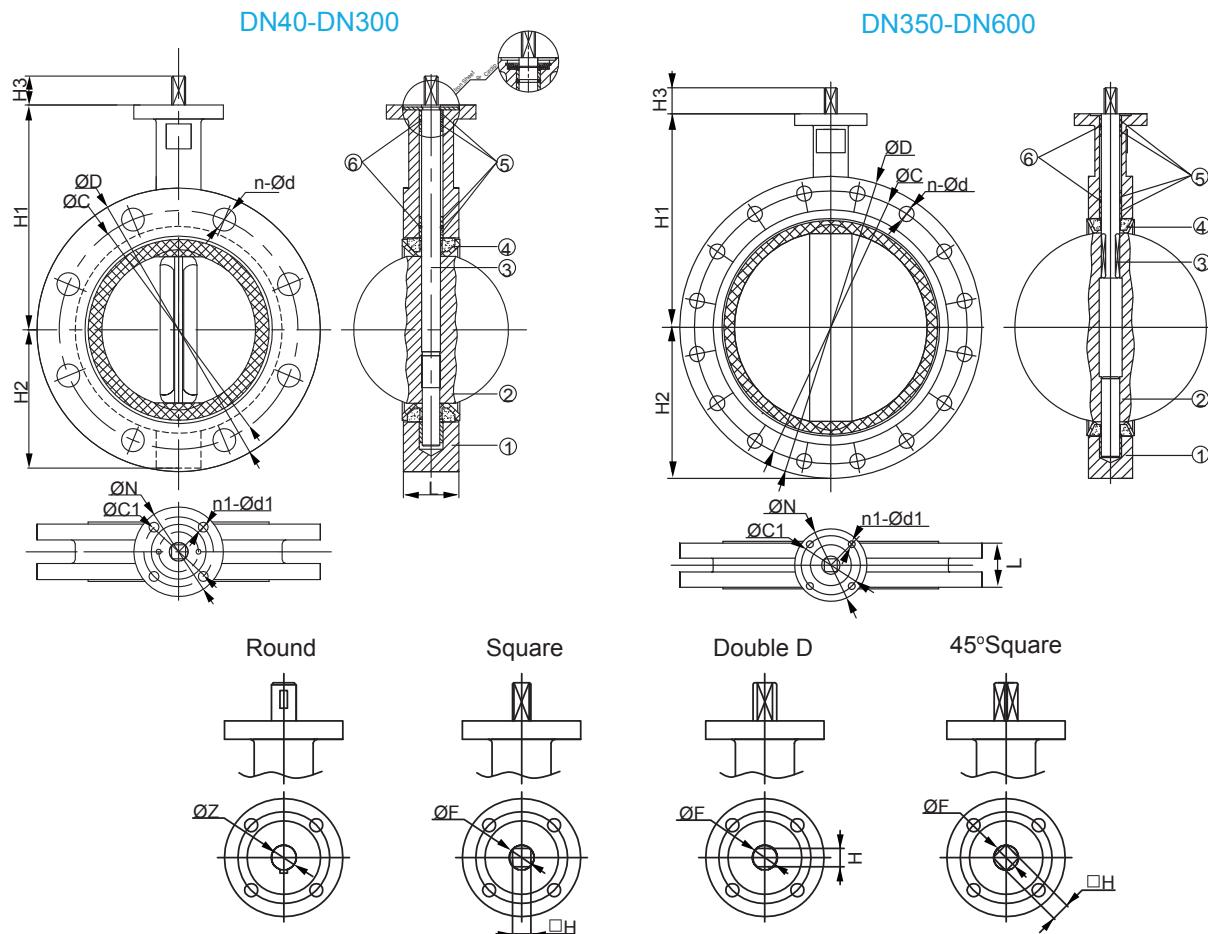
◆ Dimensions

SIZE		L	H1	H2	H3	ISO5211				DIN2501 PN16				ØZ	ØF	H
DN	NPS					No.	ØN	ØC1	n1-Ød1	ØD	ØC	n-Ød				
40	1.5"	33	139	75	29	F05	65	50	4-Ø8	150	110	4-Ø18	12.6	12.1	9	
50	2"	43	161	82.5	29	F05	65	50	4-Ø8	165	125	4-Ø18	12.6	12.1	9	
65	2-1/2"	46	175	92.5	29	F05	65	50	4-Ø8	185	145	4-Ø18	12.6	12.1	9	
80	3"	46	181	100	29	F05	65	50	4-Ø8	200	160	8-Ø18	12.6	12.1	9	
100	4"	52	200	110	29	F07	90	70	4-Ø10	220	180	8-Ø18	15.77	14.1	11	
125	5"	56	213	125	29	F07	90	70	4-Ø10	250	210	8-Ø18	18.92	18.1	14	
150	6"	56	226	142.5	29	F07	90	70	4-Ø10	285	240	8-Ø22	18.92	18.1	14	
200	8"	60	260	170	35	F10	125	102	4-Ø12	340	295	12-Ø22	22.2	22.2	17	
250	10"	68	292	202.5	35	F10	125	102	4-Ø12	405	355	12-Ø26	28.45	28.2	22	
300	12"	78	337	230	35	F10	125	102	4-Ø12	460	410	12-Ø26	31.6	28.2	22	
350	14"	78	368	260	45	F10	125	102	4-Ø12	520	470	16-Ø26	31.6	28.2	22	
400	16"	102	400	290	51.2	F14	175	140	4-Ø18	580	525	16-Ø30	33.15	28.2	22	
450	18"	114	422	324	51.2	F14	175	140	4-Ø18	640	585	20-Ø30	38	36.2	27	
500	20"	127	480	357.5	64.2	F14	175	140	4-Ø18	715	650	20-Ø33	41.15	36.2	27	
600	24"	154	562	420	70.2	F16	210	165	4-Ø22	840	770	20-Ø36	50.65	48.2	36	
SIZE		L	H1	H2	H3	ISO5211				DIN2501 PN10				ØZ	ØF	H
DN	NPS					No.	ØN	ØC1	n1-Ød1	ØD	ØC	n-Ød				
700	28"	165	624	455	85	F25	300	254	8-Ø18	895	840	24-Ø30	55	60.2	46	
750	30"	167	646	499	86	F25	300	254	8-Ø18	965	900	24-Ø30	55	60.2	46	
800	32"	190	672	513	85	F25	300	254	8-Ø18	1015	950	24-Ø33	55	60.2	46	
900	36"	203	720	563	118	F25	300	254	8-Ø18	1115	1050	28-Ø33	75	72.2	55	
1000	40"	218	800	628	130	F25	300	254	8-Ø18	1230	1160	28-Ø36	85	72.2	55	
1050	42"	251	825	740	150	F25	300	254	8-Ø18	/	/	/	85	72.2	55	
1100	44"	254	825	740	150	F25	300	254	8-Ø18	1340	1270	32-Ø36	95	72.2	55	
1200	48"	254	940	844	150	F30	350	298	8-Ø22	1455	1380	32-Ø39	105	98.2	75	

* Other available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

* Special Stem head dimensions kindly contact with Fondon Global directly.

M1103



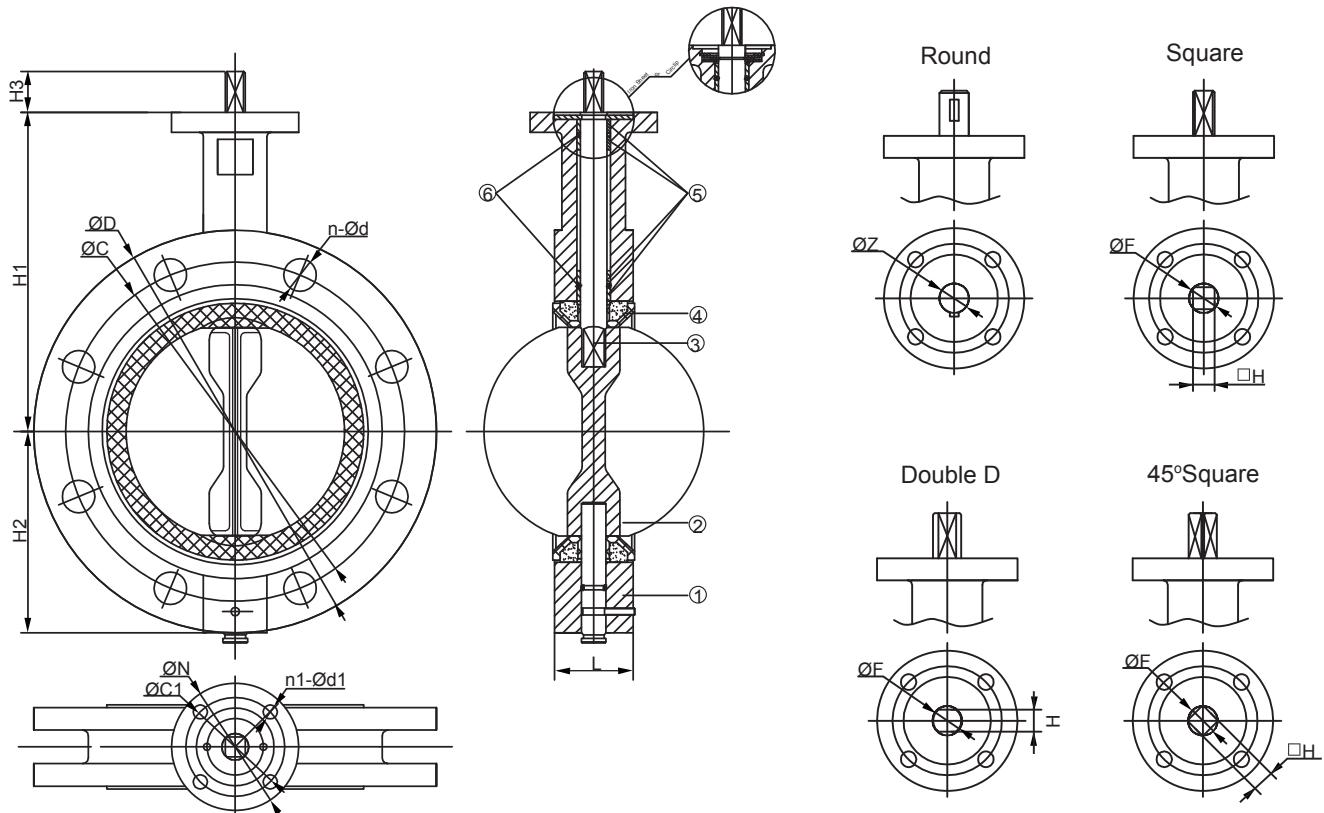
◆ Dimensions

SIZE		L	H1	H2	H3	ISO5211				DIN2501 PN16				ØZ	ØF	H
DN	NPS					No.	ØN	ØC1	n1-Ød1	ØD	ØC	n-Ød				
40	1.5"	33	139	75	29	F05	65	50	4-Ø8	150	110	4-Ø18	12.6	12.1	9	
50	2"	43	161	82.5	29	F05	65	50	4-Ø8	165	125	4-Ø18	12.6	12.1	9	
65	2-1/2"	46	175	92.5	29	F05	65	50	4-Ø8	185	145	4-Ø18	12.6	12.1	9	
80	3"	46	181	100	29	F05	65	50	4-Ø8	200	160	8-Ø18	12.6	12.1	9	
100	4"	52	200	110	29	F07	90	70	4-Ø10	220	180	8-Ø18	15.77	14.1	11	
125	5"	56	213	125	29	F07	90	70	4-Ø10	250	210	8-Ø18	18.92	18.1	14	
150	6"	56	226	142.5	29	F07	90	70	4-Ø10	285	240	8-Ø22	18.92	18.1	14	
200	8"	60	260	170	35	F10	125	102	4-Ø12	340	295	12-Ø22	22.2	22.2	17	
250	10"	68	292	202.5	35	F10	125	102	4-Ø12	405	355	12-Ø26	28.45	28.2	22	
300	12"	78	337	230	35	F10	125	102	4-Ø12	460	410	12-Ø26	31.6	28.2	22	
350	14"	78	368	260	45	F10	125	102	4-Ø12	520	470	16-Ø26	31.6	28.2	22	
400	16"	102	400	290	51.2	F14	175	140	4-Ø18	580	525	16-Ø30	33.15	28.2	22	
450	18"	114	422	324	51.2	F14	175	140	4-Ø18	640	585	20-Ø30	38	36.2	27	
500	20"	127	480	357.5	64.2	F14	175	140	4-Ø18	715	650	20-Ø33	41.15	36.2	27	
600	24"	154	562	420	70.2	F16	210	165	4-Ø22	840	770	20-Ø36	50.65	48.2	36	

* Other available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

* Special Stem head dimensions kindly contact with Fondon Global directly.

M1103



◆ Dimensions

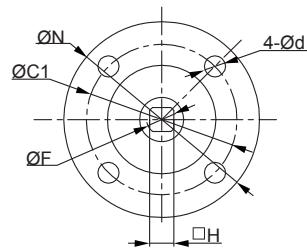
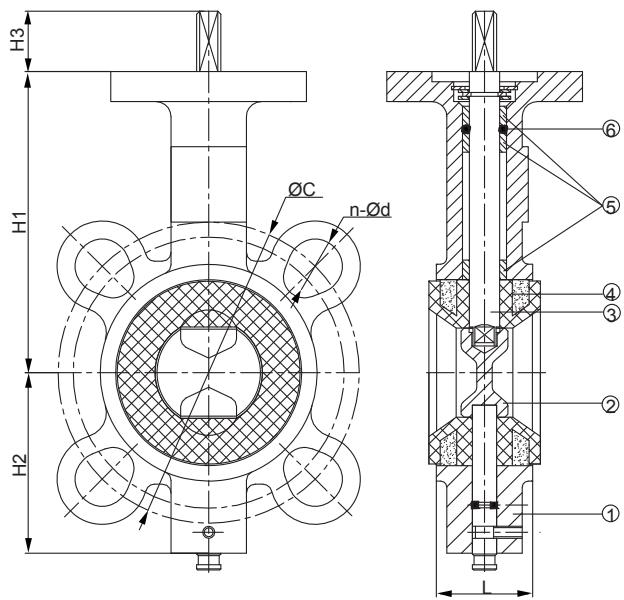
SIZE		L	H1	H2	H3	ISO5211				DIN2501 PN16			ØZ	ØF	H
DN	NPS					No.	ØN	ØC1	n1-Ød1	ØD	ØC	n-Ød			
40	1.5"	33	139	75	29	F05	65	50	4-Ø8	150	110	4-Ø18	12.6	12.1	9
50	2"	43	161	82.5	29	F05	65	50	4-Ø8	165	125	4-Ø18	12.6	12.1	9
65	2-1/2"	46	175	92.5	29	F05	65	50	4-Ø8	185	145	4-Ø18	12.6	12.1	9
80	3"	46	181	100	29	F05	65	50	4-Ø8	200	160	8-Ø18	12.6	12.1	9
100	4"	52	200	110	29	F07	90	70	4-Ø10	220	180	8-Ø18	15.77	14.1	11
125	5"	56	213	125	29	F07	90	70	4-Ø10	250	210	8-Ø18	18.92	18.1	14
150	6"	56	226	142.5	29	F07	90	70	4-Ø10	285	240	8-Ø22	18.92	18.1	14
200	8"	60	260	170	35	F10	125	102	4-Ø12	340	295	12-Ø22	22.2	22.2	17
250	10"	68	292	202.5	35	F10	125	102	4-Ø12	405	355	12-Ø26	28.45	28.2	22
300	12"	78	337	230	35	F10	125	102	4-Ø12	460	410	12-Ø26	31.6	28.2	22

* Other available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

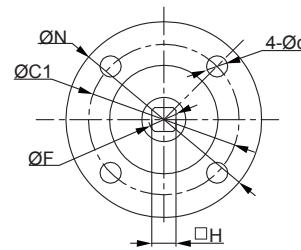
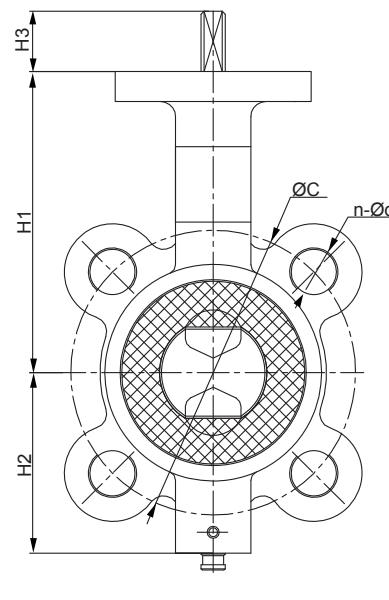
* Special Stem head dimensions kindly contact with Fondon Global directly.

M1101/1102

Wafer



Lug



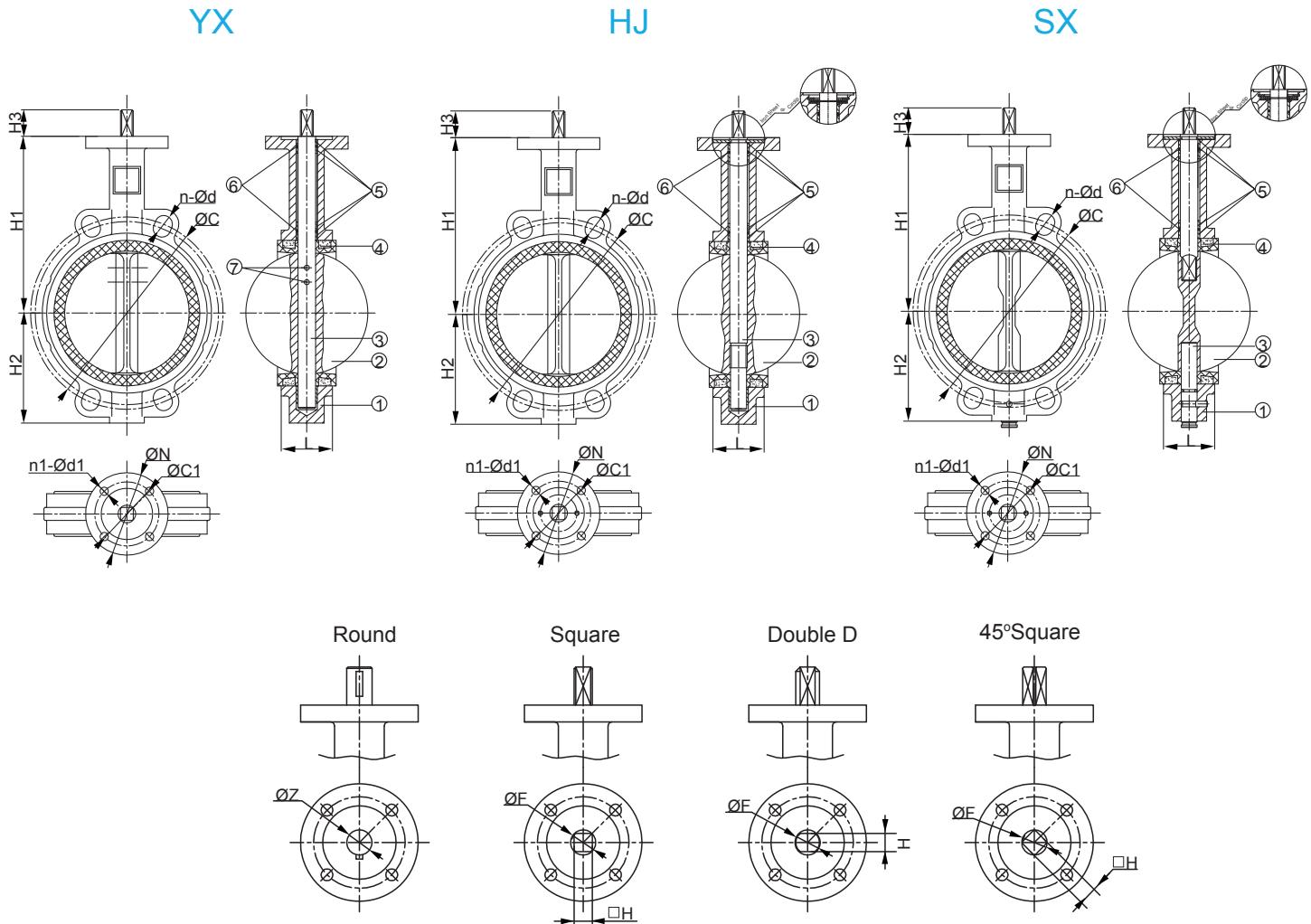
◆ Dimensions

SIZE		L	H1	H2	H3	$\varnothing N$	$\varnothing C1$	$\varnothing d$	DIN2501				$\varnothing F$	H									
DN	NPS								PN6		PN10/PN16												
									$\varnothing C$	n- $\varnothing d$	$\varnothing C$	n- $\varnothing d$											
25	1"	31	85	57	20	55	46	7	75	4-Φ11.5	85	4-Ø14	9	7									
32	1-1/4"	32	100	60	20	55	46	7	90	4-Φ14	100	4-Ø18	9	7									
40	1-1/2"	32	120	67	20	65	50	8	100	4-Φ14	110	4-Ø18	12.1	9									

* Other available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

* Special Stem head dimensions kindly contact with Fondon Global directly.

M1101



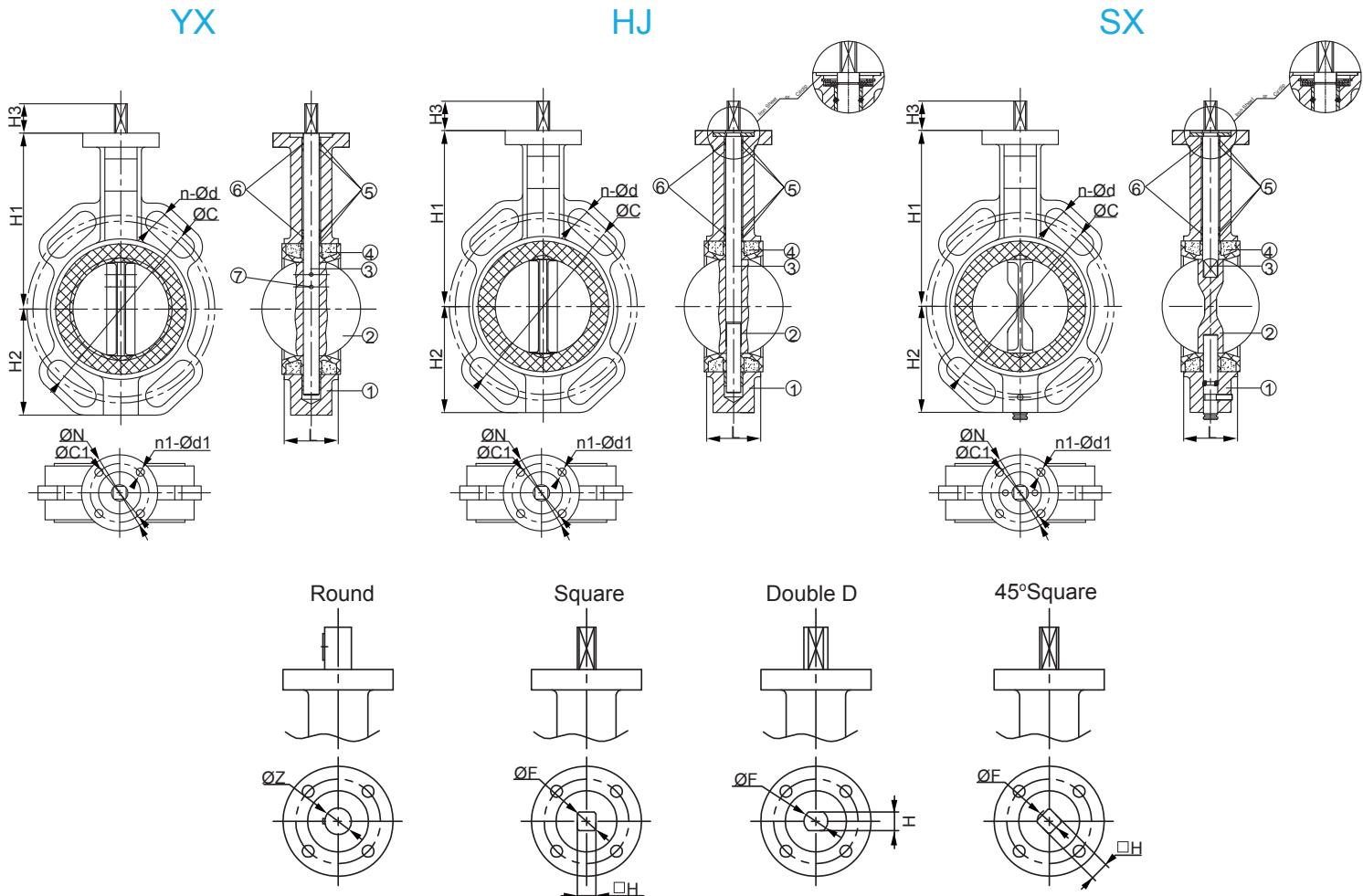
◆ Dimensions

SIZE		L	H1	H2	H3	ISO5211				DIN2501						ØZ	ØF	H
DN	NPS					No.	ØN	ØC1	n1-Ød1	ØC	n-Ød	ØC	n-Ød	ØC	n-Ød			
40	1.5"	33	120	67	29	F05	65	50	4-Ø8	100	4-Ø14	110	4-Ø18	110	4-Ø18	12.6	12.1	9
50	2"	43	140	70	29	F05	65	50	4-Ø8	110	4-Ø14	125	4-Ø18	125	4-Ø18	12.6	12.1	9
65	2-1/2"	46	155	79	29	F05	65	50	4-Ø8	130	4-Ø14	145	4-Ø18	145	4-Ø18	12.6	12.1	9
80	3"	46	160	95	29	F05	65	50	4-Ø8	150	4-Ø18	160	8-Ø18	160	8-Ø18	12.6	12.1	9
100	4"	52	180	107	29	F07	90	70	4-Ø10	170	4-Ø18	180	8-Ø18	180	8-Ø18	15.77	14.1	11
125	5"	56	193	120	29	F07	90	70	4-Ø10	200	8-Ø18	210	8-Ø18	210	8-Ø18	18.92	18.1	14
150	6"	56	200	139	29	F07	90	70	4-Ø10	225	8-Ø18	240	8-Ø22	240	8-Ø22	18.92	18.1	14
200	8"	60	240	170	35	F10	125	102	4-Ø12	280	8-Ø18	295	8-Ø22	295	12-Ø22	22.2	22.2	17
250	10"	68	272	200	35	F10	125	102	4-Ø12	335	12-Ø18	350	12-Ø22	355	12-Ø26	28.45	28.2	22
300	12"	78	317	242	37	F10	125	102	4-Ø12	395	12-Ø23	400	12-Ø22	410	12-Ø26	31.6	28.2	22

* Other available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

* Special Stem head dimensions kindly contact with Fondon Global directly.

M1101



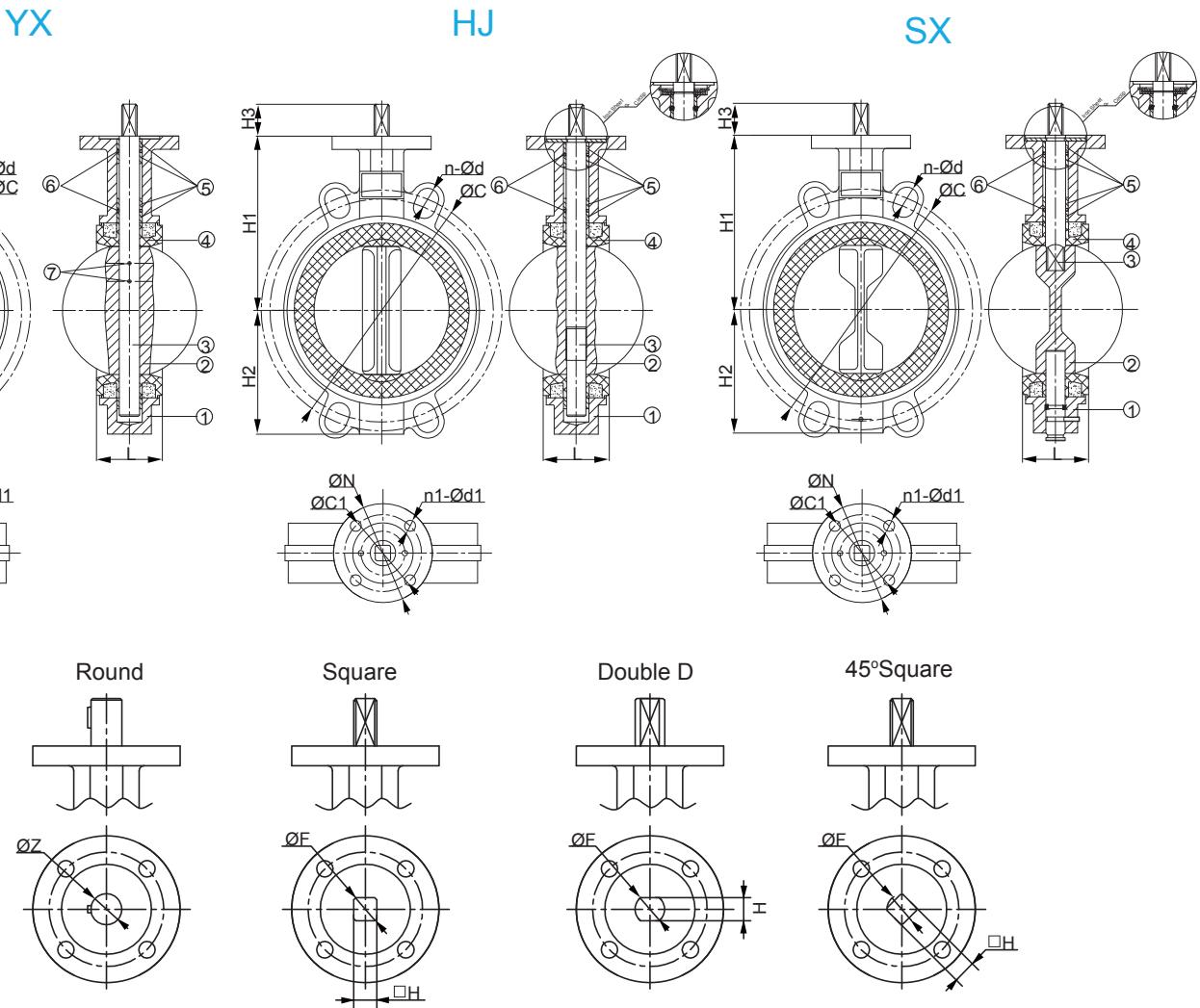
◆ Dimensions

SIZE		L	H1	H2	H3	ISO5211				ISO7005-2				ANSI		AS2129		BS		JIS B2220				ØZ	ØF	H
DN	NPS					No.	ØN	ØC1	n1-Ød1	PN6	PN10/PN16	125/150	Table D/E	Table D/E	5K	10K/16K										
50	2"	43	140	80	29	F05	65	50	4-Ø8	110	4-Ø14	125	4-Ø19	120.6	4-Ø19	114	4-Ø18	114.3	4-Ø17.5	105	4-Ø15	120	4/8-Ø19	12.6	12.1	9
65	2-1/2"	46	155	89	29	F05	65	50	4-Ø8	130	4-Ø14	145	4-Ø19	139.7	4-Ø19	127	4-Ø18	127	4-Ø17.5	130	4-Ø15	140	4/8-Ø19	12.6	12.1	9
80	3"	46	160	95	29	F05	65	50	4-Ø8	150	4-Ø19	160	8-Ø19	152.4	4-Ø19	146	4-Ø18	146.1	4-Ø17.5	145	4-Ø19	150/160	8-Ø19/23	12.6	12.1	9
100	4"	52	180	104	29	F07	90	70	4-Ø10	170	4-Ø19	180	8-Ø19	190.5	8-Ø19	178	4/8-Ø18	177.8	4/8-Ø17.5	165	8-Ø19	175/185	8-Ø19/23	15.77	14.1	11
125	5"	56	193	120	29	F07	90	70	4-Ø10	200	8-Ø19	210	8-Ø19	215.9	8-Ø22.4	210	8-Ø18	209.6	8-Ø17.5	200	8-Ø19	210/225	8-Ø23/25	18.92	18.1	14
150	6"	56	200	145	29	F07	90	70	4-Ø10	225	8-Ø19	240	8-Ø23	241.3	8-Ø22.4	235	8-Ø18/22	235	8-Ø17.5/22.2	230	8-Ø19	240/260	8/12-Ø23/25	18.92	18.1	14
200	8"	60	240	175	35	F10	125	102	4-Ø12	280	8-Ø19	295	8/12-Ø23	298.4	8-Ø22.4	292	8-Ø18/22	292.1	8-Ø17.5/22.2	280	8-Ø23	290/305	12-Ø23/25	22.1	22.1	17
250	10"	68	272	203	35	F10	125	102	4-Ø12	335	12-Ø19	350/355	12-Ø23/28	361.9	12-Ø25.4	356	8/12-Ø22	355.6	8/12-Ø22.2	345	12-Ø23	355/380	12-Ø25/27	28.45	28.2	22
300	12"	78	317	242	35	F10	125	102	4-Ø12	395	12-Ø23	400/410	12-Ø23/28	431.8	12-Ø25.4	406	12-Ø22/26	406.4	12-Ø22.2/25.4	390	12-Ø23	400/430	16-Ø25/27	31.6	28.2	22

* Other available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

* Special Stem head dimensions kindly contact with Fondon Global directly.

M1101



◆ Dimensions

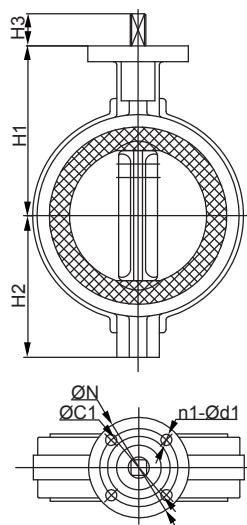
SIZE		L	H1	H2	H3	ISO5211				DIN2501 PN10/PN16		$\varnothing Z$	$\varnothing F$	H
DN	NPS					No.	$\varnothing N$	$\varnothing C1$	$n1-\varnothing d1$	$\varnothing C$	$n-\varnothing d$			
50	2"	43	110	60	29	F05	65	50	4-Φ8	125	4-Φ18	12.6	12.1	9
65	2-1/2"	46	116	68	29	F05	65	50	4-Φ8	145	4-Φ18	12.6	12.1	9
80	3"	46	126	82	29	F05	65	50	4-Φ8	160	8-Φ18	12.6	12.1	9
100	4"	52	146	100	29	F07	90	70	4-Φ10	180	8-Φ18	15.77	14.1	11
125	5"	56	161.5	112	29	F07	90	70	4-Φ10	210	8-Φ18	18.92	18.1	14
150	6"	56	180	128	29	F07	90	70	4-Φ10	240	8-Φ22	18.92	18.1	14
200	8"	60	216.5	161.75	35	F10	125	102	4-Φ12	295	8/12-Φ22	22.1	22.1	17
250	10"	68	249	195	35	F10	125	102	4-Φ12	350/355	12-Φ22/26	28.45	28.2	22
300	12"	78	281	232	35	F10	125	102	4-Φ12	400/410	12-Φ22/26	31.6	28.2	22

* Other available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

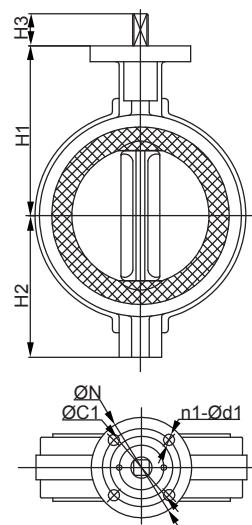
* Special Stem head dimensions kindly contact with Fondon Global directly.

M1101

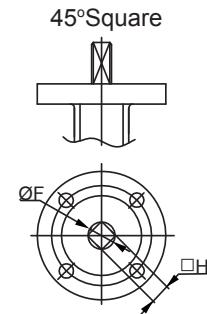
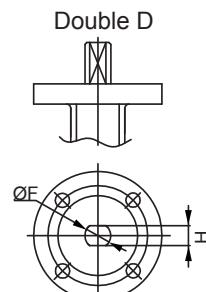
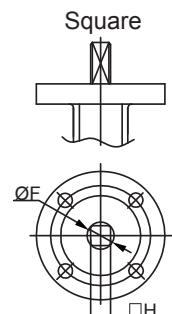
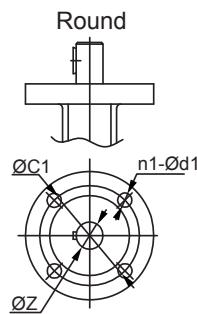
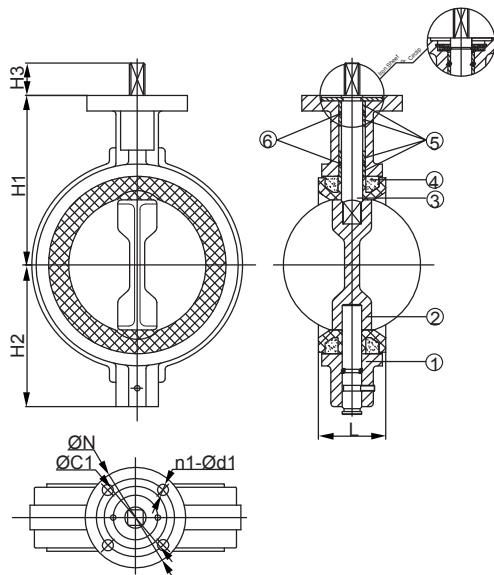
YX



HJ



SX



◆ Dimensions

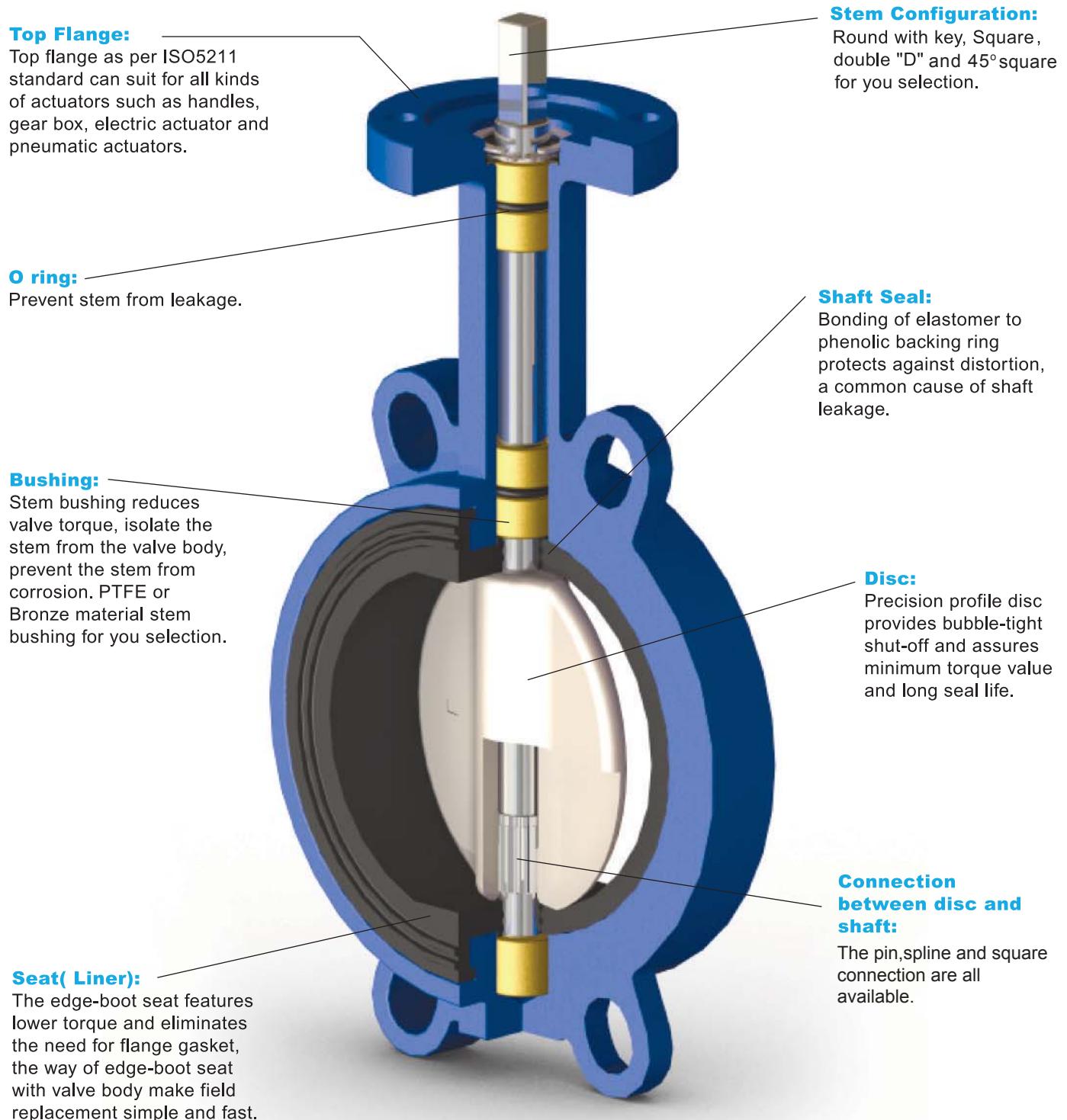
SIZE		L	H1	H2	H3	ISO5211				ØZ	ØF	H
DN	NPS					No.	ØN	ØC1	n1-Ød1			
50	2"	43	100	80	29	F05	65	50	8	12.6	12.1	9
65	2-1/2"	46	113	89	29	F05	65	50	8	12.6	12.1	9
80	3"	46	124	95	29	F05	65	50	8	12.6	12.1	9
100	4"	52	152	114	29	F10	90	70	10	15.77	14.1	11
125	5"	56	152	127	29	F10	90	70	10	18.92	18.1	14
150	6"	56	165	139	29	F10	90	70	10	18.92	18.1	14
200	8"	60	205	175	35	F12	125	102	12	22.1	22.1	17
250	10"	68	253	203	35	F12	125	102	12	28.45	28.1	22
300	12"	78	306	222	35	F12	125	102	12	31.6	28.1	22

* Other available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

* Special Stem head dimensions kindly contact with Fondon Global directly.

M1110 Series:

FG M1110 Series Butterfly Valve with edge boot seat, pin, spline or square connection between disc and stem, both wafer and lug style.



M1110 Series:

Fig.B20L

◆ Technical Data

Size	DN50-DN600
General Design	API609 *
Mounting Pad	ISO 5211
Face to Face	API609; EN 558-1 20 series etc. *
Flange Drilling	DIN 2501 PN10/PN16 *
Inspection and Test	API598



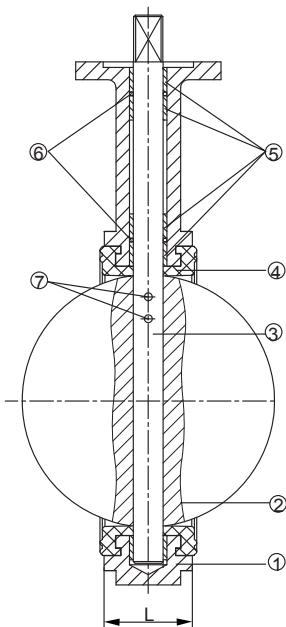
* All available General Design and Face to Face Standard kindly refer to the Basic Specification.

* All available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

◆ Product Features:

Fig.B20W

- Wafer or lug body style fit between FF or RF flanges
- PTFE bushing ensure the maximum shaft support and centralized alignment.
- 360°polished disc assures positive on-off
- Edge-Boot Seat
- One piece shaft, pinned,spined and square connected disc.
- Universal ISO 5211 mounting Pad.



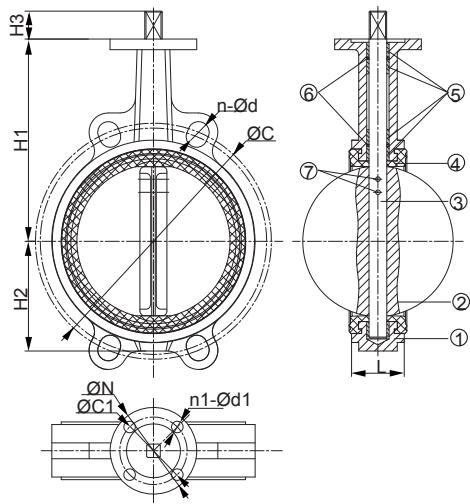
◆ Material of Construction

Parts	Description	Material	Specification
1	Body	Cast Iron	A126 Class B *
2	Disc	Stainless Steel	A351 CF8M *
3	Stem	Stainless Steel	AISI 316 *
4	Seat	EPDM	*
5	Bushing	PTFE	*
6	O Ring	EPDM	*
7	Pin	Stainless Steel	A351 CF8M *

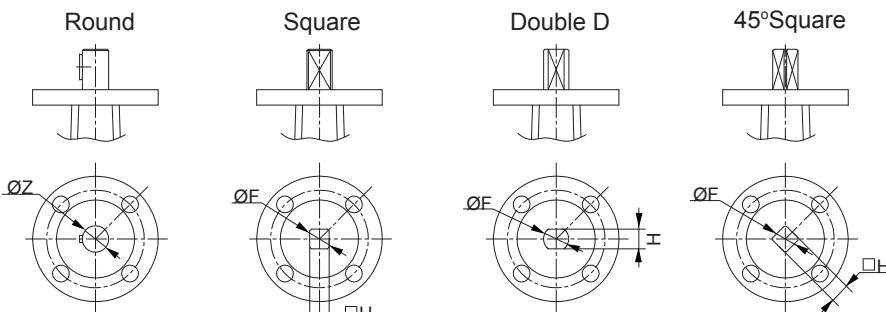
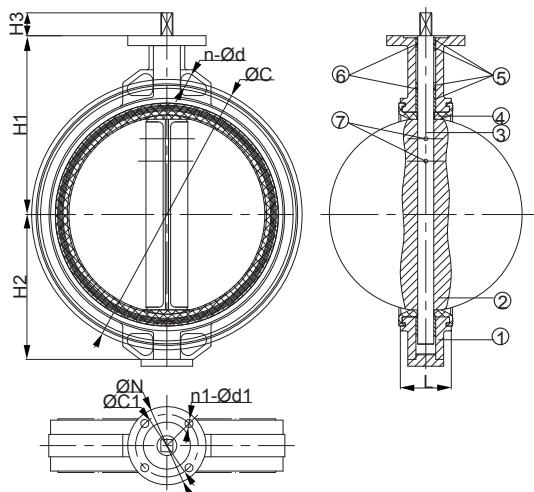
* Other material request kindly refer to Bill of Main Materials of Fondon Global.

M1111

DN50-DN300



DN350-DN600



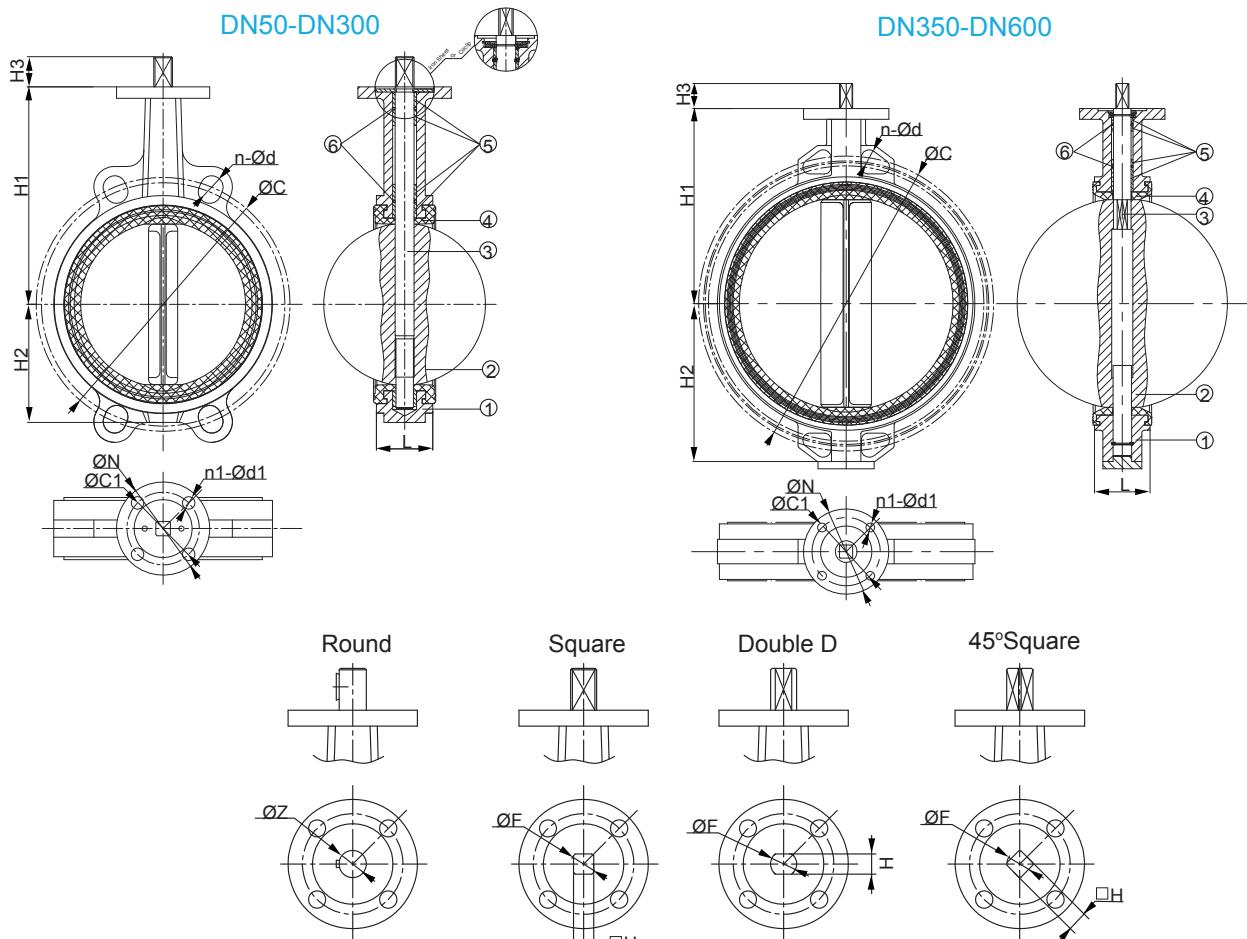
◆ Dimensions

SIZE		L	H1	H2	H3	ISO5211				ANSI 125/150		DIN2501 PN10		DIN2501 PN16		ØZ	ØF	H
DN	NPS					No.	ØN	ØC1	n1-Ød1	ØC	n-Ød	ØC	n-Ød	ØC	n-Ød			
50	2"	43	143	55	29	F05	65	50	4-Ø8	/	/	/	/	125	4-Ø18	12.6	12.1	9
65	2-1/2"	46	155	64	29	F05	65	50	4-Ø8	/	/	/	/	145	4-Ø18	12.6	12.1	9
80	3"	46	162	72	29	F05	65	50	4-Ø8	/	/	/	/	160	8-Ø18	12.6	12.1	9
100	4"	52	181	90	29	F07	90	70	4-Ø10	/	/	/	/	180	8-Ø18	15.77	14.1	11
125	5"	56	197	101	29	F07	90	70	4-Ø10	/	/	/	/	210	8-Ø18	18.92	18.1	14
150	6"	56	210	114	29	F07	90	70	4-Ø10	/	/	/	/	240	8-Ø22	18.92	18.1	14
200	8"	60	240	145	35	F10	125	102	4-Ø12	/	/	/	/	295	12-Ø22	22.1	22.1	17
250	10"	68	286	178	35	F10	125	102	4-Ø12	/	/	/	/	355	12-Ø26	28.45	28.2	22
300	12"	78	309	204	35	F10	125	102	4-Ø12	/	/	/	/	410	12-Ø26	31.6	28.2	22
350	14"	78	328	264	45	F10	125	102	4-Ø12	476.2	12-28.4	460	16-22	470	16-26	31.6	28.2	22
400	16"	102	360	293	51.2	F14	175	140	4-Ø18	539.7	16-28.4	515	16-26	525	16-30	33.15	28.2	22
450	18"	114	400	324	51.2	F14	175	140	4-Ø18	577.8	16-31.8	565	20-26	585	20-30	38	36.2	27
500	20"	127	460	350	64.2	F14	175	140	4-Ø18	635	20-31.8	620	20-26	650	20-33	41.15	36.2	27
600	24"	154	540	440	70.2	F16	210	165	4-Ø22	749.3	20-35.1	725	20-30	770	20-36	50.65	48.2	36

* Other available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

* Special Stem head dimensions kindly contact with Fondon Global directly.

M1111



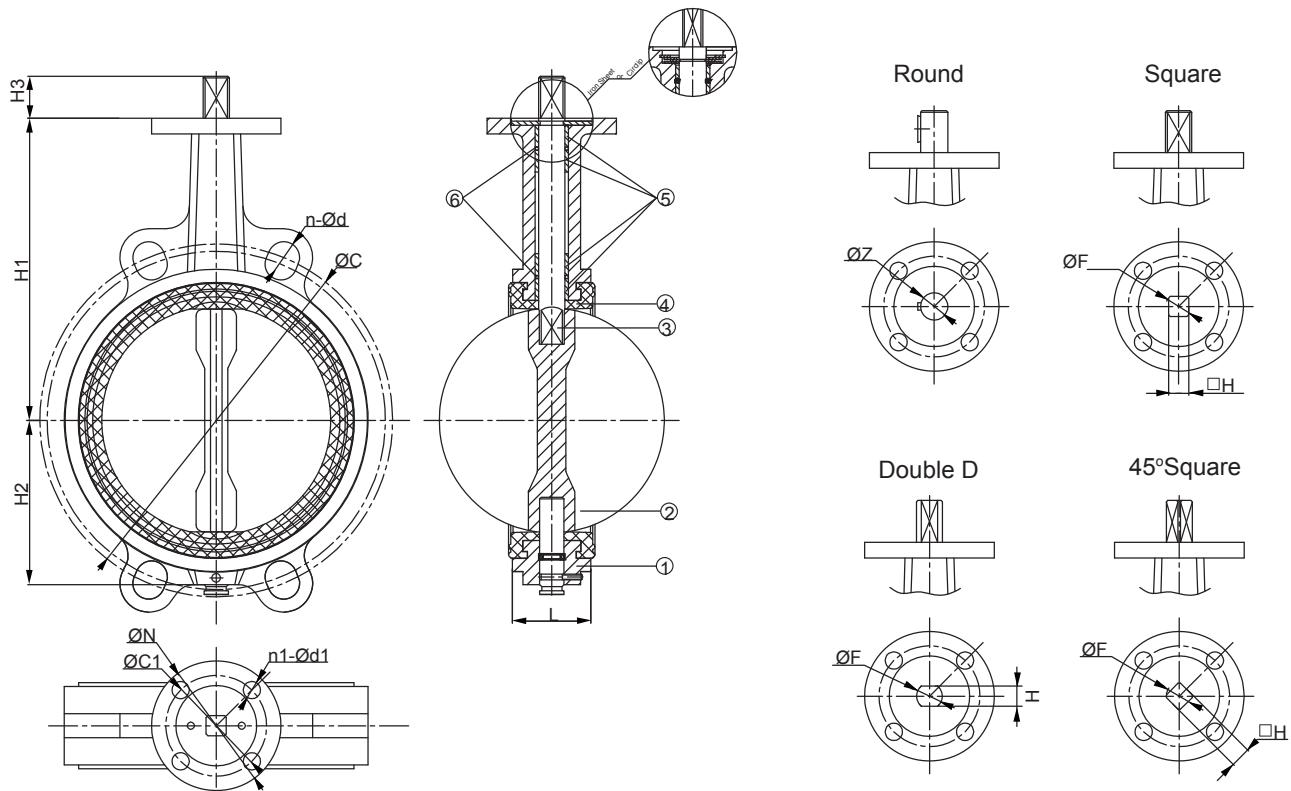
◆ Dimensions

SIZE		L	H1	H2	H3	ISO5211				ANSI 125/150		DIN2501 PN10		DIN2501 PN16		ØZ	ØF	H
DN	NPS					No.	ØN	ØC1	n1-Ød1	ØC	n-Ød	ØC	n-Ød	ØC	n-Ød			
50	2"	43	143	55	29	F05	65	50	4-Ø8	/	/	/	/	125	4-Ø18	12.6	12.1	9
65	2-1/2"	46	155	64	29	F05	65	50	4-Ø8	/	/	/	/	145	4-Ø18	12.6	12.1	9
80	3"	46	162	72	29	F05	65	50	4-Ø8	/	/	/	/	160	8-Ø18	12.6	12.1	9
100	4"	52	181	90	29	F07	90	70	4-Ø10	/	/	/	/	180	8-Ø18	15.77	14.1	11
125	5"	56	197	101	29	F07	90	70	4-Ø10	/	/	/	/	210	8-Ø18	18.92	18.1	14
150	6"	56	210	114	29	F07	90	70	4-Ø10	/	/	/	/	240	8-Ø22	18.92	18.1	14
200	8"	60	240	145	35	F10	125	102	4-Ø12	/	/	/	/	295	12-Ø22	22.1	22.1	17
250	10"	68	286	178	35	F10	125	102	4-Ø12	/	/	/	/	355	12-Ø26	28.45	28.2	22
300	12"	78	309	204	35	F10	125	102	4-Ø12	/	/	/	/	410	12-Ø26	31.6	28.2	22
350	14"	78	328	264	45	F10	125	102	4-Ø12	476.2	12-28.4	460	16-22	470	16-Ø26	31.6	28.2	22
400	16"	102	360	293	51.2	F14	175	140	4-Ø18	539.7	16-28.4	515	16-26	525	16-Ø30	33.15	28.2	22
450	18"	114	400	324	51.2	F14	175	140	4-Ø18	577.8	16-31.8	565	20-26	585	20-Ø30	38	36.2	27
500	20"	127	460	350	64.2	F14	175	140	4-Ø18	635	20-31.8	620	20-26	650	20-Ø33	41.15	36.2	27
600	24"	154	540	440	70.2	F16	210	165	4-Ø22	749.3	20-35.1	725	20-30	770	20-Ø36	50.65	48.2	36

* Other available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

* Special Stem head dimensions kindly contact with Fondon Global directly.

M1111



◆ Dimensions

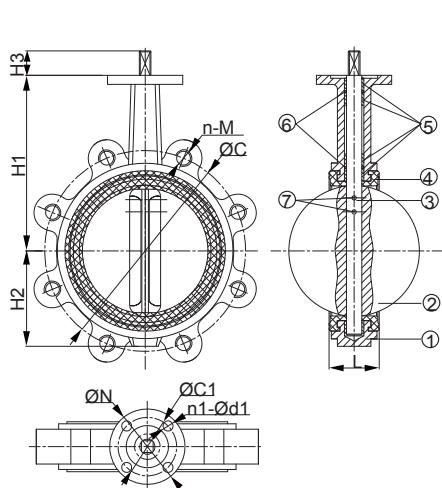
SIZE		L	H1	H2	H3	ISO5211				DIN2501 PN16		ØZ	ØF	H
DN	NPS					No.	ØN	ØC1	n1-Ød1	ØC	n-Ød			
50	2"	43	143	55	29	F05	65	50	4-Ø8	125	4-Ø18	12.6	12.1	9
65	2-1/2"	46	155	64	29	F05	65	50	4-Ø8	145	4-Ø18	12.6	12.1	9
80	3"	46	162	72	29	F05	65	50	4-Ø8	160	8-Ø18	12.6	12.1	9
100	4"	52	181	90	29	F07	90	70	4-Ø10	180	8-Ø18	15.77	14.1	11
125	5"	56	197	101	29	F07	90	70	4-Ø10	210	8-Ø18	18.92	18.1	14
150	6"	56	210	114	29	F07	90	70	4-Ø10	240	8-Ø22	18.92	18.1	14
200	8"	60	240	145	35	F10	125	102	4-Ø12	295	12-Ø22	22.1	22.1	17
250	10"	68	286	178	35	F10	125	102	4-Ø12	355	12-Ø26	28.45	28.2	22
300	12"	78	309	204	35	F10	125	102	4-Ø12	410	12-Ø26	31.6	28.2	22

* Other available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

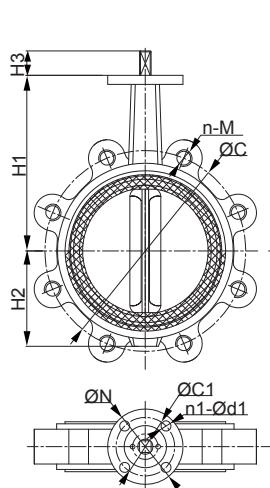
* Special Stem head dimensions kindly contact with Fondon Global directly.

M1112

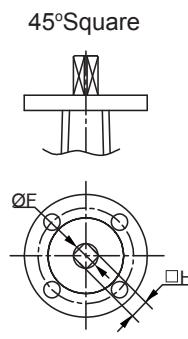
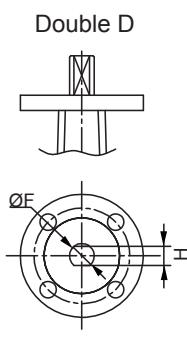
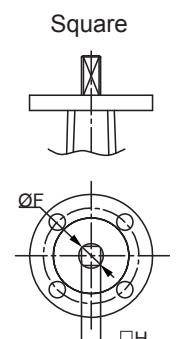
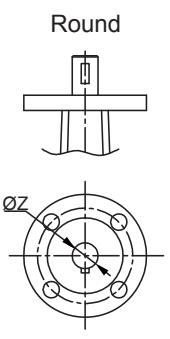
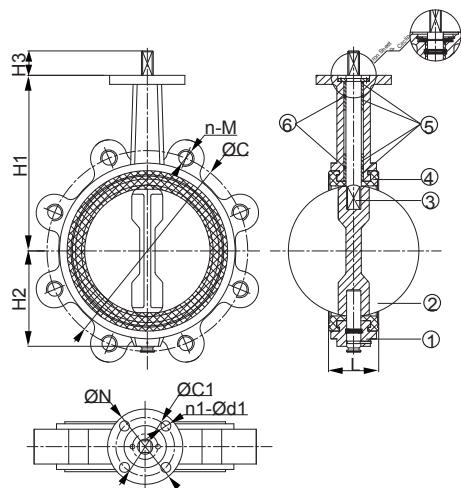
YX



HJ



SX



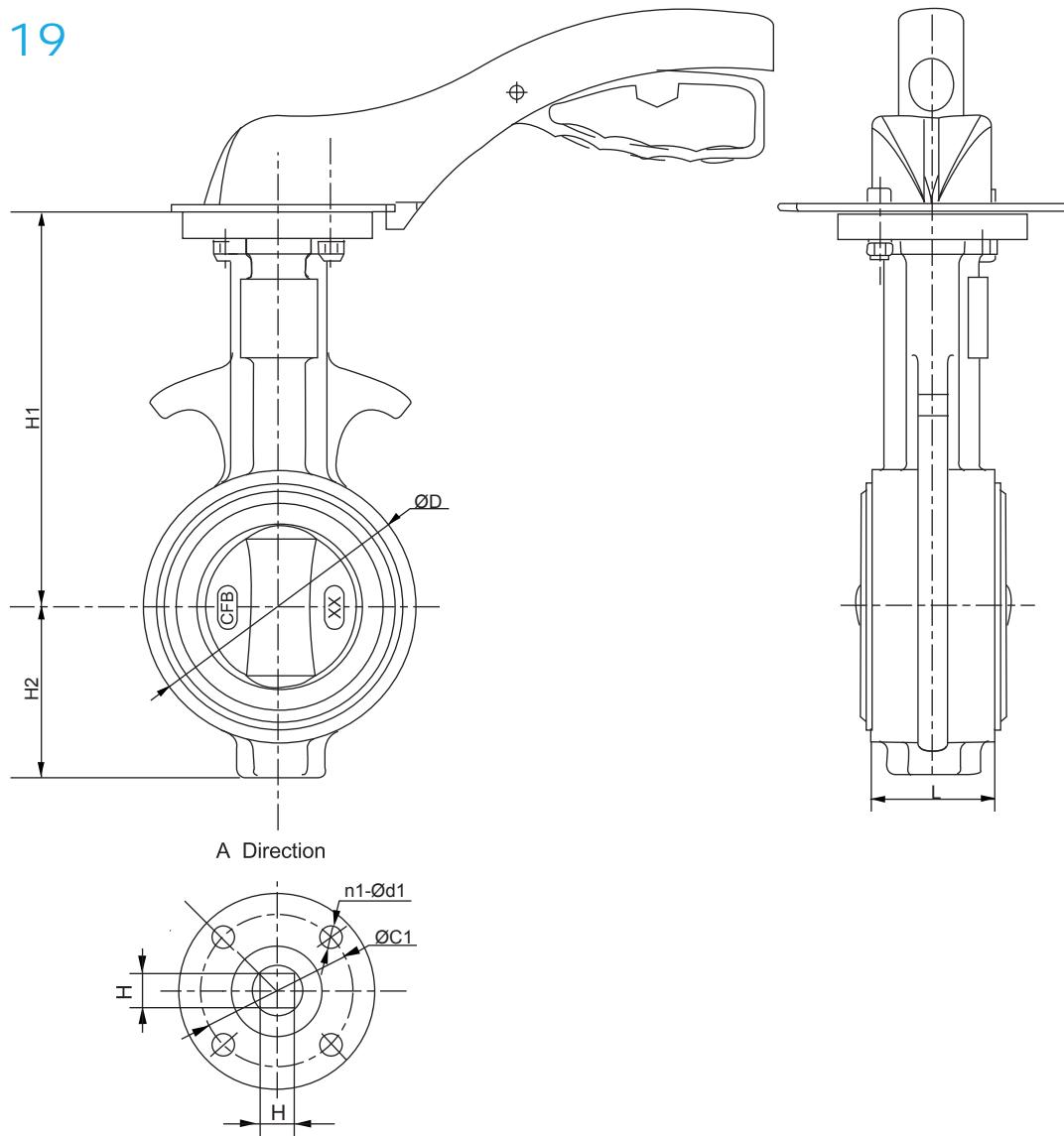
◆ Dimensions

SIZE		L	H1	H2	H3	ISO5211				DIN2501 PN16		ØZ	ØF	H
DN	NPS					No.	ØN	ØC1	n1-Ød1	ØC	n-M			
50	2"	43	143	55	29	F05	65	50	4-Ø8	125	4-M16	12.6	12.1	9
65	2-1/2"	46	155	64	29	F05	65	50	4-Ø8	145	4-M16	12.6	12.1	9
80	3"	46	162	72	29	F05	65	50	4-Ø8	160	8-M16	12.6	12.1	9
100	4"	52	181	90	29	F07	90	70	4-Ø10	180	8-M16	15.77	14.1	11
125	5"	56	197	101	29	F07	90	70	4-Ø10	210	8-M16	18.92	18.1	14
150	6"	56	210	114	29	F07	90	70	4-Ø10	240	8-M20	18.92	18.1	14
200	8"	60	240	145	35	F10	125	102	4-Ø12	295	12-M20	22.1	22.1	17
250	10"	68	286	178	35	F10	125	102	4-Ø12	355	12-M24	28.45	28.2	22
300	12"	78	309	204	35	F10	125	102	4-Ø12	410	12-M24	31.6	28.2	22

* Other available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

* Special Stem head dimensions kindly contact with Fondon Global directly.

M1119



◆ Dimensions

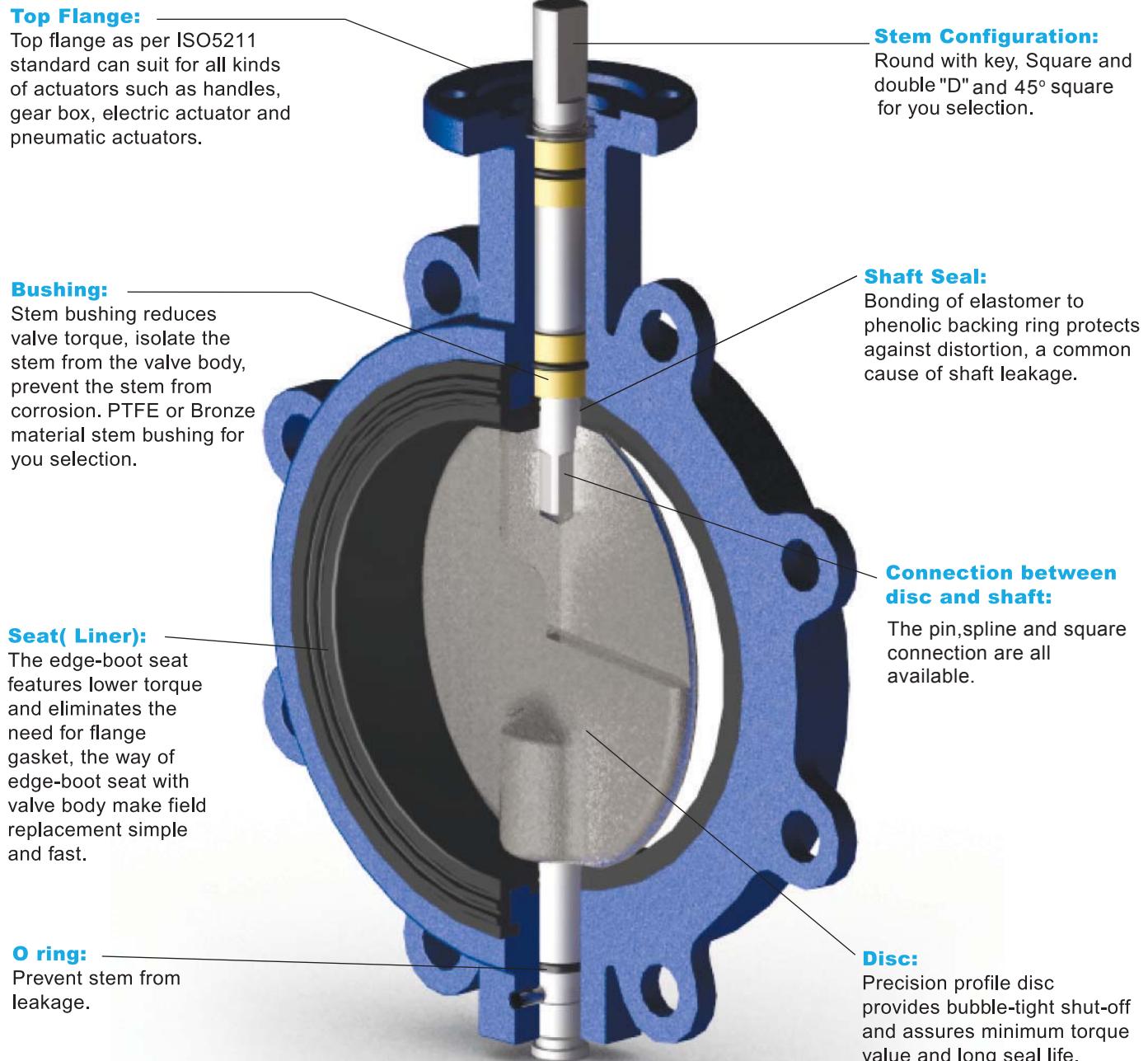
SIZE		L	H1	H2	ØD	ØC1	n1-Ød1	Flange NO	H
DN	NPS								
32	1-1/4"	31	93.5	40.5	70	55	4-8	F05	7
40	1-1/2"	32.5	98	48	77	55	4-8	F05	9
50	2"	42	131	56	93	64	4-8	F05	9
65	2-1/2"	44.7	142	65	108	64	4-8	F05	9
80	3"	45	150	80	124	64	4-8	F05	9
100	4"	51.2	170	95	156	90	4-10	F07	11
125	5"	54.4	184	109	180	90	4-10	F07	14
150	6"	55	200	127	211	90	4-10	F07	14
200	8"	58.8	240	155	268	115	4-12	F10	17

* Other available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

* Special Stem head dimensions kindly contact with Fondon Global directly.

M1120

FG M1120 Series Butterfly Valve with edge boot seat , both wafer and lug style.



M1120

◆ Technical Data

Size	DN50-DN300
General Design	API609 *
Mounting Pad	ISO 5211
Face to Face	API609; EN 558-1 20 series etc. *
Flange Drilling	DIN 2501 PN10/PN16 *
Inspection and Test	API598

* All available General Design and Face to Face Standard kindly refer to the Basic Specification.

* All available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

Fig.M1122



◆ Product Features:

Wafer or lug body style fit between FF or RF flanges

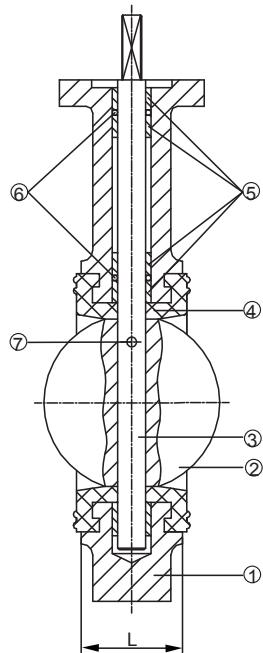
PTFE bushing ensure the maximum shaft support and centralized alignment.

360° polished disc assures positive on-off

Edge-Boot Seat

Universal ISO 5211 mounting Pad.

Fig.M1121



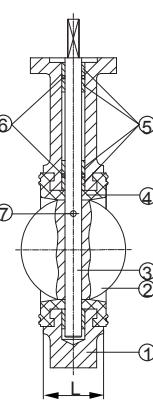
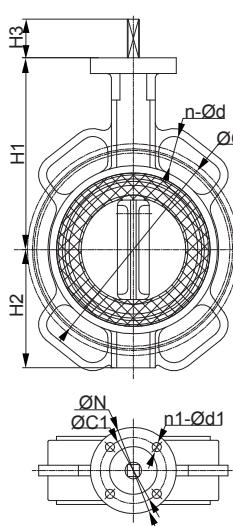
◆ Material of Construction

Parts	Description	Material	Specification
1	Body	Cast Iron	A126 Class B *
2	Disc	Stainless Steel	A351 CF8M *
3	Stem	Stainless Steel	AISI 316 *
4	Seat	EPDM	*
5	Bushing	PTFE	*
6	O Ring	EPDM	*
7	Pin	Stainless Steel	A351 CF8M *

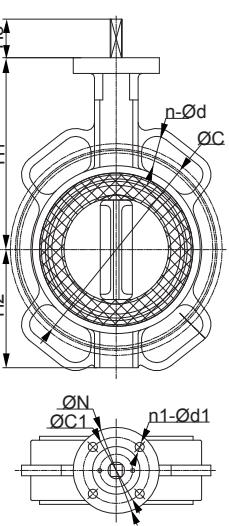
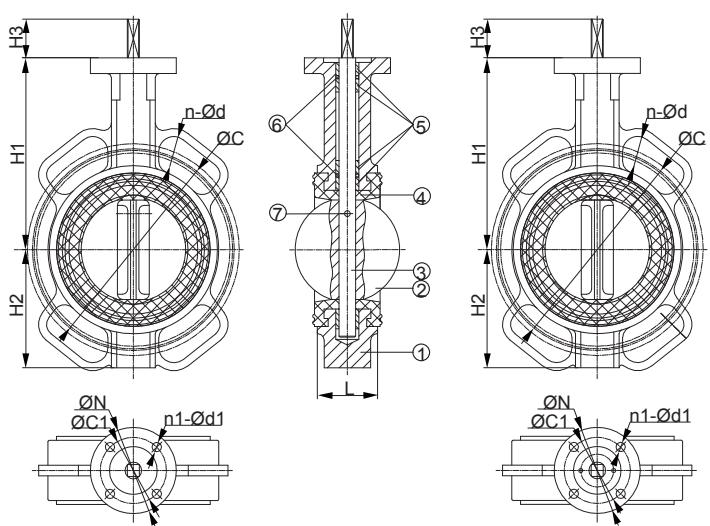
* Other material request kindly refer to Bill of Main Materials of Fondon Global.

M1121

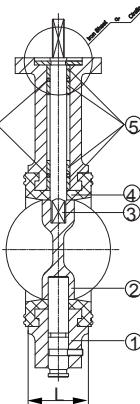
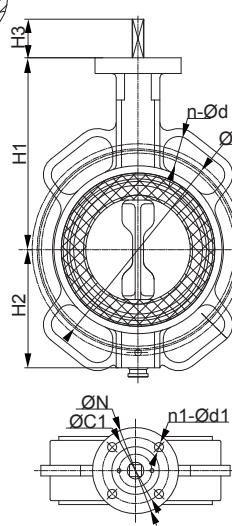
YX



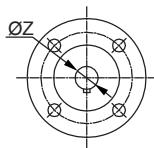
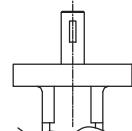
HJ



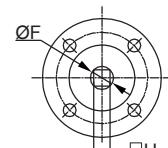
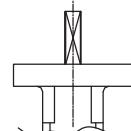
SX



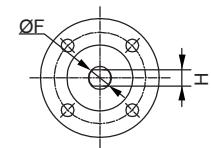
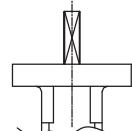
Round



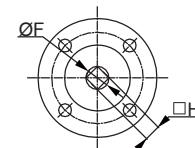
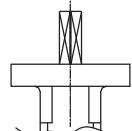
Square



Double D



45°Square



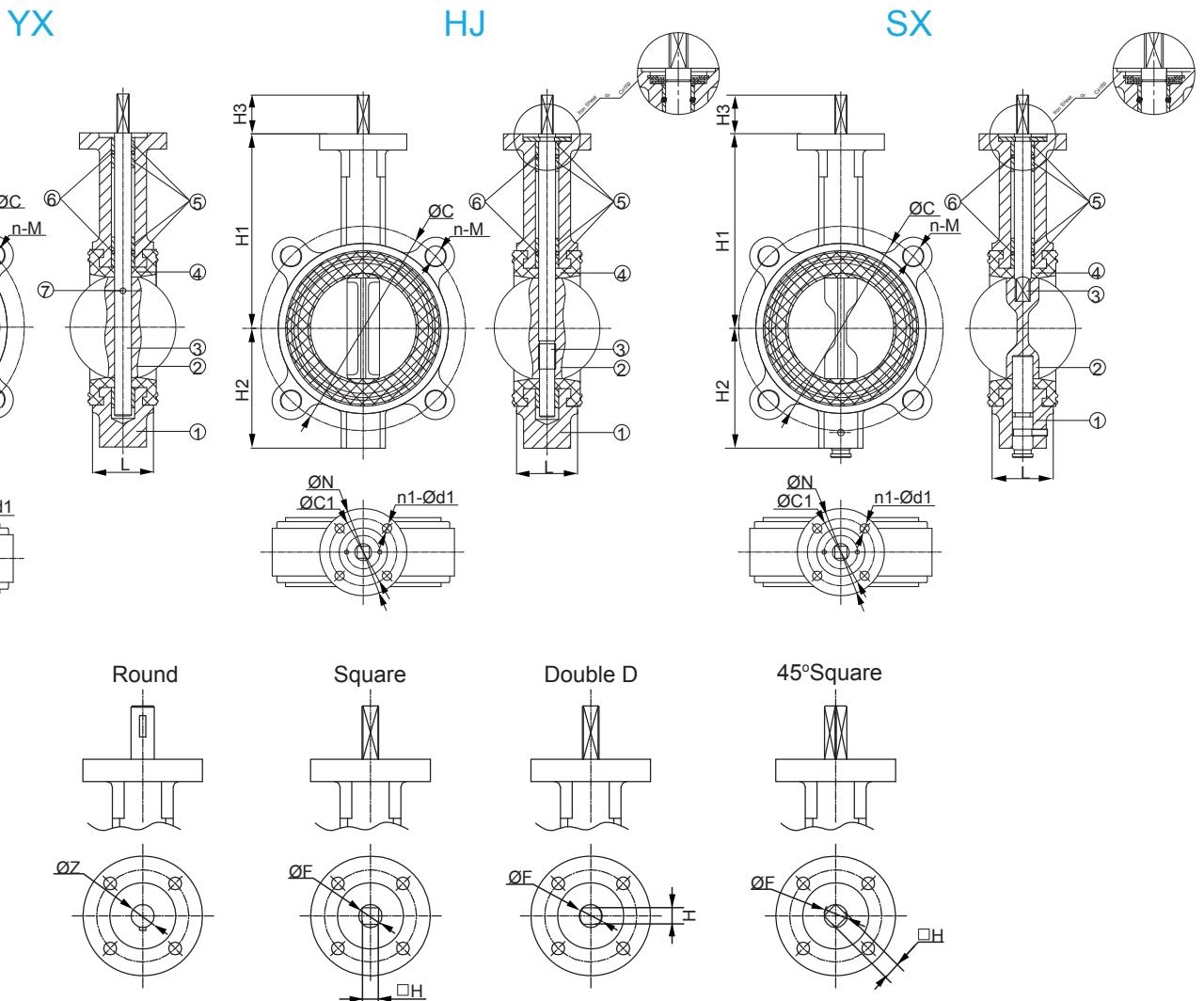
◆ Dimensions

SIZE		L	H1	H2	H3	ISO5211				ISO7005-2				ANSI		AS2129		BS				JIS B2220				ØZ	ØF	H
DN	NPS					No.	ØN	ØC1	n1-Ød1	PN6		PN10/PN16		125/150		Table D/E		Table D/E		5K		10K/16K						
										ØC	n-Ød	ØC	n-Ød	ØC	n-Ød	ØC	n-Ød	ØC	n-Ød	ØC	n-Ød	ØC	n-Ød	ØC	n-Ød			
50	2"	43	125	72	29	F05	65	50	4-Φ8	110	4-Φ14	125	4-Φ19	120.6	4-Φ19	114	4-Φ18	114.3	4-Φ17.5	105	4-Φ15	120	4/8-Φ19	12.6	12.1	9		
65	2-1/2"	46	140	78	29	F05	65	50	4-Φ8	130	4-Φ14	145	4-Φ19	139.7	4-Φ19	127	4-Φ18	127	4-Φ17.5	130	4-Φ15	140	4/8-Φ19	12.6	12.1	9		
80	3"	46	145	90	29	F05	65	50	4-Φ8	150	4-Φ19	160	8-Φ19	152.4	4-Φ19	146	4-Φ18	146.1	4-Φ17.5	145	4-Φ19	150/160	8-Φ19/23	12.6	12.1	9		
100	4"	52	165	102	29	F07	90	70	4-Φ10	170	4-Φ19	180	8-Φ19	190.5	8-Φ19	178	4/8-Φ18	177.8	4/8-Φ17.5	165	8-Φ19	175/185	8-Φ19/23	15.77	14.1	11		
125	5"	56	178	118	29	F07	90	70	4-Φ10	200	8-Φ19	210	8-Φ19	215.9	8-Φ22.4	210	8-Φ18	209.6	8-Φ17.5	200	8-Φ19	210/225	8-Φ23/25	18.92	18.1	14		
150	6"	56	185	145	29	F07	90	70	4-Φ10	225	8-Φ19	240	8-Φ23	241.3	8-Φ22.4	235	8-Φ18/22	235	8-Φ17.5/22.2	230	8-Φ19	240/260	8/12-Φ23/25	18.92	18.1	14		
200	8"	60	225	164	35	F10	125	102	4-Φ12	280	8-Φ19	295	8/12-Φ23	298.4	8-Φ22.4	292	8-Φ18/22	292.1	8-Φ17.5/22.2	280	8-Φ23	290/305	12-Φ23/25	22.1	22.1	17		
250	10"	68	257	191	35	F10	125	102	4-Φ12	335	12-Φ19	350/355	12-Φ23/28	361.9	12-Φ25.4	356	8/12-Φ22	355.6	8/12-Φ22.2	345	12-Φ23	355/380	12-Φ25/27	28.45	28.2	22		
300	12"	78	302	230	35	F10	125	102	4-Φ12	395	12-Φ23	400/410	12-Φ23/28	431.8	12-Φ25.4	406	12-Φ22/26	406.4	12-Φ22.2/25.4	390	12-Φ23	400/430	16-Φ25/27	31.6	28.2	22		

* Other available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

* Special Stem head dimensions kindly contact with Fondon Global directly.

M1122



◆ Dimensions

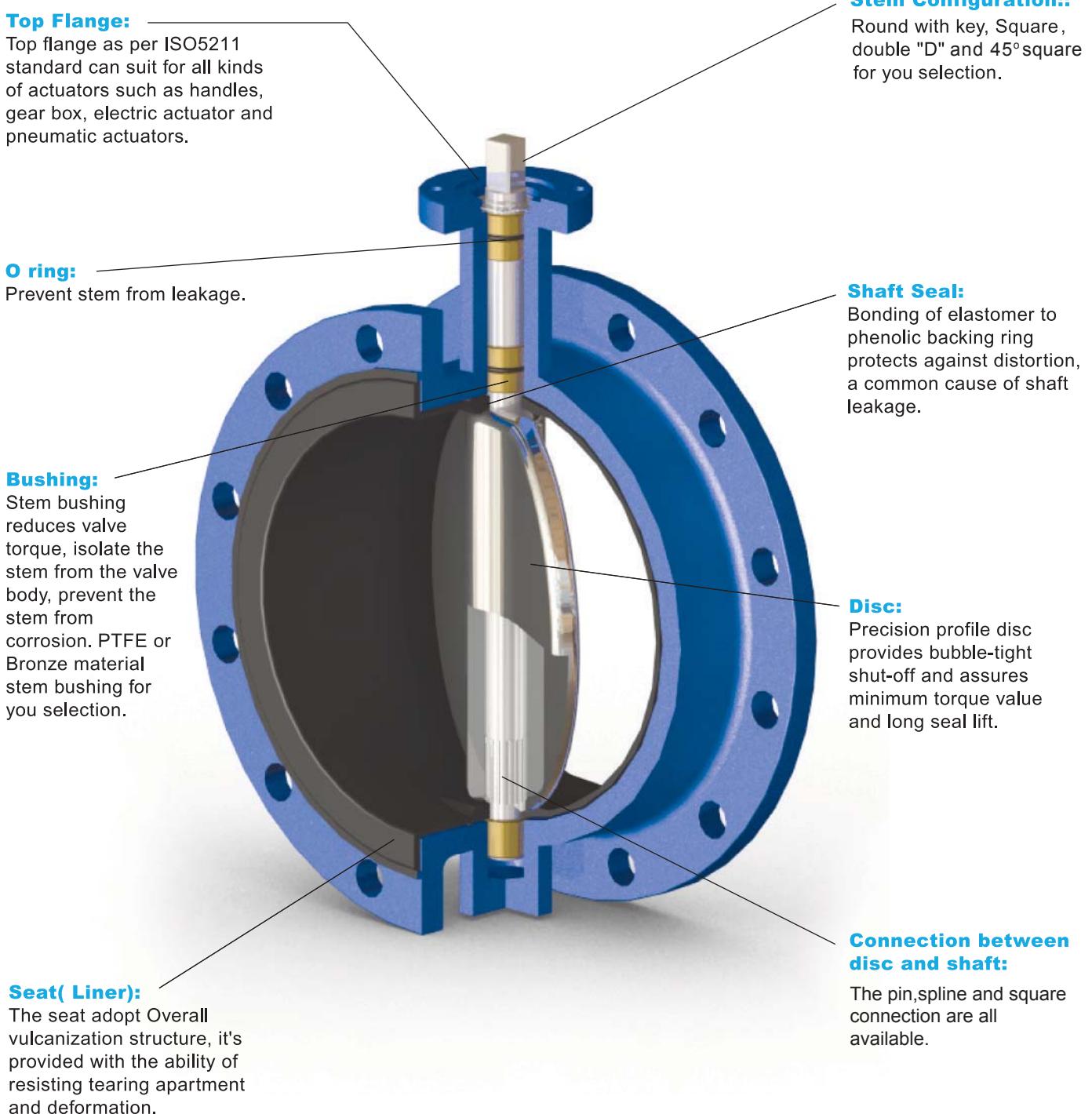
SIZE		L	H1	H2	H3	ISO5211				DIN2501 PN16		$\varnothing Z$	$\varnothing F$	H
DN	NPS					No.	$\varnothing N$	$\varnothing C1$	$n1-\varnothing d1$	$\varnothing C$	$n-M$			
50	2"	43	125	64	29	F05	65	50	4-Φ8	125	4-M16	12.6	12.1	9
65	2-1/2"	46	140	71	29	F05	65	50	4-Φ8	145	4-M16	12.6	12.1	9
80	3"	46	145	90	29	F05	65	50	4-Φ8	160	8-M16	12.6	12.1	9
100	4"	52	165	102	29	F07	90	70	4-Φ10	180	8-M16	15.77	14.1	11
125	5"	56	178	118	29	F07	90	70	4-Φ10	210	8-M16	18.92	18.1	14
150	6"	56	185	135	29	F07	90	70	4-Φ10	240	8-M20	18.92	18.1	14
200	8"	60	225	164	35	F10	125	102	4-Φ12	295	12-M20	22.1	22.1	17
250	10"	68	257	191	35	F10	125	102	4-Φ12	355	12-M24	28.45	28.2	22
300	12"	78	302	230	35	F10	125	102	4-Φ12	410	12-M24	31.6	28.2	22

* Other available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

* Special Stem head dimensions kindly contact with Fondong Global directly.

M1130 Series:

M1130 Series Butterfly Valve with Overall Vulcanization liner, pin, spline or square connection between disc and stem, center line double flanged style.



M1130 Series:

◆ Technical Data

Size	DN50-DN1200
General Design	EN 1092
Mounting Pad	ISO 5211
Face to Face	BS 5155; EN 558 13 series etc.
Flange Drilling	DIN 2501 PN10/PN16 *
Inspection and Test	API598

* All available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

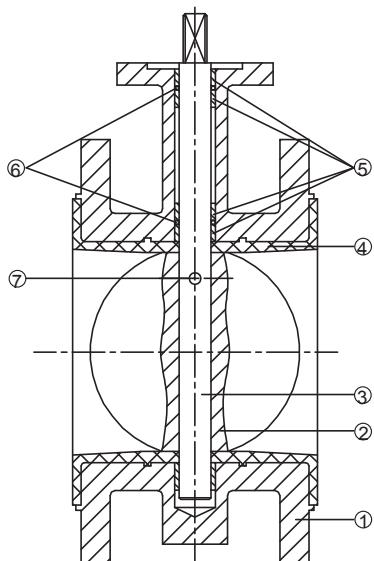
◆ Product Features:

- Double flanged style fit between FF or RF flanges
- High strength body and large safety factor ensure the body can resist high pipe pressure.
- Overall Vulcanization liner with good performance of resisting tearing apart and deformation.
- Universal ISO 5211 mounting Pad.

Fig.M1133



Fig.M1133



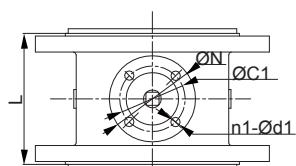
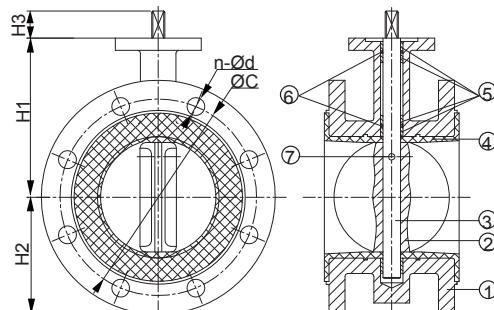
◆ Material of Construction

Parts	Description	Material	Specification
1	Body	Cast Iron	A126 Class B *
2	Disc	Stainless Steel	A351 CF8M *
3	Stem	Stainless Steel	AISI 316 *
4	Seat	EPDM	*
5	Bushing	PTFE	*
6	O Ring	EPDM	*
7	Pin	Stainless Steel	A351 CF8M *

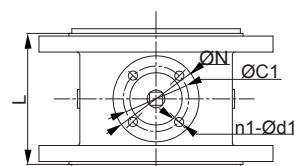
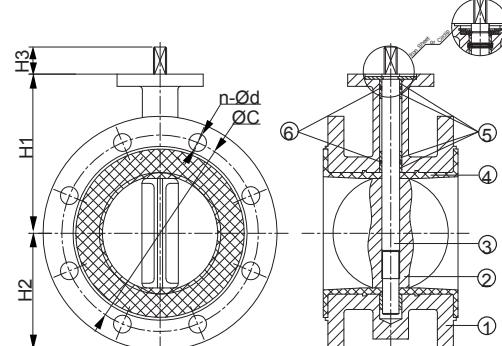
* Other material request kindly refer to Bill of Main Materials of Fondon Global.

M1133

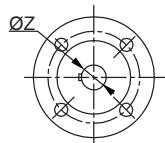
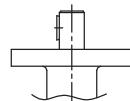
YX



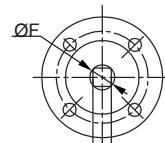
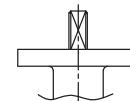
HJ



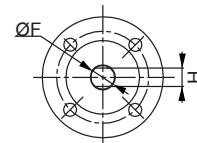
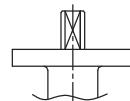
Round



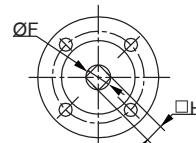
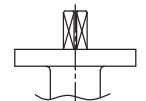
Square



Double D



45°Square



◆ Dimensions

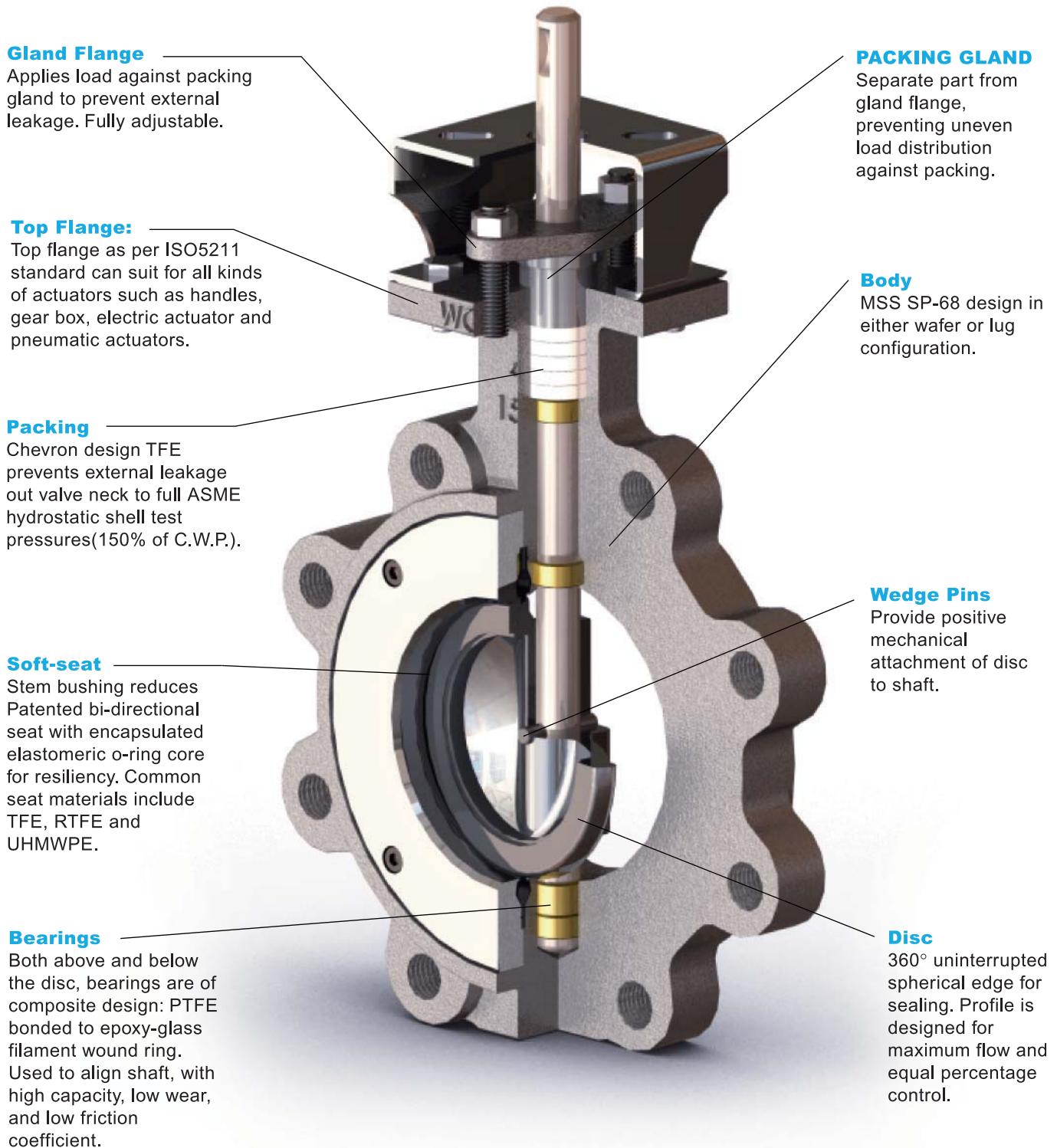
SIZE		L	H1	H2	H3	ISO5211				DIN2501 PN10		ØZ	ØF	H
DN	NPS					No.	ØN	ØC1	n1-Ød1	ØC	n-Ød			
50	2"	108	120	80	29	F05	65	50	4-Ø8	125	4-Ø18	12.6	12.1	9
65	2-1/2"	112	145	75	29	F05	65	50	4-Ø8	145	4-Ø18	12.6	12.1	9
80	3"	114	130	90	29	F05	65	50	4-Ø8	160	8-Ø18	12.6	12.1	9
100	4"	127	165	115	29	F07	90	70	4-Ø10	180	8-Ø18	15.77	14.1	11
125	5"	140	180	110	29	F07	90	70	4-Ø10	210	8-Ø18	18.92	18.1	14
150	6"	140	190	150	29	F07	90	70	4-Ø10	240	8-Ø22	18.92	18.1	14
200	8"	152	240	160	35	F10	125	102	4-Ø12	295	8-Ø22	22.2	22.2	17
250	10"	165	260	195	35	F10	125	102	4-Ø12	350	12-Ø22	28.45	28.2	22
300	12"	178	300	220	35	F10	125	102	4-Ø12	400	12-Ø22	31.6	28.2	22
350	14"	190	330	245	45	F14	175	140	4-Ø18	460	16-Ø22	31.6	28.2	22
400	16"	216	370	267	51.2	F14	175	140	4-Ø18	515	16-Ø26	33.15	28.2	22
450	18"	222	400	300	51.2	F14	175	140	4-Ø18	565	20-Ø26	38	36.2	27
500	20"	229	500	390	64.2	F14	175	140	4-Ø18	620	20-Ø26	41.15	36.2	27
600	24"	267	525	425	70.2	F16	210	165	4-Ø22	725	20-Ø30	50.65	48.2	36
700	28"	292	570	480	66	F25	300	254	8-Ø18	840	24-Ø30	55	60.2	46
800	32"	318	630	575	66	F25	300	254	8-Ø18	950	24-Ø33	55	60.2	46
900	36"	330	690	560	118	F25	300	254	8-Ø18	1050	28-Ø33	75	72.2	55
1000	40"	410	745	637	142	F25	300	254	8-Ø18	1160	28-Ø36	85	72.2	55
1200	48"	470	925	775	160	F30	350	298	8-Ø22	1380	32-Ø39	105	98.2	75

* Other available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

* Special Stem head dimensions kindly contact with Fondon Global directly.

M710 Series:

FG M710 Series High Performance butterfly valve with soft or metal seat, double or triple eccentric style, both wafer, lug and double flanged type.



M710 Series:

◆ Technical Data

Size	DN40-DN1200
General Design	MSS SP-68, API609
Mounting Pad	ISO 5211, EN12116
Face to Face	API609 *
Flange Drilling	ANSI B16.5,EN1092 *
Inspection and Test	API598

Fig.M712



* All available Face to Face Standard kindly refer to the Basic Specification of Fondon Global.

* All available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

◆ Product Features:

Features tight shut off and excellent throttling performance.

High pressure butterfly valve with eccentric Design.

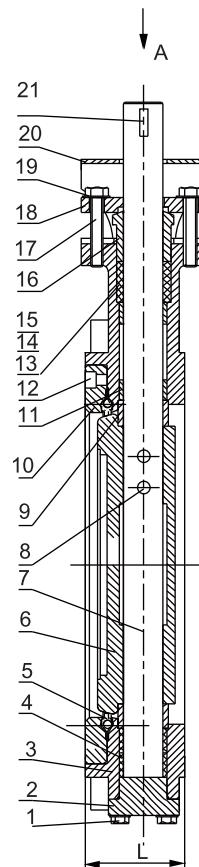
Excellent performance flexible PTFE packing ensure the reliable sealing performance.

Soft and metal seat are all available.

Unique stem to disc connection increases mechanical strength.

Full lug style can be used in dead end service at full pressure ratio of the valve.

Temperatures to $-29^{\circ}\text{C} \sim 538^{\circ}\text{C}$ according to the seal material.

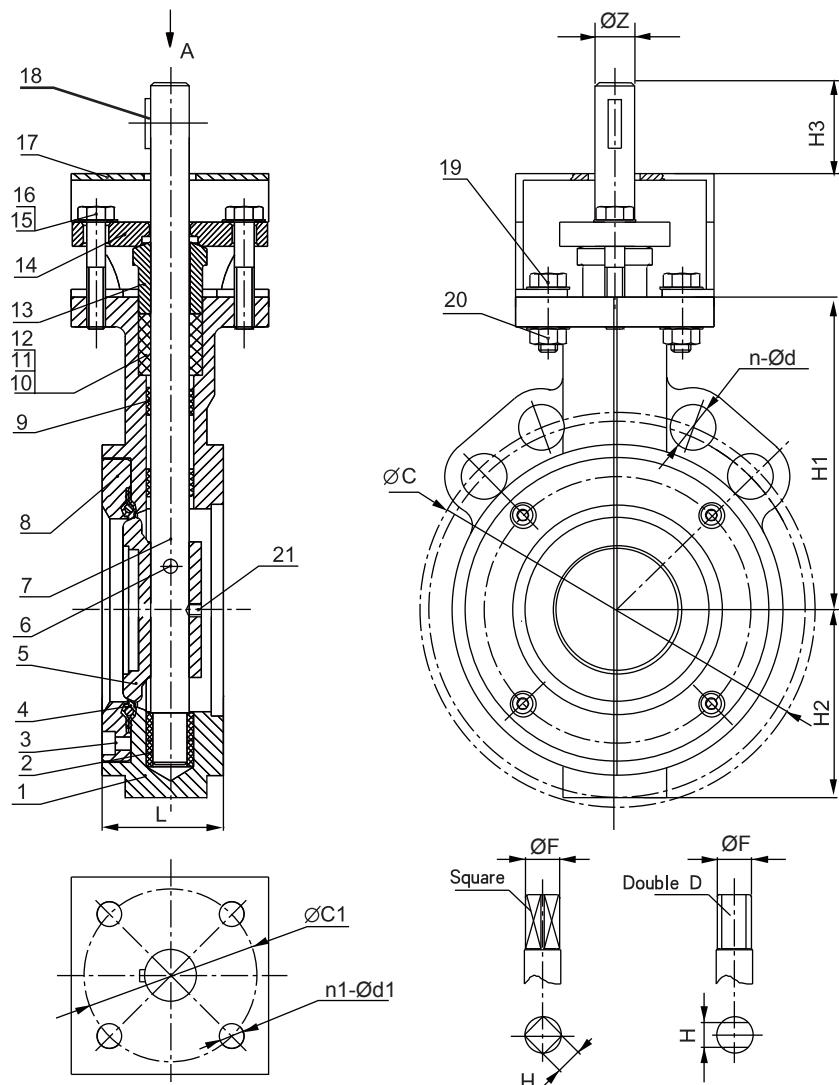


◆ Material of Construction

Parts	Description	Material	Specification	*
1	Body	Carbon Steel	A216WCB	*
2	Down Bushing	PTFE		*
3	Hex Nut	Cast Steel	A194 2H	*
4	Seat	PTFE		*
5	Disc	Stainless Steel	A351 CF8M	*
6	Cone Pin	Stainless Steel	A276 SS410	*
7	Shaft	Stainless Steel	A276 SS410	*
8	Grip Ring	Stainless Steel	A276 SS410	*
9	Upper Bushing	PTFE		*
10	Packing	PTFE		*
11	Packing	PTFE		*
12	Packing	PTFE		*
13	Gland Bushing	Stainless Steel	A276 SS410	*
14	Gland	Stainless Steel	A351 CF8M	*
15	Bolt	Cast Steel	A193 B7	*
16	Washer	Cast Steel	Steel	*
17	Braker	Carbon Steel	A216 WCB	*
18	Woodruff Key	Cast Steel	Steel	*
19	Bolt	Cast Steel	A193 B7	*
20	Nut	Cast Steel	A194 2H	*
21	Locking Screw	Stainless Steel	A276 SS410	*

* Other material request kindly refer to Bill of Main Materials of Fondon Global.

M711



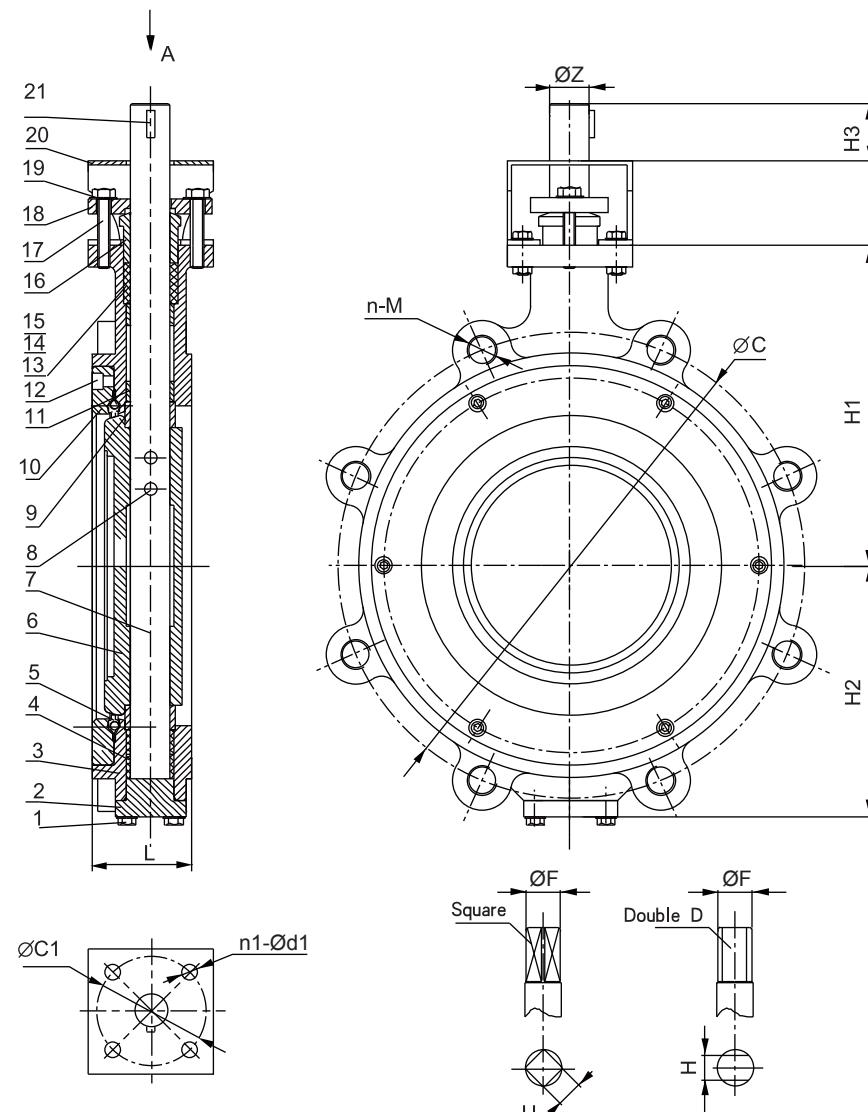
◆ Dimensions

SIZE		L	H1	H2	H3	ØC	n-Ød	ISO5211 Monunting Pad			Round	Square/Double D
DN	NPS							No.	ØC1	n1-Ød1		
50	2"	44.5	108	68.5	30	125	4-18	F05	50	4-8	12.6	12.1
65	2-1/2"	47.5	108	68.5	30	145	4-18	F05	50	4-8	12.6	12.1
80	3"	49	127	79	30	160	8-18	F05	50	4-8	12.6	12.1
100	4"	54	155	105.5	30	180	8-18	F07	70	4-10	15.77	12.1
125	5"	57	164	120	30	210	8-18	F07	70	4-10	18.92	14.1
150	6"	59	177.5	136	30	240	8-22	F07	70	4-10	18.92	18.1
200	8"	63.5	206	161	37	295	12-22	F10	102	4-12	22.1	18.1
250	10"	71.5	231	204	37	355	12-26	F10	102	4-12	28.45	22.1
300	12"	82	270	240	37	410	12-26	F10	102	4-12	31.6	28.2

* Other available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

* Special Stem head dimensions kindly contact with Fondon Global directly.

M712



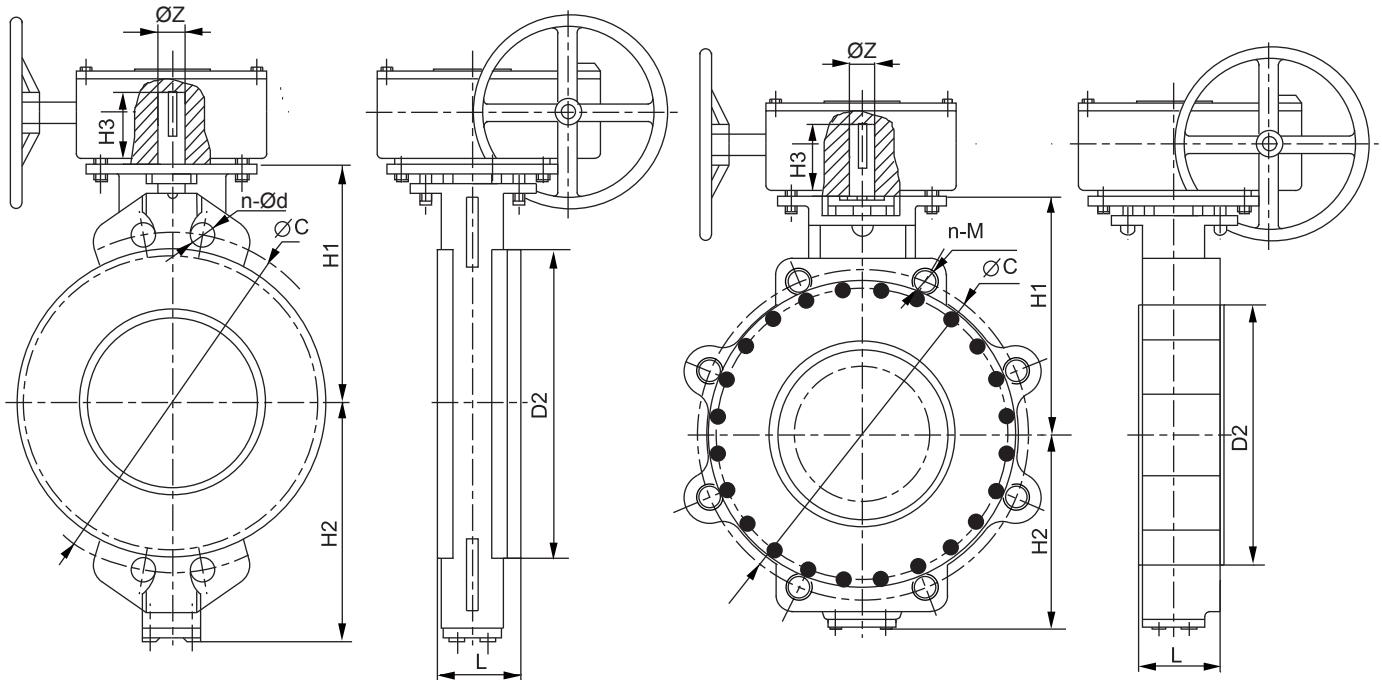
◆ Dimensions

SIZE		L	H1	H2	H3	ØC	n-M	ISO5211 Mounting Pad			Round	Square/Double D
DN	NPS							No.	ØC1	n1-Ød1		
50	2"	44.5	108	68.5	30	125	4-M16	F05	50	4-8	12.6	12.1
65	2-1/2"	47.5	108	68.5	30	145	4-M16	F05	50	4-8	12.6	12.1
80	3"	49	127	79	30	160	8-M16	F05	50	4-8	12.6	12.1
100	4"	54	155	105.5	30	180	8-M16	F07	70	4-10	15.77	12.1
125	5"	57	164	120	30	210	8-M16	F07	70	4-10	18.92	14.1
150	6"	59	177.5	136	30	240	8-M20	F07	70	4-10	18.92	18.1
200	8"	63.5	206	161	37	295	12-M20	F10	70	4-12	22.1	18.1
250	10"	71.5	231	204	37	355	12-M24	F10	102	4-12	28.45	22.1
300	12"	82	268	232	37	410	12-M24	F10	102	4-12	31.6	22

* Other available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

* Special Stem head dimensions kindly contact with Fondon Global directly.

M711/712



◆ Dimensions(150lb)

SIZE		L	H1	H2	ØC	n-Ød	N-M(in)	D2	ISO 5211	ØZ	H3
DN	NPS										
50	2"	43	150	112	120.7	4-19	4-5/8	92	F07	Ø14	30
80	3"	48	186	120	152.4	4-19	4-5/8	127	F07	Ø16	30
100	4"	54	217	138	190.5	8-19	8-5/8	157	F07	Ø20	30
125	5"	57	233	164	215.9	8-22	8-3/4	186	F10	Ø22	36
150	6"	57	307	175	241.3	8-22	8-3/4	216	F10	Ø26	36
200	8"	64	341	200	298.5	8-22	8-3/4	270	F12	Ø26	40
250	10"	71	390	231	362	12-25	12-7/8	324	F14	Ø30	45
300	12"	81	433	261	431.8	12-25	12-7/8	381	F14	Ø34	50
350	14"	92	477	298	476.3	12-28	12-1	413	F16	Ø38	50
400	16"	102	533	331	539.8	16-28	16-1	470	F16	Ø42	65
450	18"	114	564	369	577.9	16-32	16-1 1/8	533	F16	Ø46	75
500	20"	127	598	404	635	20-32	20-1 1/8	584	F16	Ø46	90
600	24"	154	702	473	749.3	20-35	20-1 1/4	692	F20	Ø70	100
700	28"	165	764	538	863.6	28-35	28-1 1/4	800	F20	Ø70	100
750	30"	165	795	580	914.4	28-35	28-1 1/4	857	F25	Ø80	130
800	32"	190	836	615	977.9	28-41	28-1 1/2	914	F25	Ø80	130
900	36"	203	948	700	1085.9	32-41	32-1 1/2	1022	F25	Ø90	130
1000	40"	216	971	720	1200.2	36-41	36-1 1/2	1124	F30	Ø100	130
1200	48"	254	1094	850	1422.4	44-41	44-1 1/2	1359	F35	Ø120	150

* The dimensions of "H3" in above sheet for reference only, special demand kindly contact with Fondon Global directly.

M711/712

◆ Dimensions(300lb)

SIZE		L	H1	H2	ØC	n-Ød	N-M(in)	D2	ISO 5211	ØZ	H3
DN	NPS										
50	2"	43	186	112	127	8-19	5-5/8	92	F07	Ø14	30
80	3"	48	217	120	168.1	8-22	8-5/8	127	F07	Ø16	30
100	4"	54	233	138	200.2	8-22	8-5/8	157	F07	Ø20	30
125	5"	59	280	164	235	8-22	8-5/8	186	F10	Ø22	40
150	6"	59	307	175	269.7	12-22	12-5/8	216	F10	Ø26	40
200	8"	73	349	210	330.2	12-25	12-7/8	270	F14	Ø34	45
250	10"	83	405	250	387.4	16-28	16-1	324	F16	Ø38	50
300	12"	92	482	289	450.9	16-32	16-1 1/8	381	F16	Ø42	50
350	14"	117	516	327	514.4	20-32	20-1 1/8	413	F16	Ø50	65
400	16"	133	560	378	571.5	20-35	20-1 1/4	470	F20	Ø55	75
450	18"	149	622	385	628.7	24-35	24-1 1/4	533	F20	Ø60	90
500	20"	159	660	424	685.8	24-35	24-1 1/4	584	F20	Ø65	100
600	24"	181	729	492	812.8	24-41	24-1 1/2	692	F25	Ø85	100

◆ Dimensions(PN25)

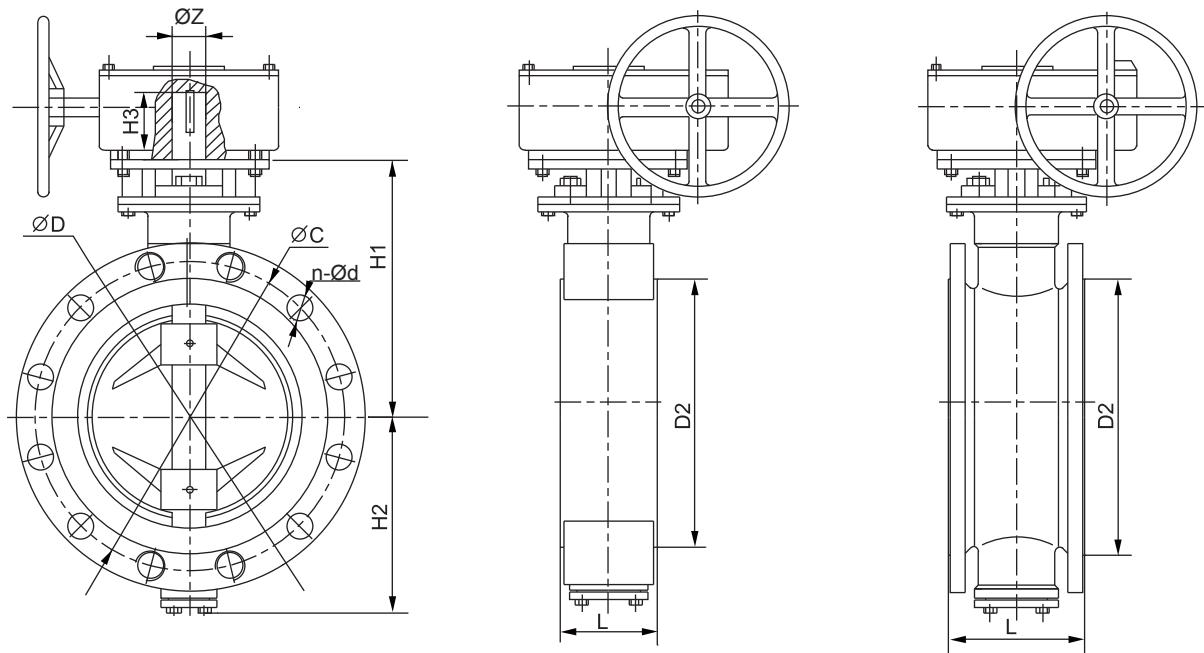
SIZE		L	H1	H2	ØC	n-Ød	N-M(in)	D2	ISO 5211	ØZ	H3
DN	NPS										
40	1-1/2"	33	143	110	110	4-18	4-16	88	F07	Ø12	30
50	2"	43	150	112	125	4-18	4-16	102	F07	Ø14	30
65	3"	46	175	114	145	8-18	8-16	122	F07	Ø14	30
80	4"	49	186	120	160	8-18	8-16	138	F07	Ø16	30
100	5"	56	217	138	190	8-22	8-20	162	F07	Ø20	30
125	6"	64	233	164	220	8-26	8-24	188	F10	Ø22	36
150	8"	70	307	175	250	8-26	8-24	218	F10	Ø26	36
200	10"	71	341	200	310	12-26	12-24	278	F12	Ø26	40
250	12"	76	390	231	370	12-30	12-27	335	F14	Ø30	45
300	14"	83	433	261	430	16-30	16-27	395	F14	Ø34	50
350	16"	92	477	298	490	16-33	16-30	450	F16	Ø38	50
400	18"	102	533	331	550	16-36	16-33	505	F16	Ø42	50
450	20"	114	564	369	600	20-36	20-33	555	F16	Ø46	65
500	24"	127	598	404	660	20-36	20-33	615	F16	Ø46	75
600	28"	154	702	473	770	20-39	20-36	720	F20	Ø70	90
700	30"	165	764	538	875	24-42	24-39	820	F20	Ø70	100
800	32"	190	836	615	990	24-48	24-45	930	F25	Ø80	100
900	36"	203	948	700	1090	28-48	24-45	1030	F25	Ø90	130
1000	40"	216	971	720	1210	28-56	28-52	1140	F30	Ø100	130
1200	48"	254	1094	850	1420	32-56	32-52	1350	F35	Ø120	150

◆ Dimensions(PN40)

SIZE		L	H1	H2	ØC	n-Ød	N-M(in)	D2	ISO 5211	ØZ	H3
DN	NPS										
50	2"	43	150	112	125	4-18	4-16	102	F07	Ø14	30
65	2-1/2"	46	175	114	145	8-18	8-16	122	F07	Ø14	30
80	3"	49	186	120	160	8-18	8-16	138	F07	Ø16	30
100	4"	56	217	138	190	8-22	8-20	162	F07	Ø20	30
125	5"	64	233	164	220	8-26	8-24	188	F10	Ø22	36
150	6"	70	307	175	250	8-26	8-24	218	F10	Ø26	36
200	8"	71	349	210	320	12-30	12-27	285	F14	Ø30	40
250	10"	76	405	250	385	12-33	12-30	345	F14	Ø34	45
300	12"	83	482	289	450	16-33	16-30	410	F16	Ø38	50
350	14"	92	516	327	510	16-36	16-33	465	F16	Ø46	65
400	16"	102	560	378	585	16-39	16-36	535	F16	Ø50	75
450	18"	114	622	385	610	20-39	20-36	560	F20	Ø55	90
500	20"	127	660	424	670	20-42	20-39	615	F20	Ø60	100
600	24"	154	729	492	795	20-48	20-45	735	F25	Ø80	100

* The dimensions of "H3" in above sheet for reference only, special demand kindly contact with Fondon Global directly.

M713



◆ Dimensions(150lb)

SIZE		L	H1	H2	ØD	ØC	n-Ød	D2	ISO 5211	ØZ	H3
DN	NPS										
50	2"	108	150	112	152	120.7	4-19	92	F07	Ø14	30
80	3"	114	186	120	191	152.4	4-19	127	F07	Ø16	30
100	4"	127	217	138	229	190.5	8-19	157	F07	Ø20	30
125	5"	140	233	164	254	215.9	8-22	186	F10	Ø22	36
150	6"	140	307	175	279	241.3	8-22	216	F10	Ø26	36
200	8"	152	341	200	343	298.5	8-22	270	F12	Ø26	40
250	10"	165	390	231	406	362	12-25	324	F14	Ø30	45
300	12"	178	433	261	483	431.8	12-25	381	F14	Ø34	50
350	14"	190	477	298	533	476.3	12-28	413	F16	Ø38	50
400	16"	216	533	331	597	539.8	16-28	470	F16	Ø42	65
450	18"	222	564	369	635	577.9	16-32	533	F16	Ø46	75
500	20"	229	598	404	699	635	20-32	584	F16	Ø46	90
600	24"	267	702	473	813	749.3	20-35	692	F20	Ø70	100
700	28"	292	764	538	927	863.6	28-35	800	F20	Ø70	100
750	30"	318	795	580	984	914.4	28-35	857	F25	Ø80	130
800	32"	318	836	615	1060	977.9	28-41	914	F25	Ø80	130
900	36"	330	948	700	1168	1085.9	32-41	1022	F25	Ø90	130
1000	40"	410	971	720	1289	1200.2	36-41	1124	F30	Ø100	130
1200	48"	470	1094	850	1511	1422.4	44-41	1359	F35	Ø120	150

* The dimensions of "H3" in above sheet for reference only, special demand kindly contact with Fondon Global directly.

M713

◆ Dimensions(300lb)

SIZE		L	H1	H2	ØD	ØC	n-Ød	D2	ISO 5211	ØZ	H3
DN	NPS										
50	2"	108	186	112	165	127	8-19	92	F07	Ø14	30
80	3"	114	217	120	210	168.1	8-22	127	F07	Ø16	30
100	4"	127	233	138	254	200.2	8-22	157	F07	Ø20	30
125	5"	140	280	164	279	235	8-22	186	F10	Ø22	40
150	6"	140	307	175	318	269.7	12-22	216	F10	Ø26	40
200	8"	152	349	210	381	330.2	12-25	270	F14	Ø34	45
250	10"	165	405	250	445	387.4	16-28	324	F16	Ø38	50
300	12"	178	482	289	521	450.9	16-32	381	F16	Ø42	50
350	14"	190	516	327	584	514.4	20-32	413	F16	Ø50	65
400	16"	216	560	378	648	571.5	20-35	470	F20	Ø55	75
450	18"	222	622	385	711	628.7	24-35	533	F20	Ø60	90
500	20"	229	660	424	775	685.8	24-35	584	F20	Ø65	100
600	24"	267	729	492	914	812.8	24-41	692	F25	Ø85	100

◆ Dimensions(PN25)

SIZE		L1	L2	H1	H2	ØD	ØC	n-Ød	D2	ISO 5211	ØZ	H3
DN	NPS											
40	1-1/2"	108	140	143	110	150	110	4-18	88	F07	Ø12	30
50	2"	108	150	150	112	165	125	4-18	102	F07	Ø14	30
65	3"	112	170	175	114	185	145	8-18	122	F07	Ø14	30
80	4"	114	180	186	120	200	160	8-18	138	F07	Ø16	30
100	5"	127	190	217	138	235	190	8-22	162	F07	Ø20	30
125	6"	140	200	233	164	270	220	8-26	188	F10	Ø22	36
150	8"	140	210	307	175	300	250	8-26	218	F10	Ø26	36
200	10"	152	230	341	200	360	310	12-26	278	F12	Ø26	40
250	12"	165	250	390	231	425	370	12-30	335	F14	Ø30	45
300	14"	178	270	433	261	485	430	16-30	395	F14	Ø34	50
350	16"	190	290	477	298	555	490	16-33	450	F16	Ø38	50
400	18"	216	310	533	331	620	550	16-36	505	F16	Ø42	50
450	20"	222	330	564	369	670	600	20-36	555	F16	Ø46	65
500	24"	229	350	598	404	730	660	20-36	615	F16	Ø46	75
600	28"	267	390	702	473	845	770	20-39	720	F20	Ø70	90
700	30"	292	430	764	538	960	875	24-42	820	F20	Ø70	100
800	32"	318	470	836	615	1085	990	24-48	930	F25	Ø80	100
900	36"	330	510	948	700	1185	1090	28-48	1030	F25	Ø90	130
1000	40"	410	550	971	720	1320	1210	28-56	1140	F30	Ø100	130
1200	48"	470	630	1094	850	1530	1420	32-56	1350	F35	Ø120	150

◆ Dimensions(PN40)

SIZE		L1	L2	H1	H2	ØD	ØC	n-Ød	D2	ISO 5211	ØZ	H3
DN	NPS											
50	2"	108	150	150	112	165	125	4-18	102	F07	Ø14	30
65	2-1/2"	112	170	175	114	185	145	8-18	122	F07	Ø14	30
80	3"	114	180	186	120	200	160	8-18	138	F07	Ø16	30
100	4"	127	190	217	138	235	190	8-22	162	F07	Ø20	30
125	5"	140	200	233	164	270	220	8-26	188	F10	Ø22	36
150	6"	140	210	307	175	300	250	8-26	218	F10	Ø26	36
200	8"	152	230	349	210	375	320	12-30	285	F14	Ø30	40
250	10"	165	250	405	250	450	385	12-33	345	F14	Ø34	45
300	12"	178	270	482	289	515	450	16-33	410	F16	Ø38	50
350	14"	190	290	516	327	580	510	16-36	465	F16	Ø46	65
400	16"	216	310	560	378	660	585	16-39	535	F16	Ø50	75
450	18"	222	330	622	385	685	610	20-39	560	F20	Ø55	90
500	20"	229	350	660	424	755	670	20-42	615	F20	Ø60	100
600	24"	267	390	729	492	890	795	20-48	735	F25	Ø80	100

* The dimensions of "H3" in above sheet for reference only, special demand kindly contact with Fondon Global directly.

M720 Series:

FG M720 Series butterfly valve with overall weld body sealing, double and triple eccentric, soft seal and metal seal double flanged style.

Special characteristics

Top Flange

Top flange as per ISO5211 standard can suit for all kinds of actuators such as handles, gear box, electric actuator and pneumatic actuators.

Connection between disc and shaft:

Two piece stem design, taper pin connection between disc and shaft, which can ensure positive vibration proof.

Disc Ring:

Rubber and graphite compounds disc ring can meet different application demand.

Bushes:

The ideal position of the bushing reduces the bending of the shaft, and ensure bi-directional tightness under different maximum pressure.

Body :

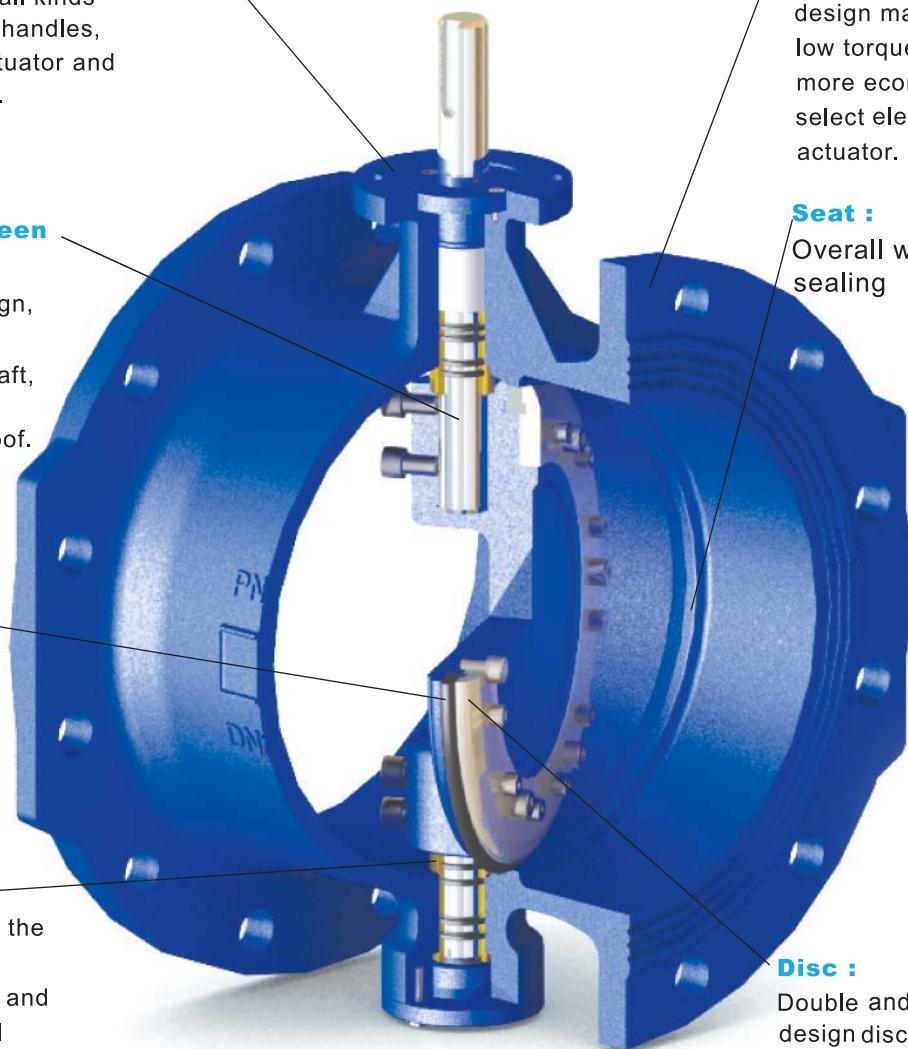
Double and triple eccentric design make the valve with low torque value, so it's more economic while you select electric or pneumatic actuator.

Seat :

Overall weld body sealing

Disc :

Double and triple eccentric design disc may reduces friction of the sealing ring, provide the valve a long service life.



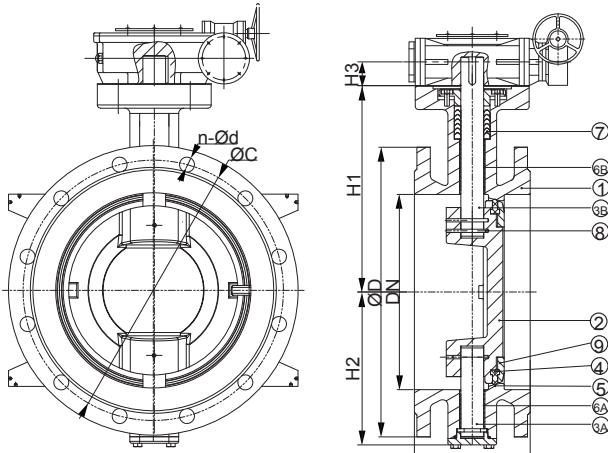
M723

Fig.M723

◆ Technical Data

Size	DN100-DN2000
General Design	EN593
Mounting Pad	ISO5211
Face to Face	EN558-1 14 Series
Flange Drilling	EN1092-2/PN10/PN16/PN25*

* All available Flange drilling kindly refer to the attached Flange Drilling Dimensions.



◆ Dimensions

SIZE		L	H1	H2	H3	EN1092-2 PN10			EN1092-2 PN16			EN1092-2 PN25		
DN	NPS					ØD	ØC	n-Ød	ØD	ØC	n-Ød	ØD	ØC	n-Ød
100	4"	190	140	115	38	220	180	8-19	220	180	8-19	235	190	8-23
125	5"	200	150	130	38	250	210	8-19	250	210	8-19	270	220	8-28
150	6"	210	160	150	38	285	240	8-23	285	240	8-23	300	250	8-28
200	8"	230	200	187	42	340	295	8-23	340	295	12-23	360	310	12-28
250	10"	250	235	215	42	395	350	12-23	405	355	12-28	425	370	12-31
300	12"	270	264	237	42	445	400	12-23	460	410	12-28	485	430	16-31
350	14"	290	300	270	51	505	460	16-23	520	470	16-28	555	490	16-34
400	16"	310	335	305	51	565	515	16-28	580	525	16-31	620	550	16-37
450	18"	330	360	335	51	615	565	20-28	640	585	20-31	670	600	20-37
500	20"	350	395	370	136	670	620	20-28	715	650	20-34	730	660	20-37
600	24"	390	460	425	136	780	725	20-31	840	770	20-37	845	770	20-41
700	28"	430	535	505	149	895	840	24-31	910	840	24-37	960	875	24-44
800	32"	470	590	560	149	1015	950	24-34	1025	950	24-41	1085	990	24-50
900	36"	510	660	630	185	1115	1050	28-34	1125	1050	28-41	1185	1090	28-50
1000	40"	550	735	705	216	1230	1160	28-37	1255	1170	28-44	1320	1210	28-57
1200	48"	630	840	815	216	1455	1380	32-41	1485	1390	32-50	1530	1420	32-57
1400	56"	710	1010	985	267	1675	1590	36-44	1685	1590	36-50	/	/	/
1600	64"	790	1130	1120	312	1915	1820	40-50	1930	1820	40-57	/	/	/
1800	72"	870	1280	1270	312	2115	2020	44-50	/	/	/	/	/	/
2000	80"	950	1405	1380	326	2325	2230	48-50	/	/	/	/	/	/



◆ Material of Construction

Parts	Description	Material	Specification
1	Body	Ductile Iron	GGG40 *
2	Disc	Ductile Iron	GGG40 *
3	Stem	Stainless Steel	SS420 *
4	Disc Sealing	EPDM	*
5	Body Sealing	Stainless Steel	AISI304 *
6	Bushing	PTFE+Non-ferrous metal	*
7	Packing	EPDM	*
8	Pin	Stainless Steel	SS420 *
9	Retaining Ring	Stainless Steel	AISI304 *

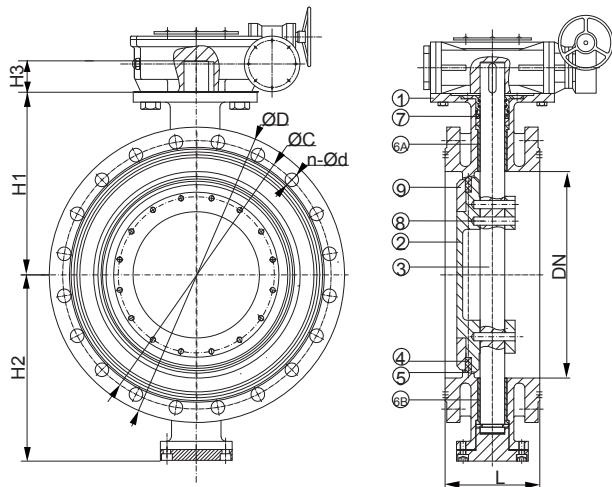
* Other material request kindly refer to bill of Main Materials of Fondon Global.

M723

◆ Technical Data

Size	DN100-DN1200
General Design	EN593
Mounting Pad	ISO5211
Face to Face	EN558-1 13 Series
Flange Drilling	DIN2501 PN10/PN16 *

* All available Flange drilling kindly refer to the attached Flange Drilling Dimensions.



◆ Material of Construction

Parts	Description	Material	Specification
1	Body	Carbon Steel	A216 WCB *
2	Disc	Carbon Steel	A216 WCB *
3	Stem	Stainless Steel	AISI316 *
4	Disc Sealing	Stainless Steel +Graphite/Asbestine	AISI304 *
5	Body Sealing	Stainless Steel	B62 *
6	Bushing	Bronze	*
7	"O"ring	EPDM	*
8	Pin	Stainless Steel	AISI316 *
9	Retaining Ring	Carbon Steel	A216 WCB *

* Other material request kindly refer to bill of Main Materials of Fondon Global.

◆ Dimensions

SIZE		L	H1	H2	H3	DIN2501 PN16		
DN	NPS					ØD	ØC	n-Ød
100	4"	127	179	146	30	220	180	8-18
125	5"	140	212.5	160.5	40	250	210	8-18
150	6"	140	227	178	40	285	240	8-22
200	8"	152	273	212	45	340	295	12-22
250	10"	165	310	271	45	405	355	12-26
300	12"	178	337	268	45	460	410	12-26
350	14"	190	400	338	75	520	470	16-26
400	16"	216	430	357	75	580	525	16-30
450	18"	222	482	377	75	640	585	20-30
500	20"	229	515	451	75	715	650	20-33
600	24"	267	587.5	502	85	840	770	20-36
700	28"	292	643	565	110	910	840	24-36
800	32"	318	713	612	110	1025	950	24-39
900	36"	330	799	654.5	145	1125	1050	28-39
1000	40"	410	895.5	719.5	168	1255	1170	28-42
1200	48"	470	999	882	180	1485	1390	32-48



Fig.M723

M510 Series:

◆ Technical Data

Size	DN40-DN300
General Design	API609 *
Mounting Pad	ISO 5211
Face to Face	API609; EN558 1-20 series etc. *
Flange Drilling	DIN 2501 PN10 *
Inspection and Test	API598

Fig.M511

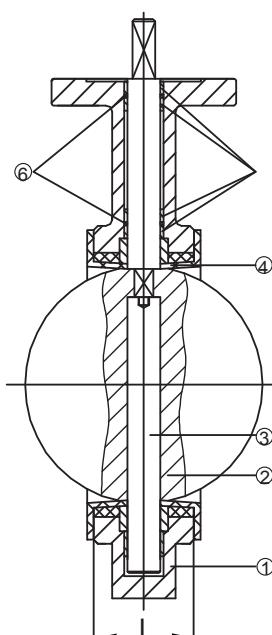


Fig.B80W



◆ Product Features:

- Wafer or lug body style fit between FF or RF flanges
- PTFE bushing ensure the maximum shaft support and centralized alignment.
- EPDM with PTFE covered or Full PTFE seat for selection.
- Nylon or PTFE coated Disc prevent chemical corrosion from flow media.
- Two-piece body design ensures assembly and maintenance easily.
- Universal ISO 5211 mounting Pad.



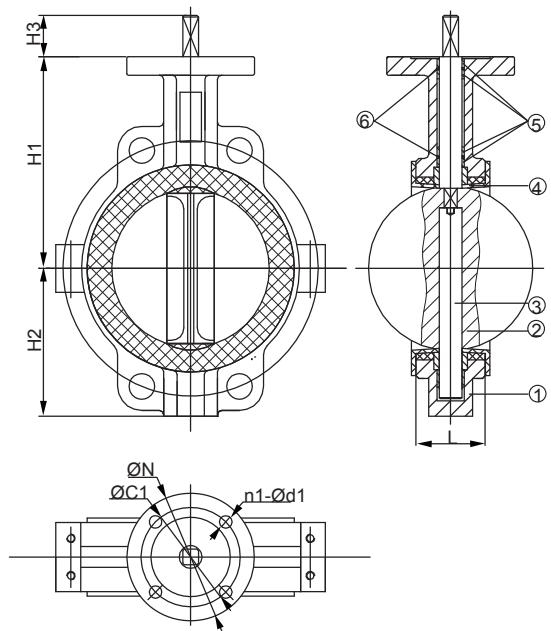
◆ Material of Construction

Parts	Description	Material	Specification
1	Body	Cast Iron+PTFE	A126 Class B+PTFE *
2	Disc	Stainless Steel+PTFE	A351 CF8M+PTFE *
3	Stem	Stainless Steel	AISI 316 *
4	Seat	PTFE	*
5	Bushing	PTFE	*
6	O Ring	EPDM	*

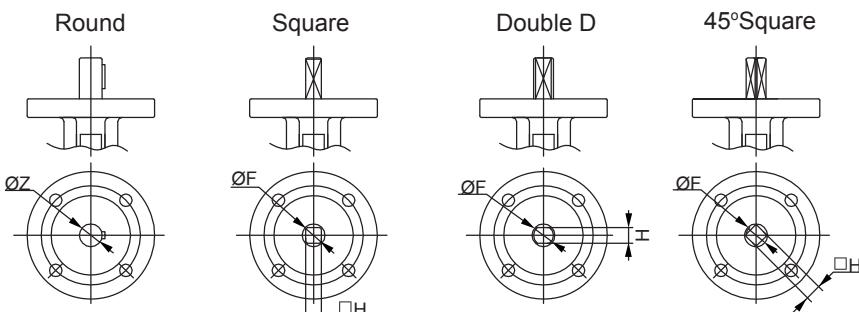
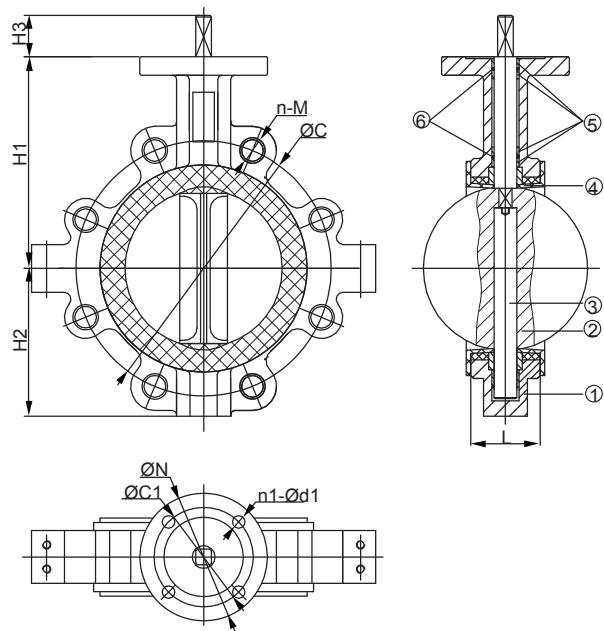
* Other material request kindly refer to Bill of Main Materials of Fondon Global.

M511/512

Wafer



Lug



◆ Dimensions

SIZE		L	H1	H2	H3	ISO5211				DIN2501 PN16				ØZ	ØF	H
DN	NPS					No.	ØN	ØC1	n1-Ød1	ØC	n-Ød	n-M				
40	1.5"	33	128	73	29	F05	65	50	4-Ø8	110	4-Ø18	4-M16	12.6	12.1	9	
50	2"	43	135	73	29	F05	65	50	4-Ø8	125	4-Ø18	4-M16	12.6	12.1	9	
65	2-1/2"	46	135	80	29	F05	65	50	4-Ø8	145	4-Ø18	4-M16	12.6	12.1	9	
80	3"	46	138	90	29	F05	65	50	4-Ø8	160	8-Ø18	8-M16	12.6	12.1	9	
100	4"	52	158	116	29	F07	90	70	4-Ø10	180	8-Ø18	8-M16	15.77	14.1	11	
125	5"	56	175	130	29	F07	90	70	4-Ø10	210	8-Ø18	8-M16	18.92	18.1	14	
150	6"	56	188	148	29	F07	90	70	4-Ø10	240	8-Ø22	8-M20	18.92	18.1	14	
200	8"	60	230	180	35	F10	125	102	4-Ø12	295	12-Ø22	12-M20	22.1	22.1	17	
250	10"	68	270	220	35	F10	125	102	4-Ø12	355	12-Ø26	12-M24	28.45	28.1	22	
300	12"	78	300	255	35	F10	125	102	4-Ø12	410	12-Ø26	12-M24	31.6	28.1	22	

* Other available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

* Special Stem head dimensions kindly contact with Fondon Global directly.

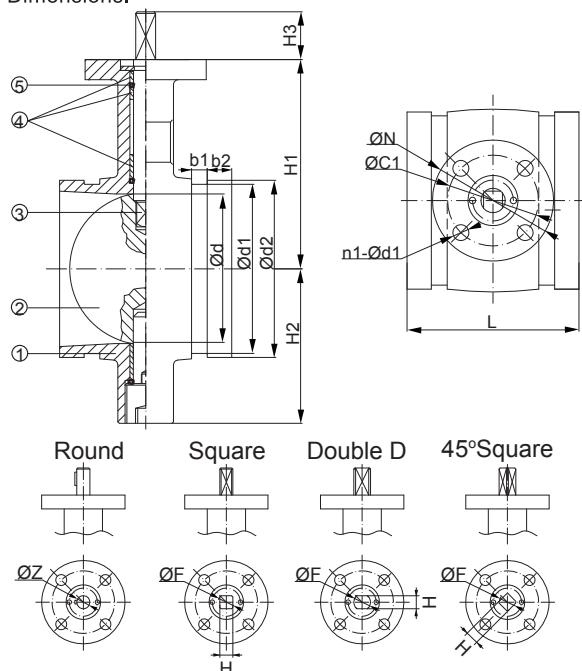
M1140 Series:

M1140

◆ Technical Data

Size	DN40-DN300
General Design	API609 MSS SP-67
Mounting Pad	ISO 5211
Face to Face	ANSI B16.10
End Connection	AWWA C606 *
Inspection and Test	API598

* All available Flange drilling kindly refer to the attached Flange Drilling Dimensions.



◆ Material of Construction

Parts	Description	Material	Specification	*
1	Body	Ductile Iron	ASTM A536	*
2	Disc	Ductile Iron+EPDM	A536+EPDM	*
3	Stem	Stainless Steel	A276 SS410	*
4	Bushing	PTFE		*
5	O ring	EPDM		*

* Other material request kindly refer to Bill of MainMaterials.

◆ Dimensions

SIZE		L	H1	H2	H3	b1	b2	Ød	Ød1	Ød2	ISO5211				ØZ	ØF	H
DN	NPS										No.	ØN	ØC1	n1-Ød1			
50	2"	84.6	101.6	70	29	8	16	48	57.15	60.5	F05	65	50	4-Φ8	12.6	12.1	9
65	2-1/2"	97.8	106.2	75	29	8	16	61.9	72.26	76.1	F05	65	50	4-Φ8	12.6	12.1	9
80	3"	97.8	112.5	82	29	8	16	77	84.94	89.9	F05	65	50	4-Φ8	12.6	12.1	9
100	4"	111.3	135.4	100	29	9.5	16	100.8	110.08	114.3	F07	90	70	4-Φ10	15.77	14.1	11
125	5"	148.8	150.9	114	29	9.5	16	123.8	135.46	139.7	F07	90	70	4-Φ10	18.92	18.1	14
150	6"	148.8	179	130	29	9.5	16	147.6	163.96	167	F07	90	70	4-Φ10	18.92	18.1	14
200	8"	134	208	162	35	12	19	199.5	214.4	219	F10	125	102	4-Φ12	22.1	22.1	17
250	10"	160	250	200	35	12	19	247	267.7	273.3	F10	125	102	4-Φ12	28.45	28.2	22
300	12"	160	275	230	35	12	19	297	317.8	324.1	F10	125	102	4-Φ12	31.6	28.2	22

* Special Stem head dimensions kindly contact with Fondon Global directly.

M1148

◆ Technical Data

Size	DN40-DN300
General Design	API609 MSS SP-67
Mounting Pad	ISO 5211
Face to Face	ANSI B16.10
End Connection	AWWA C606 *
Inspection and Test	API598

* All available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

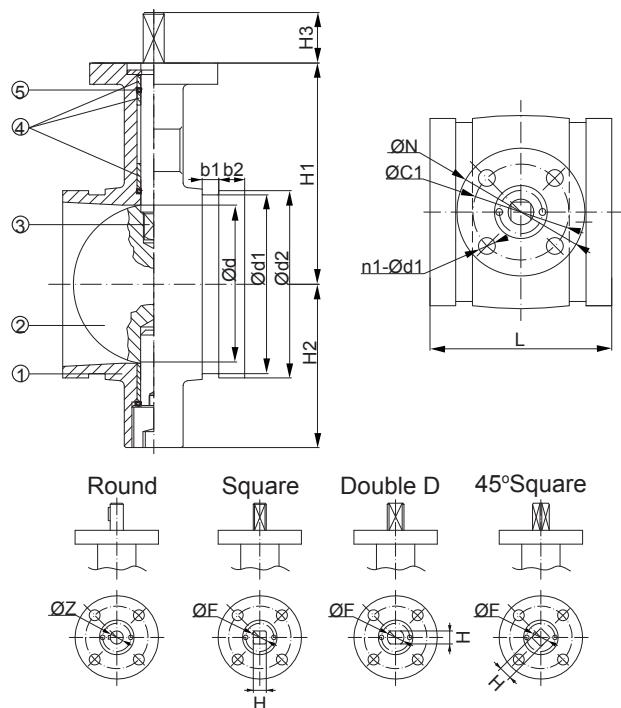


Fig.M1148



◆ Material of Construction

Parts	Description	Material	Specification
1	Body	Ductile Iron	ASTM A536 *
2	Disc	Ductile Iron+EPDM	A536+EPDM *
3	Stem	Stainless Steel	A276 SS410 *
4	Bushing	PTFE	*
5	O ring	EPDM	*

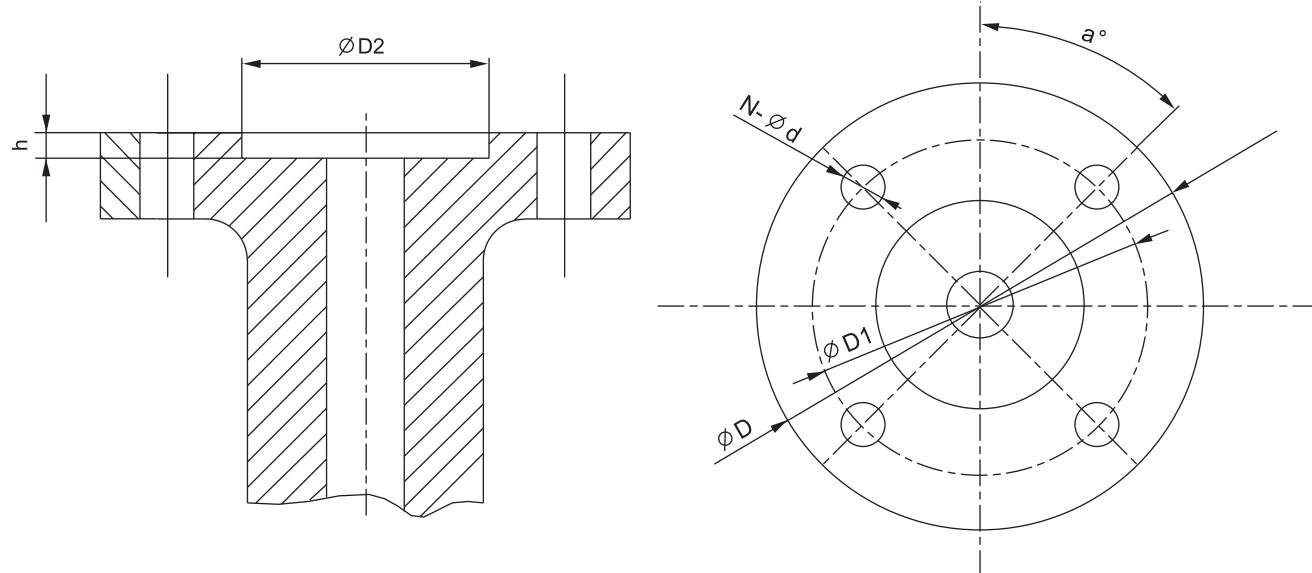
* Other material request kindly refer to Bill of MainMaterials.

◆ Dimensions

SIZE		L	H1	H2	H3	b1	b2	Ød	Ød1	Ød2	ISO5211				ØZ	ØF	H
DN	NPS										No.	ØN	ØC1	n1-Ød1			
50	2"	86	101.6	70	29	8	16	48	57.15	60.5	F05	65	50	4-Ø8	12.6	12.1	9
65	2-1/2"	97	106.2	75	29	8	16	61.9	72.26	76.1	F05	65	50	4-Ø8	12.6	12.1	9
80	3"	97	112.5	82	29	8	16	77	84.94	89.9	F05	65	50	4-Ø8	12.6	12.1	9
100	4"	116	135.4	100	29	9.5	16	100.8	110.08	114.3	F07	90	70	4-Ø10	15.77	14.1	11
125	5"	133	138	100	29	9.5	16	123.8	135.46	139.7	F07	90	70	4-Ø10	18.92	18.1	14
150	6"	134	163	115	29	9.5	16	147.6	163.96	167	F07	90	70	4-Ø10	18.92	18.1	14
200	8"	148	204	150	35	12	19	199.5	214.4	219	F10	125	102	4-Ø12	22.1	22.1	17
250	10"	159	250	200	35	12	19	247	267.7	273.3	F10	125	102	4-Ø12	28.45	28.2	22
300	12"	163	275	230	35	12	19	297	317.8	324.1	F10	125	102	4-Ø12	31.6	28.2	22

* Special Stem head dimensions kindly contact with Fondon Global directly.

ISO5211 Mounting Pad



◆ Dimensions

DN	Size	\varnothing D	\varnothing D2	\varnothing D1	\varnothing d	N	h	a
F05	DN40	65	35.5	50	8	4	3.5	45
F05	DN50	65	35.5	50	8	4	3.5	45
F05	DN65	65	35.5	50	8	4	3.5	45
F05	DN80	65	35.5	50	8	4	3.5	45
F07	DN100	90	55.5	70	10	4	3.5	45
F07	DN125	90	55.5	70	10	4	3.5	45
F07	DN150	90	55.5	70	10	4	3.5	45
F10	DN200	125	70.5	102	12	4	3.5	45
F10	DN250	125	70.5	102	12	4	3.5	45
F10	DN300	125	70.5	102	12	4	3.5	45
F10	DN350	125	70.5	102	12	4	3.5	45
F14	DN400	175	100.5	140	18	4	4.5	45
F14	DN450	175	100.5	140	18	4	4.5	45
F14	DN500	175	100.5	140	18	4	4.5	45
F16	DN550	210	130.5	165	22	4	5.5	45
F16	DN600	210	130.5	165	22	4	5.5	45
F25	DN700	300	200.5	254	18	8	5.5	22.5
F25	DN750	300	200.5	254	18	8	5.5	22.5
F25	DN800	300	200.5	254	18	8	5.5	22.5
F25	DN900	300	200.5	254	18	8	5.5	22.5
F25	DN1000	300	200.5	254	18	8	5.5	22.5
F30	DN1200	350	230.5	298	22	8	5.5	22.5

FLANGE DRILLING DIMENSIONS

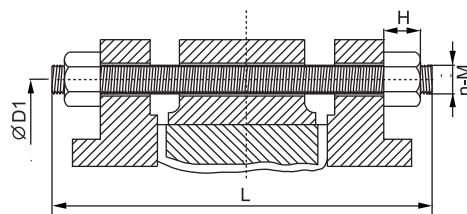
◆ Dimensions

Size		ANSI 125/150				DIN PN10/16			
		in	DN	D	ØC	n-Ød	BOLT	D	ØC
1-1/2	40	127	98.5	4-16	1/2"	150	110	4-18	M16
2	50	152	120.5	4-19	5/8"	165	125	4-18	M16
2-1/2	65	178	139.5	4-19	5/8"	185	145	4-18	M16
3	80	190	152.5	4-19	5/8"	200	160	8-18	M16
4	100	229	190.5	8-19	5/8"	220	180	8-18	M16
5	125	254	216	8-22	3/4"	250	210	8-18	M16
6	150	279	241.5	8-22	3/4"	285	240	8-22	M20
8	200	343	298.5	8-22	3/4"	340	295	8/12-22	M20
10	250	406	362	12-25	7/8"	395/405	350/355	12-22/26	M20/M24
12	300	483	432	12-25	7/8"	445/460	400/410	12-22/26	M20/M24
14	350	533	476	12-29	1"	505/520	460/470	16-22/26	M20/M24
16	400	597	540	16-29	1"	565/580	515/525	16-26/30	M24/M27
18	450	635	578	16-32	1-1/8"	615/640	565/585	20-26/30	M24/M27
20	500	699	635	20-32	1-1/8"	670/715	620/650	20-26/33	M24/M30
24	600	813	749.5	20-35	1-1/4"	780/840	725/770	20-30/36	M27/M33
28	700	927	863.5	28-35	1-1/4"	895/910	840	24-30/36	M27/M33
30	750	984	914.5	28-35	1-1/4"	-	-	-	-
32	800	1060	978	28-41	1-1/2"	1015/1025	950	24-33/39	M30/M36
36	900	1168	1086	32-41	1-1/2"	1115/1125	1050	28-33/39	M30/M36
40	1000	1289	1200	36-41	1-1/2"	1230/1255	1160/1170	28-36/42	M33/M39
42	1050	1346	1257.5	36-41	1-1/2"	-	-	-	-
48	1200	1511	1422.5	44-41	1-1/2"	1455/1485	1380/1390	32-39/48	M36/M45

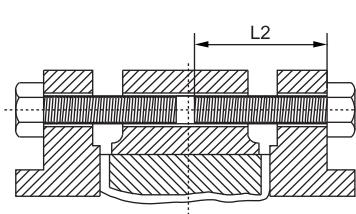
BS PN10/16				AS 2129 D/E				JIS 10K			
D	ØC	n-Ød	BOLT	D	ØC	n-Ød	BOLT	D	ØC	n-Ød	BOLT
150	110	4-19	M16	135	98	4-14	M12	140	105	4-19	M16
165	125	4-19	M16	150	114	4-18	M16	155	120	4-19	M16
185	145	4-19	M16	165	127	4-18	M16	175	140	4-19	M16
200	160	8-19	M16	185	146	4-18	M16	185	150	8-19	M16
220	180	8-19	M16	215	178	4/8-18	M16	210	175	8-19	M16
250	210	8-19	M16	255	210	8-18	M16	250	210	8-23	M20
285	240	8-23	M20	280	235	8-18/22	M16/M20	280	240	8-23	M20
340	295	8/12-23	M20	335	292	8-18/22	M16/M20	330	290	12-23	M20
395/405	350/355	12-23/28	M20/M24	405	356	8/12-22	M20	400	355	12-25	M22
445/460	400/410	12-23/28	M20/M24	455	406	12-22/26	M20/M24	445	400	16-25	M22
505/520	460/470	16-23/28	M20/M24	525	470	12-26	M24	490	445	16-25	M22
565/580	515/525	16-28/31	M24/M27	580	521	12-26	M24	560	510	16-27	M24
615/640	565/585	20-28/31	M24/M27	640	584	12/16-26	M24	620	565	20-27	M24
670/715	620/650	20-28/34	M24/M30	705	641	16-26	M24	675	620	20-27	M24
780/840	725/770	20-31/37	M27/M33	825	756	16-30/33	M26/M30	795	730	24-33	M30
895/910	840	24-31/37	M27/M33	910	845	20-30/33	M27/M30	905	840	24-33	M30
-	-	-	-	995	927	20-33/36	M30/M33	970	900	24-33	M30
1015/1025	950	24-34/40	M30/M36	1060	984	20-36	M33	1020	950	28-33	M30
1115/1125	1050	28-34/40	M30/M36	1175	1092	24-36	M33	1120	1050	28-33	M30
1230/1255	1160/1170	28-37/43	M33/M39	1255	1175	24-39	M33/M36	1235	1160	28-39	M36
1455/1485	1380/1390	32-40/48	M36/M45	1490	1410	32-39	M33/M36	1465	1380	32-39	M36

RECOMMENDED BOLT LENGTHS FOR CONCENTRIC BUTTERFLY VALVE

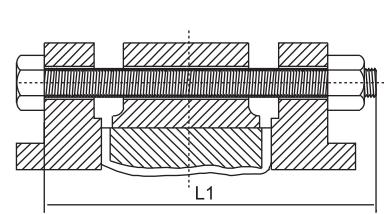
WAFER LUG STYLE



LUG STYLE



WAFER STYLE



◆ Dimensions

Size		ANSI 125/150						
inch	mm	D1 mm	n	M-BOLT	H mm	L mm	L1 mm	L2 mm
2	50	120.5	4	5/8"-11UNC	18	125	105	38
2-1/2	65	139.5	4	5/8"-11UNC	18	130	110	40
3	80	152.5	4	5/8"-11UNC	18	130	110	42
4	100	190.5	8	5/8"-11UNC	18	150	125	48
5	125	216	8	3/4"-10UNC	19	155	130	52
6	150	241.5	8	3/4"-10UNC	19	160	135	52
8	200	298.5	8	3/4"-10UNC	19	170	145	58
10	250	362	12	7/8"-9UNC	23	195	165	64
12	300	432	12	7/8"-9UNC	23	205	175	70
14	350	476	12	1"-8UNC	25	215	185	70
16	400	540	16	1"-8UNC	25	230	195	75
18	450	578	16	1-1/8"-7UNC	29	265	230	80
20	500	635	20	1-1/8"-7UNC	29	300	260	85
24	600	749.5	20	1-1/4"-7UNC	32	335	295	100

◆ Dimensions

Size		DIN 2501 PN16						
inch	mm	D1 mm	n	M-BOLT	H mm	L mm	L1 mm	L2 mm
2	50	125	4	M16	15	125	105	40
2-1/2	65	145	4	M16	15	125	105	40
3	80	160	8	M16	15	130	110	42
4	100	180	8	M16	15	135	115	42
5	125	210	8	M16	15	145	125	45
6	150	240	8	M20	18	150	130	50
8	200	295	12	M20	18	160	135	50
10	250	355	12	M24	22	185	155	60
12	300	410	12	M24	22	200	170	65
14	350	470	16	M24	22	200	170	65
16	400	525	16	M27	24	220	190	70
18	450	585	20	M27	24	245	210	75
20	500	650	20	M30	26	280	245	80
24	600	770	20	M33	28	310	275	90

GUIDE TO MATERIAL USE

Material	Suitable Temperature(°C)	Medium and suit degree												Characteristic		
		Fresh Water	Sea Water	Sail	Strong Alkali	Weak Alkali	Strong Acid	Weak Acid	Natural	Alcohols	Air	Steam	Oil			
Seat	NBR	-23°C+93°C	A	A	A	B	A	D	B	A	C	A	D	A	B	resist oil
	EPDM	-46°C+135°C	A	A	A	A	C	A	B	B	A	A	C	A	resist aging	
	NR	-20°C+85°C	A	A	A	A	C	B	D	C	A	B	B	B	high elasticity	
	CR	-29°C+99°C	A	A	B	A	A	D	C	D	C	A	D	D	abrasion proof, resist aging	
	SI	-55°C+180°C	A	A	B	D	B	D	B	A	B	A	C	C	resist high temperature	
	FPM	-23°C+200°C	A	A	A	C	A	C	A	A	C	A	A	A	Anticorrosion, resist high temperature	
	PTFE	-20°C+180°C	A	A	A	A	A	A	A	A	A	A	A	A	Anticorrosion of all chemical medium	
Disc	Plating Ductile Iron	-30°C+350°C	B	D	C	D	C	D	C	B	A	B	A	C	resist heat	
	PA	-30°C+100°C	A	A	A	A	D	A	A	C	A	D	A	A	Anticorrosion, resist alkali	
	PCR	-30°C+140°C	A	A	A	A	A	A	A	A	A	C	A	A	Anticorrosion, resist acid	
	PTFE	-20°C+180°C	A	A	A	A	A	A	A	A	A	A	A	A	Anticorrosion of all chemical medium	
	PFA	-20°C+180°C	A	A	A	A	B	A	A	A	A	A	A	A	Anticorrosion, resist high temperature	
	Stain Steel	-252°C+316°C	A	C	C	C	B	C	B	A	A	A	A	A	Anticorrosion, resist high temperature	
	Aluminum Bronze	-212°C+232°C	A	C	C	C	C	D	C	A	A	A	A	C	resist heat, resist usual temperature	
	Titanium	-196°C+550°C	A	A	A	A	A	C	B	A	A	A	A	B	Anticorrosion, resist high temperature	

Note:

A.Very Suitable B.Suitable C.Limited suitable D.Not Suitable



Diseño
Design



Fabricación
Manufacturing



Representación
Representation



Comercialización
Marketing

Fondon Redes y Fluidos, S.L.

Oficina Principal

email: fondon@fondon.org | Skype: FRF-comercial_esp
tel.: +34 985310351 | fax: +34 985312309
Avenida Veriña, 5 | 33211 Gijón | Asturias (España)

Oficina de representación en Cuba

email: fondon@fondon.co.cu
tel.: (537) 2042384 | 2042627
C/ 44 nº309 e /3ra y 5ta | Miramar | La Habana | Cuba

www.fondonglobal.com

Oficina secundaria de representación en Cuba

email: fondonmoa@fondon.co.cu
tel.: (5324) 606909 | 606908
Almacenes Universales C/1ra, s/n, Reparto
Armando Mestre | Moa | Holguín | Cuba