

# YFD343H BUTTERFLY VALVE



## Product Description

YFD343H triple eccentric butterfly valve achieves sealing through contact pressure between metal sealing surfaces, rather than relying on seat elasticity

This advanced sealing mechanism enables Class V tight shut-off (zero leakage), ensuring superior sealing reliability under demanding conditions.

With a metal seat and torque sealing design, the valve performs exceptionally well in high temperature, high pressure, corrosive and abrasive environments.



Technical Data	
Size range	DN50-DN2000
Pressure range	PN 10-16/Class 150/JIS10K
Temperature	≤ 425°C
Design	API 609/ANSI B16.34/JIS B2064/JB-T8527
Face to face	API 609/ANSI B16.10/JIS B2002/GB-T13927
Connection	ANSI B165a/JIS B2212/GB-T9113.1
Coating	Electrostatic Powder Epoxy/Spray
Testing	API 598/JIS B2003/GB-T13927
Medium	Water, oil, Gas

## Application Range

- HVAC Systems
- Pumping Stations
- Water Treatment Plants
- Reservoirs and Tanks
- Irrigation
- Industrial Applications

## Related Products

- YFZ44T METAL SEAT GATE VALVE
- YFPZ73X KNIFE GATE VALVE
- YFH44X SWING CHECK VALVE



HVAC



IRRIGATION



POTABLE WATER



INDUSTRY

# YFD343H BUTTERFLY VALVE



## Product Description

### 1. Triple Eccentric Structure for Long-Lasting Performance & Low Wear

The unique triple eccentric design significantly reduces friction between sealing surfaces, minimizes wear, and notably extends the valve's service life.

### 2. Metal Hard Sealing System for Zero Leakage Assurance

Adopting metal-to-metal hard sealing technology, it achieves Class V leakage standards without relying on elastic deformation, ensuring reliable shut-off even under extreme operating conditions.

### 3. Composite Seal Ring & Hard-Faced Disc for All-Round Protection

The multi-layer metal seal ring combines the strength of metal with elastic adaptability, delivering excellent sealing performance across both low and high temperatures. The disc's sealing surface is overlaid with hard alloy, providing exceptional resistance to wear, erosion, and corrosion.

### 4. Integrated Seat Design for Compactness & Durability

The integral seat structure enhances the valve's compactness, reduces direct medium scouring on the seat, lowers erosion risks, and extends component lifespan.

### 5. Bidirectional Sealing & Large Diameter Adaptability for Full Scene Coverage

It supports bidirectional medium flow, maintaining stable sealing performance in both directions under rated pressure. For large-diameter valves, a truss-structured disc is adopted, ensuring high load-bearing capacity, lightweight design, and reduced flow resistance.

### 6. Streamlined Valve Body for High Efficiency & Low Resistance

The optimized streamlined design increases the flow area, reduces pressure loss, and improves the overall operational efficiency of the system.

### 7. Working Condition Adaptability for Wide Application Range

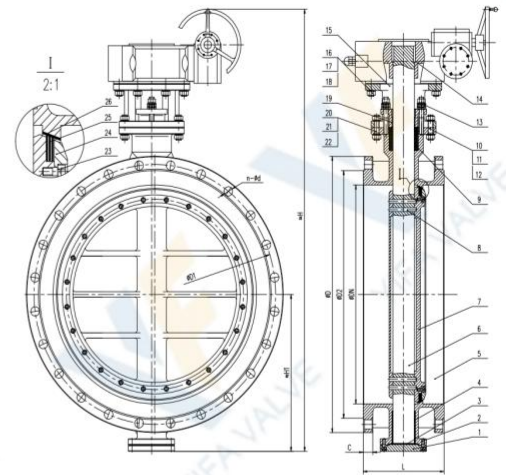
Sealing performance remains unaffected by medium pressure fluctuations, ensuring stable operation. With smooth and flexible operation, it can be widely applied in various complex industrial scenarios such as high-temperature and high-pressure systems.



# YFD343H

## BUTTERFLY VALVE

Worm Gear PN16 DN50-DN1200



### Inspection Specification

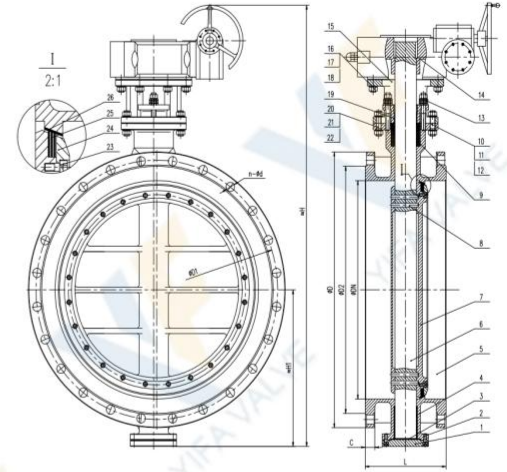
PN	16
Seat test	1.76 Mpa
Shell test	2.4 Mpa
Air test	0.6 Mpa
Temp:	-10-425°C
Medium	Water, Oil, Gas

ITEM	NAME	MATERIAL
1	body	WCB,SS304,SS316
2	disc	WCB,SS304,SS316
3	stem	2Cr13,2507,SS304
4	Seat	weld D507Mo,Stellite
5	Seal	304/316+grohpite/PTFE
6	pin	2Cr13,2507,SS304
7	o-ring	65Mn
8	press plate	Q345R
9	bonnet	WCB

ØDN	ØD	ØD1	ØD2	L	C	n-d	≈H1	≈H
50	160	125	100	108	20	4-18	110	350
65	180	145	120	112	20	4-18	115	370
80	195	160	135	114	20	8-18	120	380
100	215	180	155	127	22	8-18	140	420
125	245	210	185	140	22	8-18	165	460
150	280	240	210	140	24	8-23	175	560
200	335	295	265	152	24	12-23	200	760
250	405	355	320	165	26	12-26	240	830
300	460	410	375	178	28	12-26	250	900
350	520	470	436	190	30	16-26	280	950
400	580	525	485	216	32	16-30	305	1190
450	640	585	515	222	34	20-30	350	1260
500	705	650	608	229	34	20-34	380	1310
600	840	770	718	267	36	20-36	450	1340
700	910	840	788	292	40	24-36	480	1520
800	1020	950	898	318	42	24-39	530	1710
900	1120	1050	998	330	44	28-39	580	1810
1000	1255	1170	1110	410	46	28-42	650	1960
1200	1485	1390	1325	470	52	32-48	760	2250

# YFD343H BUTTERFLY VALVE

Worm Gear PN25 DN50-DN1200



### Inspection Specification

PN	16
Seat test	1.76 Mpa
Shell test	2.4 Mpa
Air test	0.6 Mpa
Temp:	-10-425°C
Medium	Water, Oil, Gas

ITEM	NAME	MATERIAL
1	body	WCB,SS304,SS316
2	disc	WCB,SS304,SS316
3	stem	2Cr13,2507,SS304
4	Seat	weld D507Mo,Stelite
5	Seal	304/316+grohpite/PTFE
6	pin	2Cr13,2507,SS304
7	o-ring	65Mn
8	press plate	Q345R
9	bonnet	WCB

ØDN	ØD	ØD1	ØD2	L	C	n-d	≈H1	≈H
50	160	125	100	108	20	4-18	110	350
65	180	145	120	112	22	4-18	115	370
80	195	160	135	14	24	8-18	120	380
0	230	190	160	127	24	8-18	140	420
125	270	220	188	140	26	8-18	165	460
150	300	250	218	140	28	8-23	175	560
200	360	310	278	52	30	12-23	200	760
250	425	370	332	165	32	12-26	240	830
300	485	430	390	178	34	12-26	250	900
350	550	490	448	190	38	16-26	280	950
400	610	550	505	216	40	16-30	305	1190
450	660	600	555	222	42	20-30	350	260
500	730	660	610	229	44	20-34	380	310
600	840	770	718	267	46	20-36	450	340
700	955	875	815	292	50	24-36	480	520
800	1070	990	930	318	54	24-39	530	710
900	1180	1090	1025	330	58	28-39	580	810
1000	1305	1315	1140	410	62	28-42	650	960
1200	1525	1420	1350	470	70	32-48	760	2250

# YFD343H BUTTERFLY VALVE



Torque (U.m)

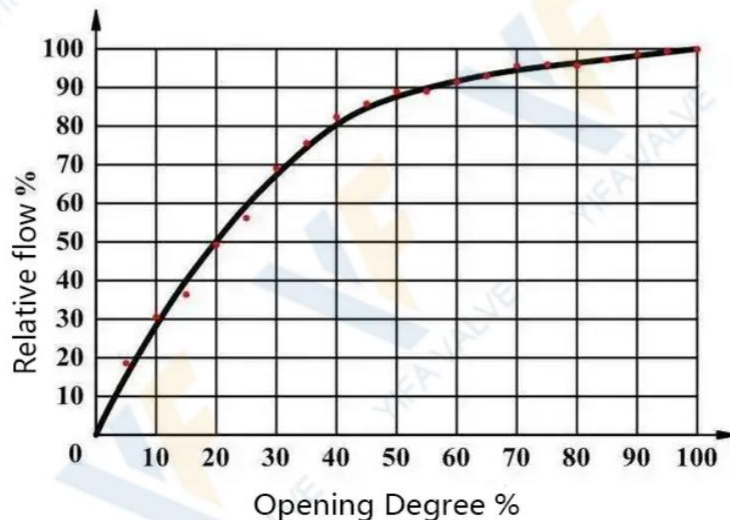
SIZEDN(MM)	PRESSURE MPA				ANSI	
	PN6	PN10	PN16	PN25	150LB	300LB
50	25	29	37	59	42	92
65	29	35	60	82	69	123
80	34	57	81	102	174	271
100	61	102	141	180	250	395
125	104	165	228	289	283	548
150	178	250	450	564	473	825
200	201	400	601	800	674	1503
250	353	518	956	1250	983	1887
300	635	992	1352	1711	2022	2508
350	819	1623	2234	2744	2520	4158
400	1047	1944	2842	3738	3175	6271
450	1451	2451	3452	4412	4239	7864
500	2043	3285	4527	5769	5531	10361
600	2779	5548	6018	9496	6011	17559
700	3080	6331	6890	14200	10440	27923
800	3912	7307	8760	19847	12654	39696
900	5275	8474	9750	26438	18078	52877
1000	6915	11717	13560	35553	24179	71105
1200	12540	20563	23360	48900	36155	
1400	24650	26589	34900			
1600	40850	43375	48600			

# YFD343H BUTTERFLY VALVE



## Cv Value

SIZE		PN(Mpa)						CLASS(Lb)		
DN	NPS	0.6	1	1.6	2.5	4	6.3	150	300	600
50	2	100	100	100	93	93	52	93	93	52
65	2½	133	133	133	133	133	78	133	133	78
80	3	165	165	165	120	1250	120	188	188	120
100	4	400	400	400	230	230	230	343	343	228
125	5	510	510	510	400	400	400	400	400	346
150	6	1050	1050	1050	660	660	660	930	868	744
200	8	2200	2200	2200	1500	1500	1500	1812	1678	1450
250	10	3300	3300	3300	2400	2400	2400	2750	2500	2125
300	12	5100	5100	5100	3600	3600	3600	3900	3510	2730
350	14	5800	5800	5800	5500	5500	5500	5515	4942	4217
400	16	9287	9287	9287	7600	7600	7600	8440	7596	6487
450	18	11400	11400	11400	10300	10300	10300	11285	10394	8874
500	20	14000	14000	14000	13000	13000	13000	14092	12965	11071
600	24	21600	21600	21600	20200	20200	20200	20587	18962	16188
700	28	30000	30000	30000						
750	30	34000	34000	34000	28245	28245	28245	33700	29600	
800	32	41000	41000	41000						
900	36	55500	55500	55500	47160	47160	47160	50470	42700	
1000	40	80000	80000	80000						
1050	42				64190	64190	64190	71100	58100	
1200	48				83840	83840	83840			

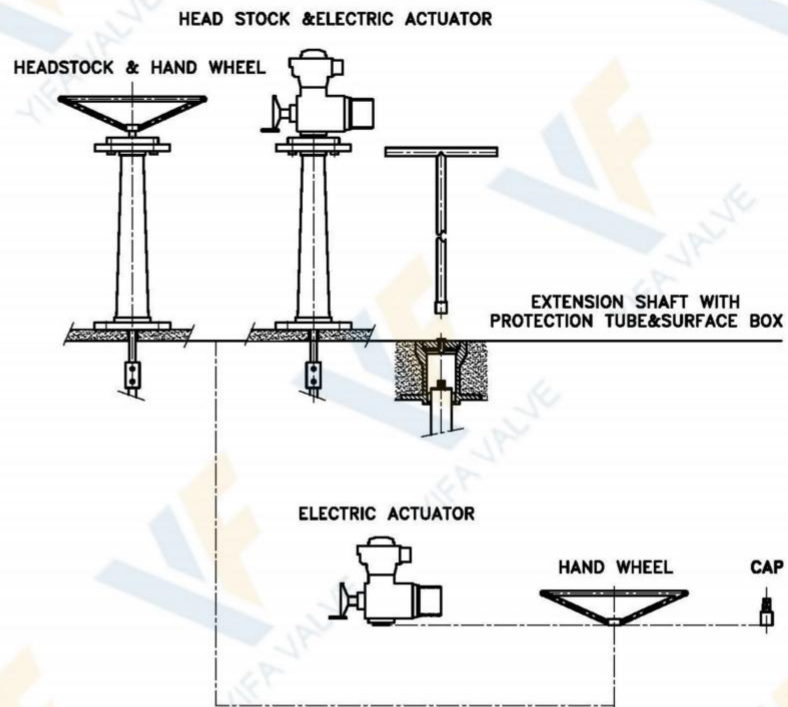


# YFD343H BUTTERFLY VALVE



## Selection for Actuator

YIFA offers butterfly valves with various actuation options. Thanks to quarter-turn operation, they are easy to use and ideal for automation. Actuation options include manual, pneumatic, electric, and hydraulic, with ON/OFF or modulating control.

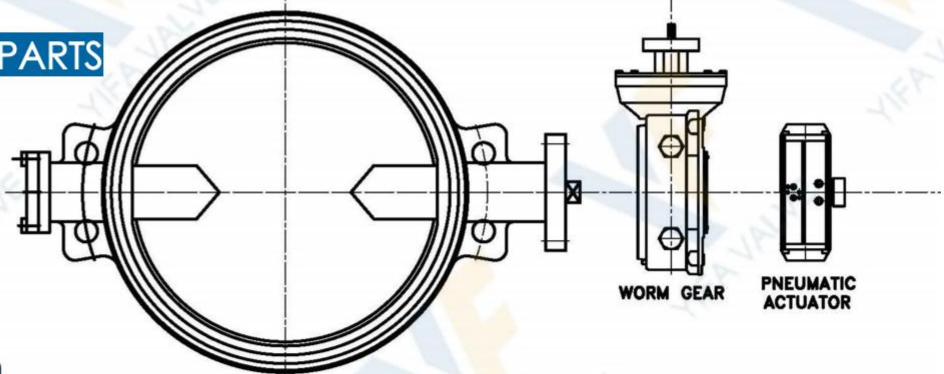


## SELECTION FOR SPARE PARTS

- Solenoid valve
- Air filter
- Limit switch
- Proximity switch
- Positioner
- Distribution box

- Hoist for platform operation

If customers have special requirements for valve stem, they shall provide the distance from platform to center of valve pipeline.



# BUTTERFLY VALVE

## Installation

---

### Pre-Installation Instructions

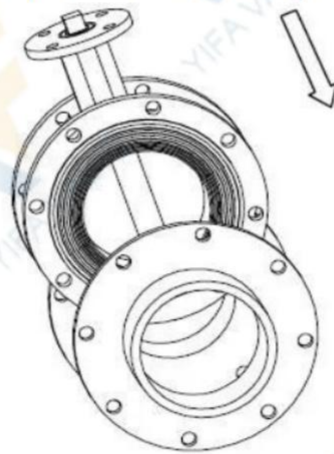
1. Before installation, clean the pipeline by blowing with air to remove foreign objects, and flush the inner surface with clean water.
2. Carefully check whether the valve specifications match the working conditions (temperature and pressure).
3. Inspect the valve passage and sealing surfaces for any debris, and remove it if found.
4. After unpacking, install the valve as soon as possible. Do not loosen any bolts or nuts on the valve.
5. Wafer butterfly valves must be installed with suitable mating flanges (dedicated butterfly valve flanges are recommended).
6. Electric butterfly valves can be installed at any angle. However, installation upside down is not recommended for easier maintenance.

During installation, ensure that the flange faces and rubber seat are properly aligned.

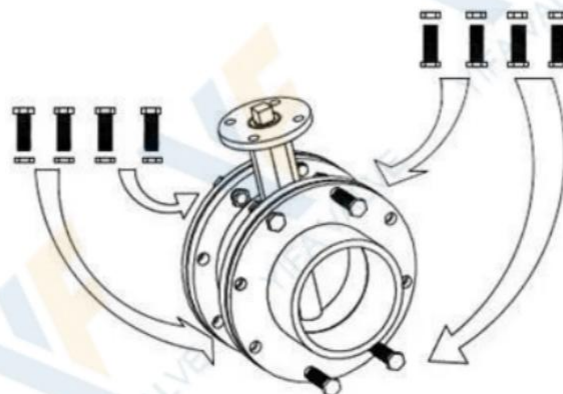
Bolts must be tightened evenly. Uneven tightening may cause deformation of the rubber seat, which can obstruct the disc or lead to leakage at the stem.

### Installation Steps

1. Place the valve between the two pre-installed flanges. Ensure that all bolt holes are properly aligned.



2. Insert the bolts and nuts (at least four sets) into the flange holes and lightly tighten them to adjust flange alignment.

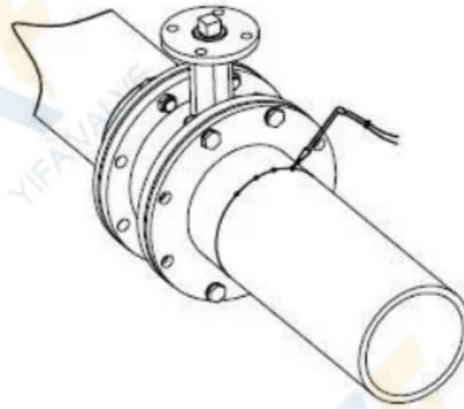


# YFD343H BUTTERFLY VALVE

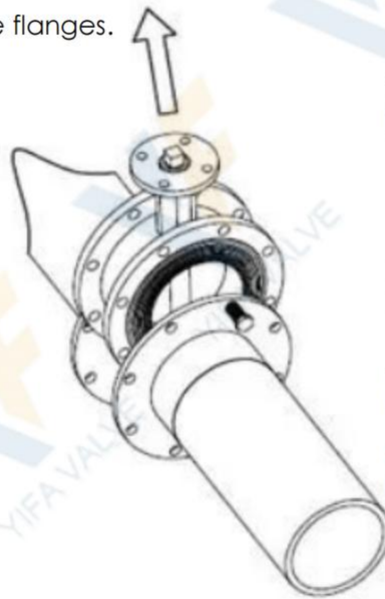


## Installation

3. Fix the flanges to the pipeline by spot welding.



4. Remove the valve from between the flanges.



### Important Notes

The valve must be placed flat before installation. Avoid impact or collision.

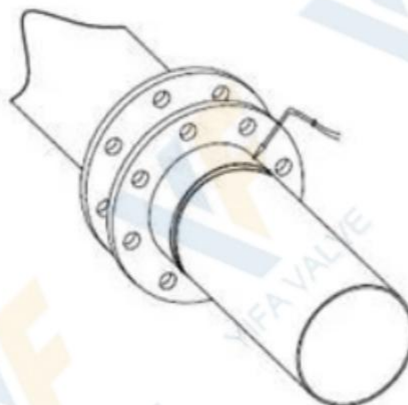
Do not forcibly stretch or compress the valve during installation.

Do not disassemble the valve without proper authorization.

After installation, it is recommended to provide proper pipeline support.

Once supports are installed, they must not be removed during operation.

5. Fully weld the flanges onto the pipeline.

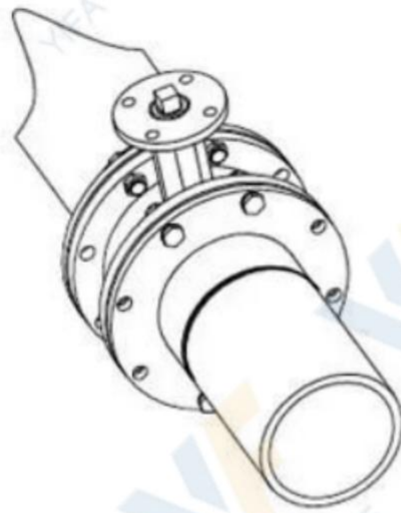


# YFD343H BUTTERFLY VALVE



## Installation

6. Install the valve after the welded joint cools down. Ensure there is sufficient clearance for the valve to move between the flanges to prevent damage to the valve, and keep the butterfly plate at a certain opening (gaskets shall be added for flange butterfly valves). Adjust the valve position and tighten all bolts (do not over-tighten them). Open the valve to ensure the butterfly plate can open and close freely, and then keep the butterfly plate slightly open.



### Important Notes

The valve must be placed flat before installation. Avoid impact or collision.

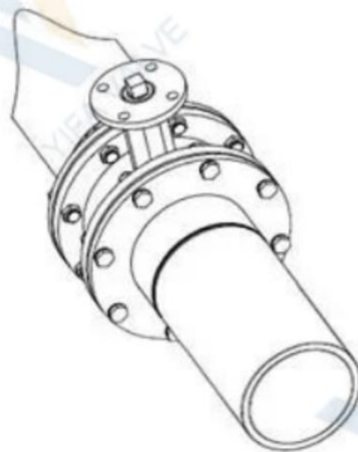
Do not forcibly stretch or compress the valve during installation.

Do not disassemble the valve without proper authorization.

After installation, it is recommended to provide proper pipeline support.

Once supports are installed, they must not be removed during operation.

7. Cross-tightening: tighten all nuts.



8. Confirm again that the valve operates freely, and ensure that the disc does not contact the pipe.

## Material Table-Metal

PARTS	ASME	DIN/EN	Cr	Ni	Mo	Ti	Temp.Range
	A216 WCB	GS-20 Mn 5	0.5	0.5	0.2	-	-29~425
	A216WCC	G20Mn5	0.5	0.5	0.2	-	-29~425
	A217 WC1		0.35	0.5	0.45~0.65		≤455
	A217 WC5		0.5~0.9	0.6~1	0.9~1.2	-	≤565
	A217 WC6	GS 17CrMo55	1~1.5		0.45~0.65		≤595
	A217 WC9		2~2.75	-	0.9~1.2	-	≤595
	A217 C5		4~6.5		0.45~0.65	-	≤650
	A217 C12		8~10	-	0.9~1.2	-	≤650
	A296 CA15	1.4006,1.4008	11.5~14	1	0.5	-	-20~480
	A351 CF8	G-X5CrNi <sup>18</sup> -10	18~21	8~11	0.05	-	≤458(540)
	A351 CF8M	X5CrNiMo18-10	18~21	9~13	2~3	-	≤425(540)
	A351 CF3	X2CrNiMo18-10	17~21	8~12	0.5	-	≤425
	A351 CF3M	GX10CrNiMo18-9	17~21	9~13	2~3		≤455
Casting	Aisi 321	X10CrNiTi18-9,1.4541	17~19	9~12	-	0.5	≤700/540
	Aisi904L	X1NiCrMoCuN25-20-6,1.4539	19~21	24~26	-		-165~600
	Aisi 316Ti	X6CrNiMoTi17-12-2	16~18	10~14	-	0.7	-165~600
	Aisi 310S	X8CrNi25-21,1.4845	24~26	19~22	-	-	≤850
	A352 LCB		-	-	-	-	-46~345
	A352 LCC		-	-	-	-	-46~345
	A352 LC1	G20Mo5,1.5419	-	-	-	-	-59~345
	A352 LC2			2~3	-		-73~200
	A352 LC3		-	3~4	-	-	-101~200
	A105(N)	C21,1.0432,S+35.8	0.3	0.4	0.12		≤450
	A350 LF1		-	-	-	-	-46~425
	A350 LF2			-			-60
	A350 LF3	10Ni14,1.5637	-	3.25~3.75	-		-101~345
	A516 Gr70	1.0539,1.0545			-	-	-46~425

## Material Table-Metal

PARTS	ASME	DIN/EN	Cr	Ni	Mo	Ti	Temp.Range
Forging	A 182 F304	174,401.4301	18~20	8~11	-	-	≤800/540
	A 182 F321	X10CrNiTi18-9,1.4541	17~21	9~12	-	0.7	≤800/540
	A 182 F316	174,401.4401	16~18	10~14	2~3	-	800/540
	A 182 F316L	174,401.4404	16~18	10~15	2~3	-	≤450
	A 182 F304L	174,401.4306	18~20	8~13	-	-	≤425
	A 182F310		24~26	19~22			-29~800
	Duplex2205	X2CrNiMoN22-5-3,1.4462	21~24	4.5~6.5	2.5~3.5	-	≤450
	Duplex2304	X2CrNiN23-4,1.4362	21.5~24.5	3~5.5	0.05~0.6	-	≤425
	Duplex2507	X2CrNiMoN25-7-4,1.4410	24~26	6~8	3~5	-	-40~315
	A 182 F51	X2 CrNiMoN 22-5-3,1.4462	21~23	4.5~6.5	2.5~3.5	-	-40~315
	A 182 F1	1.5Mo3,1.5415	-	-	0.44~0.65	-	≤470
	A 182 F2	1.7335,1.7337	0.5~0.81	-	0.44~0.65	-	≤540
	A 182 F11	13CrMo4-4,1.7335	1~1.5	-	0.44~0.65	-	≤545
	A 182F22	10CrMo9-10,1.7380		0.87~1.13		-	≤550
	A 182 F12	13CrMo4-5,1.7335	0.8~1.25	-	0.44~0.65	-	≤545
	A 182 F9	X12CrMo 9-1,1.7386	8~10	-	0.9~1.1	-	≤673
	A 182 F91	1.4903,1.7332	8~9.5	0.4	0.85~1.05	-	≤673
	A 182 F5		4~6.5	0.5	0.44~0.65	-	≤550
	A 182F6a	X10Cr13	11.5~13.5	0.5	-	-	-101~480
	A 182 F44	X1CRNiMoCuN20-18-7,1.4547	19.5~20.5	17.5~18.5	6~6.5	-	≤540
Rod	Aisi 410	X12CrN13,1.4006	11.5~13.5	0.6	-	-	-
	Aisi 416	X20Cr13	12~14	-	-	-	-38~350
	Aisi 420	X20Cr13	12~14	-	-	-	-101~480
	Aisi 430	X6Cr17	16~18	-	-	-	-
	Aisi431	Z15CN16-02,1.4057	16~18	1.5~2.5	-	0.2	-38~425
	A276 XM-19	GX4CrNiMnN22-12-5,1.3964	20.5~23.5	11.5~13.5	1.5~3		≤550
	A 193 B7		0.75~1.2		0.15~0.25		-45.6~510
	A 193 B7M		0.75~1.2		0.15~0.25	-	-20~510
	A 193 B16		0.8~1.15	-	0.5~0.65	-	-10~600
	A320 L7		0.8~1	-	0.15~0.25	-	-101~550
	A320 B8		18~20	8~10.5	-	-	254~700
	A320 B8A		18~20	8~10.5	-	-	254~700
	A320 B8M		16~18	10~14	-	-	254~816
A320 B8T		17~19	9~12	2~3	-	196~700	
Fasteners	A 1942H		-	-	-	-	-38~450
	A 1946		11.5~13.5	-		-	-101~480
	A 1948,8A		8~10.5	18~20	-		-254~800
	A 1948M,8MA		16~18	10~14	2~3	-	-254~816
	A 1948T,8TA		17~19	9~12	-		0.3~0.6 -196~700
	D507Mo		10~16	6	2.5	-	≤450
	Alloy 20		19~21	32~38	2~3	-	≤427
	Alloy 904L		19~23	23~28	4~5	-	≤700
Surfacing welding	Uranus B-6		20.5	25.5	4.5	-	≤700
	Lewmet 25		29	-	4.5	-	≤700
	Stellite Alloy 6		27~32	3	1	-	≤700
	Inconel Alloy 625		20~23	58	8~10	0.4	≤700
	Hastelloy AlloyC-276		15.5	-	16	-	≤700

## Seal parts

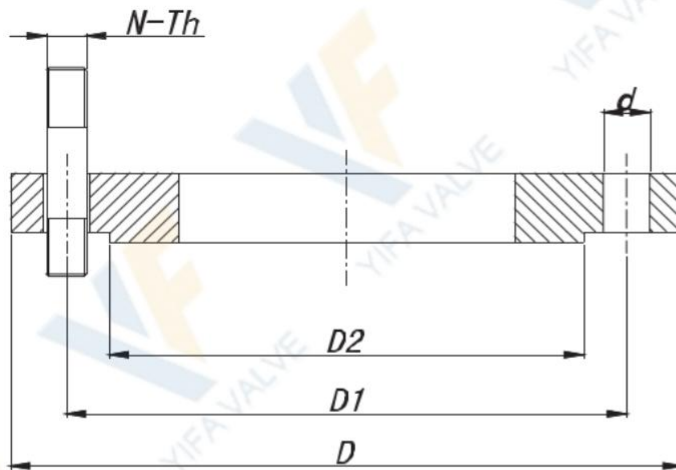
Parts	Characteristic	Low/High Temperature		Recommended
NR	High elasticity	-20	85	-5~70
NBR	Oil resistivity	-30	100	-15~90
EPDM	Aging resistance, ozone resistance, corrosion resistance	-40	125	-25~110
HT EPDM	Same as above, added heat resistance	-40	150	-25~135
SBR (wear-resistant)	Excellent traction performance and wear resistance	-30	100	-15~80
CR (neoprene)	Oil, heat, flame, sunlight, ozone, acid and alkali resistance	-30	125	-15~100
Hypalon	Oxidation resistance, resistance to winding and cracking	-40	120	-25~110
FPM (viton)	Chemical and most oils resistance, (except ketones & esters)	-20	200	-5~150
MVQ (silicon)	High and low temperature resistance, oil, corrosion resistance	-55	200	-30~180
PU	Chemical, oil, wear, low temperature, aging resistance	-20	120	-5~90
FEP (F46)	Chemical resistance, radiation resistance	-20	150	-5~120
PTFE	Heat, cold, acid, alkali, organic solvents resistant	-60	180	-45~150
RPTFE	Corrosion resistance, low friction coefficient	-60	180	-45~150
PFA	Excellent chemical corrosion resistance, low friction coefficient	-196	200	-60~180
PPL	High temperature and chemical corrosion resistance	-60	230	-45~200
UPVC	Corrosion and pressure resistance, hygiene	-30	100	-15~80
CPVC	Corrosion and pressure resistance, hygiene	-30	110	-15~95
PVDF	Anti aging and chemical resistance	-30	100	-15~70
PEEK	High temperature and chemical resistance	-60	300	-45~260
Flexible graphite	Cold and hot resistant, corrosion resistant, self-lubricating	-200	600	-60~550
Ceramic fiber	Fire, high temperature resistance, low thermal conductivity	-200	1050	-60~950
Metal to metal	High temperature, high pressure, wear, corrosion resistance	Refer to the material		

Unit: Degree

## Inspection Standards and Requirements

Inspection Standards and Requirements							
		ISO5208:2008 / GB/T13927			API598-2004		
Shell strength	Medium temperature	5~40			5~40		
	Medium	Water, kerosene, air, suitable gas			Water, kerosene, air, suitable gas		
	Test pressure	Norminal pressure (PN)×1.5			Norminal pressure×1.5		
	Minimum duration of the test	DN	Seconds		NPS	Check valve	Others
		≤50	15		≤2"	60	15
		65~200	60		2½"~6"	60	60
≥250		180		8"~12"	60	120	
Assessment	No visible leakage allowed			No visible leakage allowed			
Back seal	Test pressure	DN	PN	Pressure	NPS	Class	Pressure
		≤80	All	0.6Mpa	All	≤300	0.4~0.7Mpa
		100~200	≤5.0	0.6Mpa			
		100~200	>5.0	PN × 1.1		>300	Class x 1.1
	≥250	All	PN × 1.1				
Assessment	No visible leakage allowed			No visible leakage allowed			
High pressure sealing test	Test pressure	DN	PN	Pressure	Class	Ductile iron	Steel
		≤80	All	PN × 1.1 (liquid)	150	1.7 Mpa	Class x 1.1
		100~200	≤5.0	0.5~0.7Mpa (air)			
		100~200	>5.0	PN × 1.1 (liquid)	300	4.4 Mpa	
		≥250	All	0.5~0.7Mpa (air)			
		100~200	>5.0	PN × 1.1 (liquid)	300	4.4 Mpa	
	≥250	All	PN × 1.1 (liquid)				
	Minimum duration of the test	DN	Metal seal	Resilient seal	NPS	Check valve	Others
		≤50	15	15	≤2"	60	15
		65~200	30	15	2½"~6"	60	60
		250~450	60	30	8"~12"	60	120
		≥500	120	60	≥14"	120	120
	Assessment	Class (level)	Liquid leakage	Air leakage	NPS	Liquid & Air	Liquid & Air
		A	No visible leakage allowed (mm <sup>3</sup> /s)		≤2"	Liquid:3cm <sup>3</sup> /in. min Air:0.042m <sup>3</sup> /in.h	0 drop(bubble)/min
		B	DN x 0.01	DN x 0.3	2½"~6"		12 & 24
		C	DN x 0.03	DN x 3	8"~12"		20 & 40
D	DN x 0.1	DN x 30	≥14"			2 & 4 / in ·min	
Low pressure sealing test	Medium	Air, suitable gas			Air, suitable gas		
	Test pressure	0.5~0.7 Mpa			0.4~0.7 Mpa		
		DN	Metal seal	Resilient seal	NPS	Check valve	Others
		≤50	15	15	≤2"	60	15
	Minimum duration of the test	65~200	30	15	2½"~6"	60	60
		250~450	60	30	8"~12"	60	120
		≥500	120	60	≥14"	120	120
	Assessment	Class (level)	Air leakage		NPS	Air leakage	
		A	No visible leakage allowed (mm <sup>3</sup> /s)		≤2"		0 bubble /min
		B	DN x 0.3		2½"~6"	0.042 m <sup>3</sup> /in ·h	24
C		DN x 3		8"~12"		40	
D	DN x 30		≥14"			4 / in ·min	

## Flange connection dimensions



- D- Flange outer diameter
- D1- Bolt circle diameter
- D2- Diameter of sealing surface
- N-Th Bolt size
- d- Bolt hole diameter

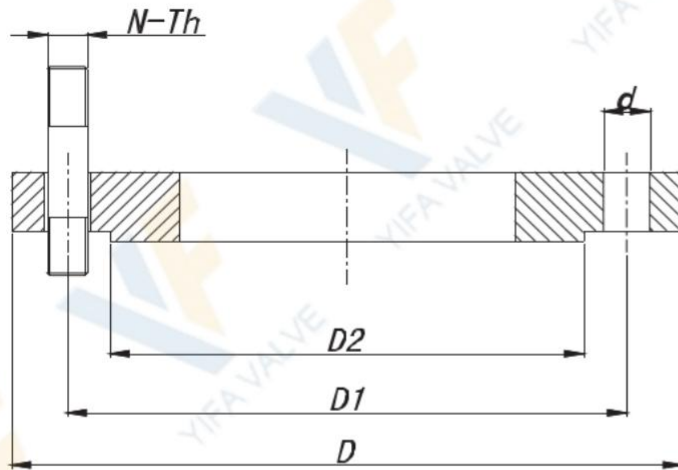
### PN10 (DIN2632)

DN	D	D1	D2	N-Th	d
DN	D	D1	D2	N-Th	d
50	165	125	102	4-M16	Φ18
65	185	145	122	4-M16	Φ18
80	200	160	138	8-M16	Φ18
100	220	180	158	8-M16	Φ18
125	250	210	188	8-M16	Φ18
150	285	240	212	8-M20	Φ23
200	340	295	268	12-M20	Φ23
250	405	355	320	12-M24	Φ27
300	460	410	378	12-M24	Φ27
350	520	470	438	16-M24	Φ27
400	580	525	490	16-M27	Φ30
450	640	585	550	20-M27	Φ30
500	715	650	610	20-M30	Φ33
600	840	770	725	20-M33	Φ36
700	910	840	795	24-M33	Φ36
800	1025	950	900	24-M36	Φ39
900	1125	1050	1000	28-M36	Φ39
1000	1255	1170	1115	28-M39	Φ42
1200	1485	1390	1330	32-M45	Φ48
1400	1685	1590	1530	36-M45	Φ48
1600	1930	1820	1750	40-M52	Φ56
1800	2130	2020	1950	44-M52	Φ56
2000	2345	2230	2150	48-M56	Φ62

### PN16 (DIN2632)

DN	D	D1	D2	N-Th	d
DN	D	D1	D2	N-Th	d
50	165	125	102	4-M16	Φ18
65	185	145	122	4-M16	Φ18
80	200	160	138	8-M16	Φ18
100	220	180	158	8-M16	Φ18
125	250	210	188	8-M16	Φ18
150	285	240	212	8-M20	Φ23
200	340	295	268	12-M20	Φ23
250	405	355	320	12-M24	Φ27
300	460	410	378	12-M24	Φ27
350	520	470	438	16-M24	Φ27
400	580	525	490	16-M27	Φ30
450	640	585	550	20-M27	Φ30
500	715	650	610	20-M30	Φ33
600	840	770	725	20-M33	Φ36
700	910	840	795	24-M33	Φ36
800	1025	950	900	24-M36	Φ39
900	1125	1050	1000	28-M36	Φ39
1000	1255	1170	1115	28-M39	Φ42
1200	1485	1390	1330	32-M45	Φ48
1400	1685	1590	1530	36-M45	Φ48
1600	1930	1820	1750	40-M52	Φ56
1800	2130	2020	1950	44-M52	Φ56
2000	2345	2230	2150	48-M56	Φ62

## Flange connection dimensions



- D- Flange outer diameter
- D1- Bolt circle diameter
- D2- Diameter of sealing surface
- N-Th Bolt size
- d- Bolt hole diameter

### PN10 (GB/T9113.1)

DN	D	D1	D2	N-Th	d
50	165	125	99	4-M16	Φ18
65	185	145	118	4-M16	Φ18
80	200	160	132	8-M16	Φ18
100	220	180	156	8-M16	Φ18
125	250	210	184	8-M16	Φ18
150	285	240	211	8-M20	Φ23
200	340	295	266	8-M20	Φ23
250	395	350	319	12-M20	Φ23
300	445	400	370	12-M20	Φ23
350	505	460	429	16-M20	Φ23
400	565	515	480	16-M24	Φ27
450	615	565	530	20-M24	Φ27
500	670	620	582	20-M24	Φ27
600	780	725	682	20-M27	Φ30
700	895	840	794	24-M27	Φ30
800	1015	950	901	24-M30	Φ33
900	1115	1050	1001	28-M30	Φ33
1000	1230	1160	1112	28-M33	Φ36
1200	1455	1380	1328	32-M36	Φ39

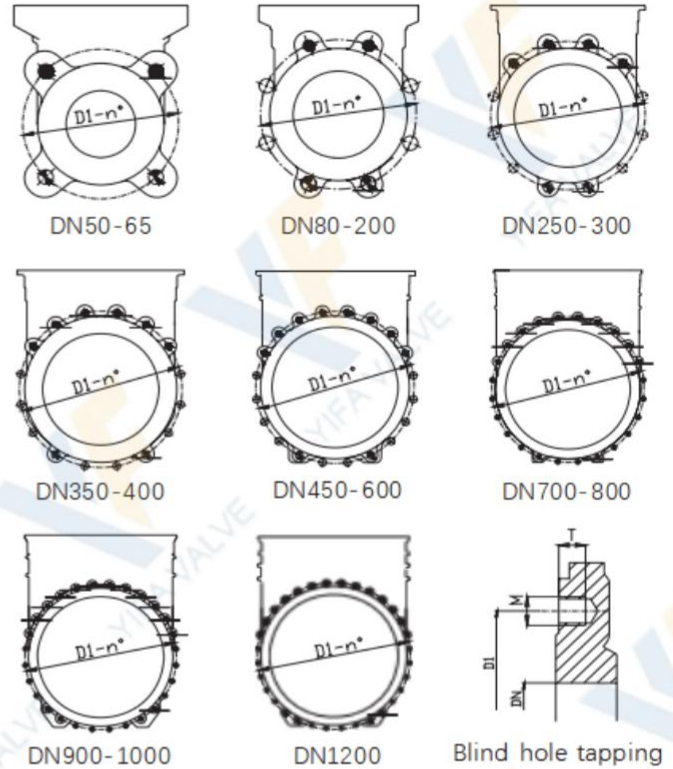
### PN16 (GB/T9113.1)

DN	D	D1	D2	N-Th	d
50	165	125	99	4-M16	Φ18
65	185	145	118	4-M16	Φ18
80	200	160	132	8-M16	Φ18
100	220	180	156	8-M16	Φ18
125	250	210	184	8-M16	Φ18
150	285	240	211	8-M20	Φ23
200	340	295	266	12-M20	Φ23
250	405	355	319	12-M24	Φ27
300	460	410	370	12-M24	Φ27
350	520	470	429	16-M24	Φ27
400	580	525	480	16-M27	Φ30
450	640	585	548	20-M27	Φ30
500	715	650	609	20-M30	Φ33
600	840	770	720	20-M33	Φ36
700	910	840	794	24-M33	Φ36
800	1025	950	901	24-M36	Φ39
900	1125	1050	1001	28-M36	Φ39
1000	1255	1170	1112	28-M39	Φ42
1200	1485	1390	1328	32-M45	Φ48

## Flange and connection details

### GB/T9113.1 PN10

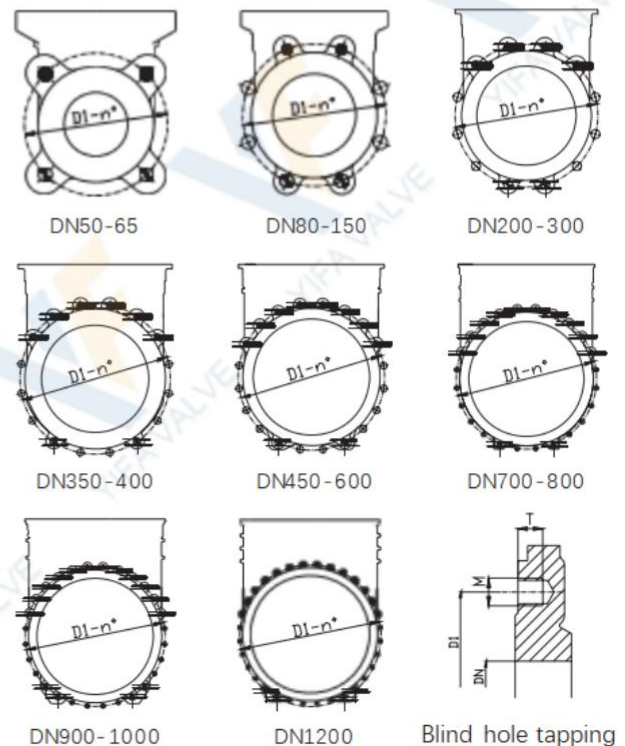
DN	D1	n°	M	T	●	⊕	+
50	125	4	M-16	10	2--0		-2
65	145	4	M-16	10	2--0		-2
80	160	8	M-16	12	2--4		-2
100	180	8	M-16	12	2--4		-2
125	210	8	M-16	14	2--4		-2
150	240	8	M-20	14	2--4		-2
200	295	8	M-20	14	2--4		-2
250	350	12	M-20	18	4--6		-2
300	400	12	M-20	21	4--6		-2
350	460	16	M-20	21	6--8		-2
400	515	16	M-24	25	6--8		-2
450	565	20	M-24	25	8--10		-2
500	620	20	M-24	26	8--10		-2
600	725	20	M-27	26	8--10		-2
700	840	24	M-27	22	10--12		-2
800	950	24	M-30	22	10--12		-2
900	1050	28	M-30	22	12--12		-4
1000	1160	28	M-33	22	12--12		-4
1200	1380	32	M-36	33	14--14		-4



- Blind hole thread
- ⊕ Through hole
- Drilling through

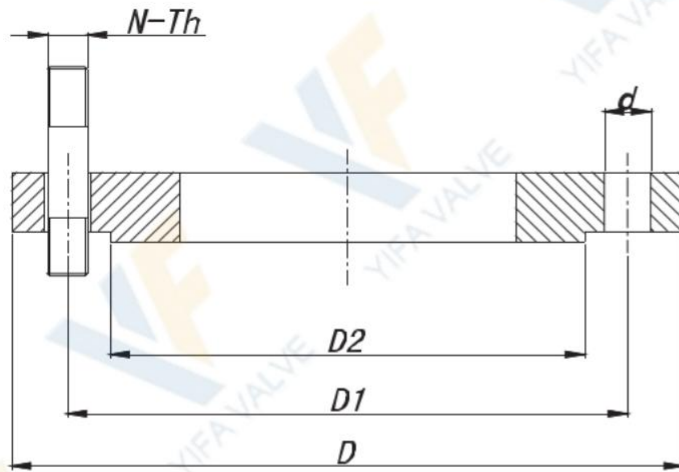
### GB/T9113.1 PN16

DN	D1	n°	M	T	●	⊕	+
50	125	4	M-16	10	2--0		-2
65	145	4	M-16	10	2--0		-2
80	160	8	M-16	12	2--4		-2
100	180	8	M-16	12	2--4		-2
125	210	8	M-16	14	2--4		-2
150	240	8	M-20	14	2--4		-2
200	295	12	M-20	14	2--4		-2
250	355	12	M-24	18	4--6		-2
300	410	12	M-24	21	4--6		-2
350	470	16	M-24	21	6--8		-2
400	525	16	M-27	25	6--8		-2
450	585	20	M-27	25	8--10		-2
500	640	20	M-30	26	8--10		-2
600	725	20	M-33	26	8--10		-2
700	840	24	M-33	22	10--12		-2
800	950	24	M-36	22	10--12		-2
900	1050	28	M-36	22	12--12		-4
1000	1170	28	M-39	22	12--12		-4
1200	1390	32	M-45	33	14--14		-4



Blind hole tapping

## Flange connection dimensions



- D- Flange outer diameter
- D1- Bolt circle diameter
- D2- Diameter of sealing surface
- N-Th Bolt size
- d- Bolt hole diameter

10K (JIS B2239-2004)

150Lb (ANSI B16.5 & ASME B16.47)

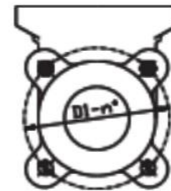
DN	D	D1	D2	N-Th	d
50	155	120	96	4-M16	Φ19
65	175	140	116	4-M16	Φ19
80	185	150	126	8-M16	Φ19
100	210	175	151	8-M16	Φ19
125	250	210	182	8-M20	Φ23
150	280	240	212	8-M20	Φ23
200	330	290	262	12-M20	Φ23
250	400	355	324	12-M22	Φ25
300	445	400	368	16-M22	Φ25
350	490	445	413	16-M22	Φ25
400	560	510	475	16-M24	Φ27
450	620	565	530	20-M24	Φ27
500	675	620	585	20-M24	Φ27
550	745	680	640	20-M30	Φ33
600	795	730	690	24-M30	Φ33
650	845	780	740	24-M30	Φ33
700	905	840	800	24-M30	Φ33
750	970	900	855	24-M30	Φ33
800	1020	950	905	28-M30	Φ33
850	1070	1000	955	28-M30	Φ33
900	1120	1050	1005	28-M30	Φ33
1000	1235	1160	1110	28-M36	Φ39
1100	1345	1270	1220	28-M36	Φ39
1200	1465	1380	1325	32-M36	Φ39
1350	1630	1540	1480	36-M42	Φ45
1500	1795	1700	1635	40-M42	Φ45

DN	D	D1	D2	N-Th	d
2D	153	120.5	92	4-5/8DUNC	Φ19
2.5D	178	139.5	105	4-5/8DUNC	Φ19
3D	191	152.5	127	4-5/8DUNC	Φ19
4D	229	190.5	157	8-5/8DUNC	Φ19
5D	254	216	186	8-3/4DUNC	Φ22
6D	280	241.5	216	8-3/4DUNC	Φ22
8D	343	298.5	270	8-3/4DUNC	Φ22
10D	407	362	324	12-7/8DUNC	Φ25
12D	483	432	381	12-7/8DUNC	Φ25
14D	534	476	413	12-1DUNC	Φ29
16D	597	539.5	470	16-1DUNC	Φ29
18D	635	578	534	16-1 1/8DUNC	Φ32
20D	699	635	584	20-1 1/8DUNC	Φ32
24D	813	749.5	692	20-1 1/4DUNC	Φ35
26D	870	806.5	749	24-1 1/4DUNC	Φ35
28D	925	863.5	800	28-1 1/4DUNC	Φ35
30D	985	914.5	857	28-1 1/4DUNC	Φ35
32D	1060	978	914	28-1 1/2DUNC	Φ41
36D	1170	1086	1022	32-1 1/2DUNC	Φ41
40D	1290	1200	1124	36-1 1/2DUNC	Φ41
42D	1345	1257	1194	36-1 1/2DUNC	Φ41
44D	1405	1314	1245	40-1 1/2DUNC	Φ41
48D	1510	1422	1359	44-1 1/2DUNC	Φ41
52D	1625	1537	1461	44-1 3/4DUNC	Φ47
56D	1745	1651	1575	48-1 3/4DUNC	Φ47
60D	1855	1759	1676	52-1 3/4DUNC	Φ47

## Flange and connection details

### JIS B2239-2004 10K

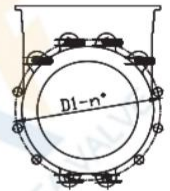
DN	D1	n°	M	T	●	⊕	+
50	120	4	M-16	10	2--0		-2
65	140	4	M-16	10	2--0		-2
80	150	8	M-16	12	2--4		-2
100	175	8	M-16	12	2--4		-2
125	210	8	M-20	14	2--4		-2
150	240	8	M-20	14	2--4		-2
200	290	12	M-20	14	2--4		-2
250	355	12	M-22	18	4--6		-2
300	400	16	M-22	21	4--6		-2
350	445	16	M-22	21	6--8		-2
400	510	16	M-24	25	6--8		-2
450	565	20	M-24	25	8--10		-2
500	620	20	M-24	26	8--10		-2
600	730	24	M-30	26	8--10		-2
700	840	24	M-30	22	10--12		-2
800	950	28	M-30	22	10--12		-2
900	1050	28	M-30	22	12--12		-4
1000	1160	28	M-30	22	12--12		-4
1200	1380	32	M-36	33	14--14		-4



DN50-65



DN80-150



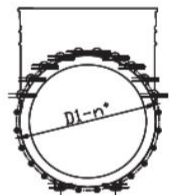
DN200-250



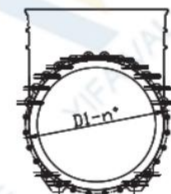
DN300-400



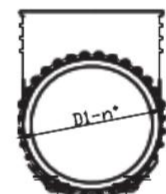
DN450-500



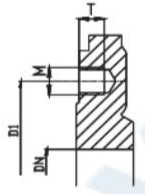
DN600-700



DN800-1000



DN1200

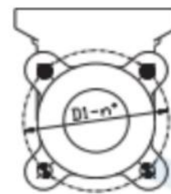


Blind hole tapping

- Blind hole thread
- ⊕ Through hole
- ⦿ Drilling through

### ANSI B16.5 & ASME B16.47 150Lb

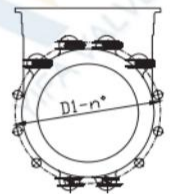
DN	D1	n°	M	T	●	⊕	+
2"	120.5	4	5/8" UNC	10	2--0		-2
2 1/2"	139.5	4	5/8" UNC	10	2--0		-2
3"	152.5	4	5/8" UNC	12	2--4		-2
4"	190.5	8	5/8" UNC	12	2--4		-2
5"	216	8	3/4" UNC	14	2--4		-2
6"	241.5	8	3/4" UNC	14	2--4		-2
8"	298.5	8	3/4" UNC	14	2--4		-2
10"	362	12	7/8" UNC	18	4--6		-2
12"	432	12	7/8" UNC	21	4--6		-2
14"	476	12	1" UNC	21	6--8		-2
16"	540	16	1" UNC	25	6--8		-2
18"	578	16	1 1/8" UNC	25	8--10		-2
20"	635	20	1 1/8" UNC	26	8--10		-2
24"	749.5	20	1 1/4" UNC	26	8--10		-2
28"	863.5	28	1 1/4" UNC	26	10--12		-2
30"	914	28	1 1/4" UNC	22	10--12		-2
32"	978	28	1 1/2" UNC	22	12--12		-4
36"	1085.8	32	1 1/2" UNC	22	12--12		-4
40"	1200.2	36	1 1/2" UNC	30	14--14		-4



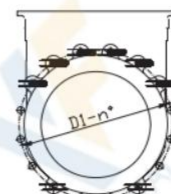
2"-3"



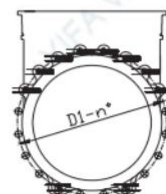
4"-8"



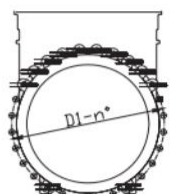
10"-14"



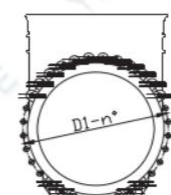
16"-18"



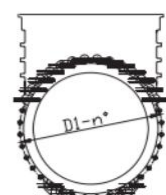
20"-24"



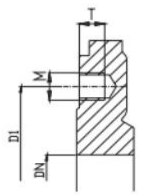
28"-32"



36"



40"



Blind hole tapping



#### ADDRESS

No.2 Road, Jinnan District  
Industrial Zone, Xiaozhan  
Town, Jinnan District, Tianjin,  
China



#### PHONE

0086 0379 69926196



#### EMAIL

[valve@yifavalves.com](mailto:valve@yifavalves.com)