



ΔΙΚΛΕΙΔΕΣ ΠΕΤΑΛΟΥΔΑΣ

Series F101 butterfly valves designed to comply with MSS SP-67, BS5155 and API 609. Compatible with GB, ANSI, DIN, BS, JIS flanges. Available in size 1/2" to 48". Available in wafer type, lug type and U-section wafer type body. Available with handles (1/2" to 12"), manual gear operators (1/2" to 48"), and electric or pneumatic actuators (1/2" to 48"). With many body/trim combinations, there is a series F101 butterfly valve to meet your application.

8. Key

Optional flat stem or square stem

7. Bushing:

Minimizes torque.



Isolate the stem from the valve body, preventing seizure of the stem due to corrosion in the stem journal.

6. O-Ring:

Provides further prevention of stem leakage

5. Disc

Provides bubbletight shutoff



Assures minimum torque



Longer seat life

1. Body

Top flange comply with ISO5211



Compatible with GB, DIN, BS, JIS, ANSI flanges

2. Stem

One-piece thru stem



Ensure dependability

3. Taper Pin

Stem to disc connection



Field replaceable

4. Seat

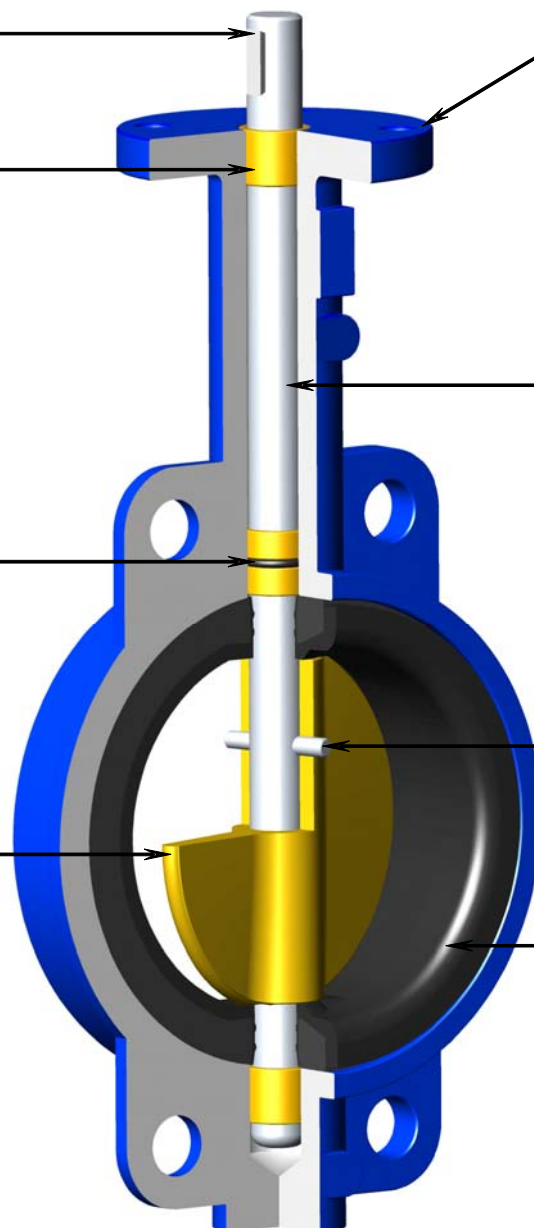
Cartridge seat



Field replaceable



No need for flange gaskets





Materials List

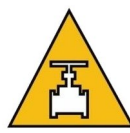
Item	Part Name	Materials
1	Body	Cast Iron: ASTM A126CL. B , DIN1691 GG25, EN 1561 EN-GJL-200; GB12226 HT200; Ductile Cast Iron: ASTM A536 65-45-12, DIN 1693 GGG40, EN1563 EN-GJS-400-15, GB12227 QT450-10; Stainless Steel: ASTM A351 CF8, CF8M; CF3, CF3M; Carbon Steel: ASTM A216 WCB
2	Stem	Zinc Plated Steel; Stainless Steel: ASTM A276 Type 316, Type 410, Type 420; ASTM A582 Type 416;
3	Taper Pin	Stainless Steel: ASTM A276 Type 304, Type 316; EN 1.4501;
4	Seat	NBR, EPDM, Neoprene, PTFE, Viton;
5	Disc	Ductile Cast Iron (Nickel plated): ASTM A536 65-45-12, DIN 1693 GGG40, EN1563 EN-GJS-400-15, GB12227 QT450-10; Stainless Steel: ASTM A351 CF8, CF8M; CF3, CF3M; EN 1.4408, 1.4469; 1.4501; AL-Bronze: ASTM B148 C95400;
6	O-Ring	NBR, EPDM, Neoprene, Viton;
7	Bushing	PTFE, Nylon, Lubricated Bronze;
8	Key	Carbon Steel

The buyer can select material as per materials list. The customer may mark the material and temperature used, Our company may select instead. When the medium and temperature is special, please consult with our company.

Seat Temperature Ratings

Material		NBR	Neoprene	EPDM	Hypalon	Viton	PTFE
Temperature Ratings	°C	-20~100	-40~100	-40~120	-32~135	-12~230	-50~200
	°F	-4~212	-40~212	-40~248	-25.6~275	10.4~446	-58~392

Seat materials are capable of withstanding lower temperatures without damage. However, the elastomer becomes hard and torques increase. Some flow media may further restrict the published temperature limits or significantly reduce seat life.



Valve Torques (N·M)

Valve Size		(N·M) Torques for differential pressure				
inch	mm	0.4MPa	0.6MPa	1.0MPa	1.4MPa	1.6MPa
1½"	40	7.3	7.7	8.2	8.9	9.2
2"	50	11.2	11.9	12.5	13.2	13.7
2½"	65	16.9	18.4	19.8	21.3	22.1
3"	80	23.3	24.8	26.2	27.5	28.3
4"	100	32.7	36.4	40.3	44.0	46.3
5"	125	47.7	54.3	61.0	67.5	72.7
6"	150	67.6	78.0	88.4	98.8	105.6
8"	200	119.7	133.6	147.6	161.5	171.4
10"	250	188.7	211.5	234.3	257.0	271.5
12"	300	290.1	315.7	341.5	367.0	384.3
14"	350	298.2	346.8	395.4	447.9	482.1
16"	400	481.3	551.3	621.4	676.4	709.6
18"	450	710.3	818.3	926.4	1037.5	1109.2
20"	500	944.5	1037.2	1129.8	1226.9	1289
24"	600	1743	1899.6	2056.3	2116	2164.2
28"	700	2147.8	2489.0	2841.5	3198.6	3427.1
30"	750	3085.9	3322.5	3559.0	3788.4	3936.8
32"	800	4067.9	4357.8	4712.6	5073.1	5304.3
36"	900	6176.5	6444.0	6711.2	6981.7	7157.7
40"	1000	7810.0	8270.4	8869.3	9365.2	9682.6
42"	1050	9316.7	9720.5	10123.4	—	—
48"	1200	12204	12733.8	13261.7	13795.6	14143.1

All torque values shown on chart are for "wet" (water and other non-lubricating media) on-off service. Under certain conditions, hydrodynamic torque can meet or exceed seating and unseating torques. When designing valve systems, hydrodynamic torque must be considered to help ensure correct selection of application.

Cv Values—Valve Sizing Coefficients (US-GPM@1ΔP)

Valve Size		DEG. OPEN								
inch	mm	10°	20°	30°	40°	50°	60°	70°	80°	90°
1½"	40	0.04	1.92	4.1	8.7	15	26	41	65	72
2"	50	0.06	3	7	15	27	44	70	105	115
2½"	65	0.1	6	12	25	45	75	119	178	196
3"	80	0.2	9	18	39	70	116	183	275	302
4"	100	0.3	17	36	78	139	230	364	546	600
5"	125	0.5	29	61	133	237	392	620	930	1022
6"	150	0.8	45	95	205	366	605	958	1437	1579
8"	200	2	89	188	408	727	1202	1903	2854	3136
10"	250	3	151	320	694	1237	2049	3240	4859	5340
12"	300	4	234	495	1072	1911	3162	5005	7507	8250
14"	350	6	338	715	1549	2761	4568	7230	10844	11917
16"	400	8	464	983	2130	3797	6282	9942	14913	16388
18"	450	11	615	1302	2822	5028	8320	13168	19752	21705
20"	500	14	791	1647	3628	6465	10698	16931	25396	27908
24"	600	22	1222	2587	5605	9989	16528	26157	39236	43116
28"	700	31	1703	3605	7813	13961	23037	36459	54689	60102
30"	750	37	2080	4406	9546	17010	28147	44545	66818	73246
32"	800	100	2436	5272	10636	18025	29440	47622	70876	77897
36"	900	260	3050	6730	12740	20220	32500	52500	79600	87500
40"	1000	313	3665	8089	15942	24299	39056	63093	95660	105154
42"	1050	350	4095	9040	17108	27150	43640	70500	106890	117500
48"	1200	455	5365	11840	22400	30600	51200	92300	140000	154000

