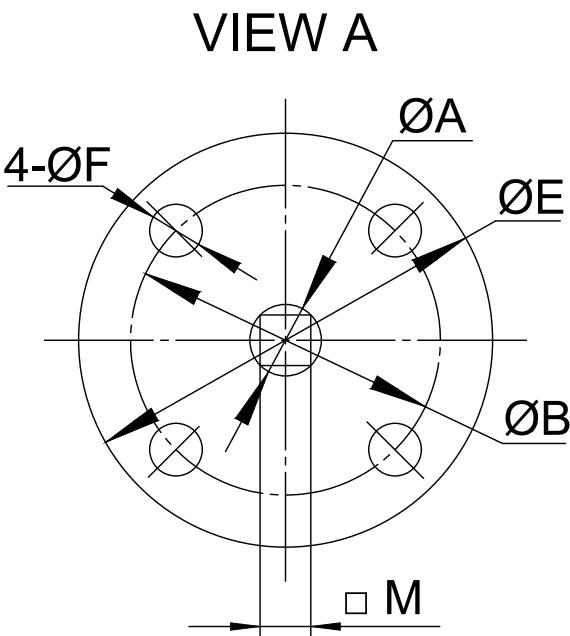
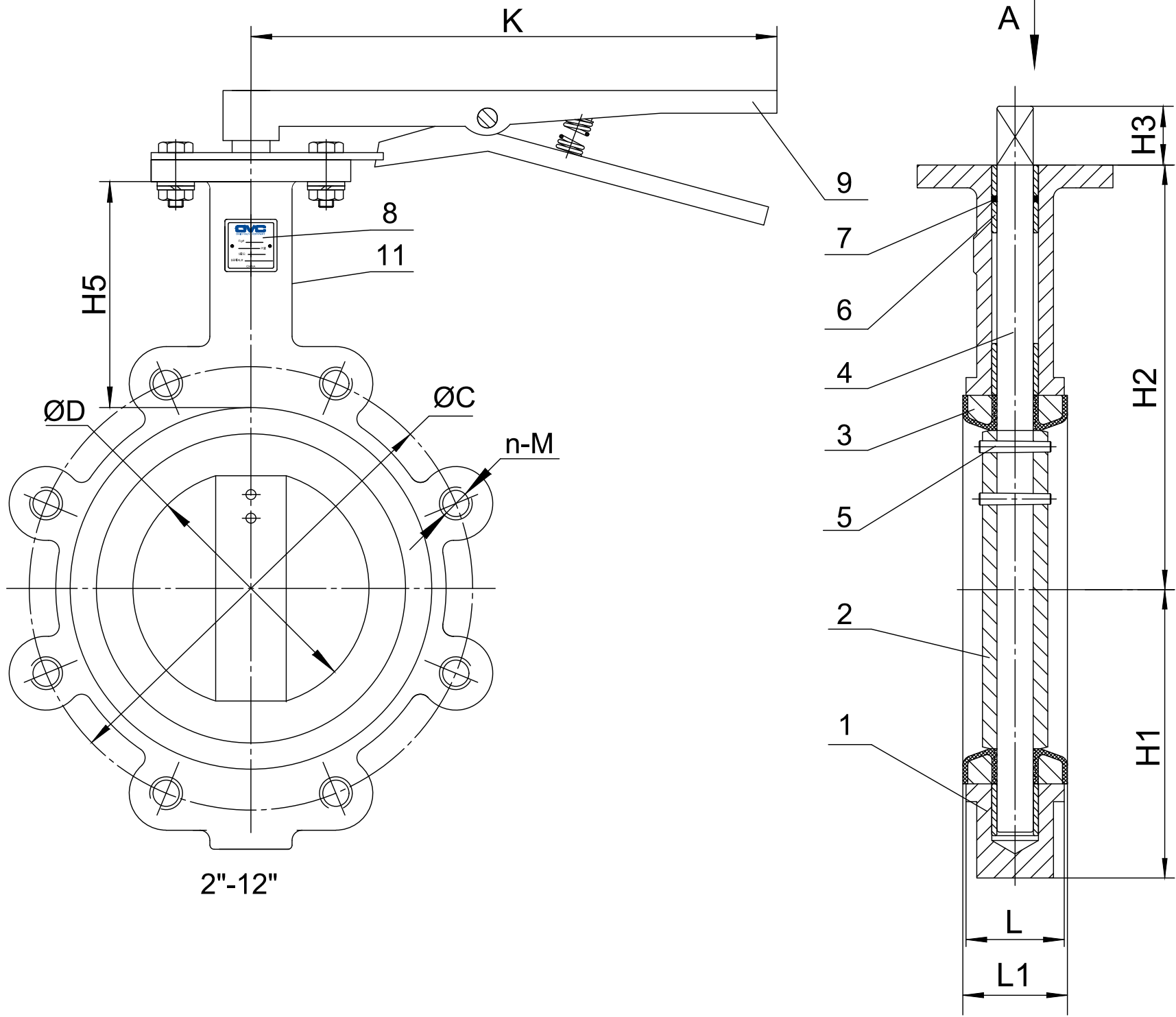
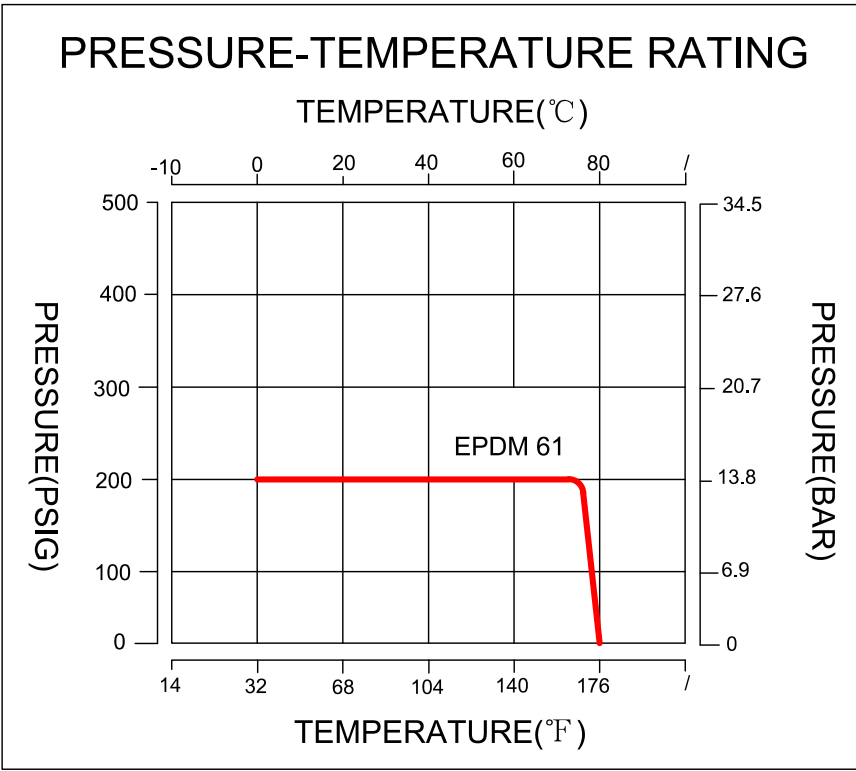


MATERIALS LIST

NO.	PART NAME	MATERIAL
1	BODY	ASTM A536 Gr. 65-45-12+Epoxy Coated
2	DISC	ASTM A351 Gr. CF8M
3	SEAT	EPDM 61
4	STEM	ASTM A276 Gr. 420
5	PIN	ASTM A276 Gr. 316
6	BUSHING	TEFLON
7	O-RING	EPDM
8	NAMEPLATE	ALUMINUM
9	LEVER	ASTM A536 Gr. 60-40-18
10	GEAR	ASTM A126 Gr. B
11	NSF TAG	ALUMINUM



SIZE	Cv Values Disc Position (Angle of Opening)								
	10°	20°	30°	40°	50°	60°	70°	80°	90°
2"	0.06	3	7	15	27	44	70	105	115
2.5"	0.1	6	12	25	45	75	119	178	196
3"	0.2	9	18	39	70	116	183	275	302
4"	0.3	17	36	78	139	230	364	546	600
5"	0.5	29	61	133	237	392	620	930	1022
6"	0.8	45	95	205	366	605	958	1437	1579
8"	2.0	89	188	408	727	1202	1903	2854	3136
10"	3.0	151	320	694	1237	2047	3240	4859	5340
12"	4.0	234	495	1072	1911	3162	5005	7507	8250

	Size	EPDM 61
Temperature Range(°F)	2"-12"	-13°F ~ +248°F
Inline Service(psig)	2"-12"	200
Dead-End Service(psig)	2"-12"	200

SIZE	H1	H2	H3	H4	H5	L (Metal- Metal)	L1 (Seat Compressed)		ØA	ØC	n-M	ØE	ØB	ØF	□ M	ØD	ØG	K		Weight (lbs)		Torque (lbf.in)	
							Size	Tolerance										Lever	Gear	Lever	Gear	Dry	Wet
2"	2.992	6.378	1.181	8.661	4.247	1.69	1.714	±0.06	0.500	4.744	4-5/8"-11	3.543	2.756	0.413	0.354	2.075	5.906	10.354	6.142	8.1	14.8	193	120
2.5"	3.150	6.890	1.181	9.173	4.452	1.81	1.834	±0.06	0.500	5.492	4-5/8"-11	3.543	2.756	0.413	0.354	2.535	5.906	10.354	6.142	10.0	16.6	260	137
3"	3.740	7.126	1.181	9.409	4.406	1.81	1.834	±0.06	0.500	6.004	4-5/8"-11	3.543	2.756	0.413	0.354	3.102	5.906	10.354	6.142	10.8	17.4	348	184
4"	4.488	7.874	1.181	10.157	4.469	2.06	2.084	±0.06	0.622	7.500	8-5/8"-11	3.543	2.756	0.413	0.433	4.094	5.906	10.354	6.142	16.1	22.4	579	317
5"	5.000	8.386	1.181	10.669	4.534	2.19	2.214	±0.06	0.750	8.504	8-3/4"-10	3.543	2.756	0.413	0.551	4.854	5.906	10.354	6.142	20.7	27.4	860	493
6"	5.512	8.858	1.181	11.142	4.465	2.19	2.214	±0.06	0.750	9.508	8-3/4"-10	3.543	2.756	0.413	0.551	6.126	5.906	10.354	6.142	24.4	29.8	1386	812
8"	6.811	10.236	1.417	12.992	4.776	2.38	2.411	±0.13	0.874	11.752	8-3/4"-10	4.921	4.016	0.492	0.669	7.976	11.811	14.291	9.449	37.7	55.1	2628	1529
10"	7.992	11.496	1.417	14.252	4.783	2.69	2.721	±0.13	1.126	14.252	12-7/8"-9	4.921	4.016	0.492	0.866	9.866	11.811	14.291	9.449	57.8	75.6	4373	2573
12"	9.331	13.260	1.417	16.339	5.453	3.06	3.091	±0.13	1.252	17.008	12-7/8"-9	4.921	4.016	0.492	0.866	11.874	11.811	14.291	9.016	84.1	106.9	6364	3903

Note: Torque does not include safety factor.

APPLICABLE STANDARDS

Design:API 609 Cat.A/MSS-SP67 TYPE I/ASME B16.34
End Design:ASME B16.42
Top Flange:ISO 5211
Catridge Seat Design
Pin Stem to Disc Design
Bi-Directional Dead-End Service
NSF 61/372 Lead Free

TEST PRESSURE

Test Inspection:API 598

HYDROSTATIC		
MATERIAL	SHELL	SEAL
EPDM 61	300 PSIG	220 PSIG

FIG NO:	DUCTILE IRON						
4800SEL/4800SEG	BUTTERFLY VALVE						
	LUG END 200 PSIG						
DRAWN BY:	RU MA	3/26/2026	HD				
CHECK BY:	HONG T.	3/26/2026	UNIT:	inch			
APPROVED BY:	Discianno	3/26/2026	REV:	00			