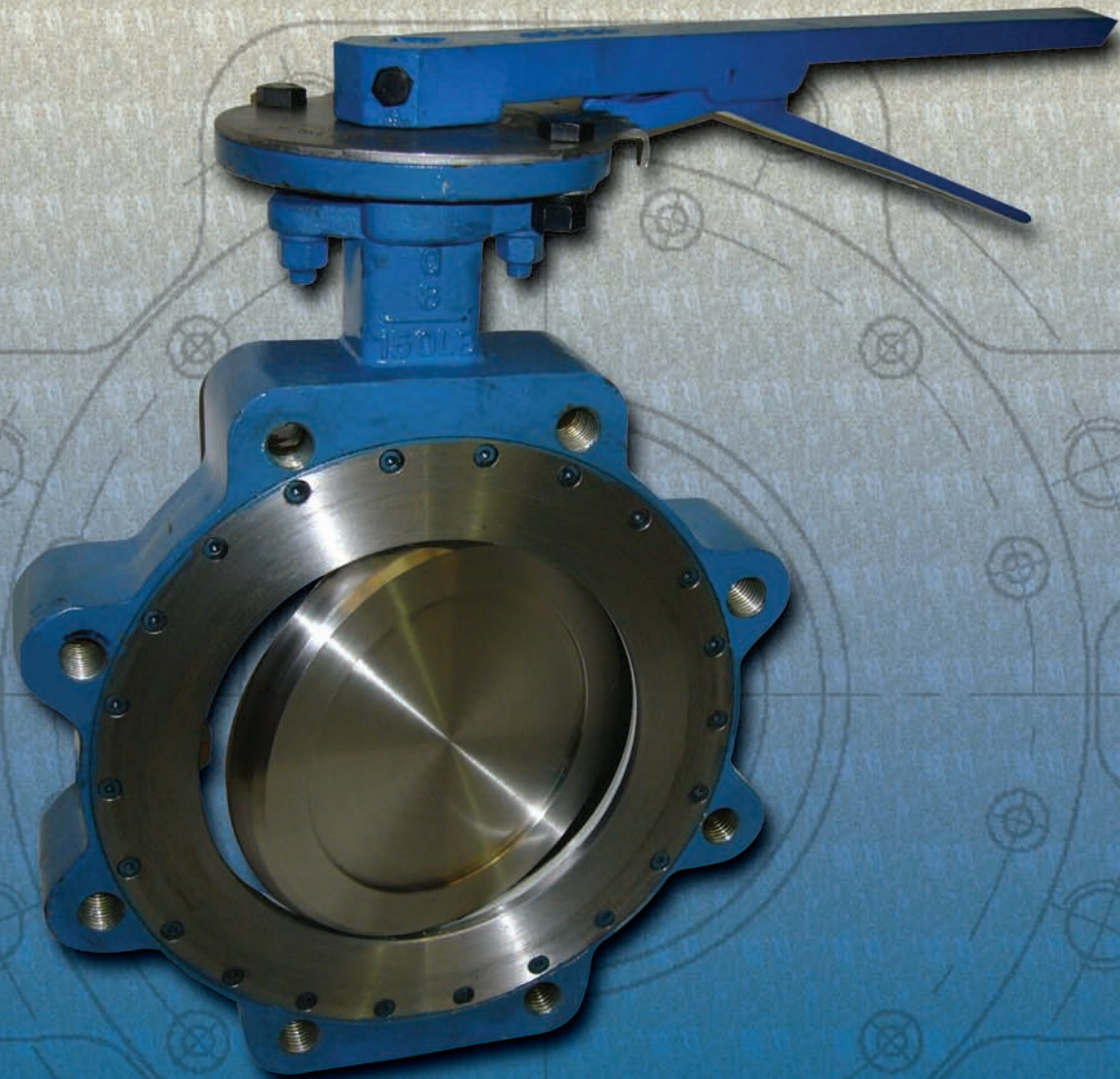




Series HPV High Performance
API 609 6th Edition & ASME B16.34 Compliant
Butterfly Valves



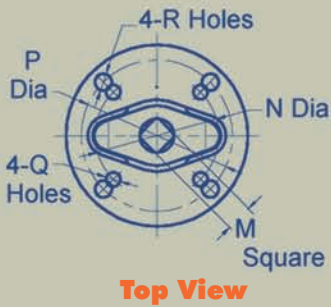
2-1/2" - 16" Lug & Wafer Style ASME Class 150 HPBFV



**Series HPV API 609 & ASME B16.34
High Performance
Butterfly Valves - Class 150**



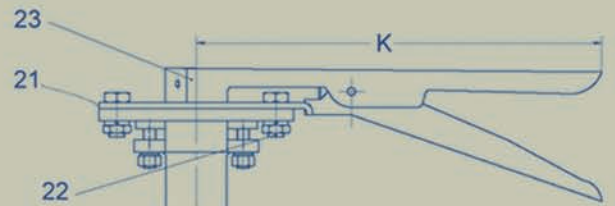
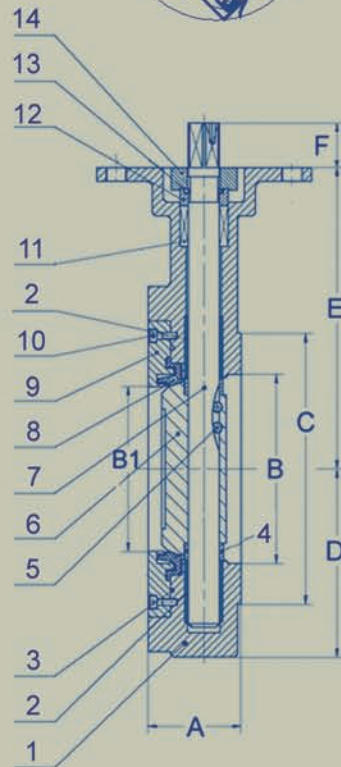
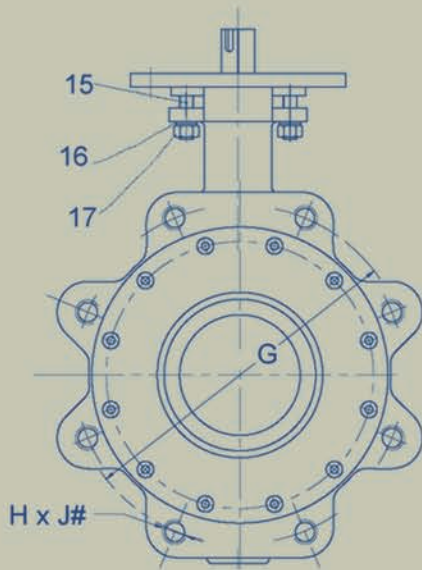
- Fully compliant with API 609 6th edition
- Fully compliant with ASME B16.34, 2004 edition
- Rated at full ASME operating pressure for bi-directional dead-end service with no downstream flange
- Patented "modified square drive" and submerged packing adjustment system, allowing direct mount of ISO 5211-compliant operating devices
- Extended topworks and mounting flange allows insulation over pipe flange OD while retaining packing adjustment access
- Multiple ISO mounting patterns in top flange allow direct mounting of both DA and SR actuators
- Large diameter 17-4PH stainless shafts provide API 609 6th Edition shaft strength safety factors
- Wafer style valves utilize unique retainer retention system



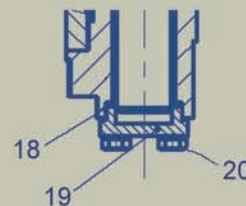
Wafer-Style Retainer Fasteners



RATINGS
WCB/CF8M Disc - 285PSIG@100°F
CF8M/CF8M Disc - 275PSIG@100°F



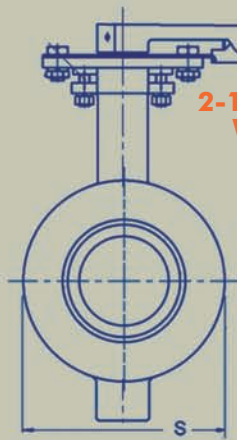
Optional Handle Assembly - 2"-12"



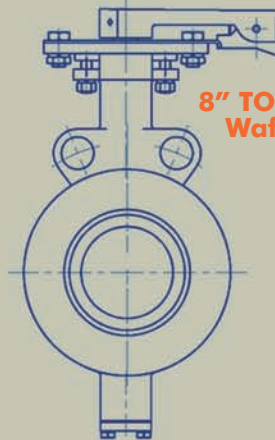
8" & Larger



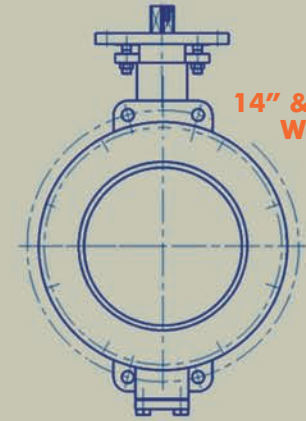
Series HPV API 609 & ASME B16.34 High Performance Butterfly Valves - Class 150



2-1/2" - 6"
Wafer



8" TO 12"
Wafer



14" & Larger
Wafer

MATERIALS OF CONSTRUCTION

PART	QTY.	DESCRIPTION	STD MATL-WCB CONSTRUCTION	STD MATL-CF8M CONSTRUCTION
1	1	BODY	ASTM A216 GRADE WCB	ASTM A351 GRADE CF8M
2	2	SHAFT BUSHING	RPTFE/304SS	RPTFE/304SS
3	1	RETAINER SEAL	RPTFE	RPTFE
4	2	THRUST BEARING	ASTM A276 GRADE 316	ASTM A276 GRADE 316
5	2	DISC PIN	17-4 PH STAINLESS STEEL	17-4 PH STAINLESS STEEL
6	1	DISC	ASTM A351 GRADE CF8M	ASTM A351 GRADE CF8M
7	1	SHAFT	17-4 PH STAINLESS STEEL	17-4 PH STAINLESS STEEL
8	1	SEAT	REINFORCED PTFE	REINFORCED PTFE
9	1	SEAT RETAINER	ASTM A105	ASTM A182 GRADE 316
10	VARIABLES	RETAINER BOLT	ASTM A193 GRADE B8	ASTM A193 GRADE B8
11	1 SET	SHAFT PACKING	CHEVRON PTFE	CHEVRON PTFE
12	1	GLAND	ASTM A276 GRADE 316	ASTM A276 GRADE 316
13	1	SHAFT RETAINER	ASTM A276 GRADE 316	ASTM A276 GRADE 316
14	1	GLAND FLANGE	ASTM A351 GRADE CF8M	ASTM A351 GRADE CF8M
15	2	PACKING BOLT	ASTM A193 GRADE B8	ASTM A193 GRADE B8
16	4	BELLEVILLE WASHERS	STAINLESS STEEL	STAINLESS STEEL
17	2	PACKING NUT	ASTM A194 GRADE 8	ASTM A194 GRADE 8
18	1	GASKET	RPTFE	RPTFE
19	1	LOWER PLATE	ASTM A216 GRADE WCB	ASTM A351 GRADE CF8M
20	4	PLATE BOLTS	ASTM A193 GRADE B8	ASTM A193 GRADE B8
21	1	STOP PLATE	300 SERIES STAINLESS	300 SERIES STAINLESS
22	4	STOP PLATE FASTENERS	300 SERIES STAINLESS	300 SERIES STAINLESS
23	1	HANDLE ASSY	ASTM A536 GRADE 60-40-18	ASTM A536 GRADE 60-40-18
24	VARIABLES	SEAT RETAINER STUDS & NUTS	ASTM A193 GRADE B8 & ASTM A194 GRADE 8	ASTM A193 GRADE B8 & ASTM A194 GRADE 8

DIMENSIONS, WEIGHTS, CV FACTORS

SIZE	A	B	B1	C	D	E	F	G (DIA) LUG	H	J	K
2-1/2"	1.88	2.91	2.32	4.14	3.35	5.79	0.79	5.50	5/8"-11	4	10.3
3"	1.88	3.50	2.87	5.00	3.74	6.10	0.79	6.00	5/8"-11	4	10.3
4"	2.12	4.49	3.76	6.02	4.53	6.93	0.94	7.50	5/8"-11	8	10.3
5"	2.25	5.04	4.37	7.32	4.72	7.91	0.94	8.50	3/4"-10	8	13.8
6"	2.25	6.46	5.59	8.50	5.71	8.70	0.94	9.50	3/4"-10	8	15.7
8"	2.50	8.26	7.48	10.67	7.48	9.65	1.18	11.75	3/4"-10	8	25.6
10"	2.81	10.04	9.29	12.75	9.06	11.41	1.34	14.25	7/8"-9	12	31.5
12"	3.19	11.97	11.10	15.00	10.24	13.00	1.34	17.00	7/8"-9	12	35.5
14"	3.62	13.78	12.99	16.25	11.26	14.57	1.50	18.75	1"-8	12	n/a
16"	4.00	15.74	14.65	19.50	13.00	15.95	1.50	21.25	1"-8	16	n/a
18"											
20"											
24"											

SIZE	M	N	P	Q	R	S (DIA) WAFER	ISO PATTERN 1	ISO PATTERN 2	LUG WT. LBS. (NO HANDLE)	WAFER WT. LBS. (NO HANDLE)	Cv FACTOR
2-1/2"	11mm	n/a	2.76	n/a	0.38	4.72	n/a	F07	11.0	10.0	80
3"	14mm	n/a	2.76	n/a	0.38	5.20	n/a	F07	14.0	13.0	180
4"	14mm	2.76	4.02	0.38	0.47	6.65	F07	F10	27.0	18.0	410
5"	17mm	2.76	4.02	0.38	0.47	7.52	F07	F10	35.5	26.0	670
6"	17mm	4.02	4.92	0.47	0.55	8.50	F10	F12	42.5	34.0	1100
8"	19mm	4.02	4.92	0.47	0.55	10.79	F10	F12	68.0	57.0	2100
10"	27mm	4.02	4.92	0.47	0.55	13.11	F10	F12	96.0	80.0	3400
12"	27mm	4.92	5.51	0.55	0.71	15.78	F12	F14	157.0	135.0	5200
14"	36mm	5.51	6.50	0.71	0.87	17.00	F14	F16	188.0	160.0	6000
16"	36mm	5.51	6.50	0.71	0.87	19.68	F14	F16	260.0	212.0	8600
18"											
20"											
24"											

Handle Assembly Weights: 2-1/2"-4"=1.5 Lbs 5"-3 Lbs 6-8"=4 Lbs 10"-7 Lbs 12"-9 Lbs

PRESSURE/TEMPERATURE CHART R-PTFE SEATS - CLASS 150

OPERATING TEMPERATURE (°F)	MAXIMUM OPERATING PRESSURE	
	WCB BODY	CF8M BODY
100	285 PSIG	275 PSIG
150	273 PSIG	258 PSIG
200	260 PSIG	240 PSIG
250	245 PSIG	228 PSIG
300	230 PSIG	215 PSIG
350	215 PSIG	205 PSIG
400	200 PSIG	195 PSIG
450	185 PSIG	183 PSIG
500	170 PSIG	170 PSIG

OPERATING TORQUES - IN LBS

SIZE	DIFFERENTIAL PRESSURE			
	100 PSID	150 PSID	200 PSID	285 PSID
2-1/2"	160	210	260	300
3"	200	300	340	420
4"	430	490	530	700
5"	450	530	650	900
6"	800	900	1150	1250
8"	1600	2100	2400	2600
10"	1900	2600	3400	4000

SIZE	DIFFERENTIAL PRESSURE			
	100 PSID	150 PSID	200 PSID	285 PSID
12"	4500	5100	5500	6000
14"	8200	9100	10000	10900
16"	10400	12000	13800	14100
18"				
20"				
24"				

Quadrant[®]

VALVE & ACTUATOR, LLC

SERIES HPV-CS & HPV-SS

REV. 03/09

NUMBERING SYSTEM ... HOW TO ORDER:

HPV 1 W C S X R G PH 300

SERIES: HPV	ASME CLASS	BODY STYLE	BODY MAT'L	DISC MAT'L	SHAFT MAT'L	SEAT MAT'L	SEAL MAT'L	OPERATOR TYPE	SIZE
1=Class 150	W=Wafer	C=WCB	S=CF8M	X=17-4PH	R=RTFE(TFM)	R=RTFE(TFM)	BS=Bare Shaft	200 = 2"	
3=Class 300	L=Lug	Carbon Steel	M=Monel	S=316SS	Z=RTFE Fire Safe	G=Graphite	PH=10 Position Handle	250 = 2-1/2"	
6=Class 600	F=Full Body	S=CF8M			M=Metal	V=PTFE	GO=Gear Operator	300 = 3"	
		Stainless Steel					PA=Double-acting Pneumatic	400 = 4"	
		A=Alloy 20					SR=Spring Return Pneumatic	500 = 5"	
								600 = 6"	
								800 = 8"	
								A00 = 10"	
								B00 = 12"	
								C00 = 14"	
								D00 = 16"	
								E00 = 18"	
								F00 = 20"	
								G00 = 24"	
								I00 = 30"	
								K00 = 36"	
								M00 = 42"	
								N00 = 48"	



**4 Inch Lug-Style HPV
with Quadrant C-Series Actuator**



**4 Inch Lug-Style HPV
with Quadrant Gear Operator**