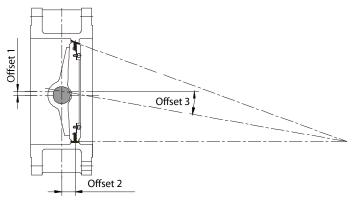


V140 Series (Wafer)/ V142 Series (Lug) Tripple Eccentric High Performance Buterfly Valves

Proval V140 Series Tripple Eccentric Valves are new generation long-life and energy saving type valves. The sealing is metal to metal which could be changed to be seal ring to metal or composite graphite to metal. The tripple eccentric design concept ensures perfect tightness even under high temperature and high pressures flow conditions.

Three offsets eliminates any rubbing trhoughout rotation and provides very low torque figures on valves.

Main applications are oil & gas upstream and downstream, pipeline and storage, supply and coal, ptrochemical, desalination plants, general energy and mining applications.









U-Metal

Sealed Structure

Multiple Arrangement Metal Hard Sealed Structure

Metal Resilient Sealed Structure

No	Part Name	No	Part Name
1	Body	10	Bottom End Cover
2	Disc	11	Gasket
3	Clamp	12	Packing
4	Seat	13	Yoke
5	Ring	14	Nut
6	Screw	15	Bolt
7	Stem	16	Packing Retainer
8	Check Pin	17	Flat key
9	Bushing	18	Bisect Rings

Available Materials of Parts

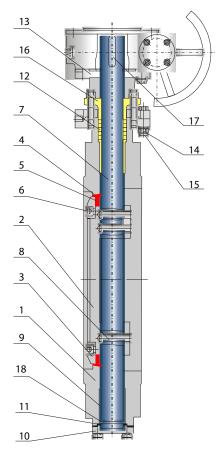
Body	WCB/LCB/CF8M/CF8/CF3M/CF3/WC6/WC9/CD3NM/Duplex
Disc	WCB+ENP/LCB/CF8/CF8M/CF3/CF3M/WC6/WC9/CD3MN/Duplex
Seat	STL/13Cr/316/316L/304/304L/F316L/Monel/F51
Stem	F6a/17-4PH/F304/F316/F304L/F316L/F51/Monel
Ring	304+Flexible Graphite/316+Flexible Graphite
Bolt	B7M/B8M/L7M/B16M
Nut	2HM/8M/7M/4M
Clamp	A36+ENP/Stainless Steel Series
Bushing Sleeve	C95200/C95500/SS+304
Gasket	Flexible Graphite+SS304 / Flexible Graphite+SS316
Packing	Flexible Graphite



Applicable Standards,

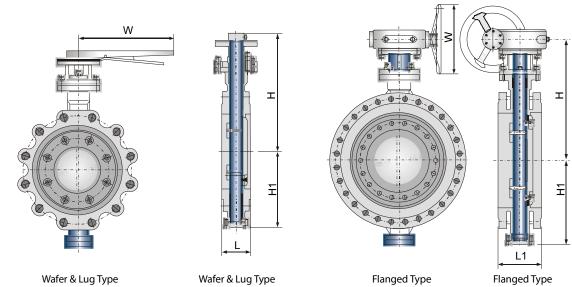
Design & Manufacturing: API607 & MSS SP-67 Face to Face Inspection and Test Working Pressure

- Connection Dimensions: ASME B16.5, ASME B16.47 : API 609, MSS SP-67, ISO 5752 : ISO5208, API 598
 - : PN16/25/40/64/100 CL150/300/600/900





Dimensions



Wafer & Lug Type

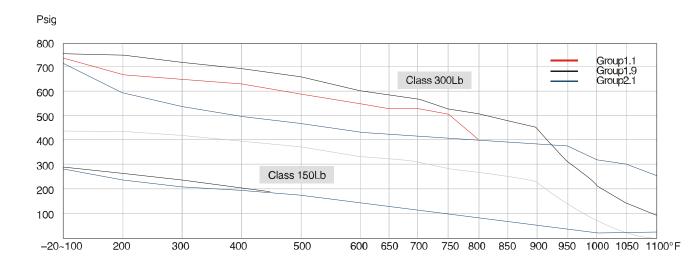
Wafer & Lug Type

Dim	Dimensional datas																
NPS	DN	L	L1	H1	н	w	MT(Wafer)	Т	NPS	DN	L	L1	H1	н	W	MT(Wafer)	Т
inch	DN	mm	mm	mm	mm	mm	kg	N.m	inch		mm	mm	mm	mm	mm	kg	N.m
							A	ISI Cla	ss 150l	b							
2	50	43	108	112	225	220	10	55	★16	400	102	216	352	540	600	160	4128
3	80	48	11 4	126	255	270	12	226	★18	450	114	222	386	585	600	200	551 1
4	100	54	127	146	285	270	16	325	★20	500	127	229	415	642	600	270	7190
★6	150	57	1 40	170	332	360	25	615	★24	600	154	267	482	693	600	420	7814
★8	200	64	1 52	218	386	300	36	902	★30	750	165	318	622	868	600	700	16450
★ 1 0	250	71	165	245	427	300	60	1278	★36	900	200	330	673	1000	700	1050	23501
* 12	300	81	178	290	498	500	80	2628	★42	1050	251	410	755	1058	700	1500	31963
★ 14		92	190	316	510	500	120	3276	★48	1200	276	470	866	1278	700	1845	47000

Dim	Dimensional datas																
NPS	DN	L	L1	H 1	н	W	MT(Wafer)	т	NPS	DN	L	L1	H1	Н	W	MT(Wafer)	Т
inch	DN	mm	mm	mm	mm	mm	kg	N.m	inch	DN	mm	mm	mm	mm	mm	kg	N.m
							A	VSI Cla	ss 300l	_b							
-	50	-	-	-	-	-	_	-	★16	400	133	216	392	582	600	185	8152
3	80	48	114	130	265	270	15	352	★18	450	149	222	420	651	600	230	10223
4	100	54	127	150	290	270	19	514	★20	500	159	229	465	704	600	330	13469
★6	150	59	1 40	185	355	300	35	1073	★24	600	181	267	532	780	600	460	22827
★8	200	73	152	236	418	500	42	1954	★30	750	-	318	642	908	700	1280	39726
★ 1 0	250	83	165	273	456	500	68	2453	★36	900	-	330	703	1108	700	2150	63452
★ 12	300	92	178	313	498	600	88	3260	★42	1050	-	410	785	1258	700	3150	85326
★ 14		11 7	190	338	547	600	144	5405	★48	1200	-	470	906	1478	1000	4885	126742

Dim	Dimensional datas																
NPS	DN	L	L1	H1	н	w	MT(Wafer)	т	NPS	DN	L	L1	H1	н	W	MT(Wafer)	Т
inch	DN	mm	mm	mm	mm	mm	kg	N.m	inch	DN	mm	mm	mm	mm	mm	kg	N.m
							Α	NSI Cla	ss 600L	b							
-	-	-	-	-	-	-	-	-	★12	300	140	270	378	690	600	398	14236
3	80	54	180	152	305	270	38	575	★14	350	155	290	412	715	600	535	16947
4	100	64	19 0	193	338	360	58	1043	★16	400	178	310	450	823	600	780	20473
★6	150	78	2 1 0	248	4 1 6	500	120	3673	★18	450	200	330	512	897	600	898	25218
★8	200	102	230	295	490	600	154	4520	★20	500	216	350	563	1094	700	1266	31861
★ 1 0	250	117	250	342	580	600	297	7061	★24	600	232	390	622	1186	700	1622	46095





ANSI Class 150/300 Lbs Pressure-Temperature Ratings

ASME B16.34 Maximum Allowable Non–Shock Pressure

ATURE							4	ASTM M	ATERIAL	.S						
				ANSI Cla	iss 150∐)						ANSI Cla	iss 300∐	o		
0	Group	Group	Group	Group	Group	Group	Group	Group	Group	Group	Group	Group	Group	Group	Group	Group
C	1.1	1.2	1.3	1.9	1.10	1.13	2.1	2.2	1.1	1.2	1.3	1.9	1.10	1.13	2.1	2.2
-20~38	285	290	265	290	290	290	275	275	740	750	695	750	750	750	720	720
93	260	260	250	230	260	260	230	235	670	750	655	750	750	745	600	620
149	230	230	230	230	230	230	205	215	655	730	640	720	720	715	540	560
204	200	200	200	200	200	200	190	195	635	705	620	695	695	705	495	515
260	170	170	170	170	170	170	170	170	600	665	585	665	665	665	465	480
316	140	140	140	140	1 40	140	140	140	550	605	535	605	605	605	435	450
343	125	125	125	125	125	125	125	125	535	590	525	590	5 90	590	430	445
371	110	110		110	1 10	110	110	110	535	5 7 0		5 7 0	5 7 0	570	425	430
399	95	95		95	95	95	95	95	50 5	505		530	530	530	415	425
427	80	80		80	80	80	80	80	4 1 0	4 1 0		5 1 0	5 1 0	510	405	420
454				65	65	65	65	65				485	485	485	395	420
482				50	50	50	50	50				450	450	370	390	415
510				35	35	35	35	35				320	375	275	380	385
538				20	20	20	20	20				215	260	200	320	350
566				20	20	20	20	20				145	175	145	310	345
593				20%	20 ⁶⁾	206)	20%	206)				95	1 1 0	100	255	305
						TEST	PRESSU	RE BY A	PI 598							
c shell test	450	450	400	450	450	450	425	425	1125	1125	1050	1125	1125	1125	1100	1100
c seal test	315	320	295	320	320	320	305	305	815	825	765	825	825	825	795	795
	°C -20~38 93 149 204 260 316 343 371 399 427 454 482 510 538 566 538 566	C Group 1.1 -20~38 285 93 260 149 230 204 200 260 170 316 140 343 125 371 110 399 95 427 80 454	C Group 1.1 Group 1.2 -20~38 285 290 93 260 260 149 230 230 204 200 200 260 170 170 316 140 140 343 125 125 371 110 110 399 95 95 427 80 80 454 - - 510 - - 538 - - 593 - - cshel test 450 450	Group Group I.1 I.2 I.3 -20-38 285 290 265 93 260 260 250 149 230 230 230 204 200 200 200 260 170 170 170 316 140 140 140 343 125 125 125 371 110 110 139 399 95 95 - 427 80 80 - 454 - - - 510 - - - 538 - - - 593 - - - cshel test 450 450 400	Group Group Group Group Group Group Group Group I.3 1.9 -20~38 285 290 265 290 93 260 260 250 230	ANSI Class 150Ll °C Group 1.1 Group 1.2 Group 1.3 Group 1.3 Group 1.9 Group 1.10 -20~38 285 290 265 290 290 93 260 260 250 230 230 149 230 230 230 230 230 204 200 200 200 200 200 260 170 170 170 170 170 316 140 140 140 140 140 343 125 125 125 125 125 371 110 110 110 110 110 399 95 95 95 95 427 80 80 80 80 454 655 65 50 50 50 50 510 20 20 20 593 20	Group Group <th< td=""><td>ATURE AVSI Class 150Lb °C Group Group</td><td>AIVSI Class 150Lb °C Group Group</td><td>ANSI Class 150Lb °C Group Group<</td><td>ANSI Class 150Lb °C Group Grou Group Group<!--</td--><td>AVSI Class 150Lb °C Group Group<</td><td>ANSI Class 150Lb ANSI Class 150Lb ANSI Class 160Lb Group 32.2 1.1 1.2 1.1 <th< td=""><td>ANSI Class 150Lb ANSI Class 300L °C Group Grou Group Grou</td></th<><td>ANSI Class 150Lb ANSI Class 30Lb °C Group Grou Group Grou</td></td></td></th<> <td>ANSI Class TSOLb ANSI Class TSOLb °C Group Group<</td>	ATURE AVSI Class 150Lb °C Group Group	AIVSI Class 150Lb °C Group Group	ANSI Class 150Lb °C Group Group<	ANSI Class 150Lb °C Group Grou Group Group </td <td>AVSI Class 150Lb °C Group Group<</td> <td>ANSI Class 150Lb ANSI Class 150Lb ANSI Class 160Lb Group 32.2 1.1 1.2 1.1 <th< td=""><td>ANSI Class 150Lb ANSI Class 300L °C Group Grou Group Grou</td></th<><td>ANSI Class 150Lb ANSI Class 30Lb °C Group Grou Group Grou</td></td>	AVSI Class 150Lb °C Group Group<	ANSI Class 150Lb ANSI Class 150Lb ANSI Class 160Lb Group 32.2 1.1 1.2 1.1 <th< td=""><td>ANSI Class 150Lb ANSI Class 300L °C Group Grou Group Grou</td></th<> <td>ANSI Class 150Lb ANSI Class 30Lb °C Group Grou Group Grou</td>	ANSI Class 150Lb ANSI Class 300L °C Group Grou Group Grou	ANSI Class 150Lb ANSI Class 30Lb °C Group Grou Group Grou	ANSI Class TSOLb ANSI Class TSOLb °C Group Group<

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Air seat test 80 ± 20

Metric conversions by API STD 2564 pressure: 1 pcund per square inch(psig)=0.06894757 bar=0.006894757 MPa temperature: "C=(5/9)" F-32

	ASME B16.34	Materials Group	
Group1.1	A105 ^{e)}	A216–WCB ^{e)}	
Group1.2	A216-WCC°)	A352-LCC ^{a)}	
Group1.3	A352-LCB ^{a)}		
Group1.9	A217-WC6 ^{d)}		
Group1.10	A217-WC9 ^{ci)}		
Group1.13	A217-C5		
Group2.1	A182-F304	A351-CF8	A351-CF3 ^{b)}
Group2.2	A182-F316	A352-CF8M	A351–CF3M ^{c)}

a).Not to be used over 650° F(343°C). b).Not to be used over 650° F(427°C).

c).Not to be used over 650° F(538° C).

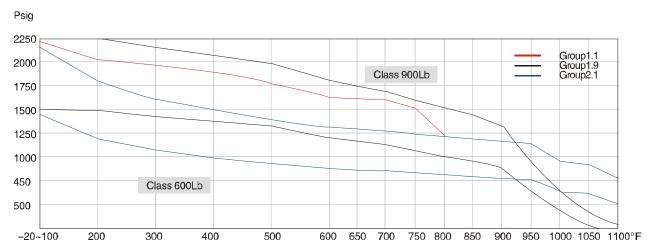
b).Not to be used over $650^{\circ}F(593^{\circ}C)$.

e).Permissible,but not recommended for prolonged use above 800°F(427°C). f)For welding end valve only, flanged end rating terminates at 1000°F(538°C).

80±20



ANSI Class 600/900 Lbs Pressure-Temperature Ratings



EMPER	ATURE		ASTM MATERIALS														
		ANSI Class 600Lb ANSI Class 900Lb															
°⊏	00	Group	Group	Group	Group	Group	Group	Group	Group	Group	Group	Group	Group	Group	Group	Group	Grou
	°C	1.1	1.2	1.3	1.9	1.10	1.13	2.1	2.2	1.1	1.2	1.3	1.9	1.10	1.13	2.1	2.2
-20~100	-20~38	1480	1500	1390	1500	1500	1500	1440	1440	2220	2250	2085	2250	2250	2250	2160	2160
200	93	1350	1500	1315	1500	1500	1490	1200	1240	2025	2250	1970	2250	2250	2235	1800	1860
300	149	1315	1455	1275	1445	1455	1430	1080	1120	1970	2185	1915	2165	2185	2150	1620	1680
400	204	1270	1410	1235	1385	1410	1410	995	1025	1900	2115	1850	2080	2115	2115	1490	1540
500	260	1200	1330	1165	1330	1330	1330	930	955	1795	1995	1745	1995	1995	1995	1395	1435
600	316	1095	1210	1065	1210	1210	1210	875	1640	1640	1815	1600	1815	1815	1815	1 310	1358
650	343	1075	1175	1045	1175	1175	1175	860	1610	1610	1765	1570	1765	1765	1765	1290	1330
700	371	1065	1135		1135	1135	1135	850	1600	1600	1705		1705	1705	1705	1275	1305
750	399	1010	1010		1065	1065	1055	830	1510	1510	1510		1595	1595	1585	1245	1280
800	427	825	825		1015	1 015	1015	805	1235	1235	1235		1525	1525	1525	1210	1265
850	454				975	975	965	790					1460	1460	1450	1190	1255
900	482				900	900	740	780					1350	1350	1110	1165	1245
950	510				640	755	550	765					955	1130	825	1 145	1160
1000	538				430	520	400	640					650	780	595	9 65	1050
1050	566				290	350	290	615					430	525	430	925	1030
1100	593				190	220	200	515					290	330	300	77 0	915
TEST PRESSURE BY API 598																	
Hydrostatic	c shell test	2225	2250	2100	2250	2250	2250	2175	3350	3350	3375	3150	3375	3375	3250	3250	325
, Hvdrostatio	c seal test	1630	1650	1530	1650	1650	1650	1585	2445	2445	2475	2295	2475	2475	2380	2380	238

Air seat test 80 ± 20

Metric conversions by API STD 2564 pressure: 1 pound per square inch(psig)=0.06894757 bar=0.006894757 MPa temperature: 'C=(5/9)'F-32

	ASME B16.34 Materials Group											
Group1.1	A105 ^{e)}	A216-WCB ^{e)}										
Group1.2	A216–WCC ^{c)}	A352-LCC ^{a)}										
Group1.3	A352-LCB ^{a)}											
Group1.9	A217-WC6 ^{d)}											
Group1.10	A217-WC9 ^{d)}											
Group1.13	A217-C5											
Group2.1	A182-F304	A351-CF8	A351-CF3 ^{b)}									
Group2.2	A182-F316	A352-CF8M	A351-CF3M°)									

a).Not to be used over 650° F(343°C).
b).Not to be used over 650° F(427°C).
c).Not to be used over 650° F(538°C).
b).Not to be used over 650° F(593°C).
c).Portriscible but act accompanded for a

e). Permissible, but not recommended for $\,$ prolonged use above 800° F(427°C).



Certificates

Turkey



11

2 22

Appareil non électrique destiné à être utilisé en atmosphères explosibles Directive 94/9/CE Non electrical equipment intended for use in patentially explosive atmospheres Directive 94/9/EC Nicht-elektrisches Gerät zur Verwendung in explosionsgefährdeten Bereichen Richtlinie 94/9/EG **Butterfly Valves**

Type(s)/ Type(s) / Typ(on) : DN40-DN1260, Wafer, Lug, Flanged PN6-PN10-PN16-CL150

G ∥ 2 GD

INERIS

Verneurl-en-Halatte, le 2013.01.31

Marin,

The Chief Executive Officer, Oer Generaldinsktor dor INERS, By delegation T. HOUEIX Ex Cartification Officer im Auftrag, T. HOUEIX Boouffragter Bescheinigung ATE)

Le che meet ne pel t être reprocul dus dans un indig dité / Guy Chenn he decuert mey se repteres / Deces Dournert det nur autornets vertetatigs vertetatigs vertet Mit2244. Parc Technologique Alata BP 2 F-60550 Verneuil-en Halalte tél = 33(0)3 44 55 66 77 - fax + 33(0)3 44 55 66 99 Internet www.ineris.it rolltut national de l'environmement industriel et dos risques Eublissamm, subicia caractér industriel et commande (10.5 Gorin B act 964 921 - Stef 101 957 921 000 °P - ME 7433