


MV Series Cryogenic




*Engineering
GREAT Solutions*

**Triple Eccentric Metal
Seated Valves**

Triple Eccentric Metal Seated Valves

IMI Orton's MV Series valves are specified worldwide for their unique combination of control, reliability and compactness. They are used for critical high pressure, tight shut-off, high temperature or cryogenic, throttling and isolation duties in critical high pressure tight shut-off, high temperature or cryogenic, throttling and isolation duties.

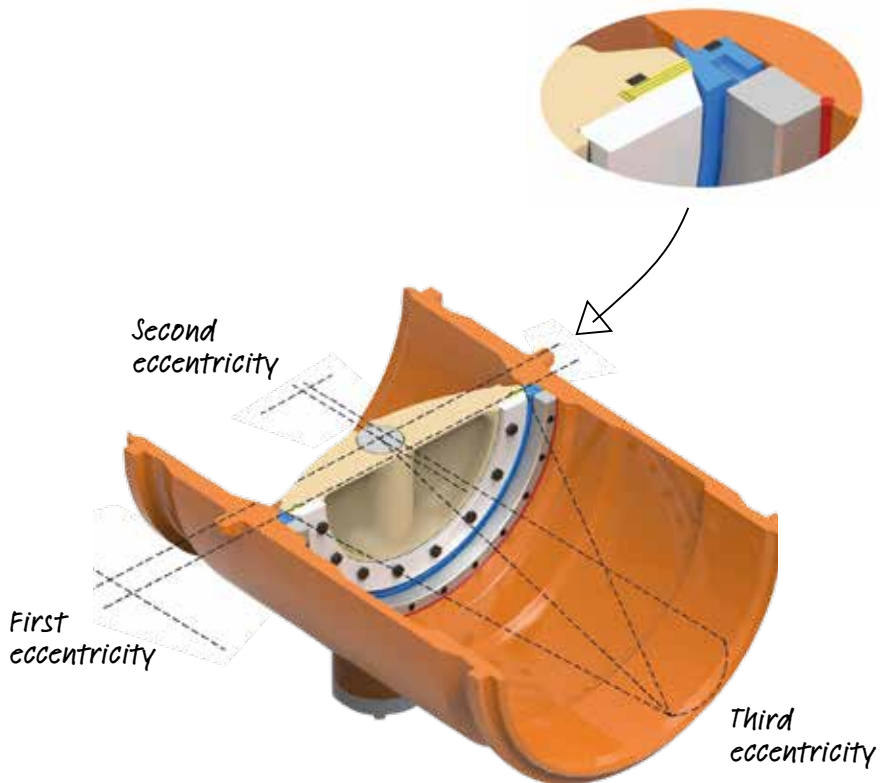
Key features

- > Triple eccentric design
- > Resilient metal-to-metal sealing
- > Quarter turn friction-free operation
- > Fire-safe and fire tested
- > Torque seated
- > External anti-blowout device
- > Bi-directional tight shut-off
- > Wide range of materials and sizes

Benefits

The unique IMI Orton triple eccentric design eliminates friction between the disc seal ring and the seat in the body, thereby preventing wear and any consequent leakage. The result is a valve with a longer service life, in which all sealing elements (seal ring on the disc, seat ring on the body) are fully replaceable with the valve in-line.

- > Easy in-line maintenance
 - Inspection door allows quick access for inspection and maintenance
 - No need to remove actuator, bonnet or packaging
 - No special tools or big cranes required
- > Unique triple eccentric metal seat design
 - Prevents wear
 - Eliminates leakage
 - Longer service life
 - Allows for lower operating torques
 - Tight seal from bi-directional pressure
 - Conical and inclined
 - Corrosion and erosion resistant
- > One-piece shaft and disc arrangement
 - Minimal hysteresis
 - Improves flow capability
 - Reduces pressure drop



Full valve selection
available on our website

www.imi-critical.com

Typical applications

- > LNG liquefaction plants
- > LNG receiving regasification terminals
- > Cargo systems of LNG tankers
- > Aerospace ground support facilities

Product specification and dimensions

Materials

As suitable list or for all applications

Production range

2" – 120" ANSI Cl.150
2" – 80" ANSI Cl.300
3" – 60" ANSI Cl.600
6" – 48" ANSI Cl.900

Temperature limits

From -196°C (-320°F) up to
+426°C (+800°F)

Pressure limits

Up to +150 bar of shut off differential
pressure

Applicable standards

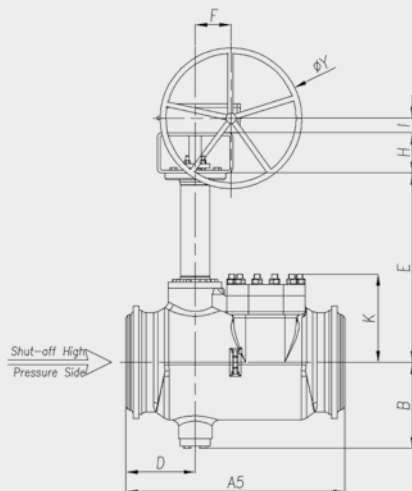
Design: ASME B16.34/ ASME VIII/ API 609
Double flanged connection: B16.5/ B16.47/
ASME VIII/ DIN/ ISO
Face to face: API 609/ ISO 5752/ custom
Butt weld connection: B16.25
Fire test: BS 6755-API607-ISO FDIS 10497
Testing API 598

Rating

ANSI Cl.150 – 300 – 600 and 900



66" cl. 150 actuated after cryo test



Other body styles available

- Double flanged
- Lug
- Butt-weld
- Butt-weld - Top entry (for in-line maintenance)
- Special execution on request

MV-BWT: Butt-Weld Top Entry (Class 150) dimensions

ND (inches)	ND (mm)	Dimension in mm										Weight (KG)
		A5	D	K	B	E	H	Handle length to spindle	I	ØY	F	
6"	150	535	150	183	175	427	100	247	29	250	52	124
8"	200	654	207	225	215	522	100	297	41	400	71	184
10"	250	700	223	250	247	560	120	305	42	500	86	244
12"	300	700	215	270	280	645	120	346	48	600	104.5	282
14"	350	744	240	295	315	672	140	346	48	600	104.5	352
16"	400	801	264	335	360	733	140	387	55	600	130	502
18"	450	808	261	365	395	813	140	447	55	700	211	615
20"	500	877	291	382	436	853	140	500	59	500	263	840
22"	550	883	290	410	490	950	140	500	59	700	263	900
24"	600	921	289	435	505	963	150	500	59	700	263	1030
26"	650	950	295	460	530	986	150	510	65	600	159	1091
28"	700	965	299	505	570	1032	200	658	74	700	169	1340
30"	750	1036	310	510	630	1162	200	658	74	700	169	1590
32"	800	1060	321	545	658	1191	200	673	100	700	293	1828
34"	850	1118	350	595	665	1195	200	673	100	700	293	1978
36"	900	1170	385	605	741	1261	200	696	115	700	285	2410
38"	950	1150	385	645	745	1264	200	696	115	700	285	2660
40"	1000	1150	410	690	795	1314	200	673	99	700	245	2833
42"	1050	1145	345	745	825	1293	200	673	99	700	245	3083
44"	1100	1180	358	785	873	1413	250	673	99	700	245	3283
46"	1150	1200	363	805	900	1463	250	696	100	700	245	3633
48"	1200	1220	372	816	940	1460	250	912	130	700	355	4250

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