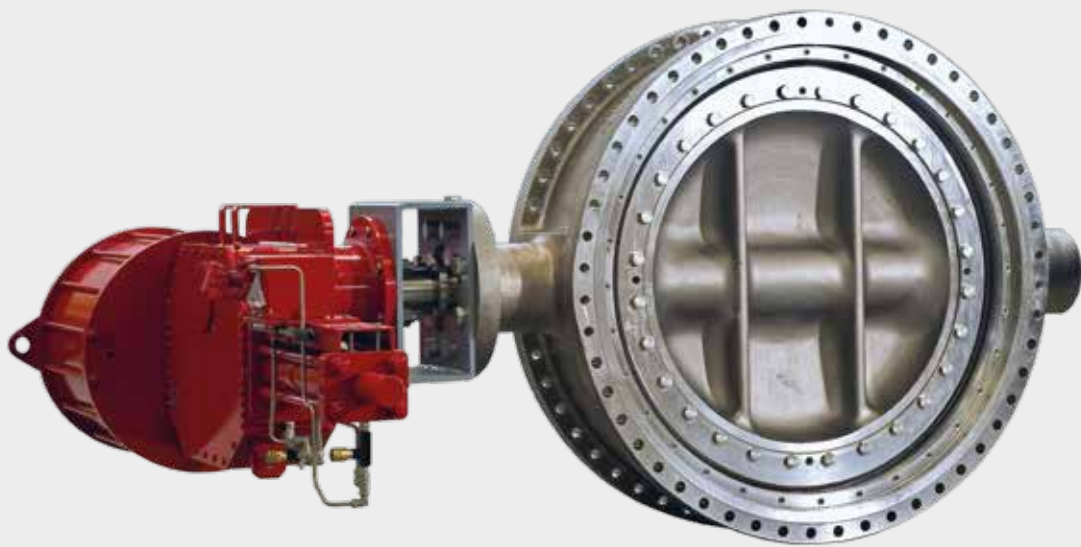


# MV Series



*Engineering  
GREAT Solutions*

**Triple Eccentric Metal  
Seated Valves**

# Triple Eccentric Metal Seated Valves

Customers worldwide specify our MV Series valves in their applications because of their unique combination of control, reliability and compactness. This makes them fit for purpose in critical high pressure, tight shut-off, high temperature or cryogenic, throttling and isolation duties.

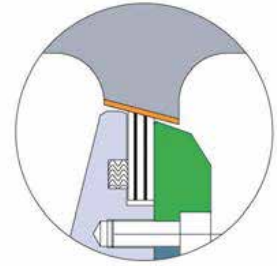
## Key features

- > Resilient metal-to-metal seal
- > Full metal construction
- > Zero leakage bi-directional tight shut-off
- > Quarter turn friction-free operation
- > Fire-safe and fire-tested
- > Integral external position indicator on valve shaft and body
- > Wide range of materials and sizes
- > Triple eccentric design
- > External anti-blowout device

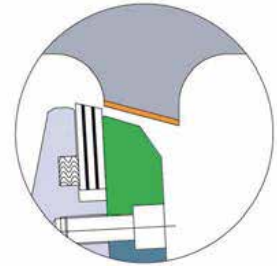
## Benefits

- > Unique triple eccentric metal seat design
  - Prevents wear
  - Zero leakage
  - Longer service life
  - Allows for lower operating torques
  - Tight seal from bi-directional pressure
  - Corrosion and erosion resistant
- > One-piece seat integrated body
  - Conical and inclined
  - Ultimate rigidity
  - Leak-free performance
  - Uninterrupted flange sealing surface
- > One-piece shaft and disc arrangement
  - Minimal hysteresis
  - Improves flow capability
  - Reduces pressure drop
- > Special bushings offer immunity to dirt and polymeric media creating a longer service life
- > Adjustable stuffing box allows flushing, additional sealing, leakage control or monitoring

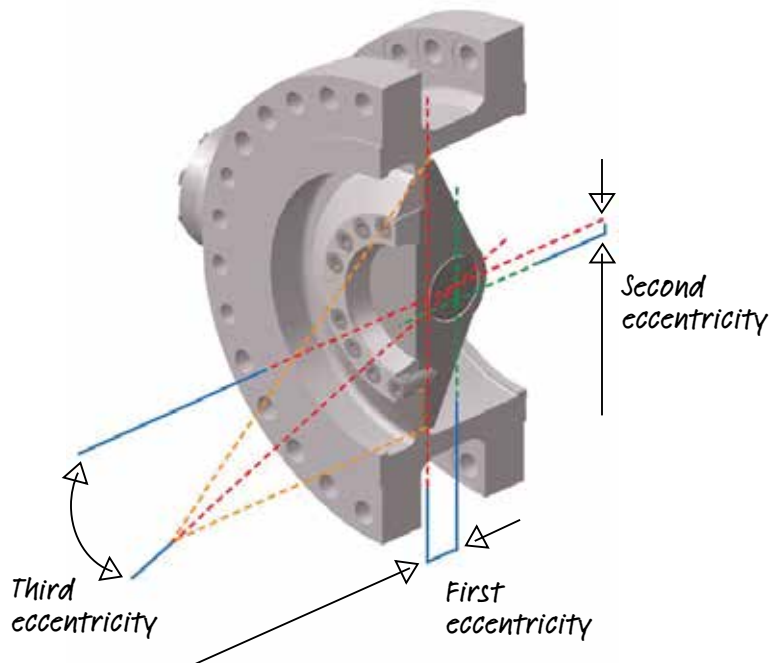
Tight shut-off sealing



Seal ring seated



Seal ring prior to seating



Unique triple eccentric design

## Typical applications

- > LNG
- > Process fluids
- > Hydrocarbons
- > Steam / geothermal steam
- > Hot gas / sour gas (NACE)
- > Oxygen / hydrogen
- > Blow down
- > Sulphur recovery
- > Acid / caustic / chloride
- > Abrasive service

*Full valve selection  
available on our website*

*[www.imi-critical.com](http://www.imi-critical.com)*

## Product Specification

### Materials

WCB  
CF8M, CF3M  
LCB, LCC, LC3  
Duplex  
Superduplex  
Monel  
Hastelloy  
254 SMO  
Alloy steel WC6, WC9  
Inconel  
Alloy 20  
Aluminium bronze  
Titanium  
C5, C12

### Body styles

See below

### Production range

ND 2" – 160" ANSI Cl.50  
ND 2" – 160" ANSI Cl.300  
ND 3" – 80" ANSI Cl.600  
ND 6" – 48" ANSI Cl.900  
ND 6" – 48" ANSI body in ANSI Cl.500 /  
ANSI Cl.2500 with ANSI Cl.900 trim

### Temperature limits

From -196°C (-320°F) up to  
+818°C (+1600°F)

### Pressure limits

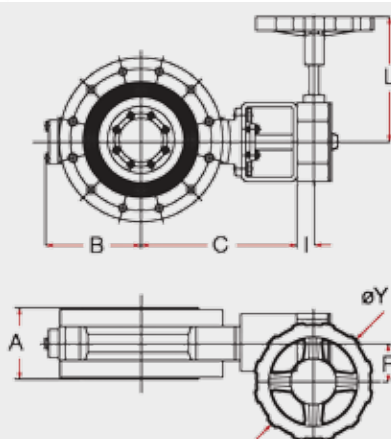
From full vacuum – up to +450 bar  
(2200 psi)

### Applicable standards

Design: ANSI B16.34/ ASME VIII/ API 609  
Face to face: API 609/ ISO 5752  
Double flanged connection: B16.5/ B16.47/  
ASME VIII/ DIN/ ISO  
Fire test: BS 6755-API607-ISO FDIS 10497  
Fugitive emission: ISO 150484-1  
Testing: API 598

### Rating

ANSI Cl.150 – 300 – 600 – 900 –  
1500 – 2500



### MVF: Double Flanged (Class 150) dimensions

Bore size	A	B	C	L	I	Y	F	Weight
2"	108	100	240	214	45	250	67	26
2 1/2"	112	130	240	214	45	250	67	26
3"	114	130	240	214	45	250	67	27
4"	127	135	255	214	45	250	67	31
5"	140	165	265	214	45	250	67	40
6"	140	190	280	214	45	250	67	49
8"	152	215	322	243	45	300	97	80
10"	165	250	380	243	45	300	97	106
12"	178	285	415	243	45	300	97	138
14"	190	315	462	380	48	500	88	182
16"	216	360	523	380	55	600	105	230
18"	222	395	554	440	55	500	123	287
20"	229	438	592	475	60	600	140	262
24"	267	505	663	520	65	600	165	510
26"	292	530	686	510	65	600	159	600
28"	292	575	782	544	74	600	217	730
30"	318	630	862	658	74	700	169	846
32"	318	630	862	658	74	700	169	970
34"	318	665	895	658	74	700	169	1186
36"	330	745	964	696	115	700	285	1337
40"	410	760	1014	696	115	700	285	1690

### Other body styles available

Double flanged ISO 5752  
Double flanged ANSI B 16-10 (gate)  
Wafer & lugged API 609  
Butt-weld

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