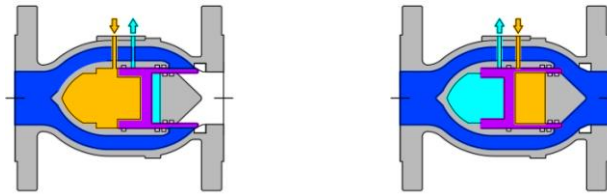


Integrated actuator valve control solution. A full range of matching MRV manual & pneumatic actuator arrangements are available for reliable On/Off and Control operation of your installation.

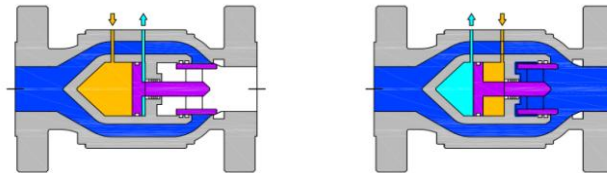
Depending on functional requirements a variety of control arrangements, MRV can be easily configured with components such as solenoid valves, quick exhaust valves, filter regulators, lock-up valves and volume boosters.

### Actuation

Low Pressure MRV  
(0 ~ 20 bar)



High Pressure MRV  
(0 ~ 100 bar)



### Specifications

Valve Size	Screw Type : 15A (1/2") ... 50A (2")		
	Flange Type : 15A (1/2") 15A (1/2") ... 300A (12") Other sizes available on request		
Max. Working Pressure	100bar over sizes available on request		
Temperature Range	NBR: -30 ... +80degC	Viton: up to +150degC	FPM: up to +200degC
Pressure Rating	JIS: 10K, 20K, 30K, 40K, 60K, 63K	ANSI: 150#, 300#, 600#, 900#, 1500#	>JIS100K or ANSI 1500#
End Connection	Thread	Flange	
Pneu. Port Connection	G1/8"	G1/4"	
Pneumatic Working Pressure <sup>1)</sup>	4.0 ... 8 bar		

<sup>1)</sup> Minimum operating pressures vary for single-acting actuators, depending on spring quality.

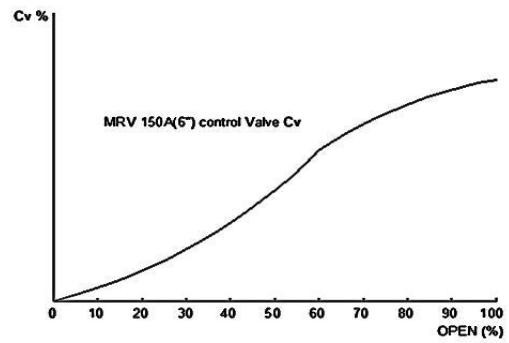
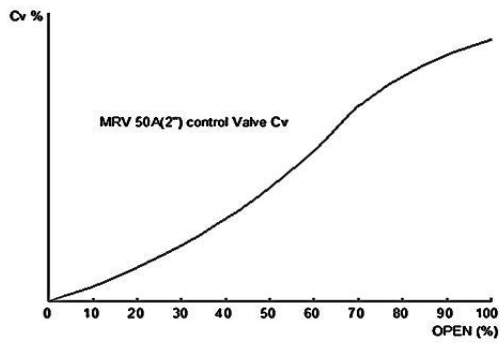
### Material

Valve Body:	SS304	SS316	Others available on request	
Seal:	NBR	VITON	FPM	Others available on request
Seat:	RTFE	PEEK	Metal	Others available on request
Valve Disc:	SS 304	SS 316	SS 304+hard facing	Others available on request

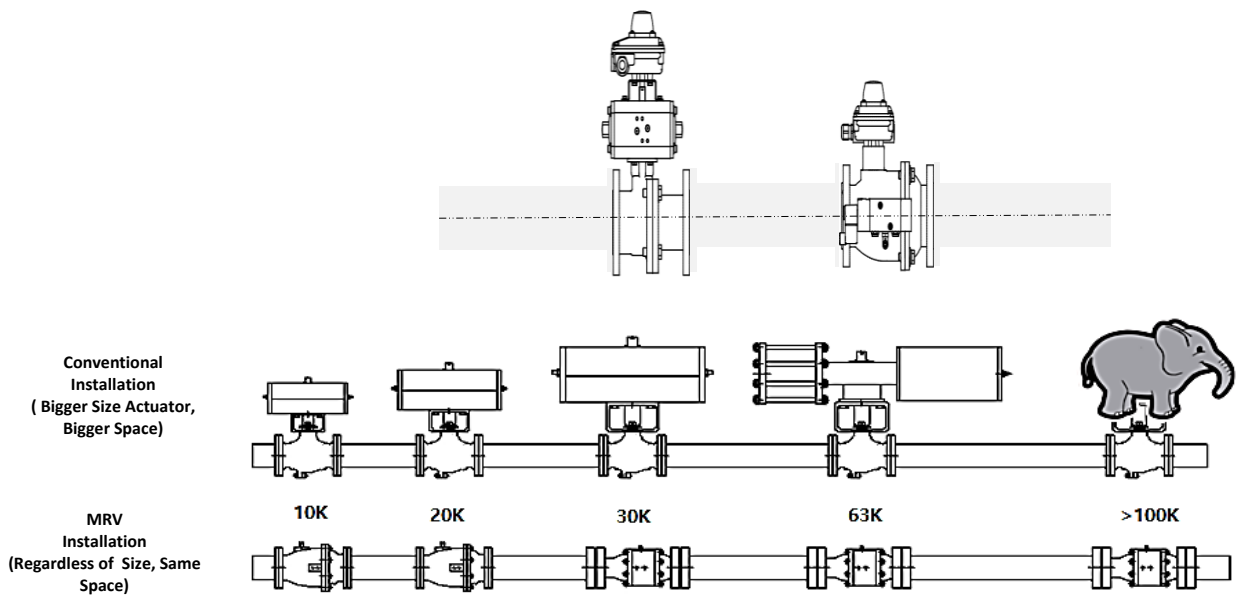
### CV Values

	15A	20A	25A	40A	50A	65A	80A	100A	125A	150A	200A	250A
MR1 :	13	23	26	42	52							
MR2 :		25	30	75	118	118	266	430	554	820	1092	1706
MRM :									554	820	1092	1706

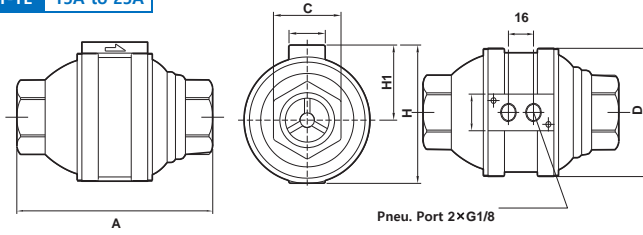
## CV Graph



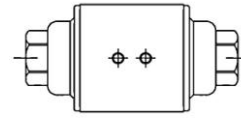
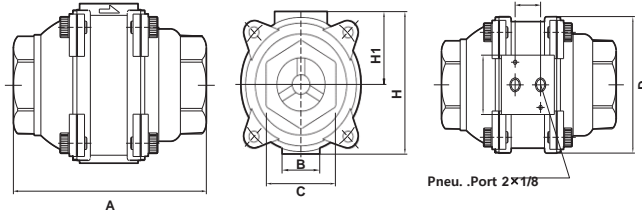
## Installation



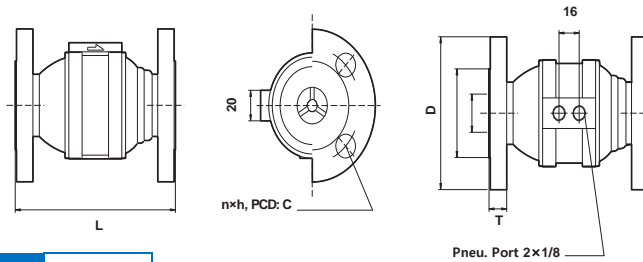
Valve Series	Model	Port	Function	P (bar)	Conn.	Indicator	Size	Remarks
<b>MR1</b> (Small Size)	MR1-TL	2-way	on-off	0~20	Thread	No	15A~50A	
	MR1-FL	2-way	on-off	0~20	Flange	No	15A~50A	
	MR1-TH	2-way	on-off	0~100	Thread	No	15A~50A	
	MR1-FH	2-way	on-off	0~100	Flange	No	15A~50A	
<b>MR2</b> (General Size)	MR2-TL	2-way	on-off	0~20	Thread	Rotary	20A~50A	
	MR2-FL	2-way	on-off/control	0~20	Flange	Rotary	20A~300A	
	MR2-TH	2-way	on-off	0~100	Thread	Rotary	20A~65A	
	MR2-FH	2-way	on-off/control	0~100	Flange	Rotary	20A~300A	
<b>MRM</b> (Manual Valve)	MRM-FL	2-way	Manual	0~20	Flange	Rotary	125A~300A	
	MRM-FH	2-way	Manual	0~100	Flange	Rotary	125A~300A	
<b>MR3</b> (3-way Valve)	MR3-TL	3-way	switching (L-port)	0~20	Thread	No	15A~50A	
	MR3-FL	3-way	switching (L-port)	0~20	Flange	No	15A~300A	
	MR3-TH	3-way	switching (L-port)	0~100	Thread	No	15A~50A	
	MR3-FH	3-way	switching (L-port)	0~100	Flange	No	15A~300A	

**MR1 (Thread, no indicator, 15A ~ 50A)**
**MR1-TL 15A to 25A**

**MR1-TH 15A to 50A**

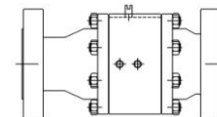
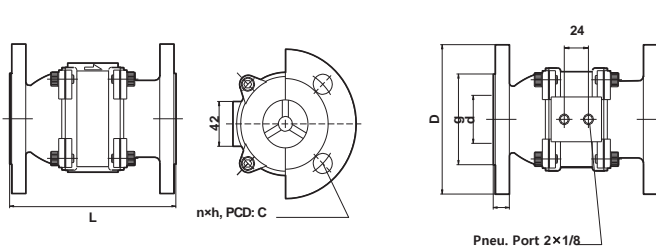
Dimension is available on request


**MR1-TL 32A to 50A**

**BSP/NPT**

Valve Size (mm/inch)	KG	L	B	C	D	H1	H	Connection
15A (1/2")	0.9	100	20	27	60	35	65	PT, NPT 1/2
20A (3/4")	1.6	130	20	39	70	41	76	PT, NPT 3/4
25A (1")	1.4	130	20	39	70	41	76	PT, NPT 1
32A (1-1/4")	3.5	165	42	55	96	52	102	PT, NPT 1-1/4
40A (1-1/2")	3.3	165	42	55	96	52	102	PT, NPT 1-1/2
50A (2")	3.8	165	42	70	96	52	102	PT, NPT 2

**MR1 (Flange, no indicator, 15A ~ 50A)**
**MR1-FL 15A to 25A**

**MR1-FH 15A to 50A**

Dimension is available on request

**MR1-FL 32A to 50A**

**JIS 10K**

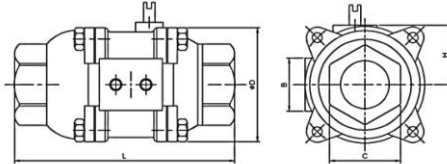
Valve Size (mm/inch)	KG	L	d	D	g	C	T	n	h
15A (1/2")	2.2	108	15	95	52	70	12	4	15
20A (3/4")	3.2	117	20	100	58	75	14	4	15
25A (1")	3.8	127	25	125	70	90	14	4	19
32A (1-1/4")	6.0	140	32	135	80	100	16	4	19
40A (1-1/2")	6.3	165	40	140	85	105	16	4	19
50A (2")	7.1	178	45	155	100	120	16	4	19
65A (2-1/2")	8.4	190	65	175	120	140	18	4	19

**JIS 20K**

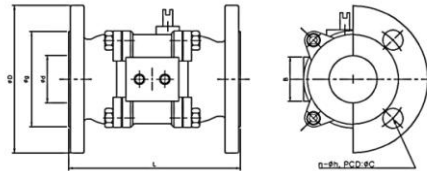
Valve Size (mm/inch)	KG	L	d	D	g	C	T	n	h
15A (1/2")	2.8	140	15	95	52	70	14	4	15
20A (3/4")	3.5	152	20	100	58	75	16	4	15
25A (1")	4.4	165	25	125	70	90	16	4	19
32A (1-1/4")	6.5	178	32	135	80	100	18	4	19
40A (1-1/2")	6.9	190	40	140	85	105	18	4	19
50A (2")	7.5	216	45	155	100	120	18	8	19
65A (2-1/2")	9.5	241	65	175	120	140	20	8	19

**MR2 (Thread, Rotary indicator, 20A ~ 50A)**
**MR2-TL 20A to 50A**
**MR2-TH 15A to 50A**

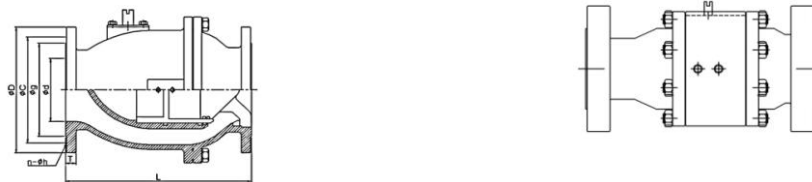
Dimension is available on request


**BSP/NPT**

Valve Size (mm/inch)	KG	L	B	C	D	H	Pneu. Port	Connection	Connection
20A (3/4")	2.3	145	42	39	80	41	2-1/8	PT, NPT	3/4
25A (1")	2.1	145	42	39	80	41	2-1/8	PT, NPT	1
32A (1-1/4")	4.6	190	42	55	104	52	2-1/4	PT, NPT	1-1/4
40A (1-1/2")	4.2	190	42	55	104	52	2-1/4	PT, NPT	1-1/2
50A (2")	4.9	190	42	70	104	52	2-1/4	PT, NPT	2

**MR2 (Flange, Rotary indicator, 20A ~ 300A)**
**MR2-FL 20A to 65A**

**MR2-FH 20A to 300A**

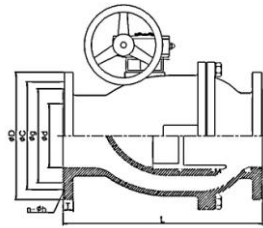
Dimension is available on request

**MR2-FL 125A to 300A**

**JIS 10K**

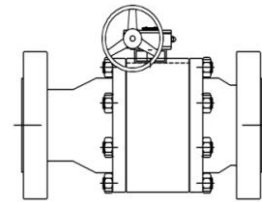
Valve Size (mm/inch)	KG	L	d	D	g	C	T	n	h
20A (3/4")	4.2	117	20	100	58	75	14	4	15
25A (1")	4.5	127	25	125	70	90	14	4	19
32A (1-1/4")	5.0	140	25	135	80	100	16	4	19
40A (1-1/2")	6.4	165	47	140	85	105	16	4	19
50A (2")	7.2	178	47	155	100	120	16	4	19
65A (2-1/2")	8.3	190	47	175	120	140	18	4	19
80A (3")	15.6	203	75	185	130	150	18	8	19
100A (4")	21.0	229	95	210	155	175	18	8	19
125A (5")	51.0	356	120	250	185	210	20	8	23
150A (6")	67.2	394	150	280	215	240	22	8	23
200A (8")	110.0	457	200	330	265	290	22	12	23
250A (10")	180.6	533	250	400	325	355	24	12	25
300A (12")	209.2	610	250	445	370	400	24	16	25

**JIS 20K**

Valve Size (mm/inch)	KG	L	d	D	g	C	T	n	h
20A (3/4")	4.6	152	25	100	58	75	16	4	15
25A (1")	4.9	165	25	125	70	90	16	4	19
32A (1-1/4")	5.4	178	47	135	80	100	18	4	19
40A (1-1/2")	6.6	190	47	140	85	105	18	4	19
50A (2")	7.6	216	47	155	100	120	18	8	19
65A (2-1/2")	8.8	241	47	175	120	140	20	8	19
80A (3")	19.6	283	75	200	135	160	22	8	23
100A (4")	30.0	305	95	225	160	185	24	8	23
125A (5")	58.4	381	125	270	195	225	26	8	25
150A (6")	74.4	403	150	305	230	260	28	12	25
200A (8")	125.0	502	200	350	275	305	30	12	25
250A (10")	202.6	568	250	430	345	380	34	12	27
300A (12")	237.0	648	250	480	395	430	36	16	27

**MRM (Flange, Manual, 125A ~ 300A)**
**MRM-FL 125A to 300A**

**MRM-FH 125A to 300A**

Dimension is available on request


**JIS 10K**

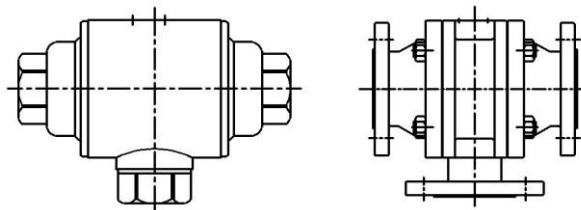
Valve Size (mm/inch)	KG	L	d	D	g	C	T	n	h
125A (5")	51.0	356	120	250	185	210	20	8	23
150A (6")	67.2	394	150	280	215	240	22	8	23
200A (8")	110.0	457	200	330	265	290	22	12	23
250A (10")	180.6	533	250	400	325	355	24	12	25
300A (12")	209.2	610	250	445	370	400	24	16	25

**JIS 20K**

Valve Size (mm/inch)	KG	L	d	D	g	C	T	n	h
125A (5")	58.4	381	120	270	195	225	26	8	25
150A (6")	74.4	403	150	305	230	260	28	12	25
200A (8")	125.0	502	200	350	275	305	30	12	25
250A (10")	202.6	568	250	430	345	380	34	12	27
300A (12")	237.0	648	250	480	395	430	36	16	27

**MR3 (Thread / Flange, no indicator, 15A ~ 300A)**
**MR3-TL 15A to 50A**
**MR3-TH 15A to 50A**
**MR3-FL 15A to 300A**
**MR3-FH 15A to 300A**

MR3's Dimensions are available on request



**!** Technical design of the valves are based on both media and application requirement. It may lead to deviations on the general specifications shown on the data sheet with regards to the design, sealing materials and characteristics.