



Manufacturer of Controls & Control Valves for Industrial Refrigeration

Made in India for the world Since 1978

HIGH PRESSURE STAINLESS STEEL VALVE SERIES



**MAXIMUM
WORKING
PRESSURE
150 BAR**



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HIGH PRESSURE STOP VALVES

TYPE MHPSV-SS

INTRODUCTION

For installations in seaside areas and outdoor applications where the air is highly humid and corrosive, Stainless Steel Valves are recommended which provide elevated surface protection against corrosion. These valves are also recommended in applications where regular surface treatment is carried out to prevent fungal and bacterial growth.

The Manik MHPSV-SS Valves have been specially design for such applications.

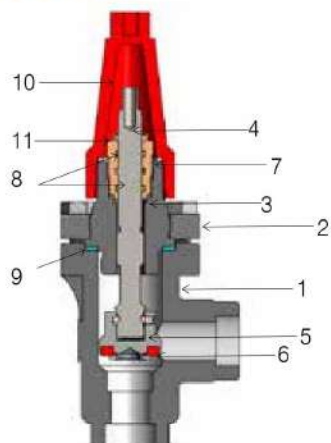
The MHPSV-SS Stop Valves are refrigerant shut-off valves designed to be socket-welded or butt-welded directly to steel piping, thereby eliminating potential leaky flanges or threaded joints and simplifying installation. These valves fit all requirements of the latest refrigeration technology and have desired flow characteristics with a low pressure drop design. The MHPSV-SS has specialised internal back- seating support which allows the shaft seal (packing gland) to be replaced while the valve is still under working condition. Interchangeable handwheel or seal cap available. These valves are available in angle and globe types. The Teflon seat lends durability to the seating surface.

DESIGN FEATURES

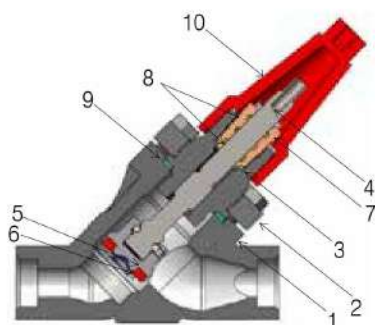
- Maximum working pressure: 150 Bar g (1160 psi g)
- Fluid temperature range: -60°C to + 150°C (-76°F to 302°F)
- Application: Ammonia, Fluorocarbons, Carbon Dioxide
- Material: Body: CF8 Cast Stainless Steel Body
- Internals: SS304
- Seat: PTFE
- Connections: DN-10-40 – Socket/Butt Weld
- DN 50-200 – Butt Weld.
- Reliable Back Seating.

MATERIAL SPECIFICATION

MHPSV-SS 10-40



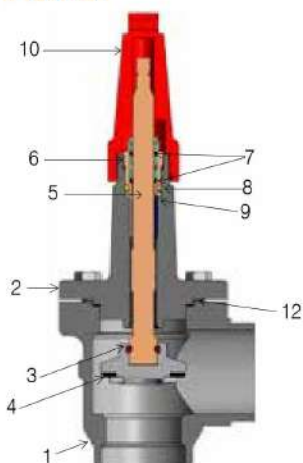
MHPSV-SS 10-40 ANG



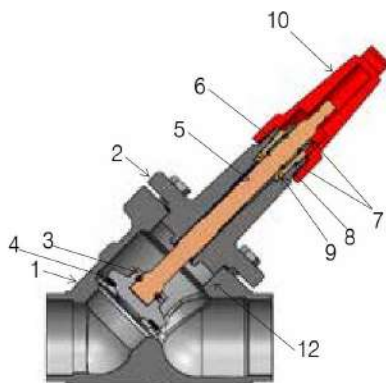
MHPSV-SS 10-40 STR

SR. NO.	PART	MATERIAL	EN
1	Housing/valve body	Stainless Steel	GX5CrNi19-10
2	Bonnet flange	Stainless Steel	GX5CrNi19-10
3	Bonnet insert	Stainless Steel	X5CrNi18-10
4	Spindle	Stainless steel	X5CrNi18-10
5	Cone	Stainless Steel	X5CrNi18-10
6	Cone seal	Teflon	PTFE
7	Packing gland	Stainless steel	X5CrNi18-10
8	O ring in packing gland	Rubber	Neoprene
9	Gasket	Non asbestos, Non metallic	
10	Seal cap	Aluminium	
11	Gasket for seal cap	Nylon	Nylon 6
12	Handwheel	Stainless Steel	GX5CrNi19-10

MHPSV-SS 50-65



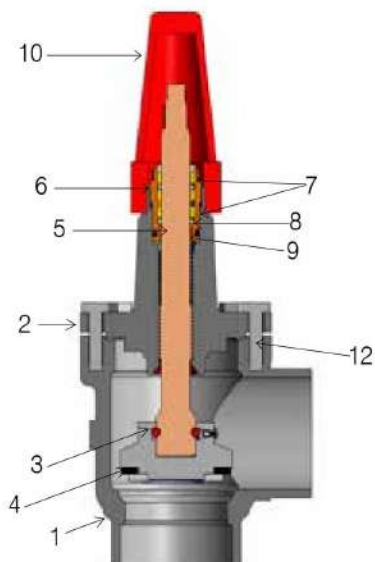
MHPSV-SS 50-65 ANG



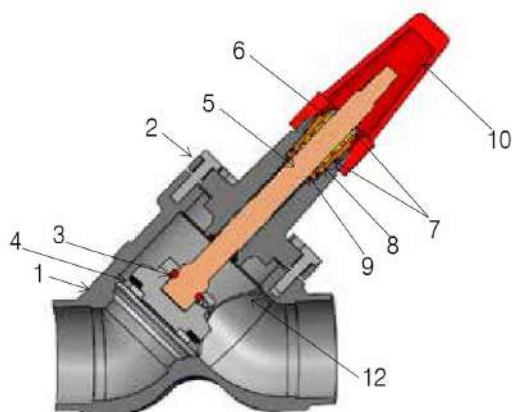
MHPSV-SS 50-65 STR

SR. NO.	PART	MATERIAL	EN
1	Housing/valve body	Stainless Steel	GX5CrNi19-10
2	Valve bonnet	Stainless Steel	GX5CrNi19-10
3	Cone	Stainless steel	X5CrNi18-10
4	Cone seal	Teflon	PTFE
5	Spindle	Stainless steel	X5CrNi18-10
6	Packing gland	Stainless steel	X5CrNi18-10
7	O ring in packing gland	Rubber	Neoprene
8	O ring on packing gland	Rubber	Neoprene
9	Packing washer	Stainless steel	X5CrNi18-10
10	Seal cap	Aluminium	AL LM24
11	Gasket for seal cap	Non asbestos, Non metallic	NYLON 6
12	Gasket	Non asbestos, Non metallic	
13	Handwheel	Stainless Steel	GX5CrNi19-10

MHPSV-SS 80-200



MHPSV -SS 80-200 ANG



MHPSV-SS 80-200 STR

SR. NO.	PART	MATERIAL	EN
1	Housing/valve body	Stainless Steel	GX5CrNi19-10
2	Valve bonnet	Stainless Steel	GX5CrNi19-10
3	Cone	Stainless steel	X5CrNi18-10
4	Cone seal	Teflon	PTFE
5	Spindle	Stainless steel	X5CrNi18-10
6	Packing gland	Stainless steel	X5CrNi18-10
7	O ring in packing gland	Rubber	Neoprene
8	O ring on packing gland	Rubber	Neoprene
9	Packing washer	Stainless steel	X5CrNi18-10
10	Seal cap	Aluminium	AL LM24
11	Gasket for seal cap	Non asbestos, Non metallic	NYLON 6
12	Gasket	Non asbestos, Non metallic	
13	Handwheel	Stainless Steel	GX5CrNi19-10

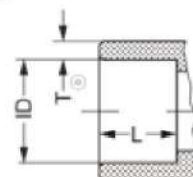
CONNECTIONS

Size		ID	T	ID	T	L	L	K _v -angle	K _v -straight
mm	Inch	mm	mm	Inch	Inch	mm	Inch	m ³ /h	m ³ /h

Socket welding ANSI (B16.11)

10	3/8	17.3	3.1	0.68	0.12	8	0.31	4.5	3.2
15	1/2	21.8	6	0.858	0.235	10	0.39	7.0	5.0
20	3/4	27.2	4.6	1.071	0.181	13	0.51	14.6	10.5
25	1	33.9	7.2	1.335	0.284	13	0.51	24.8	17.5
32	1 1/4	42.7	6.1	1.743	0.24	13	0.51	42.6	30.0
40	1 1/2	48.8	6.6	1.921	0.26	13	0.51	45.2	32.0

SOC

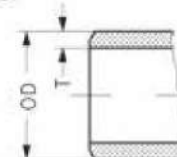


Size		OD	T	OD	T	K _v -angle	K _v -straight
mm	Inch	mm	mm	Inch	Inch	m ³ /h	m ³ /h

Butt-weld ANSI (B 36.10 Schedule 40)

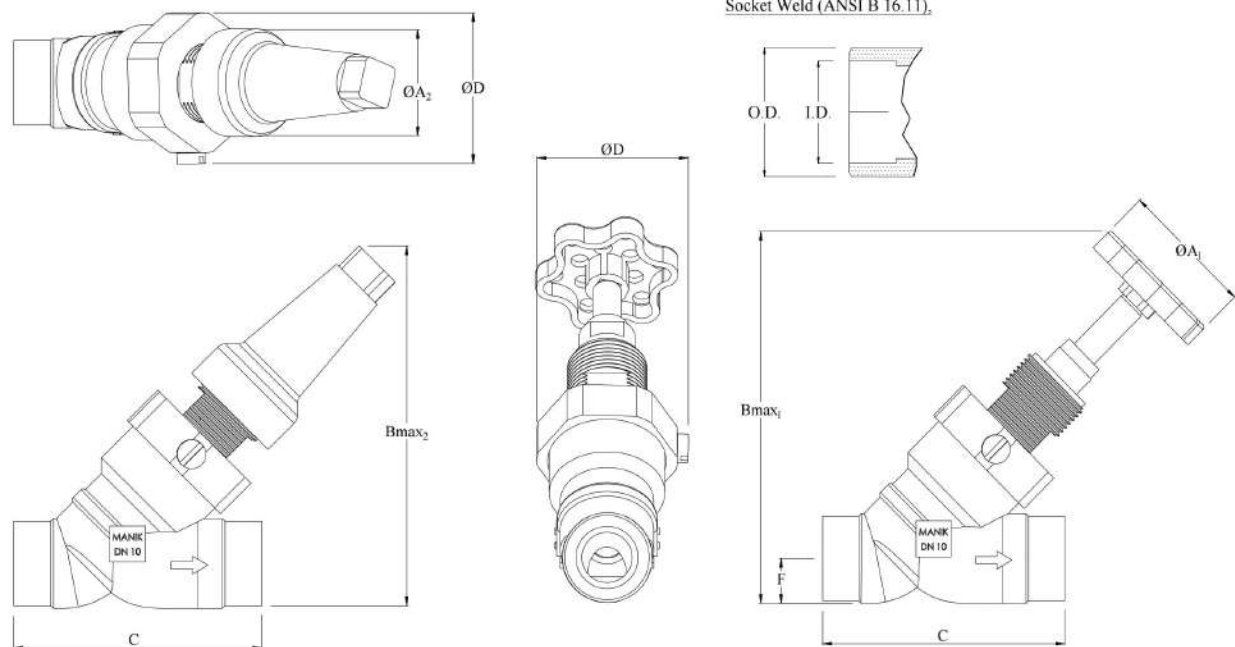
50	2	60.3	3.9	2.37	0.15	80	67.5
65	2 1/2	73.0	5.2	2.87	0.20	120	97.5
80	3	88.9	5.5	3.50	0.22	182	152.5
100	4	114.3	6.0	4.50	0.24	313	278.5
125	5	141.3	6.6	5.56	0.26	514	470.5
150	6	168.3	7.1	6.63	0.28	785	597.5
200	8	219.1	8.2	8.63	0.32	1168	1024.5

ANSI



DIMENSIONS

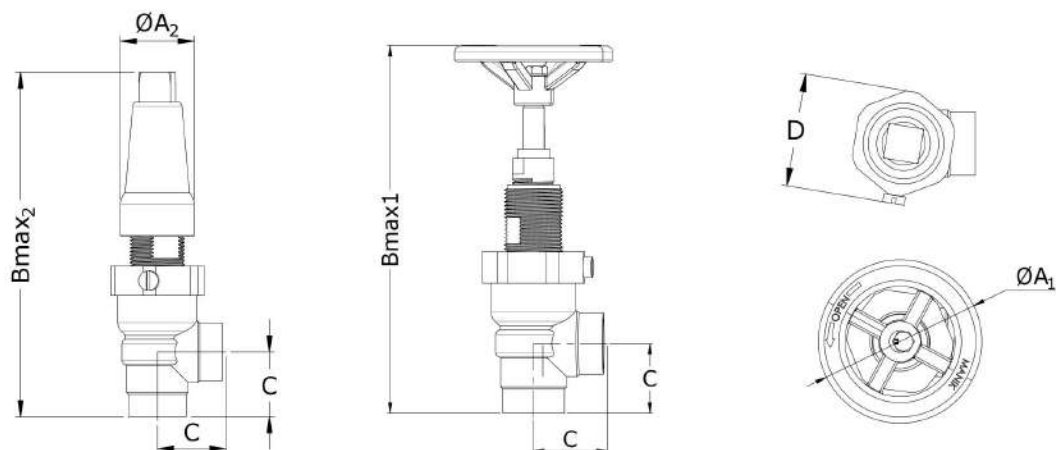
MHPSV-SS 10 SOC GLOBE



Socket Weld ANSI (B 16.11), DN 10 (3/8 in.)

DIMENSION MHPSV-SS	DIM. O.D. (mm)	DIM. I.D. (mm)	DIM. A ₁ (mm)	DIM. A ₂ (mm)	DIM. Bmax ₁ (mm)	DIM. Bmax ₂ (mm)	DIM. C (mm)	DIM. D (mm)	DIM. F (mm)
MHPSV-SS 10	23.5	17.3	60	38	110	105	61	42	13

MHPSV-SS 10 SOC ANG

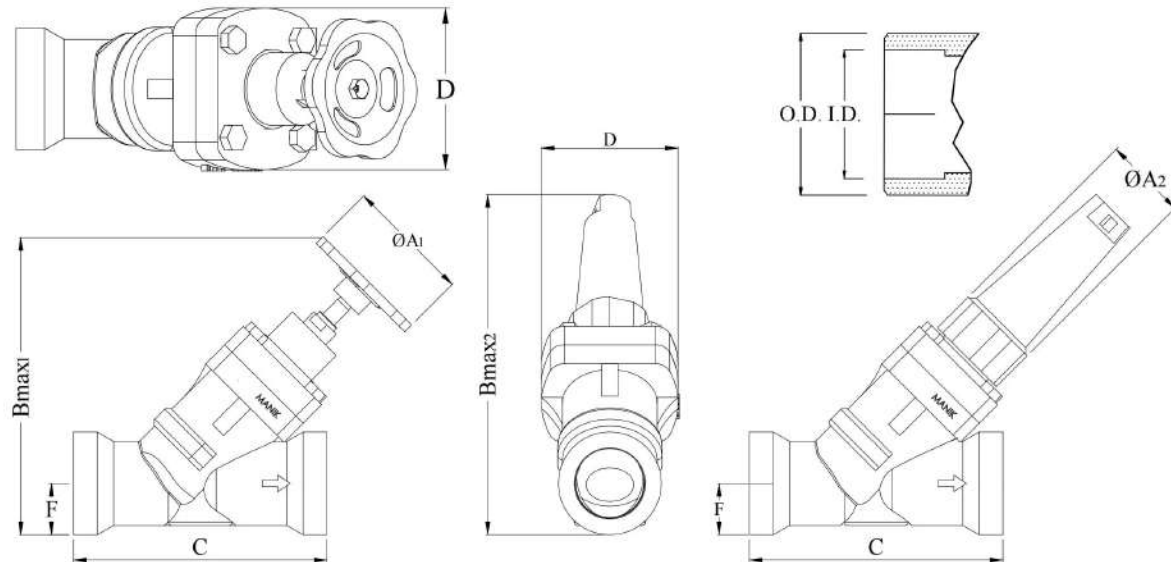


Socket Weld ANSI (B 16.11), DN 10 (3/8 in.)

DIMENSION MHPSV-SS	DIM. O.D. (mm)	DIM. I.D. (mm)	DIM. A ₁ (mm)	DIM. A ₂ (mm)	DIM. Bmax ₁ (mm)	DIM. Bmax ₂ (mm)	DIM. C (mm)	DIM. D (mm)
MHPSV-SS 10	23.5	17.3	30	30	141	141	26.5	42

MHPSV-SS 15-40 SOC GLOBE

Socket Weld (ANSI B 16.11).

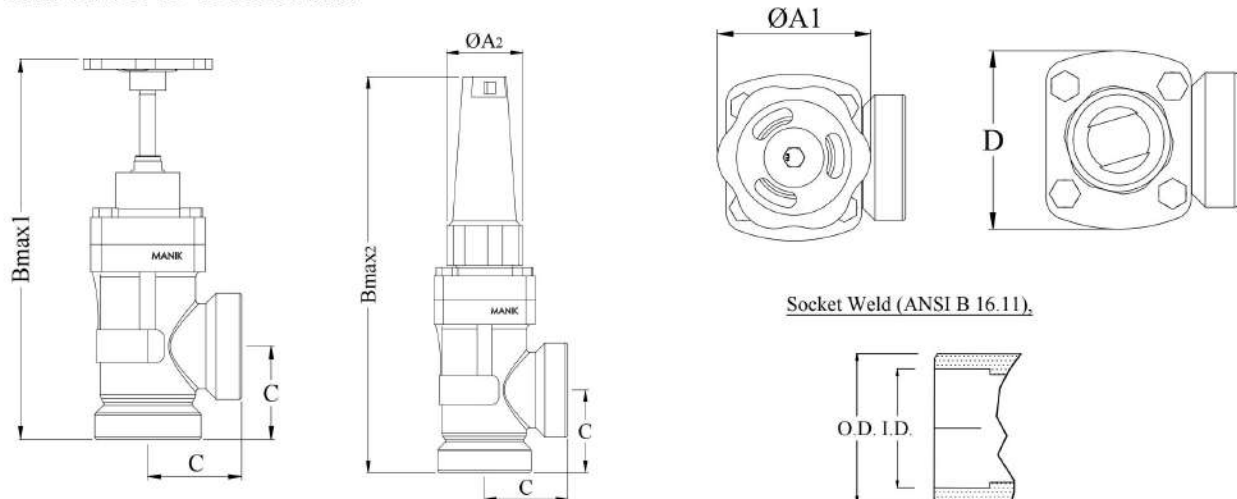


Socket Weld ANSI (B 16.11), DN 15-40 (½ - 1½ in.)

DIMENSION MHPSV-SS	DIM. O.D. (mm)	DIM. I.D. (mm)	DIM. A ₁ (mm)	DIM. A ₂ (mm)	DIM. Bmax ₁ (mm)	DIM. Bmax ₂ (mm)	DIM. C (mm)	DIM. D (mm)	DIM. F (mm)
MHPSV-SS 15	33.8	21.8	60	38	160	150	121	72	16.9
MHPSV-SS 20	36.4	27.2	60	38	160	150	121	72	18.2
MHPSV-SS 25	48.3	33.9	80	50	235	270	160	90	24.2
MHPSV-SS 32	54.9	42.7	80	50	235	270	160	90	27.5
MHPSV-SS 40	62.0	48.8	80	50	235	270	160	90	31.0

MHPSV-SS 15-40 SOC ANG

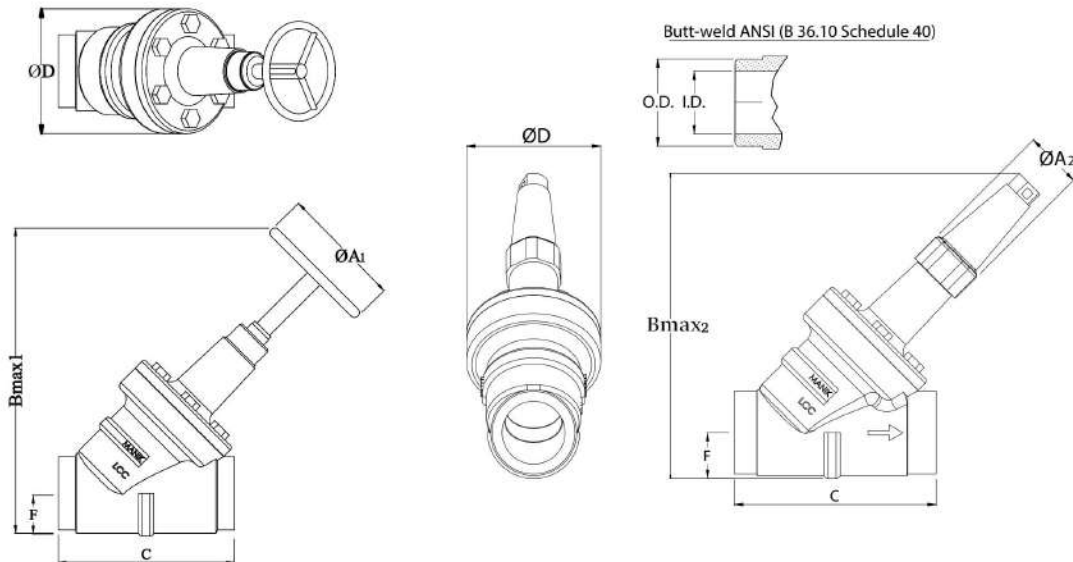
Socket Weld (ANSI B 16.11).



Socket Weld ANSI (B 16.11), DN 15-40 (½ - 1½ in.)

DIMENSION MHPSV-SS	DIM. O.D. (mm)	DIM. I.D. (mm)	DIM. A ₁ (mm)	DIM. A ₂ (mm)	DIM. Bmax ₁ (mm)	DIM. Bmax ₂ (mm)	DIM. C (mm)	DIM. D (mm)
MHPSV-SS 15	33.8	21.8	60	38	180	192	45.0	72
MHPSV-SS 20	36.4	27.2	60	38	180	192	45.0	72
MHPSV-SS 25	48.3	33.9	80	50	235	270	55.0	90
MHPSV-SS 32	54.9	42.7	80	50	235	270	55.0	90
MHPSV-SS 40	62.0	48.8	80	50	235	270	55.0	90

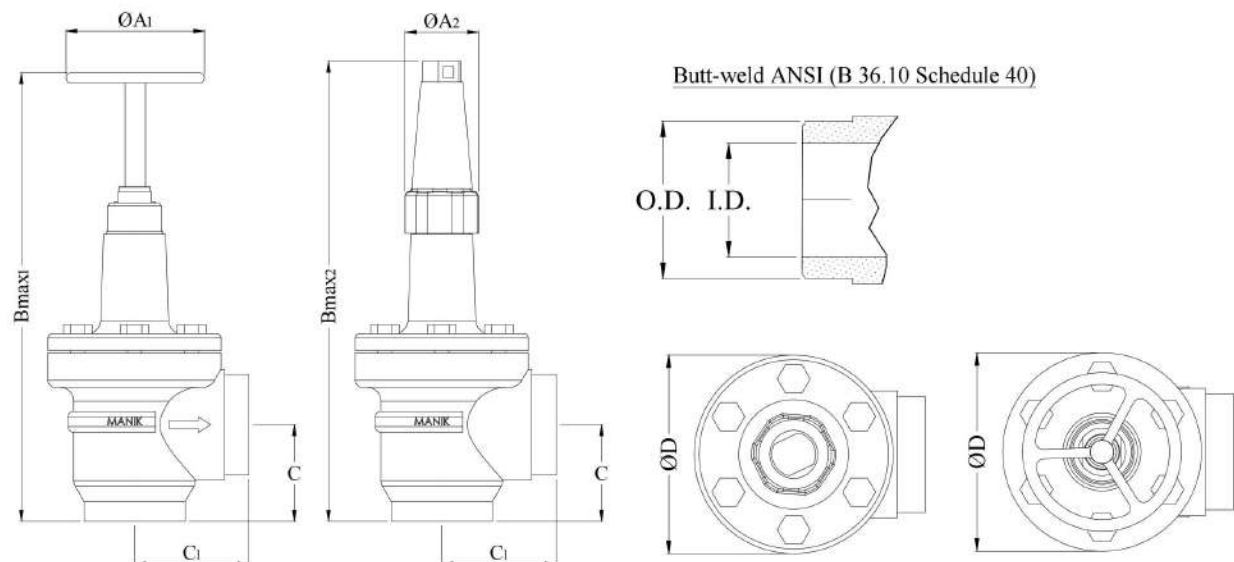
MHPSV-SS 50-65 BW GLOBE



Butt-weld ANSI (B 36.10 Schedule 40), DN 50 - 65 (2 - 2½ in.)

DIMENSION MHPSV-SS	DIM. O.D. (mm)	DIM. I.D. (mm)	DIM. A ₁ (mm)	DIM. A ₂ (mm)	DIM. Bmax ₁ (mm)	DIM. Bmax ₂ (mm)	DIM. C (mm)	DIM. D (mm)	DIM. F (mm)
MHPSV-SS 50	60.3	52.5	100	50	260	265	168	110	32
MHPSV-SS 65	73.0	62.6	100	50	285	290	184	125	40

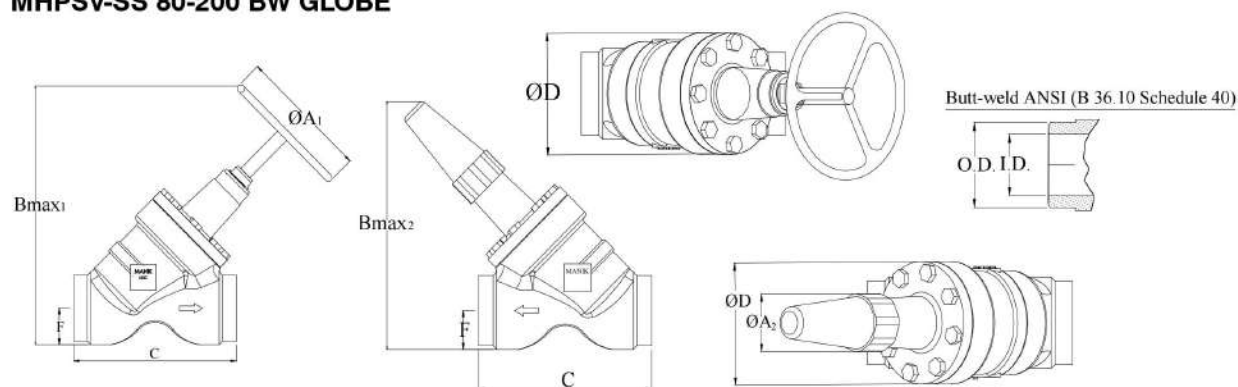
MHPSV-SS 50-65 BW ANG



Butt-weld ANSI (B 36.10 Schedule 40), DN 50 - 65 (2 - 2½ in.)

DIMENSION MHPSV-SS	DIM. O.D. (mm)	DIM. I.D. (mm)	DIM. A ₁ (mm)	DIM. A ₂ (mm)	DIM. Bmax ₁ (mm)	DIM. Bmax ₂ (mm)	DIM. C (mm)	DIM. D (mm)	DIM. F (mm)
MHPSV-SS 50	60.3	52.5	100	50	284	315	60.0	72.5	110
MHPSV-SS 65	73.0	62.6	100	50	310	335	70	82.5	125

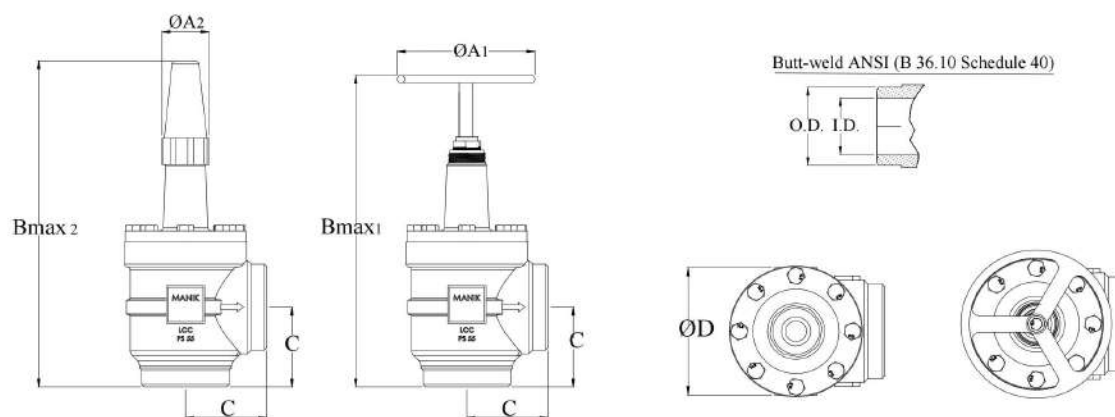
MHPSV-SS 80-200 BW GLOBE



Butt-weld ANSI (B 36.10 Schedule 40), DN 80 - 200 (3 - 8 in.) GLOBE

DIMENSION MHPSV-SS	DIM. O.D. (mm)	DIM. I.D. (mm)	DIM. A ₁ (mm)	DIM. A ₂ (mm)	DIM. Bmax ₁ (mm)	DIM. Bmax ₂ (mm)	DIM. C (mm)	DIM. D (mm)	DIM. F (mm)
MHPSV-SS 80	88.9	77.9	200	58	367	322	216	129	48
MHPSV-SS 100	114.3	102.3	250	58	443	375	264	156	60
MHPSV-SS 125	141.3	128.1	315	74	538	456	322	193	74
MHPSV-SS 150	168.3	154.1	315	74	594	505	370	219	91
MHPSV-SS 200	219.1	202.7	400	86	726	613	464	276	117

MHPSV-SS 80-200 BW ANG



Butt-weld ANSI (B 36.10 Schedule 40), DN 80 - 200 (3 - 8 in.) ANG

DIMENSION MHPSV-SS	DIM. O.D. (mm)	DIM. I.D. (mm)	DIM. A ₁ (mm)	DIM. A ₂ (mm)	DIM. Bmax ₁ (mm)	DIM. Bmax ₂ (mm)	DIM. C (mm)	DIM. D (mm)
MHPSV-SS 80	88.9	77.9	200	58	388	373	90	129
MHPSV-SS 100	114.3	102.3	250	58	437	432	106	156
MHPSV-SS 125	141.3	128.1	315	74	533	517	128	193
MHPSV-SS 150	168.3	154.1	315	74	568	564	145	219
MHPSV-SS 200	219.1	202.7	400	86	678	675	180	276

ORDERING INFO

GLOBE		Size		End Connection	Weight (Kg)
Hand Wheel	Cap	Inch	mm		
MHPSV-SS-10-G-H-S	MHPSV-SS-10-G-C-S	$\frac{3}{8}$ "	10	Socket Weld	1.2
MHPSV-SS-10-G-H-B	MHPSV-SS-10-G-C-B			Butt Weld	1.2
MHPSV-SS-15-G-H-S	MHPSV-SS-15-G-C-S	$\frac{1}{2}$ "	15	Socket Weld	2.6
MHPSV-SS-15-G-H-B	MHPSV-SS-15-G-C-B			Butt Weld	2.4
MHPSV-SS-20-G-H-S	MHPSV-SS-20-G-C-S	$\frac{3}{4}$ "	20	Socket Weld	2.6
MHPSV-SS-20-G-H-B	MHPSV-SS-20-G-C-B			Butt Weld	2.4
MHPSV-SS-25-G-H-S	MHPSV-SS-25-G-C-S	1"	25	Socket Weld	4.6
MHPSV-SS-25-G-H-B	MHPSV-SS-25-G-C-B			Butt Weld	4.2
MHPSV-SS-32-G-H-S	MHPSV-SS-32-G-C-S	1- $\frac{1}{4}$ "	32	Socket Weld	4.6
MHPSV-SS-32-G-H-B	MHPSV-SS-32-G-C-B			Butt Weld	4.2
MHPSV-SS-40-G-H-S	MHPSV-SS-40-G-C-S	1- $\frac{1}{2}$ "	40	Socket Weld	4.6
MHPSV-SS-40-G-H-B	MHPSV-SS-40-G-C-B			Butt Weld	4.4
MHPSV-SS-50-G-H-B	MHPSV-SS-50-G-C-B	2"	50	Butt Weld	7.4
MHPSV-SS-65-G-H-B	MHPSV-SS-65-G-C-B	2- $\frac{1}{2}$ "	65	Butt Weld	9.5
MHPSV-SS-80-G-H-B	MHPSV-SS-80-G-C-B	3"	80	Butt Weld	14.7
MHPSV-SS-100-G-H-B	MHPSV-SS-100-G-C-B	4"	100	Butt Weld	25
MHPSV-SS-125-G-H-B	MHPSV-SS-125-G-C-B	5"	125	Butt Weld	40.8
MHPSV-SS-150-G-H-B	MHPSV-SS-150-G-C-B	6"	150	Butt Weld	62.5
MHPSV-SS-200-G-H-B	MHPSV-SS-200-G-C-B	8"	200	Butt Weld	112

ANGLE		Size		End Connection	Weight (Kg.)
Hand Wheel	Cap	Inch	mm		
MHPSV-SS-10-A-H-S	MHPSV-SS-10-A-C-S	$\frac{3}{8}$ "	10	Socket Weld	1.0
MHPSV-SS-10-A-H-B	MHPSV-SS-10-A-C-B			Butt Weld	1.0
MHPSV-SS-15-A-H-S	MHPSV-SS-15-A-C-S	$\frac{1}{2}$ "	15	Socket Weld	2.1
MHPSV-SS-15-A-H-B	MHPSV-SS-15-A-C-B			Butt Weld	1.9
MHPSV-SS-20-A-H-S	MHPSV-SS-20-A-C-S	$\frac{3}{4}$ "	20	Socket Weld	2.1
MHPSV-SS-20-A-H-B	MHPSV-SS-20-A-C-B			Butt Weld	1.9
MHPSV-SS-25-A-H-S	MHPSV-SS-25-A-C-S	1"	25	Socket Weld	3.6
MHPSV-SS-25-A-H-B	MHPSV-SS-25-A-C-B			Butt Weld	3.4
MHPSV-SS-32-A-H-S	MHPSV-SS-32-A-C-S	1- $\frac{1}{4}$ "	32	Socket Weld	3.6
MHPSV-SS-32-A-H-B	MHPSV-SS-32-A-C-B			Butt Weld	3.4
MHPSV-SS-40-A-H-S	MHPSV-SS-40-A-C-S	1- $\frac{1}{2}$ "	40	Socket Weld	3.6
MHPSV-SS-40-A-H-B	MHPSV-SS-40-A-C-B			Butt Weld	3.4
MHPSV-SS-50-A-H-B	MHPSV-SS-50-A-C-B	2"	50	Butt Weld	5.6
MHPSV-SS-65-A-H-B	MHPSV-SS-65-A-C-B	2- $\frac{1}{2}$ "	65	Butt Weld	7.4
MHPSV-SS-80-A-H-B	MHPSV-SS-80-A-C-B	3"	80	Butt Weld	13.3
MHPSV-SS-100-A-H-B	MHPSV-SS-100-A-C-B	4"	100	Butt Weld	21
MHPSV-SS-125-A-H-B	MHPSV-SS-125-A-C-B	5"	125	Butt Weld	33.8
MHPSV-SS-150-A-H-B	MHPSV-SS-150-A-C-B	6"	150	Butt Weld	38.3
MHPSV-SS-200-A-H-B	MHPSV-SS-200-A-C-B	8"	200	Butt Weld	80



HIGH PRESSURE REGULATING VALVES

TYPE MHPRG-A-SS AND MHPRG-B-SS

INTRODUCTION

For installations in seaside areas and outdoor applications where the air is highly humid and corrosive, Stainless Steel Valves are recommended which provide elevated surface protection against corrosion. These valves are also recommended in applications where regular surface treatment is carried out to prevent fungal and bacterial growth.

The Manik MHPRG-SS Valves have been specially design for such applications.

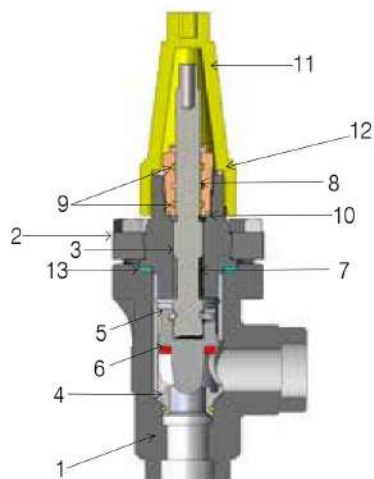
There are two types of MHPRG-SS hand regulating valve MHPRG-A-SS and MHPRG-B-SS are ideal for metering or flashing expansion of liquid refrigerants. These valves are available in angle and globe types. These valves have stainless steel stems with back seating for seal replacement under working conditions. MHPRG-SS valve available in two variants- MHPRG-A-SS for liquid expansion lines and MHPRG-B-SS for liquid line flow regulation purpose. These valves are specifically designed as per international guidelines for refrigerating installations, specific flow conditions, and line characteristics. The MHPRG-SS can also be used as a stop valve when the regulating function is not required. Interchangeable handwheel or seal cap available. Yellow seal caps or handwheels distinguish them from shut-off valves.

DESIGN FEATURES

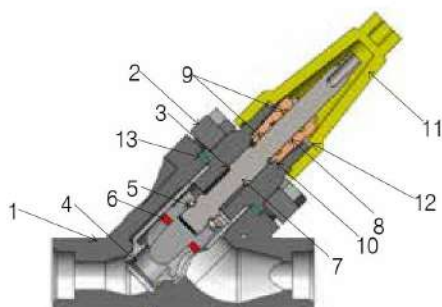
- Maximum working pressure: 150 Bar g (1160 psi g)
- Fluid temperature range: -60°C to + 150°C (-76°F to 302°F)
- Application: Ammonia, Fluorocarbons, Carbon Dioxide
- Material: Body: CF8 Cast Stainless Steel Body
- Internals: SS304
- Seat: PTFE
- Connections: DN-10-40 – Socket/Butt Weld
- DN 50-100 – Butt Weld.
- Reliable Back Seating.

MATERIAL SPECIFICATION

MHPRG-A-SS & MHPRG-B-SS



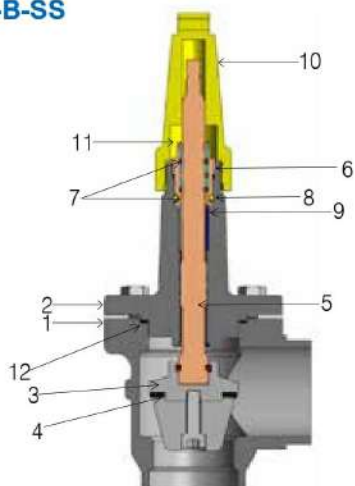
MHPRG-A & B-SS 10-40 ANG



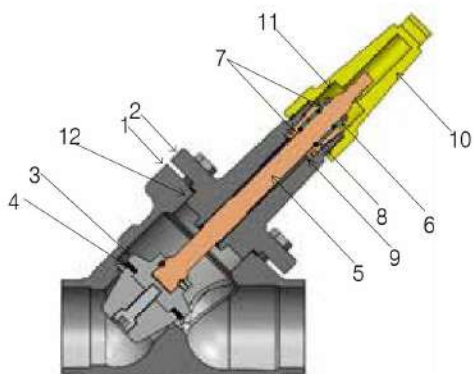
MHPRG-A & B-SS 10-40 STR

SR. NO.	PART	MATERIAL	EN
1	Housing/valve body	Stainless Steel	GX5CrNi19-10
2	Bonnet flange	Stainless Steel	GX5CrNi19-10
3	Bonnet insert	Stainless Steel	X5CrNi18-10
4	External seal	Stainless steel	X12Cr13
5	Cone	Stainless Steel	X5CrNi18-10
6	Cone seal	Teflon	PTFE
7	Spindle	Stainless steel	X5CrNi18-10
8	Packing gland	Stainless steel	X5CrNi18-10
9	O ring	Rubber	Neoprene
10	Packing washer	Aluminium	
11	Seal Cap	Aluminium	
12	Gasket for seal cap	Nylon	Nylon 6
13	Gasket	Non Asbestos	
14	Handwheel	Stainless Steel	GX5CrNi19-10

MHPRG-B-SS



MHPRG-B-SS 50-100 ANG



MHPRG-B-SS 50-100 STR

SR. NO.	PART	MATERIAL	EN
1	Housing/valve body	Stainless Steel	GX5CrNi19-10
2	Bonnet	Stainless Steel	GX5CrNi19-10
3	Cone	Stainless Steel	X5CrNi18-10
4	Cone seal	Teflon	PTFE
5	Spindle	Stainless Steel	X5CrNi18-10
6	Packing gland	Stainless Steel	X5CrNi18-10
7	O ring	Rubber	Neoprene
8	O ring on packing gland	Rubber	Neoprene
9	Packing Washer	Aluminum	
10	Seal Cap	Aluminum	
11	Seal cap Gasket	Nylon	
12	Gasket	Non asbestos	
13	Handwheel	Stainless Steel	GX5CrNi19-10

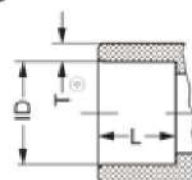
CONNECTIONS

	Size		OD mm	T mm	OD Inch	T Inch	L mm	L in	K _v -angle m ³ /h	K _v -straight m ³ /h	Cone
	mm	Inch									

Socket Welding ANSI (B16.11)

MHPRG-A-SS MHPRG-B-SS	10	3/8	17.3	3.1	0.68	0.12	8	0.31	4.5	3.2	A and B
	15	1/2	21.8	6	0.858	0.235	10	0.39	7.0	5.0	
	20	3/4	27.2	7.6	1.071	0.299	13	0.51	14.6	10.5	
	25	1	33.9	7.2	1.335	0.284	13	0.51	24.8	17.5	A and B
	32	1 1/4	42.7	6.1	1.743	0.24	13	0.51	42.6	30.0	
	40	1 1/2	48.8	6.6	1.921	0.26	13	0.51	45.2	32.0	

SOC

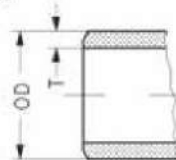


	Size		OD mm	T mm	OD Inch	T Inch	K _v -angle m ³ /h	K _v -straight m ³ /h
	mm	Inch						

Butt-weld ANSI (B 36.10 Schedule 40)

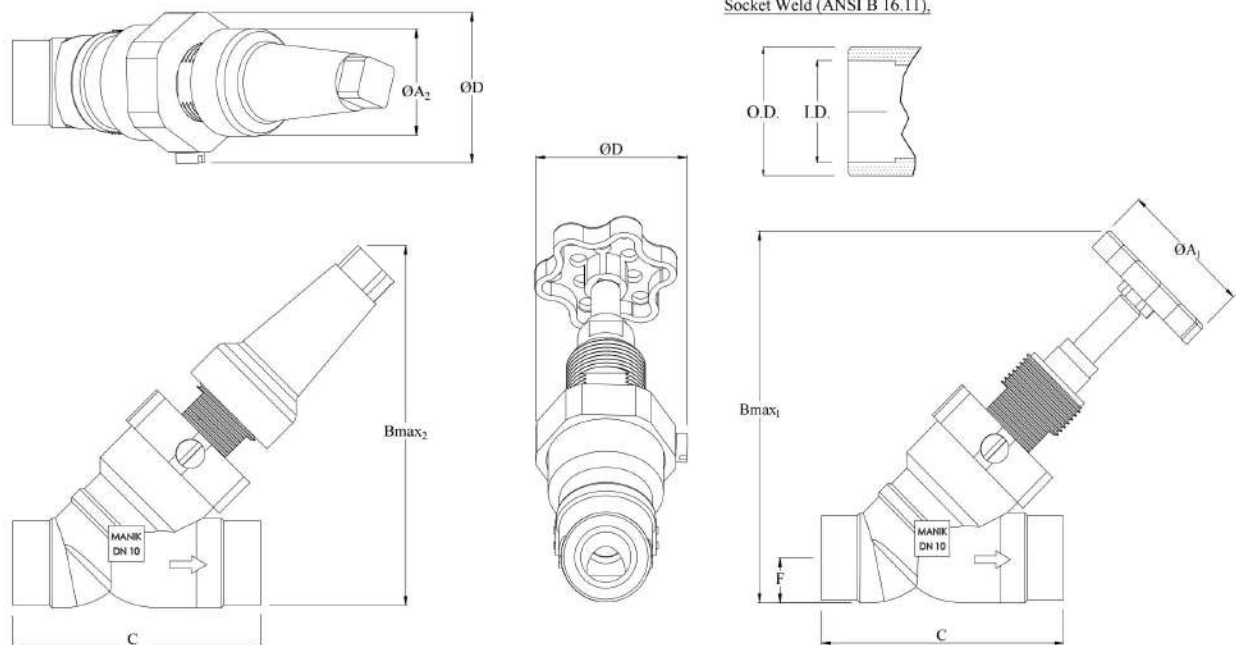
MHPRG-B-SS	50	2	60.3	3.9	2.37	0.15	80	67.5
	65	2 1/2	73.0	5.2	2.87	0.20	120	97.5
	80	3	88.9	5.5	3.50	0.22	182	152.5
	100	4	114.3	6.0	4.50	0.24	313	278.5

ANSI



DIMENSIONS

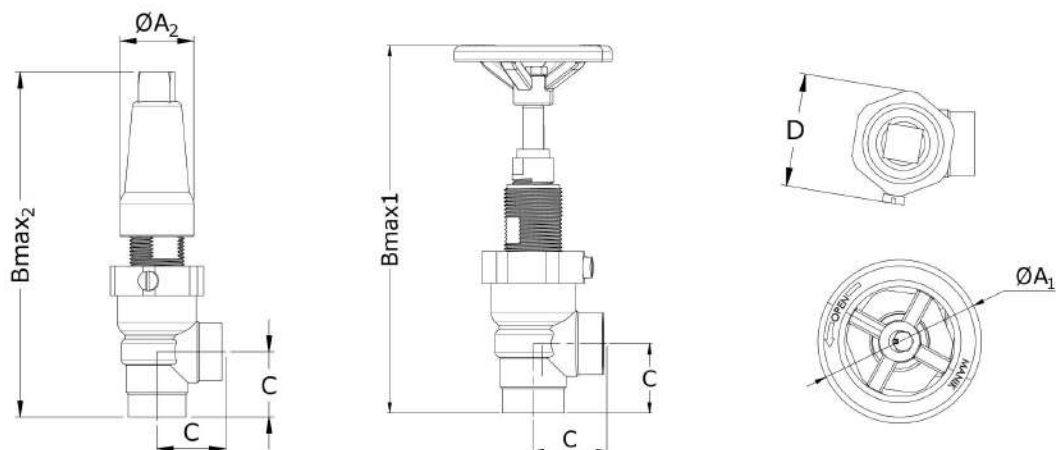
MHPRG-SS 10 SOC GLOBE



Socket Weld ANSI (B 16.11), DN 10 (3/8 in.)

DIMENSION MHPRG-SS	DIM. O.D. (mm)	DIM. I.D. (mm)	DIM. A ₁ (mm)	DIM. A ₂ (mm)	DIM. Bmax ₁ (mm)	DIM. Bmax ₂ (mm)	DIM. C (mm)	DIM. D (mm)	DIM. F (mm)
MHPRG-SS 10	23.5	17.3	38	38	110	105	61	42	13

MHPRG-SS 10 SOC ANG

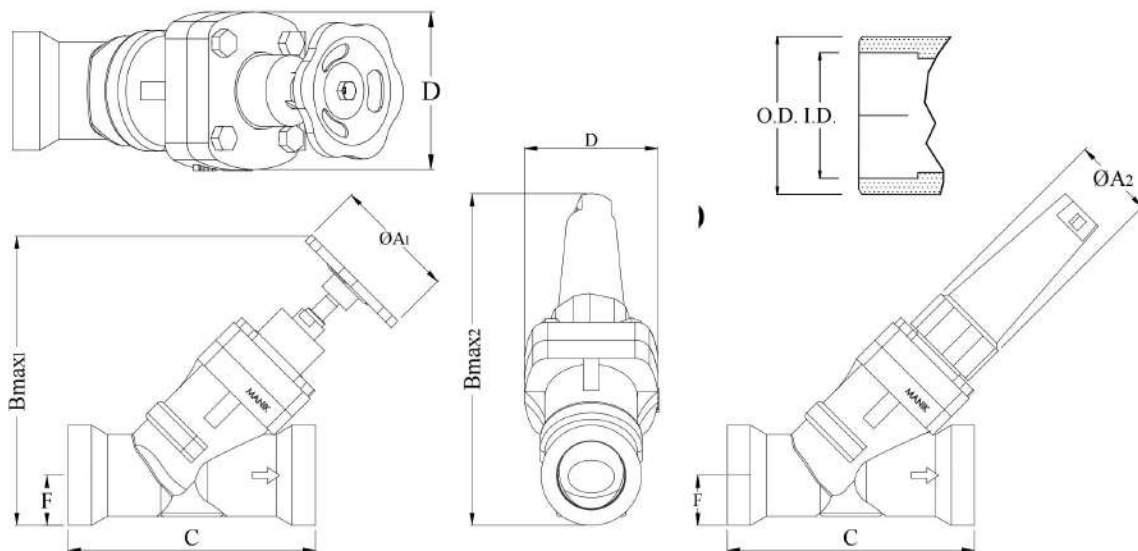


Socket Weld ANSI (B 16.11), DN 10 (3/8 in.)

DIMENSION MHPSV-SS	DIM. O.D. (mm)	DIM. I.D. (mm)	DIM. A ₁ (mm)	DIM. A ₂ (mm)	DIM. Bmax ₁ (mm)	DIM. Bmax ₂ (mm)	DIM. C (mm)	DIM. D (mm)
MHPSV-SS 10	23.5	17.3	30	30	141	141	26.5	42

MHPRG-SS 15-40 SOC GLOBE

Socket Weld (ANSI B 16.11),

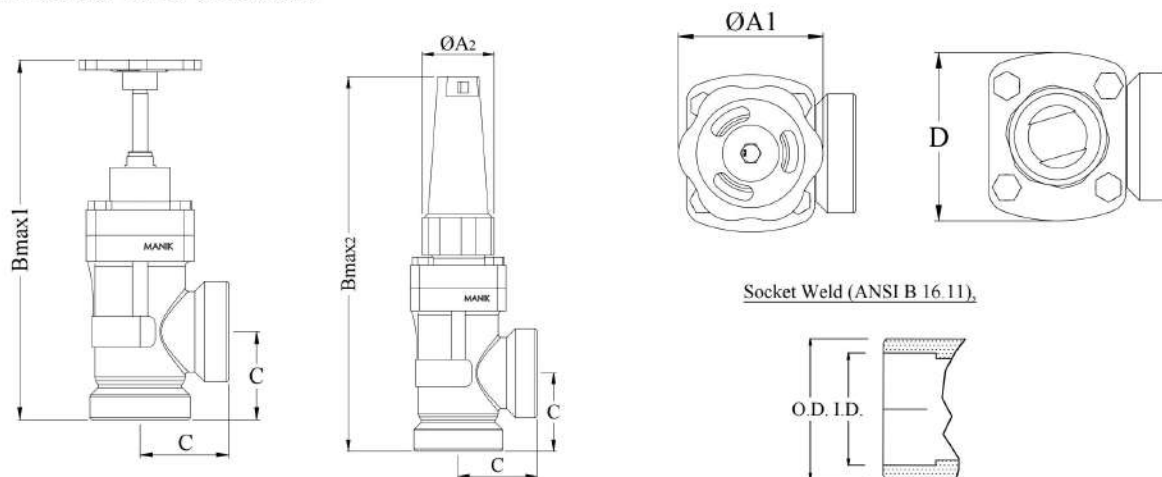


Socket Weld ANSI (B 16.11), DN 15-40 (½ - 1½ in.)

DIMENSION MHPRG-SS	DIM. O.D. (mm)	DIM. I.D. (mm)	DIM. A ₁ (mm)	DIM. A ₂ (mm)	DIM. Bmax ₁ (mm)	DIM. Bmax ₂ (mm)	DIM. C (mm)	DIM. D (mm)	DIM. F (mm)
MHPRG-SS 15	33.8	21.8	60	38	160	150	121	72	16.9
MHPRG-SS 20	36.4	27.2	60	38	160	150	121	72	18.2
MHPRG-SS 25	48.3	33.9	80	50	235	270	160	90	24.2
MHPRG-SS 32	54.9	42.7	80	50	235	270	160	90	27.5
MHPRG-SS 40	62.0	48.8	80	50	235	270	160	90	31.0

MHPRG-SS 15-40 SOC ANG

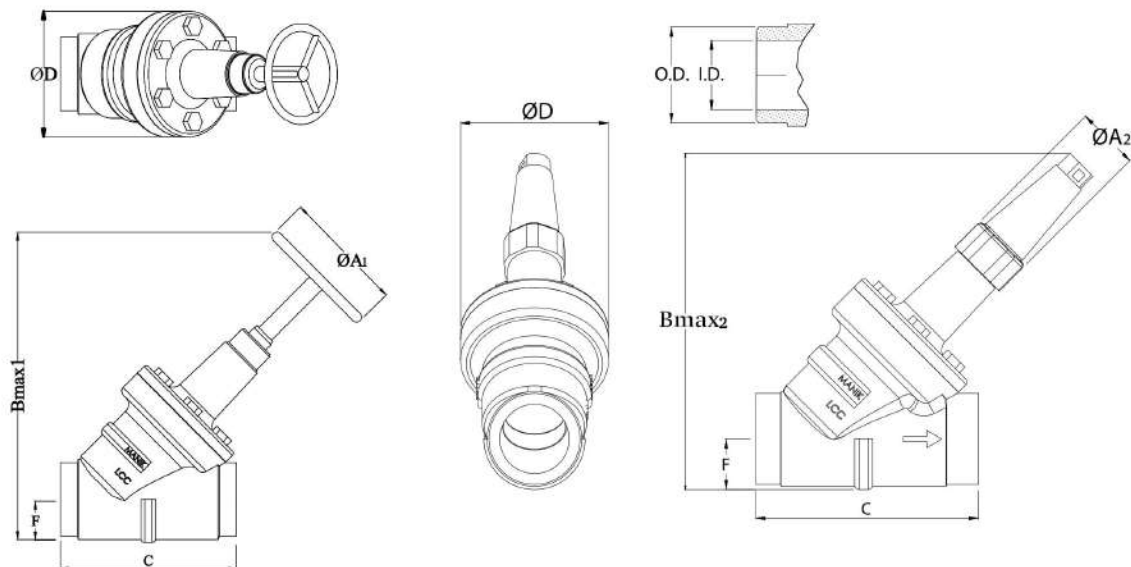
Socket Weld (ANSI B 16.11),



Socket Weld ANSI (B 16.11), DN 15-40 (½ - 1½ in.)

DIMENSION MHPRG-SS	DIM. O.D. (mm)	DIM. I.D. (mm)	DIM. A ₁ (mm)	DIM. A ₂ (mm)	DIM. Bmax ₁ (mm)	DIM. Bmax ₂ (mm)	DIM. C (mm)	DIM. D (mm)
MHPRG-SS 15	33.8	21.8	60	38	180	192	45.0	72
MHPRG-SS 20	36.4	27.2	60	38	180	192	45.0	72
MHPRG-SS 25	48.3	33.9	80	50	235	270	55.0	90
MHPRG-SS 32	54.9	42.7	80	50	235	270	55.0	90
MHPRG-SS 40	62.0	48.8	80	50	235	270	55.0	90

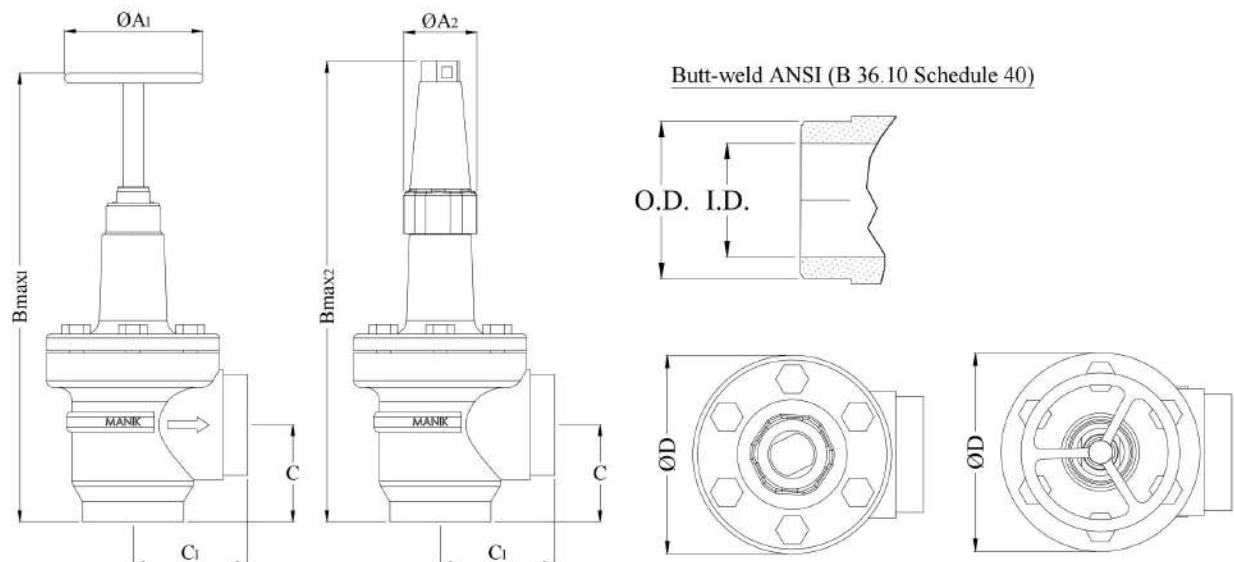
MHPRG-SS 50-65 BW GLOBE



Butt-weld ANSI (B 36.10 Schedule 40), DN 50 - 65 (2 - 2½ in.)

DIMENSION MHPRG-SS	DIM. O.D. (mm)	DIM. I.D. (mm)	DIM. A ₁ (mm)	DIM. A ₂ (mm)	DIM. Bmax ₁ (mm)	DIM. Bmax ₂ (mm)	DIM. C (mm)	DIM. D (mm)	DIM. F (mm)
MHPRG-SS 50	60.3	52.5	100	50	260	250	168	110	32
MHPRG-SS 65	73.0	62.6	100	50	285	290	184	125	40

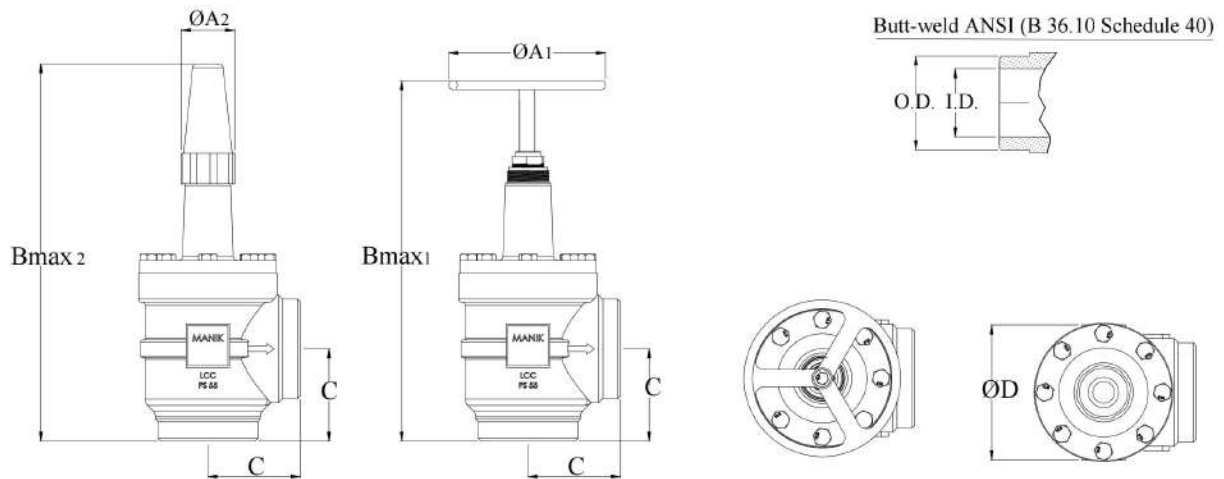
MHPRG-SS 50-65 BW ANG



Butt-weld ANSI (B 36.10 Schedule 40)

DIMENSION MHPRG-SS	DIM. O.D. (mm)	DIM. I.D. (mm)	DIM. A ₁ (mm)	DIM. A ₂ (mm)	DIM. Bmax ₁ (mm)	DIM. Bmax ₂ (mm)	DIM. C (mm)	DIM. D (mm)	DIM. F (mm)
MHPRG-SS 50	60.3	52.5	100	50	284	315	60.0	72.5	110
MHPRG-SS 65	73.0	62.6	100	50	310	335	70	82.5	125

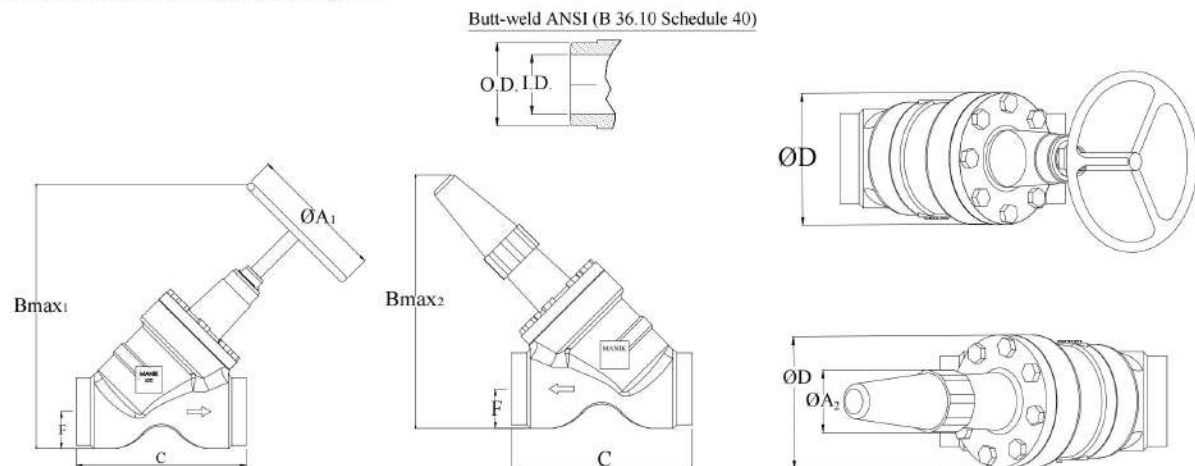
MHPRG-SS 80-100 BW ANG



Butt-weld ANSI (B 36.10 Schedule 40), DN 80 - 100 (3 - 4 in.) ANG

DIMENSION MHPRG-SS	DIM. O.D. (mm)	DIM. I.D. (mm)	DIM. A ₁ (mm)	DIM. A ₂ (mm)	DIM. Bmax ₁ (mm)	DIM. Bmax ₂ (mm)	DIM. C (mm)	DIM. D (mm)
MHPRG-SS 80	88.9	77.9	200	58	388	373	90	129
MHPRG-SS 100	114.3	102.3	250	58	437	432	106	156

MHPRG-SS 80-100 BW GLOBE



Butt-weld ANSI (B 36.10 Schedule 40), DN 80 - 100 (3 - 4 in.) GLOBE

DIMENSION MHPRG-SS	DIM. O.D. (mm)	DIM. I.D. (mm)	DIM. A ₁ (mm)	DIM. A ₂ (mm)	DIM. Bmax ₁ (mm)	DIM. Bmax ₂ (mm)	DIM. C (mm)	DIM. D (mm)	DIM. F (mm)
MHPRG-SS 80	88.9	77.9	200	58	367	322	216	129	48
MHPRG-SS 100	114.3	102.3	250	58	443	375	264	156	60

ORDERING INFO

GLOBE		Size		End Connection	Weight (Kg)
Hand Wheel	Cap	Inch	mm		
MHPRG-SS-10-G-H-S	MHPRG-SS-10-G-C-S	$\frac{3}{8}$ "	10	Socket Weld	1.2
MHPRG-SS-10-G-H-B	MHPRG-SS-10-G-C-B			Butt Weld	1.2
MHPRG-SS-15-G-H-S	MHPRG-SS-15-G-C-S	$\frac{1}{2}$ "	15	Socket Weld	2.6
MHPRG-SS-15-G-H-B	MHPRG-SS-15-G-C-B			Butt Weld	2.4
MHPRG-SS-20-G-H-S	MHPRG-SS-20-G-C-S	$\frac{3}{4}$ "	20	Socket Weld	2.6
MHPRG-SS-20-G-H-B	MHPRG-SS-20-G-C-B			Butt Weld	2.4
MHPRG-SS-25-G-H-S	MHPRG-SS-25-G-C-S	1"	25	Socket Weld	4.6
MHPRG-SS-25-G-H-B	MHPRG-SS-25-G-C-B			Butt Weld	4.2
MHPRG-SS-32-G-H-S	MHPRG-SS-32-G-C-S	1- $\frac{1}{4}$ "	32	Socket Weld	4.6
MHPRG-SS-32-G-H-B	MHPRG-SS-32-G-C-B			Butt Weld	4.2
MHPRG-SS-40-G-H-S	MHPRG-SS-40-G-C-S	1- $\frac{1}{2}$ "	40	Socket Weld	4.6
MHPRG-SS-40-G-H-B	MHPRG-SS-40-G-C-B			Butt Weld	4.4
MHPRG-SS-50-G-H-B	MHPRG-SS-50-G-C-B	2"	50	Butt Weld	7.9
MHPRG-SS-65-G-H-B	MHPRG-SS-65-G-C-B	2- $\frac{1}{2}$ "	65	Butt Weld	8.5
MHPRG-SS-80-G-H-B	MHPRG-SS-80-G-C-B	3"	80	Butt Weld	14.7
MHPRG-SS-100-G-H-B	MHPRG-SS-100-G-C-B	4"	100	Butt Weld	25

ANGLE		Size		End Connection	Weight (Kg.)
Hand Wheel	Cap	Inch	mm		
MHPRG-SS-10-A-H-S	MHPRG-SS-10-A-C-S	$\frac{3}{8}$ "	10	Socket Weld	1.0
MHPRG-SS-10-A-H-B	MHPRG-SS-10-A-C-B			Butt Weld	1.0
MHPRG-SS-15-A-H-S	MHPRG-SS-15-A-C-S	$\frac{1}{2}$ "	15	Socket Weld	2.1
MHPRG-SS-15-A-H-B	MHPRG-SS-15-A-C-B			Butt Weld	1.9
MHPRG-SS-20-A-H-S	MHPRG-SS-20-A-C-S	$\frac{3}{4}$ "	20	Socket Weld	2.1
MHPRG-SS-20-A-H-B	MHPRG-SS-20-A-C-B			Butt Weld	1.9
MHPRG-SS-25-A-H-S	MHPRG-SS-25-A-C-S	1"	25	Socket Weld	3.6
MHPRG-SS-25-A-H-B	MHPRG-SS-25-A-C-B			Butt Weld	3.4
MHPRG-SS-32-A-H-S	MHPRG-SS-32-A-C-S	1- $\frac{1}{4}$ "	32	Socket Weld	3.6
MHPRG-SS-32-A-H-B	MHPRG-SS-32-A-C-B			Butt Weld	3.4
MHPRG-SS-40-A-H-S	MHPRG-SS-40-A-C-S	1- $\frac{1}{2}$ "	40	Socket Weld	3.6
MHPRG-SS-40-A-H-B	MHPRG-SS-40-A-C-B			Butt Weld	3.4
MHPRG-SS-50-A-H-B	MHPRG-SS-50-A-C-B	2"	50	Butt Weld	6.2
MHPRG-SS-65-A-H-B	MHPRG-SS-65-A-C-B	2- $\frac{1}{2}$ "	65	Butt Weld	7.9
MHPRG-SS-80-A-H-B	MHPRG-SS-80-A-C-B	3"	80	Butt Weld	13.3
MHPRG-SS-100-A-H-B	MHPRG-SS-100-A-C-B	4"	100	Butt Weld	21

* Mention the required type of Regulating Valve during ordering. Use "A-Type" for expansion valve and "B-Type" for regulating valve.



HIGH PRESSURE STOP CHECK VALVES

TYPE MHPSCV-SS AND MHPCV-SS

INTRODUCTION

For installations in seaside areas and outdoor applications where the air is highly humid and corrosive, Stainless Steel Valves are recommended which provide elevated surface protection against corrosion. These valves are also recommended in applications where regular surface treatment is carried out to prevent fungal and bacterial growth.

The Manik MHPSCV-SS Valves have been specially design for such applications.

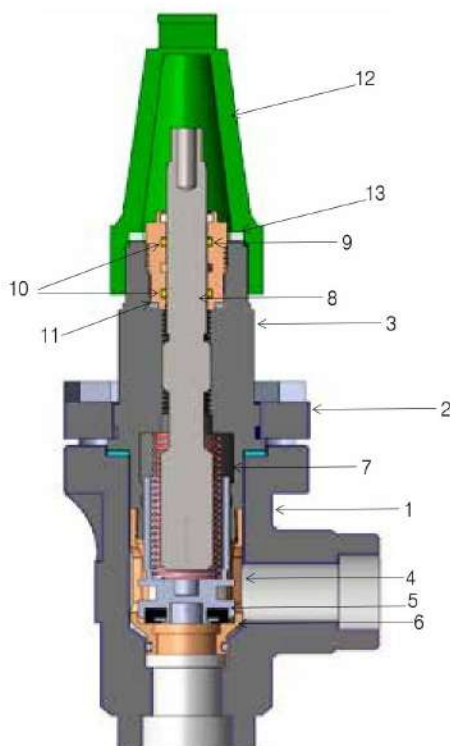
MHPSCV-SS is a combination stop valve and normally-spring-closed check valve. Whereas MHPCV-SS is a simple angle-type check valve. Both of these are available in an angle way only. Valves open wide for full flow in the arrow's direction on the valve body and promptly reset when reverse flow occurs. Optimum opening characteristics are attained due to Precisely Cut Ports. Primary characteristics of these valves include efficient functioning at low differential pressure, easy inspection and maintenance. These valves have stainless steel stems with back seating for seal replacement under working conditions. The internal design minimizes pulsations.

DESIGN FEATURES

- Maximum working pressure: 150 Bar g (1160 psi g)
- Fluid temperature range: -60°C to + 150°C (-76°F to 302°F)
- Application: Ammonia, Fluorocarbons, Carbon Dioxide
- Material: Body: CF8 Cast Stainless Steel Body
- Internals: SS304
- Seat: PTFE
- Connections: DN-15-40 – Socket/Butt Weld
- DN 50-125 – Butt Weld.
- Reliable Back Seating.

MATERIAL SPECIFICATION

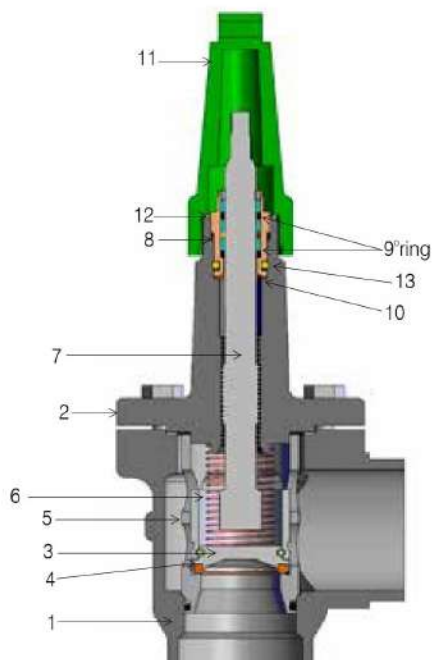
MHPSCV-SS 15-40



MHPSCV-SS 15-40

SR. NO.	PART	MATERIAL	EN
1	Housing/valve body	Stainless Steel	GX5CrNi19-10
2	Bonnet flange	Stainless Steel	GX5CrNi19-10
3	Bonnet insert	Stainless Steel	X5CrNi18-10
4	External seat	Stainless Steel	X12Cr13
5	Piston	Stainless Steel	X12Cr13
6	Seal	PTFE	
7	Spring	Spring Steel	Spring steel GR.3
8	Spindle	Stainless steel	X5CrNi18-10
9	Packing gland	Stainless steel	X5CrNi18-10
10	O ring	Neoprene	
11	Packing Washer	AL6063	
12	Seal Cap	Aluminum	
13	Seal Cap Gasket	Nylon	
14	Handwheel	Stainless Steel	GX5CrNi19-10

MHPSCV-SS 50-125



MHPSCV-SS 50-125

SR. NO.	PART	MATERIAL	EN
1	Housing/valve body	Stainless Steel	GX5CrNi19-10
2	bonnet	Stainless Steel	GX5CrNi19-10
3	Piston	Stainless Steel	X12Cr13
4	Piston Seal	PTFE	
5	External Seat	Stainless Steel	X12Cr13
6	Spring	Spring Steel	Spring Steel SR3
7	Spindle	Stainless Steel	X5CrNi18-10
8	Packing gland	Stainless Steel	X5CrNi18-10
9	O ring	Neoprene	
10	Packing Washer	Aluminium	AL6063
11	Seal cap	Aluminium	
12	Seal cap Gasket	Nylon	
13	Oring	Neoprene	
14	Handwheel	Stainless Steel	GX5CrNi19-10

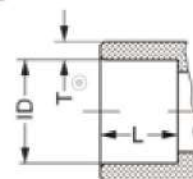
CONNECTIONS

Size		ID mm	T mm	ID Inch	T Inch	L mm	L Inch	K _v -angle m ³ /h	K _v -straight m ³ /h
mm	Inch								

Socket Welding ANSI (B16.11)

15	1/2	21.8	6	0.858	0.235	10	0.39	8.5	5.0
20	3/4	27.2	4.6	1.071	0.181	13	0.51	10.5	10.5
25	1	33.9	7.2	1.335	0.284	13	0.51	24.5	17.5
32	1 1/4	42.7	6.1	1.743	0.24	13	0.51	30.5	30.0
40	1 1/2	48.8	6.6	1.921	0.26	13	0.51	30.5	32.0

SOC

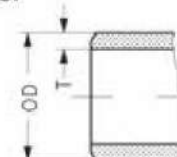


Size		OD mm	T mm	OD Inch	T Inch	K _v -angle m ³ /h	K _v -straight m ³ /h
mm	Inch						

Welding ANSI (B 36.10 Schedule 40)

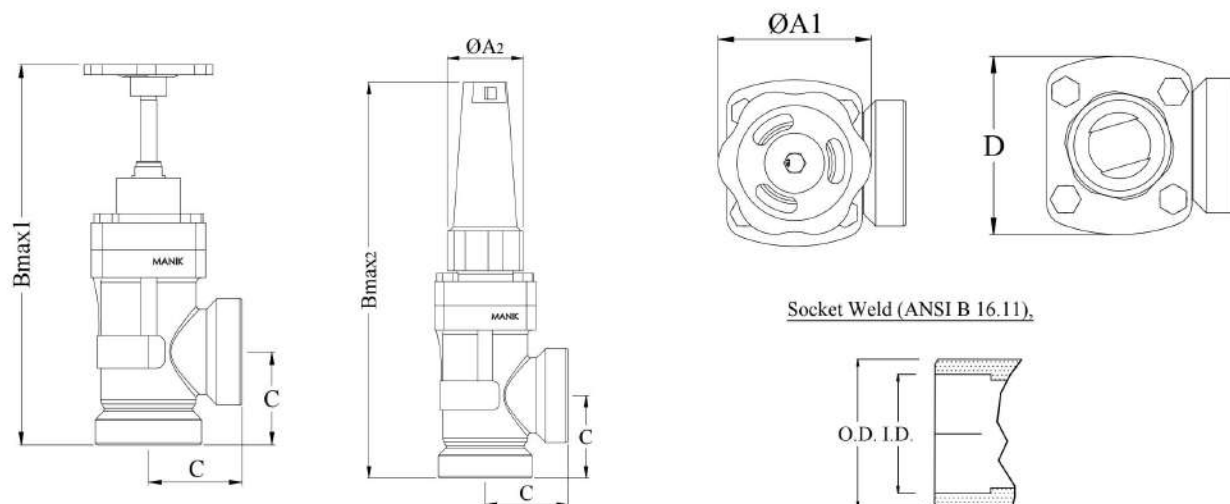
50	2	60.3	3.9	2.37	0.15	45.5	67.5
65	2 1/2	76.1	5.2	2.87	0.20	72.5	97.5
80	3	88.9	5.5	3.50	0.22	103.5	152.5
100	4	114.3	6.0	4.50	0.24	196.5	278.5
125	5	141.3	6.6	5.56	0.26	301.5	470.5

ANSI



DIMENSIONS

MHPSCV-SS 15-40 SOC ANG

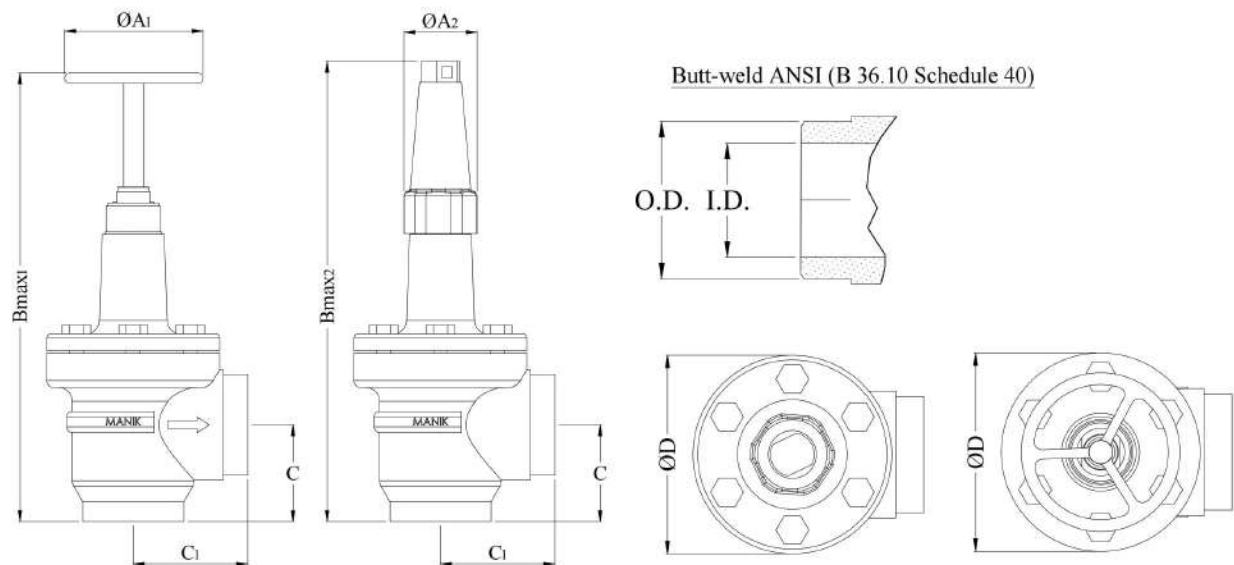


Socket Weld (ANSI B 16.11).

Socket Weld ANSI (B 16.11), DN 15-40 (1/2 - 1 1/2 in.)

DIMENSION MHPSCV-SS	DIM. O.D. (mm)	DIM. I.D. (mm)	DIM. A ₁ (mm)	DIM. A ₂ (mm)	DIM. Bmax ₁ (mm)	DIM. Bmax ₂ (mm)	DIM. C (mm)	DIM. D (mm)
MHPSCV-SS 15	33.8	21.8	60	38	205	220	45.0	72
MHPSCV-SS 20	36.4	27.2	60	38	205	220	45.0	72
MHPSCV-SS 25	48.3	33.9	80	50	290	320	55.0	90
MHPSCV-SS 32	54.9	42.7	80	50	290	320	55.0	90
MHPSCV-SS 40	62.0	48.8	80	50	290	320	55.0	90

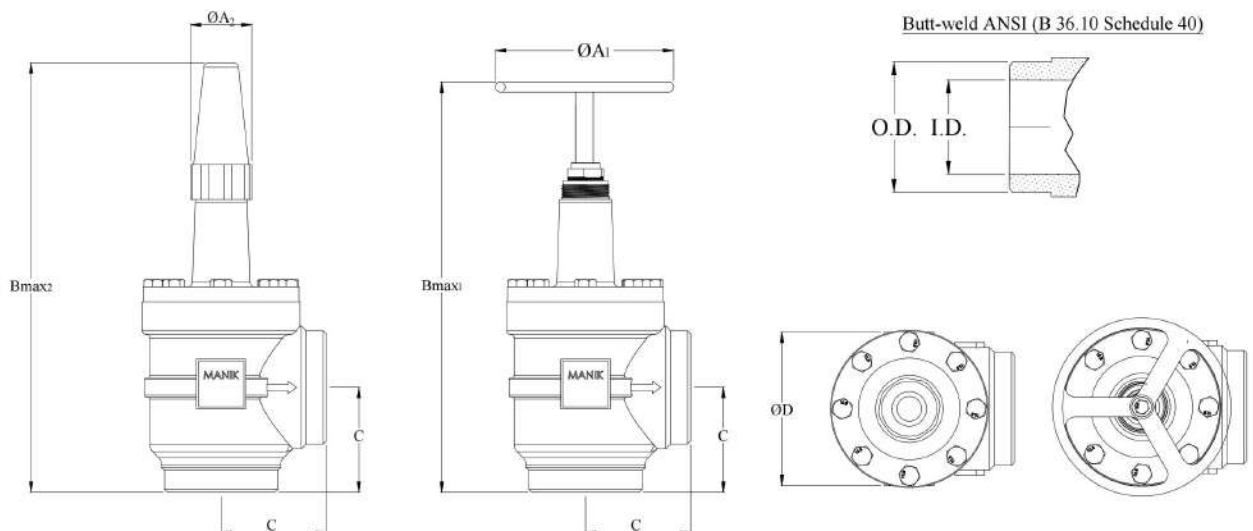
MHPSCV-SS 50-65 BW ANG



Socket Weld ANSI (B 16.11), DN 50-65 (2 - 2½ in.)

DIMENSION MHPSCV-SS	DIM. O.D. (mm)	DIM. I.D. (mm)	DIM. A ₁ (mm)	DIM. A ₂ (mm)	DIM. Bmax ₁ (mm)	DIM. Bmax ₂ (mm)	DIM. C (mm)	DIM. C ₁ (mm)	DIM. D (mm)
MHPSCV-SS 50	60.3	52.5	100	50	284	315	60.0	72.5	110
MHPSCV-SS 65	73.0	62.6	100	50	310	335	70	82.5	125

MHPSCV-SS 80-125 BW ANG



Butt-weld ANSI (B 36.10 Schedule 40), DN 80 - 125 (3 - 5 in.) ANG

DIMENSION MHPSCV-SS	DIM. O.D. (mm)	DIM. I.D. (mm)	DIM. A ₁ (mm)	DIM. A ₂ (mm)	DIM. Bmax ₁ (mm)	DIM. Bmax ₂ (mm)	DIM. C (mm)	DIM. C ₁ (mm)
MHPSCV-SS 80	88.9	77.9	200	58	388	373	90	129
MHPSCV-SS 100	114.3	102.3	250	58	437	432	106	156
MHPSCV-SS 125	141.3	128.1	315	74	533	517	128	193

ORDERING INFO

MHPSCV

ANGLE		Size		End Connection	Weight (Kg.)
Hand Wheel	Cap	Inch	MM		
MHPSCV-SS-15-A-H-S	MHPSCV-SS-15-A-C-S	1/2"	15	Socket Weld	2.3
MHPSCV-SS-20-A-H-S	MHPSCV-SS-20-A-C-S	3/4"	20	Socket Weld	2.3
MHPSCV-SS-25-A-H-S	MHPSCV-SS-25-A-C-S	1"	25	Socket Weld	4.2
MHPSCV-SS-32-A-H-S	MHPSCV-SS-32-A-C-S	1-1/4"	32	Socket Weld	4.4
MHPSCV-SS-40-A-H-S	MHPSCV-SS-40-A-C-S	1-1/2"	40	Socket Weld	4.4
MHPSCV-SS-50-A-H-B	MHPSCV-SS-50-A-C-B	2"	50	Butt Weld	5.6
MHPSCV-SS-65-A-H-B	MHPSCV-SS-65-A-C-B	2-1/2"	65	Butt Weld	7.6
MHPSCV-SS-80-A-H-B	MHPSCV-SS-80-A-C-B	3"	80	Butt Weld	13.4
MHPSCV-SS-100-A-H-B	MHPSCV-SS-100-A-C-B	4"	100	Butt Weld	22.6
MHPSCV-SS-125-A-H-B	MHPSCV-SS-125-A-C-B	5"	125	Butt Weld	34.7

MHPCV

ANGLE	GLOBE	Size		End Connection	ANGLE Weight (Kg.)	GLOBE Weight (Kg.)
		Inch	MM			
MHPCV-SS-15-A-S	MHPCV-SS-15-G-S	1/2"	15	Socket Weld	2.0	2.4
MHPCV-SS-20-A-S	MHPCV-SS-20-G-S	3/4"	20	Socket Weld	2.0	2.4
MHPCV-SS-25-A-S	MHPCV-SS-25-G-S	1"	25	Socket Weld	4.0	4.3
MHPCV-SS-32-A-S	MHPCV-SS-32-G-S	1-1/4"	32	Socket Weld	4.0	4.3
MHPCV-SS-40-A-S	MHPCV-SS-40-G-S	1-1/2"	40	Socket Weld	4.0	4.3
MHPCV-SS-50-A-B	MHPCV-SS-50-G-B	2"	50	Butt Weld	5.0	5.9
MHPCV-SS-65-A-B	MHPCV-SS-65-G-B	2-1/2"	65	Butt Weld	6.9	7.7
MHPCV-SS-80-A-B	MHPCV-SS-80-G-B	3"	80	Butt Weld	13.5	15.3
MHPCV-SS-100-A-B	MHPCV-SS-100-G-B	4"	100	Butt Weld	20.4	22.8
MHPCV-SS-125-A-B	MHPCV-SS-125-G-B	5"	125	Butt Weld	31.2	33.6



HIGH PRESSURE FILTER VALVES

TYPE MHPFV-SS

INTRODUCTION

For installations in seaside areas and outdoor applications where the air is highly humid and corrosive, Stainless Steel Valves are recommended which provide elevated surface protection against corrosion. These valves are also recommended in applications where regular surface treatment is carried out to prevent fungal and bacterial growth.

The Manik MHPFV-SS Valves have been specially design for such applications.

MHPFV-SS Filters are designed to facilitate the removal of foreign materials from refrigeration systems. They help to maintain and clean dirt and weld slag easily. These valves are available in angle and globe types. These filters are generally used to reduce downtime from the risk of unwanted breakdowns and are used ahead of key equipment such as Ammonia Pumps and Compressors etc. in the refrigeration plants during-commissioning and where uninterrupted filtration of the refrigerant is required. Filter Mesh are available across the following mesh sizes 100 μ (US150), 150 μ (US100), 250 μ (US60) and 500 μ (US35).

For other sizes, please contact Manik Engineers.

LIQUID LINES:

Before pumps : 500 μ [38 mesh]

After pumps : 150 μ [100 mesh] / 250 μ [72 mesh]

Protection of automatic regulation equipment

Generally : 150 μ [100 mesh] / 250 μ [72 mesh]

Sensitive equipment, e.g.

Suction regulators with low temperature : 250 μ [72 mesh]

SUCTION LINES:

Before screw compressor 250 μ [72 mesh]

Before piston compressor :150 μ [100 mesh]

DEFINITIONS:

Mesh is the number of threads per inch.

μ [microns] is the distance between two threads

($1\mu = 1/1000 \text{ mm}$).

The k_v value is the flow of water in m^3/h at a pressure drop in the strainer of 1 bar, $p = 1000 \text{ kg}/\text{m}^3$.

DESIGN FEATURES

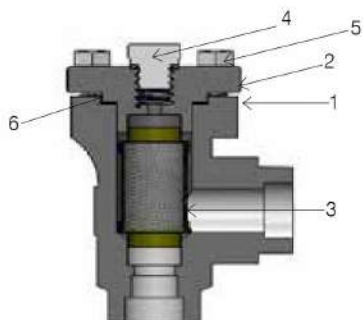
- Maximum working pressure: 150 Bar g (1160 psi g)
- Fluid temperature range: -60°C to $+150^\circ\text{C}$ (-76°F to 302°F)
- Application: Ammonia, Fluorocarbons, Carbon Dioxide
- Material: Body: CF8 Cast Stainless Steel Body
- Internals: SS304
- Seat: PTFE
- Connections: DN-15-40 – Socket/Butt Weld
- DN 50-200 – Butt Weld.
- Reliable Back Seating.

SELECTION OF FILTER SIZE :

The mesh size of the filter must satisfy the requirement stated by the suppliers of the equipment, which must be protected. The following recommendation of mesh size apply in general refrigeration installations:

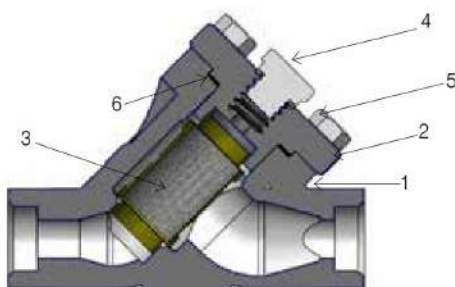
MATERIAL SPECIFICATION

MHPFV 15-40



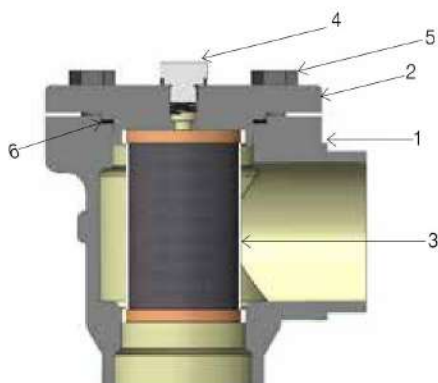
MHPFV-SS 15-40 ANG

SR. NO.	PART	MATERIAL	EN
1	Valve body	Stainless Steel	GX5CrNi19-10
2	Cover	Stainless Steel	X5CrNi18-10
3	Filter Mesh	Stainless Steel	
4	Drain nut	Stainless Steel	X5CrNi18-10
5	Bolts	Stainless steel	A2-70
6	Gasket	Non asbestos	



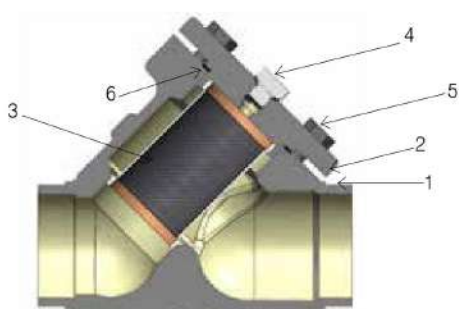
MHPFV-SS 15-40 STR

MHPFV-SS 50-65 ANG



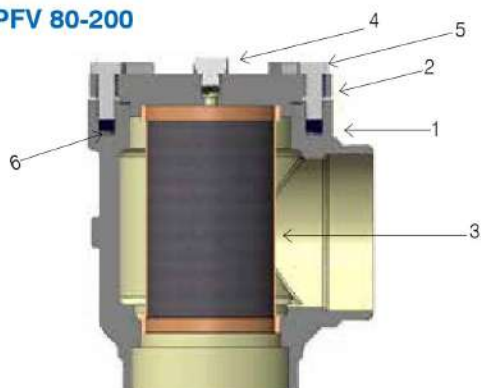
MHPFV-SS 50-65 ANG

SR. NO.	PART	MATERIAL	EN
1	Valve body	Stainless Steel	GX5CrNi19-10
2	Cover	Stainless Steel	X5CrNi18-10
3	Filter Mesh	Stainless Steel	
4	Drain nut	Stainless Steel	X5CrNi18-10
5	Bolts	Stainless steel	A2-70
6	Gasket	Non asbestos	



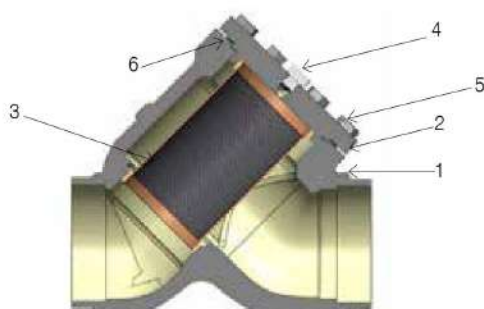
MHPFV-SS 50-65 STR

MHPFV 80-200



MHPFV 80-200 ANG

SR. NO.	PART	MATERIAL	EN
1	Valve body	Stainless Steel	GX5CrNi19-10
2	Cover	Stainless Steel	X5CrNi18-10
3	Filter Mesh	Stainless Steel	
4	Drain nut	Stainless Steel	X5CrNi18-10
5	Bolts	Stainless steel	A2-70
6	Gasket	Non asbestos	



MHPFV 80-200 STR

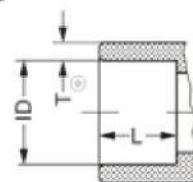
CONNECTIONS

Size		OD mm	T mm	OD Inch	T Inch	K _v -angle m ³ /h	K _v -straight m ³ /h
mm	Inch						

Socket welding ANSI (B 16.11)

15	½	21.8	6.0	0.858	0.235	7.0	5.0
20	¾	27.2	4.6	1.071	0.181	14.6	10.5
25	1	33.9	7.2	1.335	0.284	24.8	17.5
32	1¼	42.7	6.1	1.743	0.240	42.6	30.0
40	1½	48.8	6.6	1.921	0.260	45.2	32.0

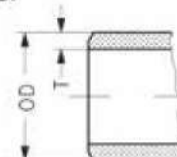
SOC



Butt-weld ANSI (B 36.10 Schedule 40)

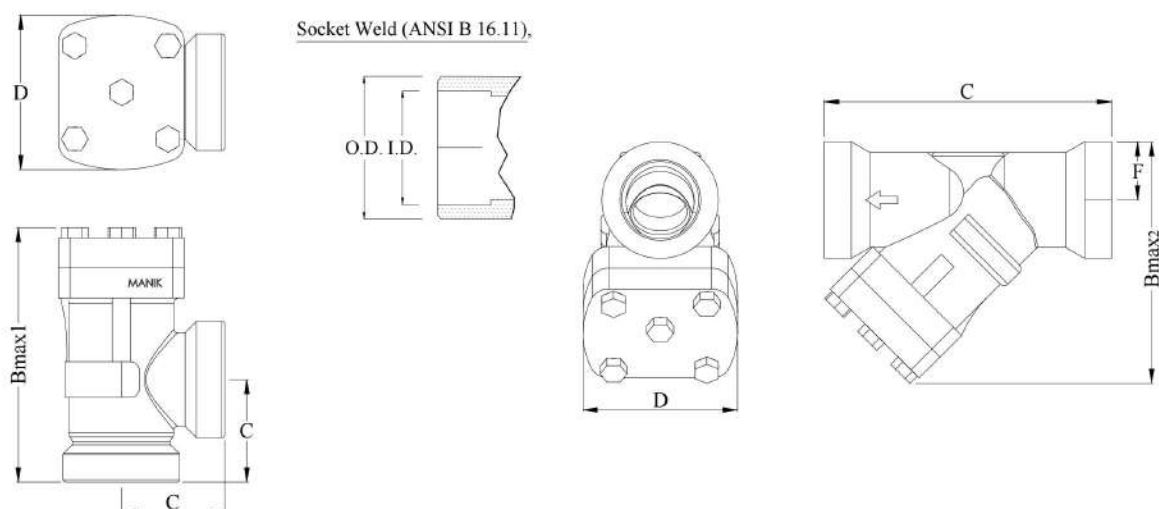
50	2	60.3	3.9	2.37	0.15	80	67.5
65	2½	73.0	5.2	2.87	0.20	120	97.5
80	3	88.9	5.5	3.50	0.22	182	152.5
100	4	114.3	6.0	4.50	0.24	313	278.5
125	5	141.3	6.6	5.56	0.26	514	470.5
150	6	168.3	7.1	6.63	0.28	785	597.5
200	8	219.1	8.2	8.63	0.32	1168	1024.5

ANSI



DIMENSIONS

MHPFV-SS 15-40 SOC ANG and STR



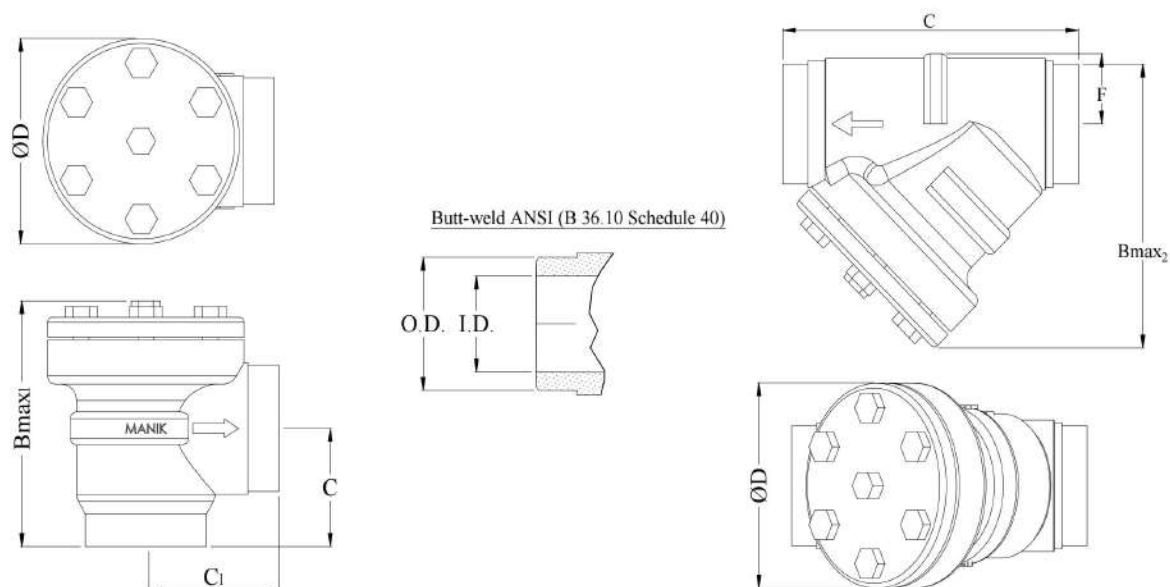
Socket Weld ANSI (B 16.11), DN 15-40 (½ - 1½ in.) ANG

DIMENSION MHPFV-SS	DIM. O.D. (mm)	DIM. I.D. (mm)	DIM. Bmax ₁ (mm)	DIM. C (mm)	DIM. D (mm)
MHPFV-SS 15	33.8	21.8	235	45.0	72
MHPFV-SS 20	36.4	27.2	235	45.0	72
MHPFV-SS 25	48.3	33.9	235	55.0	90
MHPFV-SS 32	54.9	42.7	235	55.0	90
MHPFV-SS 40	62.0	48.8	235	55.0	90

Socket Weld ANSI (B 16.11), DN 15-40 (½ - 1½ in.) Straight

DIMENSION MHPFV-SS	DIM. O.D. (mm)	DIM. I.D. (mm)	DIM. Bmax ₂ (mm)	DIM. C (mm)	DIM. D (mm)
MHPFV-SS 15	33.8	21.8	105	121	72
MHPFV-SS 20	36.4	27.2	105	121	72
MHPFV-SS 25	48.3	33.9	135	160	90
MHPFV-SS 32	54.9	42.7	135	160	90
MHPFV-SS 40	62.0	48.8	135	160	90

MHPFV-SS 50-65 BW ANG and STR



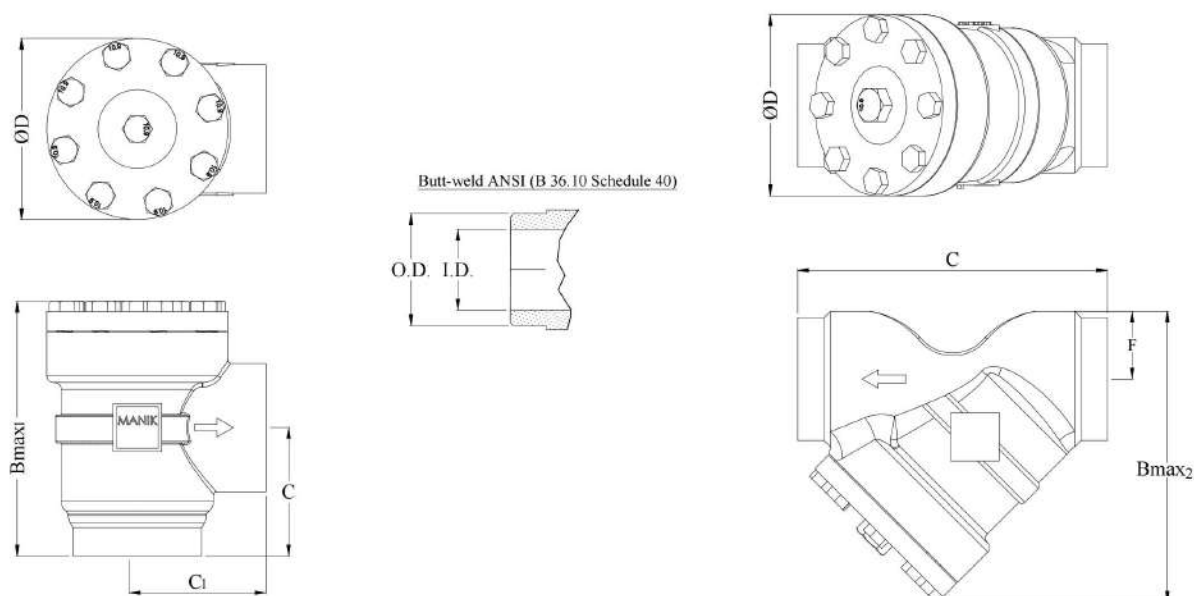
Butt-weld ANSI (B 36.10 Schedule 40), DN 50 - 65 (2 - 2½ in.) ANG

DIMENSION MHPFV-SS	DIM. O.D. (mm)	DIM. I.D. (mm)	DIM. Bmax ¹ (mm)	DIM. C (mm)	DIM. C ₁ (mm)	DIM. D (mm)
MHPFV-SS 50	60.3	52.5	132	60.0	72.5	110
MHPFV-SS 65	73.0	62.6	152	70	82.5	125

Butt-weld ANSI (B 36.10 Schedule 40), DN 50 - 65 (2 - 2½ in.) STR

DIMENSION MHPFV-SS	DIM. O.D. (mm)	DIM. I.D. (mm)	DIM. Bmax ² (mm)	DIM. C (mm)	DIM. C ₁ (mm)	DIM. D (mm)
MHPFV-SS 50	60.3	52.5	160	168	110	32
MHPFV-SS 65	73.0	62.6	183	184	125	40

MHPFV-SS 80-200 BW ANG and STR



Butt-weld ANSI (B 36.10 Schedule 40), DN 80 - 200 (3 - 8 in.) ANG

DIMENSION MHPFV-SS	DIM. O.D.	DIM. I.D.	DIM. Bmax ₁	DIM. C	DIM. D
MHPFV-SS 80	88.9	77.9	189	90	129
MHPFV-SS 100	114.3	102.3	223	106	156
MHPFV-SS 125	141.3	128.1	268	128	193
MHPFV-SS 150	168.3	154.1	303	145	219
MHPFV-SS 200	219.1	202.7	372	180	276

Butt-weld ANSI (B 36.10 Schedule 40), DN 80 - 200 (3 - 8 in.) STR

DIMENSION MHPFV-SS	DIM. O.D.	DIM. I.D.	DIM. Bmax ₂	DIM. C	DIM. D	DIM. F
MHPFV-SS 80	88.9	77.9	204	216	129	48
MHPFV-SS 100	114.3	102.3	256	264	156	60
MHPFV-SS 125	141.3	128.1	313	322	193	74
MHPFV-SS 150	168.3	154.1	370	370	219	91
MHPFV-SS 200	219.1	202.7	465	464	276	117

ORDERING INFO

STRAIGHT		Size		End Connection	Weight (Kg.)
With 100 mesh	Pleated	Inch	MM		
MHPFV-SS-15-S-S-M	MHPFV-SS-15-S-S-P	1/2"	15	Socket Weld	2.2
MHPFV-SS-20-S-S-M	MHPFV-SS-20-S-S-P	3/4"	20	Socket Weld	2.2
MHPFV-SS-25-S-S-M	MHPFV-SS-25-S-S-P	1"	25	Socket Weld	3.7
MHPFV-SS-32-S-S-M	MHPFV-SS-32-S-S-P	1-1/4"	32	Socket Weld	3.7
MHPFV-SS-40-S-S-M	MHPFV-SS-40-S-S-P	1-1/2"	40	Socket Weld	3.8
MHPFV-SS-50-S-B-M	MHPFV-SS-50-S-B-P	2"	50	Butt Weld	5.7
MHPFV-SS-65-S-B-M	MHPFV-SS-65-S-B-P	2-1/2"	65	Butt Weld	7.9
MHPFV-SS-80-S-B-M	MHPFV-SS-80-S-B-P	3"	80	Butt Weld	10.7
MHPFV-SS-100-S-B-M	MHPFV-SS-100-S-B-P	4"	100	Butt Weld	17.9
MHPFV-SS-125-S-B-M	MHPFV-SS-125-S-B-P	5"	125	Butt Weld	30.3
MHPFV-SS-150-S-B-M	MHPFV-SS-150-S-B-P	6"	150	Butt Weld	53.6
MHPFV-SS-200-S-B-M	MHPFV-SS-200-S-B-P	8"	200	Butt Weld	97

ANGLE		Size		End Connection	Weight (Kg.)
With 100 mesh	Pleated	Inch	MM		
MHPFV-SS-15-A-S-M	MHPFV-SS-15-A-S-P	1/2"	15	Socket Weld	1.9
MHPFV-SS-20-A-S-M	MHPFV-SS-20-A-S-P	3/4"	20	Socket Weld	1.9
MHPFV-SS-25-A-S-M	MHPFV-SS-25-A-S-P	1"	25	Socket Weld	3
MHPFV-SS-32-A-S-M	MHPFV-SS-32-A-S-P	1-1/4"	32	Socket Weld	3
MHPFV-SS-40-A-S-M	MHPFV-SS-40-A-S-P	1-1/2"	40	Socket Weld	3.1
MHPFV-SS-50-A-B-M	MHPFV-SS-50-A-B-P	2"	50	Butt Weld	3.9
MHPFV-SS-65-A-B-M	MHPFV-SS-65-A-B-P	2-1/2"	65	Butt Weld	5.9
MHPFV-SS-80-A-B-M	MHPFV-SS-80-A-B-P	3"	80	Butt Weld	8.5
MHPFV-SS-100-A-B-M	MHPFV-SS-100-A-B-P	4"	100	Butt Weld	14.3
MHPFV-SS-125-A-B-M	MHPFV-SS-125-A-B-P	5"	125	Butt Weld	22.4
MHPFV-SS-150-A-B-M	MHPFV-SS-150-A-B-P	6"	150	Butt Weld	29.6
MHPFV-SS-200-A-B-M	MHPFV-SS-200-A-B-P	8"	200	Butt Weld	68

Note :

Filter Mesh are available across the following mesh sizes 100 μ (US150), 150 μ (US100), 250 μ (US60) and 500 μ (US35).

Ammonia Pressure / Temperature Chart

°F	°C	INCHES OF Hg	
		PSIG"	barg
-60	-51.1	18.6	-0.61
-55	-48.3	16.7	-0.54
-50	-45.6	14.4	-0.47
-45	-42.8	11.8	-0.39
-40	-40	8.8	-0.283
-35	-37.2	5.5	-0.16
-30	-34.4	1.7	-0.05
-25	-31.7	1.2	0.082
-20	-28.9	3.5	0.241
-18	-27.8	4.5	0.310
-16	-26.7	5.6	0.386
-14	-25.6	6.7	0.461
-12	-24.4	7.8	0.537
-10	-23.3	9	0.620
-8	-22.2	10.2	0.703
-6	-21.1	11.5	0.792
-4	-20	12.8	0.882
-2	-18.9	14.2	0.979
0	-17.8	15.6	1.075
1	-17.2	16.4	1.130
2	-16.7	17.1	1.179
3	-16.1	17.9	1.234
4	-15.6	18.7	1.289
5	-15	19.5	1.344
6	-14.4	20.3	1.399
7	-13.9	21.1	1.454
8	-13.3	22	1.516
9	-12.8	22.8	1.572
10	-12.2	23.7	1.634
11	-11.7	24.6	1.696
12	-11.1	25.5	1.758
13	-10.6	26.4	1.820
14	-10	27.4	1.889
15	-9.4	28.3	1.951
16	-8.9	29.3	2.020
17	-8.3	30.3	2.089
18	-7.8	31.3	2.158
19	-7.2	32.4	2.233
20	-6.7	33.4	2.302
21	-6.1	34.5	2.378
22	-5.6	35.5	2.447
23	-5	36.6	2.523
24	-4.4	37.7	2.599
25	-3.9	38.8	2.675

°F	°C	INCHES OF Hg	
		PSIG"	barg
26	-3.3	40	2.757
27	-2.8	41.2	2.840
28	-2.2	42.4	2.923
29	-1.7	43.7	3.013
30	-1.1	44.9	3.095
31	-0.6	46.1	3.178
32	0	47.4	3.268
33	0.6	48.7	3.357
34	1.1	50	3.447
35	1.7	51.4	3.543
36	2.2	52.7	3.633
37	2.8	54.1	3.730
38	3.3	55.5	3.826
39	3.9	57	3.930
40	4.4	58.4	4.0265
41	5	59.2	4.081
42	5.6	61.4	4.233
43	6.1	62.9	4.336
44	6.7	64.5	4.447
45	7.2	66.1	4.557
46	7.8	67.6	4.660
47	8.3	69.3	4.778
48	8.9	70.9	4.888
49	9.4	72.6	5.005
50	10	74.3	5.122
55	12.8	83.2	5.736
60	15.6	92.6	6.384
65	18.3	102.8	7.087
70	21.1	113.8	7.846
75	23.9	125.5	8.652
80	26.7	138	9.514
85	29.4	151.4	10.438
90	32.2	165.5	11.410
95	35	180.6	12.451
100	37.8	196.7	13.561
105	40.6	213.9	14.747
110	43.3	231.8	15.982
115	46.1	251	17.305
120	48.9	271.1	18.691
125	51.7	292.5	20.167
130	54.4	314.9	21.7115
135	57.2	338.8	23.359
140	60	363.5	25.062
145	62.8	390.2	26.903
150	65.6	417.4	28.778