



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.

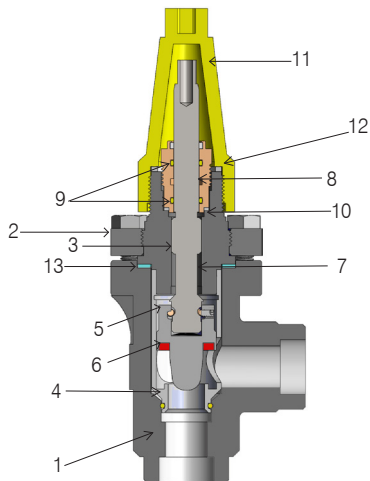
There are two types of MHPRG-SS hand regulating valve MHPRG-A-SS and MHPRG-B-SS are ideal for metering or flashing expansion of liquid refrigerants. These valves are available in angle and globe types. These valves have stainless steel stems with back seating for seal replacement under working conditions. 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

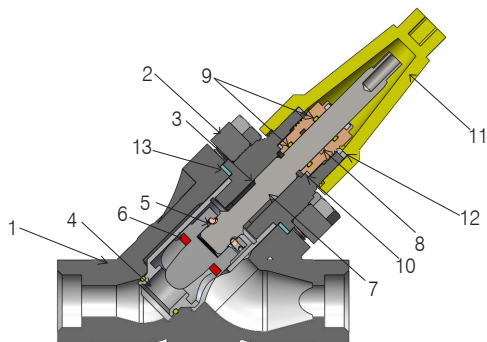
- Maximum working pressure: 150 Bar g (1160 psi g)
- Fluid temperature range: -60°C to + 150°C (-76°F to 302°F)
- Application: Ammonia, Fluorocarbons, Carbon Dioxide
- Material: Body: CF8 Cast Stainless Steel Body
- Internals: SS304
- Seat: PTFE
- Connections: DN-10-40 – Socket/Butt Weld
- DN 50-100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

MATERIAL SPECIFICATION

MHPRG-A-SS & MHPRG-B-SS



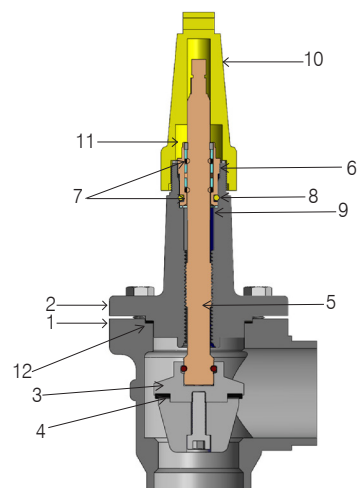
MHPRG-A & B-SS 10-40 ANG



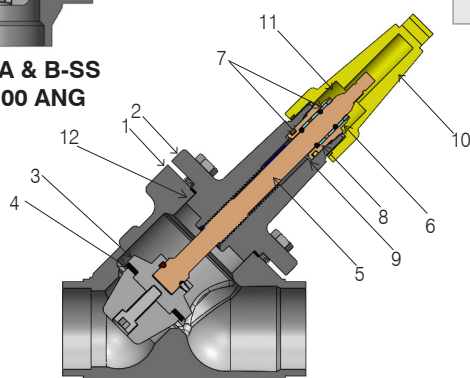
MHPRG-A & B-SS 10-40 STR

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	
	Handwheel	Stainless Steel	GX5CrNi19-10

MHPRG-A-SS & MHPRG-B-SS



MHPRG-A & B-SS 50-100 ANG



MHPRG-A & 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	
	Handwheel	Stainless Steel	GX5CrNi19-10

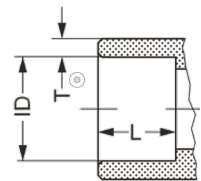
CONNECTIONS

	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

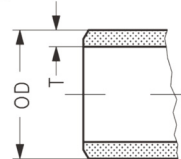


	Size		OD mm	T mm	OD Inch	T Inch	K _v -angle m ³ /h	K _v -straight m ³ /h
	mm	Inch						

Butt-weld ANSI (B 36.10 Schedule 40)

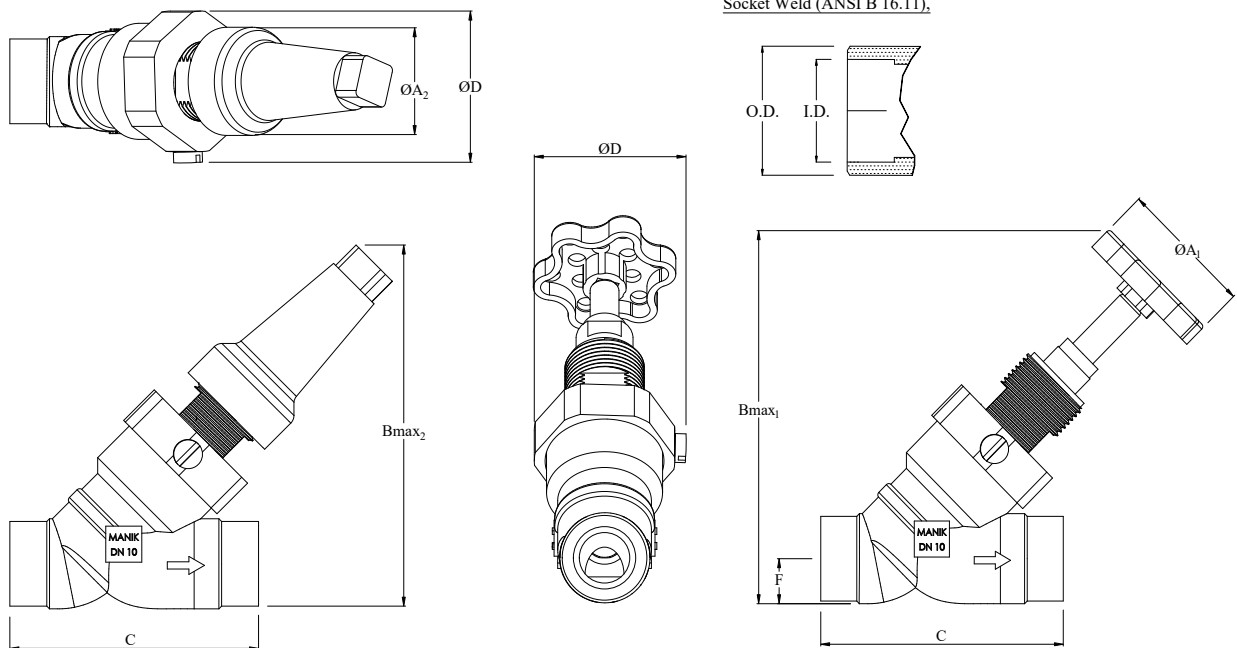
MHPRG-A-SS MHPRG-B-SS	50	2	60.3	3.9	2.37	0.15	80	67.5
	65	2 1/2	73.0	5.2	2.87	0.20	120	97.5
	80	3	88.9	5.5	3.50	0.22	182	152.5
	100	4	114.3	6.0	4.50	0.24	313	278.5

ANSI



DIMENSIONS

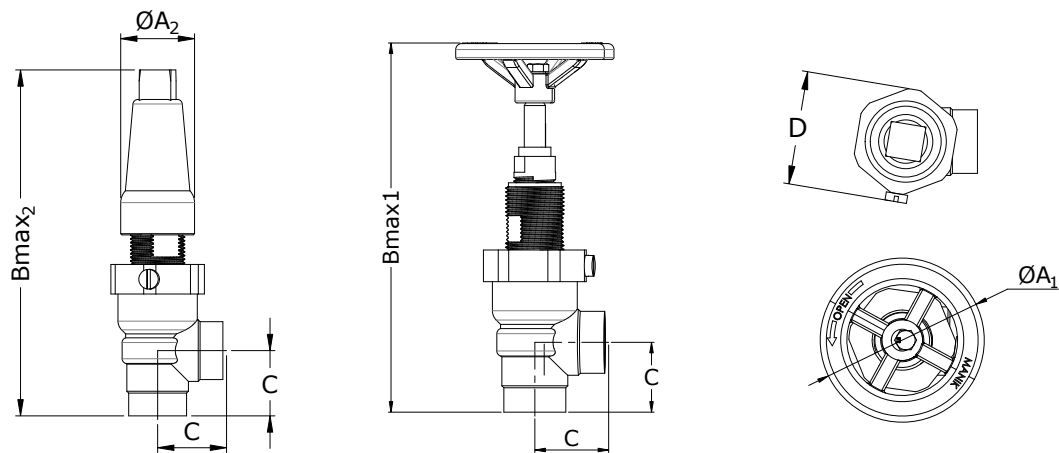
MHPRG-SS 10 SOC GLOBE



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

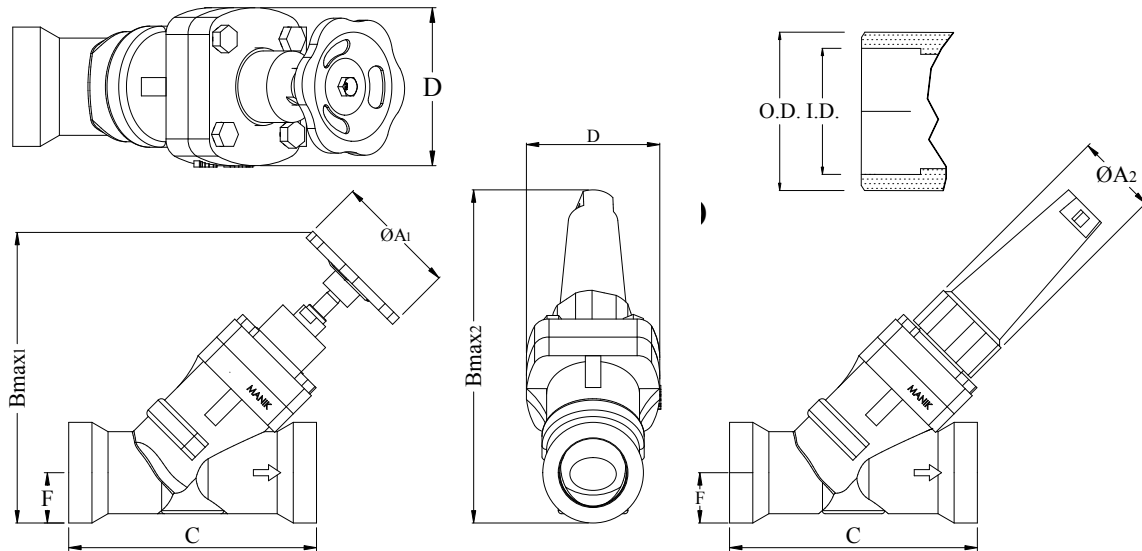


Socket Weld ANSI (B 16.11), DN 10 (3/8 in.)

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),

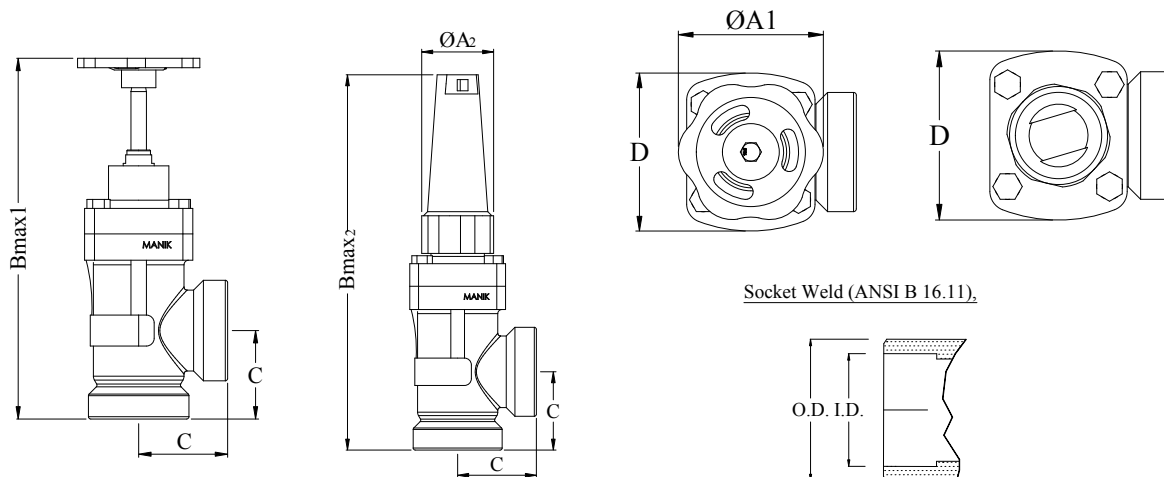


Socket Weld ANSI (B 16.11), DN 15-40 (½ - 1½ in.)

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

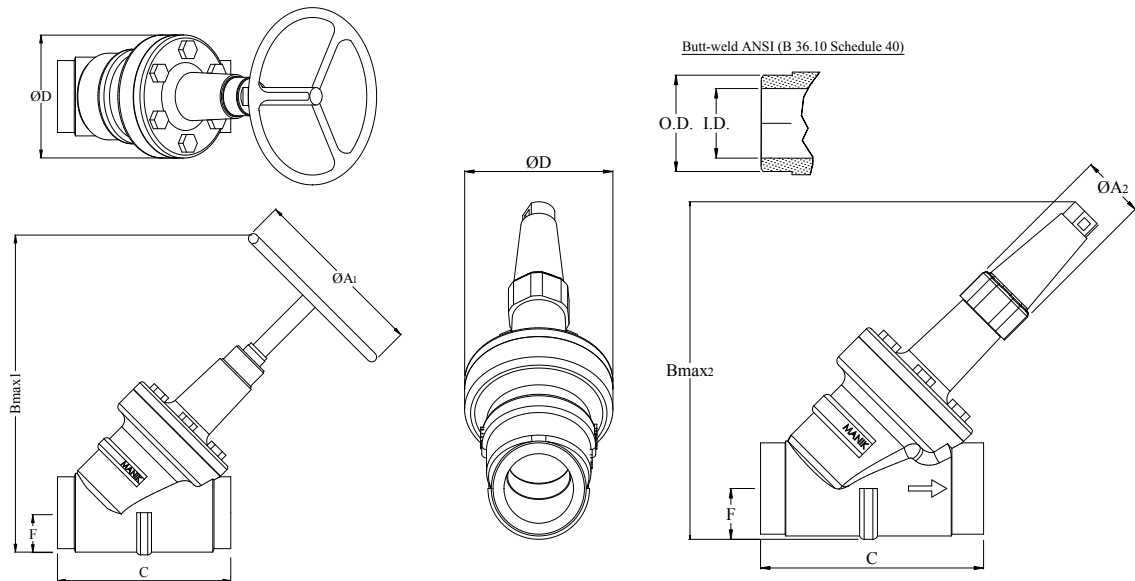
Socket Weld (ANSI B 16.11),



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

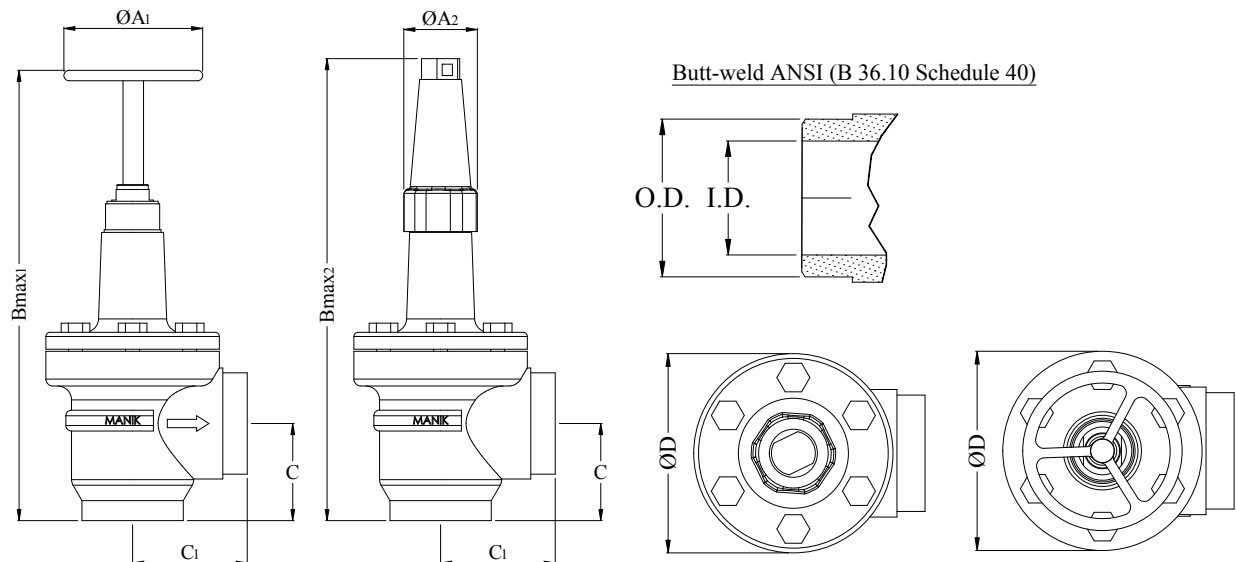
MHPRG-SS 50-65 BW GLOBE



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

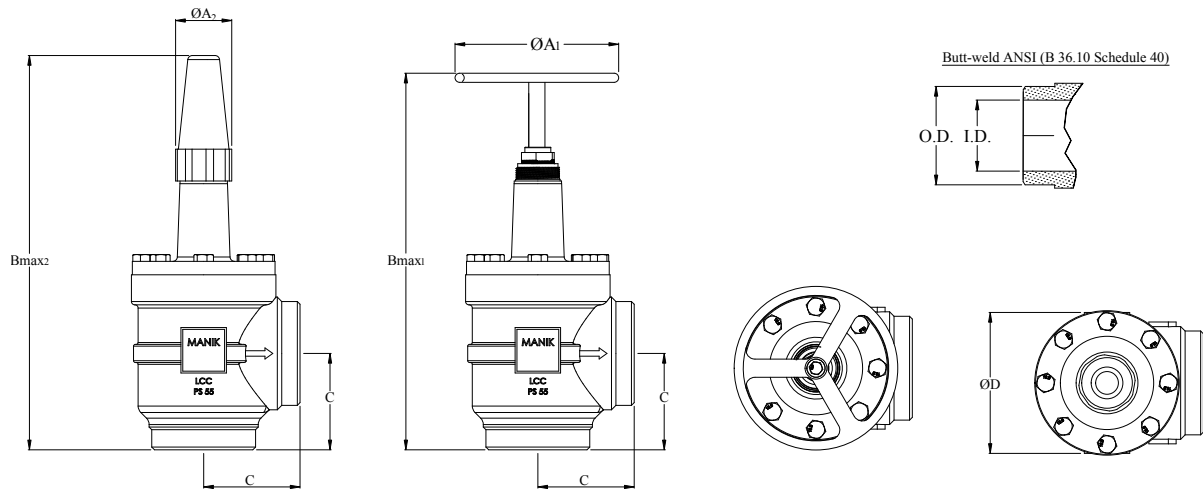


Butt-weld ANSI (B 36.10 Schedule 40)

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	284	315	60.0	72.5	110
MHPRG-SS 65	73.0	62.6	100	50	310	335	70	82.5	125

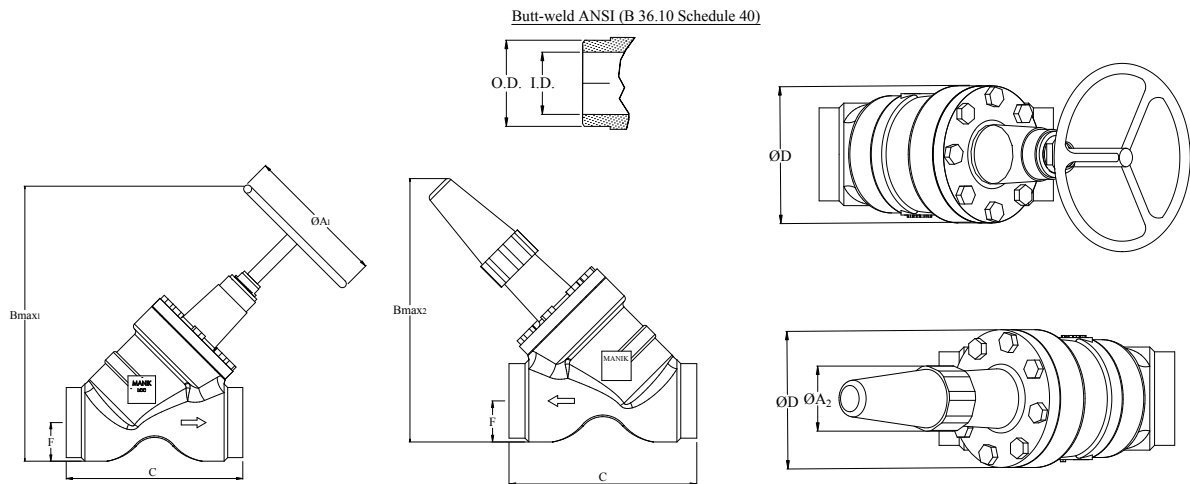
MHPRG-SS 80-100 BW ANG



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-15-G-H-S	MHPRG-SS-15-G-C-S	$\frac{1}{2}$ "	15	Socket Weld	2.7
MHPRG-SS-20-G-H-S	MHPRG-SS-20-G-C-S	$\frac{3}{4}$ "	20	Socket Weld	2.7
MHPRG-SS-25-G-H-S	MHPRG-SS-25-G-C-S	1"	25	Socket Weld	4.8
MHPRG-SS-32-G-H-S	MHPRG-SS-32-G-C-S	1-1/4"	32	Socket Weld	4.8
MHPRG-SS-40-G-H-S	MHPRG-SS-40-G-C-S	1-1/2"	40	Socket Weld	4.8
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	2-1/2"	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-G-H-S	MHPRG-SS-10-G-C-S	$\frac{3}{8}$ "	10	Socket Weld	1.0
MHPRG-SS-15-A-H-S	MHPRG-SS-15-A-C-S	$\frac{1}{2}$ "	15	Socket Weld	2.2
MHPRG-SS-20-A-H-S	MHPRG-SS-20-A-C-S	$\frac{3}{4}$ "	20	Socket Weld	2.2
MHPRG-SS-25-A-H-S	MHPRG-SS-25-A-C-S	1"	25	Socket Weld	3.8
MHPRG-SS-32-A-H-S	MHPRG-SS-32-A-C-S	1-1/4"	32	Socket Weld	3.8
MHPRG-SS-40-A-H-S	MHPRG-SS-40-A-C-S	1-1/2"	40	Socket Weld	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	2-1/2"	65	Butt Weld	7.9
MHPRG-SS-80-G-H-B	MHPRG-SS-80-A-C-B	3"	80	Butt Weld	13.3
MHPRG-SS-100-G-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.