



## 2. Manifold Fittings

Long Sweep, 3D Double Back Reinforced & Full Flow

## Section 2a. Long Sweep, 3D Double Back Reinforced & Full Flow

Forged Long Sweep Manifold Fittings are designed and manufactured in accordance with the following specifications:-

<b>MSS-SP-75</b>	Specifications for High Test Wrought Butt Weld Fittings.
<b>ANSI B31.3</b>	Chemical Plant and Petroleum Refinery Piping.
<b>ASME B16.9</b>	Factory-Made Wrought Steel Buttwelding Fittings.
<b>ASME VIII</b>	Boiler and Pressure Vessel Code.
<b>API 6A</b>	Specification for Wellhead and Christmas Tree Equipment.
<b>NACE MR-01-75</b>	Sulphide Stress Cracking Resistant Metallic Materials for Oilfield Equipment.

Manifold Fittings are available either Full Flow or with reducing configuration in all pipe wall schedules, for the following pressure ratings:-

MAX. WORKING PRESSURE	5,000 PSI	7,500 PSI	10,000 PSI	15,000 PSI
TEST PRESSURE	7,500 PSI	11,250 PSI	15,000 PSI	22,500 PSI
OPERATING TEMPERATURE RANGE	-60 TO +345 DEG C	-60 TO +345 DEG C	-60 TO +345 DEG C	-60 TO +345 DEG C
Min. YIELD	52,000 PSI	>80,000 PSI	>80,000 PSI	>80,000 PSI
Min. TENSILE	66,000 PSI	105,000 PSI	105,000 PSI	105,000 PSI
MATERIAL	MSS-SP-75 Gr WPHY 52	ASTM A234 Gr 4130	ASTM A234 Gr 4130	ASTM A234 Gr 4130

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**GENERAL NOTES:** Please contact RBV Energy for any special material or dimensional requirements.

2a.1

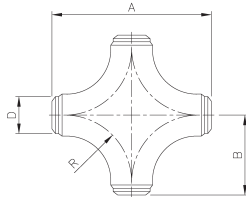
Max. working pressures stated are suitable for temperatures up to 121°C.  
De-rating of max. working pressure will occur as the operating temperature increases above 121°C.



## Section 2a. Long Sweep, 3D Double Back Reinforced & Full Flow

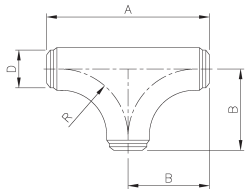


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**Table 2.1 Full Flow Cross**

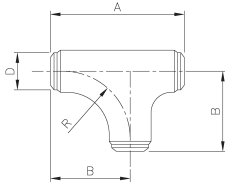
SIZE	ALL DIMENSIONS in mm				APPROX WEIGHT (KG)
	D	A	B	R	
2"	60.3	406	203	150	32
3"	88.9	406	203	150	48
4"	114.3	560	280	210	94
5"	141.3	610	305	240	138
6"	168.3	762	381	305	208



**Table 2.2 Full Flow Tee**

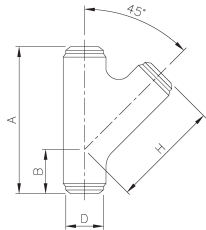
SIZE	ALL DIMENSIONS in mm				APPROX WEIGHT (KG)
	D	A	B	R	
2"	60.3	406	203	150	39
3"	88.9	406	203	150	33
4"	114.3	560	280	210	64
5"	141.3	610	305	240	90
6"	168.3	762	381	305	143

## Section 2a. Long Sweep, 3D Double Back Reinforced & Full Flow



**Table 2.3 Long Sweep Tee**

SIZE	ALL DIMENSIONS in mm				APPROX WEIGHT (KG)
	D	A	B	R	
2"	60.3	330	203	150	34
3"	88.9	330	203	150	28
4"	114.3	406	280	210	51
5"	141.3	483	305	240	76
6"	168.3	686	381	305	132



**Table 2.4 45° Lateral Tee**

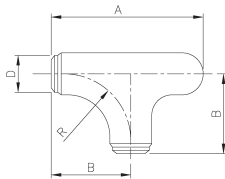
SIZE	ALL DIMENSIONS in mm				APPROX WEIGHT (KG)
	D	A	B	H	
2"	60.3	365	115	265	39
3"	88.9	365	115	265	32
4"	114.3	510	155	365	65
5"	141.3	550	165	405	90
6"	168.3	670	195	505	141

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## Section 2a. Long Sweep, 3D Double Back Reinforced & Full Flow

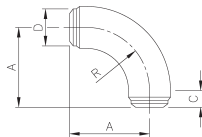


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**Table 2.5 Long Sweep Tee c/w Integral Bull Plug**

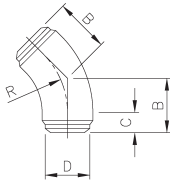
SIZE	ALL DIMENSIONS in mm				APPROX WEIGHT (KG)
	D	A	B	R	
2"	60.3	406	203	150	34
3"	88.9	406	203	150	28
4"	114.3	560	280	210	51
5"	141.3	610	305	240	76
6"	168.3	762	381	305	132



**Table 2.6 90° Long Sweep Elbow**

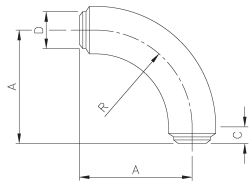
SIZE	ALL DIMENSIONS in mm				APPROX WEIGHT (KG)
	D	A	R	C	
2"	60.3	203	150	53	14
3"	88.9	203	150	53	20
4"	114.3	280	210	70	39
5"	141.3	305	240	65	57
6"	168.3	381	305	76	105

## Section 2a. Long Sweep, 3D Double Back Reinforced & Full Flow



**Table 2.7 45° Long Sweep Elbow**

SIZE	ALL DIMENSIONS in mm				APPROX WEIGHT (KG)
	D	B	R	C	
2"	60.3	118	150	56	9
3"	88.9	118	150	56	14
4"	114.3	162	210	75	26
5"	141.3	171	240	72	37
6"	168.3	203	305	25	57



**Table 2.8 90° 3d Double Backed Bend**

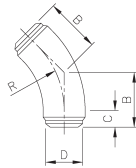
SIZE	ALL DIMENSIONS in mm				APPROX WEIGHT (KG)
	D	A	R	C	
2"	60.3	178	152	26	8
3"	88.9	305	229	76	29
4"	114.3	356	305	51	52
5"	141.3	432	381	51	87
6"	168.3	533	457	76	177

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**Section 2a. Long Sweep, 3D Double Back Reinforced & Full Flow**

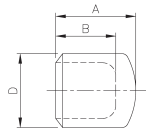


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**Table 2.9 45° 3d Double Backed Bend**

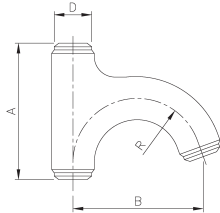
SIZE	ALL DIMENSIONS in mm				APPROX WEIGHT (KG)
	D	B	R	C	
2"	60.3	121	152	58	7
3"	88.9	171	229	76	19
4"	114.3	177	305	51	31
5"	141.3	209	381	51	50
6"	168.3	265	457	76	89



**Table 2.10 Bull Plug**

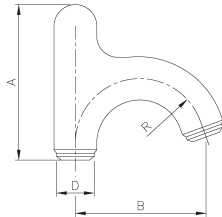
SIZE	ALL DIMENSIONS in mm			APPROX WEIGHT (KG)
	D	A	B	
2"	60.3	70	48	1
3"	88.9	90	60	3
4"	114.3	115	81	6
5"	141.3	140	102	10
6"	168.3	170	126	18

## Section 2a. Long Sweep, 3D Double Back Reinforced & Full Flow



**Table 2.11 Standpipe Goosneck 160 deg c/w Top Outlet**

SIZE	ALL DIMENSIONS in mm				APPROX WEIGHT (KG)
	D	A	B	R	
2"	60.3	330	310	150	47
3"	88.9	330	310	150	48
4"	114.3	406	431	210	91
5"	141.3	483	487	240	133
6"	168.3	686	600	305	238



**Table 2.12 Standpipe Goosneck 160 deg c/w Integral Bull Plug**

SIZE	ALL DIMENSIONS in mm				APPROX WEIGHT (KG)
	D	A	B	R	
2"	60.3	406	310	150	48
3"	88.9	406	310	150	51
4"	114.3	560	431	210	97
5"	141.3	610	487	240	142
6"	168.3	762	600	305	255

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