



# Tube & Butt Weld Fittings

## Chemical Composition (%)

化学成分

ASTM 标准	C	Si	Mn	P	S	Ni	Cr	Mo
304	≤ 0.080	≤ 1.00	≤ 2.00	≤ 0.045	≤ 0.030	8.00 – 11.00	18.00 – 20.00	-
304L	≤ 0.035	≤ 1.00	≤ 2.00	≤ 0.045	≤ 0.030	8.00 – 12.00	18.00 – 20.00	-
316	≤ 0.080	≤ 1.00	≤ 2.00	≤ 0.045	≤ 0.030	10.00 – 14.00	16.00 – 18.00	2.00 – 3.00
316L	≤ 0.035	≤ 1.00	≤ 2.00	≤ 0.045	≤ 0.030	12.00 – 16.00	16.00 – 18.00	2.00 – 3.00
316L VAR	0.015 – 0.030	≤ 1.00	1.00 – 1.50	≤ 0.045	0.005 – 0.012	12.00 – 16.00	16.00 – 18.00	2.00 – 3.00
316L VIM+VAR	0.015 – 0.030	≤ 1.00	0.15 – 0.40	≤ 0.045	0.005 – 0.010	12.00 – 16.00	16.00 – 18.00	2.00 – 3.00

## Characteristics

材料特性

ASTM	机械					抗氧化 临界温度			
	拉伸 强度 (N/mm <sup>2</sup> )	屈服 强度 (N/mm <sup>2</sup> )	延伸率 (%)	比重	热膨胀 × 10 <sup>-6</sup> 0 - 100°C	比电阻 (10 <sup>-8</sup> Ωm)	比热 0 - 100°C kJ / (kg·°C)	连续使用 (°C)	间歇使用 (°C)
304	≥ 520	≥ 205	≥ 30	7.93	17.3	72	0.5	900	810
304L	≥ 480	≥ 175	≥ 30	7.93	17.3	72	0.5	900	810
316	≥ 520	≥ 205	≥ 30	7.98	16.0	74	0.5	900	810
316L	≥ 480	≥ 175	≥ 30	7.98	16.0	74	0.5	900	810

## Cleaned Quality Assurance Values

清洁质量保证值

检测项目	保证值				
	AP	等级	BA 等级	MP + EP 等级	EP 等级
含油量测定	≤ 0.1mg/ft <sup>2</sup>		≤ 0.01mg/ft <sup>2</sup>		
颗粒计数	≤ 0.3μm 颗粒的数量 ≤ 5/cf		≤ 0.1μm 颗粒的数量 ≤ 5/cf		≤ 0.1μm 颗粒的数量 ≤ 5/cf
液体电阻率测量	-		≥ 0.5MΩ-cm		
离子色谱分析	-		≤ 10ng/cm <sup>2</sup>		≤ 5ng/cm <sup>2</sup>
露点测量	-		≤ -75°C		

# Tube & Butt Weld Fittings



## Dimensional Tolerance

尺寸公差

Item	Products	Normal Pipe Size			
		1/8" ~ 3/8"	8A ~ 10A 1/2" ~ 3/4"	15A ~ 65A 1" ~ 3"	80A ~ 200A 4" ~ 6"
Pipe Fitting Header Joint-Header Multi-Tee	Outside Diameter at End (OD)	±0.1mm	±1%		
	Wall Thickness at End (T)	Either Bigger ±0.2mm or ±20%			
	Straight End Length (L)	+ Not Specified - 0.4mm			
	Thinning Length (I)	+ Not Specified - 0			
Elbow, D-Elbow	Bend Radius (R)	±0.8mm	±1.6mm	±3.2mm	
Elbow, D-Elbow, Tee, Joint-Tee D-Tee, Header Joint-Header, Multi-Tee	Center to End (A · B · C · M)	±0.8mm	±1.6mm	±3.2mm	
Lap Joint Pipe Flange	Length (FF FP)	±0.8mm	±1.6mm	±3.2mm	
Cap, 180° Return Bend	Back to End (E, BH)	±0.8mm	±3.2mm		
Reducer, Cap Reducer J-Reducer, J-Cap Outside-Diameter-Changeable Fitting Wall-Thickness-Changeable Fitting	Over All Length (H, Q)	±0.8mm	±1.6mm	±3.2mm	
Lap Joint	Thickness of Lap (t)	10A		+1.6mm - 0	
	Diameter of Lap (G)	10A	+0mm - 0.8	+0mm -1.6	
Header Joint-Header Multi-Tee	Length of End (E-L)	±1.6mm			
	Branch Pitch (P)	±1.6mm		±3.2mm	
	Total Length (L)	+5mm -0			

## Tube Fittings Ordering Information

管件订购信息

S40		66754		0150 0100				F4	
材质		产品系列		主管尺寸		支管尺寸		表面处理	
W40	SUS316L焊管	66751	180°Elbow	0050	1/2"	0050	1/2"	BLANK	BA Ra≤0.8μm
W10	SUS304焊管	66752	45°Elbow	0075	3/4"	0075	3/4"	F1	BA Ra≤0.13μm
S40	SUS316L无缝管	66760	90°Elbow	0100	1"	0100	1"	F2	BA Ra≤0.18μm
S10	SUS304 无缝管	66761	90°Mitered Elbow	0150	1 1/2"	0150	1 1/2"	F3	BA Ra≤0.25μm
S40V	SUS316L VAR无缝管	66762	Reducer	0200	2"	0200	2"	F4	EP Ra≤0.375μm
S40W	SUS316L VIM+VAR无缝管	66753	Equal Tee	0250	2 1/2"	0250	2 1/2"	F5	MP Ra≤0.8μm
		66754	Reducer Tee	0300	3"	0300	3"	F6	AP Ra≤2.50μm
		66755	4 Way Crosses	0400	4"	0400	4"		
		66756	5 Way Crosses	0600	6"	0600	6"		
		66757	6 Way Crosses						
		66758	Reducer Crosses						

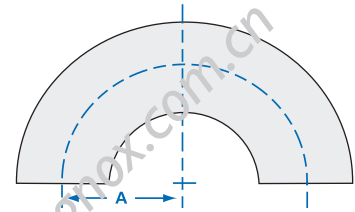
## 说明

- 1、支管尺寸选项仅适用于三通和大小头，当支管尺寸与主管尺寸相同时，支管尺寸代码将被省略。
- 2、型号说明仅用于说明型号组成规则，有些组合实际并不存在，如有疑问请联系迈格诺科销售代表。

# Tube & Butt Weld Fittings

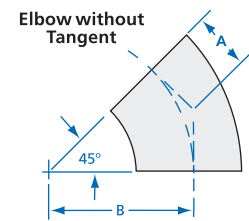
## 180° Return Bend Radius Elbows

Part Number	Dimensions, mm		
	Tube OD	Wall Thickness	A
66751-0050	12.70	1.24	19.05
66751-0075	19.05	1.65	28.70
66751-0100	25.40	1.65	38.10
66751-0150	38.10	1.65	57.15
66751-0200	50.80	1.65	76.20



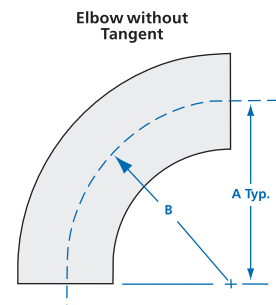
## 45° Radius Elbows

Part Number	Dimensions, mm			
	Tube OD	Wall Thickness	A	B
66752-0050	12.70	1.24	7.87	19.05
66752-0075	19.05	1.65	11.91	28.70
66752-0100	25.40	1.65	15.75	38.10
66752-0150	38.10	1.65	23.62	57.15
66752-0200	50.80	1.65	31.50	76.20
66752-0250	63.50	1.65	39.37	95.25
66752-0300	76.20	1.65	47.24	114.30
66752-0400	101.60	2.11	63.25	152.40
66752-0600	152.40	2.77-3.40	94.74	228.60



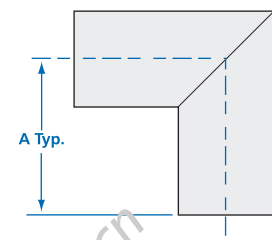
## 90° Radius Elbows

Part Number	Dimensions, mm			
	Tube OD	Wall Thickness	A	B
66760-0050	12.70	1.24	19.05	19.05
66760-0075	19.05	1.65	28.63	28.70
66760-0100	25.40	1.65	38.10	38.10
66760-0150	38.10	1.65	57.15	57.15
66760-0200	50.80	1.65	76.20	76.20
66760-0250	63.50	1.65	95.25	95.25
66760-0300	76.20	1.65	114.30	114.30
66760-0400	101.60	2.11	152.40	152.40
66760-0600	152.40	2.77-3.40	228.60	228.60



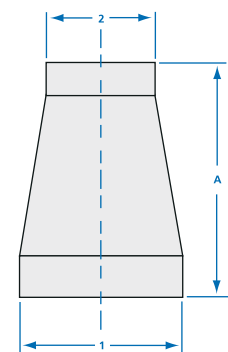
## 90° Mitered Elbow

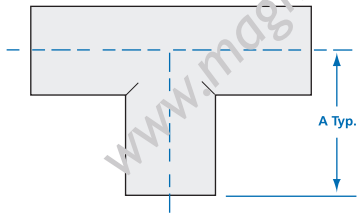
Part Number	Dimensions, mm		
	Tube OD	Wall Thickness	A
66761-0075	19.05	0.89	25.40
66761-0100	25.40	1.65	47.75
66761-0150	38.10	1.65	57.15
66761-0200	50.80	1.65	76.20
66761-0250	63.50	1.65	76.20
66761-0300	76.20	1.65	82.55
66761-0400	101.60	2.11	98.55
66761-0600	152.40	2.77	127.00



## Conical Reducers

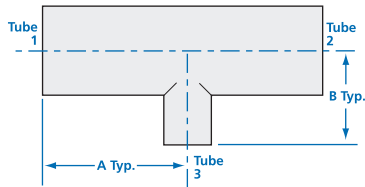
Part Number	Dimensions, (in.)		
	Tube OD	Wall Thickness	A
66762-100075	1	3/4	1.38
66762-150075	1 1/2	3/4	2.38
66762-150100	1 1/2	1	2.38
66762-200100	2	1	2.38
66762-200150	2	1 1/2	2.38
66762-250150	2 1/2	1 1/2	2.38
66762-250200	2 1/2	2	2.38
66762-300150	3	1 1/2	3.62
66762-300200	3	2	3.62
66762-300250	3	2 1/2	3.62
66762-400150	4	1 1/2	3.62
66762-400200	4	2	3.62





## Tees

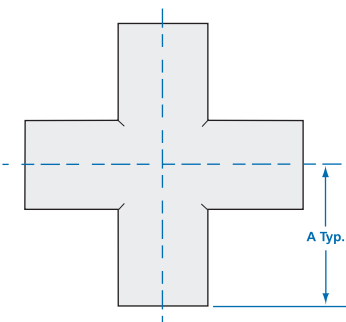
Part Number	Dimensions, mm		
	Tube OD	Wall Thickness	A
66753-0050	12.70	1.24	19.05
66753-0075	19.05	1.65	25.40
66753-0100	25.40	1.65	47.75
66753-0150	38.10	1.65	57.15
66753-0200	50.80	1.65	76.20
66753-0250	63.50	1.65	76.20
66753-0300	76.20	1.65	95.25
66753-0400	101.60	2.11	98.40
66753-0600	152.40	2.77	127.00



## Reducer Tees

Part Number	Dimensions, mm			
	Tube 1 & 2 Arm od	Tube 3 Leg od	A	B
66754-100050	25.40	12.70	47.75	25.40
66754-100075	25.40	19.05	47.75	28.45
66754-150050	38.10	12.70	57.15	31.75
66754-150075	38.10	19.05	57.15	35.05
66754-150100	38.10	25.40	57.15	54.10
66754-200050	50.80	12.70	76.20	38.10
66754-200075	50.80	19.05	76.20	41.40
66754-200100	50.80	25.40	76.20	60.45
66754-200150	50.80	38.10	76.20	63.50
66754-250150	63.50	38.10	76.20	69.85
66754-250200	63.50	50.80	76.20	82.55
66754-300150	76.20	38.10	82.55	76.20
66754-300200	76.20	50.80	82.55	88.90
66754-300250	76.20	63.50	82.55	82.55
66754-400150	101.60	38.10	98.55	88.90
66754-400200	101.60	50.80	98.55	101.60
66754-400250	101.60	63.50	98.55	95.25
66754-400300	101.60	76.20	98.55	95.25
66754-400150	152.40	38.10	127.00	114.30
66754-600200	152.40	50.80	127.00	127.00
66754-600250	152.40	63.50	127.00	120.65

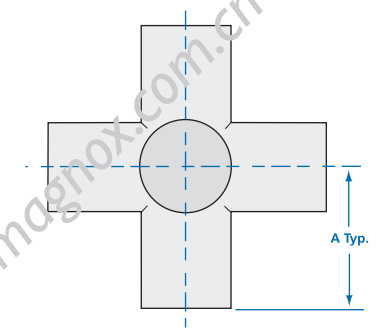
## 4-Way Crosses



Part Number	Dimensions, mm		
	Tube OD	Wall Thickness	A
66755-0050	12.70	1.24	19.05
66755-0075	19.05	1.65	25.40
66755-0100	25.40	1.65	47.75
66755-0150	38.10	1.65	57.15
66755-0200	50.80	1.65	76.20
66755-0250	63.50	1.65	76.20
66755-0300	76.20	1.65	82.55
66755-0400	101.60	2.11	98.55
66755-0500	127.00	2.11	107.95
66755-0600	152.40	2.77	127.00
66755-0800	203.20	3.05	177.80
66755-1000	254.00	3.05	241.30

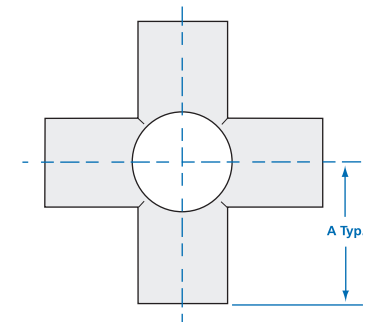
## 5-Way Crosses

Part Number	Dimensions, mm		
	Tube OD	Wall Thickness	A
66756-0075	19.05	1.65	25.40
66756-0100	25.40	1.65	47.75
66756-0150	38.10	1.65	57.15
66756-0200	50.80	1.65	76.20
66756-0250	63.50	1.65	76.20
66756-0300	76.20	1.65	82.55
66756-0400	101.60	2.11	98.55
66756-0500	127.00	2.11	107.95
66756-0600	152.40	2.77	127.00



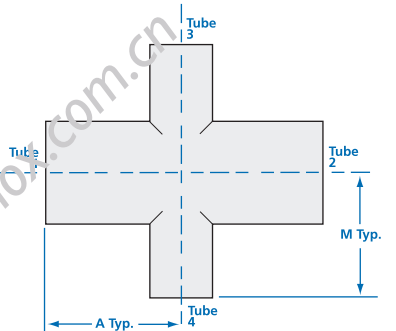
## 6-Way Crosses

Part Number	Dimensions, mm		
	Tube OD	Wall Thickness	A
66757-0075	19.05	1.65	25.40
66757-0100	25.40	1.65	47.75
66757-0150	38.10	1.65	57.15
66757-0200	50.80	1.65	76.20
66757-0250	63.50	1.65	76.20
66757-0300	63.50	1.65	95.25
66757-0400	76.20	2.11	82.55
66757-0500	127.00	2.11	107.95
66757-0600	152.40	2.77	127.00



## Reducer Crosses

Part Number	Dimensions, mm			
	Tube 1 & 2 Arm od	Tube 3 & 4 Leg od	A	B
66758-100050	25.40	12.70	47.75	25.40
66758-100075	25.40	19.05	47.75	28.45
66758-150050	38.10	12.70	57.15	31.75
66758-150075	38.10	19.05	57.15	35.05
66758-150100	38.10	25.40	57.15	54.10
66758-200050	50.80	12.70	76.20	38.10
66758-200075	50.80	19.05	76.20	41.40
66758-200100	50.80	38.10	76.20	63.50
66758-200150	63.50	38.10	76.20	69.85
66758-250150	63.50	50.80	76.20	82.55
66758-250200	76.20	38.10	82.55	76.20
66758-300150	76.20	50.80	82.55	88.90
66758-300200	76.20	63.50	82.55	82.55
66758-300250	101.60	38.10	98.55	88.90
66758-400150	101.60	50.80	98.55	101.60
66758-400200	101.60	63.50	98.55	95.25
66758-400250	101.60	76.20	98.55	95.25
66758-400300	152.40	38.10	127.00	114.30
66758-600150	152.40	50.80	127.00	127.00
66758-600200	152.40	63.50	127.00	120.65
66758-600250	152.40	76.20	127.00	120.65



Other reducer combinations can be supplied upon request

## Tube Ordering Information

管道订购信息

S40		66759		4		6		F4	
材质		产品系列		尺寸		长度		表面处理	
W40	SUS316L焊管	66759	英制	4	1/4"	2	2000mm	BLANK	BA Ra≤0.8um
W10	SUS304焊管	66763-05	A制5S	6	3/8"	4	4000mm	F4	EP Ra≤0.375um
S40	SUS316L无缝管	66763-10	A制10S	8	1/2"	6	6000mm	F5	MP Ra≤0.8um
S10	SUS304 无缝管	66764	公制	12	3/4"			F6	AP Ra≤2.50um
S40V	SUS316L VAR无缝管			16	1"				
S40W	VIM+VAR无缝管			20	1 1/4"				
				24	1 1/2"				
				32	2"				
				40	2 1/2"				
				48	3"				
				64	4"				
				80	5"				
				96	6"				
				XXXA	A制管				
				XXXM	公制管				

## 说明

型号说明仅用于说明型号组成规则，有些组合实际并不存在；  
如有疑问请联系迈格诺科销售代表。



# Tube & Butt Weld Fittings

## Tube Series

英制规格管道系列

Material	316L/304
Surface treatment	EP/BA/AP
Range of size	1/8" -12"
Comply with specification	ASTM A269.A632



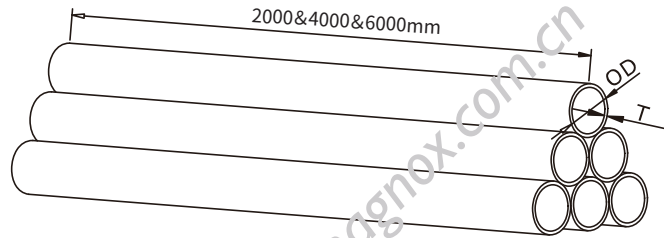
Tube size		Wall Thickness (mm)	316L/304L BA/AP 316L EP		Length
Inch size	Outside Diameter (mm)		Seamless	Seam	
1/4"	6.35	0.89/1.0	√		2000/4000/6000
3/8"	9.53	0.89/1.0	√		
1/2"	12.7	1.0/1.24	√		
5/8"	15.88	1.24	√		
3/4"	19.05	1.24/1.65	√		
1"	25.4	1.65	√	√	
1-1/2"	38.1	1.65	√	√	
2"	50.8	1.65	√	√	
2-1/2"	63.5	1.65	√	√	
3"	76.2	1.65	√	√	
4"	101.6	2.11	√	√	
5"	127	2.77	√	√	
6"	152.4	2.77	√	√	
8"	203.20	3.05	√	√	
10"	254.00	3.05	√	√	
12"	304.80	3.05	√	√	

# Tube & Butt Weld Fittings

## Pipe Series

A制规格管道系列

Material	316L/304
Surface treatment	EP/BA/AP
Range of size	15A-1000A
Comply with specification	JIS G3459, JIS G3468



Pipe size		Wall Thickness (mm)		316L/304L BA/AP 316L EP		Length
A size	Outside Diameter (mm)	5S	10S	Seamless	Seam	
15A	21.7	1.65	2.1	√	√	2000/4000/6000
20A	27.2	1.65	2.1	√	√	
25A	34.0	1.65	2.8	√	√	
32A	42.7	1.65	2.8	√	√	
40A	48.6	1.65	2.8	√	√	
50A	60.5	1.65	2.8	√	√	
65A	76.3	2.1	3.0		√	
80A	89.1	2.1	3.0		√	
90A	101.6	2.1	3.0		√	
100A	114.3	2.1	3.0		√	
125A	139.8	2.8	3.4		√	
150A	165.2	2.8	3.4		√	
200A	216.3	2.8	4.0		√	
250A	267.4	3.4	4.0		√	
300A	318.5	4.0	4.5		√	
350A	355.6	4.0	5.0		√	
400A	408.4	4.5	5.0		√	
450A	457.2	4.5	5.0		√	
500A	508.0	5.0	5.5		√	
550A	558.8	5.0	5.5		√	
600A	609.6	5.5	6.5		√	
650A	680.4	—	8.0		√	
700A	711.2	—	8.0		√	
750A	762.0	—	8.0		√	
800A	812.8	—	8.0		√	
850A	863.6	—	8.0		√	
900A	914.4	—	8.0		√	
950A	965.2	—	8.0		√	
1000A	1016	—	9.5		√	