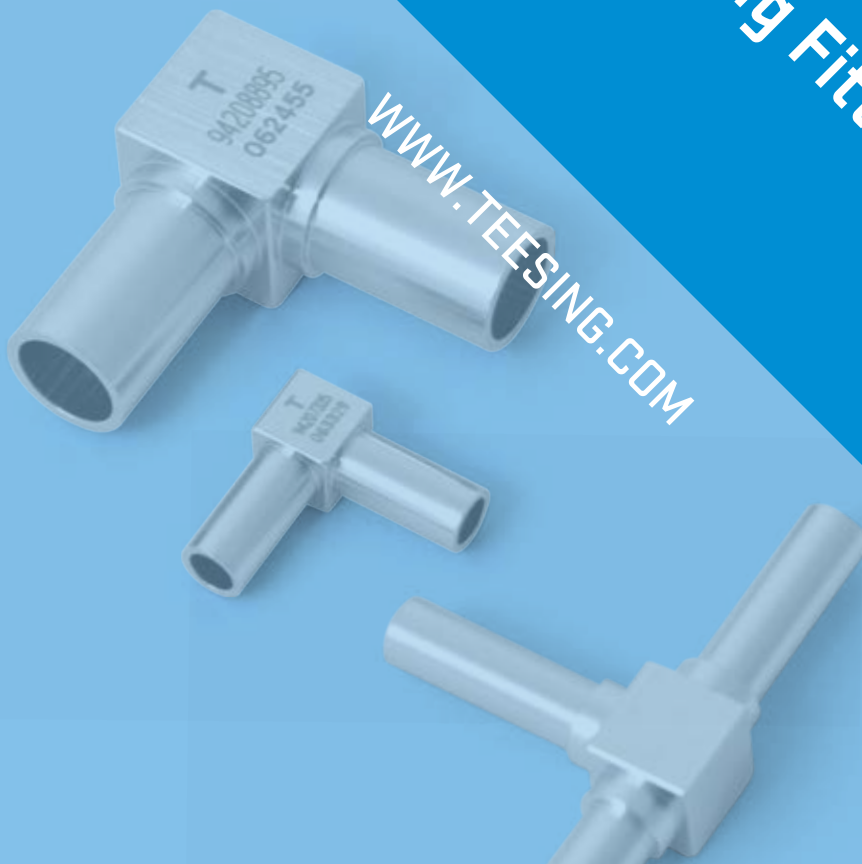


**TEESING**



Micro Butt Welding Fittings






# ABOUT TEESING

Teesing B.V. has built a sound international reputation as a technical supplier and engineering company, since 1952. An organization that learns from the past, lives in the present and looks into the future. A stimulating approach for any forward-looking enterprise! Teesing maintains harmonious working partnerships with a wide range of manufacturers and business partners worldwide. Principal markets are in Europe, Asia and the U.S.A. The company has permanent offices in Beijing (China), New Jersey (U.S.A.) and Zhubei City (Taiwan). The head office is located in Rijswijk, The Netherlands.

The more harmonious the connections, the better a system works. This goes for both technical processes and people-to-people relationships! Thinking and working together – manufacturer, supplier and customer – to fully satisfy present demands while anticipating on future needs. This is “the right connection”, the Teesing approach, fully shared by our partners on a national and international level, in a rapidly expanding global market. A vision that is fast becoming a reality!

## OUR BUSINESS UNITS

 <b>TEESING</b>	 <b>TEESING</b>	 <b>TEESING</b>
<b>INDUSTRIAL APPLICATIONS</b>	<b>SUBMICRON TECHNOLOGIES</b>	<b>ALTERNATIVE ENERGY</b>
International supplier of fittings, valves, tubing, systems and assemblies.	International supplier of HP/UHP components and assemblies from source to process.	International supplier of components, systems and assemblies for CNG/H2 projects.

# TEESING INTRODUCTION

ALL PRODUCTS  
SUPPLIED BY TEESING  
CAN BE  
DOUBLE PACKED  
IN CLEANROOM  
CONDITIONS  
ON REQUEST

## WHY TEESING?

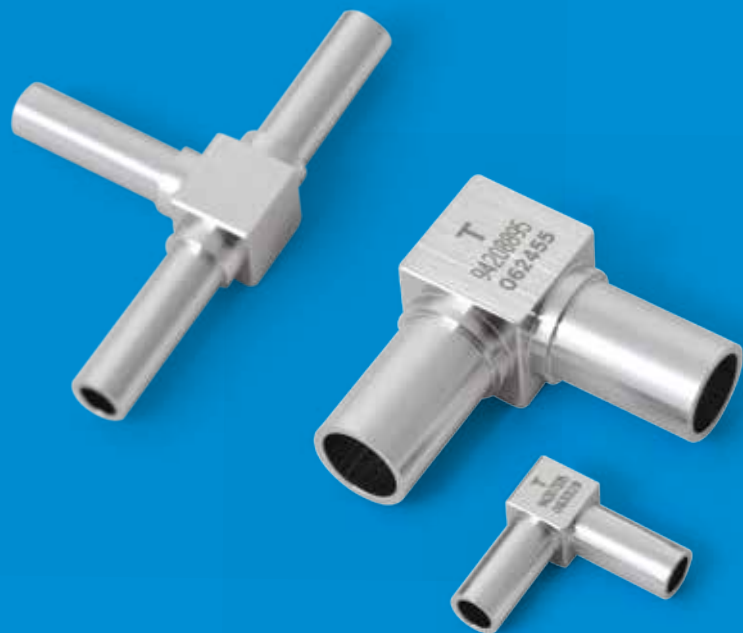
- **The International Supplier of high quality connectivity solutions**  
With offices in Europe, USA and Asia, Teesing can support you all over the world with large variety of products.
- **Extensive knowledge in application advice**  
Our experienced sales engineers can advise you on any application.
- **Customer focused**  
We are willing to adapt to customer requirements. We are interested in your specific application to ensure you acquire the best products and support.
- **Flexibility**  
Teesing has a new warehouse-system to deliver fast and secure. Double packed or regular.
- **Technical supplier for over 60 years**  
We supply since 1952, Teesing is a solid partner for a large amount of companies worldwide.
- **Innovative engineering department**  
In close co-operation with the customer and supported by the latest technology, Teesing can develop the right products and assemblies for your specific requirements.
- **In-house Cleanroom in the Netherlands**  
Teesing has the unique capability to assemble its UHP fittings, hoses, valves, regulators and tubing in a class 100 cleanroom.
- **Global Partnerships**  
We have exclusive partnerships in Europe, USA and Asia to deliver you the best products at the right price.



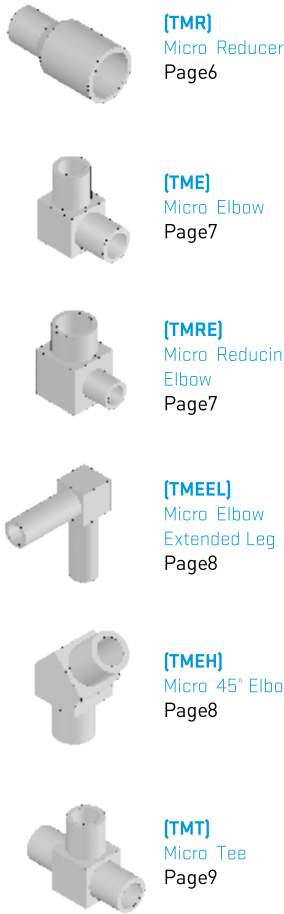
# INDEX

## MICRO BUTT WELD FITTINGS

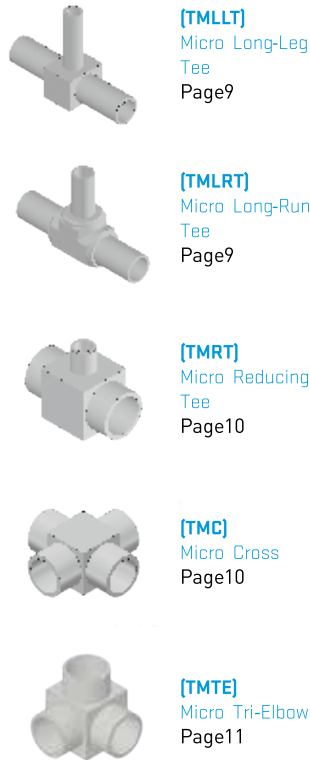
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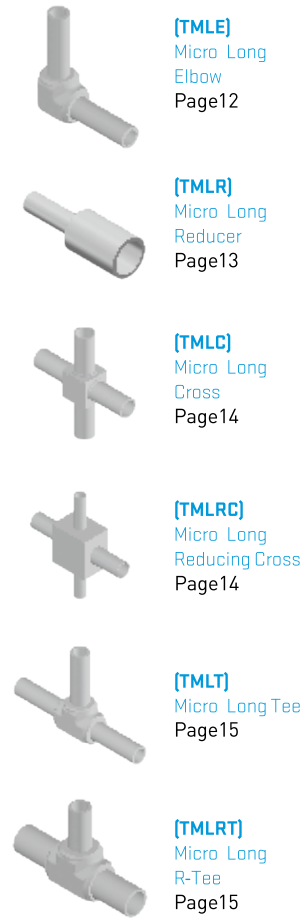
### Mini Butt Weld Fittings



### Mini Butt Weld Fittings



### Long Butt Weld Fittings



## Demonstration of Part Number

Product Category	Description	Product Code	EP 5Ra Finish	BA 10Ra Finish or Mill Finish
<u>Mini Butt Weld Fittings</u>	Micro Reducer	TMR	TMR6 -1/2 -1/4 -SE	TMR6 -1/2 -1/4 -SB
	Micro Elbow	TME	TME6 -1/2 -SE	TME6 -1/2 -SB
	Micro Reducing Elbow	TMRE	TMRE6 -1/2 -1/4 -SE	TMRE6 -1/2 -1/4 -SB
	Micro Elbow Extended Leg	TMEEL	TMEEL6 -1/4 -13 -SE	TMEEL6 -1/4 -13 -SB
	Micro 45° Elbow	TMEH	TMEH6 -1/2 -SE	TMEH6 -1/2 -SB
	Micro Tee	TMT	TMT6 -1/2 -SE	TMT6 -1/2 -SB
	Micro Long-Leg Tee	TMLLT	TMLLT6 -1/4 -SE	TMLLT6 -1/4 -SB
	Micro Long-Run Tee	TMLRT	TMLRT6 -1/4 -SE	TMLRT6 -1/4 -SB
	Micro Reducing Tee	TMRT	TMRT6 -1/2 -1/4 -SE	TMRT6 -1/2 -1/4 -SB
	Micro Cross	TMC	TMC6 -1/2 -SE	TMC6 -1/2 -SB
	Micro Tri-Elbow	TMTE	TMTE6 -1/2 -SE	TMTE6 -1/2 -SB
<u>Long Butt Weld Fittings</u>	Micro Long Elbow	TMLE	TMLE -1/4 -LE	TMLE -1/4 -LB
	Micro Long Reducer	TMLR	TMLR -3/8-1/4 -LE	TMLR -3/8-1/4 -LB
	Micro Long Tee	TMLT	TMLT -1/4 -LE	TMLT -1/4 -LB
	Micro Long R-Tee	TMLRT	TMLRT -3/8-1/4 -LE	TMLRT -3/8-1/4 -LB
	Micro Long Cross	TMLC	TMLC -1/4 -LE	TMLC -1/4 -LB
	Micro Long Reducing Cross	TMLRC	TMLRC -3/8-1/4 -LE	TMLRC -3/8-1/4 -LB

## Technical Specification

### Material Specification

Code	Material	Specification
D	316L VIM+VAR StainlessSteel	Bar stock meets the standard of
S	316L VAR or VDD StainlessSteel	ASTM A479, ASME SA479, ASTM A276.
L	316L StainlessSteel	Forged body meets the standard of
6	316 StainlessSteel	ASTM A182, ASME SA182, ASTM A314.

### Surface Roughness Specification (Wetted Area)

Code	Process Description	Specification
E	EP, electro-polishing	Ra5µin (Ra0.13 µm)
B	BA, mechanical processing	Ra10µin (Ra0.25µm)
M	Machining	mill finish

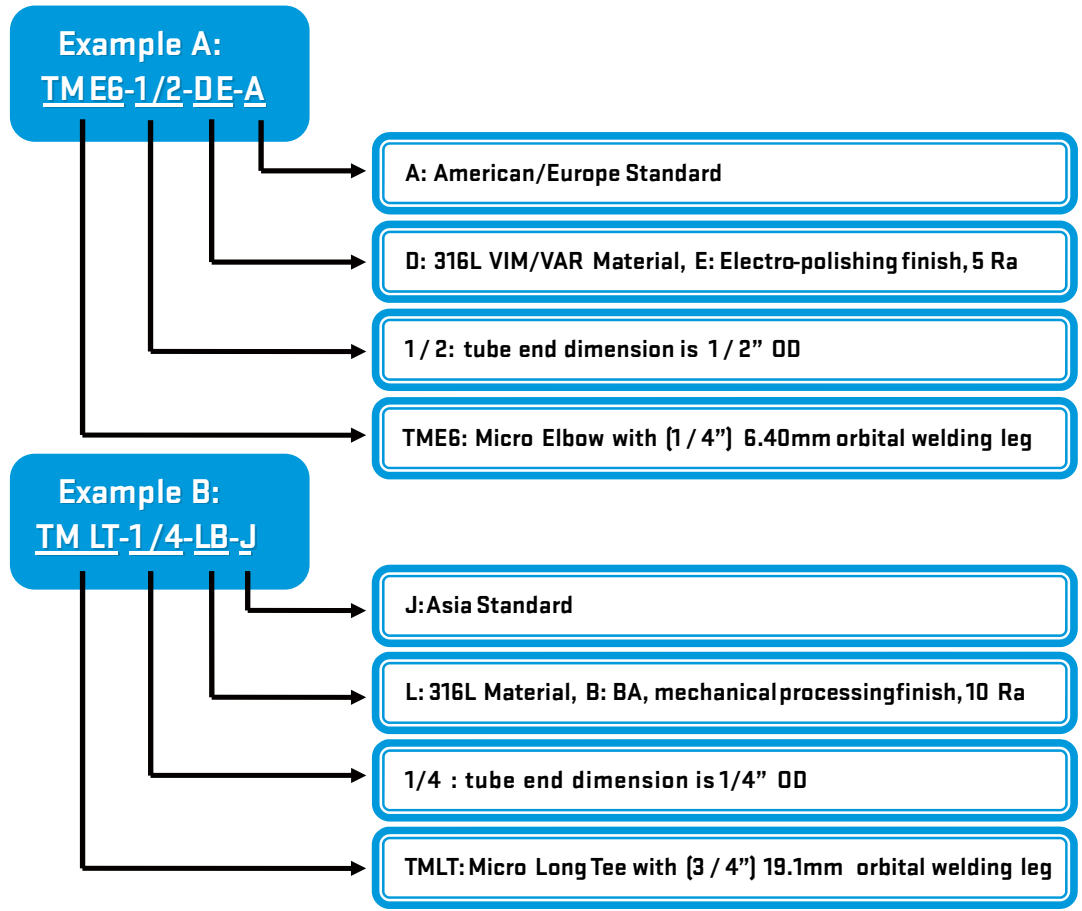
### Cleaning & Packaging Specification

Product Category	Grade	Specification
Mini Butt Weld Fittings	UHP	Teasing spec, SOP-8-57
Long Butt Weld Fittings	UHP	Teasing spec, SOP-8-57

### Pressure Rating Specification

All data shown in this catalogue is for the temperature ranging from -25°C to 36°C.

## How to Order A Part



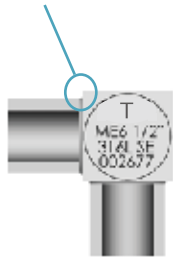
Description	P/N, Part No.	Sleeve Length 1	Tube Size 1 (Inch/mm)	Tube Size 2 (Inch/mm)	Sleeve Length 2	Material	Inner Surface Quality	Dimension Standard
Micro Reducer	TMR6-1/2-1/4-SB	6 = 6.40 mm			11 = 11.40 mm	D = 316L VIM/VAR	E = EP finish, Ra 5	A = American/ Europe Standard
Micro Elbow Extended Leg	TMEEL6-1/4-13-SE	11 = 11.40 mm	1/8"	1/8"	13 = 12.70 mm			
Micro Tee	TMT6-1/2-SB	13 = 12.70 mm	1/4"	1/4"		S = 316L VAR	B = BA finish, Ra 10	J = JIS Standard
Micro Long Elbow	TMLE-1/4-LB		3/8"	3/8"				
Micro Long Reducer	TMLR-3/8-1/4-LB		1/2"	1/2"		L = 316L	M = Mill finish	D = Standard
Micro Long Tee	TMLT-1/4-LB		3/4"	3/4"		G = 316		

# Micro Butt Welding Fittings

## Mini Butt Weld Fittings

- 1/4" (6.35mm) short orbital welding length is provided with a compact design for saving piping space.

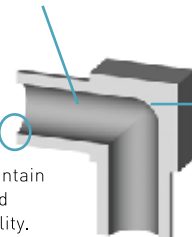
Chamfered body block helps prevent damage to other components during system fabrication or maintenance.



**Marking** identifies brand, type material, and production lot number (heat code tracing).

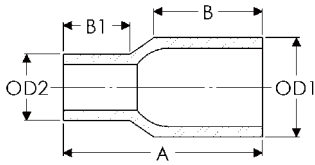
**EP Grade**, elector-polish finish with 5 µin. (0.13 µm) Ra surface finish pulsing UHP clean and pack. Standard BA grade surface finish is 10 µin. (0.25 µm) Ra.

**Square, burr-free tube weld ends** enhance alignment, maintain tube wall uniformity, and promote weld repeatability.



**Radius junction** allows for a smooth flow transition and eliminates pocket effect causing particle entrapment zones.

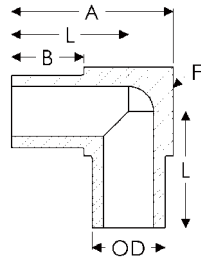
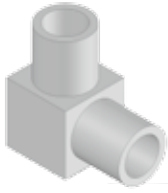
## Micro Reducer (TMR)



Part No.	Tube O.D.1	Wall Thickness 1	Tube O.D.2	Wall Thickness 2	Dimensions			Interchange Part No.1	Interchange Part No.2	Pressure Rating
					A	B	B <sub>1</sub>			
Dimensions, in. (mm)										psig (bar)
TMR6-1/4-1/8-XX	1/4	0.035	1/8	0.028	0.75 (19.1)	0.42 (10.4)	0.25 (6.4)	6LV-4MW -6-2	4-2 MHM - SSV.035 .028	5100 (351)
TMR6-3/8-1/4-XX	3/8	0.035	1/4	0.035	0.75 (19.1)	0.42 (10.4)	0.25 (6.4)	6LV-6MW -6-4	6-4 MHM - SSV.035	3300 (227)
TMR6-1/2-1/4-XX	1/2	0.049	1/4	0.035	0.75 (19.1)	0.42 (10.4)	0.25 (6.4)	6LV-8MW -6-4	8-4 MHM - SSV.049 .035	3700 (254)
TMR6-1/2-3/8-XX	1/2	0.049	3/8	0.035	0.75 (19.1)	0.42 (10.4)	0.25 (6.4)	6LV-8MW -6-6	8-6 MHM - SSV.049 .035	3300 (227)
Dimensions, mm (in.)										bar (psig)
TMR6-M8-M6-XX	8	1	6	1	19.1 (0.75)	10.4 (0.42)	6.4 (0.25)	6LV-8MMW -6M	—	310 (4499)
TMR6-M10-M6-XX	10	1	6	1	19.1 (0.75)	10.4 (0.42)	6.4 (0.25)	6LV-10MMW -6M	—	240 (3483)
TMR6-M10-M8-XX	10	1	8	1	19.1 (0.75)	10.4 (0.42)	6.4 (0.25)	6LV-10MMW -8M	—	240 (3483)
TMR6-M12-M10-XX	12	1	10	1	19.1 (0.75)	10.4 (0.42)	6.4 (0.25)	6LV-12MMW -10M	—	200 (2902)

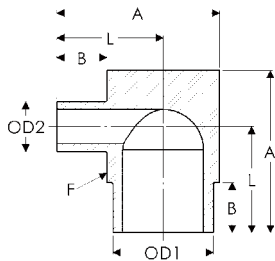
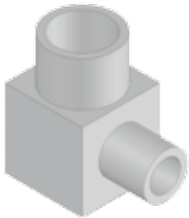


### Micro Elbow (TME)



Part No.	Tube O.D	Wall Thickness	Dimensions				Interchange Part No.1	Interchange Part No.2	Pressure Rating
			A	B	F Flat	L			
Dimensions, in. (mm)									psig (bar)
TME6-1/8-XX	1/8	0.028	0.56 [14.2]	0.25 [6.4]	5/16	0.41 [10.4]	6LV-2MW -9	2-2 MEM -SSV.028	8500 [585]
TME6-1/4-XX	1/4	0.035	0.56 [14.2]	0.25 [6.4]	5/16	0.41 [10.4]	6LV-4MW -9	4-4 MEM -SSV.035	5100 [351]
TME6-3/8-XX	3/8	0.035	0.69 [17.5]	0.25 [6.4]	7/16	0.47 [11.9]	6LV-6MW -9	6-6 MEM -SSV.035	3300 [227]
TME6-1/2-XX	1/2	0.049	0.81 [20.6]	0.25 [6.4]	9/16	0.53 [13.5]	6LV-8MW -9	8-8 MEM -SSV.049	3700 [254]
Dimensions, mm (in.)									bar (psig)
TME6-M6-XX	6	1	14.2 [0.56]	6.4 [0.25]	(5/16)	10.4 [0.41]	6LV-6MMW -9	6M-6M MEM -SSV	420 [6095]
TME6-M8-XX	8	1	17.5 [0.69]	6.4 [0.25]	(7/16)	11.9 [0.47]	6LV-8MMW -9	—	310 [4499]
TME6-M10-XX	10	1	17.5 [0.69]	6.4 [0.25]	(7/16)	11.9 [0.47]	6LV-10MMW -9	—	240 [3483]
TME6-M12-XX	12	1	20.6 [0.81]	6.4 [0.25]	(9/16)	13.5 [0.53]	6LV-12MMW -9	—	200 [2902]

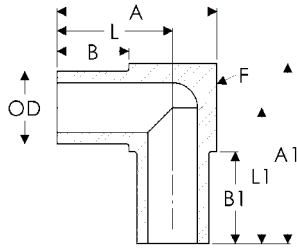
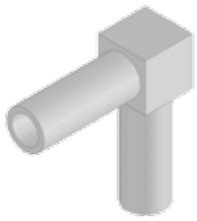
### Micro Reducing Elbow (TMRE)



Part No.	Tube O.D.1	Wall Thickness 1	Tube O.D.2	Wall Thickness 2	Dimensions				Interchange Part No.1	Interchange Part No.2	Pressure Rating
					A	B	F Flat	L			
Dimensions, in. (mm)											psig(bar)
TMRE6-3/8-1/4-XX	3/8	0.035	1/4	0.035	0.69 [17.5]	0.25 [6.4]	7/16	0.47 [11.9]	6LV-6MW -9-4	6-4 MEM -SSV.035	3300 [227]
TMRE6-1/2-1/4-XX	1/2	0.049	1/4	0.035	0.81 [20.6]	0.25 [6.4]	9/16	0.53 [13.5]	6LV-8MW -9-4	8-4 MEM -SSV.049.035	3700 [254]
TMRE6-1/2-3/8-XX	1/2	0.049	3/8	0.035	0.81 [20.6]	0.25 [6.4]	9/16	0.53 [13.5]	6LV-8MW -9-6	8-6 MEM -SSV.049.035	3300 [227]
Dimensions, mm (in.)											bar (psig)
TMRE6-M8-M6-XX	8	1	6	1	17.5 [0.69]	6.4 [0.25]	(7/16)	11.9 [0.47]	6LV-8MMW -9-6M	—	310 [4499]
TMRE6-M10-M6-XX	10	1	6	1	17.5 [0.69]	6.4 [0.25]	(7/16)	11.9 [0.47]	6LV-10MMW -9-6M	—	240 [3483]
TMRE6-M12-M6-XX	12	1	6	1	20.6 [0.81]	6.4 [0.25]	(9/16)	13.5 [0.53]	6LV-12MMW -9-6M	—	200 [2902]
TMRE6-M12-M8-XX	12	1	8	1	20.6 [0.81]	6.4 [0.25]	(9/16)	13.5 [0.53]	6LV-12MMW -9-8M	—	200 [2902]

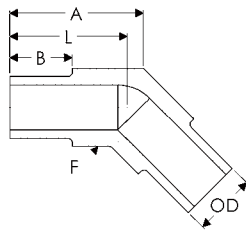
# Micro Butt Welding Fittings

## Micro Elbow Extended Leg (TMEEL)



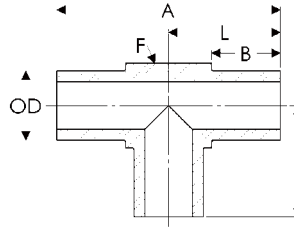
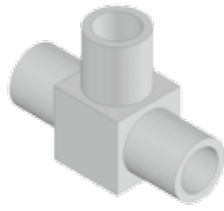
Part No.	Tube O.D.	Wall Thickness	Dimensions							Interchange Part No.1	Interchange Part No.2	Pressure Rating
			A	A <sub>1</sub>	B	B <sub>1</sub>	F Flat	L	L <sub>1</sub>			
Dimensions, in. (mm)											psig(bar)	
TMEEL6-1/4-11-XX	1/4	0.035	0.56 (14.2)	0.76 (19.3)	0.25 (6.4)	0.45 (11.4)	5/16	0.41 (10.4)	0.61 (15.5)	6LV-4MW-9-03442	4-4 MEM1-SSV.035	5100 (351)
TMEEL6-1/4-13-XX	1/4	0.035	0.56 (14.2)	0.81 (20.6)	0.25 (6.4)	0.50 (12.7)	5/16	0.41 (10.4)	0.66 (16.8)	6LV-4MW-9-03443	4-4 MEM2-SSV.035	5100 (351)
TMEEL11-1/4-11-XX	1/4	0.035	0.76 (19.3)	0.76 (19.3)	0.45 (11.4)	0.45 (11.4)	5/16	0.61 (15.5)	0.61 (15.5)	6LV-4MW-9-03444	4-4 M1EM1-SSV.035	5100 (351)
TMEEL13-1/4-13-XX	1/4	0.035	0.81 (20.6)	0.81 (20.6)	0.50 (12.7)	0.50 (12.7)	5/16	0.66 (16.8)	0.66 (16.8)	6LV-4MW-9-03445	4-4 M2EM2-SSV.035	5100 (351)

## Micro 45° Elbow (TMEH)



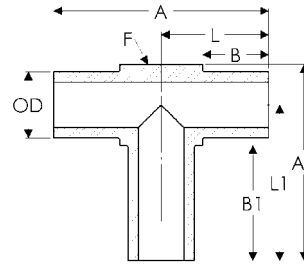
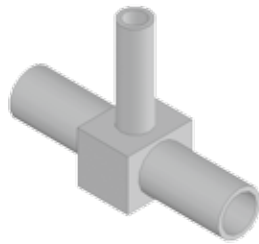
Part No.	Tube O.D.	Wall Thickness	Dimensions				Interchange Part No.1	Interchange Part No.2	Pressure Rating
			A	B	F Flat	L			
Dimensions, in. (mm)									psig (bar)
TMEH6-1/4-XX	1/4	0.035	0.47 (11.9)	0.25 (6.4)	5/16	0.41 (10.4)	6LV-4MW-5	4-4 MVM-SSV.035	5100 (351)
TMEH6-3/8-XX	3/8	0.035	0.56 (14.2)	0.25 (6.4)	7/16	0.47 (11.9)	6LV-6MW-5	6-6 MVM-SSV.035	3300 (227)
TMEH6-1/2-XX	1/2	0.049	0.64 (16.2)	0.25 (6.4)	9/16	0.53 (13.5)	6LV-8MW-5	8-8 MVM-SSV.049	3700 (254)
Dimensions, mm (in.)									bar (psig)
TMEH6-M6-XX	6	1	11.9 (0.47)	6.4 (0.25)	(5/16)	10.4 (0.41)	—	—	420 (6095)
TMEH6-M10-XX	10	1	14.2 (0.56)	6.4 (0.25)	(7/16)	11.9 (0.47)	—	—	310 (4499)

### Micro Tee (TMT)



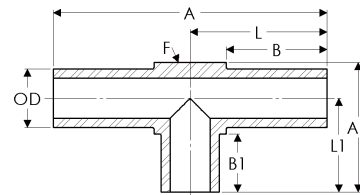
Part No.	Tube O.D.	Wall Thickness	Dimensions				Interchange Part No.1	Interchange Part No.2	Pressure Rating
			A	B	F Flat	L			
<b>Dimensions, in. (mm)</b>									psig(bar)
TMT6-1/8-XX	1/8	0.028	0.82 (20.8)	0.25 (6.4)	5/16	0.41 (10.4)	6LV-2MW -3	2-2-2 MJM -SSV.028	8500 (585)
TMT6-1/4-XX	1/4	0.035	0.82 (20.8)	0.25 (6.4)	5/16	0.41 (10.4)	6LV-4MW -3	4-4-4 MJM -SSV.035	5100 (351)
TMT6-3/8-XX	3/8	0.035	0.94 (23.9)	0.25 (6.4)	7/16	0.47 (11.9)	6LV-6MW -3	6-6-6 MJM -SSV.035	3300 (227)
TMT6-1/2-XX	1/2	0.049	1.06 (26.9)	0.25 (6.4)	9/16	0.53 (13.5)	6LV-8MW -3	8-8-8 MJM -SSV.049	3700 (254)
<b>Dimensions, mm (in.)</b>									bar(psig)
TMT6-M6-XX	6	1	20.8 (0.82)	6.4 (0.25)	(5/16)	10.4 (0.41)	6LV-6MMW -3	6M-6M-6M MJM -SSV	420 (6095)
TMT6-M8-XX	8	1	23.9 (0.94)	6.4 (0.25)	(7/16)	11.9 (0.47)	6LV-8MMW -3	—	310 (4499)
TMT6-M10-XX	10	1	23.9 (0.94)	6.4 (0.25)	(7/16)	11.9 (0.47)	6LV-10MMW -3	—	240 (3483)
TMT6-M12-XX	12	1	26.9 (1.06)	6.4 (0.25)	(9/16)	13.5 (0.53)	6LV-12MMW -3	—	200 (2902)

### Micro Long - Leg Tee (TMLLT)



Part No.	Tube O.D.	Wall Thickness	Dimensions							Interchange Part No.1	Interchange Part No.2	Pressure Rating
			A	A <sub>1</sub>	B	B <sub>1</sub>	F Flat	L	L <sub>1</sub>			
<b>Dimensions, in. (mm)</b>												psig(bar)
TMLLT6-1/4-XX	1/4	0.035	0.82 (20.8)	0.76 (19.3)	0.25 (6.4)	0.45 (11.4)	5/16	0.41 (10.4)	0.61 (15.5)	6LV-4MW -3-03446	4-4-4 MJM1 -SSV.035	5100 (351)

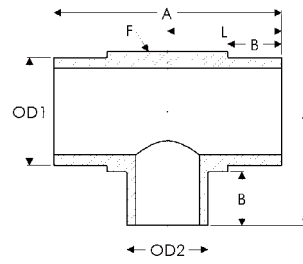
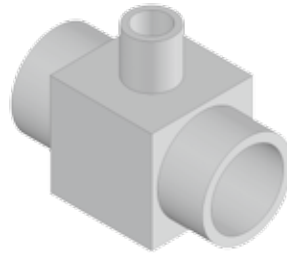
### Micro Long - Run Tee (TMLRT)



Part No.	Tube O.D.	Wall Thickness	Dimensions							Interchange Part No.1	Interchange Part No.2	Pressure Rating
			A	A <sub>1</sub>	B	B <sub>1</sub>	F Flat	L	L <sub>1</sub>			
<b>Dimensions, in. (mm)</b>												psig(bar)
TMLRT6-1/4-XX	1/4	0.035	1.96 (49.8)	0.56 (14.2)	0.83 (21.1)	0.25 (6.4)	5/16	0.98 (24.9)	0.41 (10.4)	6LV-4MW -3-03921	4-4-4 M3JM -SSV.035	5100 (351)

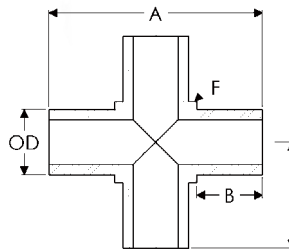
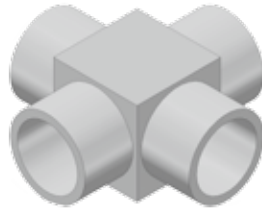
# Micro Butt Welding Fittings

## Micro Reducing Tee (TMRT)



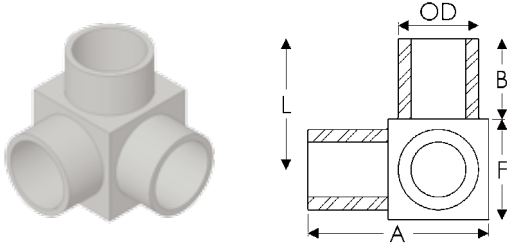
Part No.	Tube O.D.1	Wall Thickness 1	Tube O.D.2	Wall Thickness 2	Dimensions				Interchange Part No.1	Interchange Part No.2	Pressure Rating
					A	B	F Flat	L			
<b>Dimensions, in. (mm)</b>											psig(bar)
TMRT6-3/8-1/4-XX	3/8	0.035	1/4	0.035	0.94 (23.9)	0.25 (6.4)	7/16	0.47 (11.9)	6LV-6MW -3-6-4	6-6-4 MJM-SSV.035	3300 (227)
TMRT6-1/2-1/4-XX	1/2	0.049	1/4	0.035	1.06 (26.9)	0.25 (6.4)	9/16	0.53 (13.5)	6LV-8MW -3-8-4	8-8-4 MJM-SSV049049035	3700 (254)
TMRT6-1/2-3/8-XX	1/2	0.049	3/8	0.035	1.06 (26.9)	0.25 (6.4)	9/16	0.53 (13.5)	6LV-8MW -3-8-6	8-8-6 MJM-SSV049049035	3300 (227)
<b>Dimensions, mm (in.)</b>											bar(psig)
TMRT6-M10-M6-XX	10	1	6	1	23.9 (0.94)	6.4 (0.25)	(7/16)	11.9 (0.47)	6LV-10MMW -3-10M -6M	—	240 (3483)
TMRT6-M12-M6-XX	12	1	6	1	26.9 (1.06)	6.4 (0.25)	(9/16)	13.5 (0.53)	6LV-12MMW -3-12M -6M	—	200 (2902)
TMRT6-M12-M8-XX	12	1	8	1	26.9 (1.06)	6.4 (0.25)	(9/16)	13.5 (0.53)	6LV-12MMW -3-12M -8M	—	200 (2902)

## Micro Cross (TMC)



Part No.	Tube O.D.	Wall Thickness	Dimensions				Interchange Part No.1	Interchange Part No.2	Pressure Rating	
			A	B	F Flat	L				
<b>Dimensions, in. (mm)</b>										psig(bar)
TMC6-1/8-XX	1/8	0.028	0.82 (20.8)	0.25 (6.4)	5/16	0.41 (10.4)	6LV-2MW -4	2 MKM -SSV.028	8500 (585)	
TMC6-1/4-XX	1/4	0.035	0.82 (20.8)	0.25 (6.4)	5/16	0.41 (10.4)	6LV-4MW -4	4 MKM -SSV.035	5100 (351)	
TMC6-3/8-XX	3/8	0.035	0.94 (23.9)	0.25 (6.4)	7/16	0.47 (11.9)	6LV-6MW -4	6 MKM -SSV.035	3300 (227)	
TMC6-1/2-XX	1/2	0.049	1.06 (26.9)	0.25 (6.4)	9/16	0.53 (13.5)	6LV-8MW -4	8 MKM -SSV.049	3700 (254)	
<b>Dimensions, mm (in.)</b>										bar(psig)
TMC6-M6-XX	6	1	20.6 (0.81)	6.4 (0.25)	(5/16)	10.4 (0.41)	6LV-6MMW -4	6M MKM -SSV	420 (6095)	
TMC6-M8-XX	8	1	23.9 (0.94)	6.4 (0.25)	(7/16)	11.9 (0.47)	6LV-8MMW -4	—	310 (4499)	
TMC6-M10-XX	10	1	23.9 (0.94)	6.4 (0.25)	(7/16)	11.9 (0.47)	6LV-10MMW -4	—	240 (3483)	
TMC6-M12-XX	12	1	26.9 (1.06)	6.4 (0.25)	(9/16)	13.5 (0.53)	6LV-12MMW -4	—	200 (2902)	

### Micro Tri-Elbow (TMTE)

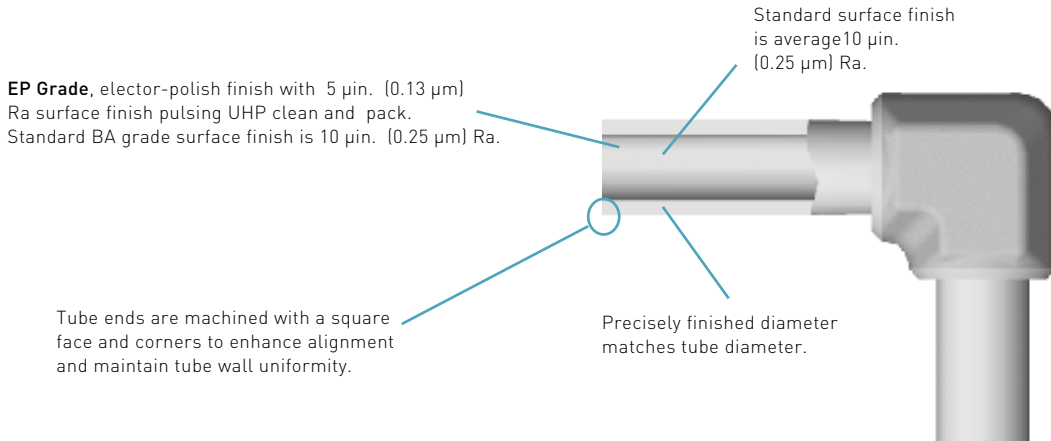


Part No.	Tube O.D.	Wall Thickness	Dimensions				Interchange Part No.1	Interchange Part No.2	Pressure Rating
			A	B	F Flat	L			
<b>Dimensions, in. (mm)</b>									psig(bar)
TMTE6-1/4-XX	1/4	0.035	0.56 (14.2)	0.25 (6.4)	5/16	0.41 (10.4)	6LV-4MW -91	4-4-4 M0JM-SSV.035	5100 (351)
TMTE6-3/8-XX	3/8	0.035	0.69 (17.5)	0.25 (6.4)	7/16	0.47 (11.9)	6LV-6MW -91	6-6-6 M0JM-SSV.035	3300 (227)
TMTE6-1/2-XX	1/2	0.049	0.81 (20.6)	0.25 (6.4)	9/16	0.53 (13.5)	6LV-8MW -91	8-8-8 M0JM-SSV.049	3700 (254)
<b>Dimensions, mm (in.)</b>									bar(psig)
TMTE6-M6-XX	6	1	14.2 (0.56)	6.4 (0.25)	(5/16)	10.4 (0.41)	6LV-6MMW -91	—	420 (6095)

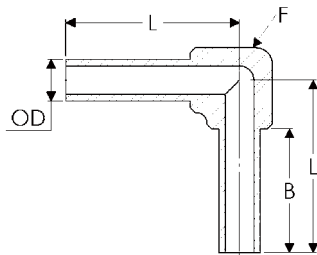
# Micro Butt Welding Fittings

## Long Butt Weld Fittings

- 3/4" (19.05mm) long extended orbital welding length is providing easier and quickly set-up w/ for the orbital welder. The forged fitting body or machined fitting body is designed with compact configuration for reducing piping weight.

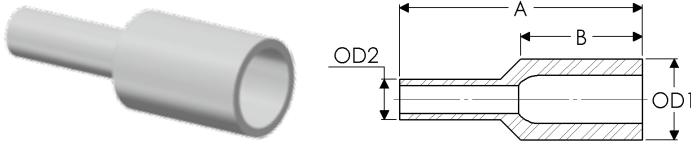


## Micro Long Elbow (TMLE)



Part No.	Tube O.D.	Wall Thickness	Dimensions			Interchange Part No.1	Interchange Part No.2	Pressure Rating
			B	F Flat	L			
<b>Dimensions, in. (mm)</b>								psig(bar)
MLE-1/4-XX	1/4	0.035	0.75 (19.1)	7/16	1.23 (31.2)	316L-4TB7-9	—	5100 (351)
MLE-3/8-XX	3/8	0.035	0.75 (19.1)	7/16	1.20 (30.5)	316L-6TB7-9	—	3300 (227)
MLE-1/2-XX	1/2	0.049	0.75 (19.1)	11/16	1.34 (34.0)	316L-8TB7-9	—	3700 (254)
MLE-3/4-XX	3/4	0.049	0.75 (19.1)	15/16	1.46 (37.1)	316L-12TB7-9	—	2400 (165)
<b>Dimensions, mm (in.)</b>								bar(psig)
MLE-M6-XX	6	1	19.1 (0.75)	(7/16)	31.2 (1.23)	316L-6MTB7-9	—	420 (6095)
MLE-M8-XX	8	1	19.1 (0.75)	(7/16)	31.2 (1.23)	316L-8MTB7-9	—	310 (4499)
MLE-M10-XX	10	1	19.1 (0.75)	(11/16)	34.0 (1.34)	316L-10MTB7-9	—	240 (3483)
MLE-M12-XX	12	1	19.1 (0.75)	(11/16)	34.0 (1.34)	316L-12MTB7-9	—	200 (2902)
MLE-M18-XX	18	1.5	19.1 (0.75)	(15/16)	37.6 (1.48)	316L-18MTB7-9	—	200 (2902)

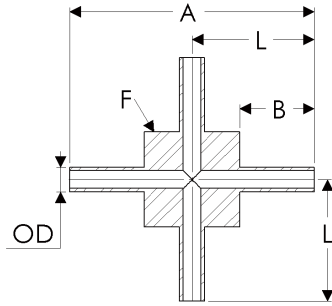
### Micro Long Reducer (TMLR)



Part No.	Tube O.D.1	Wall Thickness1	Tube O.D.2	Wall Thickness2	Dimensions		Interchange Part No.1	Interchange Part No.2	Pressure Rating
					A	B			
<b>Dimensions, in. (mm)</b>									psig(bar)
TMLR-3/8-1/4-XX	3/8	0.035	1/4	0.035	1.50 (38.1)	0.75 (19.1)	316L-8TB7-6-4	—	3300 (227)
TMLR-1/2-1/4-XX	1/2	0.049	1/4	0.049	1.50 (38.1)	0.75 (19.1)	316L-8TB7-6-4	—	3700 (254)
TMLR-1/2-3/8-XX	1/2	0.049	3/8	0.035	1.50 (38.1)	0.75 (19.1)	316L-8TB7-6-6	—	3300 (227)
TMLR-3/4-1/2-XX	3/4	0.049	1/2	0.049	1.50 (38.1)	0.75 (19.1)	316L-12TB7-6-8	—	2400 (165)
TMLR-1-1/2-XX	1	0.065	1/2	0.049	1.50 (38.1)	0.75 (19.1)	316L-16TB7-6-8	—	2400 (165)
TMLR-1-3/4-XX	1	0.065	3/4	0.049	1.50 (38.1)	0.75 (19.1)	316L-16TB7-6-12	—	2400 (165)
<b>Dimensions, mm (in.)</b>									bar(psig)
TTMLR-M8-M6-XX	8	1	6	1	38.1 (1.50)	19.1 (0.75)	316L-8MTB7-6-6M	—	240 (3483)
TMLR-M10-M6-XX	10	1	6	1	38.1 (1.50)	19.1 (0.75)	316L-10MTB7-6-6M	—	240 (3483)
TMLR-M10-M8-XX	10	1	8	1	38.1 (1.50)	19.1 (0.75)	316L-10MTB7-6-8M	—	240 (3483)
TMLR-M12-M6-XX	12	1	6	1	38.1 (1.50)	19.1 (0.75)	316L-12MTB7-6-6M	—	200 (2902)
TMLR-M12-M8-XX	12	1	8	1	38.1 (1.50)	19.1 (0.75)	316L-12MTB7-6-8M	—	200 (2902)
TMLR-M12-M10-XX	12	1	10	1	38.1 (1.50)	19.1 (0.75)	316L-12MTB7-6-10M	—	200 (2902)
TMLR-M18-M6-XX	18	1.5	6	1.5	38.1 (1.50)	19.1 (0.75)	316L-18MTB7-6-6M	—	200 (2902)
TMLR-M18-M12-XX	18	1.5	12	1.5	38.1 (1.50)	19.1 (0.75)	316L-18MTB7-6-12M	—	200 (2902)

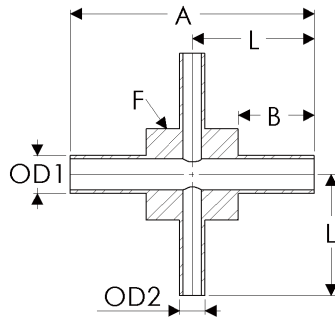
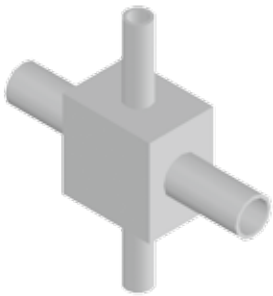
# Micro Butt Welding Fittings

## Micro Long Cross (TMLC)



Part No.	Tube O.D.	Wall Thickness	Dimensions				Interchange Part No.1	Interchange Part No.2	Pressure Rating
			A	B	F Flat	L			
Dimensions, in. (mm)									psig(bar)
TMLC-1/4-XX	1/4	0.035	2.45 (62.2)	0.75 (19.1)	7/16	1.23 (31.2)	316L-4TB7-4	—	5100 (351)
TMLC-3/8-XX	3/8	0.035	2.39 (60.7)	0.75 (19.1)	7/16	1.20 (30.5)	316L-6TB7-4	—	3300 (227)
TMLC-1/2-XX	1/2	0.049	2.61 (66.3)	0.75 (19.1)	11/16	1.34 (34.0)	316L-8TB7-4	—	3700 (254)
Dimensions, mm (in.)									bar(psig)
TMLC-M6-XX	6	1	62.2 (2.45)	19.1 (0.75)	(7/16)	31.3 (1.23)	316L-6MTB7-4	—	420 (6095)
TMLC-M8-XX	8	1	62.2 (2.45)	19.1 (0.75)	(7/16)	31.3 (1.23)	316L-8MTB7-4	—	310 (4499)
TMLC-M10-XX	10	1	64.8 (2.55)	19.1 (0.75)	(5/8)	34.0 (1.34)	316L-10MTB7-4	—	240 (3483)
TMLC-M12-XX	12	1	64.8 (2.55)	19.1 (0.75)	(5/8)	34.0 (1.34)	316L-12MTB7-4	—	200 (2902)

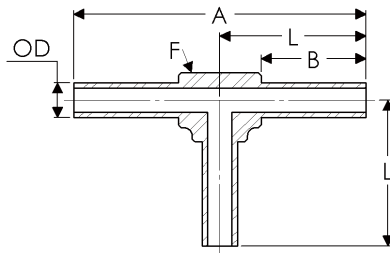
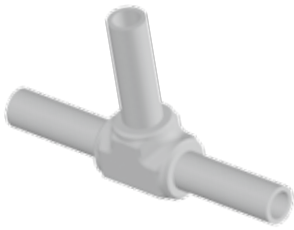
## Micro Long Reducing Cross (TMLRC)



Part No.	Tube O.D.1	Wall Thickness1	Tube O.D.2	Wall Thickness2	Dimensions				Interchange Part No.1	Interchange Part No.2	Pressure Rating
					A	B	F Flat	L			
Dimensions, in. (mm)											psig(bar)
TMLRC-3/8-1/4-XX	3/8	0.035	1/4	0.035	2.39 (60.7)	0.75 (19.1)	7/16	1.20 (30.5)	—	—	3300 (227)

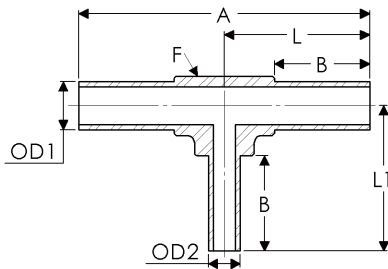
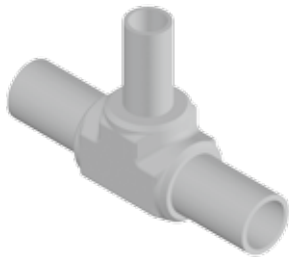


### Micro Long Tee (TMLT)



Part No.	Tube O.D.	Wall Thickness	Dimensions				Interchange Part No.1	Interchange Part No.2	Pressure Rating
			A	B	F Flat	L			
Dimensions, in. (mm)									psig(bar)
TMLT-1/4-XX	1/4	0.035	2.46 (62.5)	0.75 (19.1)	7/16	1.23 (31.2)	316L-4TB7-3	—	5100 (351)
TMLT-3/8-XX	3/8	0.035	2.40 (61.0)	0.75 (19.1)	7/16	1.20 (30.5)	316L-6TB7-3	—	3300 (227)
TMLT-1/2-XX	1/2	0.049	2.68 (68.1)	0.75 (19.1)	11/16	1.34 (34.0)	316L-8TB7-3	—	3700 (254)
TMLT-3/4-XX	3/4	0.049	2.91 (73.9)	0.75 (19.1)	15/16	1.46 (37.1)	316L-12TB7-3	—	2400 (165)
Dimensions, mm (in.)									bar(psig)
TMLT-M6-XX	6	1	62.5 (2.46)	19.1 (0.75)	(7/16)	31.2 (1.23)	316L-6MTB7-3	—	420 (6095)
TMLT-M8-XX	8	1	62.5 (2.46)	19.1 (0.75)	(7/16)	31.2 (1.23)	316L-8MTB7-3	—	310 (4499)
TMLT-M10-XX	10	1	62.5 (2.46)	19.1 (0.75)	(11/16)	34.0 (1.34)	316L-10MTB7-3	—	240 (3483)
TMLT-M12-XX	12	1	62.5 (2.46)	19.1 (0.75)	(11/16)	34.0 (1.34)	316L-12MTB7-3	—	200 (2902)
TMLT-M18-XX	18	1.5	62.5 (2.46)	19.1 (0.75)	(15/16)	37.6 (1.48)	316L-18MTB7-3	—	200 (2902)

### Micro Long R-Tee (TMLRT)



Part No.	Tube O.D.1	Wall Thickness 1	Tube O.D.2	Wall Thickness 2	Dimensions					Interchange Part No.1	Interchange Part No.2	Pressure Rating
					A	B	F Flat	L	L <sub>1</sub>			
Dimensions, in. (mm)												psig(bar)
TMLRT-3/8-1/4-XX	3/8	0.035	1/4	0.035	2.39 (60.7)	0.75 (19.1)	7/16	1.20 (30.5)	1.23 (31.2)	316L-6TB7-3-6-4	—	3300 (227)
TMLRT-1/2-1/4-XX	1/2	0.049	1/4	0.035	2.67 (67.8)	0.75 (19.1)	11/16	1.34 (34.0)	1.34 (34.0)	316L-8TB7-3-8-4	—	3700 (254)
TMLRT-1/2-3/8-XX	1/2	0.049	3/8	0.035	2.67 (67.8)	0.75 (19.1)	11/16	1.34 (34.0)	1.35 (34.3)	316L-8TB7-3-8-6	—	3300 (227)
TMLRT-3/4-3/8-XX	3/4	0.049	3/8	0.035	2.91 (73.9)	0.75 (19.1)	15/16	1.46 (37.1)	1.35 (34.3)	316L-12TB7-3-12-6	—	2400 (165)
TMLRT-3/4-1/4-XX	3/4	0.049	1/4	0.035	2.91 (73.9)	0.75 (19.1)	15/16	1.46 (37.1)	1.48 (37.6)	316L-12TB7-3-12-4	—	2400 (165)
Dimensions, mm (in.)												bar(psig)
TMLRT-M8-M6-XX	8	1	6	1	62.2 (2.46)	19.1 (0.75)	(7/16)	31.3 (1.23)	31.3 (1.23)	316L-8MTB7-3-8M-6M	—	310 (4499)
TMLRT-M10-M6-XX	10	1	6	1	62.2 (2.45)	19.1 (0.75)	(11/16)	34.0 (1.34)	34.0 (1.34)	316L-10MTB7-3-10M-6M	—	240 (3483)
TMLRT-M10-M8-XX	10	1	8	1	67.8 (2.67)	19.1 (0.75)	(11/16)	34.0 (1.34)	34.0 (1.34)	316L-10MTB7-3-10M-8M	—	200 (2902)
TMLRT-M12-M6-XX	12	1	6	1	67.8 (2.67)	19.1 (0.75)	(11/16)	34.0 (1.34)	34.0 (1.34)	316L-12MTB7-3-12M-6M	—	200 (2902)
TMLRT-M12-M8-XX	12	1	8	1	67.8 (2.67)	19.1 (0.75)	(11/16)	34.0 (1.34)	34.0 (1.34)	316L-12MTB7-3-12M-8M	—	200 (2902)

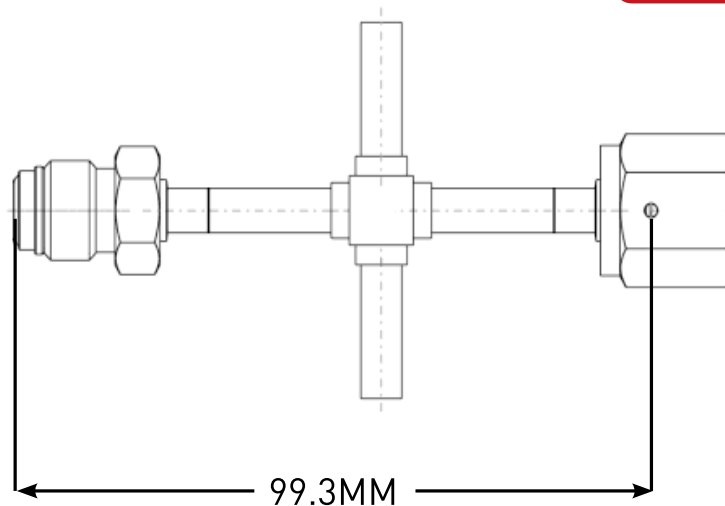
## TEESING SPACE SAVING SOLUTION

### Reducing solution

- Space saving
- Reduced footprint in gas system
- Reduced amount of weldings
- Less testing & purging time
- Reducing total costs

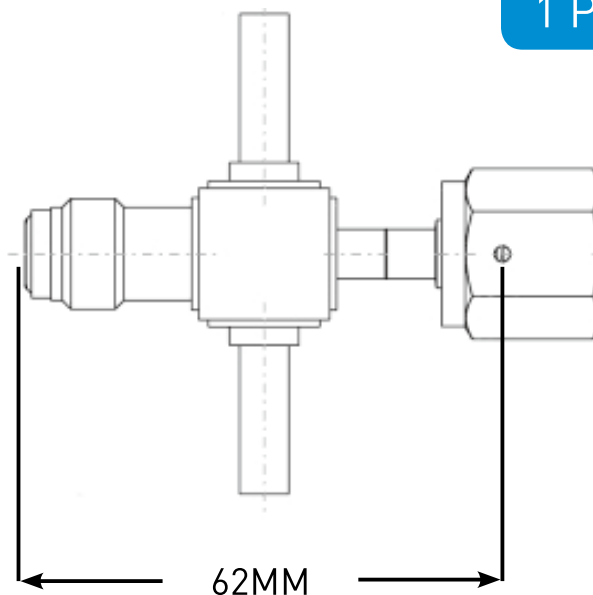
### Standard solution

3 Piece



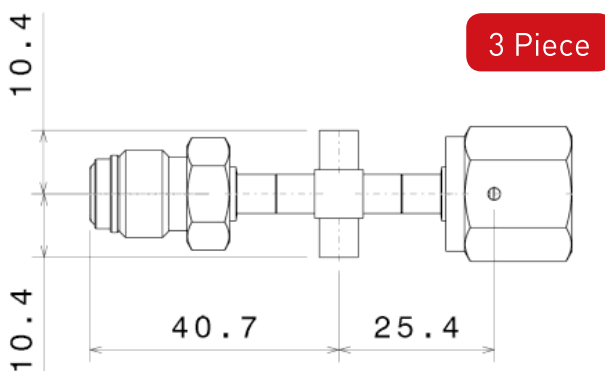
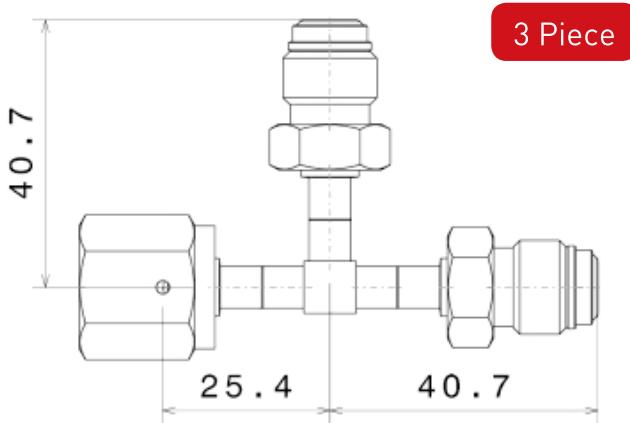
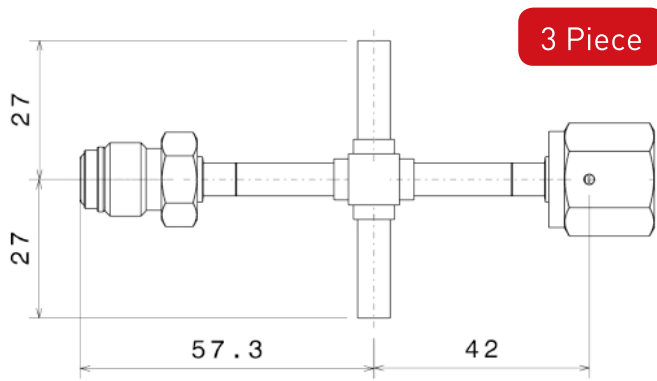
### Teesing Solution

1 Piece

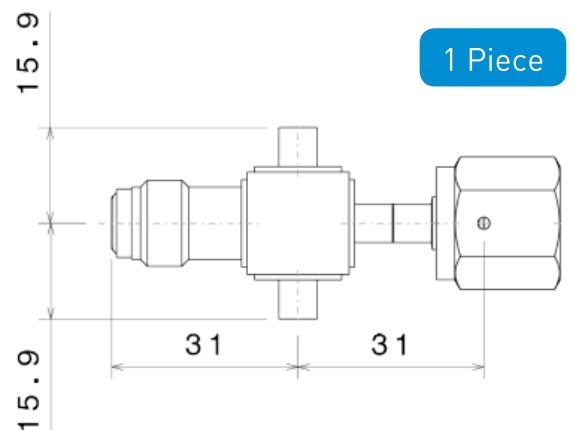
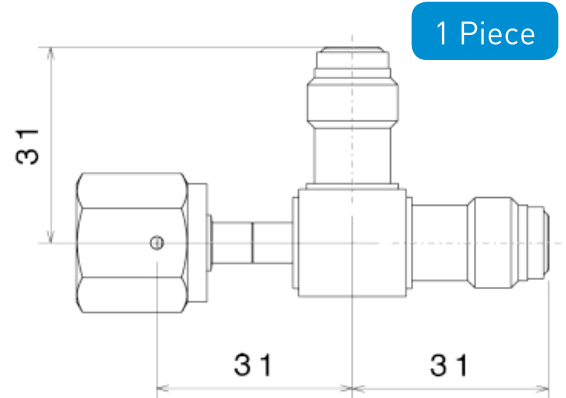
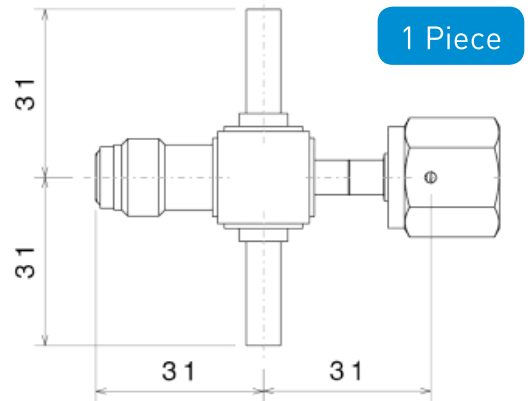


**YOU CAN MIX AND MATCH YOUR COMPONENTS FOR YOUR SPECIFIC DESIGN. CONTACT OUR SALES DEPARTMENT FOR MORE INFORMATION!**

### Standard solution



### Teesing Solution



## METAL GASKET FACE SEAL FITTINGS

### Please ask for our brochure!

Teesing can provides a large assortment of face seal fittings.

- Glands
- Bodies
- Welded assemblies
- Nuts,caps,and plugs
- High-flow connections
- Gaskets
- Face seal to iso-kf flange adaptor





### CLEAN AND LEAN-LIFTS

Teesing has had its own cleanroom for over 10 years, so it can deliver its products and assemblies clean and double-packed according to client specific requirements. A number of lean-lifts have been conditioned and are overpressured; (assembled) products are stored here for our clients in the semiconductor and mechatronics industries. This system ensures that cross contamination and movement of particles are kept to a minimum. The products are stored in a safe and clean manner.

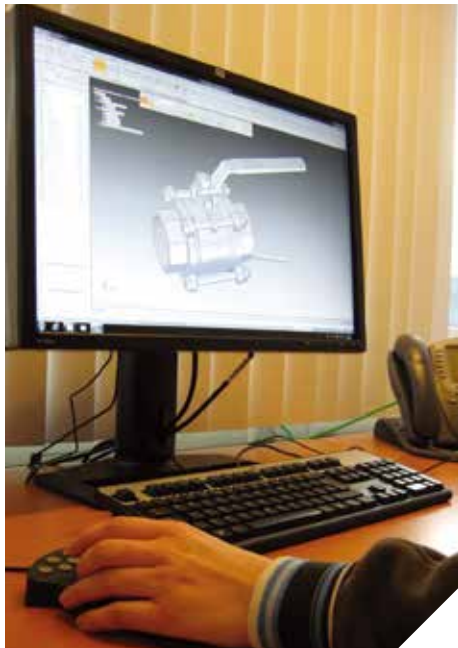
### SUPPLY INTEGRITY & EFFICIENCY

Teesing uses an automated system in the product storage process, so stock level information is updated real-time. Products come to staff instead of staff having to walk to the items, which makes a considerable difference in terms of efficiency. Besides the fact that this system saves a lot of space and time during the logistics process, the risk of making any incorrect deliveries is significantly reduced.

### TEESING CLEANROOM SOLUTIONS

Together with its partners, Teesing can handle anything from a few samples for prototypes to complete assemblies for volume production. Cleanliness is tested using UV and Laser technics. Extreme clean dry air (XCDA) with sub ppb levels of contaminants is used and Teesing has bake-out capabilities. This ensures minimal particle counts and reduces TOC levels, in order to deliver sub-systems or components ready for producing nanotechnologies.





## ENGINEERING

In close co-operation with the customer and supported by the latest technology, Teesing can develop the right products and assemblies for client specific requirements. Teesing can also provide additional engineering services like supplying CAD-files of most of the products.

## CONSULTING

The knowledge of the sales engineers regarding the product range and the various markets is complemented by the support of the in-house engineering department. This enables Teesing to advise its customers in a knowledgeable, competent manner and to propose appropriate application solutions.

## PRODUCT STREAMLINING

Teesing can analyze, optimize and redesign products in order to guarantee the optimal solution for your application. If needed the product or assembly can be modified to ensure the best result.

## “WE ENGINEER FROM SOURCE TO PROCESS”



## ADDITIONAL SERVICES

Teesing has 60 years of experience in very diverse markets. Thanks to this extensive technical know-how, we are able to offer extra services in addition to a broad and deep range of products.

Because we have our own engineering department we are able to respond quickly and efficiently to any connection problems and can supply client-specific assemblies that are tuned to your needs.



### Teesing Regulators

Designed for point-of-use medium/ high flow to be used in gas cabinets for gas companies, equipment manufactures and semiconductor manufacturers. Every step of assembly like welding, testing and final cleaning of the regulators is done in a Class 100 or 10 cleanroom.



### Teesing Valves

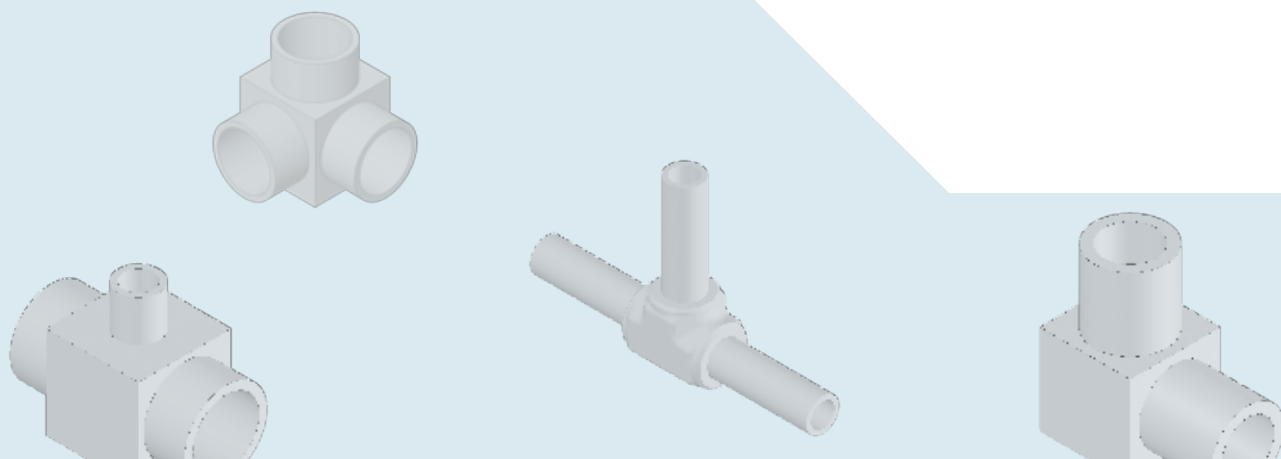
From the same range as the Teesing Regulators we can provide you a Ultra high purity valves. Our range offers diaphragm valves, bellow valves and check valves specially made for the semiconductor industry. Ask for our brochure!



### ENGINEERING

In close co-operation with the customer and supported by the latest technology, Teesing can develop the right products and assemblies for your specific requirements. We can also provide additional engineering services like CAD-files of most of our products.

"WE ENGINEER FROM SOURCE TO PROCESS"



Contact our sales engineers to receive detailed product information.  
We recommend to visit our website for regularly updated product information.

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