

# Tools and Accessories

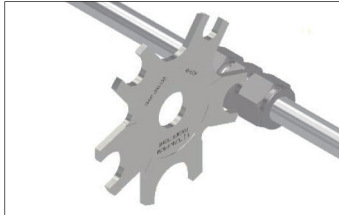
## MIG

### Gap Inspection Gauge



Part Number	Applied Fitting size
MIG-4681210M	Inch Size 1/4", 3/8", 1/2", 3/4" Metric Size 6 mm, 10 mm, 12 mm, 18 mm

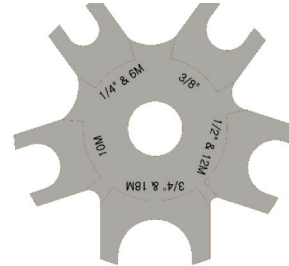
It is possible to check whether the assembly of the fitting is perfect by using the gap inspection gauge.



After assembling the fitting, if the gap inspection gauge does not enter between the body and the nut, the assembly is perfect.



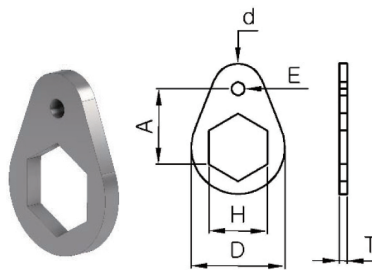
After assembling the fitting, if the gap inspection gauge is between the body and the nut, it is not a perfect assembly. At this time, tighten the nut further until the gap inspection gauge does not go in.



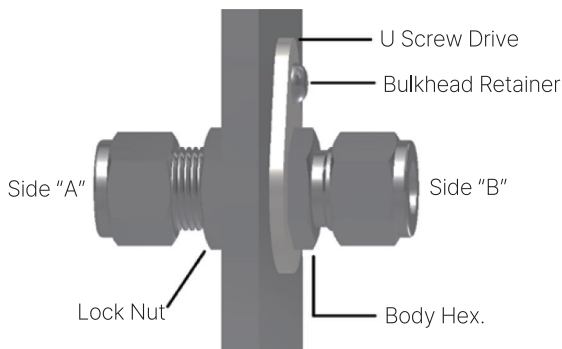
The size marked on the gap inspection gauge indicates the applicable tube fitting size.

## MBURE

### Bulkhead Retainer



Part Number	Tube OD		Dimensions							Drill Hole	U Screw Drive
	inch	mm	A	H	D	d	E	T			
MBURE - 1	1/16		9.5	7.9	7.9	9.5	4.0	3.2	3.0	6 - 3/8	
MBURE - 2	1/8		12.7	12.7	10.3	12.7	4.0	3.2	3.0	6 - 3/8	
MBURE - 3M4M3	3/16	3mm,4mm	14.3	14.3	11.9	14.3	4.0	3.2	3.0	6 - 3/8	
MBURE - 6M4	1/4	6mm	15.9	15.9	12.7	15.9	4.0	3.2	3.0	6 - 3/8	
MBURE - 5	5/16		17.5	17.5	14.3	17.5	4.0	3.2	3.0	6 - 3/8	
MBURE - 8M	5/16	8mm	17.5	0.0	14.3	17.5	4.0	3.2	3.0	6 - 3/8	
MBURE - 6	3/8		19.1	19.1	15.9	19.1	4.0	3.2	3.0	6 - 3/8	
MBURE - 10M	3/8	10mm	23.8	0.0	19.1	23.8	5.6	3.2	3.7	10 - 1/2	
MBURE - 12M8	1/2	12mm	23.8	23.8	19.1	23.8	5.6	3.2	3.7	10 - 1/2	
MBURE - 15M16M10	5/8	15mm,16mm	25.4	27.0	20.6	25.4	5.6	3.2	3.7	10 - 1/2	
MBURE - 18M12	3/4	18mm	27.0	30.2	23.0	27.0	5.6	3.2	3.7	10 - 1/2	
MBURE - 14	7/8		28.6	33.3	26.2	28.6	5.6	3.2	3.7	10 - 1/2	
MBURE - 16	1		32.5	41.3	29.4	32.5	5.6	3.2	3.7	10 - 1/2	



#### How to install fittings using Bulkhead Retainer

By using the bulkhead retainer, one person can tighten the jam nut on side A for initial bulkhead fitting installation.

Now tubing can be connected to side A and B by one person with one wrench, because the bulkhead retainer acts as a backup wrench.

# MTM

## Depth Marking Tool



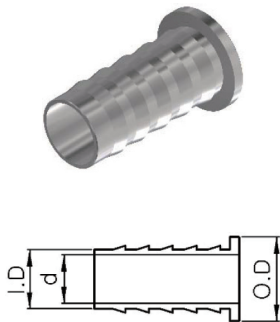
Part Number	Tube OD	Part Number	Tube OD
	inch		
MTM - 4	1/4	MTM - 6M	6
MTM - 6	3/8	MTM - 8M	8
MTM - 8	1/2	MTM - 10M	10
MTM - 12	3/4	MTM - 12M	12
MTM - 16	1	MTM - 18M	18
		MTM - 20M	20
		MTM - 25M	25

### How to use the Depth Marking Tool

1. Insert the tube to the lower end of the depth marking tool.
2. Mark the outer surface of the tube shown in the "A" part of the depth marking tool with a pen.
3. Insert the tube removed from the depth marking tool into the tube fitting.
4. The line marked on the outside of the tube should not be visible so that the tube end is in full contact with the bottom inside the fitting.

# MI

## Insert



Part Number	Dimensions				
	Tube OD		Tube ID		d
	inch	mm	inch	mm	
MI 3 - 2	3/16	4.76	1/8	3.18	2.3
MI 4 - 2	1/4	6.35	1/8	3.18	2.3
MI 4 - 3	1/4	6.35	3/16	4.76	3.6
MI 5 - 2	5/16	7.94	1/8	3.18	2.3
MI 5 - 3	5/16	7.94	3/16	4.76	3.0
MI 5 - 4	5/16	7.94	1/4	6.35	4.8
MI 6 - 3	3/8	9.53	3/16	4.76	3.0
MI 6 - 4	3/8	9.53	1/4	6.35	4.8
MI 8 - 4	1/2	12.70	1/4	6.35	4.8
MI 8 - 6	1/2	12.70	3/8	9.53	7.9
MI 10 - 6	5/8	15.88	3/8	9.53	7.9
MI 10 - 8	5/8	15.88	1/2	12.70	11.2
MI 12 - 8	3/4	19.05	1/2	12.70	11.2
MI 12 - 10	3/4	19.05	5/8	15.88	14.2
MI 16 - 12	1	25.40	3/4	19.05	17.5

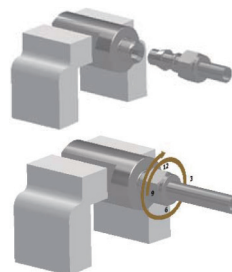
Part Number	Dimensions		
	Tube OD	Tube ID	d
MI 6M - 4M	6	4	2.8
MI 8M - 6M	8	6	4.4
MI 10M - 8M	10	8	6.4
MI 12M - 8M	12	8	6.4
MI 12M - 10M	12	10	8.3

# MPS

## Preswaging Tool

If the ferrules are swaged onto the tube in advance, the work is easy and the operator's fatigue is reduced.

Part Number	Tube OD inch	Part Number	Tube OD mm
MPS - 1	1/16	MPS - 3M	3
MPS - 2	1/8	MPS - 4M	4
MPS - 3	3/16	MPS - 6M	6
MPS - 4	1/4	MPS - 8M	8
MPS - 5	5/16	MPS - 10M	10
MPS - 6	3/8	MPS - 12M	12
MPS - 8	1/2	MPS - 14M	14
MPS - 10	5/8	MPS - 15M	15
MPS - 12	3/4	MPS - 16M	16
MPS - 14	7/8	MPS - 18M	18
MPS - 16	1	MPS - 20M	20
		MPS - 22M	22
		MPS - 25M	25



### How to use the Preswaging Tool

Insert the tube with ferrules and nuts into the MPS.

Assemble by rotating the nut while the MPS is fixed in VISE.