

MODULAR FITTINGS

2xxxxx

PRODUCT DETAIL

The MLC Press-fit Modular range comprises a plated brass body adapter featuring a double EPDM O-ring seal and a press stainless steel sleeve. The main feature of this is the allowance for full custom joints on-site using an EPDM rubber seal and Gripper ring. It allows you to adapt the 25 components that make the system into 100's of fitting combinations. All main body items are made using lightweight stainless steel bodies and also allow increased flow. Once you have your combination, the gripper ring is added, then using a torque wrench, you tighten to a specified 7nm of force to ensure good grip and long-lasting joints. What's more, this makes breakout of fittings easy as they seal on a flat face and are ultimately useable (spare seals are available). Lastly, due to the construction, joints can be pressed on a bench then lifted into place, making installation easier.

BENEFITS

- 10 Bar Operative pressure
- Non-corrosive coating for reduced corrosion risk
- Easy on bench installation
- 10 Year Insurance backed warranty as standard
- Increased bore size from like for like systems.

FEATURES

- Double O-ring seal
- U-profile pressing
- Inspection window
- Plain press sleeve for ID of pressed joints
- Clamp fixing for easy dismantling or repairs/system expansion.



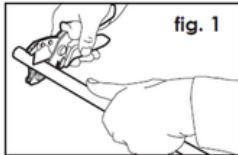
PRODUCT CODE	2xxxxx
SIZES	25-110mm
ADAPTOR BODY MATERIAL	Tin Plated Brass
SLEEVE & FITTING MATERIAL	Stainless Steel
SEAL MATERIAL	EPDM rubber
FITTING RANGE	25 Components
LOCKING BOLT TORQUE	7nm
MAXIMUM OPERATING PRESSURE	10 Bar
MAXIMUM OPERATING TEMPERATURE	95°C (100 hours)
APPROVALS	WRAS, DVGW, CE

MODULAR FITTINGS

11-M2xxxx

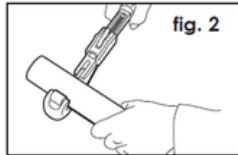
INSTALLATION

3.1.1. Preparation of the connection

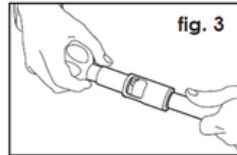


1. CUT TO LENGTH OF THE PIPE

16 mm – 20 mm (fig. 1)
Cut the MULTITUBO systems pipe right-angled with the pipe cutter.

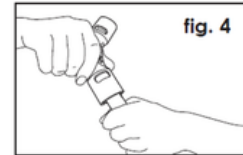


25 mm – 110 mm (fig. 2)
Cut the MULTITUBO systems pipe right-angled with the pipe cutting tool.

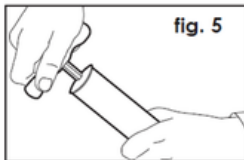


2. CENTERING AND BEVELING OF THE PIPES

16 mm – 32 mm (fig. 3)
Bevel the MULTITUBO systems multi-layer pipe by using the beveling insert in combination with the handle until there is a clearly visible edge all over the pipe end.



16 mm / 20 mm / 25 mm (fig. 4)
Use the Combined Beveling Tool for press-, push- or welding connections to make a clearly visible edge all over the pipe end.

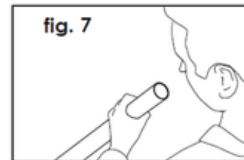


40 mm – 75 mm (fig. 5)
Use the Beveling Tool until there is a clearly visible edge all over the pipe end.



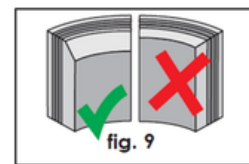
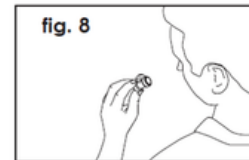
IMPORTANT: ONLY FOR WELDING AND MODULAR 90/110 CONNECTIONS

32 mm – 110 mm (fig. 6)
Make a visible edge all over the pipe end by using the Universal Beveling Tool Welding/Modular. Please be aware of the roundness of the pipe!

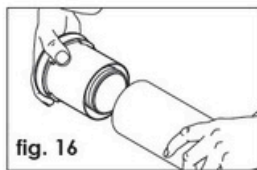
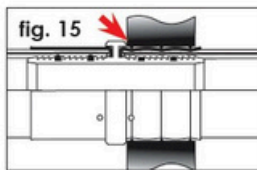


3. INSPECTION OF THE PIPE AND THE FITTING BEFORE INSERTING THE FITTING

Visual inspection of the beveled pipe end and the fitting to identify damages or impurities (fig. 7 + fig. 8). Visual inspection of the beveled pipe end to ensure an equal edge all over (fig. 7 + fig. 9).

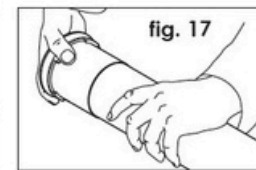


3.1.4. Press-connection MODULAR 25 mm / 110 mm

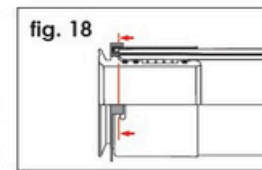


1. ATTACH FITTING TO PIPE

a) Prepare the multi-layer pipe as described in point 3.1.1. (fig. 2, fig. 6).

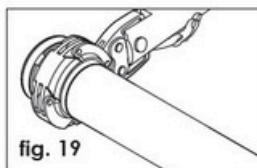


b) Push the pipe into the fitting as far as possible (fig. 16, fig. 17): The correct insertion depth is shown by the appearance of the pipe in the inspection window of the sleeve (fig. 18).

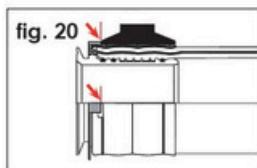


2. PRESSING OF THE FITTING

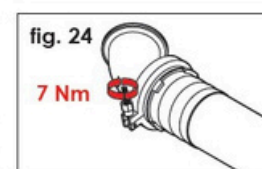
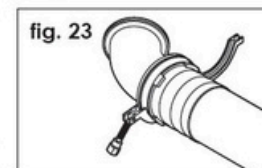
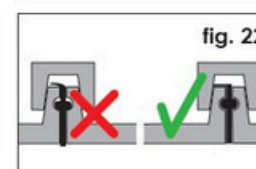
Position the pressing-chain (or pressing jaws) at the plastic-stop and connect it with the pressing gun. Start the pressing-procedure. Please ensure that the pressing gun used has a min. 32 Nm of press force is used (fig. 19, fig. 20).



3. CONNECTING TO BASE BODY OR PRESS ADAPTER
Before connecting the base body with the press adapter be sure that the joint surfaces and the sealing-ring are undamaged and free of deposits. Place the sealing-ring in the centre of the joint surface.



Place the adapter / base body onto the seal ring and fix everything with the gripper clamp (fig. 21, fig. 22). Make sure that the sealing ring is still positioned correctly and tighten the gripper clamp using 7Nm force using a torque wrench (fig. 23, fig. 24).



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ZETA VALUES

1.2.5. Zeta – values and equivalent pipe length for Metal- and PPSU-Press-Fittings

Dimension $d_a \times s$	mm	16 x 2.00	18 x 2.00	20 x 2.25	25 x 2.50	32 x 3.00	40 x 4.00	50 x 4.50	63 x 6.00	75 x 7.50	90 x 8.50	110 x 10.00
Inner-diameter d_i	mm	12	14	15.5	20	26	32	41	51	60	73	90
Zeta-value ζ / equivalent pipe-length L_a	m	ζ L_a	ζ L_a	ζ L_a	ζ L_a	ζ L_a	ζ L_a	ζ L_a	ζ L_a	ζ L_a	ζ L_a	ζ L_a
 Elbow 90°		4.3 2.0	3.6 2.0	2.9 1.9	2.7 2.4	2.3 2.7	2.0 3.1	1.6 3.3	1.4 3.8	1.5 4.6	3.7 15.4	2.9 15.5
 Elbow 45°		- -	- -	- -	- -	1.2 1.4	1.2 1.8	0.8 1.7	0.9 2.2	0.9 2.6	0.7 2.9	0.6 3.2
 Reduction		1.6 0.8	1.4 0.8	1.1 0.8	1.0 0.9	0.9 1.1	0.8 1.2	0.6 1.2	0.7 1.6	0.6 1.6	0.5 2.1	0.7 3.7
 Branch at disconnection		5.1 2.4	4.2 2.3	3.5 2.3	3.1 2.7	2.6 3.1	2.4 3.7	1.9 3.9	1.7 4.6	1.8 5.6	3.7 15.4	2.9 15.5
 Branch, pass-way at disconnection		1.1 0.6	1.0 0.6	0.8 0.5	0.8 0.7	0.7 0.8	0.5 0.8	0.4 0.8	0.5 1.1	0.5 1.3	0.5 2.1	0.4 2.1
 Branch, counter direction at disconnection		4.5 2.1	3.7 2.0	3.1 2.0	2.8 2.5	2.3 2.7	2.1 3.2	1.7 3.5	1.5 4.1	1.6 4.9	2.2 9.1	1.7 9.1

Base: Flow rate of 2 m/s

All information is compiled to the best of our knowledge. No liability can be assumed for possible faults.

FITTING RANGE

11-M22025	25mm Press Adapter	11-M21212	2 1/2" FT Socket Body
11-M22032	32mm Press Adapter	11-M21300	3" FT Socket Body
11-M22040	40mm Press Adapter	11-M29500	Blanking Cap
11-M22050	50mm Press Adapter	11-M28000	Gripper Clamp and Sealing Ring
11-M22063	63mm Press Adapter	11-M28010	Replacement Sealing Ring
11-M22075	75mm Press Adapter	11-M27300	DN80 (3") 8 Bolt Hole Flange
11-M22090	90mm Press Adapter	11-M27400	DN100 (4") 8 Bolt Hole Flange
11-M22110	110mm Press Adapter		
11-M23000	90° (swept) Elbow Body		
11-M23200	45° Elbow Body		
11-M25000	Tee Piece Body		
11-M20212	2 1/2" MT Socket Body		
11-M20300	3" MT Socket Body		
11-M20400	4" MT Socket Body		
11-M21034	3/4" FT Socket Body		
11-M21114	1 1/4" FT Socket Body		
11-M21112	1 1/2" FT Socket Body		
11-M21200	2" FT Socket Body		

