



**Zaciskanie
tulei
stalowych**

**Proste
połączenie
za pomocą
zacisków**

**Korpus
wykonany ze
stali
nierdzewnej**

**NEW
IN COMFORT
AND SAFETY**

MODULAR PRESS-FITTINGS 90 | 110

INNOVATION FOR EASIER WORK!

Flexibility creates enormous temporal or economic advantages in practice. That is why MULTITUBO systems develops innovative approaches that offer more flexibility to the user. Combining these possibilities results in much more economical work!

FITTINGS RAPIDLY AND FLEXIBLE ASSEMBLED!

With the modular system you are able to assemble more than 150 connections by using just 15 different parts.

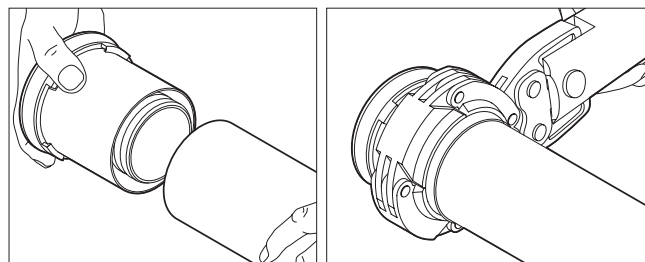
- **Stainless steel fittingbody:**
high performance – low weight
- Connection-technology:
Simple and safe
- An **economic installation**
of large sizes
- **Less overhead work**
by modular pre-mounting
- **Highest Flexibility**
in each project
- **Fully compatible**
within the system
- **Pressing on the workbench,**
installing on site



PRESSING ON THE WORKBENCH, INSTALLING ON SITE:

Convenient pressing on the work-bench. First, the pipe is prepared with a circumferential bevel by the universal deburring tool.

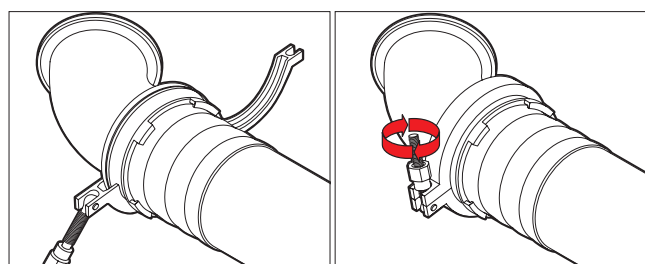
Push the adapter onto the tube as far as it will go (so that the tube is visible in the inspection windows). Place the press chain at the plastic stop points and connect it to the base pressing unit / pressing machine. Press the connection.



SIMPLE CONNECTION WITH GRIPPER CLAMPS:

The gripper clamps for the connection enable easy connection of the adapter piece to the basic body or with a further pipe section. No heavy tool is required for overhead work.

So less weight is an important contribution to more work safety at high altitude!



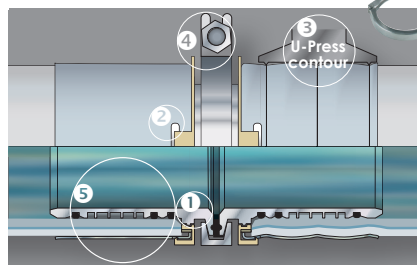


MODULAR 90/110

- Fitting body **made of stainless steel ①**
- Stainless Steel sleeves **with Inspection-window ②**
- **Special profile-geometry** for safe pressings, 3 O-Rings ⑤
- **U-Press contour ③**
- **Pressing at the workbench,** connecting on site
- **Connection by cripper-clamb ④** and torque, simple and fast
- **Safe to install,** even at height



MODULAR
PRESS-FITTINGS
90 | 110



MODULAR 90/110



Press-Adapter

Made of stainless steel with premounted pressing sleeve with inspection window and 3 O-rings.

Art.-No.:	Type	Unit/Bag	Unit/Carton
M22063	63 x 6,00	1 pc.	6 pcs.
M22075	75 x 7,50	1 pc.	6 pcs.
M22090	90 x 8,50	1 pc.	6 pcs.
M22110	110 x 10,00	1 pc.	6 pcs.



Base Body Elbow 90°

Made of stainless steel.

Art.-No.:	Type	Unit/Bag	Unit/Carton
M23000	90°	1 pc.	2 pcs.



Base Body Elbow 45°

Made of stainless steel.

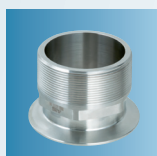
Art.-No.:	Type	Unit/Bag	Unit/Carton
M23000	45°	1 pc.	2 pcs.



Base Body Tee

Made of stainless steel.

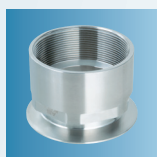
Art.-No.:	Type	Unit/Bag	Unit/Carton
M25000		1 pc.	1 pc.



Connector MT

Made of stainless steel.

Art.-No.:	Type	Unit/Bag	Unit/Carton
M20212	2 1/2" MT	1 pc.	6 pcs.
M20300	3" MT	1 pc.	6 pcs.



Connector FT

Made of stainless steel.

Art.-No.:	Type	Unit/Bag	Unit/Carton
M21034	3/4" FT	1 pc.	16 pcs.
M21114	1 1/4" FT	1 pc.	6 pcs.
M21112	1 1/2" FT	1 pc.	6 pcs.
M21200	2" FT	1 pc.	6 pcs.
M21212	2 1/2" FT	1 pc.	6 pcs.
M21300	3" FT	1 pc.	6 pcs.



Blind Cap

Made of stainless steel.

Art.-No.:	Type	Unit/Bag	Unit/Carton
M29500		1 pc.	16 pcs.

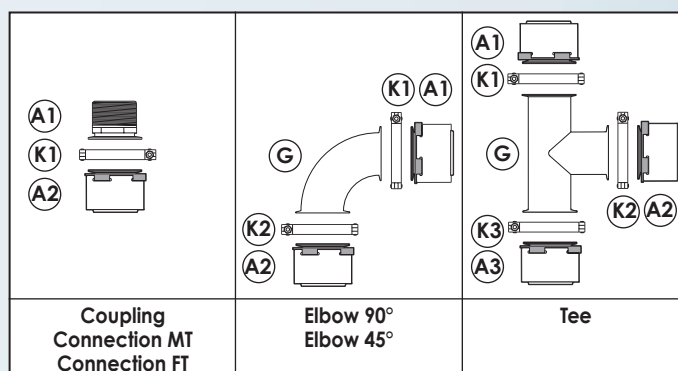
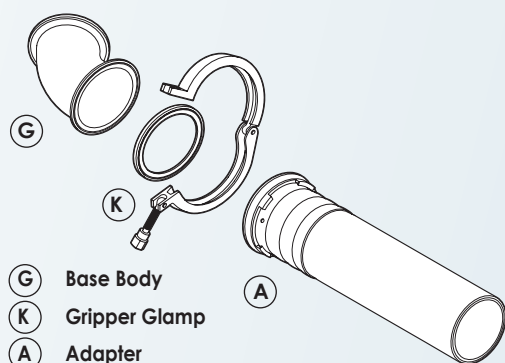


Gripper Clamp with Sealing

Made of steel.

Art.-No.:	Type	Unit/Bag	Unit/Carton
M28000		1 pc.	10 pcs.
M28010	spare seal	1 pc.	200 pcs.

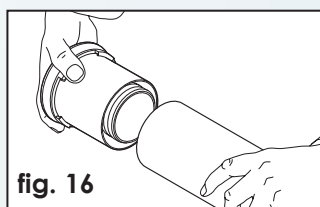
METAL-PRESS-FITTINGS MODULAR 90/110, MODULES



Type	Adapter 1 (A1)	Gripper Clamp 1 (K1)	Elbow/ Tee (G)	Gripper Clamp 2 (K2)	Adapter 2 (A2)	Gripper- Clamp 3 (K3)	Adapter 3 (A3)	alternative*	
Connection MT									
75 x 21/2" MT	(M22075)	(M28000)			(M20212)			F20090	
90 x 3" MT	M22090	M28000			M20300				
110x 3" MT	M22110	M28000			M20300				
Connection FT									
75 x 2" FT	M22075	M28000			M21200				
90 x 3" FT	M22090	M28000			M21300				
110x 3" FT	M22110	M28000			M21300				
Elbow 90°									
75 x 75	(M22075)	(M28000)	(M23000)	(M28000)	(M22075)			F23090	
90 x 90	M22090	M28000	M23000	M28000	M22090				
110x 110	M22110	M28000	M23000	M28000	M22110				
Elbow 45°									
75 x 75	(M22075)	(M28000)	(M23200)	(M28000)	(M22075)			F23290	
90 x 90	M22090	M28000	M23200	M28000	M22090				
110x 110	M22110	M28000	M23200	M28000	M22110				
Elbow 90° MT									
75 x 21/2" MT	M22075	M28000	M23000	M28000	M20212				
90 x 3" MT	M22090	M28000	M23000	M28000	M20300				
110 x 3" MT	M22110	M28000	M23000	M28000	M20300				
Tee									
75 x 75 x 75	(M22075)	(M28000)	(M25000)	(M28000)	(M22075)	(M28000)	(M22075)	F25090	
75 x 110 x 75	M22075	M28000	M25000	M28000	M22110	M28000	M22075		
90 x 90 x 90	M22090	M28000	M25000	M28000	M22090	M28000	M22090		
90 x 75 x 90	M22075	M28000	M25000	M28000	M22090	M28000	M22090		
90 x 110 x 90	M22090	M28000	M25000	M28000	M22110	M28000	M22090		
110x 90 x 110	M22110	M28000	M25000	M28000	M22090	M28000	M22110		
110x 110 x 110	M22110	M28000	M25000	M28000	M22110	M28000	M22110		
Coupling									
75 x 75	(M22075)	(M28000)			(M22075)			F27090	
75 x 90	M22075	M28000			M22090				
75 x 110	M22075	M28000			M22110				
90 x 90	M22090	M28000			M22090				
90 x 110	M22090	M28000			M22110				
110 x 110	M22110	M28000			M22110				

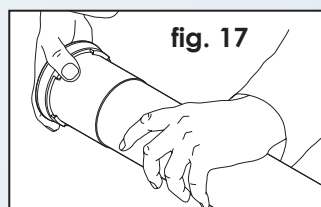


1.1.4. Press-connection MODULAR 90/110, 63 mm - 75 mm - 90 mm - 110 mm

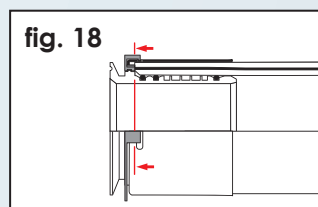


1. ATTACH FITTING TO PIPE

a) Preparation of the MULTITUBO systems multi-layer pipe as described in point 3.1.1. (**fig. 2, fig. 6**).

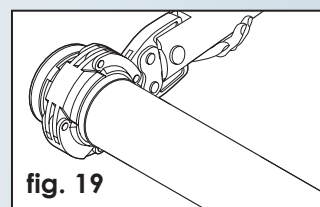


b) Push the pipe into the fitting as far as possible (**fig. 16, fig. 17**); The correct insertion depth is indicated by the appearance of the pipe in the inspection-window of the sleeve (**fig. 18**).



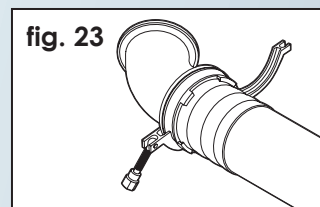
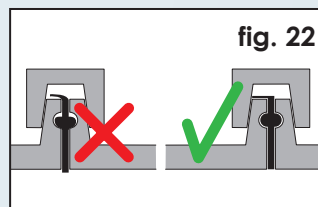
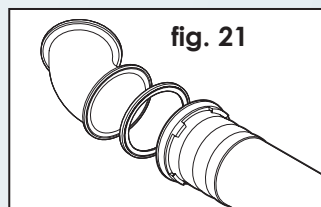
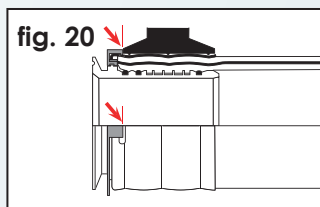
2. PRESSING OF THE FITTING

Position the pressing-chain at the plastic-stop and connect it with the pressing unit / -device. Start the pressing-procedure. Please be sure that a device with min. 32 Nm of piston force is used (**fig. 19, fig. 20**).

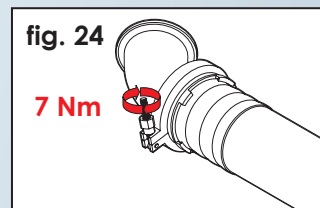


3. CONNECTING TO BASE BODY OR PRESS ADAPTER

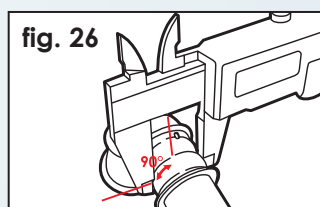
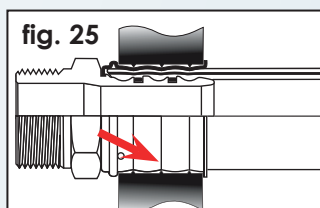
Before connecting the base bodies with the press adapter be sure that the joint surfaces and the sealing-ring are undamaged and free of deposits. Place the sealing-ring in the centre of the joint surface,



place adapter / base body accordingly 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 with 7Nm by using a torching wrench (**fig. 23, fig. 24**).



1.1.5. Use of the pressing jaws



Use of the pressing jaws

When using compatible pressing jaws with U-pressing contour, it has to be observed that the jaws used are suitable for the application and that they are in a technically faultless condition. This particularly means the compliance with the following pressing measures:

Ø 16 pressing measure 16.0 - 16.3 mm	Ø 50 pressing measure 50.0 - 50.5 mm
Ø 18 pressing measure 18.0 - 18.3 mm	Ø 63 pressing measure 63.0 - 63.5 mm
Ø 20 pressing measure 20.0 - 20.3 mm	Ø 75 pressing measure 75.0 - 75.5 mm
Ø 25 pressing measure 25.0 - 25.3 mm	Ø 90 pressing measure 91.0 - 91.5 mm
Ø 32 pressing measure 32.0 - 32.3 mm	Ø 110 pressing measure 111.0 - 111.6 mm
Ø 40 pressing measure 40.0 - 40.5 mm	

The determination of the pressing measures is carried out after the pressing process in the middle pressing groove (**fig. 25**), 90° of the push of the pressing jaws, respectively central between the bulges of the pressing chains segments (**fig. 26**).