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Installation Instruction for

M Profile Press Fittings and Pipes

1 Product Storage, Transportation and Handling

1) Pipes and fittings must not be violently transported and handled to avoid product damage, especially not to be trampled or squeezed to avoid product deformation and functional degradation or loss.
2) Pipes and fittings shall not be stored in the open air, and the storage environment shall be dry. Pay attention to product protection during storage, and do not contact pipes and fittings with sand, cement mortar and other materials that will damage the sealing ring.

2 Construction Preparation

Before construction, it should be confirmed whether the following conditions are met:

1) The materials are complete and the construction equipment can operate normally.
2) The water, electricity and material storage site conditions at the construction site can meet the demand.
3) Installers should be trained to master the key points and precautions of construction operations.
4) The appearance and joints of pipes and fittings should be carefully inspected, and the dirt and impurities on pipes and fittings should be removed in time.

3 Installation Steps and Precautions

1) Cut the pipe

According to the calculated installation size, use a pipe cutter or cutting saw to cut the steel pipe at right angles (see Figure 1), and the cut must not be inclined.



Figure 1

2) Deburr

After cutting, the internal and external burrs and chips at the pipe end must be removed to avoid damage to the sealing ring and leakage when inserting into the pipe fitting body.

3) Check the sealing ring

Check that the sealing ring is intact and in the correct position (see Figure 2).

At the same time, make sure that there is no foreign matter such as sand grains on the sealing ring. If there is foreign matter, it must be removed before installation.

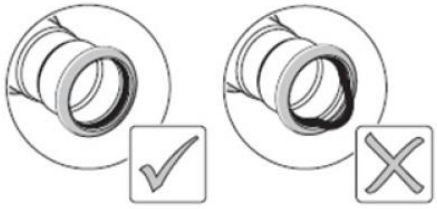


Figure 2

4) Draw lines

According to the insertion length of the steel pipe, draw a marking line on the steel pipe with a marker pen, and ensure that it is inserted to the marked position when connecting (see Figure 3 and Figure 4).

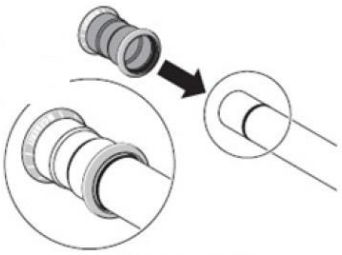


Figure 3

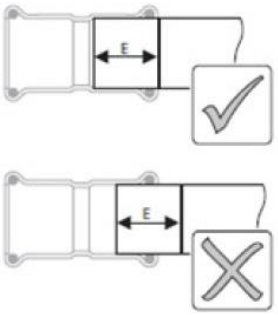


Figure 4

5) Connect pipes and fittings

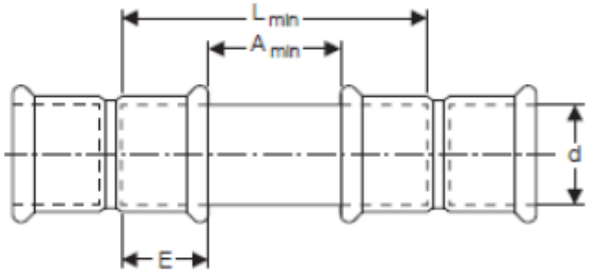
Insert the pipe into the fitting until the marked insertion depth position. When inserting, make sure that pipes and fittings are on the same axis. If the intubation is difficult due to the allowable dimensional tolerance, you can use water or soapy water to apply to the sealing ring and then insert the tube.

Note:

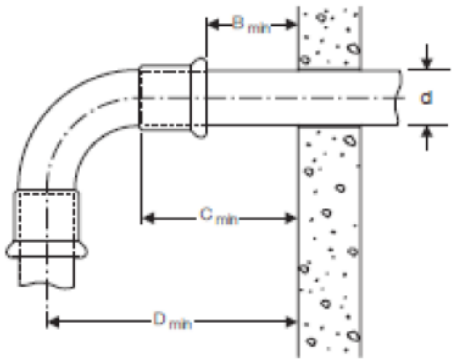
① Minimum installation distance for fittings

During the compression connection, there will be deformation at the connection between the pipe and the pipe fittings, and a certain distance must be kept between the pipe fittings.

The following table shows the minimum distance between the pipe fittings:

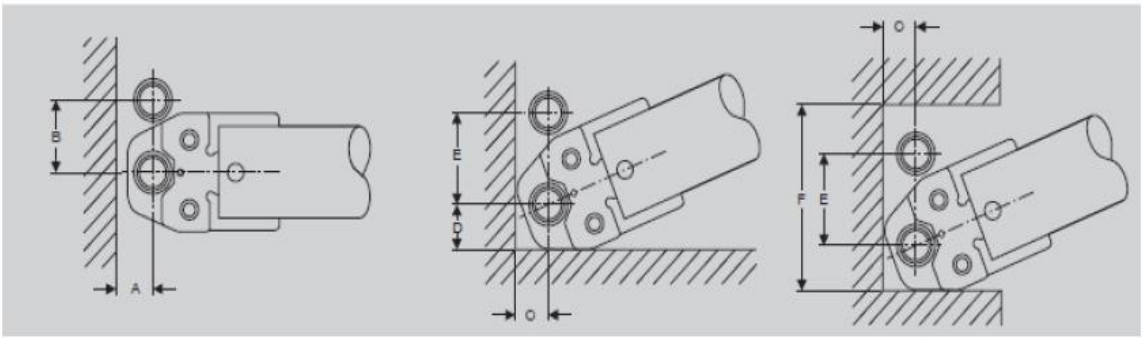


Fitting Size(mm)	A(mm)	L(mm)	E(mm)
18	20	62	21
22	20	64	22
28	20	68	24
35	25	79	27
42	25	89	32
54	25	99	37

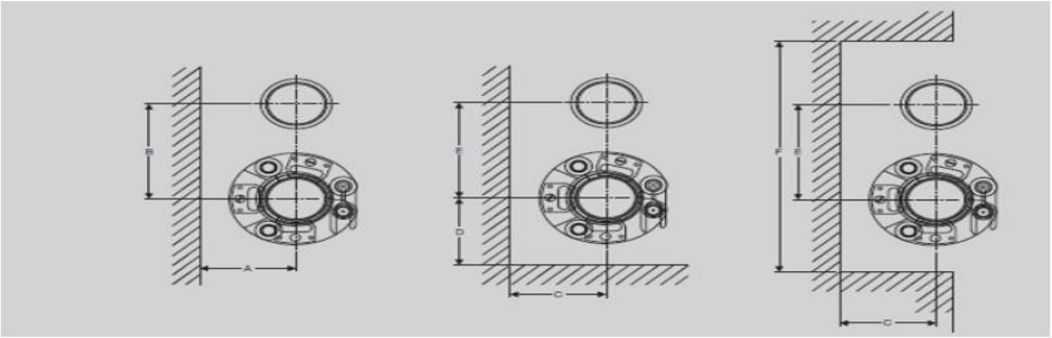


Fitting Size(mm)	B(mm)	C(mm)	D(mm)
18	25	46	75
22	25	47	82
28	25	49	93
35	20	47	101
42	20	52	115
54	20	57	135

② Construction space



Fitting Size(mm)	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)
18	25	55	35	30	70	110
22	25	60	35	30	75	120
28	25	65	35	30	80	125
35	75	95	75	75	95	245



Fitting Size(mm)	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)
42	80	100	80	80	100	260
54	95	110	95	95	110	300

6) Instal the pressing jaws

Install pressing jaws of corresponding specifications and lock the installation pin (see figure 5) to prevent pressing jaws from flying out during pressing.



Figure 5

7) Press

Confirm that the groove of the pressing jaw is placed on the protruding part of the pipe fitting and is perpendicular to the pipeline (see Figure 6, Figure 7, Figure 8, Figure 9), lightly press the switch, and after the LED light is on, press and hold the switch to carry out the pressing operation. After a cycle is automatically completed, loosen the jaws, confirm whether the pressing is in place, and tear off the indicator film.

Note:

① The threaded fittings should be screwed first and then pressed, so as to prevent the pressed pipe fittings from loosening due to threading, causing leakage.

② The vertical pipeline without positioning support should be connected to the overhead pipeline after the pressing is completed on the ground, avoiding the vertical pipeline falling under the action of gravity and leakage caused by insufficient pressing.

③ After the pressing jaws have been used for more than half a year, the jaws must be tested by special inspection tool before each use to avoid leakage caused by insufficient crimping.

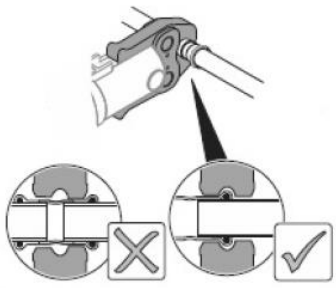


Figure 6

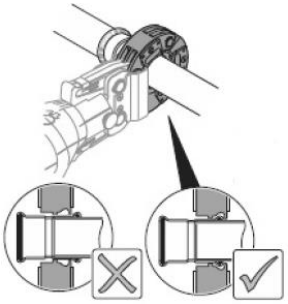


Figure 7



Figure 8



Figure 9

8) Check press condition

① After pressing, be sure to tear off the indicator film on the pressing part. The purpose of the indicator film provided by the manufacturer is to indicate whether the pipe fittings have been pressed, and tearing off the indicator film means that these pipe fittings have been pressed.

② Check for abnormal press deformation caused by misalignment of the pressing jaws or pressing ring with the end of the fitting.

If any problem that affects the function of the pipe fitting is found, the problematic part should be removed and replaced with new pipe fittings to avoid affecting the subsequent use.

4 Summary of Installation Precautions

1) Installers are not allowed to construct without training and certification.
2) Deformed steel pipes and fittings shall not be used.
3) If there are burrs on the cut of the steel pipe, do not assemble it.
4) Do not assemble the sealing ring without checking it before intubation.
5) Steel pipes that are not drawn lines (marking the insertion position) shall not be assembled.
6) Vertical pipelines without positioning support shall not be assembled without pre-pressing.
7) Threaded fittings shall not be pressed without being screwed in advance.
8) Do not press without checking the insertion position before pressing.
9) The pressing jaw that have been used for half a year must not press without being checked with the inspection tool.
10) Do not conduct the pressure test if not tearing off the leak-proof film after pressing.

5 Analysis of Common After-sales Problems

No.	Problems	Analysis	Suggestions
1	Unqualified pressing	Irregular construction or tool wear causes unqualified clamping, which may cause leakage.	When pressing each time, confirm whether the jaw is intact and operate in strict accordance with the construction specifications.
2	Pipeline deformation	Pipeline deformation due to improper transportation or storage.	It is recommended to follow the "Product Storage, Transportation and Handling" requirements in this Installation Instruction.
3	Vertical pipeline falls off during pressure test	The vertical pipeline without positioning support slides down due to the action of gravity before pressing, resulting in insufficient pressing.	The vertical pipeline without positioning support should be connected to the overhead pipeline after the pressing is completed on the ground, and check whether the drawn line position meets the requirements before pressing.
4	Steel pipes slip during pressure test	1. No line is drawn on the steel pipe before inserting the pipe fitting, and the insertion length is insufficient, resulting in slippage under pressure. 2. No press leads to slippage under pressure.	According to the insertion length, draw a line on the end of the pipe, check whether the insertion is in place when pressing and tear off the indicator film after pressing.

6 Maximum distance for the installation

Maximum distance for the installation	
d ϕ（mm）	fastening distance（m）（m）
12	1.5
15	1.5
18	1.5
22	2.0
28	2.5
35	2.5
42	3.0
54	3.5
76.1	4.0
88.9	4.5
108	5.0