



M-Press

# Press Fittings & Pipe Technical Specifications

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2023 Version - E&OE

[ValvesTubesFittings.com](http://ValvesTubesFittings.com)

# Copper Fittings - Technical Specifications

## Materials:

Formed components (fittings) material no.: CW024A according to EN 1254  
Casting components (threaded fittings) material no.: CC499K according to EN 1282

## Guarantee:

Provided your M-Press Copper fittings have been installed correctly and as per the installation guidelines set out by M-Press, you can enjoy 30 years of trouble-free service and operation from your new system. If you would like further information on training and installation techniques, please contact us on the number below, we will be delighted to assist you.

## Applications:

A premium grade Copper fitting, designed for use with:

Drinking water (fully WRAS approved)

Purified water

Heating

Cooling water (chilled water)

Boosted cold water

Plant rooms

Steam condensate

Flammable gases classed and according to DVGW G 260 (**HNBR Gas Approved Yellow seals**)

Compressed Air, Argon, Nitrogen, Carbon Dioxide

## Pressure and temperature ratings:

~ When used alongside fittings with EPDM seals for applications other than Compressed Air:

15-108mm: (PN16) 16bar -10deg C to +110deg C

~ When used alongside fittings with HNBR seals for applications involving flammable gasses:

15-108mm: (PN5) 5bar -20deg C to +70deg C

~ When used alongside fittings with EPDM seals for compressed air:

15-108mm: (PN16) 16bar -10deg C to +110deg C

## Press tools:

All M-Press Copper fittings follow the popular 'M' profile and are therefore compatible with all 'M' profile tooling.

Maintenance Free with potable water, other media follow instructions for that media.

This information is provided for reference only, is subject to change without prior notice and should not be considered accurate in every regard. E&OE

# Copper Gas Fittings - Technical Specifications

## Materials:

Formed components (fittings) material no.: CW024A according to EN 1254  
Casting components (threaded fittings) material no.: CC499K according to EN 1282

## Guarantee:

Provided your M-Press Copper fittings have been installed correctly and as per the installation guidelines set out by M-Press, you can enjoy 30 years of trouble free service and operation from your new system. If you would like further information on training and installation procedures, please contact us on the number below, we will be delighted to assist you.

## Applications:

A premium grade Copper fitting, designed for use with:  
Flammable gases classed and according to DVGW G 260 (**HNBR Gas Approved Yellow seals and FKM Gas Approved Green Special Elastomer 'Viton' seals**)

## Pressure and temperature ratings:

~ When used alongside fittings with HNBR & FKM (Viton) seals, for applications involving flammable gases:

15-108mm: (PN5) 5bar -20deg C to +70deg C

## Press tools:

All M-Press Copper fittings follow the popular 'M' profile and are therefore compatible with all 'M' profile tooling.

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# AquaGas Copper Fittings - Technical Specifications

## Materials:

Formed components (fittings) material no.: CW024A according to EN 1254

Casting components (threaded fittings) material no.: CC499K according to EN 1282

## Guarantee:

Provided your M-Press Copper fittings have been installed correctly and as per the installation guidelines set out by M-Press, you can enjoy 30 years of trouble-free service and operation from your new system. If you would like further information on training and installation techniques, please contact us on the number below, we will be delighted to assist you.

## Applications:

A premium grade Copper fitting, designed for use with:

Natural and LPG Gas

Drinking water

Purified water

Heating

Cooling water (chilled water)

Boosted cold water

Plant rooms

Flammable gases classed and according to DVGW G 260 (**HNBR Gas Approved Yellow seals**)

Compressed Air, Argon, Nitrogen, Carbon Dioxide

## Pressure and temperature ratings:

Water and heating fittings with HNBR seals.

15-28mm: (PN16) 16bar -20deg C to +95deg C

~ When used alongside fittings with HNBR seals for applications involving flammable gasses:

15-28mm: (PN5) 5bar -20deg C to +70deg C

## Press tools:

All M-Press Copper fittings follow the popular 'M' profile and are therefore compatible with all 'M' profile tooling with exception hand manual tooling.

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# Stainless Steel 316 Fittings - Technical Specifications

## Materials:

Formed components (fittings) material no.:	1.4404 according to EN 10088 /316L
Casting components (threaded fittings) material no.:	1.4408 according to EN 10283 /316L
Pipes material no.:	1.4404 according to EN 10312 (ECO 316L)

## Guarantee:

Provided your M-Press Inox tube and fittings have been installed correctly and as per the installation guidelines set out by M-Press, you can enjoy 40 years of trouble free service and operation from your new system. If you would like further information on training and installation procedures, please contact us on the number below, we will be delighted to assist you.

## Applications:

A premium grade fitting that is also unique to M-Press as it **includes 67mm** in the range and designed for use with:

Drinking water (fully WRAS approved)

Purified water

Heating

Cooling water (chilled water)

Boosted cold water

Plant rooms

Steam condensate

Flammable gases classed and according to DVGW G 260 and G 262 (**HNBR Gas Approved Yellow seals**)

Compressed Air, Argon, Nitrogen, Carbon Dioxide

## Pressure and temperature ratings:

~ When used alongside fittings with **EPDM seals** for applications other than Compressed Air:

15-108mm: (PN16) 16bar -10deg C to +110deg C

~ When used alongside fittings with **HNBR seals**:

15-108mm: (PN5) 5bar -20deg C to +70deg C

~ When used alongside fittings with **FKM seals**:

15-108mm: (PN16) 16bar -30deg C to +180deg C (230degC max spike)

## Press tools:

All M-Press Inox (Stainless Steel) fittings follow the popular 'M' profile and are therefore compatible with all 'M' profile tooling.

**It must be noted that the M-Press 66.7mm fittings must be installed with the Novopress Yorkshire 'X-Press' Press Sling, coupled with the Novopress ZB221 Press Adaptor. The Geberit 66.6mm Sling must not be used. Please also ensure the use of dri-slide or other dry film PTFE lubrication/cleaning spray or solution, for use with the press sling.**

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# Stainless Steel MXL Fittings - Technical Specifications

## Materials:

Formed components (fittings) material no.:	1.4404 according to EN 10088 /316L
Casting components (threaded fittings) material no.:	1.4408 according to EN 10283 /316L
Tube specification	1.4401 according to EN 10312 /316L

## Guarantee:

Provided your M-Press Inox tube and fittings have been installed correctly and as per the installation guidelines set out by M-Press, you can enjoy 30 years of secured service and operation from your new system. If you would like further information on training and installation techniques, please contact us on the number below, we will be delighted to assist you.

## Applications:

Drinking water (fully WRAS approved)  
Gas  
Purified water  
Heating  
Cooling water (chilled water)  
Boosted cold water  
Plant rooms  
Steam condensate  
Industrial Oils  
Compressed Air  
Chemicals

## Pressure and temperature ratings:

When used alongside fittings with EPDM seals for applications.

168.3mm and 139.7mm: (PN16) 16bar -10deg C to +110deg C

When used alongside fittings with FKM Viton Seals for Industrial and industrial gas application

168.3mm and 139mm: (PN16) 16bar -30deg C to 180deg C.

**For Natural Gas 139.7mm and 168.3mm (PN5) 5 bar -20deg C to + 70deg C**

## Press tools:

Novopress ACO401 to 168.3mm ONLY.

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# Stainless Steel 304 Pipe & Fittings - Technical Specifications

## Materials:

Formed components (fittings) material no.:	1.4404 according to EN 10088 /304
Casting components (threaded fittings) material no.:	1.4408 according to EN 10283 /304
Pipes material no.:	1.4301, according to EN10088-3

## Guarantee:

Provided your M-Press Inox fittings have been installed correctly and as per the installation guidelines set out by M-Press, you can enjoy 40 years of trouble-free service and operation from your new system. If you would like further information on training and installation procedures, please contact us on the number below, we will be delighted to assist you.

## Applications:

Heating  
Cooling water (chilled water)  
Boosted cold water  
Plant rooms & Risers  
Sprinkler systems (fit for purpose)  
Steam condensate (using FKM seals)  
Fuel Oil Installations (using FKM seals)  
Compressed Air Systems (using FKM seals)  
Natural Gas installations (using yellow HNBR seals)

## Pressure and temperature ratings:

~ When used for applications as above with either EPDM, FKM & HNBR seals:

15-108mm:	(PN16) 16bar	-10degC to +110degC (EPDM seals)
15-108mm:	(PN16) 16bar	-30degC to +180degC (FKM seals)
15-108mm:	(PN5) 5bar	-20degC to +70degC (HNBR seals for Natural Gas)

## Press tools:

All M-Press Inox (Stainless Steel) fittings follow the popular 'M' profile and are therefore compatible with all 'M' profile tooling.

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# Stainless Steel Gas Fittings - Technical Specifications

## Materials:

Formed components (fittings) material no.:	1.4404 according to EN 10088 /316L
Casting components (threaded fittings) material no.:	1.4408 according to EN 10283 /316L
Pipes material no.:	1.4404 according to EN 10312 (Series 1 316L)

## Guarantee:

Provided your M-Press Inox fittings have been installed correctly and as per the installation guidelines set out by M-Press, you can enjoy 40 years of trouble-free service and operation from your new system. If you would like further information on training and installation procedures, please contact us on the number below, we will be delighted to assist you.

## Applications:

A premium grade fitting unique to M-Press as it **now includes 67mm** and designed for use with: Flammable gases classed and according to DVGW G260 and G262 (**HNBR Gas Approved Yellow seals and FKM Gas Approved Green Special Elastomer 'Viton' seals**)

## Pressure and temperature ratings:

~ When used for flammable gas applications using HNBR & FKM (Viton) seals:  
15-108mm: (PN5) 5bar -20deg C to +70deg C

## Press tools:

All M-Press Inox (Stainless Steel) fittings follow the popular 'M' profile and are therefore compatible with all 'M' profile tooling.

**It must be noted that the M-Press 66.7mm fittings must be installed with the Novopress Yorkshire 'X-Press' Press Sling, coupled with the Novopress ZB221 Press Adaptor. The Geberit 66.6mm Sling must not be used.** Please also ensure the use of dri-slide or other dry film PTFE lubrication/cleaning spray or solution, for use with the press sling.

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# Stainless Steel Pipe (Std/Eco) - Technical Specifications

## Materials:

Pipes material no.: 1.4404 according to EN 10312 (ECO 316L)

## Guarantee:

Provided your **M-Press Ilta** Inox tube has been installed correctly and as per the installation guidelines set out by M-Press, you can enjoy 40 years of trouble free service and operation from your new system. If you would like further information on training and installation techniques, please contact us on the number below, we will be delighted to assist you.

## Applications:

A premium grade tube that **now includes 67mm** into the range and designed for use with:

Drinking water (fully WRAS approved)

Purified water

Heating

Cooling water (chilled water)

Boosted cold water

Plant rooms

Steam condensate

Flammable gases classed and according to DVGW G 260 and G 262

Compressed Air, Argon, Nitrogen, Carbon Dioxide

**Markings M-Press** from 15mm – 35mm and 67mm

**Markings ILTA** from 42mm -108mm (excluding 67mm)

## Pressure and temperature ratings:

When used alongside fittings with EPDM seals for applications other than Compressed Air:

15-108mm: (PN16) 16bar -10deg C to +110deg C

When used alongside fittings with HNBR seals for applications involving flammable gasses:

15-108mm: (PN5) 5bar -20deg C to +70deg C

When used alongside fittings with EPDM seals for compressed air:

15-108mm: (PN16) 16bar -10deg C to +110deg C

## Wall thicknesses (ECO):

15mm x 0.6mm, 22mm x 0.8mm, 28mm x 0.9mm, 35mm 67mm x 1.5mm

## Wall thickness (Standard):

42mm – 7mm x 1.5mm. 76mm 108mm x 2.00mm

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# Carbon Steel Pipe & Fittings - Technical Specifications

## Materials:

Formed components (fittings) material no.: **1.0034 according to EN 10305, ext galv'd**  
Casting components (threaded fittings) material no.: **1.0034 according to EN 10305, ext galv'd**

Pipes and Fittings are produced from unalloyed E195 (RSt 34-2) steel, with a galvanised coating not less than 8 microns.

## Guarantee:

Provided your M-Press Carbon Steel fittings have been installed correctly and as per the installation guidelines set out by M-Press, you can enjoy 25 years of trouble free service and operation from your new system. M-Press have one of the longest guarantees in the industry for Carbon Steel. If you would like further information on training and installation techniques, please contact us on the number below, we will be delighted to assist you.

## Applications:

A premium grade Carbon Steel fitting with a long guarantee, designed for use with:  
Heating (strictly closed heating systems only)  
Cooling water (chilled water – strictly closed systems only)  
Compressed air  
Sprinkler systems  
Solar Thermal (strictly closed systems only, when specified as Carbon Industry with FKM grade seals)

## Pressure and temperature ratings:

~ When used alongside fittings with EPDM seals for applications other than Compressed Air:

15-108mm: (PN16) 16bar -10deg C to +110deg C

~ When used alongside fittings with EPDM seals for compressed air:

15-108mm: (PN16) 16bar -10deg C to +110deg C

~ When used alongside fittings with FKM seals for solar thermal applications:

15-108mm: (PN16) 16bar -30deg C to +180deg C

## Considerations:

~ If the installed pipework is outside of a building and exposed to the elements, suitable insulation, conduit, duct or pipe wrap must be used. This must be waterproof to prevent any moisture ingress. This will protect the pipework and help maintain its service whilst providing necessary thermal insulation.

~ If the installed pipework is located in areas of high humidity, suitable insulation, conduit, duct or pipe wrap must be used. This must be waterproof to prevent any moisture ingress. This will protect the pipework and help maintain its service whilst providing necessary thermal insulation.

~ If the installed pipework is to be buried, it must be suitably wrapped or laid in a waterproof conduit or duct. This will help to protect the pipework and help maintain its service.

~ If fittings and tube are to be stored for any period of time prior to installation, they must be stored in a clean and dry location away from any risk of excessive moisture.

## Press tools:

All M-Press Carbon Steel fittings follow the popular 'M' profile and are therefore compatible with all 'M' profile tooling.

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# Carbon Steel Pipe (Zinc/Zinc) - Technical Specifications

## Materials:

Formed components (pipe) material no.: 1.0034 according to EN 10346, int ext galv'd

## Guarantee:

Provided your M-Press Carbon Steel fittings have been installed correctly and as per the installation guidelines set out by M-Press, you can enjoy 10 years of trouble-free service and operation from your new system. M-Press have one of the longest guarantees in the industry for Carbon Steel. If you would like further information on training and installation techniques, please contact us on the number below, we will be delighted to assist you.

## Applications:

A premium grade Carbon Steel pipe with a 10-year guarantee, designed for use with:

Heating (Closed Systems only)

Cooling water (chilled water – closed systems only)

Compressed air

Sprinkler systems (pressurised Systems only)

## Pressure and temperature ratings:

~ When used alongside fittings with EPDM seals for applications other than Compressed Air:

15-108mm: (PN16) 16bar -10deg C to +100deg C

~ When used alongside fittings with EPDM/FKM seals for compressed air:

15-108mm: (PN16) 16bar -10degC (-30&degC on FKM) to +100deg C

~ When used for extinguishing water:

15-108mm: (PN16) 16bar -10degC (-30&degC on FKM) to +100deg C

~ For fire extinguishers:

15-108mm: (PN16) 16bar -10degC (-30&degC on FKM) to +100deg C

## Press tools:

All M-Press Carbon Steel fittings follow the popular 'M' profile and are therefore compatible with all 'M' profile tooling.

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# Unipress Pipe & Fittings - Technical Specifications

Technical data system pipe MPRESS UNIPRESS ML-PIPE

The five layer system pipe MPRESS UNIPRESS ML-PIPE is a temperature resistant polyethylene pipe with Aluminium core (PE-RT/AL-PE-RT).

Pipe design:

1. Layer internal pipe PE-RT type II, DIN 16833
2. Layer adhesive layer
3. Layer butt-welded aluminium layer
4. Layer adhesive layer
5. Layer external layer PE-RT type II or heat-resistant PE

The MPRESS UNIPRESS ML-PIPE is suitable for drinking water, it is gastight, corrosion-free, chemical-resistant, deposit free, flexible, and dimensionally stable.

The pipe can be delivered as an insulated pipe. Insulation thicknesses 6mm to 20mm according to size. MPRESS UNIPRESS ML-PIPE can also be delivered as a pipe in pipe system drawn in corrugated protective pipe.

Length: rolls á 50m, 100m or 200m or bars á 5m. Dimensions: DN 16 bis 32mm.

Pipe design MPRESS UNIPRESS ML-PIPE

Characteristics	unit	PE-RT	PE-X
Design	[-]	5- layer	5- layer
Diffusion barrier	[-]	Butt-welded alu	Butt-welded alu
Oxygen diffusion	Mg/l d	< 0.005	< 0.005
application		Heating/sanitary	Heating/sanitary

Heating characteristics MPRESS UNIPRESS ML-PIPE

Characteristics	unit	PE-RT	PE-X
prolonged load ISO 10508 class 4	bar	10bar	10bar
prolonged load ISO 10508 class 5	bar	8/10bardepending on design	8/10bardepending on design
heat conductivity	W / mk	0,430	0,430
heat expansion coefficient	mm / mk	0,026	0,026

Mechanical characteristics MPRESS UNIPRESS ML-PIPE

Characteristics	unit	PE-RT	PE-X
surface roughness (Prandtel-Colebrook)	mm	0.007	0.007
Bending radii (23°C)	mm	5 dn	5 dn

Technical data system fitting MPRESS UNIPRESS

The MPRESS UNIPRESS fitting bodies are made of DZR brass in the dimensions 16 to 32 mm. MPRESS UNIPRESS fittings are universal pressfittings for MPRESS UNIPRESS ML-PIPE (multilayer pipe) and for other suitable multilayer pipes. UNIPRESS is suitable for heating-, sanitary- and floor heating systems. MPRESS UNIPRESS fittings are delivered with factory installed EPDM (black) gaskets. The elastomer (o- ring) is consistent with the requirements of the German Health Authority's KTW recommendation and is especially suitable for drinking water applications.

Diameter in mm	Wall thickness in mm
16	2.0
20	2.0
20	2.25
25	2.5
26	3.0
32	3.0

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# O-Rings - Technical Specifications

## Materials:

EPDM – Ethylene, propylene, diene, monomer rubber.

FKM - Viton fluorocarbon.

HNBR - Hydrogenated nitrile, butadiene rubber.

## Guarantee:

When fittings come with 'O' Ring Seals already installed they are guaranteed for the same length of time as the fittings.

When fitting to M-Press Fittings by a Third Party the 'O' Rings are guaranteed for the same length of time as the fittings but the fitting of the 'O' Ring Seal into the fitting guarantee is void if the seal is not inserted according to manufacturers recommendations and all precautions have not been taken to ensure no damage to the 'O' Ring Seal.

## 'O' Ring Installation:

If an 'O' Ring Seal needs to be replaced for any reason the following precautions must be taken to ensure safe and correct sealing of the seal.

Remove defective seal by using an 'O' Ring seal remover either plastic or metal.

Before inserting the new seal ensure that the profile for which the seal will sit is perfectly clean.

The 'O' Ring Seal can then be gently installed in the profile by hand, making sure no oil or chemicals come in contact.

When the seal is fitted use a very small amount of silicone lubricant.

When installed into the fittings make sure that the appropriate markings are on the fittings, Red for Viton, Yellow for Gas and Blue or No Markings for EPDM.

All 'O' Ring Seals from M-Press are approved by the National Bodies Testing Facilities WRAS, DVGW

Markings M-Press from 15mm – 35mm and 67mm

Markings ILTA from 42mm -108mm (excluding 67mm)

## Pressure and temperature ratings:

When used alongside fittings with EPDM seals for applications other than Compressed Air:

15-108mm: (PN16) 16bar -10deg C to +110deg C

When used alongside fittings with HNBR seals for applications involving flammable gasses:

15-108mm: (PN5) 5bar -20deg C to +70deg C

When used alongside fittings with EPDM seals for compressed air:

15-108mm: (PN16) 16bar -10deg C to +110deg C

When used alongside fittings with FKM seals

15-108mm: (PN16) 16bar -30deg C to +180deg C

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# Copper & Stainless Steel 316L Steam Press Fittings

## Technical Specifications

### Materials (Stainless Steel):

Formed components (fittings) material:	1.4404 to BS EN 10088 (316L)
Casting components (threaded fittings) material:	1.4408 to BS EN 10283 (316L)
Pipe material:	1.4404 to BS EN 10312 (ECO 316L)

### Materials (Copper):

Formed components (fittings) material:	CW024A to BS EN 1254
Casting components (threaded fittings) material:	CC499K to BS EN 1282
Pipe material:	1.4404 to BS EN 10312 (ECO 316L)

### Guarantee:

Provided your M-Press Inox tube and/or fittings have been installed correctly and as per the installation guidelines set out by M-Press, you can enjoy 50 years of trouble-free service and operation from your new system.

### Applications:

A premium grade fitting that is unique to M-Press and designed for use with alkalis, methanol, amines and steam.

### Pressure and temperature ratings:

With **FEPM (Aflas®)** high temperature seals:

Pressure:	16 bar maximum
Temperature:	-30°C - 235°C.

With **FEPM (Aflas®)** high temperature seals for **steam**:

Pressure:	7 bar maximum.
Temperature:	-30°C - 170°C

Fittings will be marked with white identification mark and fitted with black seals.

### Press tools:

All M-Press Inox (Stainless Steel) and copper fittings follow the popular 'M' profile and are therefore compatible with all 'M' profile tooling.

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