

TECHNICAL DATA SHEET / EN

M-105

11.25° grooved elbow

M-105 changes the pipe direction by 11.25°. It provides a defined shallow-angle fitting where the designed route requires a smaller change of direction than 22.5° or 45°.

The fixed-angle body redirects water without relying on deflection at a coupling. Separate compatible couplings and gaskets complete both grooved connections.



01 Technical parameters

Parameter	Value / condition
Working pressure	300 psi / 20.7 bar
Connection	Grooved

For aboveground steel pipework in fixed water-based fire-protection systems. The component forms part of a designed pipe assembly; it does not detect or extinguish a fire by itself.

02 Certification and scope

Document	Number	Scope
FM Approvals	PR475688	Model M-105

Approval scope depends on model, exact size, execution, pipe, gasket and pressure. Approval is not transferable between variants.

03 Dimensions and geometry

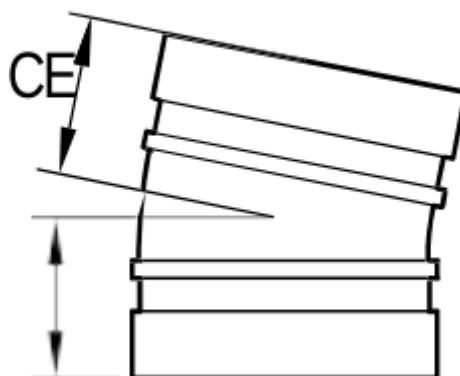


Fig. 1. Dimension symbols used in the table below.

DN	OD [mm]	CE [mm]	Mass [kg]
DN32	42.4	35	0.2
DN40	48.3	35	0.2
DN50	60.3	35	0.5
DN65	76.1	38	0.6
DN80	88.9	38	1
DN100	114.3	44	1.6
DN125	139.7	51	2.1
DN150	168.3	51	3.2
DN200	219.1	51	4.6

Dimensions in mm. Symbols apply only to Fig. 1 and the specified variant. Do not scale the drawing.

04 Main component materials

Component	Material / construction
Housing/body	Ductile iron ASTM A536 Grade 65-45-12

05 Selection and compatibility

Select the angle and model, actual pipe outside diameter, pressure and finish. Check centre-to-end dimensions, coupling clearance and the hydraulic calculation; nominal diameter alone does not establish interchangeability.

06 Installation and checks

A competent installer must check pipe preparation and clean sealing surfaces. Use the specified joining components and follow the instructions for the exact model; do not borrow a tightening method from another product.

07 Operation and maintenance

During scheduled inspections, check for leakage, corrosion and mechanical damage. Depressurize and drain the affected section before dismantling; use compatible replacement parts.

Application limitations

The bare fitting does not establish the rating of its couplings, seals or adjoining equipment. Use the lowest pressure limit of the complete assembly; verify media and temperature compatibility of all sealing components.

08 Ordering information

Variant	Mercatura code
DN32 / 42.4 mm	M-105-042
DN40 / 48.3 mm	M-105-048
DN50 / 60.3 mm	M-105-060
DN65 / 76.1 mm	M-105-076
DN80 / 88.9 mm	M-105-089
DN100 / 114.3 mm	M-105-114
DN125 / 139.7 mm	M-105-139
DN150 / 168.3 mm	M-105-168
DN200 / 219.1 mm	M-105-219

Specify finish, gasket and required approval scope with the variant identifier. The identifier alone does not establish these attributes.