

TECHNICAL DATA SHEET / EN

M-90S

Short-radius 90° grooved elbow

M-90S provides a compact 90° change of direction where installation space is limited. It is a separate short-radius style, not simply another name for the standard M-90 elbow.

The shaped body redirects water between perpendicular pipe runs. Both grooved ends connect through separate couplings and gaskets; the compact geometry must be included in the layout and hydraulic design.



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-90S

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

03 Dimensions and geometry

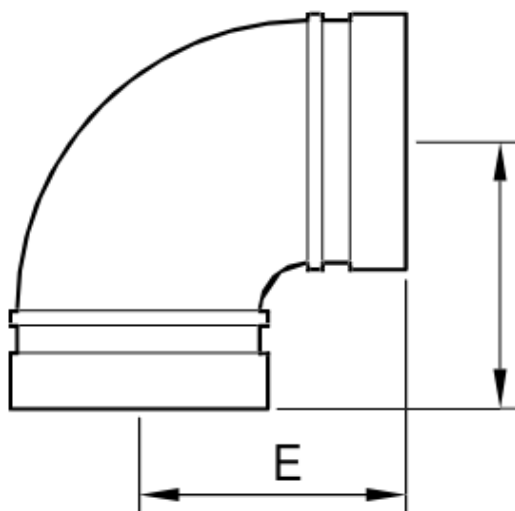


Fig. 1. Dimension symbols used in the table below.

E in the drawing corresponds to CE in the source dimension table.

DN	OD [mm]	E / CE [mm]	Mass [kg]
DN50	60.3	70	0.6
DN65	76.1	76	1
DN80	88.9	86	1.3
DN100	114.3	102	2.1
DN125	139.7	124	3.5
DN150	168.3	140	5.6
DN200	219.1	173	10.5

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	Painted (P)	Galvanized (G)
DN50	M-90S-060P	M-90S-060G
DN65	M-90S-076P	M-90S-076G
DN80	M-90S-089P	M-90S-089G
DN100	M-90S-114P	M-90S-114G
DN125	M-90S-139P	M-90S-139G
DN150	M-90S-168P	M-90S-168G
DN200	M-90S-219P	M-90S-219G

P — painted; G — galvanized. A code suffix identifies the finish, not approval coverage. Confirm the required approval for the ordered execution.