

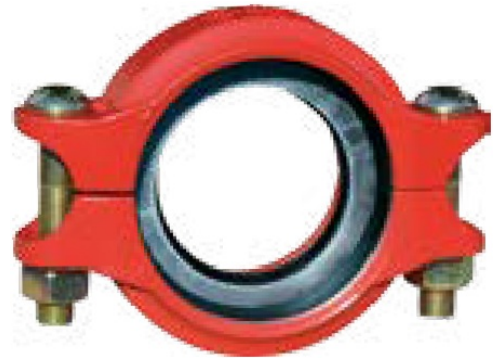
## TECHNICAL DATA SHEET / EN

# M-1NR

## Reducing grooved coupling

M-1NR directly joins two grooved pipes of different diameters in one coupling. It combines the diameter transition and mechanical joint, unlike a separate reducer installed between two couplings.

The dedicated housing and reducing gasket match the two pipe sizes. Use the insertion-limiting component according to the construction of the specific execution.



### 01 Technical parameters

| Parameter             | Value / condition                                                             |
|-----------------------|-------------------------------------------------------------------------------|
| Working pressure      | 300 psi / 20.7 bar                                                            |
| Connection            | Grooved                                                                       |
| Gasket material range | EPDM E: -34°C / +110°C                                                        |
| Temperature           | For the gasket material only; complete assembly and medium limits also apply. |

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-1NR |

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

The cited FM scope confirms the red-painted execution. The required approval scope for galvanized execution must be confirmed separately.

### 03 Dimensions and geometry

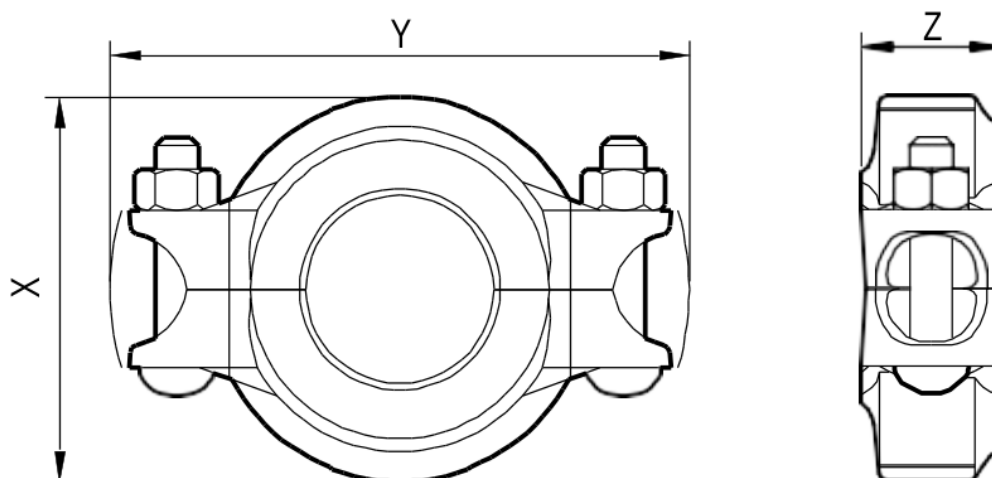


Fig. 1. Dimension symbols used in the table below.

| DN            | OD [mm]       | X [mm] | Y [mm] | Z [mm] | Mass [kg] |
|---------------|---------------|--------|--------|--------|-----------|
| DN50 x DN40   | 60.3 x 48.3   | 80     | 145    | 47     | 0.87      |
| DN65 x DN50   | 76.1 x 60.3   | 98     | 164    | 49     | 1.35      |
| DN80 x DN50   | 88.9 x 60.3   | 115    | 178    | 49     | 1.59      |
| DN80 x DN65   | 88.9 x 76.1   | 115    | 178    | 49     | 1.48      |
| DN100 x DN50  | 114.3 x 60.3  | 141    | 208    | 51     | 2.72      |
| DN100 x DN65  | 114.3 x 76.1  | 141    | 208    | 51     | 2.51      |
| DN100 x DN80  | 114.3 x 88.9  | 141    | 208    | 51     | 2.33      |
| DN150 x DN100 | 168.3 x 114.3 | 199    | 276    | 51     | 4.24      |

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

The dimension table covers only variants with available geometry. Dimensions for other sizes require separate confirmation.

### 04 Main component materials

| Component    | Material / construction                                |
|--------------|--------------------------------------------------------|
| Housing/body | Ductile iron ASTM A536 Grade 65-45-12                  |
| Gasket       | EPDM, model-specific profile                           |
| Fasteners    | Carbon steel to the controlled model bill of materials |

## 05 Selection and compatibility

Specify both actual pipe outside diameters as an exact reduction pair, together with wall thickness, groove preparation, finish and pressure requirement. Select the dedicated reducing gasket, not a modified standard seal.

## 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 lowest-rated component limits the complete assembly. A gasket material temperature range is not automatically the operating range of the whole joint. Protect water-filled pipework against freezing.

## 08 Ordering information

| Variant       | Painted (P)   |
|---------------|---------------|
| DN65 × DN50   | M-1NR-076060P |
| DN80 × DN50   | M-1NR-089060P |
| DN80 × DN65   | M-1NR-089076P |
| DN100 × DN50  | M-1NR-114060P |
| DN100 × DN65  | M-1NR-114076P |
| DN100 × DN80  | M-1NR-114089P |
| DN150 × DN80  | M-1NR-168089P |
| DN150 × DN100 | M-1NR-168114P |

P — red-painted finish.