

TECHNICAL DATA SHEET / EN

M-240

Concentric grooved reducer

M-240 connects pipe sections of different diameters while keeping their centre lines aligned. Unlike a reducing coupling, it is a fitting body requiring a separate coupling at each end.

The concentric body changes the flow passage from the larger diameter to the smaller diameter. The two end connections use couplings and gaskets sized for their respective pipe outside diameters.



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-240

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

03 Dimensions and geometry

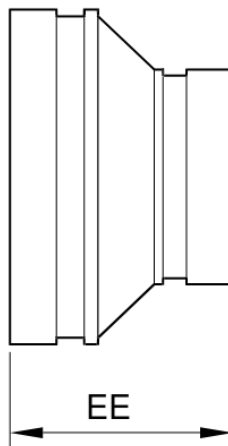


Fig. 1. Dimension symbols used in the table below.

DN	OD [mm]	EE [mm]	Mass [kg]
DN32 x DN25	42.4 x 33.4	64	0.2
DN40 x DN25	48.3 x 33.4	64	0.3
DN40 x DN32	48.3 x 42.4	64	0.3
DN50 x DN25	60.3 x 33.4	64	0.3
DN50 x DN32	60.3 x 42.4	64	0.4
DN50 x DN40	60.3 x 48.3	64	0.4
DN65 x DN25	76.1 x 33.4	64	0.5
DN65 x DN32	76.1 x 42.4	64	0.5
DN65 x DN40	76.1 x 48.3	64	0.5
DN65 x DN50	76.1 x 60.3	64	0.5
DN80 x DN25	88.9 x 33.4	64	0.6
DN80 x DN32	88.9 x 42.4	64	0.6
DN80 x DN40	88.9 x 48.3	64	0.6
DN80 x DN50	88.9 x 60.3	64	0.7
DN80 x DN65	88.9 x 76.1	64	0.7
DN100 x DN25	114.3 x 33.4	76	0.9
DN100 x DN32	114.3 x 42.4	76	0.9
DN100 x DN40	114.3 x 48.3	76	1

DN	OD [mm]	EE [mm]	Mass [kg]
DN100 x DN50	114.3 x 60.3	76	1
DN100 x DN65	114.3 x 76.1	76	1.1
DN100 x DN80	114.3 x 88.9	76	1.1
DN125 x DN25	139.7 x 33.4	89	1.4
DN125 x DN32	139.7 x 42.4	89	1.4
DN125 x DN40	139.7 x 48.3	89	1.4
DN125 x DN50	139.7 x 60.3	89	1.5
DN125 x DN65	139.7 x 76.1	89	1.5
DN125 x DN80	139.7 x 88.9	89	1.6
DN125 x DN100	139.7 x 114.3	89	1.7
DN150 x DN25	168.3 x 33.4	102	2.1
DN150 x DN32	168.3 x 42.4	102	2.1
DN150 x DN40	168.3 x 48.3	102	2.2
DN150 x DN80	168.3 x 88.9	102	2.3
DN150 x DN100	168.3 x 114.3	102	2.4
DN200 x DN25	219.1 x 33.4	127	4.1
DN200 x DN40	219.1 x 48.3	127	4.2
DN200 x DN50	219.1 x 60.3	127	4.3
DN200 x DN65	219.1 x 76.1	127	4.3

DN	OD [mm]	EE [mm]	Mass [kg]
DN200 x DN80	219.1 x 88.9	127	4.5
DN200 x DN100	219.1 x 114.3	127	4.6
DN200 x DN125	219.1 x 139.7	127	4.8
DN200 x DN150	219.1 x 168.3	127	5
DN250 x DN100	273 x 114.3	152	7.5
DN250 x DN125	273 x 139.7	152	7.6
DN250 x DN150	273 x 168.3	152	7.8
DN250 x DN200	273 x 219.1	152	8.8
DN300 x DN100	323.9 x 114.3	178	9.9
DN300 x DN125	323.9 x 139.7	178	10
DN300 x DN150	323.9 x 168.3	178	10.3
DN300 x DN200	323.9 x 219.1	178	11.2
DN300 x DN250	323.9 x 273	178	13.8

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

Order the exact larger-to-smaller diameter pair using actual pipe outside diameters. Check overall length, coupling clearances, finish and pressure; include the diameter transition in the hydraulic calculation.

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)
DN32 × DN25	M-240-042034P	M-240-042034G
DN40 × DN25	M-240-048034P	M-240-048034G
DN40 × DN32	M-240-048042P	M-240-048042G
DN50 × DN32	M-240-060042P	M-240-060042G
DN50 × DN40	M-240-060048P	M-240-060048G
DN65 × DN40	M-240-076048P	M-240-076048G
DN65 × DN50	M-240-076060P	M-240-076060G
DN80 × DN40	M-240-089048P	M-240-089048G
DN80 × DN50	M-240-089060P	M-240-089060G
DN80 × DN65	M-240-089076P	M-240-089076G
DN100 × DN40	M-240-114048P	M-240-114048G
DN100 × DN50	M-240-114060P	M-240-114060G
DN100 × DN65	M-240-114076P	M-240-114076G
DN100 × DN80	M-240-114089P	M-240-114089G
DN125 × DN50	M-240-139060P	M-240-139060G
DN125 × DN65	M-240-139076P	M-240-139076G
DN125 × DN80	M-240-139089P	M-240-139089G
DN125 × DN100	M-240-139114P	M-240-139114G
DN150 × DN80	M-240-168089P	M-240-168089G
DN150 × DN100	M-240-168114P	M-240-168114G
DN200 × DN100	M-240-219114P	M-240-219114G
DN200 × DN150	M-240-219168P	M-240-219168G
DN250 × DN150	M-240-273168P	M-240-273168G
DN250 × DN200	M-240-273219P	M-240-273219G

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