

M-321G

Flange adapter with grooved spigot

M-321G connects a grooved pipe system to compatible flanged equipment using a flanged fitting body with a grooved spigot. Its construction differs from the split adapter M-321.



The grooved spigot connects through a separate grooved coupling and gasket. The flange side uses the matching flange connection and its specified sealing and bolting arrangement.

01 Technical parameters

Parameter	Value / configuration
Nominal range	DN50–DN300
Pressure within FM scope	300 psi / 20.7 bar
Flange interface	PN16 / ANSI Class 125 & 150
Connections	Groove × flange

PN16 and ANSI Class 125/150 describe the interface configuration. Specify the mating flange standard and facing when ordering. The lowest-rated component limits the complete connection; PN16 does not mean 300 psi.

02 Approval and scope

FM Approvals	Identification	Model / standard
Model certificate	PR475688	M-321G · FM 1920

Approval applies to the specified configuration; it must not be transferred to other models, connections or complete installations.

03 Drawing and dimensions

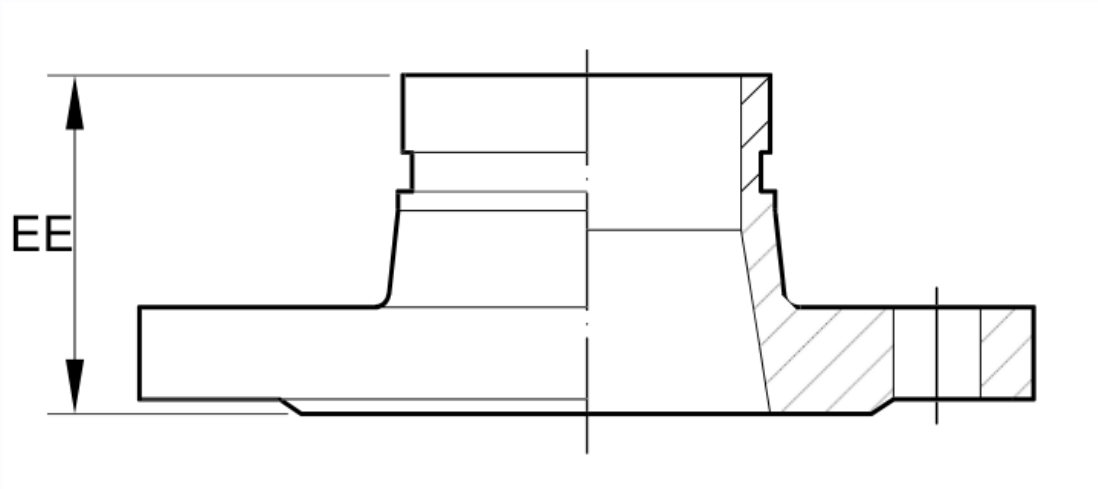


Figure 1. Dimension symbols.

DN	OD [mm]	EE [mm]	Mass [kg]
50	60.3	70	1.5
65	76.1	70	1.9
80	88.9	70	2.3
100	114.3	80	3.5
125	139.7	80	4.0
150	168.3	100	5.9
200	219.1	100	9.2
250	273.0	100	21.5
300	323.9	100	31.5

Dimensions in mm. Table letters correspond to Figure 1. Do not scale the drawing; masses are approximate. Check the actual flange interface before assembly.

04 Materials and components

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

05 Ordering information

Variant	Painted (P)	Galvanized (G)
DN50	M-321G-060P	M-321G-060G
DN65	M-321G-076P	M-321G-076G
DN80	M-321G-089P	M-321G-089G
DN100	M-321G-114P	M-321G-114G

P — painted; G — galvanized. The code does not replace the flange-standard specification or the approval scope for the execution.

The dimension table describes catalogue configurations. For a size without a listed code, specify model, DN/OD, flange standard and finish when arranging the order; do not create an article by rounding OD.

06 Installation and checks

Specify actual pipe outside diameter and the exact flange standard, drilling, facing and mating equipment. A matching bolt pattern alone does not establish pressure compatibility; confirm the complete connection arrangement.

Check mating flange geometry, sealing faces and access for the specified fasteners. Assemble using the model-specific sealing arrangement; do not force mismatched flanges together or transfer gasket details between M-321 and M-321G.

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.

08 Application limits

PN16 and ANSI Class 125/150 describe the interface configuration. Specify the mating flange standard and facing when ordering. The lowest-rated component limits the complete connection; PN16 does not mean 300 psi.