

M-321

Split flange adapter

M-321 connects a grooved pipe end to a compatible flange. Its split housing and dedicated gasket create the transition; it is not the one-piece flanged fitting with a grooved spigot designated M-321G.



The split adapter engages the pipe groove and interfaces with the mating flange. The dedicated gasket seals the transition, while the selected flange and fastening arrangement complete the joint.

01 Technical parameters

Parameter	Value / configuration
Nominal range	DN50–DN200
Pressure within FM scope	300 psi / 20.7 bar
Flange interface	PN16 / ANSI Class 125 & 150
Connections	Groove × flange
Gasket material temperature	EPDM Grade E: 34°C...+110°C

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-321 · FM 1920

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

The 34°C...+110°C range applies only to EPDM Grade E gasket material. It is not automatically the complete connection operating range and does not permit water to freeze.

03 Drawing and dimensions

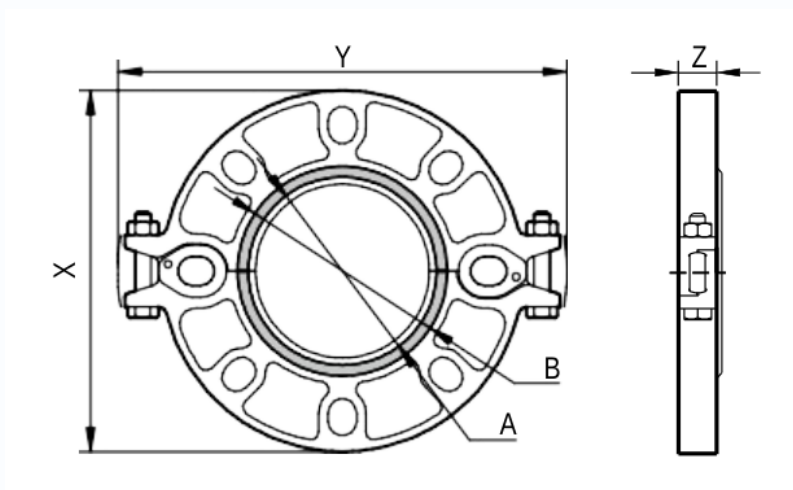


Figure 1. Dimension symbols.

DN	OD [mm]	A	B	X	Y	Z	Bolt	Mass [kg]
50	60.3	64	78	165	218	20	M10×70	1.76
65	76.1	80	94	185	238	22	M10×70	2.41
80	88.9	93	107	200	250	22	M10×70	2.55
100	114.3	119	133	229	280	24	M10×70	3.24
125	139.7	145	159	250	313	22	M12×70	3.49
150	168.3	174	188	285	345	26	M12×70	4.73
200	219.1	225	242	343	404	30	M12×70	6.95

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
Gasket	EPDM, model-specific profile
Fasteners	Carbon steel to the controlled model bill of materials

05 Ordering information

Variant	Painted (P)	Galvanized (G)
DN50	M-321-060P	M-321-060G
DN65	M-321-076P	M-321-076G
DN80	M-321-089P	M-321-089G
DN100	M-321-114P	M-321-114G
DN125	M-321-139P	M-321-139G
DN150	M-321-168P	M-321-168G
DN200	M-321-219P	M-321-219G

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

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.