

DIN / EN Gate Valve: PN16–PN64, Handwheel or Electric Actuator

DIN / EN steel gate valves are PN-rated flanged isolation valves for steam, hot water, thermal oil and process lines in plants engineered to European standards. A bolted bonnet and rising stem (OS&Y) are standard; operation is by handwheel or electric actuator.

Technical specifications

Pressure rating	PN16, PN25, PN40, PN64
End connections	EN 1092-1 flanged, EN 558 face-to-face
Design	Bolted bonnet, rising stem (OS&Y), wedge gate
Materials	1.0619 (GP240GH), 1.4408; low-temperature and alloy steel options
Operation	Handwheel, bevel gear, electric actuator
Testing	EN 12266-1



Stainless steel flanged gate valve, PN16 · representative image

Key features

- One-for-one replacement in existing DIN lines
- Certificates with EN material numbers
- Electric actuator option for automation

Standards and test pressures

- **Design:** DIN 3352 / EN 1984
- **Face-to-face:** DIN 3202 / EN 558
- **Flanges:** EN 1092-1 (DIN 2543–2547)
- **Construction:** bolted bonnet, rising stem (OS&Y); handwheel or electric actuator
- **Testing:** EN 12266-1 (DIN 3230)

Under EN 12266-1, the hydrostatic shell test is carried out at 1.5 times the valve's allowable pressure (PS) at 20 °C and the seat test at 1.1 times PS. The values below apply to material groups in which PS equals PN:

Nominal pressure	Shell test	Seat test
PN 16	2.4 MPa (24 bar)	1.76 MPa (17.6 bar)
PN 25	3.75 MPa (37.5 bar)	2.75 MPa (27.5 bar)
PN 40	6.0 MPa (60 bar)	4.4 MPa (44 bar)
PN 64	9.6 MPa (96 bar)	7.04 MPa (70.4 bar)