

Ball Valve type 546 Pro

Ball Valve type 546 Pro, manually operated



Type 546 Pro
manually operated

Product description

The Ball Valve type 546 Pro is the ideal valve for use in applications ranging from simple water applications right up to demanding chemical processes. Its modular construction guarantees simple operation, flexibility, universal automation options and the greatest possible process safety.

Function

The ball valve uses a rotating ball with a hole through it that allows straight-through flow in the open position and shuts off flow when the ball is rotated 90° to block the flow passage. This valve is mainly used for open/close functions and for regulating services.

Benefits/features

The Ball Valve type 546 Pro modular design always adapts the actual requirements. Whether electric, pneumatic or manual operation, including optional accessories, it flexibly meets all requirements.

- Lockable lever equipped as standard (DN10-50)
- Manual valve or automatic valve with/without electrical position feedback
- Ergonomic hand lever with integrated tool to open the union bushing
- Labeling in lever (optional)
- Integrated fixation system with mounted threaded inserts as standard
- Spacers keep the level of the piping system constant and simplify installation
- Individual online configuration is possible
- Unique Data Matrix Code for traceability
- Oil-free and LABS-cleaned version
- Very high flow rate
- Universal interface makes a combination with all actuators possible
- Manual spring return unit (dead man lever)
- Relief well to avoid gas accumulation possible (e.g. for H₂O₂)
- Version with linear flow characteristic available due to special ball (opening angle scaled in 0 % - 100 % on index plate)

Applications

- Chemical process industry
- Water treatment
- Microelectronics
- Measurement and control
- Shipbuilding
- Food & beverage

Flow media

Neutral and aggressive media with a small amount of particles/solids. The chemical resistance is independent of the selected valve material ([see online tool ChemRes PLUS](#)).

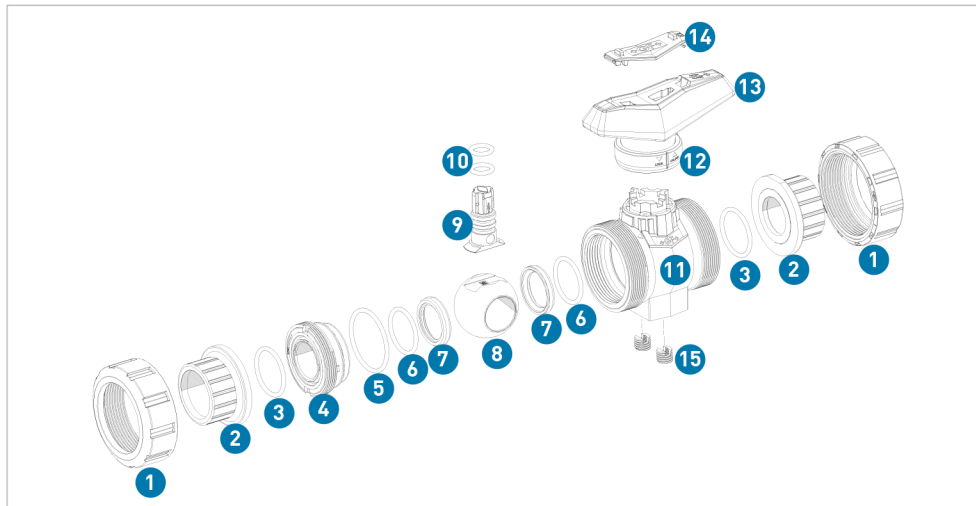
Transport of compressed air

Ball valves type 546 Pro are suitable for compressed air regulation up to 10 bar (at 20 °C). The compressed air must be dry and free of oil. For this application PP-H is recommended as valve body material and FKM* for the gaskets.

Suitable piping systems are ecoFIT (PE) or INSTAFLEX (PB). The ball valve type 546 Pro is available with suitable connection parts.

*FKM is suitable for compressed air containing mineral oil. Some ester oils can attack the material FKM, in such cases the use of EPDM gaskets is recommended.

Technical data



- 1 Union nut
- 2 Connecting part
- 3 Union seal
- 4 Union bush
- 5 Body seal
- 6 Backing seal
- 7 Ball seat
- 8 Ball
- 9 Stem
- 10 Stem seals
- 11 Body
- 12 Locking ring (DN10-50)
- 13 Lever (lockable for DN10-50)
- 14 Lever clip (DN10-50)
- 15 Threaded insert

Specification

Dimensions	d16/DN10 – d110/DN100 (d160/DN150), 3/8" – 4" (6")	
Materials	Valve body	PVC-U, PVC-C, ABS, PP-H, PVDF
	Lever	PP-GF30
Gasket materials	O-rings	EPDM, FKM, FFKM
	Ball seat	PTFE, PVDF
Pressure levels	ABS / PP-H	PN10
	PVC-U / PVC-C / PVDF	PN16
Connections	Fusion / solvent cement sockets	ISO, ASTM, JIS, BS
	Fusion / solvent cement spigot	ISO
	Threaded socket	Rp, NPT, Rc
	Backing flange	ISO, ANSI, BS, JIS
	Butt fusion spigots	SDR11 and SDR17.6
	PE100 electrofusion spigot or butt fusion spigot	SDR11 and SDR17.6
Actuation variants	Manually operated (lockable hand lever)	
	Pneumatic FC, FO, DA with and without manual override	
	Electrical AC: 100 – 230 V, AC/DC: 24 V, with / without manual override	
Flange standards	EN 1092 PN 10, ASME B16.5 Class 150, BS 1560-3.2 Class 150, JIS B2220 10K	
Third-party actuators	EN ISO 5211	
Marking	DataMatrix-Code with production data	
Product standard	EN ISO 16135	
Test standard	ISO 9393-2, EN 12266-1 (leakage rate A)	
Approvals	ACS, D.M. 174, DNV, FDA, QAP/ITP, NSF/ANSI, SIL, WRAS, ABS, BV, DiBT, RINA, LR	