

# Pneumatically actuated ball valves



**TIP** Connection diagram acc. to NAMUR with female thread!

EN 331



for Namur connection and female thread



**Warning:** With high media temperatures the actuator must be protected by a thermal bridge!



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Repair sets & ball valves with assembly flange from page 308.



for Namur connection and female thread



**Warning:** With high media temperatures the actuator must be protected by a thermal bridge!



NAMUR valves and NAMUR throttles on page 416

## Ball valves with pneumatic rotary actuators

up to 40 bar

### Ball valve

**Materials:** Housing: Brass nickel-plated, ball: Brass hard chrome-plated, seal: PTFE/FKM

Length according to DIN 3202-M3 (G 1/2" - G 2"), DVGW approval for G 1/2" - G 2" (PN 5/MOP 5)

**Temperature range:** -20°C to max. +160°C (G 2 1/2" - G 4": max. +120°C), gas: -20°C to max. +60°C

**Operating range:** Water, oil, compressed air, vacuum (max. -0.9 bar), fuels, heating oil, solvents, weak acids and alkalis, G 1/2" - G 2": Gases in accordance with DVGW worksheet (such as natural gas, city gas, liquid gas up to 5 bar)

### Rotary actuator

**Design:** ATEX-compliant II 2GD c 85°C (Actuators with size 12 or greater: II 2GD c 110°C)

**Materials:** Housing: Aluminium anodised, gear rack and piston: Aluminium, cover: Acetal resin, seal: NBR

**Temperature range:** -20°C to max. +80°C

**Control pressure:** 6 - 10 bar (lower pressures upon request)

**Optional:** FKM seal -V

Type	Type	Type	Thread ball valve	Install. length DN ball valve	Install. length PN ball valve	Actuator size* Double act. Single act.
double acting	spring closing	spring opening				
KH 14 P	KH 14 P FS	KH 14 P FO	Rp 1/4"	10	67	40 bar 1 2-F03
KH 38 P	KH 38 P FS	KH 38 P FO	Rp 3/8"	14	67	40 bar 1 2-F03
KH 12 P	KH 12 P FS	KH 12 P FO	G 1/2"	15	75	40 bar 1 2-F03
KH 34 P	KH 34 P FS	KH 34 P FO	G 3/4"	20	80	40 bar 1 2-F03
KH 10 P	KH 10 P FS	KH 10 P FO	G 1"	25	90	40 bar 1 2-F03
KH 114 P	KH 114 P FS	KH 114 P FO	G 1 1/4"	32	110	40 bar 6-VK11 6-VK11
KH 112 P	KH 112 P FS	KH 112 P FO	G 1 1/2"	40	120	40 bar 6-VK11 6-VK11
KH 20 P	KH 20 P FS	KH 20 P FO	G 2"	50	140	40 bar 6 6
KH 212 P	KH 212 P FS	KH 212 P FO	G 2 1/2"	65	165	30 bar 6 12-F07-VK14
KH 30 P	KH 30 P FS	KH 30 P FO	G 3"	76	188	25 bar 12-F07-VK14 12-F07-VK14
KH 40 P	KH 40 P FS	KH 40 P FO	Rp 4"	90	200	20 bar 25-F07-VK14 25-F07-VK14

\* for dimensions and replacement actuators see page 310

## Stainless steel ball valves, 3-piece, with pneumatic rotary actuators

PN 63

### Ball valve

**Materials:** Housing: AISI 316, ball: AISI 316, seal: PTFE (15% GF)/FKM

Length according to DIN 3202-M3

**Temperature range:** -20°C to max. +180°C

**Operating range:** Water, oil, compressed air, vacuum (max. -0.9 bar), fuels, solvents, aggressive media

**Optional:** Welding ends -AS, certificate 3.1

### Rotary actuator

**Design:** ATEX-compliant II 2GD c 85°C (Actuators with size 12 or greater: II 2GD c 110°C)

**Materials:** Housing: Aluminium anodised, gear rack and piston: Aluminium, cover: Acetal resin, seals: NBR

**Temperature range:** -20°C to max. +80°C

**Control pressure:** 6 - 10 bar (lower pressures upon request)

**Optional:** FKM seals -V

Type	Type	Type	Thread ball valve	Install. length DN ball valve	Install. length PN ball valve	Actuator size* Double act. Single act.
double acting	spring closing	spring opening				
KH 14 P ES	KH 14 P FS ES	KH 14 P FO ES	G 1/4"	10	60	1 2-F03
KH 38 P ES	KH 38 P FS ES	KH 38 P FO ES	G 3/8"	12	60	1 2-F03
KH 12 P ES	KH 12 P FS ES	KH 12 P FO ES	G 1/2"	15	75	1 2-F03
KH 34 P ES	KH 34 P FS ES	KH 34 P FO ES	G 3/4"	20	80	1 2-F03
KH 10 P ES	KH 10 P FS ES	KH 10 P FO ES	G 1"	25	90	2 6-F04
KH 114 P ES	KH 114 P FS ES	KH 114 P FO ES	G 1 1/4"	32	110	6-VK11 6-VK11
KH 112 P ES	KH 112 P FS ES	KH 112 P FO ES	G 1 1/2"	40	120	6 12
KH 20 P ES	KH 20 P FS ES	KH 20 P FO ES	G 2"	50	140	12 12
KH 212 P ES	KH 212 P FS ES	KH 212 P FO ES	G 2 1/2"	65	185	12-F07 12-F07
KH 30 P ES	KH 30 P FS ES	KH 30 P FO ES	G 3"	80	205	12-F07 25-F07
KH 40 P ES	KH 40 P FS ES	KH 40 P FO ES	G 4"	100	240	50-F10 50-F10

\* for dimensions and replacement actuators see page 310

**Order example:** KH 38 P ES \*\*

**Designation for the actuator options:**

FKM seal .....-V

**Designation for the ball valve options:**

Welding ends .....-AS

## High pressure ball valves with pneumatic rotary actuators

up to 500 bar

### Ball valve

**Materials:** Housing: Zinc-plated steel, ball: Steel hard chrome-plated, ball seal: POM, selector shaft seal: NBR

**Temperature range:** -20°C to max. +100°C (G 1 1/4" - G 2": -10°C to max. +80°C)

**Operating range:** Hydraulic oil, heating oil (water only after release by us)

**Optional:** Ball valve made of stainless steel AISI 316Ti -ES

**Rotary actuator:** See above

Type	Type	Type	G	DN	Install. length ball valve	PN	Actuator size* Double act. Single act.
double acting	spring closing	spring opening					
KH 14 HD P	KH 14 HD P FS	KH 14 HD P FO	G 1/4"	6	69	500 bar	2-F03 2-F03
KH 38 HD P	KH 38 HD P FS	KH 38 HD P FO	G 3/8"	10	72	500 bar	2-F03 2-F03
KH 12 HD P	KH 12 HD P FS	KH 12 HD P FO	G 1/2"	13	83	500 bar	2-F03 2-F03
KH 34 HD P	KH 34 HD P FS	KH 34 HD P FO	G 3/4"	20	95	420 bar	6 6
KH 10 HD P	KH 10 HD P FS	KH 10 HD P FO	G 1"	25	113	315 bar	12 12
KH 114 HD P	KH 114 HD P FS	KH 114 HD P FO	G 1 1/4"	32	110	420 bar	12 12
KH 112 HD P	KH 112 HD P FS	KH 112 HD P FO	G 1 1/2"	40	130	420 bar	12 25
KH 20 HD P	KH 20 HD P FS	KH 20 HD P FO	G 2"	50	140	420 bar	25 25

\* for dimensions and replacement actuators see page 310

**Order example:** KH 14 HD P \*\*

**Designation for the actuator options:**

Ball valve made of stainless steel .....-ES

All data are considered to be unbinding reference values. We accept no liability for data selection that is not confirmed in writing. Pressure data refer, if not otherwise indicated, to liquids of Group II at +20°C.