

Pneumatically actuated ball valves

TIP Connection diagram acc. to NAMUR with female thread!



for Namur connection and female thread
For more flange sizes see page 262.

Order example: KHFL 253/** P ES **

Standard type	
Nominal pressure	
PN 16	-16
PN 40	-40

Designation for the actuator options:
FKM seal -V

Stainless steel flanged ball valves, 3-piece, with pneumatic rotary actuators PN 16/40

Ball valve

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

Length according to DIN 3202-F1

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

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

Optional: 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

Warning: In case of high media temperatures, the actuator must be cooled!

Type	Type	Type	DN	Install. length ball valve	Actuator size* Double act.	Single act.
KHFL 153/** P ES	KHFL 153/** P FS ES	KHFL 153/** P FO ES	15	130	1	2-F03
KHFL 203/** P ES	KHFL 203/** P FS ES	KHFL 203/** P FO ES	20	150	1	2-F03
KHFL 253/** P ES	KHFL 253/** P FS ES	KHFL 253/** P FO ES	25	160	2	6-F04
KHFL 323/** P ES	KHFL 323/** P FS ES	KHFL 323/** P FO ES	32	180	6-VK11	6-VK11
KHFL 403/** P ES	KHFL 403/** P FS ES	KHFL 403/** P FO ES	40	200	6	6
KHFL 503/** P ES	KHFL 503/** P FS ES	KHFL 503/** P FO ES	50	230	12	12
KHFL 653/** P ES	KHFL 653/** P FS ES	KHFL 653/** P FO ES	65	290	12-F07	12-F07
KHFL 803/** P ES	KHFL 803/** P FS ES	KHFL 803/** P FO ES	80	310	12-F07	25-F07
KHFL 1003/** P ES	KHFL 1003/** P FS ES	KHFL 1003/** P FO ES	100	350	50-F10	50-F10

* for dimensions and replacement actuators see page 310

EN 331



Brass ball valves with full throughway and direct assembly flanges up to 40 bar

Materials: Housing: Brass nickel-plated, ball: Brass hard chrome-plated, seal: PTFE/FKM, manufactured silicone-free (G 1/2" - G 2"), 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)

Advantages: • An actuator can be fitted to the assembly flange to automate the operation of the ball valve.

Warning: Please check which temperatures the actuator you are installing is authorised to work in.

Type	G	DN	L	ISO 5211*	PN
KH 14 F MS	Rp 1/4"	10	67	F 03	40 bar
KH 38 F MS	Rp 3/8"	14	67	F 03	40 bar
KH 12 F MS	G 1/2"	15	75	F 03	40 bar
KH 34 F MS	G 3/4"	20	80	F 03	40 bar
KH 10 F MS	G 1"	25	90	F 03	40 bar
KH 114 F MS	G 1 1/4"	32	110	F 05-VK11	40 bar
KH 112 F MS	G 1 1/2"	40	120	F 05-VK11	40 bar
KH 20 F MS	G 2"	50	140	F 05	40 bar
KH 212 F MS	G 2 1/2"	65	165	F 05 / F 07-VK14	30 bar
KH 30 F MS	G 3"	76	188	F 07-VK14	25 bar
KH 40 F MS	Rp 4"	90	200	F 07-VK14	20 bar

* for assembly flange dimensions see page 309

Stainless steel ball valves, 3-piece, full throughway and direct assembly flanges PN 63

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

Length according to DIN 3202-M3, assembly flange according to ISO 5211

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

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

Advantages: • An actuator can be fitted to the assembly flange to automate the operation of the ball valve.

Warning: Please check which temperatures the actuator you are installing is authorised to work in.

Type	G	DN	L	ISO 5211*
KH 143 F ES	G 1/4"	10	60	F 03 / F 04-VK9
KH 383 F ES	G 3/8"	12	60	F 03 / F 04-VK9
KH 123 F ES	G 1/2"	15	75	F 03 / F 04-VK9
KH 343 F ES	G 3/4"	20	80	F 03 / F 04-VK9 / F 05-VK9
KH 103 F ES	G 1"	25	90	F 04 / F 05-VK11
KH 1143 F ES	G 1 1/4"	32	110	F 04 / F 05-VK11 / F 07-VK11
KH 1123 F ES	G 1 1/2"	40	120	F 05 / F 07-VK14
KH 203 F ES	G 2"	50	140	F 05 / F 07-VK14
KH 2123 F ES	G 2 1/2"	65	185	F 07 / F 10-VK17
KH 303 F ES	G 3"	80	205	F 07 / F 10-VK17
KH 403 F ES	G 4"	100	240	F 10

* for assembly flange dimensions see page 309

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.