Errors and changes excepted. Revision: 07/2020-006



Description:

- 2-way ball valve
- 2-pieces body construction
- · heavy-weight design
- full passageway
- female thread acc. to EN 10226
- blow out safe, spindle mounted from inside
- top flange acc. to EN ISO 5211
- · any installation position
- maintenance-free by self-adjusting triple sealing for the spindle

Range of application:

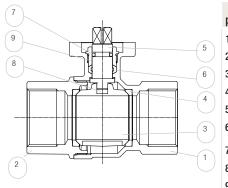
- heavy-weight design for applications in rugged environment
- with mounting flange acc. to DIN ISO 5211 for direct mounting
- working pressure PN25 up to PN40 (see pressure temperature diagram)
- temperature range: -20°C up to +150°C (see pressure temperature diagram)
- hot and cold water, compressed air, oils, not corrosive liquids, hydrocarbon

Comments:

The ball valves can be directly automated.

Better protection against unintended disengagement of the spindle and the sealing by a blow out protection. No accidental damage possible from outside. The ball valve is designed with a triple sealing for the spindle: in the upper part with a seal made of PTFE and an o-ring made of HNBR, at the bottom with an anti-friction ring made of PTFE.

Threads according to EN 10226: It describes the threaded connection of a conical male thread (R) with a parallel female thread (Rp).



pos.	part	standard material		optional material
1	body	CW617N nickel plated	Ε	-
2	connector	CW617N nickel plated		-
3	ball	CW614N chrominum-plated	F	-
4	seat sealing	PTFE	T	-
5	spindle	CW614N		-
6	sealing for spindle	PTFE	Т	-
7	o-ring	HNBR		-
8	sealing	PTFE		-
9	gland	CW614N		-

For details about the order code see "Order information". An overview of the complete material code you can find at the beginning of each product section of the product catalogue.

options:

- SV: spindle extension
- EB: relief well
- SF: free of silicone
- · OF: free of oil and grease

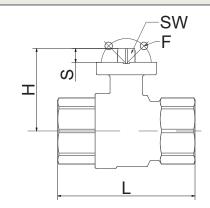
For electric actuated valves only:

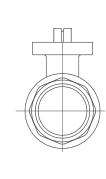
- AP: accumulator security pack
- PT: potentiometer
- PO: positioning system

For pneumatic actuated valves only:

- SD: sound absorber
- AD: exhaust air regulator
- PV: pilot valve
 For details see data sheet "GMV3197", "GMV3163"
 (3/2 way) and "MVA01" (5/2 way). Other types on request.
- PS: positioning indicator
 For details see data sheet "MCM2" (mechanical),
 "MCN2" (inductive, with ATEX 94/9/EC) and "MCS2" (inductive). Other types on request.



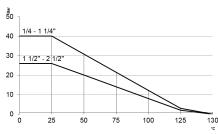




match code	size [inch]	nominal pres- sure	nominal size [mm]	L [mm]	H [mm]	thread depth [mm]	F	SW* [mm]	S [mm]	CV** [m³/h]	breakaway torque*** [Nm]	weight [kg]
NKA07-02ETFT	1/4	PN40	8	75	38	15	F03	9	9	5.9	2.8	0.41
NKA07-03ETFT	3/8	PN40	10	75	38	15	F03	9	9	9.4	2.8	0.39
NKA07-04ETFT	1/2	PN40	15	75	38	15	F03	9	9	17	4.2	0.34
NKA07-05ETFT	3/4	PN40	20	80	40.5	16.3	F03	9	9	41	5.6	0.46
NKA07-06ETFT	1	PN40	25	90	44	19.1	F03/04	9	9	70	8.4	0.71
NKA07-07ETFT	1 1/4	PN40	32	110	55	21.4	F04/05	11	11	121	9.8	1.22
NKA07-08ETFT	1 1/2	PN25	40	120	61.5	21.4	F04/05	11	11	200	13	1.65
NKA07-09ETFT	2	PN25	50	140	73	25.7	F05	14	14	292	25	2.89
NKA07-10ETFT	2 1/2	PN25	63	155	82.75	30.2	F07	14	15.5	535	38	3.29

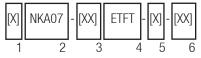
^{*} Spindle as square (standard).

^{***}Breakaway torque: all data is determined with water at max Δp and normal ambient temperature. Multiplicator for frictional media is 1.3. If your configuration has special sealing material or your application has critical media consultation is obligatory.



Pressure temperature diagram

The pressure temperature diagram refers to the ball valve of this type. For the actuated units the actuator limits the permissible pressure range to the operating pressure as indicated above, as long as this is lower than the pressure range of the ball valve. If your application has strong temperature variations, you may need additional options like a relief well, to meet the figures. Please tell us your temperature variations with your order.



Order information:

1: automation:

- · no specification: free spindle
- D: pneumatic double acting
- S: pneumatic single acting
- E: electric actuated

2: type: NKA07

3: connection size: 02-10 (see table)

4: materials:

- 1. digit: body material (brass nickel plated)
- 2. digit: sealing for spindle (PTFE)
- 3. digit: ball material (brass chrominum-plated)
- 4. digit: seat sealing (PTFE)

5: actuator:

- no specification: free spindle
- automated: see column "actuator"

6: options (see "options")

Please ask for field specifications that are not listed in this data sheet.

Before installation please consider the installation and maintenance manual, especially the safety indications!



^{**}CV value: The nominal flow rate CVs acc. to VDI/VDE 2173 shows the water quantity in cubic meter per hour with the valve fully opened, $\Delta p=1$ and the water temperature between 5°C and 30°C.

DNKA07 / SNKA07

High quality pneumatic actuator made of alloy with air connection according to NAMUR and positioning indicator. The actuator works with the rack/bevel method. For further details see the technical data sheet "DR/SC".

Types double acting (the actuator opens and closes with compressed air) and single acting (the actuator opens with compressed air and closes with spring pressure).

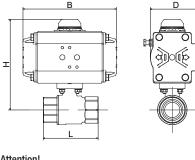
The actuators are configured for use with fluid, gas and antifriction medium. For critical media it is strictly recommended to inform us!

Description:

• working pressure: 0 - 16 bar

pilot pressure: 6 - 8 bar

medium temperature: -20°C up to +100°C (at max. ambient temperature 40°C)



Attention!

To avoid corrosion inside the spring chamber for single acting actuators caused by aggressive ambient air we recommend pilot valves with integrated air recircula-

	double ac		single acting: SNKA07							
match code	actuator	Н	В	D	weight	actuator	Н	В	D	weight
		[mm]	[mm]	[mm]	[kg]		[mm]	[mm]	[mm]	[kg]
xNKA07-02ETFT-	DR010	124	118	62	1.16	SC010-K	124	118	62	1.30
xNKA07-03ETFT-	DR010	124	118	62	1.14	SC010-K	124	118	62	1.20
xNKA07-04ETFT-	DR010	124	118	62	1.09	SC015-G	127	136	72	1.44
xNKA07-05ETFT-	DR010	126.5	118	62	1.21	SC015-H	169	136	72	1.56
xNKA07-06ETFT-	DR010	130	118	62	1.46	SC015-H	179	136	72	1.81
xNKA07-07ETFT-	DR015	144	136	72	2.22	SC030-G	215	153.5	84.5	2.92
xNKA07-08ETFT-	DR030	166.5	153.5	84.5	3.25	SC030-I	225	153.5	84.5	3.35
xNKA07-09ETFT-	DR030	154	153.5	84.5	4.49	SC060-I	262	203.5	93	6.00
xNKA07-10ETFT-	DR060	163.75	203.5	93	5.99	SC100-I	290	241	106	7.60

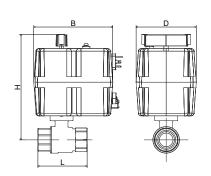
ENKA07

High-quality electric actuator in compact design with a body made of high-strength plastics. It has a high-performance motor and a gear drive made of metal. A central control room heater and an electronic torque limiter are equipped as standard. For further details see the technical data sheet "J".

Description:

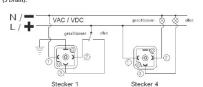
working pressure: 0 - 16 bar

medium temperature: -20°C up to +70°C (at max. ambient temperature of 40°C)



match code	actuator	H [mm]	B [mm]	D [mm]	weight [kg]
ENKA07-02ETFT-	J210-	164.5	169	104	1.162
ENKA07-03ETFT-	J210-	164.5	169	104	1.14
ENKA07-04ETFT-	J210-	164.5	169	104	1.092
ENKA07-05ETFT-	J210-	167	169	104	1.213
ENKA07-06ETFT-	J210-	170.5	169	104	1.455
ENKA07-07ETFT-	J210-	181.5	169	104	1.97
ENKA07-08ETFT-	J420-	210.5	177	110	3.05
ENKA07-09ETFT-	J435-	244	177	110	4.588
ENKA07-10ETFT-	J455-	278.75	177	110	5.585

AC/DC Beschaltung



connection voltage type:

- 19: 24V AC/DC up to 240V AC/ DC
- other voltages on request