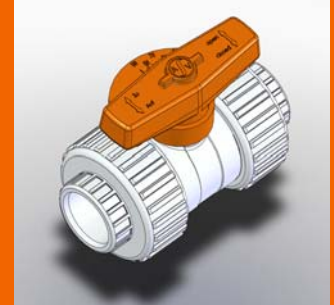
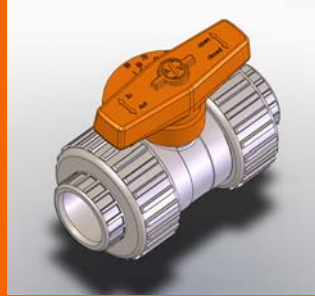


Ball Valve C 100-Prop

proportional flow characteristic, demountable,
high stability, high k_V -value



Advantages

- removable ball seat and ball
- high stability for the complete valve
- optimized inner ball diameter for high k_V -value

Application

- chemical plants
- industrial plants

Utilisation

- for precise dosing of fluids

Dosing Range

- scale graduation 5°
- 0° up to 90°

Flow media

- neutral and aggressive fluids or gaseous media free of solids provided that the components coming into contact with the medium are resistant at operating temperature according to the ASV resistance guide.

Examinations

- requirements and examinations acc. to DIN 3441, 3442, 8063 and 16962.

Nominal pressure (H₂O, 20°C)

- PVC-U PN 16
- PP PN 10
- PVDF PN 16

Media temperature

- see pressure/temperature diagram

Operating pressure

- see pressure/temperature diagram

Size

- DN 10 - DN 50

Body/Ball

- PVC-U, PP, PVDF

Ball seat

- PTFE

Sealings

- EPDM or FPM

Actuation

- with T-handle, also as position indicator
- with electric variable speed actuator

Connection

Union with

- socket ends for solvent welding DIN/ISO (PVC-U)
- socket ends for fusion welding DIN/ISO (PP, PE, PVDF)
- spigot ends for fusion welding DIN/ISO (PE, PP)
- flange DIN 2501, PN 10/16 (PVC-U, PP, PVDF), face-to-face dimension acc. ASV-standard
- face-to-face dimension acc. to DIN on request

Mounting

- as required

Fastening

- optionally available with bracket

Accessories

- limit switch unit
- bracket

Colour

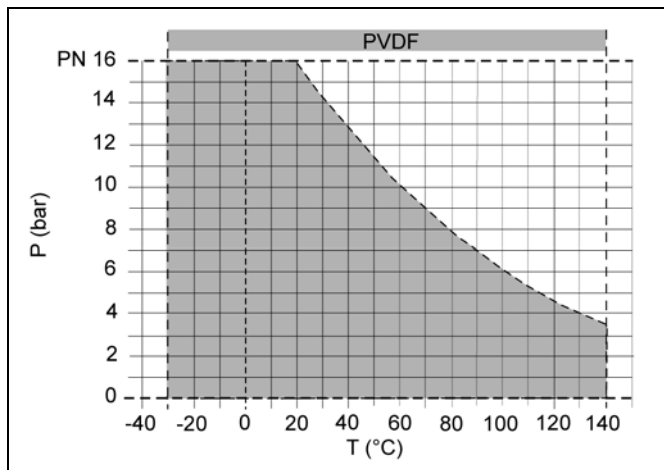
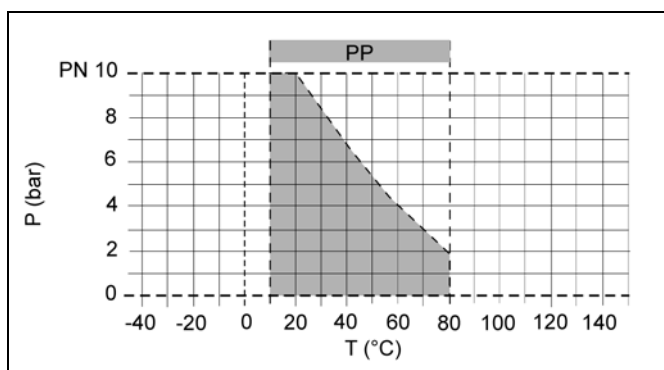
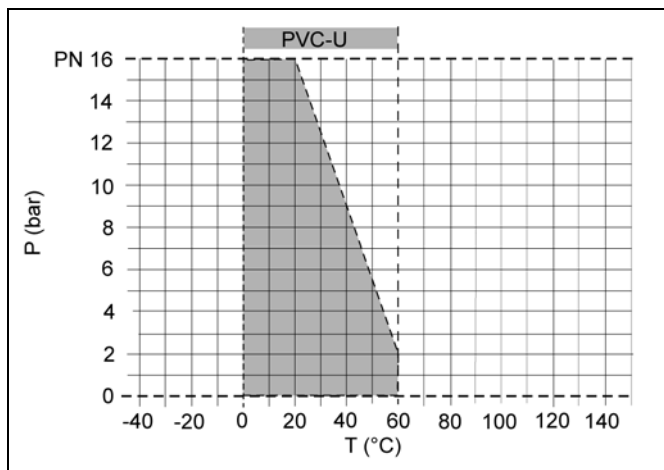
- body

PVC-U:	grey, RAL 7011
PP:	grey, RAL 7032
PVDF:	opaque, yellowish-white
- T-handle:

PVC-U:	orange, RAL 2004
--------	------------------
- scale

PVC-U:	orange, RAL 2004
--------	------------------

Pressure/temperature diagram



P = operating pressure

T = temperature

The pressure/temperature limits are applicable for the stated nominal pressures and a computed operating life factor of 25 years.

These are standard values for harmless media (DIN 2403), to which the valve material is resistant.

For other media please refer to the ASV resistance guide. The durability of wear parts depends on the operating conditions of the application.

For temperatures below 0°C (PP < +10°C) please specify the precise operating conditions of the application.

The rated pressure depends on the valve size and material. For the corresponding rated pressure value of the valve, please refer to the »Order table«

Torque Nm (standard value)

d (mm)	16	20	25	32	40	50	63
Md	2,5	2,5	3,6	4,5	6,2	8,5	11,0

The specified torques apply to manually operated valves and are reference values.

They were determined at the specified nominal pressures with H₂O, 20°C. These values can be higher or lower, depending on the operating pressure.

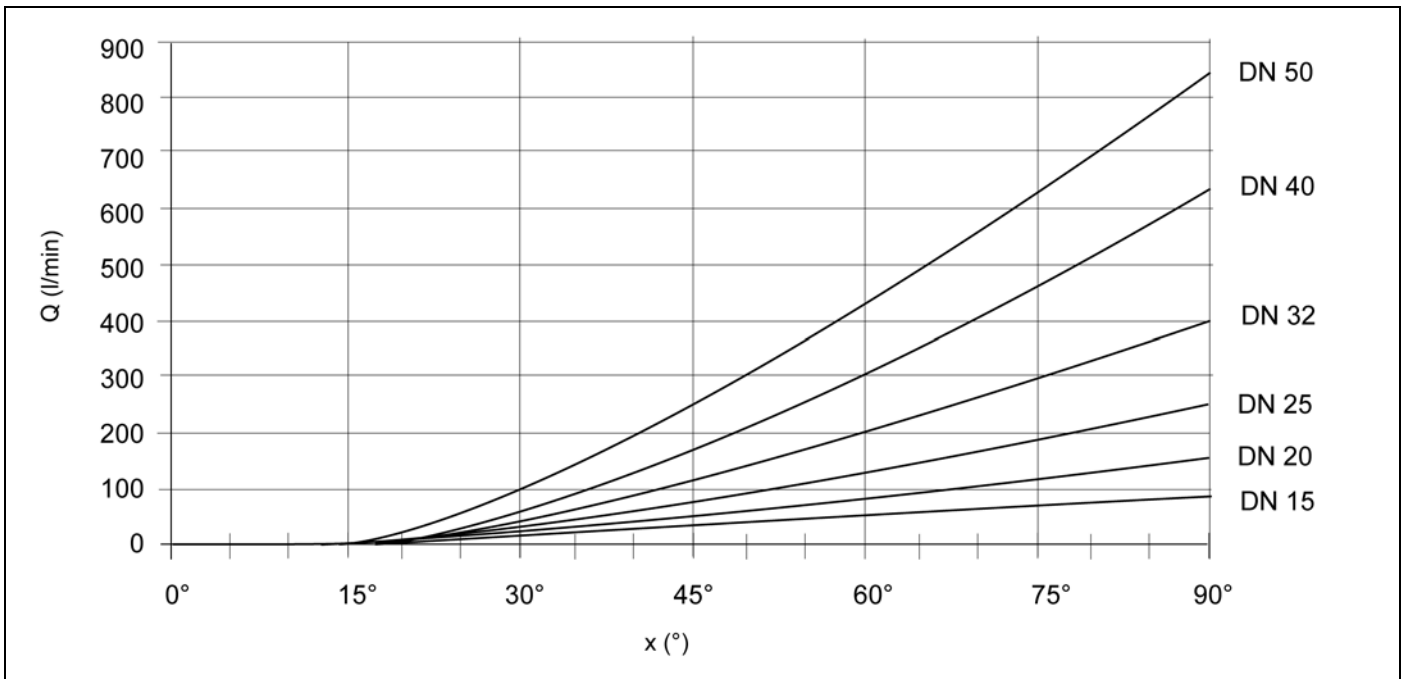
Operating note

Safe operation of the valve can only be ensured if it is properly installed, operated, serviced or repaired by qualified personnel according to its intended use while observing the accident prevention regulations, safety regulations, relevant standards, directives/technical regulations or codes of practice such as e.g. DIN, DIN EN, DIN ISO and DVS*.

*DVS = German Welding Society

The intended use includes adhering to specified limit values for pressure and temperature, as well as checking the resistance. This requires all components coming into contact with the medium to be "resistant" in accordance with the ASV resistance guide.

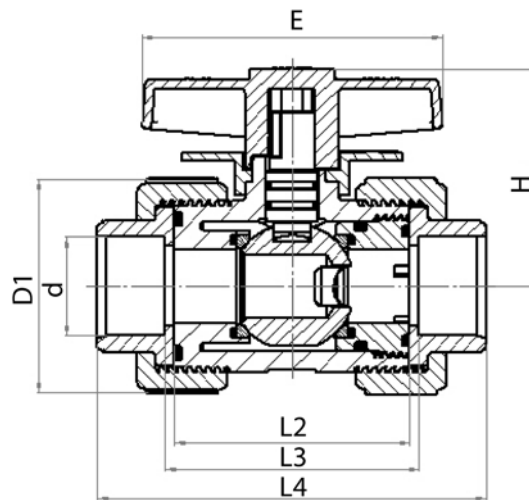
Flow Q at DP 1 bar



Q = flow

x = scale graduation

Ball Valve C 100-Prop »manual«



Dimensions

d (mm)		20	25	32	40	50	63
DN (mm)		15	20	25	32	40	50
DN (inch)		1/2	3/4	1	1 1/4	1 1/2	2
PVC/PVDF	PN (bar)	16	16	16	16	16	16
PP	PN (bar)	10	10	10	10	10	10
	E	68,0	78,0	88,0	98,0	108,0	118,0
	H	51,0	61,0	70,0	81,0	90,0	110,0
	L1	169,0	182,0	186,0	196,0	203,0	223,0
	L2	59,0	72,0	76,0	86,0	93,0	113,0
PVC-U	L3	65,0	78,0	82,0	92,0	99,0	119,0
PP	L3	68,0	84,0	90,0	103,0	114,0	140,0
PVDF	L3	67,0	83,0	89,0	102,0	112,0	138,0
PVC-U	L4	97,0	116,0	126,0	144,0	161,0	197,0
PP	L4	97,0	116,0	126,0	144,0	160,0	195,0
PVDF	L4	96,0	115,0	125,0	143,0	159,0	194,0

Weights (kg)

d (mm)		20	25	32	40	50	63
Body	Connection						
PVC-U,	socket	0,16	0,27	0,38	0,68	0,98	1,68
PP	socket	0,13	0,20	0,29	0,47	0,74	1,17
PVDF	socket	0,21	0,35	0,50	0,89	1,27	2,19



Ball Valve C 100-Prop »manual«

Ident-No.

Body: PVC-U

d (mm)		20	25	32	40	50	63
connection	sealing						
PVC-U socket	PTFE-EPDM	141530	141531	141532	141533	141534	141535
PVC-U socket	PTFE-FPM	141536	141537	141538	141539	141540	141541

Body: PP

d (mm)		20	25	32	40	50	63
connection	sealing						
PP socket	PTFE-EPDM	141542	141543	141544	141545	141546	141547
PP socket	PTFE-FPM	141548	141549	141550	141551	141552	141553

Body: PVDF

d (mm)		20	25	32	40	50	63
connection	sealing						
PVDF-socket	PTFE-FPM	141554	141555	141556	141557	141558	141559

Ball Valve C 100 »electric«

Voltage

- 90 - 240 V AC 50/60 Hz
- 24 V AC/DC 50/60 Hz

Running time

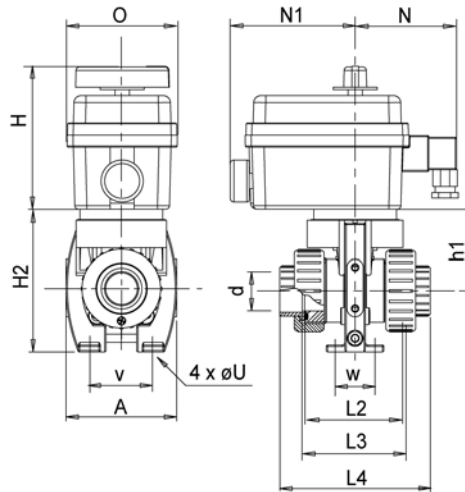
- EK20 7 sec.

Mounting set/coupling/bracket

- PA, glass fibre reinforced

Screws

- V2A (stainless steel)



dimensions	d (mm)	20	25	32	40	50	63
DN (mm)		15	20	25	32	40	50
DN (inch)		1/2	3/4	1	1 1/4	1 1/2	2
PVC/PVDF	PN (bar)	16	16	16	16	16	16
PP	PN (bar)	10	10	10	10	10	10
actuator type		ER Plus	ER Plus	ER Plus	ER Plus	ER Plus	ER Plus
running time	s	13	13	13	13	13	13
A		78,0	82,0	104,0	102,0	130,0	134,0
H		152,0	152,0	152,0	152,0	152,0	152,0
h1		50,0	60,0	66,0	74,0	95,5	104,0
H2		97,0	105,0	128,0	128,0	189,0	193,0
L2		59,0	72,0	76,0	86,0	93,0	113,0
PVC	L3	65,0	78,0	82,0	92,0	99,0	119,0
PP	L3	68,0	84,0	90,0	103,0	114,0	140,0
PVDF	L3	67,0	83,0	89,0	102,0	112,0	138,0
PVC	L4	97,0	116,0	126,0	144,0	161,0	197,0
PP	L4	97,0	116,0	126,0	144,0	160,0	195,0
PVDF	L4	96,0	115,0	125,0	143,0	159,0	194,0
N		87,0	87,0	87,0	87,0	87,0	87,0
N1		106,0	106,0	106,0	106,0	106,0	106,0
O		128,0	128,0	128,0	128,0	128,0	128,0
U		5,5	5,5	5,5	5,5	5,5	5,5
v ±5 mm		44,0	47,0	58,0	51,0	90,0	88,0
w		30,0	30,0	30,0	30,0	30,0	30,0
z		4	4	4	4	4	4

weights (kg)	d (mm)	20	25	32	40	50	63
Body	Connenction						
PVC-U	Socket	1,86	1,97	2,08	2,38	2,68	3,38
PP	Socket	1,83	1,90	1,99	2,17	2,44	2,87
PVDF	Socket	1,91	2,05	2,20	2,59	2,97	3,89



ASV Stübbe GmbH & Co. KG • Hollwieser Straße 5 • D-32602 Vlotho • Fon +49 (0) 57 33 - 7 99-0 • Fax +49 (0) 57 33 - 7 99-2 00 • www.asv-stuebbe.de • contact@asv-stuebbe.de

Ident-No.

Body: PVC-U

d (mm)			20	25	32	40	50	63
connection	sealing	voltage						
PVC-U socket	PTFE-EPDM	90 - 240 VAC	1415309135	1415319135	1415329135	1415339135	1415349135	1415359135
PVC-U socket	PTFE-FPM	90 - 240 VAC	1415369135	1415379135	1415389135	1415399135	1415409135	1415419135

Body: PP

d (mm)			20	25	32	40	50	63
connection	sealing	voltage						
PP socket	PTFE-EPDM	90 - 240 VAC	1415429135	1415439135	1415449135	1415459135	1415469135	1415479135
PP socket	PTFE-FPM	90 - 240V AC	1415489135	1415499135	1415509135	1415519135	1415529135	1415539135

Body: PVDF

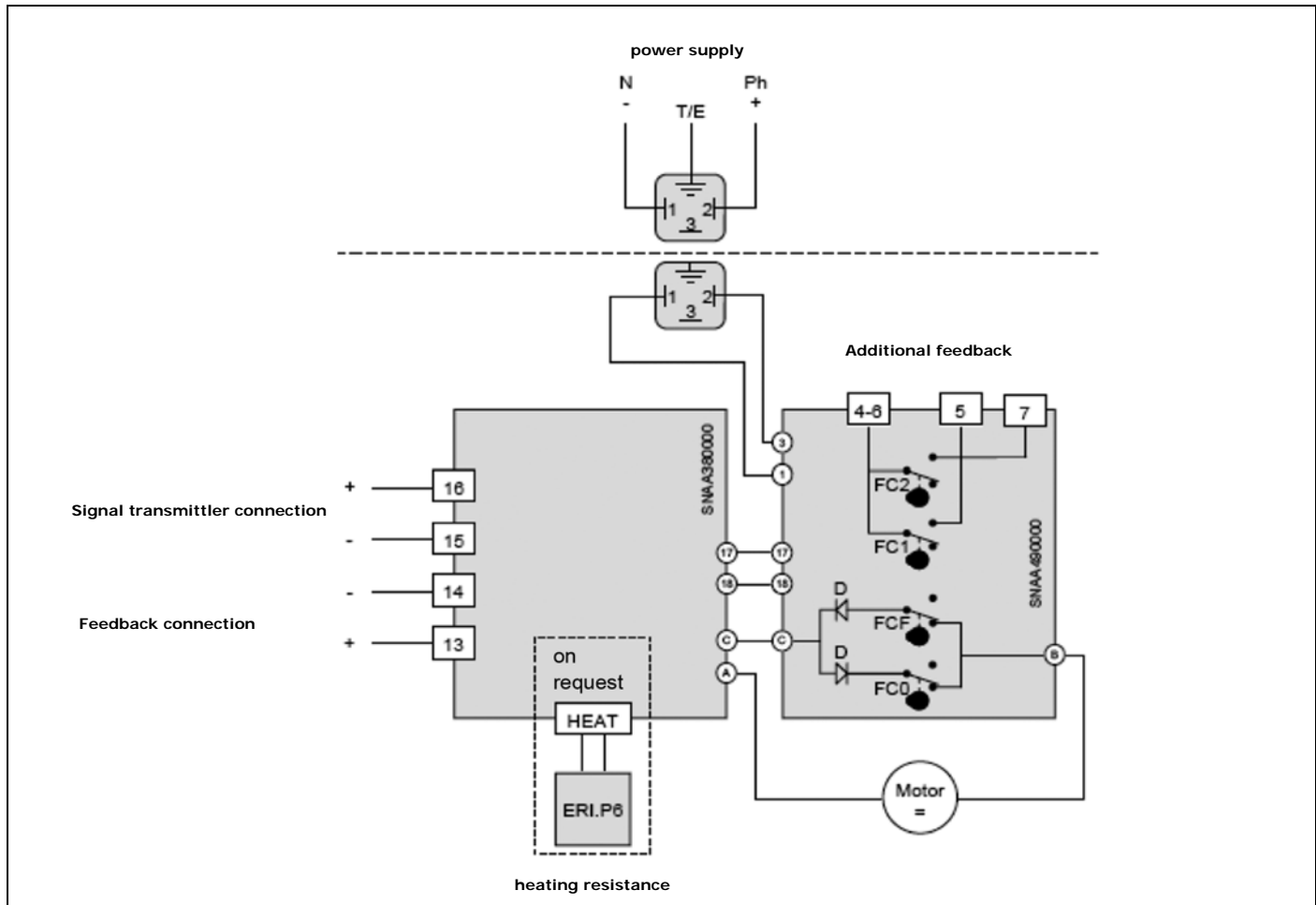
d (mm)			20	25	32	40	50	63
connection	sealing	voltage						
PVDF-socket	PTFE-FPM	90 - 240 VAC	1415549135	1415559135	1415569135	1415579135	1415589135	1415599135

Technical data

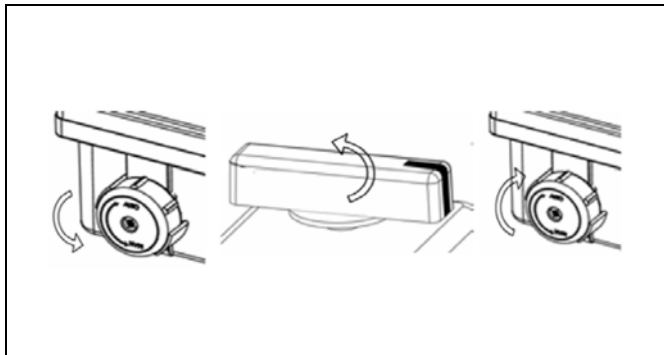
actuator type	ER Plus Posi	ER Plus Posi*
Torque (Nm)	20	20
Voltage	90 - 240 V AC	15 ... 30 V AC / 12 ... 48 V DC
Manipulating time(s)	25	25
Power consumption(W)	15	15
Setting angle(°)	90	90
Weight(kg)	1	1
Duty cycle(%)	50	50
Type of protection	IP66	IP66
Temperature(°C)	-10 ... +55°C	-10 ... +55°C

(*) Drive variants: please order separately.

Recommended wiring



Manual emergency control

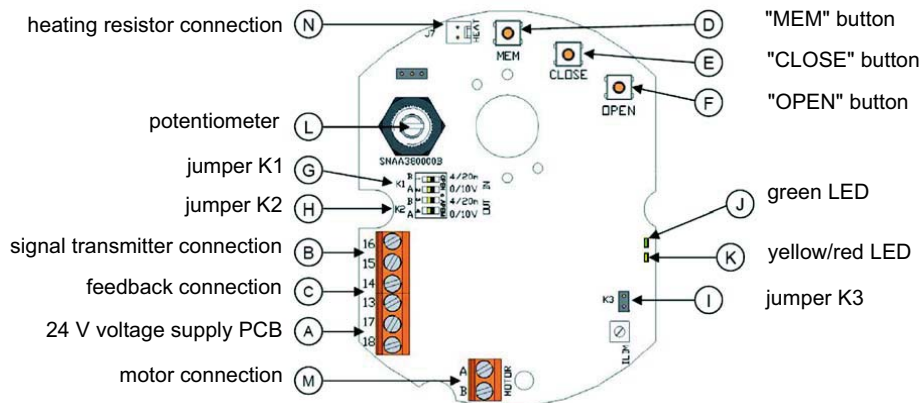


The valve can be manually operated in the event of an interruption of the power supply. To allow manual emergency control, turn the coupling switch from "AU-TO" to "MAN" and hold in the "MAN" position.

Turn the actuator shaft with the aid of an adjustable spanner.

Release the coupling switch to re-engage the gearing.

Programming



CAUTION!

Always disconnect the voltage supply plug from the actuator prior to performing any settings.



1. Rotational direction

1.1 Normal direction of rotation (preset).

- Press "OPEN", connect the voltage supply plug to the actuator while keeping the button pressed, the green LED lights up. Release the "OPEN" button, disconnect the plug from the actuator for 5 seconds and then reconnect.



1.2 Reverse direction of rotation

- Press "CLOSE", connect the voltage supply plug to the actuator while keeping the button pressed, the red LED lights up. Release the "CLOSE" button, disconnect the plug from the actuator for 5 seconds and then reconnect.



2. Input signal

2.1 Input signal 0...10 V

- Press "MEM", connect the voltage supply plug to the actuator while keeping the button pressed, the red LED flashes three times. Release the "MEM" button, disconnect the plug from the actuator for 5 seconds and then reconnect.



2.2 Input signal 0...20 mA

- Press "MEM" and "CLOSE", connect the voltage supply plug to the actuator while keeping the button pressed, the red LED flashes three times. Release the buttons, disconnect the plug from the actuator for 5 seconds and then reconnect.



2.3 Input signal 4...20 mA (preset)

- Press "MEM" and "CLOSE", connect the voltage supply plug to the actuator while keeping the button pressed, the red LED flashes three times. Release the buttons, disconnect the plug from the actuator for 5 seconds and then reconnect.



3. Learning mode (setting "OPEN/CLOSE" limits)

Press "OPEN" and "CLOSE", connect the voltage supply plug to the actuator while keeping the button pressed, both LEDs light up. Release the button, the two LEDs extinguish. The learning mode is selected.



Press the »CLOSE« button to close the valve. The red LED lights up. Save the closed position by pressing "MEM" and "CLOSE", the red LED flashes three times to confirm..



Press the »OPEN« button to open the valve. The green LED lights up. Save the open position by pressing "MEM" and "OPEN", the green LED flashes three times to confirm. Disconnect the plug from the actuator for 5 seconds, then reconnect

4. Output signal

Prior to performing any changes, disconnect the plug from the actuator.

Input (k1)

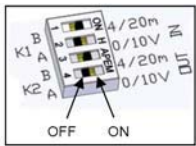
Voltage: A = ON, B = OFF

Current: A = OFF, B = ON

Output (k2)

Voltage: A = ON, B = OFF

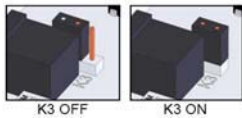
Current: A = OFF, B = ON



Current range for output (k3)

4...20 mA: ON

0...20 mA: OFF



Standard operation

Connect the voltage supply plug to the actuator. The green LED flashes three times to show that the starting process has been correctly performed.

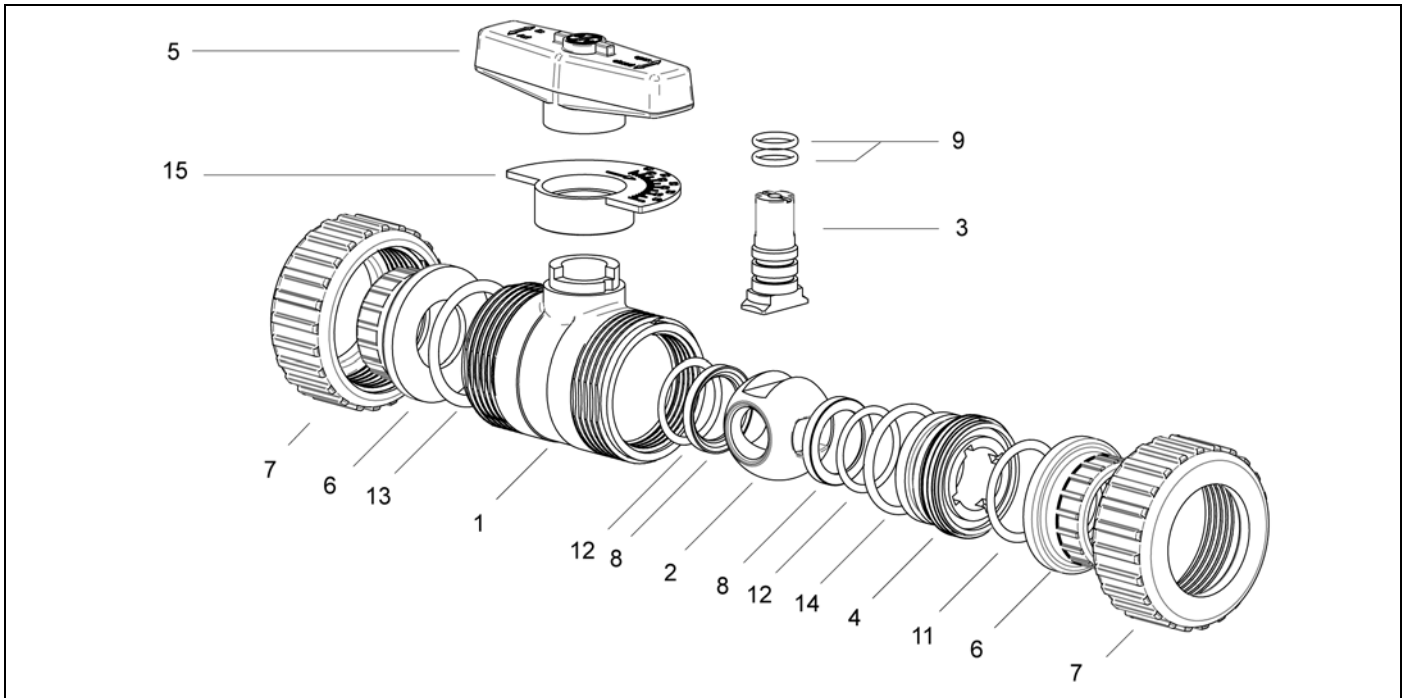
In standard operation the green LED lights up when the actuator opens the valve, and the red LED when the actuator closes the valve.

If neither of the two LEDs lights up, the actuator has not been selected.

Both LEDs light up and the actuator stops in the event of excessive torque. To restart the actuator it is necessary to change the direction of rotation.



Parts lists



item	quantity	designation
1	1	housing
2	1	ball
3	1	stem
4	1	union threaded neck
5	1	t-handle
6	2	union socket ends
7	2	union nut
8	2	ball seat
9	2	O-ring
11	1	O-ring
12	2	O-ring
13	1	O-ring
14	1	O-ring
15	1	scale plate



Stübbe®

ASV Stübbe GmbH & Co. KG • Holwieser Straße 5 • D-32602 Vlotho • Fon +49 (0) 57 33 - 7 99-0 • Fax +49 (0) 57 33 - 7 99-2 00 • www.asv-stuebbe.de • contact@asv-stuebbe.de

Subject to technical modifications