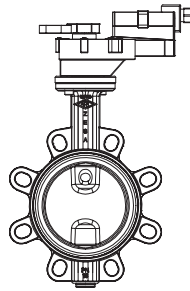


**DKD-Z-EA**

**with electric rotary actuator EA**

- Open/close or 3-point (EA1/EA2)  
230V 50/60Hz or 24V AC/DC
- Modulating 0(2)-10V (EA1Y/EA2Y)  
24V AC/DC
- Enclosure IP 54  
(IP 66/67 on request)

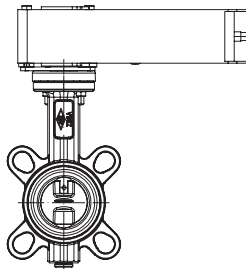


Page 4

**DKD-Z-EA**

**with electric rotary actuator EA-SR  
with safety reset**

- Open/close 230V 50/60Hz or 24V AC/DC
- Reset to start on failure  
(Spring closes on electrical power failure / NC)
- Enclosure IP 54



Page 5

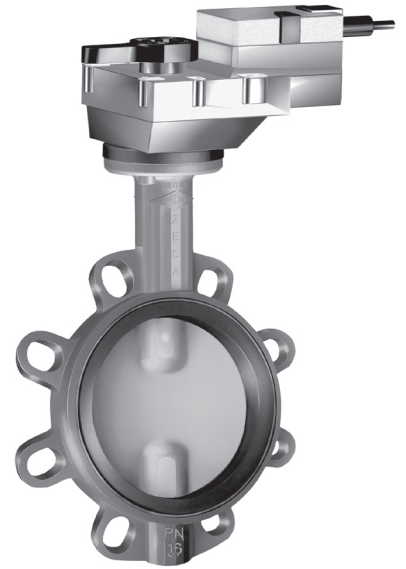


Fig. 012 - DKD-Z-EA

**Features:**

- Soft sealing
- Maintenance-free
- Good flow characteristic due to excellent Zeta-values
- Seat materials EPDM
- Double sealing of the stem
- Stainless steel disc (to DN 80)
- Complete insulation possible according to the german „Energy saving order - EnEV“
- Dew point barrier
- Central disc bearing
- Nodular iron body
- EPDM with DIN DVGW Reg. drinking water (DW-6201BR0244)
- Wafer type
- Lug type on request

Butterfly valve with elongated eyelets (SG iron)

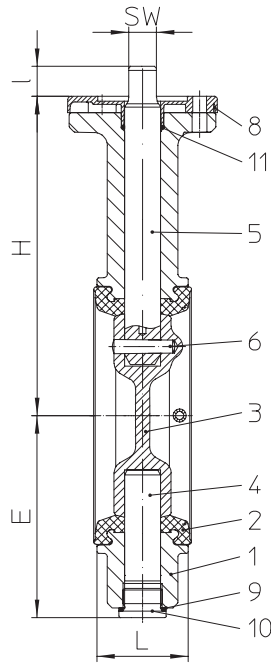
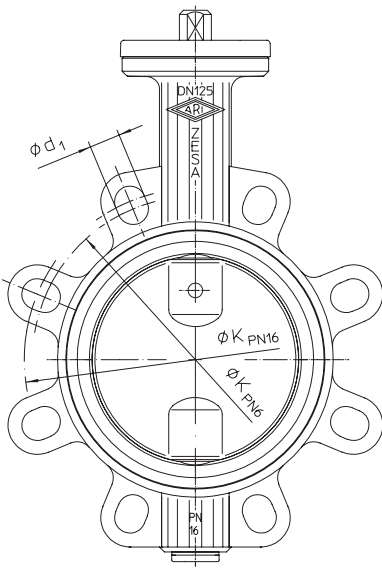


Figure	Nominal pressure	Material	Nominal diameter
20.012	PN6	EN-JS1030	DN25-200
21.012	PN10	EN-JS1030	DN25-200
22.012	PN16	EN-JS1030	DN25-200
<b>Disc:</b>	<ul style="list-style-type: none"> <li>• 1.4581 (DN25-80)</li> <li>• EN-JS1030 (DN100-200)</li> </ul>		
<b>Stem:</b>	• 1.4021-QT		
<b>Seat:</b>	• EPDM (- 10 °C to + 100 °C)		
<b>max. differential pressure:</b>	<ul style="list-style-type: none"> <li>• 6 bar (DN25-125)</li> <li>• 3 bar (DN150-200)</li> </ul>		
<b>Test:</b>			
Sealing leakage test	DIN EN 12266-1 Leakage rate A (DIN 3230 T3 Leakage rate 1)		
DVGW-Registration	EPDM DN25/32 – DN80 for water Reg.-No. DW-6201BR0244, acc. to DIN EN 1074-1/-2 incl. disinfection inspection, DVGW VP646 and DVGW W270 for drinking water		

**Selection of possible applications**

Water installations in the building technology  
(other applications on request)

**Selection of possible flow media**

Cold water, warm water, hot water, drinking water, process water, etc.  
(other flow media on request)

**Parts**

Pos.	Description	Fig. 20./21./22.012 (EA)	
		DN 25-80	DN100-200
1	Body	EN-GJS-400-15, EN-JS1030	
2	Seat	EPDM 73	
3	Disc	GX5CrNiMoN19-11-2, 1.4581	EN-JS1030, EN-GJS-400-15 (Zinc lamella coating)
4	Pivot	X20Cr13+QT, 1.4021+QT	
5	Stem	X20Cr13+QT, 1.4021+QT	
6	Taper pin	X6CrNiMoTi17 12 2, 1.4571	
8	Insulating cap *	PA 6	
9	Gasket *	CU	
10	Hexagon head screw plug *	5.8-A2G	
11	O-ring *	EPDM	

\* Spare part

Information / restriction of technical rules need to be observed!

Operating instructions can be ordered by phone +49 (0)5207 / 994-0 or fax +49 (0)5207 / 994-158 or -159.

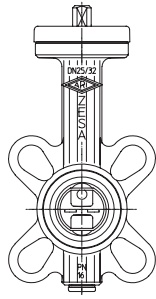
The engineer, designing a system or a plant, is responsible for the selection of the correct valve.

**Dimensions and weights**

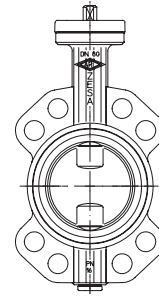
DN		25	32	40	50	65	80	100	125	150	200
L	(mm)	33	33	33	43	46	46	52	56	56	60
H	(mm)	128	128	134	140	150	158	179	196	212	246
E	(mm)	58	58	66	69	81	100	109	124	140	167
SW	(mm)	11	11	11	11	11	11	11	17	17	17
Kvs-value	(m <sup>3</sup> /h)	26	26,5	49,6	116	259	377	763	1030	1790	3460
Zeta-value	--	0,93	2,4	1,7	0,75	0,43	0,46	0,27	0,37	0,25	0,21
Weights	(kg)	1,4	1,4	1,6	2	2,6	3,2	4	4,6	8,6	12,6

Standard-flange dimensions refer to page 3

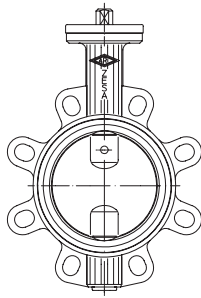
Face-to-face dimension FTF series 20 acc. to DIN EN 558



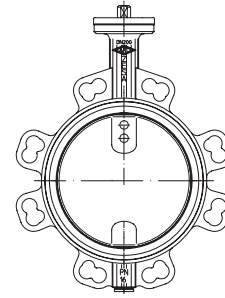
DN25-65



DN80-100



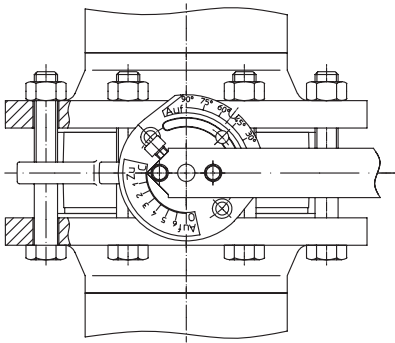
DN125-150



DN200

**Pressure-temperature-ratings**

Material	PN		-10°C to 100°C
EN-JS1030	16	bar	16



ZESA®-Wafer-type-valve

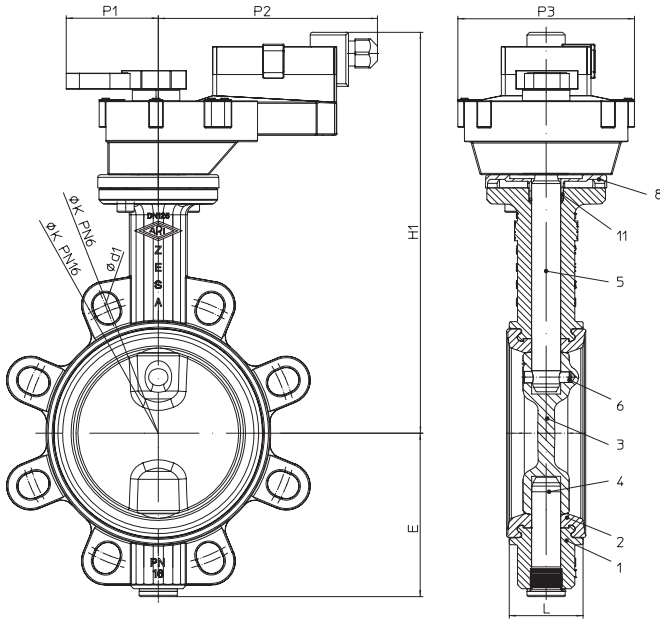
Welding neck flanges  
PN 6 / PN 10 / PN 16  
DIN EN 1092-1 / 11 / B1  
Hexagon screw  
DIN EN ISO 4016 W.-No. 4.6  
Hexagon nut  
DIN EN ISO 4034 W.-No. 5

**Standard-flange dimensions / Hexagon screw (Quantity, Thread, Length)**

		DN	25 <sup>1)</sup>	32 <sup>1)</sup>	40	50	65	80	100	125	150	200
PN6	ØK	(mm)	75	90	100	110	130	150	170	200	225	280
PN6	n x Ød1	(mm)	4x11	4x14	4x14	4x14	4x14	4x18	4x18	8x18	8x18	8x18
PN6	Quantity	(pcs.)	4	4	4	4	4	4	4	8	8	8
PN6	Thread		M10	M12	M12	M12	M12	M16	M16	M16	M16	M16
PN6	Length	(mm)	80	80	80	90	90	100	110	120	120	130
PN10	ØK	(mm)	85	100	110	125	145	160	180	210	240	295
PN10	n x Ød1	(mm)	4x14	4x18	4x18	4x18	4x18	4x18	4x18	8x18	8x22	8x22
PN10	Quantity	(pcs.)	4	4	4	4	4	8	8	8	8	8
PN10	Thread		M12	M16	M16	M16	M16	M16	M16	M16	M20	M20
PN10	Length	(mm)	90	90	90	90	110	110	120	130	130	140
PN16	ØK	(mm)	85	100	110	125	145	160	180	210	240	295
PN16	n x Ød1	(mm)	4x14	4x18	4x18	4x18	4x18	8x18	8x18	8x18	8x22	12x22
PN16	Quantity	(pcs.)	4	4	4	4	4	8	8	8	8	12
PN16	Thread		M12	M16	M16	M16	M16	M16	M16	M16	M20	M20
PN16	Length	(mm)	90	90	90	100	110	110	120	130	130	140

<sup>1)</sup> DN 25/32 suitable for flanges PN16 / DN 20

Butterfly valve with electric rotary actuator Type: EA



**EA**  
**Electric rotary actuator**

- Open/close or 3-point (EA1/EA2)  
230V 50/60Hz or 24V AC/DC
- Modulating 0(2)-10V (EA1Y/EA2Y)  
24V AC/DC
- Enclosure IP 54
- Manual operating device
- **Accessories:**  
- box with 2 limit switches for signalisation

Technical data for actuator refer to page 8.

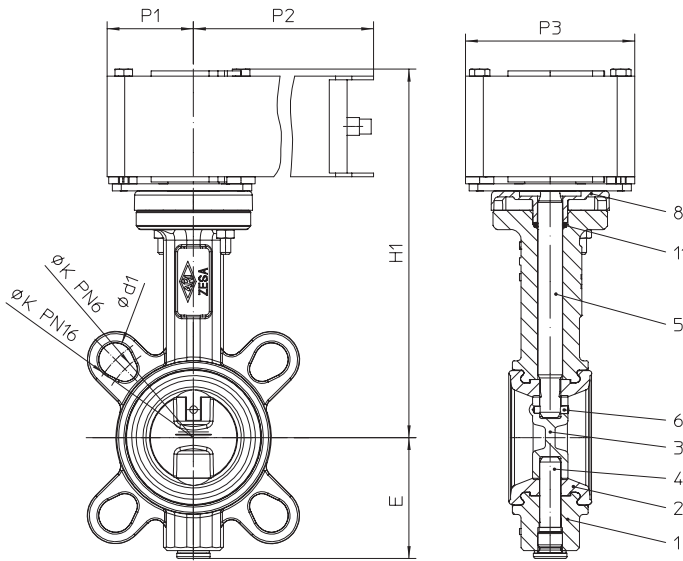
Dimensions and weights

DN	25	32	40	50	65	80	100	125	150	200	
H1	(mm) 212	212	218	224	234	242	263	293	309	343	
P1	(mm)	70 (with lever extension: 176)						69			
P2	(mm)	142						166			
P3	(mm)	95						134			
Type of actuator $\Delta P = 6$ bar	EA1						EA2		--		
Type of actuator $\Delta P = 3$ bar	--						--		EA2		
Operating time (s)	90						150				
Weight ZESA® EA (kg)	2,4	2,4	2,6	3	3,6	4,2	5	8,3	10,3	14,3	

For connection refer to terminal connection in the operating instructions of the actuator !

<p><b>Standard: EA1/EA2 - 230V 50/60Hz</b></p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>(open/close)</p> </div> <div style="text-align: center;"> <p>(3-point)</p> </div> </div>	<p><b>Standard EA1Y/EA2Y - 24V AC/DC (Modulating)</b></p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> </div> <div style="text-align: center;"> </div> </div>
<p><b>Standard: EA1/EA2 - 24V AC/DC</b></p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>(open/close)</p> </div> <div style="text-align: center;"> <p>(3-point)</p> </div> </div>	

Butterfly valve with electric rotary actuator Type: EA-SR



**EA-SR**  
**Electric rotary actuator with safety reset**

- Open/close 230V 50/60Hz or 24V AC/DC
- Enclosure IP 54
- 2 limit switches for signalisation
- Reset to start on failure (Spring closes on electrical power failure / NC)

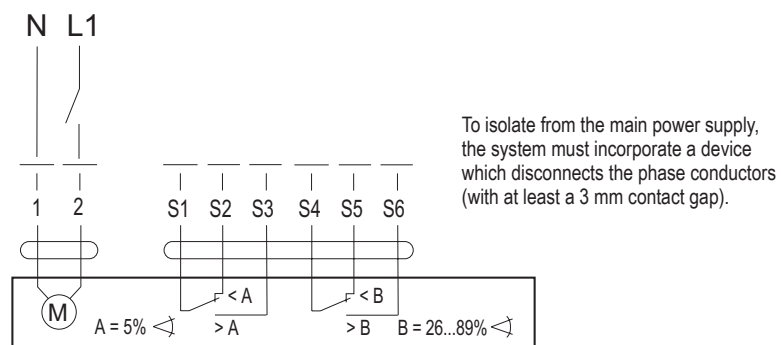
Technical data for actuator refer to page 8.

Dimensions and weights

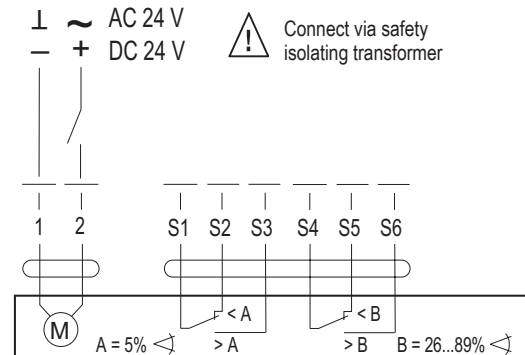
DN		25	32	40	50	65	80
H1	(mm)	197	197	203	209	219	227
P1	(mm)	50					
P2	(mm)	198					
P3	(mm)	98					
Type of actuator $\Delta P = 6$ bar		EA-SR					
Operating time (s)		150 (on electrical power failure: 16 s)					
Weight ZESA® EA-SR (kg)		4,7	4,7	4,9	5,3	5,9	6,5

For connection refer to terminal connection in the operating instructions of the actuator !

Standard: EA-SR - 230V 50/60Hz

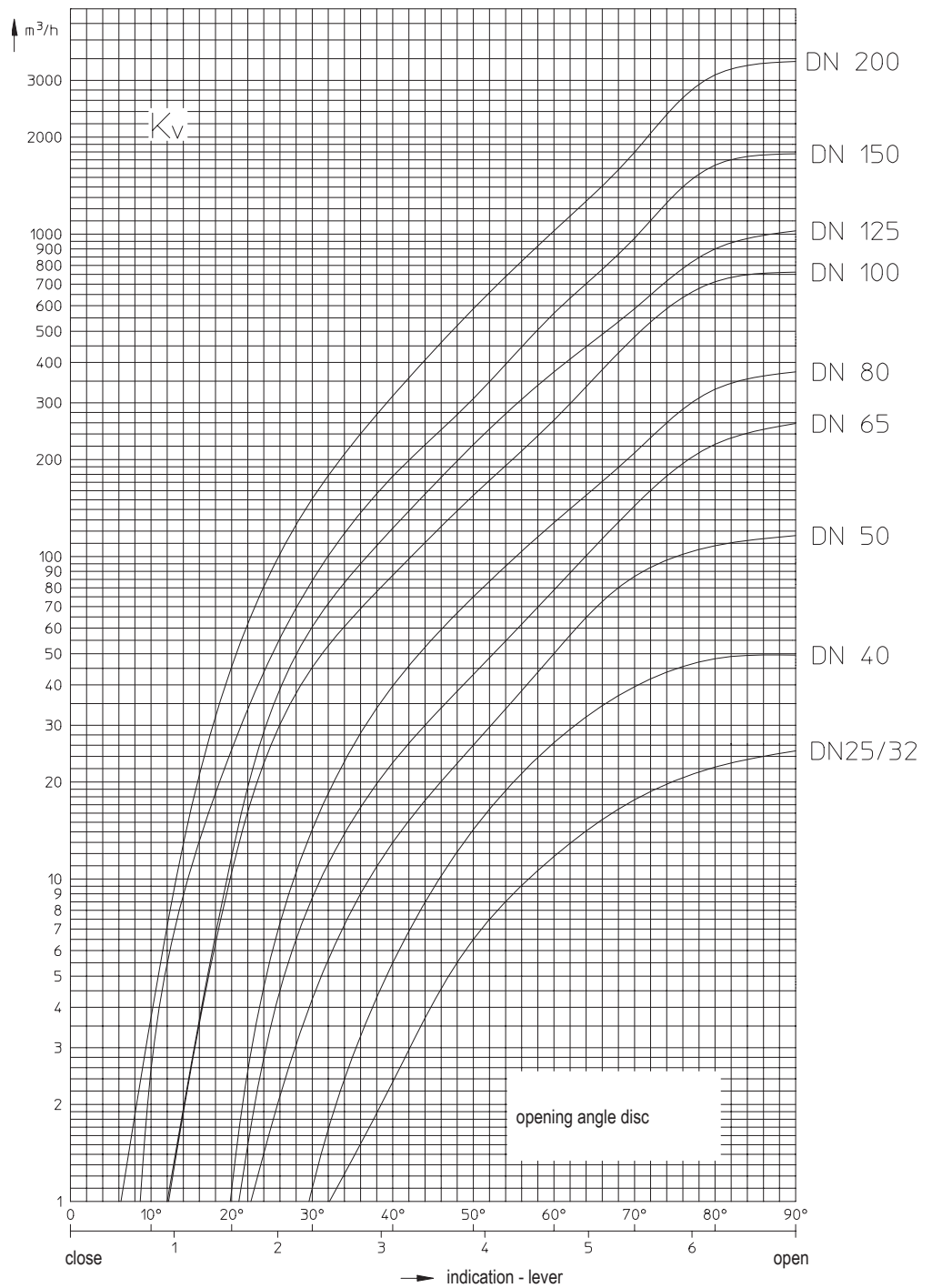


Standard: EA-SR - 24V AC/DC



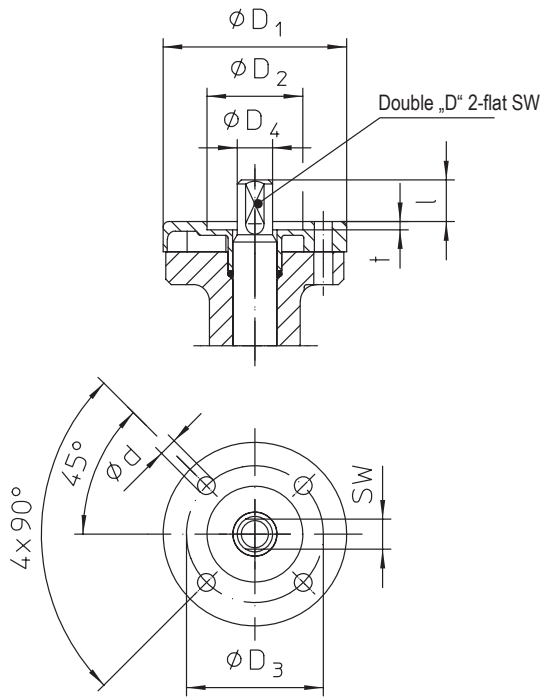
**Kvs- and zeta-values**

	DN	25	32	40	50	65	80	100	125	150	200
Kvs-value	(m <sup>3</sup> /h)	26	26,5	49,6	116	259	377	763	1030	1790	3460
Zeta-value	--	0,93	2,4	1,7	0,75	0,43	0,46	0,27	0,37	0,25	0,21



**Difference between disc outside-diameter and face-to-face**

	DN	25	32	40	50	65	80	100	125	150	200
B	(mm)	--	--	5	5	11	18	25	36	48	71
D	(mm)	--	--	26	29	49	68	88	115	142	194



	DN	25	32	40	50	65	80	100	125	150	200
Connection EN ISO 5211					F 05					F 07	
Double „D“ 2-flat SW	(mm)				11 <sub>d11</sub>					17 <sub>d11</sub>	
$\phi d$	(mm)				7					9	
$\phi D_1$	(mm)				65					90	
$\phi D_2$	(mm)				35 <sup>H10</sup>					55 <sup>H10</sup>	
$\phi D_3$	(mm)				50					70	
$\phi D_4$	(mm)				12,9					19,7	
l	(mm)				15					18	
t	(mm)				3					3	

**Please indicate when ordering:**

- Figure-No.
- Nominal pressure
- Nominal diameter
- Soft seal seat material
- Stem / disc material
- Actuator
- Special design / accessories

**Example:**

Figure 22.012; nominal pressure PN16; nominal diameter DN80; seat of EPDM, disc/stem of 1.4581/1.4021, with actuator EA.

Dimensions in mm  
Weights in kg  
1 bar  $\triangleq$  10<sup>5</sup> Pa  $\triangleq$  0,1 MPa  
Kvs in m<sup>3</sup>/h

Type	EA1-230V	EA1-24V	EA1Y-24V	EA2-230V	EA2-24V	EA2Y-24V
Motor voltage	230V 50/60 Hz	24V 50/60Hz or 24V DC		230V 50/60Hz	24V 50/60Hz or 24V DC	
Power consumption:						
- in operation	2,5 W	2 W		4 W	4,5 W	
- at rest	0,4 W	0,2 W		2 W	2 W	
- for wire sizing	6 VA	4 VA		7 VA	7 VA	
Operating time (s)	90 s			150 s		
Enclosure DIN VDE 0470	IP 54 (IP66/67 on request)			IP 54		
Protection class DIN VDE 0140-1	II Totally insulated	III Extra low voltage		II Totally insulated	III Extra low voltage	
Control signal (input)	Open/close or 3-point		Modulating 0(2)-10V	Open/close or 3-point		Modulating 0(2)-10V
Max. permissible ambient temperature	0 to +50°C			0 to +50°C		
Max. non-operating temperature	-40 to +80°C			-40 to +80°C		
Ambient humidity range	95% r.H., non-condensating (acc. to DIN EN 60730-1)					
Top mounted handwheel	Gearing latch disengaged with pushbutton					
EMC Low Voltage Directive	CE acc. to 89/336/EWG, 73/23/EWG					
Operation mode	Type 1 (acc. to DIN EN 60730-1)					
Weight (kg)	1,0	0,55	1,85	2,5		
<b>Accessories</b>						
Limit switch	Box with 2 limit switches for signalisation					

Type	EA-SR-230V	EA-SR-24V
Motor voltage	230V 50/60Hz	24V 50/60Hz or 24V DC
Power consumption:		
- motoring	6,5 W	5 W
- holding	2,5 W	1,5 W
- for wire sizing	11 VA	10 VA
Operating time (s)	150 s (on electrical power failure 16 s)	
Enclosure DIN VDE 0470	IP 54	
Protection class DIN VDE 0140-1	II Totally insulated	III Extra low voltage
Control signal (input)	Open/close	
Limit switch	2 limit switches for signalisation (2 x EPU 6 ( 3 ) A, AC 250 V)	
Max. permissible ambient temperature	-30 to +50°C	
Max. non-operating temperature	-40 to +80°C	
Top mounted handwheel	Handwheel	
EMC Low Voltage Directive	CE acc. to 89/336/EWG, 73/23/EWG	
Weight (kg)	3,0	