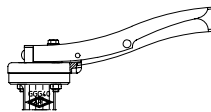


ARI-ZESA® - Fig. 012 - Free of maintenance butterfly valve with elongated eyelets - soft sealed

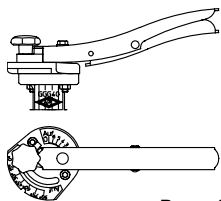
ARI-GESA® - Fig. 013 - Free of maintenance butterfly valve with threaded eyelets - soft sealed

**ARI-ZESA® / ARI-GESA®**
**with notch lever**


Page 6

**ARI-ZESA® / ARI-GESA®**
**with lock lever**

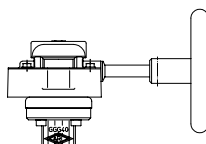
- Variable adjustment (with 0 - 90° angle positioning)
- With variable adjustment



Page 6

**ARI-ZESA® / ARI-GESA®**
**with worm gear**

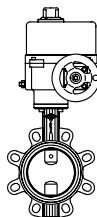
- With variable adjustment
- Self-locking



Page 6

**ARI-ZESA® / ARI-GESA®**
**with electric rotary actuator ARI-OM**

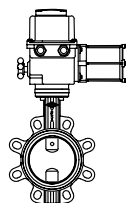
- For short time duty S 2-5 Min. (Periodic duty S3 30% ED)
- 230V 50Hz, 24V DC, 24V 50Hz
- Enclosure IP 67



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**ARI-ZESA® / ARI-GESA®**
**with electric rotary actuator Deufra**

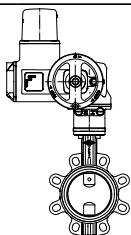
- Type of operation, on/off S4 30% (or control S4 50%)
- 230V 50Hz (400V 50Hz)
- Enclosure IP 67



Page 8

**ARI-ZESA® / ARI-GESA®**
**with electric rotary actuator Auma**

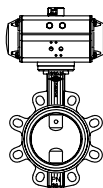
- For short time duty S 2-15 Min. (or control S4 25%)
- 400V 50Hz (230V 50Hz)
- Enclosure IP 68



Page 9

**ARI-ZESA® / ARI-GESA®**
**with pneumatic rotary actuator AIR-TORQUE / bar**

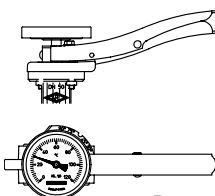
- Function: Double acting
- Function: Single acting, Spring closes on air failure (opens)
- Actuating pressure 6 bar (=0,6 MPa)



Page 10 / 11

**ARI-ZESA® / ARI-GESA®**
**with integrated Thermo - Appliance**

- Cold (-20 up to +40°C) or warm (0 up to +120°C)
- With Lever
- Precision class 1,0



Page 12



Fig. 012 - ARI-ZESA®

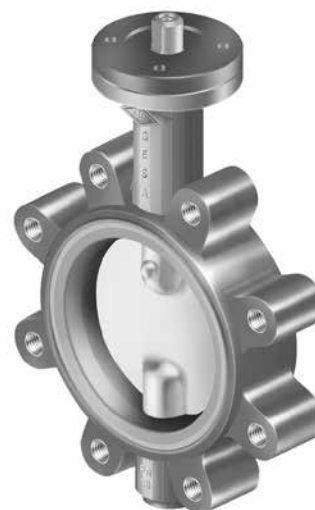
**THEA®**  
**THErmo-Appliance**


Fig. 013 - ARI-GESA®

**Features:**

- Soft sealing
- Maintenance-free
- Good flow characteristic due to excellent Zeta-values
- Seat materials EPDM / NBR / FPM
- Double sealing of the stem
- Stainless steel disc
- 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 (DW6201BR0244)

**ARI-ZESA®:**

- Wafer type

**ARI-GESA®:**

- Lug type
- As a pipe-end valve
- Pipeline one-side detachable

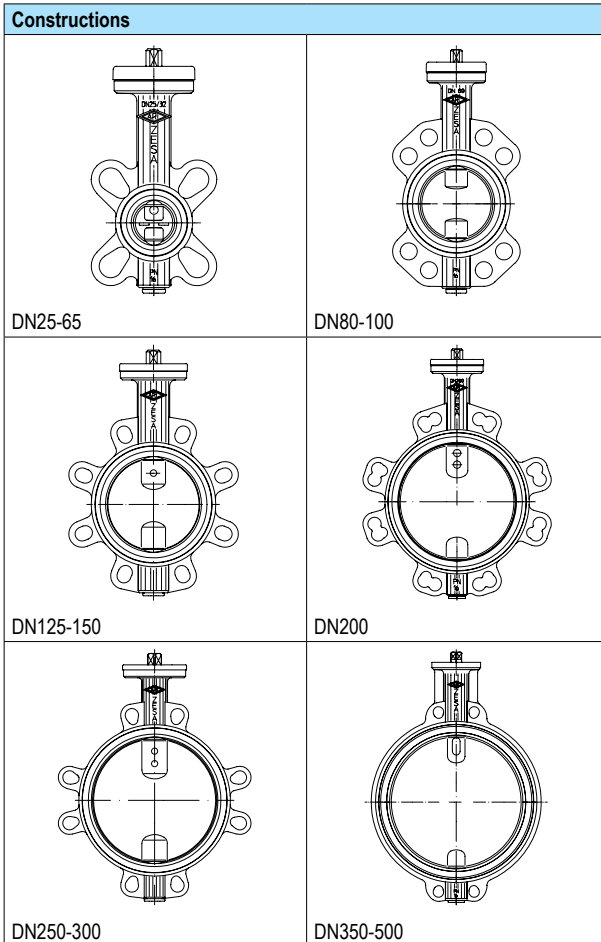
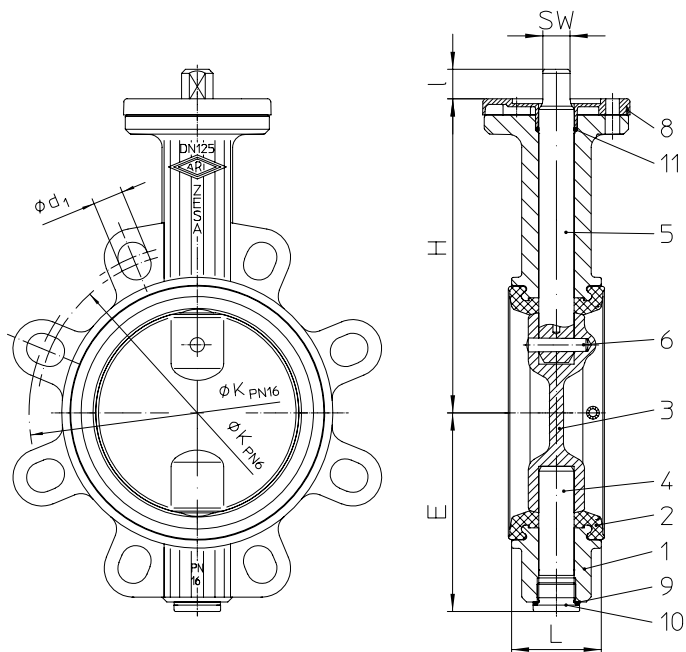
**Butterfly valve with elongated eyelets (SG iron)**


Figure	Nominal pressure	Material	Nominal diameter	Disc	Stem
20.012 (included in 22.012)	PN6	EN-JS1030	DN25-300	1.4581	1.4021+QT (optional: $\leq$ DN300 1.4571 / $\geq$ DN350 1.4542)
21.012 (included in 22.012)	PN10	EN-JS1030	DN25-500		
22.012	PN16	EN-JS1030	DN25-500		

<b>Seat:</b>	
• EPDM -10 °C to +130 °C / NBR -10 °C to +80 °C / FPM 0 °C to +150 °C (not for hot water useable)	
<b>Max. differential pressure:</b>	
• 16 bar (DN25-150) / 10 bar (DN200-500)	
<b>Actuation arrangement:</b> (refer to page 6-11)	
• Notch lever / Lock lever / Worm gear • Electric actuator (ARI-OM, Deufra, Auma) / Pneumatic actuator (AIR-TORQUE, bar)	
<b>Test:</b>	
Sealing leakage test:	• DIN EN 12266-1 Leakage rate A (DIN 3230 T3 Leakage rate 1)
DVGW-Registration:	• EPDM for water DW-6201BR0244, acc. to DIN EN 1074-1/-2 incl. disinfection inspection, DVGW VP646 and DVGW W270 for drinking water

Parts			
Pos.	Sp.p.	Description	Fig. 20. / 21. / 22.012
1		Body	EN-GJS-400-15, EN-JS1030
2		Seat	EPDM 73 / NBR 73 / FPM 73
3		Disc	GX5CrNiMoN19-11-2, 1.4581 (optional: DN40-500 CuAl10Fe5Ni5-C, CC333G)
4		Pivot	X20Cr13+QT, 1.4021+QT (optional: $\leq$ DN300 X6CrNiMoTi17 12 2, 1.4571 / $\geq$ DN350 X5CrNiCuNb16-4, 1.4542)
5		Stem	X20Cr13+QT, 1.4021+QT (optional: $\leq$ DN300 X6CrNiMoTi17 12 2, 1.4571 / $\geq$ DN350 X5CrNiCuNb16-4, 1.4542)
6		Taper pin	X6CrNiMoTi17 12 2, 1.4571
8	x	Insulating cap	PA 6
9	x	Gasket	CU
10	x	Hexagon head screw plug	5.8-A2G
11	x	O-ring	EPDM 73 / NBR 73 / FPM 73
		L Spare parts	

Information / restriction of technical rules need to be observed!

Operating and installation instructions can be downloaded at [www.ari-armaturen.com](http://www.ari-armaturen.com).

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

Resistance and fitness must be verified (contact manufacturer for information, refer to Product overview and Resistance list).

DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500
----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Face-to-face dimension FTF series 20 acc. to DIN EN 558-1																	
L	(mm)	33	33	33	43	46	46	52	56	56	60	68	78	78	102	114	127

Dimensions																	
H	(mm)	128	128	134	140	150	158	179	196	212	246	273	302	358	407	442	495
E	(mm)	58	58	66	69	81	100	109	124	140	167	203	232	258	298	319	354
I	(mm)	15	15	15	15	15	15	15	18	18	18	24	24	26	42	39	42
SW	(mm)	11	11	11	11	11	11	11	17	17	17	22	22	22	30	36	30

Kvs-value / Zeta-value <span style="float: right;">Diagram refer to page 13.</span>																	
Kvs-value	(m³/h)	26	26,5	49,6	116	259	377	763	1030	1790	3460	5070	7430	10320	13290	15200	21180
Zeta-value	--	0,93	2,4	1,7	0,75	0,43	0,46	0,27	0,37	0,25	0,21	0,24	0,23	0,23	0,23	0,28	0,22

Standard-flange dimensions / Hexagon screw (Quantity, Thread, Length)																		
PN6	ØK	(mm)	75	90	100	110	130	150	170	200	225	280	335	395	--	on request		
	n x Ød1	(mm)	4x11	4x14	4x14	4x14	4x14	4x18	4x18	8x18	8x18	8x18	8x18	8x22				
	Screws	(pcs.)	4	4	4	4	4	4	4	8	8	8	12	12				
	Thread		M10	M12	M12	M12	M12	M16	M16	M16	M16	M16	M16	M20				
	Length	(mm)	80	80	80	90	90	100	110	120	120	130	140	160				
PN10	ØK	(mm)	85	100	110	125	145	160	180	210	240	295	350	400	460	515	565	620
	n x Ød1	(mm)	4x18	4x18	4x18	4x18	4x18	4x18	4x18	8x18	8x22	8x22	8x22	8x22	4x22	4x28	4x28	4x28
	Screws	(pcs.)	4	4	4	4	4	8	8	8	8	8	12	12	16	16	20	20
	Thread		M12	M16	M16	M16	M16	M16	M16	M16	M20	M20	M20	M20	M20	M24	M24	M24
	Length	(mm)	90	90	90	100	110	110	120	130	130	140	150	160	160	200	200	220
PN16	ØK	(mm)	85	100	110	125	145	160	180	210	240	295	355	410	470	525	585	650
	n x Ød1	(mm)	4x14	4x18	4x18	4x18	4x18	4x18	4x18	8x18	8x22	8x22	8x26	8x26	4x26	4x30	20x30	4x33
	Screws	(pcs.)	4	4	4	4	4	8	8	8	8	12	12	12	16	16	20	20
	Thread		M12	M16	M16	M16	M16	M16	M16	M16	M20	M20	M24	M24	M24	M27	M27	M30
	Length	(mm)	90	90	90	100	110	110	120	130	130	140	160	170	180	220	220	260

Weights																	
Fig. 20./21./22.012	(kg)	1,4	1,4	1,6	2	2,6	3,2	4	4,6	8,6	12,6	19,4	29,4	43,9	67,7	124	111

Mounting variations	
	Welding neck flanges PN 6 / PN 10 / PN 16 DIN EN 1092-1 / 11 / B1 (for slip-on-flanges acc. to DIN EN 1092-1 use ZIVA) Hexagon screw DIN EN ISO 4016 W.-No. 4.6 Hexagon nut DIN EN ISO 4034 W.-No. 5
<b>ZESA®-Wafer-type-valve</b>	

**Pressure-temperature-ratings** Intermediate values for max. permissible operational pressures can be determined by linear interpolation of the given temperature / pressure chart.

acc. to DIN EN 1092-2	PN	-10°C to 120°C	130°C	150°C
EN-JS1030	16 (bar)	16	15,8	15,5

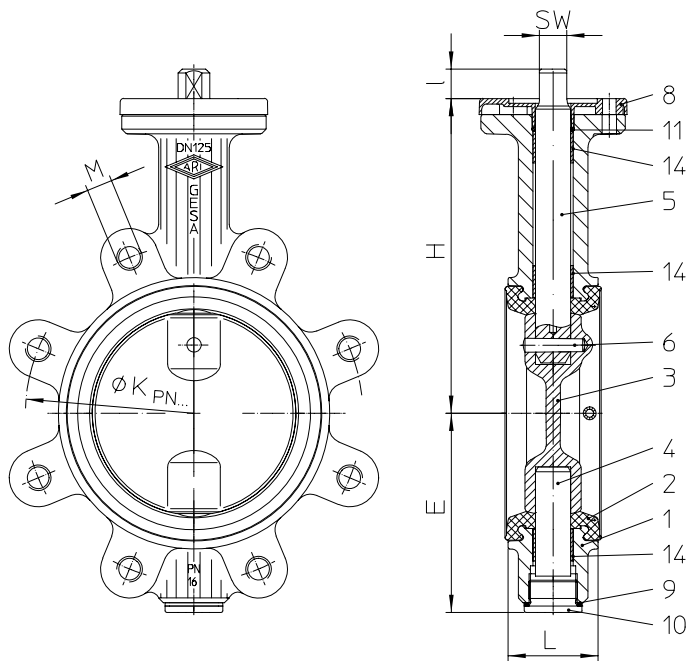
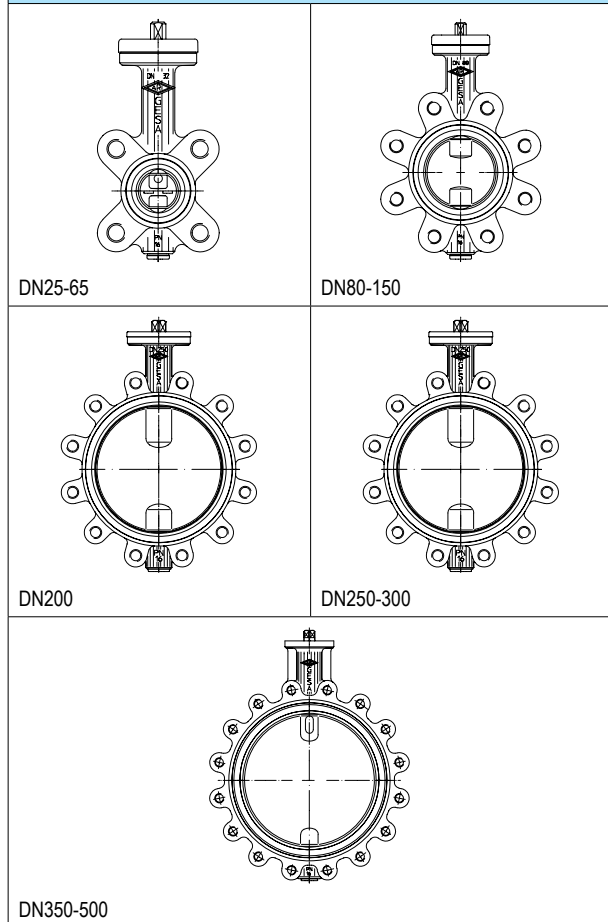
**Butterfly valve with threaded eyelets (SG iron)**

**Constructions**


Figure	Nominal pressure	Material	Nominal diameter	Disc	Stem
21.013	PN10	EN-JS1030	DN25-500	1.4581	1.4021+QT
22.013	PN16	EN-JS1030	DN25-500		(optional: $\leq$ DN300 1.4571 / $\geq$ DN350 1.4542)

**Seat:**

• EPDM -10 °C to +130 °C / NBR -10 °C to +80 °C / FPM 0 °C to +150 °C (not for hot water useable)

**Max. differential pressure:**

• 16 bar (DN25-150) / 10 bar (DN200-500)

**Actuation arrangement:**

(refer to page 6-11)

• Notch lever / Lock lever / Worm gear  
 • Electric actuator (ARI-OM, Deufra, Auma) / Pneumatic actuator (AIR-TORQUE, bar)

**Test:**

Sealing leakage test: • DIN EN 12266-1 Leakage rate A (DIN 3230 T3 Leakage rate 1)

DVGW-Registration: • EPDM for water DW-6201BR0244, acc. to DIN EN 1074-1/-2 incl. disinfection inspection, DVGW VP646 and DVGW W270 for drinking water

**Parts**

Pos.	Sp.p.	Description	Fig. 21. / 22.013
1		Body	EN-GJS-400-15, EN-JS1030
2		Seat	EPDM 73 / NBR 73 / FPM 73
3		Disc	GX5CrNiMoN19-11-2, 1.4581 (optional: DN40-500 CuAl10Fe5Ni5-C, CC333G)
4		Pivot	X20Cr13+QT, 1.4021+QT (optional: $\leq$ DN300 X6CrNiMoTi17 12 2, 1.4571 / $\geq$ DN350 X5CrNiCuNb16-4, 1.4542)
5		Stem	X20Cr13+QT, 1.4021+QT (optional: $\leq$ DN300 X6CrNiMoTi17 12 2, 1.4571 / $\geq$ DN350 X5CrNiCuNb16-4, 1.4542)
6		Taper pin	X6CrNiMoTi17 12 2, 1.4571
8	x	Insulating cap	PA 6
9	x	Gasket	CU
10	x	Hexagon head screw plug	5.8-A2G
11	x	O-ring	EPDM 73 / NBR 73 / FPM 73
14		Parallel bush	P1
L Spare parts			

Information / restriction of technical rules need to be observed!

Operating and installation instructions can be downloaded at [www.ari-armaturen.com](http://www.ari-armaturen.com).

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

Resistance and fitness must be verified (contact manufacturer for information, refer to Product overview and Resistance list).

DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500
----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Face-to-face dimension FTF series 20 acc. to DIN EN 558-1																	
L	(mm)	33	33	33	43	46	46	52	56	56	60	68	78	78	102	114	127

Dimensions																	
H	(mm)	128	128	134	140	150	158	179	196	212	246	273	302	358	407	442	495
E	(mm)	58	58	66	69	81	100	109	124	140	167	203	232	298	287	319	354
I	(mm)	15	15	15	15	15	15	15	18	18	18	24	24	26	42	39	42
SW	(mm)	11	11	11	11	11	11	11	17	17	17	22	22	22	30	36	30

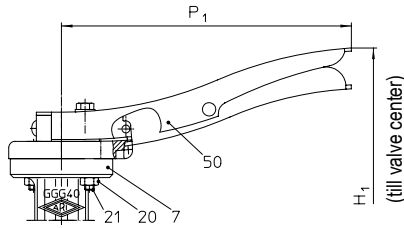
Kvs-value / Zeta-value <span style="float: right;">Diagram refer to page 13.</span>																	
Kvs-value	(m³/h)	26	26,5	49,6	116	259	377	763	1030	1790	3460	5070	7430	10320	13290	15200	21180
Zeta-value	--	0,93	2,4	1,7	0,75	0,43	0,46	0,27	0,37	0,25	0,21	0,24	0,23	0,23	0,23	0,28	0,22

Standard-flange dimensions / Hexagon screw (Quantity, Thread, Length)																			
PN10	ØK	(mm)	85	100	110	125	145	160	180	210	240	295	350	400	460	515	565	620	
	n x M	(mm)	4xM12	4xM16	4xM16	4xM16	4xM16	8xM16	8xM16	8xM16	8xM20	8xM20	12xM20	12xM20	16xM20	16xM24	20xM24	20xM24	
	Screws	(pcs.)	8	8	8	8	8	16	16	16	16	16	24	24	32	32	40	40	
	Thread		M12	M16	M16	M16	M16	M16	M16	M16	M16	M20	M20	M20	M20	M20	M24	M24	M24
	Length	(mm)	30	30	30	35	35	40	40	40	45	45	50	55	55	60	70	70	85
PN16	ØK	(mm)	85	100	110	125	145	160	180	210	240	295	355	410	470	525	585	650	
	n x Ød1	(mm)	4xM12	4xM16	4xM16	4xM16	4xM16	8xM16	8xM16	8xM16	8xM20	12xM20	12xM24	12xM24	16xM24	16xM27	20xM27	20xM30	
	Screws	(pcs.)	8	8	8	8	8	16	16	16	16	24	24	24	32	32	40	40	
	Thread		M12	M16	M16	M16	M16	M16	M16	M16	M16	M20	M20	M24	M24	M24	M27	M27	M30
	Length	(mm)	30	30	30	35	35	40	40	40	45	45	50	55	60	60	75	75	100

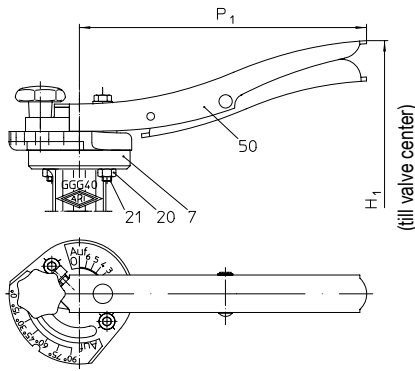
Weights																	
Fig. 20./21./22.013	(kg)	1,8	1,8	2	2,8	3,2	4,8	6,2	8,8	11	15,6	24,8	36	55,6	85	125	146

Mounting variations		
		<p>When used on end of line applications, a safety precaution (blind flange, etc.) is recommended.</p> <p><b>To ensure the seat tightness, a blind or counter flange is necessary.</b></p> <p>The installation between deviating flanges is not or only under special care possible. Please consult us.</p> <p><b>For all installation, modification or maintenance work, please observe regulations in force and the ARI-operating instructions.</b></p>
<p><b>GESA®-Wafer-type-valve</b> Welding neck flanges PN 10 / PN 16 DIN EN 1092-1 / 11 / B1 (for slip-on-flanges acc. to DIN EN 1092-1 use ZIVA) Hexagon screw DIN EN ISO 4016 W.-No. 4.6</p>	<p><b>GESA®-Pipe-end-valve</b> Welding neck flanges PN 10 / PN 16 DIN EN 1092-1 / 11 / B1 (for slip-on-flanges acc. to DIN EN 1092-1 use ZIVA) Hexagon screw DIN EN ISO 4016 W.-No. 4.6</p>	

Pressure-temperature-ratings		Intermediate values for max. permissible operational pressures can be determined by linear interpolation of the given temperature / pressure chart.		
acc. to DIN EN 1092-2	PN	-10°C to 120°C	130°C	150°C
EN-JS1030	16 (bar)	16	15,8	15,5

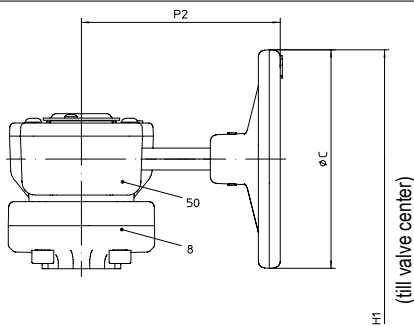
**ARI-ZESA® / ARI-GESA® with manual actuation arrangement**
**Notch lever**


For diameters larger than DN 125 we recommend using a gear mechanism. Gear recommended for inaccessible installation (see below).

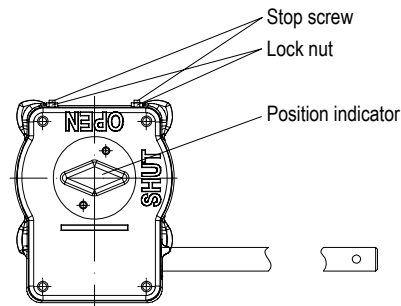
**Lock lever**


- Cap convertible for lock lever
- Variable adjustment (with 0 - 90° angle positioning) (With variable adjustment)

For diameters larger than DN 125 we recommend using a gear mechanism. Gear recommended for inaccessible installation (see below).

**Worm gear**


- With variable adjustment
- Self-locking



The SHUT-position can be adjusted to  $\pm 5^\circ$  by a locking screw.

**Parts**

Pos.	Sp.p.	Description	Fig. 20. / 21. / 22.012; 21. / 22.013
7	x	Lever cap	PA 6
8	x	Insulating cap	PA 6
20	x	Hexagon nut	5-A2B
21	x	Cheese head screw	8.8-A2B
50		Notch lever	DC01, 1.0330 (surface treatment)
50		Lock lever	DC01, 1.0330 (surface treatment)
50		Worm gear	
L Spare parts			

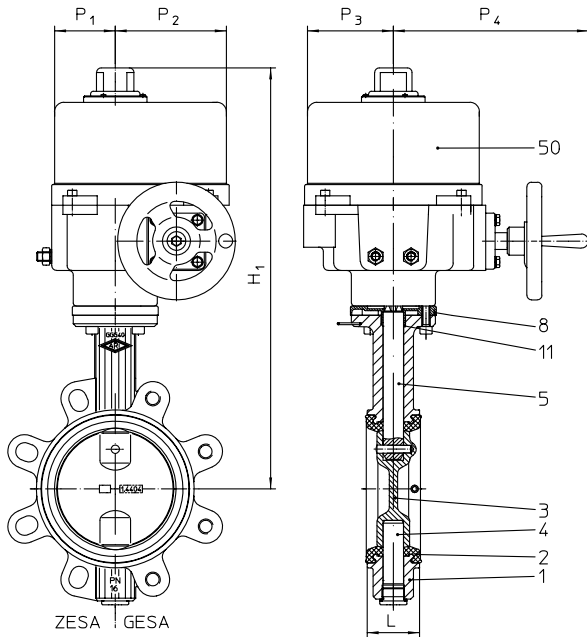
DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500
----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

**Dimensions**

H1	with lever	(mm)	187	187	193	199	209	217	238	263	279	313	--	--	--	--	--	
	with gear	(mm)	210	210	216	222	232	240	261	278	294	349	425	455	510	603	780	833
P1		(mm)	184	184	184	184	184	184	184	273	273	273	--	--	--	--	--	
P2		(mm)	147	147	147	147	147	147	147	147	147	147	249	244	244	333	361	
ØC		(mm)	125	125	125	125	125	125	125	125	125	250	250	250	300	600	600	
Type of gear			242-10S	242-10S	242-10S	242-10S	242-10S	242-10S	242-10S	242-10M	242-10M	242-10M	242-20M	242-30S	242-30S	242-30L	242-40M	242-40M

**Weights**

ZESA®	with lever	(kg)	1,8	1,8	2,0	2,4	3,0	3,6	4,4	7,4	9,4	13,4	--	--	--	--	--	
GESA®		(kg)	2,2	2,2	2,4	3,2	3,6	5,2	6,6	9,6	11,8	14,9/16,4	--	--	--	--	--	
ZESA®	with gear	(kg)	3,3	3,3	3,5	3,9	4,5	5,1	5,9	8,5	10,5	14,5	24,4	34,4	49	75,6	135	120
GESA®		(kg)	3,7	3,7	3,9	4,7	5,1	6,7	8,1	10,7	12,9	16/17,8	29,8	41	61	97	136	157

**Butterfly valve with electric rotary actuator**

**Type: ARI-OM**

- for short time duty S 2-5 Min.  
(Periodic duty S3 30% duty cycle, max. 60 c/h,  
max. modulating torque = ca. 50% rated torque)
- Enclosure IP 67
- Temperature guard in the motor

**Voltages:**

- 230V 50Hz
  - 24V AC/DC
- (Other voltages on request)

**Accessories:**

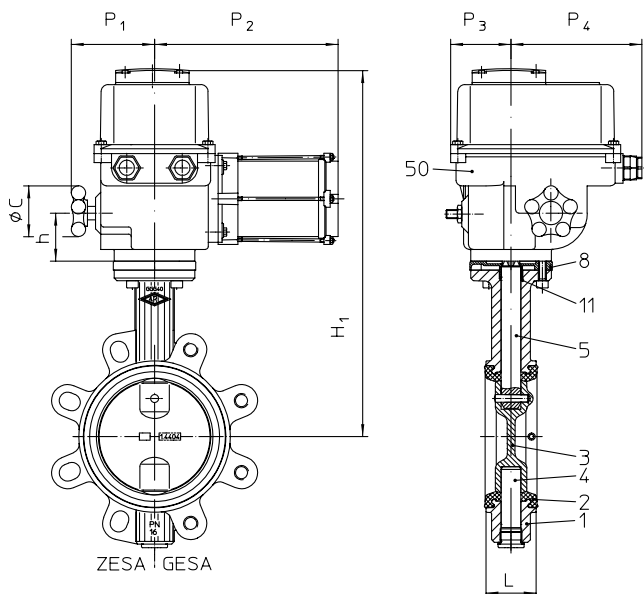
- Potentiometer (1000 Ohm)
- Positioner 4-20 mA
- Position-transmitter 4-20 mA
- Heating
- Travel switch

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

DN		25	32	40	50	65	80	100	125	150	200	250	300*
<b>Actuator</b>													
Type of actuator		OM-1					OM-A	OM-2	OM-3		OM-4		
Operating time	(s)	13					24	17	26		18		
<b>Dimensions</b>													
H1	(mm)	278	278	284	290	300	308	379	451	467	501	588	617
P1	(mm)	35	35	35	35	35	35	54	82	82	82	94	94
P2	(mm)	80	80	80	80	80	80	54	118	118	118	126	126
P3	(mm)	54	54	54	54	54	54	54	100	100	100	110	110
P4	(mm)	54	54	54	54	54	54	54	230	230	230	262	262
<b>Weights</b>													
ZESA®	(kg)	3,3	3,3	3,5	4	4,4	5	6,9	16	17,7	22,1	36,9	46,9
GESA®	(kg)	3,7	3,7	4	4,7	5,2	6,8	9,3	18,5	20	25	42,3	53,5

\* Max differential pressure against tight shut off 6 bar.

Operating and installation instructions can be downloaded at [www.ari-armaturen.com](http://www.ari-armaturen.com).

**Butterfly valve with electric rotary actuator**

**Type: Deufra**

- Type of operation on/off S4 30% (optional: for control S4 50%)
- Enclosure IP 67
- Temperature guard in the motor
- Heating

**Voltages:**

- 230V 50Hz
  - 400V 50Hz (nicht bei SQ4)
- Other voltages on request

**Accessories:**

- Travel switch
- Potentiometer
- Valve positioner 0-10V / 4-20mA
- Position-transmitter

**Special actuators:**

- Reset to start on failure Type FQ

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

DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500
----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

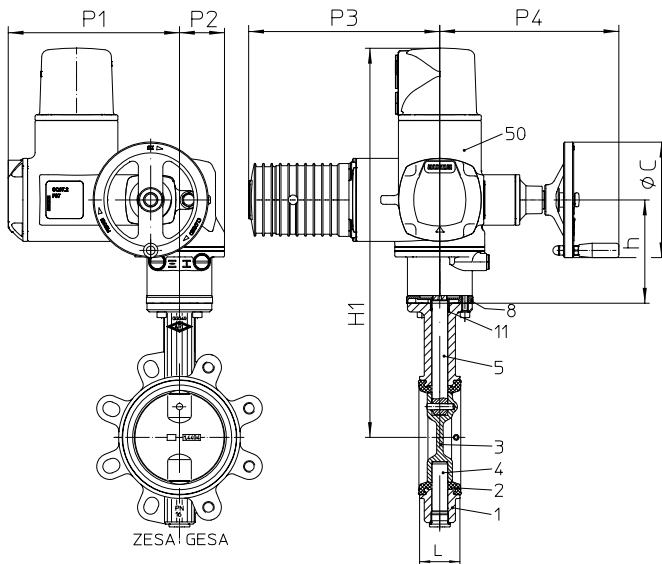
Actuator																	
Type of actuator		SQ4				SQ6	SQ10	SQ15	SQ25	SQ60	SQ120						
Operating time	(s)	6				6	6	15	10	30	30						

Dimensions																	
H1	(mm)	352	352	358	364	374	382	403	420	436	470	453	527	585	620	655	708
h	(mm)	53	53	53	53	53	53	53	53	53	53	100	100	100	86	86	86
ØC	(mm)	60	60	60	60	60	60	60	60	60	100	160	250	250	250	250	250
P1	(mm)	90	90	90	90	90	90	90	90	90	98	167	169	169	172	172	172
P2	(mm)	160	160	160	160	160	160	202	202	202	260	312	340	340	392	392	392
P3	(mm)	65	65	65	65	65	65	65	65	65	65	89	89	89	133	133	133
P4	(mm)	125	125	125	125	125	125	125	125	125	125	226	226	226	284	284	284

Weights																	
ZESA®	(kg)	7,1	7,1	7,3	7,8	8,2	8,8	9,9	13,4	14,8	18,9	37,4	45,5	61	100	159	141
GESA®	(kg)	7,5	7,5	7,8	8,5	9	10,6	12,2	15,8	17,2	21,1/21,8	43	54	74	121	160	181

Operating and installation instructions can be downloaded at [www.ari-armaturen.com](http://www.ari-armaturen.com).



**Butterfly valve with electric rotary actuator**

**Type: Auma**

- For short time duty S 2-15 Min. (for control S4 25%)
- Enclosure IP 68
- Temperature guard in the motor
- Heating

**Voltages:**

- 400V 50Hz
  - 230V 50Hz
- (Other voltages on request)

**Accessories:**

- Travel switch
- Potentiometer
- Auma Matic
- Valve positioner 0-10V / 4-20mA
- Position-transmitter

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

DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500
----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

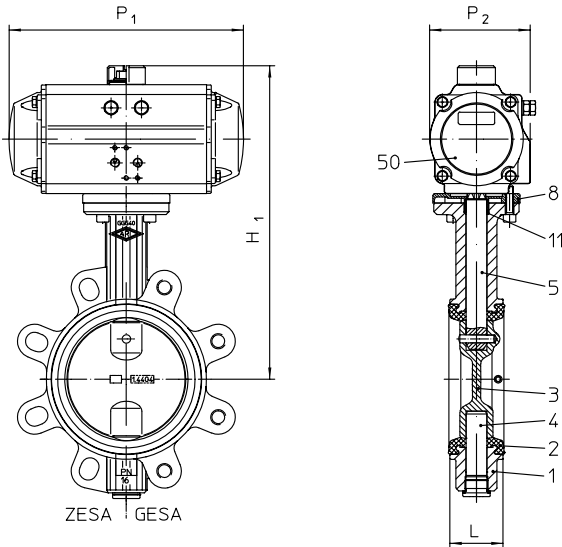
Actuator		SQ05.2										SQ07.2	SQ10.2	SQ12.2
Type of actuator														
Operating time	(s)	16										16	16	22

Dimensions																	
H1	(mm)	472	472	478	484	494	502	523	540	556	590	643	663	721	834	869	922
h	(mm)	134	134	134	134	134	134	134	134	134	134	160	151	151	215	215	215
ØC	(mm)	160	160	160	160	160	160	160	160	160	160	160	200	200	200	200	200
P1	(mm)	238	238	238	238	238	238	238	238	238	238	238	248	248	248	248	248
P2	(mm)	62,5	62,5	62,5	62,5	62,5	62,5	62,5	62,5	62,5	62,5	62,5	80	80	105	105	105
P3	(mm)	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265
P4	(mm)	249	249	249	249	249	249	249	249	249	249	249	254	254	254	254	254

Weights																	
ZESA®	(kg)	24,4	24,4	24,6	25	25,6	26,2	27	27,6	31,6	35,6	42,9	56,4	70,9	99,7	161	143
GESA®	(kg)	24,8	24,8	25	25,8	26,2	27,8	29,2	31,8	34	38,6	48,3	63	82,6	117	163	178

Operating and installation instructions can be downloaded at [www.ari-armaturen.com](http://www.ari-armaturen.com).

Butterfly valve with pneumatic rotary actuator



<b>Type: AIR TORQUE</b>
<ul style="list-style-type: none"> <li>• Function: double acting single acting, Spring closes on air failure (opens)</li> <li>• Actuating pressure 6 bar (=0,6 MPa)</li> <li>• Position indicator</li> </ul>
<b>Accessories:</b>
<ul style="list-style-type: none"> <li>• Limit switch open / close</li> <li>• Solenoid valve</li> <li>• Exhaust silencer with throttling function (double acting)</li> <li>• Speed regulating plate (single acting)</li> <li>• Valve positioner</li> <li>• Other actuating pressures on request</li> </ul>

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

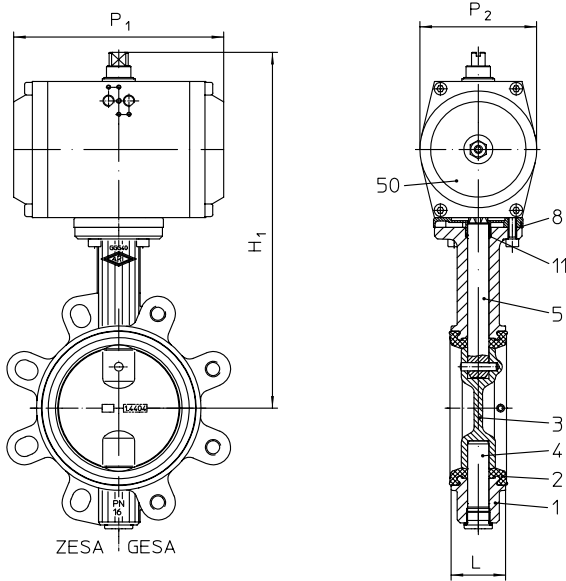
DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500
----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

double acting	<b>Actuator</b>																	
	Type of actuator	DR30						DR60	DR100	DR150	DR220	DR450	DR600	DR900	DR1200			
	<b>Dimensions</b>																	
	H1	(mm)	233	233	239	245	255	263	301	331	347	393	448	509	567	635	713	792
	P1	(mm)	159	159	159	159	159	159	211	248	248	269	315	409	409	438	474	543
P2	(mm)	83	83	83	83	83	83	95	106	106	123	141	172	172	187	200	222	
<b>Weights</b>																		
ZESA®	(kg)	3	3	3,2	3,7	4,1	4,7	6,6	10	11,4	18,6	27,8	43	59	90	153	147	
GESA®	(kg)	3,4	3,4	3,7	4,4	4,9	6,5	9	12,4	13,8	19,5/21	33,9	51,5	72	111	154	187	

single acting	<b>Actuator</b>																
	Type of actuator (closes)	SC 30-6			SC 60-6	SC 100-6	SC 150-6	SC 220-6	SC 300-6	SC 450-6	SC 600-6	SC 1200-6	SC 2000-6	SC 2000-6	SC 3000-6		
	Type of actuator (opens)	SO 30-5			SO 60-5	SO 100-5	SO 150-5	SO 220-5	SO 450-5	SO 900-5	SO 1200-5	SO 2000-5	SO 2000-5	SO 2000-5			
	<b>Dimensions</b>																
	H1	(mm)	233	233	239	245	272	293	326	371	399	453	500	597	655	758	791
P1	(mm)	159	159	159	159	211	248	269	315	345	409	438	543	543	621	605	684
P2	(mm)	83	83	83	83	95	106	123	141	152	172	187	222	222	262	262	330
<b>Weights</b>																	
ZESA®	(kg)	3,1	3,1	3,3	3,8	5,7	7,5	10,4	16	20,2	30,2	43,4	73,6	89	134	162	213
GESA®	(kg)	3,5	3,5	3,8	4,5	6,5	9,3	12,8	18,4	22,6	32,2/33,7	49,5	82,1	102	155	163	253

Operating and installation instructions can be downloaded at [www.ari-armaturen.com](http://www.ari-armaturen.com).

<p><b>Solenoid valve:</b> for control of double acting actuators 5/2 - way</p>	<p><b>Accessories: Limit switch in housing</b></p>
<p><b>Solenoid valve:</b> for control of single acting actuators 3/2 - way</p>	<p><b>Accessories: Solenoid valve</b></p>

**Butterfly valve with pneumatic rotary actuator**

**Type: bar**

- Function: double acting  
single acting, Spring closes on air failure (opens)
- Actuating pressure 6 bar (=0,6 MPa)

**Accessories:**

- Limit switch open / close
- Solenoid valve
- Exhaust silencer with throttling function (double acting)
- Speed regulating plate (single acting)
- Position indicator
- Valve positioner
- Other actuating pressures on request

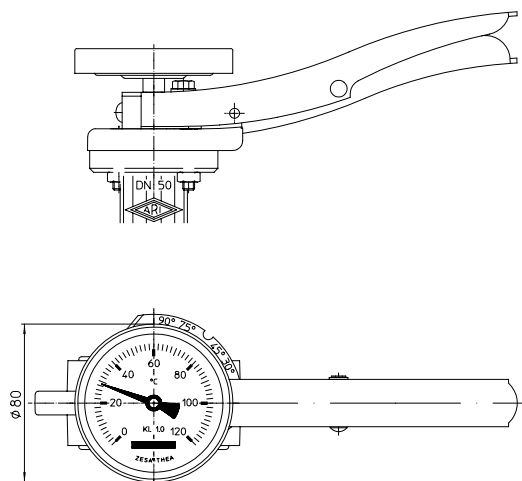
**For connection refer to terminal connection in the operating instructions of the actuator !**

DN		25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500	
double acting	<b>Actuator</b>																	
	Type of actuator	GTD 58/90				GTD 68/90		GTD 98/90		GTD 110/90	GTD 115/90	GTD143/90		GTD 163/90	GTD 185/90	GTD 210/90		GTD 250/90
	<b>Dimensions</b>																	
	H1	(mm)	232	232	238	244	254	276	297	343	359	416	443	530	588	637	727	782
	P1	(mm)	127	127	127	127	127	140	140	209	209	222	292	337	337	377	422	462
	P2	(mm)	72	72	72	72	72	82	82	108	108	120	120	172	172	172	224	224
	<b>Weights</b>																	
	ZESA®	(kg)	2,3	2,3	2,5	3	3,4	4,5	5,4	9,6	11	17,3	26,5	42,9	58,5	86,5	157	143
	GESA®	(kg)	2,7	2,7	3	3,7	4,2	6,3	7,7	12	13,4	19,3/20,2	32,6	51,4	71,5	107,5	158	183
	single acting	<b>Actuator</b>																
Type of actuator (closes)		GTE 68/90				GTE 78/90	GTE 88/90	GTE 98/90	GTE 110/90	GTE 115/90	GTE 127/90	GTE 143/90	GTE 210/90		GTE 250/90			
Type of actuator (opens)		GTE 68/90				GTE 78/90	GTE 88/90	GTE 110/90		GTE 115/90	GTE 127/90	GTE 143/90	GTE 210/90		GTE 250/90			
<b>Dimensions</b>																		
H1		(mm)	246	246	252	258	280	296	349	366	382	436	501	587	645	741	774	829
P1		(mm)	140	140	140	140	161	182	222	222	292	298	337	462	462	603	609	603
P2		(mm)	82	82	82	82	94	100	120	120	120	137	172	224	224	272	272	272
<b>Weights</b>																		
ZESA®		(kg)	3	3	3,2	3,7	4,9	6	9,8	12,4	16	22,8	37,5	66,8	82	136	195	177
GESA®		(kg)	3,4	3,4	3,7	4,5	5,6	7,8	12,2	14,8	18,4	24,8/25,7	43,6	75,3	95	157	201	217

Operating and installation instructions can be downloaded at [www.ari-armaturen.com](http://www.ari-armaturen.com).

<p><b>Solenoid valve:</b> for control of double acting actuators <b>5/2 - way</b></p>	<p><b>Accessories: Limit switch in housing</b></p>	<p><b>Accessories: Limit switch</b></p>
<p><b>Solenoid valve:</b> for control of single acting actuators <b>3/2 - way</b></p>	<p><b>Accessories: Solenoid valve</b></p>	

**THEA® - integrated ThERmo-Appliance**

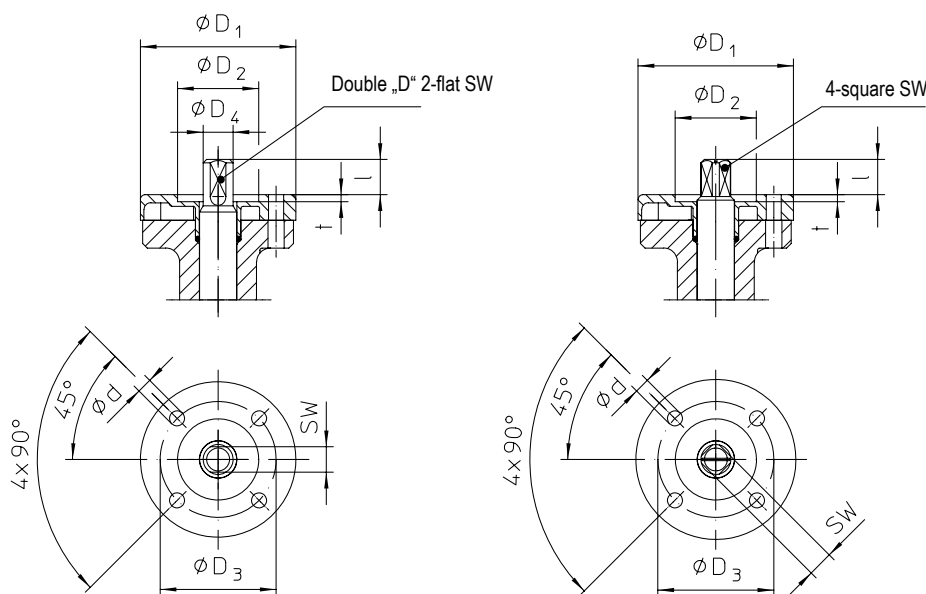


Standard thermometer ranges	
- cold (-20 to +40°C)	
- warm (0 to +120°C)	
Indication:	Precision class 1,0 (thermometer adjusted to ARI-THEA)
Diameter range:	DN 25 / 32 - DN 40 DN 50 - DN 80 DN 100 DN 125 - DN 200
Order data:	Thermo-Appliance with range ....., for diameter range .....

Indicator installed by insertion into the bore hole of the lever and the stem - convertible on site\*

\* not possible with stem of 1.4571

**Actuator flange connection**



DN25-200		DN250-500																	
DN		25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500		
Connection EN ISO 5211						F 05				F 07				F 10		F 14			
Double „D“ 2-flat SW	(mm)					11 <sub>d11</sub>				17 <sub>d11</sub>				--		--			
4-square SW	(mm)					--				--				22 <sub>d11</sub>		30 <sub>d11</sub> <sup>1)</sup>	36 <sub>d11</sub> <sup>1)</sup>	30 <sub>d11</sub> <sup>1)</sup>	
Ød	(mm)					7				9				11		18			
ØD1	(mm)					65				90				125		175			
ØD2	(mm)					35 <sup>H10</sup>				55 <sup>H10</sup>				70 <sup>H10</sup>		100 <sup>H10</sup>			
ØD3	(mm)					50				70				102		140			
ØD4	(mm)					12,9				19,7				--		--			
l	(mm)					15				18				24		40	39	40	
t	(mm)					3				3				3		4			

<sup>1)</sup> deviating from EN ISO5211

**Please indicate when ordering:**

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

**Please indicate in your order, if the valves are to be installed in hazardous areas (ATEX).**

**Example:**

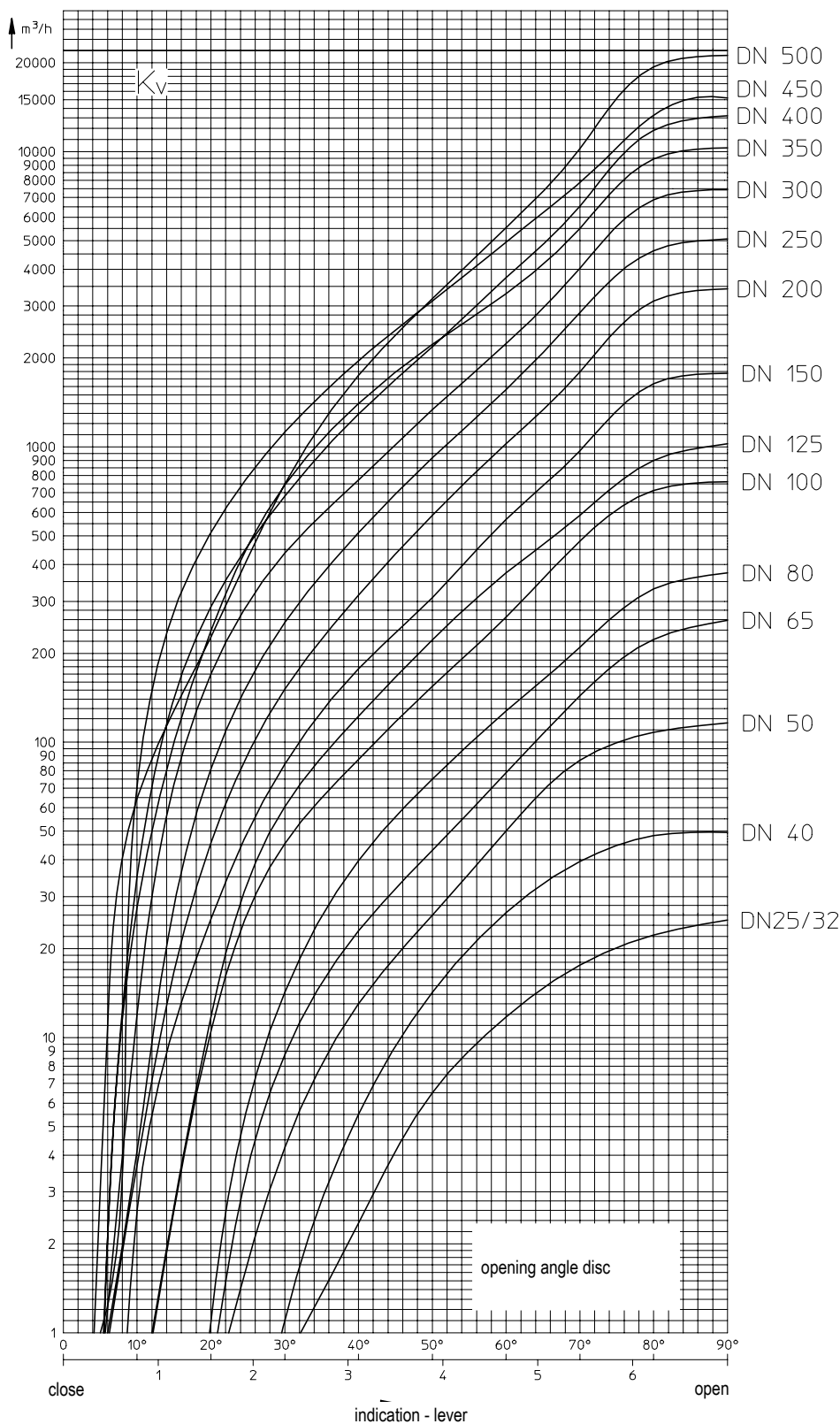
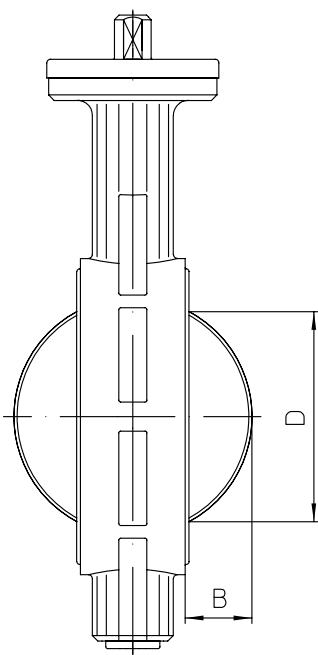
Figure 22.012; Nominal pressure PN16; Nominal diameter DN100; Seat of EPDM, Washer/Stem of 1.4581/1.4021, with notch lever and integrated Thermo-Indication (-20 to 40°C).

Kvs-value / Zeta-value		25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500
DN	(m <sup>3</sup> /h)	26	26,5	49,6	116	259	377	763	1030	1790	3460	5070	7430	10320	13290	15200	21180
Kvs-value	(m <sup>3</sup> /h)	26	26,5	49,6	116	259	377	763	1030	1790	3460	5070	7430	10320	13290	15200	21180
Zeta-value	--	0,93	2,4	1,7	0,75	0,43	0,46	0,27	0,37	0,25	0,21	0,24	0,23	0,23	0,23	0,28	0,22

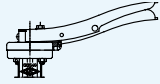
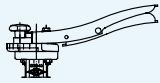
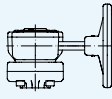





**max. permissible flow speed:**

-Liquids ≤4m/s

-Gas and vapour ≤30m/s



Difference between disc outside-diameter and face-to-face		25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500
B	(mm)	--	--	5	5	11	18	25	36	48	71	91	112	132	147	168	188
D	(mm)	--	--	26	29	49	68	88	115	142	194	243	292	333	383	436	486

DN		25-50	65	80	100	125	150	200	250	300	350	400	450	500				
Flange connection EN ISO 5211		F 05			F 07			F 10			F 14							
Double „D“ 2-flat SW	(mm)	11 <sub>d11</sub>			17 <sub>d11</sub>			--			--							
4-square SW	(mm)	--			--			22 <sub>d11</sub>			30 <sub>d11</sub> deviating from EN ISO5211	36 <sub>d11</sub> deviating from EN ISO5211	30 <sub>d11</sub> deviating from EN ISO5211					
Manual actuation	 Notch lever	Size		I			II			--								
	 Lock lever	Size		I			II			--								
	 Worm gear	Type		242-10S			242-10M			242-20M	242-30S	242-30L	242-40M					
Electric rotary actuator	 ARI-OM (230V 50Hz)	Type		OM-1		OM-A	OM-2	OM-3		OM-4		--						
	 Deufra (230V 50Hz)	Type		SQ4		SQ6	SQ10		SQ15	SQ25	SQ60		SQ120					
	 Auma (400V 50Hz)	Type		SQ05.2					SQ07.2		SQ10.2		SQ12.2					
Pneumatic rotary actuator	 AIR TORQUE	double acting	Type		DR30		DR60	DR100		DR150	DR220	DR450	DR600	DR900	DR1200			
		single acting	Spring closes on air failure	Type		SC 30-6	SC 60-6	SC 100-6	SC 150-6	SC 220-6	SC 300-6	SC 450-6	SC 600-6	SC 1200-6		SC 2000-6	SC 3000-6	
			Spring opens	Type		SO 30-5	SO 60-5	SO 100-5		SO 150-5	SO 220-5		SO 450-5	SO 900-5		SO 1200-5	SO 2000-6	SO 2000-5
	 bar	double acting	Type		GTD58/90		GTD68/90		GTD98/90		GTD 110/90	GTD 115/90	GTD143/90		GTD 163/90	GTD 185/90	GTD 210/90	
		single acting	Spring closes on air failure	Type		GTE 68/90-12	GTE 78/90-10	GTE 88/90-10	GTE 98/90-12	GTE 110/90-12	GTE 115/90-12	GTE 127/90-12	GTE 143/90-12	GTE210/90-10		GTE 250/90-8	GTE 250/90-9	GTE 250/90-8
			Spring opens	Type		GTE 68/90-8	GTE 78/90-8	GTE 88/90-8	GTE 110/90-8		GTE 115/90-6	GTE 127/90-8	GTE 143/90-8	GTE210/90-8		GTE 250/90-6	GTE 250/90-7	GTE 250/90-6