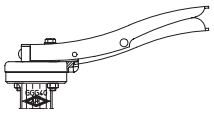
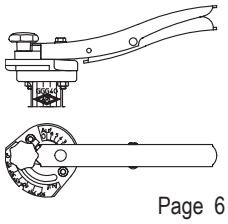
ARI-ZESA® - Fig. 012 - Free of maintenance butterfly valve with elongated eyelets - soft sealed
ARI-GESA® - Fig. 013 - Free of maintenance butterfly valve with threaded eyelets - soft sealed

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



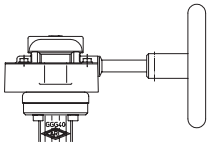
Page 6

ARI-ZESA® / ARI-GESA®
with lock lever
- With angle positioning
- With variable adjustment



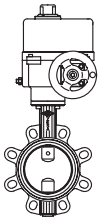
Page 6

ARI-ZESA® / ARI-GESA®
with worm gear
- With variable adjustment
- Self-locking



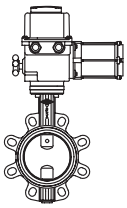
Page 6

ARI-ZESA® / ARI-GESA®
with electric rotary actuator rotork
- For short time duty S 2-5 Min. (periodic duty S3 30% duty cycle)
- 230V 50Hz
- Enclosure IP 67



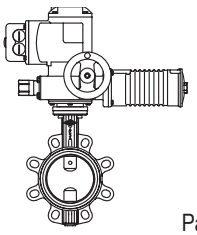
Page 7

ARI-ZESA® / ARI-GESA®
with electric rotary actuator Deufra
- Type of operation, on/off S4 30% (or controlS4 50%)
- 230V 50Hz (400V 50Hz)
- Enclosure IP 67



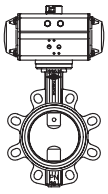
Page 8

ARI-ZESA® / ARI-GESA®
with electric rotary actuator Auma
- For temporary service S 2-15 min. (or control S4 25%)
- 400V 50Hz (230V 50Hz)
- Enclosure IP 67



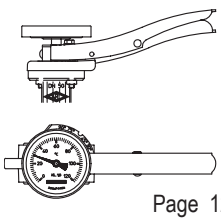
Page 9

ARI-ZESA® / ARI-GESA®
with pneumatic rotary actuator AIR-TORQUE / bar
- Function: double acting
- Function: single acting, spring closes (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

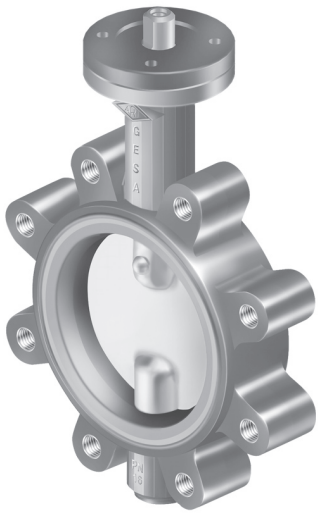


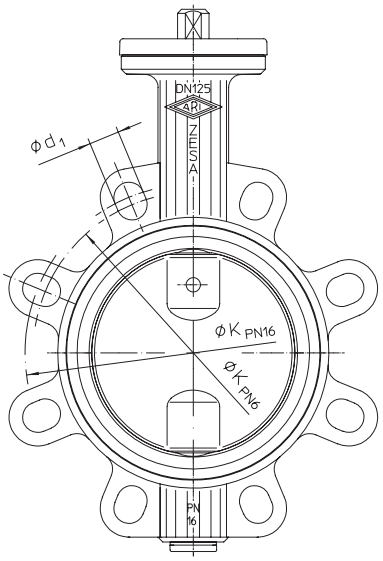
Fig. 013 - ARI-GESA®

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
- Centrical disc bearing
- Nodular iron body
- EPDM with DIN DVGW Reg. drinking water (DW-6201BR0244)

ARI-ZESA®:
- Wafer type

ARI-GESA®:
- Lug type
- As a pipe-end valve
- Pipeline one-side detachable

Butterfly valve with elongated eyelets (SG iron)



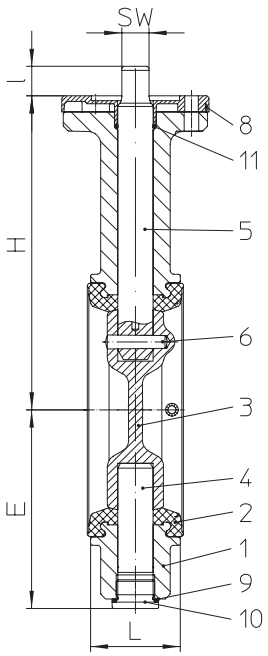


Figure	Nominal pressure	Material	Nominal diameter
20.012	PN6	EN-JS1030	DN25-300
21.012	PN10	EN-JS1030	DN25-500
22.012	PN16	EN-JS1030	DN25-500
Disc:	1.4581		
Stem:	• 1.4021+QT • 1.4571		
Seat:	• EPDM -10 °C to +130 °C • NBR -10 °C to +80 °C • FPM - 10 °C to + 150 °C (not for hot water useable)		
max. gauge press.:	16 bar (DN25-150) 10 bar (DN200-500)		
Actuation arrangement: (refer to page 6-11)	• Notch lever • Lock lever • Worm gear • Electric actuator • Pneumatic actuator		

Test:	
Sealing leakage test	EN 12266-1 Leakage rate A (DIN 3230 T3 Leakage rate 1)
DVGW-Registration	EPDM for water Reg.-No. DW-6201BR0244, acc. to DIN EN 1074-1/-2 incl. desinfection inspection, DVGW VP646 and DVGW W270 for drinking water

Selection of possible applications

Cold -and cooling water installations, Heating installations, Drinking water and domestic water, Waste water, Swimming pool-installations, Power stations, Gas installations, Shipbuilding, etc.
(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	
1	Body	EN-GJS-400-15, EN-JS1030	
2	Seat	EPDM 73 / NBR 73 / FPM 73	
3	Disc	GX5CrNiMoN19-11-2, 1.4581	
4	Pivot	X20Cr13+QT, 1.4021+QT	X6CrNiMoTi17 12 2, 1.4571
5	Stem	X20Cr13+QT, 1.4021+QT	X6CrNiMoTi17 12 2, 1.4571
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 73 / NBR 73 / FPM 73	
* Spare part			

Information / restriction of technical rules need to be observed!

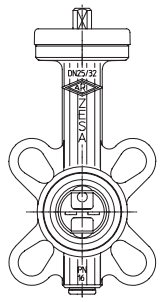
Operating instructions can be ordered by phone +49 (0)5207 / 994-0 or fax +49 (0)5207 / 994-158 or -159.

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

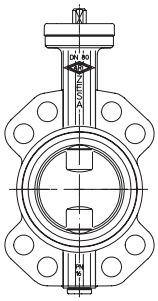
Dimensions and weights

	DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500
L	(mm)	33	33	33	43	46	46	52	56	56	60	68	78	78	102	127
H	(mm)	128	128	134	140	150	158	179	196	212	246	273	302	358	407	495
E	(mm)	58	58	66	69	81	100	109	124	140	167	203	232	258	287	354
I	(mm)	15	15	15	15	15	15	15	18	18	18	24	24	26	42	42
SW	(mm)	11	11	11	11	11	11	11	17	17	17	22	22	22	30	30
Kvs-value	(m^3/h)	26	26,5	49,6	116	259	377	763	1030	1790	3460	5070	7430	10320	13290	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	0,22
Weights	(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	111
Standard-flange dimensions refer to page 3																

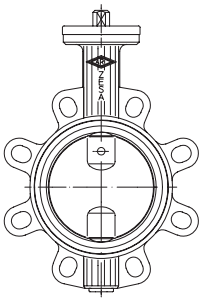
Face-to-face dimension FTF series 20 acc. to DIN EN 558-1



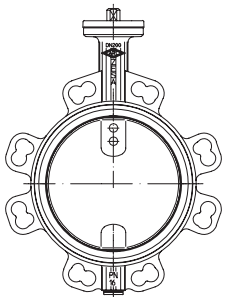
DN25-65



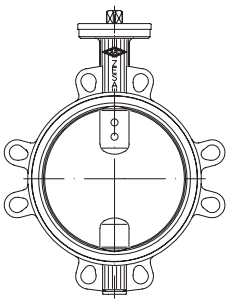
DN80-100



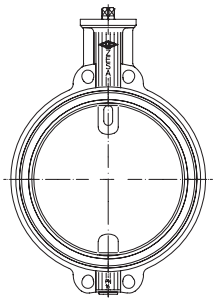
DN125-150



DN200



DN250-300

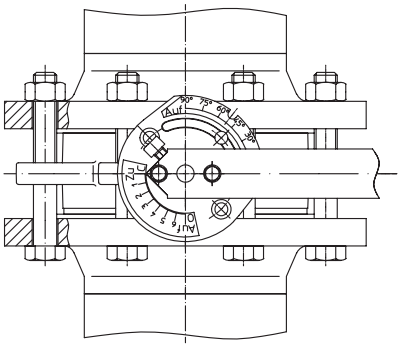


DN350-500

Pressure-temperature-ratings

Material	PN		-10°C to 120°C	130°C	150°C
EN-JS1049	16	bar	16	15,8	15,5

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



ZESA®-Wafer-type-valve

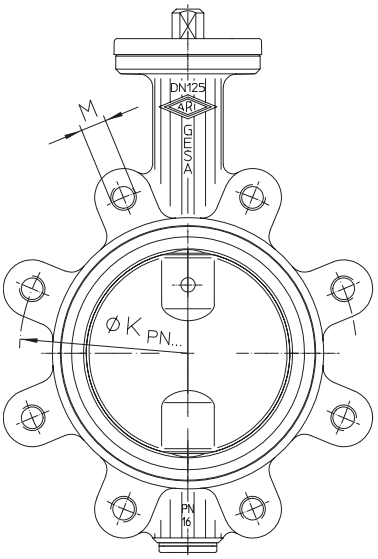
Welding neck flanges
PN 6 / PN 10 / PN 16
DIN EN 1092-1 / 11 / B1
(for slip-on-flanges acc. to DIN EN 1092-1 use ZIVA)
Hexagon screw
DIN EN ISO 4016 W.-Nr. 4.6
Hexagon nut
DIN EN ISO 4034 W.-Nr. 5

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

		DN	25 [1]	32 [1]	40	50	65	80	100	125	150	200	250	300	350	400	500
PN6	ØK	(mm)	75	90	100	110	130	150	170	200	225	280	335	395			
PN6	n x Ød1	(mm)	4x11	4x14	4x14	4x14	4x14	4x18	4x18	8x18	8x18	8x18	8x18	8x22			
PN6	Quantity	(pcs.)	4	4	4	4	4	4	4	8	8	8	12	12	--	on request	
PN6	Thread		M10	M12	M12	M12	M12	M16	M16	M16	M16	M16	M16	M20			
PN6	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	620
PN10	n x Ød1	(mm)	4x18	4x18	4x18	4x18	4x18	4x18	4x18	8x18	8x22	8x22	8x22	8x22	4x22	4x28	4x28
PN10	Quantity	(pcs.)	4	4	4	4	4	8	8	8	8	8	12	12	16	16	20
PN10	Thread		M12	M16	M16	M16	M16	M16	M16	M16	M20	M20	M20	M20	M20	M24	M24
PN10	Length	(mm)	90	90	90	100	110	110	120	130	130	140	150	160	160	200	220
PN16	ØK	(mm)	85	100	110	125	145	160	180	210	240	295	355	410	470	525	650
PN16	n x Ød1	(mm)	4x14	4x18	4x18	4x18	4x18	8x18	8x18	8x18	8x22	12x22	12x26	12x26	16x26	16x30	20x33
PN16	Quantity	(pcs.)	4	4	4	4	4	8	8	8	8	12	12	12	16	16	20
PN16	Thread		M12	M16	M16	M16	M16	M16	M16	M16	M20	M20	M24	M24	M24	M27	M30
PN16	Length	(mm)	90	90	90	100	110	110	120	130	130	140	160	170	180	220	260

[1] DN 25/32 suitable for flanges PN16 / DN 20

Butterfly valve with threaded eyelets (SG iron)



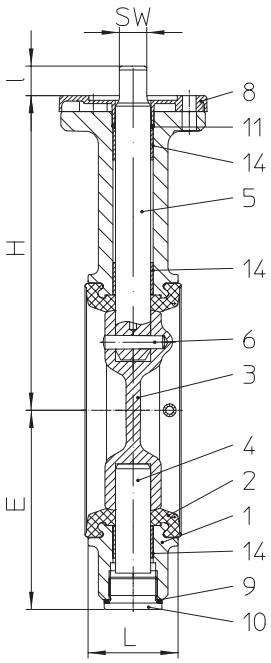


Figure	Nominal pressure	Material	Nominal diameter
21.013	PN10	EN-JS1030	DN25-500
22.013	PN16	EN-JS1030	DN25-500

Washer:	1.4581
Stem:	• 1.4021+QT • 1.4571
Seat:	• EPDM -10 °C to +130 °C • NBR -10 °C to +80 °C • FPM - 10 °C to + 150 °C (not for hot water useable)
max. gauge press.:	16 bar (DN25-150) 10 bar (DN200-500)
Actuation arrangement: (refer to page 6-11)	• Notch lever • Lock lever • Worm gear • Electric actuator • Pneumatic actuator

Test:	
Sealing leakage test	DIN EN 12266-1 Leakage rate A (DIN 3230 T3 Leakage rate 1)
DVGW-Registration	EPDM for water Reg.-No. DW-6201BR0244, acc. to DIN EN 1074-1/-2 incl. desinfection inspection, DVGW VP646 and DVGW W270 for drinking water

Selection of possible applications

Cold -and cooling water installations, Heating installations, Drinking water and domestic water, Waste water, Swimming pool-installations, Power stations, Gas installations, Shipbuilding, etc.
(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	
1	Body	EN-GJS-400-15, EN-JS1030	
2	Seat	EPDM 73 / NBR 73 / FPM 73	
3	Disc	GX5CrNiMoN19-11-2, 1.4581	
4	Pivot	X20Cr13+QT, 1.4021+QT	X6CrNiMoTi17 12 2, 1.4571
5	Stem	X20Cr13+QT, 1.4021+QT	X6CrNiMoTi17 12 2, 1.4571
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 73 / NBR 73 / FPM 73	
14	Parallel bush	P1	
* Spare part			

Information / restriction of technical rules need to be observed!

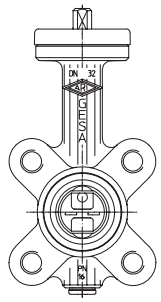
Operating instructions can be ordered by phone +49 (0)5207 / 994-0 or fax +49 (0)5207 / 994-158 or -159.

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

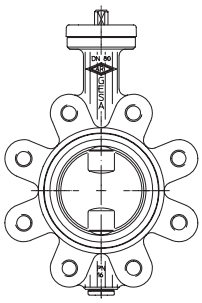
Dimensions and weights

	DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500
L	(mm)	33	33	33	43	46	46	52	56	56	60	68	78	78	102	127
H	(mm)	128	128	134	140	150	158	179	196	212	246	273	302	358	407	495
E	(mm)	58	58	66	69	81	100	109	124	140	167	203	232	258	287	354
I	(mm)	15	15	15	15	15	15	15	18	18	18	24	24	26	42	42
SW	(mm)	11	11	11	11	11	11	11	17	17	17	22	22	22	30	30
Kvs-value	(m^3/h)	26	26,5	49,6	116	259	377	763	1030	1790	3460	5070	7430	10320	13290	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	0,22
Weights	(kg)	1,8	18	2	2,8	3,2	4,8	6,2	8,8	11	15,6	24,8	36	55,6	85	146
Standard-flange dimensions refer to page 5																

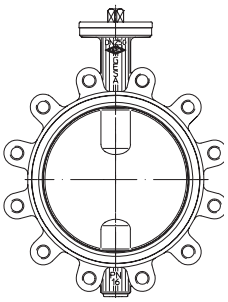
Face-to-face dimension FTF series 20 acc. to DIN EN 558-1



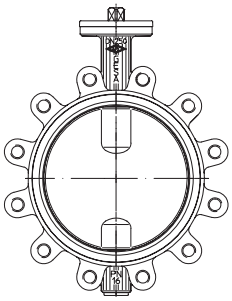
DN25-65



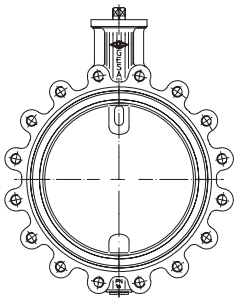
DN80-150



DN200



DN250-300

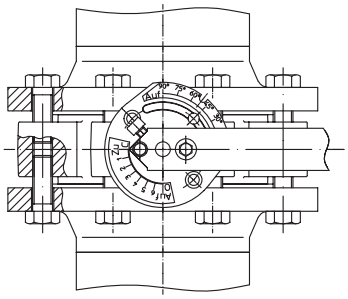


DN350-500

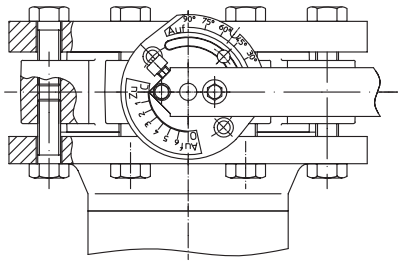
Pressure-temperature-ratings

Material	PN		-10°C to 120°C	130°C	150°C
EN-JS1049	16	bar	16	15,8	15,5

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



GESA®-Wafer-type-valve
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.-Nr. 4.6



GESA®-Pipe-end-valve
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.-Nr. 4.6

When used on end of line applications, a safety precaution (blind flange, etc.) is recommended.

To ensure the seat tightness, a blind or counter flange is necessary.

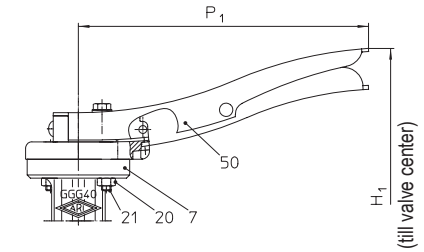
The installation between, to above deviating flanges, is not or under special care possible. Please consult us.

For all installation, modification or maintenance work, please observe regulations in force and the ARI-operating instructions.

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

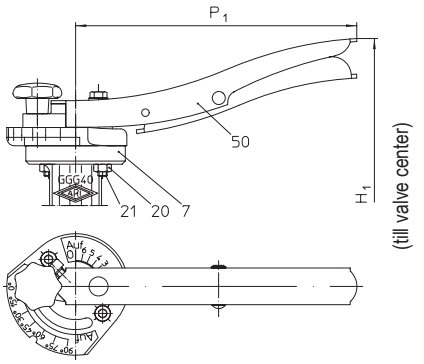
		DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500
PN10	ØK	(mm)	85	100	110	125	145	160	180	210	240	295	350	400	460	515	620
PN10	n x M	(mm)	4xM12	4xM16	4xM16	4xM16	4xM16	8xM16	8xM16	8xM16	8xM20	8xM20	12xM20	12xM20	16xM20	16xM24	20xM24
PN10	Quantity	(pcs.)	8	8	8	8	8	16	16	16	16	16	24	24	32	32	40
PN10	Thread		M12	M16	M16	M16	M16	M16	M16	M16	M20	M20	M20	M20	M20	M24	M24
PN10	Length	(mm)	30	30	30	35	35	40	40	45	45	50	55	55	60	70	85
PN16	ØK	(mm)	85	100	110	125	145	160	180	210	240	295	355	410	470	525	650
PN16	n x Ød1	(mm)	4xM12	4xM16	4xM16	4xM16	4xM16	8xM16	8xM16	8xM16	8xM20	12xM20	12xM24	12xM24	16xM24	16xM27	20xM30
PN16	Quantity	(pcs.)	8	8	8	8	8	16	16	16	16	24	24	24	32	32	40
PN16	Thread		M12	M16	M16	M16	M16	M16	M16	M16	M20	M20	M24	M24	M24	M27	M30
PN16	Length	(mm)	30	30	30	35	35	40	40	45	45	50	55	60	60	75	100

with lever



Notch lever

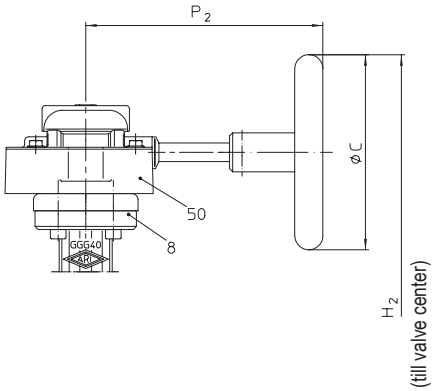
For diameters larger than DN 125 we recommend using a gear mechanism. Gear recommended for inaccessible installation (see below).



Lock lever

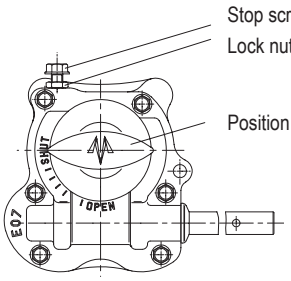
- Cap convertable for lock lever
- Variable adjustment (with 0 - 90° angle positioning) (With variable adjustment)

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 ±5° by a locking screw.

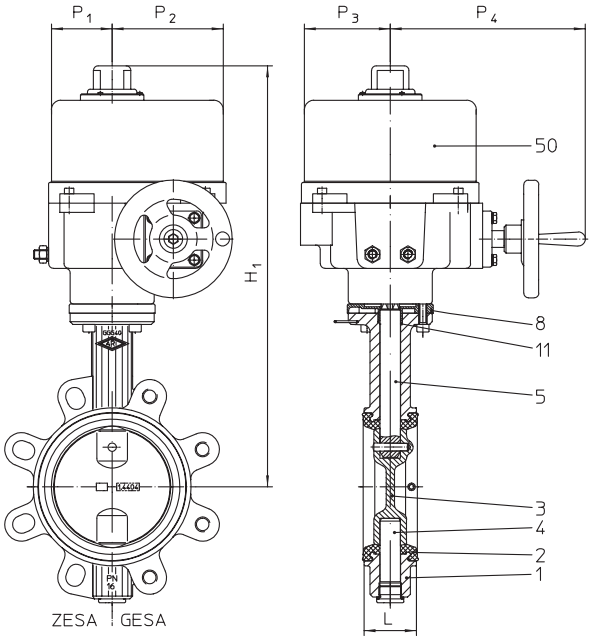
Parts

Pos.	Description	Fig. 20./21./22.012; 21./22.013
7	Lever cap *	PA 6
8	Insulating cap *	PA 6
20	Hexagon nut *	5-A2B
21	Pan head screw *	8.8-A2B
50	Notch lever	DC01, 1.0330 (surface treatment)
50	Clamp lever	DC01, 1.0330 (surface treatment)
50	Worm gear	
* Spare part		

Dimensions and weights

	DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500
H1	(mm)	187	187	193	199	209	217	238	263	279	313	--	--	--	--	--
P1	(mm)	184	184	184	184	184	184	184	273	273	273	--	--	--	--	--
H2	(mm)	217	217	223	229	239	247	268	285	301	335	428	457	513	603	691
P2	(mm)	152	152	152	152	152	152	152	152	152	152	278	278	278	320	320
ØC	(mm)	125	125	125	125	125	125	125	125	125	125	250	250	250	315	315
Type of gear		SE07	SE07	SE07	SE07	SE07	SE07	SE07	SE07	SE07	SE07	SE10	SE10	SE10	SE12	SE12
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® with lever	(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	120
GESA® with gear	(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	157

Butterfly valve with electric rotary actuator Type: rotork



rotork
Electric rotary actuator

- for short time duty S 2-5 Min.
  (Periodic duty S3 30% duty cicle, max. 60 c/h,
  max. modulating torque = ca. 50% rated torque)
- 230V 50Hz
- Enclosure IP 67
- Temperature guard in the motor
- Travel switch
- **Accessories:**
  - Potentiometer (1000 Ohm)
  - Positioner 4-20 mA
  - Position-transmitter 4-20 mA
  - Heating
- **Voltages:**
  12VDC/VAC, 24VDC/VAC, 110V
  other voltages on request

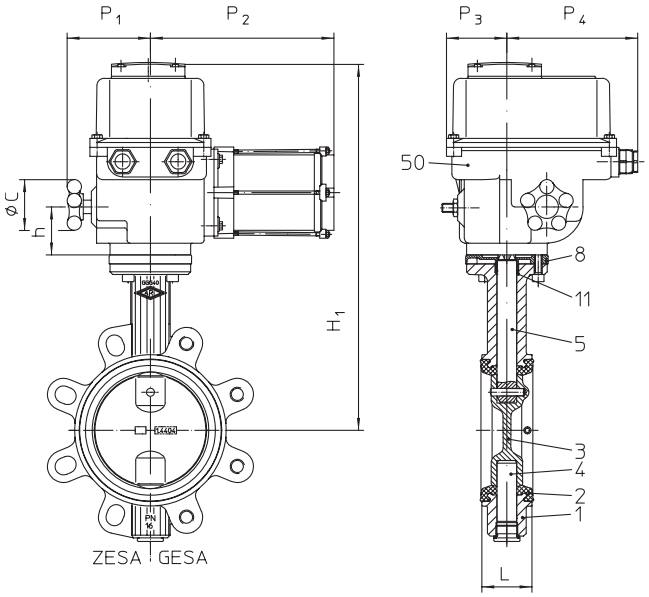
For connection refer to terminal connection in the operating instructions of the actuator !

Dimensions and weights

	DN	25	32	40	50	65	80	100	125	150	200
H1	(mm)	278	278	284	290	300	308	379	451	467	501
P1	(mm)	35	35	35	35	35	35	54	82	82	82
P2	(mm)	80	80	80	80	80	80	54	118	118	118
P3	(mm)	54	54	54	54	54	54	54	100	100	100
P4	(mm)	54	54	54	54	54	54	54	230	230	230
Type of actuator		ROM-1						ROM-A	ROM-2	ROM-3	
Operating time	(s)	13						24	17	26	
ZESA®	(kg)	3,3	3,3	3,5	4	4,4	5	6,9	16	17,7	22,1
GESA®	(kg)	3,7	3,7	4	4,7	5,2	6,8	9,3	18,5	20	25

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

Butterfly valve with electric rotary actuator Type: Deufra



Deufra
Electric rotary actuator

- Type of operation on/off S4 30% (optional: for control S4 50%)
- 230V 50Hz (400V 50Hz (not at OA3))
- Enclosure IP 67
- Temperature guard in the motor
- Heating
- **Accessories:**
  - Travel switch
  - Potentiometer
  - Valve positioner 0-10V / 4-20mA
  - Position-transmitter
- **Special actuators:**
  - Reset to start on failure Type FQ

  Other voltages on request

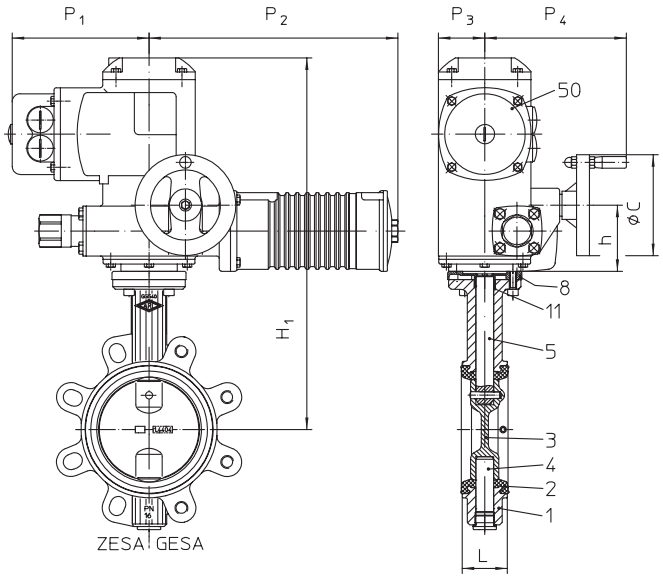
For connection refer to terminal connection in the operating instructions of the actuator !

Dimensions and weights

	DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500
H1	(mm)	352	352	358	364	374	382	403	420	436	470	453	527	585	620	708
h	(mm)	53	53	53	53	53	53	53	53	53	53	100	100	100	86	86
ØC	(mm)	60	60	60	60	60	60	60	60	60	100	160	250	250	250	250
P1	(mm)	90	90	90	90	90	90	90	90	90	98	167	169	169	172	172
P2	(mm)	160	160	160	160	160	160	202	202	202	260	312	340	340	392	392
P3	(mm)	65	65	65	65	65	65	65	65	65	65	89	89	89	133	133
P4	(mm)	125	125	125	125	125	125	125	125	125	125	226	226	226	284	284
Type of actuator		OA3						OA6	OA8		OA15	AS25	AS50		BS100	
Operating time	(s)	6						6	6		15	10	30		30	
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	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	181

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

Butterfly valve with electric rotary actuator Type: Auma



Auma
Electric rotary actuator

- for temporary service S 2-15 min. (or control S4 25%)
- 400V 50Hz (230V 50Hz)
- Enclosure IP 67
- Temperature guard in the motor
- Heating
- **Accessories**:
  - Travel switch
  - Potentiometer
  - Auma Matic
  - Valve positioner 0-10V / 4-20mA
  - Position-transmitter

  Other voltages on request

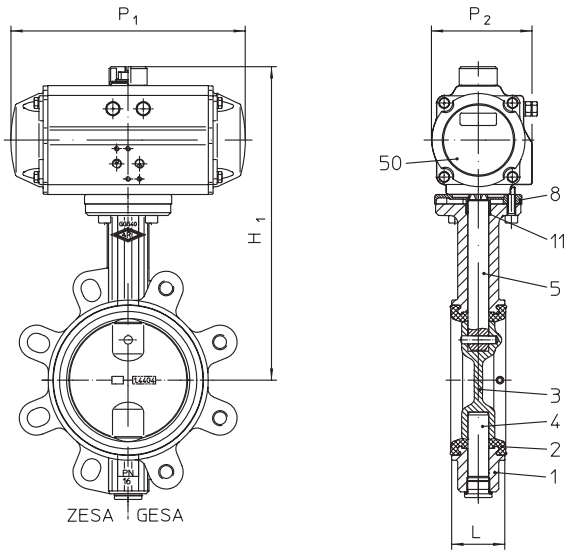
For connection refer to terminal connection in the operating instructions of the actuator !

Dimensions and weights

	DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500
H1	(mm)	403	403	409	415	425	433	454	471	487	521	548	593	651	722	810
h	(mm)	82	82	82	82	82	82	82	82	82	82	82	88	88	102	102
ØC	(mm)	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160
P1	(mm)	195	195	195	195	195	195	195	195	195	195	195	205	205	205	205
P2	(mm)	291	291	291	291	291	291	291	291	291	291	291	301	301	301	301
P3	(mm)	58	58	58	58	58	58	58	58	58	58	58	75	75	75	75
P4	(mm)	191	191	191	191	191	191	191	191	191	191	191	216	216	233	233
Type of actuator		SG05										SG07	SG10		SG12	
Operating time	(s)	16										16	16		32	
ZESA®	(kg)	19,9	19,9	21,1	20,6	21	21,6	22,4	24,6	26	30,5	38,4	53,5	69	99	140
GESA®	(kg)	20,3	20,3	20,6	21,3	21,8	23,4	24,8	27	28,4	32,1/33,4	44,5	62	82	120	180

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

Butterfly valve with pneumatic rotary actuator Type: AIR TORQUE



AIR TORQUE
Pneumatic rotary actuator

- Function: double acting
  single acting, Spring closes on air failure (opens)
- Actuating pressure 6 bar (=0,6 MPa)
- Position indicator
- **Accessories:**
  - Limit switch open / close
  - Solenoid valve
  - Exhaust silencer with throttling function
  - Valve positioner

  Other actuating pressures on request

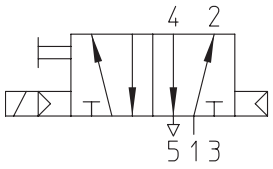
For connection refer to terminal connection in the operating instructions of the actuator !

Dimensions and weights

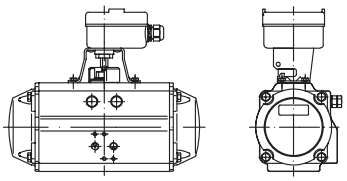
		DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500
double acting	H1	(mm)	233	233	239	245	255	263	301	331	347	393	448	509	567	635	792
	P1	(mm)	159	159	159	159	159	159	211	248	248	269	315	409	409	438	543
	P2	(mm)	83	83	83	83	83	83	95	106	106	123	141	172	172	187	222
	Type of actuator		DR30						DR60	DR100		DR150	DR220	DR450		DR600	DR1200
	ZESA®	(kg)	3	3	3,2	3,7	4,1	4,7	6,6	10	11,4	18,6	27,8	43	59	90	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	187
single acting	H1	(mm)	233	233	239	245	272	293	326	371	399	453	500	597	655	758	877
	P1	(mm)	159	159	159	159	211	248	269	315	345	409	438	543	543	621	684
	P2	(mm)	83	83	83	83	95	106	123	141	152	172	187	222	222	262	330
	Type of actuator (closes)		30SC6				60SC6	100SC6	150SC6	220SC6	300SC6	450SC6	600SC6	1200SC6		2000 SC6	3000 SC6
	Type of actuator (opens)		30SO5				60SO5	100SO5		150SO5	220SO5		450SO5	900SO5		1200 SO5	2000 SO5
	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	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	253

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

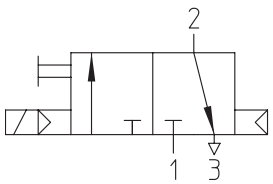
Solenoid valve:
for control of double acting actuators
5/2 - way



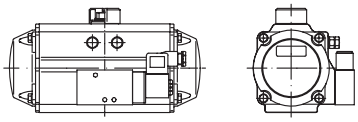
Accessories: Limit switch in housing



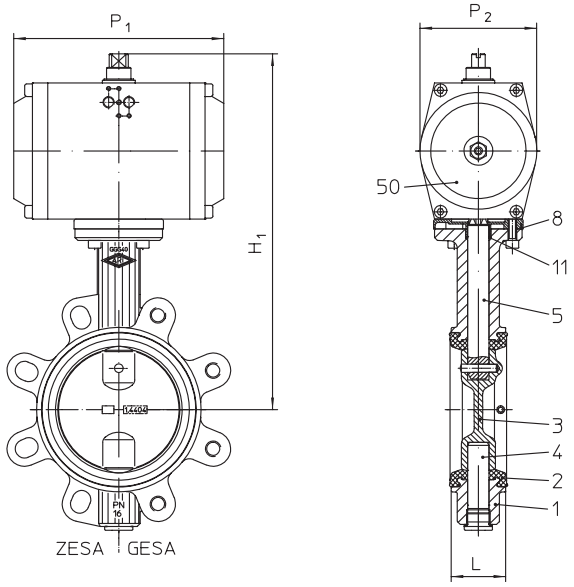
Solenoid valve:
for control of single acting actuators
3/2 - way



Accessories: Solenoid valve



Butterfly valve with pneumatic rotary actuator Type: bar



bar
Pneumatic rotary actuator

- 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
  - Position indicator
  - Valve positioner

  Other actuating pressures on request

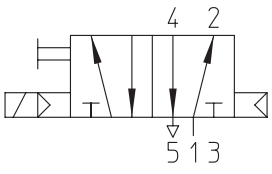
For connection refer to terminal connection in the operating instructions of the actuator !

Dimensions and weights

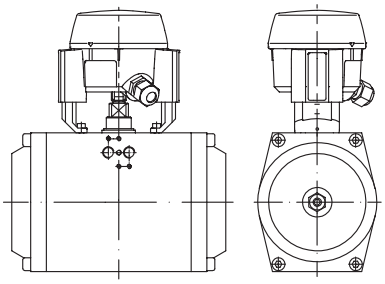
		DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500
double acting	H1	(mm)	232	232	238	244	254	276	297	343	359	416	443	530	588	637	782
	P1	(mm)	127	127	127	127	127	140	140	209	209	222	292	337	337	377	462
	P2	(mm)	72	72	72	72	72	82	82	108	108	120	120	172	172	172	224
	Type of actuator		GTD 58/90					GTD 68/90		GTD 98/90		GTD 110/90	GTD 115/90	GTD 143/90		GTD 163/90	GTD 210/90
	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	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	183
single acting	H1	(mm)	246	246	252	258	280	296	349	366	382	436	501	587	645	741	829
	P1	(mm)	140	140	140	140	161	182	222	222	292	298	337	462	462	603	603
	P2	(mm)	82	82	82	82	94	100	120	120	120	137	172	224	224	272	272
	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	
	ZESA®	(kg)	3	3	3,2	3,7	4,9	6	9,8	12,4	16	22,8	37,5	66,8	82	136	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	217

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

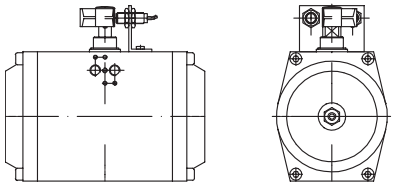
Solenoid valve:
for control of double acting actuators
5/2 - way



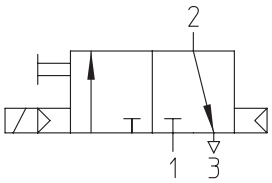
Accessories: Limit switch in housing



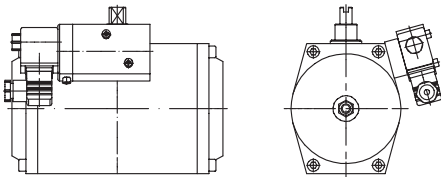
Accessories: Limit switch

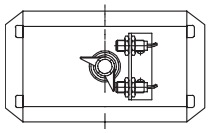


Solenoid valve:
for control of single acting actuators
3/2 - way

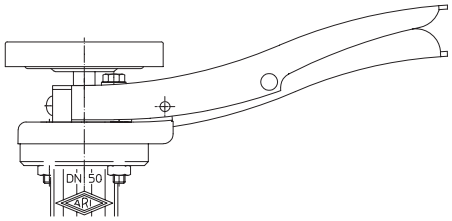


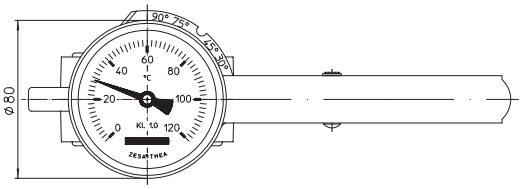
Accessories: Solenoid valve





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)

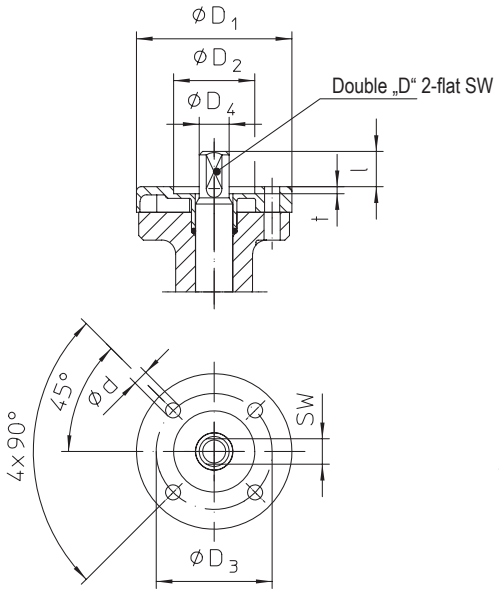
Diameter range:
DN 25 / 32 - DN 40
DN 50 - DN 80
DN 100
DN 125 - DN 200

Order data:
Thermo-Appliance with range .....,
for diameter range .....

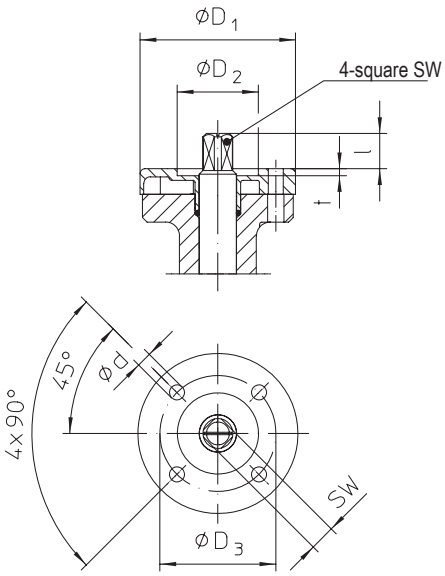
Indicator installed by insertion into the bore hole of the lever and the stem - convertible on site.

Actuator flange connection

DN25-200



DN250-500



	DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500
Connection ISO5211		F 05							F 07			F 10			F 14	
Double „D“ 2-flat SW	(mm)	11 $_{d11}$							17 $_{d11}$			--			--	
4-square SW	(mm)	--							--			22 $_{d11}$			30 $_{d11}$ [1]	
Ød	(mm)	7							9			11			18	
ØD1	(mm)	65							90			125			175	
ØD2	(mm)	35 ^{H10}							55 ^{H10}			70 ^{H10}			100 ^{H10}	
ØD3	(mm)	50							70			102			140	
ØD4	(mm)	12,9							19,7			--			--	
l	(mm)	15							18			24			40	
t	(mm)	3							3			3			4	

[1] different 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

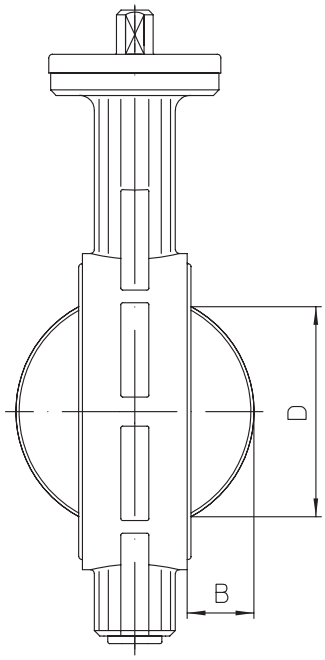
Please indicate in your order, if the valves are to be installed in hazardous areas (ATEX).

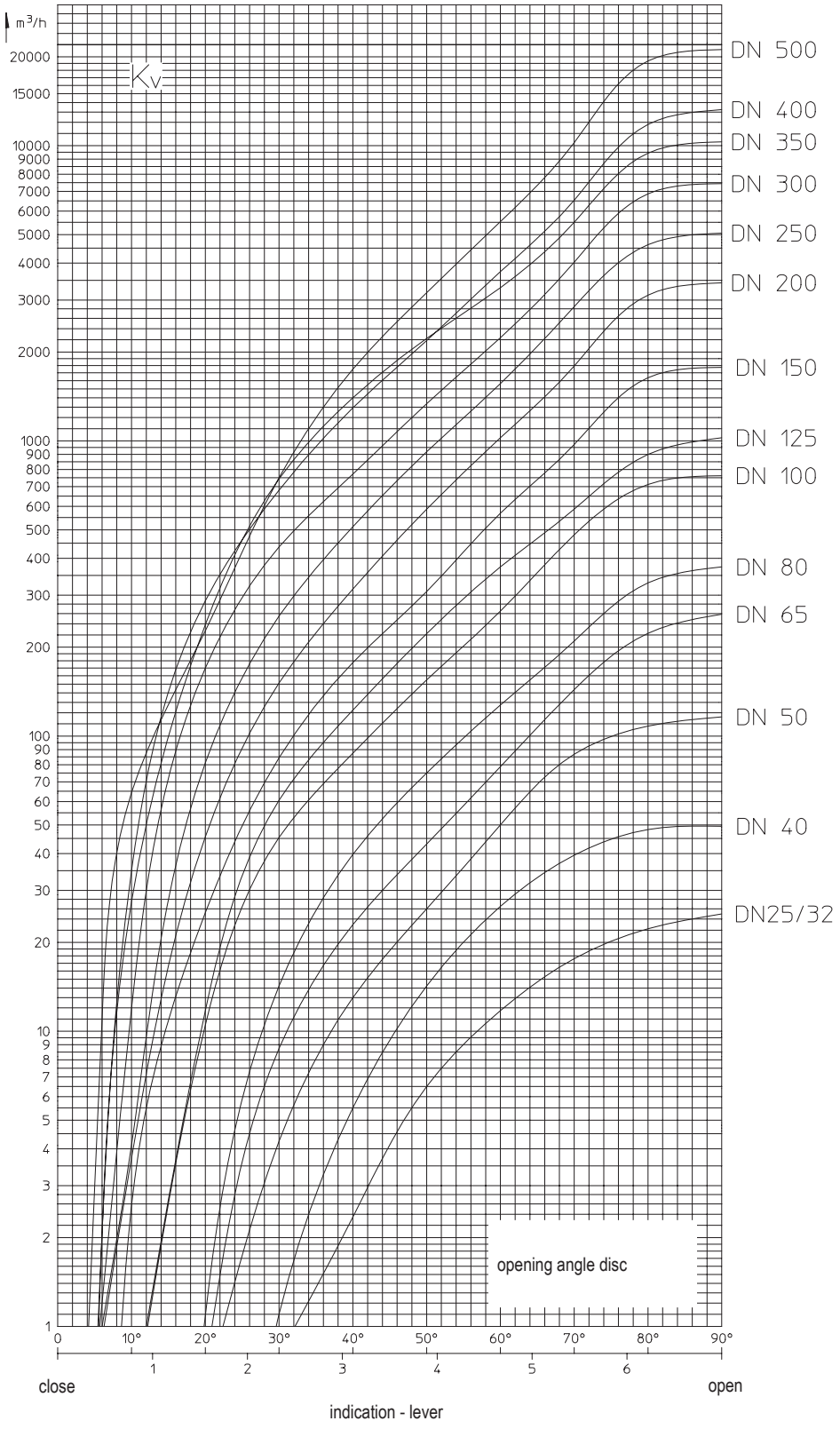
Example:
Figure 22.012; Nominal pressure PN16; Nominal diameter DN100; Seat of EPDM, Stem / disc of 1.4581/1.4021, with notch lever and integrated Thermo-Indication (-20 to 40°C).

Dimensions in mm
Weights in kg
1 bar ≙ 10^5 Pa ≙ 0,1 MPa
Kvs in m^3/h

Kvs-value and Zeta-value

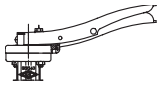
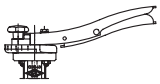
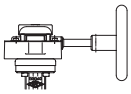
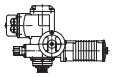
	DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500
Kvs-value	(m^3/h)	26	26,5	49,6	116	259	377	763	1030	1790	3460	5070	7430	10320	13290	21180
Zeta-value	--	0,93	2,4	1,7	0,75	0,43	0,46	0,27	0,37	0,25	0,21	0,24	0,23	0,23	0,23	0,22





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

	DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500
B	(mm)	--	--	5	5	11	18	25	36	48	71	91	112	132	147	188
D	(mm)	--	--	26	29	49	68	88	115	142	194	243	292	333	383	486

DN				25-50	65	80	100	125	150	200	250	300	350	400	500
Connection-Flange ISO 5211				F 05				F 07			F 10			F 14	
Double „D“ 2-flat SW			(mm)	11 $_{d11}$				17 $_{d11}$			--			--	
4-square SW			(mm)	--				--			22 $_{d11}$			30 $_{d11}$ different from EN ISO5211	
Manual actuation	notch lever 		Size	I				II			--				
Manual actuation	clamp lever 		Size	I				II			--				
Manual actuation	worm gear 		Type	SE07							SE10			SE12	
Electric rotary actuator	rotork (230V 50Hz)		Type	ROM-1			ROM-A	ROM-2	ROM-3		--				
Electric rotary actuator	Deufra (230V 50Hz)		Type	OA3			OA6	OA8		OA15	AS25	AS50		BS100	
Electric rotary actuator	Auma (400V 50Hz) 		Type	SG05							SG07	SG10		SG12	
Pneumatic rotary actuator	AIR TORQUE	double acting	Type	DR30			DR60	DR100		DR150	DR220	DR450		DR600	DR1200
Pneumatic rotary actuator		single acting spring closes	Type	30SC6	60SC6	100SC6	150SC6	220SC6	300SC6	450SC6	600SC6	1200SC6		2000 SC6	3000 SC6
Pneumatic rotary actuator		single acting spring opens	Type	30SO5	60SO5	100SO5		150SO5	220SO5		450SO5	900SO5		1200 SO5	2000 SO5
Pneumatic rotary actuator	bar	double acting	Type	GTD58/90		GTD68/90		GTD98/90		GTD 110/90	GTD 115/90	GTD143/90		GTD 163/90	GTD 210/90
Pneumatic rotary actuator		single acting spring closes	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		GTE250/90-8	
Pneumatic rotary actuator		single acting 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		GTE250/90-6	

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