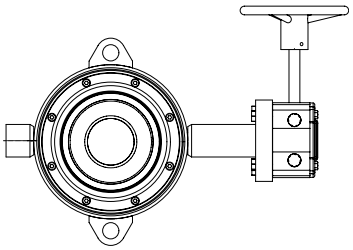
ARI-ZEDOX® - Fig. 121 - Butt weld ended high performance valve - Double offset

ARI-ZEDOX®
with worm gear



Page 4

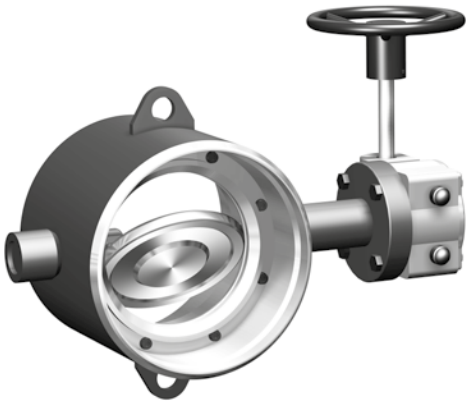
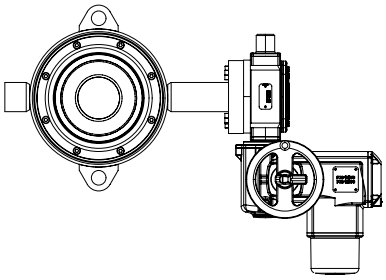


Fig. 121 -
ARI-ZEDOX® butt weld ended

ARI-ZEDOX®
with electric rotary actuator
Auma

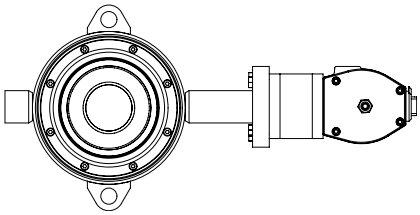


Page 5



DN200-DN250
honeycomb
shape disc

ARI-ZEDOX®
with pneumatic actuator

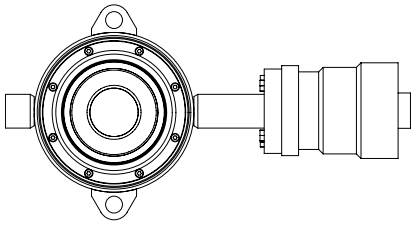


Page 6



DN300-DN1600
Disc

ARI-ZEDOX®
with hydraulic actuator



on request

Features:

- Carbon steel / stainless steel body
- Double offset construction:
  Rotary movement (90°) without wear or friction
- Metallic or PTFE+C sealing
- Bi-directional tightness
- Replaceable seat ring

Butt weld ended high performance valve (High temperature steel, Stainless steel)

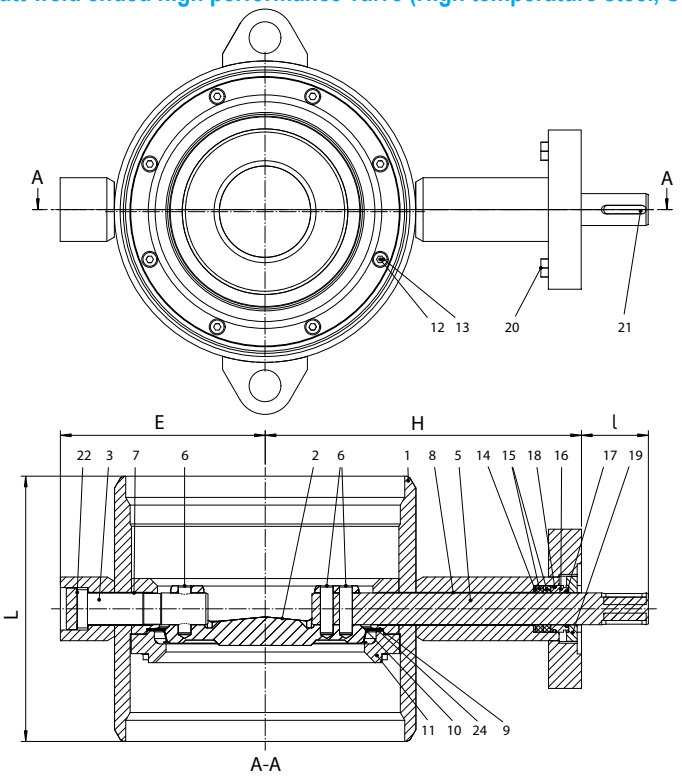


Figure	Nominal pressure	Material	Nominal diameter	Sealing element
84.121	PN6 - PN25	1.0425 / 1.0565	DN 200-700	PTFE+C (TS)
			DN 200-1600	Stainless steel (CS)
54.121	PN6 - PN25	1.4307 [1]	DN 200-700	PTFE+C (TS)
			DN 200-1600	Stainless steel (CS)

Face-to-face dimension series 14 acc. to DIN EN 12982

[1] 1.4404 also possible

Sealing element:	
• PTFE+C (TS) [2]	-40°C to 180°C
• Stainless steel (CS)	-40°C to 260°C
• higher temperatures up to 400°C on request	
[2] Observe operating limits with sealing PTFE+C, refer to page 3	
Max. differential pressure:	
84.121	• 16 bar - standard
54.121	• 25 bar - option

Actuation arrangement:	
• Worm gear • Electric actuator	• Pneumatic actuator • Hydraulic actuator
Sealing leakage test:	
PTFE+C	• DIN EN 12266-1 Leakage rate A
Stainless steel	• DIN EN 12266-1 Leakage rate B

Options on request

Parts				
Pos.	**Sp.p.**	**Description**	**Fig. 84.121**	**Fig. 54.121**
1		Body	1.0425 / 1.0565	1.4307; special material by request
2		Disc	1.4408 (DN200-DN250); 1.4460 (DN300-DN1600)	
3		Pivot	1.4418	
5		Stem	1.4418	
6		Pin	1.4462	
7		Bushing	PTFE on stainless steel net	
8		Bushing	PTFE on stainless steel net	
9 / 24	x	Shim [3]	978-C / SIGRAFLEX HOCHDRUCK (SIGRAFLEX HOCHDRUCK for steam version)	
10	x	Seat ring	CS: 1.4404 (optional: 1.4539) TS: PTFE+C; special material on request	
11		Retaining ring	1.0425	1.4307; special material by request
12		Socket screw	A4-80	
13		Washer	ZN	
14		Back-up-ring	1.4404	
15	x	Box packing	Graphite	
16		Shaft seal bushing	1.4404	
17 / 18	x	O-ring	EPDM (not fitted in steam version)	
19		Gland	1.4404	
20		Hexagonal screw	A4-70	
21		Key	1.0503	
22		Axial-washer	PTFE on stainless steel net	
	└ Spare parts			

[3] Only for CS-version

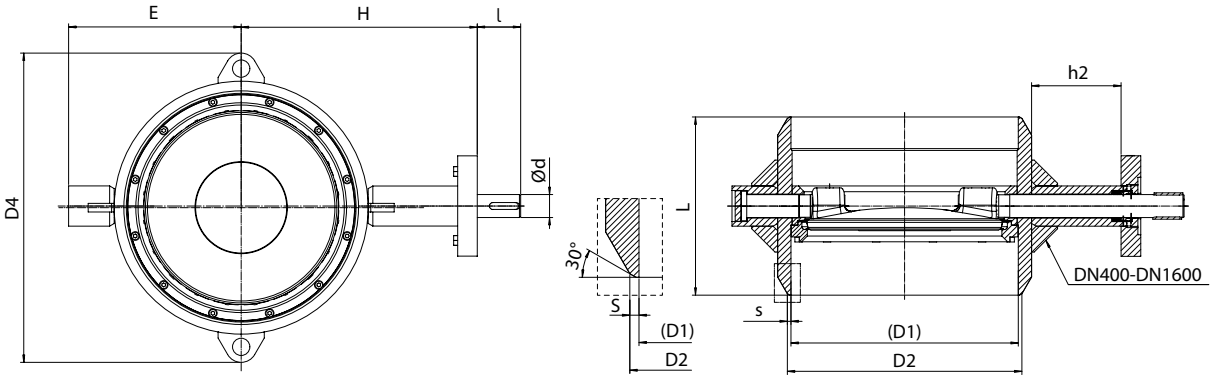
Information / restriction of technical rules need to be observed!

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

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

TS = PTFE+C (**T**eflon) seal and **S**tainless steel disc

CS = **C**hromed seatring and **S**tainless steel disc



DN			200	250	300	350	400	450	500	600	700	800	900	1000	1200	1400	1600
Face-to-face dimension series 14 acc. to DIN EN 12982																	
L		(mm)	230	250	270	290	310	330	350	390	430	470	510	550	630	710	790
Dimensions																	
D1 (DIN end)		(mm)	210,1	263,0	312,7	344,4	393,8	444,4	495,4	593,6	693,6	795,2	894,4	994,0	1195	1392	1592
D2 (DIN end)		(mm)	219,1	273,0	323,9	355,6	406,4	457,0	508,0	609,6	711,2	812,8	914,4	1016	1220	1420	1620
s (DIN end)		(mm)	4,5	5	5,6	5,6	6,3	6,3	6,3	8	8,8	8,8	10	11	12,5	14	14
D1 (GOST end)		(mm)	210,1	263,0	312,7	365,0	414,0	-	514,0	616,0	704,0	804,0	902,0	1000	1195	1392	1592
D2 (GOST end)		(mm)	219,1	273,0	323,9	377,0	426,0	-	530,0	630,0	720,0	820,0	920,0	1020	1220	1420	1620
s (GOST end)		(mm)	4,5	5	5,6	6	6	-	8	7	8	8	9	10	12,5	14	14
D4		(mm)	233	385	435	465	540	590	660	760	860	955	1070	1200	1440	1770	1918
Ød		(mm)	25	30	35	40	40	50	50	60	70	70	90	100	140	170	170
E		(mm)	154	193	229	255	299	326	351	376	439	490	575	636	805	962	1062
H		(mm)	259	298	323	353	409	445	470	548	600	651	718	764	873	1018	1118
h2		(mm)	115	125	125	125	155	149	149	178	181	183	194	183	182	206	206
l		(mm)	58	63	69	75	75	86	86	103	119	119	125	130	160	180	165
Flange ISO 5211			F10	F12	F12	F14	F14	F16	F16	F16	F25	F30	F30	F30	F35	F40	F40
Weights for butt weld ended high performance valve																	
1.0425 / 1.0565	Fig. 84.121	(kg)	27	41	56	82	111	148	196	315	403	483	694	854	2050	3210	4180
1.4307	Fig. 54.121	(kg)															

Pressure-temperature-ratings			**Intermediate values for max. permissible operational pressure can be determined by linear interpolation of the given temperature / pressure chart.**						
acc. to Högfors standard	**PN**		**-40 °C**	**0 °C**	**50 °C**	**100°C**	**150°C**	**200°C**	**250°C**	**260°C**
1.0425 / 1.0565	16	(bar)	16	16	16	15	14,2	13,4	12,3	12,06
1.0425 / 1.0565	25	(bar)	25	25	25	23,4	22,2	21	19,2	18,84
acc. to Högfors standard	**PN**		**-40 °C**	**0 °C**	**50 °C**	**100°C**	**150°C**	**200°C**	**250°C**	**260°C**
1.4307	16	(bar)	16	16	16	14,8	13,2	11,7	10,8	10,62
1.4307	25	(bar)	25	25	25	23,1	20,7	18,2	16,8	16,52
acc. to Högfors standard	**PN**		**-40 °C**	**0 °C**	**50 °C**	**100°C**	**150°C**	**200°C**	**250°C**	**260°C**
1.4404	16	(bar)	16	16	16	15,7	14,3	13	11,7	11,4
1.4404	25	(bar)	25	25	25	24,5	22,4	20,3	18,2	17,8

Operating limits sealing element [1]	**Intermediate values for max. permissible operational pressure can be determined by linear interpolation of the given temperature / pressure chart.**									
	-40 °C	**0 °C**	**50 °C**	**100 °C**	**120 °C**	**150 °C**	**180 °C**	**200 °C**	**250 °C**	**260 °C**
Sealing PTFE+C (TS)	25	25	25	25	25	14,5	4	-	-	-

[1] Note additional restrictions of the pressure-temperature-ratings!

DN			200	250	300	350	400	450	500	600	700	800	900	1000	1200	1400	1600
Max. differential pressure																	
Sealing PTFE+C (TS)	Disc Side	(bar)	25	25	25	25	16	16	16	16	16	-	-	-	-	-	-
	Shaft Side	(bar)	25	25	25	25	25	16	16	16	16	16	-	-	-	-	-
	Bi-directional	(bar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sealing stainless steel (CS)	Disc Side	(bar)	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
	Shaft Side	(bar)	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
	Bi-directional	(bar)	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25

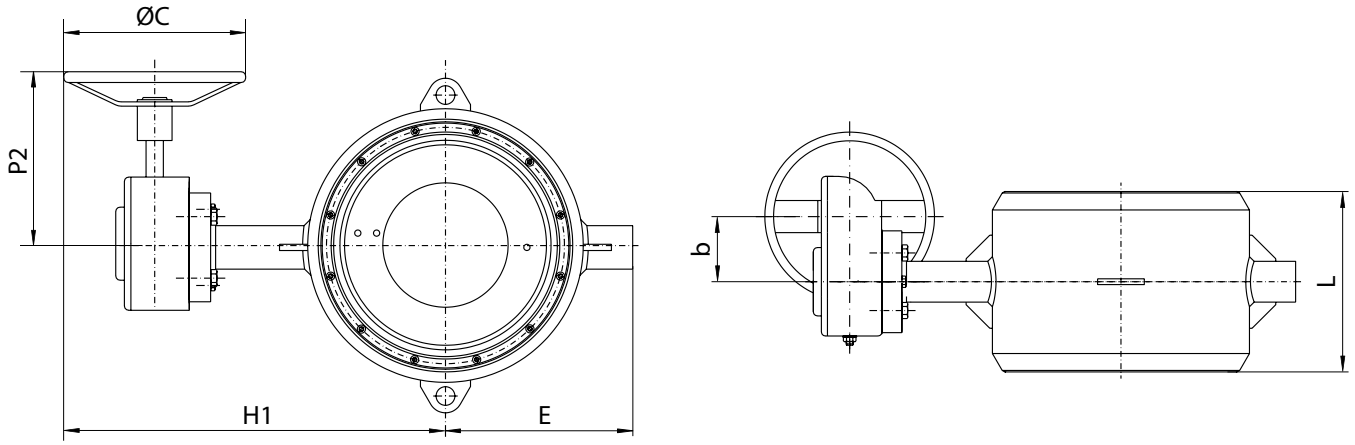
Operation torque for max. differential pressure 16 bar (bi-directional flow)																			
PN25 [2]	Sealing PTFE+C	Torque [3]	(Nm)	190	320	550	850	1300	1800	2400	3400	5500	-	-	-	-	-	on request
	Sealing stainless steel		(Nm)	240	400	700	1100	1600	2200	3000	4200	6800	10000	13000	16000	24000	34000	

[2] **max. differential pressure 16bar!**
[3] for steam duty use the next size up

ZEDOX® Butt weld ended high performance valve with worm gear

Opening and closing of the valves with the handwheel.

The position of the disc can be seen on a position indicator on top of the gear.



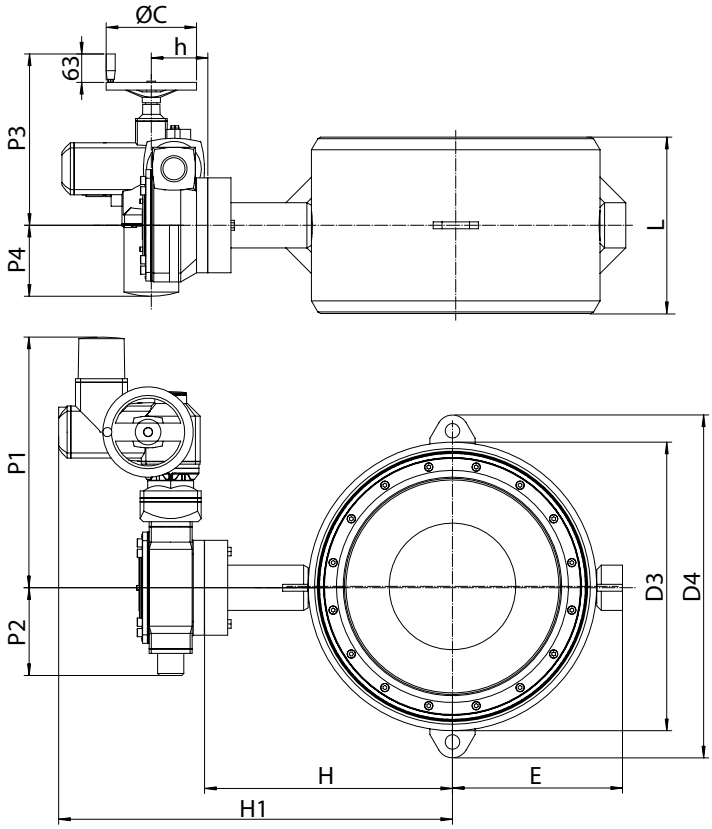
Parts			
Pos.	**Sp.**	**Description**	**Fig. 84./54.121**
500	x	Worm gear	
		└ Spare parts	

DN		**200**	**250**	**300**	**350**	**400**	**450**	**500**	**600**	**700**	**800**	**900**	**1000**	**1200**	**1400**	**1600**
Face-to-face dimension series 14 acc. to DIN EN 12982																
L	(mm)	230	250	270	290	310	330	350	390	430	470	510	550	630	710	790
Dimensions																
b	(mm)	71	71	71	86	86	130	130	53	263	263	278	384	384	279	343
ØC	(mm)	200	300	300	400	400	500	500	500	500	500	500	500	600	700	700
E	(mm)	154	193	229	255	299	326	351	376	439	490	575	636	805	962	1062
H1	(mm)	400	489	513	594	651	750	775	858	910	960	1027	1114	1273	1468	1662
P2	(mm)	220	282	282	291	291	387	387	382	500	500	546	571	571	621	683
Type of gear		AB550N	AB550N	AB550N	AB880N	AB880N	AB2000N	AB2000N	AB2000N	AB6800N-PR4	AB6800N-PR4	AB6800N-PR6	AB6800N-PR6	A200N-PR10	IW9	IW10

Weights with manual gear Rotork [1]																
1.0425 / 1.0565	Fig. 84.121	(kg)	36	50	65	96	125	172	220	339	466	546	758	918	2184	3610	4588
1.4307	Fig. 54.121	(kg)															

[1] weight of hand wheel is not included

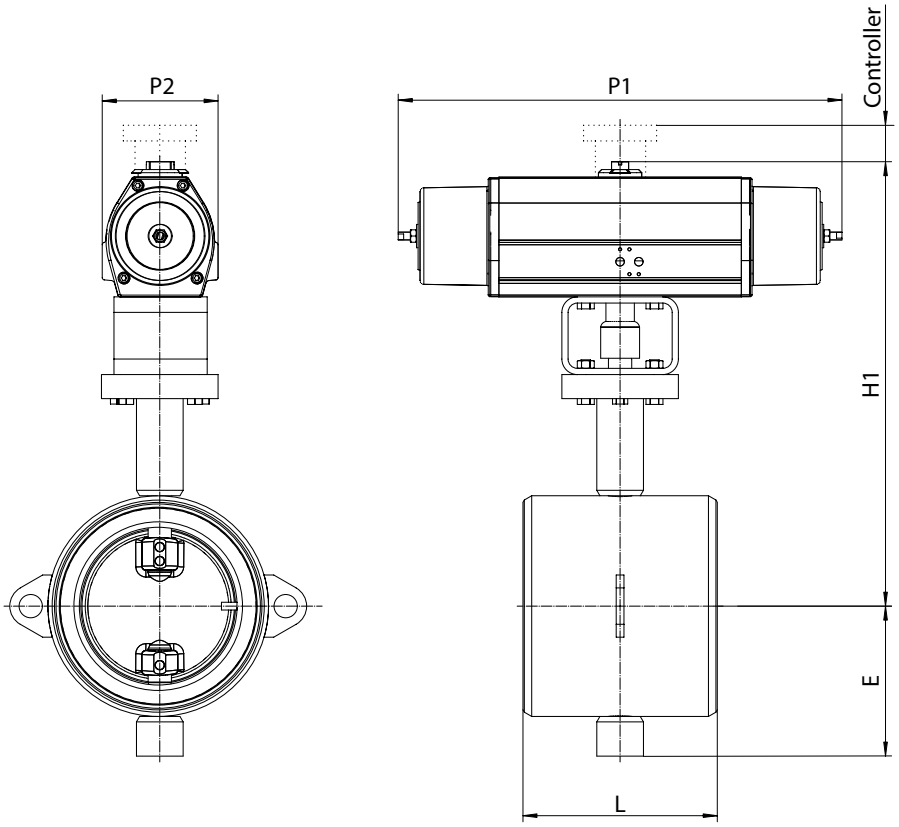
ZEDOX® Butt weld ended high performance valve with electric rotary actuator Auma



DN		200	250	300	350	400	450	500	600	700	800	900	1000	1200	1400	1600
Face-to-face dimension series 14 acc. to DIN EN 12982																
L	(mm)	230	250	270	290	310	330	350	390	430	470	510	550	630	710	790
Dimensions																
ØC	(mm)	160	160	160	200	200	160	160	200	200	160	160	160	160	200	on request
D3	(mm)	233	284	334	389	440	490	531	638	725	835	946	1060	1279	1492	
D4	(mm)	-	382	432	487	538	588	651	758	845	955	1066	1200	-	-	
E	(mm)	154	193	229	255	299	326	351	376	439	490	575	636	805	962	
h	(mm)	80	85	85	107	107	115	115	125	125	130	130	130	155	190	
H	(mm)	259	298	323	353	409	445	470	548	600	651	718	764	873	1018	
H1	(mm)	536	581	606	658	714	758	783	871	922	979	1046	1092	1226	1406	
P1	(mm)	393	422	422	428	428	547	547	554	554	698	698	758	758	860	
P2	(mm)	98	127	127	133	133	189	189	194	194	290	290	367	367	402	
P3	(mm)	302	315	315	334	334	352	352	379	379	412	412	452	452	504	
P4	(mm)	214	201	201	202	202	164	164	157	157	175	175	208	208	258	
Type of actuator PN25 max. differential pressure 16 bar, for CS- and TS-version		SA07.2-GS50.3 (51:1)-F10	SA07.6-GS63.3 (51:1)-F12	SA07.6-GS63.3 (51:1)-F12	SA10.2-GS80.3 (53:1)-F14	SA10.2-GS80.3 (53:1)-F14	SA07.6-GS100.3 (208:1)-F16	SA07.6-GS100.3 (208:1)-F16	SA10.2-GS125.3 (208:1)-F16	SA10.2-GS125.3 (208:1)-F25	SA07.6-GS160.3 (880:1)-F30	SA07.6-GS160.3 (880:1)-F30	SA07.6-GS200.3 (864:1)-F30	SA10.2-GS250.3 (848:1)-F35	SA10.2-GS315 (1696:1) F40	
Output drive	1/min	22	22	22	22	22	45	45	45	45	90	90	63	63	125	
Operating time	s/90°	35	35	35	36	36	69	69	69	69	147	147	206	202	204	

Weights for with electric actuator																
1.0425 / 1.0565	Fig. 84.121	(kg)	53	72	91	136	165	202	264	383	515	674	885	1045	2383	3865	on request
1.4307	Fig. 54.121	(kg)														

ZEDOX® Butt weld ended high performance valve with pneumatic rotary actuator AIR-TORQUE



Type of actuator	P1 (mm)	P2 (mm)
SC00450	394,5	166
SC00600	422,5	181
SC00900	474	200
SC01200	528	221,5
SC02000	605	262
SC03000	710	330
SC04000	812	371
SC05000	855	418
SC10000	950	528

DN		200	250	300	350	400	450	500	600
Face-to-face dimension acc. to ISO 5752 / DIN EN 558-1									
L	(mm)	230	250	270	290	310	330	350	390
Dimensions									
E	(mm)	154	193	229	255	299	326	351	376
H1 [1]	(mm)	630	693	772	885	969	1193	1218	1296
Type of actuator for max. differential pressure 16 bar [2]									
Spring closes flow from disc side actuating pressure actuator 5 bar	TS	SC00600-5/6	SC01200-5	SC02000-5	SC3000-5	SC4000-5/6	SC10000-4	SC10000-4/5	on request
	CS	SC00900-5	SC01200-5/6	SC02000-5/6	SC4000-5	SC05000-5/6	SC10000-4	SC10000-5/6	
Spring closes flow from disc side actuating pressure actuator 6 bar	TS	SC00600-5/6	SC01200-5	SC02000-5	SC3000-5	SC4000-5/6	SC05000-6	SC10000-4/5	
	CS	SC00900-5	SC01200-6	SC02000-6	SC4000-5	SC05000-5/6	SC10000-4	SC10000-5/6	
Spring closes flow from shaft side actuating pressure actuator 5 bar	TS	SC00600-4/5	SC00900-5/6	SC02000-4	SC03000-4	SC04000-4/5	SC05000-5	SC10000-4	SC10000-5/6
	CS	SC00600-5/6	SC001200-5	SC02000-5	SC03000-5/6	SC04000-5/6	SC10000-4	SC10000-4/5	on request
Spring closes flow from shaft side actuating pressure actuator 6 bar	TS	SC00450-6	SC00900-5/6	SC02000-4	SC02000-6	SC04000-4/5	SC05000-5	SC10000-4	SC10000-5/6
	CS	SC00600-5/6	SC001200-5	SC02000-5	SC03000-5/6	SC04000-5/6	SC05000-6	SC10000-4/5	on request

Weights with pneumatic actuator [1]									
1.0425 / 1.0565	Fig. 84.121	(kg)	65	90	132	239	292	404	452	571
1.4307	Fig. 54.121	(kg)								

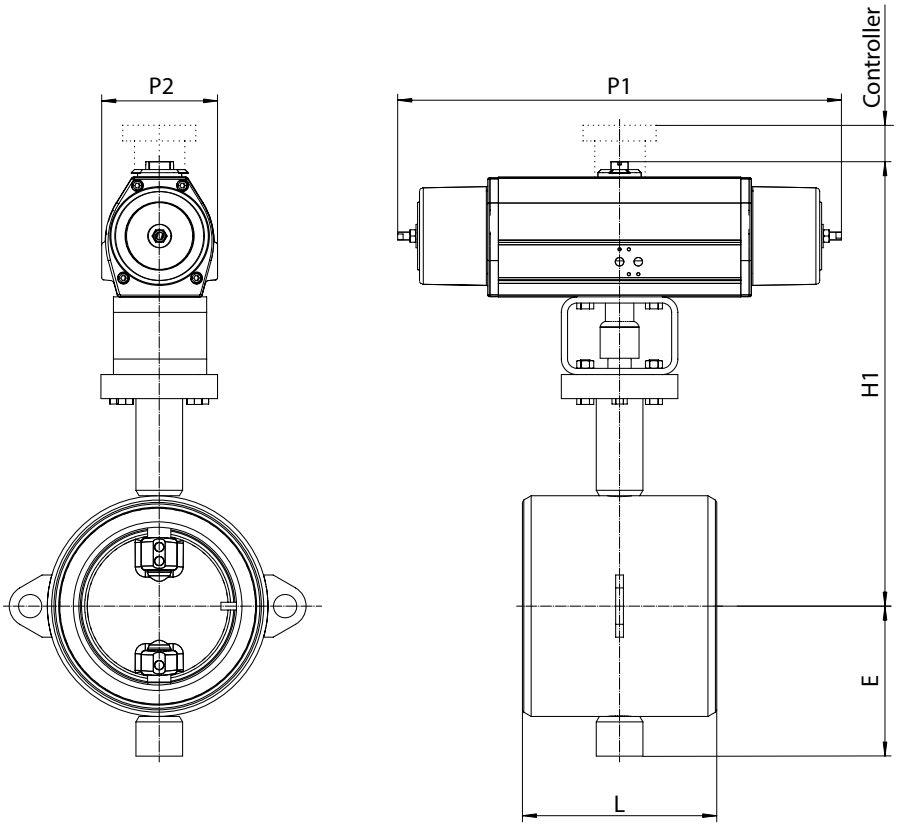
For steam duty use the next actuator up

[1] with largest actuator option

[2] other differential pressures on request

Actuator bigger than DN600 on request

ZEDOX® Butt weld ended high performance valve with pneumatic actuator Rotork RC



DN		200	250	300	350	400 [2]	450 [2]	500 [2]
Face-to-face dimension series 14 acc. to DIN EN 12982								
L	(mm)	230	250	270	290	310	330	350
Dimensions								
E	(mm)	154	193	229	255	299	326	351
H1	(mm)	504	686	701	730	1002	1038	1100
P1	(mm)	144	220	220	220	220	220	380
P2	(mm)	570	655	1020	1020	1020	1020	1700
Type of actuator spring closes [1]		RC260-SR	RC270-SR	RC280-SR	RC280-SR	RC-88-SR	RC-88-SR	RCG100-SR
Type of actuator double acting [1]		**RC240-DA**	**RC250-DA**	**RC260-DA**	**RC265-DA**	**RC270-DA**	**RC280-DA**	**RC280-DA**

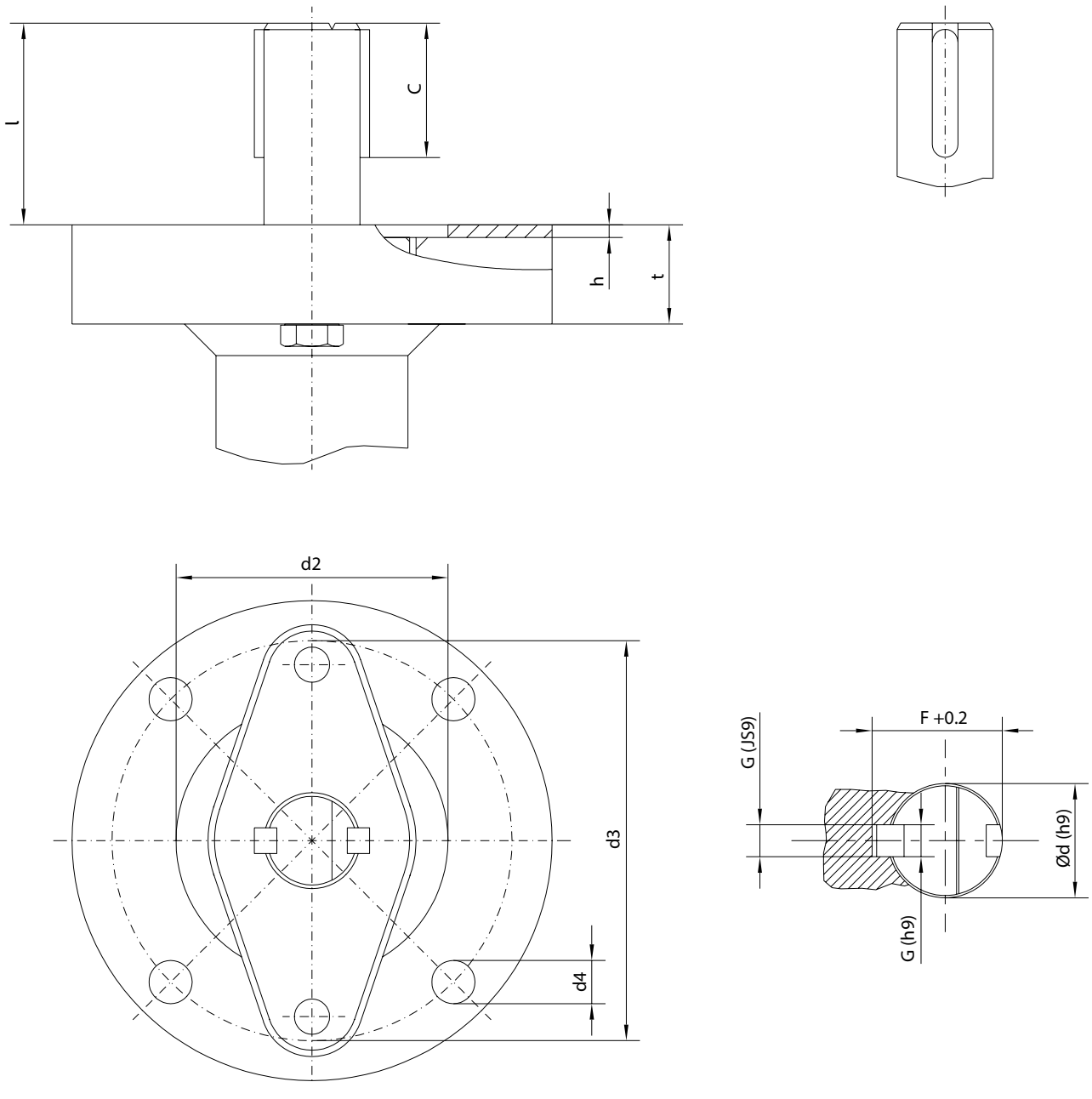
Weights with pneumatic actuator								
1.0425 / 1.0565	Fig. 84.121	(kg)	48	94	132	158	255	292	711
1.4307	Fig. 54.121	(kg)						

[1] at air pressure 6 bar

[2] Δ P max = 16 bar

actuator bigger than DN500 on request

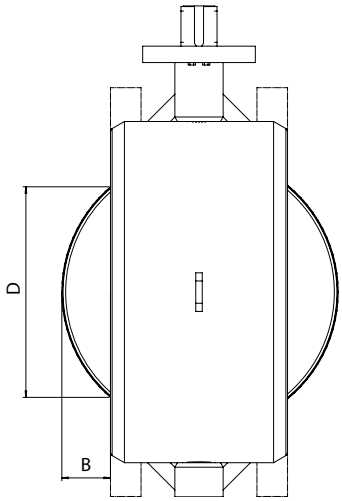
Actuator flange connection, with 2 parallel keys 180° rotated



DN		200	250	300	350	400	450	500	600	700	800	900	1000	1200	1400	1600
Connection EN ISO 5211		F10	F12		F14		F16			F25	F30			F35	F40	
C	(mm)	38	42	47	52	52	65	65	82	92	92	113	125	102	112	112
Ød	(mm)	25	30	35	40	40	50	50	60	70	70	90	100	140	170	170
d2	(mm)	70	85		100		130			200	230			260	300	
d3	(mm)	102	125		140		165			254	298			356	406	
n x d4	(mm)	4x11	4x14	4x14	4x18	4x18	4x22	4x22	4x22	8x18	8x22	8x22	8x22	8x32	8x38	8x38
F	(mm)	28.3	33.3	38.3	43.3	43.3	53.3	53.3	64.4	74.9	74.9	95.4	105.4	148.4	179.4	179.5
G	(mm)	8	8	10	12	12	14	14	18	20	20	25	28	36	40	40
h	(mm)	4			5		6									
l	(mm)	58	63	69	75	75	86	86	103	119	119	125	130	160	165	165
t	(mm)	27	31	31	34	34	37	37	43	46	46	46	41	41	66	66

Kvs-value / Zeta-value																
DN		**200**	**250**	**300**	**350**	**400**	**450**	**500**	**600**	**700**	**800**	**900**	**1000**	**1200**	**1400**	**1600**
Kvs-value	(m^3/h)	775	1522	2700	4400	6350	9500	13750	15000	20000	25500	33500	39000	58000	85000	-
Zeta-value	--	4,14	2,97	1,77	1,24	1,01	0,73	0,53	0,92	0,96	1,01	0,93	1,05	0,98	0,85	-

Difference between disc outside-diameter and face-to-face																
DN		**200**	**250**	**300**	**350**	**400**	**450**	**500**	**600**	**700**	**800**	**900**	**1000**	**1200**	**1400**	**1600**
B	**(mm)**	-	-	-	2	21	32	48	52	81	111	138	152	217	267	327
D	**(mm)**	-	-	-	38	161	213	273	299	404	504	595	655	854	1018	1204



myValve® - Your Valve Sizing-Program.

myValve® is a powerful software tool that not only helps you size your system components; it also gives you instant access to all other data about the selected product, such as order information, spare parts drawings, operating instructions, data sheets, etc., whenever you need it.



Contents:

Module ARI-high performance valve ZEDOX-calculation

- Sizing of flow quantity Kv, volume flow Q, pressure drop p, sound level; Selecting the valve size with given capacity; Selection of the actuator.
  Calculation of torque for actuators in flow from shaft side and flow from disc side.

Media:

Integrated media-data bank (more than 160 media) with conditions:

- Vapours / gases
- Steam (saturated and superheated)
- Liquids

Special features:

- Project administration of the calculation and product data incl. spare part drawings concerning to project and tag number.
- Direct output or calculation and product data in PDF format.
- Product data could be taken for a direct order.
- SI- and ANSI-units with direct conversion to another data bank.
- Settings with over pressure or absolute pressure.
- All ARI valves are integrated in a data bank.
- Direct access concerning to the product on data sheets, operating instructions, pressure-temperature-diagram and spare part drawings
- Operation in company networks possible (no complex installations on individually PC's necessary).
- Extensive catalogue extending over several product groups.

System Requirements:

Windows operating systems, Linux, etc.