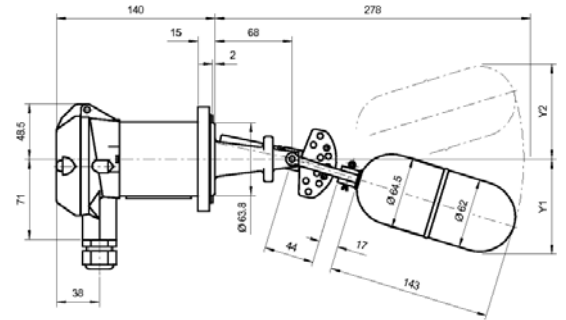


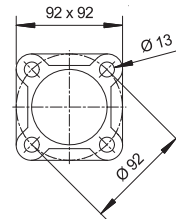
For manually adjustable operating differentials.
Ideal for 2-point control, e.g. pump control.

Type A 01 090 (SIL 1)	Operating differential 37 to 218 mm
Type A 01 091 (SIL 1)	Operating differential 56 to 317 mm
Type A 01 092 (SIL 1)	Operating differential 83 to 442 mm
Type A 01 093 (SIL 1)	Operating differential 97 to 557 mm
Type A 01 095 (SIL 1)	Operating differential 34 to 190 mm

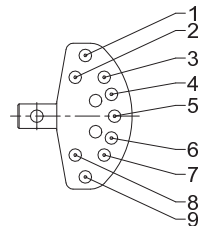
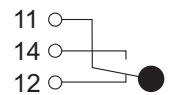
Nominal pressure	PN 25 acc. to EN/DIN
Operating temperature	0 to 300°C
Ambient temperature	0 to 70°C
Density of the liquid	min. 0.75 kg/dm ³
Operating differential	12 mm, fixed
Wetside material	stainless steel (CrNiMo)
Housing material	seawater resistant die cast aluminium
Flange	square 92 x 92 mm, PCD 92 mm
Switch element	Microswitch SPDT with silver contacts
Switch rating	250 VAC, 5 A / 30 VDC, 5 A
Enclosure	IP65
Overall length	246 to 561 mm, depending on type
Weight	approx. 2,0 kg
Approvals	ABS, BV, DNV, GL, LRS, RINA, RMRS



Flange dimensions



Connection diagram



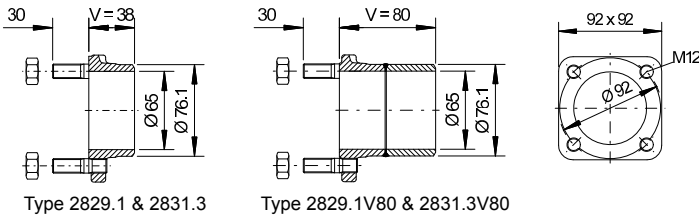
Adjustment of switching differential

The switching differential can be set by inserting pegs in holes 1 to 9 of the adjustment block (see sketch). The resulting differentials, the position of the switching points and the overall swept arc of the float can be seen in the table below. The values are in mm and are referenced to water at 20°C and density of 1.0 kg/dm³.

Type	A 01 090					A 01 091					A 01 092					A 01 093					A 01 095				
L	278 mm					361 mm					461 mm					561 mm					246 mm				
Pos.	X1	X2	Diff. S	Y1 (Z2)	Y2 (Z1)	X1	X2	Diff. S	Y1 (Z2)	Y2 (Z1)	X1	X2	Diff. S	Y1 (Z2)	Y2 (Z1)	X1	X2	Diff. S	Y1 (Z2)	Y2 (Z1)	X1	X2	Diff. S	Y1 (Z2)	Y2 (Z1)
1-4	+108	+60	48	175	(10)	+157	+85	72	238	(20)	+230	+125	105	315	(50)	+292	+160	132	395	(75)	+100	+55	45	147	(10)
1-5	+108	+15	93	175	35	+157	+25	132	238	37	+230	+39	191	315	39	+292	+48	244	395	42	+100	+18	82	147	35
1-6	+108	-25	133	175	85	+157	-37	194	238	105	+230	-51	281	315	135	+292	-65	357	395	165	+100	-18	118	147	74
1-7	+108	-52	160	175	125	+157	-90	247	238	165	+230	-124	354	315	215	+292	-160	452	395	265	+100	-46	146	147	115
1-8	+108	-80	188	175	153	+157	-128	285	238	206	+230	-171	401	315	275	+292	-215	507	395	345	+100	-70	170	147	128
1-9	+108	-110	218	175	175	+157	-160	317	238	238	+230	-212	442	315	315	+292	-265	557	395	395	+100	-90	190	147	147
2-5	+98	+15	83	153	35	+122	+25	97	206	37	+181	+39	142	275	39	+230	+48	182	345	42	+79	+18	61	128	35
2-6	+98	-25	123	153	85	+122	-37	159	206	105	+181	-51	232	275	135	+230	-65	295	345	165	+79	-18	97	128	74
2-7	+98	-52	150	153	125	+122	-90	212	206	165	+181	-124	305	275	215	+230	-160	390	345	265	+79	-46	125	128	115
2-8	+98	-80	178	153	153	+122	-128	250	206	206	+181	-171	352	275	275	+230	-215	445	345	345	+79	-70	149	128	128
2-9	+98	-110	208	153	175	+122	-160	282	206	238	+181	-212	393	275	315	+230	-265	495	345	395	+79	-90	169	128	147
3-5	+58	+15	43	125	35	+81	+25	56	165	37	+122	+39	83	215	39	+145	+48	97	265	42	+52	+18	34	115	35
3-6	+58	-25	83	125	85	+81	-37	118	165	105	+122	-51	173	215	135	+145	-65	210	265	165	+52	-18	70	115	74
3-7	+58	-52	110	125	125	+81	-90	171	165	165	+122	-124	246	215	215	+145	-160	305	265	265	+52	-46	98	115	115
3-8	+58	-80	138	125	153	+81	-128	209	165	206	+122	-171	293	215	275	+145	-215	360	265	345	+52	-70	122	115	128
3-9	+58	-110	168	125	175	+81	-160	241	165	238	+122	-212	334	215	315	+145	-265	410	265	395	+52	-90	142	115	147
4-6	+25	-25	50	85	85	+31	-37	68	105	105	+48	-51	99	135	135	+63	-65	128	165	165	+23	-18	41	74	74
4-7	+25	-52	77	85	125	+31	-90	121	105	165	+48	-124	172	135	215	+63	-160	223	165	265	+23	-46	69	74	115
4-8	+25	-80	105	85	153	+31	-128	159	105	206	+48	-171	219	135	275	+63	-215	278	165	345	+23	-70	93	74	128
4-9	+25	-110	135	85	175	+31	-160	191	105	238	+48	-212	260	135	315	+63	-265	328	165	395	+23	-90	113	74	147
5-7	-15	-52	37	35	125	-33	-90	57	37	165	-40	-124	84	39	215	-50	-160	110	42	265	-12	-46	34	35	115
5-8	-15	-80	65	35	153	-33	-128	95	37	206	-40	-171	131	39	275	-50	-215	165	42	345	-12	-70	58	35	128
5-9	-15	-110	95	35	175	-33	-160	127	37	238	-40	-212	172	39	315	-50	-265	215	42	395	-12	-90	78	35	147
6-9	-55	-110	55	(10)	175	-80	-160	80	(20)	238	-105	-212	107	(50)	315	-135	-265	130	(75)	395	-45	-90	45	(10)	147

Counterflange

not for use with the test actuator

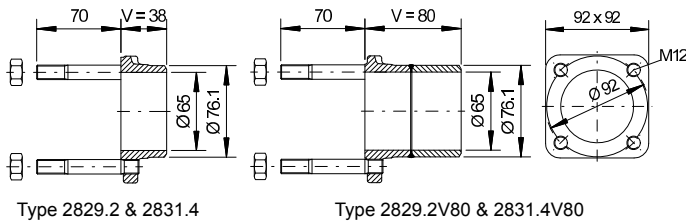


Type	Flange length	Flange material	Stud material	Stud length
2829.1	V = 38 mm	P250GH	5.8	30 mm
2831.3	V = 38 mm	1.4404	A2	30 mm
2829.1V80*	V = 80 mm	P250GH	5.8	30 mm
2831.3V80*	V = 80 mm	1.4404	A2	30 mm

***Important:** Not for use in applications on top of the tank.

Counterflange

for use with the test actuator (type 2382 & 2383)



Type	Flange length	Flange material	Stud material	Stud length
2829.2	V = 38 mm	P250GH	5.8	70 mm
2831.4	V = 38 mm	1.4404	A2	70 mm
2829.2V80*	V = 80 mm	P250GH	5.8	70 mm
2831.4V80*	V = 80 mm	1.4404	A2	70 mm

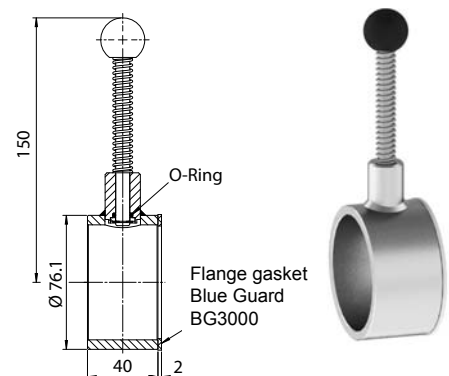
***Important:** Not for use in applications on top of the tank.

Test actuator

The test actuators 2382 and 2383 can be used, if the tank is already equipped with a counterflange, type 2829.2, 2831.4, 2829.2V80 or 2831.4V80.

Type	Material Test actuator	Material O-Ring	Temperature range	Operating pressure
2382	1.4305/1.4404	FPM	0 to 150 °C	-1 to 25 bar
2383	1.4305/1.4404	EPDM	-30 to 150 °C	-1 to 25 bar

Test actuators are supplied with flat gaskets.



Options

- Dual SPDT microswitches (SIL 2)
- Microswitches with gold plated contacts
- Self checking proximity switches acc. to NAMUR
- Enclosure IP67 or IP68 for submersible applications
- 5A/380 VAC 0,3A/440 VDC (type: AE26)
- Flameproof switches
- Pneumatic switches ON/OFF with 3/2 way valve
- High and low temperature versions
- Cable entry with 3/4" NPT internal thread
- Switch housing:
 - chromated
 - stainless steel (316 equiv.)
 - epoxy painted
- Flange modules: - acc. to ANSI, EN/DIN, BS10 and JIS

Certificates

- Material certificates acc. to EN 10204-2.2 & EN 10204-3.1
- Test record: hydraulic pressure test and functional tests
- Test records of material tests: x-ray, ultrasonic, Charpy, hardness etc.

Quality Assurance

- Bachofen AG is certified acc. to ISO 9001.

