

EXPLOSION VENTING DEVICE VENT PRO S



It is a safety device designed to relieve and release an explosion that might occur inside the protected equipment, where there is an environment with a risk of explosion. Under normal operating conditions, the relief area on the protected equipment is covered by Vent PRO S. If the p_{stat} is exceeded during an explosion inside the equipment, Vent PRO S will open, thus releasing the pressure from the jeopardized area. The equipment will be exposed to a pressure lower than its pressure resistance.

This data sheet describes the technical parameters of Vent PRO S devices, which have a single-layer convex construction, which include an integrated frame and an optional integrated flange seal. They are suitable for applications with cyclic vacuum loads. They are manufactured in a rectangular design and comply with the standard EN 14 797, NFPA 68 and European Directive 2014/34 / EU.

CLASSIFICATION

Equipment group	II
Explosive atmosphere	G, D
Equipment category, indoor/outdoor	1/2G, 1/2D
Operating temperature	-40 °C to 230 °C
Storage temperature	-10 °C to 40 °C
Standard static opening pressure*	10 kPa \pm 15%

* Can also be supplied with a different static opening pressure

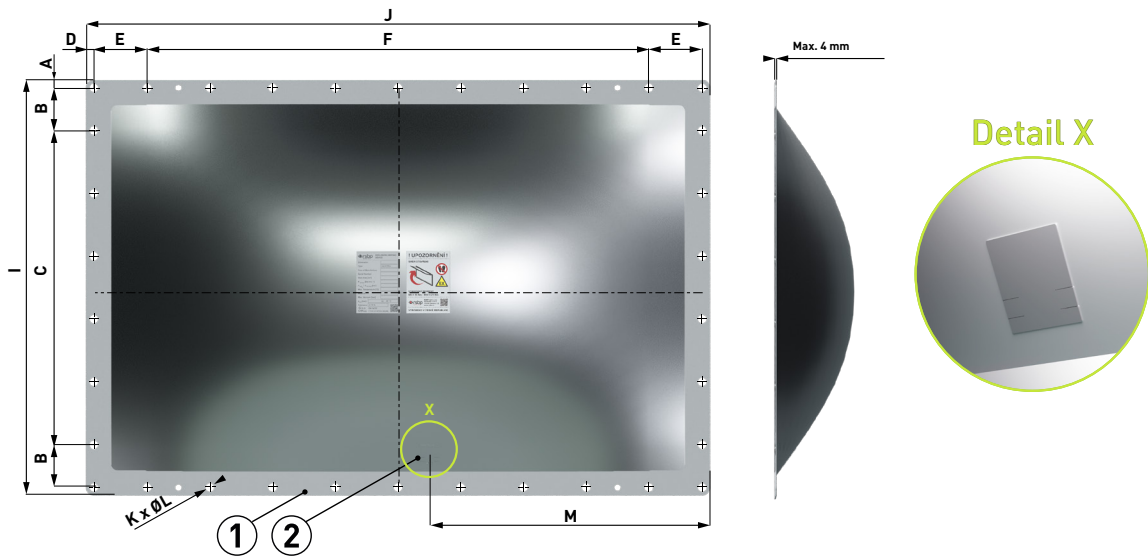
MATERIAL

Vent PRO S	Stainless steel
Vent PRO S sealing	EPDM, Silicon

OPTIONAL ACCESSORIES

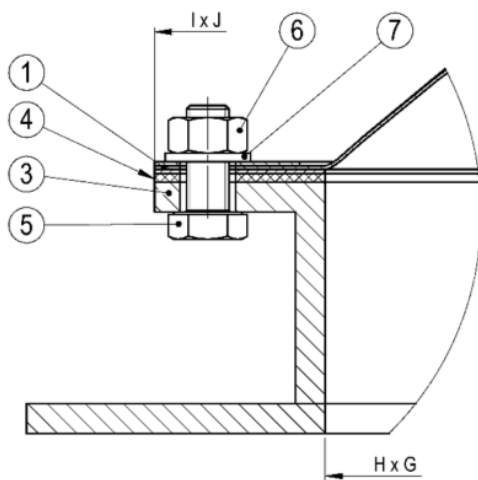
Opening indicator	Cable (type G1), magnetic (type G2) or additional (type G3)
Intrinsically safe relay	It is used to create the interface between the safe and dangerous zone
Integrated flange seal	EPDM, silicon
Thermal Insulation	Synthetic rubber-based foam
Fasteners	Screws - (strength 8.8 or A2-70), nuts ISO 4032, washers ISO 7089 (all in galvanized finish or stainless-steel design)

DIMENSIONAL DIAGRAM

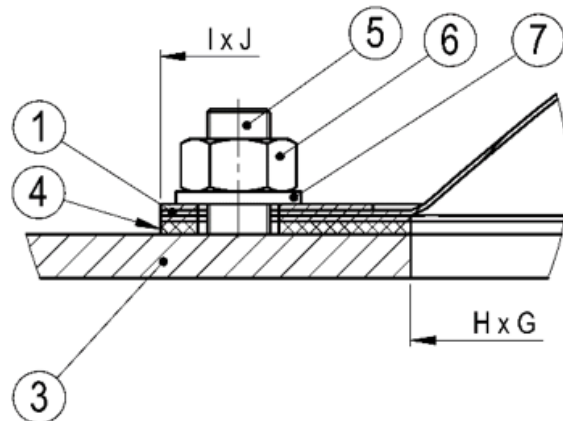


INSTALLATION VARIANTS

Installing with bolts



Installing with welded screws



Position	Components	Quantity
1	Vent PRO S	1
2	Universal opening indicator holder	1
3	Protected equipment ¹⁾	1
4	Flange gasket (can be integrated in Vent PRO S)	
5	Screw ²⁾	see ³⁾
6	Nut ²⁾	see ³⁾
7	Washer ²⁾	see ³⁾

¹⁾ The flange of the protected installation device Vent PRO S must meet the requirements of EN ISO 13920-BE and must be sufficiently rigid. In case of mounting on insufficiently rigid equipment, it is necessary to provide the flange with additional reinforcement.

The diameters of the holes in the flange of the protected device for M10 screws are $\varnothing 12$ mm [EN 20273].

²⁾ Fasteners galvanized (strength 8.8) or stainless steel (strength A2-70).

³⁾ Number according to the table of technical parameters.

Installation Note:

If the Vent PRO S is not equipped with an integrated flange seal, it is necessary to use another suitable flange seal or sealant to seal the area between the Vent PRO S and the technology flange.

TECHNICAL PARAMETERS

Dimension	Vent area [m ²]	Hole dimension in equipment H x G [mm]	Outer diameter I x J [mm]	A [mm]	B [mm]	C [mm]		D [mm]	E [mm]	F [mm]		Number / holes in Vent PRO S		M [mm]	Max. vacuum [bar]
						Number of holes	Spacing			Number of holes	Spacing	K	ØL [mm]		
229 x 229	0.05	229 x 229	309 x 309	14.5	93.0	2	94.0	14.5	93.0	2	94.0	12	154.5	-0.35	
260 x 260	0.07	260 x 260	340 x 340	16.0	103.0	2	102.0	16.0	103.0	2	102.0	12	170.0	-0.35	
170 x 470¹⁾	0.08	170 x 470	250 x 550	15.0	70.0	2	80.0	15.0	110.0	4	100.0	16	275.0	-	
150 x 600¹⁾	0.09	150 x 600	220 x 670	12.5	65.0	2	65.0	12.5	92.0	6	92.0	20	335.0	-0.15	
220 x 540	0.12	220 x 540	300 x 620	16.0	90.0	2	88.0	16.0	98.0	5	98.0	18	261.0	-0.35	
270 x 458¹⁾	0.12	270 x 458	350 x 538	20.0	100.0	2	100.0	20.0	99.0	4	100.0	16	269.0	-	
305 x 457	0.14	300 x 452	390 x 542	10.0	76.0	3	102.0	10.0	102.0	4	101.0	18	270.5	-0.35	
300 x 500¹⁾	0.15	300 x 500	382 x 589	16.0	75.0	3	100.0	19.4	75.0	5	100.0	20	244.0	-	
340 x 440	0.15	340 x 440	400 x 500	13.0	93.5	3	93.5	13.0	118.5	3	118.5	16	190.8	-0.35	
410 x 410¹⁾	0.17	410 x 410	490 x 490	20.0	150.0	2	150.0	20.0	150.0	2	150.0	12	245.0	-	
610 x 290	0.17	605 x 285	365 x 685	11.5	114.0	2	114.0	12.5	110.0	5	110.0	18	397.5	-0.30	
241 x 762¹⁾	0.18	241 x 762	331 x 852	20.0	90.0	2	111.0	20.0	116.0	6	116.0	20	426.0	-	
630 x 310	0.19	625 x 305	385 x 705	16.0	118.0	2	117.0	16.5	112.0	5	112.0	18	408.5	-0.35	
490 x 590	0.28	485 x 585	565 x 665	17.5	90.0	5	"	17.5	90.0	6	90.0	26	332.5	-0.35	
600 x 600¹⁾	0.36	590 x 590	680 x 680	15.0	180.0	2	180.0	15.0	18.0	2	180.0	16	328.0	-	
450 x 800	0.36	450 x 800	530 x 880	15.0	125.0	3	125.0	15.0	110.0	6	126.0	22	440.0	-0.30	
610 x 610	0.37	610 x 610	690 x 690	15.0	110.0	5	110.0	15.0	110.0	5	110.0	24	290.0	-0.35	
457 x 890¹⁾	0.40	457 x 890	537 x 970	15.0	102.0	4	101.0	15.0	114.0	"	"	28	485.0	-	
578 x 851	0.47	560 x 845	658 x 931	22.7	102.3	5	102.0	16.1	99.4	8	100.0	30	465.5	-0.35	
586 x 920	0.53	581 x 915	661 x 995	12.5	68.0	6	100.0	12.5	85.0	9	100.0	34	447.5	-0.30	
588 x 908¹⁾	0.53	588 x 908	680 x 1000	17.0	161.5	3	161.5	17.0	138.0	6	138.0	22	500.0	-	
800 x 800	0.64	800 x 800	880 x 880	56.5	185.0	3	185.0	56.5	185.0	3	185.0	20	334.0	-0.30	
685 x 1100¹⁾	0.75	685 x 1100	765 x 1178	15.0	105.0	6	105.0	15.0	114.0	9	115.0	34	531.5	-	
870 x 910¹⁾	0.79	870 x 910	960 x 1000	18.0	77.0	8	110.0	18.0	97.0	8	110.0	36	500.0	-	
920 x 920	0.84	915 x 915	995 x 995	12.5	85.0	9	100.0	12.5	85.0	9	100.0	40	447.5	-0.30	
851 x 1162	0.98	845 x 1162	931 x 1242	16.1	99.4	8	100.0	12.95	100.0	11	"	42	672.0	-0.30	
1020 x 1020	1.01	1015 x 1015	1095 x 1095	12.5	107.0	9	107.0	12.5	107.0	9	107.0	40	494.0	-0.30	
915 x 1118	1.01	910 x 1113	990 x 1193	12.5	82.5	9	100.0	12.5	111.5	10	105.0	42	596.5	-0.30	
1130 x 1130	1.28	1130 x 1130	1220 x 1220	20.0	90.0	11	100.0	20.0	90.0	11	100.0	48	560.0	-0.30	

¹⁾ Contact the manufacturer for more information.

Use screws M10, flat washers M10 (ISO 7089) and nuts M10 (ISO 4032) to secure the Vent PRO S and comply with a tightening torque of 21Nm.

The values of maximum vacuum are for Vent PRO S with a static opening pressure of 10 kPa.