

EXPLOSION VENTING DEVICE VMP SU - RECTANGULAR



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 VMP SU. If the pstat is exceeded during an explosion inside the equipment, VMP SU 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 VMP SU. These VMPs have a convex three-layer construction and high vacuum resistance. They are manufactured in a circular and rectangular design and they are in accordance with EN 14797 and European Directive 2014/34/EU.

VMP SU CLASSIFICATION

Equipment group	II.
Explosive atmosphere	D
Equipment category	1D
Operating temperature	-40 to 240 °C
Storage temperature	10 to 40 °C
Standard static opening pressure	10 kPa +/-15 %

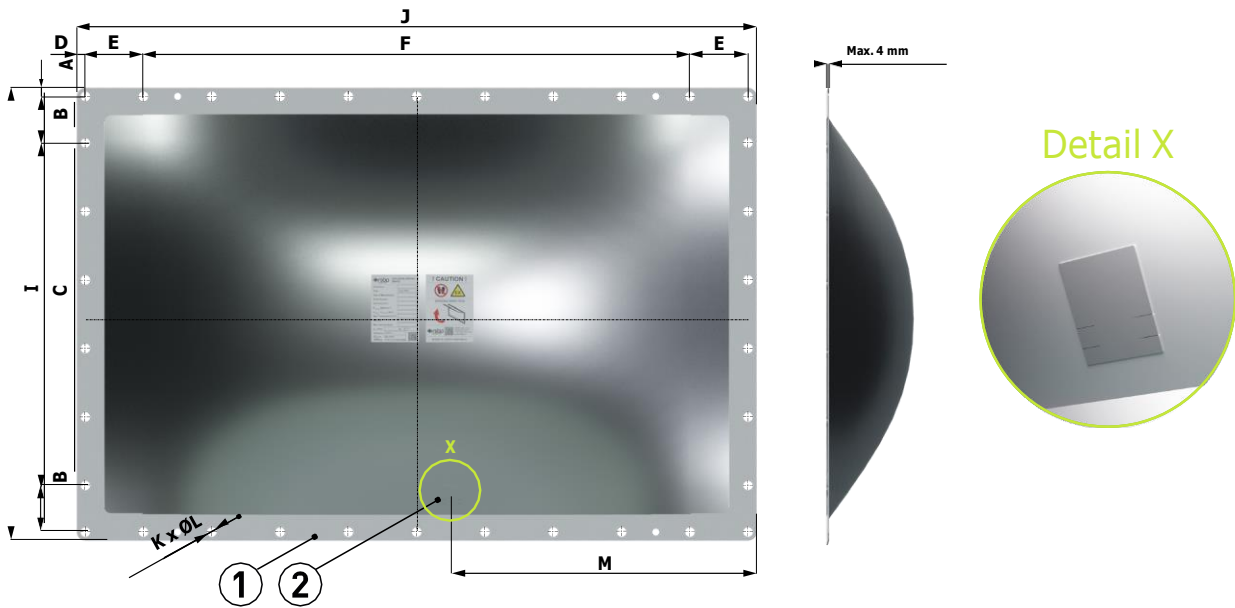
MATERIAL DESIGN

VMP	Stainless steel
VMP sealing	PTFE

OPTIONAL ACCESSORIES

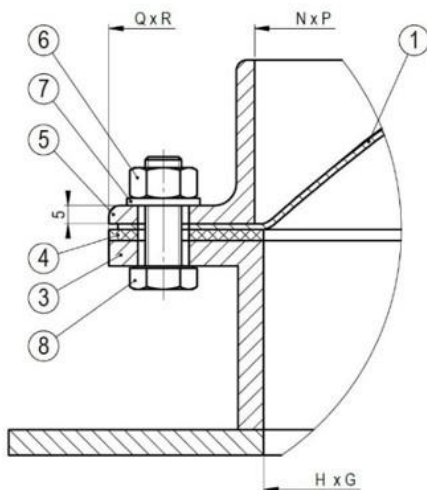
Opening indicator	Cable (type G1), magnetic (type G2) or additional (type G3)
Intrinsically safe relay	It is used to create the interface between the safe and dangerous zone
Flange gasket	EPDM, silicon
Thermal Insulation	Synthetic rubber-based foam
Fasteners	Screws - (strength 8.8 or A2-70), nuts ISO 4070, washers ISO 7090 (all in galvanized finish or stainless-steel design)
Upper frame	Made of stainless steel or constructional steel, galvanized

DIMENSIONAL DIAGRAM

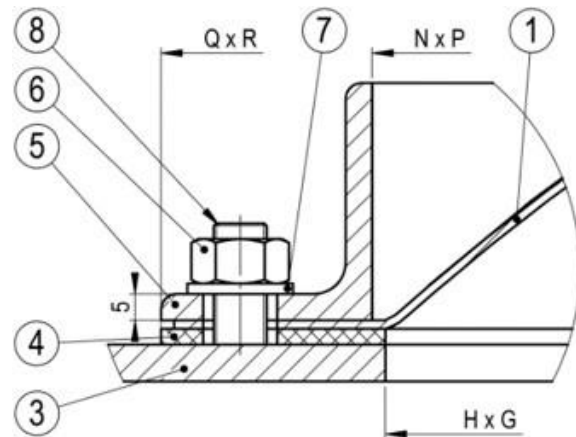


INSTALLATION VARIANTS

Installing with bolts



Installing with welded screws



Position	Components	Quantity
1	VMP SU	1
2	Universal opening indicator holder	1
3	Protected equipment ¹⁾	1
4	Flange gasket ⁵⁾	1
5	Upper frame ^{2), 3)}	1
6	Nut ³⁾	see 4)
7	Washer ³⁾	see 4)
8	Screw ³⁾	see 4)

1) For the installation of VMP SU, the flange of the protected equipment must meet the requirements of standard 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.

2) The frame is made out of 40x40x5 L-shaped steel.

In case there is a risk of rainwater remaining in the upper frame, it is necessary to create drainage channels 5 mm wide and 5 mm high in suitable places in it.

3) Material - galvanized steel or stainless steel (screws strength 8.8 or A2-70).

4) Number according to technical parameters table

5) A suitable sealant can be used instead of the flange gasket.

Dimensions	Vent area [m ²]	Hole dimension in protected equipment H x G [mm]	Outer diameter I x J [mm]	A [m]	B [m]	C [mm]		D [m]	E [m]	F [mm]		screws / holes		M [m]	Frame internal dimension N x P [mm]	Frame, seal and flange external dimension Q x R [mm]
						number of holes	spacing			number of holes	spacing	K	ØL [mm]			
229x229	0,04	229x229	309x309	14,5	93	2	94	14,5	93	2	94	12		154,5	235x235	315x315
260x260	0,05	260x260	340x340	16	103	2	102	16	103	2	102	12		155,5	265x265	345x345
220x540	0,10	220x540	300x620	16	90	2	88	16	98	5	98	18		261	220x540	300x620
305x457	0,11	300x452	375x527	9,5	76	3	102	10	102	4	101	18		263,5	305x457	385x537
610x290	0,14	285x605	365x685	11,5	114	2	114	12,5	110	4	110	18		397,5	290x610	370x690
630x310	0,16	305x625	385x705	16	118	2	117	16,5	112	5	112	18		408,5	310x630	390x710
490x590	0,24	485x585	565x665	17,5	90	5		17,5	90	6	90	26	14	332,5	490x590	570x670
2x610x290	0,28	285x1285	385x1385	21,5	114	2	114	21,5	122	4		34			290x1290	390x1390
450x800	0,32	450x800	530x880	15	125	3	250	15	110	6	126	22		440	455x805	535x885
2x630x310	0,32	305x1305	385x1385	16	118	2	117	16	123	5		34			310x1310	410x1410
586x920	0,48	581x915	661x995	12,5	68	6	100	12,5	85	9	100	34		447,5	586x920	666x1000
920x920	0,78	915x915	995x995	12,5	85	9	100	12,5	85	9	100	40	16	447,5	920x920	1000x1000
915x1118	0,95	910x1113	990x1193	12,5	82,5	9	100	12,5	111,5	10	105	42		596,5	915x1118	995x1198
1020x1020	0,96	1015x1015	1095x1095	12,5	107	9	107	12,5	107	9	107	40		600	1020x1020	1100x1100

1) Contact the manufacturer for more information and another dimensions Use M10 screws, flat washers 10 (ISO 7090) and M10 nuts (ISO 7040) Comply with a tightening torque of 21 Nm.