

Pressure-Vacuum Valve

with END OF LINE DEFLAGRATION FLAME ARRESTER

APPLICATION

Pressure Vacuum Valve with ribbon coil is a Protection System: deflagration end of line flame arrester in according with Directive 2014/34/EU and harmonized standard EN ISO 16852:2016.

- Regulate hydrocarbons or chemical storage tank pressure
- Reduce evaporation for saving environment and product loss
- Stage I vapor recovery compliant
- The Flame Arrester protects tank from outside fire
- Surface Protection System is for all ATEX zone (0, 1 and 2)
- Vapor recovery of Truck system shall be connected for fill storage tank

End of line deflagration flame arresters and pressure valve are tipically installed on storage tanks and vessels of the chemial, petrochemical, and pharmaceutical industries for protection.



Mod. 197 EN-P

GAS & VAPOR COMPATIBILITY

Inflammable gases and vapours classification is necessary to correct use of flame arrester. UE-Type Examination Certificate EPT 19 ATEX 3333 X is for Explosion Group "IIB3" tested with Ethylene and compatible for all gas with MESG 0.65 mm for example: Ammonia. Industrial methane, Blas-furnace gas, Carbon monoxide, Propane, Butane,

Pentane, Esane, Eptane, Iso-octane, Decane, Benzene, Xilene, Cyclohexane, Acetone, Ethyl-methyl-ketone, Methyl acetate, Ethyl acetate, Normal propyl acetate, Normal b utyl ac etate, Amyl ac etate, Cloroethylene, Methanol, Ethanol, Iso Butanol, Normal Butanol, Amyl alcohol and Ethyl nitrite. Use only for gas or vapor with MESG 0.65 mm. Marked "IIC" for Hydrogen and gas/vapor with MESG < 0.5 mm 197 EN-P H2. Burning rating BC=b and t_{BT} =1 min and for "H2" model BC=c and t_{BT} =0 min. Max operational temperature 60°C.





Mod. 197 SM Alluminium



Mod. 197 Alluminium



Mod. 197 PTFE



Mod. 197 SS

PRODUCT	197 2" SM EN-P	197 2" EN-P	197 4" EN-P	197 6" EN-P
ALUMINIUM CODE	197 SM-50	197 EN P-35	197FA-100-35	197FA-150-35
PFTE CODE	-	197 EN P-35PTFE	197FP-100-35	197FP-150-35
SS CODE	-	197 EN P-35 SS	197FS-100-35	197FS-150-35
THREAD	2" NPT FEMALE	2" NPT FEMALE	4" NPT FEMALE	6" NPT FEMALE
PRESSURE mbar	35	35	35	35
TEST FLOW (Mbar 80 – Ø 72) l/min 9200	1500	1900	4600	> 9000
VACUUM mbar	-10	-2.5	-2,5	-2,5
TEST FLOW (Mbar 80 − Ø 72) l/min 9200	1200	1500	3700	> 6000

RIDART s.r.l. via Adua, 17 – 21045 Gazzada Schianno (VA) ITALY P.IVA/C.F. IT 01454770122 www.ridart.it info@ridart.it +39 0332 463301 Product Certification, Declaration of Conformity, User Manual and Testing on: www.ridart.it/support The Data and Images are not binding. We reserve the right to make changes without notice. Pressure & Flow Tolerances ±20%.

CHEMICAL SUITABILITY

Standard model is for traditional fuel without additives.

ON DEMAND:

- "PTFE" coated model is for special fuel, non-aggresive solvents or chemical products.

"SS" model (Stainless Steel) is for aggressive solvents, acids or bases.
"H2" model is for Hydrogen (Contact our technical department: <u>quality@ridart.it</u>)

#	SIZE	2" AL EN-P	2" PTFE EN-P	2" SS EN-P	
1;4	SEALS	VITON®	TEFLON®		
2;5	POPPETS	BRASS	STAINLESS STEEL		
3	САР	ALUMINIUM	AL + PTFE COATING	STAINLESS STEEL	
6;7;8	SCREWS & BOLTS	STAINLESS STEEL			
9;11	SPRINGS	STAINLESS STEEL			
10	RIBBON COIL	STAINLESS STEEL			
12	BODY	ALUMINIUM	AL + PTFE COATING	STAINLESS STEEL	
14	SUPPORT	STAINLESS STEEL			





#	SIZE	4" 4" AL EN-P PTFE EN-P		4" SS EN-P	
26	SEALS	TEFLON®			
4	CAP	PAINTED CARB.STEEL	STAINLESS STEEL		
13;14;15	SCREWS & BOLTS	STAINLESS STEEL			
12	SPRINGS	STAINLESS STEEL			
11	RIBBON COIL	STAINLESS STEEL			
7	POPPETS	ALUMINIUM	AL + PTFE COATING	STAINLESS STEEL	
1,2,6	BODY	ALUMINIUM	AL + PTFE STAINLESS COATING STEEL		
8,9	SUPPORT	STAINLESS STEEL			

#	SIZE	6" AL EN-P	6" PTFE EN-P		6" SS EN-P
5;11	SEALS	TEFLON®			
6	CAP	PAINTED CARB.STEEL STAINL			NLESS STEEL
26;27;28	SCREWS & BOLTS	STAINLESS STEEL			
19;20	SPRINGS	STAINLESS STEEL			
29	RIBBON COIL	STAINLESS STEEL			
9;10	POPPETS	ALUMINIUM	AL + PTFE COATING		STAINLESS STEEL
1;2;3;4;8	BODY	ALUMINIUM	AL + PTFE COATING		STAINLESS STEEL
13;14;15;16	SUPPORT	STAINLESS STEEL			



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INSTALLATION

- Vent valve is only for vertical installation at the end of vapor pipeline.
 All Models are NPT Threaded female

- All Models are NPT Threaded female
 For 1"1/2 pipeline 197 50 + adaptor 2"x1"1/2
 For 3" pipeline use 197-100 + adaptor 4"x3"
 For 5" pipeline 197-150 + adaptor 6"x5"
 For correct installation follow the Directives and product User Manual.
 Explosion Group is "IIB3" in according with EN ISO 16852 (MESG > 0.65 mm).
 Explosion Group is "IIC" in according with EN ISO 16852 (MESG < 0.5 mm), Hydrogen suitability.
 Contact our technical department for custom application or maintenance by email to: <u>quality@ridart.it</u>.
- Product Certification, Declaration of Conformity and User Manuals are available on: www.ridart.it/support.

MAINTENANCE

- Periodically check the valve is necessary to remove possible dirty, nests or insects.
- Always replace the product after fire or deflagration.
- In case of tampering warranty expires and safety protection is not quaranteed.