



UV series drain valves and breathers

• Use

The UV drain valves and breathers are normally used in the chemical and petrochemical plants, off-shore platforms, refineries and any other industry where hazardous atmospheres (gas and combustible dust) are potentially present.

The drain valves and breathers are specially recommended for tropical environments where the phenomenon of water condensation mixed with chemical agents is the first cause of corrosion of electrical components inside the enclosures.

• Function

The UV drain valves and breathers normally installed on Ex-d and Ex-e enclosures. Both models UVB and UVD can be used as a combination drain and breather. The UVB model is equipped with internal o-ring so to allow an IP 66 protection to the enclosure when not in use.

• Construction

The material used to manufacture the Ex-d operators series have been studied to allow the maximum protection against the highly corrosive agents present in these industries:

- bushing and shaft, as components directly involved into the explosion proof protection, are made in stainless steel AISI 316
- internal o-ring in silicone
- external gasket in silicone
- adaptor for thin wall enclosures (≤ 8 mm.) and locknut in stainless steel AISI 316

The UVB - UVD have a double marking Ex d and Ex e to be suitable for every kind of installation.

Since Ex e enclosures are normally build with thin walls, Supermec designed a special adaptor to allow the full discharging of water within a range of 0,8 to 8 mm. wall thickness. An external gasket allows an IP66 protection when the drain valve is not in use.

Thin wall adaptor



• Protection

certificate number:	IMQ 11 ATEX 029 U
marking:	Ex II 2GD Ex d IIC Gb - Ex e IIC Gb - Ex tb IIIC Db
ambient temperature:	-60°C +60°C
degree of protection:	IP66 / IP6X
conformity:	Directive ATEX 94/9/EC
standards:	EN60079-0 / EN60079-1 / EN60079-7 / EN60079-31 / EN60529
category:	suitable for Zone 1 – 21 (gas) and Zone 2 – 22 (dust)

• **Methods of installation**

The installation of drain valve on bottom and breather on top side of enclosure is granting the most complete solution against water condensation since the continuous ventilation minimizes the phenomena.

The internal pressure is pushed outside through the breather (chimney effect) limiting the possible entry of rain from the top.



The sole installation of valve on bottom with the combined function of drain and breather is giving, anyway, a good result and, since the water penetration is practically impossible due to installation point, the IP X6 protection is guaranteed also with the UVD model (always open).



UVB - UVBM

Lockable drain valve and breather unit with internal o-ring for IP66 protection when closed. Recommended use as breather on top side for outdoor installations.

Code	Colour	Ø
UVB	●	3/8" NPT
UVBM	●	M 16



UVD - UVDM

Drain valve and breather "always open" with IP56 protection when installed on the bottom side. Recommended use as breather on top side for indoor installations.

Code	Colour	Ø
UVD	●	3/8" NPT
UVDM	●	M 16



UVBME - UVDM

Drain valve based on UVBM and UVDM models complete with adaptor kit to be installed on Ex-e enclosures with wall thickness range from 0,8 to 8 mm. Provided with external gasket to maintain the IP rating of enclosure.

Code	Colour	Ø
UVBME	●	M 20
UVDM	●	M 20



UVXE

Adaptor Kit for UV with metric thread to install on Ex e enclosures with wall thickness range from 0,8 to 8 mm.

Code	Colour	Ø
UVXE	●	M 20

