VSE

- **Zone 1, 2, 21, 22**
- **Warning lighting**
- **LED technology**
- **Lamp lifespan more than 10 years**

Borosilicate glass globe

Stainless steel bolts

Painted aluminium body

Silicon gasket

Ex e terminal box for fast connection

CORTEM GROUP®

VSE LED Warning lighting fixtures

The VSE series warning lighting fixtures with flashing or fixed light are suitable for industrial signalling. The flashing can be adjusted via internal DIP switch with a frequency of 20 to 70 flashes per minute. The VSE lighting fixture, available in different colors, is equipped with LEDs installed on the electronic plate with a single circuit and an internal reflector.

Application sectors:

Oil refineries	Chemical and petrochemical plants	Onshore plants	Offshore plants	Oil loading/ unloading jetties	Combustible liquid depots	High buildings	Aircraft storage facilities Hangars

CERTIFICATION DATA

Classification:	Gruppo II	Categoria 2GD		
Installation: EN 60079.14	zona 1 - zona 2 (Gas)	zona 21 - zona 22 (Polveri)		
Marking:	CE 0722 ⟨Ex⟩ II 2GD Ex db eb op is IIC T6 Gb; Ex tb op is IIIC T75°C Db IP66			
Certification:	ATEX CML 19 ATEX 1333X			
	IECEx IECEx CML 19.0102X			
Standards:	CENELEC EN 60079-0: 2012+A11: 2013, EN 60079-1: 2014, EN 60079-31: 2014, EN 60079-28: 2015, EN 60079-7: 2015 and EUROPEAN DIRECTIVE 2014/34/UE IEC 60079-0: 2011, IEC 60079-1: 2014-06, IEC 60079-28: 2015, IEC 60079-31: 2013, IEC 60079-7: 2015 European Directive 2004/108 Electromagnetic compatibility European Directive 2012/19/UE, 2002/96/CE, 2003/108/CE WEEE European Directive 2011/65/UE RoHS			
Class temperature:	55°C (T6)	75°C (T6)		
Ambient temperature:	-40°C +40°C (T6)	-40°C +60°C (T5)		
Degree of protection:	IP66			

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ORIGINAL PRODUCT

MECHANICAL FEATURES

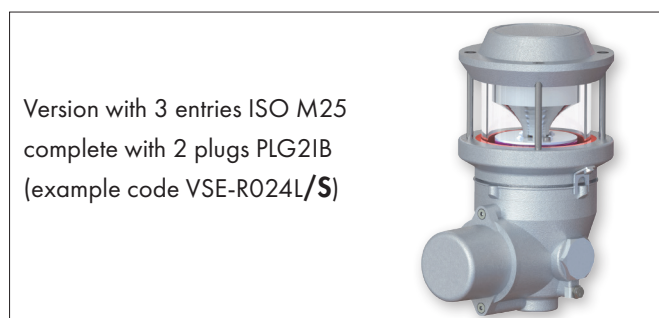|	
Body:	Low copper content aluminium alloy
Glass face:	Shock and temperature resistant borosilicate glass sealed with aluminium shade ring
Internal reflector:	In chromed aluminum
Gaskets:	Silicone acid/hydrocarbon and high temperatures resistant
Mounting:	See "dimensional drawings"
Bolts and screws:	Stainless steel
Entries:	2 ISO M25 entries
Coating:	Epoxy coating Ral 7035 (light grey)
Corrosion Resistance:	The STANDARD of the aluminium alloy used by Cortem has passed the tests required by standards EN60068-2-30 (hot/humid cycles) and EN60068-2-11 (salt mist tests)

ELECTRICAL FEATURES

LEDs: 4 x LEDs fitted to electronic plate with single circuit

- High resistance to vibration (longer lifespan if installed in severe operating conditions)
- Estimated lifespan 100,000 hours (12 hours per day for 20 years)

Obstruction lighting fixtures	Rated voltage	Rated frequency
VSE-..230..	100-240 Vac ±10%	50/60 Hz
VSE-..024..	18-32 Vdc ±10%	-

ACCESSORIES AVAILABLE / SPECIAL REQUESTS

Cable gland: NAV25IB for armoured cable or NEV25IB for non-armoured cable

Ex or watertight protected control panel

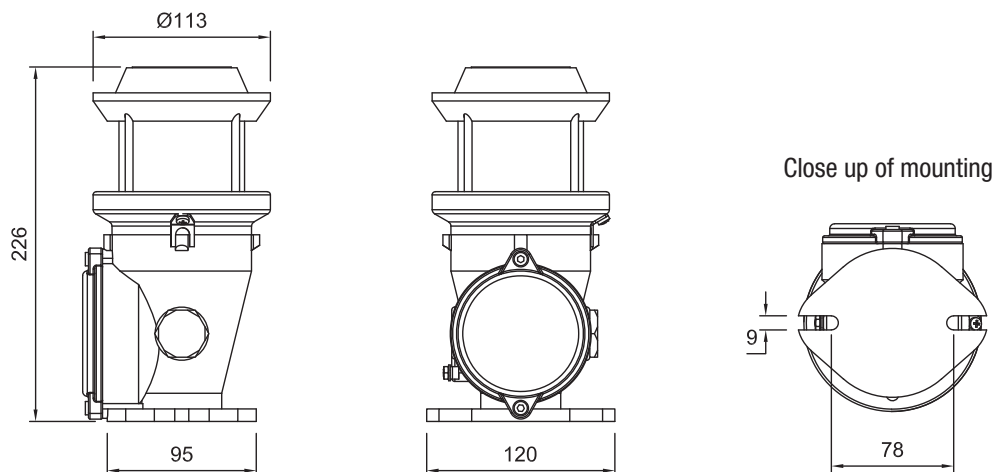Version with 3 entries ISO M25 complete with 2 plugs PLG2IB (example code VSE-R024L/**S**)

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VSE LED Warning lighting fixtures

Code	Colour light	Type of light	Type of circuit	Supply voltage	Power	Weight kg	mm
VSE-R230L	Red	Flashing	Single	100-240 Vac	6 W	2 Kg	232x125x125
VSE-Y230L	Yellow	Flashing	Single	100-240 Vac	6 W	2 Kg	232x125x125
VSE-G230L	Green	Flashing	Single	100-240 Vac	6 W	2 Kg	232x125x125
VSE-B230L	Blue	Flashing	Single	100-240 Vac	6 W	2 Kg	232x125x125
VSE-R024L	Red	Flashing	Single	18-32 Vdc	6 W	2 Kg	232x125x125
VSE-Y024L	Yellow	Flashing	Single	18-32 Vdc	6 W	2 Kg	232x125x125
VSE-G024L	Green	Flashing	Single	18-32 Vdc	6 W	2 Kg	232x125x125
VSE-B024L	Blue	Flashing	Single	18-32 Vdc	6 W	2 Kg	232x125x125

NOTE:
Code with F suffix for version with fixed light (e.g. code: **VSE-B024F**)

DIMENSIONAL DRAWING

Close up of mounting

Features	VSE
Type of product:	Warning lighting fixture Low intensity
Light source:	LED
Light color:	Red, Yellow, Green, Blue
Typical use:	Night hours
Power consumption:	6 W
Connection:	Direct connection to terminal board L, N, Pe. Section 4mm², suitable for loop-in/loop-out
Vertical beam spread:	> 10°
Minimum light intensity (360°):	>32 cd in nighttime
Horizontal coverage:	360°

Flashing adjustment via internal DIP switch, see table on the right
(See safety, use and maintenance instructions)

	FLASHING MODE			
ON	ON	ON	ON	20 FPM
	ON	OFF	ON	30 FPM
	OFF	ON	ON	40 FPM
	OFF	OFF	ON	50 FPM
	OFF	ON	OFF	60 FPM
	OFF	OFF	OFF	70 FPM
OFF	FIXED MODE			

FPM = flash per minute