

ATEX certified, 3 dBd, Omnidirectional Base Station
Antenna for the 146 - 174 MHz Band in Hazardous
areas

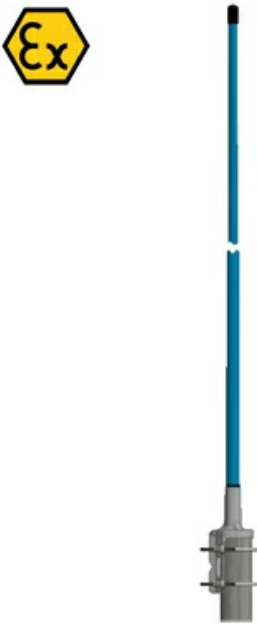
BESCHREIBUNG

- CXL 150-3LW-SS-Ex is a 3 dBd, vertically polarised, omnidirectional base station antenna, which covers the VHF-band.
- The antenna is specified as an ATEX antenna for use in zone 2 in potentially explosive areas.
- Before installing the antenna, please read the ATEX Product Manual carefully.
- The antenna is suitable for use in gas groups IIA, IIB and IIC in zone 2.
- It's only necessary to install an ATEX grounding Kit on the LW-SS-Ex bracket, when the point of installation has a different electrical potential than the system.
- The accompanying U-bolts and fittings are made of stainless steel.
- The carefully designed, broad-banded antenna element is sealed in a high-quality glass fibre tube with low wind-load, which will ensure performance undisturbed by corrosive environments.
- All metal parts in the antenna are DC-grounded. Consequently, the antenna shows a DC-short across the coaxial cable.

SPEZIFIKATIONEN

Elektrisch DE	
Modell	CXL 150-3LW-SS-Ex
Frequenz	146 - 174 MHz
Antennentyp	Broad-banded collinear antenna
Spezielle spez. Info	Max. HF Eingangsleistung (EIRP) in ATEX Umgebung *: Group IIA : 32.6 dBm (1.8 W) Group IIB : 30.3 dBm (1.0 W) Group IIC : 27.8 dBm (0.6 W)
Polarisation	Vertikal
Muster-Art	Omnidirektional
Öffnungswinkel 3 dB, vertikal	40 °
Öffnungswinkel 3 dB, horizontal	Omnidirectional
Impedanz	50 Ω
Gewinn	3 dBd (5.2 dBi)
VSWR	< 1.5:1
Bandbreite	28 MHz
Antistatischer Schutz	Alle Metallteile DC-geerdet (Stecker zeigt einen DC-Kurzschluss)
HCM-Code(s)	HCM000ND00, 015DE50

Mechanisch DE	
Verbindungsmoment	N(f) : 0.7 - 1.1 Nm
Materialien	Radome: Polyurethane-coated glass fibre Mounting bracket: Stainless acid-proof steel (AiSi 316L) U-bolt and fittings: Stainless steel (AiSi 316)
Installationsmoment	3 Nm
Farbe	Blau (RAL 5015)
Windbereich	0.0651 sq. m
Windlast	97 N (160 km/h)
Durchmesser	25.5 mm
Höhe	ca. 2.7 m
Gewicht	ca. 2.1 kg
Montage	On 16 to 54 mm dia. mast tube
ATEX-Markierung	II 3G Ex nA IIC T6



Umwelt	
Betriebstemperaturbereich	-30 °C to +60 °C
Max. Windgeschwindigkeit	200 km/h
IP Schutzklasse	IP66

BESTELLUNG

Modell	Produkt Nr	Frequenz
CXL 150-3LW-SS-Ex	115000018	146 - 174 MHz
Accessories		
ATEX grounding kit	115000100	

CALCULATION OF MAX. ANTENNA INPUT POWER IN DIFFERENT ATEX GROUPS

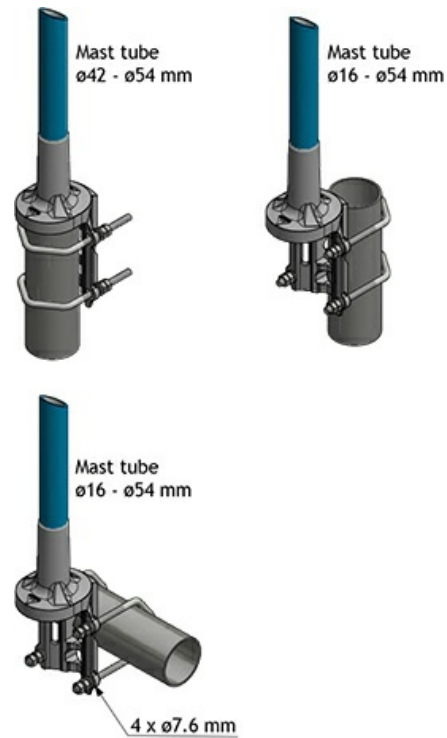
ATEX GROUP	MAX. EIRP POWER	ANTENNA GAIN	MAX INPUT POWER
IIA	37.7 dBm (6.0 W)	3 dBd / 5.15 dBi	32.6 dBm (1.8 W)
IIB	35.4 dBm (3.5 W)	3 dBd / 5.15 dBi	30.3 dBm (1.0 W)
IIC	33.0 dBm (2.0 W)	3 dBd / 5.15 dBi	27.8 dBm (0.6 W)

*See the ATEX Product Manual (safety and mounting instructions) and related EU DECLARATION OF CONFORMITY ATEX Directive 2014/34/EU.

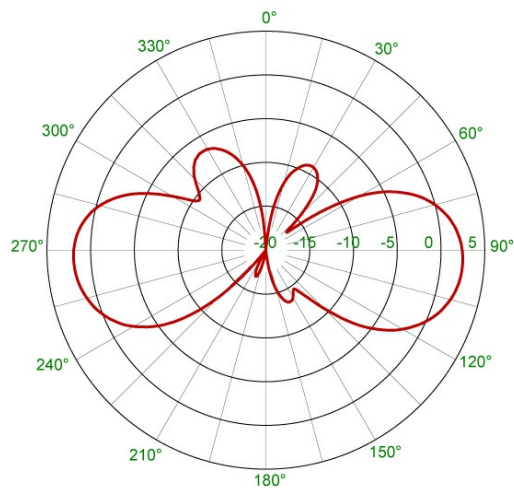
TYPICAL VSWR CURVE



MOUNTING DETAILS



TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)

