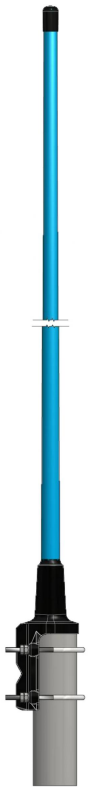
CXL 150-1LW-Ex

ATEX certified, 0 dBd, Omnidirectional Base Station Antenna for the 138 - 175 MHz Band in Hazardous areas

DESCRIPTION

- CXL 150-1LW-Ex is a 0 dBd, vertically polarized, omnidirectional base station Antenna which covers the 138 - 175 MHz band in three models.
- The antenna is specified as ATEX antenna for use in zone 2 in potentially explosive areas.
- Before installing the antenna, read the technical documentation carefully.
- The antenna is suitable for use in gas groups IIA, IIB and IIC in zone 2.
- A grounding-kit is supplied with the antenna. See installation instruction for further details.
- The accompanying U-bolts and fittings are made of stainless steel.
- All metal parts in the antenna are DC-grounded. Consequently, the antenna shows a DC-short across the coaxial cable.



ORDERING DESIGNATIONS

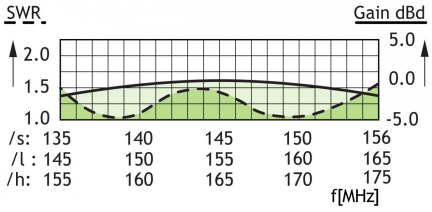
TYPE	FREQUENCY	PRODUCT NO.
CXL 150-1LW-Ex/s	138 - 156 MHz	115000005
CXL 150-1LW-Ex/l	144 - 165 MHz	115000004
CXL 150-1LW-Ex/h	155 - 175 MHz	115000003

SPECIFICATIONS

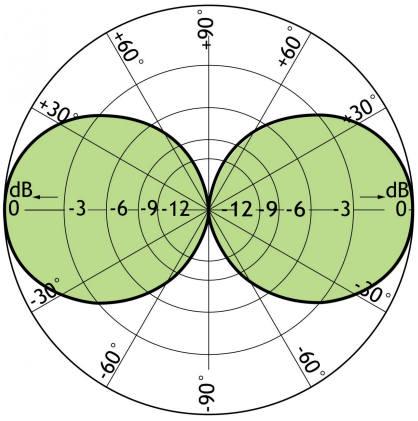
ELECTRICAL	
MODEL	CXL 150-1LW-Ex
ANTENNA TYPE	½ λ coaxial dipol, broad-banded
FREQUENCY	18 - 21 MHz wide frequency segments within 138 - 175 MHz. See ordering designations
IMPEDANCE	Nom. 50 Ω
RADIATION	Omnidirectional
POLARIZATION	Vertical
GAIN	2 dBi 0 dBd
BANDWIDTH	18 - 21 MHz depending on model
SWR	≤ 1.5
MAX. RF INPUT POWER DUE TO MAX. EIRP IN ATEX ENVIRONMENT *	
Group IIA Group IIB Group IIC	: 35.6 dBm (3.6 W) : 33.3 dBm (2.1 W) : 30.8 dBm (1.2 W)
ANTISTATIC PROTECTION	All metal parts DC-grounded (Connector shows a DC-short)
MECHANICAL	
TEMP. RANGE	-30° C → +60° C
CONNECTOR TIGHTENING TORQUE	N-female 0.7 - 1.1 Nm
WIND SURFACE	0.027 m² / 0.3 ft²
WIND LOAD	32 N @ 160 km/h / 99.42 mph.
MAX. WIND SPEED	200 km/h / 124.27 mph.
COLOUR	Blue
MATERIALS	Radome: Polyurethane-coated glass fibre Mounting bracket: Seawater resistant aluminium, black-coated U-bolt and fittings: Stainless steel
TOTAL HEIGHT	Approx. 1.3 m / 51.18 in.
WEIGHT	Approx. 1 kg / 2.20 lb.
DIA. IN TOP END	17 mm / 0.67 in.
DIA. IN BOTTOM END	23.6 mm / 0.93 in.
MOUNTING	On 16 to 54 mm / 0.63 x 2.13 in. dia. mast tube
TIGHTENING TORQUE	3 Nm
ATEX MARKING	II 3G Ex nA IIC T6

*See the ATEX Product Manual (safety and mounting instructions) and related EC DECLARATION OF CONFORMITY ATEX Directive 94/9/EC.

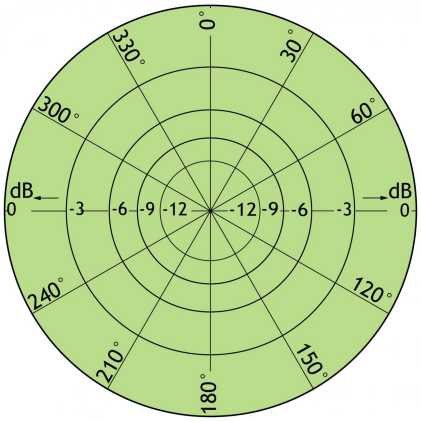
TYPICAL GAIN AND SWR CURVES



TYPICAL RADIATION PATTERN (E-PLANE)



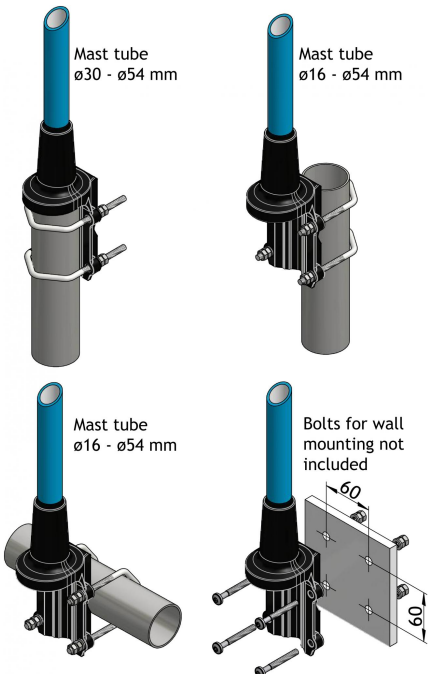
TYPICAL RADIATION PATTERN (H-PLANE)



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)	0 dBd / 2.15 dBi	35.6 dBm (3.6 W)
IIB	35.4 dBm (3.5 W)	0 dBd / 2.15 dBi	33.3 dBm (2.1 W)
IIC	33.0 dBm (2.0 W)	0 dBd / 2.15 dBi	30.8 dBm (1.2 W)

MULTI-PURPOSE MOUNTING BRACKET



PROCOM A/S reserve the right to amend specifications without prior notice.

04/09/15