

Operating manual: ORE-ATL-CBG-NO
O/E Converter, Housing M18
 Made for



II 3G Ex ec IIB T4 Gc

Technical Data	Type	ORE-ATL-CBG-NO / E3401 0043								
Gas Ex protection designation		II 3G Ex ec IIB T4 Gc								
For use in Ex Zones		Zone 2								
Interface		CAN								
Number of receivers		1								
Output type		push-pull, max. 50mA, short circuit protected								
Supply voltage, Ue		24VDC +/-10%								
Absolute maximum supply voltage, Um		30VDC								
Current consumption		< 10mA, no load at output								
Maximum power dissipation		< 0.3W, no load at output								
Housing		M18, yellow brass, nickel plated								
Enclosure rating		IP67 (with fitted POF and fitted cable connector), according to EN 60529								
Ambient working temperature range, Tamb		0°C up to +50°C								
Storage temperature range		-20°C up to +70°C								
Relative humidity		15% ... 90%, noncondensing								
Socket		Lumberg, M12 male receptacle, type RSF 8, 8 contacts								
Fibre optics fitting		Screwed connection, without additional parts or special tools								
Tightening torque for the fibre optics fixing screw		0.8Nm - 1.5Nm								
Accessories	Included	Optional								
		<ul style="list-style-type: none"> • 2x nuts M18 • 1x Safety interlock device for the connector, to be mounted at the cable connection. (black synthetic) • 1x Warning plate "WARNING - Explosion Hazard - Do Not Disconnect While Circuit Is Live Unless Area Is Known To Be Non-Hazardous", self-sealing, for gluing on the cable connector. 								
Wiring and Connection	<p>M12 plug, 8 Pins Shield to knurled nut</p> <table border="0"> <tr> <td>1: +24VDC</td> <td>5: CAN_H</td> </tr> <tr> <td>2: DNC</td> <td>6: CAN_L</td> </tr> <tr> <td>3: 0V</td> <td>7: DNC</td> </tr> <tr> <td>4: F_SIG_OUT</td> <td>8: PE/PA</td> </tr> </table>		1: +24VDC	5: CAN_H	2: DNC	6: CAN_L	3: 0V	7: DNC	4: F_SIG_OUT	8: PE/PA
1: +24VDC	5: CAN_H									
2: DNC	6: CAN_L									
3: 0V	7: DNC									
4: F_SIG_OUT	8: PE/PA									
<p>Dimensions ORE-ATL-CBG-NO: Male receptacle M12 x 1 Lumberg Series RSF8, 8 terminals</p> <p>The knurled nut for the POF fixation must only be screwed strong with fitted POF!</p> <p>Coupling ring for fibre optics fitting</p>										
<p>Hazardous Area Nonhazardous Area</p> <p>Ensure local equipotential bonding by means of a corrosion-resistant PE connection.</p> <p>Safety interlock device</p> <p>The end of the cable must be connected outside the hazardous locations.</p> <p>The cable shield is to connect to PE in a wide area.</p>										

ORE-ATL-CBG-NO_e5/2025-06-12/MP

Operating Manual / EC-/EU-declaration of conformity

Installation prescriptions for hazardous locations

The applicable rules and equipment regulations regarding explosion protection must be strictly observed (std). The local equipotential bonding must be corrosion-resistant and permanently ensured. The protective conductor \equiv is firmly connected to the housing. The maximum permissible input voltage $U_m = 30VDC$ must not be exceeded. Connecting cables must be laid or protected in such a way that they cannot be damaged. Inside the Ex area, connecting cables must be terminated inside certified Ex boxes or outside the Ex area.

ORE-ATL-CBG-NO / E3401 0043

This O/E converter is designed for use in Zone 2 hazardous areas.

General Notes, disposal

We reserve the right to modify our equipment. Our equipment is designed such way, that it has the least possible adverse effect on the environment. It neither emit or contain any damaging or siliconized substances and use a minimum of energy and resources. No longer usable or irreparable units must be disposed of in accordance with local waste disposal regulations.

Function

This O/E converter converts an optical signal into an electrical signal.

Maintenance

Protect the sensor head and fibre optics from pollution. Please use the filler plug if no fibre optics are connected. If the sensor head or fibre optics are polluted, clean them gently **without solvents**. Plastic fibre optics can be damaged by solvents, especially alcohol. The devices may only be maintained or repaired by the manufacturer.

General safety informations

The sensors may only be installed, connected and put into operation by trained specialists. The ORE-ATL-CBG-NO sensors must not be used for accident protection. Caution there is a risk of ignition when connecting or removing the connection cable if the plug isolating fuse has removed and the sensor is under voltage. The relevant EU and national regulations and guidelines, particularly those relating to explosion protection, must be observed during assembly, operation and maintenance. The sensors are conform to the following standards: EN IEC 60079-0:2018, EN 60079-7:2015, IEC 61000-4-2:2008, IEC 61000-4-3:2006+A1:2007+A2:2010, IEC 61000-4-4:2012, IEC 61000-4-5:2014, IEC 61000-4-6:2013, IEC 61000-6-1:2016, IEC 61000-6-2:2016, ATEX directive 2014/34/EU, Machine directive 2006/42/EC, EMC directive 2014/30/EU, RoHS directive 2011/65/EU

General Notes and disposal

We reserve the right to modify our equipment. Our equipment is designed such way, that it has the least possible adverse effect on the environment. It neither emit or contain any damaging or siliconized substances and use a minimum of energy and resources. No longer usable or irreparable units must be disposed of in accordance with local waste disposal regulations.

EU-Declaration of Conformity

Type ORE-ATL-CBG-NO manufacturer declaration according to ATEX guidelines 2014/34/EU. Production of Ex products according to the directive 2014/34/EU, Eurofins NB no. 1258, SEV 21 ATEX 4580, QAR No. CH/SEV/QAR21.0009.

The conformity of the devices with all used standards and directives and the EC-type examination certificate and the observation of the Quality Management System ISO 9001:2015 with the ATEX module „Production“, declares:

Ehrendingen, 12.6.2025



Pablo Ledergerber, Matrix Elektronik AG

ORE-ATL-CBG-NO_e5/2025-06-12/MP

Tippkemper-Matrix GmbH
Meeßger Str. 43, D-51491 Overath
Tel.: +49 2206 9566-0, Fax -19
info@tippkemper-matrix.de

Matrix Elektronik AG (Manufacturer)
Kirchweg 24, CH-5420 Ehrendingen
Tel.: +41 56 20400-20, Fax -29
info@matrix-elektronik.com