Cable entries Type 07-925.-..../.... to 07-929.-..../....

Note on instructions

When working in hazardous areas, the safety of personnel and equipment depends on compliance with the relevant safety regulations. The people in charge of installation and maintenance bear a special responsibility. It is essential that they have an exact knowledge of the applicable rules and regulations.

The instructions provide a summary of the most important safety measures and must be read by everyone working with the product so that they will be familiar with the correct handling of the product.

The instructions have to be kept for future reference and must be available throughout the expected life of the product.

Description

Cable entries, type 07-925.-..../.... to type 07-929.-..../.... are elements which allow electrical cables to be introduced into an Ex d enclosure, without danger of explosion.

The cable entry consists of a threaded metal plug-in sleeve, in which a sheathed cable is anchored and encapsulated.

Individual cores are led out of the d area side for connecting the devices.

The length of cores and cables are customer-tailored.

Explosion protection

Ex type of protection

ATEX

Ⓔx II 2 G Ex db IIC

Ⓔx II 2 D Ex tb IIIC

0044

IECEx

Ex db IIC

Ex tb IIIC

Certification

PTB 03 ATEX 1197 U

IECEx PTB 13.0050U

Ambient temperature

Depending on the design and cables

Cable operation temperature

For fixed installation

H05RNF/A05RNF	-40 °C to +60 °C (-40 °F to +140 °F)
H07RNF/A07RNF	-40 °C to +60 °C (-40 °F to +140 °F)
H05GG-F	-40 °C to +110 °C (-40 °F to +230 °F)
H05VV-F	-40 °C to +70 °C (-40 °F to +158 °F)
LiYCY-220	-30 °C to +80 °C (-22 °F to +176 °F)
NSSHÖU	-40 °C to +90 °C (-40 °F to +194 °F)
Ölflex Classic	-40 °C to +80 °C (-40 °F to +176 °F)
Ölflex-CY	-40 °C to +80 °C (-40 °F to +176 °F)
Ölflex Heat	-60 °C to +110 °C (-76 °F to +230 °F)
OZOFLEX Plus	-40 °C to +90 °C (-40 °F to +194 °F)
RADOX 125	-40 °C to +110 °C (-40 °F to +230 °F)
RADOX 155	-60 °C to +110 °C (-76 °F to +230 °F)
RG 178 LFH	-30 °C to +105 °C (-22 °F to +221 °F)
RG 179 LFH	-30 °C to +105 °C (-22 °F to +221 °F)
RG 58 C/U	-40 °C to +80 °C (-40 °F to +176 °F)
Unitronic LiYCY	-40 °C to +80 °C (-40 °F to +176 °F)

Approved for zones

1 and 2

Technical data

Electrical data

Rated voltage: max. 1140 V

Terminal cross-section:
0.2 mm² to 185 mm²

Max. rated current at:

0.2 mm²	3.0 A
0.3 mm²	4.5 A
0.35 mm²	5.5 A
0.5 mm²	7.5 A
0.75 mm²	10 A
1.0 mm²	12 A
1.5 mm²	15 A
2.5 mm²	21 A
4.0 mm²	28 A
6 mm²	36 A
10 mm²	50 A
16 mm²	67 A
25 mm²	90 A
35 mm²	110 A
50 mm²	140 A
70 mm²	170 A
95 mm²	205 A
120 mm²	240 A
150 mm²	275 A
185 mm²	310 A

Sleeve material

Metal,
bare, painted, or galvanized

External diameter of the sleeve

15 mm to 90 mm
(0.59 in to 3.54 in)

Gap length of the sleeve

L ≥ 12.5 mm (0.49 in)
L ≥ 25 mm (0.98 in)
L ≥ 40 mm (1.57 in)

Dimensions

See separate dimension sheet

01-9200-7D0001-12/13-STVT-308787

BARTEC GmbH Max-Eyth-Straße 16 D-97980 Bad Mergentheim Germany
Tel.: +49 7931 597-0 Fax: +49 7931 597-119
info@bartec.de www.bartec.de

Safety Instructions

The cable entries are suitable for use in zones 1/2.

The cable entry may be used only for the approved purpose. Incorrect installation can cause malfunctioning and the loss of explosion protection.

When determining the maximum current carrying capacity of the connection cores, consideration must be given to their self-heating and the enclosure heating at the place of installation at maximum ambient temperature.

Utilization in areas other than those specified or the modification of the product by anyone other than the manufacturer is not permitted and will exempt BARTEC from liability for defects and any further liability.

The generally applicable statutory rules and other binding directives relating to workplace safety, accident prevention and environmental protection must be observed.

The cable entries may be operated only if they are clean and not damaged in any way.

It is not permissible to convert or modify the cable entries.

Marking

Particularly important points in these instructions are marked with a symbol:

⚠ DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

⚠ WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION

CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to personal injury.

ⓘ Note

Important instructions and information on effective, economical and environmentally compatible handling.

Standards conformed to

IEC 60079-0:2007
EN 60079-0:2009
IEC/EN 60079-1:2007
IEC 60079-31:2008 + Corrigendum 1:2009
EN 60079-31:2009

Transport, Storage

NOTICE

Damage to the cable entries through incorrect transport or incorrect storage.

➢ Transport and storage is permissible in original packaging only.

Assembly, Installation and Commissioning

⚠ WARNING

Risk of serious injury due to incorrect proceedings.

➢ Only authorized and qualified personnel may do any of the assembly, disassembly, installation and commissioning work.

Assembly/Disassembly

⚠ WARNING

Risk of serious injury due to incorrect assembly.

➢ When assembling the equipment, the IEC/EN 60079-14 and other applicable national standards and installation regulations must be observed.

➢ Boreholes into which the cable entries are inserted must meet the minimum requirements of IEC/EN 60079-1, section 5.2 (table 1 or 2). Observe the minimum lengths and gap widths.

➢ When laying the sheathed lead in Ex zones, the installation regulations for hazardous areas must be observed.

➢ Select the quality of the conductors so that they correspond to the thermal and mechanical requirements of the respective range of application.

ⓘ Note

The non-threaded sleeve is usually mounted outwards from the d area. As a special version, the cable entry can be screwed in from outside.

Check when assembling:

- Use appropriate tools.
- Make sure the cable entry is in perfect condition.
- Fasten the cable entry in the electrical operating equipment in a way that will prevent rotation and self-loosening. Customary aids are: adhesive, retaining ring etc. Assembly instruction, see page 3.
- When using a cable gland for shielded conductors, insert only fixed-installation cables.

Installation

Check when installing:

- Core wires that are connected in hazardous areas must be protected by means of an enclosure offering a standardized type of protection conforming to IEC/EN 60079-0.
- Cores that are not needed must be wired to terminals.

Commissioning

Before commissioning, check that:

- The cable entry is assembled and installed correctly.
- The cable entry and cables are not damaged.
- The cores have been laid correctly.
- The junction space is clean.
- The connection has been established properly.

ⓘ Note

Temperature ranges are specified for fixed installed cables. For flexible installation, it is necessary to contact the manufacturer.

Operation

⚠ DANGER

Death or serious injury due to improper use.

➢ The cable entries may be operated only within the technical limits that apply to them (see page 1).

01-9200-7D0001-12/13-STVT-308787

Maintenance and Fault Clearance

⚠ WARNING

Risk of serious injury due to incorrect proceedings.

- ➢ Only authorized qualified personnel may do any of the work relating to maintenance and fault clearance.
- ➢ IEC/EN 60079-17 must be observed.

Maintenance

⚠ WARNING

Risk of serious accidents due to damaged parts.

- ➢ Check cable entries and cables regularly for cracks and damage. Make sure that they are properly established.

The operator of the cable entries must keep them in good condition, operate them properly, monitor them and clean them regularly.

Fault Clearance

⚠ WARNING

Risk of serious injury due to use of non-original spare parts.

- ➢ Use original parts only as replacements.

Defective cable entries cannot be repaired; they must be replaced considering this operational instruction.

Accessories, Spare Parts

See BARTEC catalogue.

Disposal

The components in the cable entries contain metal and plastic parts.

Therefore the statutory requirements for disposing of electronic scrap must be observed (e.g. disposal by an approved disposal company).

Service Address

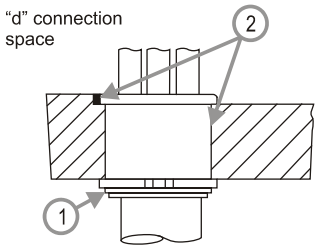
BARTEC GmbH
Max-Eyth-Straße 16
97980 Bad Mergentheim
Germany
Tel.: +49 7931 597-0
Fax: +49 7931 597-119

Assembly Instruction

ⓘ Note

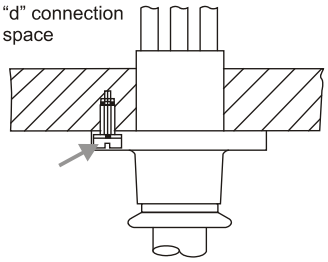
The cable entries in the sketches are used as examples for all different types of cable entries.

Type 07-925.-..../.... to 07-928.-..../.... (plug-in versions)



1 Retaining ring
2 Protection against twisting
  – by adhesive
  – place the collar against a surface, i.e. without adhesive

Type 07-929.-..../.... (plug-in versions with mounting flange)



Protection against twisting and self-loosening by means of a special screw with washer.

01-9200-7D0001-12/13-STVT-308787

Erklärung der Konformität
Declaration of Conformity
Attestation de conformité

Nº 01-9200-7C0003

BARTEC GmbH
Max-Eyth-Straße 16
97980 Bad Mergentheim
Germany

Wir	We	Nous
BARTEC GmbH,		
erklären in alleiniger Verantwortung, dass das Produkt	declare under our sole responsibility that the product	attestons sous notre seule responsabilité que le produit
Ex d Leitungseinführung	**Ex d cable entry**	**Entrée de câble Ex d**

Typ 07-925*-**/**** bis 07-929*-****/****

auf das sich diese Erklärung bezieht den Anforderungen der folgenden **Richtlinien (RL)** entspricht	to which this declaration relates is in accordance with the provision of the following **directives (D)**	se référant à cette attestation correspond aux dispositions des **directives (D)** suivantes
ATEX-Richtlinie 94/9/EG	**ATEX-Directive 94/9/EC**	**ATEX-Directive 94/9/CE**
und mit folgenden Normen oder normativen Dokumenten übereinstimmt	and is in conformity with the following standards or other normative documents	et est conforme aux normes ou documents normatifs ci-dessous
EN 60079-0:2009 **EN 60079-1:2007**	**EN 60079-31:2009**	
Kennzeichnung	**Marking**	**Marquage**
II 2 G Ex db IIC **II 2 D Ex tb IIIC**		
Verfahren der EG-Baumusterprüfung / Benannte Stelle	**Procedure of EC-Type Examination / Notified Body**	**Procédure d'examen CE de type / Organisme Notifié**

PTB 03 ATEX 1197 U
0102 PTB, Bundesallee 100, 38116 Braunschweig, D

0044

Bad Mergentheim, den 26.03.2014

ppa. Ewald Warmuth
Geschäftsleitung / General Manager

03-0383-0289

01-9200-7D0001-12/13-STVT-308787