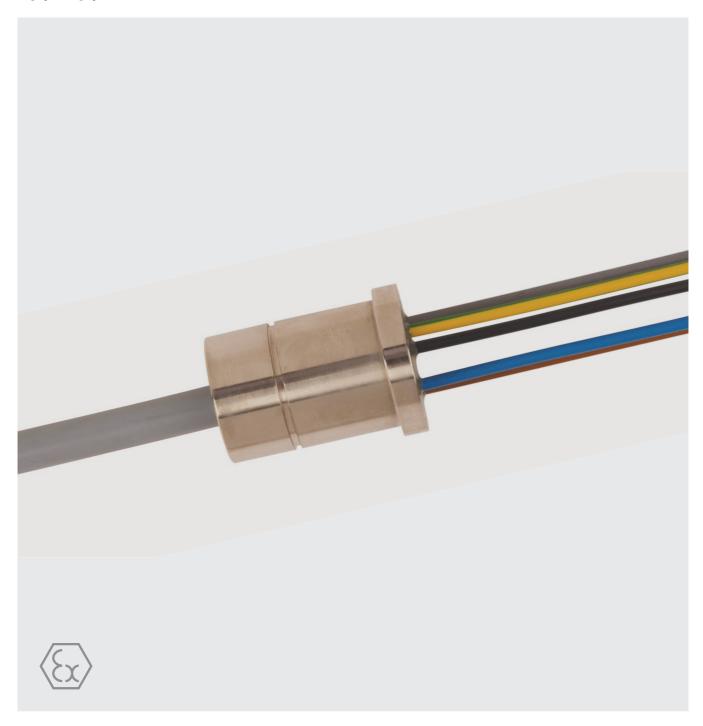


## **BARTEC**

# Leitungseinführung Cable entries

Typ/Type 07-925\*-\*\*\*/\*\*\* bis/to 07-929\*-\*\*\*/\*\*\*



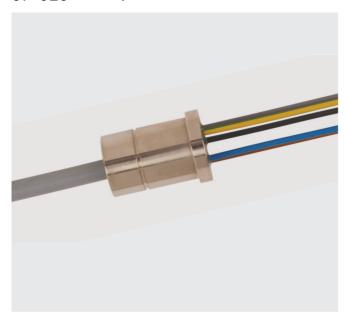






## Cable entries

# Type 07-925\*-\*\*\*/\*\*\* to 07-929\*-\*\*\*/\*\*\*



## Note on instructions

When working in potentially explosive areas, the safety of people and systems depends on compliance with the relevant safety regulations. Persons responsible for assembly and maintenance bear a special responsibility.

A prerequisite for this is precise knowledge of the applicable rules and regulations.

The instructions summarise the most important safety measures and must be read by everyone working with the product, so that they are familiar with the correct handling of the product.

The instructions must be retained and must be available throughout the life of the product.

## Description

The cable entires type 07-925\*-\*\*\*\* to 07-929\*-\*\*\*\*/\*\*\*\* are connection elements with which electrical cables can be fed directly into Ex d housings in an explosion-proof manner.

The cable entires consists of a metal screw sleeve in which a hose line is cast in a strain-relieved and flame-proof manner.

If individual wires are brought out, they must be installed in the "d" space.

The length of the connection wires and the cable are designed depending on the application.

## **Explosion protection**

Notified Body Number	0044
Approved Body Number	2503
ATEX / UKEX marking	<ul> <li>         ⊕ II 2 G Ex db IIC Gb         </li> <li>         ⊕ II 2 D Ex tb IIIC Db     </li> </ul>
IECEx	Ex db IIC Gb Ex tb IIIC Db
Inspection documents	EPS 17 ATEX 1100 U IECEx EPS 17.0051U CML 21 UKEX 1855 U

Ambient :	emperature
-----------	------------

Depending on the type of construction and the electrical lines

Operating temperature of	On anothing the construction of the first disease of the first disease.		
Operating temperature examples for fixed installations:			
H05RNF/A05RNF	-40 °C to +60 °C (-40 °F to +140 °F)		
H07RNF/A07RNF	-40 °C to +60 °C (-40 °F to +140 °F)		
H05VV-F	-40 °C to +70 °C (-40 °F to +158 °F)		
NSSHÖU	-40 °C to +90 °C (-40 °F to +194 °F)		
Ölflex Classic	-40 °C to +80 °C (-40 °F to +176 °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)		
BETAflam 145 flex	-60 °C to +110 °C (-76 °F to +230 °F)		
BETAflam 145 C-flex	-60 °C to +110 °C (-76 °F to +230 °F)		
Enviroflex 316	-40 °C to +105 °C (-40 °F to +221 °F)		
Approved for the zones	1 and 2 as well as 21* and 22*		









## Technical data

Electrical data	
Rated voltage	max. 1140 V
Rated currents	see table below
Connection cross-section	0.2 mm <sup>2</sup> to 185 mm <sup>2</sup>

Rated currents				
Nominal cross-section of copper conductor	Ampacity of the hose line A07RN-F or H07RN-F	Load capacity (remaining cable types)		
[mm²]	[A]	[A]		
0.14	-	1.8		
0.25	-	3.6		
0.34	-	5.5		
0.5	-	8.2		
0.75	-	11		
1	11	14		
1.5	14	16		
2.5	19	24		
4	26	31		
6	33	40		
10	46	56		
16	61	75		
25	81	98		
35	100	123		
50	126	153		
70	156	188		
95	186	227		
120	216	266		
150	248	305		
185	281	347		
240	332	412		
300	377	476		

## Technical data

Conversion fac	ctors for	different	ambient	temperature	S

Permissible operating temperature of the cable (see TS marking of the CE). Conversion factors to be applied to the current-carrying capacity specifications At Ta

[°C]	60 °C	70 °C	80 °C	90 °C	110 °C
10	1.29	1.22	1.18	1.00	1.00
15	1.22	1.17	1.14	1.00	1.00
20	1.15	1.12	1.10	1.00	1.00
25	1.08	1.06	1.05	1.00	1.00
30	1.00	1.00	1.00	1.00	1.00
35	0.91	0.94	0.95	1.00	1.00
40	0.82	0.87	0.89	1.00	1.00
45	0.71	0.79	0.84	1.00	1.00
50	0.58	0.71	0.77	1.00	1.00
55	0.41	0.61	0.71	0.94	1.00
60	-	0.50	0.63	0.87	1.00
65	-	0.35	0.55	0.79	1.00
70	-	-	0.45	0.71	1.00
75	-	-	0.32	0.61	1.00
80	-	-	-	0.50	1.00
Sleeve n	naterial	Metal, b	oright, lacque	red or galvar	nised
Outer di sleeve	ameter of the	15 mm	to 90 mm (0,5	59 in to 3,54 i	n)
Gap leng	gth of the slee	L≥ 25 n	i mm (0.49 in) nm (0.98 in) nm (1.57 in)	)	

Dimensions See separate dimension sheet.





 $\textbf{Reservation:} \ \textbf{We reserve the right to make technical changes.} \ \textbf{Changes, errors and misprints shall not justify any claims for damages.} \ \textbf{Changes, errors and misprints shall not justify any claims for damages.} \ \textbf{Changes, errors and misprints shall not justify any claims for damages.} \ \textbf{Changes, errors and misprints shall not justify any claims for damages.} \ \textbf{Changes, errors and misprints shall not justify any claims for damages.} \ \textbf{Changes, errors and misprints shall not justify any claims for damages.} \ \textbf{Changes, errors and misprints shall not justify any claims for damages.} \ \textbf{Changes, errors and misprints shall not justify any claims for damages.} \ \textbf{Changes, errors and misprints shall not justify any claims for damages.} \ \textbf{Changes, errors and misprints shall not justify any claims for damages.} \ \textbf{Changes, errors and misprints shall not justify any claims for damages.} \ \textbf{Changes, errors and misprints shall not justify any claims for damages.} \ \textbf{Changes, errors and misprints shall not justify any claims for damages.} \ \textbf{Changes, errors and misprints shall not justify any claims for damages.} \ \textbf{Changes, errors and misprints shall not justify any claims for damages.} \ \textbf{Changes, errors and misprints shall not justify any claims for damages.} \ \textbf{Changes, errors and misprints shall not justify any claims for damages.} \ \textbf{Changes, errors and misprints shall not justify any claims for damages.} \ \textbf{Changes, errors and misprints shall not justify any claims for damages.} \ \textbf{Changes, errors and misprints shall not justify any claims for damages.} \ \textbf{Changes, errors and misprints shall not justify any claims for damages.} \ \textbf{Changes, errors and misprints shall not justify any claims for damages.} \ \textbf{Changes, errors and misprints shall not justify any claims for damages.} \ \textbf{Changes, errors and misprints shall not justify any claims for damages.} \ \textbf{Changes, errors and misprints shall not justify any claims for damages.} \ \textbf{Changes, errors and misprints shall not justif$ 

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## Safety Instructions

The cable entry is suitable for the use in zones 1 and 2.

The cable entry may only be used for the approved purpose. Incorrect installation may result in malfunctions or loss of explosion protection.

When determining the maximum current-carrying capacity of the connecting wires, self-heating and housing heating at the installation site at the maximum permissible ambient temperature must be assumed.

Use in areas other than those specified or modification of the product by someone other than the manufacturer shall not be permitted and releases BARTEC from liability for defects and further liability.

The generally applicable legal rules and other binding guidelines on occupational safety, accident prevention and environmental protection must be observed.

The cable entry may only be operated if it is clean and not damaged.

Any modifications or changes are not permitted.

## Labelling

Passages of particular importance in these instructions are marked with a symbol:



#### DANGER

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



#### WARNING

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



#### CAUTION

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



#### **ATTENTION**

Is used to address practices not related to personal injury.



#### PLEASE NOTE

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

## Compliance with standards

See Attestations of Conformity.

## Transport and Storage

# <u>(İ</u>)

#### ATTENTION

Damage to the cable entry due to incorrect transport or incorrect storage.

 Transport and storage shall only be permitted in the original packaging.

# Assembly, Installation and Commissioning

#### WARNING

#### Risk of serious injury due to incorrect proceedings.

- Work on assembly, disassembly, installation and commissioning may only be carried out by authorised specialist personnel.
- Holes into which the cable entry are inserted must comply with the minimum requirements of IEC/EN - 60079-1, Section 5.2 (Table 2 or 3).
- When installing the hose assembly in Ex-zones, the installation regulations for hazardous areas must be observed.
- The quality of the hoses must be selected in such a way that they comply with the thermal and mechanical requirements.



#### PLEASE NOTE

In general, the screw sleeve is mounted from the d-space to the outside.  $\,$ 

As a special version, the cable entry can also be screwed in from the outside.

The following must be observed during the assembly:

- Suitable tools must be used.
- It must be ensured that the cable entry is in technically flawless condition.
- The cable entry must be secured within the electrical equipment in such a way that it is protected against twisting and self-loosening. Adhesives, locking rings, etc. may be used as commonly used auxiliaries. In terms of installation instructions, please refer to Page 3.
- When using a cable entry for shielded cables, only permanently installed cables may be inserted.

### Installation

During the installation, please note:

- The connection of the wire lines in the hazardous area must be protected by a housing with a standardised type of protection in accordance with IEC/EN 60079-0.
- Wire any wires that are not required to the terminals.









## Commissioning

Before commissioning, check that:

- the assembly was carried out according to the regulations.
- the installation was carried out according to the regulations.
- the cable entry and the cables are not damaged.
- the wires are laid correctly.
- the terminal compartment is clean.
- the connection has been made properly.



#### PLEASE NOTE

The temperature ranges and voltage specifications are given for "fixed and protected installation" of the cables. Consultation with the manufacturer is required for "flexible installations".

## Operation



#### DANGER

Death or risk of injury due to improper use.

• Operate the cable entires only within the technical limits that apply to it (see page 1).

### Maintenance and Fault Clearance



#### WARNING

Risk of serious injury due to incorrect procedure.

- 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

Serious accidents caused by damaged components.

 Cable entry, seals and cables must be checked on a regular basis in terms of any cracks, damages and tightness.

The operator of the cable entry must keep the same in good condition, operate it properly and monitor it.

## Fault Clearance



#### WARNING

Serious accidents due to the use of non-original spare parts.

 Any defect or broken parts must be replaced by original parts.

Damaged or defective cable entires cannot be repaired. They must be exchanged in accordance with the operating instructions.

## Accessories, Spare Parts

Please have a look at the BARTEC catalogue.

## Disposal

The cable entry components contain metal and plastic parts.

For this reason, the legal requirements for electronic waste must be observed for disposal (e.g. disposal by an approved disposal company).









## Installation instructions



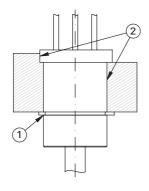
#### PLEASE NOTE

The cable entries depicted in the graphics are exemplary for all cable entries. The screw sleeves are mounted from the d-space outwards.

### Type 07-925\*-\*\*\*/\*\*\*\* to 07-928\*-\*\*\*/\*\*\*\* (pluggable)

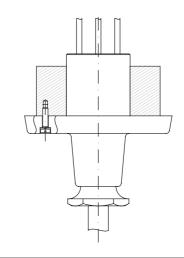
- 1. Locking ring
- 2. Anti-twist protection
  - by gluing
  - by resting the collar against a surface, i.e. without gluing

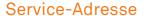




## Type 07-929\*-\*\*\*/\*\*\*\* (pluggable with mounting flange)

 Protection against twisting and self-loosening by using a special screw and a spring washer.





BARTEC GmbH

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Konformitätsbescheinigung Attestation of Conformity Attestation de conformité **BARTEC** 

Nº 01-9200-7C0003 B

Wir	We	Nous
	BARTEC GmbH Max-Eyth-Straße 16 97980 Bad Mergentheim Germany	
erklären in alleiniger Verantwortung, dass das Produkt <b>Leitungseinführung</b>	declare under our sole responsibility that the product  Cable entry	attestons sous notre seule responsabilité que le produit Entrée de câble

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

auf das sich diese Erklärung bezieht den Anforderungen der folgenden **Richtlinien (RL)** entspricht

ATEX-Richtlinie 2014/34/EU RoHS-Richtlinie 2011/65/EU

und mit folgenden Normen oder normativen Dokumenten übereinstimmt to which this declaration relates is in accordance with the provision of the following **directives (D)** 

ATEX-Directive 2014/34/EU RoHS-Directive 2011/65/EU

and is in conformity with the following standards or other normative documents

se référant à cette attestation correspond aux dispositions des **directives (D)** suivantes

Directive ATEX 2014/34/UE
Directive RoHS 2011/65/UE

et est conforme aux normes ou documents normatifs ci-dessous

EN IEC 60079- 0:2018/AC:2020 EN 60079-1:2014/AC:2018 EN 60079-31:2014

Verfahren der EU-Baumusterprüfung / Benannte Stelle Procedure of EU-Type Examination / Notified Body

Procédure d'examen UE de type / Organisme Notifié

#### EPS 17 ATEX 1100 U(\*)

#### 2004, Bureau Veritas Germany GmbH, 86842 Türkheim

(\*) Die Ex-Komponente ist Teil eines elektrischen Betriebsmittels oder eines Moduls, gekennzeichnet mit dem Symbol "U", das nicht für sich allein verwendet werden darf und über dessen Einbau in elektrische Betriebsmittel oder Systeme zur Verwendung in explosionsgefährdeten Bereichen gesondert entschieden werden muss.

Merkmale dieser Komponente sowie die Bedingungen für ihren Einbau in Geräte und Schutzsys teme siehe Betriebsanleitung der Komponente. (\*) The Ex-component is a part of an electrical apparatus or a module, marked with the symbol "U", which is not intended to be used alone and requires additional consideration when incorporated into electrical apparatus or systems for use in explosive atmospheres.

Characteristics and how the component must be incorporated into equipment or protective systems see operation manual of the component.

(\*) Le composant Ex est partie de matériel électrique ou de module, marquée du symbol « U », ne devant pas être utilisée seule et nécessitant une certification complémentaire lorsqu'elle est incorporée a un matériel électrique ou à un système pour atmosphères explosives.

Les caractéristiques du composant ainsi que les conditions d'incorporation dans des appareils ou des systèmes de protection regarde voir l'instruction d'emploi du composant.

0044

Bad Mergentheim, 22.06.2021

i.A. Olaniyi Popoola

Product Manager, Line Bushings, Line Entries and Cable Glands i.A. Steffen Mika

Certification Manager R&D ESS