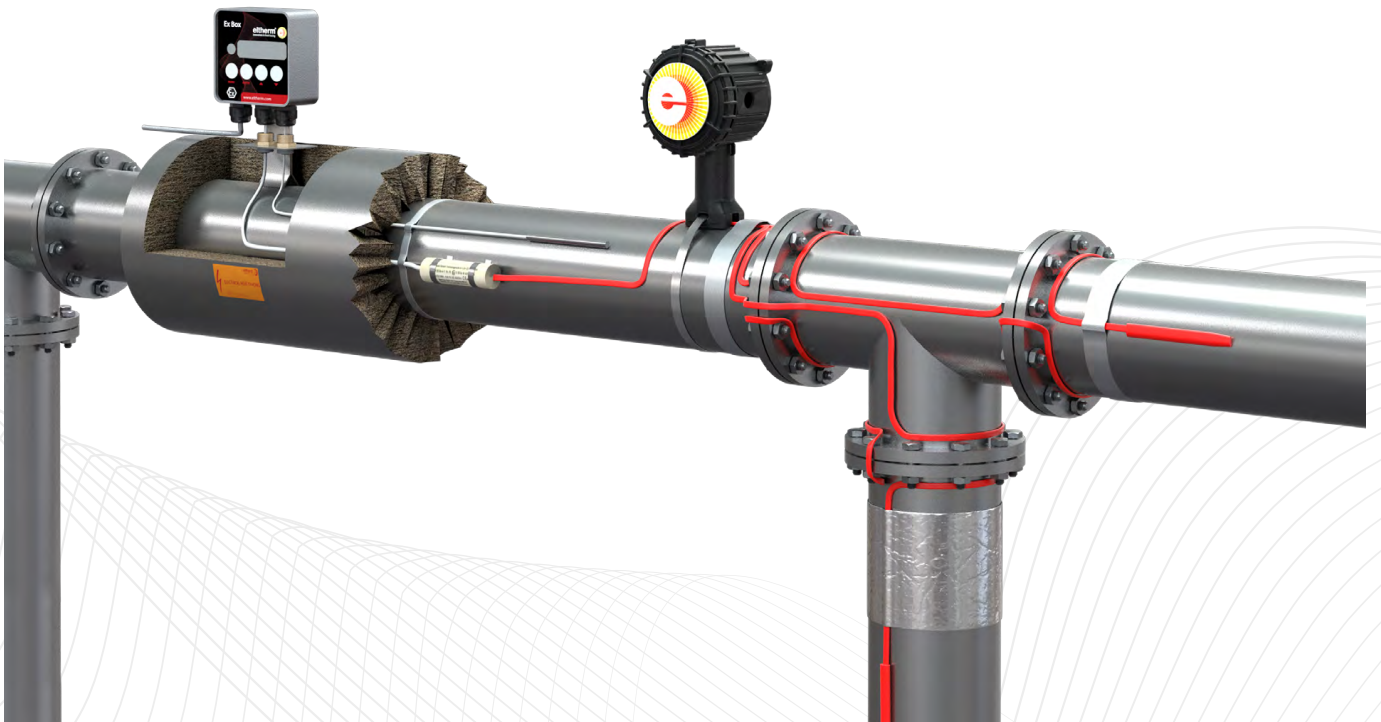
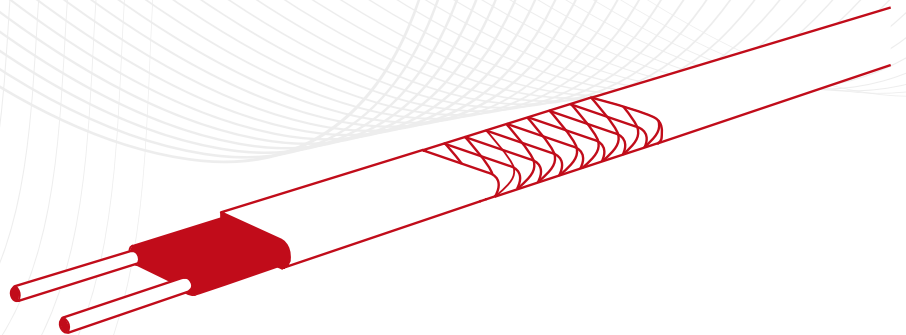


SYSTEM- OVERVIEW



ELSR



Self regulating trace heater

CONTENT

INTRODUCTION	3
APPLICATIONS	3
APPLICATION AREAS	3
SYSTEM DESIGN	4
TRACE HEATER ELSR	5
LOW TEMPERATURE (for use up to 80 °C)	5
MEDIUM TEMPERATURE (for use up to 100 °C)	6
HIGH TEMPERATURE (for use up to 250 °C)	7
NEW GENERATION HIGH TEMPERATURE (for use up to 250 °C)	8
CONNECTION CABLE	9
POWER CONNECTION & END TERMINATION KITS	9
<u>Ex POWER CONNECTION KITS</u>	9
Ex-Con SR	9
ELVB-SRAN-Ex-20; ELVB-SRAL-Ex-20; ELVB-SRAH-Ex-20	10
ELVB-SREx-SH+-20; ELVB-SREx-25	11
<u>Ex END TERMINATION KITS</u>	12
EL-ECSH-Ex; EL-ECN-Ex; EL-ECL-Ex; Ex-It-S; Ex-It-L End of circuit light	12
<u>non Ex POWER CONNECTION KITS</u>	13
EI-Click; ELVB-SREx-IT; ELVB-SRA-25	13
ELVB-SRAH-25; ELVB-SRAM-25; ELVB-SRAR-25	14
ELVB-SRV-N-LS-W; ELVB-SRV-H; ELVB-SRV-M	15
ELVB-SRV-RAMP	16
<u>non Ex END TERMINATION KITS</u>	16
EL-EC	16
JUNCTION BOXES	17
JUNCTION BOXES FOR Ex AREAS	17
JUNCTION BOXES FOR non Ex AREAS	19
INSULATING BUSHINGS	21
MOUNTING BRACKETS	21
ORDERING INFORMATION	22

Reservation

Subject to technical changes. Changes, errors and misprints do not constitute grounds for claims for damages. For safety components and systems, the assembly instructions as well as the relevant and currently valid standards and regulations must be observed.

eltherm GmbH Ernst-Heinkel-Str. 6-10 57299 Burbach P.: +49 2736 4413-0 F.: +49 2736 4413-50 info@eltherm.com	Document: 864301ELSR001 System overview ELSR		System overview ELSR	
	Author:	Detlef Matthes	Date:	10.05.2023
	Revision: 2	Julian Engel	Date:	17.12.2025

INTRODUCTION

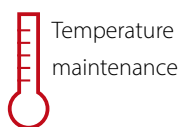
This system overview is intended to provide a compact overview of the ELSR systems and their components - please refer to the respective data sheets for detailed information on the products.

The system overview focuses on the products that are absolutely necessary for a functioning heating circuit. Accessories are not dealt with separately - information on these can be found in the accessories data sheets.

ELSR (**el**therm **self**-regulating) self-regulating trace heaters consist of two parallel supply conductors embedded in a cross-linked heating element doped with carbon particles. When the temperature rises, the distances between the carbon particles increase due to molecular expansion. The resistance increases and the power decreases. When it cools down, this process reverses and the power increases. This prevents any overheating of the heater. Temperature limitation can be dispensed with. Self-regulating trace heaters can be laid crosswise, many are also approved for explosive areas.

The ELSR self-regulating trace heaters are used for frost protection and temperature maintenance in containers, pipes, valves, etc. They are also suitable for aggressive environments when fitted with a chemical-resistant outer jacket (option "BOT").

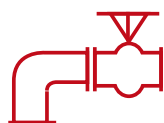
APPLICATIONS



Temperature maintenance



Frost prevention



Valves, pumps



Pipelines



Silos, vessels, tanks



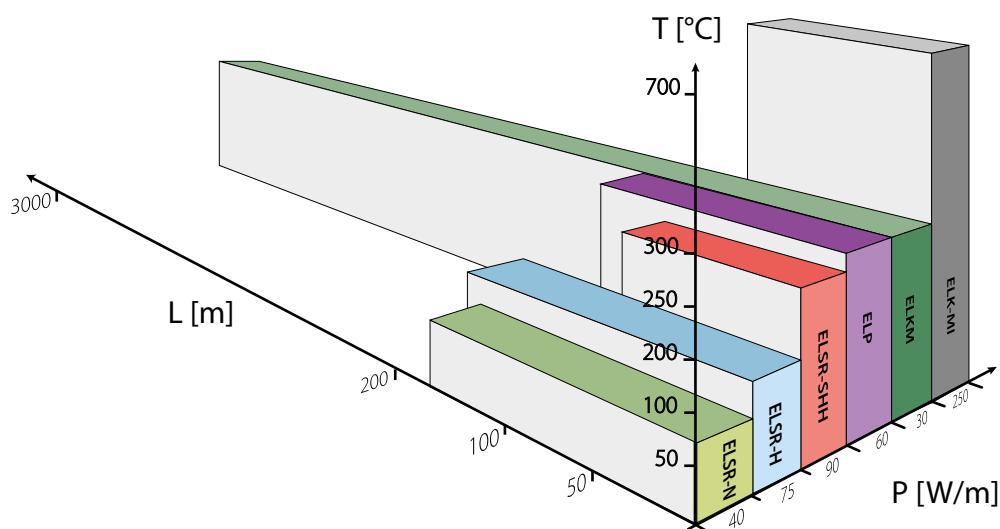
Open spaces



Roof & Gutter

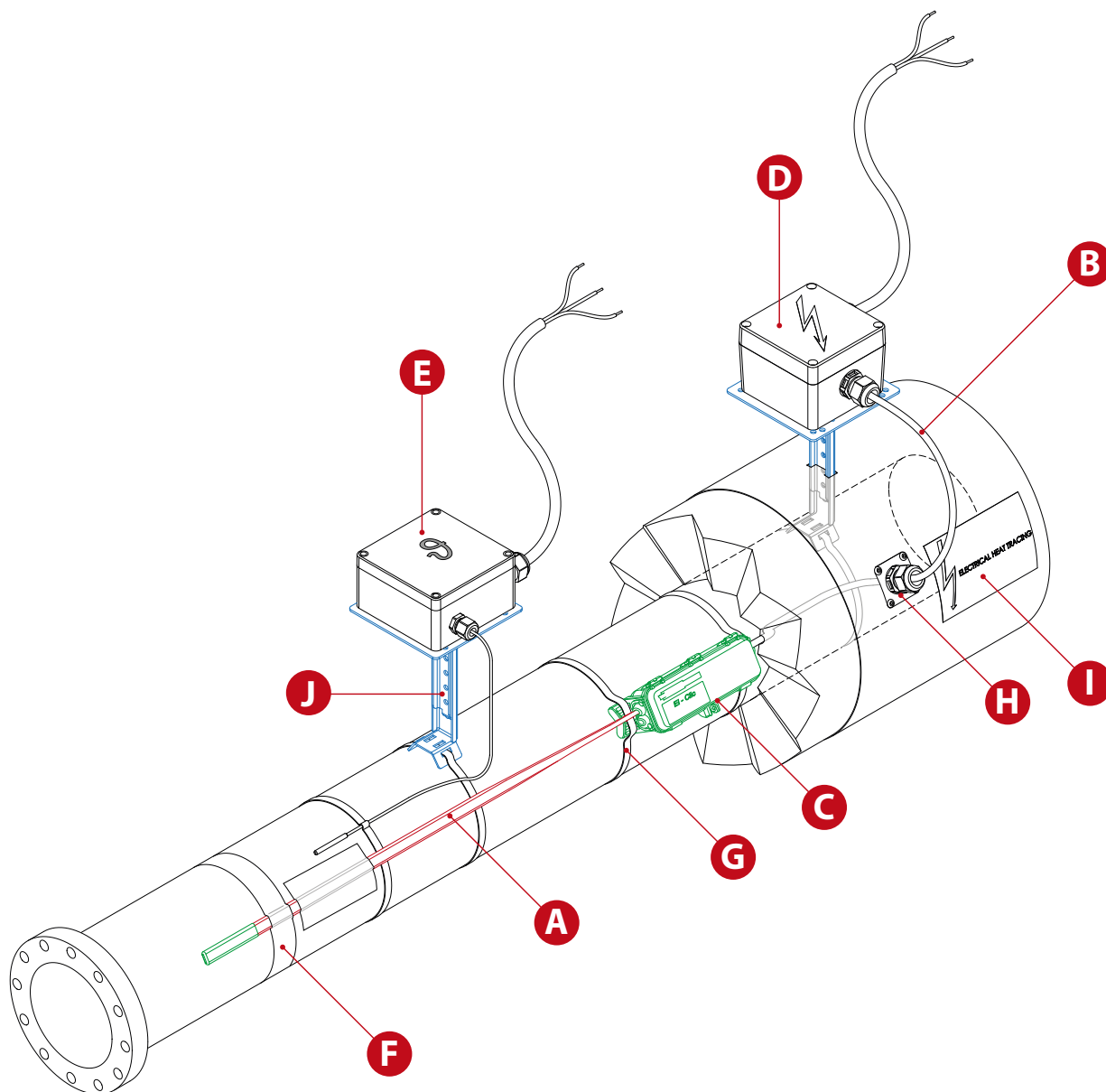


Special solutions



SYSTEM DESIGN - TRACE HEATING PIPE

A	Trace heater ELSR	page 5 to 8	F	Adhesive tapes	see data sheet
B	Connection cable	page 9	G	Tensioning straps	see data sheet
C	Power connection set	page 9 to 16	H	Insulation Bushing	page 21
D	Junction box	page 17 to 21	I	Warning sign	see data sheet
E	Temperature controller	see data sheet	J	Mounting bracket	page 21



Schematic diagram

i NOTE

To determine your required heating power, you can also use our free design software "eltherm designer," which will identify various types of trace heaters that are directly suitable for your application and provide you with a corresponding order list for export.

You can download eltherm designer free of charge at the following link <https://eltherm.com/eltherm-designer>

(A) ELSR - SELF REGULATING TRACE HEATER

LOW temperature (for use up to 80 °C)

									
Parameters		ELSR-N	ELSR-LS	ELSR-M	ELSR-M-BAF	ELSR-R			
Max. operation temperatur (switched on)		65°C	65°C	65°C	65°C	65°C		65°C	
Max. operation temperatur (switched off)		80°C	80°C	65°C	65°C	65°C		65°C	
Nominal Voltage		230 VAC	230 VAC	230 VAC	230 VAC	230 VAC		230 VAC	
Min. bending radius		25 mm	25 mm	25 mm	25 mm	30 mm			
Min. installation temperature		- 60°C	- 60°C	- 45°C	- 45°C	- 30°C			
Nominal power output @ 10°C		10 W/m	10 W/m	10 W/m	10 W/m	19 W/m			
		20 W/m	15 W/m	15 W/m	15 W/m	27 W/m			
		30 W/m	25 W/m						
		40 W/m							
Max. Heating circuit length (16A)* ¹		177 m	196 m	126 m	89 m	102 m			
		109 m	160 m	105 m	89 m	32 m			
		83 m	103 m						
		77 m							
Designs	Aluminum foil, TPE-O outer sheath	AO	AO	AO	BAF				
	Aluminum foil, halogen-free outer sheath	AHF							
	Braid * ² , TPE-O outer sheath	BO	BO	BO					
	Braid * ² , halogen-free outer sheath	BHF							
	Braid * ² , FEP outer sheath	BOT						BOT	
Ex approved									
VDE approved									
Drinking water suitable									

NOTE

*¹ Heating circuit lengths on the following conditions

- 230 V nominal voltage
- Delayed action circuit breakers (C-characteristic) with 80 % max. load
- Maximum 10 % line voltage drop on trace heater bus wire
- Power connection to one heater end
- In certain installation situations, the heating circuit length may vary.

*² Braid Cu, tin-plated

Further heating circuit lengths for other switch-on temperatures or circuit breakers can be found in the respective data sheet.

➤ Contact us: +49 2736 4413-0 • info@eltherm.com

MEDIUM temperature (for use up to 100 °C)

					
		ELSR-W	ELSR-Ramp	ELSR-FHP	
Parameters				ELSR-FHP-23	ELSR-FHP-38
Max. operation temperatur (switched on)		80°C	80°C	65°C	80°C
Max. operation temperatur (switched off)		100°C	100°C	80°C	110°C
Nominal Voltage		230 VAC	230 VAC	230 VAC	230 VAC
Min. bending radius		20 mm	50 mm	50 mm	50 mm
Min. installation temperature		- 20°C	- 20°C	- 45°C	- 45°C
Nominal power output @ 10°C		9 W/m (@ 55°C) 13 W/m (@ 65°C)	50 W/m (@ 10°C) 110 W/m (@ 5°C in concrete)	23 W/m (@ -5°C)	38 W/m (@ -5°C)
Max. Heating circuit length (16A)* ¹		113 m 73 m	28 m	(-5°C) 48 m (-15°C) 37 m	(-5°C) 36 m (-15°C) 43 m
Designs	Aluminum foil, TPE-O outer sheath	AO		Fluoropolymer	
	Braid *2, TPE-O outer sheath	BO	TPE		
	Braid *2, FEP outer sheath				
Ex approved				IEC IECEx	
VDE approved					
Drinking water suitable					

NOTE

*¹ Heating circuit lengths on the following conditions

- 230 V nominal voltage
- Delayed action circuit breakers (C-characteristic) with 80 % max. load
- Maximum 10 % line voltage drop on heating cable bus wire
- Power connection to one heater end
- In certain installation situations, the heating circuit length may vary.

*² Braid Cu, tin-plated

Further heating circuit lengths for other switch-on temperatures or circuit breakers can be found in the respective data sheet.

HIGH temperature (for use up to 250 °C)

				
	ELSR-H		ELSR-SHH	
Parameters				
Max. operation temperatur (switched on)	120°C		250°C	
Max. operation temperatur (switched off)	210°C		250°C	
Nominal Voltage	230 VAC		230 VAC	
Min. bending radius	25 mm		25 mm	
Min. installation temperature	- 60°C		- 40°C	
	Nominal power output	max. HC length (16A)	Nominal power output	max. HC length (16A)
	10 W/m	193 m	15 W/m	122 m
	15 W/m	158 m	30 W/m	82 m
	20 W/m	122 m	45 W/m	62 m
	30 W/m	82 m	60 W/m	38 m
	45 W/m	55 m	75 W/m	24 m
	60 W/m	41 m		
	75 W/m	33 m		
Designs	Fluoropolymer		Fluoropolymer	
Braid *2, Fluoropolymer outer sheath				
Ex approved				
VDE approved				
Drinking water suitable				

NOTE

*1 Heating circuit lengths on the following conditions

- 230 V nominal voltage
- Delayed action circuit breakers (C-characteristic) with 80 % max. load
- Maximum 10 % line voltage drop on heating cable bus wire
- Power connection to one heater end
- In certain installation situations, the heating circuit length may vary.

*2 Braid Cu, nickel-plated (ELSR-H, tin-plated)

Further heating circuit lengths for other switch-on temperatures or circuit breakers can be found in the respective data sheet.

New Generation HIGH temperature (for use up to 250 °C)

				
Parameters	ELSR-H+		ELSR-SH+	
Max. operation temperatur (switched on)	120°C		165°C	
Max. operation temperatur (switched off)	210°C		250°C	
Nominal Voltage	230 V		230 V	
Min. bending radius	25 mm		25 mm	
Min. installation temperature	- 60°C		- 60°C	
	Nominal power output	max. HC length (16A)	Nominal power output	max. HC length (16A)
	15 W/m	156 m	15 W/m	150 m
	30 W/m	69 m	30 W/m	84 m
	45 W/m	63 m	45 W/m	58 m
	60 W/m	34 m	60 W/m	44 m
	75 W/m	26 m	75 W/m	31 m
			90 W/m	20 m
Designs	Fluoropolymer		Fluoropolymer	
Braid *2, Fluoropolymer outer sheath				
Ex approved				
VDE approved				
Drinking water suitable				

NOTE

*1 Heating circuit lengths on the following conditions

- 230 V nominal voltage
- Delayed action circuit breakers (C-characteristic) with 80 % max. load
- Maximum 10 % line voltage drop on heating cable bus wire
- Power connection to one heater end
- In certain installation situations, the heating circuit length may vary.

*2 Braid Cu, nickel-plated

Further heating circuit lengths for other switch-on temperatures or circuit breakers can be found in the respective data sheet.

(B) - CONNECTION CABLES

There are various options for connecting the ELSR to a junction box. Many of the eltherm junction boxes allow a direct connection of the heating cable with corresponding connection sets (marked as direct connection).

Another possibility to connect the ELSR to a junction box is to use suitable three-core stranded connection cable (e.g. 3 x 1.5mm² H05VV, or Ölflex) in combination with an appropriate connection technique.

NOTEs for the correct selection can be found in the operating instructions for the connection technology.

(C) - POWER CONNECTION & END TERMINATION SETS

This chapter provides information on the permissible combinations of the connection sets with the respective ELSR trace heaters. The ELSR trace heaters suitable for use with the respective connection sets are marked in colour

- Light: blue for low-temperature applications, e.g. **ELSR-N**
- Yellow: for medium-temperature applications, e.g. **ELSR-W**
- Red: for high temperature applications, e.g. **ELSR-H**, and
- Orange: the new generation of trace heaters for high-temperature applications, e.g. **ELSR-H+**

The suitability for use in potentially explosive atmospheres is indicated by the "Ex" symbol.

Please be sure to observe the applicable operating instructions and data sheets for the connection sets.

A "splice" mentioned in the document is a connection of two or more conductors that results in a permanent electrical and mechanical connection. The splice is usually made by crimping, e.g., ELVB-SRV-H.

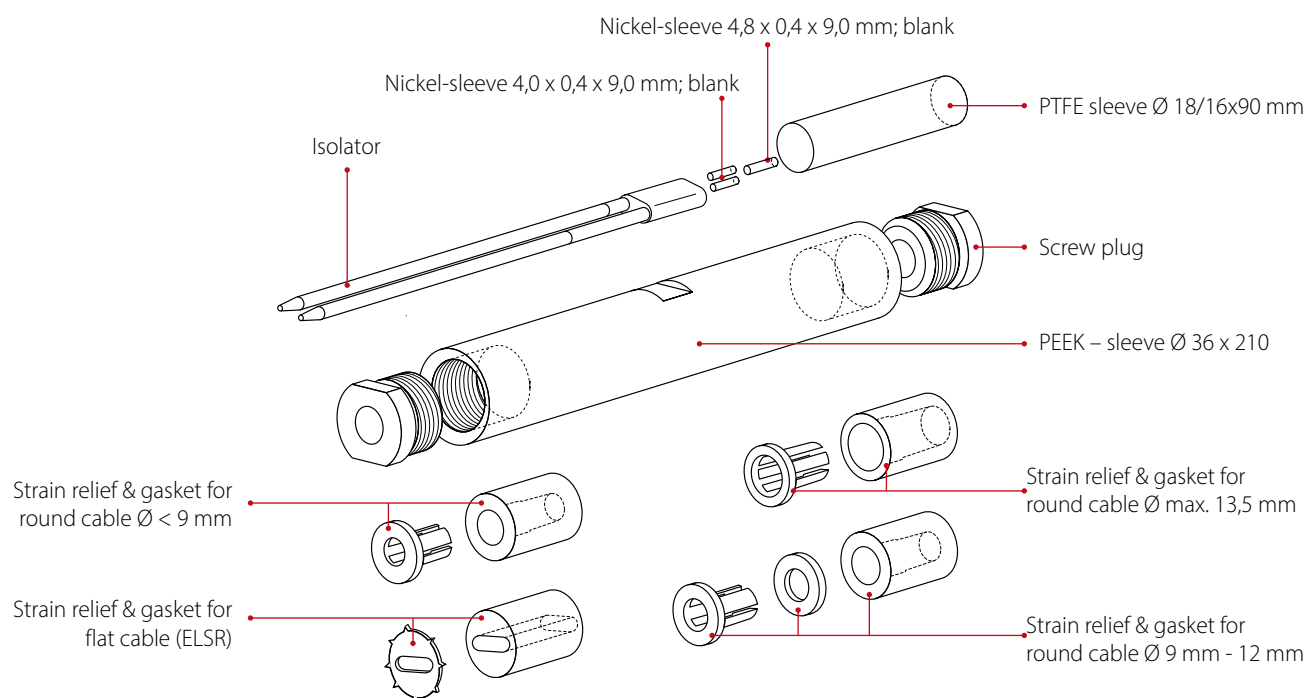
Ex Power connection kits

Ex-Con-SR

ELSR-N **ELSR-LS** **ELSR-H** **ELSR-SHH** **ELSR-H+** **ELSR-SH+**

Article N°: **0X81125** - power connection or connection sleeve for ELSR trace heaters

Connection kit for use with connection cables or for connecting two ELSR trace heaters

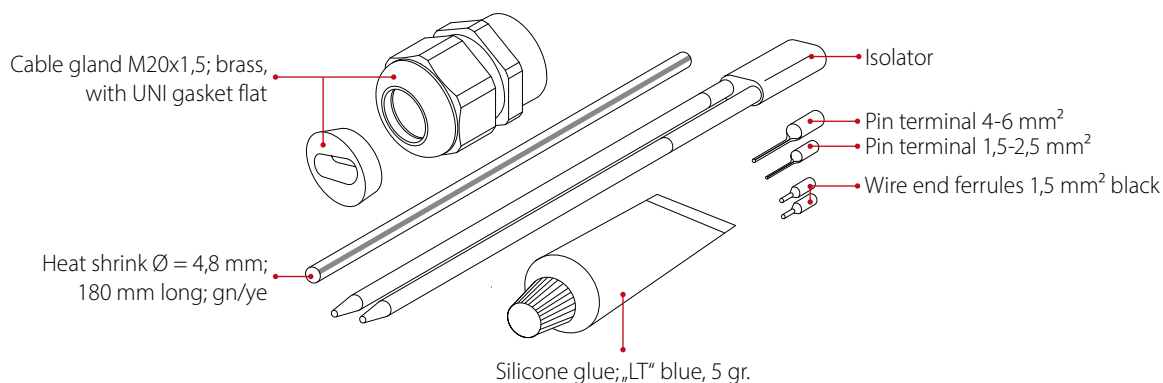


ELVB-SRAN-Ex-20

ELSR-N

Article N°: **0X81PND**

Cold power connection kit incl. brass cable gland M20 for direct connection to junction boxes

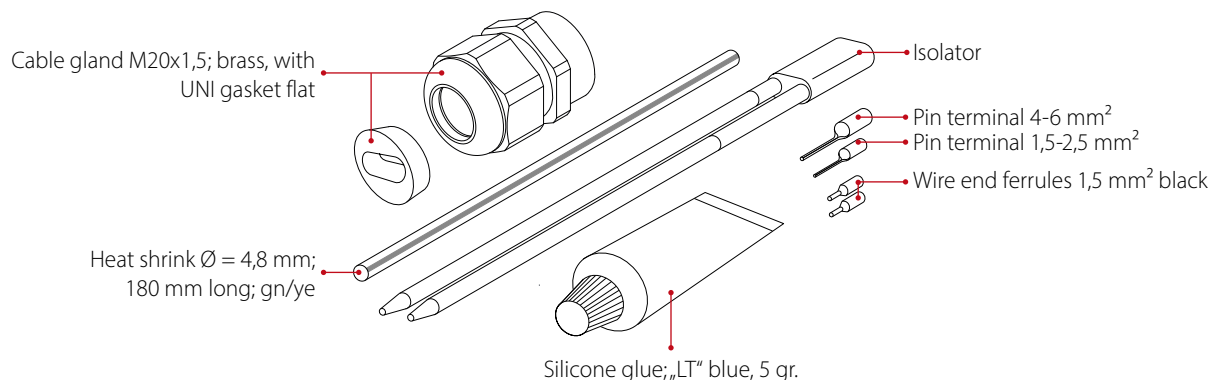


ELVB-SRAL-Ex-20

ELSR-LS

Article N°: **0X81PLD**

Cold power connection kit incl. brass cable gland M20 for direct connection to junction boxes

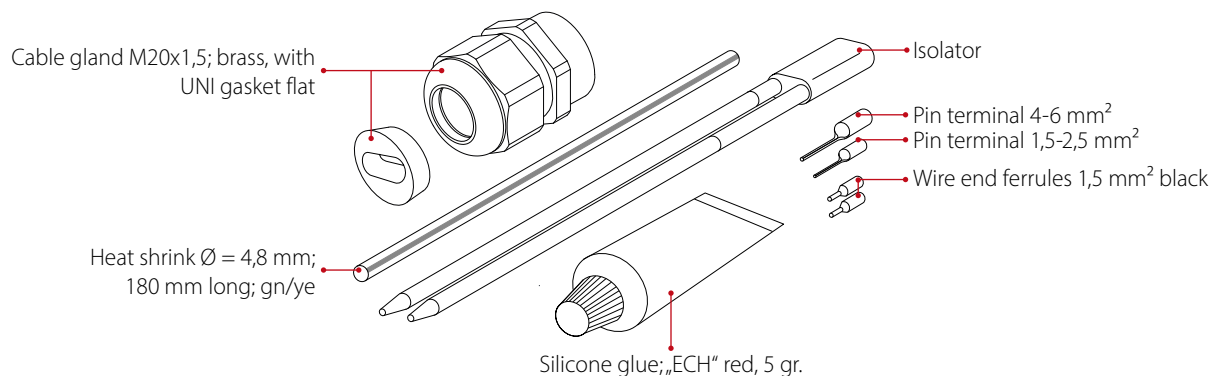


ELVB-SRAH-Ex-20

ELSR-H ELSR-SHH

Article N°: **0X81PHD**

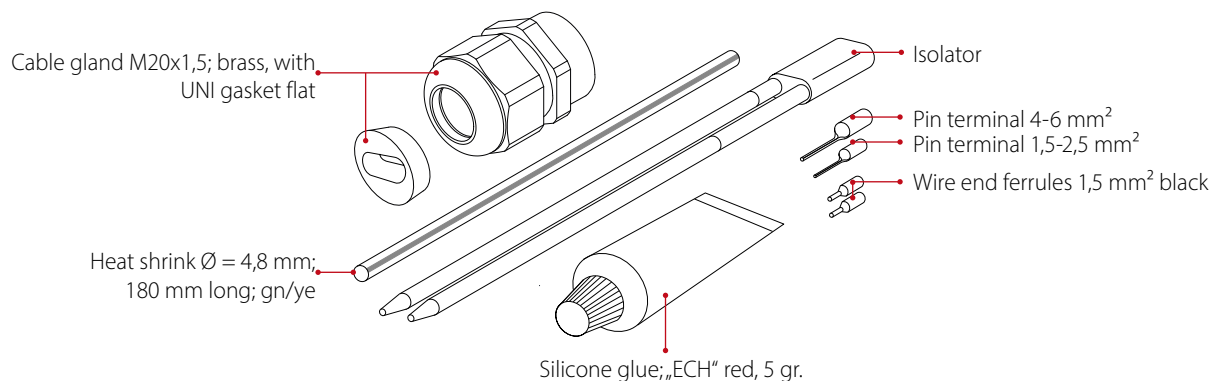
Cold power connection kit incl. brass cable gland M20 for direct connection to junction boxes



ELVB-SREx-SH+-20

ELSR-H+ ELSR-SH+

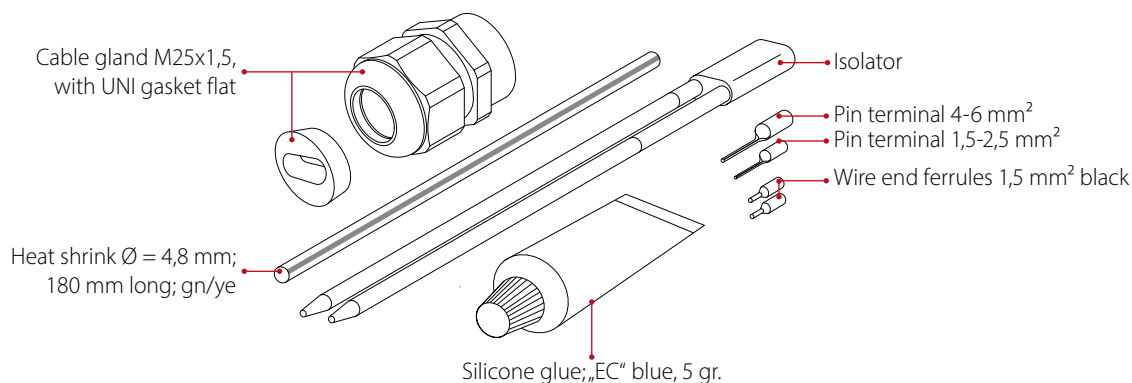
 Article N°: **0X81PHD**

 Cold power connection kit incl. brass cable gland M20 for direct connection to junction boxes


ELVB-SREx-25

ELSR-N ELSR-LS ELSR-FHP ELSR-H ELSR-SHH ELSR-H+ ELSR-SH+

 Article N°: **0X81PA1**

 Cold power connection kit incl. PA cable gland M25 for direct connection to junction boxes


Ex END TERMINATION KITS

EL-ECSH-Ex

ELSR-H

ELSR-SHH

ELSR-H+

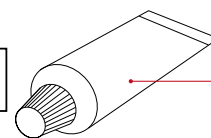
ELSR-SH+

Article N°: **0X81EH2**

End termination kit for ELSR



Termination cap EL-ECSH,
silicone, Red



Silicone glue; „ECH“ red, 5 gr.

EL-ECN-Ex

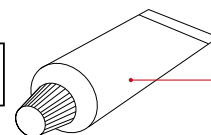
ELSR-N

Article N°: **0X81EN1**

End termination kit for ELSR



Termination cap EL-ECN,
silicone, black



Silicone glue; „EC“ blue, 5 gr.

EL-ECL-Ex

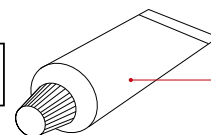
ELSR-LS

Article N°: **0X81EL1**

End termination kit for ELSR



Termination cap EL-ECL,
silicone, black



Silicone glue; „EC“ blue, 5 gr.

Ex-It-L / -S

ELSR-N

ELSR-LS

ELSR-H

ELSR-H+

ELSR-SH+

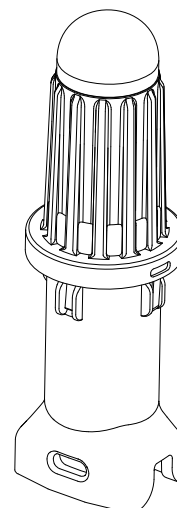
End of circuit light incl. mounting post

Article N°: **0X8ITLG** - End termination (mounting post with green end of circuit light)

End termination kit to signalise the operating status of an ELSR trace heater,

Article N°: **0X8ITS0** - Connection & end termination (mounting post with blind cap)

For creating an externally accessible end termination of an ELSR trace heater
or for creating an externally accessible splice of two ELSR trace heaters



non Ex POWER CONNECTION KITS

EL-Clic®

ELSR-N

ELSR-LS

ELSR-W

Quick connector for up to 3 ELSR trace heaters

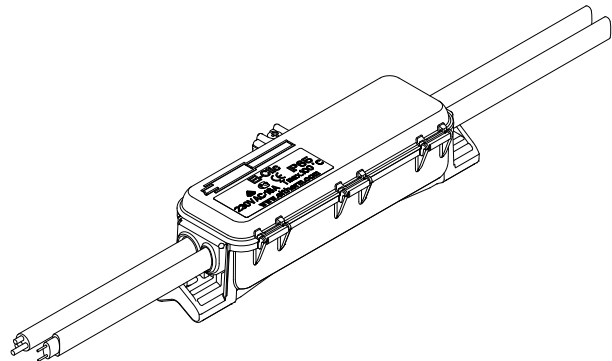
Article N°: **09ClicP** - Connector with cold connection cable

Connection kit with factory-assembled
2.5 m 3G 1.5 H05 SS-F connection cable
for use with 1 to 3 ELSR trace heaters or

Article N°: **09ClicS** - Connector without cold connection cable

Connection or T-connector kit for 2 to 3 ELSR trace heaters;

UV-resistant with 2 cable ties (360 mm) each



ELVB-SREx-IT

ELSR-N

ELSR-LS

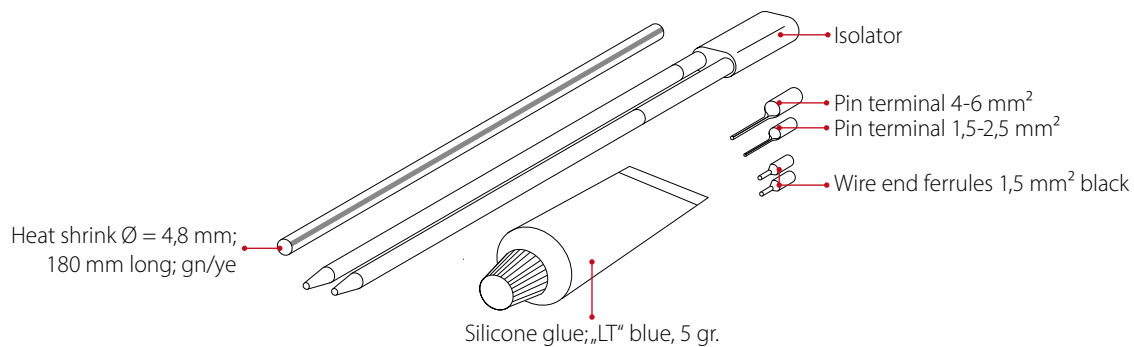
ELSR-H

ELSR-H+

ELSR-SH+

Article N°: **091AIT1**

Cold power connection kit for direct connection to a junction box with mounting post Ex-It



ELVB-SRA-25

ELSR-N

ELSR-LS

ELSR-W

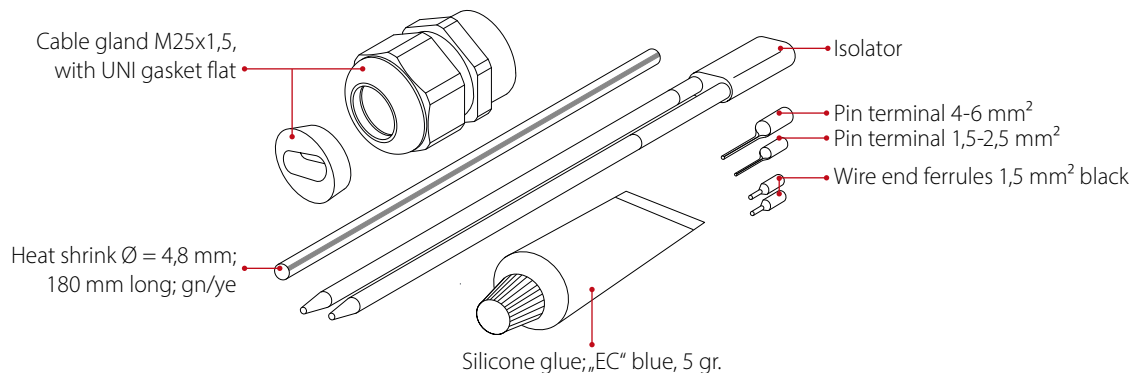
ELSR-FHP

ELSR-H+

ELSR-SH+

Article N°: **091A010**

Cold power connection kit incl. cable gland M25 for direct connection to junction boxes



ELVB-SRAH-25

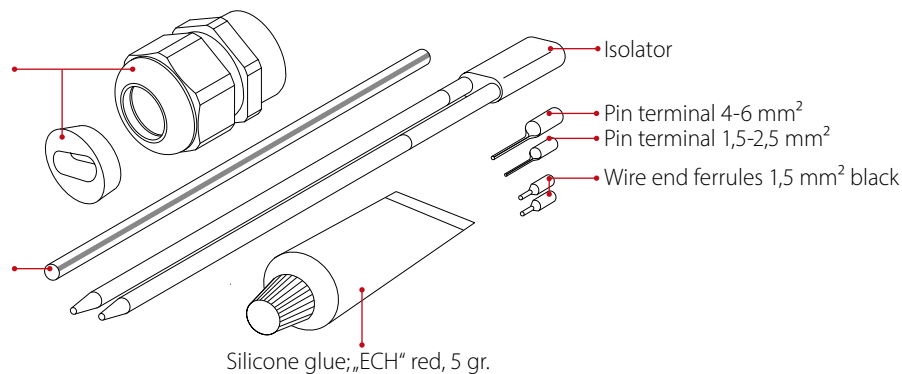
ELSR-H ELSR-SHH

Article N°: **091A040**

Cold power connection kit incl. cable gland M25 for direct connection to junction boxes

Cable gland M25x1,5, with UNI gasket flat

Heat shrink Ø = 4,8 mm;
180 mm long; gn/ye



ELVB-SRAM-25

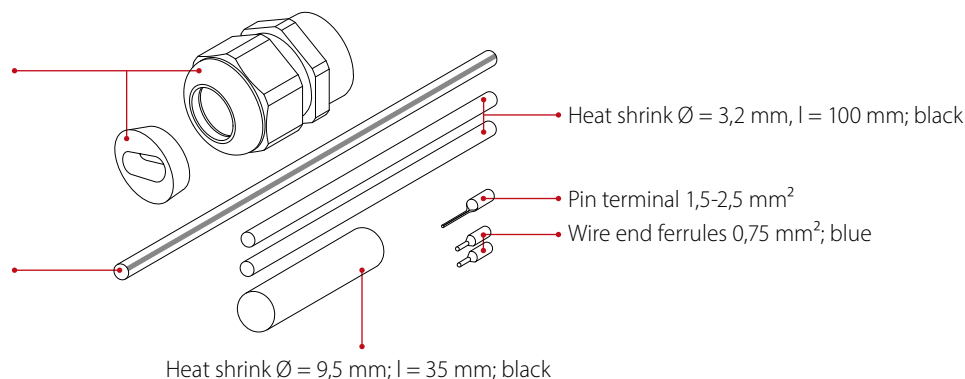
ELSR-M ELSR-R

Article N°: **091A015**

Heat shrink power connection kit incl. cable gland M25 for direct connection to junction boxes

Cable gland M25x1,5, with UNI gasket flat

Heat shrink Ø = 4,8 mm;
180 mm long; gn/ye



ELVB-SRAR-25

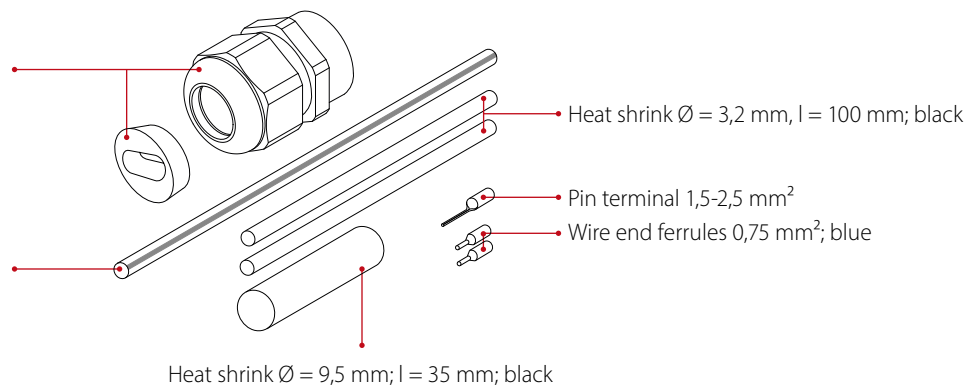
ELSR-R

Article N°: **091A020**

Heat shrink power connection kit incl. Cable gland M25 for direct connection to junction boxes

Cable gland M25x1,5, with UNI gasket flat

Heat shrink Ø = 4,8 mm;
180 mm long; gn/ye



ELVB-SRV-N-LS-W

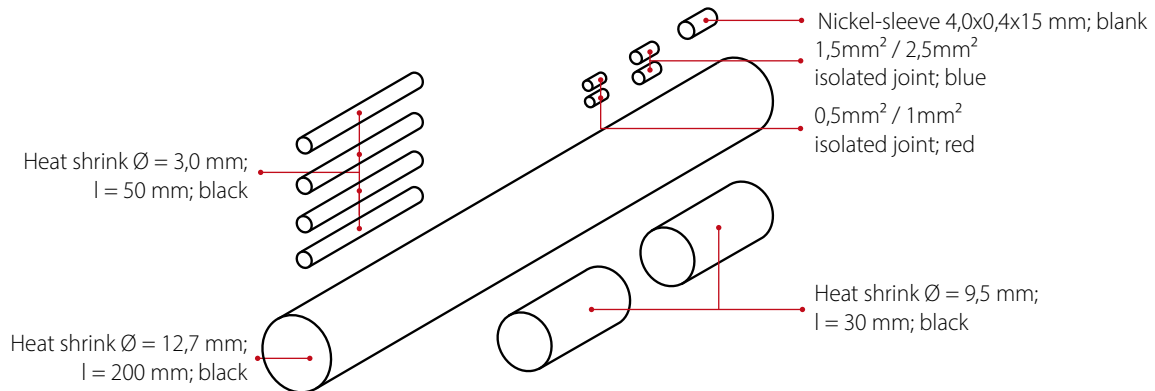
ELSR-N

ELSR-LS

ELSR-W

Article N°: **0911116**

Heat shrink connection and repair kit (connection cable H07RN-F 3G1,5 o.s.)



ELVB-SRV-H

ELSR-H

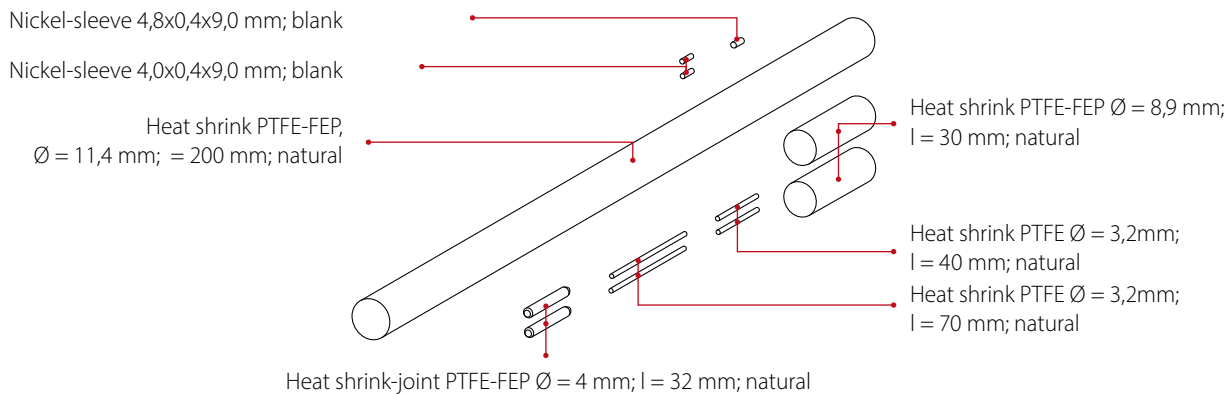
ELSR-SHH

ELSR-H+

ELSR-SH+

Article N°: **0911117**

Heat shrink connection and repair kit (connection cable ÖLFLEX® HEAT 180 SiHF o.s.)



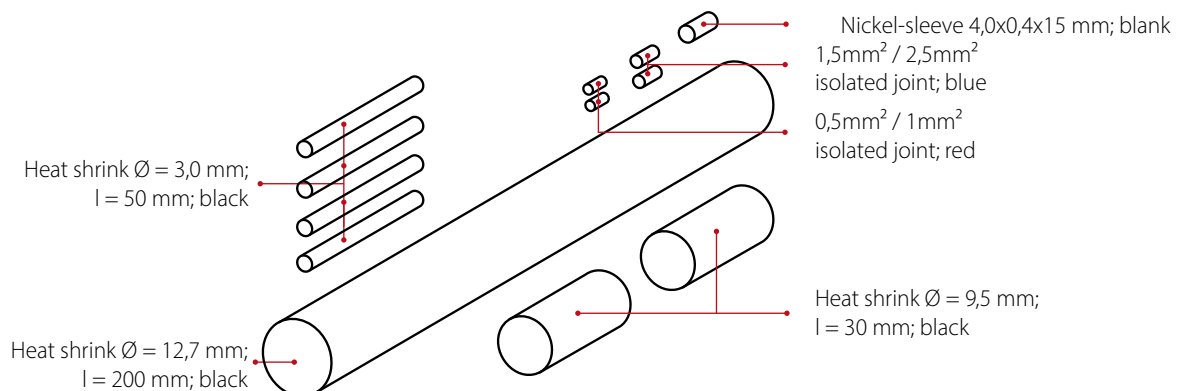
ELVB-SRV-M

ELSR-M

ELSR-R

Article N°: **0911122**

Heat shrink connection and repair kit (connection cable H07RN-F 3G1,5 o.s.)

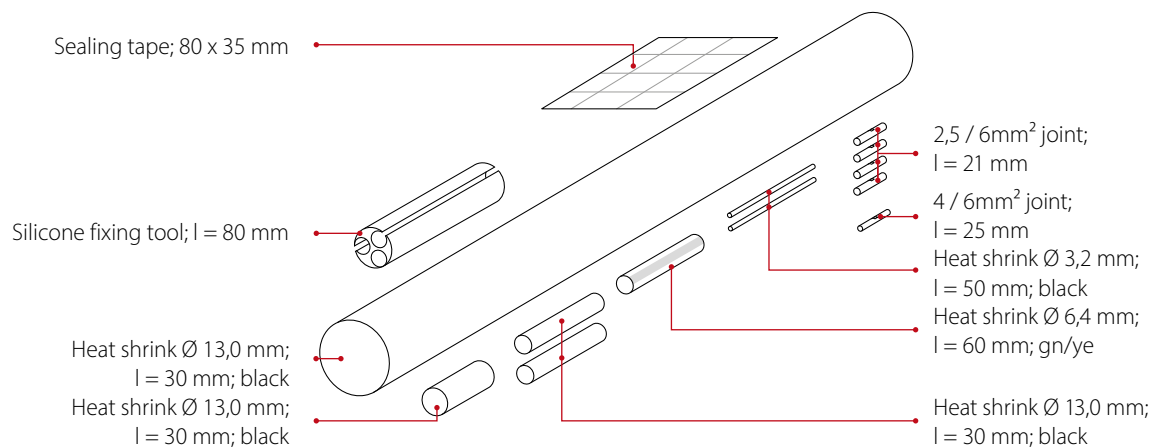


ELVB-SRV-RAMP

ELSR-RAMP

Article N°: **0911124**

Heat shrink connection kit (connection cable H07RN-F 3G6 o.s.)



non Ex END TERMINATION KITS

EL-EC

ELSR-N

ELSR-LS

ELSR-M

ELSR-FHP

ELSR-RAMP

ELSR-W

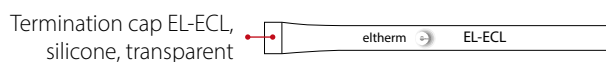
Article N°: **09112N1**

End termination kit for ELSR-N & ELSR-FHP



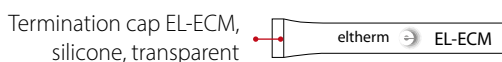
Article N°: **09112L1**

End termination kit for ELSR-LS



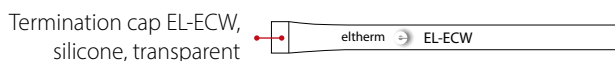
Article N°: **09112M1**

End termination kit for ELSR-M & ELSR-R



Article N°: **09112W1**

End termination kit for ELSR-W



Article N°: **09112RA**

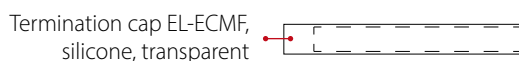
End termination kit for ELSR-RAMP



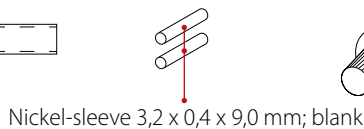
Sealing tape; 35 x 35 mm

Article N°: **09112MF**

End termination kit for ELSR-M-BAF



Heat shrink, Ø = 3,0 mm; black



(D) - JUNCTION BOXES

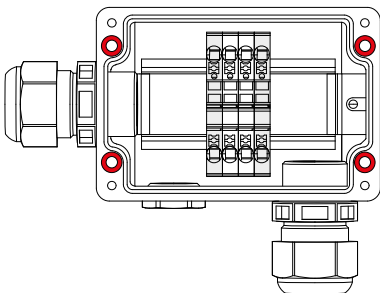
This section is intended to provide an overview of the eltherm plenum boxes for use with the ELSR Heating cable. For detailed information about the plenum boxes, please refer to the respective data sheets.

Junction boxes for hazardous areas

ELAK-Ex 2.00

Ex- Junction box for 1x ELSR & 1x connection cable

Dimensions: 110 x 75 x 57 mm (WxHxD), Article N°: **0X85200**



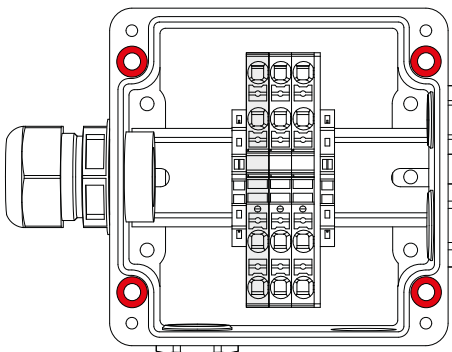
- 1x M20 Blind plug
 - 1x Cable gland M25 1-times
 - 1x Cable gland M25 2-times
 - 1x Reducer M25 auf M20*
 - 2x Feed-through terminal
 - 2x Protective conductor terminal block
- *Enclosed, loose

■ Terminal for earthing or electrical protection

ELAK-Ex 4.01

Ex- Junction box for 1-3 ELSR & 1x connection cable

Dimensions: 122 x 120 x 90 mm (WxHxD), Article N°: **0X85401**



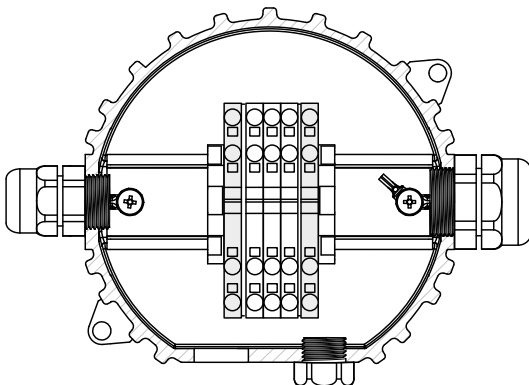
- 2x M25 Blind plug
 - 1x M20 Blind plug
 - 1x Cable gland M25 1-times*
 - 1x Cable gland M32 1-times
 - 1x Reducer M32 auf M25*
 - 2x Feed-through terminal PT6-Quattro
 - 1x Protective conductor terminal block PT6-Quattro-PE
- *Enclosed, loose

■ Terminal for earthing or electrical protection

ELAK-Ex R5

Ex Junction box for 1 ELSR + EL-CT

Dimensions: (ca.) Ø 154,5 mm, Height 125 mm; Article N°: **0X80075**



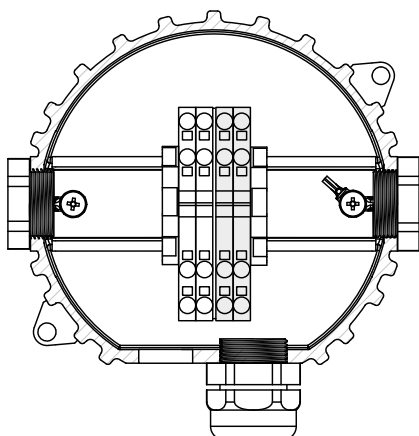
Type	Qty.	Clamp range
Cable gland M20x1,5	1	7 - 12 mm
Cable gland M25x1,5	1	9-13/12-17 mm
Cable gland M16x1,5	1	4 - 10 mm
Threaded hole M20	1	-
Protective earth terminal	2	6 mm ²
Feed-through terminal	3	6 mm ²

■ Terminal for earthing or electrical protection

ELAK-Ex R7

Ex Junction box for 1 - 3 ELSR or ELP

Dimensions: (ca.) Ø 154,5 mm, Height 125 mm, Article N°: **0X80077**



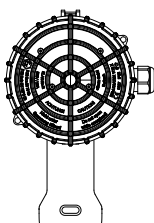
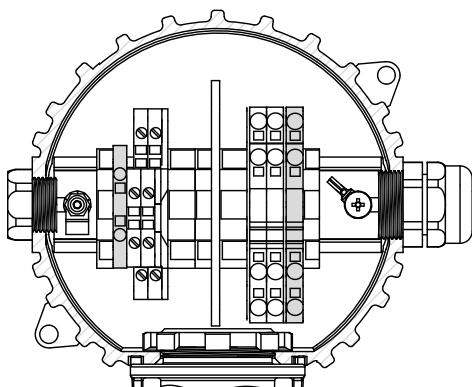
Type	Qty.	Clamp range
Blind plug M25x1,5	2	-
Threaded hole M25	1	-
Cable gland M25x1,5	2	9-13/12-17 mm
Protective earth terminal	2	6 mm ²
Feed-through terminal	2	6 mm ²

 Terminal for earthing or electrical protection

Ex-It-R

Junction box incl. stand, for 1 - 3 ELSR, 1 supply line, 1 Sensor

Dimensions: (ca.) Ø 154,5 mm, Depth 125 mm, Height incl. stand 266 mm; Article N°: **0X80070**



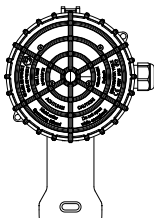
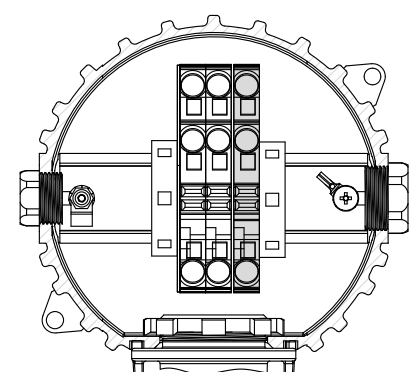
Type	Qty.	Clamp range
Blind plug M25x1,5	1	-
Protective earth terminal	1	2,5 mm ²
Double-deck terminal	2	2,5 mm ²
Cable gland M25x1,5	2	9-13/12-17 mm
Protective earth terminal	2	4 mm ²
4-wire Feed-through terminal	2	4 mm ²

 Terminal for earthing or electrical protection

Ex-It-R-T

Junction box incl. stand for splice or T-connector, up to 3 ELSR

Dimensions: (ca.) Ø 154,5 mm, Depth 125 mm, Height incl stand 266 mm; Article N°: **0X80082**



Type	Qty.	Clamp range
Blind plug M25x1,5	1	-
Blind plug M20x1,5	1	-
3-wire protective earth terminal	1	10 mm ²
3-wire feed-through terminal	2	10 mm ²

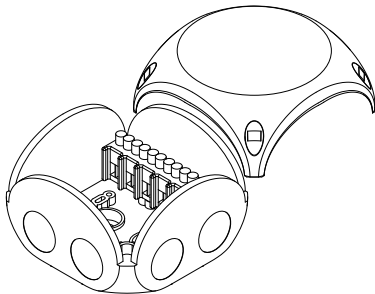
 Terminal for earthing or electrical protection

Junction boxes for non hazardous area

ELAK-2

Junction box for 1 to 2x ELSR & 1x connection cable

Dimensions: 104 x 104 x 70 mm (WxHxD); Article N°: **0920030**

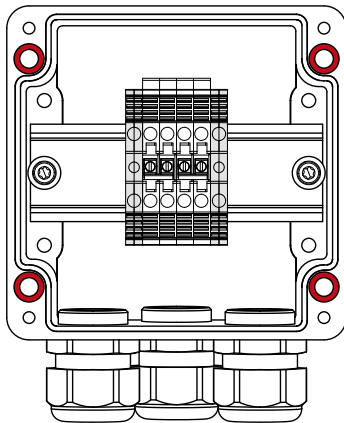


- 7x Pre-stamped M20/M25
 - 2x Cable gland M25 single, Ø 9-17 mm*
 - 2x Lock nut M25*
 - 2x Sealing ring M25*
 - 1x 5-pole terminal, 1.5-4 mm²
- *Enclosed, loose

ELAK-5

Junction box for 1 - 2 ELSR & 1x connection cable

Dimensions: 122 x 120 x 90 mm (WxHxD), Article N°: **0920013**



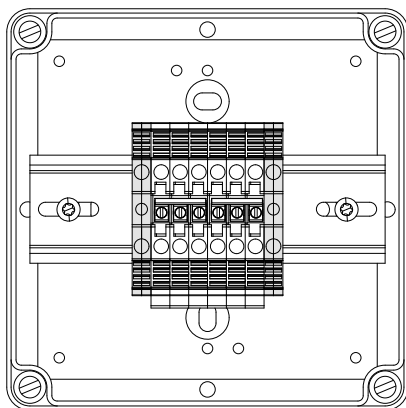
- 3x Cable gland M25 single, Ø 9-17 mm
- 2x Protective conductor terminal block WPE4 4,0 mm²
- 4x Feed-through terminal WDU4 4,0 mm²
- 2x Jumper WQV 4/2 4,0 mm²

■ Terminal for earthing or electrical protection

ELAK-5.1

Junction box for 1 - 3 ELSR & 1x supply line

Dimensions: 130 x 130 x 75 mm (WxHxD), Article N°: **0920002**



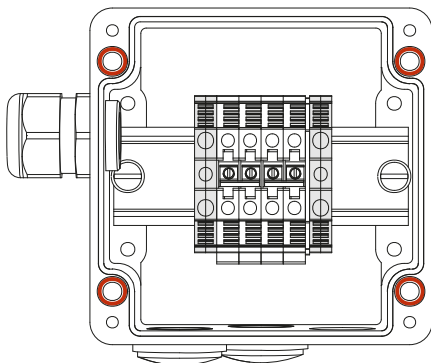
- 2x PE terminal 4 mm²
- 6x Terminal block 4 mm²
- 2x 3-way jumper 1-3, 4-6

■ Terminal for earthing or electrical protection

ELAK-5.7

Junction box for 1 - 3 ELSR & 1x supply line

Dimensions: 122 x 120 x 90 mm (WxHxD), Article N°: **0920014**



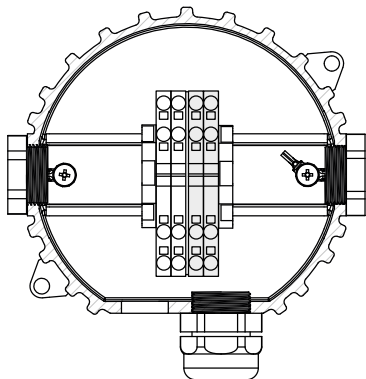
- 2x PE terminal WPE 6 mm²
- 4x Terminals WDU 6 mm²
- 1x M25 cable gland single, 9-17 mm
- 2x Blind plug M25
- 1x Thread M25

■ Terminal for earthing or electrical protection

ELAK-R7

Junction box for 1 - 3 ELSR and 1x supply line

Dimensions: (ca.) Ø 154,5 mm, Height 125 mm, Article N°: **0920057**



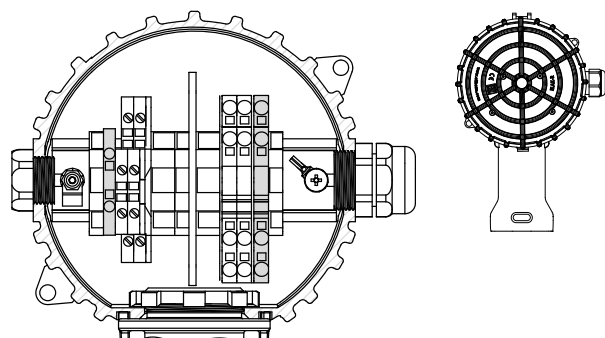
Type	Qty.	Clamp range
Blind plug M25x1,5	2	-
Blind plug M25x1,5	1	-
Threaded hole M25	1	-
Cable gland M25x1,5	1	9-13/12-17 mm
Protective earth terminal	2	6 mm ²
Feed-through terminal	2	6 mm ²

■ Terminal for earthing or electrical protection

ELAK-RS

Junction box incl. stand, for 1 - 3 ELSR, 1 supply line, 1 sensor

Dimensions: (ca.) Ø 154,5 mm, Depth 125 mm, Height incl. stand 266 mm; Article N°: **0920050**



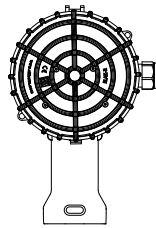
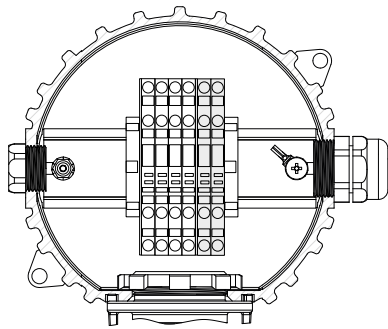
Type	Qty.	Clamp range
Blind plug M25x1,5	1	-
Protective earth terminal	1	2,5 mm ²
Double-deck terminal	2	2,5 mm ²
Cable gland M25x1,5	2	9-13/12-17 mm
Protective earth terminal	2	4 mm ²
4-wire Feed-through terminal	2	4 mm ²

■ Terminal for earthing or electrical protection

ELAK-RS-T

Junction box incl. stand for splice or T-connector, up to 3 ELSR

Dimensions: (ca.) Ø 154,5 mm, Depth 125 mm, Height incl. stand 266 mm; Article N°: **0920059**

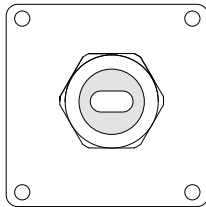


Type	Qty.	Clamp range
Blind plug M20x1,5	1	-
Cable gland M25x1,5	1	9-13/12-17 mm
4-wire Protective earth terminal	2	4 mm ²
4-wire Feed-through terminal	4	4 mm ²

■ Terminal for earthing or electrical protection

(H) - INSULATING BUSHINGS

Insulating bushing; Dimensions: 70 x 70 mm, plate Aluminium



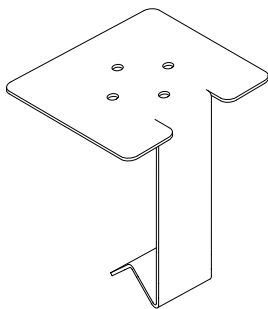
Type	Artikel-N°.	Cable gland	suitable for ELSR
ELISD-R1	0921035	1x M25	-N; -LS; -W; -SH
ELISD-R4	0921047	1x M25	-H; -SHH
ELISD-R5	0921101	1x M25	-M; -R

(J) - MOUNTING BRACKET

ELMW-6

Article N°: **0941006**

Mounting bracket for ELAK-2 junction boxes (max. insulation thickness 80 mm)



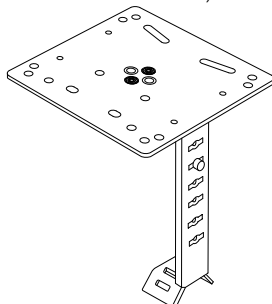
Enclosed every mounting bracket:

Type	Qty.
Cylinder head screw M4x12	2
Nut M4 self-locking	2
Washer Ø 4,3	4

EL-VSB 300

Article N°: **0941085**

Variable mounting bracket for ELAK-Ex-2.00, -4.01, -R5 & -R7 as well as ELAK-5, -5.1, -5.7 & -R7 junction boxes (max. insulation thickness 280 mm)



Enclosed every mounting bracket:

Type	Qty.
Cylinder head screw M6x30	4
Cylinder head screw M4x25	4
Nut M6 self-locking	4
Nut M4 self-locking	4

ORDERING INFORMATION

ELSR-Type:	Design:	Power:	Ex article:	Order quantity:
Art.N°:	Description:	Suitable for use:	Ex article:	Order quantity:
OX81125	Ex-Con-SR Connection sleeve	ELSR-N, -LS, -H, -SHH, -H+, -SH+	Yes	
OX81PND	ELVB-SRAN-Ex-20 Power connection kit Ex d M20	ELSR-N	Yes	
OX81PLD	ELVB-SRAL-Ex-20 Power connection kit Ex d M20	ELSR-LS	Yes	
OX81PHD	ELVB-SRAH-Ex-20 Power connection kit Ex d M20	ELSR-H, -SHH	Yes	
OX81SP1	ELVB-SREx-SH+-20 Power connection kit Ex d M20	ELSR-H+, -SH+	Yes	
OX81PA1	ELVB-SREx-25 Power connection kit Ex e M25	ELSR-N, -LS, -FHP, -H, -SHH, -H+, -SH+	Yes	
OX81EH2	EL-ECSH-Ex End termination kit	ELSR-H, -SHH, -H+, -SH+	Yes	
OX81EN1	EL-ECN-Ex End termination kit	ELSR-N	Yes	
OX81EL1	EL-ECL-Ex End termination kit	ELSR-LS	Yes	
OX81EL1	Ex-It-L End of circuit light green	ELSR-LS	Yes	
OX81EL1	Ex-It-S End termination kit or splice kit	ELSR-LS	Yes	
09CLICP	EL-Cllic P Quick connector with connection cable 2,5 m	1 to 3x ELSR-N, -LS, -W	No	
09CLICS	EL-Cllic S Quick connector without connection cable	1 to 3x ELSR-N, -LS, -W	No	
091AIT1	ELVB-SREx-IT Power connection kit for Ex-It	ELSR-N, -LS, -H, -H+, -SH+	No	
091A010	ELVB-SRA-25 Power connection kit M25	ELSR-N, -LS, -W, -FHP, -H+, -SH+	No	
091A040	ELVB-SRAH-25 Power connection kit M25	ELSR-H, -SHH	No	
091A015	ELVB-SRAM-25 Power connection kit M25	ELSR-M, -R	No	
091A020	ELVB-SRAR-25 Power connection kit M25	ELSR-R	No	
0911116	ELVB-SRV-N-LS-W Connection & repair kit shrink technique	ELSR-N, -LS, -W	No	
0911117	ELVB-SRV-H Connection & repair kit shrink technique	ELSR-H, -SHH, -H+, -SH+	No	
0911122	ELVB-SRV-M Connection & repair kit shrink technique	ELSR-M, -R	No	
0911124	ELVB-SRV-RAMP Connection & repair kit shrink technique	ELSR-Ramp	No	

Art.Nº.:	Description:	Suitable for use:	Ex article:	Order quantity:
09112N1	EL-ECN End termination kit	ELSR-N, -FHP	No	
09112L1	EL-ECL End termination kit	ELSR-LS	No	
09112M1	EL-ECM End termination kit	ELSR-M, -R	No	
09112W1	EL-ECW End termination kit	ELSR-W	No	
09112RA	EL-ECRA End termination kit	ELSR-Ramp	No	
09112MF	EL-ECMF End termination kit drinking water	ELSR-M-BAF	No	
0X85200	ELAK-Ex-2.00 Junction box Ex e	1x supply line, 1x all Ex-ELSR	Yes	
0X85401	ELAK-Ex-4.01 Junction box Ex e	1x supply, 1 to 3x all Ex-ELSR	Yes	
0X80075	ELAK-Ex-R5 Junction box Ex e	1x all Ex-ELSR, 1x EL-CT	Yes	
0X80077	ELAK-Ex-R7 Junction box Ex e	1x supply line, 1 to 3x all Ex-ELSR	Yes	
0X80070	Ex-It-R Junction box Ex e with mounting post	1x supply line, 1 to 3x all Ex-ELSR, 1x sensor	Yes	
0X80082	Ex-It-R-T Splice / T-Connector Ex e with mounting post	1 to 3x all Ex-ELSR	Yes	
0920030	ELAK-2 Junction box	1x supply line, 1 to 2x all ELSR	No	
0920013	ELAK-5 Junction box	1x supply line, 1 to 3x all ELSR	No	
0920002	ELAK-5.1 Junction box	1x supply line, 1 to 3x all ELSR	No	
0920014	ELAK-5.7 Junction box	1x supply line, 1 to 3x all ELSR	No	
0920057	ELAK-R7 Junction box	1x supply line, 1 to 3x all ELSR	No	
0920050	ELAK-R5 Junction box with mounting post	1x supply line, 1 to 3x all ELSR (except -W, -M, -R, -Ramp), 1x sensor	No	
0920059	ELAK-R5-T Splice / T-Connector with mounting post	1 to 3x all ELSR (except -W, -M, -R, -Ramp)	No	
0921035	ELISD-R1 Insulation bushing with aluminum plate	ELSR-N, -LS, -W, -H+, -SH+	No	
0921047	ELISD-R4 Insulation bushing with aluminum plate	ELSR-H, -SHH	No	
0921101	ELISD-R5 Insulation bushing with aluminum plate	ELSR-M, -R	No	
0941006	ELMW-6 Mounting bracket	ELAK-2	No	
0941085	EL-VSB 300 Variable mounting bracket	ELAK-Ex-2.00, ELAK-Ex-4.01 ELAK-Ex-R5, ELAK-Ex-R7, ELAK-5, ELAK-5.1, ELAK-5.7, ELAK-R7	No	



You can also find this document on the eltherm website.
Visit our download area.



eltherm GmbH

Ernst-Heinkel-Straße 6-10
57299 Burbach. Germany

T.: +49 2736 4413-0
F.: +49 2736 4413-50
info@eltherm.com

www.eltherm.com