



- Simple handling using hot swap technology
- Versatile application possibilities thanks to modular structure
- Most extreme operating conditions in hazardous areas
- Reliable data and signal connections or power supplies
- Simple connection and disconnection thanks to one-handed operation

E3

MY R. STAHL 8595B






R. STAHL's Series 8595/1 explosion-protected miniCON plug connectors with up to eight poles keep you safely connected. The high-quality plastic or stainless steel plug connectors have impressed many customers with their reliability and versatility in application. Their hot swap disconnecting capacity means that intrinsically safe signal supplies and power supplies up to 500 V/16 A can be connected and disconnected reliably and safely without the need for a hot work permit or other hot work authorisation. The miniCON connectors designed for conductor cross-sections of 0.25 mm² to 2.5 mm² are available for directly connecting electrical lines or for device installation in the device plug and flange socket types of construction. The new plug connectors for hazardous areas in Zones 1 and 21 stand out from the competition thanks to their modular structure and logically arranged components, which enable quick, easy mounting. Our patented single-handed operation means that matching plug connectors, which can be defined by the installer using internal coding for up to three applications, can be connected in no time.

	IECEX / ATEX					
Zone	0	1	2	20	21	22
Installation in		•	•		•	•

Selection Table							
Version	Enclosure material			Plug			
	Nickel-plated brass						
Figure	Connection thread	Contact type	Connection cross-section	Connection cross-section AWG	Product Type	Art. No.	Weight
	M20 x 1.5	Pin contact	0.5 mm ²	20 AWG	8595/1-PB1-S-P05-001	298963	491 g
		Pin contact	0.75 – 1 mm ²	18 AWG	8595/1-PB1-S-P10-001	298966	491 g
		Pin contact	1.5 mm ²	16 AWG	8595/1-PB1-S-P15-001	298969	491 g
		Pin contact	2.5 mm ²	14 AWG	8595/1-PB1-S-P25-001	298972	491 g
	M25 x 1.5	Pin contact	0.5 mm ²	20 AWG	8595/1-PB1-S-P05-002	298964	491 g
		Pin contact	0.75 – 1 mm ²	18 AWG	8595/1-PB1-S-P10-002	298967	491 g
		Pin contact	1.5 mm ²	16 AWG	8595/1-PB1-S-P15-002	298970	491 g
		Pin contact	2.5 mm ²	14 AWG	8595/1-PB1-S-P25-002	298973	491 g

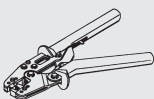
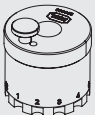
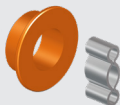
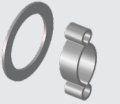


Selection Table							
Version Enclosure material Cable gland Clamping range		Plug Plastic Series 8161/7 made of plastic 5 ... 13 mm					
Figure	Connection thread	Contact type	Connection cross-section	Connection cross-section AWG	Product Type	Art. No.	Weight
	M20 x 1.5	Pin contact	0.5 mm ²	20 AWG	8595/1-PP1-S-P05-011	286548	174 g
		Pin contact	0.75 – 1 mm ²	18 AWG	8595/1-PP1-S-P10-011	286550	174 g
		Pin contact	1.5 mm ²	16 AWG	8595/1-PP1-S-P15-011	286552	174 g
		Pin contact	2.5 mm ²	14 AWG	8595/1-PP1-S-P25-011	286554	174 g
Version Enclosure material Cable gland Clamping range		Plug Plastic Series 8161/7 made of plastic 13 ... 17 mm					
Figure	Connection thread	Contact type	Connection cross-section	Connection cross-section AWG	Product Type	Art. No.	Weight
	M25 x 1.5	Pin contact	0.5 mm ²	20 AWG	8595/1-PP1-S-P05-012	286549	174 g
		Pin contact	0.75 – 1 mm ²	18 AWG	8595/1-PP1-S-P10-012	286551	174 g
		Pin contact	1.5 mm ²	16 AWG	8595/1-PP1-S-P15-012	286553	174 g
		Pin contact	2.5 mm ²	14 AWG	8595/1-PP1-S-P25-012	286555	174 g
Version Enclosure material		Plug Stainless steel 1.4404					
Figure	Connection thread	Contact type	Connection cross-section	Connection cross-section AWG	Product Type	Art. No.	Weight
	M20 x 1.5	Pin contact	0.5 mm ²	20 AWG	8595/1-PS1-S-P05-001	286584	491 g
		Pin contact	0.75 – 1 mm ²	18 AWG	8595/1-PS1-S-P10-001	286587	491 g
		Pin contact	1.5 mm ²	16 AWG	8595/1-PS1-S-P15-001	286590	491 g
		Pin contact	2.5 mm ²	14 AWG	8595/1-PS1-S-P25-001	286593	491 g
	M25 x 1.5	Pin contact	0.5 mm ²	20 AWG	8595/1-PS1-S-P05-002	286585	491 g
		Pin contact	0.75 – 1 mm ²	18 AWG	8595/1-PS1-S-P10-002	286588	491 g
		Pin contact	1.5 mm ²	16 AWG	8595/1-PS1-S-P15-002	286591	491 g
		Pin contact	2.5 mm ²	14 AWG	8595/1-PS1-S-P25-002	286594	491 g
Version Enclosure material		Plug, reverse Nickel-plated brass					
Figure	Connection thread	Contact type	Connection cross-section	Connection cross-section AWG	Product Type	Art. No.	Weight
	M20 x 1.5	Socket contact	0.5 mm ²	20 AWG	8595/1-PB1-S-S05-001	298951	491 g
		Socket contact	0.75 – 1 mm ²	18 AWG	8595/1-PB1-S-S10-001	298954	491 g
		Socket contact	1.5 mm ²	16 AWG	8595/1-PB1-S-S15-001	298957	491 g
		Socket contact	2.5 mm ²	14 AWG	8595/1-PB1-S-S25-001	298960	491 g
	M25 x 1.5	Socket contact	0.5 mm ²	20 AWG	8595/1-PB1-S-S05-002	298952	491 g
		Socket contact	0.75 – 1 mm ²	18 AWG	8595/1-PB1-S-S10-002	298955	491 g
		Socket contact	1.5 mm ²	16 AWG	8595/1-PB1-S-S15-002	298958	491 g
		Socket contact	2.5 mm ²	14 AWG	8595/1-PB1-S-S25-002	298961	491 g
Version Enclosure material Cable gland Clamping range		Plug, reverse Plastic Series 8161/7 made of plastic 5 ... 13 mm					
Figure	Connection thread	Contact type	Connection cross-section	Connection cross-section AWG	Product Type	Art. No.	Weight
	M20 x 1.5	Socket contact	0.5 mm ²	20 AWG	8595/1-PP1-S-S05-011	286530	174 g
		Socket contact	0.75 – 1 mm ²	18 AWG	8595/1-PP1-S-S10-011	286542	174 g
		Socket contact	1.5 mm ²	16 AWG	8595/1-PP1-S-S15-011	286544	174 g
		Socket contact	2.5 mm ²	14 AWG	8595/1-PP1-S-S25-011	286546	174 g


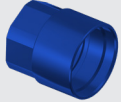
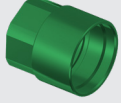
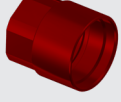
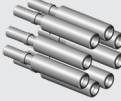
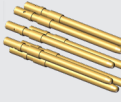


Selection Table							
Version	Plug, reverse						
Enclosure material	Plastic						
Cable gland	Series 8161/7 made of plastic						
Clamping range	13 ... 17 mm						
Figure	Connection thread	Contact type	Connection cross-section	Connection cross-section AWG	Product Type	Art. No.	Weight
	M25 x 1.5	Socket contact	0.5 mm ²	20 AWG	8595/1-PP1-S-S05-012	286541	174 g
		Socket contact	0.75 – 1 mm ²	18 AWG	8595/1-PP1-S-S10-012	286543	174 g
		Socket contact	1.5 mm ²	16 AWG	8595/1-PP1-S-S15-012	286545	174 g
		Socket contact	2.5 mm ²	14 AWG	8595/1-PP1-S-S25-012	286547	174 g
Version	Plug, reverse						
Enclosure material	Stainless steel 1.4404						
Figure	Connection thread	Contact type	Connection cross-section	Connection cross-section AWG	Product Type	Art. No.	Weight
	M20 x 1.5	Socket contact	0.5 mm ²	20 AWG	8595/1-PS1-S-S05-001	286572	491 g
		Socket contact	0.75 – 1 mm ²	18 AWG	8595/1-PS1-S-S10-001	286575	491 g
		Socket contact	1.5 mm ²	16 AWG	8595/1-PS1-S-S15-001	286578	491 g
		Socket contact	2.5 mm ²	14 AWG	8595/1-PS1-S-S25-001	286581	491 g
	M25 x 1.5	Socket contact	0.5 mm ²	20 AWG	8595/1-PS1-S-S05-002	286573	491 g
		Socket contact	0.75 – 1 mm ²	18 AWG	8595/1-PS1-S-S10-002	286576	491 g
		Socket contact	1.5 mm ²	16 AWG	8595/1-PS1-S-S15-002	286579	491 g
		Socket contact	2.5 mm ²	14 AWG	8595/1-PS1-S-S25-002	286582	491 g

Cable glands are not part of the standard metallic product.
NEC® / CE Code versions on request.


Technical Data	
Variant	
Explosion Protection	
Area of application	European Union (ATEX) IECEX
IECEX gas explosion protection	Ex db eb IIC T6 / T5 Gb
IECEX gas explosion protection 2	Ex ia IIC T6 Ga
IECEX dust explosion protection	Ex tb IIIC T80 °C / T95 °C Db
IECEX dust explosion protection 2	Ex ia IIIC T80 °C Da
ATEX gas explosion protection	Ⓔ II 2 G Ex db eb IIC T6 / T5 Gb
ATEX gas explosion protection 2	Ⓔ II 1 G Ex ia IIC T6 Ga
ATEX dust explosion protection	Ⓔ II 2 D Ex tb IIIC T80 °C / T95 °C Db
ATEX dust explosion protection 2	Ⓔ II 1 D Ex ia IIIC T80 °C Da
Certificates	ATEX (EPS), IECEX (EPS)
Declaration of conformity	ATEX (EUK)
Notes	Product label may vary. Series devices are labelled with ATEX and IECEX.
Electrical Data	
Rated operational voltage AC	500 V
Rated operational voltage DC	max. 110 V
Voltage tolerance	+10%
Rated insulation voltage	690 V
Rated operational current for AC	16 A
Rated operational current for DC 2	16 A
No. of poles	7
No. of poles note	Eight contacts are included in the delivery as standard. One to eight contacts can be used.
AC frequency range	50 – 60 Hz
Notes	For metal versions, at voltages > 60 V, the enclosure must be included in the protective grounding.

Technical Data	
Variant	
Ambient Conditions	
Ambient temperature	-60 °C ... 75 °C
Ambient temperature	-76 °F ... +167 °F
Mechanical Data	
Degree of protection (IP) (IEC 60529)	IP66 IP67
IP degree of protection (IEC 60079)	IP64
Impact strength (IEC 60079)	7 J
Seal	Silicone
Coding	1-3, arbitrary
Notes	For preassembled variants, coding 1 is pre-set
Mounting / Installation	
Connection type	crimp
Connection type 2	solder
The standard connection type is crimping. Soldering is possible in the range of 0.25 – 1.5 mm ² (24 AWG - 16 AWG).	

Accessories			
Figure	Description	Art. No.	Weight
Crimping tool			
	For all versions with crimp connection of 0.14 to 6 mm ²	295689	1 kg
Contact mounts/positioners for rotated industrial contacts			
	The selection of the contact mount is based on the crimp contacts to be processed. - Exact positioning of the crimp contact during the crimping process - Reliable, reproducible crimping result - Adapted for miniCON contacts	299586	100 g
2-ear clamps			
	KIT 8595 2-ear clamps, small Strain relief depending on the cable gland used Cable outer diameter 5 to 13 mm	286168	13 g
	KIT 8595 2-ear clamps, big Strain relief depending on the cable gland used Cable outer diameter 13 to 17 mm	286169	19 g
Adaptor			
	KIT 8595 plastic adaptor, consisting of: Adaptor made of plastic for cable gland M20 x 1.5 incl. strain relief Cable outer diameter 5 to 13 mm	286162	36 g
	KIT 8595 plastic adaptor, consisting of: Adaptor made of plastic for cable gland M25 x 1.5 incl. strain relief Cable outer diameter 13 to 17 mm	286163	41 g
Adapters			
	8595 nickel-plated brass adapter for cable gland, M16 x 1.5	314522	500 g
	8595 stainless steel adapter for cable gland, M16 x 1.5	314521	500 g

Accessories			
Figure	Description	Art. No.	Weight
Adaptor			
	KIT 8595 nickel-plated brass adaptor for cable gland, M20 x 1.5	296752	100 g
	KIT 8595 stainless steel adaptor for cable gland, M20 x 1.5	286164	63 g
	KIT 8595 nickel-plated brass adaptor for cable gland, M25 x 1.5	296753	100 g
	KIT 8595 stainless steel adaptor for cable gland, M25 x 1.5	286165	62 g
	KIT 8595 plastic adaptor, colour: blue for cable gland, M20 x 1.5	299299	500 g
	KIT 8595 plastic adaptor, colour: blue for cable gland, M25 x 1.5	299322	520 g
	KIT 8595 plastic adaptor, colour: green for cable gland, M20 x 1.5	299297	500 g
	KIT 8595 plastic adaptor, colour: green for cable gland, M25 x 1.5	299300	520 g
	KIT 8595 plastic adaptor, colour: red for cable gland, M20 x 1.5	299298	500 g
	KIT 8595 plastic adaptor, colour: red for cable gland, M25 x 1.5	299321	520 g
Socket contact			
	KIT 8595 socket contacts (0.25 to 0.5 mm ²), 8 pieces	286151	25 g
	KIT 8595 socket contacts (0.75 to 1 mm ²), 8 pieces	286152	24 g
	KIT 8595 socket contacts (1.5 mm ²), 8 pieces	286153	25 g
	KIT 8595 socket contacts (2.5 mm ²), 8 pieces	286154	26 g
Pin contact			
	KIT 8595 pin contacts (0.25 to 0.5 mm ²), 8 pieces	286155	26 g
	KIT 8595 pin contacts (0.75 to 1 mm ²), 8 pieces	286156	26 g
	KIT 8595 pin contacts (1.5 mm ²), 8 pieces	286157	27 g
	KIT 8595 pin contacts (2.5 mm ²), 8 pieces	286158	26 g
Code disks			
	KIT coding plate 8595, four colours, without labelling Customer-specific labelling available on request	289939	4 g
Plastic cable gland			
	8161/7-M20-1304-LT, Ex e Polyamide, M20 x 1,5 mm, 4 – 13 mm Lot size 50 pieces	329692	13 g
	8161/7-M25-1707-LT, Ex e Polyamide, M25 x 1,5 mm, 7 – 17 mm Lot size 50 pieces	329693	19 g
	8161/8-M20-1304-LT, Ex i Polyamide, M20 x 1,5 mm, 4 – 13 mm Lot size 50 pieces	329696	13 g
	8161/8-M25-1707-LT, Ex i Polyamide, M25 x 1,5 mm, 7 – 17 mm Lot size 50 pieces	329697	19 g

Accessories

Figure	Description	Art. No.	Weight
Metal cable gland			
	CMP type 20C2K, Ex e Nickel-plated brass, M20 x 1.5, for armoured cables, thread length 10 mm Cable outer diameter 12.5 to 20.9 mm	309134	1 kg
	CMP type 20C2K, Ex e Stainless steel, M20 x 1.5, for armoured cables, thread length 10 mm Cable outer diameter 12.5 to 20.9 mm	309098	1 kg
	CMP type 20s/16C2K, Ex e Nickel-plated brass, M20 x 1.5, for armoured cables, thread length 10 mm Cable outer diameter 9.5 to 15.9 mm	309133	1 kg
	CMP type 20s/16C2K, Ex e Stainless steel, M20 x 1.5, for armoured cables, thread length 10 mm Cable outer diameter 6.1 to 13.1 mm	309097	1 kg
	CMP type 20sC2K, Ex e Nickel-plated brass, M20 x 1.5, for armoured cables, thread length 10 mm Cable outer diameter 9.5 to 15.9 mm	313014	1 kg
	CMP type 25C2K, Ex e Nickel-plated brass, M25 x 1.5, for armoured cables, thread length 10 mm Cable outer diameter 18.2 to 26.2 mm	309135	1 kg
	CMP type 25C2K, Ex e Stainless steel, M25 x 1.5, for armoured cables, thread length 10 mm Cable outer diameter 18.2 to 26.2 mm	309099	1 kg
	CMP type 20A2e100, Ex e Nickel-plated brass, M20 x 1.5, for unarmoured cables Cable outer diameter 7 to 13.5 mm	309137	1 kg
	CMP type 20A2e100, Ex e Stainless steel, M20 x 1.5, for unarmoured cables Cable outer diameter 7 to 13.5 mm	309131	1 kg
	CMP type 20s/16A2e100, Ex e Nickel-plated brass, M20 x 1.5, for unarmoured cables Cable outer diameter 3.2 to 8 mm	309136	1 kg
	CMP type 20s/16A2e100, Ex e Stainless steel, M20 x 1.5, for unarmoured cables Cable outer diameter 3.2 to 8 mm	309100	1 kg
	CMP type 25A2e100, Ex e Nickel-plated brass, M25 x 1.5, for unarmoured cables Cable outer diameter 11.5 to 19.5 mm	309138	1 kg
	CMP type 25A2e100, Ex e Stainless steel, M25 x 1.5, for unarmoured cables Cable outer diameter 11.5 to 19.5 mm	309132	1 kg

Spare Parts

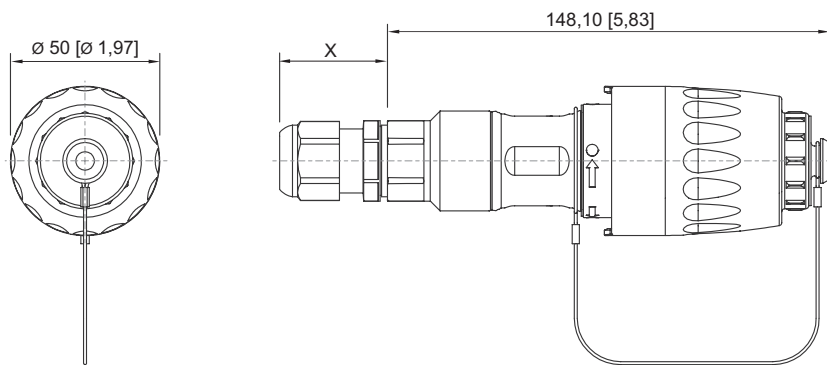
Figure	Description	Art. No.	Weight	
Jam nut, nickel-plated brass				
	Material: Nickel-plated brass Thread size: M32	One piece	110869	11 g
Contact holder for socket contact				
	KIT 8595 socket contact insert		286145	31 g
	KIT 8595 socket contact insert + PE		286146	33 g
Contact holder for pin contact				
	KIT 8595 pin contact insert		286147	21 g
	KIT 8595 pin contact insert + PE		286148	23 g

Spare Parts

Figure	Description	Art. No.	Weight
Protective cap			
	KIT 8595 plug protective cap (pin/socket) Incl. KIT 8595 coding plates, four colours, without labelling	286161	34 g

Batch size: Purchase order quantity in [no. of units]; the delivery quantity is automatically rounded to the batch size.

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



8595/1 plug
X = depending on the cable gland used