



- 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 8595C



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 mm<sup>2</sup> to 2.5 mm<sup>2</sup> 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	Coupling						
Enclosure material	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 <sup>2</sup>	AWG20	8595/1-CB1-S-S05-001	298975	323 g
		Socket contact	0.75 – 1 mm <sup>2</sup>	AWG18	8595/1-CB1-S-S10-001	298978	323 g
		Socket contact	1.5 mm <sup>2</sup>	AWG16	8595/1-CB1-S-S15-001	298981	323 g
		Socket contact	2.5 mm <sup>2</sup>	AWG14	8595/1-CB1-S-S25-001	298984	323 g
	M25 x 1.5	Socket contact	0.5 mm <sup>2</sup>	AWG20	8595/1-CB1-S-S05-002	298976	323 g
		Socket contact	0.75 – 1 mm <sup>2</sup>	AWG18	8595/1-CB1-S-S10-002	298979	323 g
		Socket contact	1.5 mm <sup>2</sup>	AWG16	8595/1-CB1-S-S15-002	298982	323 g
		Socket contact	2.5 mm <sup>2</sup>	AWG14	8595/1-CB1-S-S25-002	298985	323 g

Selection Table							
Version Enclosure material Cable gland Clamping range		Coupling 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 <sup>2</sup>	AWG20	8595/1-CP1-S-S05-011	286556	130 g
		Socket contact	0.75 – 1 mm <sup>2</sup>	AWG18	8595/1-CP1-S-S10-011	286558	130 g
		Socket contact	1.5 mm <sup>2</sup>	AWG16	8595/1-CP1-S-S15-011	286560	130 g
		Socket contact	2.5 mm <sup>2</sup>	AWG14	8595/1-CP1-S-S25-011	286562	130 g
Version Enclosure material Cable gland Clamping range		Coupling 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	Socket contact	0.5 mm <sup>2</sup>	AWG20	8595/1-CP1-S-S05-012	286557	130 g
		Socket contact	0.75 – 1 mm <sup>2</sup>	AWG18	8595/1-CP1-S-S10-012	286559	130 g
		Socket contact	1.5 mm <sup>2</sup>	AWG16	8595/1-CP1-S-S15-012	286561	130 g
		Socket contact	2.5 mm <sup>2</sup>	AWG14	8595/1-CP1-S-S25-012	286563	130 g
Version Enclosure material		Coupling 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 <sup>2</sup>	AWG20	8595/1-CS1-S-S05-001	286596	323 g
		Socket contact	0.75 – 1 mm <sup>2</sup>	AWG18	8595/1-CS1-S-S10-001	286599	323 g
		Socket contact	1.5 mm <sup>2</sup>	AWG16	8595/1-CS1-S-S15-001	286602	323 g
		Socket contact	2.5 mm <sup>2</sup>	AWG14	8595/1-CS1-S-S25-001	286605	323 g
	M25 x 1.5	Socket contact	0.5 mm <sup>2</sup>	AWG20	8595/1-CS1-S-S05-002	286597	323 g
		Socket contact	0.75 – 1 mm <sup>2</sup>	AWG18	8595/1-CS1-S-S10-002	286600	323 g
		Socket contact	1.5 mm <sup>2</sup>	AWG16	8595/1-CS1-S-S15-002	286603	323 g
		Socket contact	2.5 mm <sup>2</sup>	AWG14	8595/1-CS1-S-S25-002	286606	323 g
Version Enclosure material		Coupling, 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	Pin contact	0.5 mm <sup>2</sup>	AWG20	8595/1-CB1-S-P05-001	298987	323 g
		Pin contact	0.75 – 1 mm <sup>2</sup>	AWG18	8595/1-CB1-S-P10-001	298990	323 g
		Pin contact	1.5 mm <sup>2</sup>	AWG16	8595/1-CB1-S-P15-001	298993	323 g
		Pin contact	2.5 mm <sup>2</sup>	AWG14	8595/1-CB1-S-P25-001	298996	323 g
	M25 x 1.5	Pin contact	0.5 mm <sup>2</sup>	AWG20	8595/1-CB1-S-P05-002	298988	323 g
		Pin contact	0.75 – 1 mm <sup>2</sup>	AWG18	8595/1-CB1-S-P10-002	298991	323 g
		Pin contact	1.5 mm <sup>2</sup>	AWG16	8595/1-CB1-S-P15-002	298994	323 g
		Pin contact	2.5 mm <sup>2</sup>	AWG14	8595/1-CB1-S-P25-002	298997	323 g

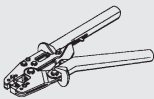
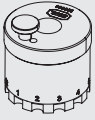
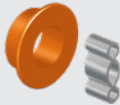

Selection Table							
Version		Coupling, reverse					
Enclosure material		Plastic					
Cable gland		Series 8161/7 made of plastic					
Clamping range		5 ... 13 mm					
Figure	Connection thread	Contact type	Connection cross-section	Connection cross-section AWG	Product Type	Art. No.	Weight
	M20 x 1.5	Pin contact	0.5 mm <sup>2</sup>	AWG20	8595/1-CP1-S-P05-011	286564	130 g
		Pin contact	0.75 – 1 mm <sup>2</sup>	AWG18	8595/1-CP1-S-P10-011	286566	130 g
		Pin contact	1.5 mm <sup>2</sup>	AWG16	8595/1-CP1-S-P15-011	286568	130 g
		Pin contact	2.5 mm <sup>2</sup>	AWG14	8595/1-CP1-S-P25-011	286570	130 g
Version		Coupling, 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	Pin contact	0.5 mm <sup>2</sup>	AWG20	8595/1-CP1-S-P05-012	286565	130 g
		Pin contact	0.75 – 1 mm <sup>2</sup>	AWG18	8595/1-CP1-S-P10-012	286567	130 g
		Pin contact	1.5 mm <sup>2</sup>	AWG16	8595/1-CP1-S-P15-012	286569	130 g
		Pin contact	2.5 mm <sup>2</sup>	AWG14	8595/1-CP1-S-P25-012	286571	130 g
Version		Coupling, 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	Pin contact	0.5 mm <sup>2</sup>	AWG20	8595/1-CS1-S-P05-001	286608	323 g
		Pin contact	0.75 – 1 mm <sup>2</sup>	AWG18	8595/1-CS1-S-P10-001	286611	323 g
		Pin contact	1.5 mm <sup>2</sup>	AWG16	8595/1-CS1-S-P15-001	286614	323 g
		Pin contact	2.5 mm <sup>2</sup>	AWG14	8595/1-CS1-S-P25-001	286617	323 g
	M25 x 1.5	Pin contact	0.5 mm <sup>2</sup>	AWG20	8595/1-CS1-S-P05-002	286609	323 g
		Pin contact	0.75 – 1 mm <sup>2</sup>	AWG18	8595/1-CS1-S-P10-002	286612	323 g
		Pin contact	1.5 mm <sup>2</sup>	AWG16	8595/1-CS1-S-P15-002	286615	323 g
		Pin contact	2.5 mm <sup>2</sup>	AWG14	8595/1-CS1-S-P25-002	286618	323 g


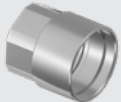
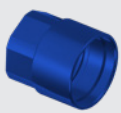
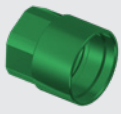
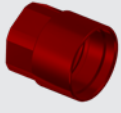



Cable glands are not part of the standard metallic product.  
NEC/CE Code versions on request.

Technical Data	
Explosion Protection	
Scope of validity	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.

Technical Data	
<b>Electrical Data</b>	
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 P + PE / 8 P
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.
<b>Ambient Conditions</b>	
Ambient temperature	-60 °C ... +75 °C
Ambient temperature	-76 °F ... +167 °F
<b>Mechanical Data</b>	
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
<b>Mounting / Installation</b>	
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<sup>2</sup> (AWG24 - AWG16).

Accessories			
Figure	Description	Art. No.	Weight
<b>Crimping tool</b>			
	For all versions with crimp connection of 0.14 to 6 mm <sup>2</sup>	295689	1 kg
<b>Contact mounts/positioners for rotated industrial contacts</b>			
	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
<b>2-ear clamps</b>			
	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

Accessories			
Figure	Description	Art. No.	Weight
<b>Adaptor</b>			
	KIT 8595 plastic adaptor, consisting of: Ex e adaptor and cable gland of Series 8161/7 made of plastic, M20 x 1.5 Cable outer diameter 5 to 13 mm	286162	36 g
	KIT 8595 plastic adaptor, consisting of: Ex e adaptor and cable gland of Series 8161/7 made of plastic, M25 x 1.5 Cable outer diameter 13 to 17 mm	286163	41 g
	8595 nickel-plated brass adaptor for cable gland, M16 x 1.5	314522	500 g
	8595 stainless steel adaptor for cable gland, M16 x 1.5	314521	500 g
	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	-
	KIT 8595 plastic adaptor, colour: blue for cable gland, M25 x 1.5	299322	-
	KIT 8595 plastic adaptor, colour: green for cable gland, M20 x 1.5	299297	-
	KIT 8595 plastic adaptor, colour: green for cable gland, M25 x 1.5	299300	-
	KIT 8595 plastic adaptor, colour: red for cable gland, M20 x 1.5	299298	-
	KIT 8595 plastic adaptor, colour: red for cable gland, M25 x 1.5	299321	-
<b>Socket contact</b>			
	KIT 8595 socket contacts (0.25 to 0.5 mm <sup>2</sup> ), 8 pieces	286151	25 g
	KIT 8595 socket contacts (0.75 to 1 mm <sup>2</sup> ), 8 pieces	286152	24 g
	KIT 8595 socket contacts (1.5 mm <sup>2</sup> ), 8 pieces	286153	25 g
	KIT 8595 socket contacts (2.5 mm <sup>2</sup> ), 8 pieces	286154	26 g
<b>Pin contact</b>			
	KIT 8595 pin contacts (0.25 to 0.5 mm <sup>2</sup> ), 8 pieces	286155	26 g
	KIT 8595 pin contacts (0.75 to 1 mm <sup>2</sup> ), 8 pieces	286156	26 g
	KIT 8595 pin contacts (1.5 mm <sup>2</sup> ), 8 pieces	286157	27 g
	KIT 8595 pin contacts (2.5 mm <sup>2</sup> ), 8 pieces	286158	26 g
<b>Code disks</b>			
	KIT coding plate 8595, four colours, without labelling Customer-specific labelling available on request	289939	4 g

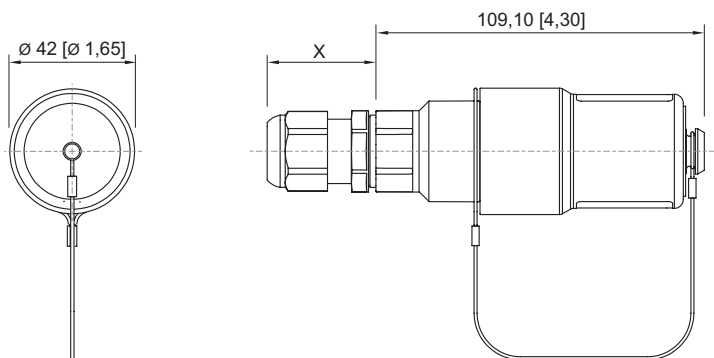
## Accessories

Figure	Description	Art. No.	Weight
<b>Cable gland made of plastic</b>			
	8161/7-M20-1307-LT, Ex e Plastic, M20 x 1.5, cable outer diameter 7 to 13 mm Lot size 50 pieces	239204	13 g
	8161/7-M25-1710-LT, Ex e Plastic, M25 x 1.5, cable outer diameter 10 to 17 mm Lot size 50 pieces	239205	19 g
	8161/8-M20-1307-LT, Ex i Plastic, M20 x 1.5, cable outer diameter 7 to 13 mm Lot size 50 pieces	239212	13 g
	8161/8-M25-1710-LT, Ex i Plastic, M25 x 1.5, cable outer diameter 10 to 17 mm Lot size 50 pieces	239213	19 g
<b>Metal cable gland</b>			
	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 (-60 to +75 °C) To mount the cable entries in the through holes				
	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
Protective cap				
	KIT 8595 coupling protective cap (pin) Incl. KIT 8595 coding plates, four colours, without labelling		286160	33 g
	KIT 8595 coupling protective cap (socket) Incl. KIT 8595 coding plates, four colours, without labelling		286159	32 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 coupling  
X = depending on the cable gland used