

# Multi-pole plug connectors TBC

Powerline | Industrial Connectors



## STÄUBLI ELECTRICAL CONNECTORS

## Long-term solutions – Expert connections



**Stäubli Electrical Connectors is a leading international manufacturer of high-quality electrical connector systems. We are part of the Stäubli Group which offers mechatronics solutions for electrical connectors, liquid and gas couplings, robots and textile machinery.**

Stäubli develops, produces, sells and maintains products for markets with high productivity standards. As recognized specialists, our focus is always on solutions and customers. Many new developments got their start here and have begun to make their way around the world.

Businesses and customers count on our commitment and our active support when dealing with unusual problems. With us, you are entering into a long-term partnership built on reliability, dynamism, and exceptional quality in both products and services.



**UNLIMITED POSSIBILITIES FOR CONTACT SOLUTIONS****MULTILAM Technology**

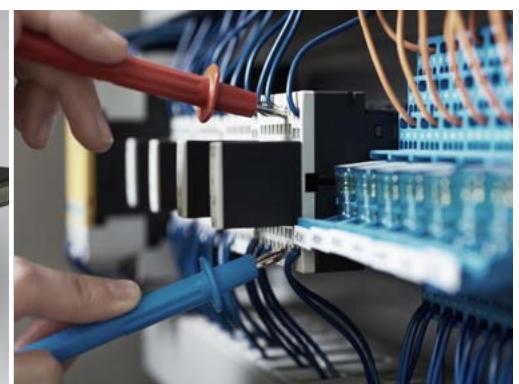
**MULTILAM** are specially formed and resilient contact elements. All Stäubli Electrical Connectors products benefit from the unique and outstanding performance of the **MULTILAM** Technology.

Thanks to their constant spring pressure, MULTILAM louvers ensure continuous contact with the contact surface, resulting in a constantly low contact resistance.

MULTILAM Technology allows to find solutions for connectors within the severest constraints and in certain products for up to 1 million mating cycles.

This makes the MULTILAM Technology the best choice for applications with demanding requirements:

- Reliable and longlife operation due to constantly high performance
- Safe operation under highest environmental demands on temperature, vibration and shock
- Suitable for data and signal contacts as well as high-current connectors
- Automated solutions with a high number of mating cycles



# TBC plug connectors

**In combination with Stäubli MULTILAM Technology, the design of the TBC plug connector ensures a dependable contact even when subjected to severe vibration and shocks.**

The connector is characterised by a high shock and impact resistance and a high tolerance to hydrocarbon compounds such as fossil fuels.

The compact design allows applications with voltages of up to 1000 V and continuous currents of 180 A.

## Characteristics

### TBC guarantees

- a permanent electrical contact with low contact resistance even when subjected to vibration
- secure mechanical protection against pole reversal

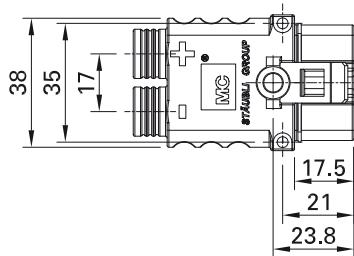
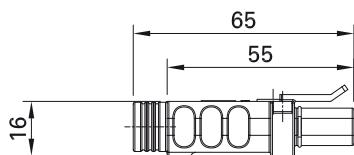
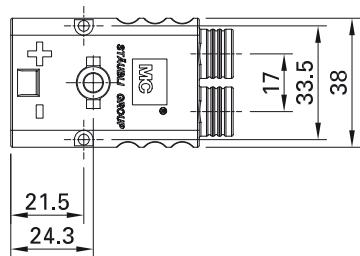
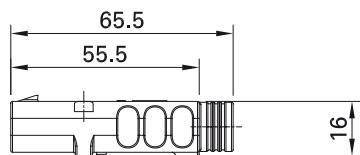
### Advantages

- Dependable
- Shock resistant
- Simple handling
- High vibration resistance due to use of MULTILAM Technology
- Resistant to hydrocarbons and fuels.

TBC, the new range of reliable  
and robust power connectors



**Mechanical protection against pole reversal**

**TBC2-2B****TBC2-2S**

Order No.	Type	Description	No. of poles	Conductor cross section	Material	Colours
mm <sup>2</sup>						
<b>19.7940-21</b>	TBC2-2-BP6/10	Socket, Size 2	2	10	CuZn	
<b>19.7939-21</b>	TBC2-2-SP6/10	Plug, Size 2				
<b>19.7942-21</b>	TBC2-2-BP6/16	Socket, Size 2	2	16	CuZn <sup>1)</sup>	<span style="color: black;">21</span> <span style="color: orange;">30</span> <sup>1)</sup>
<b>19.7941-21</b>	TBC2-2-SP6/16	Plug, Size 2				
<b>19.7944-21</b>	TBC2-2-BP6/25	Socket, Size 2	2	25	Cu	
<b>19.7943-21</b>	TBC2-2-SP6/25	Plug, Size 2				

#### General data

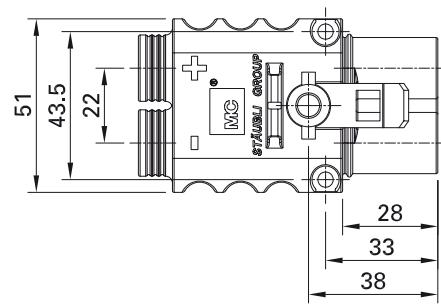
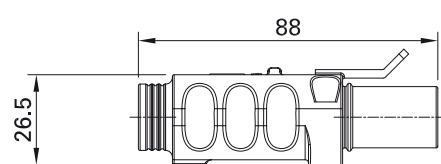
Rated voltage	600 V
Rated current	80 A (10 mm <sup>2</sup> ) 110 A (16 mm <sup>2</sup> ) 125 A (25 mm <sup>2</sup> )
Limiting temperature (IEC 61984), upper lower	+125 °C -40 °C
Degree of protection mated unmated	IP54 <sup>2)</sup> IP2X
Nominal Ø plug/socket	6 mm
Type of termination	Crimp

<sup>1)</sup> Upon request<sup>2)</sup> When using adhesive lined shrink tubing (cable side)

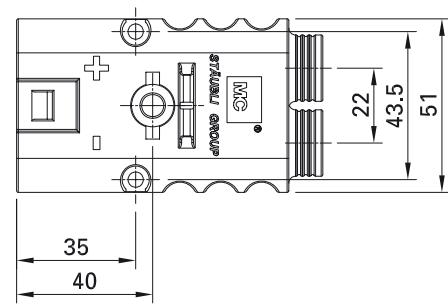
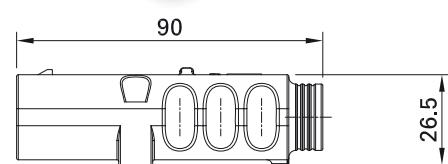
#### Assembly instructions MA087

[www.staubli.com/electrical](http://www.staubli.com/electrical)

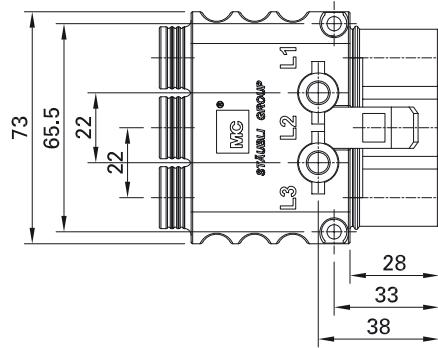
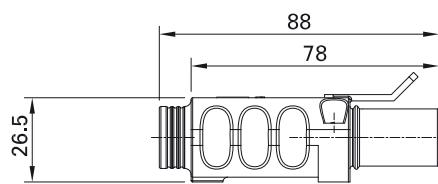
TBC3-2B



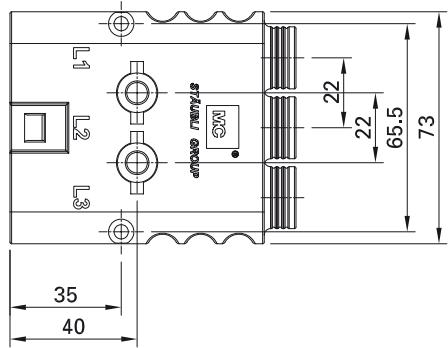
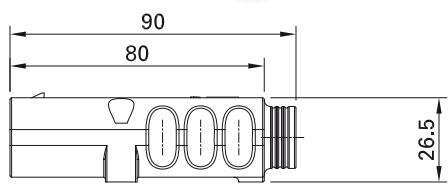
TBC3-2S



TBC3-3B



TBC3-3S



Order No.	Type	Description	No. of poles	Conductor cross section	Material	Colours	
				mm <sup>2</sup>		21   30 <sup>1)</sup>	
<b>19.7928-21</b>	TBC3-2-BP8/35	Socket, Size 3	2	35	CuZn		
<b>19.7927-21</b>	TBC3-2-SP8/35	Plug, Size 3					
<b>19.7930-21</b>	TBC3-2-BP8/50	Socket, Size 3	2	50	Cu		
<b>19.7929-21</b>	TBC3-2-SP8/50	Plug, Size 3					
<b>19.7932-21</b>	TBC3-3-BP8/35	Socket, Size 3	3	35	CuZn		
<b>19.7931-21</b>	TBC3-3-SP8/35	Plug, Size 3					
<b>19.7934-21</b>	TBC3-3-BP8/50	Socket, Size 3	3	50	Cu		
<b>19.7933-21</b>	TBC3-3-SP8/50	Plug, Size 3					

**General data**

Rated voltage	1000 V
Rated current	150 A (35 mm <sup>2</sup> ) 180 A (50 mm <sup>2</sup> )
Limiting temperature (IEC 61984), upper lower	+125 °C –40 °C
Degree of protection mated unmated	IP54 <sup>2)</sup> IP2X
Nominal Ø plug/socket	8 mm
Type of termination	Crimp

<sup>1)</sup> Upon request<sup>2)</sup> When using adhesive lined shrink tubing (cable side)**Assembly instructions MA087**[www.staubli.com/electrical](http://www.staubli.com/electrical)



■ Stäubli Units    ○ Agents

## Global presence of the Stäubli Group

[www.staubli.com](http://www.staubli.com)