

# MODULE 20 CONTACTS



Pin protection against mechanical damage

## SIGNAL



Contact diameter: 0.76 mm  
Mating cycles: minimum 100,000  
Current-carrying capacity<sup>1</sup>: 11 A

### TECHNICAL NOTES

- The current load information is valid for single contacts or fully equipped modules. For use in connector systems, the load should be reduced according to VDE 0298-4:2013 (see [ODU-MAC® Silver-Line | ODU DOCK Silver-Line catalog, page 197](#)).
- For crimp information see [ODU-MAC® Silver-Line | ODU DOCK Silver-Line catalog from page 174](#).
- Module can't be used in ODU-MAC® ZERO.

## REMOVAL TOOL I (ANGLED)



Removal of the already assembled contact (incl. cable)

**PART NUMBER: 087.170.361.000.000**

## REMOVAL TOOL II



Removal of the still unassembled contact (without cable, which may have to be cut off)

**PART NUMBER: 087.611.001.001.000**

For an overview of all tools please see [ODU-MAC® Silver-Line | ODU DOCK Silver-Line catalog from page 183](#).

### TECHNICAL DATA

#### Voltage information<sup>2</sup>

Operating voltage	250 V	50 V
Rated impulse voltage	1,500 V	1,500 V
Degree of pollution	2	3

#### Voltage information acc. to MIL<sup>3</sup>

Operating voltage	500 V
Test voltage	1,500 V

#### Mechanical data

Total mating force (average)	27 N / Module
Total sliding force (average)	19.6 N / Module
Contact diameter	0.76 mm
Operating temperature	-40 °C to +125 °C
Mating cycles	minimum 100,000

#### Materials

Insulator	Thermoplastic fiber glass reinforced acc. to UL 94
Contact body	Cu alloy
Contact spring	CuBe alloy
Contact plating	Au over Ni

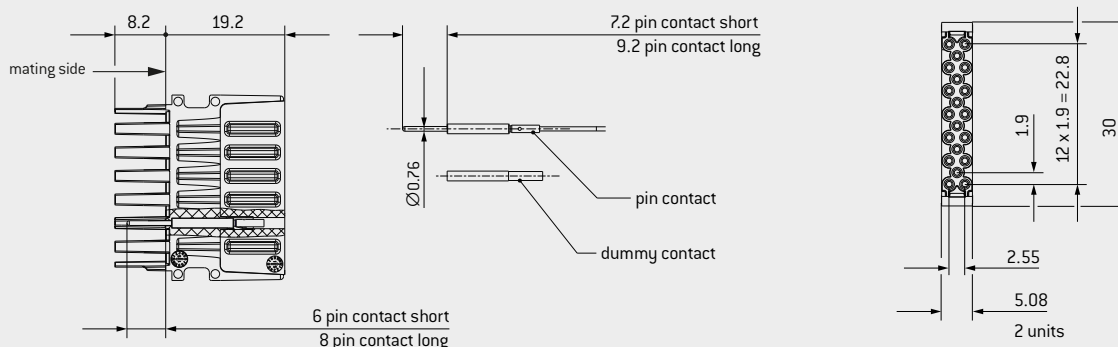
<sup>1</sup> Definition max. continuous current see [ODU-MAC® Silver-Line | ODU DOCK Silver-Line catalog page 197](#).

<sup>2</sup> Acc. to IEC 60664-1:2007 (VDE 0110-1:2008) see [ODU-MAC® Silver-Line | ODU DOCK Silver-Line catalog page 191](#).

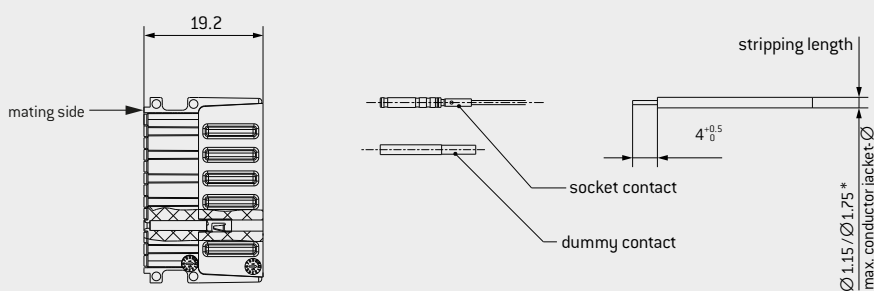
<sup>3</sup> See [ODU-MAC® Silver-Line | ODU DOCK Silver-Line catalog page 194](#).



### INSULATOR PIN

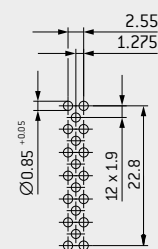


### INSULATOR SOCKET



\*= Ø 1.15 with removal tool / ≤ Ø 1.75 without removal tool

### PCB LAYOUT



Module 20 contacts	Part number
Insulator	610.178.120.922.000
Insulator pin	611.178.120.922.000
Dummy contact	021.341.123.300.000

Description	Part number	Conductor cross-section mm <sup>2</sup>	Termination AWG/mm	Nominal current <sup>2</sup>		Max. continuous current <sup>3</sup> Single contact A	Contact resistance mΩ
				Single contact A	Module fully equipped A		
Pin contact short <sup>1</sup>	180.361.000.307.000	0.38	22	7.5	4	11	3.8
Pin contact long <sup>1</sup>	180.381.000.307.000						
Socket contact <sup>1</sup>	170.361.700.207.000						
Pin contact short <sup>1</sup>	180.540.000.307.000	0.25 – 0.08	24 – 28	6	3.5	9	3.8
Pin contact long <sup>1</sup>	180.570.000.307.000						
Buchsenkontakt <sup>1</sup>	170.540.700.207.000						
Pin contact short <sup>1</sup>	180.850.000.307.000	PCB termination Ø 0.76 mm	PCB termination Ø 0.76 mm	7.5	4	11	3.8
Pin contact long <sup>1</sup>	180.851.000.307.000						
Socket contact <sup>1</sup>	170.850.700.207.000						



<sup>1</sup> Non-magnetic version on request <sup>2</sup> Determined acc. to IEC 60512-5-1:2002 [DIN EN 60512-5-1:2003] at a temperature increase of 45 K. <sup>3</sup> Definition max. continuous current see ODU-MAC® Silver-Line | ODU DOCK Silver-Line catalog page 197.