

## Connectors M 16

**T**WINTUS  
inclusive



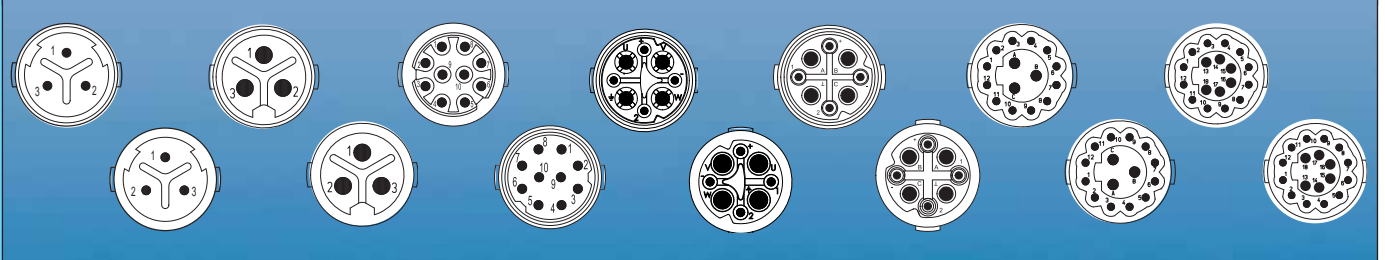
Housings

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Inserts

page 22



Accessories

page 29



## M 16 Control Signal Connectors

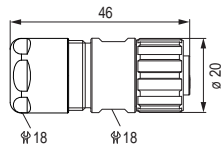
Mechanical Data	Materials and Technical Data
Housing	Copper-Zinc alloy Die Casting Aluminium alloy
Housing surface	Nickel plated other surface upon request
Inserts (for contacts)	Thermoplastic Polyamid PA 6 (Nylon 6/6), PBT Fire protection class V-0
Contacts	Brass Alloy
Contact surface at point of contact	Nickel and gold plated (0,25µm Au)
Minimum mating cycles	> 1000
Seals / O-Rings	Buna-N standard, optional Viton® (Viton is a registered trademark of DuPont)
Temperature range	-40° C – 125° C (-40 °F – 257 °F)
Type of contacts	Crimp, dip-solder (PCB)
Protection	IP 67 / IP 69K per EN 60 529 (connected), NEMA 4x
Cable diameter range	2 – 11 mm (.08 – .43")

Electrical Data					
Number of positions	3 (3 x 1 mm)	3 (3 x 2 mm)	4 + 3 + PE / 320 V		4 + 3 + PE / 630 V
Number of contacts	3	3	4	4	4 4
ContactØ [mm]	1	2	0,8	1,6	0,8 1,25
AWG [mm <sup>2</sup> ]	0,14 – 1	0,5 – 2,5	0,08 – 0,34	0,34 – 1,5	0,08 – 0,34 0,34 – 1,5
Nominal current <sup>1)</sup> [A]	8	20	5	16	5 16
Nominal voltage <sup>2)</sup> [V~] degree of protection 2 <sup>4)</sup>	630	630	320	630	300 800
Nominal voltage <sup>2)</sup> [V~] degree of protection 3 <sup>4)</sup>	400	400	160	320	300 630
Test voltage (Breakdown voltage) <sup>3)</sup> [V~]	2500	2500	1500	2500	1500 2500
Insulation resistance [MΩ]	> 10 <sup>10</sup>	> 10 <sup>10</sup>	> 10 <sup>10</sup>		> 10 <sup>10</sup>
Max. contact resistance [mΩ]	3	3	3		3 3
Number of positions		10	12 + 3		18
Number of contacts		10	12	3	18
ContactØ [mm]		1	0,8	1,25	0,8
AWG [mm <sup>2</sup> ]		0,14 – 0,75	0,08 – 0,34	0,5 – 1,5	0,08 – 0,34
Nominal current <sup>1)</sup> [A]		8	3	10	3
Nominal voltage <sup>2)</sup> [V~] degree of protection 2 <sup>4)</sup>		230	60	160	60
Nominal voltage <sup>2)</sup> [V~] degree of protection 3 <sup>4)</sup>		160	24	60	24
Test voltage (Breakdown voltage) <sup>3)</sup> [V~]		1500	1500	2500	1500
Insulation resistance [MΩ]		> 10 <sup>6</sup>	> 10 <sup>10</sup>		> 10 <sup>10</sup>
Max. contact resistance [mΩ]		3	3	3	3

<sup>1), 2), 3), 4)</sup> See Technical Information page 14

## Connectors M 16 / Housing

### Straight Connector, Female Thread



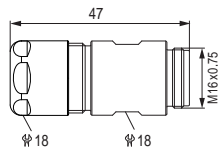
#### Cable-Ø

#### Part Number

2 – 7 mm (.08 – .28")	7.810.300.000
5 – 9 mm (.20 – .35")	7.810.400.000
8 – 11 mm (.31 – .43")	7.810.500.000

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### Straight Connector, Male Thread



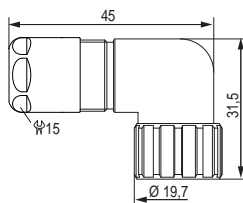
#### Cable-Ø

#### Part Number

2 – 7 mm (.08 – .28")	7.820.300.000
5 – 9 mm (.20 – .35")	7.820.400.000
8 – 11 mm (.31 – .43")	7.820.500.000

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### Right Angle Connector, Female Thread



#### Cable-Ø

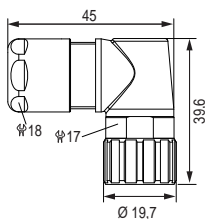
#### Part Number

2 – 7 mm (.08 – .28")	7.830.300.000
5 – 9 mm (.20 – .35")	7.830.400.000

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Assembly tool 7.010.900.125 is required

### Right Angle Connector with positioning



#### Cable-Ø

#### Part Number

2 – 7 mm (.08 – .28")	7.831.300.000
5 – 9 mm (.20 – .35")	7.831.400.000
8 – 11 mm (.31 – .43")	7.831.500.000

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Cable-Ø	Part Number	Panel Connector with built in Cable Strain Relief
<b>Rear mounting, single hole mounted</b> 2 – 7 mm (.08 – .28").....7.852.300.000 5 – 9 mm (.20 – .35").....7.852.400.000		
Including jam nut PG 11		
Contacts and inserts page 22 • Assembly instructions page 34 / 35		

Cable-Ø	Part Number	Panel Connector with built in Cable Strain Relief
<b>Rear mounting, M2,5 x 4 single hole mounted</b> 2 – 7 mm (.08 – .28").....7.847.300.000 5 – 9 mm (.20 – .35").....7.847.400.000		
Contacts and inserts page 22 • Assembly instructions page 34 / 35		

Type	Part Number	Panel Connector, Male Thread, Front Mounting
4 x holes Ø 2,7 mm (.11") ..7.840.000.000 Flange 20 x 20 mm		
4 x holes Ø 2,7 mm.....7.840.100.000 Flange 25 x 25 mm		
Contacts and inserts page 22 • Assembly instructions page 38		

Type	Part Number	Panel Connector, Male Thread, Front Mounting
<b>Short version</b> 4 x holes Ø 2,7 mm (.11") ..7.840.200.000 Flange 20 x 20 mm		
Contacts and inserts page 22 • Assembly instructions page 38		

## Connectors M 16 / Housing

Right Angle Panel Connector, Male Thread, rotating		Type	Part Number
		<b>300° rotating, locking screw at flange</b> 4 x holes Ø 2,7 mm (.11") ...7.843.000.000 Flange 20 x 20 mm	
		4 x holes Ø 2,7 mm .....7.843.100.000 Flange 25 x 25 mm	
		Contacts and inserts page 22 • Assembly instructions page 39	

Panel Connector, Male Thread		Type	Part Number
		<b>Front mounting, single hole mounted</b> Thread M 16 x 1,5 .....7.842.000.000	
		Contacts and inserts page 22 • Assembly instructions page 38	

Panel Connector, Male Thread		Type	Part Number
		<b>Rear mounting, single hole mounted</b> Including jam nut .....7.850.000.000	
		Contacts and inserts page 22 • Assembly instructions page 38	

Panel Connector, Male Thread		Type	Part Number
		<b>Rear mounting, 4 x thread M2,5</b> Flange 20 x 20 mm .....7.845.000.000	
		Contacts and inserts page 22 • Assembly instructions page 38	



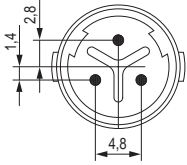
Type	Part Number	TWINTUS	
Flange 20 x 20 mm			
Uncoated .....	7.848.000.000		
Surface nickel plated .....	7.848.000.001		
Surface black conductive.....	7.848.000.00B		
Contacts and inserts page 22 • Assembly instructions page 33			



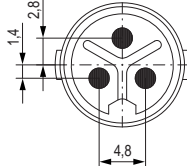
Type	Part Number	TWINTUS	
Flange 20 x 20 mm			
Uncoated .....	7.848.100.000		
Surface nickel plated .....	7.848.100.001		
Surface black conductive.....	7.848.100.00B		
Contacts and inserts page 22 • Assembly instructions page 33			

Type	Part Number	TWINTUS M 16 / M 12	
Flange 20 x 20 mm			
Uncoated .....	7.848.200.000		
Surface nickel plated .....	7.848.200.001		
Surface black conductive.....	7.848.200.00B		
Contacts and inserts page 22 • Assembly instructions page 33			

Type	Part Number	TWINTUS M 16 / M 12	
Flange 25 x 25 mm			
Uncoated .....	7.848.300.000		
Surface nickel plated .....	7.848.300.001		
Surface black conductive.....	7.848.300.00B		
Contacts and inserts page 22 • Assembly instructions page 33			

## Connectors M 16 / Inserts / Pinouts

Inserts 3-pole (3 x 1 mm)	Type	Part Number	Part Number
		Pins	Sockets
 <p>Insert pin mating view</p>	Insert		
	without contacts .....	7.003.903.101 .....	7.003.903.102
	Insert with dip solder contacts		
	Length 10 mm .....	7.001.903.127 .....	7.001.903.108
	Insert with dip solder contacts		
	Length 17 mm .....	7.001.903.137 .....	7.001.903.118
 <p>Insert socket mating view</p>	<b>Required Contacts</b>		
	3 x 1 mm .....	7.010.901.001 .....	7.010.901.002 / 7.010.901.012
			
	Contacts page 26-28		

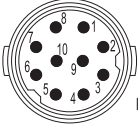
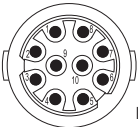
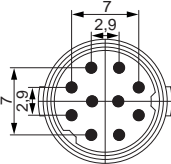
Inserts 3-pole (3 x 2 mm)	Type	Part Number	Part Number
		Pins	Sockets
 <p>Insert pin mating view</p>	Insert		
	without contacts .....	7.003.983.101 .....	7.003.983.102
	Insert with dip solder contacts		
	Length 10 mm .....	7.001.983.127 .....	7.001.983.108
	Insert with dip solder contacts		
	Length 17 mm .....	7.001.983.137 .....	7.001.983.118
 <p>Insert socket mating view</p>	<b>Required Contacts</b>		
	3 x 2 mm .....	7.010.982.001 .....	7.010.982.002
			
	Contacts page 26-28		

Type	Part Number	Part Number	Inserts 4+3+PE
	<b>Pins</b>	<b>Sockets</b>	
Insert without contacts .....	7.003.943.101	7.003.943.102	<p>Insert pin mating view</p>
Insert RAL 2003 (DESINA orange) without contacts .....	7.053.943.101	7.053.943.102	
Insert with dip solder contacts Length 10 mm .....	7.001.943.127	7.001.943.108	<p>Insert socket mating view</p>
Insert with dip solder contacts Length 17 mm .....	7.001.943.137	7.001.943.118	
<b>Required Contacts</b>			
4 x 0,8 mm .....	7.010.980.801	7.010.980.802	
4 x 1,6 mm .....	7.010.981.601	7.010.981.602	
Contacts page 26-28			

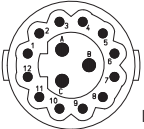
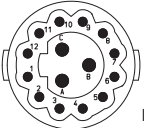
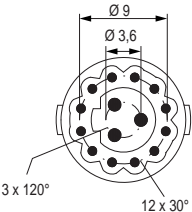
Type	Part Number	Part Number	Inserts 4+3+PE 630 V
	<b>Pins</b>	<b>Sockets</b>	
Insert without contacts .....	7.003.908.101	7.003.908.102	<p>Insert pin mating view</p>
Insert RAL 2003 (DESINA orange) without contacts .....	7.053.908.101	7.053.908.102	
Insert with dip solder contacts Length 10 mm <sup>1)</sup> .....	7.001.908.127	7.001.908.108	<p>Insert socket mating view</p>
Insert with dip solder contacts Length 17 mm <sup>1)</sup> .....	7.001.908.137	7.001.908.118	
<b>Required Contacts</b>			
4 x 0,8 mm .....	7.010.980.811	7.010.980.812	
4 x 1,25 mm .....	7.010.981.211	7.010.981.212	
Contacts page 26-28			

<sup>1)</sup> Under development

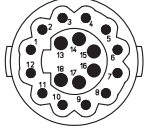
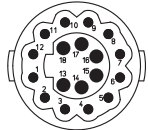
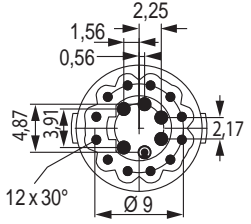
## Connectors M 16 / Inserts / Pinouts

Inserts 10-pole	Type	Part Number	
		Pins	Sockets
 <p>Insert pin mating view</p>	Insert		
	without contacts .....	7.003.910.101	7.003.910.102
	Insert RAL 6018 (DESINA green)		
 <p>Insert socket mating view</p>	without contacts .....	7.053.910.101	7.053.910.102
	Insert with dip solder contacts		
	Length 10 mm .....	7.001.910.127	7.001.910.108
	Insert with dip solder contacts		
	Length 17 mm <sup>1)</sup> .....	7.001.910.137	7.001.910.118
	<b>Required Contacts</b>		
	10 x 1 mm .....	7.010.981.001	7.010.981.002

Contacts page 26-28




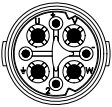



Inserts 12+3-pole	Type	Part Number	
		Pins	Sockets
 <p>Insert pin mating view</p>	Insert		
	without contacts .....	7.003.985.101	7.003.985.102
	Insert with dip solder contacts		
 <p>Insert socket mating view</p>	Length 10 mm .....	7.001.985.127	7.001.985.108
	Insert with dip solder contacts		
	Length 17 mm .....	7.001.985.137	7.001.985.118
	<b>Required Contacts</b>		
	12 x 0,8 mm .....	7.010.980.801	7.010.980.802
	3 x 1,25 mm .....	7.010.981.201	7.010.981.202

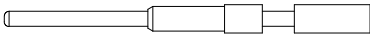
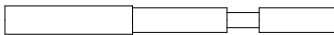
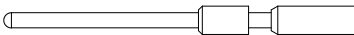




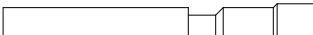

Contacts page 26-28

Type	Part Number	Part Number	Inserts 18-pole
	<b>Pins</b>	<b>Sockets</b>	
Insert without contacts .....	7.003.988.101 .....	7.003.988.102	 <p>Insert pin mating view</p>
Insert RAL 6018 (DESINA green) without contacts .....	7.053.988.101 .....	7.053.988.102	
Insert with dip solder contacts Length 10 mm .....	7.001.988.127 .....	7.001.988.108	 <p>Insert socket mating view</p>
Insert with dip solder contacts Length 17 mm .....	7.001.988.137 .....	7.001.988.118	
<b>Required Contacts</b> 18 x 0,8 mm .....	7.010.980.801 .....	7.010.980.802	

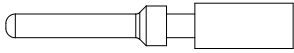

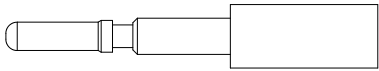
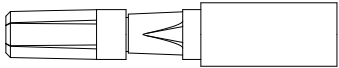
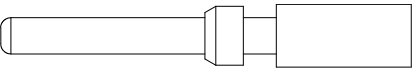
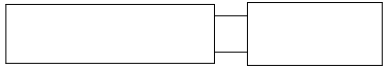
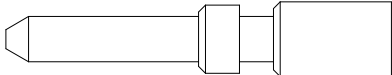

Contacts page 26-28

## Connectors M 16 / Required Contacts

Contact Arrangement	Number of Poles	Required Contacts	Type	Part Number
	3 (3 x 1)	3 x 1 mm	Pins..... Sockets.....	7.010.901.001 7.010.901.002
	3 (3 x 2)	3 x 2 mm	Pins..... Sockets.....	7.010.982.001 7.010.982.002
	4 + 3 + PE	4 x 0,8 mm 4 x 1,6 mm	Pins..... Sockets..... Pins..... Sockets.....	7.010.980.801 7.010.980.802 7.010.981.601 7.010.981.602
	4 + 3 + PE 630 V	4 x 0,8 mm 4 x 1,25 mm	Pins..... Sockets..... Pins..... Sockets.....	7.010.980.811 7.010.980.812 7.010.981.211 7.010.981.212
	10	10 x 1 mm	Pins..... Sockets.....	7.010.981.001 7.010.981.002
	15 (12 + 3)	12 x 0,8 mm 3 x 1,25 mm	Pins..... Sockets..... Pins..... Sockets.....	7.010.980.801 7.010.980.802 7.010.981.201 7.010.981.202
	18	18 x 0,8 mm	Pins..... Sockets.....	7.010.980.801 7.010.980.802

Type	Crimp Range	Part Number	Contacts
Crimp pin 0,8 mm, machined.....	0,08 – 0,34 mm <sup>2</sup> (AWG 28 – 22)	7.010.980.801	
Crimp socket 0,8 mm, machined.....	0,08 – 0,34 mm <sup>2</sup> (AWG 28 – 22)	7.010.980.802	
Crimp pin 0,8 mm, machined.....	0,08 – 0,34 mm <sup>2</sup> (AWG 28 – 22)	7.010.980.811	
Crimp socket 0,8 mm, machined.....	0,08 – 0,34 mm <sup>2</sup> (AWG 28 – 22)	7.010.980.812	
Crimp pin 1 mm, machined.....	0,08 – 0,75 mm <sup>2</sup> (AWG 28 – 18)	7.010.981.001	
Crimp socket 1 mm, machined.....	0,08 – 0,75 mm <sup>2</sup> (AWG 28 – 18)	7.010.981.002	
Crimp pin 1 mm, machined.....	0,14 – 1 mm <sup>2</sup> (AWG 26 – 17)	7.010.901.001	
Crimp socket 1 mm, machined.....	0,08 – 0,56 mm <sup>2</sup> (AWG 28 – 20)	7.010.901.012	
Crimp socket 1 mm, machined.....	0,34 – 1 mm <sup>2</sup> (AWG 22 – 17)	7.010.901.002	

Please see assembly instructions on page 40

Contacts	Type	Crimp Range	Part Number
	Crimp pin 1,25 mm, machined.....	0,5 – 1,5 mm <sup>2</sup> (AWG 20 – 16).....	7.010.981.201
	Crimp socket 1,25 mm, machined.....	0,5 – 1,5 mm <sup>2</sup> (AWG 20 – 16).....	7.010.981.202
	Crimp pin 1,25 mm, machined.....	0,5 – 1,5 mm <sup>2</sup> (AWG 20 – 16).....	7.010.981.211
	Crimp socket 1,25 mm, machined.....	0,5 – 1,5 mm <sup>2</sup> (AWG 20 – 16).....	7.010.981.212
	Crimp pin 1,6 mm, machined.....	0,34 – 1,5 mm <sup>2</sup> (AWG 22 – 16) ..	7.010.981.601
	Crimp socket 1,6 mm, machined.....	0,34 – 1,5 mm <sup>2</sup> (AWG 22 – 16).....	7.010.981.602
	Crimp pin 2 mm, machined.....	1,0 – 2,5 mm <sup>2</sup> (AWG 17 – 14).....	7.010.982.001
	Crimp socket 2 mm, machined.....	1,0 – 2,5 mm <sup>2</sup> (AWG 17 – 14) .....	7.010.982.002

Crimp Tool Settings see page 31 / 32  
Please see assembly instructions on page 40

Type	Part Number	Accessories
Plastic protective cap for connectors with male thread .....7.000.980.161 for connectors with female thread.....7.000.980.162		
Brass protective cap for connectors with female thread.....7.010.900.163		
Brass protective cap for connectors with male thread .....7.010.900.162		
Brass protective cap with chain for connectors with female thread .....Length 70 mm .....7.010.9S0.705		
Brass protective cap with chain for connectors with male thread .....Length 70 mm .....7.010.9S0.704		
Assembly tool for Right Angle Connector M 16 .....7.010.900.125		

## Connectors M 16 / Accessories

Accessories	Type	Part Number
	Crimp tool for manual crimping of machined crimp contacts for signal connectors M 16 and M 23 .....	7.000.900.904
See page 84 for crimp tool instructions		
	Adaptor flange for Straight Connectors .....	7.010.900.135
	Conduit adaptor	DN 10 .....7.010.900.200 Snapflex 16.....7.010.900.201 DN 12 .....7.010.900.202 Snapflex 16.....7.010.900.203
	EMC-sheet for TWINTUS Flange 20 x 20 ..... for TWINTUS Flange 25 x 25 .....	7.040.848.101 7.040.848.102
	Plastic protective cap for TWINTUS	TWINTUS M 16 .....7.000.848.101 TWINTUS M 16 / M 12 .....7.000.848.102

Please see assembly instructions on page 34

## Crimp Tool for Connectors M 16

### Crimp Tool Setting for HUMMEL Crimp Contacts (Crimp Tool 7.000.900.904)

Part Number	Crimp Contact	Cross Section (mm <sup>2</sup> )	AWG	Crimp Tool Setting mm	Locator Setting
7.010.980.801	Crimp pin 0,8 mm	0,08	AWG 28	0,57	10
		0,14	AWG 26	0,60	
		0,25	AWG 24	0,64	
		0,34	AWG 22	0,73	
7.010.980.802	Crimp socket 0,8 mm	0,08	AWG 28	0,57	10
		0,14	AWG 26	0,60	
		0,25	AWG 24	0,64	
		0,34	AWG 22	0,73	
7.010.980.811	Crimp pin 0,8 mm	0,08	AWG 28	0,57	B7
		0,14	AWG 26	0,60	
		0,25	AWG 24	0,64	
		0,34	AWG 22	0,73	
7.010.980.812	Crimp socket 0,8 mm	0,08	AWG 28	0,57	B8
		0,14	AWG 26	0,60	
		0,25	AWG 24	0,64	
		0,34	AWG 22	0,73	
7.010.981.001	Crimp pin 1 mm	0,08	AWG 28	0,60	7
		0,14	AWG 26	0,65	
		0,25	AWG 24	0,67	
		0,34	AWG 22	0,71	
		0,56	AWG 20	0,75	
		0,75	AWG 18	0,82	
7.010.981.002	Crimp socket 1 mm	0,08	AWG 28	0,60	8
		0,14	AWG 26	0,63	
		0,25	AWG 24	0,66	
		0,34	AWG 22	0,69	
		0,56	AWG 20	0,75	
		0,75	AWG 18	0,83	
7.010.901.001	Crimp pin 1 mm	0,14	AWG 26	0,70	1
		0,25	AWG 24	0,76	
		0,34	AWG 22	0,82	
		0,50	AWG 20	0,90	
		0,75	AWG 18	1,00	
		1,0	AWG 17	1,10	
7.010.901.012	Crimp socket 1 mm (0,08-0,56 mm <sup>2</sup> )	0,08	AWG 28	0,75	2
		0,14	AWG 26	0,78	
		0,25	AWG 24	0,82	
		0,34	AWG 22	0,86	
		0,56	AWG 20	0,90	

These values are only guidelines and actual conductor cross sections depend on manufacturer tolerances.

See page 40 for crimp tool instructions

## Crimp Tool for Connectors M 16

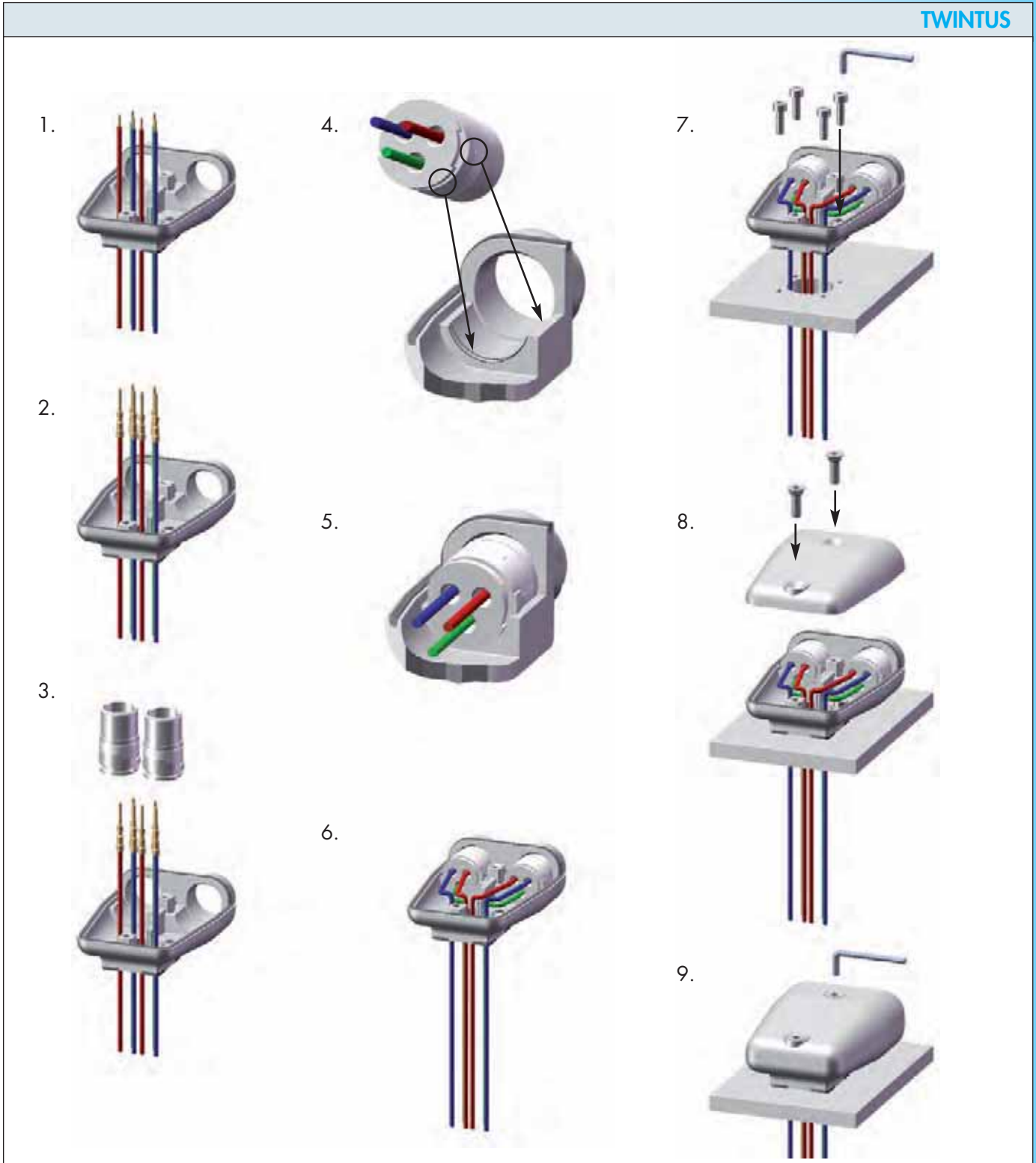
### Crimp Tool Setting for HUMMEL Crimp Contacts (Crimp Tool 7.000.900.904)

Part Number	Crimp Contact	Cross Section (mm <sup>2</sup> )	AWG	Crimp Tool Setting mm	Locator Setting
7.010.901.002	Crimp socket 1 mm (0,34 – 1 mm <sup>2</sup> )	0,34	AWG 22	0,77	2
		0,56	AWG 20	0,82	
		0,75	AWG 18	0,88	
		1,0	AWG 17	0,95	
7.010.981.201	Crimp pin 1,25 mm	0,5	AWG 20	0,70	2
		0,75	AWG 18	0,73	
		1,0	AWG 17	0,79	
		1,5	AWG 16	0,88	
7.010.981.202	Crimp socket 1,25 mm	0,5	AWG 20	0,70	2
		0,75	AWG 18	0,73	
		1,0	AWG 17	0,79	
		1,5	AWG 16	0,88	
7.010.981.211	Crimp pin 1,25 mm	0,34	AWG 22	0,80	B9
		0,5	AWG 20	0,84	
		0,75	AWG 18	0,90	
		1,0	AWG 17	1,00	
		1,5	AWG 16	1,10	
7.010.981.212	Crimp socket 1,25 mm	0,34	AWG 22	0,80	B10
		0,5	AWG 20	0,84	
		0,75	AWG 18	0,90	
		1,0	AWG 17	1,00	
		1,5	AWG 16	1,10	
7.010.981.601	Crimp pin 1,6 mm	0,34	AWG 22	0,80	6
		0,56	AWG 20	0,84	
		0,75	AWG 18	0,90	
		1,0	AWG 17	1,00	
		1,5	AWG 16	1,10	
7.010.981.602	Crimp socket 1,6 mm	0,34	AWG 22	0,83	9
		0,56	AWG 20	0,90	
		0,75	AWG 18	0,97	
		1,0	AWG 17	1,02	
		1,5	AWG 16	1,10	
7.010.982.002	Crimp socket 2 mm	1,0	AWG 17	1,35	4
		1,5	AWG 16	1,45	
		2,5	AWG 14	1,60	
7.010.982.001	Crimp pin 2 mm	1,0	AWG 17	1,35	5
		1,5	AWG 16	1,45	
		2,5	AWG 14	1,60	

These values are only guidelines and actual conductor cross sections depend on manufacturer tolerances.

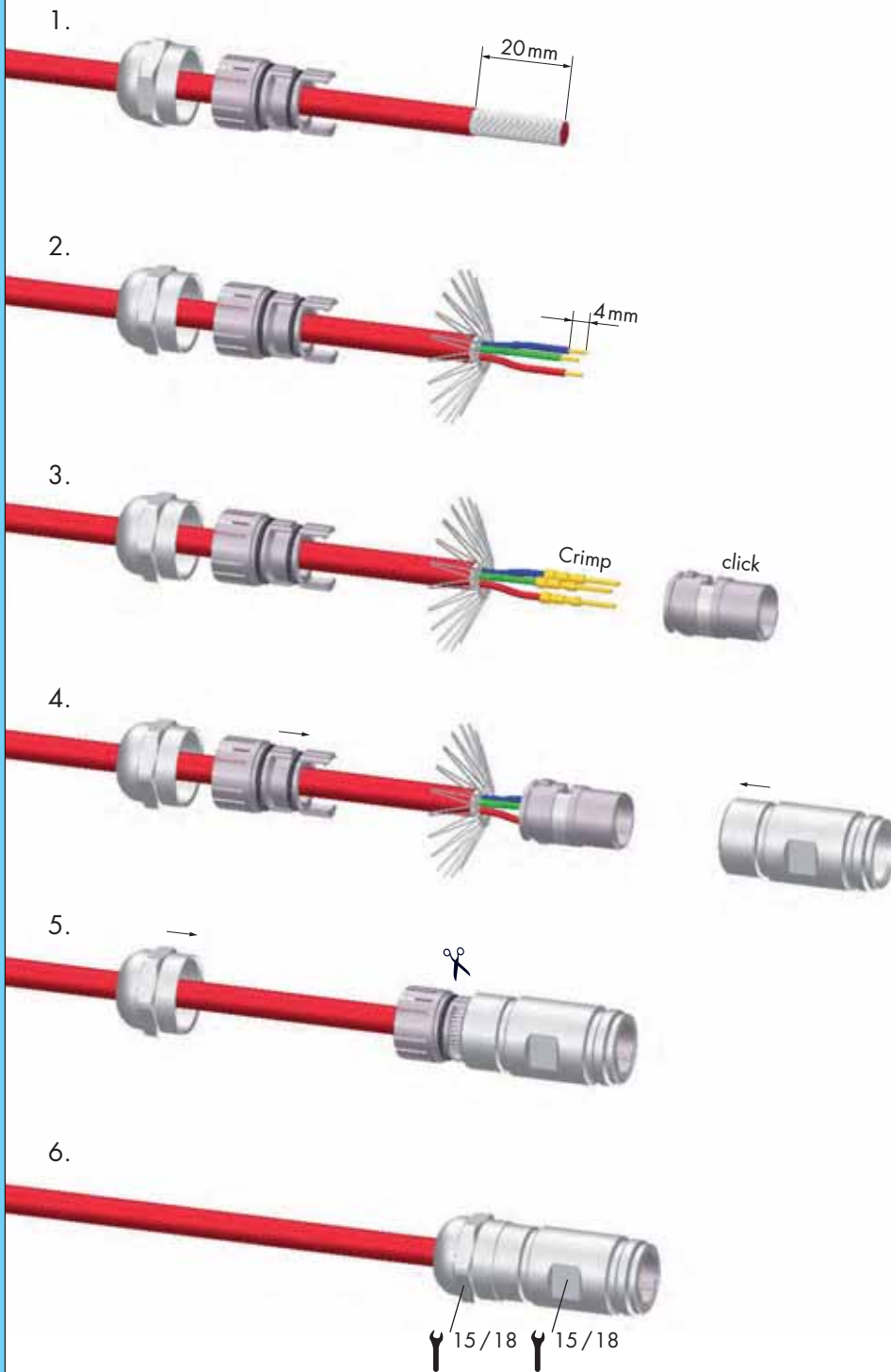
See page 40 for crimp tool instructions

TWINTUS



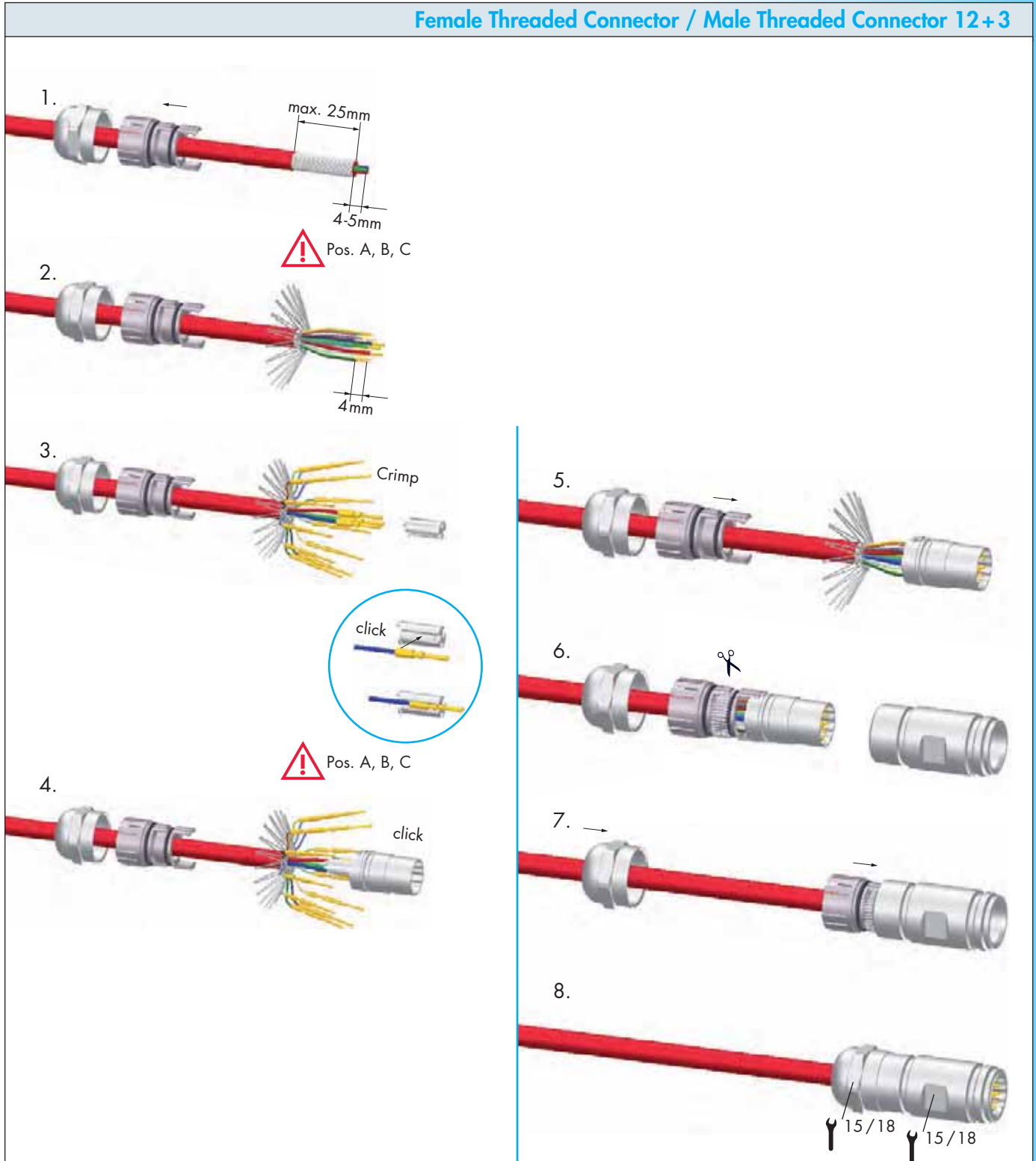
# Connectors M 16 / Assembly Instructions

## Female Threaded Connector / Male Threaded Connector



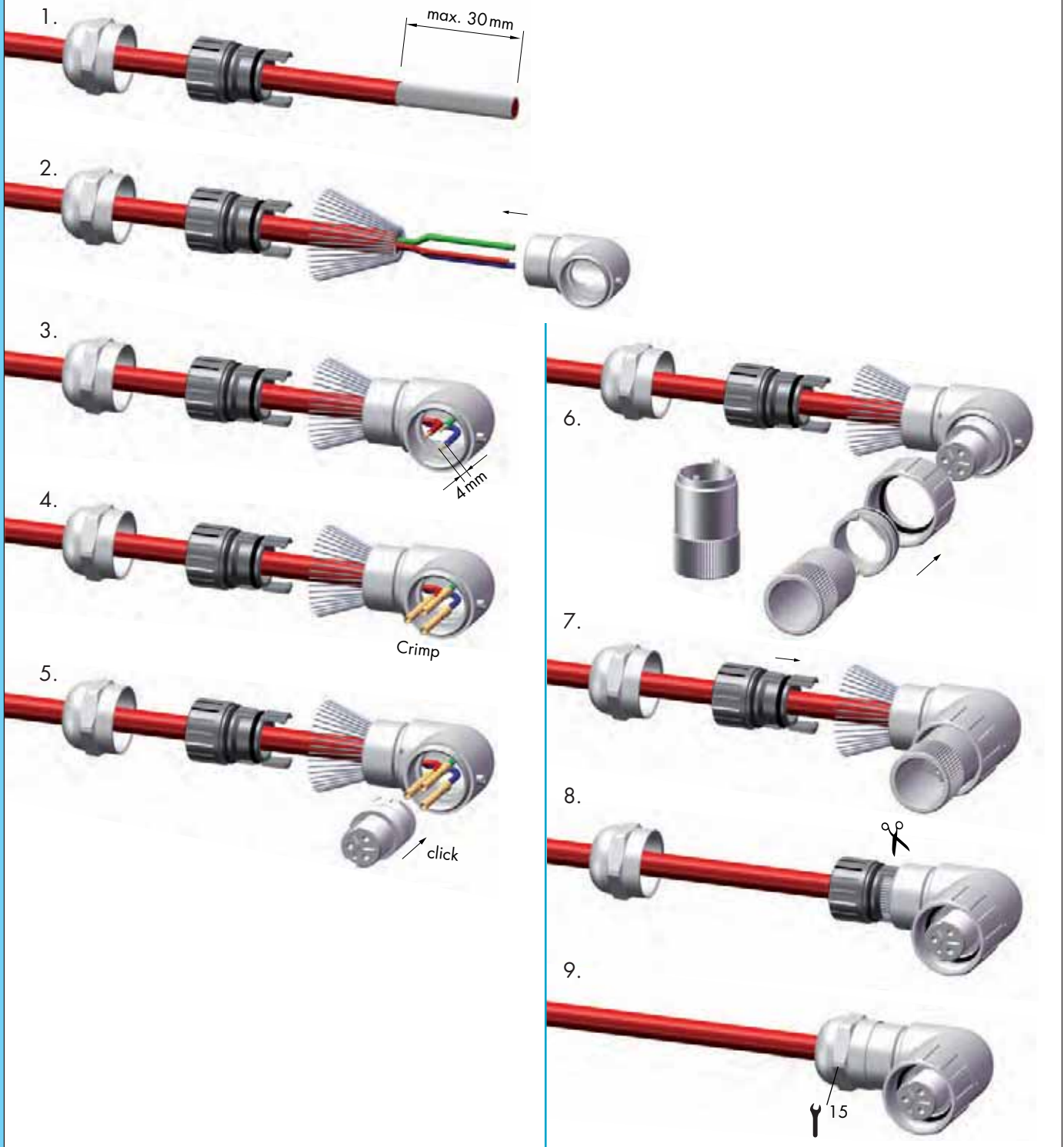
# Connectors M 16 / Assembly Instructions

## Female Threaded Connector / Male Threaded Connector 12+3

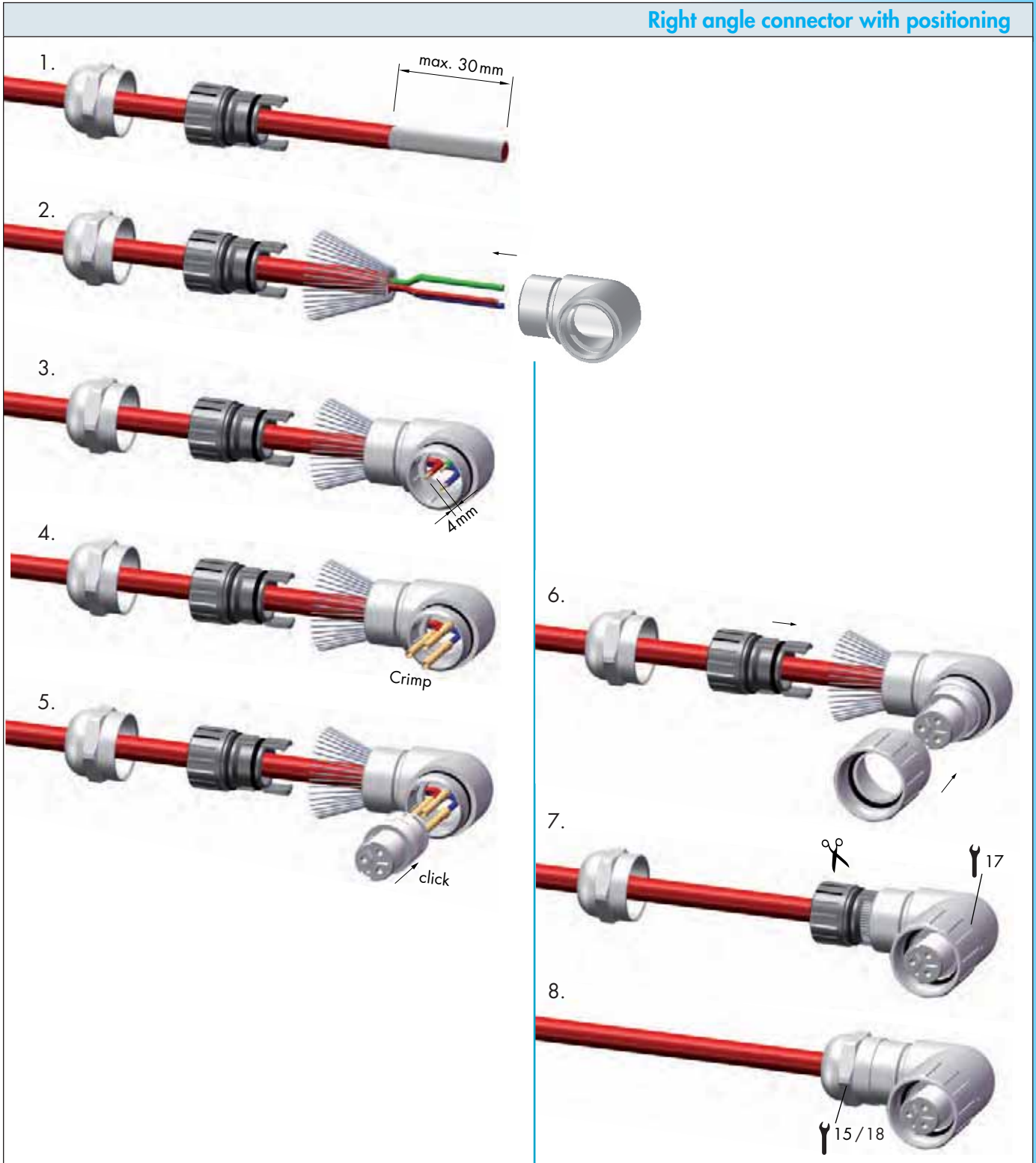


# Connectors M 16 / Assembly Instructions

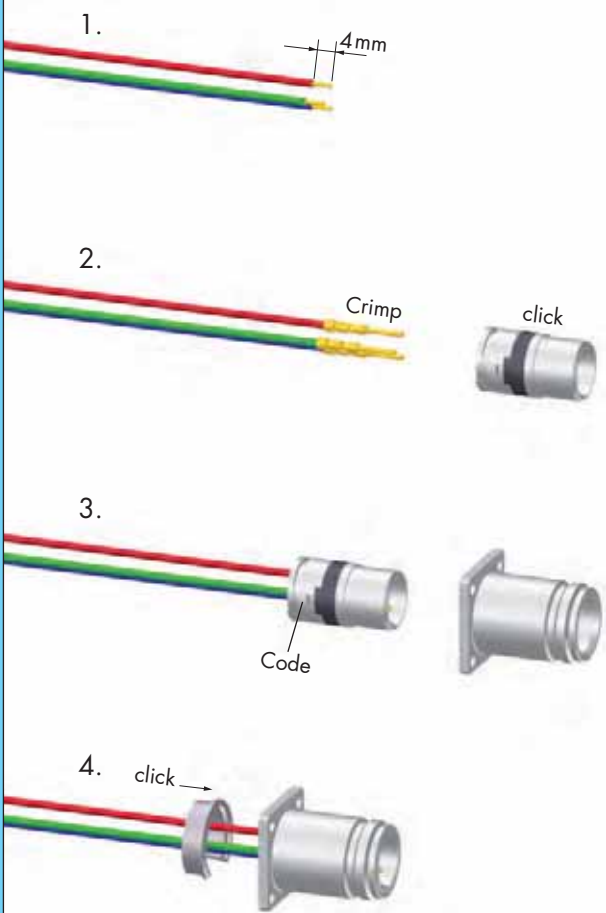
## Right Angle Connectors



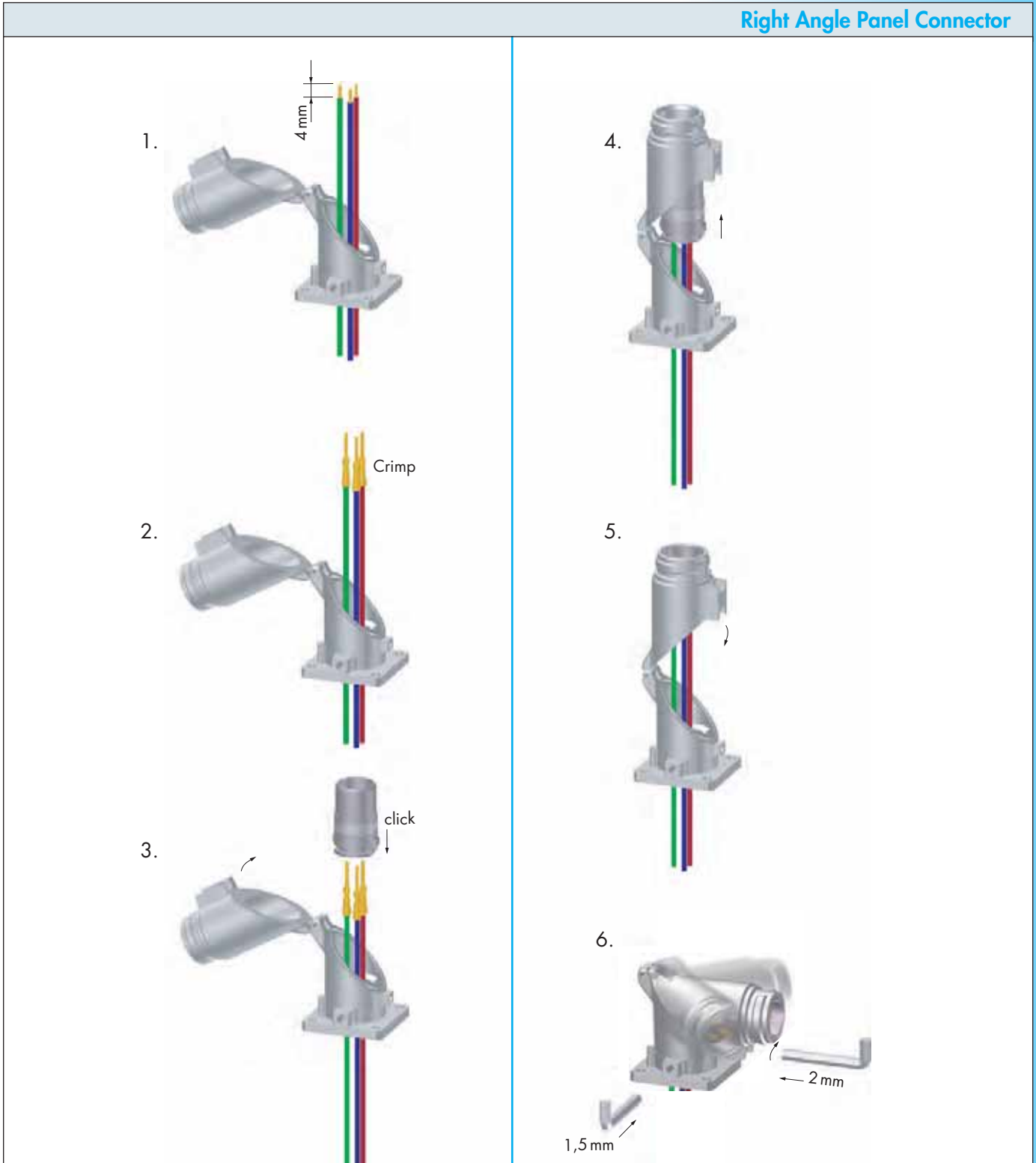
## Right angle connector with positioning



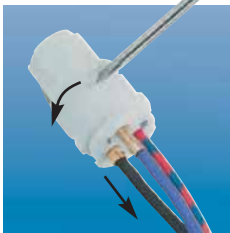
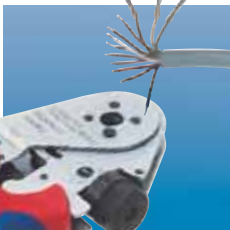
## Panel Connector



## Right Angle Panel Connector



## Crimping, Assembly and Disassembly of Contacts



### Crimping

- Remove conductor insulation 4 mm (.16") max.
- Select appropriate Crimp tool setting (see page 31 - 32)
- Push crimp contact into opening of crimping tool
- Insert stripped wire into the funnel shaped end of the crimp contact
- Squeeze handles of crimping tool together connect contact to wire

### Assembly

- Remove crimped assembly and pull on wire to test connection
- Push into desired position of insert

### Disassembly of Contacts from Insert

A small screwdriver is needed to remove the contacts from the insert.

- Release the white ring by a screwdriver out of the insert
- Move the misplaced contacts out of the insert
- Enter the ring back into the insert
- Push the contacts back into insert

### Shielding

- Assemble strain relief insert with insert
- Fold stranding of the shield back over the first O-Ring of the strain relief insert
- Cut back the overextending braid

The stranding of the shield is not allowed to touch the second O-Ring. Otherwise the assembly may not be proof.