

## Push-Pull Technology



## Product Overview

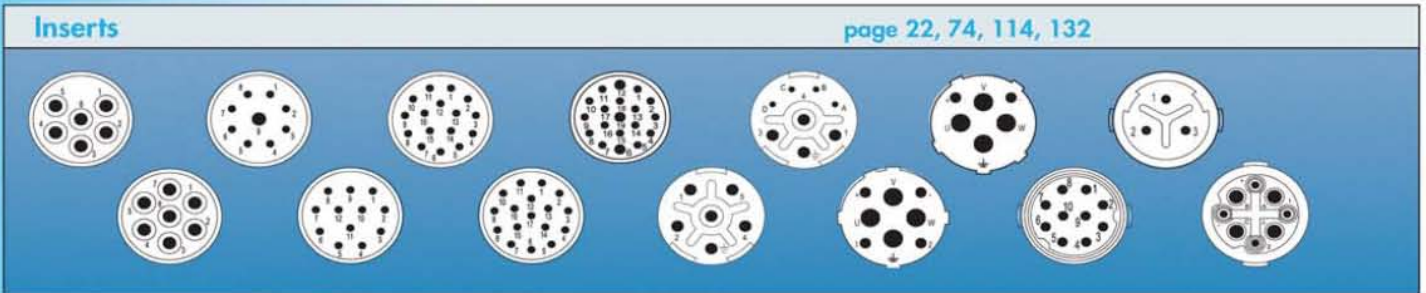
### Housings

page 152



### Inserts

page 22, 74, 114, 132



### Accessories

page 29, 59, 82, 116, 138



**Push-Pull 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 (0,25 µm Au)
Minimum mating cycles	> 250
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 M 16	Crimp, dip-solder (PCB)
Type of contacts signal M 23	Crimp, solder, dip-solder (PCB)
Type of contacts power M 23, M 40	Crimp
Protection	IP 67 / IP 69K per EN 60 529 (connected), NEMA 4x

**Additional Information**

<b>Electrical data see standard program</b>		<b>Inserts and contacts see standard program</b>	
Connectors M 16	page 17	Connectors M 16	page 22
Signal Connectors M 23	page 65	Signal Connectors M 23	page 74
Power Connectors M 23	page 107	Power Connectors M 23	page 114
Power Connectors Size 1,5	page 131	Power Connectors Size 1,5	page 132

 We do not recommend disconnecting or connecting HUMMEL Connectors under load.

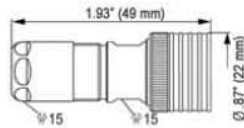
**Characteristics**

**HUMMEL Push-Pull Connectors guarantee:**

- Quick connecting cycle
- EMC compatible connection due to radially locked metal ring
- High protection rate
- Easy connection / disconnection even under tight space conditions
- Best reliability with optional safety ring

## M 16 Signal Connectors / Push-Pull

### Straight Connector, Female Thread



#### Cable-Ø

#### Part Number

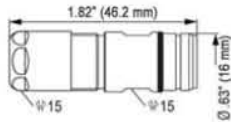
2 – 7 mm (.08 – .28").....7.813.300.000  
5 – 9 mm (.20 – .35").....7.813.400.000

**Optional:**  
Safety ring

**EMI Ready**

Contacts and inserts page 22 • Assembly instructions page 34

### Straight Connector, Male Thread



#### Cable-Ø

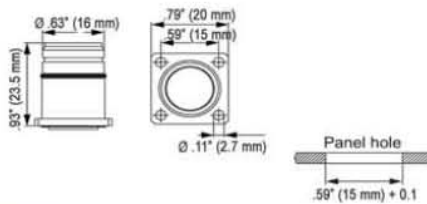
#### Part Number

2 – 7 mm (.08 – .28").....7.823.300.000  
5 – 9 mm (.20 – .35").....7.823.400.000

**EMI Ready**

Contacts and inserts page 22 • Assembly instructions page 34

### Panel Connector, Male Thread



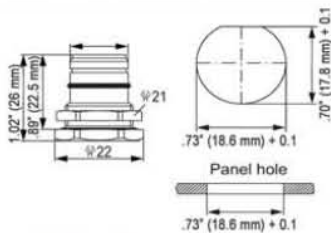
#### Cable-Ø

#### Part Number

4 holes Ø 2,7 mm (.11").....7.840.300.000

Contacts and inserts page 22 • Assembly instructions page 38

### Panel Connector, Male Thread



#### Cable-Ø

#### Part Number

**Rear mounting, single hole mounted**  
Including jam nut.....7.850.300.000

Contacts and inserts page 22 • Assembly instructions page 38

Signal Connectors M 23/ Push-Pull


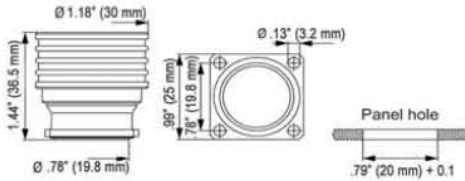
Cable-Ø	Part Number	Straight Connector, Female Thread
3 – 7 mm (.12 – .28")	7.156.400.000	
7 – 12 mm (.24 – .47")	7.156.500.000	
11 – 17 mm (.43 – .67")	7.156.600.000	
<b>Optional:</b> Safety ring		
Contacts and inserts page 74 • Assembly instructions page 87		


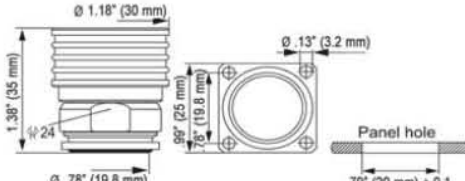
Cable-Ø	Part Number	Right Angle Connector, Female Thread
3 – 7 mm (.12 – .28")	7.304.300.000	
5 – 10 mm (.20 – .39")	7.304.400.000	
7 – 12 mm (.24 – .47")	7.304.500.000	
10 – 14 mm (.39 – .55")	7.304.600.000	
<b>Optional:</b> Safety ring		
Contacts and inserts page 74 • Assembly instructions page 88		


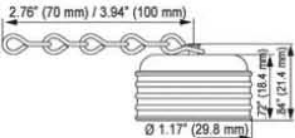
Cable-Ø	Part Number	Right Angle Connector, Female Thread, EMC
3 – 7 mm (.12 – .28")	7.305.300.000	
5 – 10 mm (.20 – .39")	7.305.400.000	
7 – 12 mm (.24 – .47")	7.305.500.000	
10 – 14 mm (.39 – .55")	7.305.600.000	
<b>Optional:</b> Safety ring		
Contacts and inserts page 74 • Assembly instructions page 88		

Signal Connectors M 23 Push-Pull fit to all housings with male thread of the standard series HUMMEL Signal Connectors M 23

## Signal Connectors M 23 / Push-Pull

Panel Connector, Female Thread, with knurled Nut		Type	Part Number
		<b>Without coding option</b>	4 holes $\varnothing$ 3,2 mm (.13") .....7.440.500.000
		<b>Optional:</b> Safety ring	
		Contacts and inserts page 74 • Assembly instructions page 90	

Panel Connector, Female Thread, with knurled Nut		Type	Part Number
		<b>With coding option</b>	4 holes $\varnothing$ 3,2 mm (.13") .....7.448.500.000
		<b>Optional:</b> Safety ring	
		Contacts and inserts page 74 • Assembly instructions page 90	

Protective Caps, Push-Pull Signal		Type	Part Number
		<b>For signal connectors with male thread</b>	.....7.010.950.102
		<b>with chain 100 mm</b>	.....7.010.955.102

Signal Connectors M 23 Push-Pull fit to all housings with male thread of the standard series HUMMEL Signal Connectors M 23


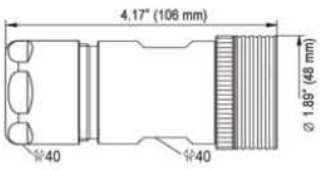

Signal Connectors M 23 / Push-Pull


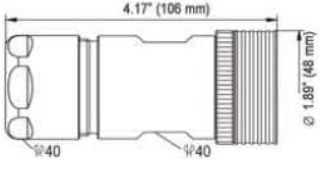
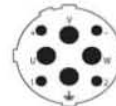
Cable-Ø	Part Number	Straight Connector, Female Thread	
7 – 12 mm (.24 – .47")	.....7.555.500.000		
11 – 17 mm (.43 – .67")	.....7.555.600.000		
<b>Optional:</b> Safety ring			
<small>Contacts and inserts page 114 • Assembly instructions page 122</small>			

Cable-Ø	Part Number	Right Angle Connector, Female Thread	
7 – 12 mm (.24 – .47")	.....7.575.500.000		
10 – 14 mm (.39 – .55")	.....7.575.600.000		
<b>Optional:</b> Safety ring			
<small>Contacts and inserts page 114 • Assembly instructions page 124</small>			

Power Connectors M 23 Push-Pull fit to all housings with male thread of the standard series HUMMEL Power Connectors M 23

## Power Connectors Size 1,5 / Push-Pull

Straight Connector, Female Thread		Cable-Ø	Part Number
			<b>2 + 3 + PE, insert for sockets</b> 13 - 18 mm (.52 - .71").....7.715.623.000 17 - 24 mm (.67 - .95").....7.715.723.000 21 - 28 mm (.83 - 1.10")...7.715.823.000
			<b>Optional:</b> Safety ring  Contacts page 136 • Assembly instructions page 145


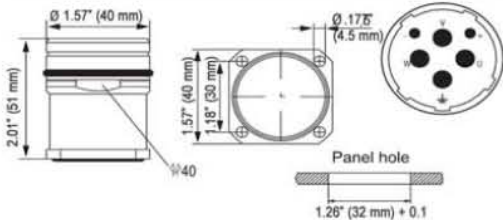
Straight Connector, Female Thread		Cable-Ø	Part Number
			<b>4 + 3 + PE, insert for sockets</b> 13 - 18 mm (.52 - .71").....7.715.643.000 17 - 24 mm (.67 - .95").....7.715.743.000 21 - 28 mm (.83 - 1.10")...7.715.843.000
			<b>Optional:</b> Safety ring  Contacts page 136 • Assembly instructions page 145


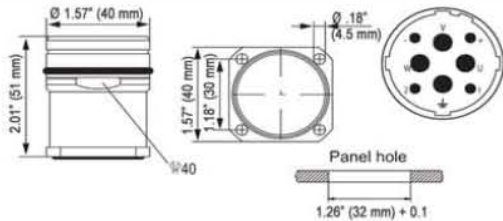
Power Connectors Size 1,5 / Push-Pull

Cable-Ø	Part Number	Straight Connector, Male Thread	
<b>2+3+PE, insert for pins</b>			
13 – 18 mm (.52 – .71").....	7.725.623.000		
17 – 24 mm (.67 – .95").....	7.725.723.000		
21 – 28 mm (.83 – 1.10")...	7.725.823.000		
Contacts page 136 • Assembly instructions page 145			

Cable-Ø	Part Number	Straight Connector, Male Thread	
<b>4+3+PE, insert for pins</b>			
13 – 18 mm (.52 – .71").....	7.725.643.000		
17 – 24 mm (.67 – .95").....	7.725.743.000		
21 – 28 mm (.83 – 1.10")...	7.725.843.000		
Contacts page 136 • Assembly instructions page 145			

## Setting Standards

Panel Connector	Type	Part Number
	<p><b>2 + 3 + PE, insert for pins</b> 4 holes Ø 4,5 mm (.18") .....7.740.523.000</p>	
		
<p>Contacts page 136 • Assembly instructions page 146</p>		

Panel Connector	Type	Part Number
	<p><b>4 + 3 + PE, insert for pins</b> 4 holes Ø 4,5 mm (.18") .....7.740.543.000</p>	
		
<p>Contacts page 136 • Assembly instructions page 146</p>		