

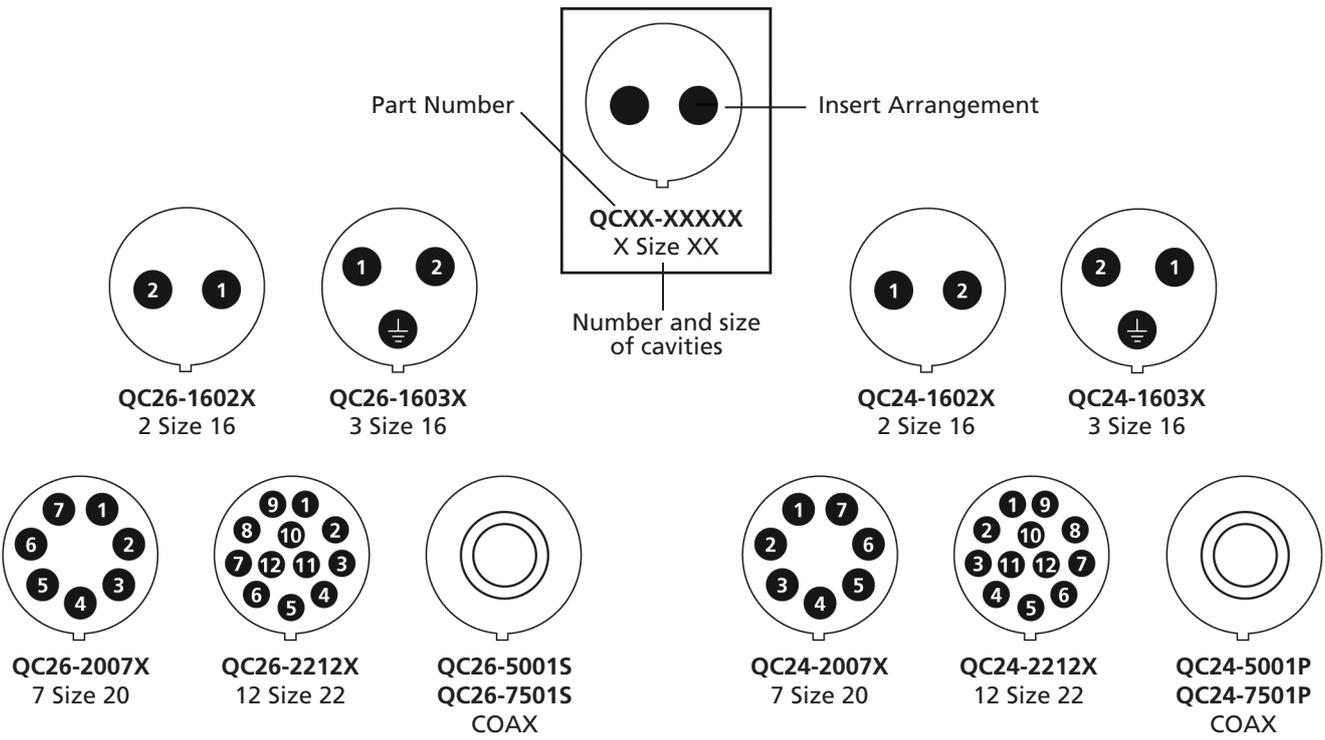


# Quick Connect & IMC Series Catalogue





**Quick Connect Series Configurations**



**Accessories**

Deutsch Industrial offers several accessory items that can be used to complement the connectors. The Quick Connect Series accessories include items such as back fittings, wire seals, compression screws, and mounting hardware. Accessories are designed to complement applications and meet a wide array of design requirements such as mounting solutions, providing additional protection, and offering increased aesthetics.

**Dust Caps**

Deutsch offers dust caps for use with the Quick Connect Series of connectors. Dust caps are available to maintain the environmental seal for both the plug and receptacle. The QC dust caps include a lanyard for easy use.

Dust Cap	Part Number	Description
	QC28	Pro-cap low cost (plug only)
	QC38	Plug pro-cap with lanyard
	QC39	Receptacle pro-cap with lanyard

## Back Fittings

Name	Description	Part Number
1. Washer	Neoprene washer that provides an environmental seal between connector and mounting surface or long compression rear adapter.	429638
2. Panel mount lock nut	Lock nut for attaching connector to mounting surface or to deck mount flange.	429637
3. Deck mount flange	Flange used to mount the connector. Connector attaches to deck mount flange and deck mount flange attaches to mounting surface.	429726
4. Deck mount gasket	Neoprene gasket used with the deck mount flange to provide an environmental seal between the flange and mounting surface.	429727
5. Long compression rear adapter	Adapter used to join the compression screw or compression screw with strain relief to the connector.	429624
6. Seal ring	Nitrile ring with removable segments to adapt to multiple jacketed cable diameters. The seal ring is placed in the back of the long compression rear adapter. The compression screw or compression screw with strain relief tightens down against the seal ring to form an environmental seal on the jacketed cable.	429707
7. Compression screw	Screws onto the back of the long compression rear adapter and tightens down against the seal ring to form a seal on the jacketed cable.	429662
8. Compression screw with strain relief	Screws onto the back of the long compression rear adapter and tightens down against the seal ring to form a seal on the jacketed cable. Has two screws that are tightened down to provide strain relief.	429706
9. Wire seal, 2 way	Silicone grommet with 2, 3, 7, or 12 cavities that is inserted into the back of the connector. An environmental seal is achieved on the individual wires.	429621-02
Wire seal, 3 way		429621-03
Wire seal, 7 way		429621-07
Wire seal, 12 way		429621-12



## Panel Mount Examples

The Quick Connect Series offers several mounting options, below are a few examples. Refer to the back fittings section to see a complete list of all of the options.

Description	Components
Provides seal against insulation on individual wires, and between connector and mounting surface.	
Provides seal against mounting surface and deck mount flange, and between deck mount flange and connector.	

**Wire Seal Examples**

The Quick Connect Series offers several sealing options to accommodate many design requirements. The QC connectors can be used unsealed, or with additional items can be sealed up to an IP68 watertight seal. Below are a few examples of possible sealing options. Refer to the back fittings section to see a complete list of all of the options.

Description	Components
Provides seal against insulation on individual wires.	
Provides seal between connector and adapter, and against jacketed cable.	
Provides seal against insulation on individual wires, between connector and adapter, and against jacketed cable. Includes strain relief.	

*Note*  
 Diameter .18-.43 (4.5-11.0) cable sealing, compression fittings must be correctly tightened to achieve IP68 watertight seal.

**Sealing Plugs**

Sealing plugs must be used to fill any unused connector cavities to maintain an environmental seal.

Sealing Plug	Part Number	Contact Size
	114017	Size 16
	0413-204-2005	Size 20
	600300-22	Size 22

## Tools & Contacts

The Quick Connect Series uses special contacts and tools. The contacts are smaller and designed for high pin density. Removal tools along with multiple crimp tools are available and are designed to work with the smaller contacts and tighter pin arrangements. The Common Contact System and tools are not compatible with the Quick Connect Series.

### Tools for Quick Connector Series

Tools for Solid Contacts	
<b>Part Number</b>	<b>Adjustable Hand Crimp Tools</b>
MH860	QC/IMC #22 crimp tool, adjustable AWG ranges, requires 86-5
86-5	QC/IMC crimp tool positioner for MH860
AF8-TH163	QC/IMC #20 and #16 crimp tool, adjustable AWG ranges
	<b>Single Gauge Hand Crimp Tools</b>
AMSC22/1	QC/IMC #22 crimp tool, low cost, only crimps 22 AWG wire
AMSC20/1	QC/IMC #20 crimp tool, low cost, only crimps 20 AWG wire
AMSC16/A/1	QC/IMC #16 crimp tool, low cost, only crimps 16 AWG wire
	<b>Insert/Removal Tools</b>
6757-201-2201	Insert/Removal Tool #22
6757-201-2001	Insert/Removal Tool #20
6757-201-1601	Insert/Removal Tool #16



### Solid Contacts for Quick Connector Series



Size	Solid Contact Part Numbers		Wire Size AWG	Recommended Strip Length	Sealing Range Diameter
	Pin	Socket			
22	6860-201-22278	6862-201-22278	22, 24, 26	4.06-4.83mm	.76-1.37mm
20	6860-201-20278	6862-201-20278	20, 22, 24	5.84-6.60mm	1.02-2.11mm
16	6860-201-16278	6862-201-16278	16, 18, 20	5.84-6.60mm	1.65-2.77mm
*16	429913-31	429915	16, 18, 20	5.84-6.60mm	1.65-2.77mm

\*For QC 3 way only to ensure leading earth, early mate, late break.



# IMC Series

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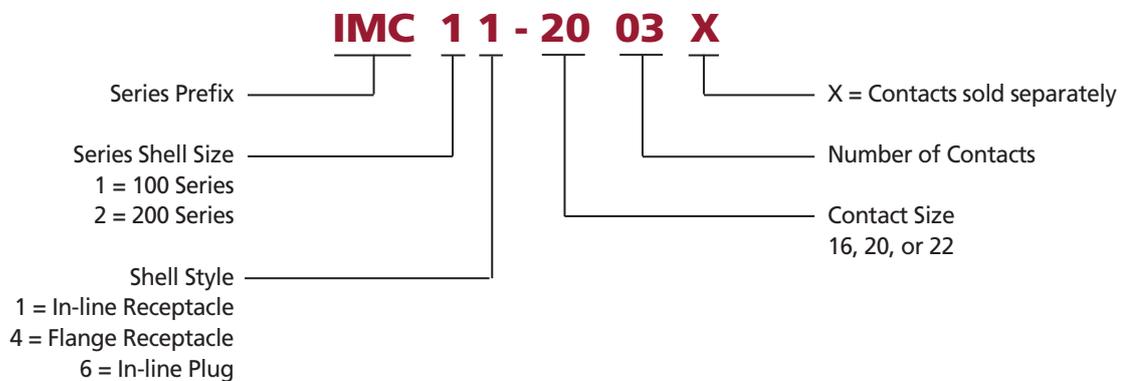
## IMC Series Overview

The Industrial Micro Connector Series are unsealed connectors constructed from Ultem®, a high temperature and corrosion resistant composite material suited for industrial applications. The IMC Series offers high pin density and several contact arrangements that accept a wide range of wire gauges. They feature a bayonet style lock coupling mechanism and withstand heat, dust, and moisture. To create an environmental seal and achieve an IP67 rating, the addition of a back fitting and adhesive is required.

The compact design is ideal for applications where space is at a premium, meeting the requirements of manufacturers of test equipment, industrial sensors, medical diagnostic equipment, instrumentations and process control systems.



## IMC Series Part Numbering System



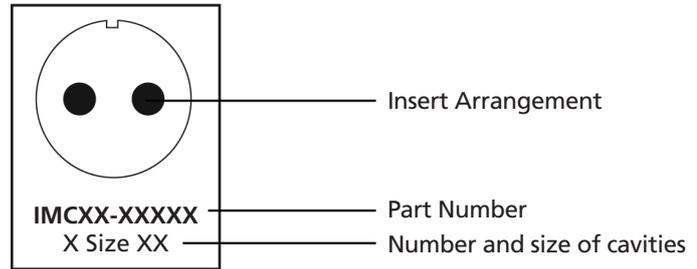
## IMC Series Dimensions



Series	Style	IMC Plug		IMC Receptacle	
		Overall Length A	Overall Width ØB	Overall Length C	Overall Width ØD
100	In-line	19.2mm max.	15.2mm max.	19.2mm max.	15.2mm max.
	Flange	--	--	19.2mm max.	17.9mm max.
200	In-line	19.2mm max.	19.2mm max.	19.2mm max.	19.2mm max.
	Flange	--	--	19.2mm max.	24.0mm max.

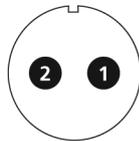
Dimensions are for reference only

## IMC Series Configurations

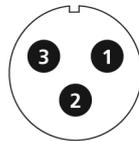


### Plugs - cavity identification from rear

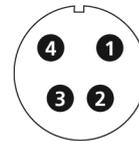
#### 100 Series



IMC16-2002X  
2 Size 20

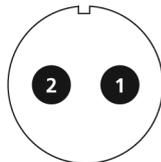


IMC16-2003X  
3 Size 20

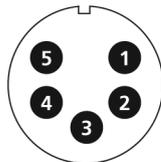


IMC16-2204X  
4 Size 22

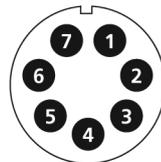
#### 200 Series



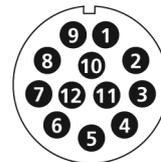
IMC26-1602X  
2 Size 16



IMC26-2005X  
5 Size 20



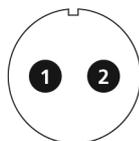
IMC26-2007X  
7 Size 20



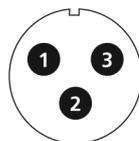
IMC26-2212X  
12 Size 22

### Receptacles - cavity identification from rear

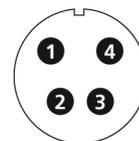
#### 100 Series



IMC1\*-2002X  
2 Size 20

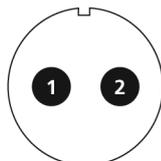


IMC1\*-2003X  
3 Size 20

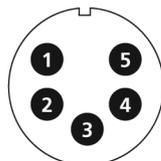


IMC1\*-2204X  
4 Size 22

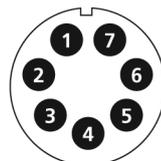
#### 200 Series



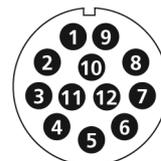
IMC2\*-1602X  
2 Size 16



IMC2\*-2005X  
5 Size 20



IMC2\*-2007X  
7 Size 20



IMC2\*-2212X  
12 Size 22

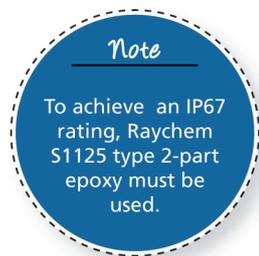
## Accessories

Deutsch Industrial offers several accessory items that are used to complement the connectors. The IMC family accessories include items such as boots, dust caps, and adapters. Accessories are designed to complete the application and meet a wide array of design requirements such as providing additional protection and offering increased aesthetics.

### PVC and Santoprene Boots

Boots provide a professional looking finishing touch for your Deutsch IMC Series connectors. Boots are used to provide additional protection and provide strain relief. The boots can be used with an epoxy adhesive to seal the connectors against dust and moisture and achieve an IP67 rating.

Contact the office for availability



#### Boot

Part Number	Description
6810-204-1001-1-200	100 Series 5.08mm opening
6810-201-2001-1-105	200 Series 2.67mm opening
6810-201-2001-1-125	200 Series 3.17mm opening
6810-201-2001-1-120	200 Series 3.05mm opening
6810-201-2001-1-140	200 Series 3.56mm opening
6810-207-2001-2-250	200 Series 6.35mm opening
6810-207-2001-2-165	200 Series 4.19mm opening

### Dust Caps

IMC connectors plastic dust caps are available to provide a temporary cover for the connector interface when the connectors are not mated.



#### Dust Cap

Part Number	Description
IMC18	100 Series pro-cap plug
IMC19	100 Series pro-cap receptacle
IMC28	200 Series pro-cap plug
IMC29	200 Series pro-cap receptacle

### Adapters

The IMC Series adapters are used to provide added protection and strain relief. The adapters are made up of several parts and feature a housing that is tightened with screws to provide the appropriate grip on the wires.



#### Adapter

Part Number	Description
IMC1AD	100 Series adapter
IMC2AD	200 Series adapter

## Tools & Contacts

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### Tools for IMC Series

Tools for Solid Contacts	
<b>Part Number</b>	<b>Adjustable Hand Crimp Tools</b>
MH860	QC/IMC #22 crimp tool, adjustable AWG ranges, requires 86-5
86-5	QC/IMC crimp tool positioner for MH860
AF8-TH163	QC/IMC #20 and #16 crimp tool, adjustable AWG ranges
	<b>Single Gauge Hand Crimp Tools</b>
AMSC22/1	QC/IMC #22 crimp tool, low cost, only crimps 22 AWG wire
AMSC20/1	QC/IMC #20 crimp tool, low cost, only crimps 20 AWG wire
AMSC16/A/1	QC/IMC #16 crimp tool, low cost, only crimps 16 AWG wire
	<b>Insert/Removal Tools</b>
6757-201-2201	Insert/Removal Tool #22
6757-201-2001	Insert/Removal Tool #20
6757-201-1601	Insert/Removal Tool #16



### Solid Contacts for IMC Series



Size	Solid Contact Part Numbers		Wire Size AWG	Recommended Strip Length
	Pin	Socket		
22	6860-201-22278	6862-201-22278	22, 24, 26	4.06-4.83mm
20	6860-201-20278	6862-201-20278	20, 22, 24	5.84-6.60mm
16	6860-201-16278	6862-201-16278	16, 18, 20	5.84-6.60mm



Size	PCB Pin Part Number
22	6860-202-22278
20	6860-202-20278
16	6860-202-16278

## General Specifications

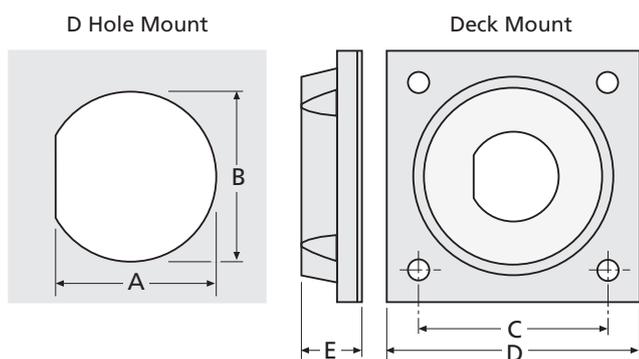
Temperature Rating: -55° to +175°C  
 Voltage: up to 1000Vac  
 Flamability: Meets UL94 Class V-0

Shell Material: Temperature and corrosion resistant composite, ULTEM  
 Contacts: Copper Alloy, Gold Plated

Size	Wire Sealing Range (QC only)	Size	Contact Rating
16	1.65 - 2.77mm OD	16	13 Amps
20	1.02 - 2.11mm OD	20	7.5 Amps
22	0.76 - 1.37mm OD	22	5 Amps

### Panel Mounting - Quick Connect & IMC

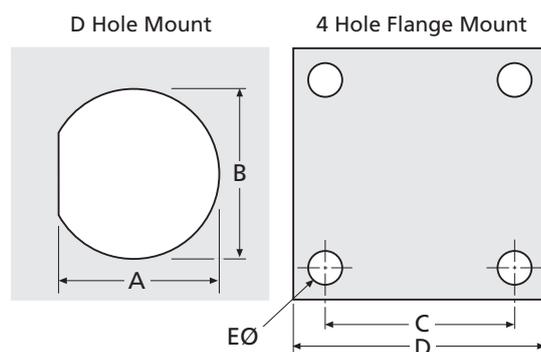
#### Quick Connect



	A	B	C	D	E
Quick Connect	15.20	16.10	33.00	45.00	12.00

All dimensions are in millimetres

#### IMC



	A	B	C	D	EØ
IMC Series 100	10.40	11.40	12.70	17.80	3.00
IMC Series 200	15.10	16.10	18.20	23.80	3.20

### Overmoulding

Deutsch offers a space and cost saving alternative to conventional back fittings while maintaining environmental sealing and strain relief.

Overmoulding solutions can be tailored to suit customer requirements as well as providing an aesthetically pleasing finish and consistent assembly quality.



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