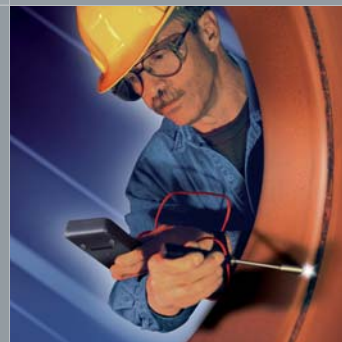


# fischer connectors

## Shortform catalogue



# fischer connectors

## *High performance push-pull connector and cable assembly solutions*

For more than 50 years, Fischer Connectors has designed, manufactured, and distributed high performance push-pull connector and cable assembly solutions. Known for their quality and ruggedness, our products prove to be reliable in the most demanding environments.

Fischer Connectors is committed to working closely with its customers to equip their application with the most appropriate connector and cable system. Our product range comprises over 10,000 standard items and we are always prepared to develop customized solutions for specific requests.

Primary design and manufacturing facilities are in Switzerland, with subsidiaries and distributors located worldwide.



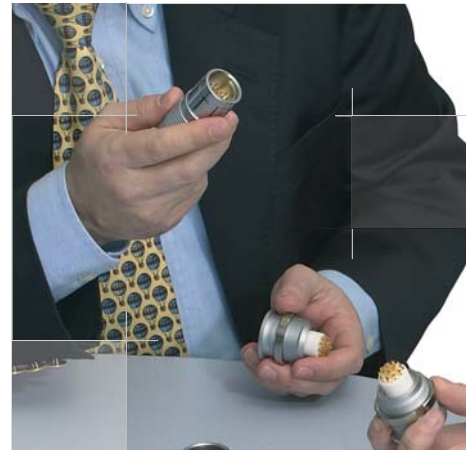
### *Core competencies*

- Integrated push-pull connector and cable systems
- World-class customer service
- Rugged solutions for demanding environments
- High flexibility of product configurations
- Standard solutions or customized product development
- Specialized advice and support
- High quality industrial processes
- Trusted by high-end industries
- Certified ISO 9001:2000 and 14001:2004



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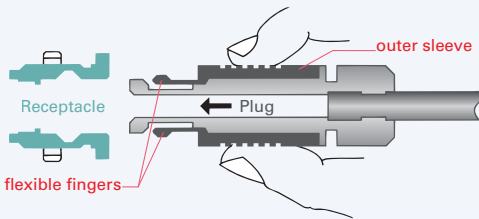


## ■ Original push-pull locking system

- **Original push-pull locking system**  
*widely adopted by the industry*
- **Unparalleled signal integrity**  
*fully secured against accidental disconnection*
- **Self-locking mechanism**  
*designed for frequent connect/disconnect operations*
- **Ideal for compact product designs**  
*locking system integrated into connector housing*
- **Push-pull locking system delivered as standard**  
*non-locking or emergency release solutions also available*

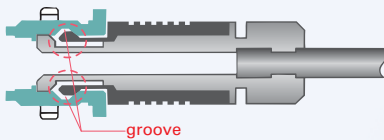
### How does it work ?

The plug has an outer sleeve, with flexible fingers, which slides forward and backwards along the plug body.



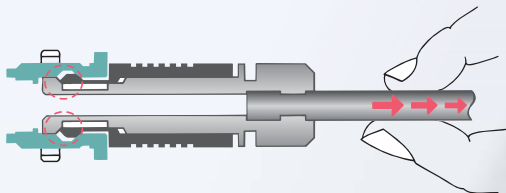
### When mated

The bevelled edges are firmly captured by a locking groove located inside the receptacle.



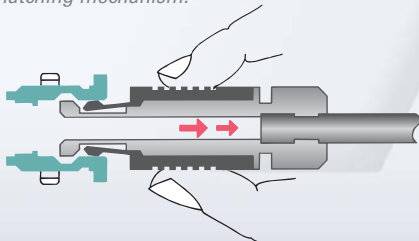
### When cable pulled

The bevelled edges of the fingers are forced into the groove, securing the connection.



### When unplugging

Pulling on the outer sleeve of the plug unlocks the latching mechanism.



## ■ Designed for easy connect/disconnect operations

- **Easy mating, even feasible blind**  
*guiding mechanism ensures precise alignment*
- **Increased safety and user friendliness**  
*mechanical and color coding prevent misconnection*
- **Convenient grip even with gloves**  
*circular connectors with ribbed housing profile*
- **Increased equipment life span**  
*guiding mechanism optimally protects the contacts*





■ *Proven rugged, lightweight and compact solutions*

- **Robust and shock resistant designs**  
*ideal for equipment used in the field*
- **Compact and lightweight construction**  
*ideal for miniature and portable devices*
- **High pin density and hybrid contacts**  
*contributing to equipment miniaturization*
- **Long product durability**  
*10,000 mating cycles guaranteed*



■ *Operational in demanding and harsh environments*

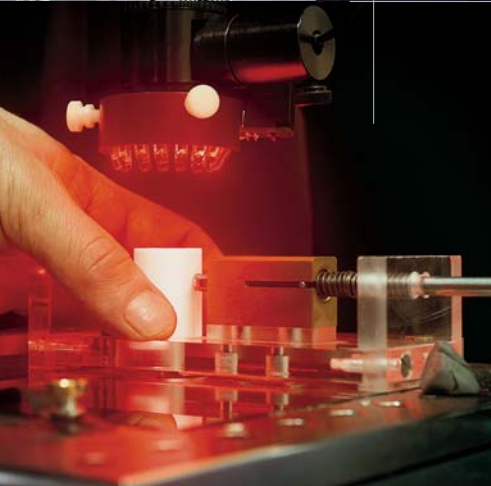
- **High performance connectors**  
*designed and tested to withstand extreme conditions*
- **Sealed up to IP68 and corrosion resistant**  
*usable underwater*
- **Hermetic**  
*for use in vacuum or pressurized environments*
- **Sterilizable**  
*ideal for medical applications*
- **360° EMC shielded**  
*preventing electromagnetic interferences*
- **Functional in a wide temperature range**  
*from -50°C to +150°C*





## ■ *Complete customer package*

- **Leading edge connector technology**  
*innovative and high performance products*
- **Cable assembly service**  
*standard or custom cabling and cable design assistance*
- **Standard or customized solutions**  
*> 10,000 standard items or custom developments*
- **Specialized technical and sales support**  
*assistance through advice, design, prototype and assembly*
- **Worldwide network**  
*close to our customers to offer best-in-class service*





## ■ *Cable assembly*

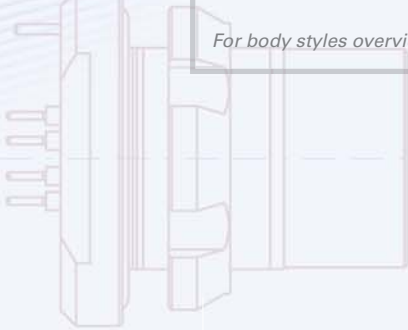
- *Integrated connector and cable systems*
- *Off the shelf or customized cable assembly solutions*
- *Cable termination, overmolded or heat shrunk*
- *Testing process ensures optimum reliability*
- *Rugged, sealed and sterilizable cable solutions*
- *Complete range of accessories (cable bend relief, sleeves, caps and reels)*



## 1 Body styles

- Circular push-pull design
- Metal or plastic housings
- Ultralight housings available
- Various housing colors
- Cable or panel mounted
- Straight or right-angled
- Flush or front projecting
- Unsealed, sealed or hermetic
- Front or rear-mounted
- Overmoldable, heat shrinkable
- Reusable or single-use solutions

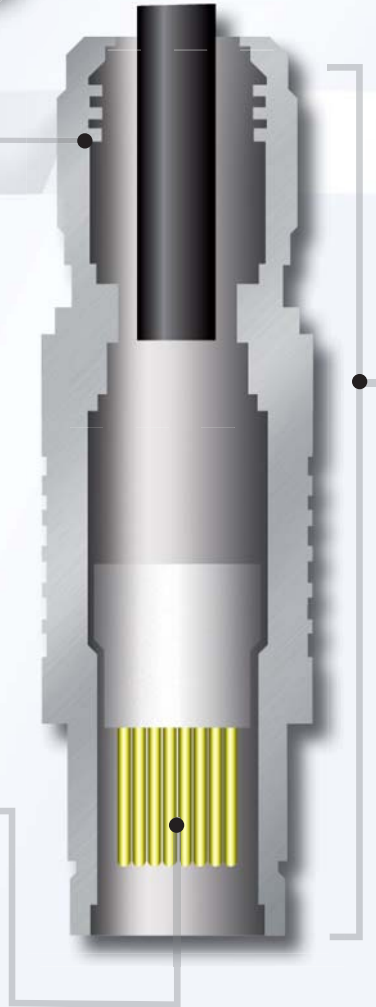
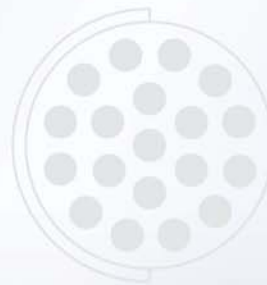
For body styles overview, see page 12 and following.



## 3 Contact configurations

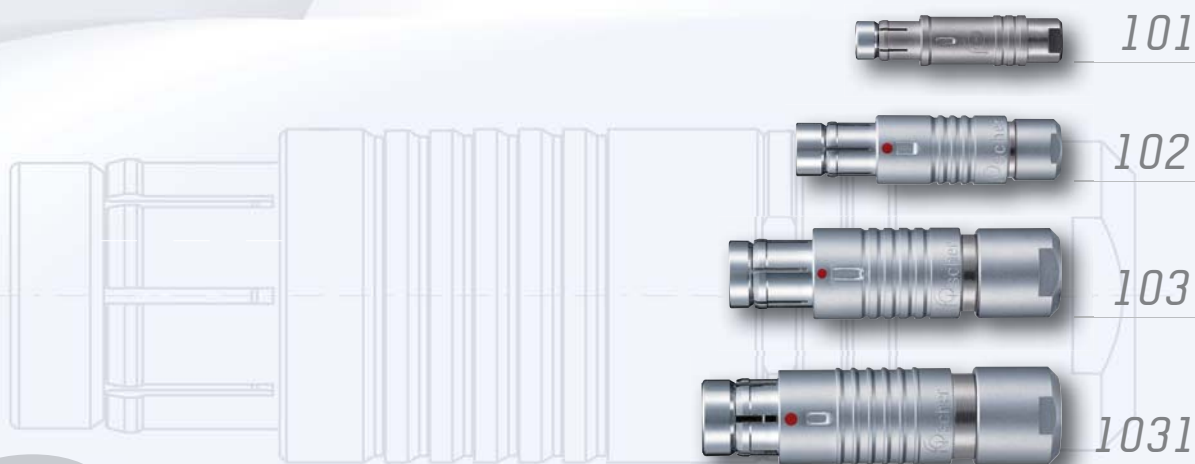
- Low voltage
- High voltage
- Coax / Triax
- Fiber optic
- Fluid / Gas
- Hybrid

For more information on contact configurations, see pages 8 and 9.





ore than 10,000 configurations



2

## Sizes

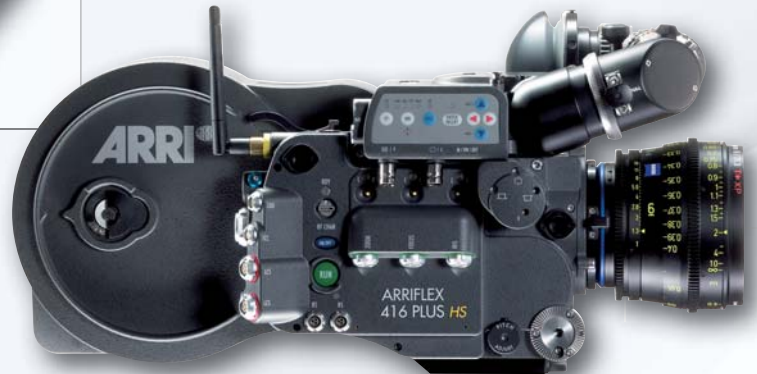
- All body styles<sup>1</sup> available in nine sizes (101 to 107 series)
- From 1.5 to 22.7mm cable diameters
- From 1 to 55 contacts

<sup>1</sup>Pictures represent plug S.



## ■ Low voltage

- Wide range of body styles and sizes
- Signal or power
- Single or multipole (up to 55 contacts)
- Up to 50A
- Standard or inverted polarity
- Solder, crimp or PCB contacts
- Available with flexible circuits
- Unsealed, sealed or hermetic



## ■ High voltage

- Wide range of body styles and sizes
- Power
- Multipole or coax
- Up to 50kV
- Standard or inverted polarity
- Individually insulated contacts
- Locking ring for integral safety
- Unsealed, sealed or hermetic





## ■ Coax/Triax

- Wide range of body styles and sizes
- RF signal or power
- 50 and 75 ohms impedance
- Up to 6GHz
- Standard or inverted polarity
- Unsealed, sealed or hermetic
- Dedicated Coax series (101 A004) for Nim-Camac standard
- Dedicated Triax series (1051/1052) for broadcast cameras



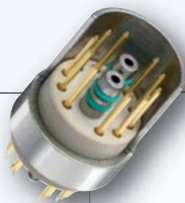
## ■ Fiber optic

- Wide range of body styles and sizes
- Signal or light
- Single or multimode
- Single or multi-fiber (up to 16)
- Sealed or unsealed



## ■ Hybrids

- High flexibility of contact configurations, mixing:
  - Low voltage
  - High voltage
  - Coax
  - Fiber optic
  - Fluid/Gas
- Solving complex interconnection needs
- Wide range of body styles and sizes
- Sealed or unsealed
- Dedicated hybrid series (1053) for fiber-based HDTV cameras



## ■ *Medical*

- *Diagnostic devices*
- *Surgical instrumentation*
- *Therapy applications*
- *Medical imaging*
- *Cardiac assist devices*
- *Disposable equipment*



## ■ *Instrumentation*

- *Test & measurement*
- *Sensors*
- *Data acquisition*
- *Automation*
- *Scientific research*
- *Vacuum*



## ■ *Transport*

- *Avionics*
- *Maritime*
- *Automotive*
- *Railways*







## ■ Energy

- Petrol & gas
- Nuclear
- Renewable energies
- Batteries
- Fuel cells



## ■ Defense & Security

- Communication systems
- Surveillance equipment
- Computers
- Target acquisition



## ■ Broadcast



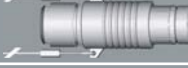

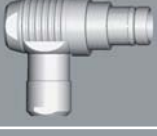
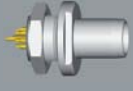





- Studios and outside broadcasting
- TV and motion picture
- HD and SD cameras
- Remote camera control



## ■ Extreme
















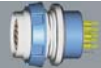


- Motorsports
- Sailboat racing
- Diving
- Submarine industry
- Weatherproof applications



	Connector style	Protection			Locking system				Contacts			Design			Assembly						
		Sealed up to IP68	Hermetic	360°EMC shielded	None	Push-pull	Emergency release	Lanyard	Tamperproof	Crimp	Solder	PCB	Shortened body	Right angle	Disposable	Cable mounted	Overmoldable	Heat shrinkable	Panel mounted	Front mounting	Rear mounting
Metal		S	●		●		●			●	●				●						
		SC	●		●			●		●	●				●						
		SOV	●		●	●				●	●				●						
		SA	●		●		●	●		●	●				●						
		SV	●		●		●		●	●	●				●						
		SS	●		●		●			●	●		●		●	●	●				
		SSC	●		●			●		●	●		●		●	●	●				
		WSO	●		●		●			●	●			●	●						
		SF			●	●				●	●	●							●	●	
		SFU	●		●	●					●	●							●	●	
		SFE	●	●	●	●					●	●							●	●	
		SFPU	●		●	●					●	●							●		●
		SFPE	●	●	●	●					●	●							●		●
	Plastic		405 S			●	●			●	●					●					
		405 SI					●		●	●					●						
		4032 SI	●				●		●	●					●						
		L.U.C.				●			●	●	●			●	●						
		L.U.C. interface				●				●	●	●	●	●	●	●	●		●	●	






The 405 plastic plugs are intermateable with any metal receptacles or cable receptacles of the size 105.  
The L.U.C. plastic plugs are intermateable with any metal receptacles or cable receptacles of the size 104.



	Connector style	Protection			Contacts			Design				Assembly	
		Sealed up to IP68	Hermetic	360°EMC shielded	Crimp	Solder	PCB	Right angle	Flush	Front projecting	Bulkhead feedthrough	Front mounting	Rear mounting
<b>Metal</b>				●	●	●	●		●			●	
		●		●		●	●		●			●	
		●	●	●		●	●		●			●	
				●	●	●	●			●		●	
		●		●		●	●			●		●	
		●	●	●		●	●			●		●	
				●	●	●	●		●				●
		●		●		●	●		●				●
		●	●	●		●	●		●				●
		●		●		●	●			●			●
		●	●	●		●	●			●			●
				●	●	●			●	●		●	●
				●			●		●	●		●	●
				●			●	●	●				●
			●	●	●	NA	NA	NA		●	●	●	●
<b>Plastic</b>				●	●	●	●		●				●
					●	●	●		●				●
		● <sup>1</sup>			●	●	●		●				●

<sup>1</sup>The 4032 DBPO receptacle is sealed up to IP68 only when mated.  
The 405 plastic panel receptacle is intermateable with any metal plugs of the size 105.

# Cable receptacles

	Metal	Connector style	Protection		Contacts		Design	Assembly			
			Sealed up to IP68	360°EMC shielded	Crimp	Solder	Shortened body	Cable mounted	Overmoldable	Heat shrinkable	Panel mounted
		<b>K</b>		●	●	●		●			
		<b>KE</b>	●	●	●	●		●			
		<b>KS</b>		●	●	●	●	●	●	●	
		<b>KSE</b>	●	●	●	●	●	●	●	●	
		<b>DKBE</b>	●	●	●	●		●			●
		<b>DK</b>		●	●	●		●			●
		<b>DKE</b>	●	●	●	●		●			●



## Contact us for more

What is the optimal connector shell size for my application? Would a plastic housing be better than a metal one? Could my connection mix fiber optic and electrical contacts? For my application, what would be the appropriate sealing level?... Selecting the right connector and cable system is an important and challenging process.

If in doubt, just ask! Our specialists are on hand to help you equip your application with the most suitable connector solution. Contact us.

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

Our website is your starting point to:

- Find your local Fischer Connectors office

[www.fischerconnectors.com/contacts](http://www.fischerconnectors.com/contacts)

- Download our catalogues

[www.fischerconnectors.com/catalogues](http://www.fischerconnectors.com/catalogues)

- Access our technical library

- 3D CAD models
- Technical and dimensional specifications
- Assembly instructions

[www.fischerconnectors.com/technical](http://www.fischerconnectors.com/technical)

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