

Fischer UltiMate™ Series

Connect²

Expertise | Reliability | Innovation



Rugged, compact, lightweight

Connectors and cable assemblies

www.fischerconnectors.com

fischer[®]
CONNECTORS

FISCHER ULTIMATE™ SERIES

KEY FEATURES

DURABILITY



- Sealing IP68/IP69K even unmated
- Hermetic
- Extremely robust mechanical keying
- 10,000 mating cycles

PERFORMANCE



- 360° EMC shielding
- Grounding contact ring
- Easy cable assembly

RUGGED



- High shock & vibration resistance
- Operating temperature: -55°C to +135°C
- High corrosion resistance
- Blind mating

PERSONALIZED



- Wide range of configurations
- Miniature & ultralight design
- Color overmolding available
- Crimp and solder contacts

CERTIFICATION & COMPLIANCE

Fischer Connectors is committed to quality throughout every phase of its operations. The company supports its customers and applies within its organization all directives and norms improving the quality, safety and environmental friendliness of its connectors, processes and systems.

MIL-SPECS: The Fischer UltiMate™ Series is engineered to withstand extreme operational environments, such as vibration, shock, rain, humidity, salt fog, sand/dust, or temperature; our military connectors are tested according to IEC standards.

Fischer Connectors is **EN ISO 13485:2012** certified and meets the quality management systems requirements for the design and manufacture of medical devices.

Our company is **ISO 9001:2008** certified. Through longstanding quality management commitment, we target excellence.

Fischer Connectors' environmental management system is **ISO 14001:2004** certified. Our company is committed to efficiently managing its waste, to preventing contamination and to reducing the environmental impact.

All connectors from Fischer Connectors are **RoHS** and **REACH** compliant.

ISO 9001

ISO 13485

ISO 14001



PRODUCT RANGE



For more detailed information, please consult the Fischer UltiMate™ Series Technical Specifications.

TECHNICAL DATA

ENVIRONMENTAL & TECHNICAL SPECIFICATION

Characteristic	Performance and standard	
Sealing performance mated and unmated	«W» and «V» sealing level: IP68: 120m submersion for 24 hours; IEC 60529 IP69K ¹⁾ «V» sealing level: Hermetic: Tested: <10 ⁻⁸ mbar l/sec. ; IEC 60068-2-17 Test Qk, Method 3	
Operating temperature range	-55°C to +135°C ²⁾ ; IEC 60512-6-11 i+j; IEC 60068-2-14-Nb	
Corrosion resistance	Salt mist, 1000 hours ³⁾ , 5% salt solution, 35°C IEC 60068-2-11 Test Ka; MIL-STD-202 Method 101; EIA-364-26	
Endurance	10'000 mating cycles; IEC 60512-5-9a; EIA-364-09	
Vibration, random	37.80 Grms, MIL-STD-202 Method 214A Condition I; EIA-364-28 Condition V	
Shock	300 g amplitude, half sine pulse of 3 ms, no discontinuity > 1 µs	MIL-STD-202 Method 213 EIA-364-27

1) Dust tight, protected against the effects of the high-pressure liquids. The test requirements for IP69K exist only in DIN 40050-9, the German version of IEC 60529.

2) Min. mating temperature of -20°C with EPDM interface O-ring. Other materials on request. Temperature range of -40°C to +125°C for cable connectors overmolded with TPU material.

3) Preserved mechanical and electrical functionalities, connector in mated condition and with cap in unmated position.

ELECTRICAL DATA

Characteristic	Contact size	Performance and standard	
Contact resistance over 10'000 mating cycles	Ø 0.5 mm Ø 0.7 mm Ø 0.9 mm	5 mΩ 5 mΩ 4 mΩ	IEC 60512-2-1-2a IEC 60512-2-2-2b
Insulation resistance		> 10 ¹⁰ Ω; IEC 60512-3-1-3a	
Shielding effectiveness ⁴⁾	Black	> 55 dB (very good)	up to 1 GHz, IEC 60512-23-3

4) Size 08 connector pair

ACCESSORIES

SOFT CAPS

Sealing caps protect unmated Fischer UltiMate™ Series in the field. The soft caps perfectly suit applications where a lightweight, noiseless option is preferred.



For more detailed information, please consult the Fischer UltiMate™ Series Technical Specifications.

FISCHER ULTIMATE™

BEND RELIEF

Top performance, no hassle

- No tool required: 5 steps to complete self-assembly
- Clean cut: perfectly adjust the bend relief to your cable diameter with a simple blade
- Long lasting:
 - Resists 10,000 constraints at a 90° angle
 - Operating temperatures -55°C to +135°C
 - UV resistant



For more detailed information, please consult the Fischer UltiMate™ Bend Relief Assembly Instructions.

CABLE ASSEMBLY SOLUTIONS

Fischer Connectors' skilled technical and support teams help you build the perfect Fischer UltiMate™ cable assembly for your unique application, providing advice through design, prototype, assembly, testing, manufacturing, installation, and beyond.

Our complete cable assembly solutions include:

- Overmolded cable assemblies, including thermoplastic & silicone
- Rugged & submersible cable solutions
- Heat shrinking for added protection and support to exposed wire
- Straight and right-angle overmolding



FISCHER ULTIMATE™ SERIES FOR HARSH ENVIRONMENTS

The Fischer UltiMate™ Series is specially designed for a broad range of harsh environment applications. It offers rugged, compact, lightweight, sealed connectors and cable assembly solutions ideally suited to withstand a variety of severe environmental, industrial and chemical conditions.

DEFENSE



SECURITY



INDUSTRIAL



ENERGY



MEDICAL



OIL & GAS



VACUUM



EXTREME



FISCHER CONNECTORS HEADQUARTERS



FISCHER CONNECTORS SA

Ch. du Glapin 20 – 1162 Saint-Prex – Switzerland
Phone +41 21 800 95 95 - Free phone +41 800 800 008
www.fischerconnectors.com – mail@fischerconnectors.ch

FISCHER CONNECTORS SALES NETWORK

United States and Canada

FISCHER CONNECTORS Inc.
Atlanta, GA
Phone +1 678 393 5400
Toll free: 800 551 0121
www.fischerconnectors.com
mail@fischerconnectors.com

Germany and Eastern Europe

FISCHER CONNECTORS GmbH
Zorneding
Phone +49 8106 37722 0
Gebührenfrei: 0 800 233 3233
www.fischerconnectors.de
mail@fischerconnectors.de

Sweden and Finland

FISCHER CONNECTORS AB
Billdal
Phone +46 31 910 420
www.fischerconnectors.se
mail@fischerconnectors.se

India

FISCHER CONNECTORS
India Pvt. Ltd.
Gurgaon - Haryana
Phone +91 124 4255642 to 45
www.fischerconnectors.in
raman.kalra@fischerconnectors.in

France

FISCHER CONNECTORS Sarl
Paris
Phone +33 1 5578 2578
Appel gratuit: 0 800 590 444
www.fischerconnectors.fr
mail@fischerconnectors.fr

Italy

FISCHER CONNECTORS Srl
Monza
Phone +39 039 734 072
www.fischerconnectors.it
mail@fischerconnectors.it

United Kingdom and Ireland

FISCHER CONNECTORS Ltd.
Havant/Hampshire
Phone +44 23 9245 9600
Toll free: 0 800 432 0301
www.fischerconnectors.co.uk
sales@fischerconnectors.co.uk

Asia

FISCHER CONNECTORS ASIA Ltd.
Hong Kong
Phone +852 2620 6118
www.fischerconnectors.hk
mail@fischerconnectors.hk

For more information visit www.fischerconnectors.com or call us



★ Headquarters ■ Subsidiaries ● Distributors
● Offices