

Welcome to the TURCK Connectivity Capabilities brochure. TURCK is a worldwide leader in industrial automation with the industry's broadest line of connectors, cables and cordset products. TURCK connectivity products connect the sensing devices to higher-level control components - and much more!

This brochure contains our standard connectivity products from M5 to M40 connectors, network media, cable and wiring examples, and a sampling of custom solutions we've done for customers in the past.

TURCK



How would you like to connect?

ENDLESS POSSIBILITIES, ONE MANUFACTURER.

M5 - pentafast ®	
M8 - picofast ®	
M12 - eurofast ®	
1/2" - microfast ®	
7/8", 1", 1-1/8" - minifast ®	
M16 - versafast ®	
M23, M27 - multifast ®	
M16, M23, M40 - powerfast ®	
Network Media	
Custom Solutions	
Process Automation	



M5 Thread

- 3 and 4-pin
- 125 V, 1 A



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PUR flexlife®

- Cut/abrasion immune
- Over 2 million cycles

3

M5 Thread

- 3 and 4-pin
- 125 V, 1 A





M8 Thread

- 3, 4, and 6-pin
- 125 V, 2 A to 125 V, 4 A

5

PUR flexlife ® -20

- Cut/abrasion immune
- Over 20 million cycles

6

M8 Thread

- 3, 4, and 6-pin
- 125 V, 2 A to 125 V, 4 A



M8 Snap Lock (Locking Sleeve)

- 3, 4, and 6-pin
- 125 V, 2 A to 125 V, 4 A



8

PUR Shielded

- EMI/RFI protection
- Cut/abrasion immune

9

M8 Snap Lock with LEDs

- 10 VAC/20 VDC, 2 and 4 A
- PNP and NPN Signals





M8 Connector to Splitter

• 125 V, 4 A

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Compact M8 Splitter with Mounting Hole

 Simple connector or connector with extension cable

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M8 Connector Branches from Splitter

• 125 V, 4 A

M12 Thread

- Accepts 20, 22 and 24 AWG wires
- 2-6, 10 and 12-pin
- 60 VAC/75 VDC, 2 A to 250 VAC/300 VDC, 4 A



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PVC flexlife ®

• Over 2 million cycles

15

M12 Thread

- Accepts 20 and 22 AWG wires
- 3 and 4-pin
- 250 V, 4 A





M12 Thread

- Accepts 18, 20, 22 and 24 AWG wires
- 2, 6, 8, 10 and 12-pin
- 60 VAC/75 VDC, 2 A to 250 V, 4 A

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PUR-Shield and Double Jacket

- Braided shield
- Cut/abrasion immune

18

M12 Thread

- Accepts 18, 20, 22 and 24 AWG wires
- 3-6, 8, 10 and 12-pin
- 60 VAC/75 VAC, 2 A to 250 V, 4 A

M12 Armored

- Shield tied to coupling nut
- 3, 4 and 5-pin
- 250 V, 4 A

20

PVC Armor

• Tray rated

21

M12 Armored

- Shield tied to coupling nut
- 3, 4 and 5-pin
- 250 V, 4 A





M12 with LEDs

- 3, 4 and 5-pin
- 10-30 V, 4 A
- PNP and NPN signals

23

Irradiated PVC

- Weld flash immune
- High temperature immune

24

M12 316 Stainless Steel

- Hex coupling nut
- 2-6, 10 and 12-pin
- 60 VAC/75 VAC,
 2 A to 250 VDC,
 4 A



M12 Reverse Key (B-Code)

- 3 and 5-pin
- 250 V, 4 A



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PVC Grey flexlife®

- Commonly used with reverse key (B-code) connectors
- Over 2 million cycles

27

M12 Reverse Key (B-Code)

- 3 and 5-pin
- 250 V, 4 A





M12 Incremental Encoder Connector

- 3 indicator LEDs
- 8-pin
- 5-30 VDC

29

PVC Shielded

- RFI/EMI protection
- Differential and single ended mode applications

30

M12 Incremental Encoder Connector

- Shield tied to coupling nut
- RFI/EMI protection
- 8-pin
- 60 VAC/75 VDC, 2 A

1/2" Thread

- Accepts 20 and 22 AWG wires
- 3, 4, 5 and 6-pin
- 250 V, 4 A



PUR Coil Cord

• For repetitive motion



1/2" Thread

- Accepts 18 AWG wires
- 2, 3 and 5-pin
- 250 V, 4 A





7/8" Thread

- Accepts 18 AWG wires
- 2 through 6-pin
- 300 V, 9 A

35

TPE weldlife®

- STOW rating
- Weld flash immune

36

7/8" Thread

- Accepts 16 AWG wires
- 2 through 6-pin
- 600 V, 9 A

7/8" Armored

- Shield tied to coupling nut
- 2 through 6-pin
- 600 V, 9 A

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PVC Armor

• Tray rated

39

7/8" Armored

- Shield tied to coupling nut
- 2 through 6-pin
- 600 V, 9 A





Wash Down Connector

- Wash down mold material and contact holders
- Standard or with shielding

41

Wash Down Cable

- Polypropylene cable jacket
- Flame retardant

42

Wash Down Connector

- Wash down mold material and contact holders
- Standard or with shielding

1" Thread

- Accepts 16 AWG wires
- 6, 7 and 8-pin
- 600 VAC/VDC, 8 A



44

CPE Rubber

- SOOW rating
- Weld flash immune
- Flame immune

45

1-1/8" Thread

- Accepts 16 AWG wires
- 9, 10 and 12-pin
- 600 VAC/VDC, 7 A





M16 Thread

- Accepts 18, 22, 24 and 26 AWG wires
- 5-8, 12, 14 and 19-pin
- 30 V, 3 A to 125 V, 8 A

47

TPE flexlife®

• Over 2 million cycles



- 48
- Accepts 18, 22, 24 and 26 AWG wires
- 5-8, 12, 14 and 19-pin
- 30 V, 3 A to 125 V, 8 A



M23 Thread

- Shield tied to coupling nut
- 7, 12 and 19-pin
- 150 V, 9 A to 300 V, 20 A



50

PVC Shielded

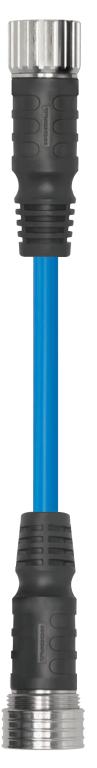
- EMI/RFI protection
- Tray rated

51

M23 Thread

- Shield tied to coupling nut
- 7, 12 and 19-pin
- 150 V, 9 A to 300 V, 20 A





M23 Thread

- 12, 16 and 19-pin
- 150 V, 9 A to 300 V, 20 A

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PVC NAMUR

• Tray rated

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M23 Thread Push-Pull Connection

- 12 and 19-pin
- 150 V, 9 A to 300 V, 6 A

M27 Thread

- 26 and 28-pin
- 150 V, 5 A



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PVC Multiconductor

• 25 and 27-wire

57

M27 Thread

- 26 and 28-pin
- 150 V, 5 A





M16 Thread - Power

- Accepts 12 and 14 AWG wires
- · Shielding available
- 2, 3 and 4-pin
- 600 V, 15-18 A

59

PVC - High Current

- Tray rated exposed run
- · Shielding available
- Up to 18 A



M16 Thread - Power 60

- Accepts 12 and 14 AWG wires
- Shielding available
- 2, 3 and 4-pin
- 600 V, 15-18 A



M23 Thread - Power

- Accepts 12, 14 and 18 AWG wires
- 3-key
- Shielding available
- 6 and 8-pin
- 600 V, 30 A



62

PVC - High Current

- Tray rated exposed run
- Shielding available
- Up to 30 A

63

M23 Thread - Power

- Accepts 12, 14 and 18 AWG wires
- 3-key
- Shielding available
- 6 and 8-pin
- 600 V, 30 A





M40 Thread - Power

- Accepts 8 AWG wires
- 4 and 8-pole (shielded)
- 600 V, 40 A

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PVC - High Current

- · Shielding available
- Up to 40 A

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M40 Thread - Power

- Accepts 8 AWG wires
- 4 and 8-pole (shielded)
- 600 V, 40 A

PROFIBUS®-DP D-Sub Connector

- Integrated terminating switch
- Right angle and master connection option
- 250 V, 5 A



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PROFIBUS®-DP Cable

- Meets requirements of EN50170-2-2:1996 for communications up to 12 Mbaud
- PVC, PUR and TPU cable jackets
- Braided over foil shield
- Aluminium armor option

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M12 PROFIBUS ®-DP Connectors

- 5-pin
- 250 V, 4 A
- Standard reverse key
- Shielded-tied to coupling nut





5-pin Diagnostic Connector for DeviceNet™

- Nylon housing
- 250 V, 12 A

71

DeviceNet[™] Cable, 5-wire

- Meets ODVA requirements of type I (thin), type II (thick), and type III (mid)
- Braided and/or foil shield
- PVC, PUR, TPE cable jacket

72

M12 Thread DeviceNet™

- 5-pin
- 250 V, 4 A



RJ45 Connector

- For Ethernet connections
- 42 V, 1.5 A
- Shielded and economy version options



74

Ethernet Cable, 8-wire

- Meets TIA/EIA 568-B, 2 category 5e cable for 10 and 100 Base-T Ethernet
- PVC jacket, braided and/or foil shield
- Armored option

75

M12 Bulkhead Connector

- 8-pin
- 60 V, 2 A





TURCK Sensor

 Connected to commercial style connector

77

Jacket Options for any Environment

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Commercial Style Connector

• Connected to TURCK Sensor

TURCK Sensor with weldguard ® Protective Face

- Resists weld slag
- Integral extension cable with silicone tubing



80

Protective Silicone Tubing with Heat Shrink to Cable

• Protects from weld slag



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M8 Thread

- Connected to TURCK sensor
- Multiple connector styles available



Valve Connectors

- Use 9.4 to 18 mm cable
- M8 to 7/8" connector extensions
- · Field wireable styles
- Custom print labels

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Private Label

84

Insulated Ferrules

- Multiple color and AWG size options
- Provides cleaner connection
- Private labeling on wires

Custom Solution

D-Sub Molded or Assembled Connectors

- Connected to **TURCK** connector
- 9, 15 and 25-pin



86

Jacket Diameters from 3.5 mm to 18.5 mm

87

M23 Connector

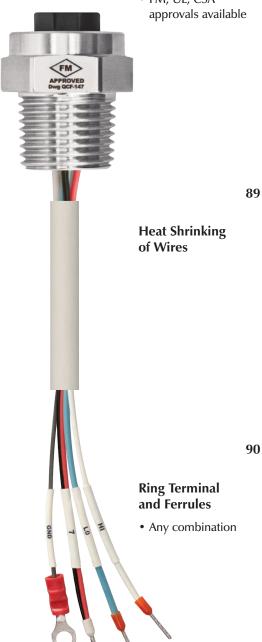
 Connected to D-Sub Connector



Justom Solutions

Approvals

• FM, UL, CSA



TURCK Sensor

 Connected to automotive style connector



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Wire Gauge Ranges from 8 to 26

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Automotive Style Connector

- Stabilizing pin
- Connected to **TURCK** sensor





TURCK Sensor

 Connected to automotive style connector

95

2 to 27 Conductors, Braided or Foil Shields

96

Automotive Style Connector

 Connected to TURCK sensor

TURCK Sensor

- Custom pad printing and color
- Connected to automotive style connector



98

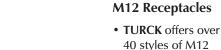
Spooled Cable in 30, 100 or 200 Meter Lengths

99

Automotive Style Connector

 Connected to TURCK sensor





40 styles of M12 receptacles

• Front mount, rear mount, solder cups, PCB mount and more

 Connected to commercial style connector

101

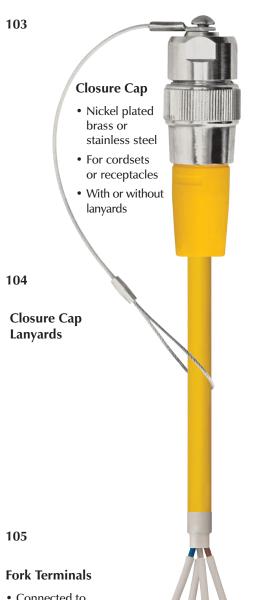
Ferrite Tubing



102

Commercial Style Connector

· Connected to **TURCK** M12 receptacle



- Connected to TURCK connector
- Private labeling on wires





Nylon Coupling Nut

• TURCK offers nickel plated brass, nylon and 316 stainless steel coupling nut options

107

TURCK Can Process Your Cable

108

USB Connector

• Connected to TURCK connector

Multiple Connector Mold Colors



110

Custom Cable Colors

111

Pigtail Option





M12 Connector to Splitter

 Choose from integral connector or connector with extension cable

113

3 Branch Molded Splitter

- 2 and 4 branch options
- LED options
- Standard, series or parallel wiring
- Custom hot stamp printing
- Coil Cord

114

Multiple Thread Types and Mold Colors

- 1/2" and M12 threads
- M12 thread reverse key (B-code)

Molded on Amp Connector

• Connected to **TURCK** connector



116

UL Recognized and CSA Approvals

117

PVC Plug Body and Contact Holders

- Excellent resistance to wash down chemicals
- Available in numerous connector styles





Right Angle Connector

 Right angles available in all thread types

119

2 Branch Molded Splitter

- 3 and 4 branch options
- LED options
- Standard, series or parallel wiring

120

Molded on Automotive Style Connectors

- Multiple cable jacket colors
- Connected to TURCK splitter

Weld Protection

- Weld slag resistant silicone tubing
- PTFE coated coupling nut
- · LED options



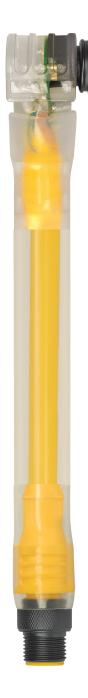
Silicone Tubing

 Excellent weld slag resistance

123

Weld Protection

- Weld slag resistant silicone tubing
- PTFE coated coupling nut





Expandable Fiberglass Sleeving

- · "Heat shrink" like fit
- Abrasion, moisture, cut-through and chemical resistance
- -55 °C to +200 °C

125

Expandable Fiberglass Sleeving

- "Heat shrink" like fit
- Abrasion, moisture, cut-through and chemical resistance
- -55 °C to +200 °C

126

AC Wall Plug

• Connected to TURCK connector

Stainless Steel Coupling Nut

 Nickel plated brass and nylon coupling nuts available



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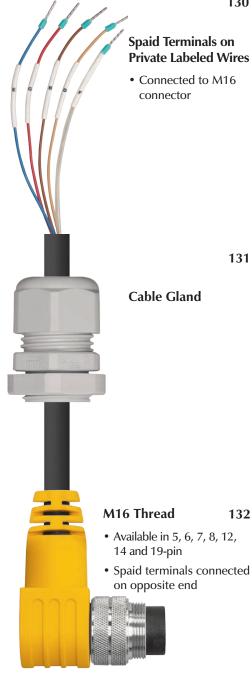
Over 400 Different Cable Styles

129

Insulated Spaid Terminals

• Connected to TURCK connector





Hybrid Cordsets

- Combine multiple thread sizes in one cordset
- Our project engineers will assist you



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Mix and Match

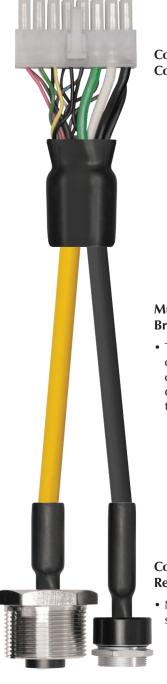
 M23 on one end, M16 thread on the other end

135

Hybrid Cordsets

- Combine multiple thread sizes in one cordset
- Our project engineers will assist you





Commercial Style Connector

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Multiple Cable Branches

 Two cables from commercial style connector to two different receptacle types

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Combine Multiple Receptacles

 Numerous receptacle styles in all thread sizes

M16 Connectors to Drop Tee





Overmolded Receptacle

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Process Connectivity

- 2-wire analog or HART control circuits
- Additional analog or discrete control circuits
- NAMUR circuits
- extremelife ® marine cable

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M23 Home Run Connector with Set Screw Locks

- For Class I, Division 2 hazardous locations
- Render a connection not normally arcing



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····Sense It!·····Connect It!·····Bus It!·····Solve It!