UTS SERIES

SOURIAU

Waterproof Plastic Connectors

IP68 and IP69K

Esterline
Connection Technologies

Contents

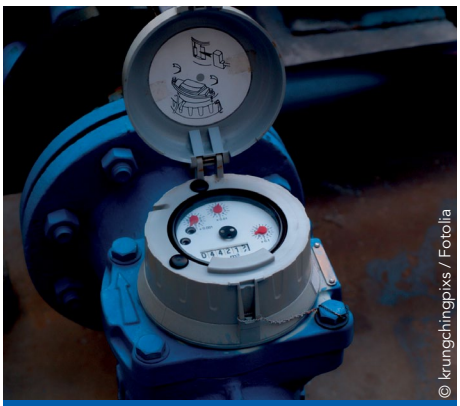
Overview

Typical Applications

Energy - Power

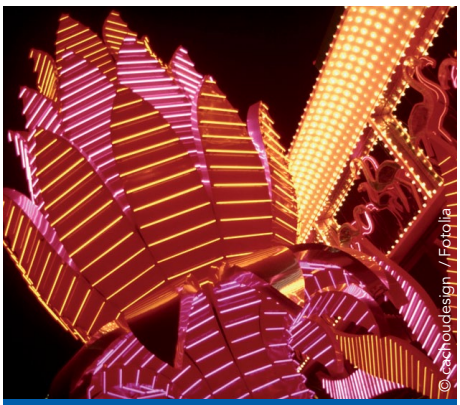
Off-Road

Building Automation & Control



Instrumentation - Measurement

Rail



Stage - Light

Features & Benefits

WATER PROOF

IP68/69K Dynamic Mated & Unmated

Ideal for outdoor and indoor dynamic applications requiring continuous underwater immersion, routine pressure washing and dust protection.

UV RESISTANT

No Degradation Over Time

No mechanical deterioration or important variation in colour after 5 years of exposure in natural environment (equivalent exposure to sun and moisture as per ISO4892) and F1 rated per UL 746C.

UL/IEC COMPLIANT

Qualified & Certified

In accordance with:
- UL 1977 - Certificate ECBT2, File number: E169916
- CSA C22.2 n°182.3 - Certificat ECBT8, File number: E169916.

QUICK MATING

1/3 Bayonet Coupling

With only 1/3 twist of the bayonet coupling system, connectors are mated with audible "click" and tactile feel to confirm proper mating. This mating feature eliminates connection uncertainty and reduces time and labor during installation.

COST SAVINGS

Mixed Power & Signal Contacts

Power supply and signal transmission can be combined in a unique interconnect solution to reduce system complexity and minimize component installation cost.

Range

UTS Series

Cable Sealed

Single Wire Sealed

UTS Standard

Sealed: IP68/69K dynamic
UV resistant
UL/IEC compliant

Corrosion-proof
Plastic housing

Contacts Supplied Separately

Choice of Crimp Contacts

- Machined
- Stamped and Formed
- Coaxial

PCB Contacts

Fiber Optic

Contacts Loaded Screw Termination

Contacts Loaded Handsolder

Plug

UTS Backshells

Cable Sealing

Double Sealing (Wires + Cable)

Grommet

Single Wire Sealed

Flexible conduit adaptators

Contact us for more information

UTS Sealed Unmated

Sealed Unmated: IP68/69K dynamic
MIL-C-26482 compatible
UV resistant
UL/IEC compliant

Corrosion-proof
Plastic housing

Overmoulded Cable Assembly

Overview

UTS Standard Receptacle

Square Flange

Threaded Receptacle

Contacts Supplied Separately

Choice of Crimp Contacts
- Machined
- Stamped and Formed
- Coaxial

PCB Contacts

Fiber Optic

In-line

Jam Nut

Contacts Supplied Separately

Choice of Crimp Contacts
- Machined
- Stamped and Formed
- Coaxial

PCB Contacts

Fiber Optic

Contacts Loaded

Screw Termination

PCB

UTS Backshells

Cable Sealing

Double Sealing (Wires + Cable)

Grommet

Single Wire Sealed

Flexible conduit adaptators

Contact us for more information

UTS Sealed Unmated Receptacle

Jam Nut

Square Flange

Contacts Loaded

Handsolder

PCB

UTS PCB Contacts

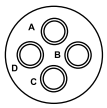
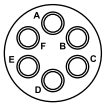
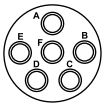
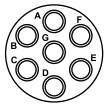
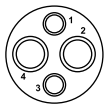
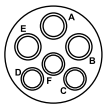
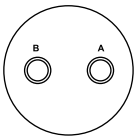
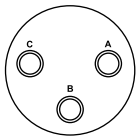
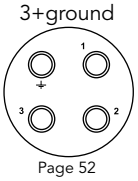
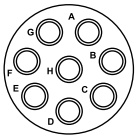
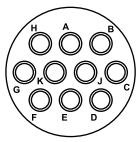
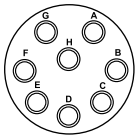
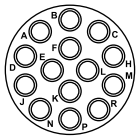
Stand-offs to allow cleaning after soldering

Metal hold down clips
- to lock the connector easily on the PCB and to release stress on solder joints
- suitable for soldering in a metallic hole

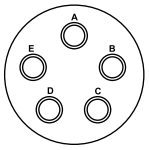
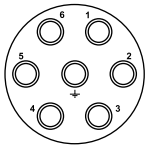
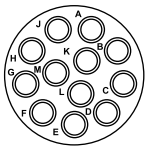
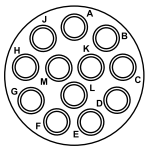
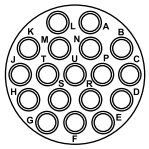
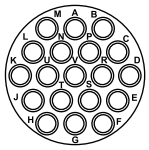
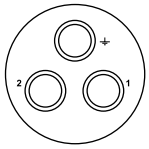
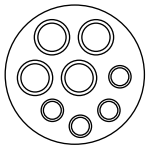
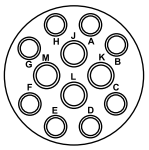
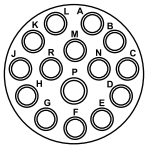
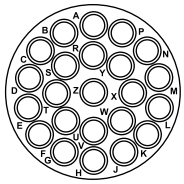
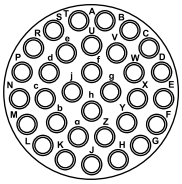
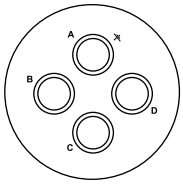
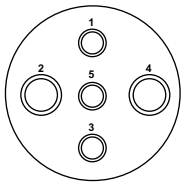
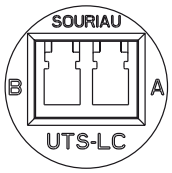
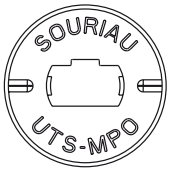
Pre-assembled PCB contacts
- machined or stamped versions available
- different solder tails lengths possible
- different plating options

Low profile housing to limit space between panel and PCB

Layouts (Electrical parameter according to IEC)

Shell Size	Contact #16 (Ø 1.6mm)	Contact #20 (Ø 1.0mm)	Contact #8 (Ø 3.6mm)	Hybrid & others
8		**8E2/8D2**(1) 7A 32V 2 contacts  Page 20 **8E3/8D3**(1) 7A 32V 3 contacts  Page 36 **8E3A/8D3A**(1) 7A 50V 3 contacts  Page 40 **8E98/8D98**(1) 7A 50V 3 contacts  Page 40 **8E33/8D33**(1) 7A 50V 3 contacts  Page 44 **8E4/8D4**(1)* 7A 32V 4 contacts  Page 60		
10	**103** 16A 300V 2+ground  Page 28 **104**(3) 13A 150V 4 contacts  Page 68	**106*** **10E6**(1)**/10D6** 7A 32V 6 contacts  Page 84 **10E98/10D98** 7A 50V 6 contacts  Page 88 **10E7**(1)**/10D7** 7A 50V 7 contacts  Page 96		**102W2** 25A 150V 4 contacts 2xØ2.4 (#12) 2xØ1.0 (#20)  Page 64 **103W3** 5A 32V 6 contacts 3xØ1.6 (#16) 3xØ1.0 (#20)  Page 80
12	**12E2/12D2** 16A 150V 2 contacts  Page 24 **12E3/12D3** 16A 150V 3 contacts  Page 48 **124** **12E4/12D4** 16A 300V 3+ground  Page 52 **128**(1) (3) 10A 80V 8 contacts  Page 100	**1210*** **12E10/12D10** 6A 50V 10 contacts  Page 112 **12E8/12D8** 6A 32V 8 contacts  Page 104 **12E14/12D14** 5A 32V 14 contacts  Page 128		

1: M12, M16 and M20 threaded receptacle available 2: NPT available 3: Discrete wire grommet option * Ethernet compatible: see pages 195 & 196

Shell Size	Contact #16 (Ø 1.6mm) Contacts #20: from AWG 26 to 18, 0.13 to 0.93 mm²	Contact #20 (Ø 1.0mm) Contacts #16: from AWG 30 to 14, 0.05 to 2.5 mm²	Contact #8 (Ø 3.6mm) Contacts #12: from AWG 22 to 12, 0.13 to 4 mm²	Mixed Power Contacts #8: from AWG 16 to 8, 1.5 to 10 mm²
14	**14E5/14D5** 16A 150V 5 contacts  Page 72 **147**[3] **14E7/14D7** 16A 300V 6+ground  Page 92 **1412**[3] 10A 63V 12 contacts  Page 116 **1492**[3] 10A 63V 12 contacts  Page 124	**14E18/14D18** 5A 50V 18 contacts  Page 136 **1419** **14E19/14D19** 5A 32V 19 contacts  Page 140	**142G1**[2] 40A 300V 2+ground  Page 32	**148** 17A 230V 8 contacts 4xØ1.6 (#16)+4xØ2.4 (#12)  Page 108 **14E12/14D12** 4A 50V 12 contacts 4xØ1.6 (#16)+8xØ1.0 (#20)  Page 120 **14E15/14D15** 4A 50V 15 contacts 1xØ1.6 (#16)+14xØ1.0 (#20)  Page 132
18	**1823** 9A 63V 23 contacts  Page 144	**18E32/18D32** 4A 32V 32 contacts  Page 148	**183G1**[2] 32A 300V 3+ground  Page 56	**18X2M3**[2] 32A 300V 5 contacts 3xØ1.6 (#16)+2xØ3.6 (#8)  Page 76 **LC**  Page 152 **MPO**  Page 156

XXXXXX blue highlighted items: UTS Sealed in Unmated Condition

General Technical Characteristics

Materials

- **Body connector + Backshell:** Thermoplastic
- **Insert:**
  - UTS Standard, UTS Single Wire Sealed, UTS Screw Termination Contacts: Thermoplastic
  - UTS Sealed Unmated Handsolder & UTS Sealed Unmated with PC Tails Contacts: Elastomer
- **Nut:** Metal
- **Contacts:** See page 161
- **Halogen free**
- **RoHS compliant & conforms to the Chinese standard SJ/T1166-2006 (Chinese RoHS equivalent)**

Environmental

- **Operating temperature:** from -40°C to +105°C 40/100/21 per NFF 61-030
- **Flammability rating:**
  - UL94 V-0 (all UTS except the Sealed Unmated version) see page 180
  - UL94 HB (UTS Sealed Unmated version only) see page 180
  - I2F3 according to NFF 16101 & NFF 16102
- **Salt spray:** per EIA-026A ≥500 hours
- **UV resistant:** No mechanical degradation or important variation of colour after 5 years of exposure in natural environment (equivalence exposure to sun and moisture as per ISO 4892) and F1 rated per UL 746C
- **Sealing:**
  - UTS Standard: IP68/IP69K dynamic (mated)
  - UTS Sealed Unmated version: IP68/IP69K dynamic (unmated)
  - UTS Single Wire Sealed: IP67/69K (up to IP68 with double sealing backshell)
  - UTS Screw Termination Contacts: IP68/IP69K dynamic (mated)

  Note: IP68=10 m underwater during 1 week
- **Fluid resistance:**
  - Gas and Oil
  - Mineral oil
  - Acid bath
  - Basic bath

Electrical

- **In accordance with:**
  - UL 1977: Certificat ECBT2 File number: E169916
  - CSA C22.2 n°182.3: Certificat ECBT8 File number: E169916
- Also see pages 10 & 11

Mechanical

- **Durability:** 250 matings & unmatings per MIL-C-26482
- **Vibration resistance (all UTS versions except UTS Screw Termination contacts):** Sinusoidal vibrations per IEC 60512-4 - from 10 to 2000 Hz
- **Thermal shock:** 5 cycles 30 min. from -40°C to 105°C per MIL-STD-1344 method 1003