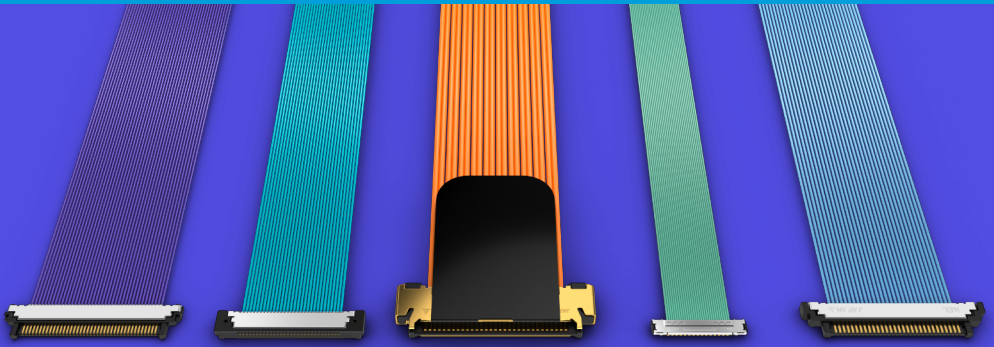




Micro Coax Cable Assemblies

Fine Pitch 0.25-0.55mm

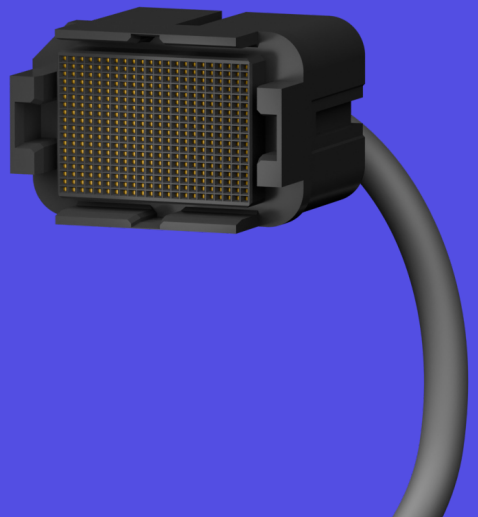
Non-Magnetic/EMC options

Interface Connector For Ultrasound Customizable

High pin count up to 400

High density with 1.0mm pitch

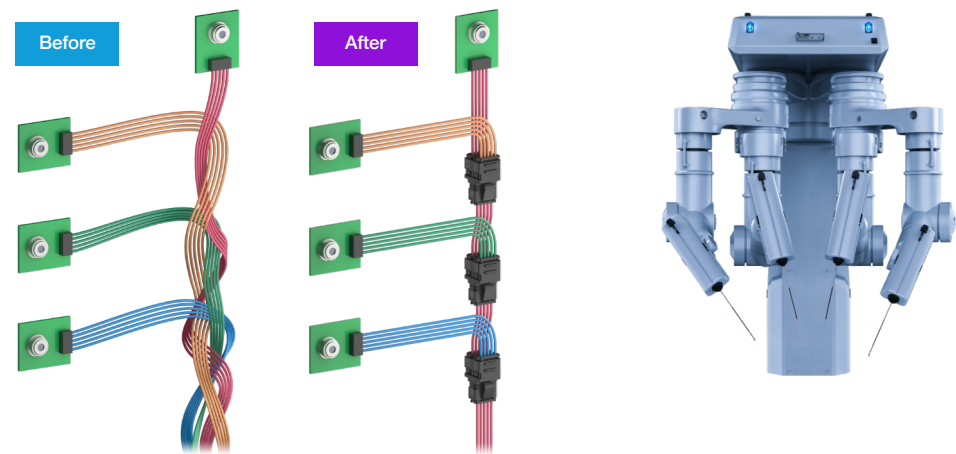
High mating durability up to 10K



Custom Connectors
Manufactured in Japan

Branch and Relay Design

- Reduces the number of wiring runs to motors and sensors
- Enables miniaturization and weight reduction

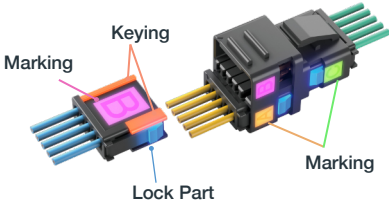


Slim, Flush-Locking Design



Keying and Marking Mechanism

- Prevents work errors on the manufacturing floor



Standard Rated Current

Unit: A (per contact)

Receptacle	Plug	AWG#22	AWG#24	AWG#26	AWG#28
FK01-05-□	FK11-05	5.5	4.5	4.0	3.0
FK01-07-□	FK11-07	5.0	4.0	3.5	2.5

Rated Current for UL UL1977 *UL cUL File No. E509060

Unit: A (per contact)

Receptacle	Plug	AWG#22	AWG#24	AWG#26	AWG#28
FK01-□□-□	FK11-□□	5.0	4.0	3.5	2.5

General Specifications

Pitch	2.1mm
Compatible Cables	AWG#22/24/26/28
Operating Temperature	-55°C to +105°C
General rated voltage	AC/DC250V
UL rated voltage	AC/DC30V
Insertion/Removal durability	50 times
Contact Resistance	20mΩ max
Insulation Resistance	1,000 MΩ min. at 500 V DC
Dielectric withstand voltage	AC1000V, 5 minutes

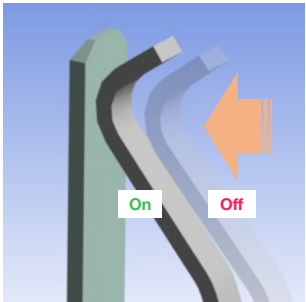
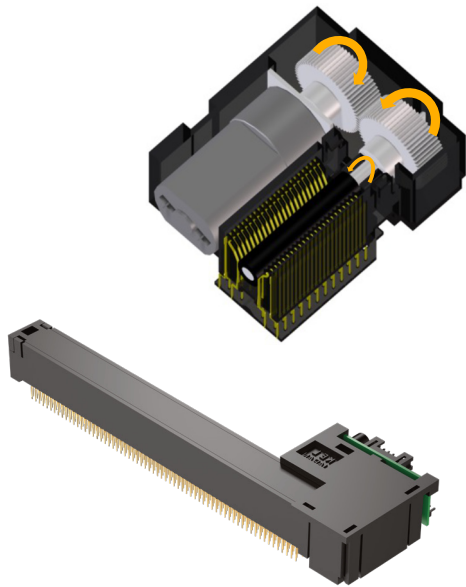
Eliminating Relays

Space Saving Circuit Board

- Batch ON/OFF switching of 130ch, 194ch, and 260ch
- Non-magnetic plated contacts
- Optimized board circuitry

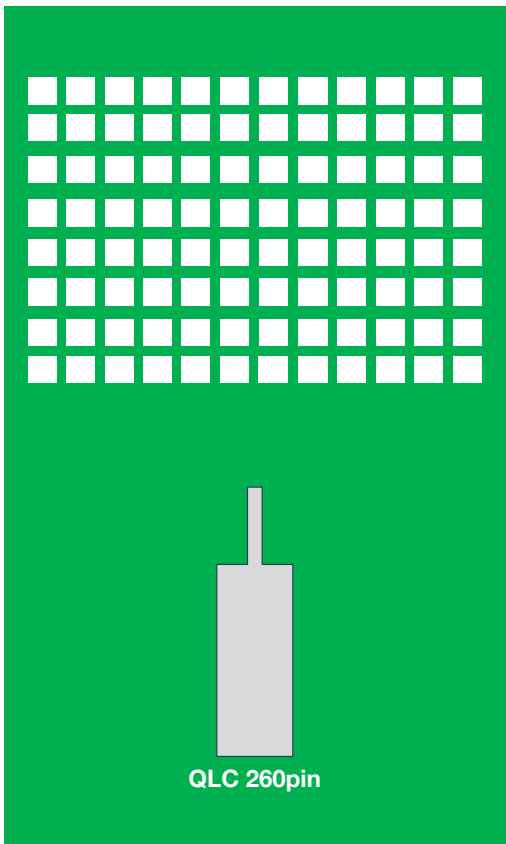
Mating Structure

- Rotating shaft brings contacts together



Closeup of the Contact

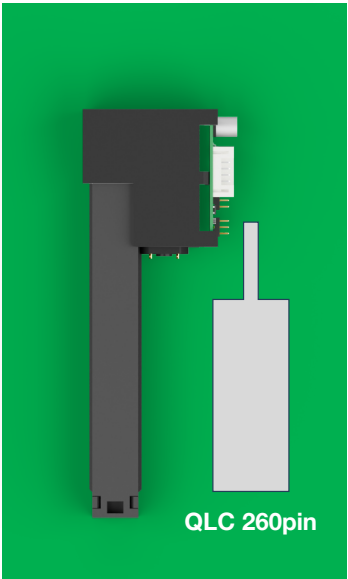
Fewer Relays, 20–40% Smaller Board



Before



After



Custom Interface Connector

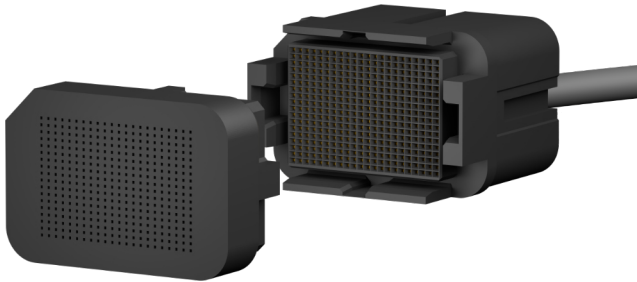
For Endoscopy

Multi-Mating-Cycle Custom Connector

- Mating durability: 10,000 cycles
- Ideal for attaching/detaching ultrasound scopes
- Spring loaded protective plate concealing contact terminals and preventing pin buckling

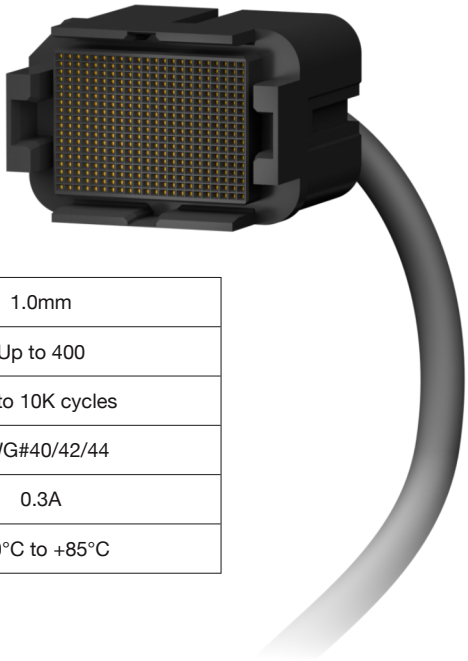
Multi-Pole Support Up to 400 Pins

- Can be designed for multi-channel ultrasound applications



Features

- Non-magnetic plated contacts
- Insulator material: Radel (PPSU)
- Includes a guide plate for contact protection



General Specifications

Pitch	1.0mm
Contacts	Up to 400
Mating Durability	Up to 10K cycles
Compatible Cable	AWG#40/42/44
Rated Current	0.3A
Operating Temperature	-40°C to +85°C

Various Connector Shapes & Custom Harness Available

Rectangular



Circular

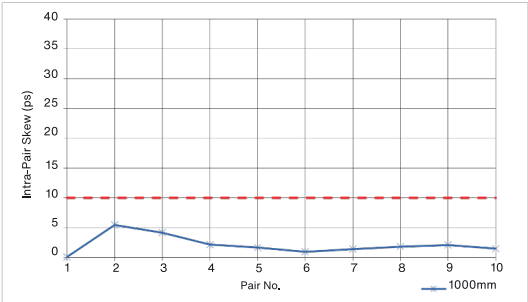
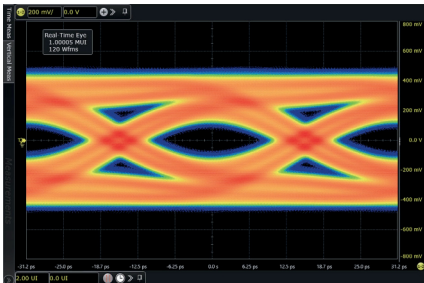
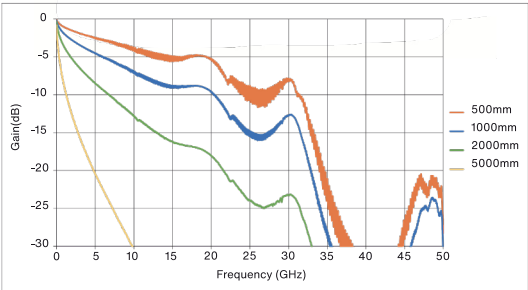
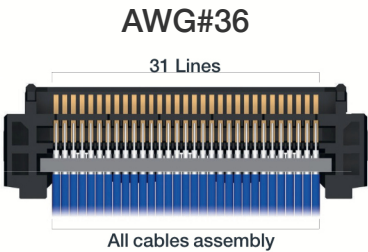
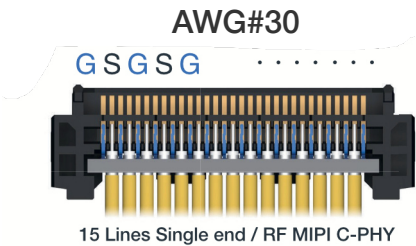
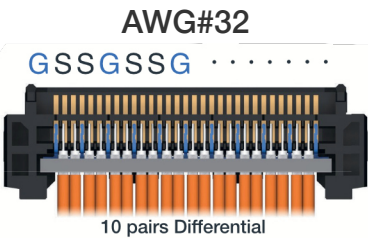


TSL
SERIES

32 Gbps at 1000mm

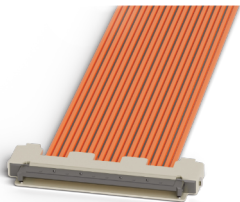
Key Features

- 0.55mm pitch
- 32 Gbps per pair with AWG #32.
- 320 Gbps over 10 differential pairs in a single connector.
- Straight & right angle.
- 10ps of intra-pair skew up to 1000mm of RUOTA* AWG#32



Non-Magnetic Version

- TSL-NM2 series
- Mating height 2.17mm
- Horizontal mating



Micro Coax Cable Assembly Family

Pitch	0.25mm	0.4mm	0.5mm	0.55mm
Series	XSL, XSLS	USL, USLS, ASLS	SSL	TSL, TSLN-M2
No. of Contacts	30/40/48/52	20/30/34/40/50/60*	10/20/30/40	31
Cable	#44/46	#40/42/44/46	#36/38/40	#30/32/36
Mating Height	1.0 - 1.44mm	1.0 - 1.65mm	1.4mm	2.17 - 3.25mm
Non Magnetic	No	Yes (ASLS)	No	Yes (TSL-NM2)

Custom
AOC

Active Optical Connector

Custom Optical Module

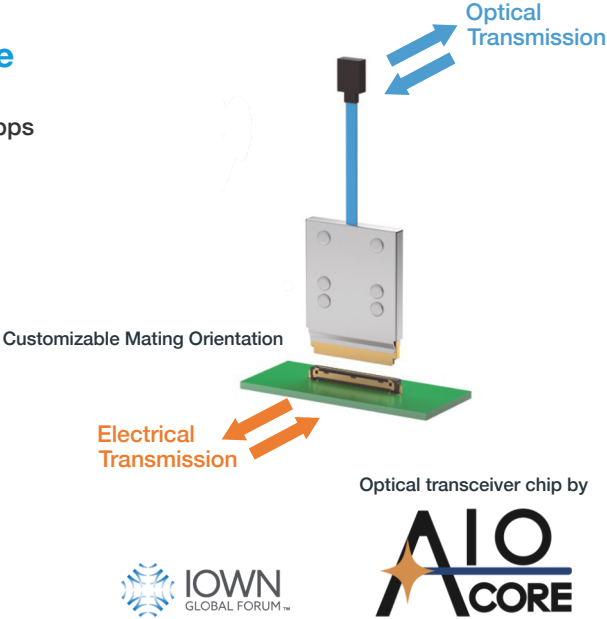
- Tailored to customer specifications
- Any transmission speed up to 32Gbps
- Customizable connector interface

Key Advantages

- EMI immunity
- Electrical isolation
- High-speed transmission
- Long-distance transmission
- Application-specific customization

Applications

- Integrated operating rooms
- Surgical Robots
- Imaging systems
- Surgical video networks



Reference Optical Specifications

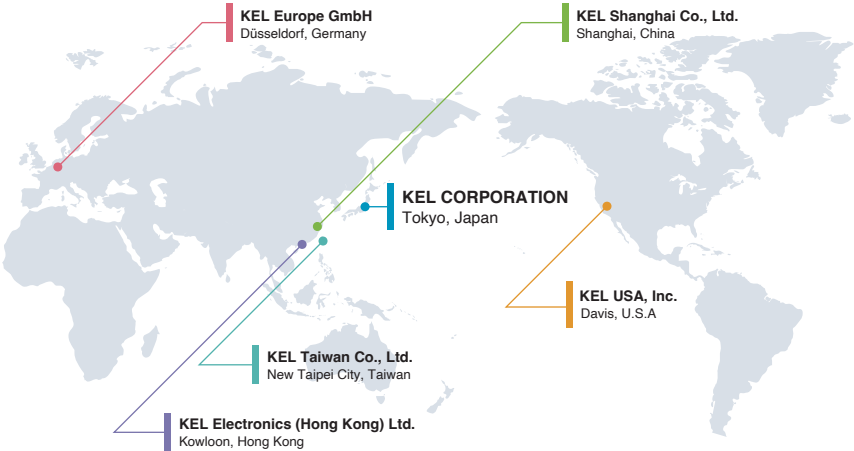
Transmission Rate	Max. 128 Gbps, 32 per channel x 4
Transmission Distance	≤30 m
Operating Temperature	-40 to +85 °C
Supply Voltage	1.1 V×3 + 3.3 V×1
Bit Error Rate	≤1.0 × 10 ⁻¹²

Reference Optical Specifications

Optical Fiber	50μm Core Diameter (Multimode)
Wavelength	1300 nm
Optical Interference	MT Connector, 12 Pins (8 Pins Used)
Optoelectronic	AIO Core IO Core™

KEL Company Profile

Global Network



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