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USCL SERIES

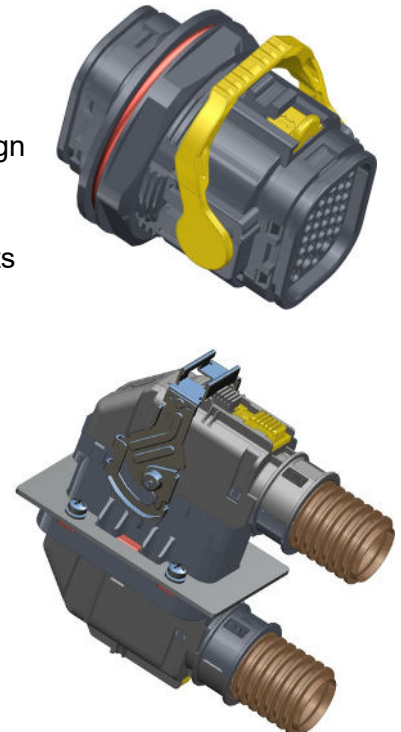
USCL (Ultra Sealed Connector, Lever-driven) is the solution for increasingly complex and highly reliable signal and power connection applications, its rugged design ensuring safe and reliable signal transmission and power supply for vehicle and industrial equipment in harsh environments.

USCL, an environmentally sealed connector series incorporating thermoplastic housings, silicone rubber seals and precision stamping contacts that delivers superior mechanical & electrical performances, the USCL connectors are designed to be high waterproof grade with integral real grommets or individual sealing plugs, up to IP67, IP69K, IP68, and 48Kpa airtight protection. The coupling and locking of the plug and receptacle are designed as levers and secondary locker (CPA) to provide tactile and audible feedbacks to the operator, ensuring the connector can be mated in right position easily and realize fast plugging and locking; precision stamping contact features low conduction resistance and high vibration resistance & mechanical shock resistance;

The USCL series is available in a variety of layouts (from 16 to 87 poles) to meet the needs of multichannel signal and power connections.

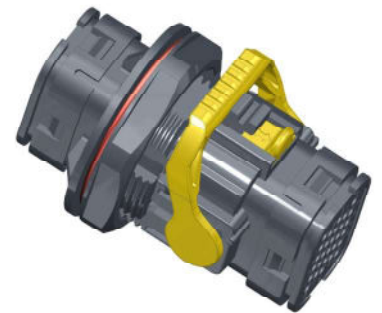
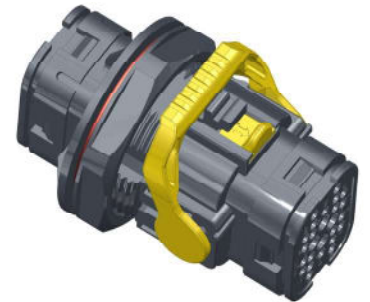
Key Features

- Thermoplastic shells connectors
- Individual sealing plugs or integral real grommet waterproof design
- Wide arrangements ranging from 16 to 87 poles
- Mixed layouts are available, Mixes signal and 30A power contacts in one housing
- Accepts contact size 12#&16# (Max. 30A/13A)
- Minimum 200 mating cycles for stamped contacts
- Cable Range: 24-12 AWG (0.35mm² - 4.0mm²)
- Operating Temp: -55°C to +125 °C
- IP67, IP68, and IP6K9K, 48Kpa Air-tight(when mated)
- Jam-Nut and Cable-to-Cable installation methods
- Locating cover design offers accurate contact positioning



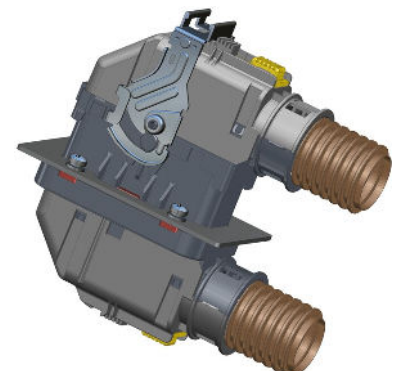
Technical Overview

Current Rating	Up to 10A@20# contacts, 13A@16# contacts, 30A@12# contacts
Operation Voltage	48V AC/DC, up to 250V AC/DC* (HV applications)
Cable Range	24- 12 AWG (0.35mm ² - 4. 0mm ²)
	Insulator diameter ranges: 16#: Ø1.2mm to 2. 70mm
	12#: Ø2.2mm to 3. 81mm
	20#: Ø1.3mm to 2. 20mm
Operating Temp	-55°C to +125°C
Durability	Minimum 200 mating cycles
Waterproof	IP67, IP68 (1meter, 24H), IP6K9K
Flammability	UL 94 V-0
Dielectric Voltage	1500V ac for 60 s
Thermal Shock	-55°C to +125°C, 20 cycles
Physical Shock	50g's peak, 3axes, 11millisecond duration half-sine pulse, no loss of continuity >1µsec
Vibration	Refer. SAE J2030-201506
	No unlocking or un-mating and exhibits no mechanical or physical damage after sinusoidal vibration levels of 20 G's at 10 to 2000 Hz in each of the three mutually perpendicular planes No electrical discontinuities longer than 1µsec
Salt Spray	96 H
Air-Tight	Pressure with 48kPa and keep 15s, no leakage
Temp. Endurance	1008H at 125°C, Insulation Resistance >100MΩ
Moisture Resistance	Ref. IEC 60068-2-78, RH90-95%, 40°C, 504 H; Insulation Resistance > 100MΩ
Humidity Steady	Ref. QC/T-1067.1, 10 Cycles; Insulation Resistance > 100MΩ



Product Material

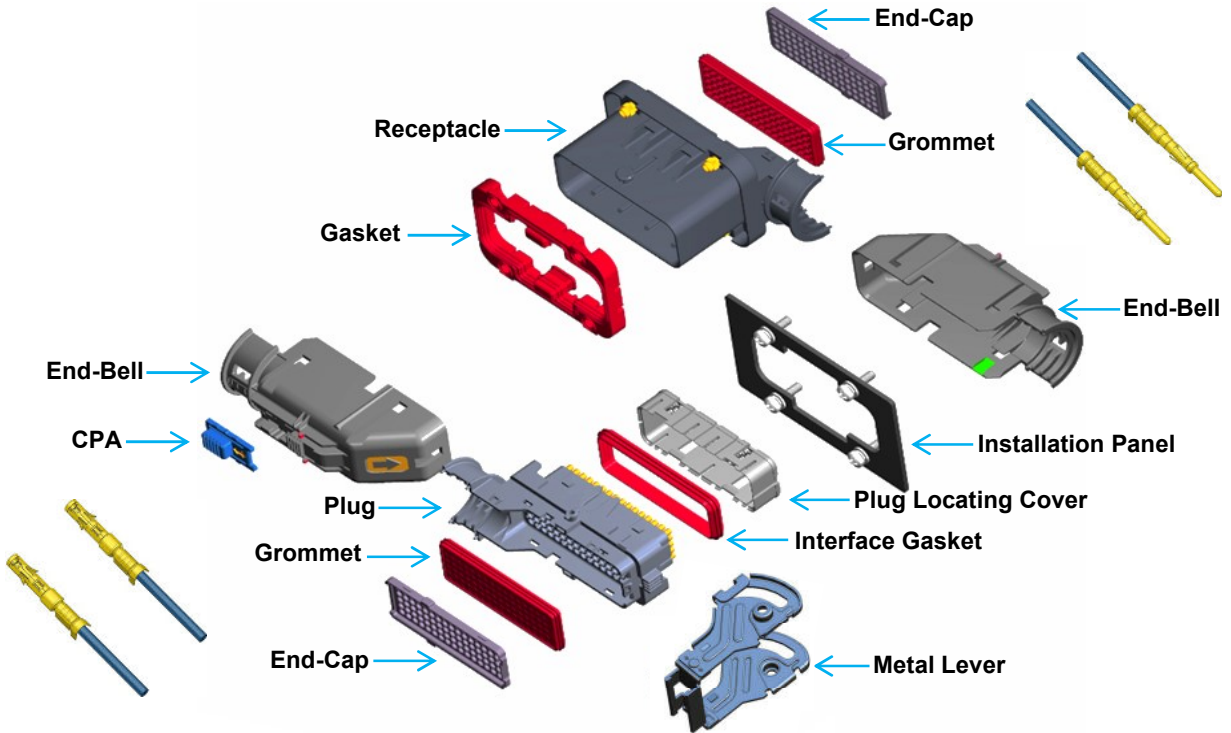
Housing	Thermoplastic, Glass filled PA
Seals	Silicone Rubber
Locating Cover	PBT+GF
Secondary Lock	Thermoplastic, Glass filled PA
Contact	Copper alloy & stainless steel
	Nickel, or gold flash plating



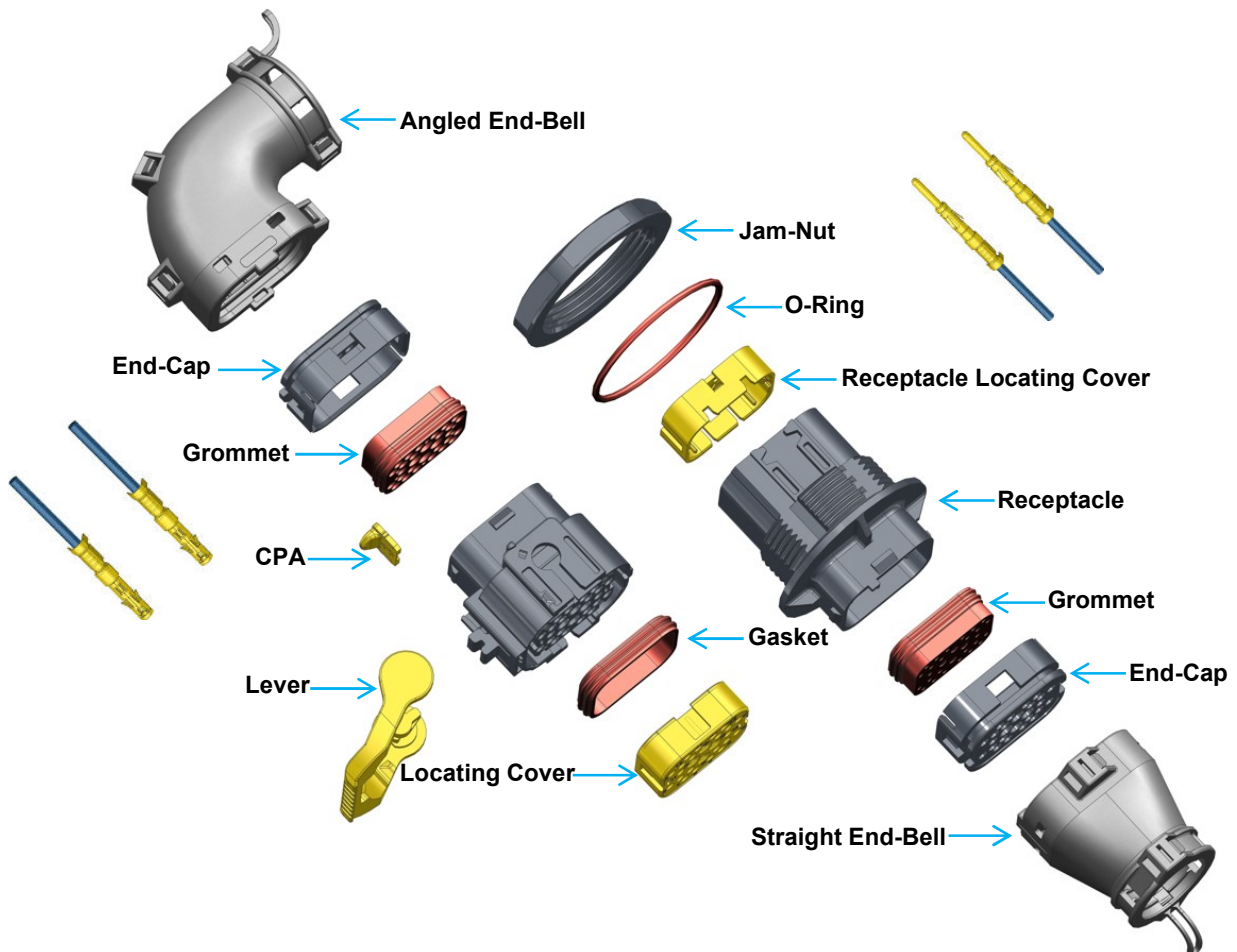
* High-Voltage applications, further information available upon request

Product Exploded View

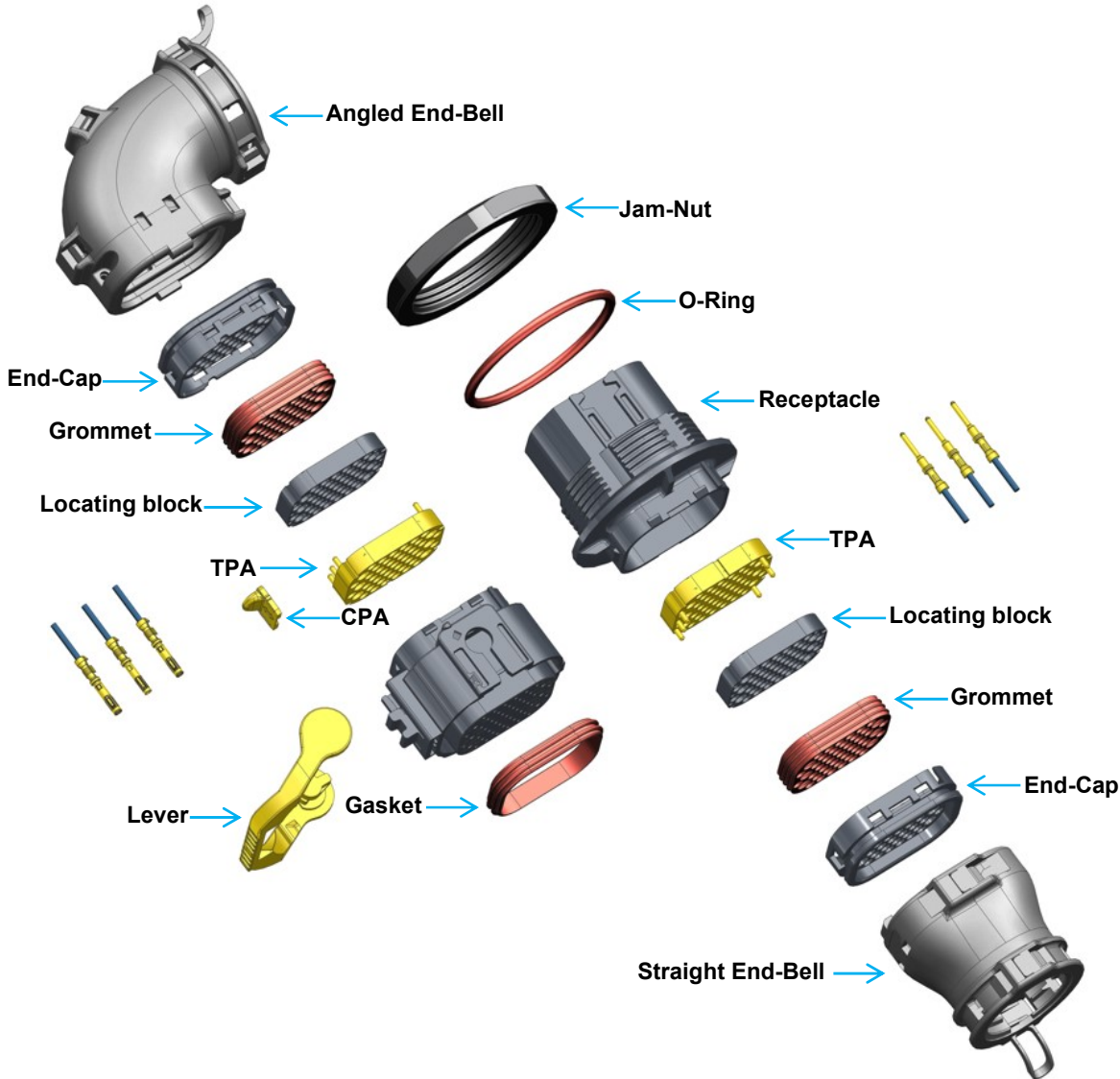
(一) Flange + Integral Grommet + Stamped Contacts



(二) Jam-Nut + Integral Grommet + Stamped Contacts



(E) Jam-Nut + Integral Grommet + Stamped Contacts (Clean Body)



Target Market

- **Heavy Vehicle**
 - Heavy Truck
 - Bus
- **Off-Road Vehicle& Equipment**
 - Construction
 - Mining
 - Agriculture
- **Industrial**
 - Factory equipment& Robotics
 - Outdoor Electronics

Applications

- Engine & Transmission Harnessing
- Lighting
- Control Units
- Signal Interfaces
- Cabin Harness& Accessories
- Vehicle Seat& Brand Logo
- Wipers/under hood electronics
- LCD displays & accessories
- Sensors (Electrical, Pressure, Temperature)



Heavy Truck



Bus



Tractor



Agriculture



Construction



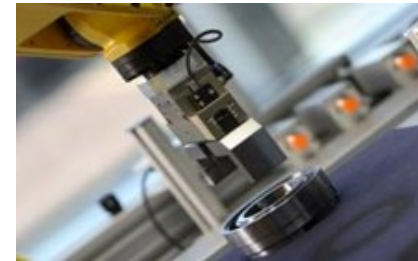
Off-Road



Outdoor Electronics

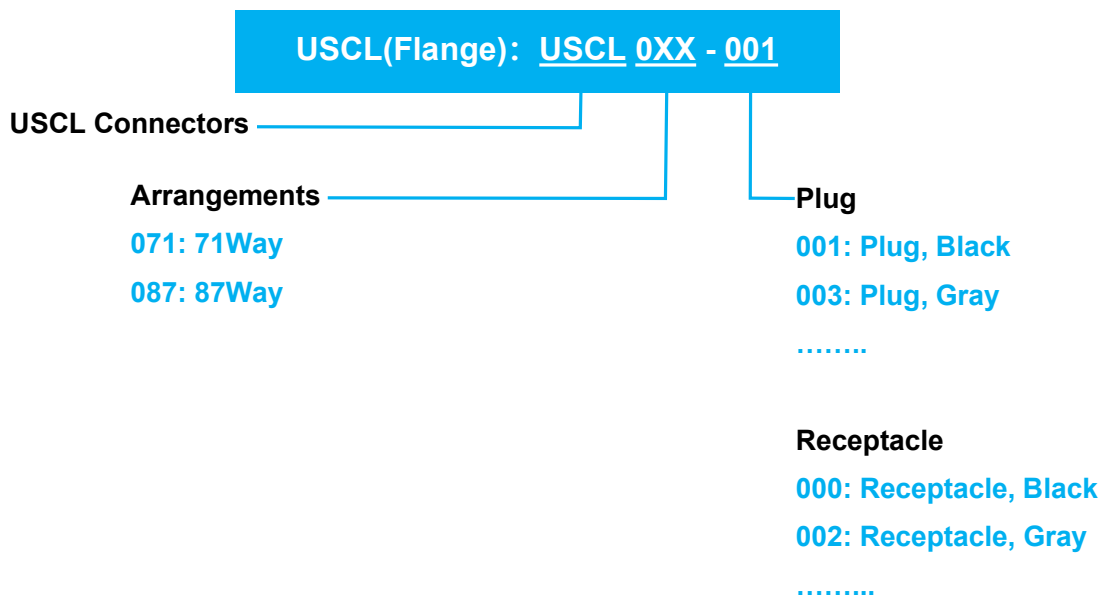
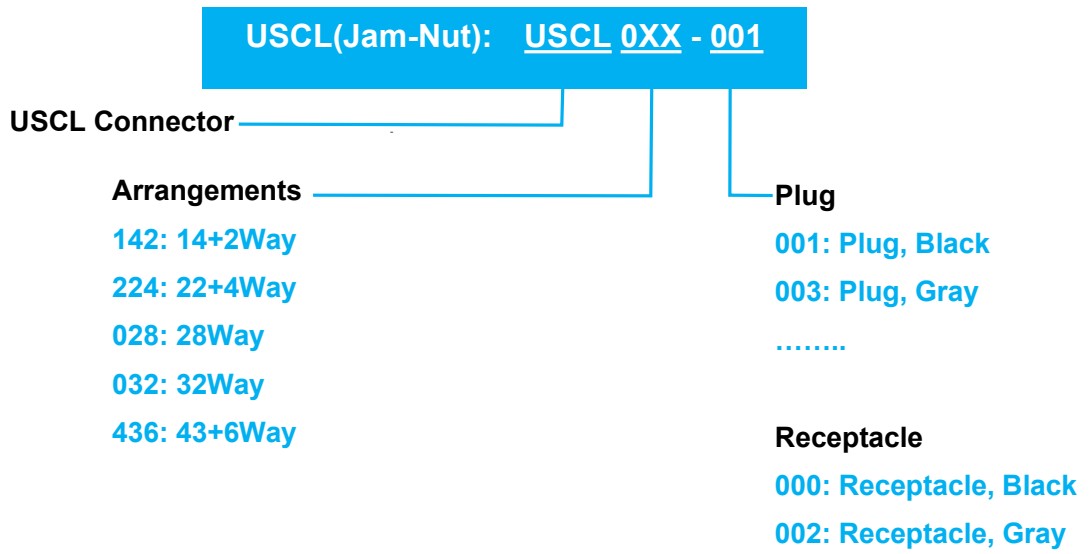


Robotics

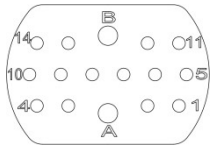


Factory Equipment

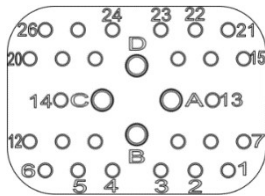
How To Order



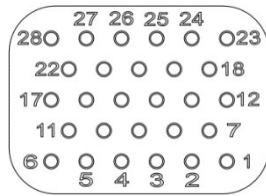
USCL Series Layouts



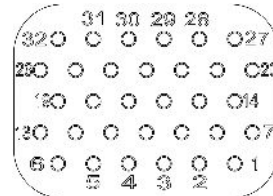
16芯=14*16#+2*12#



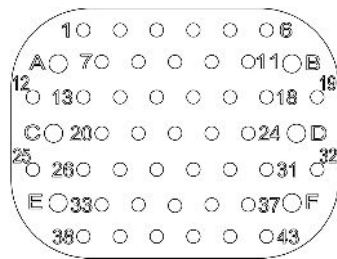
26芯=22*16#+4*12#



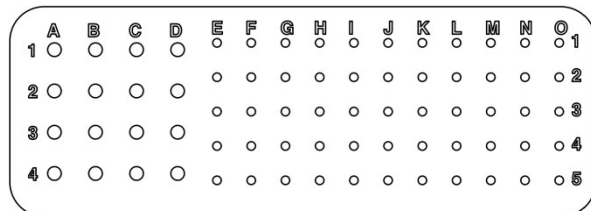
28芯=28*16#



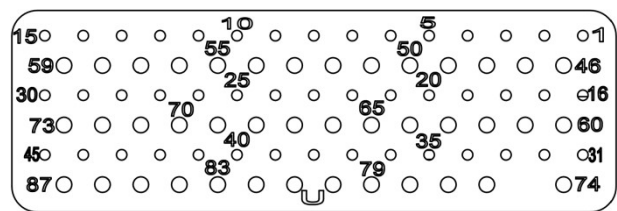
32芯=32*16#



49芯=43*20#+6*16#



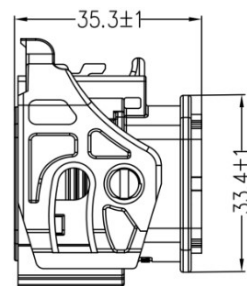
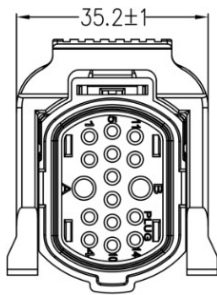
71芯=55*20#+16*16#



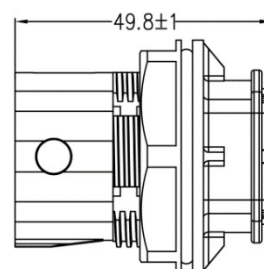
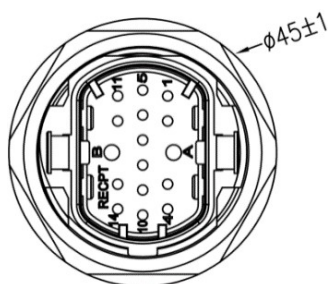
87芯=45*20#+42*16#

USCL, Jam-Nut Installation (1)

14+2 Way – Individual Cable Seals + Stamped Contacts



Connector	Color	P/N	Description
Plug	Black	USCL142-001	14+2Way, Plug, BK
	Gray	USCL142-003	14+2Way, Plug, GY



Connector	Color	P/N	Description
Receptacle	Black	USCL142-000	14+2Way, Receptacle, BK
	Gray	USCL142-002	14+2Way, Receptacle, GY

End-Bell	Color	P/N	Description
Straight End-Bell	Black	USCL142-111	Straight End-Bell, BK
	Gray	USCL142-113	Straight End-Bell, GY
Angled End-Bell	Black	USCL142-112	Angled End-Bell, BK
	Gray	USCL142-114	Angled End-Bell, GY



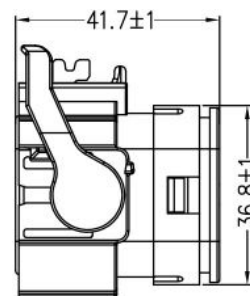
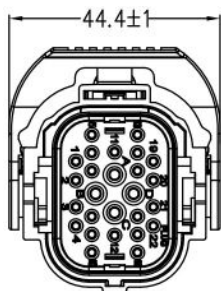
Key Feature

- ◆ 14+2 Way, Mixed Layout: signaling + power connectors
Current rating: Max. 13A&30A
- ◆ 2 color options: black or gray
- ◆ Individual cable plug sealing design, refer to page 20 for compatible sealing plugs
- ◆ Lever-Driven + CPA, Jam-Nut installation
- ◆ Accepts contact size 16#&size 12#, refer to page 16
- ◆ IP67, IP68, and IP6K9K, 48Kpa Air-tight (when mated)
- ◆ Flammability: UL94 V-0

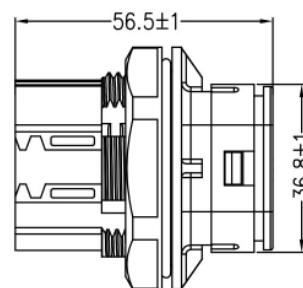
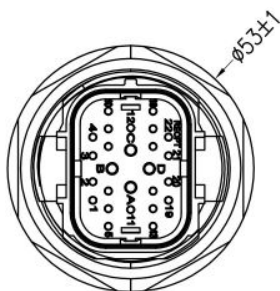


USCL, Jam-Nut Installation (2)

22+4 Way – Integral Grommet + Stamped Contacts



Connector	Color	P/N	Description
Plug	Black	USCL224-001	22+4 Way, Plug, BK
	Gray	USCL224-003	22+4 Way, Plug, GY



Connector	Color	P/N	Description
Receptacle	Black	USCL224-000	22+4way Receptacle, BK
	Gray	USCL224-002	22+4way Receptacle, GY

End-Bell	Color	P/N	Description
Straight End-Bell	Black	USCL028-111	Straight End-Bell, BK
	Gray	USCL028-113	Straight End-Bell, GY
Angled End-Bell	Black	USCL028-112	Angled End-Bell, BK
	Gray	USCL028-114	Angled End-Bell, GY



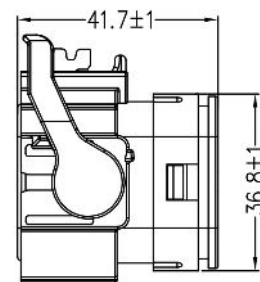
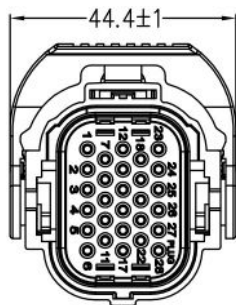
Key Feature

- ◆ 22+4 Way, Mixed Layout: signaling + power connectors, Current rating: Max. 13A&30A
- ◆ 2 color options: black or gray
- ◆ Integral grommet sealing design
- ◆ Lever-Driven + CPA, Jam-Nut installation
- ◆ Accepts contact size 16#&size 12#, refer to page 17
- ◆ IP67, IP68, and IP6K9K, 48Kpa Air-tight (when mated)
- ◆ Flammability: UL94 V-0

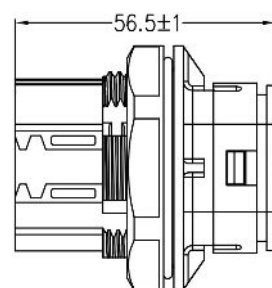
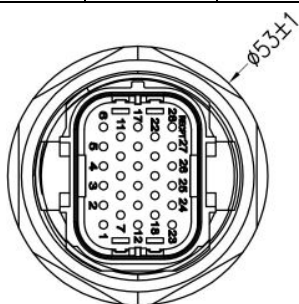


USCL, Jam-Nut Installation (3)

28 Way – Integral Grommet + Stamped Contacts



Connector	Color	P/N	Description
Plug	Black	USCL028-001	28 Way, Plug, BK
	Gray	USCL028-003	28 Way, Plug, GY



Connector	Color	P/N	Description
Receptacle	Black	USCL028-000	28 Way Receptacle, BK
	Gray	USCL028-002	28 Way Receptacle, GY

End-Bell	Color	P/N	Description
Straight End-Bell	Black	USCL028-111	Straight End-Bell, BK
	Gray	USCL028-113	Straight End-Bell, GY
Angled End-Bell	Black	USCL028-112	Angled End-Bell, BK
	Gray	USCL028-114	Angled End-Bell, GY



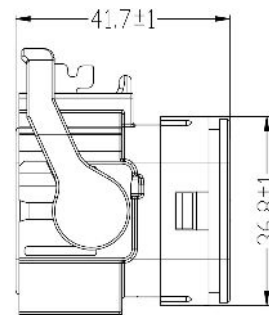
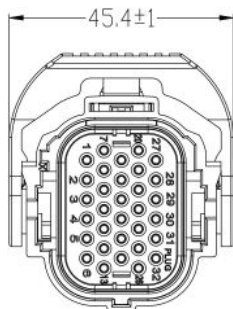
Key Feature

- ◆ 28 Way signaling connectors, Current rating: Max.13A
- ◆ 2 color options: black or gray
- ◆ Integral grommet sealing design
- ◆ Lever-Driven + CPA, Jam-Nut installation
- ◆ Accepts contact size 16#, refer to page 17
- ◆ IP67, IP68, and IP6K9K, 48Kpa Air-tight (when mated)
- ◆ Flammability: UL94 V-0

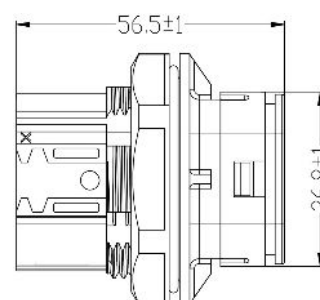
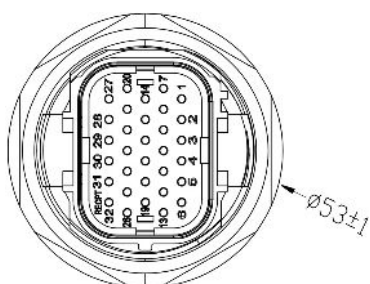


USCL, Jam-Nut Installation (4)

32 Way – Integral Grommet + Stamped Contacts

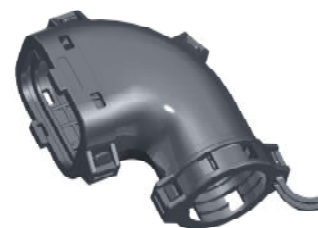


Connector	Color	P/N	Description
Plug	Black	USCL032-001	32 Way, Plug, BK
	Gray	USCL032-003	32 Way, Plug, GY



Connector	Color	P/N	Description
Receptacle	Black	USCL032-000	32 Way Receptacle, BK
	Gray	USCL032-002	32 Way Receptacle, GY

End-Bell	Color	P/N	Description
Straight End-Bell	Black	USCL028-111	Straight End-Bell, BK
	Gray	USCL028-113	Straight End-Bell, GY
Angled End-Bell	Black	USCL028-112	Angled End-Bell, BK
	Gray	USCL028-114	Angled End-Bell, GY



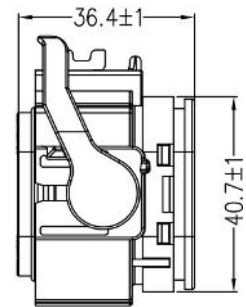
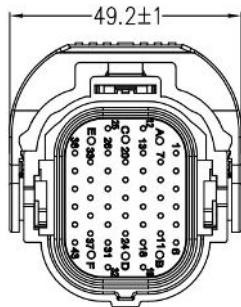
Key Feature

- ◆ 32 Way signaling connectors, Current rating: Max.13A
- ◆ 2 color options: black or gray
- ◆ Integral grommet sealing design
- ◆ Lever-Driven + CPA, Jam-Nut installation
- ◆ Accepts contact size 16#, refer to page 17
- ◆ IP67, IP68, and IP6K9K, 48Kpa Air-tight (when mated)
- ◆ Flammability: UL94 V-0

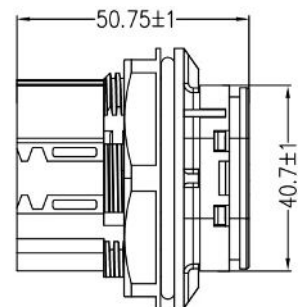
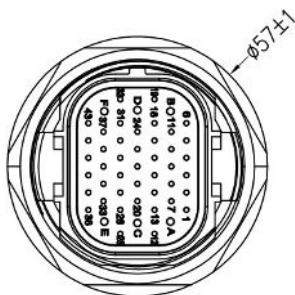


USCL, Jam-Nut Installation (5)

49 Way – Integral Grommet + Stamped Contacts (clean body)



Connector	Color	P/N	Description
Plug	Black	USCL436-001	43+6 Way, Plug, BK
	Gray	USCL436-003	43+6 Way, Plug, GY



Connector	Color	P/N	Description
Receptacle	Black	USCL436-000	43+6 Way Receptacle, BK
	Gray	USCL436-002	43+6 Way Receptacle, GY

End-Bell	Color	P/N	Description
Straight End-Bell	Black	USCL436-111	Straight End-Bell, BK
	Gray	USCL436-113	Straight End-Bell, GY
Angled End-Bell	Black	USCL436-112	Angled End-Bell, BK
	Gray	USCL436-114	Angled End-Bell, GY



Key Feature

- ◆ 43+6 Way, Mixed Layout: signaling + power connectors, Current rating: Max.10A&13A
- ◆ 2 color options: black or gray
- ◆ Integral grommet sealing design
- ◆ Lever-Driven + CPA, Jam-Nut installation
- ◆ Accepts contact size20#&size16# (Clean body), refer to page 18
- ◆ IP67, IP68, and IP6K9K, 48Kpa Air-tight (when mated)
- ◆ Flammability: UL94 V-0

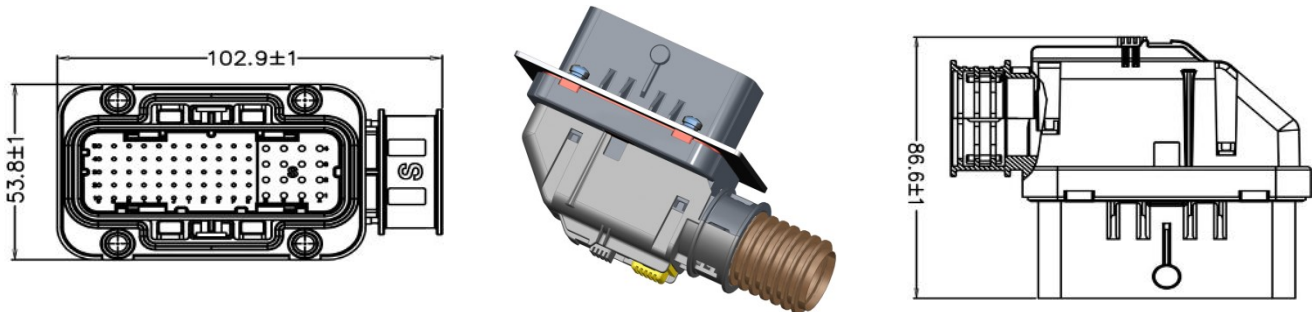


USCL, Flange Installation (1)

71 Way – Integral Grommet + Stamped Contacts



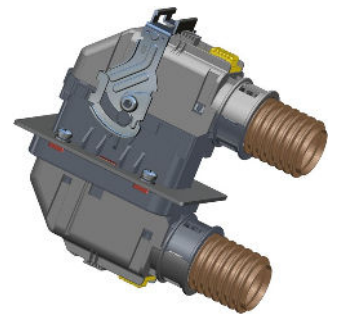
Connector	Color	P/N	Description
Plug	Black	USCL071-001	55+16 Way, Plug, BK
	Gray	USCL071-013	55+16 Way, Plug, GY



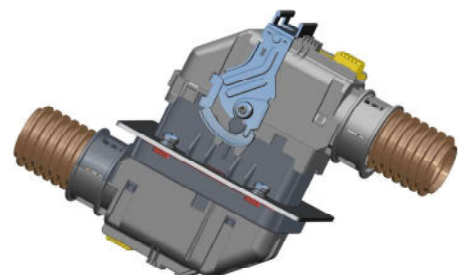
Connector	Color	P/N	Style	Description
Receptacle	Black	USCL071-002	S Style	55+16 Way Receptacle, BK
	Gray	USCL071-014	S Style	55+16 Way Receptacle, GY
	Black	USCL071-004	U Style	55+16 Way Receptacle, BK
	Gray	USCL071-016	U Style	55+16 Way Receptacle, GY

Key Feature

- ◆ 71 Way, Mixed Layout: signaling + power connectors, Current rating: Max. 10A&13A
- ◆ 2 color options: black or gray
- ◆ Integral grommet sealing design
- ◆ Lever-Driven + CPA, flange installation
- ◆ Accepts contact size 20#&size 16#, refer to page 17
- ◆ IP67, IP68, and IP6K9K, 48Kpa Air-tight (when mated)
- ◆ Flammability: UL94 V-0

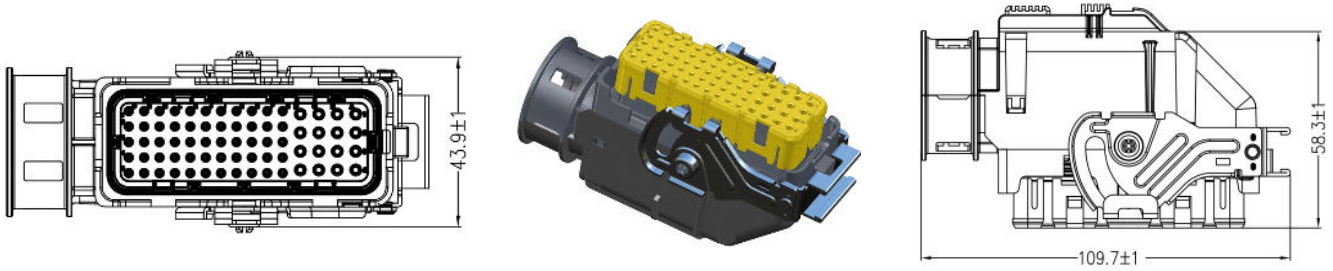


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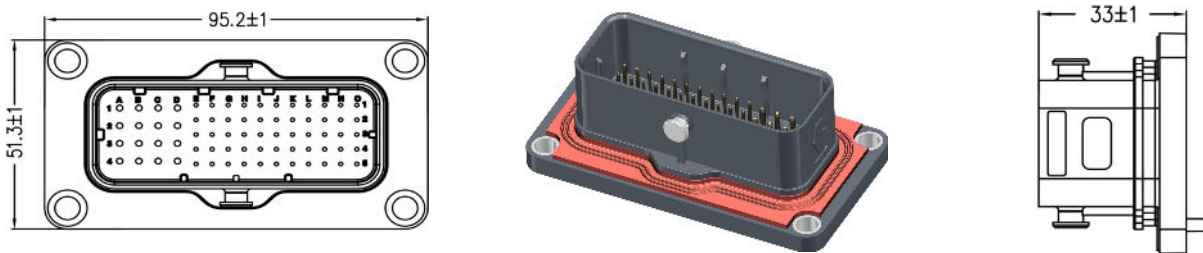


S Style

USCL, Flange Installation (2) 71 Way (Soldering) – Integral Grommet + Stamped Contacts



Connector	Color	P/N	Description
Plug	Black	USCL071-001	55+16 Way, Plug, BK
	Gray	USCL071-013	55+16 Way, Plug, GY



Connector	Color	P/N	Description
Receptacle	Black	USCL071-000	55+16 Way Receptacle, BK
	Gray	USCL071-018	55+16 Way Receptacle, GY

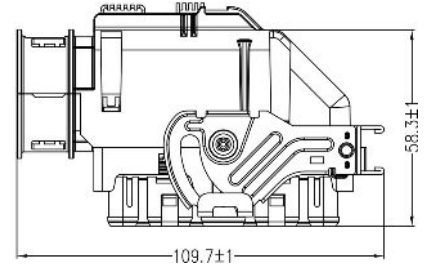
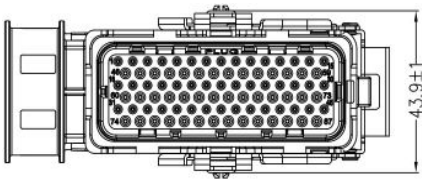
Key Feature

- ◆ 71 Way, soldering receptacles, Mixed Layout: signaling + power connectors, Current rating: Max.10A&13A
- ◆ 2 color options: black or gray
- ◆ Integral grommet sealing design
- ◆ Lever-Driven + CPA, flange installation
- ◆ Accepts contact size20#&size16#, refer to page 17
- ◆ IP67, IP68, and IP6K9K, 48Kpa Air-tight (when mated)
- ◆ Flammability: UL94 V-0

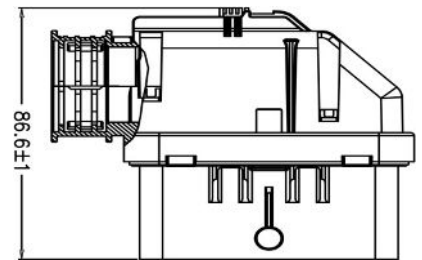
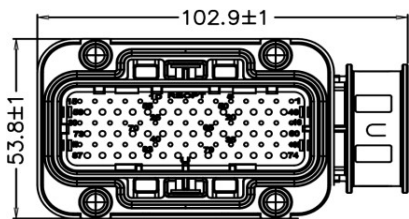


USCL, Flange Installation (3)

87 Way – Integral Grommet + Stamped Contacts

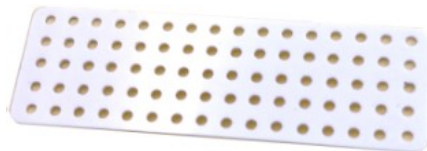


Connector	Color	P/N	Description
Plug	Black	USCL087-001	87 Way, Plug, BK
	Gray	USCL087-003	87 Way, Plug, GY



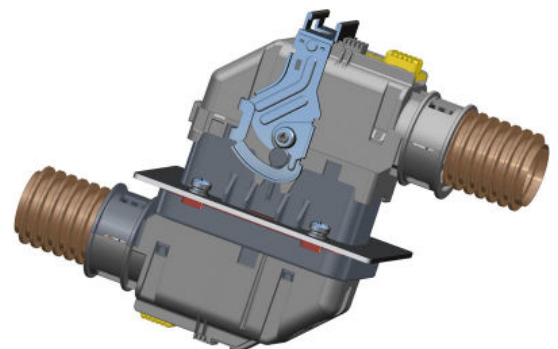
Connector	Color	P/N	Style	Description
Receptacle	Black	USCL087-000	U Style	87 Way Receptacles Flange bolts unsealed
	Gray	USCL087-006	U Style	
	Black	USCL087-002	S Style	
	Gray	USCL087-008	S Style	
	Black	USCL087-004	U Style	87 Way Receptacles Flange bolts sealed
	Gray	USCL087-012	U Style	
	Black	USCL087-010	S Style	
	Gray	USCL087-014	S Style	

Guide Disc	Color	P/N	Description
Receptacle Disc	White	USCL087-200	87 Way Guide Disc



Key Feature

- ◆ 87 Way, Mixed Layout: signaling + power connectors
Current rating: Max. 10A&13A
- ◆ 2 color options: black or gray
- ◆ Integral grommet sealing design
- ◆ Lever-Driven + CPA, flange installation
- ◆ Accepts contact size 20#&size 16#, refer to page 17
- ◆ IP67, IP68, and IP6K9K, 48Kpa Air-tight (when mated)
- ◆ Flammability: UL94 V-0



Specifications and dimensions subject to change

Stamped Contact System (1)

Contact Resistances

Cable Range AWG (mm ²)	Current(A)	Voltage Drop (mV Max.)
12 (4.0)	30	100
14 (2.5)	25	100
16 (1.5)	13	100
18 (1.0)	10	100
20 (0.5)	7.5	100

Contact Features

- Size 16# signal contacts, current rate: Max 13A
 - Size 12# power contacts, current rate: Max 30A
 - Contact clip with 3prongs, used with individual seals
 - Nickel and gold flash plating options
 - Contact durability \geq 200 times
 - Cable ranges:
- Signal contacts: 22AWG (0.35mm²) to 14AWG(2.5mm²)
 Power contacts: 16AWG (1.5mm²) to 12AWG(4.0mm²)

Stamped & Plated Contacts (crimp with cable seals)

Size 16#, Cable-Range		Type	Nickel Plated (2000/reel)	Gold Plated (2000/reel)	Cable Φ OD
mm ²	AWG				
0.35 - 0.50	22 - 20 AWG	Pin	USCT000-055	USCT000-255	Φ 1.20-1.60mm
0.35 - 0.50	22 - 20 AWG	Socket	USCT000-054	USCT000-254	Φ 1.20-1.60mm
0.75 - 1.50	18 - 16 AWG	Pin	USCT000-051	USCT000-251	Φ 1.40-2.40mm
0.75 - 1.50	18 - 16 AWG	Socket	USCT000-050	USCT000-250	Φ 1.40-2.40mm
1.50 - 2.50	16 - 14 AWG	Pin	USCT000-053	USCT000-253	< Φ 2.40mm (ultrathin cable) or customized connectors
1.50 - 2.50	16 - 14 AWG	Socket	USCT000-052	USCT000-252	
Size 12#, Cable-Range		Type	Tin Plated (3000/reel)	Gold Plated (3000/reel)	Cable Φ OD
mm ²	AWG				
1.5 - 2.50	16 - 14 AWG	Pin	USCT000-087	USCT000-287	Φ 2.20-3.00mm
1.5 - 2.50	16 - 14 AWG	Socket	USCT000-088	USCT000-288	Φ 2.20-3.00mm
4.00	12 AWG	Pin	USCT000-095	USCT000-295	Φ 3.40-3.70mm
4.00	12 AWG	Socket	USCT000-096	USCT000-296	Φ 3.40-3.70mm



Size 12#



Size 16#

Stamped Contact System (2)

Contact Resistances

Cable Range AWG (mm ²)	Current(A)	Voltage Drop (mV Max.)
12 (4.00)	30	100
14 (2.50)	25	100
16 (1.50)	13	100
18 (1.00)	10	100
20 (0.50)	7.5	100
22 (0.35)	5.0	100

Contact Features

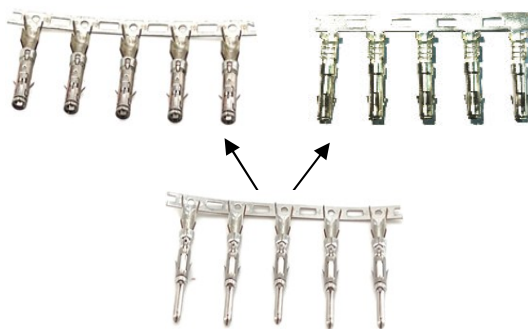
- Size20# signal contacts, current rate: Max 10A
- Size16# signal contacts, current rate: Max 13A
- Size12# power contacts, current rate: Max 30A
- Contact clip with 3prongs, used with integral grommet
- Nickel and gold flash plating options
- Contact durability \geq 200 times
- Cable ranges:
Signal contacts: 22AWG (0.35mm²) to 14AWG(2.5mm²)
Power contacts: 14AWG (2.5mm²) to 12AWG(4.0mm²)

Stamped & Plated Contacts (Compatible with integral grommets)

Size 20#, Cable-Range		Type	Nickel Plated (3000/reel)	Gold Plated (3000/reel)	Cable Φ OD
mm ²	AWG				
0.35 - 0.75	22 - 18 AWG	Pin	USCT000-030	USCT000-930	Φ 1.30-2.20mm
0.35 - 0.75	22 - 18 AWG	Socket	USCT000-020	USCT000-920	Φ 1.30-2.20mm
0.75 - 1.00	18 - 17 AWG	Pin	USCT000-042	USCT000-942	Φ 1.30-2.20mm
0.75 - 1.00	18 - 17 AWG	Socket	USCT000-043	USCT000-943	Φ 1.30-2.20mm
Size 16#, Cable-Range		Type	Nickel Plated (3000/reel)	Gold Plated (3000/reel)	Cable Φ OD
mm ²	AWG				
0.35 - 0.50	22 - 20 AWG	Pin	USCT000-016	USCT000-216	Φ 1.50-2.70mm
0.35 - 0.50	22 - 20 AWG	Socket	USCT000-015	USCT000-913	Φ 1.50-2.70mm
0.35 - 0.50	22 - 20 AWG	Socket	USCT000-502	USCT000-902	Φ 1.50-2.70mm*
0.75 - 1.50	18 - 16 AWG	Pin	USCT000-013	USCT000-213	Φ 1.50-2.70mm
0.75 - 1.50	18 - 16 AWG	Socket	USCT000-012	USCT000-932	Φ 1.50-2.70mm
0.75 - 1.50	18 - 16 AWG	Socket	USCT000-504	USCT000-904	Φ 1.50-2.70mm*
1.50 - 2.50	16 - 14 AWG	Pin	USCT000-011	USCT000-211	Φ 1.50-2.70mm
1.50 - 2.50	16 - 14 AWG	Socket	USCT000-010	USCT000-934	Φ 1.50-2.70mm
1.50 - 2.50	16 - 14 AWG	Socket	USCT000-506	USCT000-906	Φ 1.50-2.70mm*
Size 12#, Cable-Range		Type	Tin Plated (3000/reel)	Gold Plated (3000/reel)	Cable Φ OD
mm ²	AWG				
1.5 - 2.50	14 AWG	Pin	USCT000-089	USCT000-289	Φ 2.41-3.81mm
1.5 - 2.50	14 AWG	Socket	USCT000-090	USCT000-290	Φ 2.41-3.81mm
2.5 - 4.00	12 AWG	Pin	USCT000-093	USCT000-293	Φ 2.41-3.81mm
2.5 - 4.00	12 AWG	Socket	USCT000-094	USCT000-294	Φ 2.41-3.81mm



Size 12#



Size 16#



Size 20#

*Specified socket contacts for 71&87 Way Plug connectors;

Specifications and dimensions subject to change

Stamped Contact System (2)

contact Resistances

Cable Range AWG (mm ²)	Current(A)	Voltage Drop (mV Max.)
14 (2.50)	25	100
16 (1.50)	13	100
18 (1.00)	10	100
20 (0.50)	7.5	100
22 (0.35)	5.0	100

Contact Features

- Size20# signal contacts, current rate: Max 10A
- Size16# signal contacts, current rate: Max 13A
- Contact clip with 3prongs, used with integral grommet
- Nickel and gold flash plating options
- Contact durability \geq 200 times
- Cable ranges:
Signal contacts: 22AWG (0.35mm²) to 14AWG(2.5mm²)

Stamped & Plated Contacts (Clean Body, used with integral grommet)

Size 20#, Cable-Range		Type	Nickel Plated (3000/reel)	Gold Plated (3000/reel)	Cable Φ OD
mm ²	AWG				
0.35 - 0.75	22- 18 AWG	Pin	USCT000-071	USCT000-271	Φ 1.30-2.20mm
0.35 - 0.75	22- 18 AWG	Socket	USCT000-072	USCT000-272	Φ 1.30-2.20mm
0.75 - 1.50	18- 16 AWG	Pin	USCT000-073	USCT000-273	Φ 1.30-2.20mm
0.75 - 1.50	18- 16 AWG	Socket	USCT000-074	USCT000-274	Φ 1.30-2.20mm
Size 16#, Cable-Range		Type	Nickel Plated (3000/reel)	Gold Plated (3000/reel)	Cable Φ OD
mm ²	AWG				
0.35 - 0.50	22- 20 AWG	Pin	USCT000-085	USCT000-285	Φ 1.50-2.70mm
0.35 - 0.50	22- 20 AWG	Socket	USCT000-084	USCT000-284	Φ 1.50-2.70mm
0.75 - 1.50	18- 16 AWG	Pin	USCT000-077	USCT000-277	Φ 1.50-2.70mm
0.75 - 1.50	18- 16 AWG	Socket	USCT000-076	USCT000-276	Φ 1.50-2.70mm
1.50 - 2.50	16- 14 AWG	Pin	USCT000-079	USCT000-279	Φ 1.50-2.70mm
1.50 - 2.50	16- 14 AWG	Socket	USCT000-078	USCT000-278	Φ 1.50-2.70mm



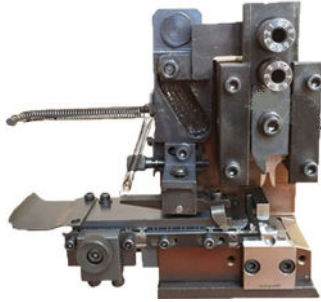
Size 16#



Size 20#



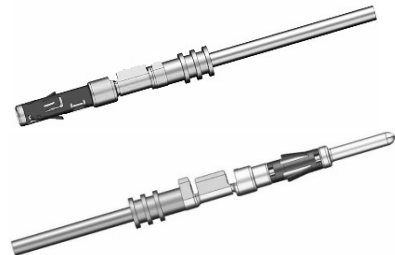
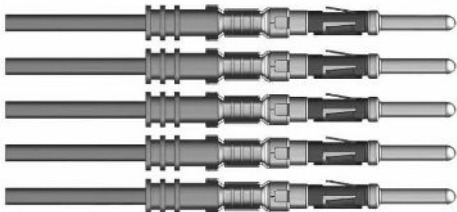
Contacts Crimp Tool



Cable Size/AWG (mm ²)	Tool No.	Description
12# (4.0)	T-0307	Automatic crimp tool
14# (2.5)	T-0306	Automatic crimp tool
16# (1.5)	T-0305	Automatic crimp tool
18#(1.0)	T-0304	Automatic crimp tool
20# (0.5)	T-0303	Automatic crimp tool



Cable Size/AWG (mm ²)	Tool No.	Description
12# (4.0)	T-1307	Hand crimp tool
14# (2.5)	T-1306	Hand crimp tool
16# (1.5)	T-1305	Hand crimp tool
18#(1.0)	T-1304	Hand crimp tool
20# (0.5)	T-1303	Hand crimp tool



Contact Extrusion Tool



Contact Type	Tool No.	Description
Signal Pin(Φ1.0mm)	T-00207	Tool for Mini contacts
Signal Pin (Φ1.6mm)	T-00301	Tool for STD contacts
Power Pin(Φ2.5mm)	T-00206	Tool for Power contacts

Cable Seal & Blind Plugs

USCL connector adopts individual sealing plugs to realize excellent waterproof function, Wire Seals are required for connectors without an integrated rear seal to maintain an environmental seal.

Size 16# contacts accept below cable seals:

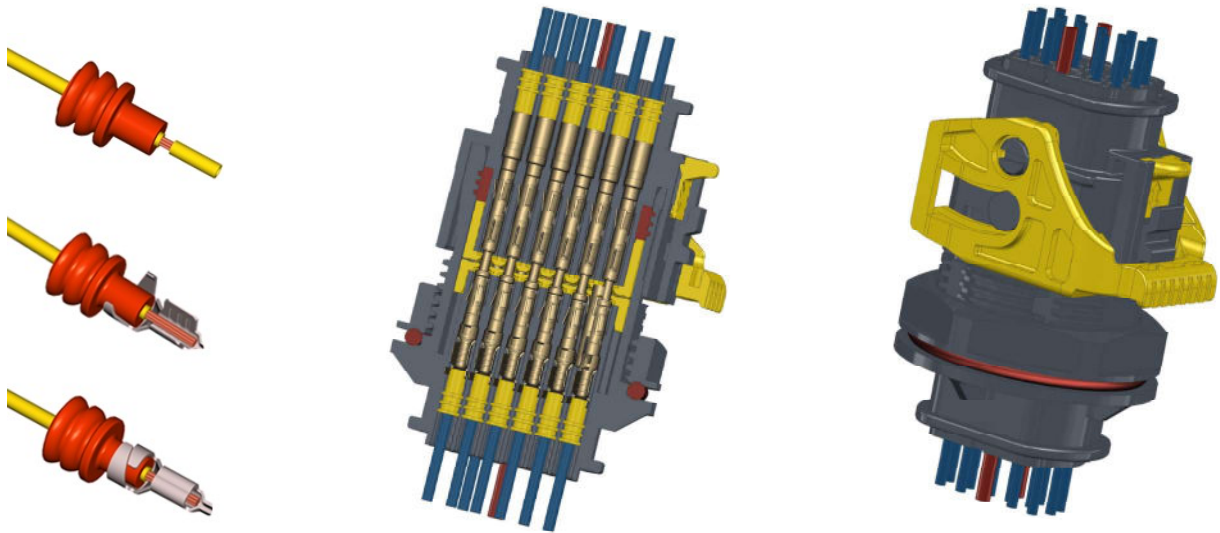


Acceptable cables (OD)	P/Ns	Color	Type
Φ1.2mm-Φ1.6mm	USCM49711	Red	Cable Seal
Φ1.4mm-Φ1.9mm	USCM35301	Gray	Cable Seal
Φ1.9mm-Φ2.4mm	USCM49721	Yellow	Cable Seal
N/A	USCM35311	White	Blind plug



Size 12# contacts accept below cable seals:

Acceptable cables (OD)	P/Ns	Color	Type
Φ1.2mm-Φ2.1mm	USCM89041	Light-Blue	Cable Seal
Φ2.2mm-Φ3.0mm	USCM89051	White	Cable Seal
Φ3.1mm-Φ3.7mm	USCM89061	Blue	Cable Seal
N/A	USCM89221	White	Blind plug



Dust-Cap

USCM dust-cap provide an environmental sealing and are used to protect the connector interface when the plug and receptacle are not mated.

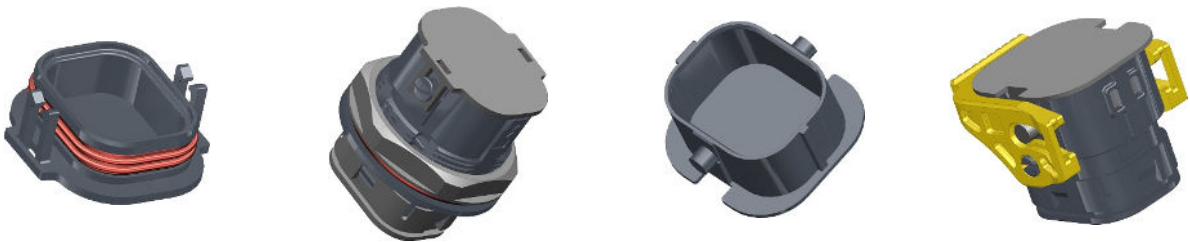


Dust-Cap for the receptacles (dustproof+waterproof,IPX5)

Compatible Connectors	P/N	Color	Type
14+2 Way Receptacles	DC-142	Black	Rubber Cover
22+4/28 Way Receptacles	DC-028	Black	Rubber Cover
32/43+6 Way Receptacles	DC-032	Black	Rubber Cover
71/87 Way Receptacles	DC-071	Black	Rubber Cover
14+2 Way Receptacles	DC-142L	Black	Rubber Cover + Tie
22+4/28 Way Receptacles	DC-028L	Black	Rubber Cover + Tie
32/43+6 Way Receptacles	DC-032L	Black	Rubber Cover + Tie
71/87 Way Receptacles	DC-071L	Black	Rubber Cover + Tie

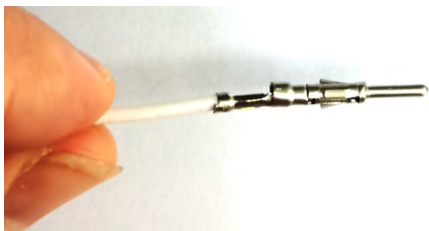
Dust-Cap for the receptacles (dustproof + waterproof, IPX67)

Compatible Connectors	P/N	Color	Type
14+2 Way Receptacles	DC-142R	Pure	Plastic Cover
22+4/28 Way Receptacles	DC-028R	Pure	Plastic Cover
32/43+6 Way Receptacles	DC-052R	Pure	Plastic Cover
71/87 Way Receptacles	DC-071R	Pure	Plastic Cover
14+2 Way Receptacles	DC-142P	Pure	Plastic Cover
22+4/28 Way Receptacles	DC-028P	Pure	Plastic Cover
32/43+6 Way Receptacles	DC-052P	Pure	Plastic Cover
71/87 Way Receptacles	DC-071P	Pure	Plastic Cover



Operating Instructions

Contact insertion and extrusion



Insertion: Step-1#:

Grasp crimped contact approximately 1.5~2.0cm behind the contact



Insertion: Step-3#:

Push contact straight into connector until a click is felt. A slight tug will confirm that it is properly locked in place



Extrusion: Step-2#

Remove the End-Cap firstly with a tool. Pry off the End-Cap from the housing hooks one by one, do not destroy the components



Extrusion: Step-4#

Insert the tool into the contact cavity from the mating direction, push the tube fully into the cavity



Insertion: Step-2#:

Make sure the contact is in the correct orientation. Insert the contacts vertically into the connector holes



Extrusion: Step-1#

Using a specialized tool (Tweezers or pliers with barbs) remove out the locating cover



Extrusion: Step-3#

After the End-Cap removed, draw it back to the appropriate position, convenient for contact extrusion



Extrusion: Step-5#

Depress the plunger to eject the contact, the contact can be removed from the back of the connector

Amphenol

Amphenol is one of the world's largest designers, manufacturers and marketers of connectors and interconnect systems, antennas solutions, sensors and high-speed cable. Our connector and connector system solutions include fiber optic interconnect, harsh environment interconnect, high-speed interconnect, power interconnect, power distribution and busbars and radio frequency (RF) interconnect products. Our sensors and sensor-based product solutions include gas and moisture sensors, level sensors, position sensor, pressure sensors, temperature sensors and vibration sensors. Our value-added cable assemblies include cable assemblies and harnesses, cable management products and backplane interconnect systems. Our cable solutions include coaxial cable, power cable and specialty cable. We also provide combiner/splitter products, flexible and rigid printed circuit boards, hinges and molded parts.

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