

Overview



SOURIAU
Connection Technology

COMPANY PROFILE

SOURIAU is a world-leading supplier of high performance interconnect solutions for severe environments.

The company designs, manufactures and markets standard electrical, fiber optic connectors and complex interconnect systems. SOURIAU was established in 1917 and has the industrial, aeronautical, defense and space activities of SOURIAU, JUPITER and BURNDY.

The dedicated end markets for the company's products are aerospace, defense, railways and industrial markets. The group's products are engineered and manufactured in USA and Dominican Republic, Europe and Morocco, India and Japan, and sold by a worldwide sales and marketing organization. The group employs 1400 people all over the world.

Laboratory & test center

SOURIAU has its own independent test center recognized by many National Standard Laboratories.

This center carries-out validation or qualification programs complying with : MIL-Standard – CECC – GSFC – VDE – SCC – EN – CSA – UL –

The laboratory has the capabilities to perform testing in compliance with the above mentioned standards as follow : electrical, environmental, mechanical.

Design & Development

SOURIAU continues its strong commitment to invest in design and development to provide innovative solutions.

Our company is structured into cross functional teams of scientists, engineers and technicians working closely with customers to bring new products to market.

More than 6% of our sales are invested in new product development.

Quality Assurance

Quality is a key objective for SOURIAU focusing on :

Total customer satisfaction

The widespread application of a Quality Assurance System that spans all processes, is consistent throughout the company and meets the requirements ISO9001 / ISO14001 / MIL-STD790 / NATO AQAP110 / BOEING D1-9001 / AS-9100

Souriau reserves the right to make any engineering refinements, alterations or improvements deemed necessary on its products. The dimensions appearing in this catalogue are thus subject to change without notice. When dimensions are critical detailed drawings should be requested.

Page

• Overview

4

• Circular connectors

Circular overview	10
UTP - Full plastic circular connector	13
UTG - Plastic connector with metal coupling system	17
UTO - Metal circular connector	21
UTOW - Metal circular connector - high density	27
Shielded connectors... how to assemble	33
Mixed power signal versions etc...	35
Circular accessories for UTP - UTG - UTO - UTOW	41
MBG - Circular connector with quick mating feature.....	49

• Rectangular connectors

MSM - High performance cable connectors	55
MSO - High performance boardmount connectors	61
V.35 - DTE/DCE interface connectors	67
MSG – Low profile lever locking connectors	73
MB - Robust lever locking connectors	79
SMS – Qikmate cable and boardmount connectors	81
Mixed power signal versions etc...	97

• Contacts

RM/RC - Machined size 16 contacts	102
SM-M/SC-M - Stamped and formed size 16 contacts	106
RMDX/RCDX - Coax size 16 contacts	108
8012 - Fibre optic size 16 contacts	114
RM-W/RC-W + SM-W/SC-W size 20 contacts	116
8291 – Power contacts	118

• Accessories

Discrimination keys for size 16 connectors.....	120
---	-----

• Ruggedized TRIM TRIO connectors

UTV Series incl. backshells - contacts - tooling	122
--	-----

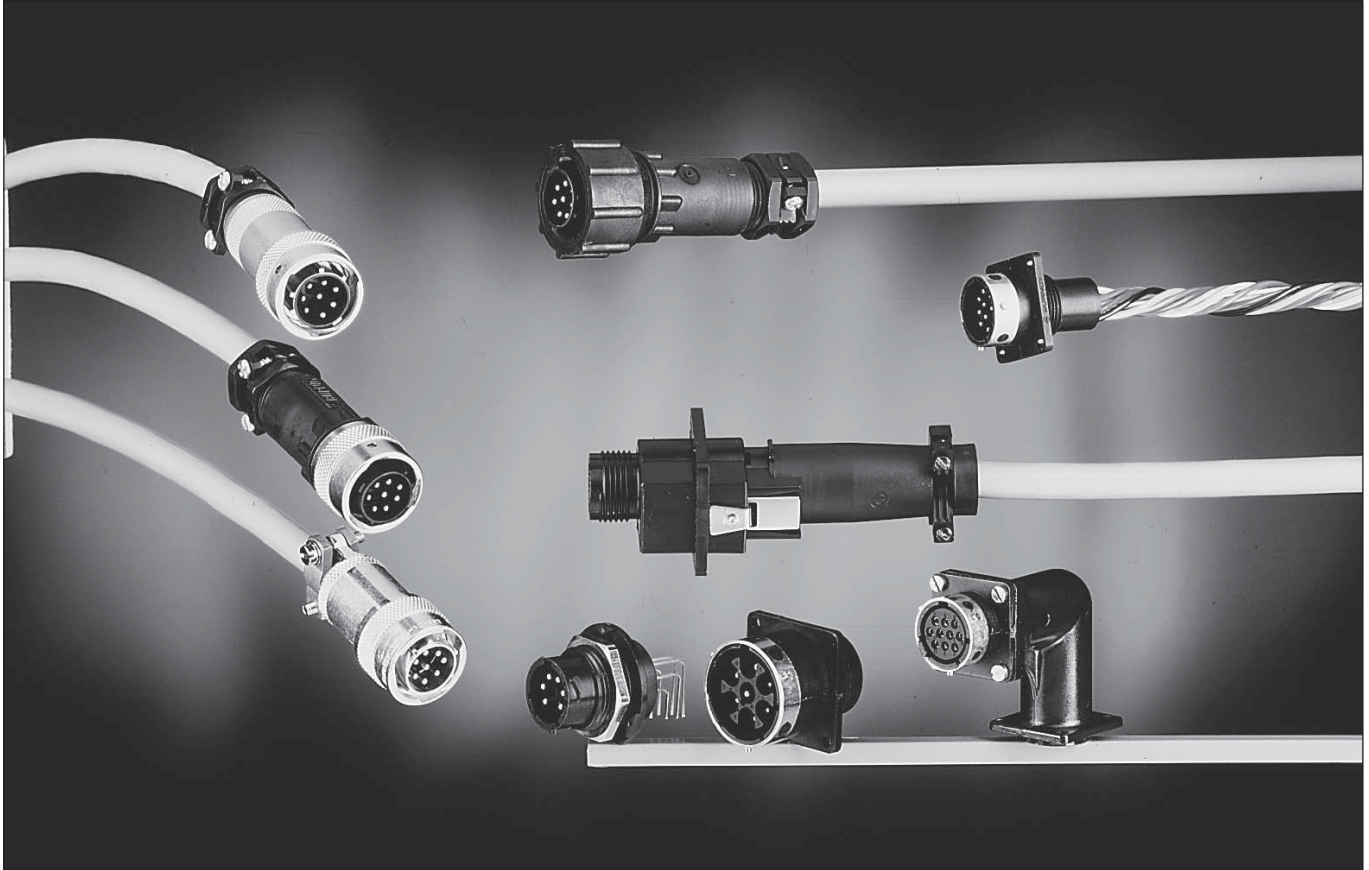
• Tooling

Crimp and extraction tooling	141
------------------------------------	-----

Circular



Overview Circular TRIM TRIO connectors



Circular TRIM TRIO connectors are a wide and versatile range that are offered in many options from low cost plastic to top class metal solutions.

This section gives an overview on available circular connectors for:

1. Bayonet connectors derived from MIL-C-26482 series 1 but using size 16 contacts (1.6mm).

- UTP - Full plastic version.
- UTG - Plastic connector with metal bayonet coupling system.
- UTO - Metal circular connector offering top class performance characteristics.

2. High density bayonet connectors using size 20 contacts (1.0mm).

- UTOW - Metal circular connector offering top class performance characteristics.

3. Mixed power / signal connectors.

- A range of connectors with contact arrangements offered with a mix of signal and power contacts up to 44 A.

4. Push-pull connectors using size 16 contacts (1.6mm).

- MBG – Plastic connector with metal quick mating feature.

Circular - Overview



TRIM TRIO Insert arrangements and moulded-in contact identification

~ Viewed from front face of male connector ~

Shell size	Contact # 16 (Ø 1,6)	Contact # 20 (Ø 1,0)	VDE versions Mixed power / signal versions	
10	 10-4	 10-6	 10-3 VDE 3 x # 16 (Ø 1,6) Group C 250V	 10-3W3 3 x # 16 (Ø 1,6) 3 x # 20 (Ø 1,0)
12	 12-8	 12-10	 12-3 3 x # 12 (Ø 2,4)	
14	 14-12	 14-19	 14-8 4 x # 12 (Ø 2,4) 4 x # 16 (Ø 1,6)	
16	 16-19	 16-26		
18	 18-23	 18-32	 18-7 VDE Group C 380V 7 x # 16 (Ø 1,6)	 18-7 2 x # 12 (Ø 2,4) 5 x # 16 (Ø 1,6)

Circular - Overview



Shell size	Contact # 16 (Ø 1,6)	Contact # 20 (Ø 1,0)	VDE versions Mixed power / signal versions
20	20-28	20-41	20-20 VDE 20 x # 16 (Ø 1,6) Group C 660V
22	22-35	22-55	
24	24-48	24-61	24-7 7 x # 8 (Ø 3,6) 2 x # 16 (Ø 1,6)
	UTP UTG UT0 + Ethernet cat 5e UTOW		24-11 4 x # 8 (Ø 3,6) 7 x # 16 (Ø 1,6)

Contact identification positions shown are for mating face of pin contact connectors and wire face of socket contact connectors.



Plastic connector with metal coupling system

Description

"UTG" Metalok Bantam plastic industrial circular connectors with metal coupling are a range of multiway connectors to provide the complete answer to the need for lightweight, robust circular connectors. They are available in 8 shell sizes, 11 insert arrangements **all intermateable, interchangeable and intermountable** with the TRIM TRIO "UTO" and "UTP" industrial connector families.



Features and benefits

- Available in 8 shell sizes and 11 insert arrangements incl. 3 VDE versions.
- Available in plug and receptacle versions for both male and female contacts.
- Connectors and accessories are moulded from highly durable glass-filled thermoplastic.
- Flammability rating: UL94-V0.
- Metal bayonet ring:
 - Metal wave spring loaded.
 - Locks with audible positive "click"
 - Assures 500 matings and unmatings
 - UL recognized file Nr.: E238675

Performance characteristics

Operating temperature:	-55°C to +125°C
Insulation resistance:	5000 MΩ min.
Test potential:	2000 VAC
Durability:	500 matings and unmatings.
Vibration resistance:	Per MIL-STD202 method 204
Thermal shock:	Per MIL-STD202 method 207
Degree of protection per DIN 40050: IP65 in mated condition. "H" version used with waterprotected backshells.	

Construction

Connector body	Glass filled thermoplast UL94-V0
	Colour: black
Coupling ring:	Nickel plated brass
Tri-lock pins:	Stainless steel
Coupling spring:	Spring steel

Contact accommodation

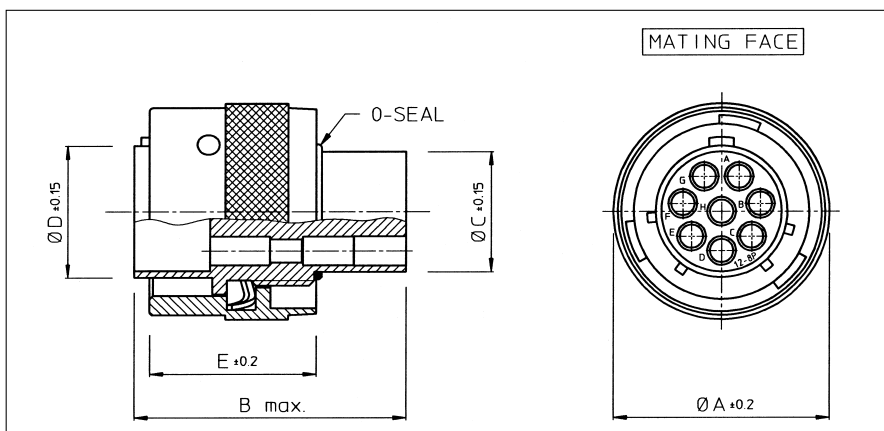
- "UTG" connectors accept TRIM TRIO size 16 removable snap-lock contacts (see contact section)
- Contacts to be ordered seperately.

How to order

Connector family :		UTG	0	14	12	P		H	--
		UTG	6	14	12	S	N		--
Body variation:	0 : Wall mounting receptacle 6 : Cable plug 1 : Free hanging receptacle								
Shell size:									
Insert arrangement:									
Type of contacts:	P : Pin contacts S : Socket contacts								
Plating	N : Nickelplated bayonet ring								
Application	No letter : Standard version H : Water protected version (only receptacle)								
Design variation	No letter : Moulded-in contact marking (standard version) Others : Specials versions								



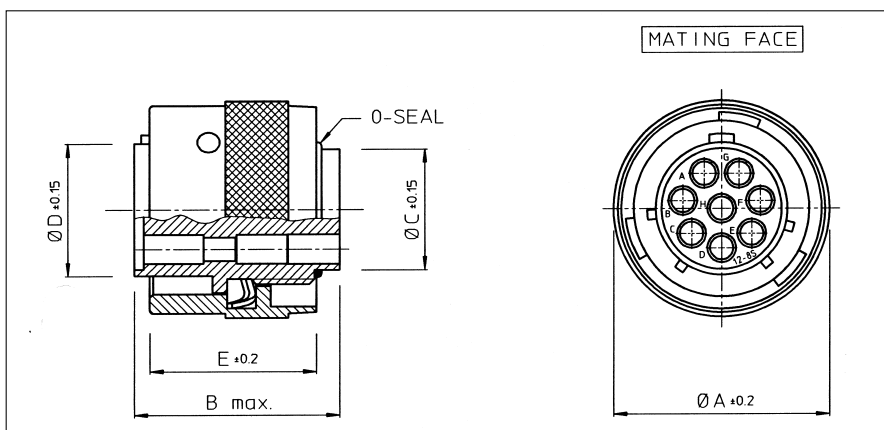
Cable plug for pin contacts (UTG6- - - -PN)



Part number	Shell size	Ø A ±0.2	B max.	Ø C ±0.15	Ø D ±0.15	E ±0.2
UTG6104PN / UTG6103PNVDE	10	21.6	31.8	10.9	12.2	19.1
UTG6128PN	12	24.8		13.8	15.1	
UTG61412PN	14	28.0		17.0	18.3	
UTG61619PN	16	31.2		19.9	21.5	
UTG61823PN / UTG6187PNVDEU	18	34.3	31.8 / 33.0	22.4	24.0	
UTG62028PN / UTG62020PN	20	37.5	31.8 / 35.3	25.6	27.2	
UTG62235PN	22	40.7	31.8	26.5	30.4	
UTG62448PN	24	43.9		31.7	33.5	

Part numbers are suitable for both standard and IP65 water protection versions.

Cable plug for socket contacts (UTG6- - - -SN)

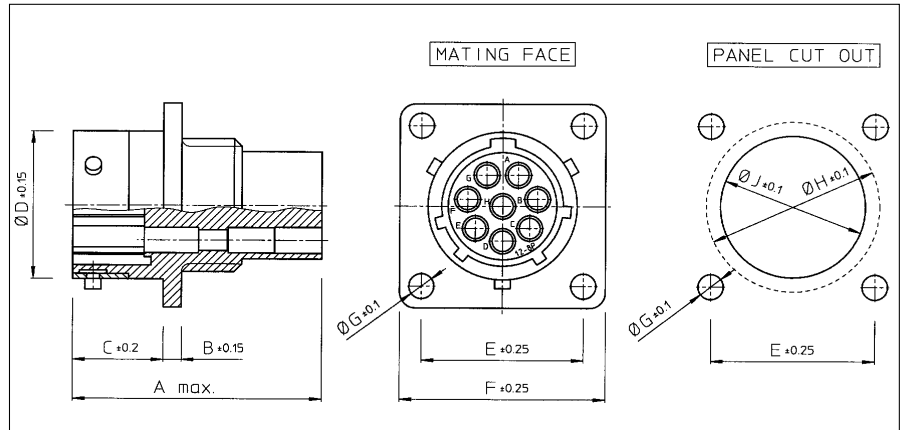


Part number	Shell size	Ø A ±0.2	B max.	Ø C ±0.15	Ø D ±0.15	E ±0.2
UTG6104SN / UTG6103SNVDE	10	21.6	23.9 / 26.75	10.9	12.2	19.1
UTG6128SN	12	24.8	23.9	13.8	15.1	
UTG61412SN	14	28.0		17.0	18.3	
UTG61619SN	16	31.2		19.9	21.5	
UTG61823SN / UTG6187SNVDEU	18	34.3	23.9 / 29.0	22.4	24.0	
UTG62028SN / UTG62020SN	20	37.5	24.9	25.6	27.2	
UTG62235SN	22	40.7		28.5	30.4	
UTG62448SN	24	43.9	26.2	31.7	33.5	

Part numbers are suitable for both standard and IP65 water protection versions.



Wall mounting receptacle for pin contacts (UTG0- - -P)

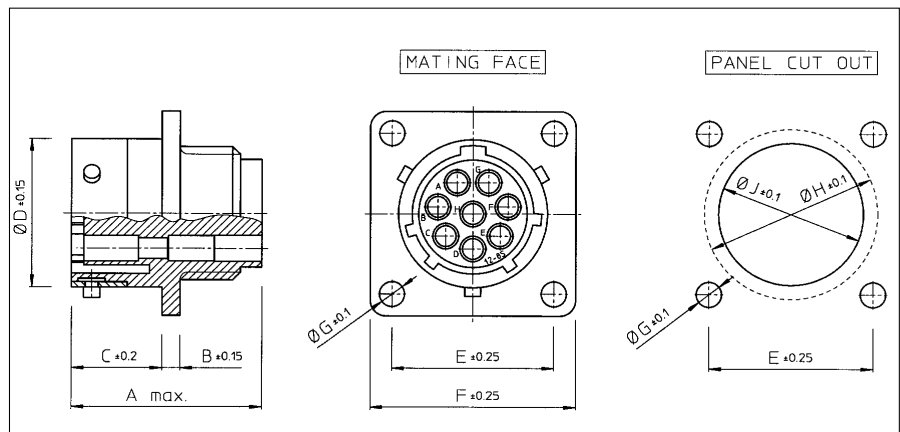


Part number	Shell size	A max.	B ±0.15	C ±0.2	Ø D ±0.15	E ±0.25	F -0.25	Ø G ±0.1	Ø H ±0.1	Ø J ±0.1
UTG0104P / UTG0103PVDE	10	31.7	2.3	11.3	15.0	18.3	23.8	3.2	17.3	15.1
UTG0128P	12				19.0	20.6	26.2		21.8	18.2
UTG01412P	14				22.2	23.0	28.6		25.0	21.4
UTG01619P	16				25.3	24.6	31.0		28.1	24.6
UTG01823P / UTG0187PVDEU	18	31.7/34.0	2.5	11.3/17.9	28.5	27.0	33.3	3.9	31.3	27.8
UTG02028P / UTG02020P	20	33.3/34.3		14.5	31.7	29.4	36.5		34.5	30.9
UTG02235P	22	33.3	3.5	15.3	34.9	31.8	39.7		37.7	34.1
UTG02448P	24				38.0	34.9	42.9	40.9	37.3	

For IP65 waterprotected version add "H" behind "P" e.g. UTG01412PH

A square flange sealing has to be ordered separately to guarantee a sealing with the equipment. Refer to "Circular accessories" section (UTFD-).

Wall mounting receptacle for socket contacts (UTG0- - -S)



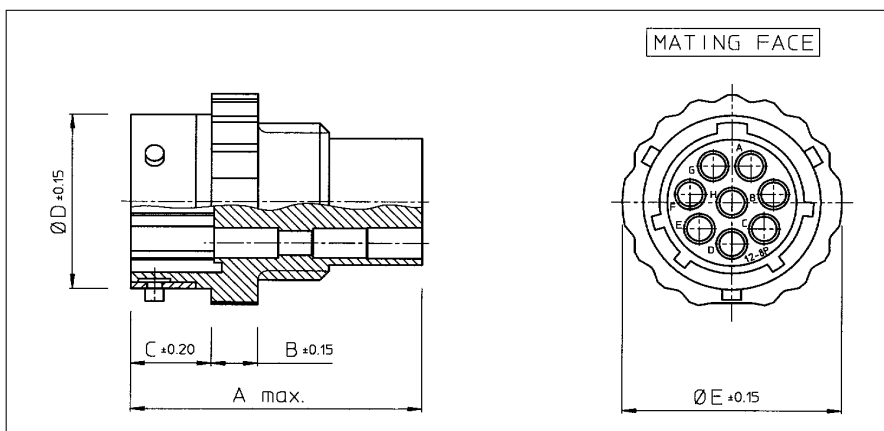
Part number	Shell size	A max.	B ±0.15	C ±0.2	Ø D ±0.15	E ±0.25	F -0.25	Ø G ±0.1	Ø H ±0.1	Ø J ±0.1
UTG0104S / UTG0103SVDE	10	24.3	2.3	11.3	15.0	18.3	23.8	3.2	17.3	15.1
UTG0128S	12				19.0	20.6	26.2		21.8	18.2
UTG01412S	14				22.2	23.0	28.6		25.0	21.4
UTG01619S	16				25.3	24.6	31.0		28.1	24.6
UTG01823S / UTG0187SVDEU	18	24.3/30.4	2.5	11.3/17.9	28.5	27.0	33.3	3.9	31.3	27.8
UTG02028S / UTG02020S	20	27.0			31.7	29.4	36.5		34.5	30.9
UTG02235S	22	28.0			34.9	31.8	39.7		37.7	34.1
UTG02448S	24	30.4			15.3	38.0	42.9		40.9	37.3

For IP65 waterprotected version add "H" behind "S" e.g. UTG01412SH

A square flange sealing has to be ordered separately to guarantee a sealing with the equipment. Refer to "Circular accessories" section (UTFD-).



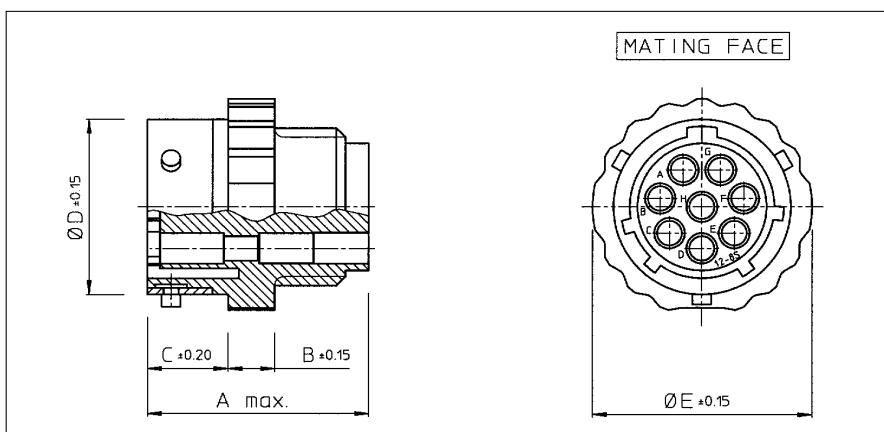
Free hanging receptacle for pin contacts (UTG1- - -P)



Part number	Shell size	A max.	B ±0.15	C ±0.2	Ø D ±0.15	Ø E ±0.15
UTG1104P / UTG1103PVDE	10	31.7	5.0	8.65	15.0	19.5
UTG1128P	12				19.0	23.5
UTG11412P	14				22.2	27.0
UTG11619P	16				25.3	30.0
UTG11823P / UTG1187PVDEU	18	31.7/34.0	5.0	8.65/15.35	28.5	33.0
UTG12028P / UTG12020P	20	33.3/34.3		12.05	31.7	36.5
UTG12235P	22	33.3		13.85	34.9	39.5
UTG12448P	24				38.0	42.5

For IP65 waterprotected version add "H" behind "P" e.g. UTG11412PH

Free hanging receptacle for socket contacts (UTG1- - -S)



Part number	Shell size	A max.	B ±0.15	C ±0.2	Ø D ±0.15	Ø E ±0.15	
UTG1104S / UTG1103SVDE	10	24.3/27.6	5.0	8.65	15.0	19.5	
UTG1128S	12	24.3			8.65/15.35	19.0	23.5
UTG11412S	14					22.2	27.0
UTG11619S	16					25.3	30.0
UTG11823S / UTG1187SVDEU	18	24.3/30.4		28.5		33.0	
UTG12028S / UTG12020S	20	25.9		12.05	31.7	36.5	
UTG12235S	22			13.85	34.9	39.5	
UTG12448S	24				38.0	42.5	

For IP65 waterprotected version add "H" behind "S" e.g. UTG11412SH

new

UTO

Dynamic IP68 / IP69K
High salt spray resistance
RoHS compliant



Metal circular connector

Description

"UTO" industrial circular connectors are a range of multiway connectors available in 8 shell sizes and 8 insert arrangements all interchangeable, interchangeable and intermountable with the TRIM TRIO "UTG" and "UTP" industrial connector families.

"UTO" is equipped with identical shells from military connectors complying to MIL-C-26482 spec.

Strong and rugged built to resist every environmental and mechanical requirement for indoor and outdoor applications.

Amongst several characteristics, "UTO" offers possibilities on: Shielding, High levels on sealing and salt spray. UTO is also the perfect solution to connect cat5e Ethernet applications in combination with other signals, using the same TRIM TRIO contacts (consult factory for more info).

Features and benefits (see p2)

- Suitable for shielding applications
- Available in 8 shell sizes and 8 insert arrangements.
- Available in plug and receptacle versions for both male and female contacts.
- Different insert orientations possible.
- Plastic inserts with flammability rating: UL94-V0.
- **2 levels of water protection:** Dynamic IP67 and IP68 both versions are IP69K
- **2 levels of salt spray:** 48h and 96h Higher salt spray resistance (200/500h) upon request
- Cat5e Ethernet compatible. Can be combined with other signals offering the advantage to use same contacts (consult factory).
- UL recognition in process.
- Metal bayonet ring:
 - Metal wave spring loaded
 - Locks with audible positive "click"
 - Assures 500 matings and unmatings
- RoHS compliant



Performance characteristics

Operating temp:	-40°C to +105°C
Insulation resistance:	5000 MΩ min.
Test potential:	2000 VAC
Durability:	500 matings and unmatings.
Vibration resistance:	Per MIL-STD202 method 204
Thermal shock:	Per MIL-STD202 method 207
Corrosion:	Salt spray per MIL-STD 202 method 101 48h (standard version) 96h (black anodised coupling ring)
Higher salt spray resistance (200/500h) upon request	
Shielding effectiveness: 95 dB at 1 Mhz	
Degree of water protection per DIN 40050: Dynamic IP67 / IP68 / IP69K in mated condition and in combination with sealed back shell.	

Construction

Shells:	Zinc alloy
Backshells and cable glands:	Brass
Coupling ring:	Aluminium alloy
Coupling spring:	Spring stainless steel
Insert:	Glass-filled thermoplast UL94-V0
RoHS compliant	

Contact accommodation

- "UTO" connectors accept TRIM TRIO size 16 crimp-type removable snap-lock contacts (see contacts section)
- Contacts to be ordered separately.

How to order

	UTO	0	14	12	P	-	H or H6	--	--
	UTO	6	14	12	S	-	H		
Body variation:	0 : Wall mounting receptacle 6 : Cable plug 7 : Jam nut receptacle for rear panel mounting								
Shell size:									
Insert arrangement:									
Type of contacts:	P : Pin contacts S : Socket contacts								
Insert polarisation:	No letter : Standard version W, X, Y, Z : Different orientations (consult factory)								
Application:	H : Standard version, water protected IP 67 & IP 69K H6 : Water protected IP 68 & IP 69K (only needed for wall mounting & jam nut receptacles)								
Design variation:	No letter : Standard version Others : Special versions								
Plating:	No letter : Standard is nickel plating (48h salt spray) 01 : Black anodised jam nut (96h salt spray) 02 : Black anodised coupling ring (96h salt spray)								

New UTO-UTOW series



New UTO – UTOW series:

- The exclusive new product range in the TRIM TRIO broadline.
- Aesthetic and top class performances

UTO – UTOW series major technical features & benefits

• Full metal bayonet connector

- Enabling 500 mating-unmating without wear out
- Secure locking device: audible “click” when mating



• Dynamic IP68*

Connector will remain IP68 even when:

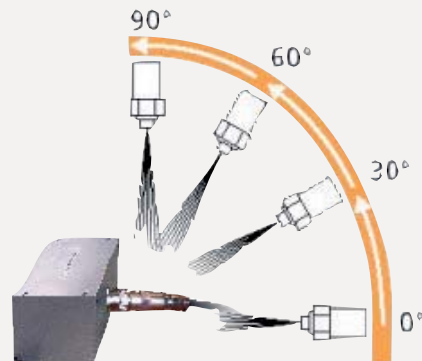
- Pulling on the cable
- Bending the cable



- * With appropriate back shell
- * Exists also in IP67 version

• Dynamic IP69K*

Connector withstands high pressure water cleaning.



- * With appropriate back shell

• High salt spray resistance*

- Can be used in severe environment

- * Exists in 48 and 96 hours salt spray version
- * Higher salt spray resistance (e.g. 200 or 500 hours) upon request

• RoHS compliant

- Cadmium and lead free materials are used

• In accordance with following standards

- UTO is Ethernet Cat5e compatible (consult factory)
- UTO-UTOW ranges are upgradeable to highspeed solutions



For detailed information on UTO and UTOW series offering see pages 21 to 31

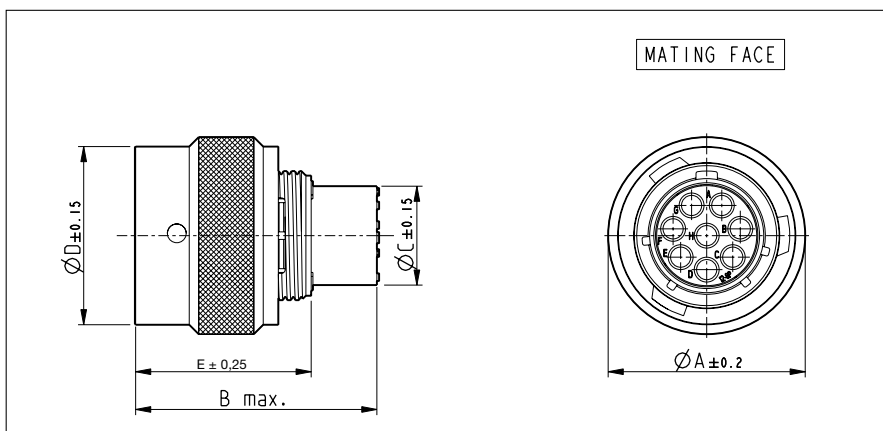
new

UTO

Dynamic IP68 / IP69K
High salt spray resistance
RoHS compliant



Cable plug for pin contacts (UT06- - -PH)

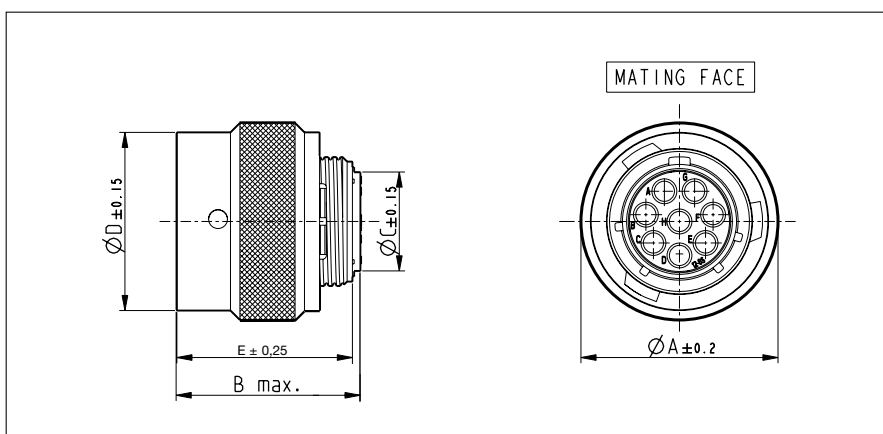


Part number	Shell size	Ø A ±0.2	B max.	Ø C ±0.15	Ø D ±0.15	E ±0.25
UT06104PH	10	21.80	33.00	10.2	20.00	23.25
UT06128PH	12	26.10		13.4	23.60	
UT061412PH	14	29.30		16.7	26.80	
UT061619PH	16	32.45		19.7	30.00	
UT061823PH	18	35.25		21.7	33.30	
UT062028PH	20	38.80	25.20	24.9	36.55	25.20
UT062235PH	22	42.00		28.1	39.50	
UT062448PH	24	45.05		31.2	42.60	

Part numbers are suitable for both IP67 and IP68 water protection

For 96h salt spray version add "02" behind "H" e.g. UT061412PH02 (only bayonet ring will be black anodised)

Cable plug for socket contacts (UT06- - -SH)



Part number	Shell size	Ø A ±0.2	B max.	Ø C ±0.15	Ø D ±0.15	E ±0.25
UT06104SH	10	21.80	33.00	10.2	20.00	23.25
UT06128SH	12	26.10		13.4	23.60	
UT061412SH	14	29.30		16.7	26.80	
UT061619SH	16	32.45		19.7	30.00	
UT061823SH	18	35.25		21.7	33.30	
UT062028SH	20	38.80	27.30	24.9	36.55	25.20
UT062235SH	22	42.00		28.1	39.50	
UT062448SH	24	45.05		31.2	42.60	

Part numbers are suitable for both IP67 and IP68 water protection

For 96h salt spray version add "02" behind "H" e.g. UT061412SH02 (only bayonet ring will be black anodised)

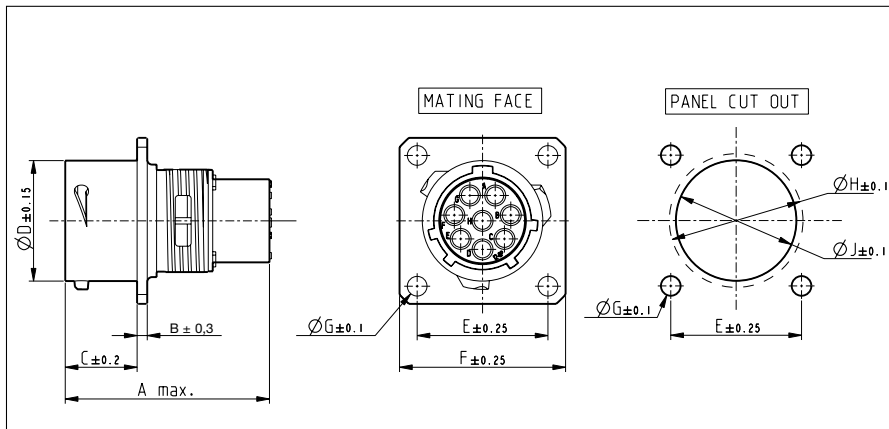
new

UTO

Dynamic IP68 / IP69K
High salt spray resistance
RoHS compliant



Wall mounting receptacle for pin contacts (UT00---PH/PH6)

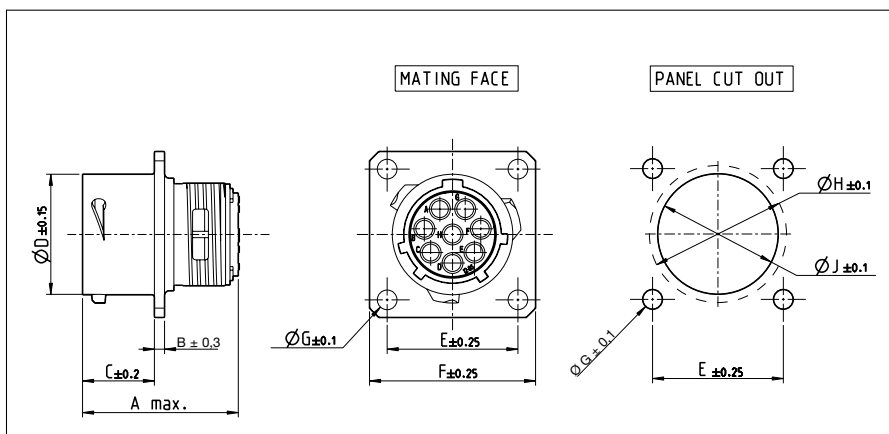


Part number		Shell size	A max.	B ± 0.3	C ± 0.2	Ø D ± 0.15	E ± 0.25	F ± 0.25	Ø G ± 0.1	Ø H ± 0.1	Ø J ± 0.1
IP67	IP68										
UT00104PH	UT00104PH6	10	33.23	1.6	11.35	15.0	18.3	23.8	3.2	17.3	14.2
UT00128PH	UT00128PH6	12				19.0	20.6	26.2		21.8	18.4
UT001412PH	UT001412PH6	14				22.2	23.0	28.6		25.0	21.5
UT001619PH	UT001619PH6	16				25.3	24.6	31.0		28.1	24.6
UT001823PH	UT001823PH6	18				28.5	26.9	33.3		31.3	27.8
UT002028PH	UT002028PH6	20	34.75	2.4	14.55	31.7	29.4	36.5	3.9	34.5	30.9
UT002235PH	UT002235PH6	22				34.9	31.8	39.7		37.7	34.1
UT002448PH	UT002448PH6	24				38.0	34.9	42.9		40.9	37.3

Part numbers are suitable for both 48h and 96h salt spray.

A square sealing has to be ordered separately to guarantee a sealing with equipment. Refer to "Circular accessories" section (UTFD--).

Wall mounting receptacle for socket contacts (UT00---SH/SH6)



Part number		Shell size	A max.	B ± 0.3	C ± 0.2	Ø D ± 0.15	E ± 0.25	F ± 0.25	Ø G ± 0.1	Ø H ± 0.1	Ø J ± 0.1
IP67	IP68										
UT00104SH	UT00104SH6	10	25.20	1.6	11.35	15.0	18.3	23.8	3.2	17.3	14.2
UT00128SH	UT00128SH6	12				19.0	20.6	26.2		21.8	18.4
UT001412SH	UT001412SH6	14				22.2	23.0	28.6		25.0	21.5
UT001619SH	UT001619SH6	16				25.3	24.6	31.0		28.1	24.6
UT001823SH	UT001823SH6	18				28.5	26.9	33.3		31.3	27.8
UT002028SH	UT002028SH6	20	29.00	2.4	14.55	31.7	29.4	36.5	3.9	34.5	30.9
UT002235SH	UT002235SH6	22				34.9	31.8	39.7		37.7	34.1
UT002448SH	UT002448SH6	24				38.0	34.9	42.9		40.9	37.3

Part numbers are suitable for both 48h and 96h salt spray.

A square sealing has to be ordered separately to guarantee a sealing with equipment. Refer to "Circular accessories" section (UTFD--).

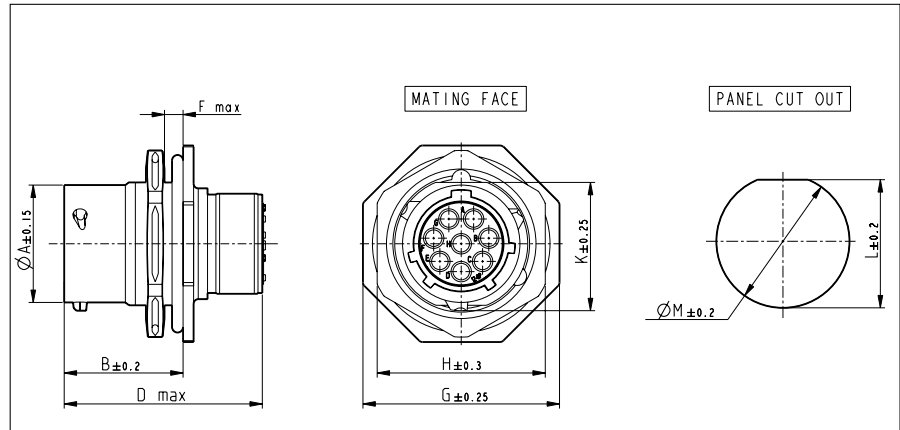
new

UTO

Dynamic IP68 / IP69K
High salt spray resistance
RoHS compliant



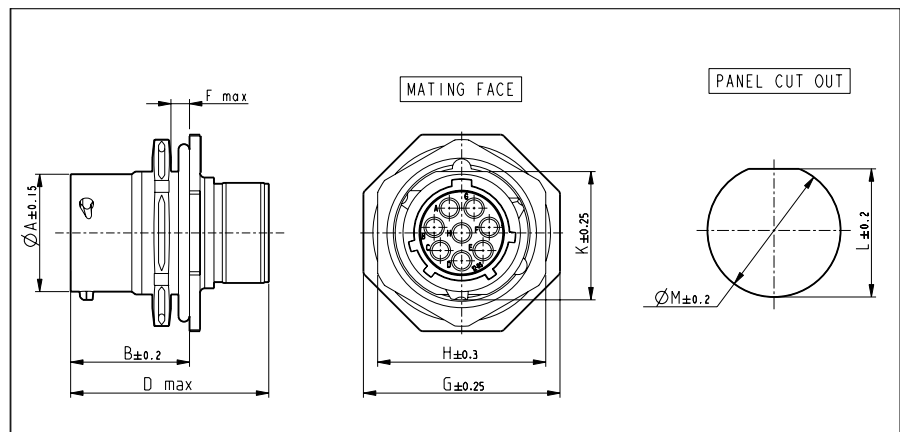
Jam nut receptacle for pin contacts (UT07---PH/PH6) - suitable for rear panel mounting



Part number		Shell size	Ø A ± 0.15	B ± 0.2	D Max.	F Max.	G ± 0.25	H ± 0.3	K ± 0.25	L ± 0.2	Ø M ± 0.2
IP67	IP68										
UT07104PH	UT07104PH6	10	14.9	19.30	33.90	3.2	27.0	22.2	16.6	17.0	17.7
UT07128PH	UT07128PH6	12	19.0				31.8	27.0	20.8	21.2	22.5
UT071412PH	UT071412PH6	14	22.2				34.9	30.2	23.9	24.3	25.7
UT071619PH	UT071619PH6	16	25.3				38.1	33.3	27.1	27.5	28.7
UT071823PH	UT071823PH6	18	28.5				41.3	36.5	30.3	30.6	32.0
UT072028PH	UT072028PH6	20	31.7	24.70	39.00	6.4	46.1	39.7	33.4	33.8	35.2
UT072235PH	UT072235PH6	22	34.9				49.2	42.9	36.6	37.0	38.4
UT072448PH	UT072448PH6	24	38.0	25.50	40.50		53.4	46.0	39.8	40.1	41.5

For 96h salt spray version add "01" at the end of the part number e.g. UT071412PH601 (only jam nut will be black anodised)

Jam nut receptacle for socket contacts (UT07---SH/SH6) - suitable for rear panel mounting



Part number		Shell size	Ø A ± 0.15	B ± 0.2	D Max.	F Max.	G ± 0.25	H ± 0.3	K ± 0.25	L ± 0.2	Ø M ± 0.2
IP67	IP68										
UT07104SH	UT07104SH6	10	14.9	19.30	33.00	3.2	27.0	22.2	16.6	17.0	17.7
UT07128SH	UT07128SH6	12	19.0				31.8	27.0	20.8	21.2	22.5
UT071412SH	UT071412SH6	14	22.2				34.9	30.2	23.9	24.3	25.7
UT071619SH	UT071619SH6	16	25.3				38.1	33.3	27.1	27.5	28.7
UT071823SH	UT071823SH6	18	28.5				41.3	36.5	30.3	30.6	32.0
UT072028SH	UT072028SH6	20	31.7	24.70	39.00	6.4	46.1	39.7	33.4	33.8	35.2
UT072235SH	UT072235SH6	22	34.9				49.2	42.9	36.6	37.0	38.4
UT072448SH	UT072448SH6	24	38.0	25.50	40.50		53.4	46.0	39.8	40.1	41.5

For 96h salt spray version add "01" at the end of the part number e.g. UT071412PH601 (only jam nut will be black anodised)

new

UTO

Dynamic IP68 / IP69K
High salt spray resistance
RoHS compliant



Insert rotation positions

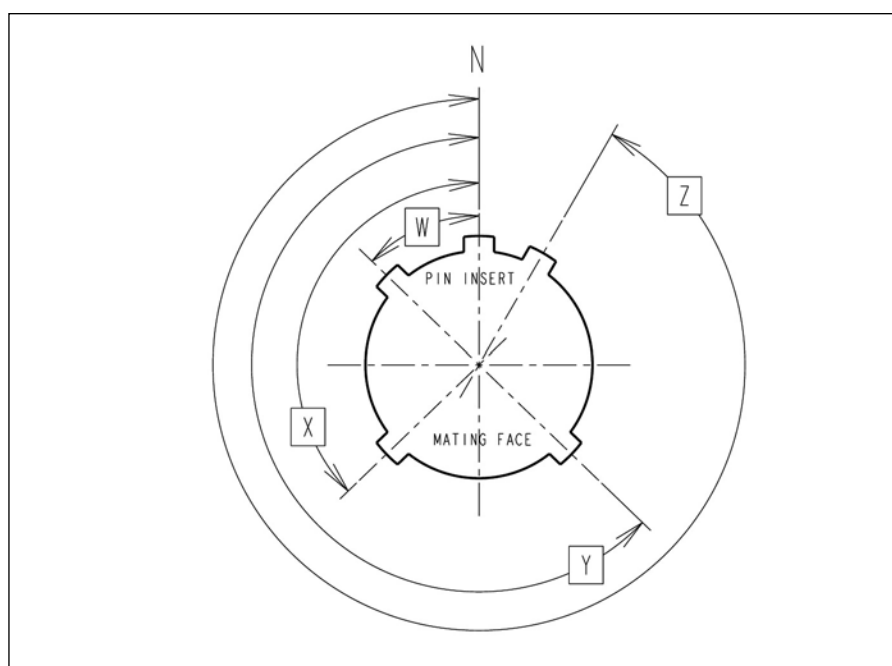
The table shows possible insert rotation positions.

5 positions N,W,X,Y and Z differ in the degree of rotation for the various connectors sizes.

The table indicates the exact degree of rotation.

Note: Insert rotation positions are optional (consult factory)

Shell size	Contact number	Insert rotation positions			
		W	X	Y	Z
10	4	45	-	-	-
12	8	26	-	-	-
14	12	60	-	-	-
16	19	30	165	-	315
18	23	-	158	-	270
20	28	79	-	259	-
22	35	13	162	198	265
24	48	60	120	189	351

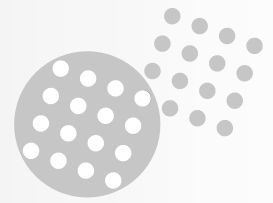


Extra O-seals for wall mounting (UT00) and jam nut (UT07) receptacle connectors

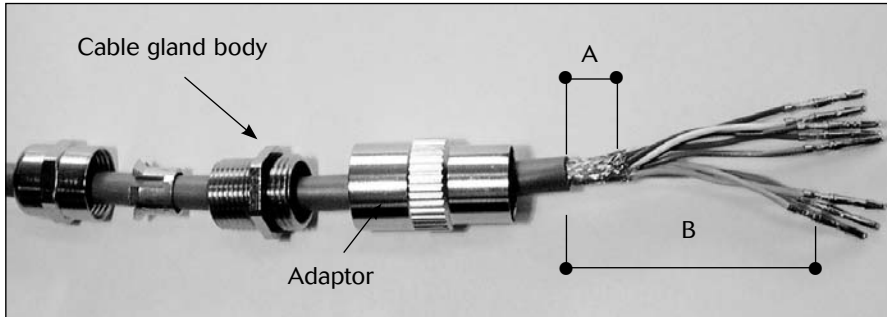
An extra O-seal must be mounted on the receptacle connectors when a backshell is used. This to guarantee the IP68 sealing level

Part number	Shell size
UT010REARSEAL	10
UT012REARSEAL	12
UT014REARSEAL	14
UT016REARSEAL	16
UT018REARSEAL	18
UT020REARSEAL	20
UT022REARSEAL	22
UT024REARSEAL	24

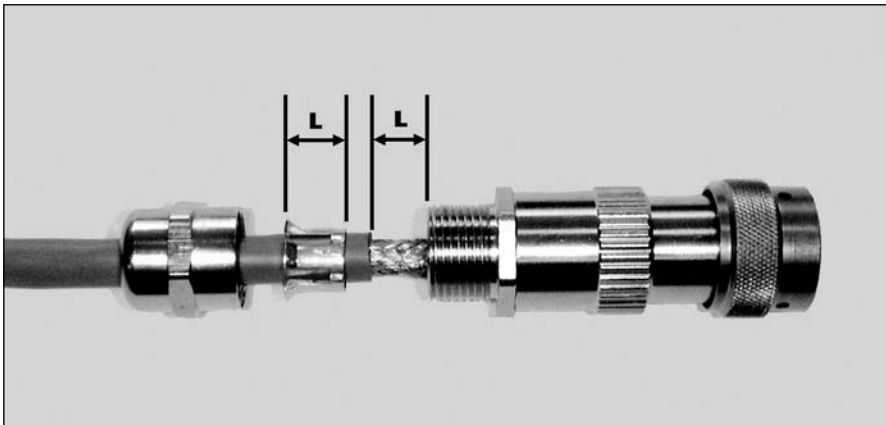
Shielded connectors



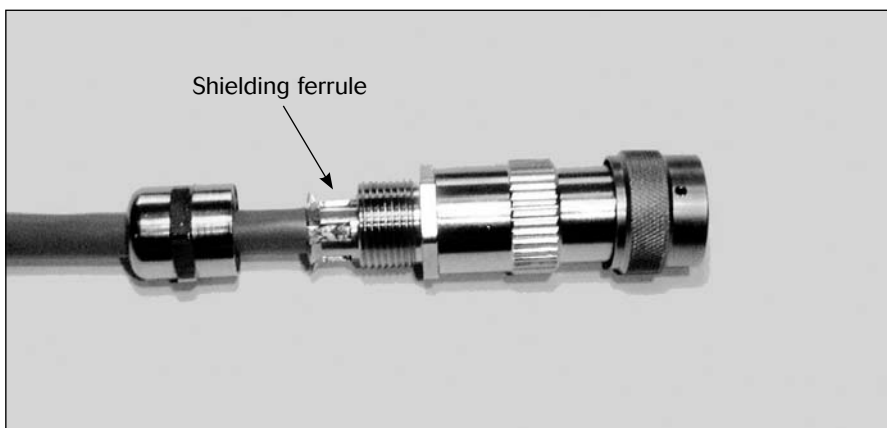
How to assemble shielded connectors...



1. Put all the parts over the cable as shown on the picture.
2. Keep about 10mm of the shielding (dim A)
3. The total strip length (dim B) of the outer jacket has to be defined practically. This length is defined by the length of the adaptor, the cable gland body, type of contacts, the gender of the plug connector and the dim. L as shown on picture 2.
4. The strip length of the individual wires is defined in the different contact sections.



5. Put the contacts in the corresponding cavities
6. Screw / tighten the adaptor and the cable gland body. The max tightening torque is indicated in the table below.
7. Make sure the dim L is kept after the assembly of the adaptor and the cable gland body. This dimension is needed to allow repair of the harnessing. It will also release the stress on the contacts when the assembly of the cable clamp is finished.

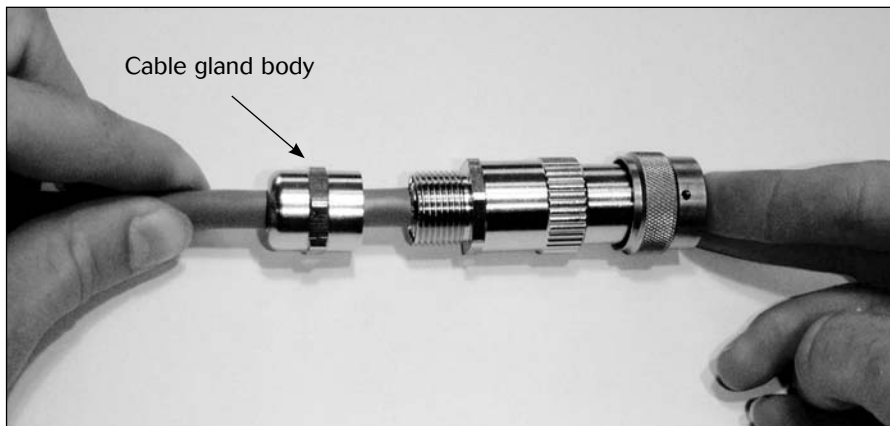


8. Carefully slide the shielding ferrule until is positioned over the shielding and as close as possible to the cable jacket.
9. Make sure that the shielding ferrule is correctly polarised. This polarisation is a feature to avoid twisting of the cable during the tightening of the cable gland.

Shielded connectors



How to assemble shielded connectors... (con't)



10. Manually push the shielding ferrule inside the cable gland body.

11. Make sure the shielding ferrule does not slide over the cable jacket.

12. Hold the cable in this position prior to the assembly of the cable gland hood.



13. Hold the cable in the same position as explained above and tighten the cable gland hood. The max tightening torque is indicated in the table below.

14. To ease the tightening operation, an empty receptacle connector can be used when fixed in a bench.

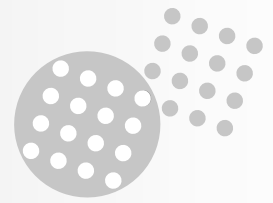
15. Make sure that the cable is not twisted during the tightening operation.

Max tightening torques in Nm

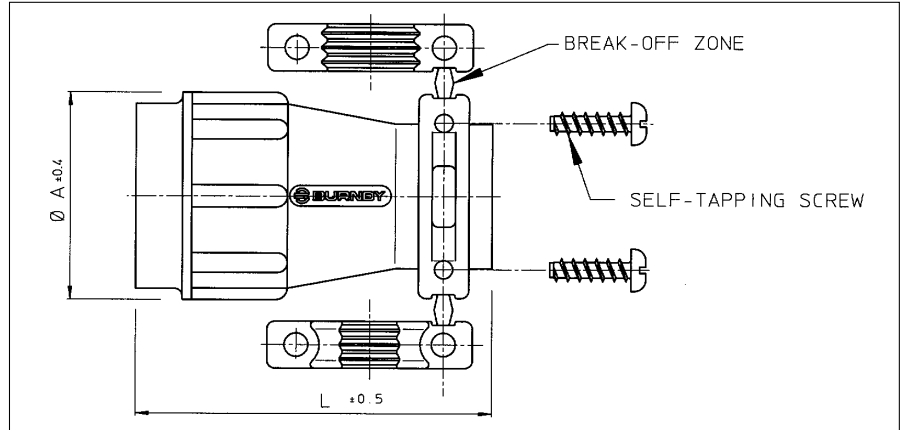
Shell size	Cable gland body	Cable gland hood
10	6	5
12	10	8
14	10	8
16	14	12
18	14	12
20	24	20
22	24	20
24	24	20

Above tightening torques are indicative and have to be adjusted in accordance to the cable diameter and application.

Circular accessories



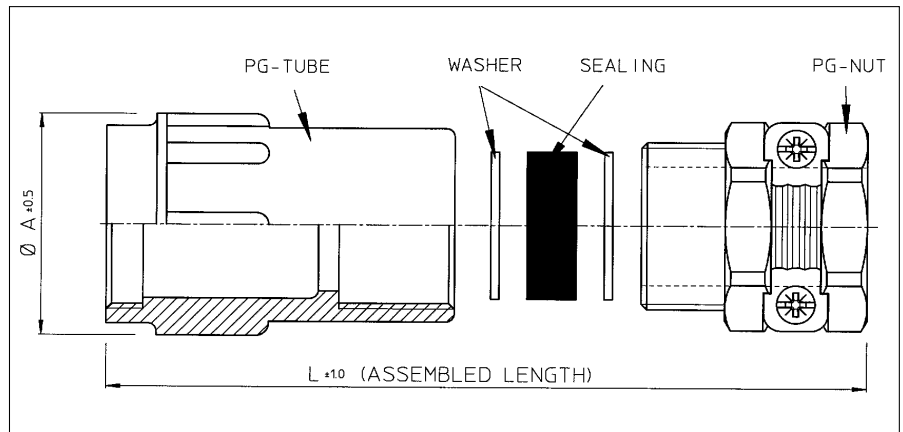
Plastic cable clamp with strain relief (UTG--AC)



Part number	Shell size	Cable range $\varnothing$	$\varnothing A \pm 0.4$	$L \pm 0.5$
UTG10AC	10	3.0 - 8.7	21.0	40.0
UTG12AC	12	3.0 - 12.8	24.0	40.0
UTG14AC	14	4.0 - 13.8	27.0	46.0
UTG16AC	16	5.0 - 17.0	30.2	46.0
UTG18AC	18	5.0 - 19.0	33.3	50.0
UTG20AC	20	5.0 - 21.0	36.5	55.0
UTG22AC	22	5.0 - 23.0	39.7	60.0
UTG24AC	24	8.0 - 27.0	42.9	65.0

For threading specifications see last page of this section "Circular accessories"

Plastic cable clamp with strain relief nut for waterprotected (IP65) applications (UTG--PG)



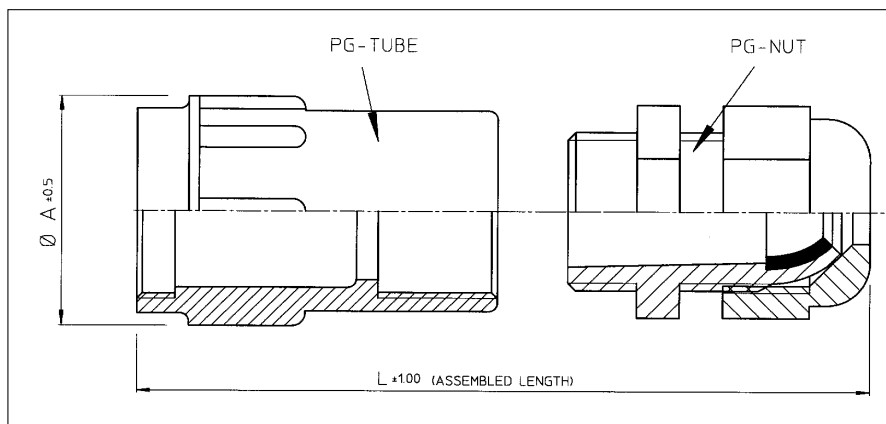
Part number	Shell size	Sealing* outer dia x inner dia's	$L \pm 1$	$A \pm 0.5$
UTG10PG	10	13.5 x 5 x 8	54	21.0
UTG12PG	12	16 x 7 x 10.5 x 13 x 16	57	24.0
UTG14PG	14	18.5 x 7 x 10.5 x 13 x 16	62	27.0
UTG16PG	16	20.5 x 8 x 10.5 x 13 x 16	68	30.2
UTG18PG	18	20.5 x 8 x 10.5 x 13 x 16	71	33.3
UTG20PG	20	26 x 11 x 15 x 18 x 22	82	36.5
UTG22PG	22	26 x 11 x 15 x 18 x 22	88	39.7
UTG24PG	24	35 x 19 x 23 x 27 x 31	103	42.9

*In order to accommodate different cable dia's, the sealing exists of different layers which can be pulled out easily. Cable clamp has a PG style cable gland. For threading specifications see last page of this section "Circular accessories"

Circular accessories



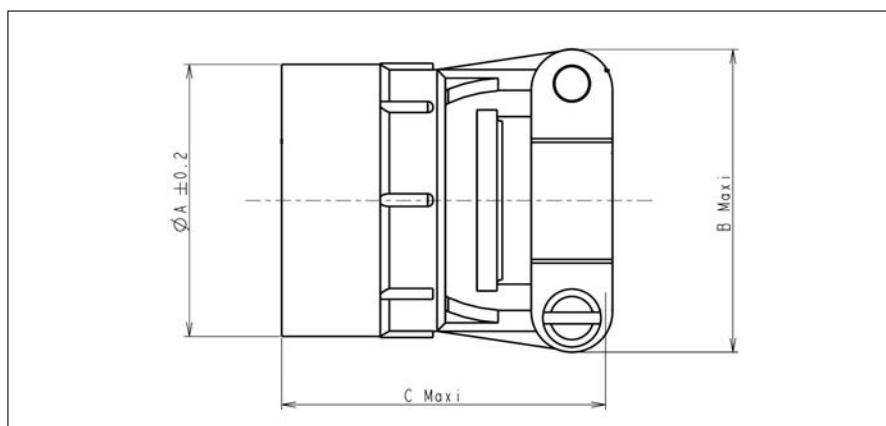
Plastic cable clamp with strain relief nut for waterprotected (IP65) applications (UTG--ST)



Part number	Shell size	Cable range	Dia. A ± 0.5	L ± 1
UTG10ST	10	2 - 6	21.0	64
UTG12ST	12	3 - 7	24.0	64
UTG14ST	14	6 - 9	27.0	69
UTG16ST	16	7 - 12	30.2	72
UTG18ST	18		33.3	76
UTG20ST	20	9 - 16	36.5	80
UTG22ST	22		39.7	86
UTG24ST	24	13 - 20	42.9	91

Cable clamp has a PG style cable gland. For threading specifications see last page of this section "Circular"

Metal cable clamp with strain relief (UT0--AC)



Part number	Shell size	Max cable dia. Excl. sealing	$\varnothing A \pm 0.2$	B maxi	C maxi
UT010AC	10	5.0	16.3	21.6	31.0
UT012AC	12	8.2	19.4	25.0	31.5
UT014AC	14	10.0	22.5	27.4	34.0
UT016AC	16	13.0	25.8	29.4	34.0
UT018AC	18	16.0	29.2	35.2	31.4
UT020AC	20	16.0	32.5	35.2	32.0
UT022AC	22	19.3	35.7	41.1	31.0
UT024AC	24	20.6	38.8	42.4	31.0

For threading specifications see last page of this section "Circular accessories"

Circular accessories

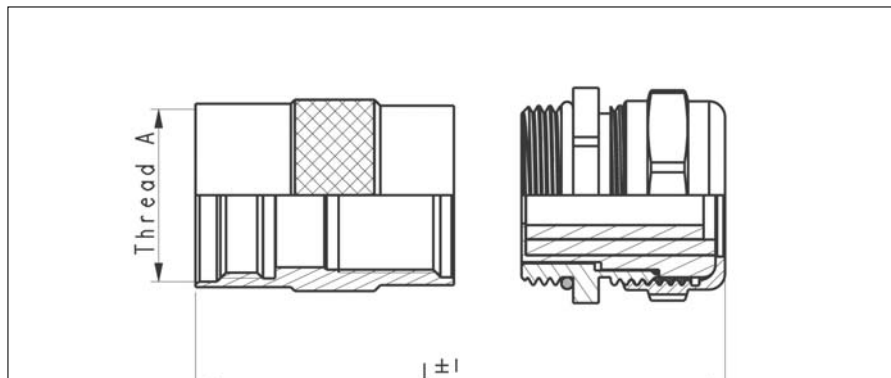


Short cable clamp with strain relief nut for waterprotected applications (IP68). (UT0--JCS)

Long cable clamp with strain relief nut for waterprotected applications (IP68). (UT0--JC)



Suitable for UT0-UT0W



Part number		Shell size	Clamping range (Ø en mm) min / max	L ± 1		Thread A
Short version	Long version			Short version	Long version	
UT010JCS	UT010JC	10	03 / 06	48.5	60.5	9/16 – 24 UNEF Class 2A
UT012JCS	UT012JC	12	06 / 10	49.5	61.5	11/16 – 24 UNEF Class 2A
UT014JCS	UT014JC	14	06 / 10	53.5	67.5	13/16 – 20 UNEF Class 2A
UT016JCS	UT016JC	16	9.5 / 14	62.5	73.5	15/16 – 20 UNEF Class 2A
UT018JCS	UT018JC	18	9.5 / 14	65.5	76.0	1" 1/16 – 18 UNEF Class 2A
UT020JCS	UT020JC	20	11.5 / 18	70.5	84.0	1" 3/16 – 18 UNEF Class 2A
UT022JCS	UT022JC	22	11.5 / 18	76.5	88.0	1" 5/16 – 18 UNEF Class 2A
UT024JCS	UT024JC	24	11.5 / 18	82.0	92.0	1" 7/16 – 18 UNEF Class 2A

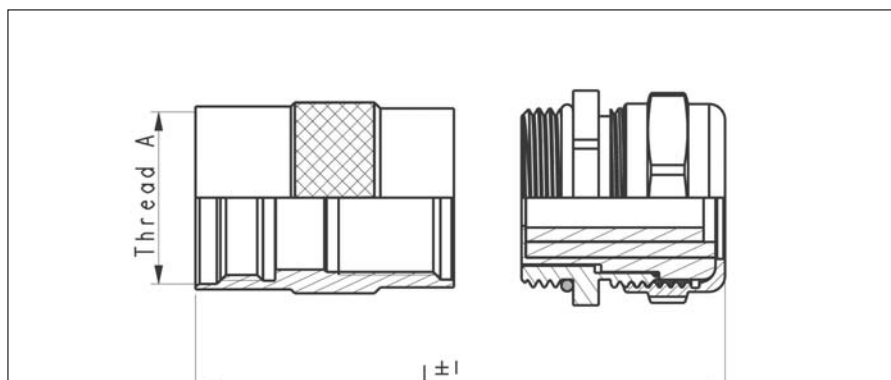
Cable clamp has a Metric style cable gland. For threading specifications see last page of this section "Circular accessories"

Short cable clamp with large strain relief nut for waterprotected applications (IP68). (UT0--JCSL)

Long cable clamp with large strain relief nut for waterprotected applications (IP68). (UT0--JCL)



Suitable for UT0-UT0W

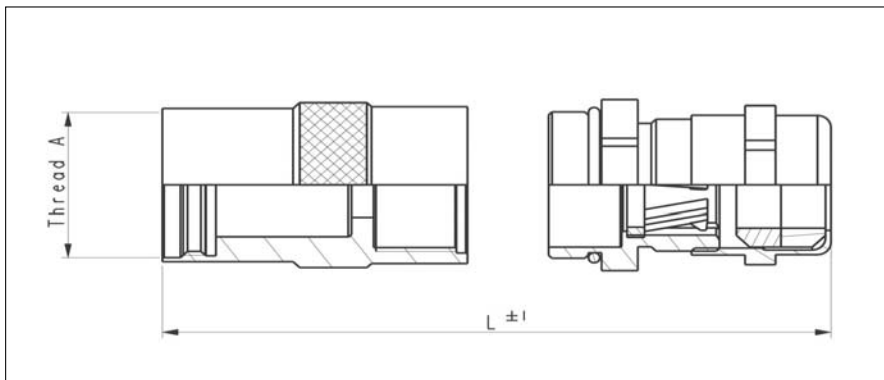


Part number		Shell size	Clamping range (Ø en mm) min / max	L ± 1		Thread A
Short version	Long version			Short version	Long version	
UT010JCSL	UT010JCL	10	05 / 08	49.5	61.5	9/16 – 24 UNEF Class 2A
UT012JCSL	UT012JCL	12	08 / 12	49.5	62.5	11/16 – 24 UNEF Class 2A
UT014JCSL	UT014JCL	14	08 / 12	54.5	68.5	13/16 – 20 UNEF Class 2A
UT016JCSL	UT016JCL	16	11.5 / 18	68.5	79.5	15/16 – 20 UNEF Class 2A
UT018JCSL	UT018JCL	18	11.5 / 18	71.5	82.0	1" 1/16 – 18 UNEF Class 2A
UT020JCSL	UT020JCL	20	15 / 24	77.5	91.0	1" 3/16 – 18 UNEF Class 2A
UT022JCSL	UT022JCL	22	15 / 24	83.5	95.0	1" 5/16 – 18 UNEF Class 2A
UT024JCSL	UT024JCL	24	15 / 24	89.0	99.0	1" 7/16 – 18 UNEF Class 2A

Cable clamp has a Metric style cable gland. For threading specifications see last page of this section "Circular accessories"



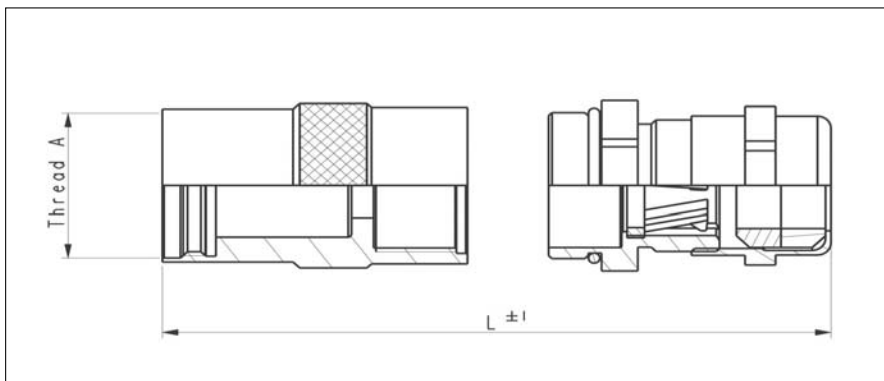
Short shielded cable clamp with strain relief nut for waterprotected applications (IP68). (UT0S----JCS)
Long shielded cable clamp with strain relief nut for waterprotected applications (IP68). (UT0S----JC)



Part number		Shell size	Clamping range (Ø en mm) min / max	L ± 1		Thread A
Short version	Long version			Short version	Long version	
UT0S10JCS	UT0S10JC	10	04 / 6.5	58.5	70.5	9/16 – 24 UNEF Class 2A
UT0S12JCS	UT0S12JC	12	07 / 10.5	61.5	74.5	11/16 – 24 UNEF Class 2A
UT0S14JCS	UT0S14JC	14	07 / 10.5	66.5	80.5	13/16 – 20 UNEF Class 2A
UT0S16JCS	UT0S16JC	16	10 / 14.5	72.5	83.5	15/16 – 20 UNEF Class 2A
UT0S18JCS	UT0S18JC	18	10 / 14.5	75.5	86.0	1" 1/16 – 18 UNEF Class 2A
UT0S20JCS	UT0S20JC	20	13.5 / 18	84.5	97.5	1" 3/16 – 18 UNEF Class 2A
UT0S22JCS	UT0S22JC	22	13.5 / 18	90.0	101.5	1" 5/16 – 18 UNEF Class 2A
UT0S24JCS	UT0S24JC	24	13.5 / 18	95.5	105.5	1" 7/16 – 18 UNEF Class 2A

Cable clamp has a Metric style cable gland. For threading specifications see last page of this section "Circular accessories"

Short shielded cable clamp with large strain relief nut for waterprotected applications (IP68). (UT0S----JCSL)
Long shielded cable clamp with large strain relief nut for waterprotected applications (IP68). (UT0S----JCL)

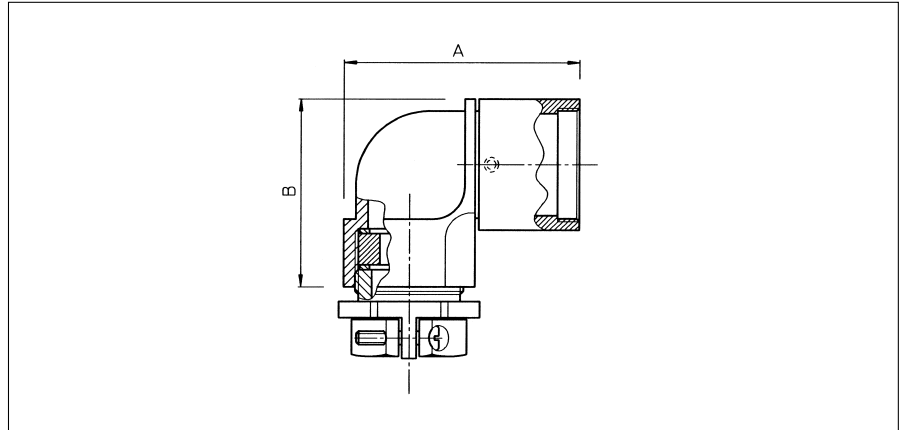


Part number		Shell size	Clamping range (Ø en mm) min / max	L ± 1		Thread A
Short version	Long version			Short version	Long version	
UT0S10JCSL	UT0S10JCL	10	05 / 8.5	59.5	71.5	9/16 – 24 UNEF Class 2A
UT0S12JCSL	UT0S12JCL	12	08 / 12.5	61.5	74.5	11/16 – 24 UNEF Class 2A
UT0S14JCSL	UT0S14JCL	14	08 / 12.5	66.5	80.5	13/16 – 20 UNEF Class 2A
UT0S16JCSL	UT0S16JCL	16	13.5 / 18	82.5	93.5	15/16 – 20 UNEF Class 2A
UT0S18JCSL	UT0S18JCL	18	13.5 / 18	85.5	96.0	1" 1/16 – 18 UNEF Class 2A
UT0S20JCSL	UT0S20JCL	20	17 / 24	93.0	106.5	1" 3/16 – 18 UNEF Class 2A
UT0S22JCSL	UT0S22JCL	22	17 / 24	99.0	110.5	1" 5/16 – 18 UNEF Class 2A
UT0S24JCSL	UT0S24JCL	24	17 / 24	104.5	114.5	1" 7/16 – 18 UNEF Class 2A

Cable clamp has a Metric style cable gland. For threading specifications see last page of this section "Circular accessories"



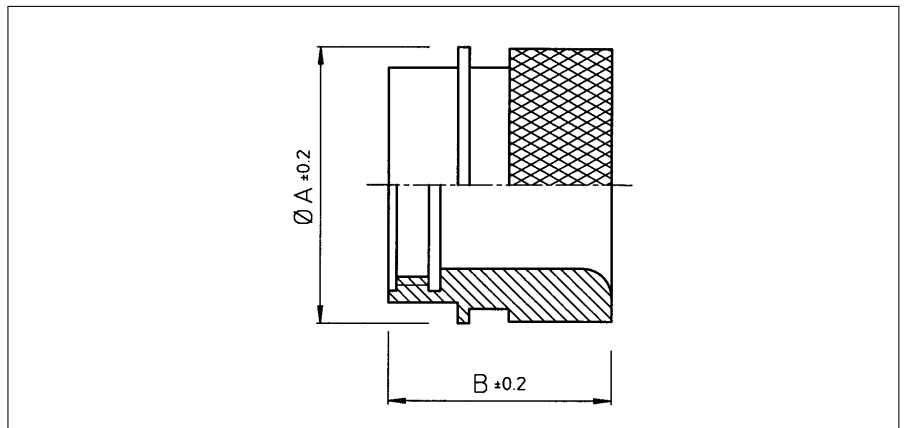
Metal right angle cable clamp with strain relief nut (UTG--LPGN / UTO--LPGN)



Part number For UTP / UTG	Part number For UTO / UTOW	Shell size	A max	B max	Cable range
UTG10LPGN	UT010LPGN	10	48.0	30.0	13.5 x 5 x 8
UTG12LPGN	UT012LPGN	12	50.0	33.5	16 x 7 x 10.5 x 13
UTG14LPGN	UT014LPGN	14	52.0	36.5	18.5 x 7 x 10.5 x 13 x 16
UTG16LPGN	UT016LPGN	16	55.0	39.5	20.5 x 8 x 10.5 x 13 x 16
UTG18LPGN	UT018LPGN	18	60.0	46.0	20.5 x 8 x 10.5 x 13 x 16
UTG20LPGN	UT020LPGN	20	58.0	47.0	26 x 11 x 15 x 18 x 22
UTG22LPGN	UT022LPGN	22	58.0	48.5	26 x 11 x 15 x 18 x 22
UTG24LPGN	UT024LPGN	24	67.0	54.5	35 x 19 x 23 x 27 x 31

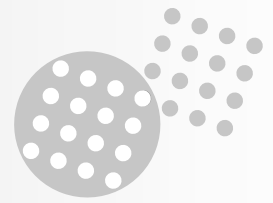
Cable clamp has a PG style cable gland. For threading specifications see last page of this section "Circular accessories"

Metal shrink boot adaptor (UTG--AD) for UTP and UTG

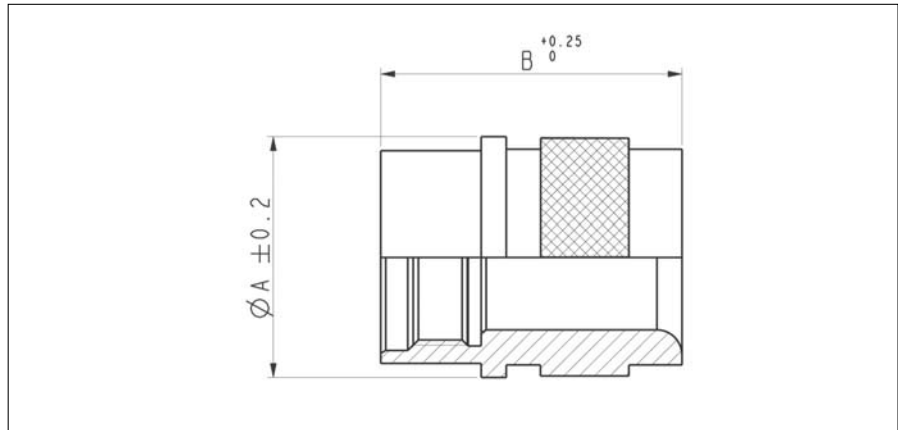


Part number	Shell size	Ø A ±0.2	B
UTG10AD	10	21.0	19.2
UTG12AD	12	24.0	
UTG14AD	14	27.0	
UTG16AD	16	30.0	21.5
UTG18AD	18	33.3	
UTG20AD	20	36.5	22.8
UTG22AD	22	39.7	
UTG24AD	24	42.9	21.9

Standard plating is anodised black. For tin plating add "T" at the end of the part number e.g. UTG12ADT
For threading specifications see last page of this section "Circular accessories"



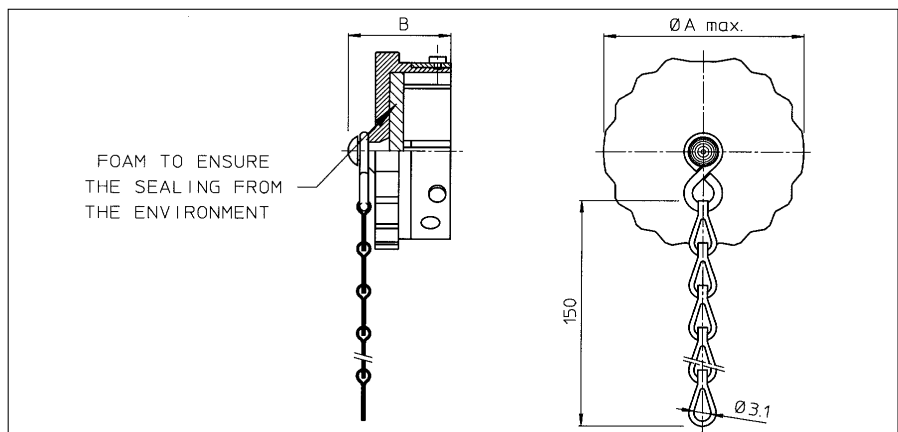
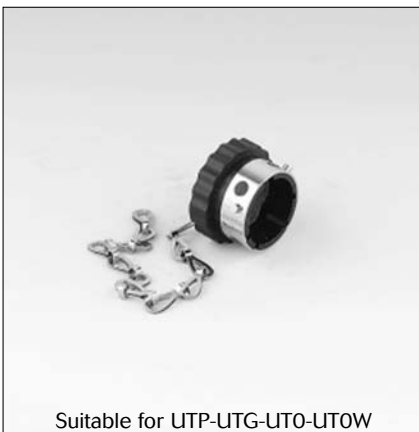
Metal shrink boot adaptor for UTO and UTOW



Part number	Shell size	$\varnothing A \pm 0.2$	B
UT010AD	10	21	24.7
UT012AD	12	24	
UT014AD	14	27	
UT016AD	16	30	27
UT018AD	18	33.3	
UT020AD	20	36.5	
UT022AD	22	39.7	
UT024AD	24	42.9	

For threading specifications see last page of this section "Circular accessories"

Environmental dustcap for plugs (UTG6--DCG)



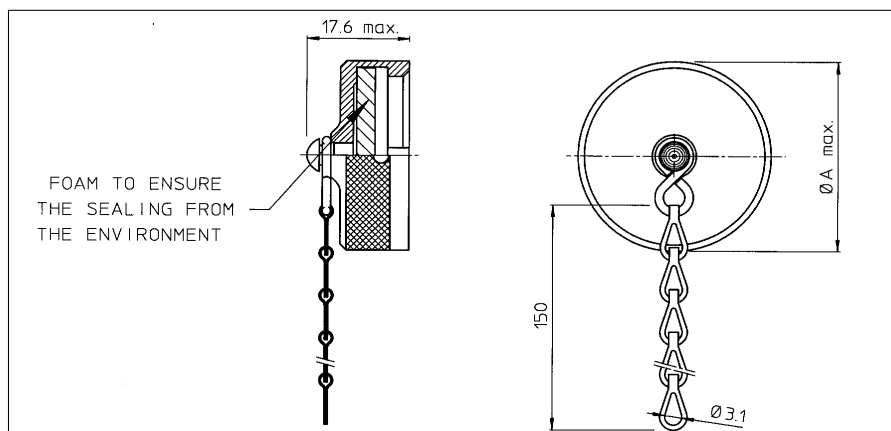
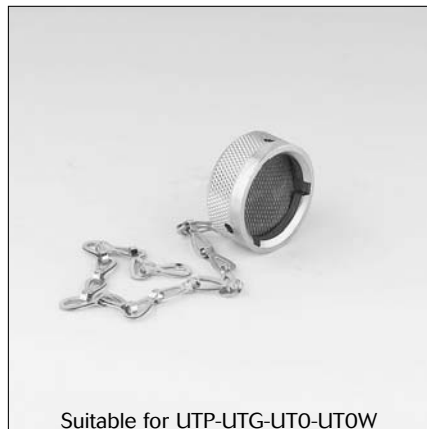
Part number	Shell size	A max.	B
UTG610DCG	10	20.0	20.8
UTG612DCG	12	24.0	
UTG614DCG	14	27.5	
UTG616DCG	16	30.5	
UTG618DCG	18	33.5	
UTG620DCG	20	36.5	22.5
UTG622DCG	22	40.0	
UTG624DCG	24	43.0	

For dustcap without chain skip "G" e.g. UTG612DC

Circular accessories



Metal environmental dustcap for receptacles (UT0--DCG)

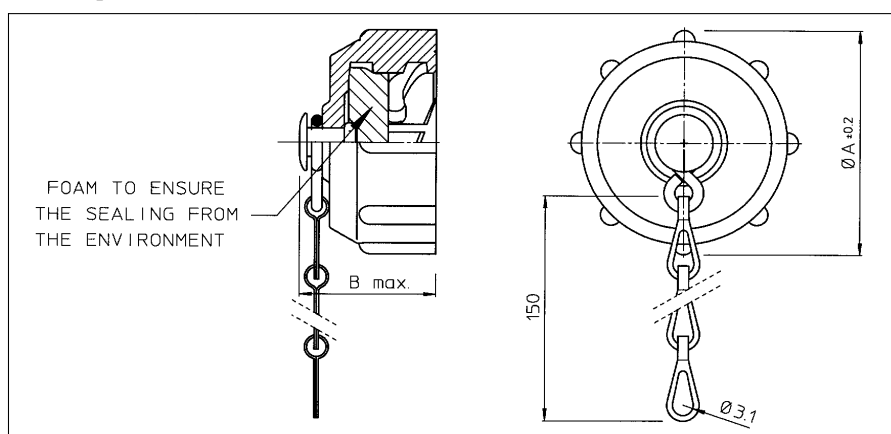
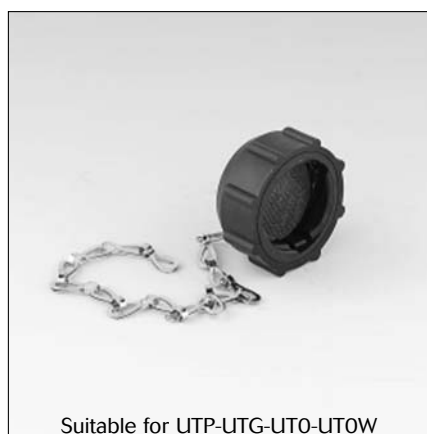


Part number	Shell size	A max.
UT010DCG	10	20.8
UT012DCG	12	24.9
UT014DCG	14	28.1
UT016DCG	16	31.3
UT018DCG	18	34.4
UT020DCG	20	37.6
UT022DCG	22	40.8
UT024DCG	24	43.9

For dustcap without chain skip "G" e.g. UTG12DC

For jam dustcap consult factory

Plastic environmental dustcap for receptacles (UTP--DCG)



Part number	Shell size	$\varnothing A \pm 0.2$	B max.
UTP10DCG	10	26.7	19.3
UTP12DCG	12	31.4	20.0
UTP14DCG	14	34.5	20.2
UTP16DCG	16	37.8	
UTP18DCG	18	40.8	
UTP20DCG	20	43.9	21.8
UTP22DCG	22	47.0	
UTP24DCG	24	50.1	

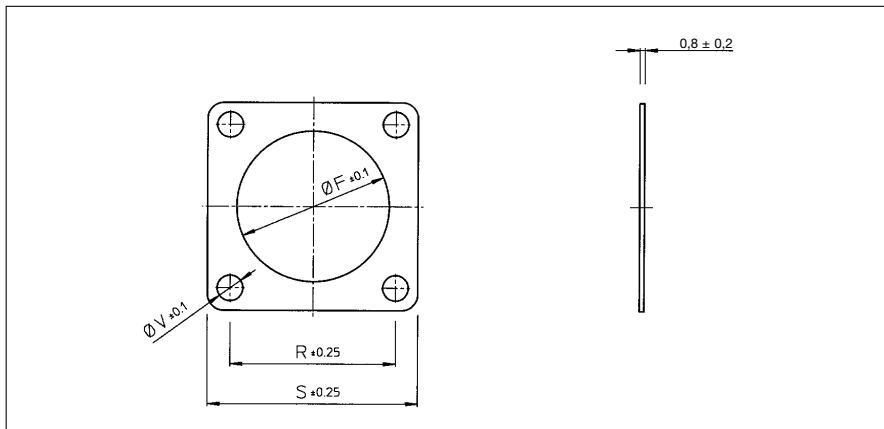
For dustcap without chain skip "G" e.g. UTP12DC

For jam dustcap consult factory

Circular accessories

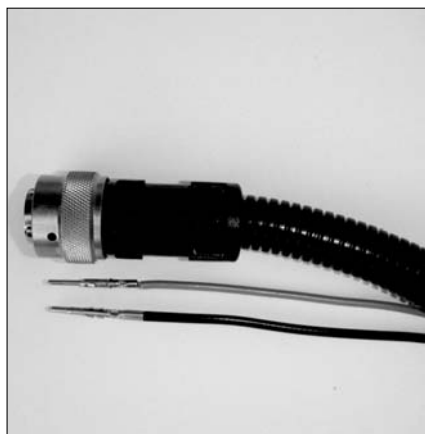


Sealing for wall mounting receptacle (UTFD1-B)



Part number	Shell size	Ø F ±0.1	R ±0.25	S ±0.25	Ø V
UTFD12B	10	15.9	18.3	23.8	3.3
UTFD13B	12	19.0	20.6	26.2	
UTFD14B	14	22.2	23.0	28.6	
UTFD15B	16	25.4	24.6	31.0	
UTFD16B	18	28.6	27.0	33.3	
UTFD17B	20	31.8	29.4	36.5	
UTFD18B	22	34.9	31.8	39.7	
UTFD19B	24	38.1	34.9	42.9	4.0

Adaptors for flexible cable protection systems (conduits)



Adaptors for flexible cable protections systems that fit to the TRIM TRIO circular connectors are available from cable protection systems manufacturers (e.g. PMA).

2 solutions are offered:

- UNEF Adaptors that fit directly onto the connectors (left picture)
- METRIC Adaptors that fit onto the metal cable clamp tubes as indicated on pages 43 and 44 (right picture)

These types of adaptors offer extra protection to single wire applications (electrical, coax, Fibre optic ... etc.)

Note: the adaptors are not available from Souriau. They must be ordered directly from the manufacturers



Cable gland threadings used on cable clamps

Shell size	Thread size on connectors	PG threading	Metric threading
10	9/16 - 24 UNEF	PG9	M16 x 1.5
12	11/16 - 24 UNEF	PG11	M20 x 1.5
14	13/16 - 20 UNEF	PG13.5	M20 x 1.5
16	15/16 - 20 UNEF	PG16	M25 x 1.5
18	1-1/16 - 18 UNEF	PG16	M25 x 1.5
20	1-3/16 - 18 UNEF	PG21	M32 x 1.5
22	1-5/16 - 18 UNEF	PG21	M32 x 1.5
24	1-7/16 - 18 UNEF	PG29	M32 x 1.5

RM/RC



Size 16 solid machined contacts for TRIM TRIO connectors

Description

Size 16 RM/RC .063" (1.6mm) diameter contacts are precision solid machined crimp snap-in pin and sockets for heavy duty top performance requirements.

Springs on both contacts are made of spring-tempered, heat-treated, beryllium copper.

The socket inner spring supplies high contact pressure to ensure low-resistance contact between pin and socket. The socket contact features closed entry to prevent probe damage. Crimp barrels have insulation grips for vibration support and are provided with a cable stop and inspection hole.

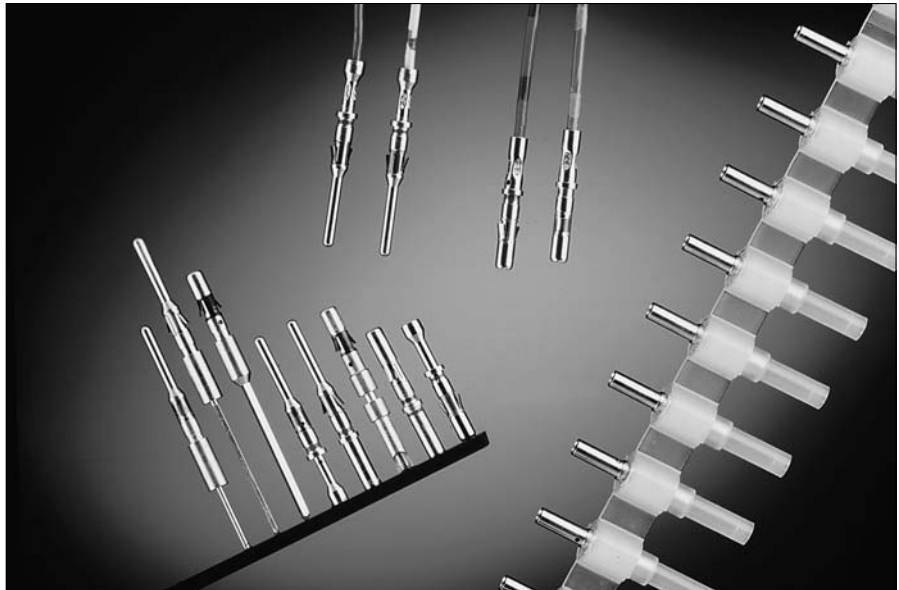
Features and benefits

- Made from high conductive copper alloy with gold or tin over nickel plate finish.
- Heat-treated beryllium copper locking springs assure proper locking and alignment of contacts in the housing.
- Closed entry design on RC socket contact to prevent probe damage.
- Contacts available in bulk packing

Performance characteristics

Current rating:	13 Amp
Contact resistance:	≤ 3 mΩ

Contact retention in body:	110 N min.
Individual insertion force:	3.5 N max.
Individual withdrawal force:	0.55 N min.



Construction

Contact body: High conductive copper alloy.

Outer spring: Tempered, heat-treated, beryllium copper.

Inner spring socket: Tempered, heat-treated, plated beryllium copper.

Plating table

K (std)	= Min. 0.4 μ Gold all over, over Nickel
J	= Gold flash all over, over Nickel
N	= Min. 0.75 μ Gold all over, over Nickel
T	= 3 - 5 μ Tin all over, over Nickel
Other platings on request	

Connector accommodation

Any TRIM TRIO size 16 contact can be used in any contact position in any connector in the TRIM TRIO size 16 interconnection system.

- MS-M / MSG / MB
- SMS Qikmate
- UTG
- UTP
- UT0
- MBG

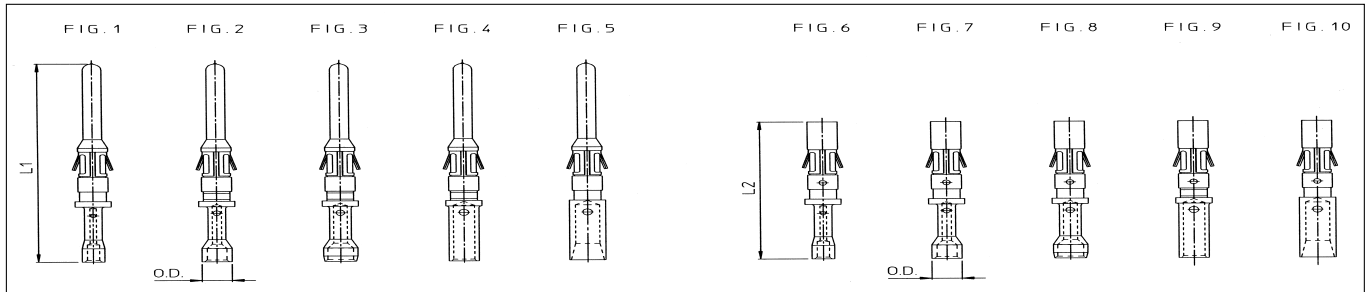
How to order

	(K) RM (K) RC	16 16	M M	23 23	(GE1) (GE1)	K K	- -
Contact type:	RM: Male contact bulk packing RC: Female contact bulk packing KRM: Male contact on plastic carrier strip KRC: Female contact on plastic carrier strip						
AWG Size:	16, 20, 24, 28						
Size 16:	.0625" (1.6mm) Diameter contacts						
Design variation:	Crimp barrel						
Grounding contact:							
Plating indication:	See plating table						
Packing quantity:	No digit (std) : 50 pcs. bulk packing (RM/RC) : 2000 pcs on reel (KRM/KRC) 1000 : 1000 pcs bulk packing (RM/RC)						

RM/RC



Standard RM/RC crimp contacts: Contact size 16 - Pin diameter 1.6mm (.063")



Dimensional table

Part number		Wire size		Max. wire dia.	Max. insul. dia.	Wire strip length	O.D.	L1	L2
Pin contacts	Fig.	Socket contacts Standard	Fig.	AWG	mm ²				
RM28M1(*)	1	RC28M1(*)	6	30-28	0.05-0.08	0.55	1.1	1,90	26,2
RM24M9(*)	2	RC24M9(*)	7	26-24	0.13-0.20	0.8	1.6	2,55	
RM20M13(*)	3	RC20M13(*)	8	22-20	0.32-0.52	1.18	1.8	2,92	
RM20M12(*)		RC20M12(*)					2.2	2,92	
RM16M23(*)	4	RC16M23(*)	9	20-16	0.52-1.50	1.80	3.2	2,55	27,2
RM16M23GE1(*)		RC16M23GE1(*)	9					3,10	
RM14M50(*)	5	RC14M50(*)	10	16-14	1,5-2,5	2,05		3,10	26,2
RM14M30(*)	5	RC14M30(*)	10	16-14	1,5-2,5	2,28		3,10	

(*) Plating indication : See plating table

For machined contact reeled on plastic carrier: put "K" in front of part number e.g. KRM16M23K

For grounding contacts (1 mm longer) add "GE1" to the part number (e.g. RM16M23GE1K)

For last make contacts (0,3 mm shorter) add "GE3" to the part number (e.g. RM16M23GE3K)

Special RM / RC contacts: Contact size 16 - Pin diameter 1.6mm (.063")

Part number			Type	Wire size		Post cross section A	Length out of TRIM TRIO cavity	Anti-rotating bushing part number
Pin contacts	Socket contacts			AWG	mm ²			
RM16SE0(*)	RC16SE4(*)		Handsolder	16 - 20	1.50 - 0.52	ø1.7	3.5	-
RM20M12G4(*)	RC20M12G4(*)		Mini - wrap	28 - 30	0.08 - 0.05	ø 0.636	16.0	J1661

(*) Plating indication : See plating table.

Crimptooling table

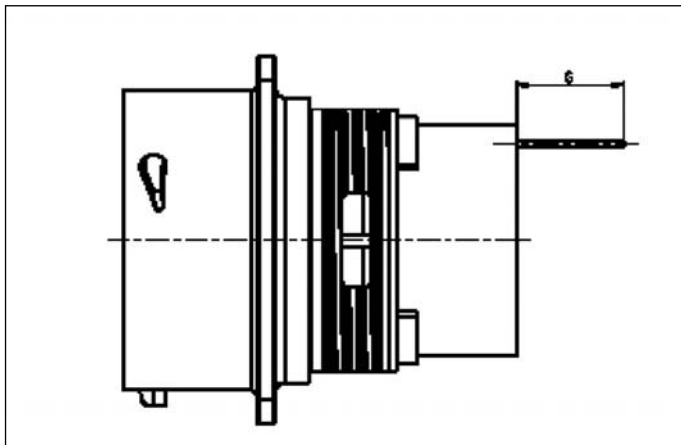
Size	Hand crimp tooling for loose contacts						Automatic crimp tooling for contacts on strip		Extraction tools
	Hand tools die set included	MH860		M10S1		M8ND	P100MAN (Press)		
		Positioner (not incl.)	Locator setting	Die set (not incl.)	Stop bushing (not incl.)	Die set (not incl.)	Left side applicator KRM/KRC (not incl.)	Stripper unit (not incl.)	
28-1	Y16RCM or AF8 + TP120	MH86164G	4/6	S9	SL40	N24RT10	--	Consult Factory	RX2025GE1 or RX2025GE2 or RX16D11D1
24-9			5/6			MLSP2763			
20-12/13			5/7	S10		N20RT30	MLSP2764		
16-23		MH86186	6/8	S3D1	SL39	N16RT21	MLSP2765		
16-GE1					SL115	N16RT25			
14-50	--	--	S3-14	SL39	--	--	--		
14-30		--	--	--	--	--	--		

For detailed information on crimp tooling : See crimp tooling section

RM/RC



Nominal length (dim G) of dipsolder contacts out of connector (contacts to be ordered separately)



UTP0 / UTG0 wall mounting receptacle connectors

Connector size	Pin contact		Socket contact		
	RM20M12E8*	RM20M12E83*	RC20M12E8*	RC20M12E83*	RC20M12E84*
All sizes	5.2	10.3	5.2	10.4	13.9

* Plating indication: See (plating table)

UT00 wall mounting receptacle connectors

Connector size	Pin contact		Socket contact		
	RM20M12E8*	RM20M12E83*	RC20M12E8*	RC20M12E83*	RC20M12E84*
10	4	9.1	3.3	8.5	12.1
12	4	9.1	3.3	8.5	12.1
14	4	9.1	3.3	8.5	12.1
16	4	9.1	3.3	8.5	12.1
18	4	9.1	3.3	8.5	12.1
20	4.1	9.2	1.8	7	10.6
22	4.1	9.2	1.1	6.3	9.9
24	4.1	9.2	1.1	6.3	9.9

* Plating indication: See (plating table)

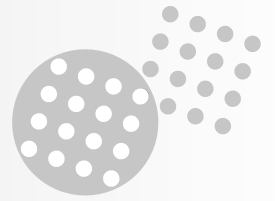
UT07 jam nut receptacle connectors

Connector size	Pin contact		Socket contact		
	RM20M12E8*	RM20M12E83*	RC20M12E84*	RC20M12E85*	RC20M12E86*
10	4.1	9.2	4.65	7.15	7.95
12	4.1	9.2	4.65	7.15	7.95
14	4.1	9.2	5.35	7.85	8.65
16	4.1	9.2	4.65	7.15	7.95
18	4.1	9.2	4.65	7.15	7.95
20		4.85		3.4	4.2
22		4.85		2.7	3.5
24		3.35		1.3	2.1

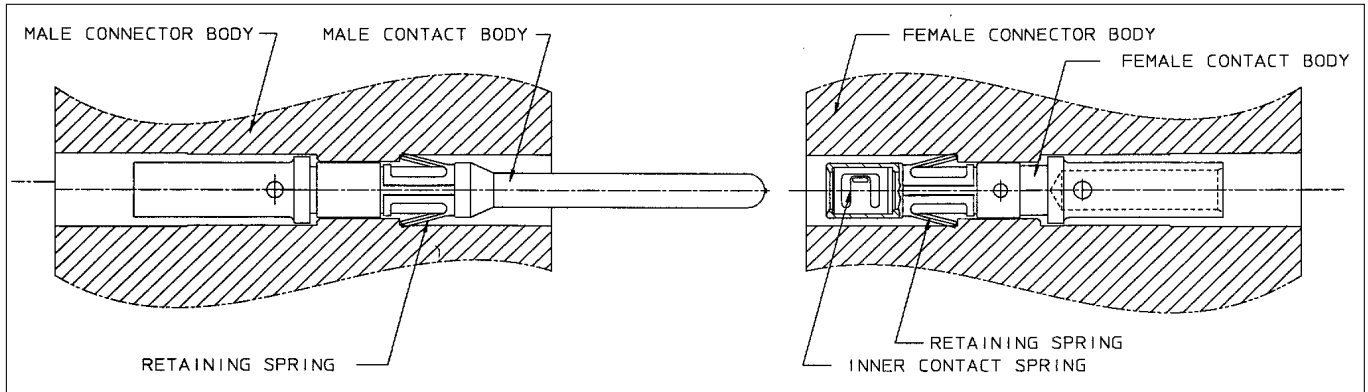
For recommended PC-Board hole lay out: Consult factory

* Plating indication: See (plating table)

RM/RC



The RM/RC contact principle



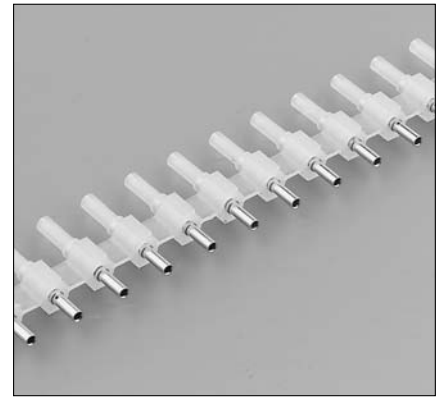
The RM/RC contact packing



50 pcs bulk packing (standard)



1000 pcs bulk packing



Reeled contacts on plastic carrier (qty 2000 pcs)

SM/SC-M



Size 16 stamped and formed contacts for TRIM TRIO connectors

Description

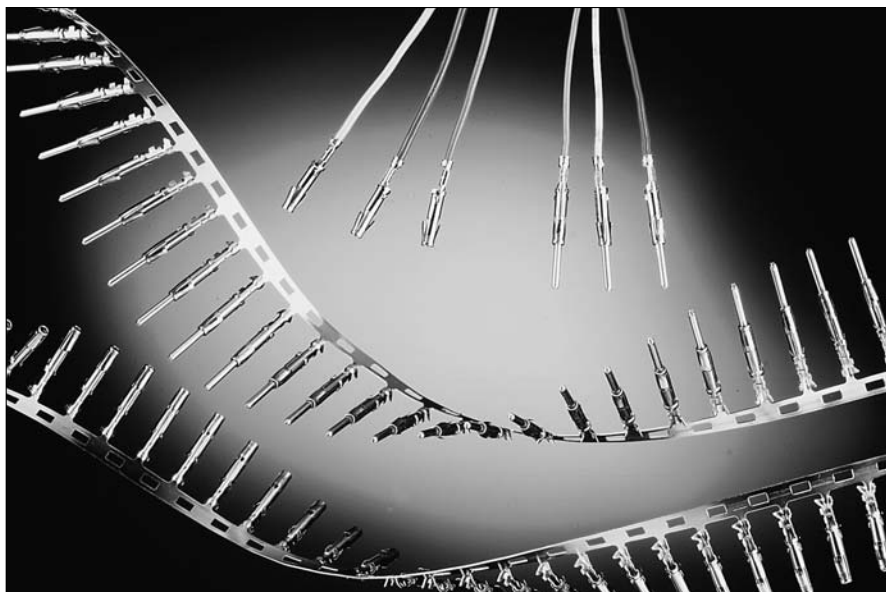
Size 16 SM/SC .063" (1.6mm) diameter contacts are two piece strip formed crimp snap-in pin and sockets. These contacts consist of a crimp body made of high conductive copper alloy, and a stainless steel retaining spring featuring retention in the housing cavity and a closed entry socket to prevent probe damage. The contact with its open barrel is standard available on strip and packaged with 3000 pcs on reel. This reel packaging combined with semi or even full automatic crimp tooling provides the added advantage of a lower installed cost.

Features and benefits

- Made from high conductive copper alloy with gold or tin over nickel plate finish.
- Two piece construction with dual purpose spring which serves for contact retention and protects the body against damage.
- Contacts available on reel (standard) and in bulk packing (100 pcs).
- Suitable for high volumes and lower installation cost.

Performance characteristics

Current rating:	13 Amp
Contact resistance:	≤ 6 mΩ
Contact retention in body:	65 N min.
Individual insertion force:	3.5 N max.
Individual withdrawal force:	0.55 N min.



Construction

Contact body: High conductive copper alloy.

Outer spring: Stainless steel

Plating table

S6 = 0.75m Gold min. in contact area, flash on crimp barrel over Nickel.

D70 = Gold flash all over, over Nickel.

TK6 = Preplated Tin all over.

Connector accommodation

Any TRIM TRIO size 16 contact can be used in any contact position in any connector in the TRIM TRIO size 16 interconnection system.

- MS-M / MSG / MB
- SMS Qikmate
- UTG
- UTP
- UTO
- MBG

Note:

Reeled contacts are for applicator with left side feeding.

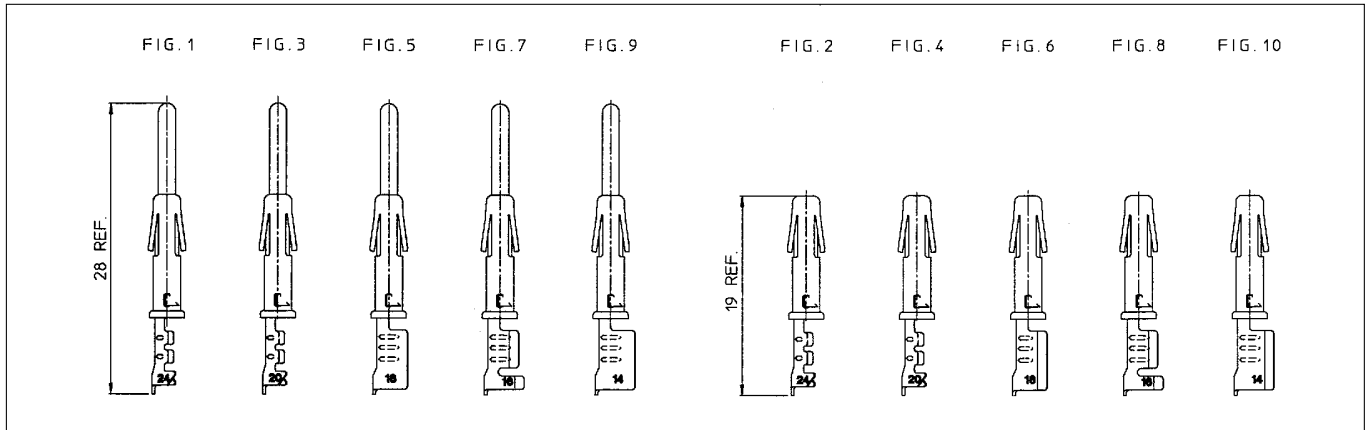
How to order

	SM SC	16 16	M M	(L) (L)	1 1	S6 S6
Contact type:	SM: Male contact SC: Female contact					
AWG Size:	14, 16, 20, 24					
Type of crimp barrel:	American open crimp barrel					
Packing:	No digit: Contacts on strip (qty 3000 per reel) L: Preformed loose piece contacts					
Design variation	1 : Only wire crimp for size 14 and 16 11 : Wire + insulation crimp for sizes 20 and 24 11 : Wire + insulation crimp for size 16					
Plating indication:	See plating table					

SM/SC-M



Standard SM/SC crimp contacts: Contact size 16 - Pin diameter 1.6mm (.063")



Dimensional table

Part number: contacts on strip Loose pieces				Wire size		Insulation diameter	Wire strip length
Pin contacts	Fig.	Socket contacts	Fig.	AWG	mm ²		
SM24M1S6 SM24ML1S6	1	SC24M1S6 SC24ML1S6	2	26 - 24	0.13 - 0.25	0.89 - 1.58	4.0
SM20M1S6 SM20ML1S6	3	SC20M1S6 SC20ML1S6	4	22 - 20	0.35 - 0.50	1.17 - 2.08	4.0
SM16M1S6 SM16ML1S6	5	SC16M1S6 SC16ML1S6	6	18 - 16	0.80 - 1.50	3.0	6.35
SM16M11S6 SM16ML11S6	7	SC16M11S6 SC16ML11S6	8	18 - 16	0.80 - 1.50	2.0 - 3.0	4.65
SM14M1S6 SM14ML1S6	9	SC14M1S6 SC14ML1S6	10	14	2.0 - 2,5	3.2	6.35

For other platings: See plating table.

Crimptooling table

Size	Hand crimp tooling for loose contacts		Automatic crimp tooling for contacts on strip		Extraction tooling
	Hand tools die set included	M8ND Die set (not included)	P100 MAN Mini Applicator (not included)	(Stripper - crimper)	
24	Y16SCM2 (ratchet)	N24RT11	MLS0318B	SC10S1	RX2025GE1 or RX2025GE2 or RX16D11D1
20	Y14SCM2 (not ratchet) Y14MTV (ratchet)	N20RT29	MLS0555A		
16M(L)11	Y16SCM2 (ratchet) Y14SCM2 (not ratchet)	N16RT26	MLS0356A		
16M(L)1	Y14SCM (ratchet) Y14MTV (ratchet)	N16RT24	MLS1579		
14	Y14SCM (ratchet) Y14MTV (ratchet)	N14RT13	MLS1047		

For detailed information on crimp tooling : See crimp tooling section