



## Contact selector guide

### Electrical characteristics: contact resistance

#20 Ø1mm	Machined	< 6mΩ
	Stamped & formed	< 15mΩ
#16 Ø1.6mm	Machined	< 3mΩ
	Stamped & formed	< 6mΩ
#12 Ø2.4mm	Machined	< 5mΩ
#8 Ø3.6mm	Machined	< 5mΩ

### Available platings

A	2μ Ni + 2μ Ag
J	Gold flash over 2μ Ni
K	Min 0.4μ gold over 2μ Ni
S31	Gold flash over Ni
S18	0.75μ gold min in active part over 2μ Ni Gold flash over Ni
S25 S26	Active part: 0.75μ Au over Ni Crimp area: flash Au over Ni
T	T: 2μm Ni mini all over + 3 to 5 μm Sn all over
TK6	2-5μ Sn pre-plated

## Packaging

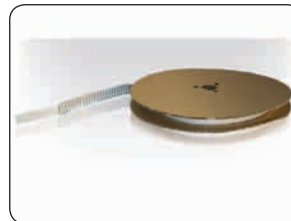
Conscious of the wide variety of applications, contact packaging has been considered for small series (bulk packaging) and high volume production (reeled contacts):



• 50 pieces bulk packing (standard)



• 1000 pieces bulk packing



• 3000 pieces reeled stamped & formed contacts



• 5000 pieces reeled machined contacts



# UTS Series

## Crimp contacts

### Standard version



Contact size	Type	Wire size		Part number		Max wire Ø	Max insulator Ø	Color band		Plating available
		AWG	mm <sup>2</sup>	Male	Female			Front	Rear	
#20 Ø1 mm	Machined	26-24	0.13-0.20	RM24W3-	RC24W3-		1.58 max	-	-	K
	S&F	26-24	0.13-0.25	SM24W3S26 (1) SM24WL3S26 (2)	SC24W3S25 (1) SC24WL3S25 (2)		0.89-1.58	-	-	S25, S26
	Machined	22-20	0.32-0.52	RM20W3-	RC20W3-		1.58 max	-	-	K
	S&F	22-20	0.35-0.5	SM20W3S26 (1) SM20WL3S26 (2)	SC20W3S25 (1) SC20WL3S25 (2)		1.17-2.08	-	-	S25, S26
	Machined	20-18	0.50-0.93	RM18W3-	RC18W3-		2.10 max	-	-	K
#16 Ø1.6 mm	Machined	30-28	0.05-0.08	RM28M1-	RC28M1-	0.55	1.1	-	-	K, J, T
	Machined	26-24	0.13-0.2	RM24M9-	RC24M9-	0.8	1.6	Red	-	K, J, T
	S&F	26-24	0.13-0.25	SM24M1- (1) SM24ML1- (2)	SC24M1- (1) SC24ML1- (2)	0.89-1.28		-	-	S31, S18, TK6
	Machined	22-20	0.32-0.52	RM20M13-	RC20M13-	1.18	1.8	Black	-	K, J, T
				RM20M12-	RC20M12-		2.2	Blue		
	S&F	22-20	0.35-0.5	SM20M1- (1) SM20ML1- (2)	SC20M1- (1) SC20ML1- (2)	1.17-2.08		-	-	S31, S18, TK6
	Machined	20-16	0.52-1.5	RM16M23-	RC16M23-	1.8	3.2	-	-	K, J, T
	S&F	18-16	0.8-1.5	SM16M1- (1) SM16ML1- (2)	SC16M1- (1) SC16ML1- (2)	3.0		-	-	S31, S18, TK6
	S&F	18-16	0.8-1.5	SM16M11- (1) SM16ML11- (2)	SC16M11- (1) SC16ML11- (2)	2.0-3.0		-	-	S31, S18, TK6
	Machined	16-14	1.5-2.5	RM14M50-	RC14M50-	2.05	3.2	-	-	K, J, T
	Machined	16-14	1.5-2.5	RM14M30-	RC14M30-	2.28	3.2	-	-	K, J, T
S&F	14	2.0	SM14M1- (1) SM14ML1- (2)	SC14M1- (1) SC14ML1- (2)	3.2		-	-	S31, S18, TK6	
#12 Ø2.4 mm	Machined	22	0.13-0.4	8291 1457N-	8291 1456-	-	4.9	-	-	A, K
		20	0.5	8291 1459N-	8291 1458-					
		18	0.75-1.0	8291 1461N-	8291 1460-					
		16	1.5	8291 1463N-	8291 1462-					
		14	2.5	8291 1465N-	8291 1464-					
		12	4	8291 1467N-	8291 1466-					
#8 Ø3.6 mm	Machined	16	1.5	8291 3601-	8291 3600-	-	6.5	-	-	A
		14	2.5	8291 3603-	8291 3602-					
		12	4	8291 3605-	8291 3604-					
		10	6.0	8291 3607-	8291 3606-					
		8	10.0	8291 3609-	8291 3608-					

(1) contact reeled  
(2) loose contact



## Crimp contacts

### First Mate Last Break contacts

Contact size	Type	Wire size		Part number		Max wire Ø	Max insulator Ø	Color band		Plating available
		AWG	mm <sup>2</sup>	Male	Female			Front	Rear	
# 16 Ø1.6 mm Longer male contact (+1mm)	Machined	30-28	0.05-0.08	RM28M1GE1□	-	0.55	1.1	-	Red	□ = K, J or T
		26-24	0.13-0.2	RM24M9GE1□		0.8	1.6	Red	Red	
		22-20	0.32-0.52	RM20M13GE1□		1.18	1.8	Black	Red	
				RM20M12 GE1□				2.2	Blue	
		20-16	0.52-1.5	RM16M23 GE1□		1.8	3.2	-	Red	
		16-14	1.5-2.5	RM14M50 GE1□		2.05	-	-	Red	
16-14	1.5-2.5	RM14M30 GE1□	2.28	-	-	Red				
# 16 Ø1.6 mm Shorter female contact (-0.7mm)	Machined	30-28	0.05-0.08	-	RC28M1GE7□	0.55	1.1	-	Blue	□ = K, J or T
		26-24	0.13-0.2		RC24M9GE7□	0.8	1.6	Red	Blue	
		22-20	0.32-0.52		RC20M13GE7□	1.18	1.8	Black	Blue	
					RC20M12GE7□			2.2	Blue	
		20-16	0.52-1.5		RC16M23GE7□	1.8	3.2	-	Blue	
		16-14	1.5-2.5		RC14M50GE7□	2.05	-	-	Blue	
16-14	1.5-2.5	RC14M30GE7□	2.28	-	-	Blue				

### How to make FMLB / LMFB connection

Contact 1 \ Contact 2	Standard male contact	Standard female contact	Longer male contact
Standard male contact		✓	
Standard female contact	✓		✓ FMLB
Shorter female contact	✓ LMFB		

First Mate Last Break contacts should be chosen only if the cavity is not marked with the earth symbol. For cavities marked with the earth symbol, standard contacts will fulfill the same role as a first mate, last break contact used in a standard cavity.



Ground symbol



# UTS Series

## Coaxial contacts

### Coaxial contact range

We provide 2 types of coaxial contacts suitable for 50 or 75Ω, coaxial cable or twisted pair cable.

#### Monocrimp coaxial contact

- The monocrimp one-piece coaxial contacts offer high reliability plus the economic advantage of a 95% reduction in installation time over conventional assembly methods.
- This economy is achieved by simultaneously crimping both the inner conductor and outer braid or drain wire.



#### Multipiece crimp coaxial contact

- The inner conductor and outer braid is crimped individually.
- The thermoplastic insulating bushing in the outer body is designed to accept and permanently retain the inner contact.
- An outer ferrule is used to connect the braid to the outer contact and provide cable support to ensure against bending and vibration.



#### Suitable for Coaxial cable or Twisted cable

- For jacket diameter from 1.78 to 3.05mm  
Inner conductor up to 2.44mm diameter



- For jacket diameter from 0.64 to 1.45mm  
Inner conductor from AWG30 to AWG24



#### Contacts for coaxial cable summary

Contact type	Contact range		Contact part number with cable combination	Cabling notice
	Male contact	Female contact		
<b>Multipiece</b>	RMDXK10D28	RCDXK1D28	See page 68	See pages 72 & 73
<b>Monocrimp</b>	RMDX60xxD28	RCDX60xxD28		See page 74

#### Contacts for twisted pairs cable summary

Contact type	Contact range		Contact part number with cable combination	Cabling notice
	Male contact	Female contact		
<b>Multipiece</b>	RMDXK10D28 + YORK090	RCDXK1D28 + YORK090	See page 69	See page 70
<b>Monocrimp</b>	RMDX60xxD28	RCDX60xxD28		See page 71



## PCB contacts

### PCB contacts

#### PCB soldering

UTS range can be carried out with a wave soldering process, but not reflow soldering process. All high temperature processes are prohibited.



Contact size	Type	Part number		Plating
		Male	Female	
#20 Ø1mm	Short version	RMW50A7□	RCW50A7□	□ = K
	Long version	RMW5016□	RCW5016□	
#16 Ø1.6mm	Short version	RM20M12E8□	RC20M12E8□	□ = K or T
	Long version	RM20M12E83□	RC20M12E83□	
			RC20M12E84□	



# UTS Series

## Fibre optic contacts

### Description

#### Size 16 Fibre optic contacts for TRIM TRIO® connectors

Size 16 Fibre optic contacts are optical contacts designed for the integration of optical links in all TRIM TRIO® cable connectors.

#### The Fibre optic contacts are designed to accommodate:

- Plastic Optical Fibre (POF)
  - 1 mm core and 2.2 mm jacket
- Plastic Clad Fibre (PCF)
  - 230µm core and 2.2 mm jacket
- Multimode Silica Fibre
  - 62.5/125µm type 2.0 mm max. jacket
- Singlemode Silica Fibre
  - 9/125µm type 2.0 mm jacket



#### Typical features and benefits are:

- Socket contact is spring loaded to avoid any air gap between the two optical faces.
- Low insertion loss is provided by high precision pieces.
- Single jumpers, multiway harness and active device housings can be supplied regarding customer requirement.

### Technical characteristics

#### Performance

• Fibre type:	POF/PCF	Multimode 62.5/125µm	Singlemode 9/125µm
• Wave length:	650 nm	1300 nm	1310 nm
• Optical insertion loss (typ.):	2 dB max.	< 0.5 dB	< 0.35 dB
• Jacketed external diameter:	2.2mm	2.0mm max.	2.0mm max.
• Temperature range:	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C
• Cable retention:	49N		
• Mating cycles without cleaning:	50		
• Max. mating cycles:	500		

#### Construction

- Contact body: Copper alloy

#### 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 : UTP, UTS, UTG, UTO.



## Fibre optic contacts

### Ordering information

#### POF Contacts (Plastic Optical Fibre)

Male contact	RMPOF1000
Female contact	RCPOF1000B

#### PCF Contacts (Plastic Clad Fibre)

Male contact	RMPCF230
Female contact	RCPCF230B

#### Silica Contacts - Multimode

Male contact	RMMMOFA
Female contact	RCMMOFA

#### Silica Contacts - Monomode

Male contact	RMSMOFA
Female contact	RCSMOFA

### POF Contact (Plastic Optical Fibre)

#### STANDARD TOOLING KIT - P/N 80MS0004

The *standard tooling kit* is made of the part numbers below that can be ordered separately as well.

Part numbers	Descriptions
80WD0005	Stripping tool
80WD0025	Automatic stripping tool for Ø 0.5 mm, 0.6 mm, 0.7 mm & 3.8 mm
80WM0006	Ruler
80WP0005	Polishing plate
80WP0013	Non slip base (to hold the polishing plate)
80WP0014	Polishing disk (grain size 9µm)
80WP0018	Polishing tool
80WP0019	Polishing disk (grain size 30µm)
80WS0002	Crimping plier

#### SPECIFIC TOOLING LIST - can be ordered only separately

Part numbers	Descriptions
80WG0010	Needle
80WG0015	Capsule
80WG0016	Syringe
80WN0005	Dry air spray
80WN0006	Optical paper
80WN0012	Dropping bottle
80WN0008	Wiping solvent

### PCF Contact (Plastic Clad Fibre)

#### STANDARD TOOLING KIT - P/N 80MG0039

Descriptions
Stripping tool for Ø 2.2 mm
Kevlar scissors
Stripping tool for Ø 0.25 mm
Alumina blade
Polishing tool
Press fit tool
Microscope

Descriptions
Polishing disk (grain size 9µm)
Polishing disk (grain size 0.3µm)
Curing oven
Polishing plate
Non slip base (to hold the polishing plate)
Glue



# UTS Series

## Fibre optic contacts

### Multimode Contact - Silica

#### STANDARD TOOLING KIT - P/N 80MG0027

The *standard tooling kit* is made of the part numbers below that can be ordered separately as well.

Part numbers	Descriptions
80WC0001	Aramid yarn scissors
80WC0003	Cutter
80WC0004	Alumina blade
80WD0008	Stripping tool for Ø 0.20 mm
80WD0010	Stripping tool for Ø 0.25 mm
80WD0014	Stripping tool for Ø 0.60 mm
80WD0025	Automatic stripping tool for Ø 0.5 mm, 0.6 mm, 0.7 mm & 3.8 mm
80WM0006	Ruler
80WP0005	Polishing plate
80WP0013	Non slip base (to hold the polishing plate)
80WT0008	Curing oven
80WT0009	Protective tube

#### SPECIFIC TOOLING LIST - can be ordered only separately

Part numbers	Descriptions
80WD0036	Stripping tool for Ø 0.9 mm & 0.25 mm
80WD0005	Stripping tool for Ø 2.2 mm & 1.5 mm
80WL0001	Microscope x400
80WL0008	Microscope adaptor
80WP0025	Polishing tool
80WS0002	Crimping tool
80WT0005	Contact support for polymerisation
80WG0010	Needle
80WG0014	Glue
80WG0015	Capsule
80WG0016	Syringe
80WN0005	Dry air spray
80WN0006	Optical paper
80WN0012	Dropping bottle
80WP0014	Polishing disk (grain size 9µm)
80WP0015	Polishing disk (grain size 0.3µm)