SOURIAU

The full plastic circular connector

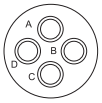
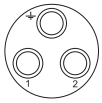
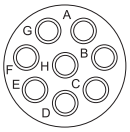
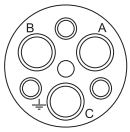
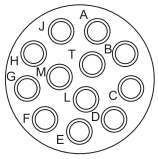
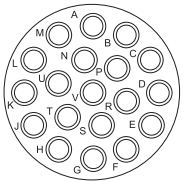
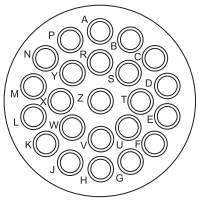
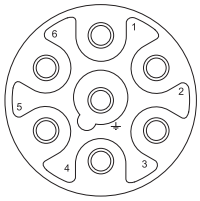
UTP provides the complete answer to the need for economical lightweight and robust circular connector

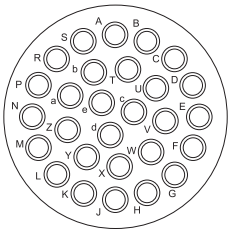
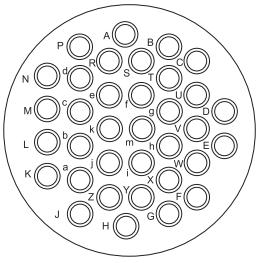
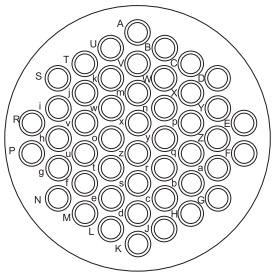
Flammability rating	✓	UL94-V0 compliant
Rapid and secure locking	✓	Locks with audible positive «click»
Interconnectivité & intermariable	✓	Intermateable and interchangeable with UTO, UTG and UTS series
Complete range of contacts	✓	Trim Trio contacts #16

RoHS Compliant

Esterline Connection Technologies

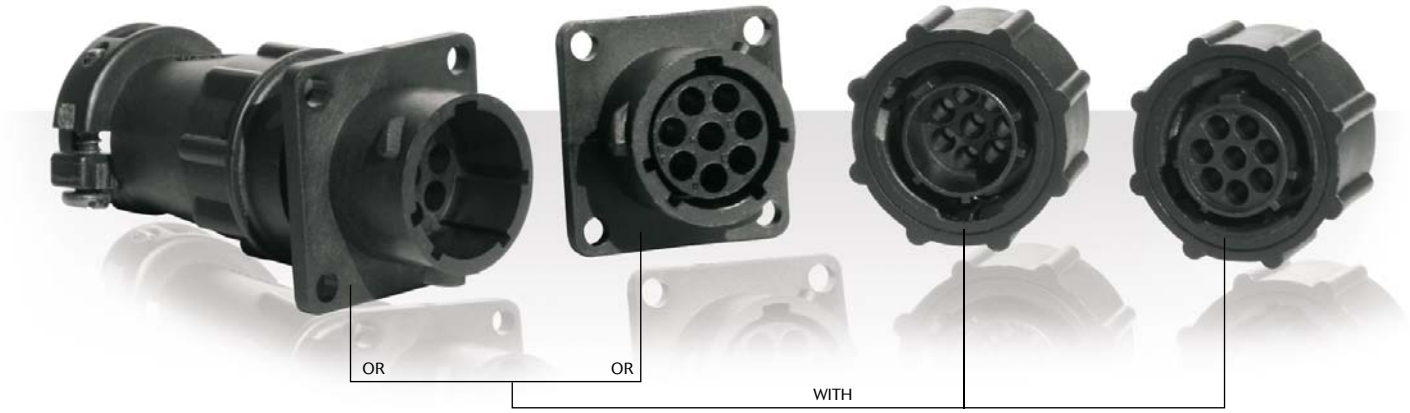
Layout

Shell size	Contact # 16 (Ø 1,6)	Mixed power / signal versions
10	 10-4	 10-3 3 x #16 (Ø 1,6) Group C 250V
12	 12-8	 12-2G1 3 x #12 (Ø 2,4)
14	 14-12	
16	 16-19	
18	 18-23	 18-7 Group C 380V 7 x # 16 (Ø 1,6)

Shell size	Contact # 16 (Ø 1,6)	Mixed power / signal versions
20	 20-28	
22	 22-35	
24	 24-48	

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

UTP Series



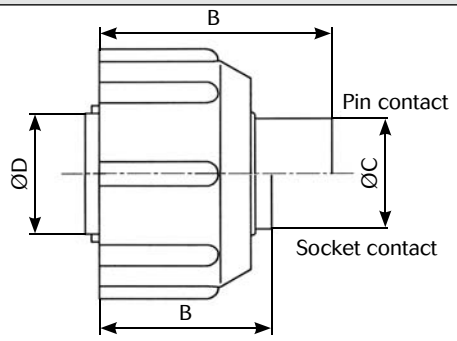
Specifications

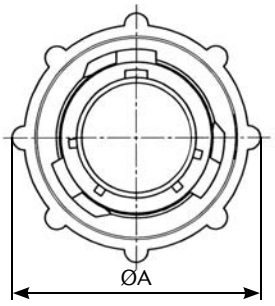
Connector type	Shell size	Contacts number*	Part number	
			Male insert	Female insert
Cable plug	10	4	UTP6104P	UTP6104S
			UTP6103P	UTP6103S
	12	8	UTP6128P	UTP6128S
		2 + ground	UTP6122G1P	UTP6122G1S
	14	12	UTP61412P	UTP61412S
	16	19	UTP61619P	UTP61619S
	18	23	UTP61823P	UTP61823S
		6 + ground	UTP6187P	UTP6187S
	20	28	UTP62028P	UTP62028S
	22	35	UTP62235P	UTP62235S
	24	48	UTP62448P	UTP62448S
Panel mounting receptacle	10	4	UTP0104P	UTP0104S
			UTP0103P	UTP0103S
	12	8	UTP0128P	UTP0128S
		2 + ground	UTP0122G1P	UTP0122G1S
	14	12	UTP01412P	UTP01412S
	16	19	UTP01619P	UTP01619S
	18	23	UTP01823P	UTP01823S
		6 + ground	UTP0187P	UTP0187S
	20	28	UTP02028P	UTP02028S
	22	35	UTP02235P	UTP02235S
	24	48	UTP02448P	UTP02448S

*Contacts supply separately

Dimensions

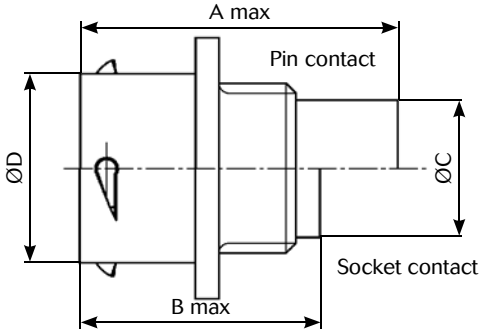
Cable plug - UTP6

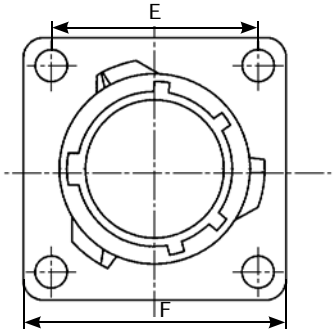


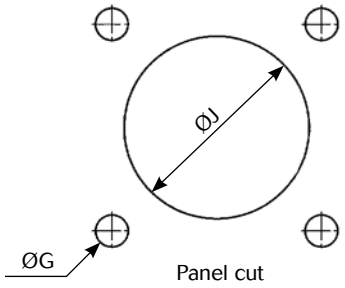


Shell size	ØA±0.2	B max		ØC±0.15	ØD±0.15	ØE±0.2
		Pin contact	Socket contact			
10	26.7	31.8	23.9 / 26.75	10.9	12.2	19.1
12	31.4		23.9	13.8	15.1	
14	34.5			17.0	18.3	
16	37.8			19.9	21.5	
18	40.8	31.8 / 33.0	23.9 / 29.0	22.4	24.0	
20	43.9	31.8	24.9	25.6	27.2	
22	47.0			28.5	30.4	
24	50.1		26.2	31.7	33.5	

Panel mounting - UTP0







Shell size	A max		B±0.15	C±0.2	ØD±0.15	ØE±0.2	F±0.25	ØG±0.1	ØJ±0.1
	Pin contact	Socket contact							
10	31.7	24.3 / 27.6	2.3	11.3	15.0	18.3	23.8	3.2	15.1
12		24.3			19.0	20.6	26.2		18.2
14					22.2	23.0	28.6		21.4
16					25.3	24.6	31.0		24.6
18	31.7 / 34.0	24.3 / 30.4	2.5	11.3 / 17.9	28.5	27.0	33.3		27.7
20	33.3	27.0		14.5	31.7	29.4	36.5		30.9
22		28.0	3.5		34.9	31.8	39.7		34.1
24		30.4		15.3	38.0	34.9	42.9	3.9	37.3

Note: all dimensions are in mm

Accessories and tooling

Cable clamp

Part number	Shell size
UTG10AC	10
UTG12AC	12
UTG14AC	14
UTG16AC	16
UTG18AC	18
UTG20AC	20
UTG22AC	22
UTG24AC	24

Cable clamp for waterprotected (IP65) application

Part number	Shell size
UTG10PG	10
UTG12PG	12
UTG14PG	14
UTG16PG	16
UTG18PG	18
UTG20PG	20
UTG22PG	22
UTG24PG	24

Cable gland for waterprotected (IP65) application

Part number	Shell size
UTG10ST	10
UTG12ST	12
UTG14ST	14
UTG16ST	16
UTG18ST	18
UTG20ST	20
UTG22ST	22
UTG24ST	24

Metal shrink boot

Part number	Shell size
UTG10AD	10
UTG12AD	12
UTG14AD	14
UTG16AD	16
UTG18AD	18
UTG20AD	20
UTG22AD	22
UTG24AD	24

Dustcap (receptacle)

Part number	Shell size
UTG10DC	10
UTG12DC	12
UTG14DC	14
UTG16DC	16
UTG18DC	18
UTG20DC	20
UTG22DC	22
UTG24DC	24

Dustcap with chain (receptacle)

Part number	Shell size
UTG10DCG	10
UTG12DCG	12
UTG14DCG	14
UTG16DCG	16
UTG18DCG	18
UTG20DCG	20
UTG22DCG	22
UTG24DCG	24

Plastic protective cap for receptacle

Part number	Shell size
8500-5586A	10
8500-5587A	12
8500-5588A	14
8500-5589A	16
8500-5590A	18
8500-5591A	20
8500-5592A	22
8500-5593A	24

Gasket

Part number	Shell size
UTFD12B	10
UTFD13B	12
UTFD14B	14
UTFD15B	16
UTFD16B	18
UTFD17B	20
UTFD18B	22
UTFD19B	24

Handle

Part number
Shandles

Tool kit

Part number
Toolkit

Crimp tooling

Contacts	Contact size	Part number of head
RM/RC 28M1K(1)	Standard contacts #16 Ø 1.6mm	S16RCM20
RM/RC 24M9K(1)		S16RCM20
RM/RC 20M13K(1)		S16RCM20
RM/RC 20M12K(1)		S16RCM20
RM/RC 16M23K(1)		S16RCM16
RM/RC 14M50K(1)		S16RCM1450
RM/RC 14M30K(1)		S16RCM14
SM/SC 24ML1TK6(1)		S16SCM20
SM/SC 20ML1TK6(1)		S16SCM20
SM/SC 16ML1TK6(1)		S16SCML1
SM/SC 14ML1TK6(1)		S16SCML1
SM/SC 16ML11TK6(1)		S16SCML11
RMDXK10D28K	Coaxial contacts	M10S-1J
RCDXK1D28K		M10S-1J
RM/RC DX60xxD28K		M10S-1J
RM/RC DXK10D28 + york090		M10S-1J
RM/RC DX60xxD28		M10S-1J

(1): example of plating, for other plating see page 8

Contacts

Description

The UTP series is delivered without contact (crimp version). When contacts are not loaded, this series offers the unique possibility to use the same contact in any layout as long as it receives the same active part size. Thus it is possible to buy only one contact reference and equip all connectors even if housings are different.

The main benefit is the standardisation which means reduction of inventory cost.

Bearing in mind that any additional tool or complicated assembly process should be avoided, our contacts are based on a snap-in principle which avoid the use of an insertion tool.

Crimp contacts are available in different versions:

• machined

• stamped & formed

• coaxial

• fiber optic

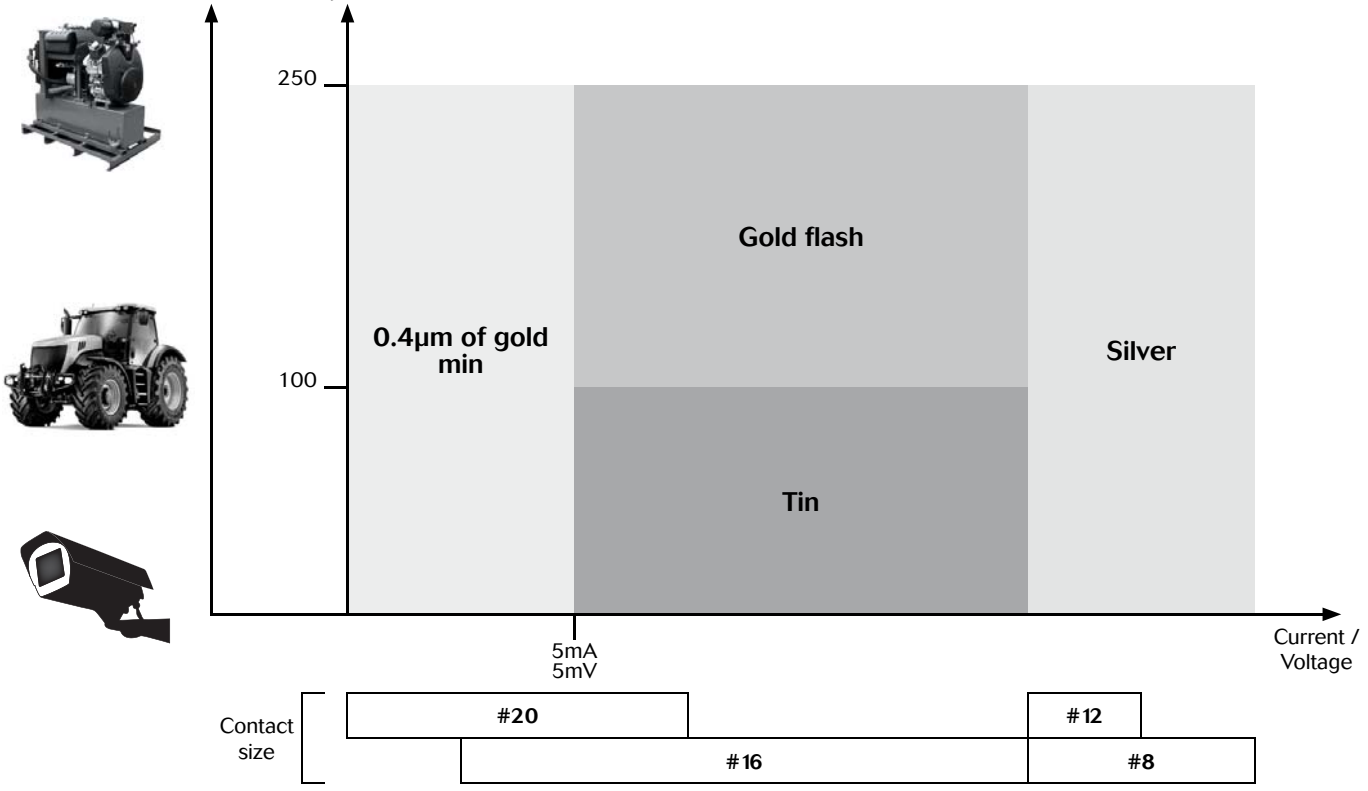
Contact plating selector guide

As soon as you know what contact size you need, you next have to decide on which type to use.
Souriau proposes mainly two different types of electrical contacts:

- Machined
- Stamped & formed

Machined contacts are generally chosen for low quantities purpose as well as a better solution for power applications.
Stamped & formed contacts offer the ability to be crimped automatically which makes them more suitable for high volume production applications.

Then comes the question: What plating should I choose ?
Hereunder is a graph with criteria to guide you:
NB: do not mix different plating (e.g. tin plated pin contact with gold plated socket contact).



Contact selector guide

Contact preloaded

Electrical characteristics: contact resistance		
#16 Ø1.6mm	Machined	< 3mΩ

Available platings (contact preloaded)
Min 0.4µ gold over 2µ Ni

Contact supply separately

Electrical characteristics: contact resistance		
#16 Ø1.6mm	Machined	< 3mΩ
	Stamped & formed	< 6mΩ

Available platings (contact supply separately)	
J	Gold flash over 2µ Ni
K	Min 0.4µ gold over 2µ Ni
S31	Active part: Gold flash over Ni Crimp area: Nickel
S18	Active part: 0.75µ gold min over 2µ Ni Crimp area: 1.3µ tin over Ni Other: Nickel
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):

Size contacts #20 & #16

- 25 pieces bulk packing (stamped & formed contacts)

- 50 pieces bulk packing (machined contacts)

- 1000 pieces bulk packing (machined contacts)

- 3000 pieces reeled (stamped & formed contacts)

- 5000 pieces reeled (machined contacts)

Crimp contacts

Standard version

Contact size	Type	Wire size		Part number		Max wire Ø	Max insulator Ø	Plating available
		AWG	mm²	Male	Female			
#16 Ø1.6 mm	Machined	30-28	0.05-0.08	**RM28M1-**	**RC28M1-**	0.55	1.1	K, J
	Machined	26-24	0.13-0.2	**RM24M9-**	**RC24M9-**	0.8	1.6	K, J
	Stamped & Formed	26-24	0.13-0.25	**SM24M1-**(1) **SM24ML1-**(2)	**SC24M1-**(1) **SC24ML1-**(2)	0.89-1.28	Insulation grip	S31, S18, TK6
	Machined	22-20	0.32-0.52	**RM20M13-**	**RC20M13-**	1.18	1.8	K, J
				RM20M12-	**RC20M12-**		2.2	
	Stamped & Formed	22-20	0.35-0.5	**SM20M1-**(1) **SM20ML1-**(2)	**SC20M1-**(1) **SC20ML1-**(2)	1.17-2.08	Insulation grip	S31, S18, TK6
	Machined	20-16	0.52-1.5	**RM16M23-**	**RC16M23-**	1.8	3.2	K, J
	Stamped & Formed	18-16	0.8-1.5	**SM16M1-**(1) **SM16ML1-**(2)	**SC16M1-**(1) **SC16ML1-**(2)	3.0	No insulation grip	S31, S18, TK6
	Stamped & Formed	18-16	0.8-1.5	**SM16M11-**(1) **SM16ML11-**(2)	**SC16M11-**(1) **SC16ML11-**(2)	2.0-3.0	Insulation grip	S31, S18, TK6
	Machined	16-14	1.5-2.5	**RM14M50-**	**RC14M50-**	2.05	3.2	K, J
	Machined	16-14	1.5-2.5	**RM14M30-**	**RC14M30-**	2.28	3.2	K, J
	Stamped & Formed	14	2.0-2.5	**SM14M1-**(1) **SM14ML1-**(2)	**SC14M1-**(1) **SC14ML1-**(2)	3.2	No insulation grip	S31, S18, TK6

(1) contact reeled (2) loose contact

Exemple: **RM20M13K** - Size #16, Machined, AWG22 wire.

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	mm²	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
		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	
				RM20M12GE1□			2.2	Blue	Red	
		20-16	0.52-1.5	RM16M23GE1□		1.8	3.2	-	Red	
		16-14	1.5-2.5	RM14M50GE1□		2.05	-	-	Red	
		16-14	1.5-2.5	RM14M30GE1□		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
		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	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	

Exemple: RM16M3GE1K - Size #16, Machined, Longer male, AWG16 wire.

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

#16 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

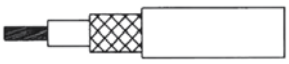
• The inner conductor and outer braid is crimped individually.

• 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		
Multipiece	RMDXK10D28	RCDXK1D28	See page 16	See pages 20 & 21
Monocrimp	RMDX60xxD28	RCDX60xxD28		See page 22

Contacts for twisted pairs cable summary

Contact type	Contact range		Contact part number with cable combination	Cabling notice
	Male contact	Female contact		
Multipiece	RMDXK10D28 + YORK090	RCDXK1D28 + YORK090	See page 17	See page 18
Monocrimp	RMDX60xxD28	RCDX60xxD28		See page 19

PCB contacts

PCB contacts

PCB soldering

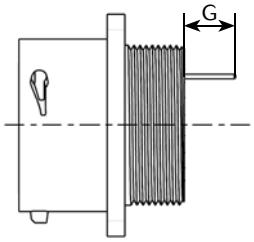
UTP range can be carried out with a wave soldering process, but not reflow soldering process.
All high temperature processes are prohibited.

Contact size	Type	Part number		Plating
		Male	Female	
#16 Ø1.6mm	Short version	RM20M12E8*	RC20M12E8*	*=K
	Long version	RM20M12E83*	RC20M12E83*	
			RC20M12E84*	

Exemple: **RM50A7K** - Size #20, Short version, male.

Nominal length (G)

Dimension of dipsolder contacts out of connector (contacts to be ordered separately).



UTP0

Connector size	Pin contact		Socket contact		
	RM20M12E8*	RM20M12E83*	RC20M12E8*	RC20M12E83*	RC20M12E84*
All size	5.2	10.3	5.2.3	10.4	13.9

* Plating indication: see plating table

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

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

- Wave length: ..... 650 nm
- Optical insertion loss (typ.): ..... 2 dB max.
- Jacketed external diameter: 2.2mm
- Temperature range: ..... -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.

#16 coaxial contacts

Coaxial cable - Contact monocrimp and multipiece

Cable type	Impe-dance	Contact type	Ø over jacket		Ø over dielectric		Inner cond size	Ø outer braid		Male contact kit for coaxial cable	Female contact kit for coaxial cable
			inch	mm	inch	mm	Ext. Ø mm	inch	mm		
RG161/U	75	Multi piece	0.09	2.29	0.057	1.45				RMDXK10D28	RCDXK1D28
RG179A/U	75		0.105	2.67	0.063	1.6	0.3	0.084	2.13 max		
RG179B/U	75		0.105	2.67	0.063	1.6	0.3	0.084	2.13 max		
RG187/U	75		0.11	2.79 max	0.06	1.52	0.3				
RG188/U	50		0.11	2.79 max	0.06	1.52	0.51	0.078	1.98 max		
RG174/U	50		0.11	2.92	0.06	1.52	0.48	0.088	2.24 max		
AMPHENOL 21-598	50		0.105	2.67	0.06	1.52	0.48				
RG196/U	50		0.08	2.03 max	0.034	0.086	0.3				
RG178A/U	50		0.075	1.91	0.034	0.86	0.3	0.054	1.37 max		
RG/188A/U	50	Mono crimp	0.110	2.79	0.06	1.52	0.51	0.078	1.98 max	RMDX6036D28	RCDX6036D28
KX21TVT (europe) RG178 B/U	50		0.075	1.91	0.034	0.86	0.3	0.054	1.37 max	RMDX6034D28	RCDX6034D28
RG178 / BU	50		0.075	1.91	0.034	0.86	0.3	0.054	1.37 max	RMDX6050D28	RCDX6016D28
RG174/U	50		0.115	2.92	0.06	1.52	0.48	0.088	2.24 max	RMDX6032D28	RCDX6032D28
RG188A/U	50		0.11	2.79	0.06	1.52	0.51	0.078	1.98 max	RMDX6036D28	RCDX6036D28
RG316/U	50		0.107	2.72	0.6	1.52	0.51	0.078	2.05 max	RMDX6036D28	RCDX6036D28
raychem 5024A3111	50		0.12	3.05	0.083	2.11	0.64	0.097	2.46	RMDX6052D28	RCDX6052D28
raychem 5026e1614	50		0.083	2.11	0.05	1.27	0.48	0.067	1.7	RMDX6036D28	RCDX6036D28
surprenant pn 8134	-	Multi piece	0.1	2.54	0.058	1.47	0.3			RMDXK10D28	RCDXK1D28
PRD PN 247AS-C1123-001	-	Mono crimp	0.103	2.62	0.06	1.52	0.51	0.078	1.98	RMDX6018D28	RCDX6018D28
PRD PN 247AS-C1251	-		0.092	2.34	0.05	1.27	0.64	0.067	1.7	RMDX6018D28	RCDX6018D28
JUDD C15013010902	-		0.087	2.13	0.05	1.27	0.48	0.066	1.67	RMDX6036D28	RCDX6036D28
CDC PIN22939200	-		0.09	2.29	0.048	1.22	0.3	0.064	1.63	RMDX6046D28	RCDX6016D28
CDC PIN22939200	-		0.09	2.29	0.048	1.22	0.3	0.064	1.63	RMDX6050D28	RCDX6016D28
CDC PIN245670000	-		0.104	2.64	0.067	1.7	0.3	0.083	2.11	RMDX6050D28	RCDX6016D28
ampex	-		0.114	2.9	0.075	1.91	0.38	0.09	1.29	RMDX6032D28	RCDX6032D28
TI PN 920580	-		0.7	1.78	0.038	0.96	0.48	0.054	1.37	RMDX6024D28	RCDX6024D28
Honeywell PN 58000062	-		0.12	3.05	0.077	1.96	0.41 solid	0.096	2.44	RMDX6026D28	RCDX6026D28
-	-		0.104	2.64	0.067	1.7	0.3		2.11	RMDX6050D28	-
-	-		0.09	2.29	0.048	1.22	0.3		1.63	RMDX6050D28	-
-	-		0.114	2.9	0.075	1.91	0.38		1.29	RMDX6032D28	RCDX6032D28
-	-		0.07	1.78	0.038	0.96	0.48		1.37	RMDX6024D28	RCDX6024D28
-	-		0.12	3.05	0.077	1.96	0.41		2.44	RMDX6026D28	RCDX6026D28

Twisted cable - Contact monocrimp and multipiece

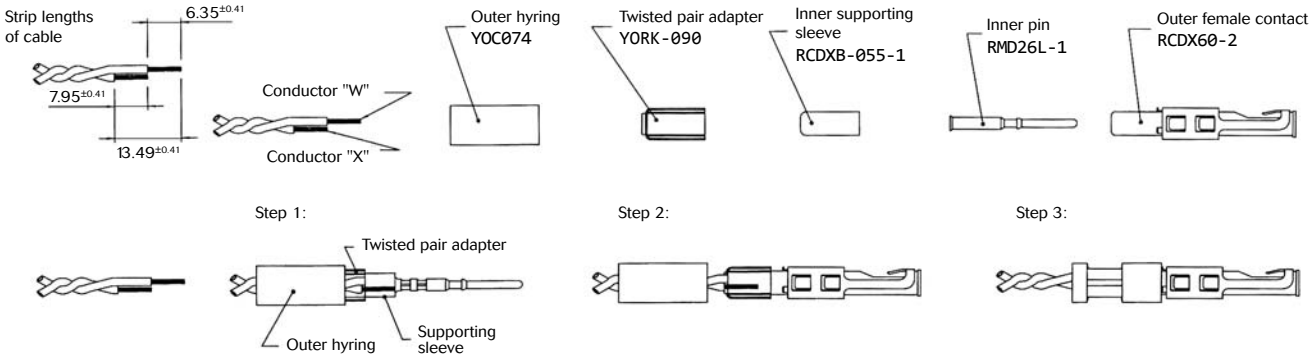
Cable type	Contact type	Inner AWG cond	Ø over jacket (single wire)		Inner cond size		Ø outer braid		Male contact kit for coaxial cable	Female contact kit for coaxial cable
			inch	mm	Stranded definition	Ext. Ø mm	inch	mm		
2#24 stranded mil w 16878 type B	Multi piece	24	0.049	1.24 max	7/.008		-	-	RMDXK10D28	RCDXK1D28
2 #24 solid mil-w-76 type LW		24	0.047	1.12 max	1/.0201		-	-	RMDXK10D28	RCDXK1D28
2 #26 stranded mil w 76 type LW or mil w16878 type b&e		26	0.043	1.09 max	7/.0063	0.16	-	-	RMDXK10D28	RCDXK1D28
2 #28 solid mil-w-81822/3		28	0.028	0.71 max			-	-	RMDXK10D28	RCDXK1D28
TWISTED PAIR 1/.201 SOLID MIL w 76 TYPE lw or MIL W 16878		26	0.044	1.12 max	1/.0201	0.511	-	-	RMDXK10D28	RCDXK1D28
twisted pair solid mil w 81822/3		28	0.028	0.71 max	1/.0126	0.32	-	-	RMDXK10D28	RCDXK1D28
#28 7/.0036 per Hitachi spec ec-711 (13-2820)	Mono crimp	-	0.046	1.17	7/.0036	-	-	-	RMDX6031D28 + YORX090	RCDX6031D28 + YORX090
20218201		-	0.028	0.71	-	-	-	-	RMDX6031D28 + YORX090	RCDX6031D28 + YORX090
#30 solid		-	0.025	0.64	-	-	-	-	RMDX6015D28 + YORX090	RCDX6015D28 + YORX090
#26 7/.0063		26	0.028	0.71	7/.063	0.16	-	-	RMDX6031D28 + YORX090	RCDX6031D28 + YORX090
#26 19/.004		26	0.049	1.24	19/.004	-	-	-	RMDX6019D28 + YORX090	RCDX6019D28 + YORX090
#24 7/.008		24	0.049	1.24	7/.008	-	-	-	RMDX6019D28 + YORX090	RCDX6019D28 + YORX090
#24 19/.005		24	0.057	1.45	19/.005	-	-	-	RMDX6019D28 + YORX090	RCDX6019D28 + YORX090
-		26	-	1.25	-	-	-	19x0.1	RMDX6019D28 + YORX090	RCDX6019D28 + YORX090
-		24	-	1.25	-	-	-	7x0.2	RMDX6019D28 + YORX090	RCDX6019D28 + YORX090
-		24	-	1.45	-	-	-	19x0.13	RMDX6019D28 + YORX090	RCDX6019D28 + YORX090
-		26	-	0.7	-	-	-	7x0.16	RMDX6031D28 + YORX090	RCDX6031D28 + YORX090

#16 coaxial contacts

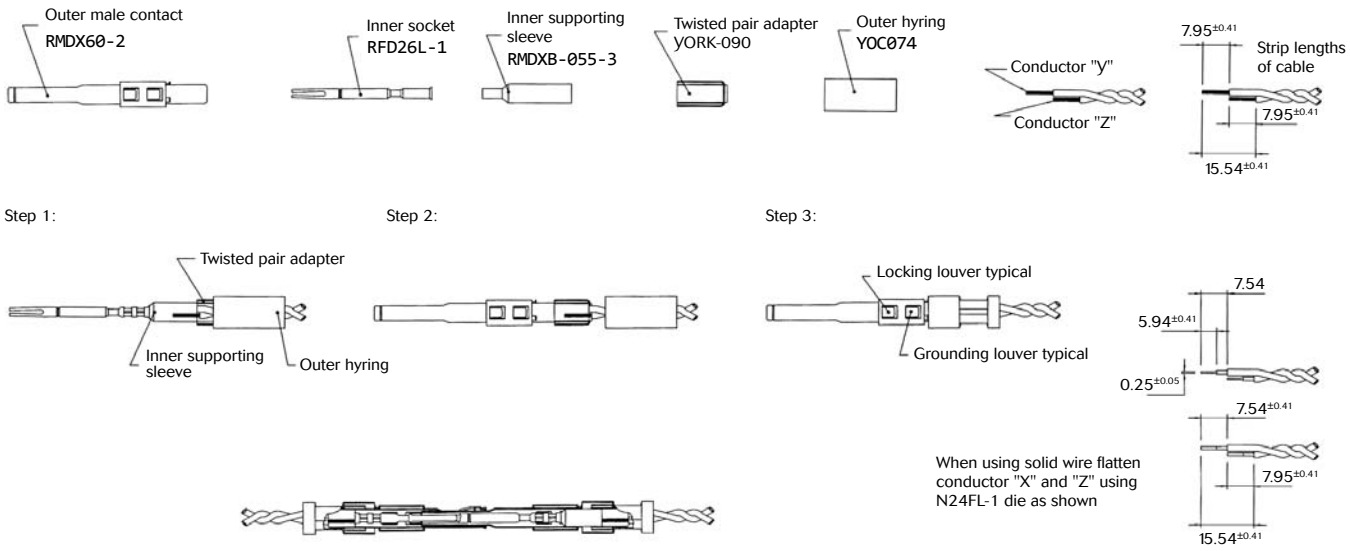
Twisted pair cable multipiece contact cabling

Cable reference	Contact type	Male contact	Female contact	Crimp tool	Die set	Stop bushing	Cable strip length			Inner conductor crimp		Braid crimp	
							A	B	C	g dim	t dim	g dim	t dim
2#24 stranded mil w 16878 type B	Multi piece	RMDXK10D28	RCDXK1D28	M10S1J	-	-	See assembly notice						
2 #24 solid mil-w-76 type LW													
2 #26 stranded mil w 76 type LW or mil w16878 type B & E													
2 #28 solid mil-w-81822/3													
twisted pair 1/.201 solid mil w 76 type LW or mil w 16878													
twisted pair solid mil w 81822/3													

Female contact



Male contact

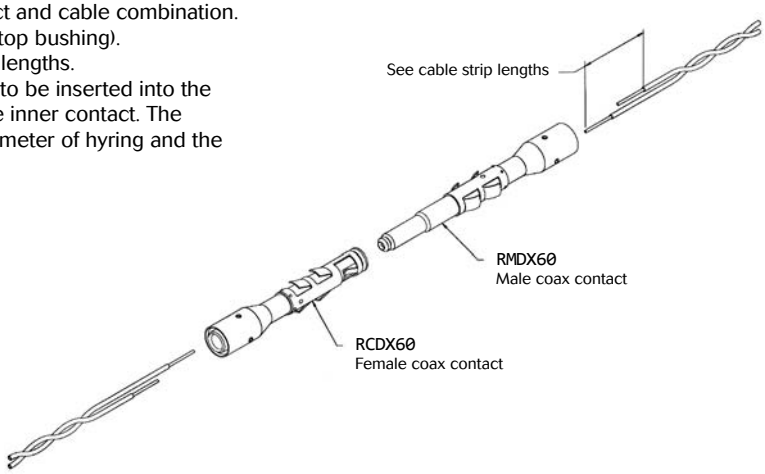


Note : all dimensions are in mm

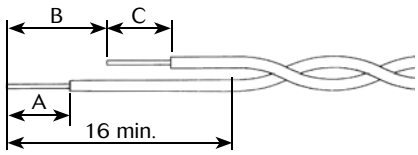
Twisted pair cable monocrimp contact cabling

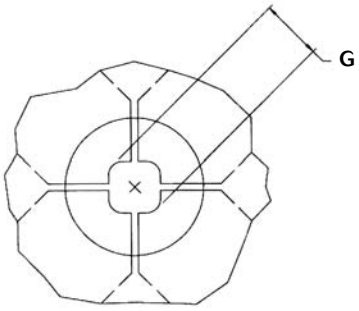
Cable reference	Contact type	Male contact	Female contact	Crimp tool	Die set	Stop bushing	Cable strip length			Inner conductor crimp		Braid crimp	
							A	B	C	g dim	t dim	g dim	t dim
#28 7/.0036 per Hitachi spec ec-711 (13-2820)	Mono crimp	RMDX6031D28 + YORX090	RCDX6031D28 + YORX090	M10S1J	S80	SL105	4.7	6.1	4.32	1.30 to 1.12	1.4 to 1.22	2.97 to 2.84	3.07 to 2.9
20218204					S80	SL105	3.94	6.1	3.16	1.30 to 1.17	1.4 to 1.22	2.97 to 2.84	3.07 to 2.79
#30 solid					S83	SL105	4.7	6.1	4.06	1.22 to 1.12	1.35 to 1.22	2.97 to 2.84	3.12 to 2.95
#26 7/.0063					S80	SL105	4.7	6.1	4.06	1.30 to 1.17	1.4 to 1.22	2.97 to 2.84	3.07 to 2.9
#26 19/.004					M10SG8 ASSY'Y TOOL DIE SET STOP BUSHING M10S1J TOOL		4.7	6.1	4.06	1.22 to 1.17	1.35 to 1.22	2.84 to 2.79	3.12 to 2.97
#24 7/.008							4.7	6.1	4.06	1.22 to 1.17	1.35 to 1.22	2.84 to 2.79	3.12 to 2.97
#24 19/.005							4.7	6.1	4.06	1.22 to 1.17	1.35 to 1.22	2.84 to 2.79	3.12 to 2.97
AWG26 (19x0.1)					M10SG8 crimping kit		4.7	6	4				
AWG24 (7x0.2)													
AWG24 (19x0.13)													
AWG26 (7x0.16)					S80	SL150							

- Select appropriate monocrimp coax twisted pair contact and cable combination.
- Select appropriate crimp tooling (hand tool, S-die set, stop bushing).
- Strip the twisted pair cable to the designated wire strip lengths.
- Insert the stripped cable into the contact. One cable is to be inserted into the inside diameter of hyring, and pushed forwaerd into the inner contact. The second cable is to be inserted between the outside diameter of hyring and the inside diameter of the outer contact body.
- Crimp the contact.

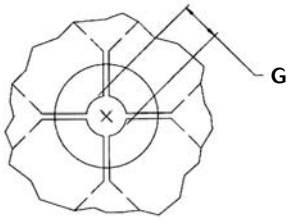


Cable strip length





Braid crimp (G) to be measured with die set fully closed



Inner conductor crimp (G) to be measured with die set fully closed

Note : all dimensions are in mm

#16 coaxial contacts

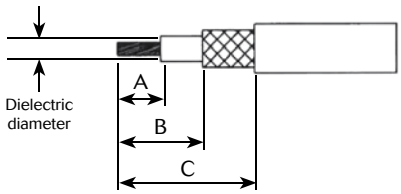
Multipiece male contact with coax cable

Cable reference	Contact	Hyring complementary compoments	Outer contact crimp tool Crimp tool M10S1J		Inner contact crimp tool Crimp tool M10S1J		Cable strip length		
			Die set	Stop bushing	Die set	Stop bushing	A	B	C
RG161U	Male: RMDXK10D28	YOC074	S221	SL471	S23D2	SL46D2	4.37	7.95	15.88
RG179							4.37	7.95	15.88
RG187U							4.37	7.95	15.88
RG188/U					S26D2		4.37	7.95	15.88
RG174/U							4.37	7.95	15.88
RG178A/U		YOC074 + RMDXB0553			S23D2		7.54	9.12	17.53
RG196U							7.54	9.12	17.53
AMPHENOL 21-598		YOC074			-		4.37	7.95	15.88
surprenant pn 8134					-		4.37	7.95	15.88

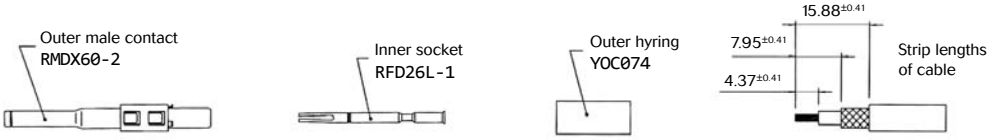
Multipiece kit details

RMDXK10D28 includes	RMDX602D28	Outer contact
	RFD26L1D28	Inner contact
	YOC074	Outer hyring
	RMDXB0553	Inner supporting sleeve

Cable stip length



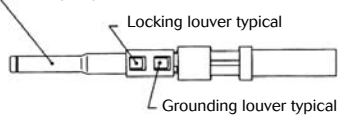
Contact assembly with dielectric diameter over 1.4mm - without inner supporting sleeve



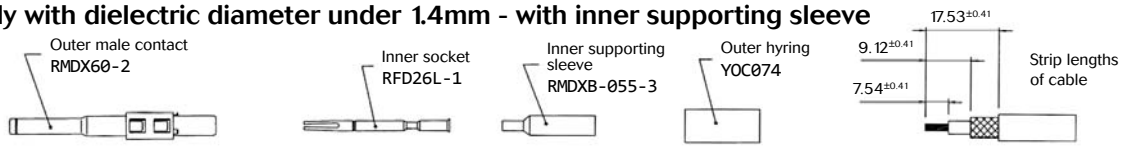
Step 1:
- Assemble outer hyring onto cable
- Assemble inner socket to inner conductor and crimp

Step 2:
- Insert the assembly into the outer male contact until the inner socket snaps into place
- The cable braid (shield) should now cover the barrel of the outer male contact as shown

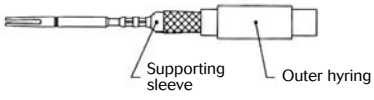
Step 3:
- Slide outer hyring forward against spring and crimp in place as shown



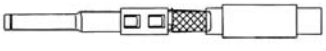
Contact assembly with dielectric diameter under 1.4mm - with inner supporting sleeve



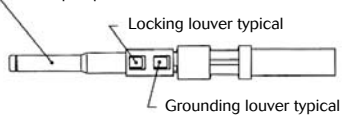
Step 1:
- Assemble outer hyring onto cable
- Assemble supporting sleeve over dielectric and under braid
- Assemble inner socket to inner conductor, push back against sleeve and crimp



Step 2:
- Insert the assembly into the outer male contact until the inner socket snaps into place
- The cable braid (shield) should now cover the barrel of the outer male contact as shown



Step 3:
- Slide outer hyring forward against spring and crimp in place as shown



Note : all dimensions are in mm

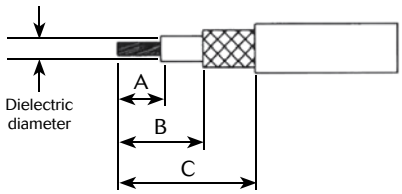
Multipiece female contact with coax cable

Cable reference	Contact	Hyring complementary compoments	Outer contact crimp tool		Inner contact crimp tool		Cable strip length		
			Crimp tool M10S1J		Crimp tool M10S1J				
			Die set	Stop bushing	Die set	Stop bushing	A	B	C
RG161U	Female: RCDXK1D28	YOC074	S221	SL471	S23D2	SL46D2	4.37	-	11.13
RG179							4.37		11.13
RG187U							4.37		11.13
RG188/U					S26D2		4.37		11.13
RG174/U							4.37		11.13
RG178A/U		YOC074 + RMDXB0553			S23D2		6.35		11.13
RG196U							6.35		11.13
AMPHENOL 21-598		YOC074			-		4.37		11.13
surprenant pn 8134					-		4.37		11.13

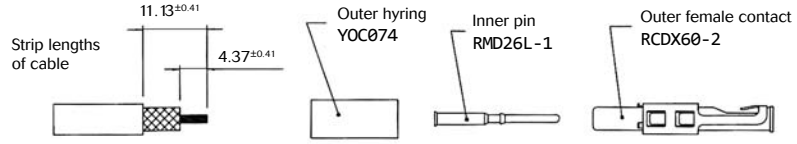
Multipiece kit details

RCDXK1D28 includes	RCDX602D28	Outer contact
	RMD26L1D28	Inner contact
	YOC074	Outer hyring
	RCDXB0553	Inner supporting sleeve

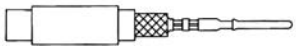
Cable stip length



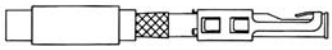
Contact assembly with dielectric diameter over 1.4mm - without inner supporting sleeve



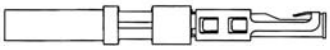
Step 1:
- Assemble outer hyring onto cable
- Assemble inner pin to inner conductor and crimp



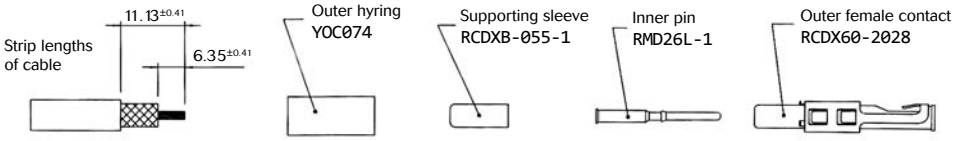
Step 2:
- Insert the assembly into the outer female contact until the inner pin snaps into place
- The cable braid (shield) should now cover the barrel of the outer female contact as shown



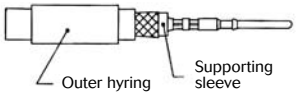
Step 3:
- Slide outer hyring forward against spring and crimp in place as shown



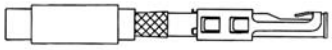
Contact assembly with dielectric diameter under 1.4mm - with inner supporting sleeve



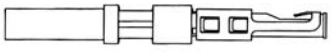
Step 1:
- Assemble outer hyring onto cable
- Assemble supporting sleeve over dielectric and under braid
- Assemble inner pin to inner conductor, push back against sleeve and crimp



Step 2:
- Insert the assembly into the outer female contact until the inner pin snaps into place
- The cable braid (shield) should now cover the barrel of the outer female contact as shown



Step 3:
- Slide outer hyring forward against spring and crimp in place as shown



Note : all dimensions are in mm

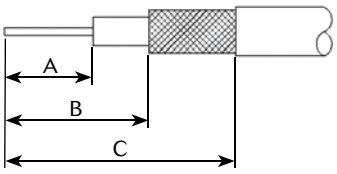
#16 coaxial contacts

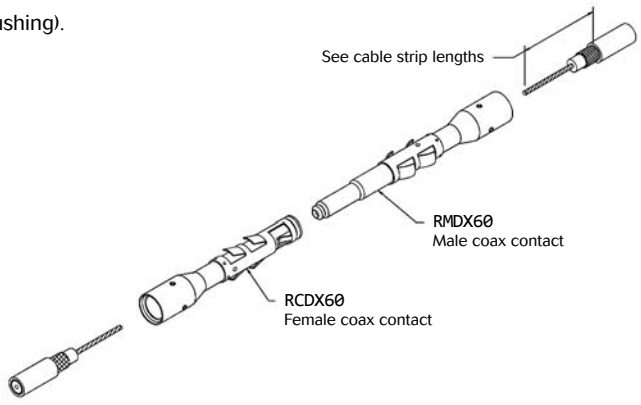
Coax cable with monocrimp contact cabling

Cable reference	Male contact	Female contact	Crimp tool	Die set	Stop bushing	Cable strip length			Inner conductor crimp		Braid crimp	
						A	B	C	g dim	t dim	g dim	t dim
CDC PIN22939200	RMDX6046D28	RCDX6016D28	M10S1J	S80	SL105	4.19	5.97	8.51	1.30/1.17	1.40/1.22	2.77/2.64	3.02/2.84
CDC PIN22939200	RMDX6046D28	RCDX6016D28		S87	SL105	5.08	6.35	8.89	1.30/1.17	1.40/1.22	2.77/2.64	3.02/2.84
CDC PIN245670000	RMDX6050D28	RCDX6016D28		S80	SL105	5.08	6.35	8.89	1.30/1.17	1.40/1.22	2.97/2.84	3.12/2.95
KX21TVT (europe) RG178 B/U	RMDX6034D28	RCDX6034D28		S82	SL105	5.08	6.35	8.89	1.30/1.17	1.32/1.17	2.84/2.74	3.07/2.9
RG178 / BU	RMDX6050D28	RCDX6016D28		S87	SL105	5.08	6.35	8.89	1.30/1.17	1.40/1.22	2.77/2.64	3.02/2.84
ampex	RMDX6032D28	RCDX6032D28		S80	SL105	5.08	6.35	11.68	1.30/1.17	1.40/1.22	2.97/2.84	3.12/2.95
TI PN 920580	RMDX6024D28	RCDX6024D28		S82	SL105	5.08	6.35	8.89	1.35/1.19	1.42/1.27	2.87/2.74	3.07/2.9
RG174/U	RMDX6032D28	RCDX6032D28		S80	SL105	5.08	6.35	11.68	1.30/1.17	1.40/1.22	2.97/2.84	3.12/2.95
Honeywell PN 58000062	RMDX6026D28	RCDX6026D28		S82	SL105	5.08	6.35	8.89	1.35/1.19	1.42/1.27	2.87/2.74	3.07/2.9
RG188A/U	RMDX6036D28	RCDX6036D28		S80	SL105	5.08	6.35	11.68	1.30/1.17	1.40/1.22	2.97/2.84	3.12/2.95
RG316/U	RMDX6036D28	RCDX6036D28		S80	SL105	5.08	6.35	11.68	1.30/1.17	1.40/1.22	2.97/2.84	3.12/2.95
PRD PN 247AS-C1123-001	RMDX6018D28	RCDX6018D28		M10SG8 ASSY'Y TOOL DIE SET STOP BUSHING M10S1J TOOL		5.08	6.35	8.89	1.22/1.17	1.35/1.22	2.92/2.79	3.12/2.97
PRD PN 247AS-C1251	RMDX6018D28	RCDX6018D28				5.08	6.35	8.89	1.22/1.17	1.35/1.22	2.92/2.79	3.12/2.97
raychem 5024A3111	RMDX6052D28	RCDX6052D28		S88	SL105	5.08	6.35	11.68	1.37/1.27	1.45/1.32	2.92/2.79	
raychem 5026e1614	RMDX6036D28	RCDX6036D28		M10SG8 ASSY'Y TOOL DIE SET STOP BUSHING M10S1J TOOL		5.08	6.35	8.89	1.22/1.17	1.35/1.22	2.92/2.79	3.12/2.97
JUDD C15013010902	RMDX6036D28	RCDX6036D28				5.08	6.35	8.89	1.22/1.17	1.35/1.22	2.92/2.79	3.12/2.97
inner cond. #30, braid diam 2.64	RMDX6050D28	-		S80	SL105	5.1	6.35	8.9	-	-	-	-
inner cond. #30, braid diam 2.29	RMDX6050D28	-		S87	SL105	4.2	6.35	8.5	-	-	-	-
inner cond. #28, braid diam 2.9	RMDX6032D28	RCDX6032D28		S80	SL105	5.1	6.35	11.7	-	-	-	-
inner cond. #26, braid diam 1.78	RMDX6024D28	RCDX6024D28		S82	SL105	5.1	6.35	8.9	-	-	-	-
inner cond. #26, braid diam 3.05	RMDX6026D28	RCDX6026D28		S82	SL105	5.1	6.35	8.9	-	-	-	-

- Select appropriate cable and contact combination.
- Select appropriate crimp tooling (hand tool, S-die set, stop bushing).
- Strip coax cable to the designated wire strip lengths.
- Insert the stripped coax into the rear of the contact.
- Crimp the contact.

Cable strip length



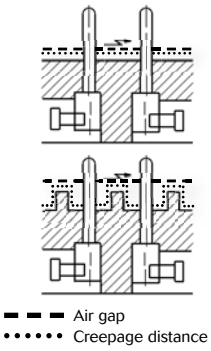


Note : all dimensions are in mm

Glossary of terms

• Clearance
Per the IEC 60664-1 it is the shortest distance between two conductive parts even over the air.

• Creepage distance
Per the IEC 60664-1 it represents the shortest distance along the surface of the insulating material between two conductive parts.



• Working voltage
Per the IEC 60664-1 it is the highest r.m.s. value of A.C. or D.C. voltage across any particular insulation which can occur when the equipment is supplied at rated voltage.

• Rated impulse voltage
Impulse withstands voltage value assigned by the manufacturer to the equipment or to a part of it characterizing the specified withstand capability of its insulation against transient overvoltage.

• Working current
It is the maximum continuous and not interrupted current able to be carried by all contacts without exceeding the maximum temperature of the insulating material.

• Transient voltage
Extract from the IEC 60664-1: Short duration overvoltage of a few millisecond or less, oscillatory or non-oscillatory, usually highly damped.

• CTI (Comparative Tracking Index)
The CTI value is commonly used to characterize the electrical breakdown properties of an insulating material. It allows users to know the tendency to create creepage paths. This value represents the maximum voltage after 50 drops of ammonium chloride solution without any breakdown.

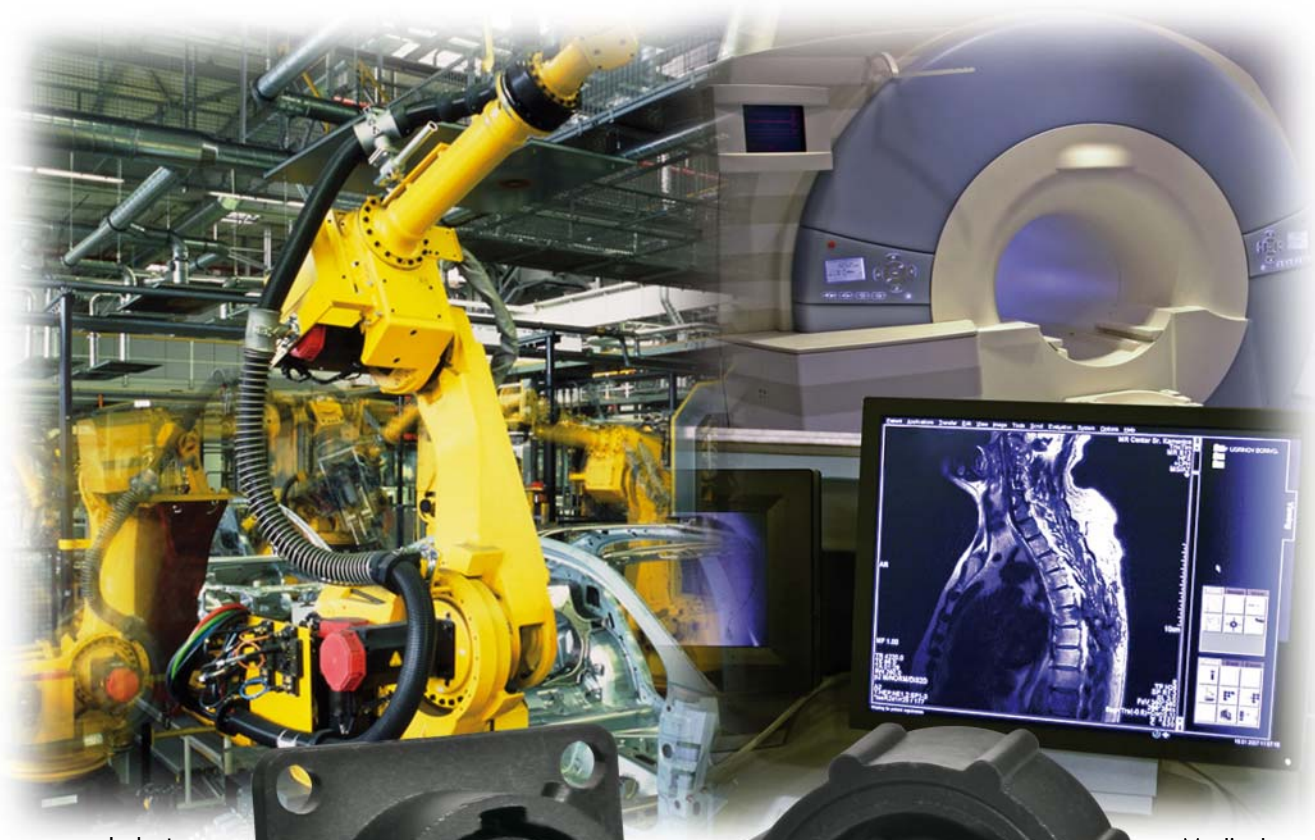
• RTI (Relative temperature Index):
Extract from ULs website:
"Maximum service temperature for a material, where a class of critical property will not be unacceptably compromised through chemical thermal degradation, over the reasonable life of an electrical product, relative to a reference material having a confirmed, acceptable corresponding performance defined RTI.

- **RTI Elec**: Electrical RTI, associated with critical electrical insulating properties.

- **RTI Mech Imp**: Mechanical Impact RTI, associated with critical impact resistance, resilience and flexibility properties.

- **RTI Mech Str:** Mechanical Strength (Mechanical without Impact) RTI, associated with critical mechanical strength where impact resistance, resilience and flexibility are not essential"

UTP Series



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