## Contacts







### **Description**

TRIM TRIO® contacts are a wide and versatile range that are offering many options for crimp, coax and fiber optic applications.

#### 1. Size 16 contacts (1.6mm)

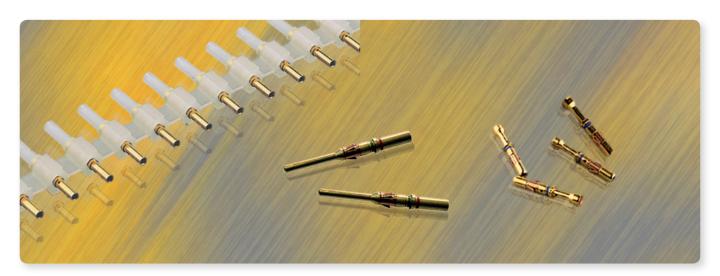
- RM/RC High performance machined contacts
- SM-M/SC-M Stamped & formed contacts
- RMDX/RCDX Coax contacts
- Fiber optic contacts

### 2. Size 20 contacts (1.0mm)

- RM-W/RC-W High performance machined contacts
- SM-W/SC-W Stamped & formed contacts

### 3. Power contacts

- Size 12 contacts (2.4mm)
- Size 8 contacts (3.6mm)





### **Description**

### Size 16 machined contacts for TRIM TRIO® connectors

Size 16 RM/RC .0625" (1.6mm) diameter contacts are precision machined crimp snap-in pins and sockets for heavy duty top performance requirements. 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 wire stop and inspection hole.

### Typical benefits are:

- Easy mounting & dismounting
- Excellent cable retention as well as contact retention in the cavity
- Easy wire identification with color coding



### **Technical characteristics**

### **Electrical**

• Current per contact max.: 13 A according to SAE 39029

15 A according to NFF61030

• Contact resistance:  $\leq$  3 M $\Omega$ • 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

### Plating table

K (std)
 J
 Min. 0.4µm gold all over, over nickel
 J
 Gold flash all over, over nickel
 N
 Min. 0.75µm gold all over, over nickel

Other plating, on request

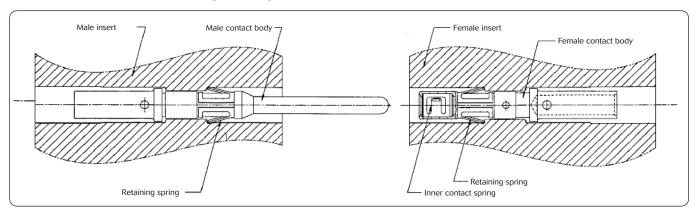
#### Connector accomodation

 TRIM TRIO® RC/RM machined contact size 16 can be used in any contact position in any connector from the TRIM TRIO® interconnection system - UTP, UTS, UTG, UTO, MBG, MS-M, MSG / MB, SMS, UTV - as well as in VGE1 and 838 connectors

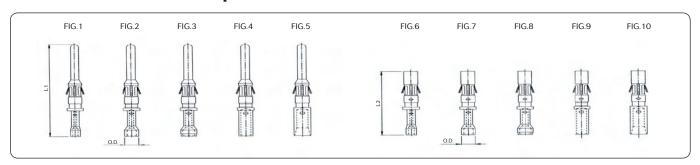
## **Ordering information**

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	(K)RM (K)RC	16 16	M M	23 23	(GE1) (GE7)	K K	-	
Wire size: 14, 16, 20, 24, 28								
Contact size 16: .0625" (1.6mm) diameter contacts								
Design variation : Crimp barrel								
Types of contact No digit Standard contact GE1 Longer contact GE3 Shorter contact (only male contact) GE7 Shorter contact (only female 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)								

## The RM/RC contact principle



## Standard RM/RC crimp contacts: Contact size 16 - Pin Ø1.6mm (.063")



### Dimensional table - Standard RM/RC contacts

	Part numbers			Wire size		Max.	Max.	Wire strip	O.D.**	L1	L2		
Male contact	Fig.	Female contact	Fig.	AWG	mm²	wire Ø	insul. Ø	length					
RM28M1(*)	1	RC28M1(*)	6	30-28	0.05-0.08	0.55	1.1		1.90				
RM24M9(*)	2	RC24M9(*)	7	26-24	0.13-0.20	0.8	1.6	4.8	4.8	4.8	2.55		
RM20M13(*)	- 3	RC20M13(*)	8	22-20	0.22.0.52	1 10	1.8				2.92	26.2	18.2
RM20M12(*)	] 3	RC20M12(*)	0 22	0 22-20	8 22-20	0 22-20	0.32-0.52	1.18	2.2		2.92		
RM16M23(*)	4	RC16M23(*)	9	20-16	0.52-1.50	1.80			2.55				
RM14M50(*)	5	RC14M50(*)	10	16-14	1.5-2.5	2.05	3.2	7.1	3.10	20.2	10.0		
RM14M30(*)	5	RC14M30(*)	10	16-14	1.5-2.5	2.28	1		3.10	26.2	18.2		

<sup>\*</sup> Plating indication : See plating table

For machined contacts reeled on plastic carrier: put «K» in front of part number e.g. KRM16M13K

## Dimensional table - Crimp RM/RC contacts

### Comparison with standard RM / RC contacts

	GE1	GE3	GE7
RM contact (male contact)	+ 1 mm	-1 mm	-
RC contact (female contact)	+ 1.5 mm	-	-0.6 mm

### Contact selector guide

	Standard RC contact	RM*GE1	RC*GE7
Standard RC contact			
Standard RM contact			Last Mate, First Break
RM*GE1	First Mate, Last Break		



First Mate, Last Break contact can be used as grounding contact.

Note : all dimensions are in mm / \*\* Outer diameter



## Longer RM/RC contacts

	Part numbers			Wire size		Max.	Max. insul. Ø	Wire strip	O.D.**	L1	L2			
Male contact	Fig.	Female contact	Fig.	AWG	mm²	wire Ø	insui. Ø	length						
RM28M1 <b>GE1</b> (*)	1	RC28M1 <b>GE1</b> (*)	6	30-28	0.05-0.08	0.55	1.1		1.90					
RM24M9 <b>GE1</b> (*)	2	RC24M9 <b>GE1</b> (*)	7	26-24	0.13-0.20	0.8	1.6	4.8	4.8	2.55				
RM20M13 <b>GE1</b> (*)	3	RC20M13 <b>GE1</b> (*	8	22-20	0.22.0.52	1.18	1.8			4.0	4.0	4.0	2.02	
RM20M12 <b>GE1</b> (*)	] 3	RC20M12 <b>GE1</b> (*	0	22-20	2-20 0.32-0.52	1.10	2.2		2.92	27.2	19.7			
RM16M23 <b>GE1</b> (*)	4	RC16M23 <b>GE1</b> (*)	9	20-16	0.52-1.50	1.80			2.55					
RM14M50 <b>GE1</b> (*)	5	RC14M50 <b>GE1</b> (*)	10			2.05	3.2 7.1	2.10						
RM14M30 <b>GE1</b> (*)	5	RC14M30 <b>GE1</b> (*)	10	16-14	1.5-2.5	2.28	1		3.10					

<sup>\*</sup> Plating indication : See plating table

### Shorter RM/RC contacts

Part numbers	6	Wire	size	Max. wire Ø	Max. insul. Ø	Wire strip	O.D.**	L1																																					
Male contact	Fig.	AWG	mm²			length																																							
<b>RM28</b> M1GE3*	1	30-28	0.05-0.08	0.55	1.1		1.90																																						
RM24M9GE3*	2	26-24	0.13-0.20	0.8	1.6	4.0	2.55																																						
RM20M13GE3*		22.20	0.32-0.52		1.8	4.8	2.02																																						
RM20M12GE3*	3	22-20		0.32-0.52	0.32-0.52	0.32-0.52	0.32-0.32	0.32-0.52	0.32-0.52	0.32-0.52	0.32-0.32	0.32-0.52	0.32-0.52	0.32-0.52	0.32-0.52	0.32-0.52	0.32-0.52	0.32-0.52	0.32-0.52	0.32-0.52	0.32-0.52	0.32-0.52	0.32-0.32	0.32-0.32	0.32-0.52	0.32-0.52	0.32-0.52	0.32-0.52	0.32-0.32	0.32-0.52	0.32-0.32	0.32-0.52	0.32-0.52	0.32-0.52	0.32-0.52	0.32-0.52	0.32-0.52	0.32-0.52	0.32-0.52	0.32-0.52	0.32-0.52		2.2		2.92
RM16M23GE3*	4	20-16	0.52-1.50	1.80			2.55																																						
RM14M50GE3*	5	16.14	15.25	2.05	3.2	7.1	2.10																																						
RM14M30GE3*	5	16-14	1.5-2.5	2.28			3.10																																						

<sup>\*</sup> Plating indication : See plating table

Part numbers		Wire	size	Max. wire Ø	Max. insul. Ø	Wire strip	O.D.**	L2	
Female contact	Fig.	AWG	mm²			length			
RC28M1GE7*	6	30-28	0.05-0.08	0.55	1.1		1.90		
RC24M9GE7*	7	26-24	0.13-0.20	0.8	1.6	4.8	2.55		
RC20M13GE7*	8	22.20	0.32-0.52	1.10	1.18	1.8	4.8	2.02	
RC20M12GE7*	8	22-20	0.32-0.32	1.10	2.2		2.92	17.6	
RC16M23GE7*	9	20-16	0.52-1.50	1.80			2.55		
RC14M50GE7*	10	16 14	1.5-2.5	2.05	3.2	7.1	2.10		
RC14M30GE7*	10	16-14	1.5-2.5	2.28			3.10		

<sup>\*</sup> Plating indication : See plating table

### Dimensional table - Handsolder RM/RC contacts

Part nu	umbers	Wire size			
Male contact	Female contact	AWG	mm²		
RM16SEO(*)	RC16SE4(*)	16-20	1.50-0.52		

<sup>\*</sup> Plating indication : See plating table

Note : all dimensions are in mm / \*\* Outer diameter

## **Crimptooling table**

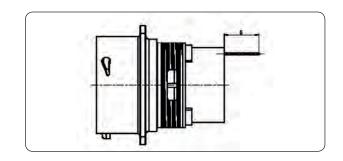
	Hand cr	imp tooling for loose of	contacts	Automatic crimp too		
Size	Hand tools	мн	860	P107	Press	Extraction tools
0.20	die set	Positioner	Locator setting	Left side applicator	Stripper unit	
	included	(not incl.)		KRM/KRC (not incl.)	(not incl.)	
R*28M1			4/6	-		
R*24M9	Y16RCM	MH86164G	5/6	MLSP2763	SC11	
R*20M12/13	y rokem	МП00104G	5/7	MLSP2764	3011	
R*16M23			6/8	MLSP2765		
R*14M50	AF8 + TP1142		-	-	-	
R*14M30	AI O T II II42	-	-	-		
R*28M1GE1			4/6	-	-	
R*24M1GE1	V16RCM	CM MH861686	5/6	-	-	
R*20*GE1	y rokewi		5/7	-	-	
R*16M23GE1			6/8	-	-	
R*14*GE1	*	-	-	-	-	RX2025GE1
RM28M1GE3			4/6	-		
RM24M1GE3	Y16RCM	*	5/6	MLSP2763	SC11	
RM20*GE3	y rokem		5/7	MLSP2764	3011	
RM16M23GE3			6/8	MLSP2765		
RM14*GE3	*	-	-	-	-	
RC28M1GE7			4/6	-		
RC24M1GE7	Y16RCM	*	5/6	MLSP2763		
RC20*GE7	y ronciwi		5/7	MLSP2764	SC11	
RC16M23GE7			6/8	MLSP2765		
RC14*GE7	*	-	-	-		

<sup>\*</sup> Consult factory

Note : all dimensions are in mm

## Nominal length (dim G) of dipsolder contacts out of connector

(contacts to be ordered separately)



## **UTSO** wall mounting receptacles

Connector	Male co	ontacts	Female contacts				
sizes	RM20M12E8*	RM20M12E83*	RC20M12E8*	RC20M12E83*	RC20M12E84*		
All sizes	5.2	10.3	5.2	10.4	13.9		

<sup>\*</sup> Plating indication : See plating table

### **UTS7** jam nut receptacles

Connector	Male c	ontacts	Female contacts				
sizes	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	1.3	2.1		

For recommended PC-Board hole layout, please consult factory \* Plating indication : See plating table

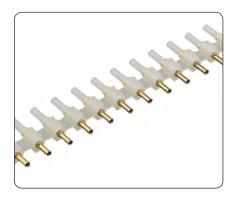
## The RM/RC contact packing



50 pcs bulk packing (standard)



1000 pcs bulk packing



Reeled contacts on plastic carrier (qty 2000 pcs)

## SC/SM Stamped & formed contacts size 16





### **Description**

### Size 16 stamped and formed contacts for TRIM TRIO® connectors

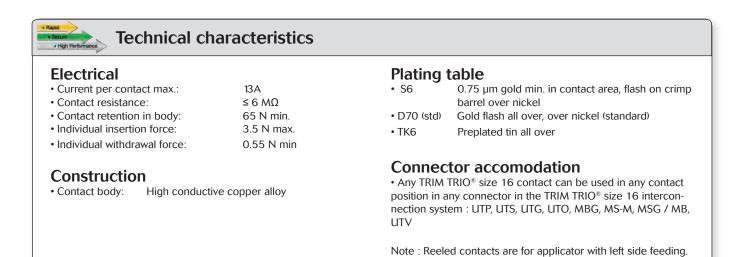
Size 16 SM/SC .0625" (1.6mm) diameter contacts are two piece strip formed crimp snap-in pin and sockets. These contacts consist of a crimp body made of high conductive copper alloy, and a stainless steel retaining spring featuring retention in the housing cavity and a closed entry socket to prevent probe damage.

The contact with 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.

Typical features and benefits are:

- 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 automatic crimping thus lower installation cost.

## SC/SM Stamped & formed contacts size 16

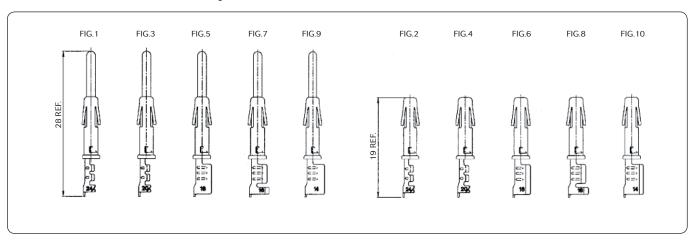


## **Ordering information**



## SC/SM Stamped & formed contacts size 16

## Standard SM/SC crimp contacts: Contact size 16 - Pin Ø1.6mm (.063")



### **Dimensional table**

Part n		contacts on strip pieces		Wire	size	Insulation	Wire strip
Male contacts	Fig.	Female contacts	Fig.	AWG	mm²	diameter	length
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	3.2	6.35

For other platings : See plating table

## **Crimptooling table**

	Hand crimp tooling for loose contacts	Automatic crimp toolir		
Size	<b>Y14MTV / Y16SCM2</b> die set included	P107 Press Mini applicator (not incl.)	(Stripper - crimper)	Extraction tools
24		MLS0318B		
20	y 14MTV	MLS0555A		
16M(L)11	or	MLS0356A	SC11	RX2025GE1
16M(L)1	V16SCM2	MLS 1579		
14	,	MLS1047		

For detailed information on crimp tooling: See crimp tooling section

Note : all dimensions are in mm





### **Description**

### Size 16 Multipiece COAXIAL contacts for TRIM TRIO® connectors

Size 16 RMDX/RCDX Multipiece .0625" (1.6mm) diameter contacts are subminiature coaxial contacts to cover a wide range of subminiature coaxial and twisted pair cables.

They are suitable in applications where a mix of signal, power and coaxial cable terminations for low frequency, shielded signal and high frequency applications are needed.

The contact consists of an inner pin/socket and an outer male/female body.

The thermoplastic insulating bushing in the outer body is designed to accept and permanently retain the inner contact.

The outer ferrule hold the outer braid to the outer contact and act as an insulating support to ensure against bending and vibrating stresses.

The inner and the outer conductors are crimped individually, thereby enabling inspection of both critical crimp points.

### Typical features and benefits are:

- The inner and outer conductors are crimped individually.
- The thermoplastic insulating bushing in the outer body is designed to accept and permanently retain the inner contact.
- Outer ferrule hold the outer braid to the outer contact and act as an insulating support to ensure against bending and vibration.



### **Technical characteristics**

### **Electrical**

• Operating voltage between

inner / outer contact: 230 VDC

• Test potential between

inner / outer contact: 750 VAC 1 min.
• Contact retention in body: 65 N min.

Contact voltage drop at 1A: 25m V max.
Isolation at 30 MHZ: 140 db.

#### Construction

• Inner and outer contacts: High conductive copper alloy

Insulating bushing: Thermoplastic

#### **Environmental**

• Operating temperature: -55°C to +125°C

### Plating table

• Retaining spring: Nickel spring

• Inner and outer contacts: D28: 0.75µm gold min. over

nickel

#### **Connector accomodation**

 Any TRIM TRIO<sup>®</sup> size 16 contact can be used in any contact position in any connector in the TRIM TRIO<sup>®</sup> size 16 interconnection system: UTP, UTS, UTG, UTO, MS-M, MSG / MB, SMS

## **Ordering information**

 Type
 RMDX RCDX
 K10 D28 K1
 D28 D28

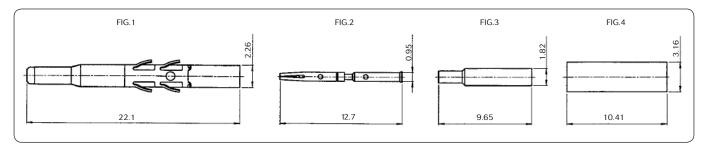
 Contact type
 Contact type

RCDX Male subminiature coax
RCDX Female subminiature coax

Multipiece coax kit
K10 Kit male coax
K1 Kit female coax

Plating indication

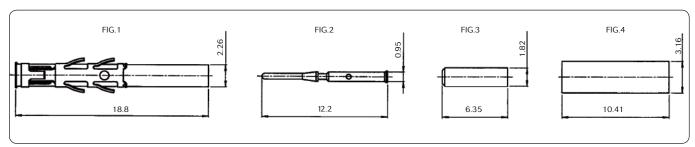
### MULTIPIECE Subminiature coax - Male contact for coaxial cable



	Conta	act for inn	er conducto	r								
Type of	Inner female of	ontact	Crimp to	ol M10S1	M10S1 Outer male contact		Hyring		Crimp tool M10S1		Extraction tool	
coaxial cable	Part number	Fig.	Die set	Stop bushing	Part number	Fig.	Part number	Fig.	Die set	Stop bushing		
RG161U									\$22-1	SL47-1	RX2025GE1	
RG179A/U			Caaba					4				
RG179B/U			\$23D2			2000220	YOC074					
RG187U	DED261 1D20	2			RMDX602D28							
RG188/U	RFD26L1D28	2	C2CD2	SL46D2	KMDX602D28	1						
RG174/U		S26D2										
RG178A/U			Caapa	]			YOC074 +	4				
RG196U			S23D2				RMDXB0553	3			,	

Kit reference RMDXK10D28 includes RMDX602D28 + RFD26L1D28 + yOC074 + RMDXB0553 and are packed in plastic bag.

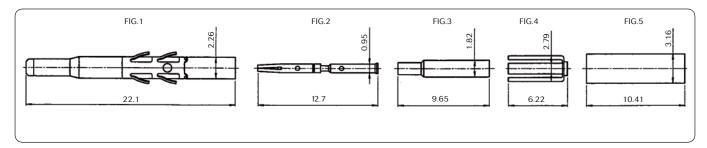
## MULTIPIECE Subminiature coax - Female contact for coaxial cable



	Conta	act for inn	er conducto	r		Contact for outer braid						
Type of	Inner male co	Inner male contact Crimp tool M10S1 C		Outer female	Outer female contact Hyring			Crimp to	Extraction tool			
coaxial cable	Part number	Fig.	Die set	Stop bushing	Part number	Fig.	Part number	Fig.	Die set	Stop bushing		
RG161U			S23D2									
RG179A/U							yoco74	4				
RG179B/U												
RG187U			S26D2									
RG174/U	RMD26L1D28	2	32602	SL46D2	RCDX602D28	1			S22-1	SL47-1	RX2025GE1	
RG188/U							YOC074	4				
RG174/U												
RG178A/U			S23D2				YOC074 +	4				
RG196U			52302				RCDXB0551	3			]	

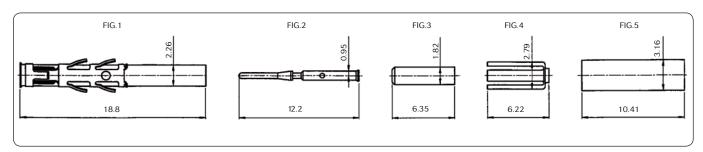
Kit reference RCDXK1D28 includes RCDX602D28 + RMD26L1D28 + YOC074 + RCDXB0551 and are packed in plastic bag.

### MULTIPIECE Subminiature coax - Male contact for coaxial cable



	Contact for inner conductor					Contact for outer braid						
Type of	Inner female o	ontact	Crimp to	ol M10S1	Outer male co	ontact	Hyring		Crimp to	ol M10S1	Extraction tool	
coaxial cable	Part number	Fig.	Die set	Stop bushing	Part number	Fig.	Part number	Fig.	Die set	Stop bushing		
2 #24 stranded MIL-W-16878 Type B							YOC074 RMDXB0554 YORX090	5 3 4				
2 #24 solid MIL-W-76 Type LW			\$26D2						S221			
2 #26 stranded MIL-W-76 Type LW or MIL-W16878 type B & E	RFD26L1D28	RFD26L1D28 2	SL46D2	RMDX602D28	1	yOC074 RMDXB0553 yORX090	5 3 4		SL471	RX2025GE1		
2 #28 solid MIL-W-81822/3			S46						S47		,	

## MULTIPIECE Subminiature coax - Female contact for coaxial cable



	Contact for inner conductor					Contact for outer braid						
Type of	Inner male co	ontact	Crimp to	ol M10S1	Outer female	contact	Hyring		Crimp to	ol M10S1	Extraction tool	
coaxial cable	Part number	Fig.	Die set	Stop bushing	Part number	Fig.	Part number	Fig.	Die set	Stop bushing		
2 #24 stranded MIL-W-16878 Type B							YOC074 RCDXB0552 YORX090	5 3 4				
2 #24 solid MIL-W-76 Type LW			S26D2						S221			
2 #26 stranded MIL-W-76 Type LW or MIL-W16878 type B & E	RMD26L1D28 2	SL46D	SL46D2	RCDX602D28	D28 1	YOC074         5           RMDXB0551         3           YORX090         4	3		SL471	RX2025GE1		
2 #28 solid MIL-W-81822/3			S46						S47			





### **Description**

### Size 16 Monocrimp COAXIAL contacts for TRIM TRIO® connectors

Size 16 RMDX/RCDX Monocrimp .0625" (1.6mm) diameter contacts are one-piece monocrimp subminiature coaxial contacts to cover a wide range of subminiature coaxial and twisted pair cables.

They provide cost effective solutions in applications where a mix of signal, power and coaxial cable terminations for low frequency, shielded signal and high frequency applications are needed.

Monocrimp one-piece coaxial contacts offer high reliability plus the economic advantage of a 95% reduction in installation time over conventional assembly methods currently in use.

### Typical features and benefits are:

- 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 of both the inner and outer conductor.



### **Technical characteristics**

### **Electrical**

• Operating voltage between

inner / outer contact: 230 VDC

• Test potential between inner / outer contact:

450 VAC 1 min.

• Contact retention in body:

65 N min.

Thermoplastic

Contact voltage drop at 1A: 30m V max.Isolation at 30 MHZ: 140 db.

Construction

• Inner and outer contacts: High conductive copper alloy

Insulating bushing:

### **Environmental**

• Operating temperature: -55°C to +125°C

Plating table

• Retaining spring: Nickel

• Inner and outer contacts: D28: 0.75µm gold min. over

nickel

### **Connector accomodation**

• 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, MS-M, MSG / MB, SMS

## **Ordering information**

Type RMDX60 36 D28 RCDX60 36 D28

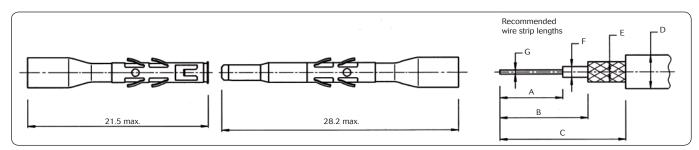
Contact type

RMDX Male subminiature coax
RCDX Female subminiature coax

Monocrimp design variation

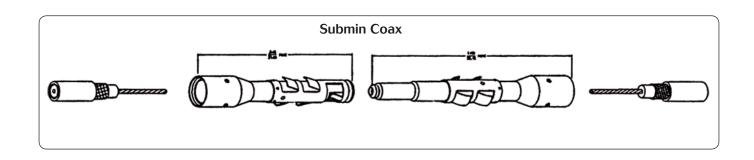
**Plating indication** 

### **MONOCRIMP Subminiature coax**



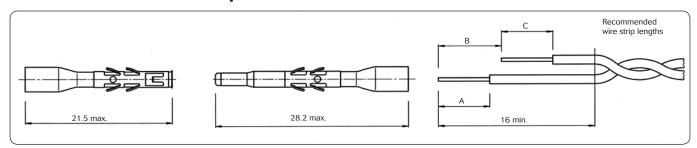
Part numbers	AWG			Coax din	nensions		Co	ax strip leng	ths	Crimp to	ol M10S1	
Male Female	inner conduct.	Cable type	D max.	E	F	G	A	В	С	Die set not incl.	Stop bushing not incl.	Extraction tool
RMDX6050D28 RCDX6050D28	20	-	2.64	2.11	1.70	0.30	5.1	6.35	8.9	\$80		
RMDX6050D28 RCDX6050D28	30	-	2.29	1.63	1.22	0.30	4.2	5.97	8.5	S87		RX2025GE1
RMDX6032D28 RCDX6032D28	28	-	2.90	1.29	1.91	0.38			11.7	\$80	- SL105	
RMDX6024D28 RCDX6024D28		-	1.78	1.37	0.96	0.48			8.9	S82		
RMDX6032D28 RCDX6032D28		RG 174/U	2.92	2.24	1.52	0.48	F.4		11.7	\$80		
RMDX6026D28 RCDX6026D28	26	-	3.05	2.44	1.96	0.41	5.1	6.35	8.9	S82		
RMDX6036D28 RCDX6036D28		RG188A/U	2.79	1.00	4.50	0.51			44.7	600		
RMDX6036D28 RCDX6036D28		RG316/U	2.72	1.98	1.52	0.51			11.7	\$80		

<sup>\*</sup> M10SG8 consists of die set, stop bushing and M10S1 tool



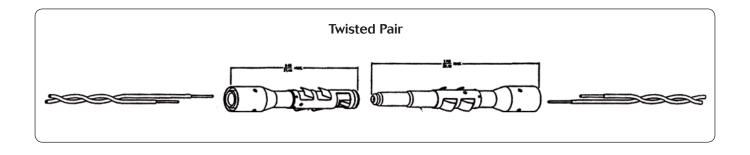
Note : all dimensions are in mm

## MONOCRIMP Twisted pair



Part number	414/6			Cable strip lengths	<b>S</b>	Crimp to		
Male	AWG inner	Dia. outer			C	Die set	Stop bushing	Extraction tool
Female	conduct.	A   B   C		not incl.	not incl.			
RMDX6019D28	26 (19 x 0.10)	1.25		M10	SG8*			
RCDX6019D28	24 (7 x 0.20) 24 (19 x 0.13)	1.25 1.45	4.7	6.0	4.0	Crimping kit		RX2025GE1
RMDX6031D28 RCDX6031D28	26 (7 x 0.16)	0.70	1.7			\$80	SL105	10/2020GE1

<sup>\*</sup> M10SG8 consists of die set, stop bushing and M10S1 tool



Note : all dimensions are in mm

# Fibre optic contacts size 16





### **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)
  - $230\mu m$  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.

# Fibre optic contacts size 16



### **Technical characteristics**

### **Performance**

• Fibre type: POF/PCF Singlemode Multimode 62.5/125µm 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. -25°C to +70°C • Temperature range: -25°C to +70°C -25°C to +70°C

Cable retention:
Mating cycles without cleaning:
Max. mating cycles:
500

### Construction

• Contact body: Copper alloy

#### Connector accommodation

Any TRIM TRIO<sup>®</sup> size 16 contact can be used in any contact position in any connector in the TRIM TRIO<sup>®</sup> size 16 interconnection system: UTP, UTS, UTG, UTO.

### **Ordering information**

POF Contacts (Plastic Optical Fibre) Silica Contacts - Multimode

Male contactRMPOF1000Male contactRMMMOFAFemale contactRCPOF1000BFemale contactRCMMOFA

PCF Contacts (Plastic Clad Fibre) Silica Contacts - Monomode

Male contactRMPCF230Male contactRMSMOFAFemale contactRCPOF230BFemale contactRCSMOFA

## **Tooling kit**



## **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 separatly as well.

Part numbers	Descriptions
80WD005	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 separatly

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



# Fibre optic contacts size 16



### **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



### **Multimode Contact - Silica**

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

The *standard tooling kit* is made of the part numbers below that can be ordered separatly 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 separatly

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)					

## Machined / Stamped & formed contacts size 20





### **Description**

#### Size 20 contacts for TRIM TRIO® connectors

Size 20 contacts with a .040" (1.0mm) pin diameter are two piece crimp snap-in contacts in pin and socket version available in:

- Machined version
- Stamped and formed version
- Machined dip solder contacts
  - 50A7
  - 5016

and designed for heavy duty top performance requirements. These contacts consist of a crimp/solder 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.

Crimp contacts accommodate AWG20 through AWG26 wire and the crimp barrels.

Typical features and benefits are:

- Made from high conductive copper alloy with gold plate finish.
- Two piece construction with dual purpose spring which serves for contact retention and protects the body against damage.
- Stamped and formed contacts packaging: on reel: 3000 pcs / in bulk packing: 100 pcs in plastic bag.
- Machined crimp and dip solder contacts packaging: 50 pcs in plastic box.

## Machined / Stamped & formed contacts size 20



### **Technical characteristics**

### **Performance**

• Current per contact max.:

Machined

Stamped and formed

5 A

5 A

• Contact resistance:  $\leq 6 \text{ m}\Omega$   $\leq 15 \text{ m}\Omega$ 

Dielectric withstanding voltage:
 Contact retention in body:
 Contact engagement force:
 Contact separation force:
 N max.
 Contact separation force:
 0.3 N min.

■ Plating: 0.40µm gold over nickel 0.75µm gold over nickel

### Construction

• Contact body: High conductive copper alloy

### **Connector accommodation**

Any size 20 contacts for UTO, UTS and UTG connectors can be used in any contact position.

## **Ordering information**

	Contact type		Part numbers	AWG	Section mm <sup>2</sup>	Insulation diameter		
	84	Pin	RM24W3K	26 - 24	0.13 - 0.20	1.58 max.		
dwi			RM20W3K	22 -20	0.32 - 0.52	1.58 max.		
b g	s a		RM18W3K	20 - 18	0.50 - 0.93	2.10 max.		
Machined crimp	225	Socket	RC24W3K	26 - 24	0.13 - 0.20	1.58 max.		
Мас			RC20W3K	22 - 20	0.32 - 0.52	1.58 max.		
	9 5		RC18W3K	20 - 18	0.50 - 0.93	2.10 max		
Q.	28.5	Reeled	SM24W3S26	26 - 24	0.13 - 0.25	0.89 - 1.58		
ri <u>i</u>		loose piece Pin Reeled loose piece	SM24WL3S26					
ped			SM20W3S26	22 - 20	0.35 - 0.50	1.17 - 2.08		
form			SM20WL3S26					
and	202	Reeled loose piece Socket Reeled loose piece	SC24W3S25	26 - 24	0.13 - 0.25	0.89 - 1.58		
ped			SC24WL3S25	20 - 24	0.13 - 0.23			
Stamped and formed crimp			SC20W3S25	22 - 20	0.35 - 0.50	1.17 - 2.08		
			SC20WL3S25	22 - 20	0.55 - 0.50			
Machined Dip solder		Pin 50A7	RMW50A7K	For solder tail details see next page				
		5016	RMW5016K					
Macl Dip s	0	50A7 Socket	RCW507AK					
		5016	RCW5016K					

Note : all dimensions are in mm

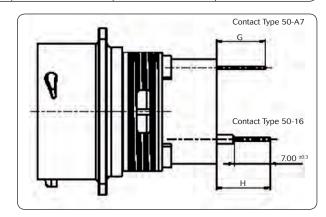
## Machined / Stamped & formed contacts size 20

## Crimptooling table

	Hand cr	rimp tooling for loose c	ontacts	Automatic crimp too str				
Size	Y14MTV / Y16SCM2	МН	860	P107	Extraction tools			
	die set included	Positioner (not incl.)	Locator setting	Left side applicator KRM/KRC (not incl.)	Stripper unit (not incl.)			
RM24W3K			5/6			RX20D44		
RM20W3K	Y16RCM		5/7					
RM18W3K	or	MH86301	6/8		-			
RC24W3K			5/6	-				
RC20W3K	AF8 + TP120		4/7					
RC18W3K			6/8					
SM24W3S26 SM24WL3S26			-	MLS0318B				
SM20W3S26 SM20WL3S26	\/14AAT\/			MLS0555A	SC11			
SC24W3S25 SC24WL3S25	<u>5  </u>	-		MLS0318B	5011			
SC20W3S25 SC20WL3S25				MLS0555A				
RMW50A7K								
RMW5016K	For addantal datally and helen							
RCW507AK	For solder tail details, see below							
RCW5016K								

# Nominal length (dim G) of dipsolder contacts out of connector

(contacts to be ordered separately)



## **UTS7** jam nut receptacle connectors

Size	Male c	contact	Female contact				
	RMW50A7K	RMW5016K	RCW50A7K	RCW5016K			
10							
12							
14	9.51	10.41	2.4 3.04				
16							
18							
20	5	6					
22	3	Ö	-	-			
24	3.6	4.6					

<sup>\*</sup> Plating indication : see plating table / Note : all dimensions are in mm

# Power contacts







### **Description**

TRIM TRIO<sup>®</sup> connectors also offer possibilities to use or combine power contacts with the standard size 16 signal contacts into the same housing.

It offers customers to reduce the number of connectors when combining signal and high current applications into one connector.

The signal cavities accept the full range of TRIM TRIO®:

- Size 16 contacts for applications up till 13 A
- Size 20 contacts for applications up till 7.5 A

Power cavities will either accept:

- Size 12 contacts for applications up till 26A
- Size 8 contacts for applications up till 44A

Pin and socket contacts are machined crimp snap-in and sockets for heavy duty top performance requirements.

For any specific power arrangement, please consult us.



## Power contacts





### **Technical characteristics**

#### **Performance**

Contacts # 12 ( $\emptyset$ 2.4) Contacts # 8 ( $\emptyset$ 3.6)
• Current per contact max.: 26 A 44A
• Contact resistance:  $\leq 5 \, \text{m}\Omega$   $\leq 5 \, \text{m}\Omega$ 

### Construction

• Contact body: High conductive copper alloy

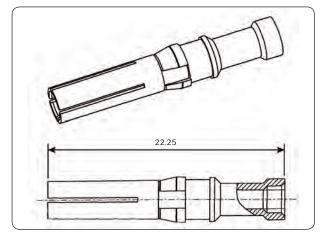
### **Plating**

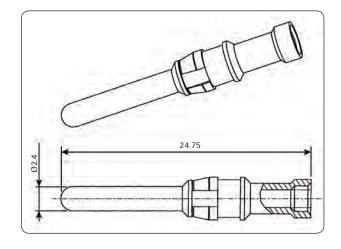
K 0.4µm gold min. all over, over nickel A 3µm silver all over

### **Connector accommodation**

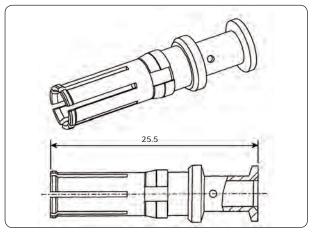
Power contacts can be used in the existing power arrangements of the UTS - see catalog pages 6/7 - UTP, UTG, UTO, UTV and SMS connectors - see pages in the TRIM TRIO® catalog.

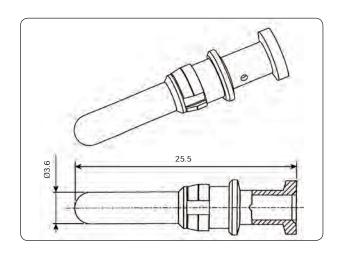
### Contacts #12 (Ø2.4 mm)





## Contacts #8 (Ø3.6 mm)





Note : all dimensions are in mm

# Power contacts



## **Ordering information**

Part nu	mbers	- Contact size	Contact Ø	Cable		Crimp	Locator	Locator	Extraction		
Pin	Socket			Sec	tion	Insulator Ø	tooling	setting	Locator	tooling	Plating
				mm²	AWG	mm					
82911459NA	82911458A			0.5	20			2			
82911461 NA	82911460A			0.75-1.0	18			2			
82911463NA	82911462A	# 12	2.4	1.5	16	4.9	M317	3	VGE10077A	51060210924	Ag
82911465NA	82911464A			2.5	14			3			
82911467NA	82911466A			4.0	12			4			
82911459NK	82911458K			0.5	20			2			
82911461NK	82911460K			0.75-1.0	18			2			
82911463NK	82911462K	# 12	2.4	1.5	16	4.9	M317	3	VGE10077A	51060210924	Au
82911465NK	82911464K			2.5	14			3			
82911467NK	82911466K	1		4.0	12			4			
82913601A	82913600A			1.5	16			3			
82913603A	82913602A			2.5	14			3			
82913605A	82913604A	#8	3.6	4.0	12	6.5	M317	4	VGE10078A	51060210936	Ag
82913607A	82913606A			6.0	10			5			
82913609A	82913608A			10.0	8			6-7			