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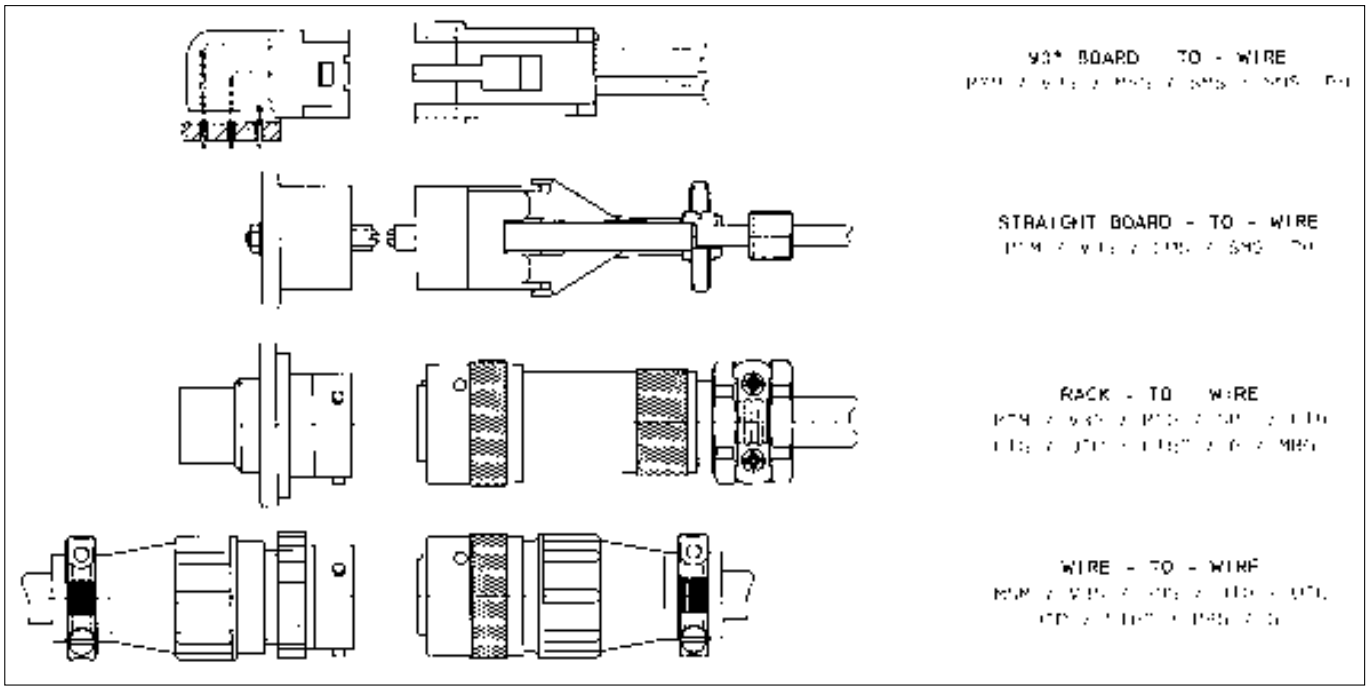
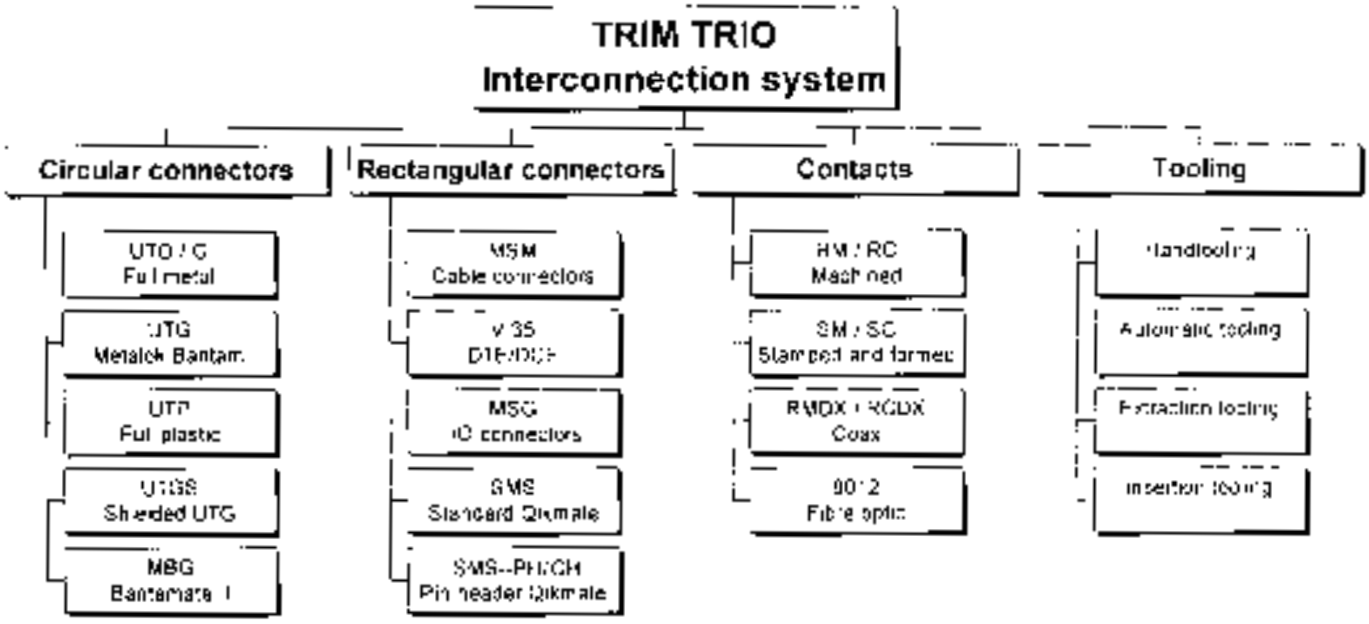
Introduction

Versatility

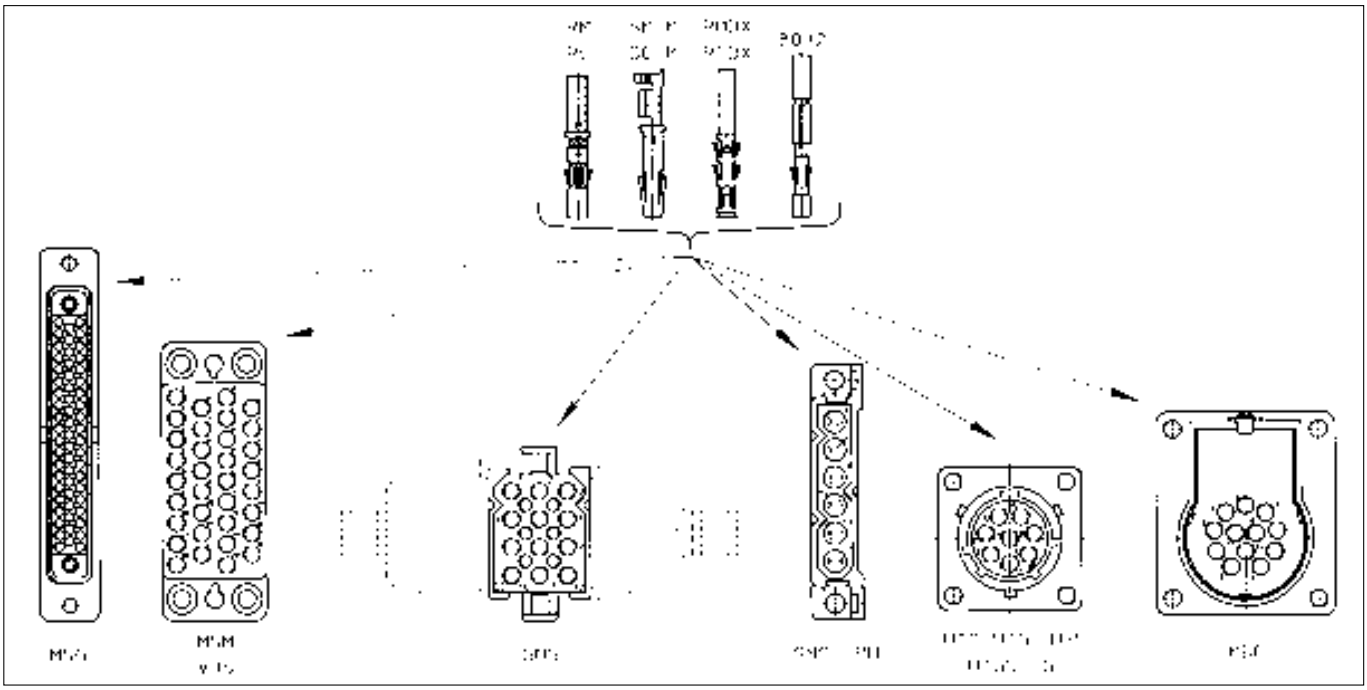


TRIM TRIO selection matrix



Introduction

TRIM TRIO - The principle



The TRIM TRIO interconnection system is a fully integrated system, in which 4 contact types can be used in a variety of connector styles and sizes, ranging from 1 to 104 contact positions.
This interchangeability offers boundless design possibilities with a large commonality throughout the entire range.

The commonality in the system is established in:
- contact performance and wire range.
- configuration of contact cavities in the housings.
- crimp tooling
- assembly procedures.
- quality assurance procedures.
- field service and maintenance.
- personnel training.

Products

The contacts, both male and female, accommodate a wire range of AWG14 up to AWG30. The 4 contact families are:
- Machined contacts for high performance (up to 13 Amp current rating), with gold or tin plating.
- Stamped and formed two-piece contacts, for more cost effective applications (up to 13 Amp current rating).
- Subminiature coaxial contacts, in a multi-piece and a mono-crimp version, for coaxial or twisted-pair cables.
- Fibre optic contacts to accommodate 1000µ plastic fibres with a cable diameter of 2.2 mm.

The housings offer many options in contact cavities and backshell possibilities
The main version are:
- circular connectors:
  - full metal
  - plastic with metal coupling system
  - full plastic
  - metallised plastic for shielding
  - plastic with quick mating feature
- rectangular, high performance, rack and panel and printed circuit board versions.
- rectangular, low cost, rack and panel and printed circuit board versions.
- rectangular connectors for V.35 applications.
- rectangular connectors for I/O applications.

(See TRIM TRIO selection matrix on the next page)

The beauty of the TRIM TRIO system means that the 4 contact types can be combined (both male and female) in any TRIM TRIO connector type of any geometry.

The keywords in the TRIM TRIO interconnection system are standardisation, versatility, reliability and economy.
These words explain why the TRIM TRIO name is so well known, and its connectors are used all over the world.

Standardisation

- The same contact cavity for each type of housing
- identical crimp tooling for all types of contacts except fibre optics
- reduced manufacturing methods
- standardised operator training
- international acceptance

Versatility

- wide range in current capability
- various contact platings
- wire and cable accommodations
- housings accommodate pin and socket (male and female) contacts
- variety of terminations
- variations in mounting
- number of sizes
- discrimination keying
- broad range of installation tooling
- variety of possible applications

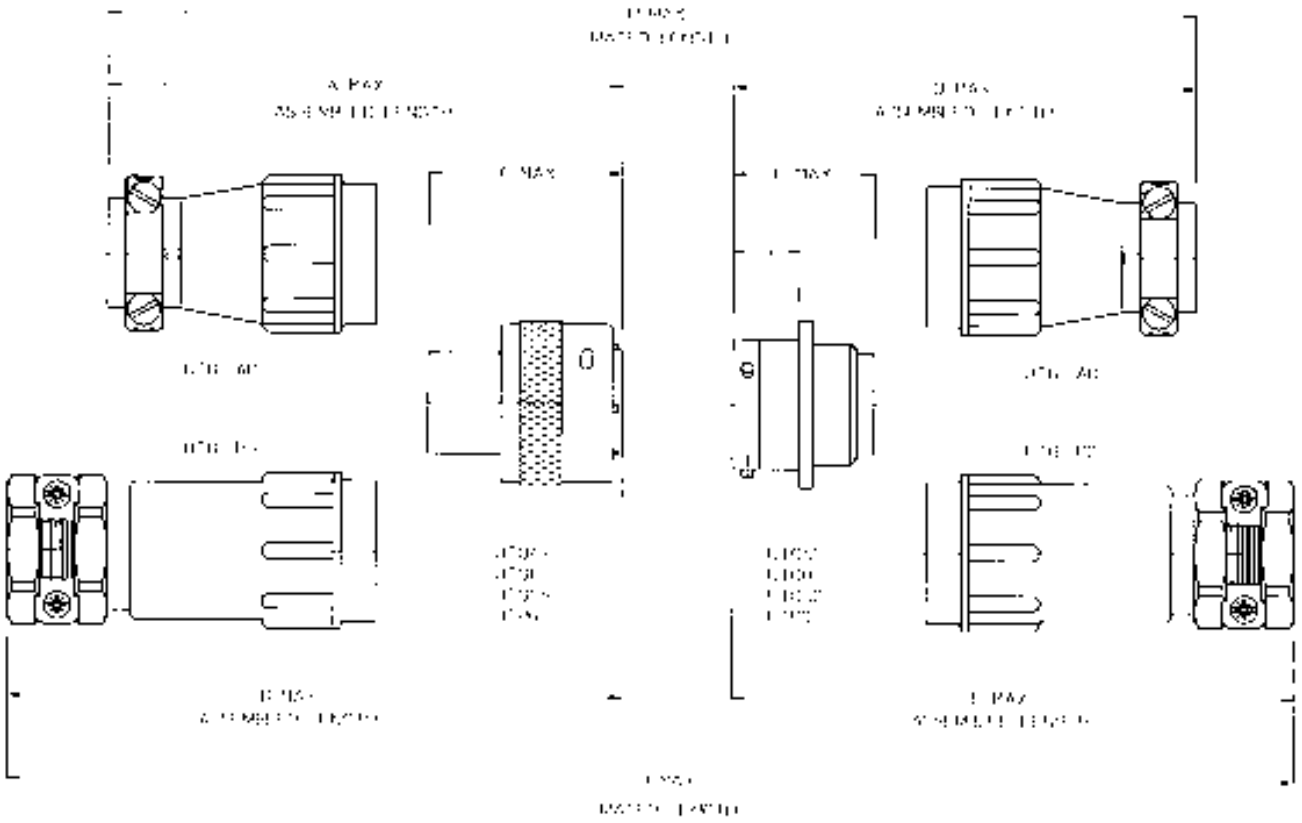
Reliability

- proven materials
- guaranteed quality assurance per ISO 9001 certification
- rigid inspection procedures
- positive polarisation
- pin protection
- rugged mouldings
- restricted entry contacts

Economy

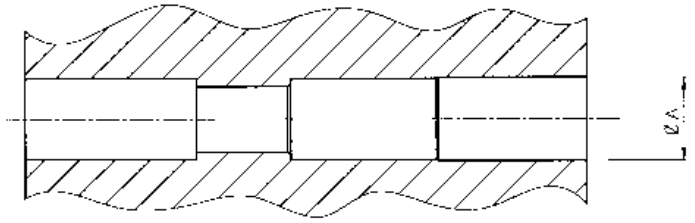
- low assembly cost
- minimal tooling downtime
- easy connecting and disconnecting
- low wiring cost
- simplified personnel education
- low inspection cost
- removable contacts
- reduced number of components
- low installed cost

Mating Dimensions TRIM TRIO



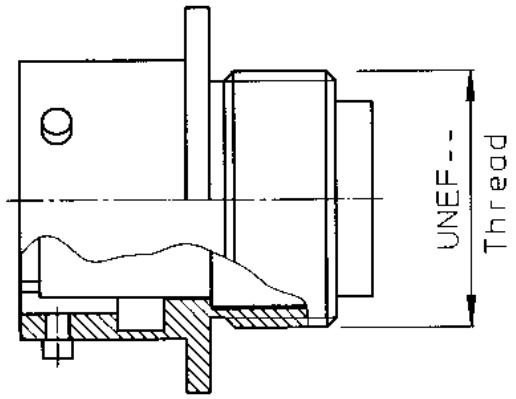
Shell size	Dimensions in mm								
	A max.	B max.	C max.	D max.	E max.	F max.	G ±0.2	H max.	J max.
10	57	72		57.5	72.5			106	136
12		74			74.0				139
14	63	81		63.5	81	24.3	11.4	118	153
16		85			85				161
18	67	88	31.8	67.5	89			126	168
20	74	101		76	103		14.6	140	191
22	79	117		82	110	26		151	207
24	84	123		88	127		15.4	162	240
10-3VDE	57	72		57.5	72.5	31.7	11.4	106	136
18-7 VDE	73.5	94,5	33	74	95.5	34	17.9	133	175
20-20VDE	74	101	31.8	76	103	26	14.6	140	191

TRIM TRIO cavity dimensions on wire face



CONNETOR FAMILY	ØA	
UTO	3.20	3.30
UTG		
UTGS	3.30	3.40
UTP		

TRIM TRIO back shell threading

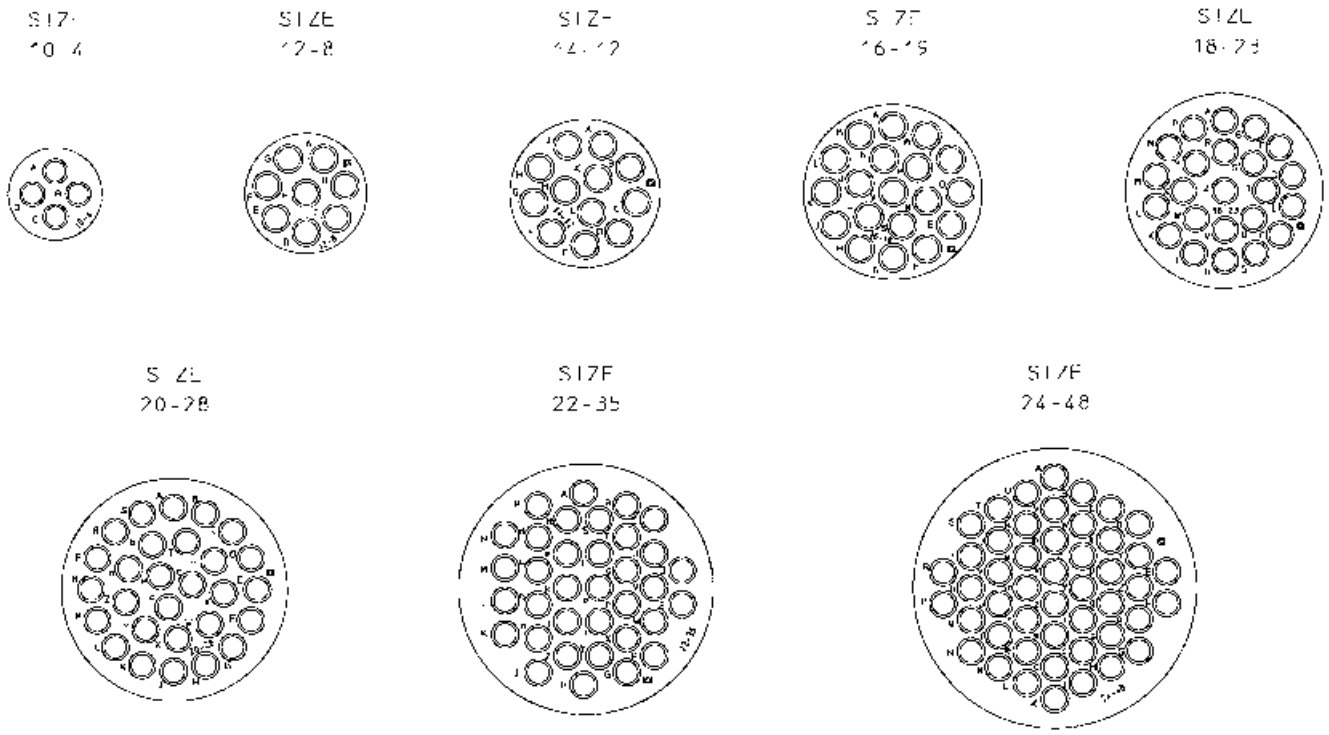


TRIM TRIO threading dimensions

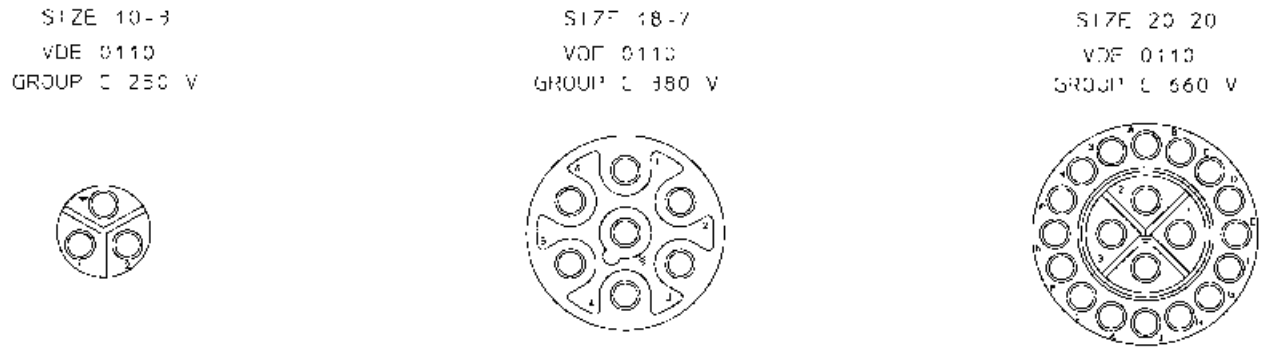
Shell size	Shell thread size for backshells	PG - thread on PG cable clamp
10	9/16 - 24 UNEF	PG9
12	11/16 - 24 UNEF	PG11
14	13/16 - 20 UNEF	PG13.5
16	15/16 - 20 UNEF	PG16
18	1-1/16 - 18 UNEF	
20	1-3/16 - 18 UNEF	PG21
22	1-5/16 - 18 UNEF	
24	1-7/16 - 18 UNEF	PG29

TRIM TRIO Insert arrangements and moulded-in contact identification

TRIM TRIO arrangements only available for UT0, UTG, UTGS and UTP



TRIM TRIO additional arrangements only available for UTG, UTGS and UTP



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