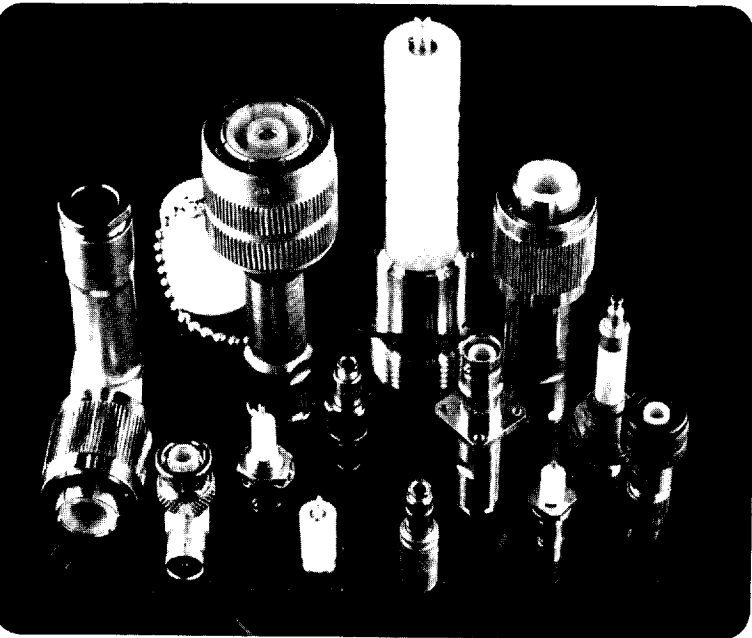


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# HIGH VOLTAGE COAXIAL CONNECTORS



**M.HT  
BNC.HT  
SHV  
MQ.HT  
THT.20  
THT.40**

**series**

## INTRODUCTION

This catalogue features 6 series of high voltage coaxial connectors from the miniature M - HT series up to the large THT - 40 series, varying in voltage from withstanding continuous voltages from 10 000 V to 40 000 V.

## TEST VOLTAGES

The test voltages quoted in this catalogue are given as an indication only. The figures correspond to those made under normal atmospheric conditions during a test period of 1 minute as specified in the French standard NF - C - 20 600.

## OPERATING VOLTAGES

The operating voltage chosen is the responsibility of the user depending on the conditions under which the connectors are to be used (environmental, safety factor, etc. . .). The cables listed on page 4 are recommended for their mechanical and dimensional suitability with our connectors. As to the electrical characteristics of the cables and in particular the maximum voltage capability, it is necessary to conform with the recommendations of the cable manufacturer.

# CABLES SUITABLE

The cable groups are classified by ext. dia (mm) / impedance ( $\Omega$ )

Other special cables, not listed below can also be used with certain connector series.

Cable Refs. CODE No. Page

## CABLE 5/12

R 331 007 20

## CABLE 2,6/50

|             |           |    |
|-------------|-----------|----|
| RG. 174/U   |           |    |
| RG. 188 A/U |           |    |
| RG. 316/U   | R 310 002 | 7  |
| URM 95      | R 310 322 | 7  |
| URM 109     | R 317 003 | 13 |
| URM 116     |           |    |

## CABLE 5/50

|             |           |    |
|-------------|-----------|----|
| RG. 58 C/U  |           |    |
| RG. 141 A/U | R 316 007 | 9  |
| RG. 142 B/U | R 316 207 | 9  |
| RG. 223/U   | R 316 257 | 9  |
| RG. 303/U   | R 317 005 | 13 |
| RG. 400/U   | R 317 072 | 13 |
| URM 43      | R 317 255 | 13 |
| URM 72      | R 317 270 | 13 |
| URM 76      | R 321 007 | 16 |
| URM 108     | R 321 257 | 16 |
| URM 301     |           |    |

## CABLE 6/75

|               |           |    |
|---------------|-----------|----|
| RG. 59 B/U    |           |    |
| RG. 140/U     | R 316 011 | 9  |
| URM 70        | R 316 211 | 9  |
| URM 90        | R 316 261 | 9  |
| KX. 6A        | R 317 074 | 13 |
| KX. 25        | R 321 011 | 16 |
| KX. 52        | R 321 014 | 16 |
| KX. 53        | R 321 261 | 16 |
| Filotex 17950 |           |    |

Cable Refs. CODE No. Page

## CABLE 10/50

|             |           |    |
|-------------|-----------|----|
|             | R 321 020 | 16 |
|             | R 321 085 | 16 |
| UG. 165/U   | R 331 018 | 20 |
| RG. 213/U   | R 331 168 | 20 |
| RG. 215/U ★ | R 331 218 | 20 |
| URM 67      | R 331 268 | 20 |
|             | R 346 018 | 25 |
|             | R 346 268 | 25 |

## CABLE 10/75

|              |           |    |
|--------------|-----------|----|
| RG. 11 A/U   | R 331 018 | 20 |
| RG. 12 A/U ★ | R 331 168 | 20 |
| RG. 144 A/U  | R 331 218 | 20 |
| URM 57       | R 331 268 | 20 |
| URM 64       | R 346 018 | 25 |
|              | R 346 268 | 25 |

## CABLE 11/50

|           |           |    |
|-----------|-----------|----|
| RG. 214/U | R 331 018 | 20 |
| RG. 225/U | R 331 168 | 20 |
| URM 91    | R 331 218 | 20 |
| URM 112   | R 331 268 | 20 |
|           | R 346 018 | 25 |
|           | R 346 268 | 25 |

## CABLE 11/75

|                       |           |    |
|-----------------------|-----------|----|
| RG. 216/U             | R 331 018 | 20 |
| URM 60                | R 331 168 | 20 |
| 75 MD                 | R 331 218 | 20 |
| 100 MD (98 $\Omega$ ) | R 331 268 | 20 |
|                       | R 331 323 | 20 |

★ Armoured cables requiring the use of armoured cable clamp R 280 115 (MX 564 A/U) in place of the connector back nut - see page 21.

# NUMERICAL LISTING OF CONNECTORS SHOWN IN THIS CATALOGUE

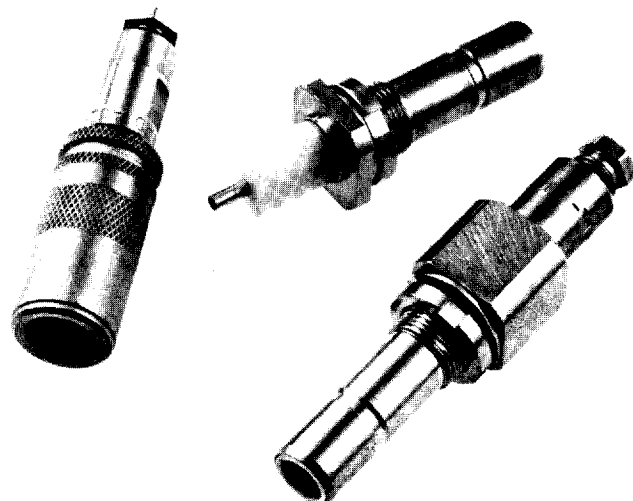
(by code no.)

| Code No.      | Page | Code No.      | Page | Code No.  | Page |
|---------------|------|---------------|------|-----------|------|
| R 280 115     | 21   | R 316 780     | 11   | R 321 261 | 16   |
| R 280 503     | 11   | R 316 812     | 11   | R 321 405 | 17   |
|               |      |               |      | R 321 603 | 17   |
| R 310 002 129 | 7    | R 317 003     | 13   | R 321 620 | 17   |
| R 310 322     | 7    | R 317 005     | 13   | R 321 703 | 18   |
| R 310 582     | 7    | R 317 071     | 13   | R 321 704 | 18   |
| R 310 862     | 7    | R 317 072     | 13   | R 321 710 | 18   |
|               |      | R 317 074     | 13   | R 321 812 | 18   |
|               |      | R 317 255     | 13   |           |      |
| R 316 004     | 9    | R 317 270     | 13   | R 331 007 | 20   |
| R 316 007     | 9    | R 317 404     | 14   | R 331 018 | 20   |
| R 316 011     | 9    | R 317 404 290 | 14   | R 331 168 | 20   |
| R 316 015     | 9    | R 317 405     | 14   | R 331 218 | 20   |
| R 316 072     | 9    | R 317 580     | 14   | R 331 268 | 20   |
| R 316 207     | 9    | R 317 580 290 | 14   | R 331 323 | 20   |
| R 316 211     | 9    | R 317 603     | 14   | R 331 405 | 21   |
| R 316 257     | 9    | R 317 720     | 14   | R 331 603 | 21   |
| R 316 261     | 9    | R 317 720 160 | 14   | R 331 803 | 21   |
| R 316 405     | 10   |               |      |           |      |
| R 316 553     | 10   | R 321 007     | 16   |           |      |
| R 316 603     | 10   | R 321 011     | 16   | R 346 018 | 25   |
| R 316 704     | 10   | R 321 014     | 16   | R 346 268 | 25   |
| R 316 714     | 10   | R 321 020     | 16   | R 346 405 | 25   |
| R 316 754     | 11   | R 321 085     | 16   | R 346 603 | 25   |
| R 316 770     | 11   | R 321 257     | 16   | R 346 803 | 25   |

# HIGH VOLTAGE COAXIAL CONNECTORS

## M.HT SERIES

R 310 ...



### GENERAL CHARACTERISTICS

Miniature connectors designed with a dual operation coupling and locking mechanism.

- 1 - Automatic latching with low force push fit
- 2 - The connector coupling nut is then pushed forward, clamping the latching mechanism and locking the connectors. They can be seen to be locked as part of the black washer underneath the coupling nut is visible after the coupling nut has been pushed forward to lock the connectors.

Demating (and unlatching) is effected by a simple pulling movement of the coupling nut.

Materials : metal parts : brass and heat treated beryllium  
insulators : PTFE and silicone rubber  
plating : centre contacts gold - other pieces : NSR nickel

### ELECTRICAL CHARACTERISTICS

|                 |   |                                   |                            |                                         |
|-----------------|---|-----------------------------------|----------------------------|-----------------------------------------|
| Frequency range | : | 0 - 2 GHz                         |                            |                                         |
| Test voltage    | : | unmated connectors : 6 000 V D.C. | For Filotex cable<br>38421 | 2000 V DC For other<br>2000 V DC cables |
|                 | : | mated pair : 20 000 V D.C.        |                            |                                         |
| Current rating  | : | 5 A max.                          |                            |                                         |

### MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Life : 500 matings min.  
Temperature range : - 50° C + 125° C  
Splashproof  
Salt spray : 96 H

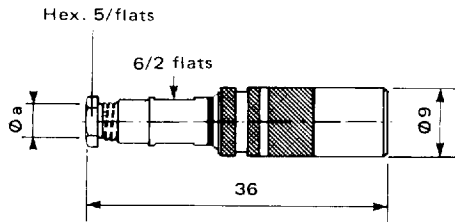
### COAXIAL CABLES SUITABLE

— FILOTEX Reference 38 421, edition 4

| 2,6 / 50 $\Omega$ |            |          |        |         |         |
|-------------------|------------|----------|--------|---------|---------|
| RG 174/U          | RG 188 A/U | RG 316/U | URM 95 | URM 109 | URM 116 |

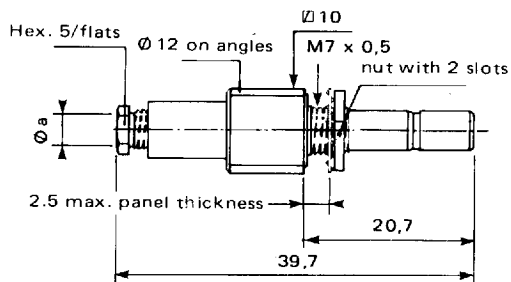
| CODE No. | STYLE | Cable group<br>$\Omega$ | max.<br>$\varnothing a$ | Assembly<br>code | Panel<br>piercing | Weight (g) |
|----------|-------|-------------------------|-------------------------|------------------|-------------------|------------|
|----------|-------|-------------------------|-------------------------|------------------|-------------------|------------|

## STRAIGHT PLUG



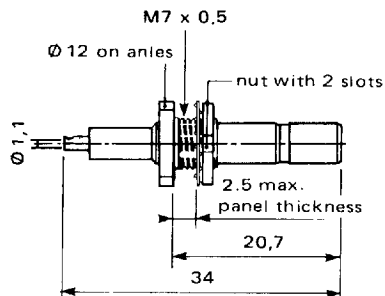
|                |             |                                |   |        |  |    |
|----------------|-------------|--------------------------------|---|--------|--|----|
| R 310 002 129* | Cable clamp | - 2,6/50<br>- Filotex<br>38421 | 3 | K25-66 |  | 10 |
|----------------|-------------|--------------------------------|---|--------|--|----|

## STRAIGHT JACK



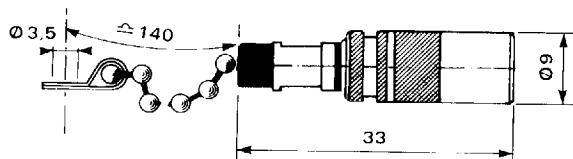
|            |                                                     |                                |   |        |     |    |
|------------|-----------------------------------------------------|--------------------------------|---|--------|-----|----|
| R 310 322* | Bulkhead<br>mounting -<br>panel seal<br>Cable clamp | - 2,6/50<br>- Filotex<br>38421 | 3 | K10-66 | e 4 | 12 |
|------------|-----------------------------------------------------|--------------------------------|---|--------|-----|----|

## STRAIGHT RECEPTACLE



|            |                                      |  |  |  |     |   |
|------------|--------------------------------------|--|--|--|-----|---|
| R 310 582* | Bulkhead<br>mounting -<br>panel seal |  |  |  | e 4 | 8 |
|------------|--------------------------------------|--|--|--|-----|---|

## CAPS

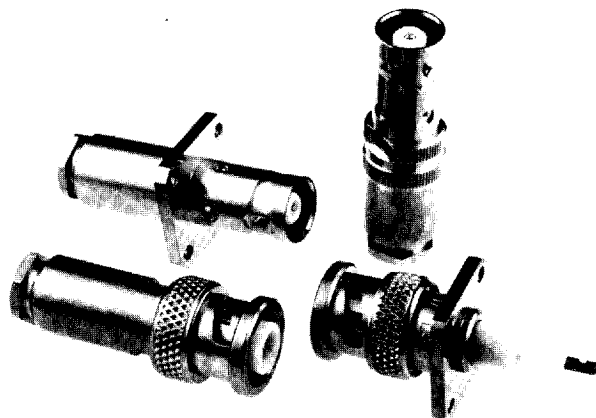


|            |                                                                |  |  |  |  |    |
|------------|----------------------------------------------------------------|--|--|--|--|----|
| R 310 862* | short circuit<br>cap and chain<br>for jacks and<br>receptacles |  |  |  |  | 14 |
|------------|----------------------------------------------------------------|--|--|--|--|----|

# HIGH VOLTAGE COAXIAL CONNECTORS

## BNC.HT series

R 316 ...



### GENERAL CHARACTERISTICS

The connectors of this series are not intermateable with those of the BNC and SHV series.  
2 pip bayonet coupling.

|           |   |                         |   |                                                                   |
|-----------|---|-------------------------|---|-------------------------------------------------------------------|
| Materials | : | contacts and interfaces | : | brass and heat treated beryllium copper                           |
|           | : | other metal parts       | : | brass                                                             |
|           | : | insulators              | : | P.T.F.E. (styles R 316 780 and R 316 770, insulator polyethylene) |
|           | : | gaskets                 | : | silicone rubber (styles R 316 780 and R 316 770, neoprene rubber) |
|           | : | plating                 | : | NSR nickel - centre contacts, gold                                |

### ELECTRICAL CHARACTERISTICS

|                 |   |                    |   |                                   |
|-----------------|---|--------------------|---|-----------------------------------|
| Test voltage    | : | unmated connectors | : | male : 6 000 V D.C.               |
|                 | : |                    | : | female : 8 000 V D.C.             |
|                 | : | mated pair         | : | 10 000 V D.C.                     |
| Impedance       | : |                    | : | 50 $\Omega$                       |
| Frequency range | : |                    | : | 0 - 2 GHz                         |
| V.S.W.R.        | : |                    | : | 1.20 +0.2 F (GHz) (plug and jack) |
| Current rating  | : |                    | : | 10 A                              |

### MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

|                   |   |                                                                              |
|-------------------|---|------------------------------------------------------------------------------|
| Life              | : | 500 mating                                                                   |
| Vibration         | : | 20 g - 2 000 Hz                                                              |
| Shock             | : | 50 g                                                                         |
| Salt spray        | : | 48 H                                                                         |
| Temperature range | : | - 55°C +155°C (except styles with polyethylene insulator) :<br>- 40°C + 70°C |

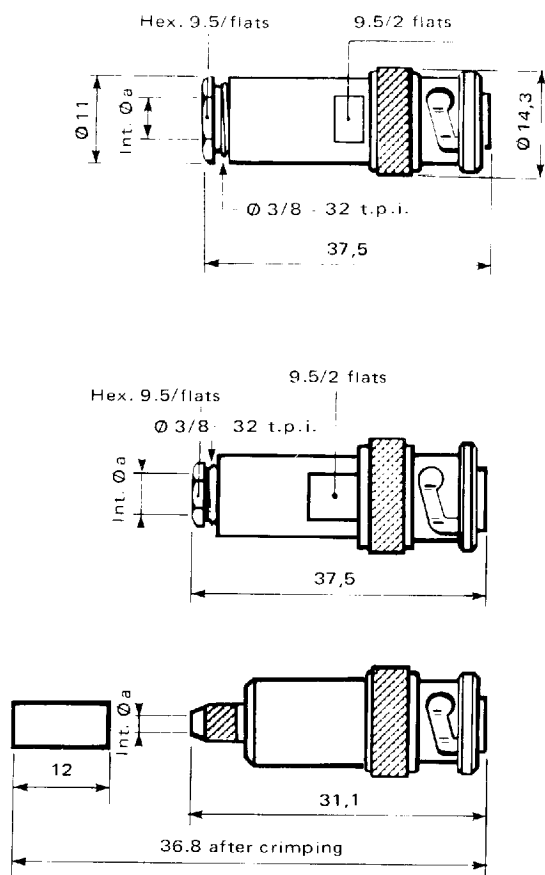
### COAXIAL CABLES SUITABLE

| 5/50 $\Omega$ | 6/75 $\Omega$ |
|---------------|---------------|
| RG. 58 C/U    | RG. 59 B/U    |
| RG. 141 A/U   | RG. 140/U     |
| RG. 142 B/U   | URM 70        |
| RG. 223/U     | URM 90        |
| RG. 303/U     | KX. 6 A       |
| RG. 400/U     | KX. 25        |
| URM 43        | KX. 52        |
| URM 72        | KX. 53        |
| URM 76        |               |
| URM 108       |               |
| URM 301       |               |

# BNC.HT series

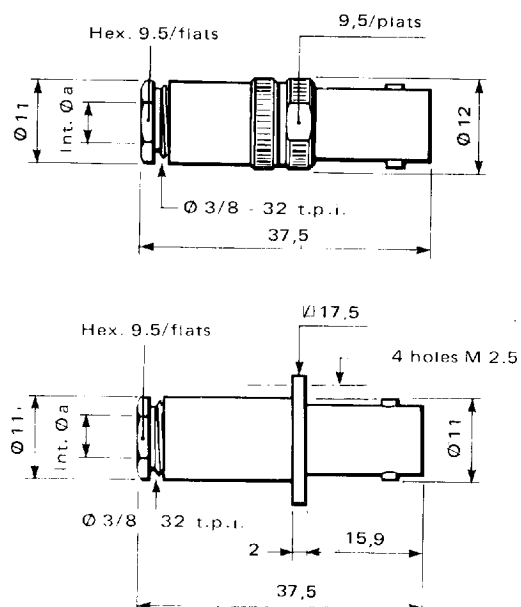
| CODE No. | STYLE | Cable Group<br>$\Omega$ | max.<br>$\varnothing_a$ | Assembly code | Panel piercing | Weight (g) |
|----------|-------|-------------------------|-------------------------|---------------|----------------|------------|
|----------|-------|-------------------------|-------------------------|---------------|----------------|------------|

## STRAIGHT PLUGS



|            |                                             |                              |     |             |  |    |
|------------|---------------------------------------------|------------------------------|-----|-------------|--|----|
| R 316 004  | Cable clamp                                 | 2,6/50                       | 3   | (not shown) |  | 20 |
| R 316 007  | Cable clamp                                 | 5/50                         | 5,4 | K13-67      |  | 20 |
| R 316 011  | Cable clamp<br>Interchangeable with UG932/U | 6/75                         | 6,5 | K13-67      |  | 19 |
| R 316 015* | Cable clamp                                 | Filotex 17950                | 6,5 | K13-67      |  | 19 |
| R 316 072  | Crimp                                       | RG. 58C/U<br>KX.15<br>S.SCR. | 3,2 |             |  | 15 |

## STRAIGHT JACKS

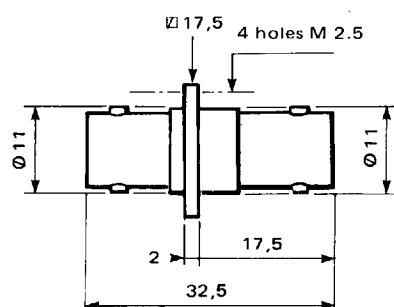
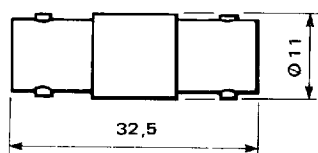
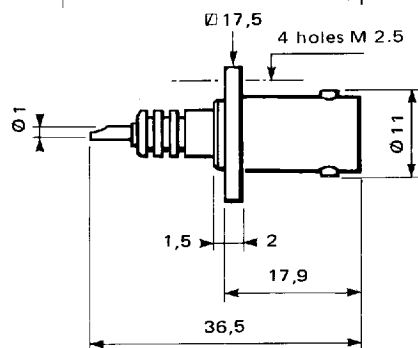
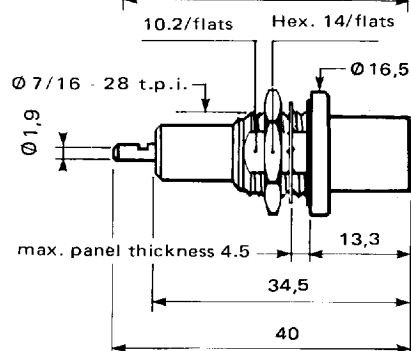
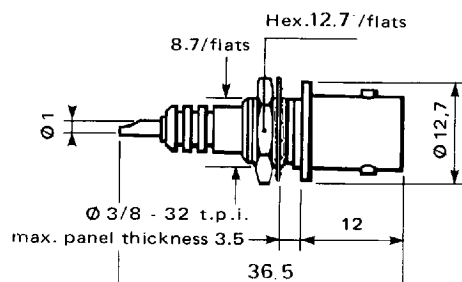


|           |                             |      |     |        |      |      |
|-----------|-----------------------------|------|-----|--------|------|------|
| R 316 207 | Cable clamp                 | 5/50 | 5,4 | K13-67 |      | 16   |
| R 316 211 | Cable clamp                 | 6/75 | 6,5 | K13-67 |      | 15   |
| R 316 257 | Square flange - cable clamp | 5/50 | 5,4 | K13-67 | a 14 | 17,5 |
| R 316 261 | Square flange - cable clamp | 6/75 | 6,5 | K13-67 | a14  | 18,5 |

# BNC.HT series

| CODE No. | STYLE | Cable<br>Group<br>$\Omega$ | Assembly<br>code | Panel<br>Piercing | Weight (g) |
|----------|-------|----------------------------|------------------|-------------------|------------|
|----------|-------|----------------------------|------------------|-------------------|------------|

## RECEPTACLES



|                  |                                                                                                 |  |  |  |      |     |
|------------------|-------------------------------------------------------------------------------------------------|--|--|--|------|-----|
| <b>R 316 553</b> | Bulkhead mounting                                                                               |  |  |  | d 28 | 8,5 |
| <b>R 316 603</b> | Bulkhead mounting<br>panel seal<br>— Watertight : — 40°C + 70°C<br>— at pressure : 3.5 bar max. |  |  |  | d 29 | 15  |
| <b>R 316 405</b> | Square flange<br>mounting<br>Interchangeable<br>with UG. 931/U                                  |  |  |  | a 14 | 10  |

## ADAPTORS

|           |                                  |  |  |  |  |      |    |
|-----------|----------------------------------|--|--|--|--|------|----|
| R 316 704 | Straight<br>female - female      |  |  |  |  |      | 11 |
| R 316 714 | Square flange<br>female - female |  |  |  |  | a 14 | 19 |

# BNC.HT series

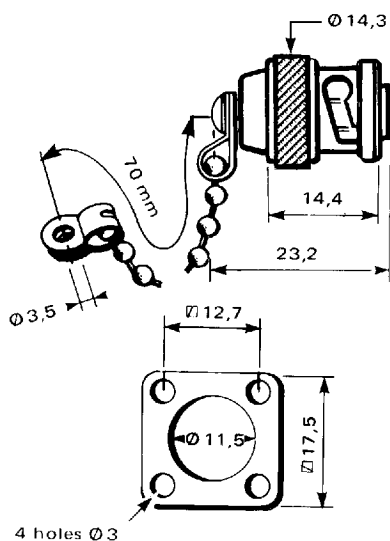
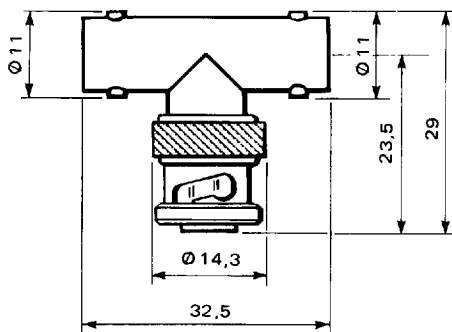
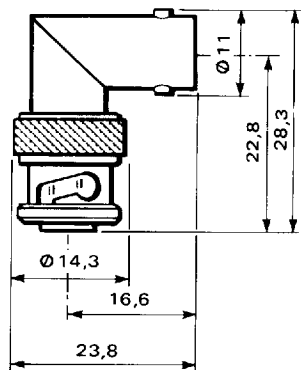
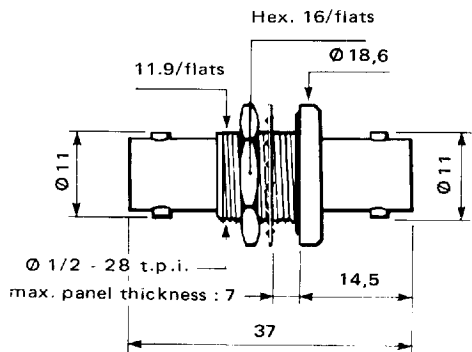
| CODE No. | STYLE | Cable Group<br>$\Omega$ | Assembly code | Panel piercing | Weight (g) |
|----------|-------|-------------------------|---------------|----------------|------------|
|----------|-------|-------------------------|---------------|----------------|------------|

## ADAPTORS

|           |                                                                                                                      |  |  |     |    |
|-----------|----------------------------------------------------------------------------------------------------------------------|--|--|-----|----|
| R 316 754 | Bulkhead<br>female - female<br>with panel seal<br><br>— Watertight : — 40°C to +85°C<br>— at pressure : 3.5 bar max. |  |  | d18 | 21 |
| R 316 770 | Elbow<br>male - female<br>polyethylene<br>insulator                                                                  |  |  |     | 17 |
| R 316 780 | Tee female -<br>female - male<br>polyethylene<br>insulator                                                           |  |  |     | 19 |

## ACCESSORIES

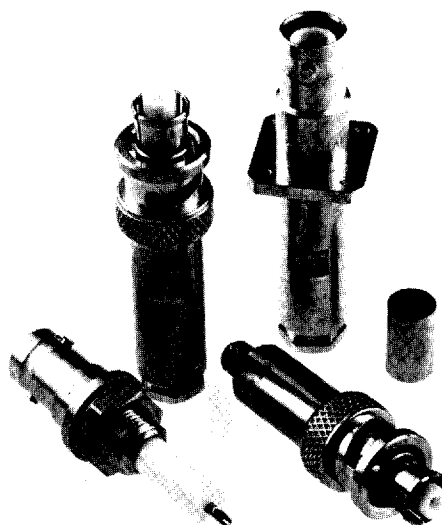
|           |                                                                                                                        |  |  |  |    |
|-----------|------------------------------------------------------------------------------------------------------------------------|--|--|--|----|
| R 316 812 | Protection cap and chain, ensures a watertight seal and electrical insulation when mated with BNC.HT female connectors |  |  |  | 14 |
| R 280 503 | Neoprene<br>flange<br>gasket                                                                                           |  |  |  |    |



# HIGH VOLTAGE COAXIAL CONNECTORS

## SHV series

R 317 ...



These safe high voltage connectors meet all requirements of the NIM Standard (Nuclear Instrumentation Module) Specification ND 545 Amendment A. Both the pin and socket contacts are securely recessed inside the insulation to prevent the danger of electrical shock when live unmated connectors are handled. They are particularly recommended for impulse circuits of linear accelerators as well as in military, nuclear and medical electronics.

In general, this series should be considered for use where the user is anxious to work under conditions of guaranteed safety.

### GENERAL CHARACTERISTICS

These connectors are not intermateable with those of the BNC and BNC.HT series. 2 pip bayonet coupling.

|           |   |                         |   |                                  |
|-----------|---|-------------------------|---|----------------------------------|
| Materials | : | contacts and interfaces | : | heat treated beryllium copper    |
|           |   | other metal parts       | : | brass                            |
|           |   | insulators              | : | P.T.F.E. or polyethylene         |
| Plating   |   |                         | : | NSR nickel-centre contacts, gold |

### ELECTRICAL CHARACTERISTICS

|                    |   |                                                                  |
|--------------------|---|------------------------------------------------------------------|
| Impedance          | : | 50 $\Omega$                                                      |
| Frequency range    | : | 0 - 2 GHz                                                        |
| V.S.W.R.           | : | < 1.20 +0.3 F (GHz) - (plug and jack)                            |
| Contact resistance | : | centre contact < 2.1 m $\Omega$ - outer contact < 1.5 m $\Omega$ |
| Test voltage       | : | unmated connectors : 10 000 V D.C. - 1 mn                        |
|                    | : | mated pair : 12 000 V D.C. - 1 mn                                |
| Current rating     | : | 10 A                                                             |

### MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

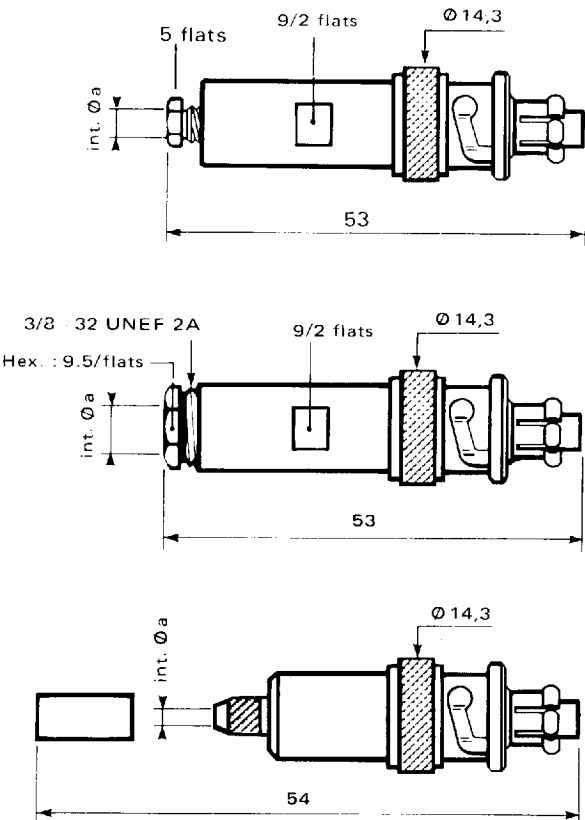
|                                  |   |                                                       |
|----------------------------------|---|-------------------------------------------------------|
| Contact to cable retention force | : | > 27 Newton                                           |
| Coupling nut retention force     | : | > 450 Newton                                          |
| Cable retention                  | : | > 180 Newton                                          |
| Vibration                        | : | 10 g - 500 Hz to MIL-STD-202, method 204, condition A |
| Shock                            | : | to MIL-STD-202, method 213 B, condition A             |
| Life                             | : | 500 matings                                           |
| Temperature range                | : | - 65°C +165°C                                         |
| Salt spray                       | : | to MIL-STD-202, method 101, condition B - 48 H        |

### COAXIAL CABLES SUITABLE

| 2.6/50 + 75 $\Omega$ |         | 5/50 $\Omega$ |         | 6/75 $\Omega$ |        |
|----------------------|---------|---------------|---------|---------------|--------|
| RG. 174 /U           | URM 95  | RG. 58 C/U    | URM 43  | RG. 59 B/U    | KX. 6A |
| RG. 179 B/U          | URM 109 | RG. 141 A/U   | URM 72  | RG. 140 /U    | KX. 25 |
| RG. 316 /U           | URM 116 | RG. 142 B/U   | URM 76  | URM 70        | KX. 52 |
|                      |         | RG. 223 /U    | URM 108 | URM 90        | KX. 53 |
|                      |         | RG. 303 /U    | URM 301 |               |        |
|                      |         | RG. 400 /U    |         |               |        |

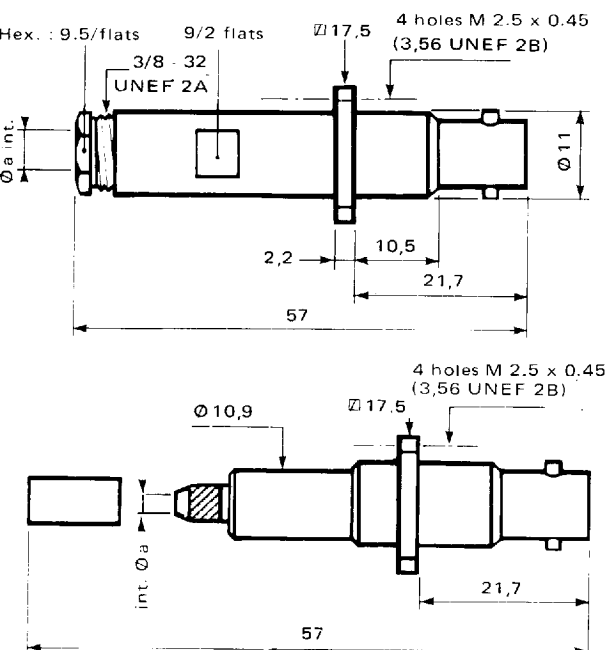
| CODE No. | STYLE | Cable group<br>$\Omega$ | max.<br>$\Phi_a$ | Assembly<br>code | Panel<br>piercing | Weight (g) |
|----------|-------|-------------------------|------------------|------------------|-------------------|------------|
|----------|-------|-------------------------|------------------|------------------|-------------------|------------|

## STRAIGHT PLUGS



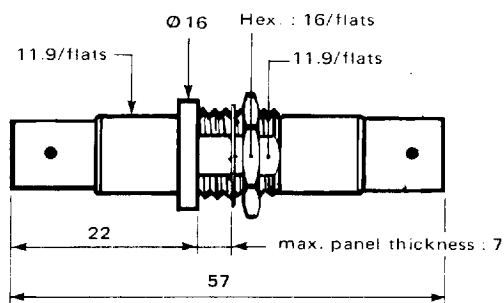
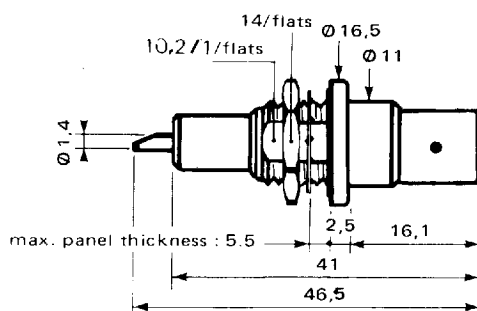
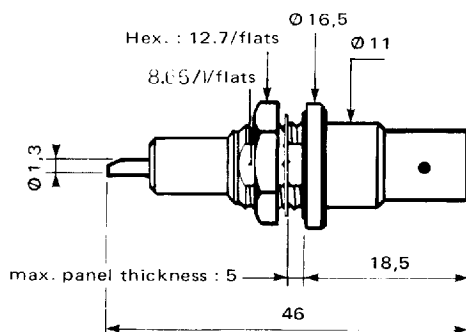
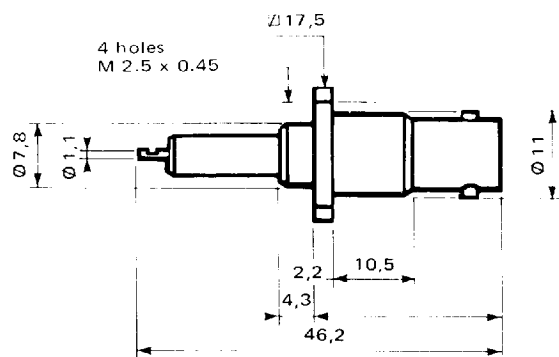
|            |                                     |             |     |         |  |    |
|------------|-------------------------------------|-------------|-----|---------|--|----|
| R 317 003* | Cable clamp - captive contact       | 2,6/50 + 75 | 3   |         |  | 26 |
| R 317 005  | Cable clamp - captive contact       | 5/50        | 5,6 | K13-68  |  | 25 |
| R 317 071* | Crimp - Nuclear radiation resistant | 5/50 S.SCR. | 5,5 | K43-75A |  |    |
| R 317 072  | Crimp                               | 5/50 S.SCR  | 5,5 | K43-75A |  | 21 |
| R 317 074  | Crimp                               | 6/75        | 6,6 | K43-75A |  | 21 |

## STRAIGHT JACKS



|           |                                             |            |     |         |     |    |
|-----------|---------------------------------------------|------------|-----|---------|-----|----|
| R 317 255 | Square flange - cable clamp captive contact | 5/50       | 5,6 | K13-68  | a14 | 25 |
| R 317 270 | Square flange - crimp                       | 5/50 S.SCR | 5,5 | K43-75A | a14 | 22 |

# SHV series



| CODE No. | STYLE | Cable group<br>$\Omega$ |  | Assembly code | Panel piercing | Weight (g) |
|----------|-------|-------------------------|--|---------------|----------------|------------|
|----------|-------|-------------------------|--|---------------|----------------|------------|

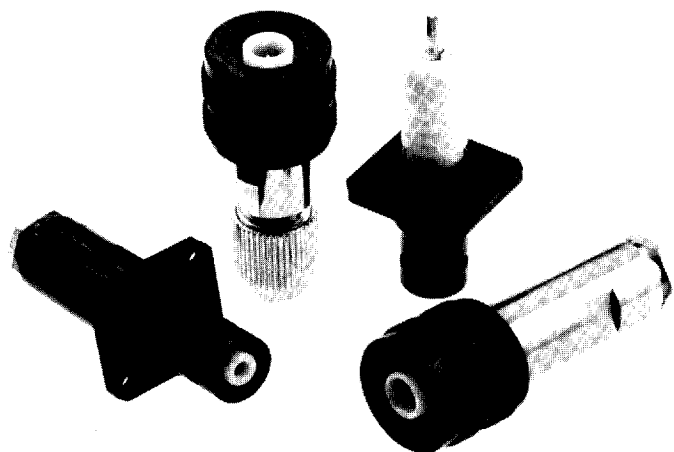
## RECEPTACLES

|                |                                                                        |  |  |  |         |    |
|----------------|------------------------------------------------------------------------|--|--|--|---------|----|
| R 317 405      | Square flange mounting<br>4 holes M 2.5 x 0.45 (7.56 UNCF 2B)          |  |  |  | a8-a14  | 15 |
| R 317 404      | Square flange mounting<br>4 holes 3.2 Ø                                |  |  |  | a16-a45 | 15 |
| R 317 404 290* | Square flange mounting<br>4 holes 3.2 Ø<br>Nuclear radiation resistant |  |  |  | a16-a45 | 15 |
| R 317 580      | Bulkhead mounting                                                      |  |  |  | d11     | 25 |
| R 317 580 290* | Bulkhead mounting -<br>Nuclear radiation resistant                     |  |  |  | d11     | 12 |
| R 317 603*     | Bulkhead mounting -<br>panel seal.                                     |  |  |  |         | 20 |

## ADAPTORS

|                |                                                                 |                        |  |  |     |    |
|----------------|-----------------------------------------------------------------|------------------------|--|--|-----|----|
| R 317 720      | Bulkhead mounting -<br>jack - jack                              |                        |  |  | d12 | 29 |
| R 317 720 160* | Bulkhead mounting<br>jack - jack<br>Nuclear radiation resistant | Polyethylene insulator |  |  | d12 | 29 |

# HIGH VOLTAGE COAXIAL CONNECTORS



## mini QUICK .HT series

R 321 ...

### GENERAL CHARACTERISTICS

These connectors have a special instantaneous automatic latching system which has been patented. They are not intermateable with the miniQUICK series.

|                     |   |                         |   |                               |
|---------------------|---|-------------------------|---|-------------------------------|
| Materials           | : | contacts and interfaces | : | heat treated beryllium bronze |
|                     |   | other metal parts       | : | brass                         |
|                     |   | insulators              | : | P.T.F.E.                      |
|                     |   | gaskets                 | : | silicone rubber               |
| Plating             | : |                         | : | nickel chrome                 |
| Plating of contacts | : |                         | : | gold                          |

### ELECTRICAL CHARACTERISTICS

|                                 |   |                    |   |                                                      |
|---------------------------------|---|--------------------|---|------------------------------------------------------|
| Test voltage                    | : | unmated connectors | : | 7 000 V D.C.                                         |
|                                 |   | mated pair         | : | 12 000 V D.C.                                        |
| — threshold of corona discharge | : |                    | : | 4 500 V r.m.s. - 50 Hz (LCIE certificate N° 137656C) |
| Impedance                       | : |                    | : | 50 $\Omega$                                          |
| Frequency range                 | : |                    | : | 0 - 2 GHz                                            |
| V.S.W.R.                        | : |                    | : | $< 1.20 + 0.3$ F (GHz) - (plug and jack)             |
| Current rating                  | : |                    | : | 20 A                                                 |

### MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

|                   |   |                                              |
|-------------------|---|----------------------------------------------|
| Life              | : | 1 000 matings                                |
| Vibration         | : | 20 g - 2 000 Hz                              |
| Shock             | : | 50 g                                         |
| Salt spray        | : | 48 H                                         |
| Temperature range | : | $- 40^{\circ}\text{C} + 100^{\circ}\text{C}$ |

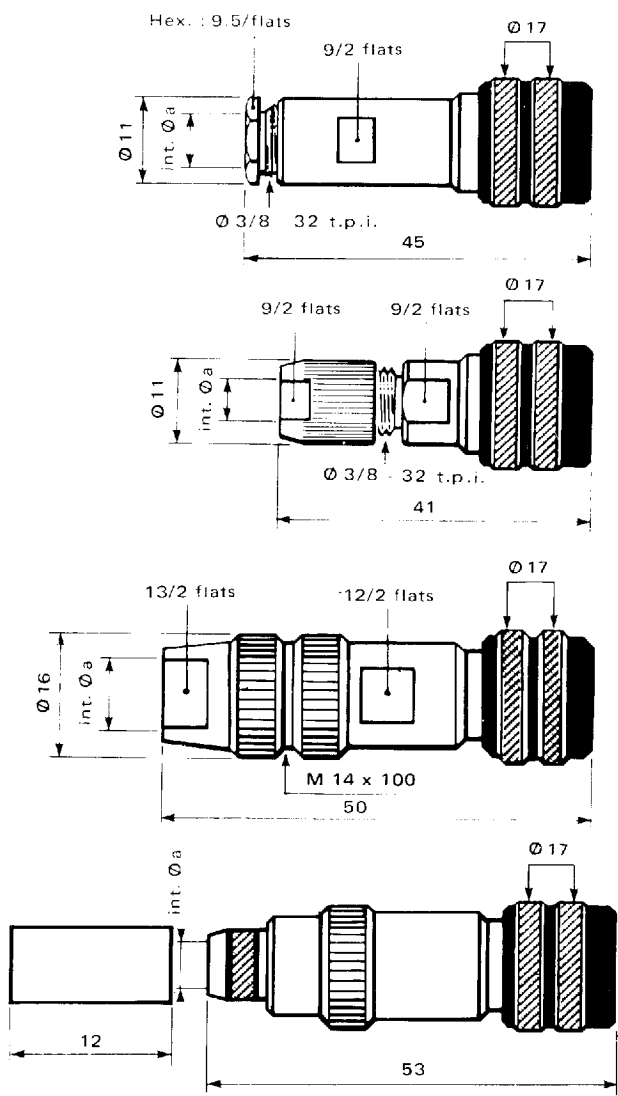
### COAXIAL CABLES SUITABLE

| 5/50 $\Omega$ |         | 6/75 $\Omega$ |        | 10/50 $\Omega$ |
|---------------|---------|---------------|--------|----------------|
| RG. 58 C/U    | URM 43  | RG. 59 B/U    | KX. 6A | RG. 165/U      |
| RG. 141 A/U   | URM 72  | RG. 140 /U    | KX. 25 | RG. 213/U      |
| RG. 142 B/U   | URM 76  | URM 70        | KX. 52 | URM 67         |
| RG. 223 /U    | URM 108 | URM 90        | KX. 53 |                |
| RG. 303 /U    | URM 301 |               |        |                |
| RG. 400 /U    |         |               |        |                |

# mini QUICK.HT series

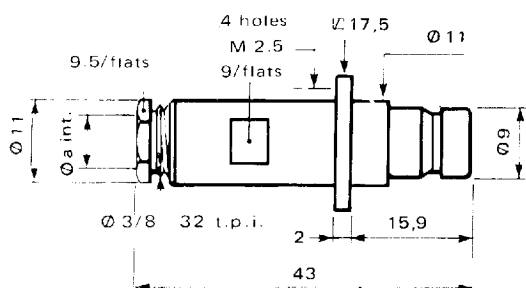
| CODE No. | STYLE | Cable group<br>$\Omega$ | max.<br>$\varnothing a$ | Assembly<br>code | Panel<br>piercing | Weight (g) |
|----------|-------|-------------------------|-------------------------|------------------|-------------------|------------|
|----------|-------|-------------------------|-------------------------|------------------|-------------------|------------|

## STRAIGHT PLUGS



|            |                      |               |      |         |  |    |
|------------|----------------------|---------------|------|---------|--|----|
| R 321 007  | Cable clamp          | 5/50          | 5,4  | K13-69  |  | 32 |
| R 321 011  | Cable clamp          | 6/75          | 6,4  | k13-69  |  | 31 |
| R 321 014* | Improved cable clamp | Filotex 17950 | 6,4  | K56-70  |  | 33 |
| R 321 020* | Improved cable clamp | 10/50         | 11,2 | K56-76  |  | 33 |
| R 321 085* | Crimp                | 10/50         | 7,5  | K43-75B |  | 55 |

## STRAIGHT JACKS

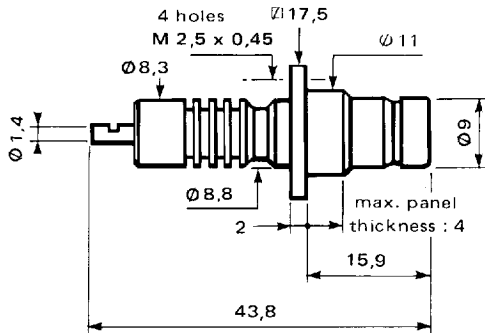


|            |                             |               |     |        |     |    |
|------------|-----------------------------|---------------|-----|--------|-----|----|
| R 321 257* | Square flange - cable clamp | 5/50          | 5,4 | K13-69 | a14 | 21 |
| R 321 261* | Square flange - cable clamp | Filotex 17950 | 6,4 | K13-69 | a14 | 20 |

# mini QUICK.HT series

| CODE No. | STYLE | Cable group<br>$\Omega$ | max.<br>$\Phi_a$ | Assembly code | Panel piercing | Weight (g) |
|----------|-------|-------------------------|------------------|---------------|----------------|------------|
|----------|-------|-------------------------|------------------|---------------|----------------|------------|

## RECEPTACLES

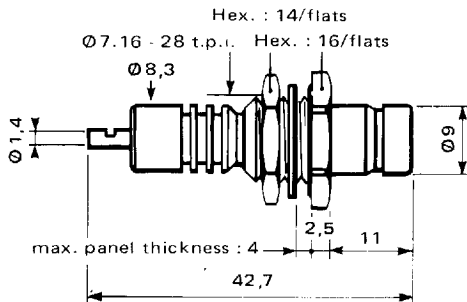


R 321 405

Square flange mounting

a11-a14

15

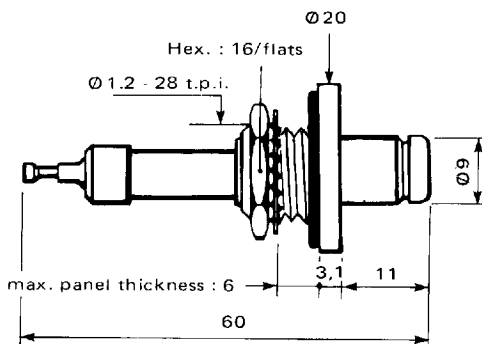


R 321 603

Bulkhead mounting panel seal

e 6

14



R 321 620

Hermetically sealed bulkhead mounting

e 8

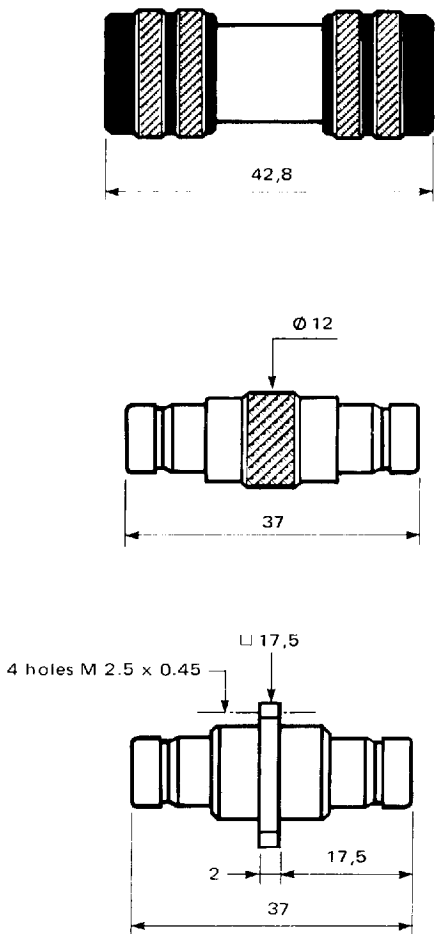
25

- Ceramic insulation
- Viton gasket
- Leakage rate :  $< 10^{-8}$  atm/cm<sup>3</sup>/sec.
- Temperature range :  $-80^{\circ}\text{C}$  +  $250^{\circ}\text{C}$  (flange braised onto panel)
- Flange mounted with viton gasket onto panel
- Pressure : 30 bars

# mini QUICK.HT series

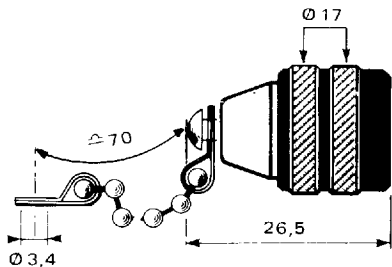
| CODE No. | STYLE | Cable group<br>$\Omega$ | max.<br>$\varnothing_a$ | Assembly<br>code | Panel<br>piercing | Weight (g) |
|----------|-------|-------------------------|-------------------------|------------------|-------------------|------------|
|----------|-------|-------------------------|-------------------------|------------------|-------------------|------------|

## ADAPTORS



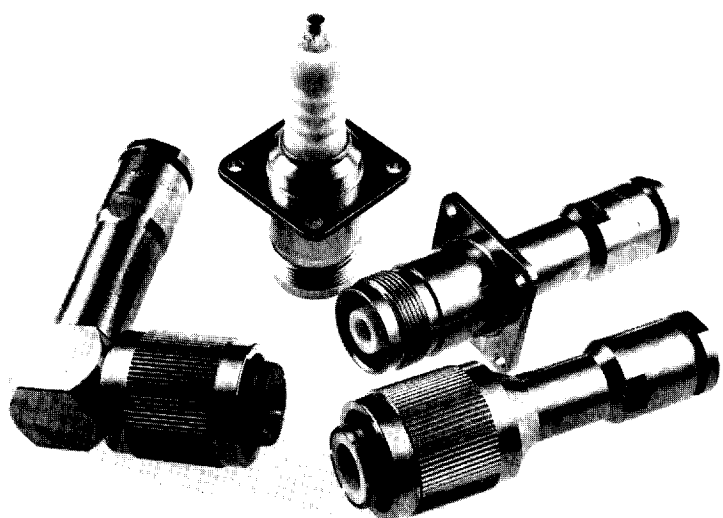
|            |                             |  |  |  |     |    |
|------------|-----------------------------|--|--|--|-----|----|
| R 321 703° | Straight<br>male - male     |  |  |  |     | 45 |
| R 321 704° | Straight<br>female - female |  |  |  |     | 40 |
| R 321 710° | Flange<br>female - female   |  |  |  | a14 | 18 |

## CAP



|            |                                                                                                                            |  |  |  |  |    |
|------------|----------------------------------------------------------------------------------------------------------------------------|--|--|--|--|----|
| R 321 812° | Protection cap and chain, ensures a watertight seal and electrical insulation when mated with miniQUICK female connectors. |  |  |  |  | 30 |
|------------|----------------------------------------------------------------------------------------------------------------------------|--|--|--|--|----|

# HIGH VOLTAGE COAXIAL CONNECTORS



## THT.20 series

R 331 ...

### GENERAL CHARACTERISTICS

- Screw coupling.
- Female centre contact has a 4 mm internal dia. which allows testing with standard banana plugs.
- Materials : metal parts : brass and heat treated beryllium copper  
insulators : P.T.F.E. - polyethylene or polystyrene  
gaskets : silicone rubber
- Plating : NSR nickel - centre contacts, gold

### ELECTRICAL CHARACTERISTICS

- Test voltage : unmated connectors : 10 000 V D.C.  
mated pair : 20 000 V D.C.
- Impedance : 50  $\Omega$
- Frequency range : 0 - 1 GHz
- Current rating : 20 A.

### MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

- Life : 500 matings
- Salt spray : 48 H
- Splashproof
- Temperature range : - 40°C + 70°C (polyethylene or styramic insulators)  
- 55°C + 125°C (P.T.F.E. insulator)

### COAXIAL CABLES SUITABLE

| 10/50 $\Omega$                                  | 10/75 $\Omega$                                               | 11/50 $\Omega$                              | 11/75 + 98 $\Omega$                                   |
|-------------------------------------------------|--------------------------------------------------------------|---------------------------------------------|-------------------------------------------------------|
| RG. 165/U<br>RG. 213/U<br>RG. 215/U ★<br>URM 67 | RG. 11 A/U<br>RG. 12 A/U ★<br>RG. 144 /U<br>URM 57<br>URM 64 | RG. 214/U<br>RG. 225/U<br>URM 91<br>URM 112 | RG. 216/U<br>URM 60<br>75 MD<br>100 MD (98 $\Omega$ ) |

★ Armoured cables requiring the use of armoured cable clamp R. 280 115 (MX. 564 A/U) in place of the connector back nut - see page 21)

# THT.20 series

| CODE No. | STYLE | Cable group<br>$\Omega$ | max.<br>$\varnothing_a$ | Assembly code | Panel piercing | Weight (g) |
|----------|-------|-------------------------|-------------------------|---------------|----------------|------------|
|----------|-------|-------------------------|-------------------------|---------------|----------------|------------|

## STRAIGHT PLUGS

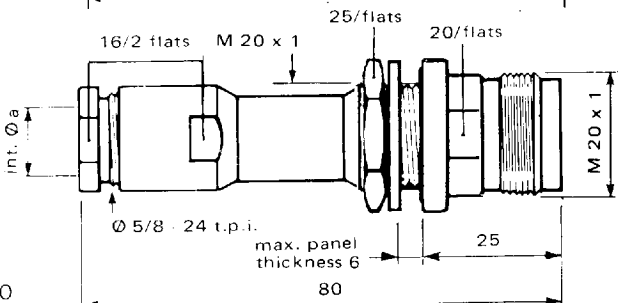
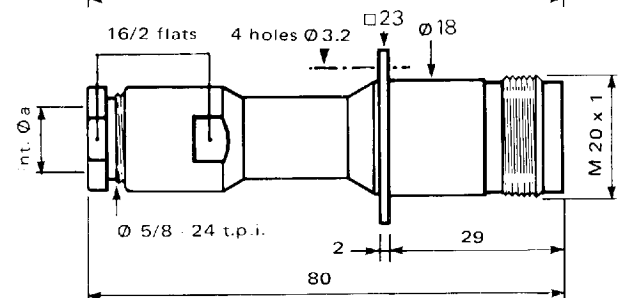
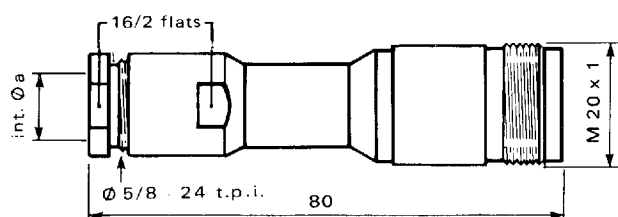
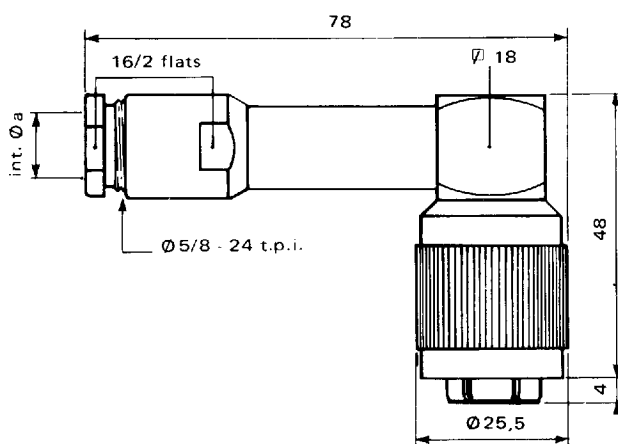
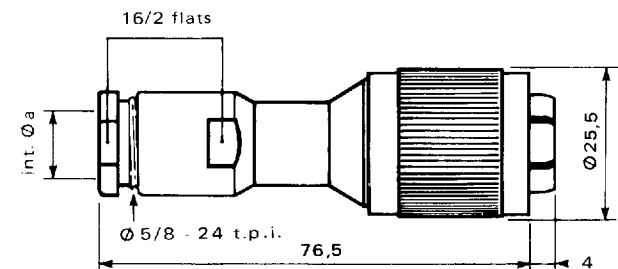
|           |             |                                  |      |        |  |     |
|-----------|-------------|----------------------------------|------|--------|--|-----|
| R 331 018 | Cable clamp | 10/50<br>10/75<br>11/50<br>11/75 | 11,2 | K13-77 |  | 100 |
| R 331 007 | Cable clamp | 5/12                             | 5,4  | K57-77 |  | 100 |

## ELBOW PLUG

|           |             |                                  |      |        |  |     |
|-----------|-------------|----------------------------------|------|--------|--|-----|
| R 331 168 | Cable clamp | 10/50<br>10/75<br>11/50<br>11/75 | 11,2 | K13-71 |  | 130 |
|-----------|-------------|----------------------------------|------|--------|--|-----|

## STRAIGHT JACKS

|            |                                           |                                  |      |        |              |    |
|------------|-------------------------------------------|----------------------------------|------|--------|--------------|----|
| R 331 218  | Cable clamp                               | 10/50<br>10/75<br>11/50<br>11/75 | 11,2 | K13-77 |              | 80 |
| R 331 268* | Square flange mounting - cable clamp      | 10/50<br>10/75<br>11/50<br>11/75 | 11,2 | K13-77 | a 31<br>a 34 | 88 |
| R 331 323  | Bulkhead mounting panel seal. cable clamp | 11/75                            |      |        | e 12         | 95 |

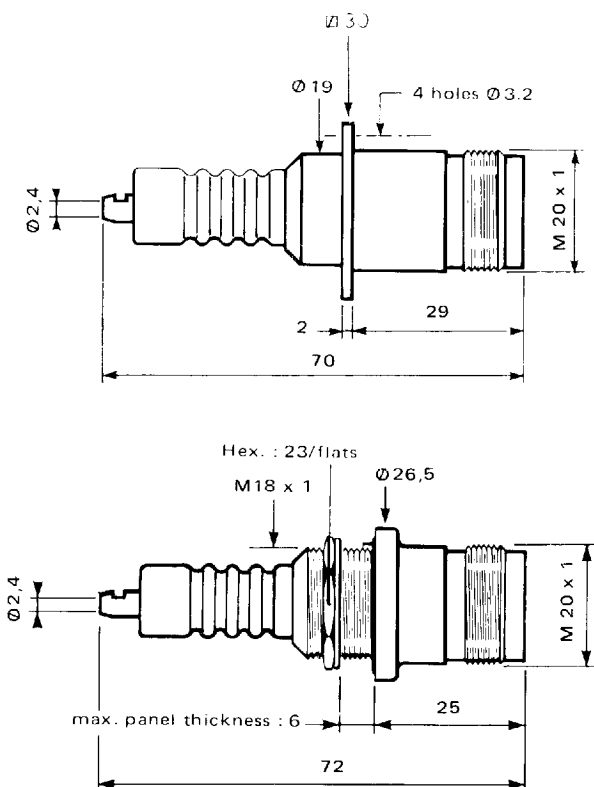


• Manufactured upon request.

# THT.20 series

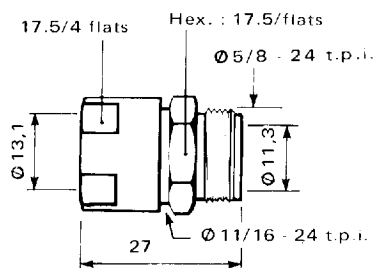
| CODE No. | STYLE | Cable group<br>$\Omega$ | max.<br>$\varnothing_a$ | Assembly<br>code | Panel<br>piercing | Weight (g) |
|----------|-------|-------------------------|-------------------------|------------------|-------------------|------------|
|----------|-------|-------------------------|-------------------------|------------------|-------------------|------------|

## RECEPTACLES



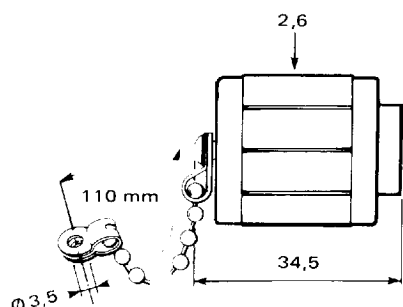
|           |                                                  |  |  |  |         |    |
|-----------|--------------------------------------------------|--|--|--|---------|----|
| R 331 405 | Square flange -<br>P.T.F.E.<br>insulator         |  |  |  | a31-a34 | 73 |
| R 331 603 | Bulkhead,<br>panel seal<br>P.T.F.E.<br>insulator |  |  |  | J7      | 75 |

## ARMoured CABLE CLAMP



|            |                           |                                                                                    |  |  |  |    |
|------------|---------------------------|------------------------------------------------------------------------------------|--|--|--|----|
| R 280 115* | Other ref.<br>MX. 564 A/U | For armoured cables this cable clamp is fitted in place of the connector back nut. |  |  |  | 27 |
|------------|---------------------------|------------------------------------------------------------------------------------|--|--|--|----|

## CAP



|           |                                    |                                                                                                                                                          |  |  |  |    |
|-----------|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|----|
| R 331 803 | For THT 20<br>female<br>connectors | This cap and chain ensures a dust and watertight seal and electrical insulation when mated. The body of these caps is entirely made of styramic plastic. |  |  |  | 20 |
|-----------|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|----|

# THT.20.B series

*THT 20 B bayonet coupling version of THT 20 are not used to such a large extent as the THT 20 series. It is Radiall's intention to withdraw this series from our range. We suggest that you consider using the THT 20 series which are very similar except for the method of coupling and offer the same performance.*

*For existing users, we are continuing to hold stocks of these connectors but we ask you to take this information into consideration when specifying these series for future use.*

## THT 20 - THT 20 B EQUIVALENT CROSS REFERENCE LIST.

| THT 20              | THT 20 B  |
|---------------------|-----------|
| R 331 018           | R 332 018 |
| R 331 007           | R 332 007 |
| R 331 323           | R 332 323 |
| no exact equivalent | R 332 510 |
| R 331 603           | R 332 603 |
| R 331 803           | R 332 803 |
| no exact equivalent | R 332 802 |

# THT.30.B series

*THT 30 B are not used to such a large extent as the THT 40 series. It is Radiall's intention to withdraw this series from our range. We suggest that you consider using the THT 40 series which are similar except for the method of coupling and offer a better performance.*

*For existing users, we are continuing to hold stocks of these connectors but we ask you to take this information into consideration when specifying these series for future use.*

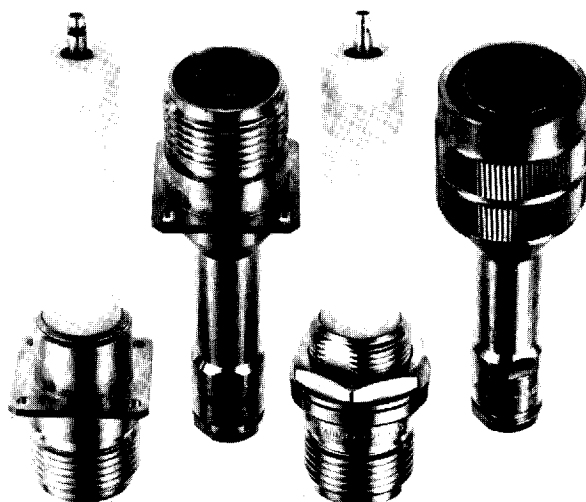
## THT 30 B - THT 40 EQUIVALENT CROSS REFERENCE LIST

| THT 30 B             | THT 40              |
|----------------------|---------------------|
| <del>R 341 018</del> | R 346 018           |
| <del>R 341 603</del> | R 346 603           |
| <del>R 341 841</del> | no exact equivalent |
| <del>R 341 803</del> | R 346 803           |

# HIGH VOLTAGE COAXIAL CONNECTORS

## THT.40 series

R 346 ...



### GENERAL CHARACTERISTICS

|           |               |                                     |
|-----------|---------------|-------------------------------------|
| Materials | : metal parts | : brass                             |
|           | : insulators  | : high voltage polyethylene         |
| Plating   |               | : NSR nickel - centre contact, gold |

### ELECTRICAL CHARACTERISTICS

|                 |                      |                   |
|-----------------|----------------------|-------------------|
| Test voltage    | : unmated connectors | : 10 000 V D.C. - |
|                 | : mated pairs        | : 40 000 V D.C. - |
| Impedance       |                      | : 50 $\Omega$     |
| Frequency range |                      | : 0 - 700 MHz     |
| Current rating  |                      | : 25 A            |

### MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

|                   |                 |
|-------------------|-----------------|
| Life              | : 500 matings   |
| Temperature range | : - 40°C + 70°C |
| Splashproof       |                 |
| Salt spray        | : 48 H          |

### COAXIAL CABLES SUITABLE

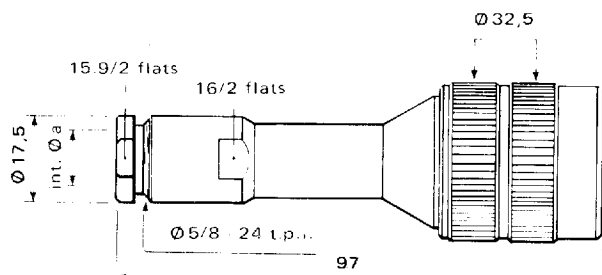
| 10/50 $\Omega$                                  | 10/75 $\Omega$                                               | 11/50 $\Omega$                              | 11/75 + 98 $\Omega$                                   |
|-------------------------------------------------|--------------------------------------------------------------|---------------------------------------------|-------------------------------------------------------|
| RG. 165/U<br>RG. 213/U<br>RG. 215/U ★<br>URM 67 | RG. 11 A/U<br>RG. 12 A/U ★<br>RG. 144 /U<br>URM 57<br>URM 64 | RG. 214/U<br>RG. 225/U<br>URM 91<br>URM 112 | RG. 216/U<br>URM 60<br>75 MD<br>100 MD (98 $\Omega$ ) |

★ Armoured cables requiring the use of armoured cable clamp R 280 115 (MX. 564 A/U) in place of the connector back nut - see page 21.

# THT.40 series

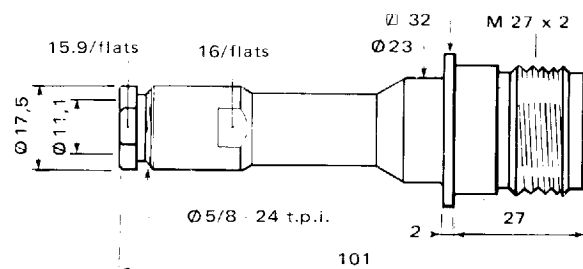
| CODE No. | STYLE | Cable group<br>$\Omega$ | max.<br>$\varnothing_a$ | Assembly code | Panel piercing | Weight (g) |
|----------|-------|-------------------------|-------------------------|---------------|----------------|------------|
|----------|-------|-------------------------|-------------------------|---------------|----------------|------------|

## STRAIGHT PLUGS



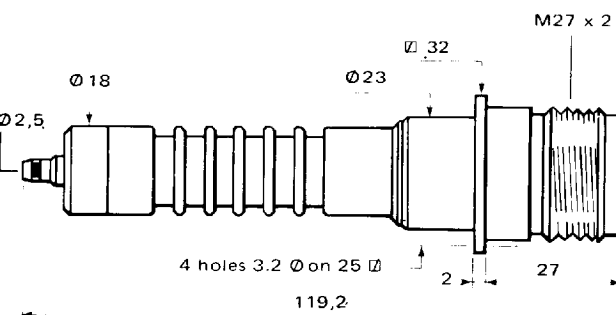
|            |             |                                  |      |        |  |     |
|------------|-------------|----------------------------------|------|--------|--|-----|
| R 346 018° | Cable clamp | 10/50<br>10/75<br>11/50<br>11/75 | 11,1 | K13-73 |  | 180 |
|------------|-------------|----------------------------------|------|--------|--|-----|

## STRAIGHT FLANGE JACK

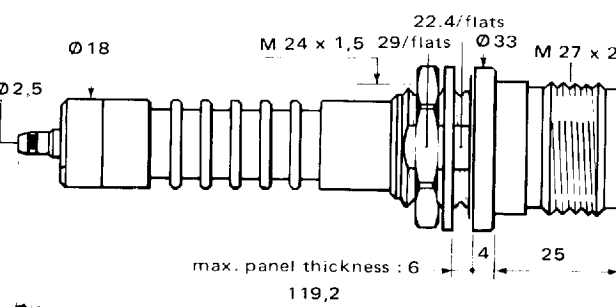


|            |             |                                  |      |        |         |     |
|------------|-------------|----------------------------------|------|--------|---------|-----|
| R 346 268° | Cable clamp | 10/50<br>10/75<br>11/50<br>11/75 | 11,1 | K13-73 | a37-a39 | 160 |
|------------|-------------|----------------------------------|------|--------|---------|-----|

## RECEPTACLES

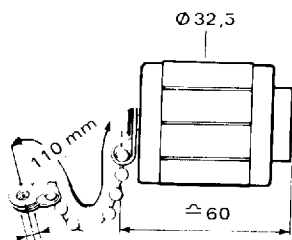


|            |                        |  |  |  |         |     |
|------------|------------------------|--|--|--|---------|-----|
| R 346 405° | Square flange mounting |  |  |  | a37-a39 | 120 |
|------------|------------------------|--|--|--|---------|-----|



|            |                               |  |  |  |     |     |
|------------|-------------------------------|--|--|--|-----|-----|
| R 346 603° | Bulkhead mounting, panel seal |  |  |  | d26 | 126 |
|------------|-------------------------------|--|--|--|-----|-----|

## CAP

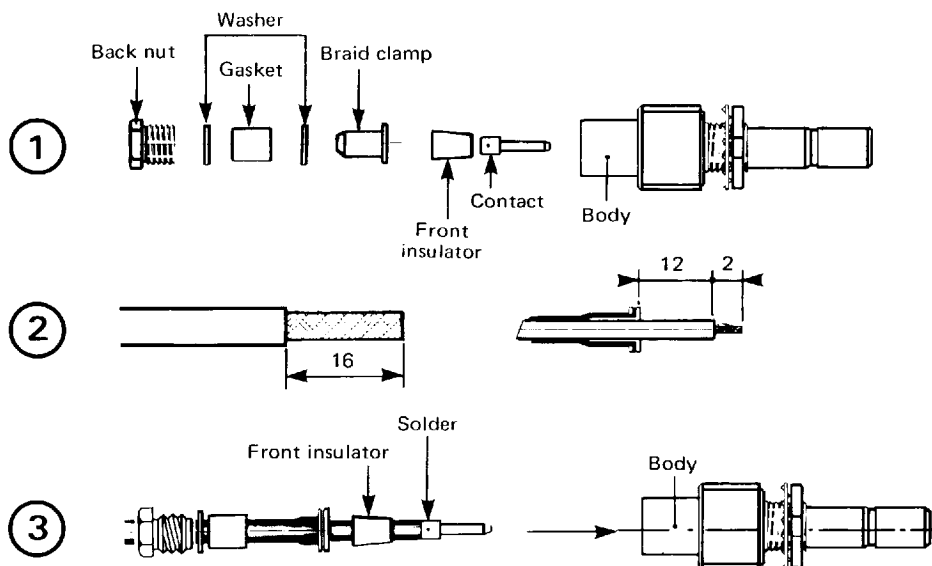


|            |                                                 |  |  |  |  |    |
|------------|-------------------------------------------------|--|--|--|--|----|
| R 346 803° | Protection cap for THT 40 jacks and receptacles |  |  |  |  | 30 |
|------------|-------------------------------------------------|--|--|--|--|----|

# CONNECTOR TO CABLE ASSEMBLY

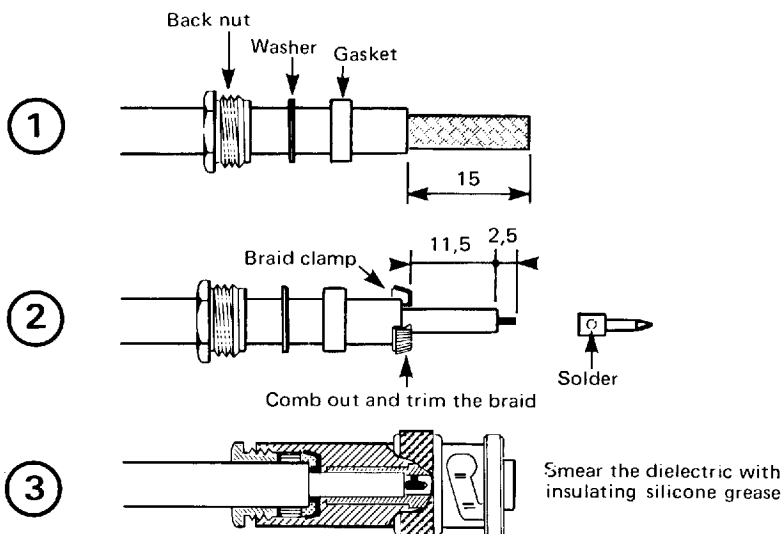
## K10-66

COUPLING TORQUE  
40 N cm



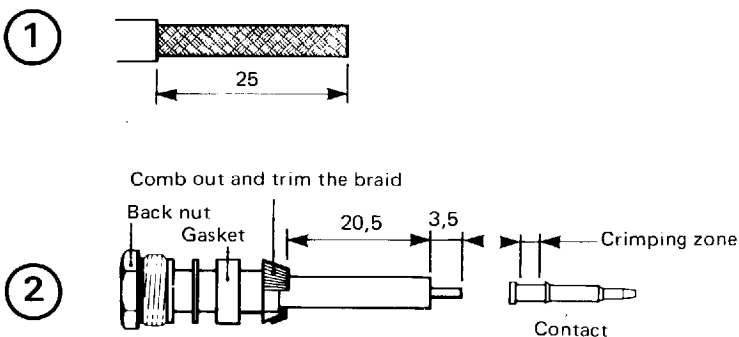
## K13-67

COUPLING TORQUE  
150 N cm



## K13-68

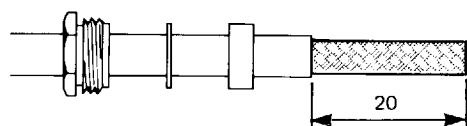
COUPLING TORQUE  
150 Ncm



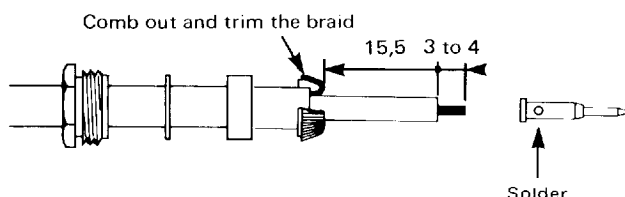
# CONNECTOR TO CABLE ASSEMBLY

## K13-69

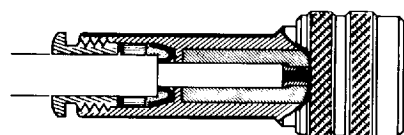
COUPLING TORQUE  
150 Ncm



①



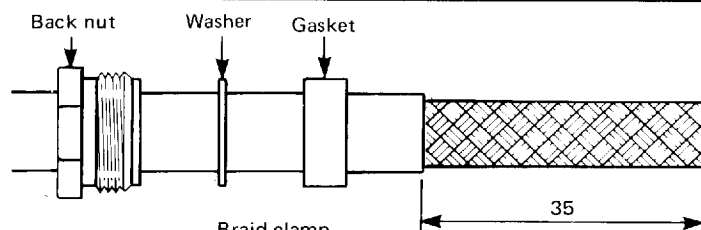
②



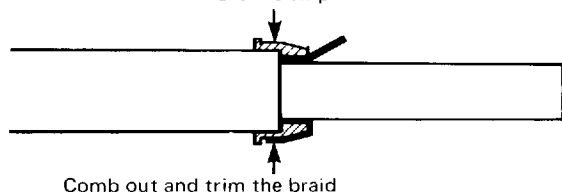
③

## K13-71

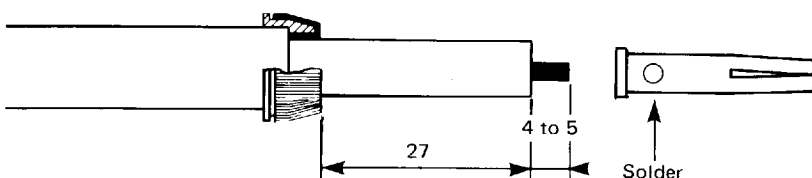
COUPLING TORQUE  
800 Ncm



①



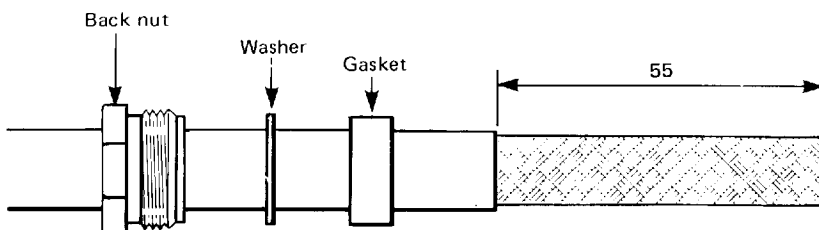
②



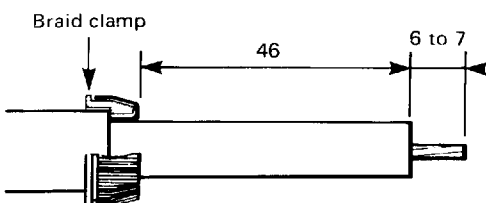
③

## K13-73

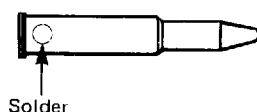
COUPLING TORQUE  
800 Ncm



①



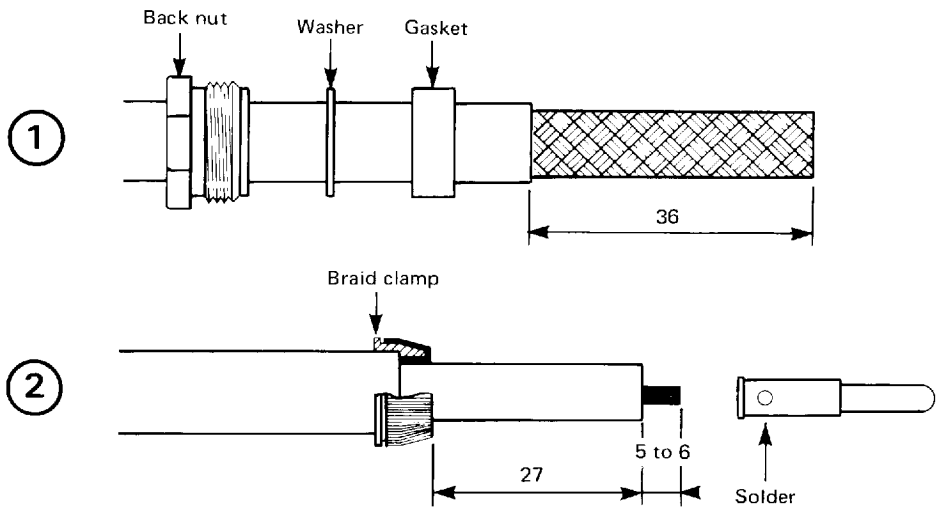
②



# CONNECTOR TO CABLE ASSEMBLY

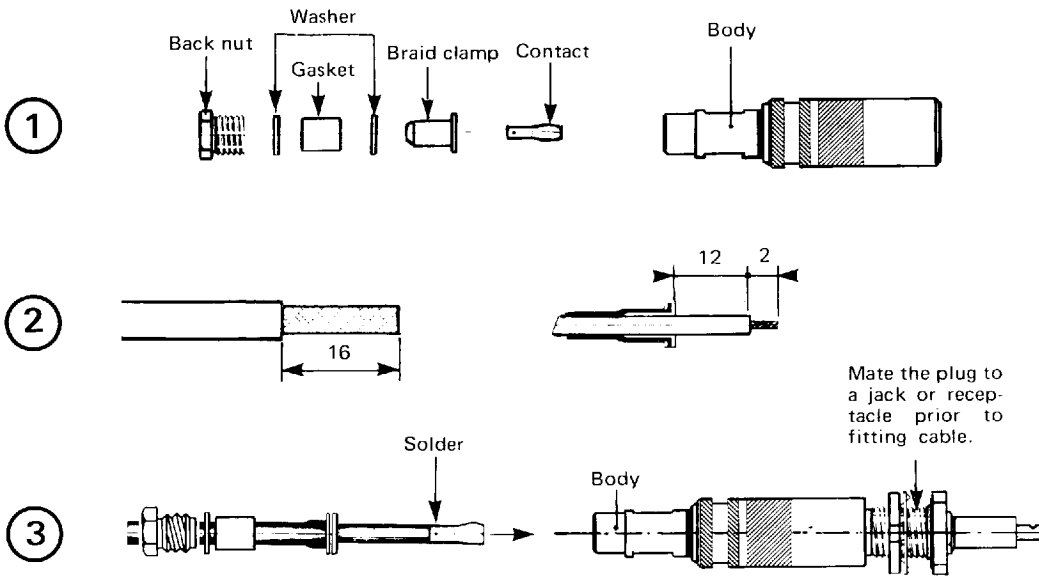
## K13-77

COUPLING TORQUE  
800 Ncm



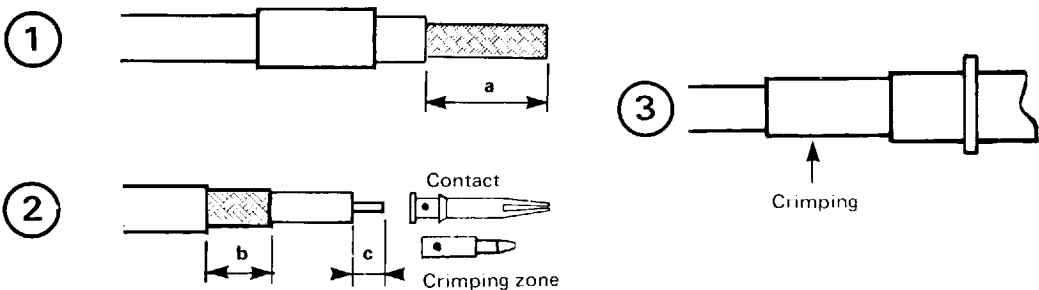
## K25-66

COUPLING TORQUE  
40 Ncm



## K43-75

A  
B  
C

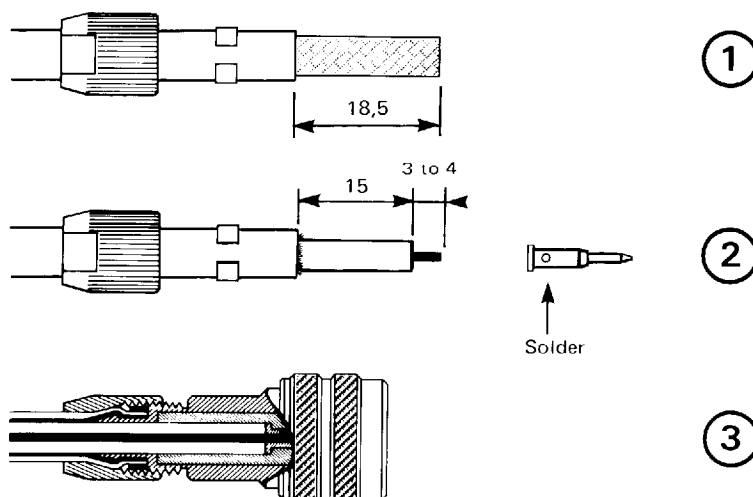


|   | Code No.  | a    | b   | c   | Hex. Core | Hex. Ferrule | Crimp tool |
|---|-----------|------|-----|-----|-----------|--------------|------------|
| A | R 317 071 | 30   | 6,5 | 3,5 | 1,7       | 6,35         | R 282 221  |
|   | R 317 072 |      |     |     |           | 5,4          | R 282 216  |
|   | R 317 074 |      |     |     |           | 6,35         | R 282 221  |
|   | R 317 270 |      |     |     |           | 5,4          | R 282 216  |
| B | R 321 085 | 32   | 8   | 5   | 2,54      | 10,54        | R 282 231  |
| C | R 316 072 | 19,5 | 6,5 | 2,5 | NA        | 5,4          | R 282 216  |

# CONNECTOR TO CABLE ASSEMBLY

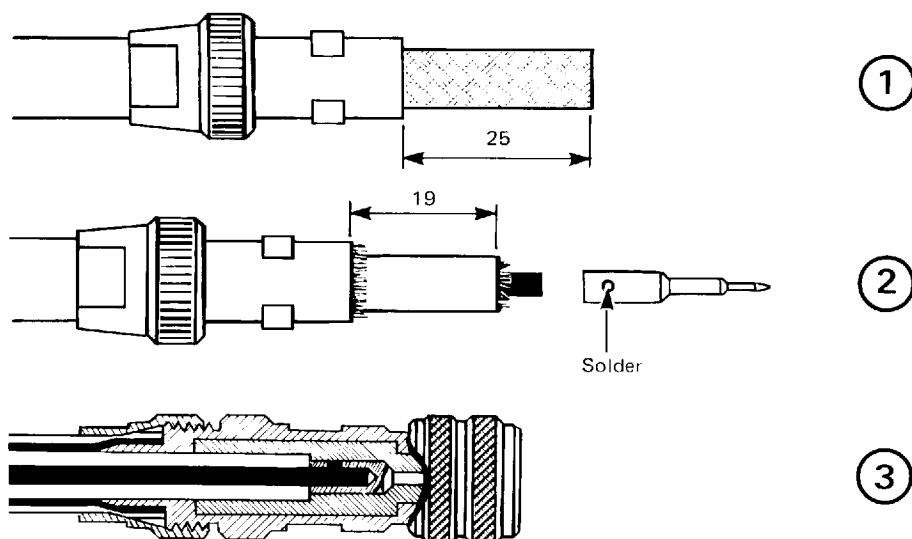
## K56-70

COUPLING TORQUE  
450 Ncm



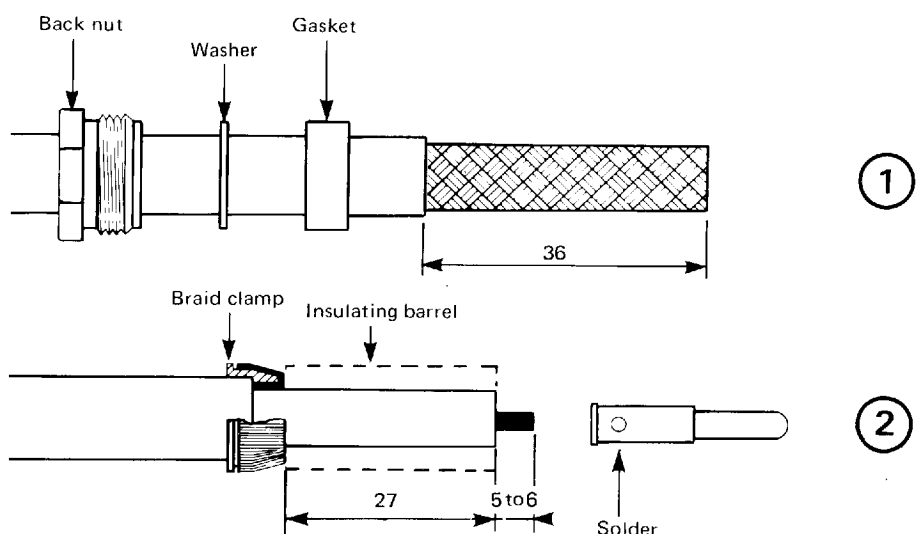
## K56-76

COUPLING TORQUE  
800 Ncm

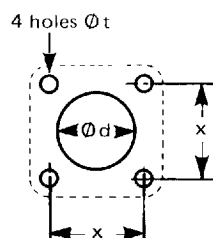


## K57-77

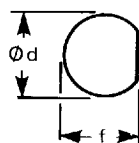
COUPLING TORQUE  
450 Ncm



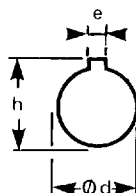
# PANEL PIERCING



a



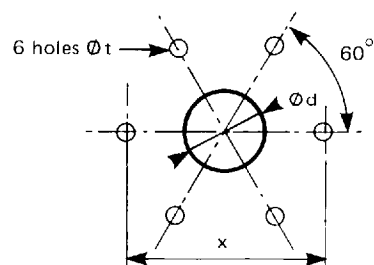
d



j



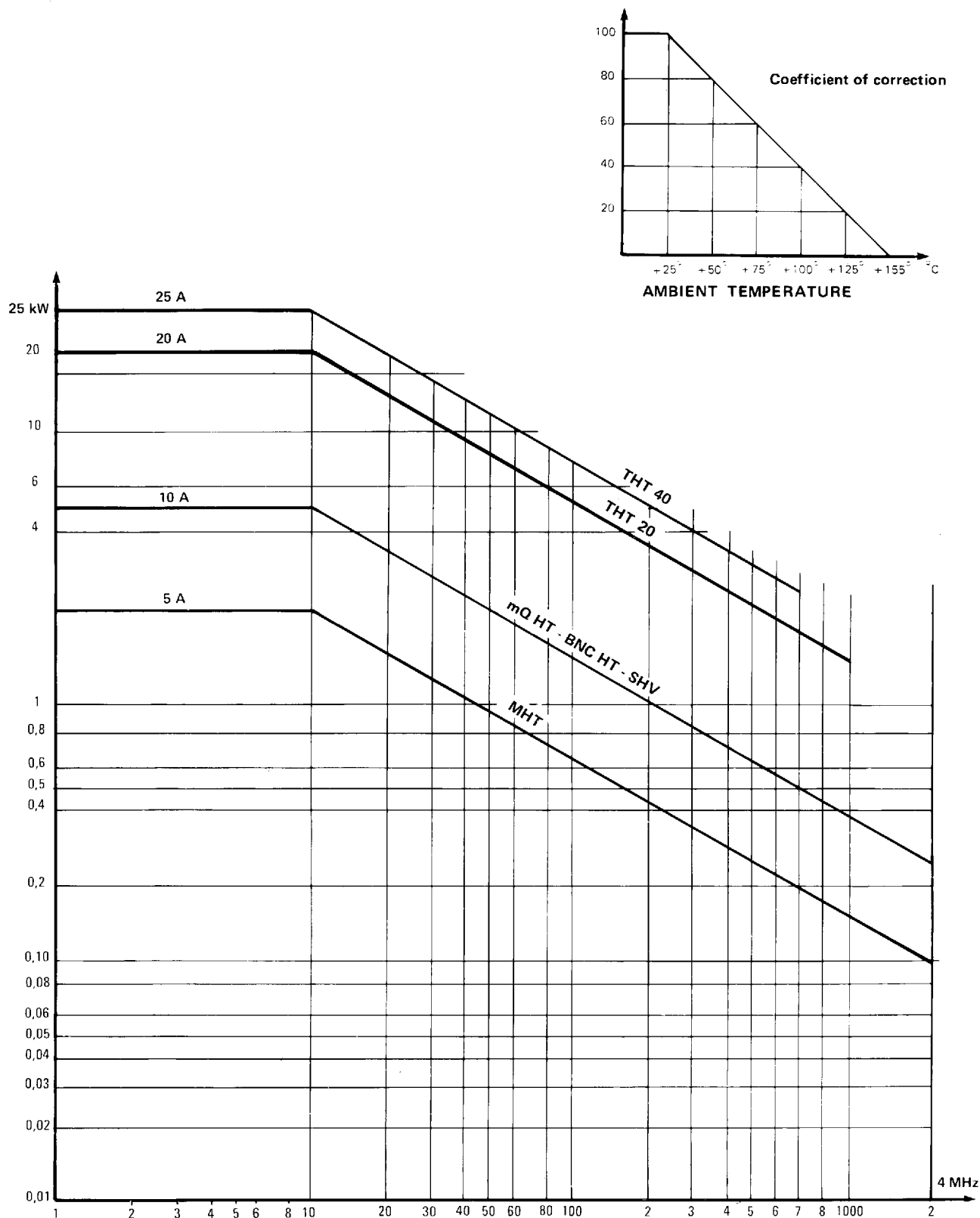
e



r

| Reference | Ød   | Øt  | x    | e   | f    | h  |
|-----------|------|-----|------|-----|------|----|
| a 8       | 8    | 2,6 | 12,7 |     |      |    |
| a 11      | 9,2  | 2,6 | 12,7 |     |      |    |
| a 14      | 11,2 | 2,6 | 12,7 |     |      |    |
| a 16      | 11,2 | 3,2 | 12,7 |     |      |    |
| a 31      | 19,3 | 3,2 | 23,0 |     |      |    |
| a 34      | 20,3 | 3,2 | 23,0 |     |      |    |
| a 37      | 23,4 | 3,2 | 25,0 |     |      |    |
| a 39      | 27,4 | 3,2 | 25,0 |     |      |    |
| a 45      | 8    | 3,2 | 12,7 |     |      |    |
| d 11      | 9,5  |     |      |     | 8,8  |    |
| d 18      | 12,7 |     |      |     | 12,0 |    |
| d 25      | 20,0 |     |      |     | 19,0 |    |
| d 28      | 9,6  |     |      |     | 8,8  |    |
| d 29      | 11,2 |     |      |     | 10,3 |    |
| j 7       | 18,0 |     |      | 2,2 |      | 19 |
| e 4       | 7,2  |     |      |     |      |    |
| e 6       | 11,1 |     |      |     |      |    |
| e 8       | 12,7 |     |      |     |      |    |
| e 12      | 20,0 |     |      |     |      |    |
| r 2       | 22,8 | 4,2 | 31,0 |     |      |    |

# admissable mean power



Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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