Hitech India Private Limited

# 2PM / WP SERIES

# RUSSIAN CONNECTOR S

# Introduction

The 2PM/WP series Connectors have metric threads for coupling and have inserts made of either Neoprene Rubber or Hard Phenolic. Both the versions meet the requirements of Indian Joint Service Specification JSS:5935-10:2006* (Superceding JSS 50860) and are approved for Defence use. These connectors find application in Military Communication, Armoured and Tracked vehicles and various other Defence sectors.

WP Series (SHR SERIES)

The receptacle and the plug parts are drawn together by means of threads provided on the receptacle and plug coupling nut.

The group of connectors are classified on the basis of common unitized shells available in ten sizes.

Constructionally each type of connector has specific application feature specified for the given types by the operating condition.

WP (SHR) = Unsealed Connector

WPΓ (SHRG) = Sealed Receptacle Connector

CWP(SSHR) = Special Unsealed Connector

## Technical Data

A) Operating voltage (max. at sea level) 500 V (rms)

B) Operating current and contact resistance refer table given below

| Contact size mm | Rated Current-A | Contact Resistance m Ohms (Max) |
|---|---|---|
| 1.5 | 14 | 2.50 |
| 2.5 | 25 | 1.00 |
| 3.5 | 40 | 0.75 |
| 5.5 | 80 | 0.30 |
| 9.0 | 200 | 0.15 |

C) Operating Temperature : -55°c to +125°c

D) Material

1. Insulator : Hard Dielectric / Neoprene Rubber
2. Socket contact 1.5, & 2.5 : Brass Alloy
3. Socket contact 3.5, 5.5 & 9 : Phosphor Bronze
4. Pin contact : Brass Alloy
5. Contact clip : Beryllium Copper
6. Shell : Aluminium Alloy

E) Finish

a. Contact : Silver Plated

b. Shell : Cadmium Plated with Olive drab

F) Insulation resistance : 5000 M Ohms (Min)

G) Voltage proof (At sea level) : 2000V AC (rms)

SHR - SERIES (WP Series)

Plug with Straight Split Hood

Plug with Angled Split Hood

Receptacle with Straight Hood

## Connector Designation & Ordering Information

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| RUSSIAN --> | ШР | Г | 20 | П,У,ПК,СК | 5 | Э | Г(Ш) | 10 | |
| ENGLISH--> | SHR | G | 20 | P,U,PK,SK | 5 | E | G(SH) | 10 | HD |

SHR - For Sealed Connector applicable for Receptacle Connector only

G - Shell Size: (12,16,20,28,32,36,40,48,55,60)

P - P-With Split hood for Plug connector
P-Will not have any designation incase of Receptacle connector
U-With Angle hood for plug connector
PK-With Straight hood for Receptacle connector
SK-With Angle hood for Receptacle connector

5 - Number of contacts (Terminals)

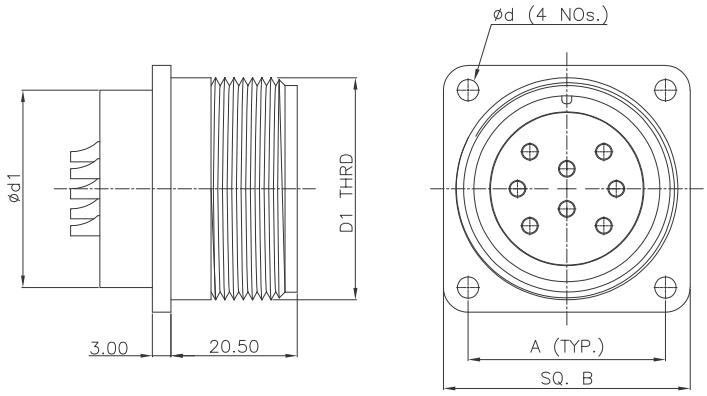
E - E- Screen Clamp (Not applicable for receptacle connector without accessories)
N– Cable Clamp

G(SH) - (SH)- for Pin Contact in Receptacle, Socket contact incase of Plug connector
G-for Socket contact in Receptacle, Pin contact incase of Plug connector

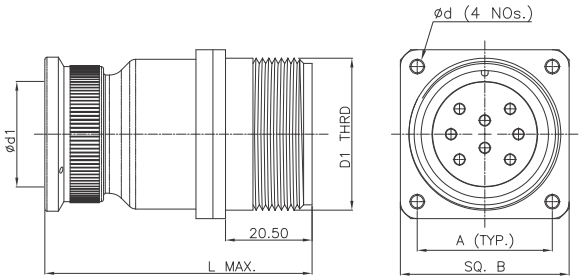
10 - Arbitrary Number of contact set

HD - Connector with Hard Phenolic Insert
(Connector with Neoprene Rubber connector if HD letter in marking is absent)

## RECEPTACLE ASSEMBLY WITHOUT ACCESSORIES




## RECEPTACLE ASSEMBLY WITH STRAIGHT HOOD & SCREEN CLAMP




## Receptacle Pin Assembly Without Accessories

| SHELL SIZE | A | B | D1 THRD | ød1 | ød |
|---|---|---|---|---|---|
| 12 | 16 | 22 | M16x1.5 | 12 | 3.5 |
| 16 | 19 | 25 | M20X1.5 | 16 | 3.5 |
| 20 | 22 | 30 | M24X1.5 | 20 | 3.5 |
| 28 | 30 | 38 | M33X1.5 | 28 | 3.5 |
| 32 | 32 | 40 | M36X1.5 | 32 | 3.5 |
| 36 | 34 | 42 | M39X1.5 | 36 | 3.5 |
| 40 | 40 | 48 | M45X1.5 | 40 | 3.5 |
| 48 | 48 | 58 | M52X1.5 | 48 | 4.5 |
| 55 | 52 | 64 | M60X1.5 | 55 | 4.5 |
| 60 | 54 | 68 | M64X1.5 | 60 | 4.5 |

## Receptacle Pin With Straight Hood & Screen Clamp

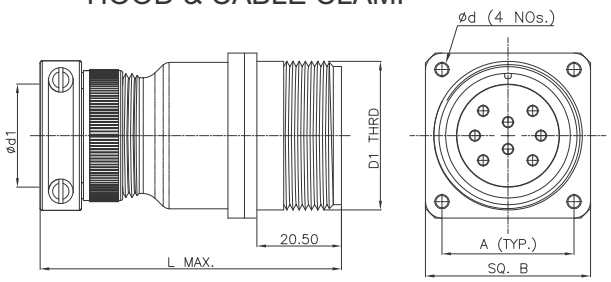
| SHELL SIZE | A | B | D1 THRD | ød1 (min. cable entry) | ød | L MAX. |
|---|---|---|---|---|---|---|
| 12 | 16 | 22 | M16x1.5 | 8 | M3 | 51 |
| 16 | 19 | 25 | M20X1.5 | 11 | M3 | 55 |
| 20 | 22 | 30 | M24X1.5 | 18 | M3 | 54 |
| 28 | 30 | 38 | M33X1.5 | 25 | M3 | 59 |
| 32 | 32 | 40 | M36X1.5 | 25 | M3 | 63 |
| 36 | 34 | 42 | M39X1.5 | 29 | M3 | 65 |
| 40 | 40 | 48 | M45X1.5 | 32 | M3 | 65 |
| 48 | 48 | 58 | M52X1.5 | 36 | M4 | 87 |
| 55 | 52 | 64 | M60X1.5 | 46 | M4 | 87 |
| 60 | 54 | 68 | M64X1.5 | 50 | M4 | 85 |

## Receptacle Socket Assembly Without Accessories

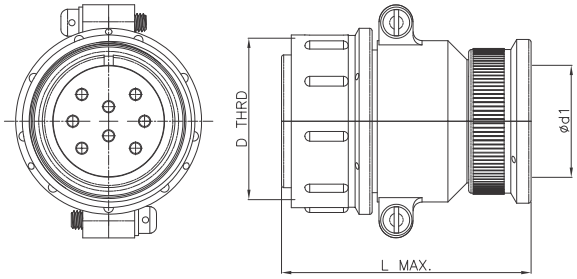
## Receptacle Socket With Straight Hood & Screen Clamp

ALL DIMENSIONS ARE IN MM

## RECEPTACLE WITH STRAIGHT HOOD & CABLE CLAMP




## PLUG WITH STRAIGHT SPLIT HOOD & SCREEN CLAMP




### Receptacle Pin With Straight Hood & Cable Clamp

| SHELL SIZE | A | B | D1 THRD | ød1 (min. cable entry) | ød | L MAX. |
|---|---|---|---|---|---|---|
| 12 | 16 | 22 | M16x1.5 | 5 | M3 | 63 |
| 16 | 19 | 25 | M20X1.5 | 7 | M3 | 65 |
| 20 | 22 | 30 | M24X1.5 | 14 | M3 | 70 |
| 28 | 30 | 38 | M33X1.5 | 21 | M3 | 77 |
| 32 | 32 | 40 | M36X1.5 | 21 | M3 | 81 |
| 36 | 34 | 42 | M39X1.5 | 23 | M3 | 83 |
| 40 | 40 | 48 | M45X1.5 | 24 | M3 | 83 |
| 48 | 48 | 58 | M52X1.5 | 32 | M4 | 85 |
| 55 | 52 | 64 | M60X1.5 | 40 | M4 | 85 |
| 60 | 54 | 68 | M64X1.5 | 48 | M4 | 83 |

### Plug Pin With Straight Split Hood & Screen Clamp

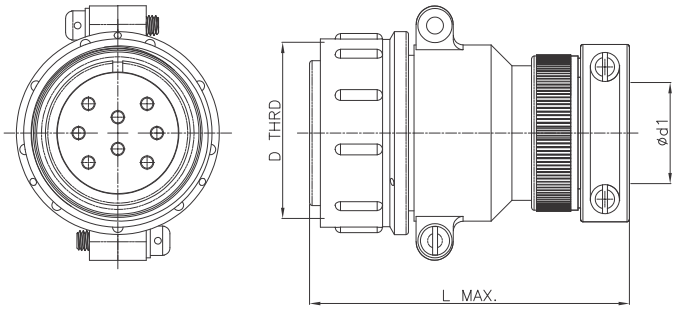
| SHELL SIZE | D THRD | ød1 (min. cable entry) | L MAX. |
|---|---|---|---|
| 12 | M16x1.5 | 8 | 50 |
| 16 | M20X1.5 | 11 | 50 |
| 20 | M24X1.5 | 18 | 53 |
| 28 | M33X1.5 | 25 | 56 |
| 32 | M36X1.5 | 25 | 58 |
| 36 | M39X1.5 | 29 | 62 |
| 40 | M45X1.5 | 32 | 64 |
| 48 | M52X1.5 | 36 | 66 |
| 55 | M60X1.5 | 46 | 66 |
| 60 | M64X1.5 | 50 | 64 |

### Receptacle Socket With Straight Hood & Cable Clamp

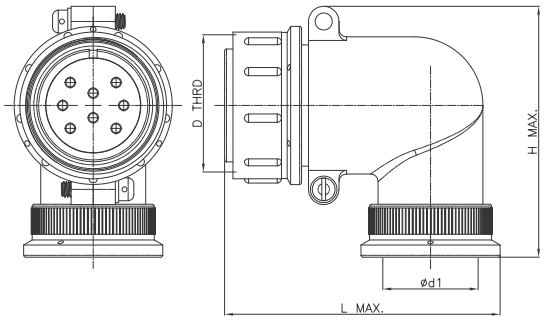
### Plug Socket With Straight Split Hood & Screen Clamp

ALL DIMENSIONS ARE IN MM

## PLUG WITH STRAIGHT SPLIT HOODS & CABLE CLAMP




## PLUG WITH ANGULAR SPLIT HOODS & SCREEN CLAMP




## Plug Pin With Straight Split Hoods & Cable Clamp

| SHELL SIZE | D1 THRD | ød1 (min. cable entry) | L MAX. |
|---|---|---|---|
| 12 | M16x1.5 | 5 | 62 |
| 16 | M20X1.5 | 7 | 60 |
| 20 | M24X1.5 | 14 | 64 |
| 28 | M33X1.5 | 21 | 70 |
| 32 | M36X1.5 | 21 | 72 |
| 36 | M39X1.5 | 23 | 76 |
| 40 | M45X1.5 | 24 | 78 |
| 48 | M52X1.5 | 32 | 80 |
| 55 | M60X1.5 | 40 | 80 |
| 60 | M64X1.5 | 48 | 78 |

## Plug Pin With Angular Split Hoods & Screen Clamp

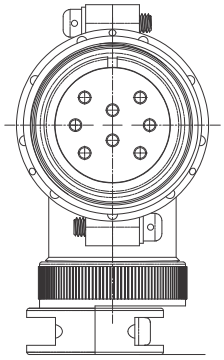
| SHELL SIZE | D1 THRD | ød1 (min. cable entry) | H MAX. | L MAX. |
|---|---|---|---|---|
| 12 | M16x1.5 | 8 | 39 | 51 |
| 16 | M20X1.5 | 11 | 36 | 56 |
| 20 | M24X1.5 | 18 | 45 | 64 |
| 28 | M33X1.5 | 25 | 62 | 73 |
| 32 | M36X1.5 | 25 | 66 | 73 |
| 36 | M39X1.5 | 29 | 67 | 76 |
| 40 | M45X1.5 | 32 | 72 | 80 |
| 48 | M52X1.5 | 36 | 81 | 90 |
| 55 | M60X1.5 | 46 | 106 | 98 |
| 60 | M64X1.5 | 50 | 94 | 103 |

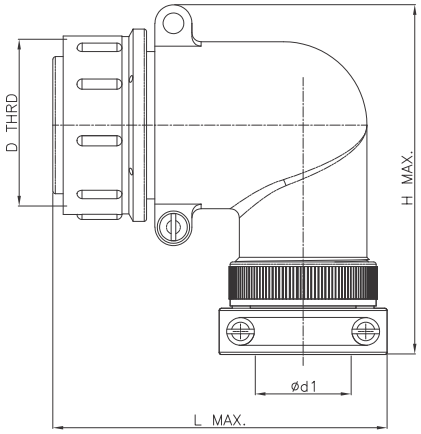
## Plug Socket With Straight Split Hoods & Cable Clamp

## Plug Socket With Angular Split Hoods & Screen Clamp

ALL DIMENSIONS ARE IN MM

## PLUG WITH ANGULAR SPLIT HOODS & CABLE CLAMP





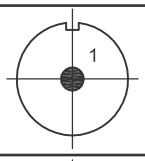
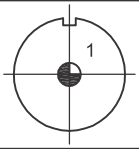
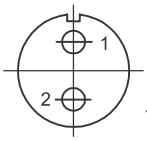
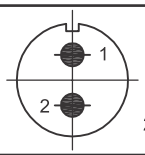
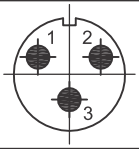
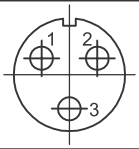
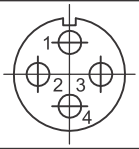
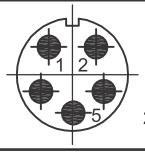

| SHELL SIZE | D1 THRD | ød1 (min. cable entry) | H MAX. | L MAX. |
|---|---|---|---|---|
| 12 | M16x1.5 | 5 | 51.5 | 53.5 |
| 16 | M20X1.5 | 7 | 53.5 | 60 |
| 20 | M24X1.5 | 14 | 63 | 68 |
| 28 | M33X1.5 | 21 | 78 | 76.5 |
| 32 | M36X1.5 | 21 | 82 | 76.5 |
| 36 | M39X1.5 | 23 | 83.5 | 79 |
| 40 | M45X1.5 | 24 | 88 | 84.5 |
| 48 | M52X1.5 | 32 | 97 | 95.5 |
| 55 | M60X1.5 | 40 | 104 | 102 |
| 60 | M64X1.5 | 48 | 110 | 108 |

Plug Pin With Angular Split Hoods & Cable Clamp

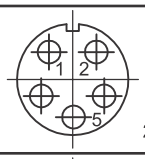
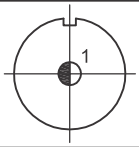
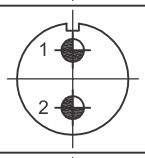
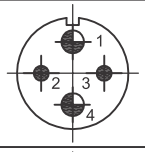
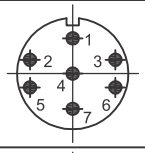
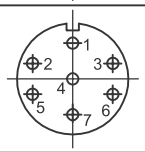
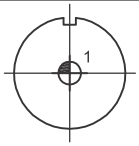
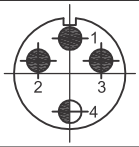
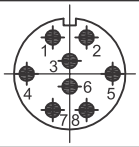
Plug Socket With Angular Split Hoods & Cable Clamp

ALL DIMENSIONS ARE IN MM

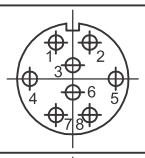
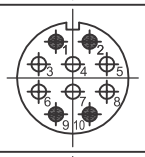
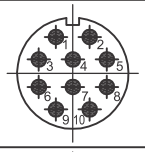
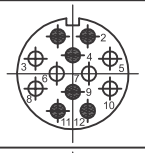
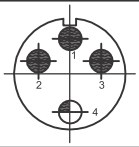
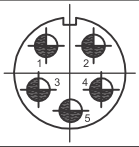
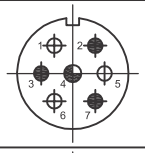
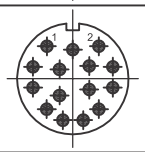
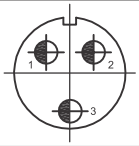
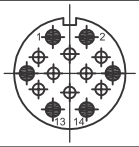
## VIEW FOR SOCKET FROM THE MATING SIDE

| Conventional shell size | Contact layout | Conventional connector designation | Contact diameter, mm | Number of contacts | | Arbitrary Number of Contact Set | Max. current carrying capacity, A | |
|---|---|---|---|---|---|---|---|---|
| | | | | in connector | of each diameter | | per single contact | total per connector |
| 12 |  12/1/2 |  | 2.5 | 1 | 1 | 2 | 25 | 25 |
| 16 |  16/1/3 |  | 3.5 | 1 | 1 | 3 | 50 | 50 |
| |  16/2/5 |  | 1.5 | 2 | 2 | 5 | 10 | 20 |
| 20 |  20/2/6 |  | 2.5 | 2 | 2 | 6 | 25 | 50 |
| |  20/3/7 |  | 2.5 | 3 | 3 | 7 | 25 | 75 |
| |  20/3/6 |  | 1.5 | 3 | 3 | 6 | 10 | 30 |
| |  20/4/8 |  | 2.5 | 4 | 4 | 8 | 25 | 100 |
| |  20/4/4 |  | 1.5 | 4 | 4 | 4 | 10 | 40 |
| |  20/5/10 |  | 2.5 | 5 | 5 | 10 | 25 | 125 |

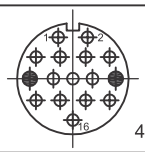
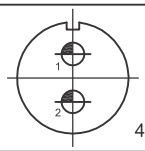
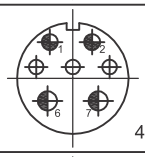
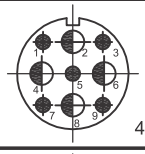
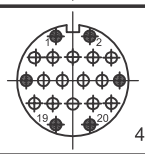
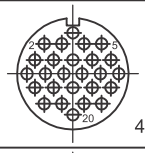
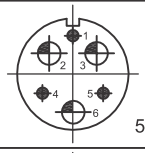
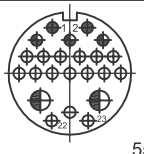
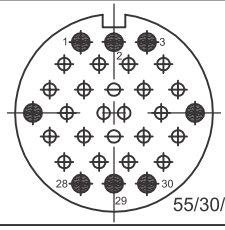
## VIEW FOR SOCKET FROM THE MATING SIDE

| Conventional shell size | Contact layout | Conventional connector designation | Contact diameter, mm | Number of contacts | | Arbitrary Number of Contact Set | Max. current carrying capacity, A | |
|---|---|---|---|---|---|---|---|---|
| | | | | in connector | of each diameter | | per single contact | total per connector |
| 20 |  20/5/7 | | 1.5 | 5 | 5 | 7 | 10 | 50 |
| 28 |  28/1/4 | | 5.5 | 1 | 1 | 4 | 100 | 100 |
| |  28/2/7 | | 3.5 | 2 | 2 | 7 | 50 | 100 |
| |  28/4/5 | | 2.5 | 4 | 2 | 5 | 25 | 150 |
| | | | 3.5 | | 2 | | 50 | |
| |  28/7/9 | | 2.5 | 7 | 7 | 9 | 25 | 175 |
| |  28/7/7 | | 1.5 | 7 | 7 | | 10 | 70 |
| 32 |  32/1/5 | | 9 | 1 | 1 | 5 | 200 | 200 |
| |  32/4/14 | | 5.5 | 4 | 1 | 14 | 100 | 175 |
| | | | 2.5 | | 3 | | 25 | |
| |  32/8/3 | | 2.5 | 8 | 8 | 3 | 25 | 200 |

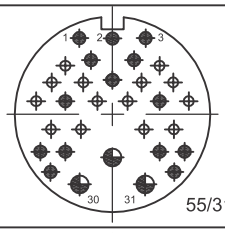
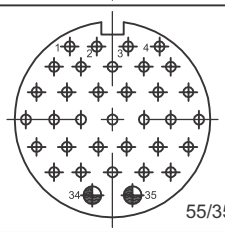
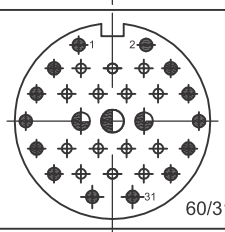
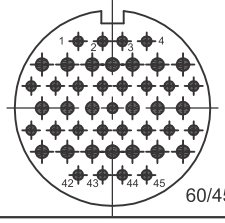
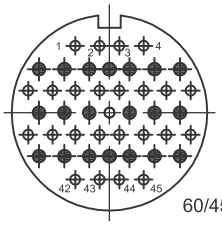
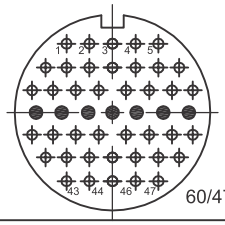
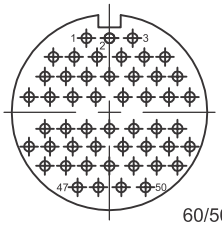
## VIEW FOR SOCKET FROM THE MATING SIDE

| Conventional shell size | Contact layout | Conventional connector designation | Contact diameter, mm | Number of contacts | | Arbitrary Number of Contact Set | Max. current carrying capacity, A | |
|---|---|---|---|---|---|---|---|---|
| | | | | in connector | of each diameter | | per single contact | total per connector |
| 32 |  32/8/2 | ⊕ | 1.5 | 8 | 8 | 2 | 10 | 80 |
| |  32/10/1 | ⊕ | 1.5 | 10 | 6 | 1 | 10 | 160 |
| | | ● | 2.5 | | 4 | | 25 | |
| |  32/10/4 | ● | 2.5 | 10 | 10 | 4 | 25 | 250 |
| |  32/12/1 | ⊕ | 1.5 | 12 | 6 | 1 | 10 | 210 |
| | | ● | 2.5 | | 6 | | 25 | |
| 36 |  36/4/13 | ● | 2.5 | 4 | 3 | 13 | 25 | 275 |
| | | ⊕ | 9 | | 1 | | 200 | |
| |  36/5/11 | ● | 3.5 | 5 | 5 | 11 | 50 | 250 |
| |  36/7/1 | ⊕ | 1.5 | 7 | 3 | 1 | 10 | 155 |
| | | ● | 2.5 | | 3 | | 25 | |
| | | ● | 3.5 | | 1 | | 50 | |
| |  36/15/5 | ● | 2.5 | 15 | 15 | 5 | 25 | 375 |
| 40 |  40/3/9 | ⊕ | 5.5 | 3 | 3 | 9 | 100 | 300 |
| |  40/14/2 | ⊕ | 1.5 | 14 | 8 | 2 | 10 | 230 |
| | | ● | 2.5 | | 6 | | 25 | |

## VIEW FOR SOCKET FROM THE MATING SIDE

| Conventional shell size | Contact layout | Conventional connector designation | Contact diameter, mm | Number of contacts | | Arbitrary Number of Contact Set | Max. current carrying capacity, A | |
|---|---|---|---|---|---|---|---|---|
| | | | | in connector | of each diameter | | per single contact | total per connector |
| 40 |  40/16/2 | ⊕ | 1.5 | 16 | 14 | 2 | 10 | 190 |
| | | ● | 2.5 | | 2 | | 25 | |
| 48 |  48/2/9 | ⊕ | 9 | 2 | 2 | 9 | 200 | 400 |
| |  48/7/2 | ⊕ | 1.5 | 7 | 3 | 2 | 10 | 330 |
| | | ● | 3.5 | | 2 | | 50 | |
| | | ● | 5.5 | | 2 | | 100 | |
| |  48/9/7 | ⊕ | 2.5 | 9 | 5 | 7 | 25 | 525 |
| | | ● | 5.5 | | 4 | | 100 | |
| |  48/20/1 | ⊕ | 1.5 | 20 | 14 | 1 | 10 | 290 |
| | | ● | 2.5 | | 6 | | 25 | |
| |  48/26/2 | ⊕ | 1.5 | 26 | 26 | 2 | 10 | 260 |
| 55 |  55/6/6 | ● | 2.5 | 6 | 3 | 6 | 25 | 675 |
| | | ● | 9 | | 3 | | 200 | |
| |  55/23/1 | ⊕ | 1.5 | 23 | 16 | 1 | 10 | 560 |
| | | ● | 2.5 | | 2 | | 25 | |
| | | ● | 3.5 | | 3 | | 50 | |
| | | ● | 5.5 | | 2 | | 100 | |
| |  55/30/1 | ⊕ | 1.5 | 30 | 22 | 1 | 10 | 410 |
| | | ● | 2.5 | | 8 | | 25 | |

## VIEW FOR SOCKET FROM THE MATING SIDE

| Conventional shell size | Contact layout | Conventional connector designation | Contact diameter, mm | Number of contacts | | Arbitrary Number of Contact Set | Max. current carrying capacity, A | |
|---|---|---|---|---|---|---|---|---|
| | | | | in connector | of each diameter | | per single contact | total per connector |
| 55 |  55/31/3 | ⊕ | 1.5 | 31 | 14 | 3 | 10 | 512 |
| | | ● | 2.5 | | 14 | | 25 | |
| | | ◒ | 3.5 | | 3 | | 50 | |
| |  55/35/3 | ⊕ | 1.5 | 35 | 33 | 3 | 10 | 380 |
| | | ◒ | 3.5 | | 2 | | 25 | |
| 60 |  60/31/1 | ⊕ | 1.5 | 31 | 14 | 1 | 10 | 552 |
| | | ● | 2.5 | | 14 | | 25 | |
| | | ◒ | 3.5 | | 2 | | 50 | |
| | | ⊕ | 5.5 | | 1 | | 80 | |
| |  60/45/3 | ● | 2.5 | 45 | 45 | 3 | 25 | 520 |
| |  60/45/2 | ⊕ | 1.5 | 45 | 25 | 2 | 10 | 515 |
| | | ● | 2.5 | | 20 | | 25 | |
| |  60/47/2 | ⊕ | 1.5 | 47 | 40 | 2 | 10 | 399 |
| | | ● | 2.5 | | 7 | | 25 | |
| |  60/50/3 | ● | 2.5 | 50 | 50 | 3 | 10 | 500 |

## 2PTT Series (2RTT SERIES)

Plug with Straight Split Hood

Plug with Angled Split Hood

Receptacle with Straight Hood

### Connector Designation & Ordering Information

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| RUSSIAN–––> | 2PTT | 20 | Б(К) | П(у) | Э(Н) | 4 | Ш(Г) | 6 | 0 | В |
| ENGLISH–––> | 2RTT | 20 | B(K) | P(U) | E(N) | 4 | SH(G) | 6 | 0 | V |

Series

Conventional shell size

Shell type
B-Receptacle
K-Plug

Backshell style: P=Straight
U-angled

Backshell nut style: E-for shielded cable
N-for unshielded cable

Number of contacts

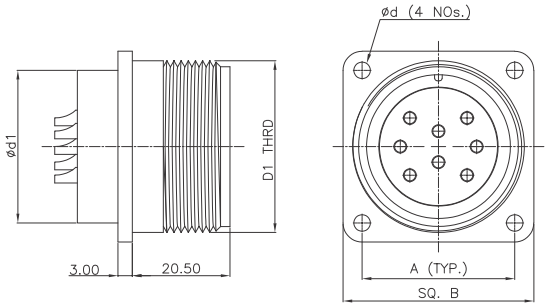
Contact : SH - Male, G - Female

Designation of contact combination-reference number

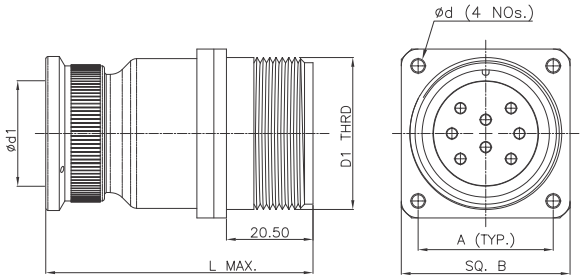
0-backshell without rubber outer shells, sleeves and washers
Without “0”-backshells with rubber outer shells, sleeves

All climatic conditions

## RECEPTACLE ASSEMBLY WITHOUT ACCESSORIES




## RECEPTACLE WITH STRAIGHT HOOD & SCREEN CLAMP




## Receptacle Pin Assembly Without Accessories

| SHELL SIZE | A | B | D1 THRD | ød1 | ød |
|---|---|---|---|---|---|
| 12 | 16 | 22 | M16x1.5 | 12 | 3.5 |
| 16 | 19 | 25 | M20X1.5 | 16 | 3.5 |
| 20 | 22 | 30 | M24X1.5 | 20 | 3.5 |
| 28 | 30 | 38 | M33X1.5 | 28 | 3.5 |
| 32 | 32 | 40 | M36X1.5 | 32 | 3.5 |
| 36 | 34 | 42 | M39X1.5 | 36 | 3.5 |
| 40 | 40 | 48 | M45X1.5 | 40 | 3.5 |
| 48 | 48 | 58 | M52X1.5 | 48 | 4.5 |
| 55 | 52 | 64 | M60X1.5 | 55 | 4.5 |
| 60 | 54 | 68 | M64X1.5 | 60 | 4.5 |

## Receptacle Pin With Straight Hood & Screen Clamp

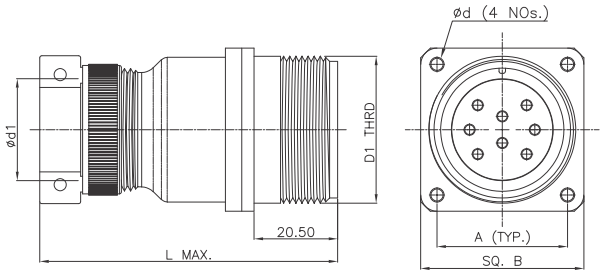
| SHELL SIZE | A | B | D1 THRD | ød1 (min. cable entry) | ød | L MAX. |
|---|---|---|---|---|---|---|
| 12 | 16 | 22 | M16x1.5 | 8 | M3 | 51 |
| 16 | 19 | 25 | M20X1.5 | 11 | M3 | 55 |
| 20 | 22 | 30 | M24X1.5 | 18 | M3 | 54 |
| 28 | 30 | 38 | M33X1.5 | 25 | M3 | 59 |
| 32 | 32 | 40 | M36X1.5 | 25 | M3 | 63 |
| 36 | 34 | 42 | M39X1.5 | 29 | M3 | 65 |
| 40 | 40 | 48 | M45X1.5 | 32 | M3 | 65 |
| 48 | 48 | 58 | M52X1.5 | 36 | M4 | 87 |
| 55 | 52 | 64 | M60X1.5 | 46 | M4 | 87 |
| 60 | 54 | 68 | M64X1.5 | 50 | M4 | 85 |

## Receptacle Socket Assembly Without Accessories

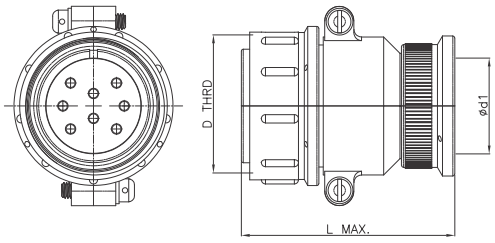
## Receptacle Socket With Straight Hood & Screen Clamp

ALL DIMENSIONS ARE IN MM

## RECEPTACLE WITH STRAIGHT HOOD & CABLE CLAMP




## PLUG WITH STRAIGHT SPLIT HOOD & SCREEN CLAMP




## Receptacle Pin With Straight Hood & Cable Clamp

| SHELL SIZE | A | B | D1 THRD | ød1 (min. cable entry) | ød | L MAX. |
|---|---|---|---|---|---|---|
| 12 | 16 | 22 | M16x1.5 | 5 | M3 | 63 |
| 16 | 19 | 25 | M20X1.5 | 7 | M3 | 65 |
| 20 | 22 | 30 | M24X1.5 | 14 | M3 | 70 |
| 28 | 30 | 38 | M33X1.5 | 21 | M3 | 77 |
| 32 | 32 | 40 | M36X1.5 | 21 | M3 | 81 |
| 36 | 34 | 42 | M39X1.5 | 23 | M3 | 83 |
| 40 | 40 | 48 | M45X1.5 | 24 | M3 | 83 |
| 48 | 48 | 58 | M52X1.5 | 32 | M4 | 85 |
| 55 | 52 | 64 | M60X1.5 | 40 | M4 | 85 |
| 60 | 54 | 68 | M64X1.5 | 48 | M4 | 83 |

## Plug Pin With Straight Split Hood & Screen Clamp

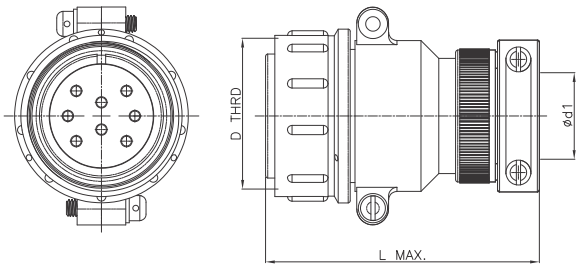
| SHELL SIZE | D1 THRD | ød1 (min. cable entry) | L MAX. |
|---|---|---|---|
| 12 | M16x1.5 | 8 | 50 |
| 16 | M20X1.5 | 11 | 50 |
| 20 | M24X1.5 | 18 | 53 |
| 28 | M33X1.5 | 25 | 56 |
| 32 | M36X1.5 | 25 | 58 |
| 36 | M39X1.5 | 29 | 62 |
| 40 | M45X1.5 | 32 | 64 |
| 48 | M52X1.5 | 36 | 66 |
| 55 | M60X1.5 | 46 | 66 |
| 60 | M64X1.5 | 50 | 64 |

## Receptacle Socket With Straight Hood & Cable Clamp

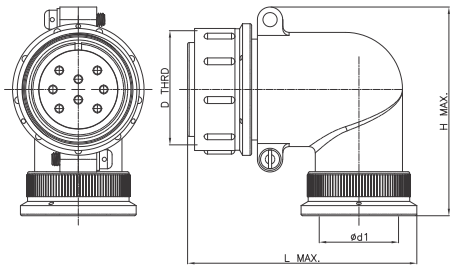
## Plug Socket With Straight Split Hood & Screen Clamp

ALL DIMENSIONS ARE IN MM

## PLUG WITH STRAIGHT SPLIT HOOD & CABLE CLAMP




## PLUG WITH ANGULAR SPLIT HOOD & SCREEN CLAMP




## Plug Pin With Straight Split Hood & Cable Clamp

| SHELL SIZE | D1 THRD | ød1 (min. cable entry) | L MAX. |
|---|---|---|---|
| 12 | M16x1.5 | 5 | 62 |
| 16 | M20X1.5 | 7 | 60 |
| 20 | M24X1.5 | 14 | 64 |
| 28 | M33X1.5 | 21 | 70 |
| 32 | M36X1.5 | 21 | 72 |
| 36 | M39X1.5 | 23 | 76 |
| 40 | M45X1.5 | 24 | 78 |
| 48 | M52X1.5 | 32 | 80 |
| 55 | M60X1.5 | 40 | 80 |
| 60 | M64X1.5 | 48 | 78 |

## Plug Pin With Angular Split Hood & Screen Clamp

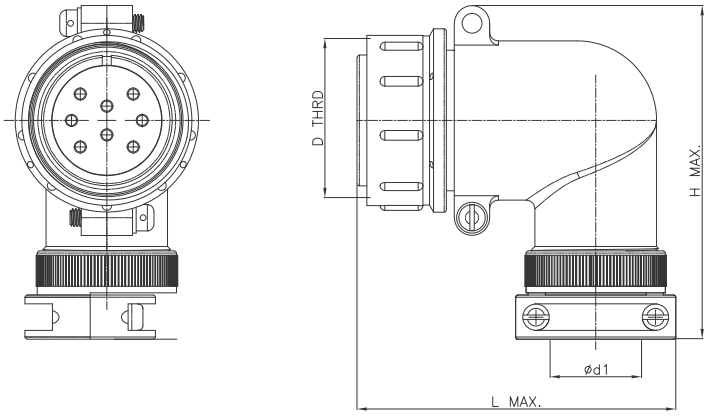
| SHELL SIZE | D1 THRD | ød1 (min. cable entry) | H MAX. | L MAX. |
|---|---|---|---|---|
| 12 | M16x1.5 | 8 | 39 | 51 |
| 16 | M20X1.5 | 11 | 36 | 56 |
| 20 | M24X1.5 | 18 | 45 | 64 |
| 28 | M33X1.5 | 25 | 62 | 73 |
| 32 | M36X1.5 | 25 | 66 | 73 |
| 36 | M39X1.5 | 29 | 67 | 76 |
| 40 | M45X1.5 | 32 | 72 | 80 |
| 48 | M52X1.5 | 36 | 81 | 90 |
| 55 | M60X1.5 | 46 | 106 | 98 |
| 60 | M64X1.5 | 50 | 94 | 103 |

## Plug Socket With Straight Split Hood & Cable Clamp

## Plug Socket With Angular Split Hood & Screen Clamp

ALL DIMENSIONS ARE IN MM

## PLUG WITH STRAIGHT SPLIT HOOD & CABLE CLAMP



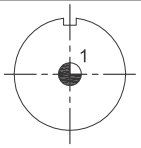
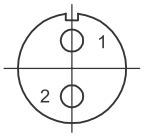
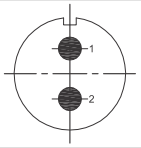
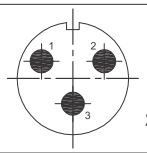
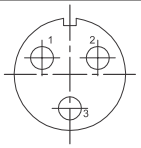
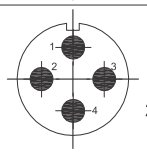
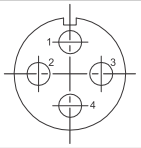
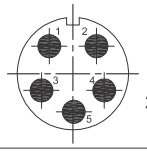

| SHELL SIZE | D1 THRD | ød1 (min. cable entry) | H MAX. | L MAX. |
|---|---|---|---|---|
| 12 | M16x1.5 | 5 | 51.5 | 53.5 |
| 16 | M20X1.5 | 7 | 53.5 | 60 |
| 20 | M24X1.5 | 14 | 63 | 68 |
| 28 | M33X1.5 | 21 | 78 | 76.5 |
| 32 | M36X1.5 | 21 | 82 | 76.5 |
| 36 | M39X1.5 | 23 | 83.5 | 79 |
| 40 | M45X1.5 | 24 | 88 | 84.5 |
| 48 | M52X1.5 | 32 | 97 | 95.5 |
| 55 | M60X1.5 | 40 | 104 | 102 |
| 60 | M64X1.5 | 48 | 110 | 108 |

### Plug Pin With Angular Split Hood & Cable Clamp

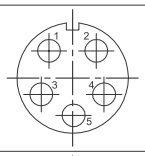
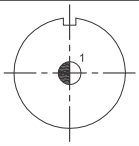
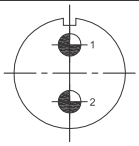
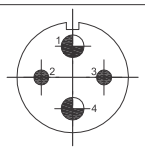
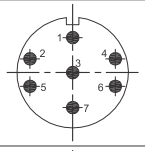
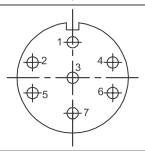
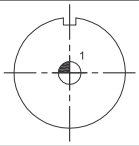
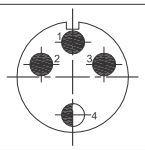
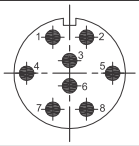
### Plug Socket With Angular Split Hood & Cable Clamp

ALL DIMENSIONS ARE IN MM

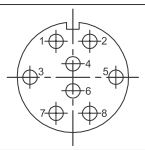
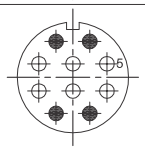
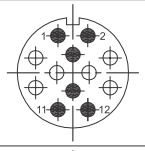
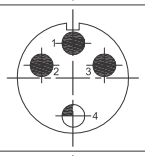
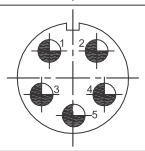
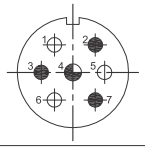
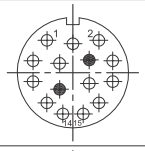
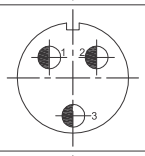
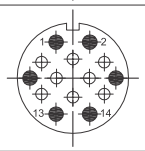
VIEW FOR SOCKET FROM THE MATING SIDE

| Conventional shell size | Contact Layout | Conventional connector designation | Contact diameter mm | Number of contacts | | Designation of contact combination | Max. current carrying capacity, A | |
|---|---|---|---|---|---|---|---|---|
| | | | | in connector | of each diameter | | per single contact | total per connector |
| 12 |  12/1/1 |  | 2.5 | 1 | 1 | 1 | 35 | 25 |
| 16 |  16/1/2 |  | 3.5 | 1 | 1 | 2 | 50 | 50 |
| |  16/2/3 |  | 1.5 | 2 | 2 | 3 | 20 | 20 |
| 20 |  20/2/4 |  | 2.5 | 2 | 2 | 4 | 35 | 50 |
| |  20/3/5 |  | 2.5 | 3 | 3 | 5 | 35 | 75 |
| |  20/3/38 |  | 1.5 | 3 | 3 | 38 | 20 | 30 |
| |  20/4/6 |  | 2.5 | 4 | 4 | 6 | 35 | 100 |
| |  20/4/39 |  | 1.5 | 4 | 4 | 39 | 20 | 40 |
| |  20/5/40 |  | 2.5 | 5 | 5 | 40 | 35 | 125 |

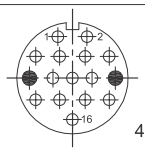
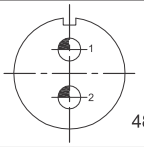
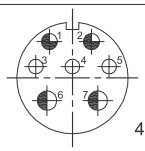
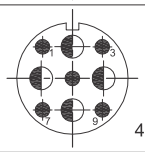
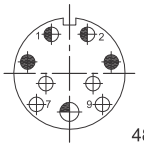
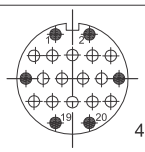
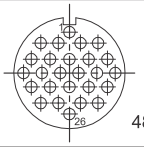
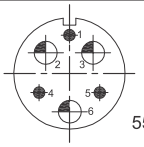
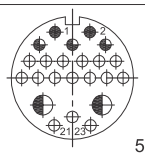
VIEW FOR SOCKET FROM THE MATING SIDE

| Conventional shell size | Contact Layout | Conventional connector designation | Contact diameter mm | Number of contacts | | Designation of contact combination | Max. current carrying capacity, A | |
|---|---|---|---|---|---|---|---|---|
| | | | | in connector | of each diameter | | per single contact | total per connector |
| 20 |  20/5/7 |  | 1.5 | 5 | 5 | 7 | 20 | 50 |
| 28 |  28/1/8 |  | 5.5 | 1 | 1 | 8 | 100 | 100 |
| |  28/2/9 |  | 3.5 | 2 | 2 | 9 | 50 | 100 |
| |  28/4/10 |  | 2.5 | 4 | 2 | 10 | 35 | 150 |
| | |  | 3.5 | | 2 | | 50 | |
| |  28/7/11 |  | 2.5 | 7 | 7 | 11 | 35 | 155 |
| |  28/7/41 |  | 1.5 | 7 | 7 | 41 | 20 | 70 |
| 32 |  32/1/12 |  | 9 | 1 | 1 | 12 | 200 | 200 |
| |  32/4/13 |  | 5.5 | 4 | 1 | 13 | 100 | 175 |
| | |  | 2.5 | | 3 | | 35 | |
| |  32/8/14 |  | 2.5 | 8 | 8 | 14 | 35 | 175 |

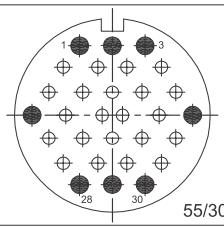
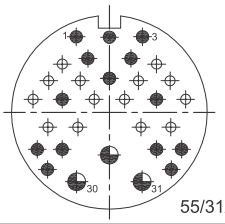
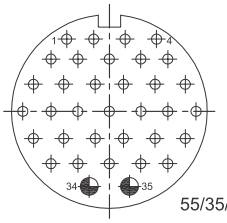
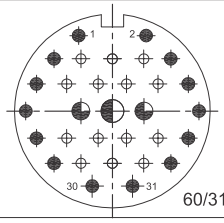
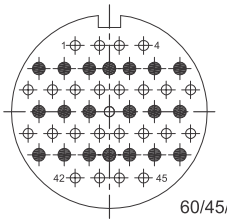
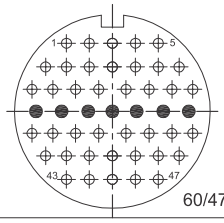
VIEW FOR SOCKET FROM THE MATING SIDE

| Conventional shell size | Contact Layout | Conventional connector designation | Contact diameter, mm | Number of contacts | | Designation of contact combination | Max. current carrying capacity, A | |
|---|---|---|---|---|---|---|---|---|
| | | | | in connector | of each diameter | | per single contact | total per connector |
| 32 |  32/8/42 | ⊕ | 1.5 | 8 | 8 | 42 | 20 | 80 |
| |  32/10/15 | ⊕ | 1.5 | 10 | 6 | 15 | 20 | 160 |
| | | ● | 2.5 | | 4 | | 35 | |
| |  32/12/16 | ⊕ | 1.5 | 12 | 6 | 16 | 20 | 210 |
| | | ● | 2.5 | | 6 | | 35 | |
| 36 |  32/4/17 | ● | 2.5 | 4 | 3 | 17 | 35 | 275 |
| | | ⊕ | 9 | | 1 | | 200 | |
| |  36/5/18 | ● | 3.5 | 5 | 5 | 18 | 50 | 250 |
| |  36/7/19 | ⊕ | 1.5 | 7 | 3 | 19 | 20 | 155 |
| | | ● | 2.5 | | 3 | | 35 | |
| | | ● | 3.5 | | 1 | | 50 | |
| |  36/15/20 | ⊕ | 1.5 | 15 | 13 | 20 | 20 | 180 |
| | | ● | 2.5 | | 2 | | 35 | |
| 40 |  36/3/21 | ● | 5.5 | 3 | 3 | 21 | 100 | 300 |
| |  40/14/22 | ⊕ | 1.5 | 14 | 8 | 22 | 20 | 230 |
| | | ● | 2.5 | | 6 | | 35 | |

## VIEW FOR SOCKET FROM THE MATING SIDE

| Conventional shell size | Contact Layout | Conventional connector designation | Contact diameter, mm | Number of contacts | | Designation of contact combination | Max. current carrying capacity, A | |
|---|---|---|---|---|---|---|---|---|
| | | | | in connector | of each diameter | | per single contact | total per connector |
| 40 |  40/16/23 | ⊕ | 1.5 | 16 | 14 | 23 | 20 | 190 |
| | | ● | 2.5 | | 2 | | 35 | |
| 48 |  48/2/24 | ⊕ | 9 | 2 | 2 | 24 | 200 | 400 |
| |  48/7/25 | ⊕ | 1.5 | 7 | 3 | 25 | 20 | 330 |
| | | ● | 3.5 | | 2 | | 50 | |
| | | ● | 5.5 | | 2 | | 100 | |
| |  48/9/27 | ● | 2.5 | 9 | 5 | 27 | 35 | 525 |
| | | ● | 5.5 | | 4 | | 100 | |
| |  48/9/26 | ⊕ | 1.5 | 9 | 4 | 26 | 20 | 490 |
| | | ● | 2.5 | | 2 | | 35 | |
| | | ● | 5.5 | | 2 | | 100 | |
| | | ● | 9 | | 1 | | 200 | |
| |  48/20/28 | ⊕ | 1.5 | 20 | 14 | 28 | 20 | 290 |
| | | ● | 2.5 | | 6 | | 35 | |
| |  48/26/29 | ⊕ | 1.5 | 26 | 26 | 29 | 20 | 234 |
| 55 |  55/6/30 | ● | 2.5 | 6 | 3 | 30 | 35 | 475 |
| | | ⊕ | 9 | | 3 | | 200 | |
| |  55/23/31 | ⊕ | 1.5 | 23 | 16 | 31 | 20 | 503 |
| | | ● | 2.5 | | 2 | | 35 | |
| | | ● | 3.5 | | 3 | | 45 | |
| | | ● | 5.5 | | 2 | | 90 | |

VIEW FOR SOCKET FROM THE MATING SIDE

| Conventional shell size | Contact Layout | Conventional connector designation | Contact diameter, mm | Number of contacts | | Designation of contact combination | Max. current carrying capacity, A | |
|---|---|---|---|---|---|---|---|---|
| | | | | in connector | of each diameter | | per single contact | total per connector |
| 55 |  55/30/32 | ⊕ | 1.5 | 30 | 22 | 32 | 20 | 374 |
| | | ● | 2.5 | | 8 | | 20 | |
| |  55/31/33 | ⊕ | 1.5 | 31 | 14 | 33 | 20 | 512 |
| | | ● | 2.5 | | 14 | | 35 | |
| | | ◕ | 3.5 | | 3 | | 40 | |
| |  55/35/34 | ⊕ | 1.5 | 35 | 33 | 34 | 20 | 344 |
| | | ◕ | 3.5 | | 2 | | 35 | |
| 60 |  60/31/35 | ⊕ | 1.5 | 31 | 14 | 35 | 20 | 552 |
| | | ● | 2.5 | | 14 | | 35 | |
| | | ◕ | 3.5 | | 2 | | 40 | |
| | | ◕ | 5.5 | | 1 | | 80 | |
| |  60/45/36 | ⊕ | 1.5 | 45 | 25 | 36 | 20 | 515 |
| | | ● | 2.5 | | 20 | | 35 | |
| |  60/47/37 | ⊕ | 1.5 | 47 | 40 | 37 | 20 | 399 |
| | | ● | 2.5 | | 7 | | 35 | |

TECHNICAL DATA:

A) Operating voltage (max. at sea level) 500 V (rms)

B) Operating current and contact resistance refer table given below

| Contact size mm | Rated Current-A | Contact Resistance m Ohms (Max) |
|---|---|---|
| 1.5 | 14 | 2.50 |
| 2.5 | 25 | 1.00 |
| 3.5 | 40 | 0.75 |
| 5.5 | 80 | 0.30 |
| 9.0 | 200 | 0.15 |

C) Operating Temperature : -55°c to +125°c

D) Material

1. Insulator : Hard Dielectric
2. Socket contact 1.5, & 2.5 : Copper Alloy
3. Socket contact 3.5, 5.5 & 9 : Copper Alloy
4. Pin contact : Copper Alloy
5. Contact clip : As per Ty-14-1-4618-89
6. Shell : Aluminium Alloy

E) Finish
a. Contact : Silver Plated
b. Shell : Cadmium Plated with Olive drab

F) Insulation resistance : 5000 M Ohms (Min)
G) Voltage proof (At sea level) : 2000V AC (rms)

## 2PM & 2PMД Series (2RM & 2RMD Series)

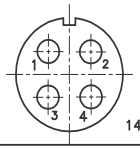
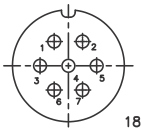
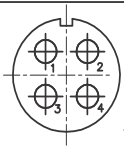
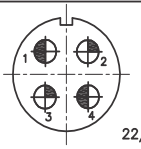
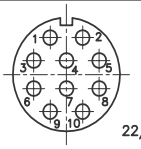
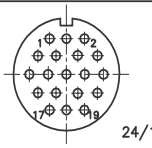
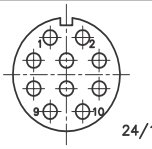
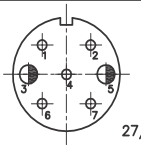
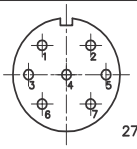
**2RM and 2MRD**
The 2RM and 2MRD Series Connectors find their applications in electrical and radio equipment.
The 2RM and 2RMD Connectors differ in the contact layout.
The Connectors have threaded coupling.

## Contact Voltage Rating

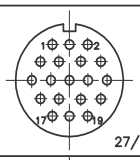
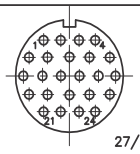
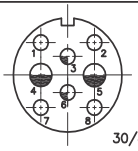
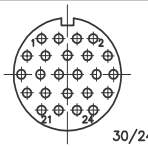
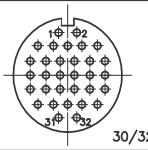
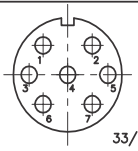
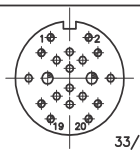
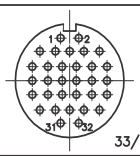
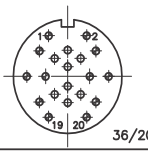
| Connector Series | Contact Dia. mm | Graphical Symbol | Operating Voltage v |
|---|---|---|---|
| 2RM | 1.0 | | 500 |
| | 1.5 | | 560 |
| | 2.0 | | 560 |
| | 3.0 | | 560 |

| Connector Series | Contact Dia. mm | Graphical Symbol | Operating Voltage v |
|---|---|---|---|
| 2RMD | 1.5 | | 560 |
| | 1.5 | | 560 |
| | 2.0 | | 560 |
| | 3.0 | | 560 |

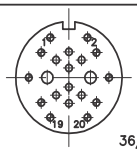
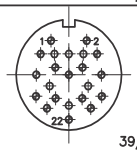
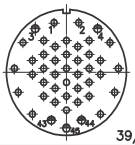
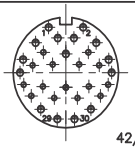
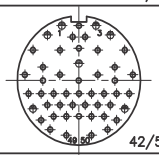
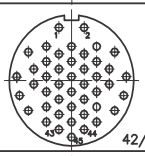
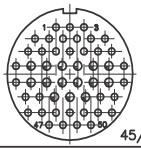
## VIEW FOR SOCKET FROM THE MATING SIDE

| Conventional shell size | Connector type | Contact layout | Contact designation | Contact diameter, mm | Number of contacts in one connector | Number of contacts of each diameter | Designation of contact combination | Max. current carrying capacity, A per single contact | Max. current carrying capacity, A total per connector | Max. Operating Voltage, V |
|---|---|---|---|---|---|---|---|---|---|---|
| 14 | 2RM |  14/4/1 |  | 1.0 | 4 | 4 | 1 | 8 | 27 | 560 |
| 18 | 2RM |  18/7/1 |  | 1.0 | 7 | 7 | 1 | 7 | 40 | 560 |
| | 2RMD |  18/4/5 |  | 1.5 | 4 | 4 | 5 | 15 | 50 | 560 |
| 22 | 2RM |  22/4/3 |  | 2.0 | 4 | 2 | 3 | 18 | 80 | 560 |
| | | |  | 3.0 | | 2 | | 32 | | |
| | 2RM |  22/10/1 |  | 1.0 | 10 | 10 | 1 | 7 | 58 | 560 |
| 24 | 2RM |  24/19/1 |  | 1.0 | 19 | 19 | 1 | 5 | 80 | 560 |
| | 2RMD |  24/10/5 |  | 1.5 | 10 | 10 | 5 | 10 | 83 | 560 |
| 27 | 2RM |  27/7/2 |  | 1.0 | 7 | 5 | 2 | 8 | 60 | 700 |
| | | |  | 1.5 | | 2 | | 16 | | |
| | 2RMD |  27/7/5 |  | 1.5 | 7 | 7 | 5 | 12 | 70 | 700 |

## VIEW FOR SOCKET FROM THE MATING SIDE

| Conventional shell size | Connector type | Contact layout | Contact designation | Contact diameter, mm | Number of contacts in one connector | Number of contacts of each diameter | Designation of contact combination | Max. current carrying capacity, A per single contact | Max. current carrying capacity, A total per connector | Max. Operating Voltage, V |
|---|---|---|---|---|---|---|---|---|---|---|
| 27 | 2RMD |  27/19/5 |  | 1.5 | 19 | 19 | 5 | 7 | 110 | 560 |
| | 2RM |  27/24/1 |  | 1.0 | 24 | 24 | 1 | 7 | 100 | 560 |
| 30 | 2RMD |  30/8/7 |  | 1.5 | 8 | 4 | 7 | 13 | 120 | 560 |
| | | |  | 2.0 | | 2 | | 18 | | |
| | | |  | 3.0 | | 2 | | 36 | | |
| | 2RMD |  30/24/5 |  | 1.5 | 24 | 24 | 5 | 7 | 140 | 560 |
| | 2RM |  30/32/1 |  | 1.0 | 32 | 32 | 1 | 4 | 106 | 560 |
| 33 | 2RM |  33/7/9 |  | 3.0 | 7 | 7 | 9 | 32 | 128 | 560 |
| | 2RM |  33/20/4 |  | 1.0 | 20 | 10 | 4 | 6 | 110 | 700 |
| | | |  | 1.0 | | 8 | | | | 560 |
| | | |  | 3.0 | | 2 | | 36 | | |
| | 2RMD |  33/32/5 |  | 1.5 | 32 | 32 | 5 | 6 | 160 | 560 |
| 36 | 2RMD |  36/20/8 |  | 1.5 | 20 | 12 | 5 | 8 | 133 | 700 |
| | | |  | 1.5 | | 8 | | | | 560 |

## VIEW FOR SOCKET FROM THE MATING SIDE

| Conventional shell size | Connector type | Contact layout | Contact designation | Contact diameter, mm | Number of contacts in one connector | Number of contacts of each diameter | Designation of contact combination | Max. current carrying capacity, A per single contact | Max. current carrying capacity, A total per connector | Max. Operating Voltage, V |
|---|---|---|---|---|---|---|---|---|---|---|
| 36 | 2RMD |  36/20/6 | | 1.5 | 20 | 10 | 6 | 10 | 147 | 700 |
| | | | | 1.5 | | 8 | | | | |
| | | | | 3.0 | | 2 | | 36 | | 560 |
| 39 | 2RMD |  39/22/5 | | 1.5 | 22 | 17 | 5 | 8 | 146 | 700 |
| | | | | 1.5 | | 5 | | | | 560 |
| | 2RM |  39/45/2 | | 1.0 | 45 | 40 | 2 | 4 | 167 | 700 |
| | | | | 1.5 | | 5 | | 8 | | 560 |
| 42 | 2RM |  42/30/2 | | 1.0 | 30 | 15 | 2 | 4.5 | 168 | 700 |
| | | | | 1.5 | | 15 | | 9 | | 560 |
| | 2RM |  42/50/2 | | 1.0 | 50 | 43 | 2 | 4 | 190 | 700 |
| | | | | 1.5 | | 7 | | 8 | | 700 |
| | 2RMD |  42/45/5 | | 1.5 | 45 | 45 | 5 | 5 | 187 | 560 |
| 45 | 2RMD |  45/50/8 | | 1.5 | 50 | 35 | 8 | 5 | 260 | 560 |
| | | | | 2.0 | | 15 | | 7.5 | | |

## CONNECTOR DESIGNATION & ORDERING INFORMATION:

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Russian | ——> | 2PM | Г | 18 | К | П | Э | 7 | Г | 1 | В | 1 | |
| English | ——> | 2RM | G | 18 | K | P | E | 7 | G | 1 | V | 1 | B,L | HD |

Series
2RM (2PM) Series
2RMD (2PMД) Series

G- For Sealed Connector
Applicable Only for Receptacle

Shell Size
( 14, 18, 22, 24, 27, 30, 33, 36, 39, 42, & 45)

B- For Receptacle
K- For Plug

P- For Straight Hood
U- For Angle Hood

E- For Screen Clamp
N- For Cable Clamp

Number of Contacts

G- For Socket Contact and SH- For Pin Contact

Insert Configuration Number

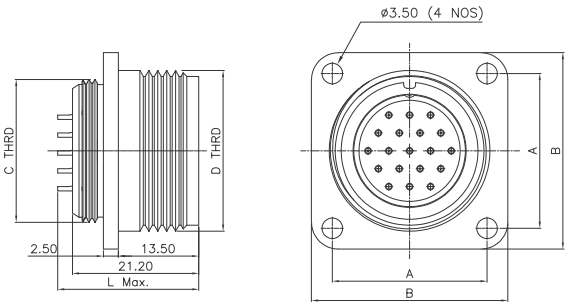
Type of Plating on Contact A- For Gold and V- For Silver

Operating Temperature
1- Stands For -55°c to + 125°c

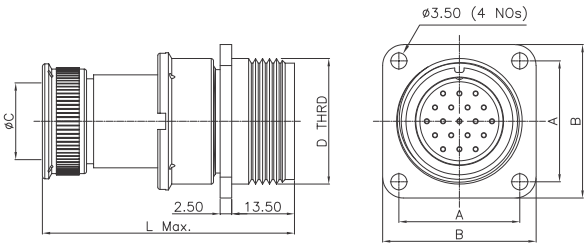
B- For Fixed Connector Type Without Backside Thread
L- For 90° Orientation of Insert

Connector with Hard Phenolic Insert
(Connector with Neoprene Rubber connector if HD letter in marking is absent)

## RECEPTACLE WITHOUT ACCESSORIES




## RECEPTACLE WITH STRAIGHT HOOD & SCREEN CLAMP




### Receptacle Pin Without Accessories

| SHELL SIZE | A | B | C THREAD | D THREAD |
|---|---|---|---|---|
| 14 | 17 | 24 | M14X1.0 | M16X1.0 |
| 18 | 20 | 27 | M18X1.0 | M20X1.0 |
| 22 | 23 | 30 | M22X1.0 | M24X1.0 |
| 24 | 26 | 33 | M24X1.0 | M27X1.5 |
| 27 | 29 | 38 | M27X1.0 | M30X1.5 |
| 30 | 31 | 38 | M30X1.0 | M33X1.5 |
| 33 | 32 | 40 | M33X1.0 | M36X1.5 |
| 36 | 35 | 43 | M36X1.0 | M39X1.5 |
| 39 | 37 | 46 | M39X1.0 | M42X1.5 |
| 42 | 40 | 49 | M42X1.0 | M45X1.5 |
| 45 | 43 | 52 | M45X1.0 | M48X1.5 |

### Receptacle Pin With Straight Hood & Screen Clamp

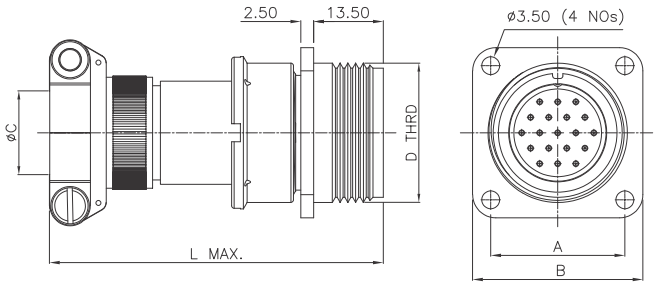
| SHELL SIZE | A | B | øC | D THREAD | L MAX. |
|---|---|---|---|---|---|
| 14 | 17 | 24 | 6.5 | M16X1.0 | 48 |
| 18 | 20 | 27 | 10.5 | M20X1.0 | 48 |
| 22 | 23 | 30 | 14 | M24X1.0 | 48 |
| 24 | 26 | 33 | 16.5 | M27X1.5 | 54 |
| 27 | 29 | 38 | 18.5 | M30X1.5 | 54 |
| 30 | 31 | 38 | 20.5 | M33X1.5 | 54 |
| 33 | 32 | 40 | 23 | M36X1.5 | 59 |
| 36 | 35 | 43 | 23 | M39X1.5 | 59 |
| 39 | 37 | 46 | 24.5 | M42X1.5 | 59 |
| 42 | 40 | 49 | 30.5 | M45X1.5 | 59 |
| 45 | 43 | 52 | 30.5 | M48X1.5 | 59 |

### Receptacle Socket Without Accessories

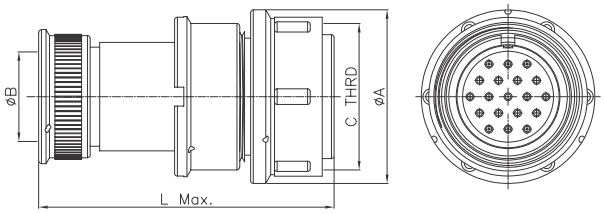
### Receptacle Socket With Straight Hood

FOR CONNECTORS WITH ø1.0 AND ø1.5MM CONTACTS DIMENSIONS L=26.00 MAX.
FOR CONNECTORS WITH ø2.0 AND ø3.0MM CONTACTS DIMENSIONS L=28.00 MAX.

RECEPTACLE WITH
STRAIGHT HOOD & CABLE CLAMP




PLUG WITH STRAIGHT HOOD & SCREEN CLAMP




## Receptacle Pin With Straight Hood & Cable Clamp

| SHELL SIZE | A | B | øC | D THREAD | L MAX. |
|---|---|---|---|---|---|
| 14 | 17 | 24 | 6.5 | M16X1.0 | 53.5 |
| 18 | 20 | 27 | 10.5 | M20X1.0 | 53.5 |
| 22 | 23 | 30 | 14 | M24X1.0 | 56 |
| 24 | 26 | 33 | 16.5 | M27X1.5 | 62.5 |
| 27 | 29 | 38 | 18.5 | M30X1.5 | 62.5 |
| 30 | 31 | 38 | 20.5 | M33X1.5 | 62.5 |
| 33 | 32 | 40 | 23 | M36X1.5 | 62.5 |
| 36 | 35 | 43 | 23 | M39X1.5 | 67.5 |
| 39 | 37 | 46 | 24.5 | M42X1.5 | 67.5 |
| 42 | 40 | 49 | 30.5 | M45X1.5 | 67.5 |
| 45 | 43 | 52 | 30.5 | M48X1.5 | 67.5 |

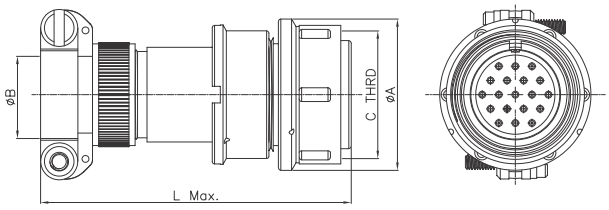
## Plug Pin With Straight Hood & Screen Clamp

| SHELL SIZE | øA | øB | C THREAD | L MAX. |
|---|---|---|---|---|
| 14 | 22 | 6.5 | M16X1.0 | 48 |
| 18 | 25 | 10.5 | M20X1.0 | 48 |
| 22 | 29 | 14 | M24X1.0 | 48 |
| 24 | 32 | 16.5 | M27X1.5 | 54 |
| 27 | 35 | 18.5 | M30X1.5 | 54 |
| 30 | 39 | 20.5 | M33X1.5 | 54 |
| 33 | 42 | 23 | M36X1.5 | 59 |
| 36 | 45 | 23 | M39X1.5 | 59 |
| 39 | 48 | 24.5 | M42X1.5 | 59 |
| 42 | 51 | 30.5 | M45X1.5 | 59 |
| 45 | 54 | 30.5 | M48X1.5 | 59 |

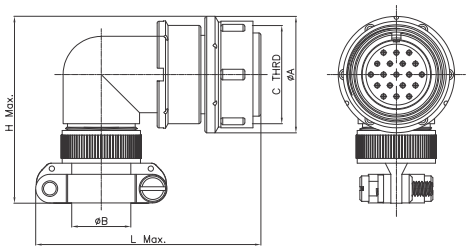
## Receptacle Socket With Straight Hood & Cable Clamp

## Plug Socket With Straight Hood & Screen Clamp

## PLUG WITH STRAIGHT HOOD & CABLE CLAMP




## PLUG WITH ANGLE HOOD & CABLE CLAMP




## Plug Pin With Straight Hood & Cable Clamp

| SHELL SIZE | øA | øB | C THREAD | L MAX. |
|---|---|---|---|---|
| 14 | 22 | 6.5 | M16X1.0 | 53.5 |
| 18 | 25 | 10.5 | M20X1.0 | 53.5 |
| 22 | 29 | 14 | M24X1.0 | 56 |
| 24 | 32 | 16.5 | M27X1.5 | 62.5 |
| 27 | 35 | 18.5 | M30X1.5 | 62.5 |
| 30 | 39 | 20.5 | M33X1.5 | 62.5 |
| 33 | 42 | 23 | M36X1.5 | 67.5 |
| 36 | 45 | 23 | M39X1.5 | 67.5 |
| 39 | 48 | 24.5 | M42X1.5 | 67.5 |
| 42 | 51 | 30.5 | M45X1.5 | 67.5 |
| 45 | 54 | 30.5 | M48X1.5 | 67.5 |

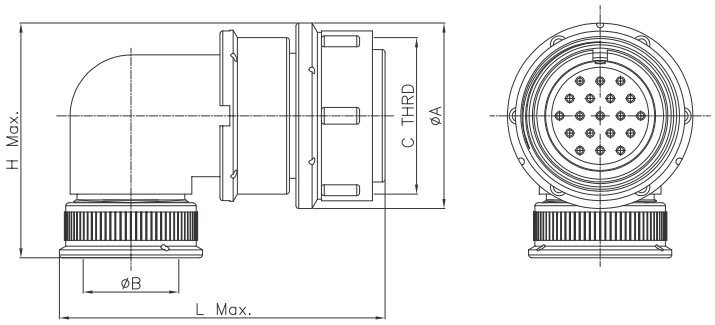
## Plug Pin With Angle Hood & Cable Clamp

| SHELL SIZE | øA | øB | C THREAD | H MAX. | L MAX. |
|---|---|---|---|---|---|
| 14 | 22 | 6.5 | M16X1.0 | 37.5 | 53.5 |
| 18 | 25 | 10.5 | M20X1.0 | 41 | 53.5 |
| 22 | 29 | 14 | M24X1.0 | 47.5 | 56 |
| 24 | 32 | 16.5 | M27X1.5 | 50 | 62.5 |
| 27 | 35 | 18.5 | M30X1.5 | 53.5 | 62.5 |
| 30 | 39 | 20.5 | M33X1.5 | 57.5 | 62.5 |
| 33 | 42 | 23 | M36X1.5 | 50.5 | 67.5 |
| 36 | 45 | 23 | M39X1.5 | 63.5 | 67.5 |
| 39 | 48 | 24.5 | M42X1.5 | 56.5 | 67.5 |
| 42 | 51 | 30.5 | M45X1.5 | 69.5 | 67.5 |
| 45 | 54 | 30.5 | M48X1.5 | 72.5 | 67.5 |

## Plug Socket With Straight Hood & Cable Clamp

## Plug Socket With Angle Hood & Cable Clamp

## PLUG WITH ANGLE HOOD & SCREEN CLAMP




| SHELL SIZE | øA | øB | C THREAD | H MAX. | L MAX. |
|---|---|---|---|---|---|
| 14 | 22 | 6.5 | M16X1.0 | 31 | 53.5 |
| 18 | 25 | 10.5 | M20X1.0 | 34.5 | 53.5 |
| 22 | 29 | 14 | M24X1.0 | 38.5 | 56 |
| 24 | 32 | 16.5 | M27X1.5 | 41 | 62.5 |
| 27 | 35 | 18.5 | M30X1.5 | 44 | 62.5 |
| 30 | 39 | 20.5 | M33X1.5 | 48 | 62.5 |
| 33 | 42 | 23 | M36X1.5 | 51 | 67.5 |
| 36 | 45 | 23 | M39X1.5 | 54 | 67.5 |
| 39 | 48 | 24.5 | M42X1.5 | 57 | 67.5 |
| 42 | 51 | 30.5 | M45X1.5 | 60 | 67.5 |
| 45 | 54 | 30.5 | M48X1.5 | 63 | 67.5 |

Plug Pin With Angle Hood & Screen Clamp

Plug Socket With Angle Hood & Screen Clamp

TECHNICAL DATA:

A) Operating temperature: -55°c to +125°c

B) Operating voltage (at sea level) 500 V AC (rms) max

C) Operating current and contact resistance refer table given below :

| Contact Dia-mm | Rated Current-A | Contact Resistance m Ohms (Max) |
|---|---|---|
| 1.0 | 7A | 5.0 |
| 1.5 | 10A | 2.5 |
| 2.0 | 18A | 1.6 |
| 3.0 | 32A | 0.8 |

D) Insulation resistance : 5000 MΩ(Min)

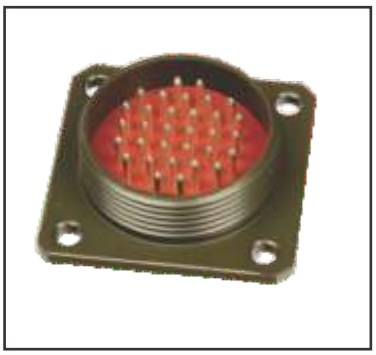
E) Voltage proof (At sea level) :1500V AC (rms)

F) Material

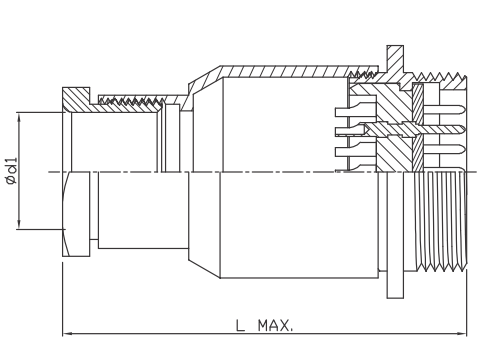
1. Insulator : Hard Dielectric / Neoprene Rubber
2. Socket contact ⌀1.0 & ⌀1.5 : Brass
3. Socket contact ⌀ 2.0 & ⌀3.0 : Brass/Phospher bronze
4. Pin contact : Brass
5. Contact clip : As per Ty-14-1-4618-89
6. Shell : Aluminum Alloy
7. 'O' ring, 'D' Ring : Silicon

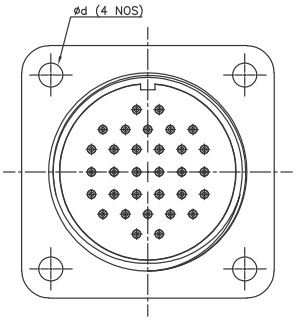
G) Finish

a. Contact : Silver/Gold Plated
b. Shell : Cadmium Plated with Olive drab passivation

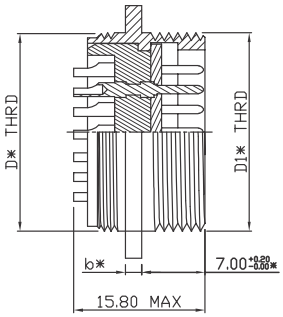


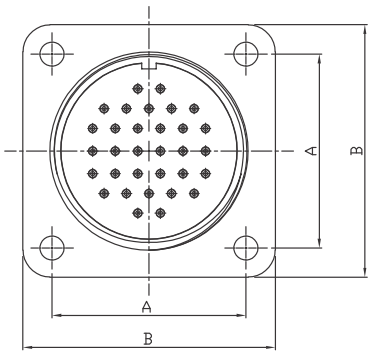
## Plug Connector With Accessories




## Plug Connector Without Accessories

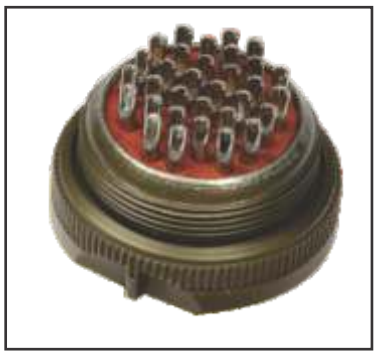


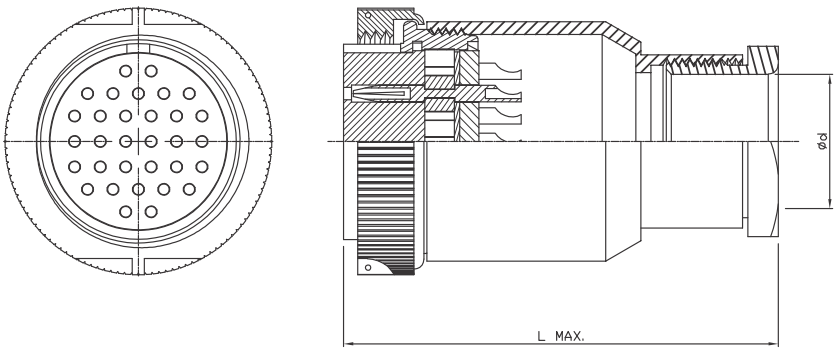

| Connector P/N | NO. OF CONTACT | THREAD D* | THREAD D1* | A | B | ød | b* | ød1 | L MAX. |
|---|---|---|---|---|---|---|---|---|---|
| Plug PC4TB | 4 | M10X0.75 | M10X0.75 | 11.80 | 16.50 | 2.20 | 1.40 | 6.00 | 36.00 |
| Plug PC7TB | 7 | M12X0.75 | M12X0.75 | 13.20 | 18.00 | | | 8.00 | 38.00 |
| Plug PC10TB | 10 | M14X0.75 | M14X0.75 | 15.00 | 20.00 | | | 9.00 | 41.00 |
| Plug PC19TB | 19 | M18X0.75 | M18X1.00 | 18.00 | 24.00 | | | 11.00 | 43.00 |
| Plug PC32TB | 32 | M22X0.75 | M22X1.00 | 21.50 | 28.00 | 2.70 | 1.80 | 13.00 | 45.00 |
| Plug PC50TB | 50 | M27X0.75 | M27X1.00 | 26.00 | 33.00 | 3.20 | 2.00 | 16.00 | 48.00 |

Note: 1) * Dimensions are for reference only.

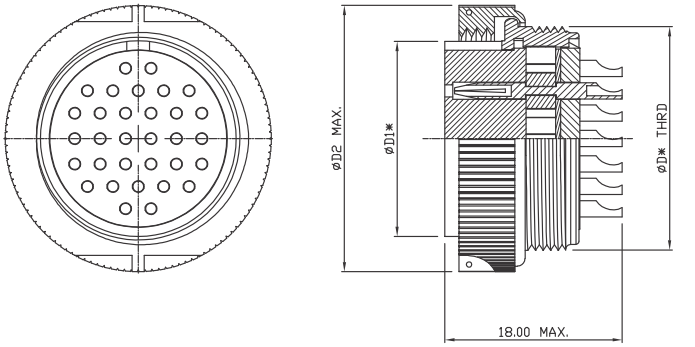
ALL DIMENSIONS ARE IN MM



## Socket Connector With Accessories




## Socket Connector Without Accessories




| Connector Part Number | No. of Contacts | ThreadøD* | øD1* | øD2 max | ød | L max |
|---|---|---|---|---|---|---|
| Socket PC4TB | 4 | M10X0.75 | 7.90 | 14.00 | 6.00 | 36.00 |
| Socket PC7TB | 7 | M12X0.75 | 9.70 | 16.00 | 8.00 | 38.00 |
| Socket PC10TB | 10 | M14X0.75 | 11.70 | 18.00 | 9.00 | 41.00 |
| Socket PC19TB | 19 | M18X0.75 | 15.20 | 22.50 | 11.00 | 43.00 |
| Socket PC32TB | 32 | M22X0.75 | 19.25 | 26.50 | 13.00 | 45.00 |
| Socket PC50TB | 50 | M27X0.75 | 23.70 | 31.50 | 16.00 | 48.00 |

Note: 1) * Dimensions are for reference only.

ALL DIMENSIONS ARE IN MM

## TECHNICAL DATA

| | |
|---|---|
| 1) Contact resistance | :- 5 m Ohms Max. |
| 2) Insulation resistance under normal climatic conditions | :- ≥5000 M Ohms |
| 3) Voltage Proof | :- 1500 V ac |

### A) MATERIAL

| | |
|---|---|
| 1. Insulator | :- Hard Dielectric |
| 2. Socket Contact | :- Beryllium Copper |
| 3. Pin Contact | :- Brass |
| 4. Shell | :- Aluminium Alloy |
| 5. Gasket | :- Silicon Rubber |

### B) Finish

| | |
|---|---|
| 1. Contact | :- Silver/Gold Plated |
| 2. Shell | :- Cadmium Plated with Olive Drab Passivation / Anodic Oxidation |

## Connector Designation & Ordering Information

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Russian | ---> | ( Plug / Socket ) | PC | Г | 10 | A | TB |
| English | ---> | ( Plug / Socket ) | RS | G | 10 | A | TV AO |

Series

G-Sealed Connector
(only for Plug)

Number of Contacts
(4, 7, 10, 19, 32, 50)

Contact Plating
A- Gold, Letter absence means silver

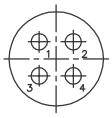
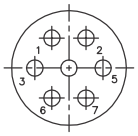
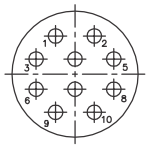
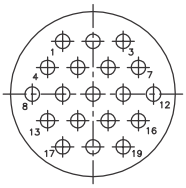
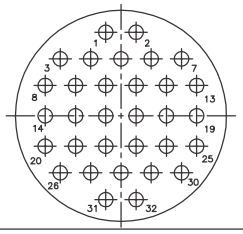
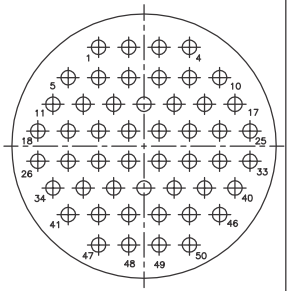
All Climatic Conditions

Anodic Oxidation

For Plug Connectors “With Hood” has to be added to connector number

VIEW FOR SOCKET FROM THE MATING SIDE

Contact layout and electro-mechanical parameters: Table - 1

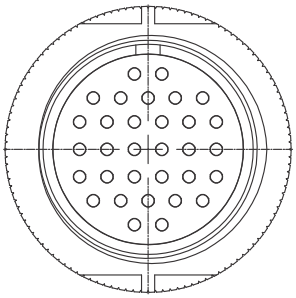
| Conventional shell size | Contact Layout | Contact Diameter in mm | Number of contacts for measuring the over heat temp. | Total No. of Contacts | Current load, A max. | | | Total no. of contact loaded with max. current | Operational voltage (amplitude value) V, max. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Total current load on connector | Max. operating current on single contact | On rest of contacts | | In normal climatic conditions | At pressure less than 4400(33) to 2000 (13) Pa (mmmg cal) | At pressure less than 2000(13) to 0.00013($10^{-5}$) Pa (mmmg cal) |
| 10 |  | 1.0 | ANY | 4 | 15 | 5 | 3 | 3 | 200 | 180 | 150 |
| 12 |  | | 4 | 7 | 22 | | 2.5 | 3 | | | |
| 14 |  | | 4(7) | 10 | 30 | | 2.5 | 4 | | | |
| 18 |  | | 10 | 19 | 40 | | 1.5 | 5 | | | |
| 22 |  | | 16(17) | 32 | 60 | | 1.5 | 7 | | | |
| 27 |  | | 27(30) | 50 | 75 | | 1 | 10 | | | |

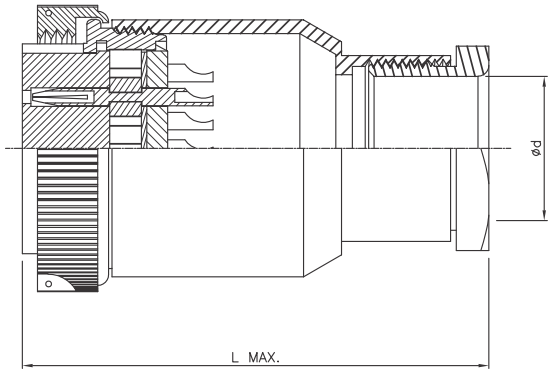
PPC3

PPC4

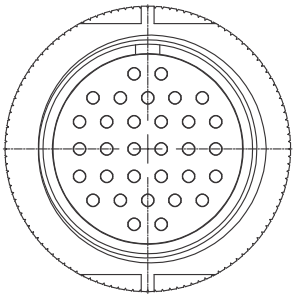
PPC5

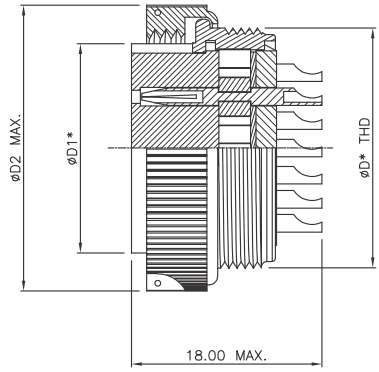
## Connector With Accessories






## Connector Without Accessories



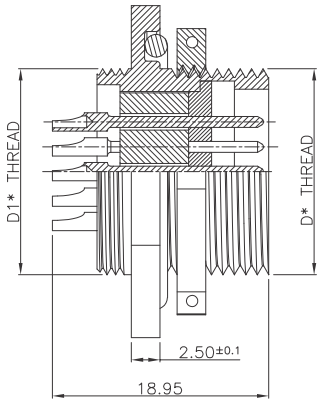


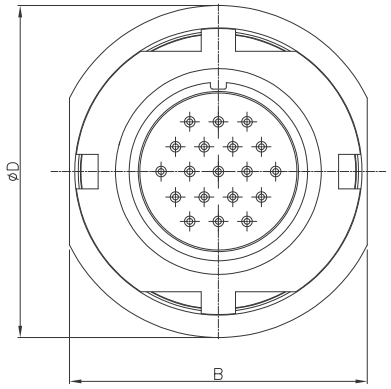

NOTE: 1) * DIMENSIONS ARE FOR REFERENCE ONLY.

| No. of Contacts | Thread D* | D1* | D2 max | **ød** | L max |
|---|---|---|---|---|---|
| 10 | M14X0.75 | 11.70 | 18.00 | 9.00 | 41.00 |
| 19 | M18X0.75 | 15.20 | 22.50 | 11.00 | 43.00 |
| 32 | M22X0.75 | 19.25 | 26.50 | 13.00 | 45.00 |
| 50 | M27X0.75 | 23.70 | 31.50 | 16.00 | 48.00 |

ALL DIMENSIONS ARE IN MM

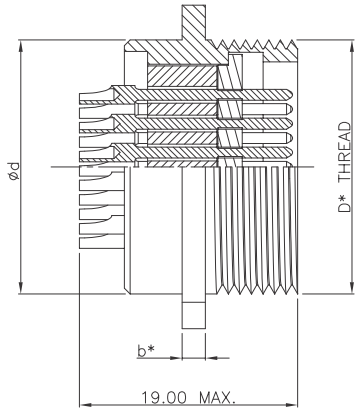
## FIXED MALES OF PPC4 TYPE (HERMETICALLY SEALED CONNECTOR)

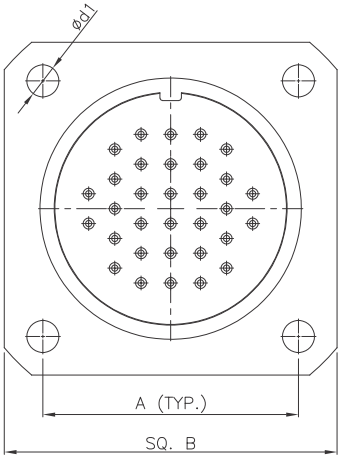


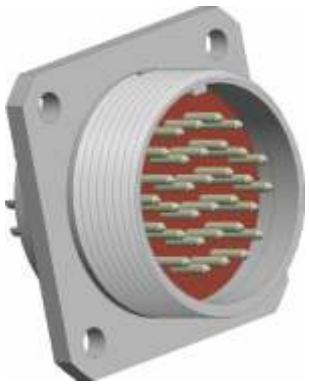




| NO. OF CONTACT | øD | THREAD D1* | THREAD D* | B |
|---|---|---|---|---|
| 10 | 25 | M14X0.75 | M14X0.75 | 25 |
| 19 | 29 | M18X1.00 | M18X0.75 | 29 |
| 32 | 33 | M22X1.00 | M22X0.75 | 33 |
| 50 | 38 | M27X1.00 | M27X0.75 | 38 |

## Fixed Males of PPC5 Type (Hermetically Sealed Connector)



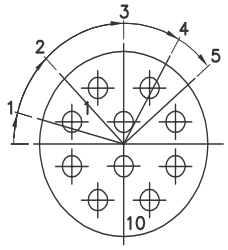
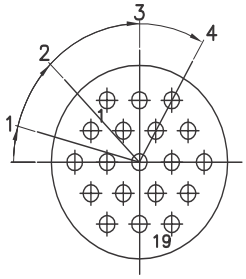
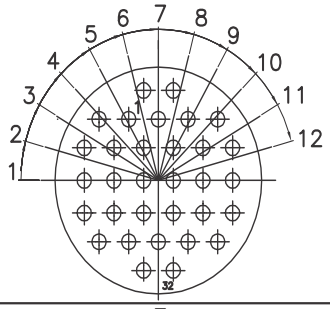
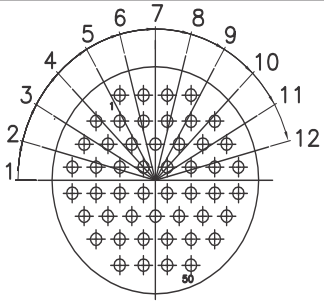



| NO. OF CONTACT | ød* | THREAD D* | ød1 | A | B | b |
|---|---|---|---|---|---|---|
| 10 | 14 | M14X0.75 | 2.2 | 15 | 20 | 1.8 |
| 19 | 18 | M18X1.00 | 2.7 | 18 | 24 | 2 |
| 32 | 22 | M22X1.00 | 2.7 | 21.5 | 28 | 2 |
| 50 | 27 | M27X1.00 | 3.2 | 26 | 33 | 2 |

NOTE: 1) * DIMENSIONS ARE FOR REFERENCE ONLY.

VIEW FOR SOCKET FROM THE MATING SIDE

## Layout of contact and electro-mechanical parameters: Table - 1

| Contact Layout | Number of contacts | Current carrying capability, | | | Insulator Orientation in Degrees | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Operating current per contact, A | Max operating current per contact, A | Max total current per connector, A | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|  | 10 | 1.5 | 2 | 15 | 15 | 45 | 90 | 120 | 140 | – | – | – | – | – | – | – |
|  | 19 | 1.1 | 2 | 20 | 15 | 45 | 90 | 120 | – | – | – | – | – | – | – | – |
|  | 32 | 0.9 | 2 | 28 | 0 | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 |
|  | 50 | 0.7 | 2 | 35 | 0 | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 |

## CONNECTOR DESIGNATION & ORDERING INFORMATION

| | | | | | | |
|---|---|---|---|---|---|---|
| **Russian** ---> | **PPC3, 4, 5** | **10** | **A** | **1** | **1...12** | **В/Э** |
| **English** ---> | **RRS3,4,5** | **10** | **A** | **1** | **1...12** | **V/E** |

Series

Number of Contacts
(10, 19, 32, 50)

Contact Plating:
A-gold for socket contact
Nickel (If A is absent) for pin contact

Connector Types:
1 - fixed male, connector without accessories
0 - cable female, connector without accessories
7 - cable female, connector with straight-type accessories
9 - cable female, connector with angle-type accessories
P- adapter

Insulator orientation ref. table -1

B - All climatic conditions / Э - For cold climatic conditions

## TECHNICAL DATA:

| | |
|---|---|
| a) Contact resistance | :- 70 m Ohms Max. |
| b) Insulation resistance under normal climatic conditions | :- ≥5000 M Ohms |
| c) Contact Dia | :- 1.00 mm |
| d) Operating Voltage | :- 200 V peak |
| e) Temperature | :- $-60^{\circ}$ c to + $100^{\circ}$ c |
| f) Helium Leak rate | :- $1.316X10^{-8}$ Std cc/sec at 2bar pressure. (PPC4 & 5 series connector) |

A) Material :-

| | |
|---|---|
| 1. Insulator | :- Hard Dielectric for Socket and Glass for Pin Connector |
| 2. Socket contact | :- Beryllium copper |
| 3. Pin contact | :- Alloy - 52 |
| 4. Plug Shell | :- Aluminium Alloy |
| 5. Receptacle shell | :- Stainless steel |
| 5. Gasket | :- Silicon Rubber |

B) Finish

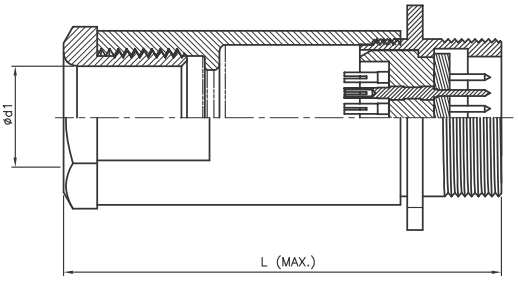
| | |
|---|---|
| 1. Pin Contact | :- Nickel |
| 2. Socktet Contact | :- Gold |
| 3. Receptacle Shell | :- Nickel |
| 4. Plug shell | :- Cadmium Plated with Olive Drab Passivation or Anodic Oxidation |

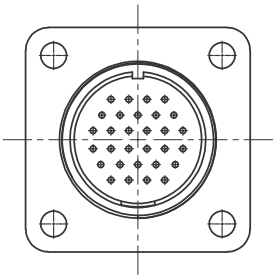
## MP1 PLUG & SOCKET

MP1 PLUG

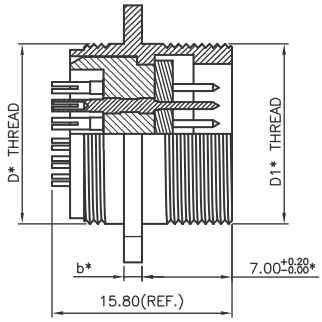
MP1 SOCKET

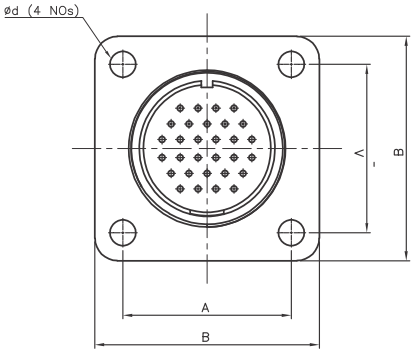
### Connector With Accessories



### Plug Connector Without Accessories



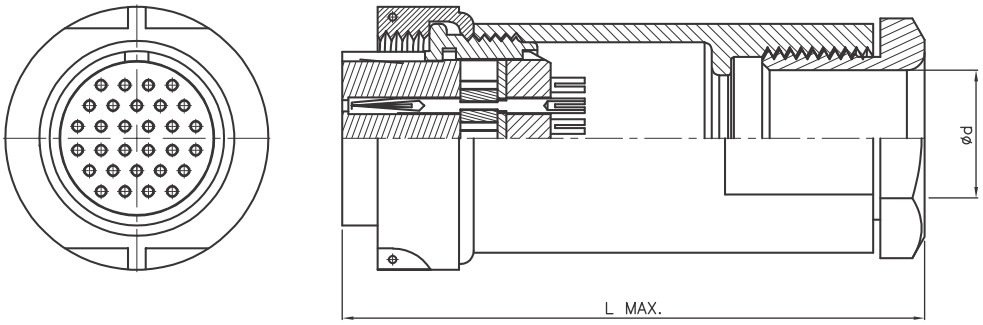



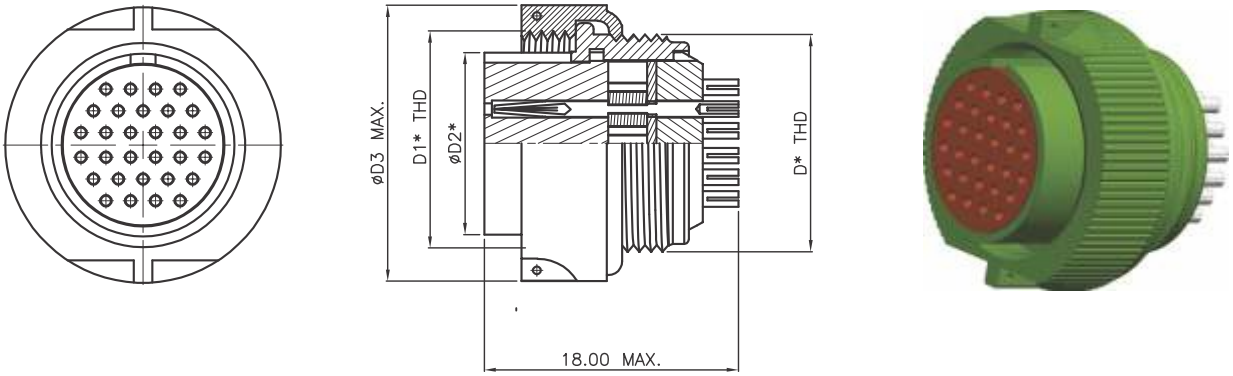

| Connector Part No. | D* Thread | D1* Thread | A | B | b* | ød | ød1 | L MAX. |
|---|---|---|---|---|---|---|---|---|
| MP1 - 10 - 1 - B | M10X0.75 | | 11.8 | 16.5 | 1.4 | 2.2 | 6.0 | 36.0 |
| MP1 - 19 - 1 - B | M12X0.75 | | 13.2 | 18.0 | | | 8.0 | 38.0 |
| MP1 - 30 - 1 - B | M14X0.75 | | 15.0 | 20.0 | | | 9.0 | 41.0 |
| MP1 - 50 - 1 - B | M18X0.75 | M18X1 | 18.0 | 24.0 | | | 11.0 | 43.0 |
| MP1 - 76 - 1 - B | M22X0.75 | M22x1 | 21.5 | 28.0 | 1.8 | 2.7 | 13.0 | 45.0 |
| MP1 - 102 - 1 - B | M27X0.75 | M27x1 | 26.0 | 33.0 | 2 | 3.2 | 16.0 | 48.0 |

NOTE: 1) *DIMENSIONS ARE FOR REFERENCE ONLY.

ALL DIMENSIONS ARE IN MM

## SOCKET CONNECTOR WITH ACCESSORIES



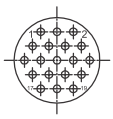
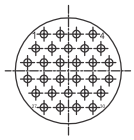
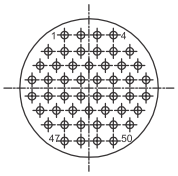
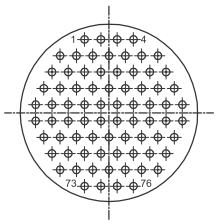
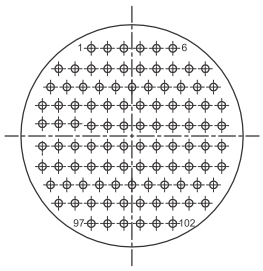




| Connector Part No. | D* Thread | D1* Thread | øD2* | øD3,Max | ød | L MAX. |
|---|---|---|---|---|---|---|
| MP1 - 10 -5 - B | M10X0.75 | | 7.9 | 14.0 | 6.0 | 36.0 |
| MP1 - 10 - 6 - B | | | | | | |
| MP1 - 19 - 5 - B | M12X0.75 | | 9.7 | 16.0 | 8.0 | 38.0 |
| MP1 - 19 - 6 - B | | | | | | |
| MP1 - 30 - 5 - B | M14X0.75 | | 11.7 | 18.0 | 9.0 | 41.0 |
| MP1 - 30 - 6 - B | | | | | | |
| MP1 - 50 - 5 - B | M18X0.75 | M18X1 | 15.2 | 22.5 | 11.0 | 43.0 |
| MP1 - 50 - 6 - B | | | | | | |
| MP1 - 76 - 5 - B | M22X0.75 | M22x1 | 19.25 | 26.5 | 13.0 | 45.0 |
| MP1 - 76 - 6 - B | | | | | | |
| MP1 - 102 - 5 - B | M27X0.75 | M27x1 | 23.7 | 31.5 | 16.0 | 48.0 |
| MP1 - 102 - 6 - B | | | | | | |

ALL DIMENSIONS ARE IN MM

VIEW FOR SOCKET FROM THE MATING SIDE

## Contact Layout and Electro-Mechanical Parameters: Table -1

| Conventional shellsize | Contact Layout | Number of contacts | Operating current per contact, A | Maximum current load capability, A | |
|---|---|---|---|---|---|
| | | | | per contact | total per connector |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 10 |  | 10 | 0.5 | 3 | 5 |
| 12 |  | 19 | 0.5 | 3 | 9.5 |
| 14 |  | 30 | 0.5 | 3 | 15 |
| 18 |  | 50 | 0.5 | 3 | 25 |
| 22 |  | 76 | 0.5 | 3 | 38 |
| 27 |  | 102 | 0.5 | 3 | 51 |

## CONNECTOR DESIGNATION & ORDERING INFORMATION

| | | | | | |
|---|---|---|---|---|---|
| English | MR1 | - 10 | -5 | V | |
| Russian | MP1 | - 10 | -5 | B | AO |

Series

Number of Contacts
(10, 19, 30, 50, 76, 102)

Connector Type:

1. fixed male, threaded coupling, silver plated contact
2. fixed male, threaded coupling, gold plated contact
3. fixed male, cut-in mating, silver plated contact
4. fixed male, cut-in mating gold plated contact
5 .free female, threaded coupling, silver plated contact
6. free female, threaded coupling, gold plated contact
7. free female, cut-in mating with silver plated contact
8. fixed female cut-in mating with gold plated contact

Designed for all climatic conditions

Anodic Oxidation

## Technical Data

| | |
|---|---|
| A) Contact resistance | :- ≤10 m Ohms |
| B) Insulation resistance under normal climatic conditions | :-≥1000 M Ohms |
| C) Current capability | :- SEE TABLE 1 |
| D) Operating Voltage | :- 150 V peak |
| E) Contact Mating Diameter | :- Ø0.60 mm |
| F) Number of mate-unmate operation | :- 250 |

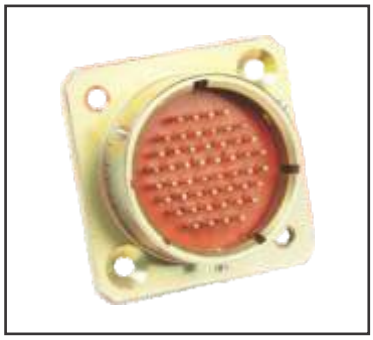
G) Material

| | |
|---|---|
| 1. Insulator | :- Hard Dielectric |
| 2. Socket contact | :- Beryllium copper |
| 3. Pin contact | :- Brass |
| 4. Shell | :- Aluminium Alloy |
| 5. Gasket | :- Silicon Rubber |

H) Finish

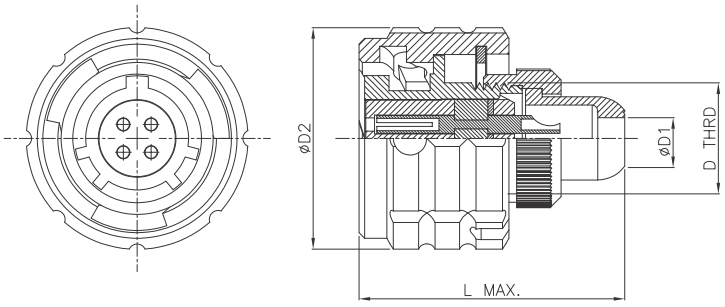
| | |
|---|---|
| a. Contact | :- Silver/Gold Plated |
| b. Shell | :- Cadmium Plated with Olive Drab Passivation or Anodic Oxidation |

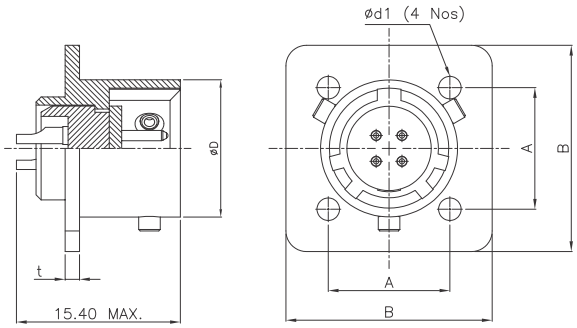
## ОНЦ-БС1 SERIES (ONTS-BS1)



ONTS-BS1 Socket Connector

ONTS-BS1 Plug Connector




| SHELL SIZE | D THRD | øD1 | øD2 | L MAX. |
|---|---|---|---|---|
| 10 | M10X0.75 | 4.5 | 20 | 30 |
| 12 | M12X0.75 | 6.0 | 21 | 31 |
| 14 | M14X0.75 | 7.0 | 24 | 32 |
| 18 | M18X1.00 | 9.2 | 27 | 33 |
| 22 | M22X1.00 | 11.0 | 31 | 34 |
| 27 | M27X1.00 | 13.0 | 36 | 36 |

| SHELL SIZE | øD | ød1 | A | B | t |
|---|---|---|---|---|---|
| 10 | 13.3 | 2.2 | 11.8 | 20 | 1.4 |
| 12 | 14.8 | 2.2 | 13.2 | 21 | 1.4 |
| 14 | 16.8 | 2.2 | 15.0 | 24 | 1.4 |
| 18 | 20.0 | 2.2 | 18.0 | 27 | 1.4 |
| 22 | 24.0 | 2.7 | 21.5 | 31 | 1.8 |
| 27 | 29.0 | 3.2 | 26.0 | 36 | 2.0 |

ALL DIMENSIONS ARE IN MM

# Connector Designation And Ordering Information

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Russian | ОНЦ-БС | 1(2) | -10/ | 10- | В(Р) | 1(12) | 1(2-20) | В |
| English | ONTS-BS | 1(2) | -10/ | 10- | V(R) | 1(12) | 1(2-20) | V |

Series

Contact Plating
1- Silver
2- Gold

Number of Contact

Conventional Shell Size

Connector Type:
V- male, R- female

Design :
1- Fixed part without outer shell
12- cable half with unshielded straight outer shell

Multipositional polarization

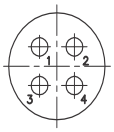
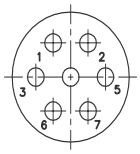
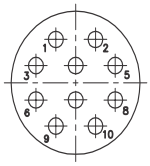
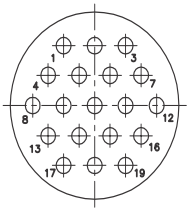
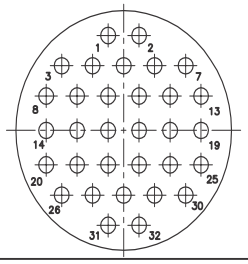
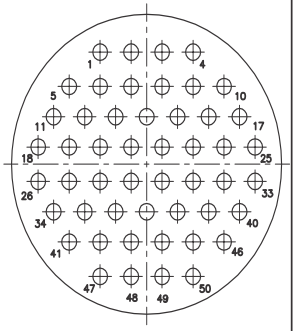
All climatic condition design

## Technical Data

| | |
|---|---|
| A) Operating Temperature | :- -55°c to +125°c |
| B) Operating Voltage (at sea level) | :- 500 V AC (rms) Max |
| C) Operating Current | :- 7A |
| Contact Dia | :- 1.00 mm |
| D) Insulation Resistance | :- ≥1000 M ohms (Minimum) |
| E) Contact Resistance | :- ≤5 m ohms |
| F) Material | |
| 1. Insulator | :- Hard Dielectric |
| 2. Socket contact | :- Beryllium copper |
| 3. Pin contact | :- Brass |
| 4. Shell/Nut | :- Aluminium Alloy |
| 5. Gasket | :- Silicon Rubber |
| G) Finish | |
| a. Contact | :- Silver/Gold Plated |
| b. Shell | :- Cadmium Plated with Yellow Passivation or Anodic Oxidation |

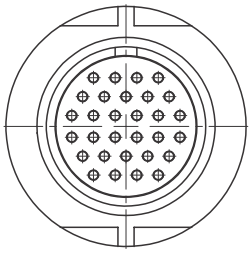
VIEW FOR SOCKET FROM THE MATING SIDE

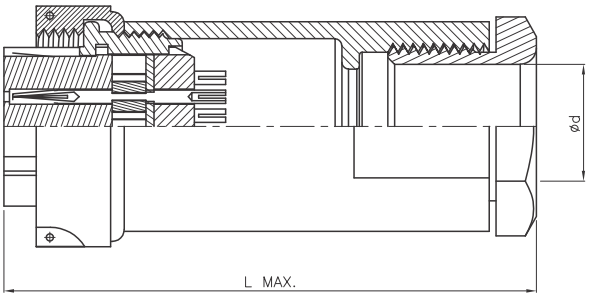
## Contact Layout And Electro-Mechanical Parameters: Table-1

| Conventional shellsize | Contact Layout | Contact Diameter in mm | Numbers of contacts for measuring the over heat temperature. | Total No. of Contact | Current Load, A max | | | Separation force of connector N(kgf) | Operational Voltage (amplitude value) V, max | | Rotation torque of shell in N–m (kgf–m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Total current load on connector | Max. operating current on single contact | operating current on each contact | | In normal climatic condition | At low atmospheric pressure | |
| 10 |  | 1.0 | ANY | 4 | 15 | 7 | 3.7 | 21.6(2.2) | 250 | 150 | 39.2 (4)* |
| 12 |  | | 4 | 7 | 22 | | 3.1 | 36.8(3.75) | | | 58.4 (6)* |
| 14 |  | | 4(7) | 10 | 30 | | 3 | 53(5.4) | | | 76 (8)* |
| 18 |  | | 10 | 19 | 40 | | 2.1 | 103(10.5) | | | 98 (10) |
| 22 |  | | 16(17) | 32 | 60 | | 1.8 | 170(17.4) | | | 127 (13)* |
| 27 |  | | 22(30) | 50 | 75 | | 1.5 | 265(27) | | | 147 (15)* |

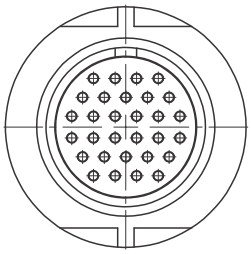
## СНЦ 13, 14 SERIES (SNTS13, 14)

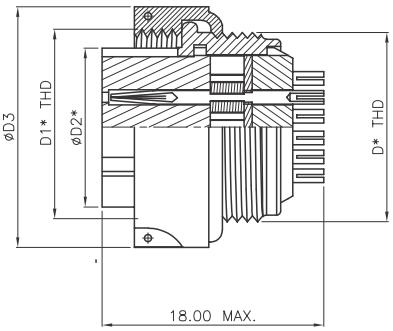
### SNTS-13 Socket Connector With Accessories






### SNTS-13 Socket Connector Without Accessories

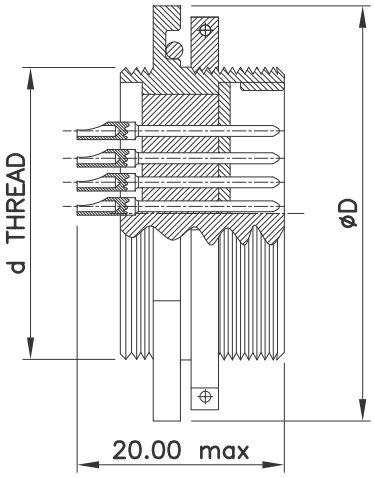





| SHELL SIZE | D* Thread | D1* Thread | øD2* | øD3 | ød | L MAX. |
|---|---|---|---|---|---|---|
| 10 | M10X0.75 | | 7.9 | 14.0 | 6.0 | 36.0 |
| 12 | M12X0.75 | | 9.7 | 16.0 | 8.0 | 38.0 |
| 14 | M14X0.75 | | 11.7 | 18.0 | 9.0 | 41.0 |
| 18 | M18X0.75 | M18X1 | 15.2 | 22.5 | 11.0 | 43.0 |
| 22 | M22X0.75 | M22x1 | 19.25 | 26.5 | 13.0 | 45.0 |
| 27 | M27X0.75 | M27x1 | 23.7 | 31.5 | 16.0 | 48.0 |

ALL DIMENSIONS ARE IN MM

## SNTS-14 PLUG CONNECTOR




| Conventional Shell Size | øD | D1 THREAD |
|---|---|---|
| 10 | 22 | M10X0.75 |
| 12 | 24 | M12X0.75 |
| 14 | 25 | M14X0.75 |
| 18 | 29 | M18X0.75 |
| 22 | 33 | M22X0.75 |
| 27 | 38 | M27X0.75 |

## Connector Designation & Ordering Information

| | | | | | | |
|---|---|---|---|---|---|---|
| Russian | СНЦ13,14 | 10 | В(Р) | 1(2,6) | а(б,в,г,д,е) | В |
| English | SNTS13, 14 | 10 | V(R) | 1(2,6) | a(b,v,g,d,e) | V |

Series

Number of contacts
(10, 19, 30, 50, 76, 102)

V = Male contact
R = Female Contact

Connector types :-
1 - fixed male connector without outer shell
2 - Fixed male with straight outer shell
3 - Female connector with straight - type outer shell

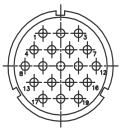
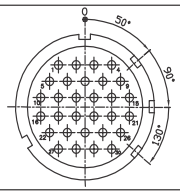
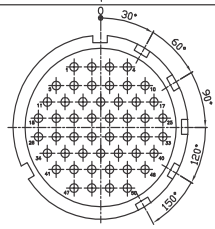
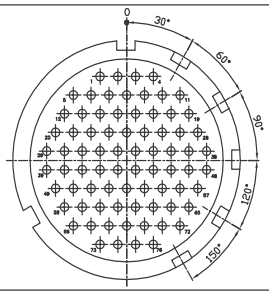
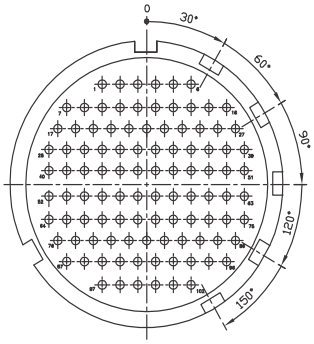
Varient of angled position of polarization keys on insulators

All climatic conditions

ALL DIMENSIONS ARE IN MM

VIEW FOR SOCKET FROM THE MATING SIDE

Contact Layout And Electro-Mechanical Parameters: Table -1

| Conventional shell size | Contact Layout | Contact Diameter in mm | Total No. of Contacts | Quantity of Contacts Loaded by Max. Current | Number of Contacts Loaded by Max. Current | Numbers of Contacts for measuring the temp. of overheating | Operating current to each contact | Max. current to the single contact | To each of the remaining contact with the peak load on the single contact | Mx. summary current load on the connector | Partition force of connectors. N(Kgf) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 |  | 0.6 | 10 | 4 | 1,5,6,10 | 4 (7) | 1 | 2 | 0.3 | 10 | 19,6(2) |
| 12 |  | | 19 | 6 | 1,3,8,12,17,19 | 10 (14) | 1.05 | | 0.6 | 20 | 39.2 (4) |
| 14 |  | | 30 | 7 | 1,4,10,15,22 26,28 | 12 (13) | 1 | | 0.7 | 30 | 58.8(6) |
| 18 |  | | 50 | 8 | 1,4,11,17,34,40 47,50 | 21 (22) | 0.8 | | 0.57 | 40 | 88.2(9) |
| 22 |  | | 76 | 9 | 5,11,20,28,39.48,58,65, , 74 | 33 (34) | 0.72 | | 0.55 | 55 | 117,6(12) |
| 27 |  | | 102 | 10 | 16,17,27,40,51,64,75,87,96 | 46 (47) | 0.78 | | 0.65 | 60 | 147(15) |

TECHNICAL DATA:

| | |
|---|---|
| a) Contact resistance | 70 m Ohms Max |
| b) Insulation resistance under normal climatic conditions | ⩾5000 M Ohms |
| c) Contact dia | 0.60 mm |
| d) Operating voltage | 140 V peak |
| e) Helium Leak rate | $1.32 \times 10^{-10}$ Std. cc/sec at 3bar pressure. (SNTS 14 series connectors) |

A) Material

| | |
|---|---|
| 1. Insulator | : Hard Dielectric for Socket and Glass for Pin |
| 2. Socket contact | : Beryllium copper |
| 3. Pin contact | : Alloy-52 |
| 4. Plug Shell | : Aluminium Alloy |
| 5. Receptacle Shell | : Stainless steel |
| 6. Gasket | : Silicon Rubber |

B) Finish

| | |
|---|---|
| 1. Pin Contact | : Nickel |
| 2. Socket Contact | : Gold |
| 3. Receptacle Shell | : NIckel |
| 4. Plug Shell | : Cadmium Plated with Yellow Passivation or Anodic Oxidation |

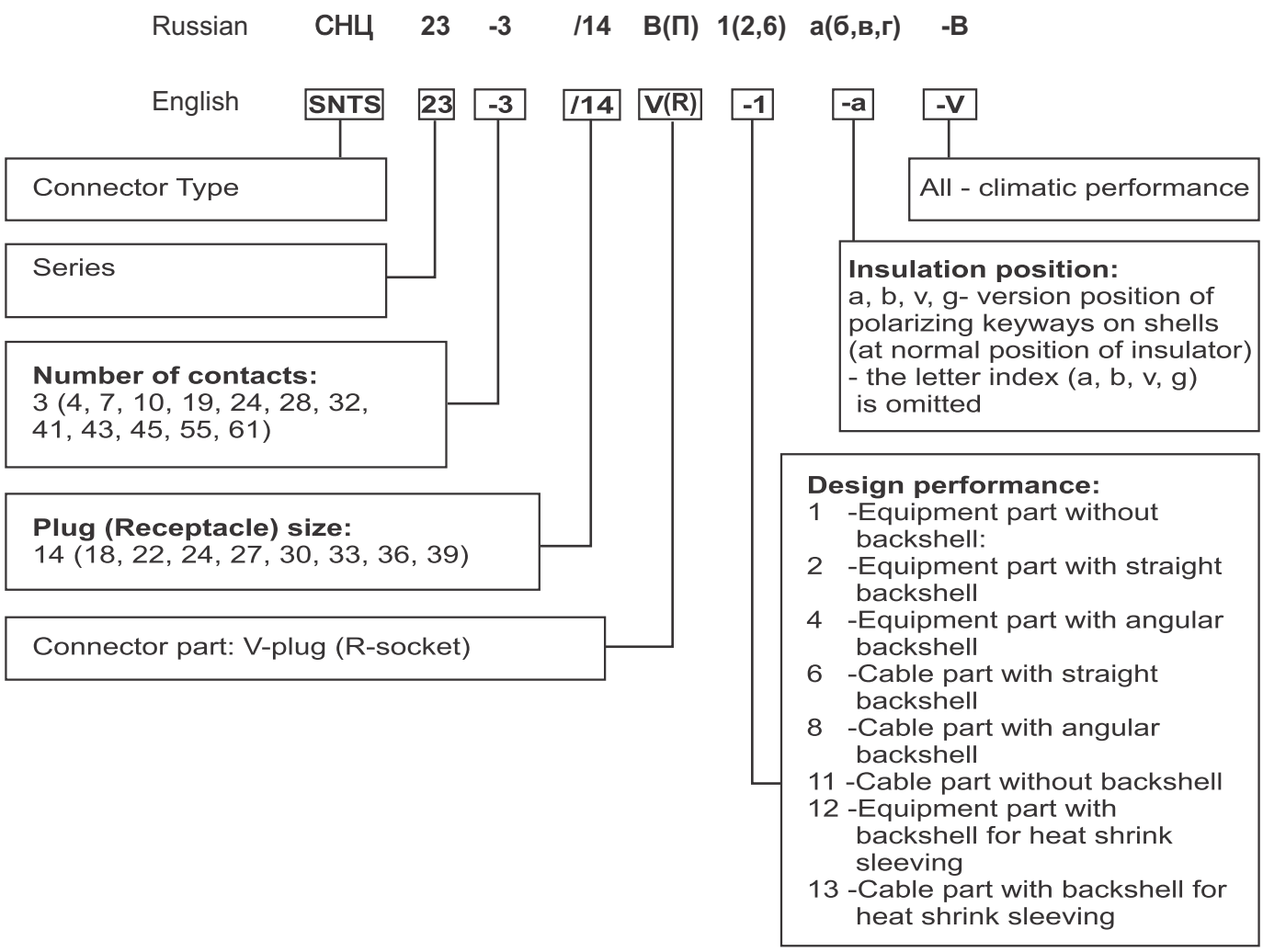
SNTS 23 Series

These connectors are multi-positional having 5 key positions with different insert orientations. They are field serviceable having crimp contacts and are intended for use in electrical circuits of direct, alternating (3MHz max) and pulse currents at voltages up to 700V max. The Plugs and receptacles are manufactured without backshells, with straight backshells, with angular backshells or with backshells for heatshrink sleeving.

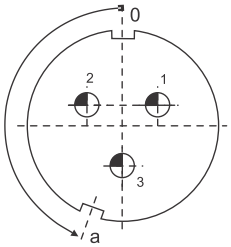
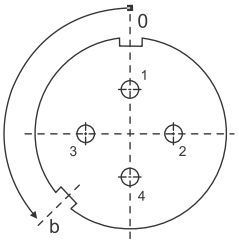
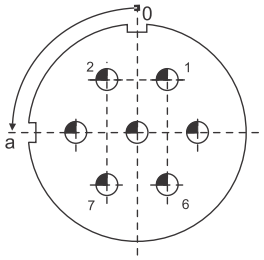
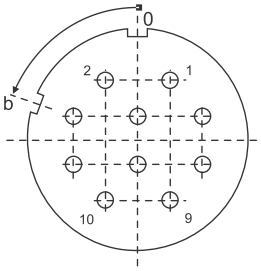
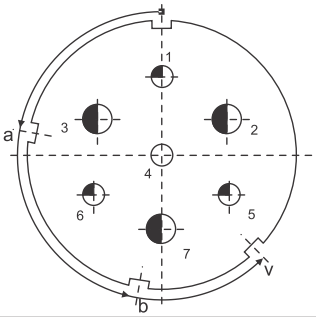
## Technical Characteristics

| | | |
|---|---|---|
| 1. Contact resistance: | contact dia. 1.0mm<br>contact dia. 1.5mm<br>contact dia. 2.0mm | 4.0m Ohms max<br>2.5m Ohms max<br>1.6m Ohms max |
| 2. Insulation resistance: | | 5000M Ohms min |
| 3. Max. operating current per each contact: | contact dia. 1.0mm<br>contact dia. 1.5mm<br>contact dia. 2.0mm | 3.6A-9.5A<br>90A-15A<br>14 A |
| 4. Max. current per single contact: | contact dia. 1.0mm<br>contact dia. 1.5mm<br>contact dia. 2.0mm | 11.0A<br>20.0A<br>35.0A |
| 9. Max. operating voltage of direct current or amplitude value of voltage of alternate current: | SNTS23-3/14, 4/14, 7/22,19/24, 32/33, 43/36, 45/39<br>SNTS23-7/18,10/22, 28/27, 24/30<br>SNTS23-10/18, 19/22, 32/27,19/27, 41/30, 55/33, 61/36 | 700v<br>500v<br>400v |
| 6. Contact plating | Gold/Silver | |

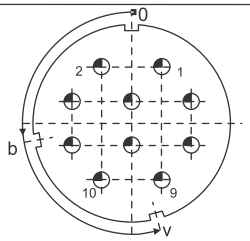
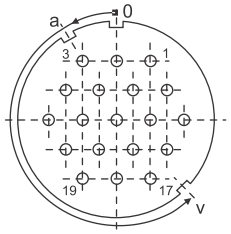
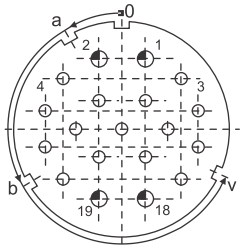
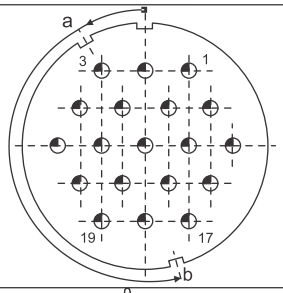
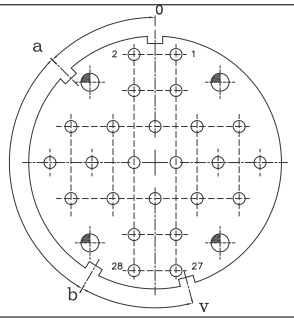
ORDERING INFORMATION



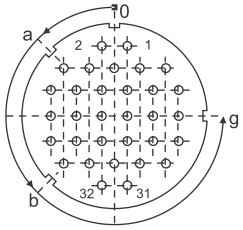
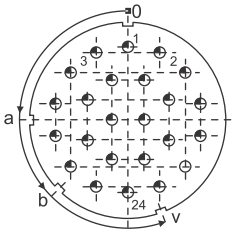
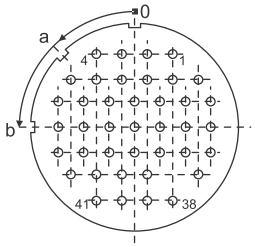
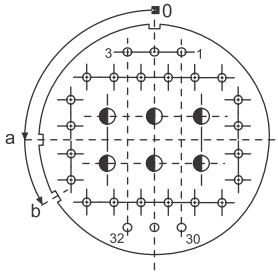
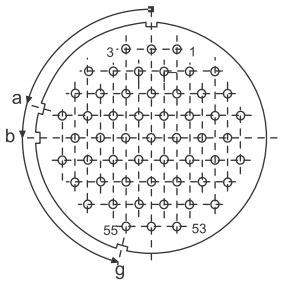
## CONTACT LAYOUT AND ELECTRO-MECHANICAL PARAMETERS

| Plug (Receptacle) size | Contact arrangement in insulation as viewed from mounting face of receptacles | Designation of contact | Contact diameter, mm | Number of contacts | Rotation angle of insulator in relation to normal position (in degree) for position | | | | | Operating current per each contact, A | Max. permissible short -term current per contact, A |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Normal position | a | b | v | g | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 14 |  | ⊕ | 1.5 | 3 | 0 | 160 | - | - | - | 15,0 | 30,0 |
| |  | ⊕ | 1.0 | 4 | 0 | - | 135 | - | - | 9,5 | 19,0 |
| 18 |  | ⊕ | 1.5 | 7 | 0 | 90 | - | - | - | 12,0 | 24,0 |
| |  | ⊕ | 1.0 | 10 | 0 | - | 70 | - | - | 7,5 | 15,0 |
| 22 |  | ⊕ | 1.5 | 4 | 0 | 80 | 170 | 225 | - | 9,0 | 18,0 |
| | | ⊕ | 2,0 | 3 | | | | | | 9,0 | 18,0 |

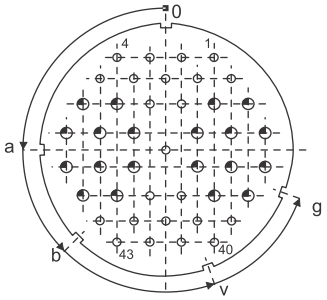
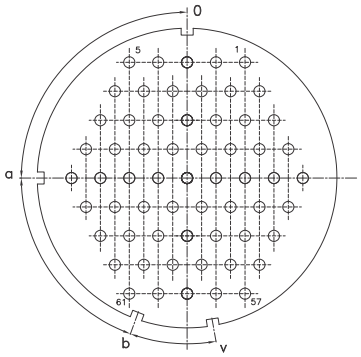
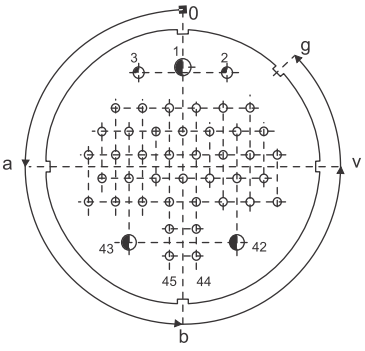
## CONTACT LAYOUT AND ELECTRO-MECHANICAL PARAMETERS

| Plug (Receptacle) size | Contact arrangement in insulation as viewed from mounting face of receptacles | Designation of contact | Contact diameter, mm | Number of contacts | Rotation angle of insulator in relation to normal position (in degree) for position | | | | | Operating current per each contact, A | Max. permissible short -term current per contact, A |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Normal position | a | b | v | g | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 22 |  | ⊕ | 1.5 | 10 | 0 | - | 100 | 195 | - | 9,0 | 18,0 |
| |  | ⊕ | 1.0 | 19 | 0 | 30 | - | 225 | - | 5,0 | 10,0 |
| 24 |  | ⊕ | 1.0 | 15 | 0 | 30 | 120 | 245 | - | 5,0 | 10,0 |
| | | ⊕ | 1.5 | 4 | | | | | | 9,0 | 18,0 |
| 27 |  | ⊕ | 1.5 | 19 | 0 | 30 | 195 | - | - | 9,0 | 18,0 |
| |  | ⊕ | 1.0 | 24 | 0 | 45 | 150 | 195 | - | 5,0 | 10,0 |
| | | ⊕ | 1,5 | 4 | | | | | | 9,0 | 18,0 |

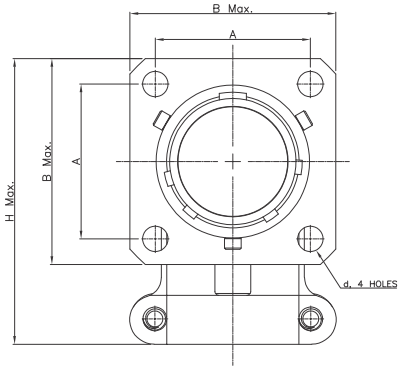
## CONTACT LAYOUT AND ELECTRO-MECHANICAL PARAMETERS

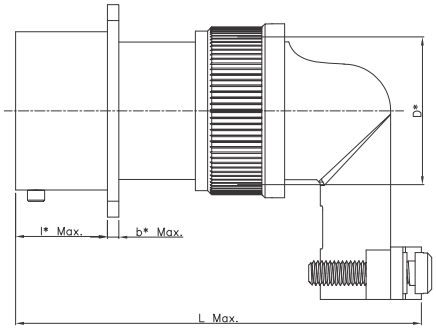
| Plug (Receptacle) size | Contact arrangement in insulation as viewed from mounting face of receptacles | Designation of contact | Contact diameter, mm | Number of contacts | Rotation angle of insulator in relation to normal position (in degree) for position | | | | | Operating current per each contact, A | Max. permissible short -term current per contact, A |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Normal position | a | b | v | g | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 27 |  | ⊕ | 1.0 | 32 | 0 | 45 | 135 | - | 270 | 5,0 | 10,0 |
| 30 |  | ⊕ | 1.5 | 24 | 0 | 90 | 135 | 200 | - | 9,0 | 18,0 |
| |  | ⊕ | 1.0 | 41 | 0 | 45 | 90 | - | - | 5,0 | 10,0 |
| 33 |  | ⊕ | 1.0 | 26 | 0 | 90 | 120 | - | - | 5,0 | 10,0 |
| | | ⊕ | 2.0 | 6 | | | | | | 14,0 | 28,0 |
| |  | ⊕ | 1.0 | 55 | 0 | 75 | 90 | - | 165 | 5,0 | 10,0 |

## CONTACT LAYOUT AND ELECTRO-MECHANICAL PARAMETERS

| Plug (Receptacle) size | Contact arrangement in insulation as viewed from mounting face of receptacles | Designation of contact | Contact diameter, mm | Number of contacts | Rotation angle of insulator in relation to normal position (in degree) for position | | | | | Operating current per each contact, A | Max. permissible short -term current per contact, A |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Normal position | a | b | v | g | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 36 |  | ⊕ | 1.0 | 23 | 0 | 90 | 135 | 200 | 250 | 5,0 | 10,0 |
| | | ⊕ | 1.5 | 20 | | | | | | 9,0 | 18 ,0 |
| |  | ⊕ | 1.0 | 61 | 0 | 90 | 160 | 190 | - | 5,0 | 10,0 |
| 39 |  | ⊕ | 1.0 | 40 | 0 | 90 | 180 | 270 | 315 | 5,0 | 10,0 |
| | | ⊕ | 1.5 | 2 | | | | | | 9,0 | 18,0 |
| | | ⊕ | 2.0 | 3 | | | | | | 14,0 | 28,0 |

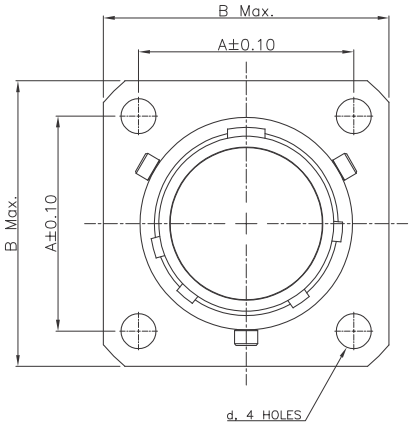
## APPEARANCE, OVERALL, MOUNTING AND ATTACHING DIMENSIONS
## EQUIPMENT PLUG (RECEPTACLE) WITH ANGULAR BACKSHELL

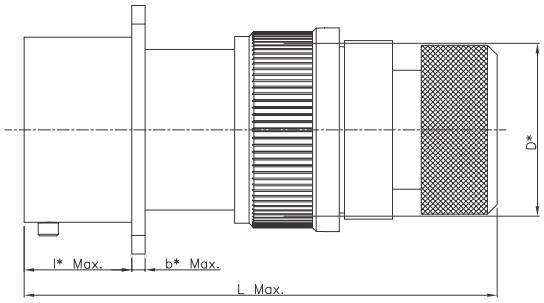



| SL No. | Connector Part No. | Dimensions, mm | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | A | B Max. | D* | d | l* Max. | b* Max. | H Max. | L Max. |
| 1 | A SNTS23-4/14V(R)-4-V | 16.5 | 21.7 | M14x0.5 | 2.2 | 11.3 | 1.4 | 33 | 48 |
| 2 | A SNTS23-3/14V(R)-4-V | | | | | | | | |
| 3 | A SNTS23-10/18V(R)-4-V | 19.5 | 25.9 | M18x1 | 3.2 | | | 36 | 51 |
| 4 | A SNTS23-7/18V(R)-4-V | | | | | | | | |
| 5 | A SNTS23-19/22V(R)-4-V | 23 | 29.4 | M22x1 | | | 1.8 | 40 | 55 |
| 6 | A SNTS23-10/22V(R)-4-V | | | | | | | | |
| 7 | A SNTS23-7/22V(R)-4-V | | | | | | | | |
| 8 | A SNTS23-19/24V(R)-4-V | 25 | 31.4 | M24x1 | | | | 42 | 57 |
| 9 | A SNTS23-32/27V(R)-4-V | 27 | 33.4 | M27x1 | | | | 45 | 60 |
| 10 | A SNTS23-19/27V(R)-4-V | | | | | | | | |
| 11 | A SNTS23-28/27V(R)-4-V | | | | | | | | |
| 12 | A SNTS23-41/30V(R)-4-V | 31 | 37.8 | M30x1 | | | | 49 | 63 |
| 13 | A SNTS23-24/30V(R)-4-V | | | | | | | | |
| 14 | A SNTS23-55/33V(R)-4-V | 34 | 41.5 | M33x1 | | 14.5 | 2 | 52 | 68 |
| 15 | A SNTS23-32/33V(R)-4-V | | | | | | | | |
| 16 | A SNTS23-61/36V(R)-4-V | 36.5 | 44.5 | M36x1 | | 15.3 | | 55 | 70 |
| 17 | A SNTS23-43/36V(R)-4-V | | | | | | | | |
| 18 | A SNTS23-45/39V(R)-4-V | 40 | 46.4 | M39x1 | | | | 57 | 73 |

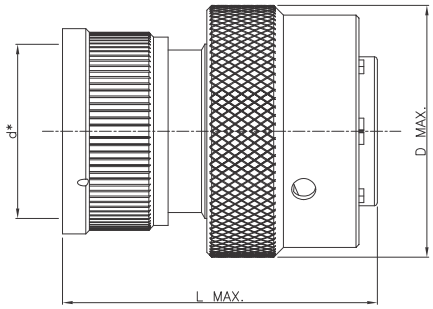
# EQUIPMENT PLUG (RECEPTACLE) WITH BACKSHELL FOR HEAT SHRINK SLEEVING



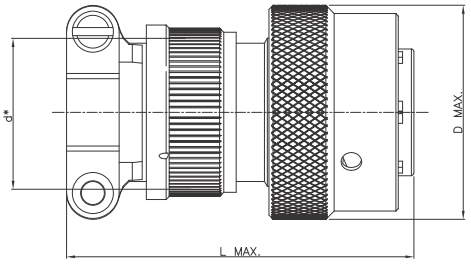

| SL No. | Connector Part No. | Dimensions, mm | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | A | B Max. | D* | d | l* Max. | b* Max. | L Max. |
| 1 | A SNTS23-4/14V(R)-12-V | 16.5 | 21.7 | M14x0.5 | 2.2 | 11.3 | 1.4 | 50 |
| 2 | A SNTS23-3/14V(R)-12-V | | | | | | | |
| 3 | A SNTS23-10/18V(R)-12-V | 19.5 | 25.9 | M18x1 | 3.2 | | | |
| 4 | A SNTS23-7/18V(R)-12-V | | | | | | | |
| 5 | A SNTS23-19/22V(R)-12-V | 23 | 29.4 | M22x1 | | | 1.8 | |
| 6 | A SNTS23-10/22V(R)-12-V | | | | | | | |
| 7 | A SNTS23-7/22V(R)-12-V | | | | | | | |
| 8 | A SNTS23-19/24V(R)-12-V | 25 | 31.4 | M24x1 | | | | |
| 9 | A SNTS23-32/27V(R)-12-V | 27 | 33.4 | M27x1 | | | | |
| 10 | A SNTS23-19/27V(R)-12-V | | | | | | | |
| 11 | A SNTS23-28/27V(R)-12-V | | | | | | | |
| 12 | A SNTS23-41/30V(R)-12-V | 31 | 37.8 | M30x1 | | | | |
| 13 | A SNTS23-24/30V(R)-12-V | | | | | | | |
| 14 | A SNTS23-55/33V(R)-12-V | 34 | 41.5 | M33x1 | | 14.5 | 2 | 51 |
| 15 | A SNTS23-32/33V(R)-12-V | | | | | | | |
| 16 | A SNTS23-61/36V(R)-12-V | 36.5 | 44.5 | M36x1 | | 15.3 | | |
| 17 | A SNTS23-43/36V(R)-12-V | | | | | | | |
| 18 | A SNTS23-45/39V(R)-12-V | 40 | 46.4 | M39x1 | | | | |

## CABLE PLUG (RECEPTACLE)



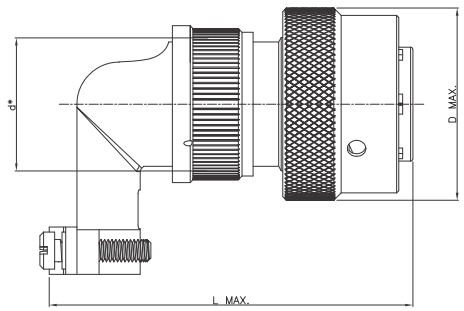

| SL. No. | Connector Part No. | Dimensions, mm | | |
|---|---|---|---|---|
| | | D Max. | d* | L* Max. |
| 1 | A SNTS23-4/14V(R)-11-V | 22 | M14x0.5 | 32 |
| 2 | A SNTS23-3/14V(R)-11-V | | | |
| 3 | A SNTS23-10/18V(R)-11-V | 26 | M18x1 | |
| 4 | A SNTS23-7/18V(R)-11-V | | | |
| 5 | A SNTS23-19/22V(R)-11-V | 29.5 | M22x1 | |
| 6 | A SNTS23-10/22V(R)-11-V | | | |
| 7 | A SNTS23-7/22V(R)-11-V | | | |
| 8 | A SNTS23-19/24V(R)-11-V | 32 | M24x1 | |
| 9 | A SNTS23-32/27V(R)-11-V | 35 | M27x1 | |
| 10 | A SNTS23-19/27V(R)-11-V | | | |
| 11 | A SNTS23-28/27V(R)-11-V | | | |
| 12 | A SNTS23-41/30V(R)-11-V | 38 | M30x1 | |
| 13 | A SNTS23-24/30V(R)-11-V | | | |
| 14 | A SNTS23-55/33V(R)-11-V | 42 | M33x1 | 34 |
| 15 | A SNTS23-32/33V(R)-11-V | | | |
| 16 | A SNTS23-61/36V(R)-11-V | 46 | M36x1 | |
| 17 | A SNTS23-43/36V(R)-11-V | | | |
| 18 | A SNTS23-45/39V(R)-11-V | 49 | M39x1 | |

## CABLE PLUG (RECEPTACLE) WITH STRAIGHT BACKSHELL



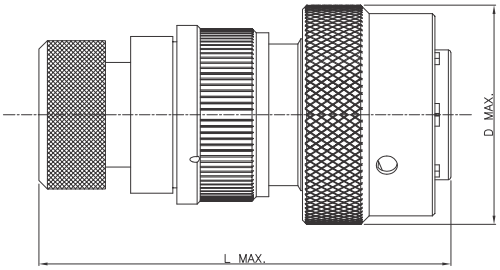

| SL. No. | Connector Part No. | Dimensions, mm | | |
|---|---|---|---|---|
| | | D Max. | d* | L* Max. |
| 1 | A SNTS23-4/14V(R)-6-V | 22 | M14x0.5 | 42 |
| 2 | A SNTS23-3/14V(R)-6-V | | | |
| 3 | A SNTS23-10/18V(R)-6-V | 26 | M18x1 | |
| 4 | A SNTS23-7/18V(R)-6-V | | | |
| 5 | A SNTS23-19/22V(R)-6-V | 29.5 | M22x1 | 48 |
| 6 | A SNTS23-10/22V(R)-6-V | | | |
| 7 | A SNTS23-7/22V(R)-6-V | | | |
| 8 | A SNTS23-19/24V(R)-6-V | 32 | M24x1 | |
| 9 | A SNTS23-32/27V(R)-6-V | 35 | M27x1 | |
| 10 | A SNTS23-19/27V(R)-6-V | | | |
| 11 | A SNTS23-28/27V(R)-6-V | | | |
| 12 | A SNTS23-41/30V(R)-6-V | 38 | M30x1 | |
| 13 | A SNTS23-24/30V(R)-6-V | | | |
| 14 | A SNTS23-55/33V(R)-6-V | 42 | M33x1 | 50 |
| 15 | A SNTS23-32/33V(R)-6-V | | | |
| 16 | A SNTS23-61/36V(R)-6-V | 46 | M36x1 | |
| 17 | A SNTS23-43/36V(R)-6-V | | | |
| 18 | A SNTS23-45/39V(R)-6-V | 49 | M39x1 | |

## CABLE PLUG (RECEPTACLE) WITH ANGULAR BACKSHELL



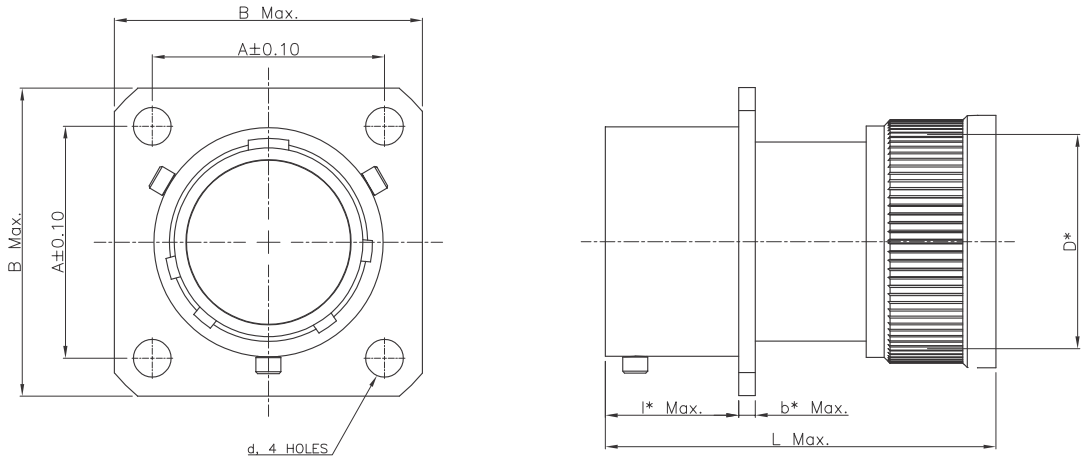

| SL. No. | Connector Part No. | Dimensions, mm | | | |
|---|---|---|---|---|---|
| | | D Max. | d* | H Max | L* Max. |
| 1 | A SNTS23-4/14V(R)-8-V | 22 | M14x0.5 | 32 | 48 |
| 2 | A SNTS23-3/14V(R)-8-V | | | | |
| 3 | A SNTS23-10/18V(R)-8-V | 26 | M18x1 | 36 | 51 |
| 4 | A SNTS23-7/18V(R)-8-V | | | | |
| 5 | A SNTS23-19/22V(R)-8-V | 29.5 | M22x1 | 40 | 55 |
| 6 | A SNTS23-10/22V(R)-8-V | | | | |
| 7 | A SNTS23-7/22V(R)-8-V | | | | |
| 8 | A SNTS23-19/24V(R)-8-V | 32 | M24x1 | 42 | 57 |
| 9 | A SNTS23-32/27V(R)-8-V | 35 | M27x1 | 45 | 60 |
| 10 | A SNTS23-19/27V(R)-8-V | | | | |
| 11 | A SNTS23-28/27V(R)-8-V | | | | |
| 12 | A SNTS23-41/30V(R)-8-V | 38 | M30x1 | 50 | 63 |
| 13 | A SNTS23-24/30V(R)-8-V | | | | |
| 14 | A SNTS23-55/33V(R)-8-V | 42 | M33x1 | 53 | 68 |
| 15 | A SNTS23-32/33V(R)-8-V | | | | |
| 16 | A SNTS23-61/36V(R)-8-V | 46 | M36x1 | 57 | 70 |
| 17 | A SNTS23-43/36V(R)-8-V | | | | |
| 18 | A SNTS23-45/39V(R)-8-V | 49 | M39x1 | 60 | 73 |

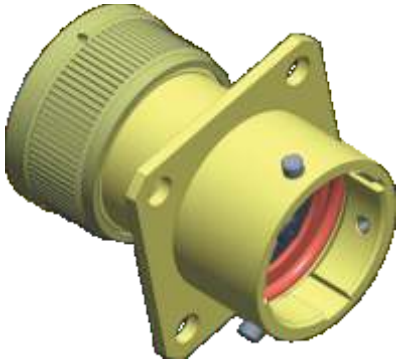
## CABLE PLUG (RECEPTACLE) WITH BACKSHELL FOR HEAT SLEEVING




| SL. No. | Connector Part No. | Dimensions, mm | | |
|---|---|---|---|---|
| | | D Max. | d* | L* Max. |
| 1 | A SNTS23-4/14V(R)-13-V | 22 | M14x0.5 | 50 |
| 2 | A SNTS23-3/14V(R)-13-V | | | |
| 3 | A SNTS23-10/18V(R)-13-V | 26 | M18x1 | |
| 4 | A SNTS23-7/18V(R)-13-V | | | |
| 5 | A SNTS23-19/22V(R)-13-V | 29.5 | M22x1 | |
| 6 | A SNTS23-10/22V(R)-13-V | | | |
| 7 | A SNTS23-7/22V(R)-13-V | | | |
| 8 | A SNTS23-19/24V(R)-13-V | 32 | M24x1 | |
| 9 | A SNTS23-32/27V(R)-13-V | 35 | M27x1 | |
| 10 | A SNTS23-19/27V(R)-13-V | | | |
| 11 | A SNTS23-28/27V(R)-13-V | | | |
| 12 | A SNTS23-41/30V(R)-13-V | 38 | M30x1 | |
| 13 | A SNTS23-24/30V(R)-13-V | | | |
| 14 | A SNTS23-55/33V(R)-13-V | 42 | M33x1 | 51 |
| 15 | A SNTS23-32/33V(R)-13-V | | | |
| 16 | A SNTS23-61/36V(R)-13-V | 46 | M36x1 | |
| 17 | A SNTS23-43/36V(R)-13-V | | | |
| 18 | A SNTS23-45/39V(R)-13-V | 49 | M39x1 | |

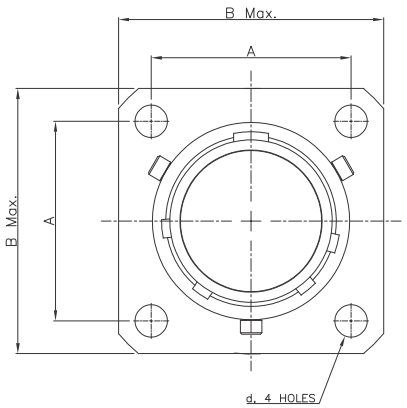
## EQUIPMENT PLUG (RECEPTACLE)

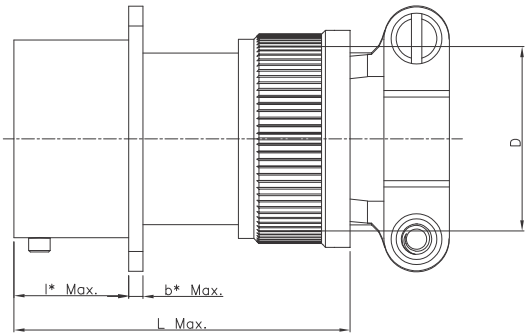


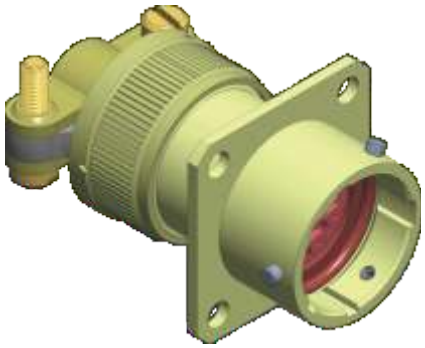



| SL No. | Connector Part No. | Dimensions, mm | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | A | B Max. | D* | d | l* Max. | b* Max. | L Max. |
| 1 | A SNTS23-4/14V(R)-1-V | 16.5 | 21.7 | M14x0.5 | 2.2 | 11.3 | 1.4 | 32 |
| 2 | A SNTS23-3/14V(R)-1-V | | | | | | | |
| 3 | A SNTS23-10/18V(R)-1-V | 19.5 | 25.9 | M18x1 | 3.2 | | | |
| 4 | A SNTS23-7/18V(R)-1-V | | | | | | | |
| 5 | A SNTS23-19/22V(R)-1-V | 23 | 29.4 | M22x1 | | | 1.8 | |
| 6 | A SNTS23-10/22V(R)-1-V | | | | | | | |
| 7 | A SNTS23-7/22V(R)-1-V | | | | | | | |
| 8 | A SNTS23-19/24V(R)-1-V | 25 | 31.4 | M24x1 | | | | |
| 9 | A SNTS23-32/27V(R)-1-V | 27 | 33.4 | M27x1 | | | | |
| 10 | A SNTS23-19/27V(R)-1-V | | | | | | | |
| 11 | A SNTS23-28/27V(R)-1-V | | | | | | | |
| 12 | A SNTS23-41/30V(R)-1-V | 31 | 37.8 | M30x1 | | | | |
| 13 | A SNTS23-24/30V(R)-1-V | | | | | | | |
| 14 | A SNTS23-55/33V(R)-1-V | 34 | 41.5 | M33x1 | | 14.5 | 2 | 33 |
| 15 | A SNTS23-32/33V(R)-1-V | | | | | | | |
| 16 | A SNTS23-61/36V(R)-1-V | 36.5 | 44.5 | M36x1 | | 15.3 | | |
| 17 | A SNTS23-43/36V(R)-1-V | | | | | | | |
| 18 | A SNTS23-45/39V(R)-1-V | 40 | 46.4 | M39x1 | | | | |

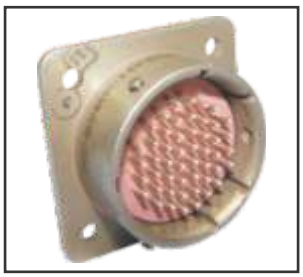
## EQUIPMENT PLUG (RECEPTACLE) WITH STRAIGHT BACKSHELL



| SL No. | Connector Part No. | Dimensions, mm | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | A | B Max. | D* | d | l* Max. | b* Max. | L Max. |
| 1 | A SNTS23-4/14V(R)-2-V | 16.5 | 21.7 | M14x0.5 | 2.2 | 11.3 | 1.4 | 42 |
| 2 | A SNTS23-3/14V(R)-2-V | | | | | | | |
| 3 | A SNTS23-10/18V(R)-2-V | 19.5 | 25.9 | M18x1 | 3.2 | | | |
| 4 | A SNTS23-7/18V(R)-2-V | | | | | | | |
| 5 | A SNTS23-19/22V(R)-2-V | 23 | 29.4 | M22x1 | | | 1.8 | 48 |
| 6 | A SNTS23-10/22V(R)-2-V | | | | | | | |
| 7 | A SNTS23-7/22V(R)-2-V | | | | | | | |
| 8 | A SNTS23-19/24V(R)-2-V | 25 | 31.4 | M24x1 | | | | |
| 9 | A SNTS23-32/27V(R)-2-V | 27 | 33.4 | M27x1 | | | | |
| 10 | A SNTS23-19/27V(R)-2-V | | | | | | | |
| 11 | A SNTS23-28/27V(R)-2-V | | | | | | | |
| 12 | A SNTS23-41/30V(R)-2-V | 31 | 37.8 | M30x1 | | | | |
| 13 | A SNTS23-24/30V(R)-2-V | | | | | | | |
| 14 | A SNTS23-55/33V(R)-2-V | 34 | 41.5 | M33x1 | | 14.5 | 2 | 50 |
| 15 | A SNTS23-32/33V(R)-2-V | | | | | | | |
| 16 | A SNTS23-61/36V(R)-2-V | 36.5 | 44.5 | M36x1 | | 15.3 | | |
| 17 | A SNTS23-43/36V(R)-2-V | | | | | | | |
| 18 | A SNTS23-45/39V(R)-2-V | 40 | 46.4 | M39x1 | | | | |



## SNTS 127 : (СНЦ-127)

The connectors have 5 key positions for proper mating. These are non-removable and have solder pockets for wiring. The connectors are intended for use in electrical circuits of direct, alternating (3MHz) and pulse currents at voltages up to 250V max. The Plugs have straight backshell. The receptacles are sealed and shielded.

### Technical Characteristics

| | |
|---|---|
| 1. Contact resistance | 5m Ohms max |
| 2. Insulation resistance | 5000M Ohms |
| 3. Contact dia | 1.00 mm |
| 4. Operating Current | 7A |
| 5. Shielding efficiency | 33db min. at 100 MHZ |
| | 22db min. at 100 MHZ |
| 6. Sealing | 104 Pa |
| 7. Contact plating | Gold/silver |
| 8. Number of matings | 250 |
| 9. Storage life | 15 years |

## ORDERING INFORMATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Russian | СНЦ 127 | -4 | /10 | В(Р) | П(1) | 1(2) | 7(8) | 1(2...20) | В |
| English | SNTS 127 | -4 | /10 | V(R) | P(1) | 1(2) | 7(8) | 1(2...20) | V |

Connector Type

**Number of contacts:**
4 (7,10,19,32,50)

**Conventional shell size:**
10 (12,14,18,22,27)

**Contact Type:**
V-Pin contact (plug)
R-Female contact (Socket)

**Mounting Type:**
P-Solder
1- Tail for point to point mounting)

**Contact plating:**
1- gold, 2 - Silver

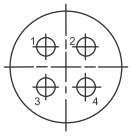
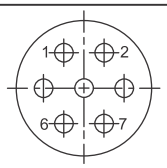
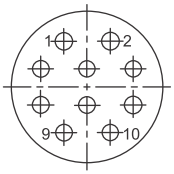
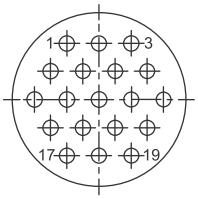
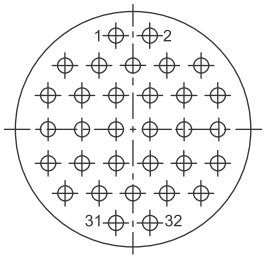
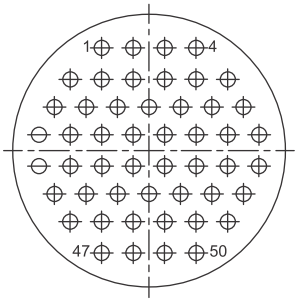
**Design:**
7 - Fixed shielded male without an outer shell
8- Free shielded female with a straight outer shell

Variant of angled position in polarization

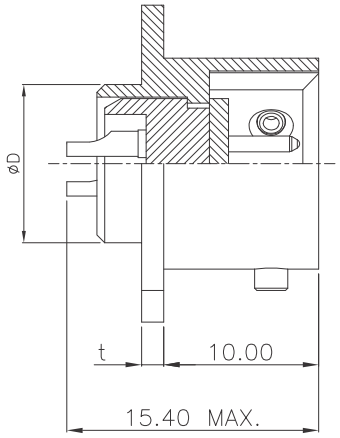
All climatic condition design

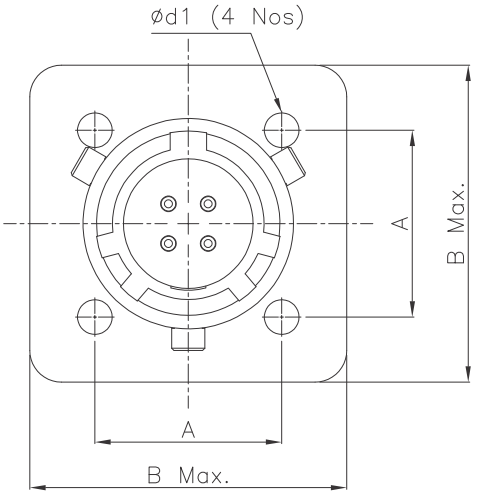
VIEW FOR SOCKET FROM THE MATING SIDE

CONTACT LAYOUT AND ELECTRO-MECHANICAL PARAMETERS

| Conventional shell size | Contact layout | Number of contacts pcs. | Operating current per each contact, A | max current per contact, A |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| 10 |  | 4 | 3.7 | 7 |
| 12 |  | 7 | 3.1 | |
| 14 |  | 10 | 3 | |
| 18 |  | 19 | 2.1 | |
| 22 |  | 32 | 1.8 | |
| 27 |  | 50 | 1.5 | |

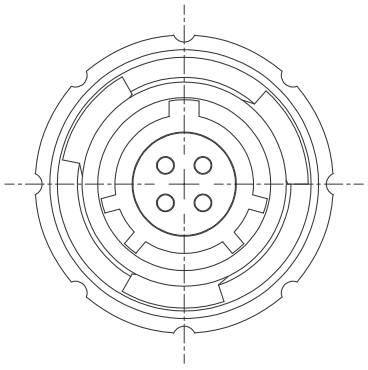
## PIN CONNECTORS OF SNTS 127 TYPE WITHOUT OUTER SHELL

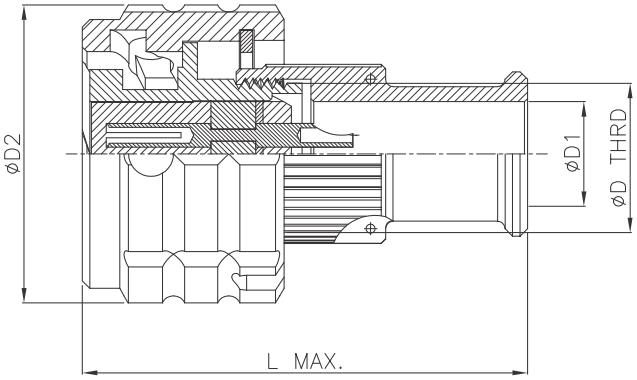



| SHELL SIZE | øD | ød1 | A | B MAX. | t |
|---|---|---|---|---|---|
| 10 | 10 | 2.2 | 11.8 | 20.1 | 1.4 |
| 12 | 12 | 2.2 | 13.2 | 21.1 | 1.4 |
| 14 | 14 | 2.2 | 15.0 | 24.1 | 1.4 |
| 18 | 18 | 2.2 | 18.0 | 27.1 | 1.4 |
| 22 | 22 | 2.7 | 21.5 | 31.1 | 1.8 |
| 27 | 27 | 3.2 | 26.0 | 36.1 | 2.0 |

## Socket Connectors Of SNTS 127 Type With Outer Shell






| SHELL SIZE | D THRD | øD1 | øD2 | L MAX. |
|---|---|---|---|---|
| 10 | M10X0.75 | 7 | 20 | 32.3 |
| 12 | M12X0.75 | 9 | 21 | 32.3 |
| 14 | M14X0.75 | 11 | 24 | 32.3 |
| 18 | M18X1.00 | 13 | 27 | 41 |
| 22 | M22X1.00 | 15 | 31 | 42 |
| 27 | M27X1.00 | 20 | 36 | 43 |

ALL DIMENSIONS ARE IN MM

| Joint Services Standard (JSS-5935-10) Pattern | Details | Amphenol India Series | Gost No. |
|---|---|---|---|
| CCTM-WP/R | Receptacle WP Series | SHR Series | GEO.364.107.TU |
| CCTM-WP/PS CCTM-WP/PA | Plug WP Series | SHR Series | GEO.364.107.TU |
| CCTM-2PMr/R | Receptacle 2 PMG & 2 PMGD Series | 2 RMG & 2 RMGD Series | GEO.364.126.TU GEO.364.140.TU |
| CCTM-2PM/PS CCTM-2PM/PA | Plug 2PM & 2PMD Series | 2RM & 2RMD Series | GEO.364.126.TU |
| CCTM-PC/PS CCTM-PC/R | Plug, PC Series Receptacle, PC Series | RS Series | ABO.364.047.TU |
| NA | Plug, 2PTT Series Receptacle, 2PTT Series | 2RTT Series | GEO.364.120.TU |
| NA | PPC 3, 4, 5 Series | RRS 3, 4, 5 Series | GEO.364.215.TU |
| NA | MP1 Series | MR1 Series | GEO.364.184.TU |
| NA | ОНЦ-БС1 Series | ONTS-BS1 Series | BRO.364.030.TU |
| NA | СНЦ 13,14 Series | SNTS- 13,14 Series | GEO.364.345.TU |
| NA | СНЦ 23 Series | SNTS 23 Series | GEO.364.241.TU |
| NA | СНЦ 127 Series | SNTS 127 Series | NKTSs. 434410.511.TU |