

# Amphenol

Heavy Duty RS 709 Metric Series  
Rev. 03 / 20



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# Amphenol



## Connectors Applications



## Certification & Qualification

Our 2RM, 2RMD & 2RMDT, SNTS23 series connectors are 'CEMILAC' (Centre for Military Airworthiness & Certification) approved for use on Russian Aircrafts, SU-30MKI, MIG-29. 2PM, 2PMД, PC, PPC3, 4,5, MP1, ОНЦ-BC1, 2PTT & ЧЦ13, 14 series connectors are qualified for the use on Missile (BrahMos).

# Introduction

The RS709 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.

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## 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
WPF (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

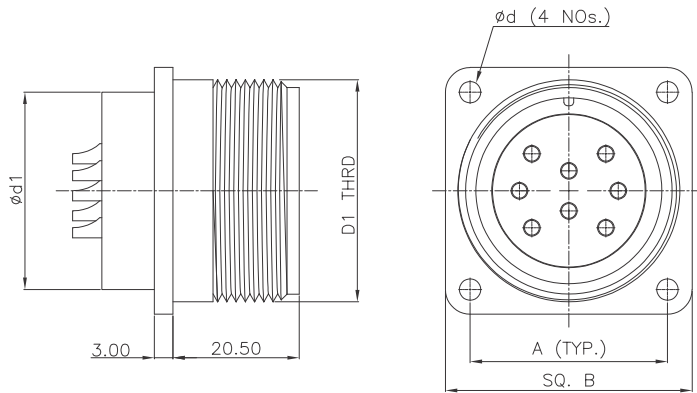


Receptacle with Straight Hood

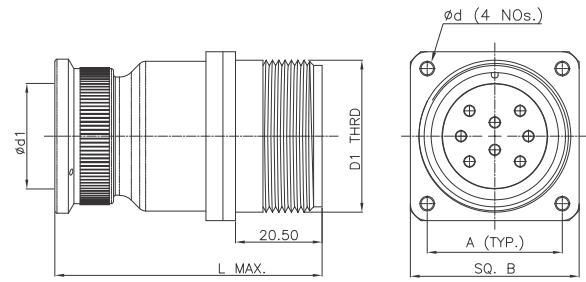
### Connector Designation & Ordering Information

RUSSIAN -->	<u>ШР</u>	<u>Г</u>	<u>20</u>	<u>П,У,ПК,СК</u>	<u>5</u>	<u>Э</u>	<u>Г(Ш)</u>	<u>10</u>	
ENGLISH -->	<u>SHR</u>	<u>G</u>	<u>20</u>	<u>P,U,PK,SK</u>	<u>5</u>	<u>E</u>	<u>G(SH)</u>	<u>10</u>	<u>HD</u>
	<p>For Sealed Connector applicable for Receptacle Connector only</p> <p>Shell Size: (12,16,20,28,32,36,40,48,55,60)</p> <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</p> <p>Number of contacts (Terminals)</p> <p>E- Screen Clamp (Not applicable for receptacle connector without accessories) N- Cable Clamp</p> <p>(SH)- for Pin Contact in Receptacle, Socket contact incase of Plug connector G-for Socket contact in Receptacle, Pin contact incase of Plug connector</p> <p>Arbitrary Number of contact set</p> <p>Connector with Hard Phenolic Insert (Connector with Neoprene Rubber connector if HD letter in marking is absent)</p>								

## RECEPTACLE ASSEMBLY WITHOUT ACCESSORIES



## RECEPTACLE ASSEMBLY WITH STRAIGHT HOOD & SCREEN CLAMP



Receptacle Pin Assembly  
Without Accessories

Receptacle Pin With Straight  
Hood & Screen Clamp



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

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

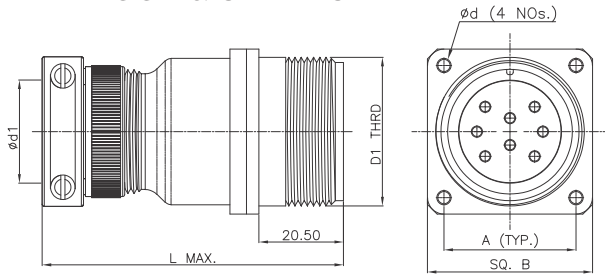
Receptacle Socket Assembly  
Without Accessories

Receptacle Socket With Straight  
Hood & Screen Clamp

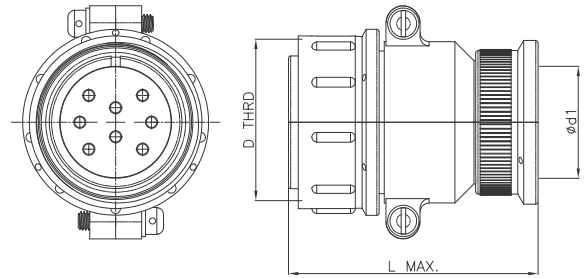




## RECEPTACLE WITH STRAIGHT HOOD & CABLE CLAMP



## PLUG WITH STRAIGHT SPLIT HOOD & SCREEN CLAMP



Receptacle Pin With Straight Hood & Cable Clamp

Plug Pin With Straight Split Hood & Screen 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

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

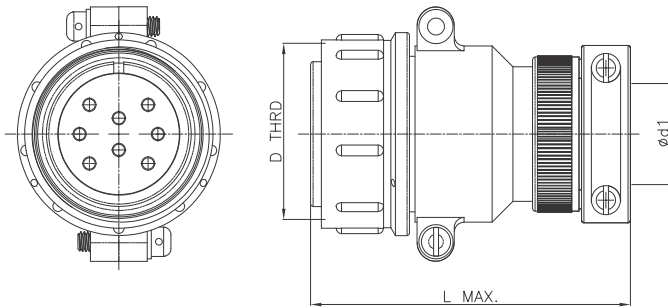
Receptacle Socket With Straight Hood & Cable Clamp

Plug Socket With Straight Split Hood & Screen Clamp

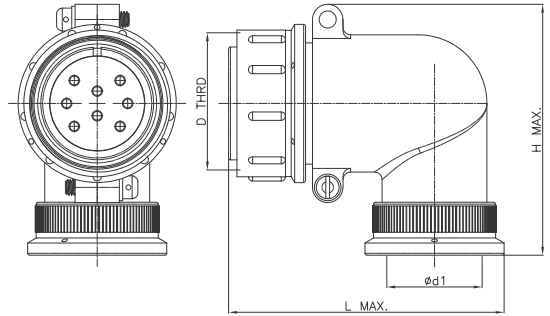




PLUG WITH STRAIGHT SPLIT HOODS & CABLE CLAMP



PLUG WITH ANGULAR SPLIT HOODS & SCREEN CLAMP



Plug Pin With Straight Split Hoods & Cable Clamp

Plug Pin With Angular Split Hoods & Screen 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

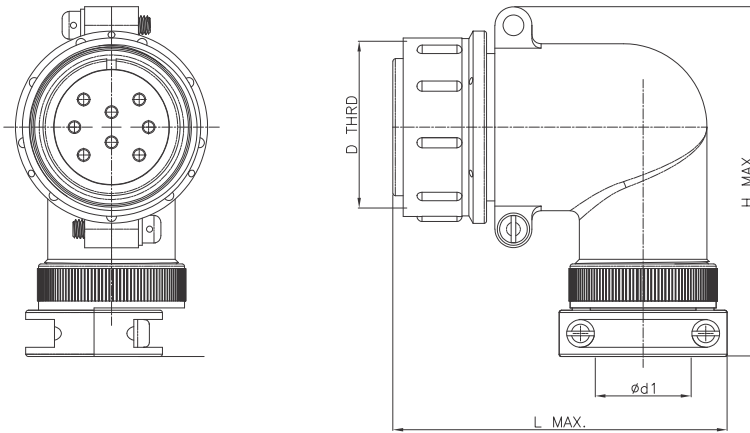
SHELL SIZE	D1 THRD	ød1 (min. cable entry)	H MAX.	L MAX.
12	M16x1.5	8	39	51
16	M20x1.5	11	36	56
20	M24x1.5	18	45	64
28	M33x1.5	25	62	73
32	M36x1.5	25	66	73
36	M39x1.5	29	67	76
40	M45x1.5	32	72	80
48	M52x1.5	36	81	90
55	M60x1.5	46	106	98
60	M64x1.5	50	94	103

Plug Socket With Straight Split Hoods & Cable Clamp

Plug Socket With Angular Split Hoods & Screen Clamp



PLUG WITH ANGULAR SPLIT HOODS & CABLE CLAMP



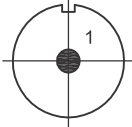

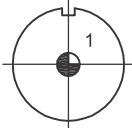

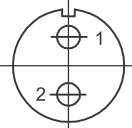

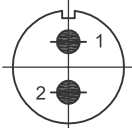

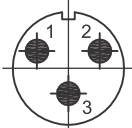

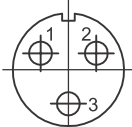



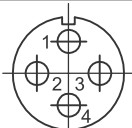

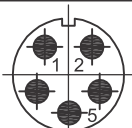

SHELL SIZE	D1 THRD	ød1 (min. cable entry)	H MAX.	L MAX.
12	M16x1.5	5	51.5	53.5
16	M20x1.5	7	53.5	60
20	M24x1.5	14	63	68
28	M33x1.5	21	78	76.5
32	M36x1.5	21	82	76.5
36	M39x1.5	23	83.5	79
40	M45x1.5	24	88	84.5
48	M52x1.5	32	97	95.5
55	M60x1.5	40	104	102
60	M64x1.5	48	110	108

Plug Pin With Angular Split Hoods  
& Cable Clamp

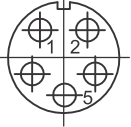

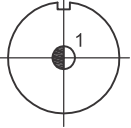

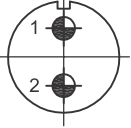

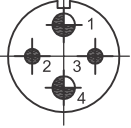


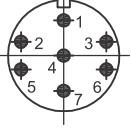



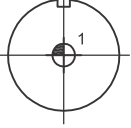

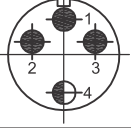


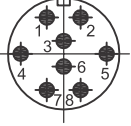

Plug Socket With Angular Split Hoods  
& Cable Clamp



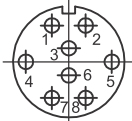




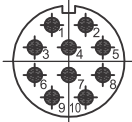

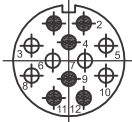


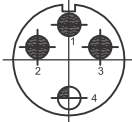


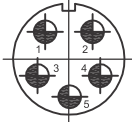

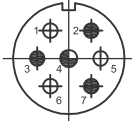



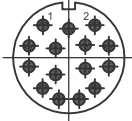

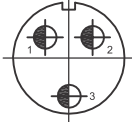

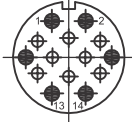


## VIEW FOR SOCKET FROM THE MATING SIDE

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

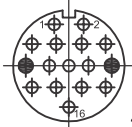

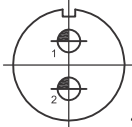

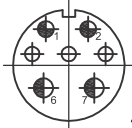



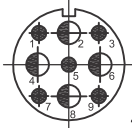


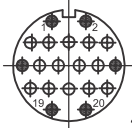


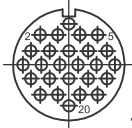

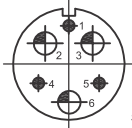


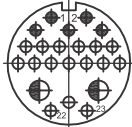



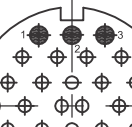


## VIEW FOR SOCKET FROM THE MATING SIDE

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

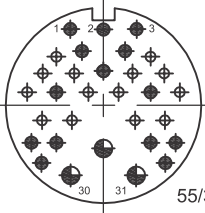



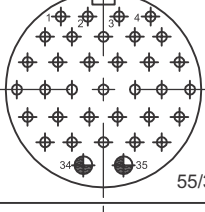


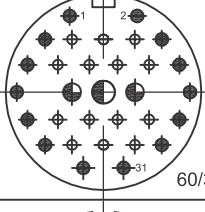




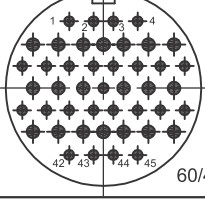

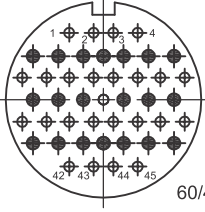


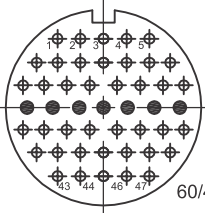


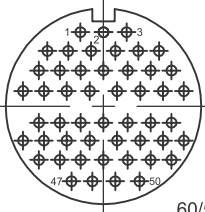

Conventional shell size	Contact layout	Conventional connector designation	Contact diameter, mm	Number of contacts		Arbitrary Number of Contact Set	Max. current carrying capacity, A	
				in connector	of each diameter		per single contact	total per connector
32	 32/8/2		1.5	8	8	2	10	80
	 32/10/1		1.5	10	6	1	10	160
			2.5				4	
	 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	
	 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	 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	
 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(K) П(y) Э(H) 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

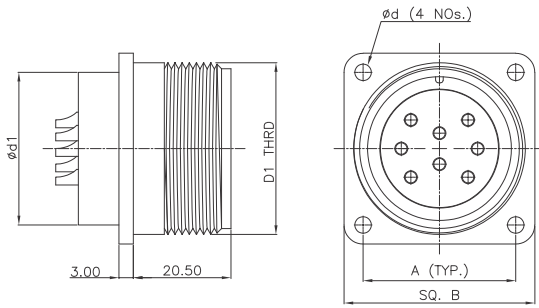
Contact : SH - Male, G - Female

Designation of contact combination-reference number

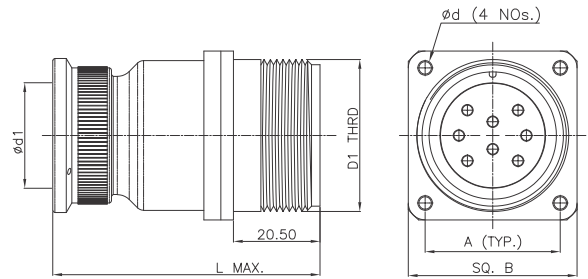
0-backshell without rubber outer shells, sleeves and washers  
Without "0"-backshells with rubber outer shells, sleeves

All climatic conditions

## RECEPTACLE ASSEMBLY WITHOUT ACCESSORIES



## RECEPTACLE WITH STRAIGHT HOOD & SCREEN CLAMP



### Receptacle Pin Assembly Without Accessories



### Receptacle Pin With Straight Hood & Screen Clamp



SHELL SIZE	A	B	D1 THRD	$\phi d1$	$\phi d$
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

SHELL SIZE	A	B	D1 THRD	$\phi d1$ (min. cable entry)	$\phi d$	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

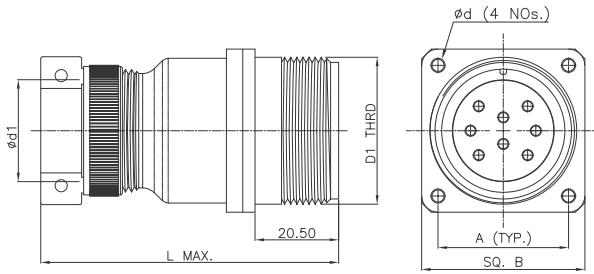
### Receptacle Socket Assembly Without Accessories



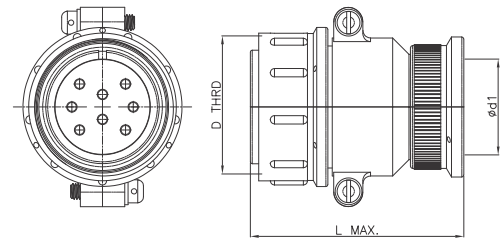
### Receptacle Socket With Straight Hood & Screen Clamp



## RECEPTACLE WITH STRAIGHT HOOD & CABLE CLAMP



## PLUG WITH STRAIGHT SPLIT HOOD & SCREEN CLAMP



### Receptacle Pin With Straight Hood & Cable Clamp

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



SHELL SIZE	A	B	D1 THRD	$\phi d1$ (min. cable entry)	$\phi d$	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

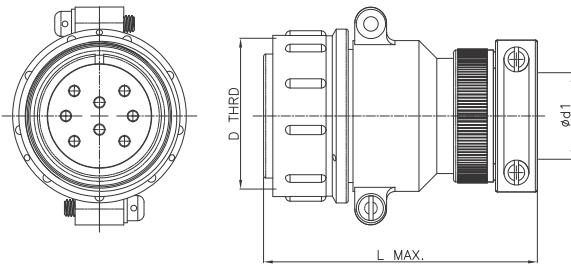
SHELL SIZE	D1 THRD	$\phi d1$ (min. cable entry)	L MAX.
12	M16x1.5	8	50
16	M20x1.5	11	50
20	M24x1.5	18	53
28	M33x1.5	25	56
32	M36x1.5	25	58
36	M39x1.5	29	62
40	M45x1.5	32	64
48	M52x1.5	36	66
55	M60x1.5	46	66
60	M64x1.5	50	64

### Receptacle Socket With Straight Hood & Cable Clamp

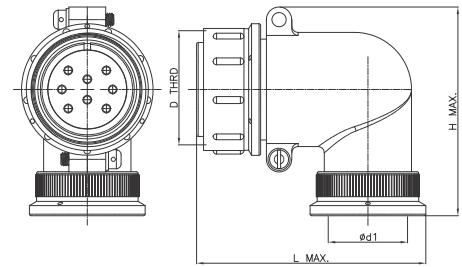
### Plug Socket With Straight Split Hood & Screen Clamp



## PLUG WITH STRAIGHT SPLIT HOOD & CABLE CLAMP



## PLUG WITH ANGULAR SPLIT HOOD & SCREEN CLAMP



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



### Plug Pin With Angular Split Hood & Screen 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

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

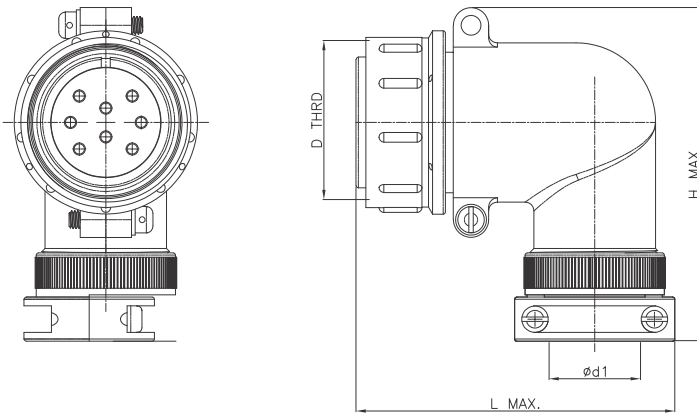
### Plug Socket With Straight Split Hood & Cable Clamp



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



## 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



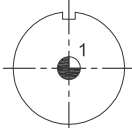

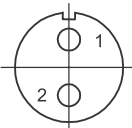

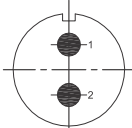

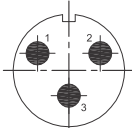

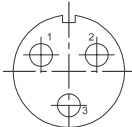

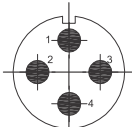

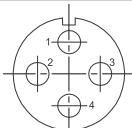

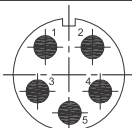

Plug Pin With Angular Split Hood & Cable Clamp

Plug Socket With Angular Split Hood & Cable Clamp



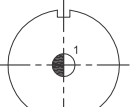

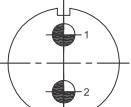

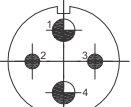


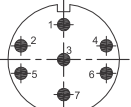

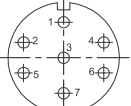

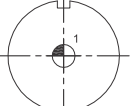

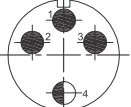


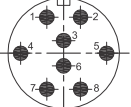





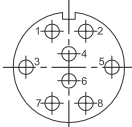

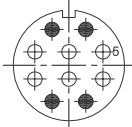


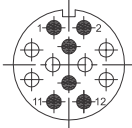


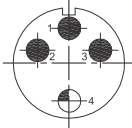


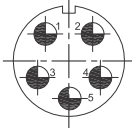





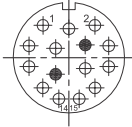


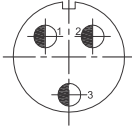

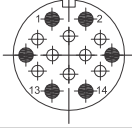


## VIEW FOR SOCKET FROM THE MATING SIDE

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

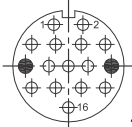


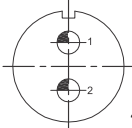

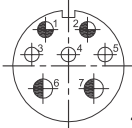



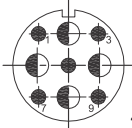







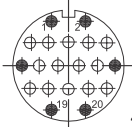


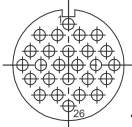

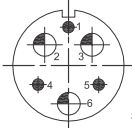


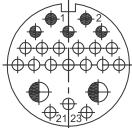




## VIEW FOR SOCKET FROM THE MATING SIDE

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				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	
 32/8/14		2.5	8	8	14	35	175	

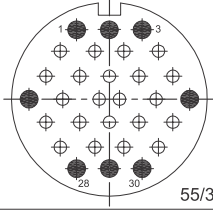


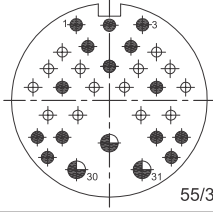



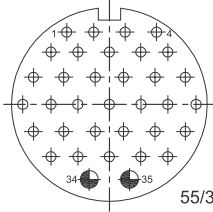


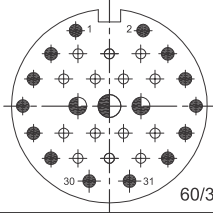




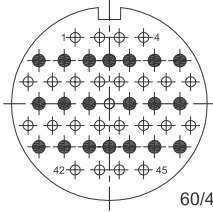


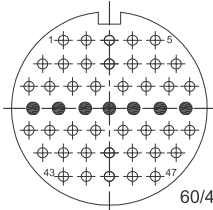


## VIEW FOR SOCKET FROM THE MATING SIDE

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
			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	 40/3/21		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	 48/9/26		1.5	9	4	26	20	490
				2.5		2		35	
				5.5		2		100	
				9		1		200	
48	 48/20/28		1.5	20	14	28	20	290	
			2.5		6		35		
48	 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	 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)



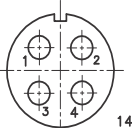

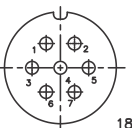

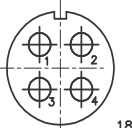

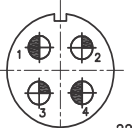


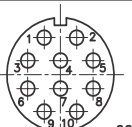

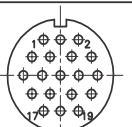

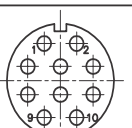

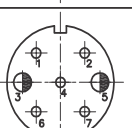


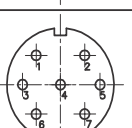

**2PM & 2PMA Series (2RM & 2RMD Series)****2RM and 2MRD**

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.

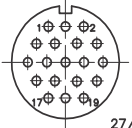

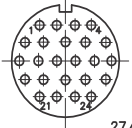

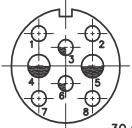



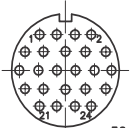

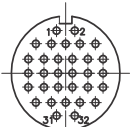

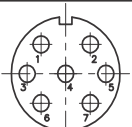

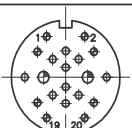


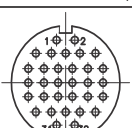

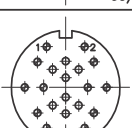


**Contact Voltage Rating**

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

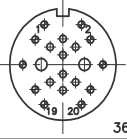

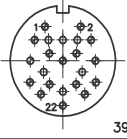

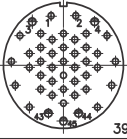

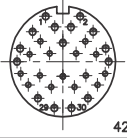

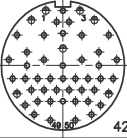

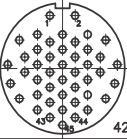

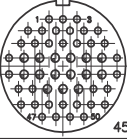

## VIEW FOR SOCKET FROM THE MATING SIDE

Conventional shell size	Connector type	Contact layout	Contact designation	Contact diameter, mm	Number of contacts		Designation of contact combination	Max. current carrying capacity, A		Max. Operating Voltage, V
					in one connector	of each diameter		per single contact	total per connector	
14	2RM			1.0	4	4	1	8	27	560
18	2RM			1.0	7	7	1	7	40	560
	2RMD			1.5	4	4	5	15	50	560
22	2RM		 	2.0 3.0	4	2 2	3	18 32	80	560
	2RM			1.0	10	10	1	7	58	560
24	2RM			1.0	19	19	1	5	80	560
	2RMD			1.5	10	10	5	10	83	560
27	2RM		 	1.0 1.5	7	5 2	2	8 16	60	700
	2RMD			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		Designation of contact combination	Max. current carrying capacity, A		Max. Operating Voltage, V
					in one connector	of each diameter		per single contact	total per connector	
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		
30	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
	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

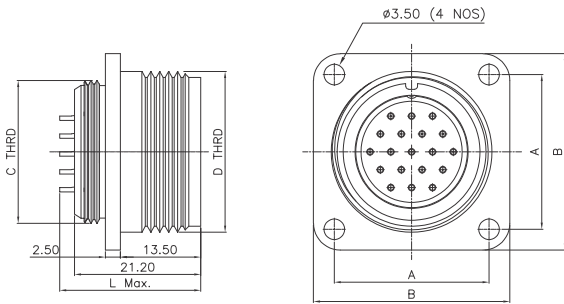
## VIEW FOR SOCKET FROM THE MATING SIDE

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

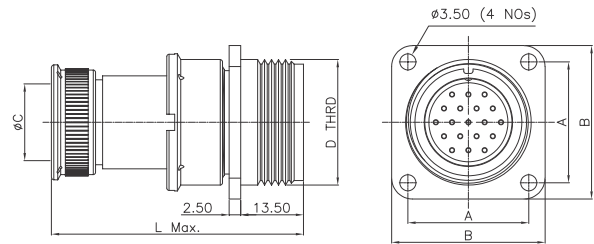
## CONNECTOR DESIGNATION & ORDERING INFORMATION:

Russian	-->	<u>2PM</u>	<u>Г</u>	<u>18</u>	<u>К</u>	<u>П</u>	<u>Э</u>	<u>7</u>	<u>Г</u>	<u>1</u>	<u>В</u>	<u>1</u>		
English	-->	<u>2RM</u>	<u>G</u>	<u>18</u>	<u>K</u>	<u>P</u>	<u>E</u>	<u>7</u>	<u>G</u>	<u>1</u>	<u>V</u>	<u>1</u>	<u>B,L</u>	<u>HD</u>
Series		G- For Sealed Connector Applicable Only 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		
2RM (2PM) Series 2RMD (2PMД) Series														
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														
Insert Configuration Number														
Type of Plating on Contact A- For Gold and V- For Silver														
Operating Temperature 1- Stands For -55 <sup>o</sup> c to + 125 <sup>o</sup> c														
B- For Fixed Connector Type Without Backside Thread L- For 90 <sup>o</sup> 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

Receptacle Pin With Straight Hood & Screen Clamp



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

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

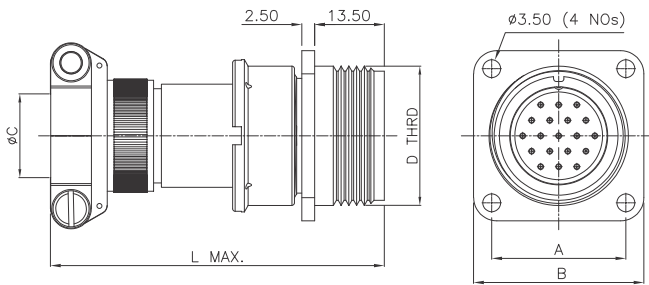
Receptacle Socket Without Accessories

Receptacle Socket With Straight Hood

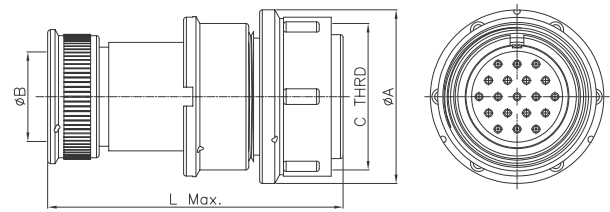


FOR CONNECTORS WITH  $\phi 1.0$  AND  $\phi 1.5$ MM CONTACTS DIMENSIONS L=26.00 MAX.  
FOR CONNECTORS WITH  $\phi 2.0$  AND  $\phi 3.0$ MM CONTACTS DIMENSIONS L=28.00 MAX.

## RECEPTACLE WITH STRAIGHT HOOD & CABLE CLAMP



## PLUG WITH STRAIGHT HOOD & SCREEN CLAMP



### Receptacle Pin With Straight Hood & Cable Clamp

### Plug Pin With Straight Hood & Screen 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

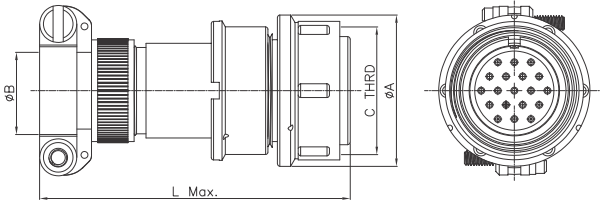
SHELL SIZE	øA	øB	C THREAD	L MAX.
14	22	6.5	M16X1.0	48
18	25	10.5	M20X1.0	48
22	29	14	M24X1.0	48
24	32	16.5	M27X1.5	54
27	35	18.5	M30X1.5	54
30	39	20.5	M33X1.5	54
33	42	23	M36X1.5	59
36	45	23	M39X1.5	59
39	48	24.5	M42X1.5	59
42	51	30.5	M45X1.5	59
45	54	30.5	M48X1.5	59

### Receptacle Socket With Straight Hood & Cable Clamp

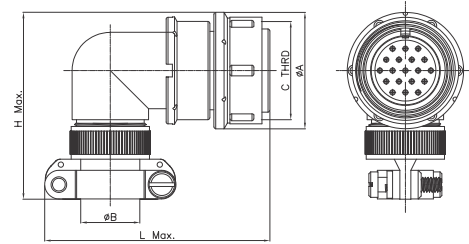
### Plug Socket With Straight Hood & Screen Clamp



## PLUG WITH STRAIGHT HOOD & CABLE CLAMP



## PLUG WITH ANGLE HOOD & CABLE CLAMP



### Plug Pin With Straight Hood & Cable Clamp



### Plug Pin With Angle 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

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

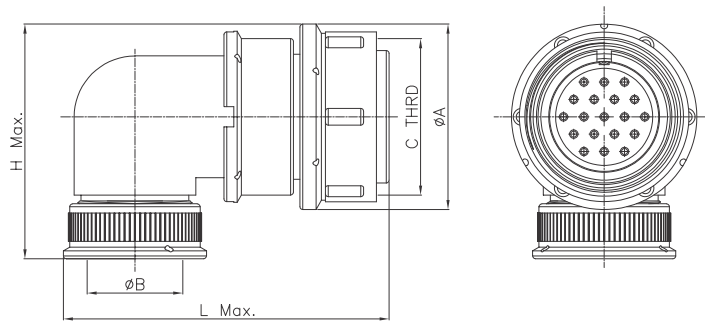


### Plug Socket With Angle Hood & Cable Clamp





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:

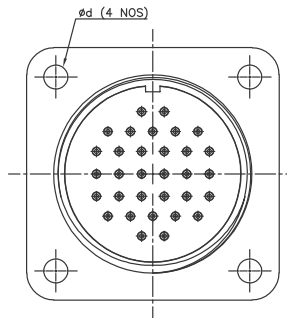
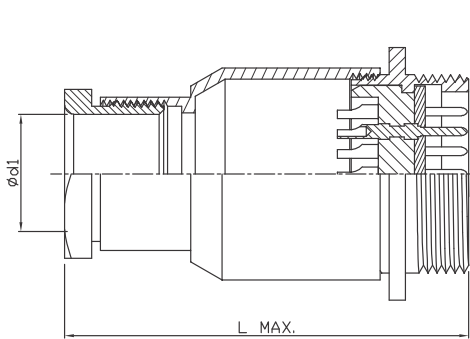
- A) Operating temperature:  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$
- B) Operating voltage (at sea level) 500 V AC (rms) max
- C) Operating current and contact resistance refer table given below :

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

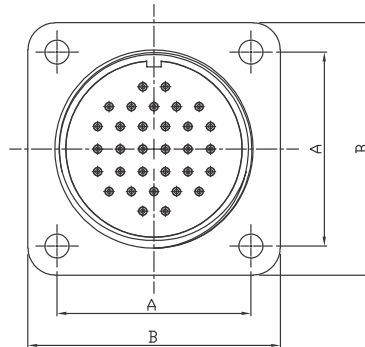
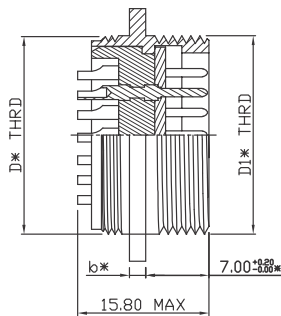
- D) Insulation resistance : 5000 M $\Omega$ (Min)
- E) Voltage proof (At sea level) :1500V AC (rms)
- F) Material
1. Insulator : Hard Dielectric / Neoprene Rubber
  2. Socket contact  $\varnothing$ 1.0 &  $\varnothing$ 1.5 : Brass
  3. Socket contact  $\varnothing$  2.0 &  $\varnothing$ 3.0 : Brass/Phosphor 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

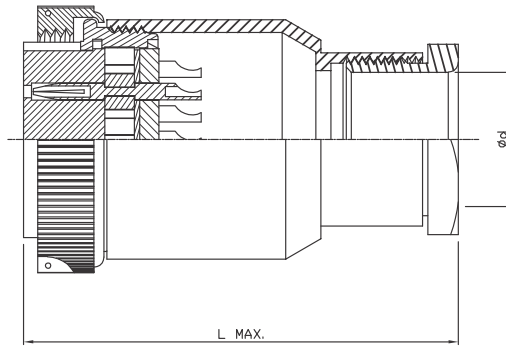
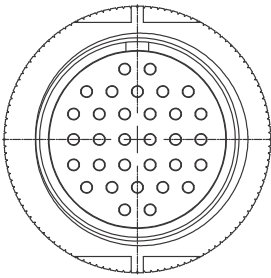


Connector P/N	NO. OF CONTACT	THREAD D*	THREAD D1*	A	B	$\phi d$	b*	$\phi d1$	L MAX.
Plug PC4TB	4	M10X0.75	M10X0.75	11.80	16.50	2.20	1.40	6.00	36.00
Plug PC7TB	7	M12X0.75	M12X0.75	13.20	18.00			8.00	38.00
Plug PC10TB	10	M14X0.75	M14X0.75	15.00	20.00			9.00	41.00
Plug PC19TB	19	M18X0.75	M18X1.00	18.00	24.00			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

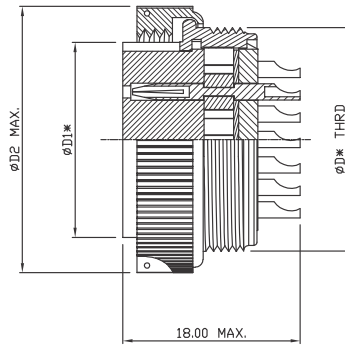
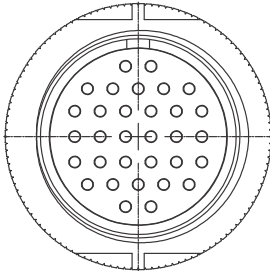
Note: 1) \* Dimensions are for reference only.



## Socket Connector With Accessories



## Socket Connector Without Accessories



Connector Part Number	No. of Contacts	Thread $\phi$ D*	$\phi$ D1*	$\phi$ D2 max	$\phi$ d	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.

## TECHNICAL DATA

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

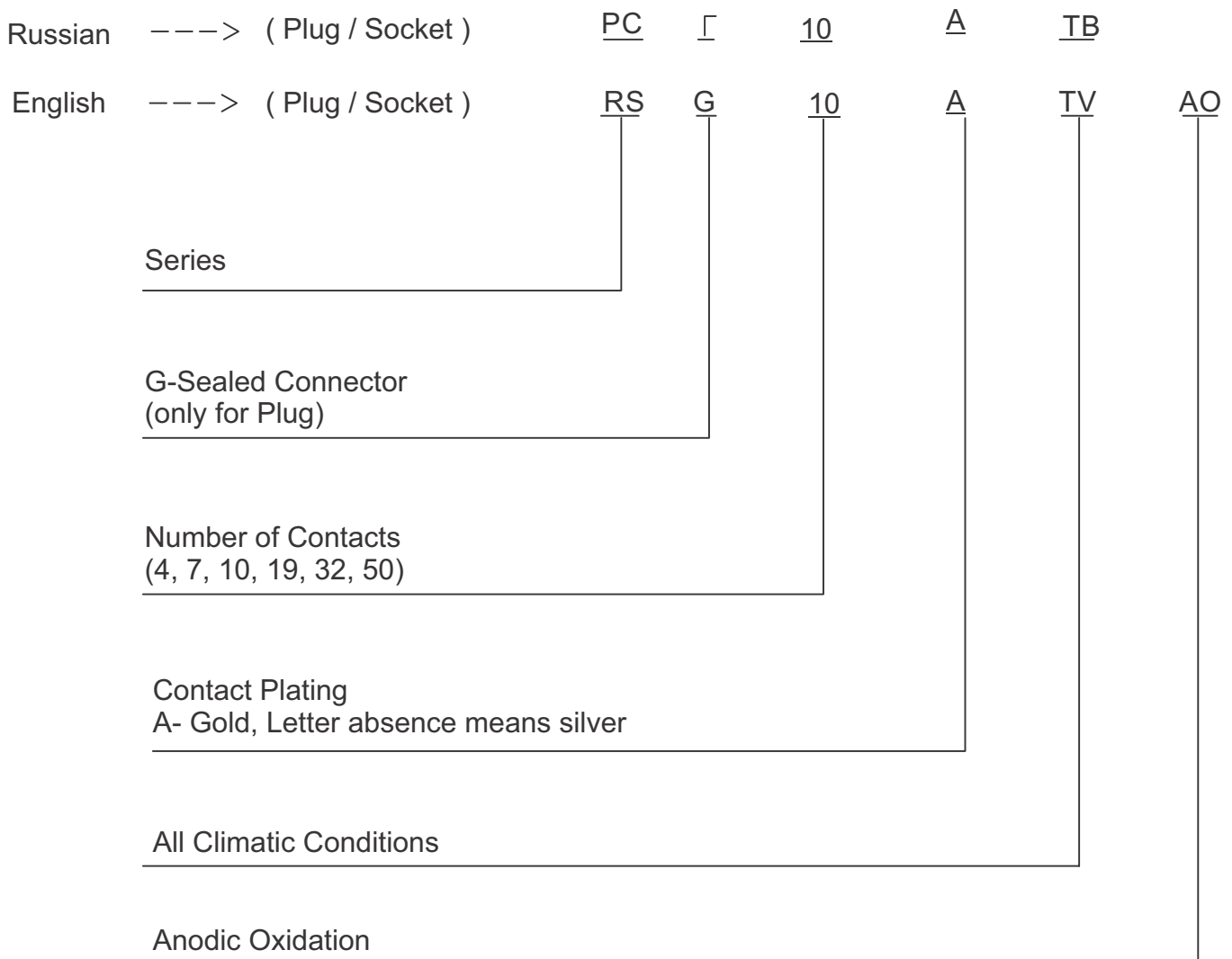
### A) MATERIAL

- 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

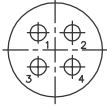

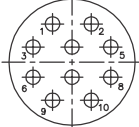
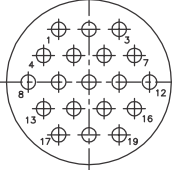
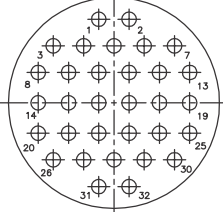
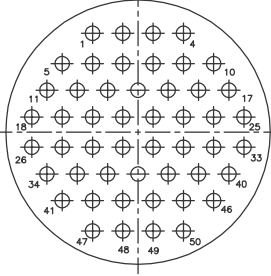
## Connector Designation & Ordering Information



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.			Operational voltage (amplitude value) V, max.			
					Total current load on connector	Max. operating current on single contact	On rest of contacts	Total no. of contact loaded with max. current	In normal climatic conditions	At pressure less than 4400(33) to 2000 (13) Pa (mmm cal)	At pressure less than 2000(13) to 0.00013(10 <sup>-5</sup> ) Pa (mmm cal)
10		1.0	ANY	4	15		3	3	200	180	150
12			4	7	22		2.5	3			
14			4(7)	10	30		2.5	4			
18			10	19	40	5	1.5	5			
22			16(17)	32	60		1.5	7			
27			27(30)	50	75		1	10			



PPC3

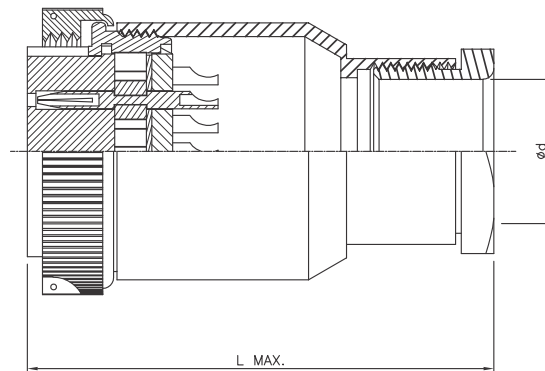
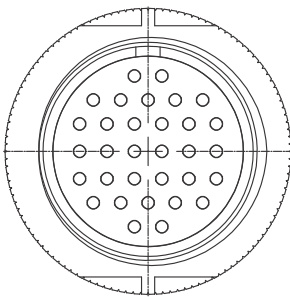


PPC4

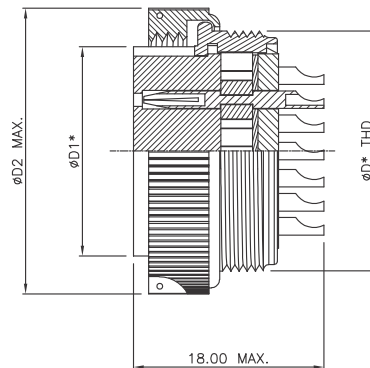
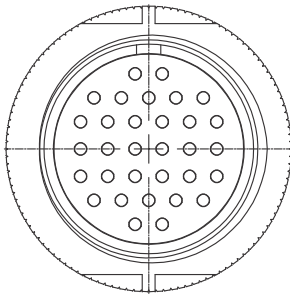


PPC5

## Connector With Accessories



## Connector Without Accessories

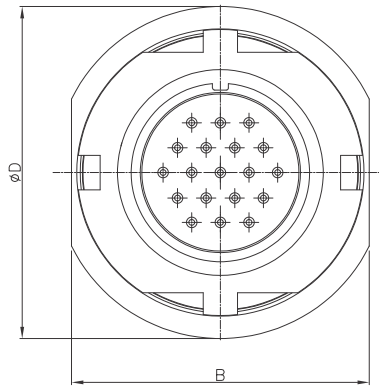
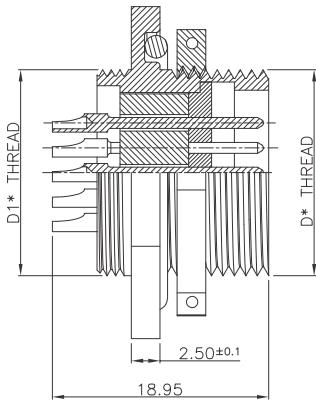


NOTE: 1) \* DIMENSIONS ARE FOR REFERENCE ONLY.

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

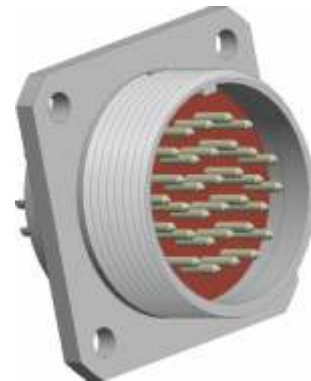
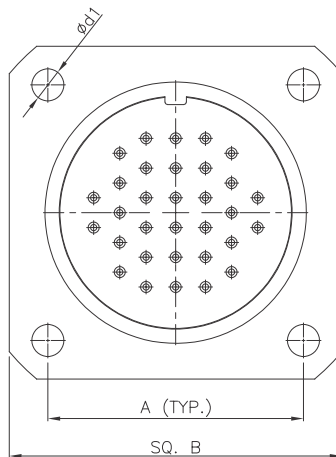
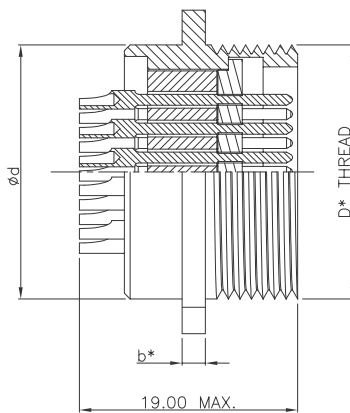
ALL DIMENSIONS ARE IN MM

### 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 &amp; ORDERING INFORMATION

<u>Russian</u> ---> <u>PPC3, 4, 5</u>	<u>10</u>	<u>A</u>	<u>1</u>	<u>1...12</u>	<u>B/∅</u>
<u>English</u> ---> <u>RRS3,4,5</u>	<u>10</u>	<u>A</u>	<u>1</u>	<u>1...12</u>	<u>V/E</u>
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 / ∅ - For cold climatic conditions					

## TECHNICAL DATA:

a) Contact resistance	:- 70 m Ohms Max.
b) Insulation resistance under normal climatic conditions	:- $\geq 5000$ 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	:- $1.316 \times 10^{-8}$ 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. Socket Contact	:- Gold
3. Receptacle Shell	:- Nickel
4. Plug shell	:- Cadmium Plated with Olive Drab Passivation or Anodic Oxidation

## MP1 PLUG & SOCKET

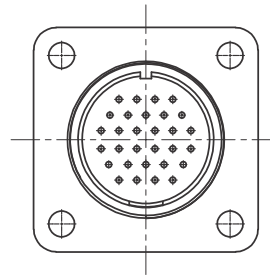
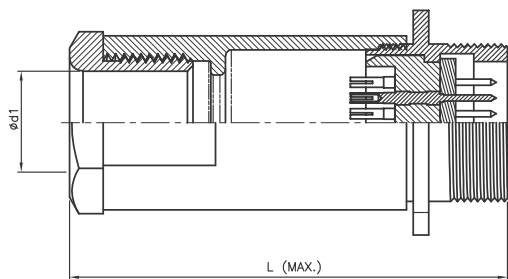


MP1 PLUG

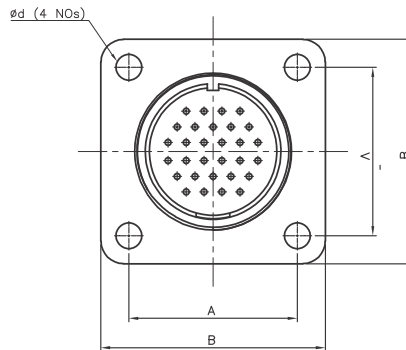
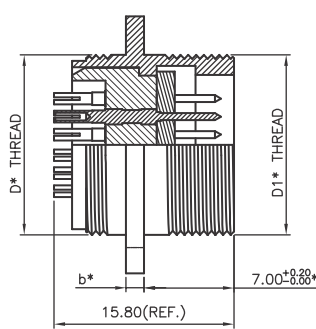


MP1 SOCKET

### Connector With Accessories



### Plug Connector Without Accessories

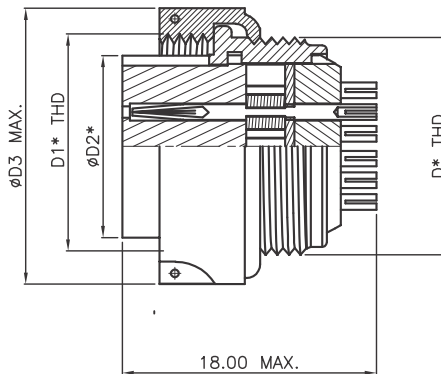
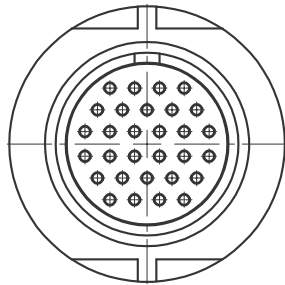
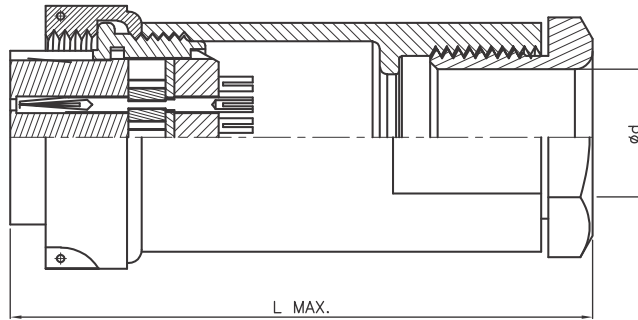
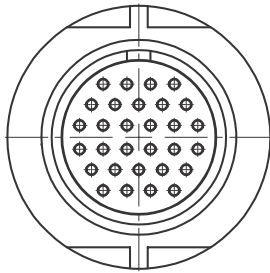


Connector Part No.	D* Thread	D1* Thread	A	B	b*	$\phi d$	$\phi d1$	L MAX.
MP1 - 10 - 1 - B	M10X0.75		11.8	16.5	1.4	2.2	6.0	36.0
MP1 - 19 - 1 - B	M12X0.75		13.2	18.0			8.0	38.0
MP1 - 30 - 1 - B	M14X0.75		15.0	20.0			9.0	41.0
MP1 - 50 - 1 - B	M18X0.75	M18X1	18.0	24.0			11.0	43.0
MP1 - 76 - 1 - B	M22X0.75	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




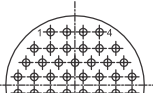
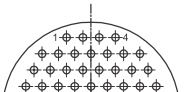
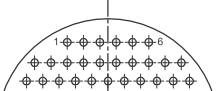


Connector Part No.	D* Thread	D1* Thread	øD2*	øD3,Max	ød	L MAX.
MP1 - 10 - 5 - B	M10X0.75		7.9	14.0	6.0	36.0
MP1 - 10 - 6 - B						
MP1 - 19 - 5 - B	M12X0.75		9.7	16.0	8.0	38.0
MP1 - 19 - 6 - B						
MP1 - 30 - 5 - B	M14X0.75		11.7	18.0	9.0	41.0
MP1 - 30 - 6 - B						
MP1 - 50 - 5 - B	M18X0.75	M18X1	15.2	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 shell size	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 &amp; 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:					
<ul style="list-style-type: none"> <li>1. fixed male, threaded coupling, silver plated contact</li> <li>2. fixed male, threaded coupling, gold plated contact</li> <li>3. fixed male, cut-in mating, silver plated contact</li> <li>4. fixed male, cut-in mating gold plated contact</li> <li>5. free female, threaded coupling, silver plated contact</li> <li>6. free female, threaded coupling, gold plated contact</li> <li>7. free female, cut-in mating with silver plated contact</li> <li>8. fixed female cut-in mating with gold plated contact</li> </ul>					
Designed for all climatic conditions					
Anodic Oxidation					

## Technical Data

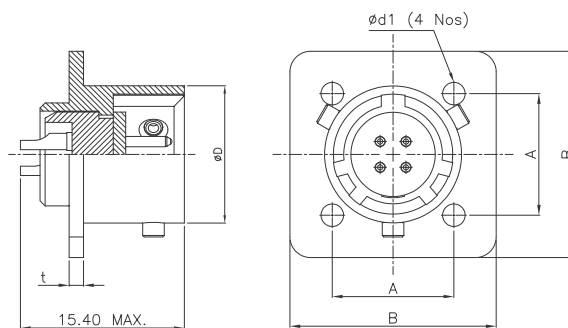
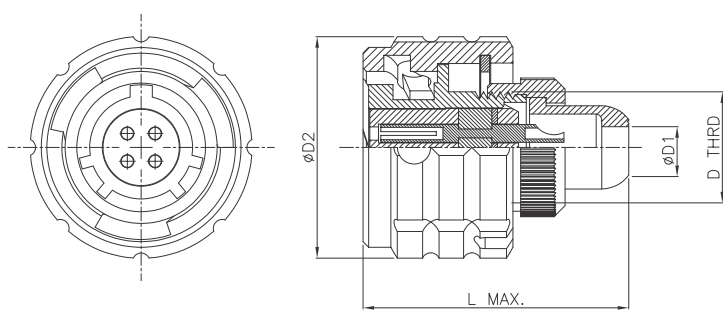
A) Contact resistance	:- ≤10 m Ohms
B) Insulation resistance under normal climatic conditions	:- ≥1000 M Ohms
C) Current capability	:- SEE TABLE 1
D) Operating Voltage	:- 150 V peak
E) Contact Mating Diameter	:- Ø0.60 mm
F) Number of mate-unmate operation	:- 250
G) Material	
1. Insulator	:- Hard Dielectric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



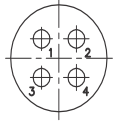
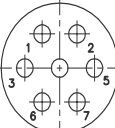
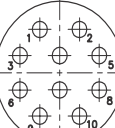
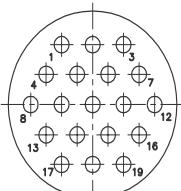
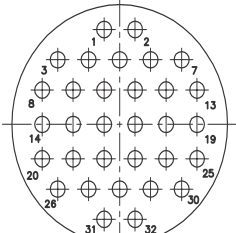
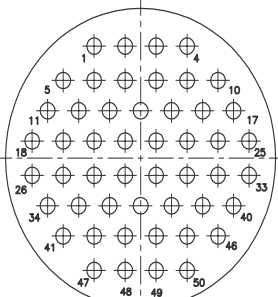
Russian	OHL-BC	1(2)	-10/	10-	B(P)	1(12)	1(2-20)	B
English	ONTS-BS	1(2)	-10/	10-	V(R)	1(12)	1(2-20)	V
Series								
Contact Plating 1- Silver 2- Gold								
Number of Contact								
Conventional Shell Size								
Connector Type: V- male, R- female								
Design : 1- Fixed part without outer shell 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

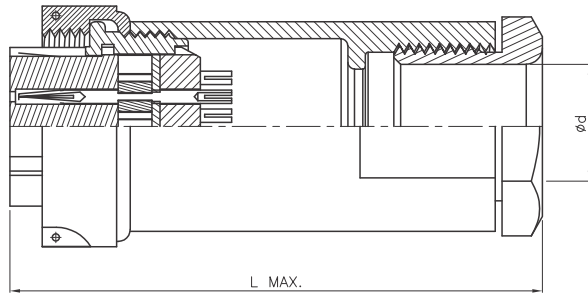
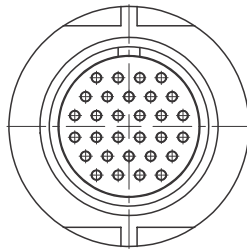
### Contact Layout And Electro-Mechanical Parameters: Table-1

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		3.7	21.6(2.2)			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	7	2.1	103(10.5)	250	150	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)*

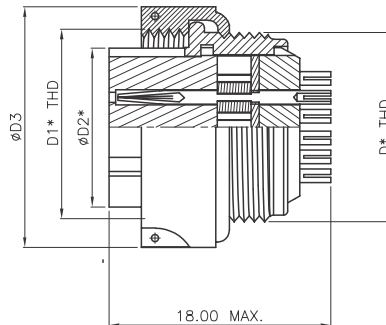
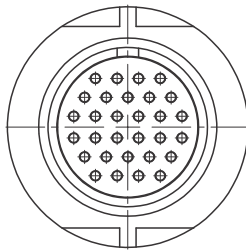
## CHL 13, 14 SERIES (SNTS13, 14)



### SNTS-13 Socket Connector With Accessories



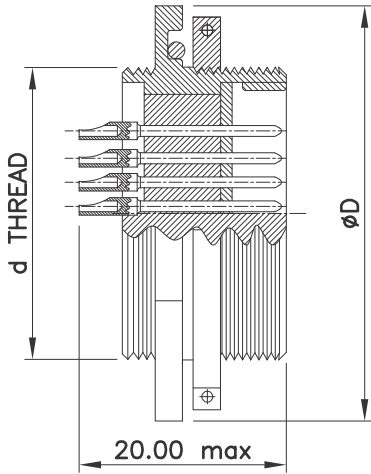
### SNTS-13 Socket Connector Without Accessories



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




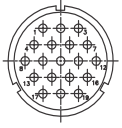
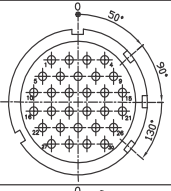
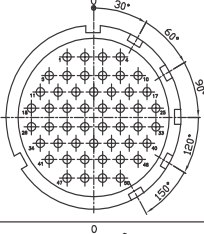
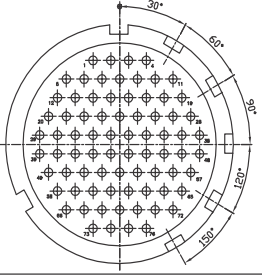
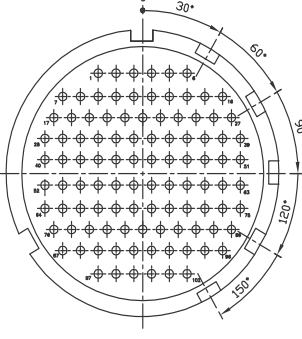
Conventional Shell Size	øD	D1 THREAD
10	22	M10X0.75
12	24	M12X0.75
14	25	M14X0.75
18	29	M18X0.75
22	33	M22X0.75
27	38	M27X0.75

### Connector Designation & Ordering Information

Russian	CHЦ13,14	10	B(P)	1(2,6)	a(б,в,г,д,е)	B
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						
Variant of angled position of polarization keys on insulators						
All climatic conditions						

## 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 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	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	1.32x10 <sup>-10</sup> 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

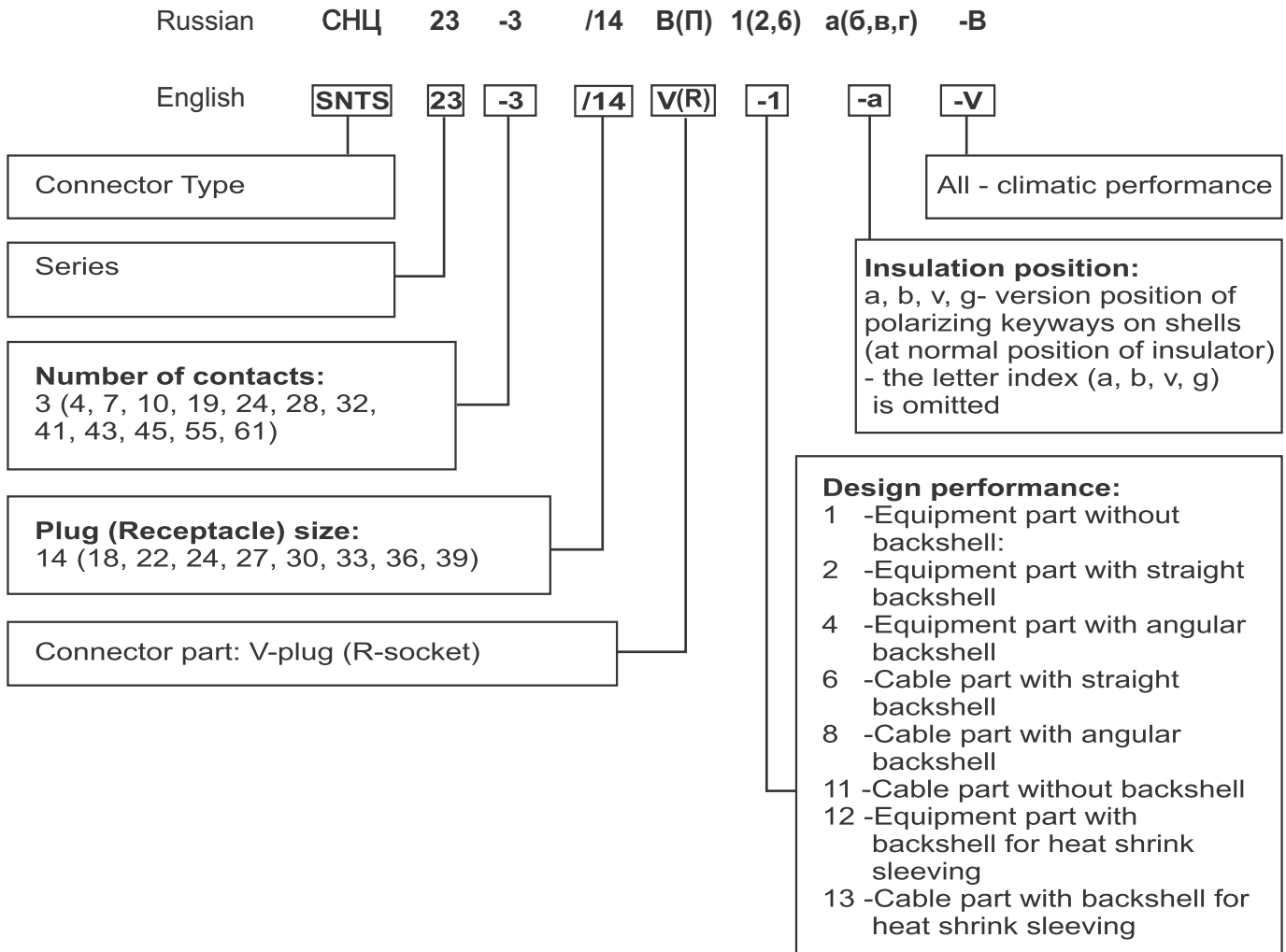


These connectors are multi-positional having 5 key positions with different insert orientations. They are field serviceable having crimp contacts and are intended for use in electrical circuits of direct, alternating (3MHz max) and pulse currents at voltages up to 700V max. The Plugs and receptacles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

### Technical Characteristics

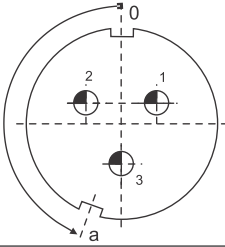
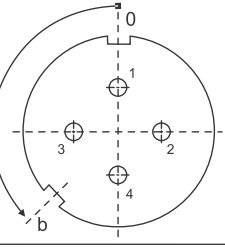
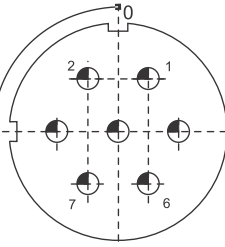
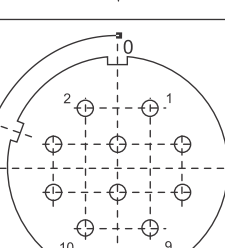
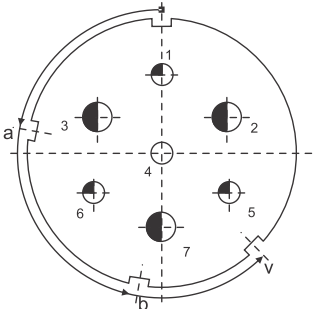
1. Contact resistance:	contact dia. 1.0mm contact dia. 1.5mm contact dia. 2.0mm	4.0m Ohms max 2.5m Ohms max 1.6m Ohms max
2. Insulation resistance:		5000M Ohms min
3. Max. operating current per each contact:	contact dia. 1.0mm contact dia. 1.5mm contact dia. 2.0mm	3.6A-9.5A 90A-15A 14 A
4. Max. current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

## ORDERING INFORMATION





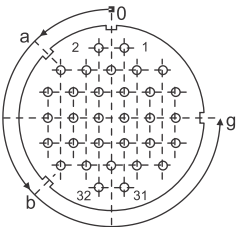
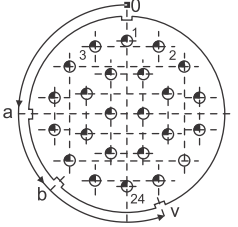
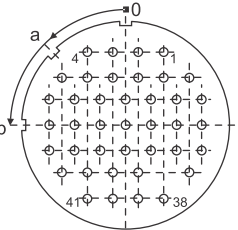
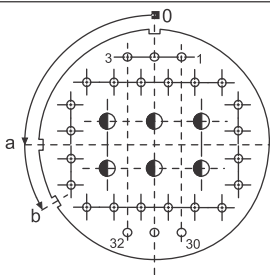
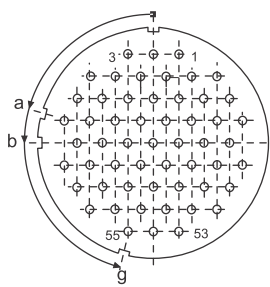
## CONTACT LAYOUT AND ELECTRO-MECHANICAL PARAMETERS

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	

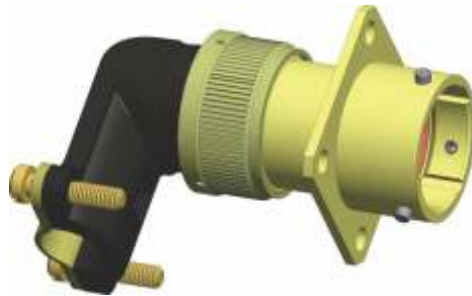
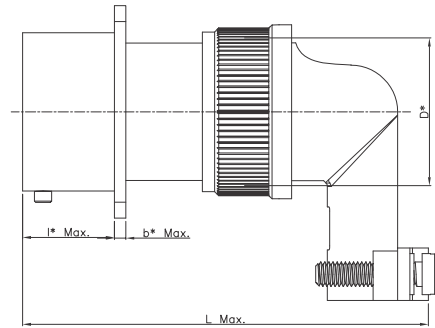
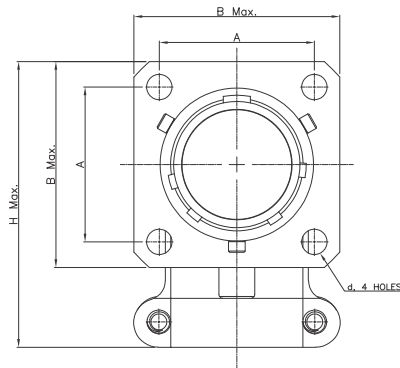
## CONTACT LAYOUT AND ELECTRO-MECHANICAL PARAMETERS

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

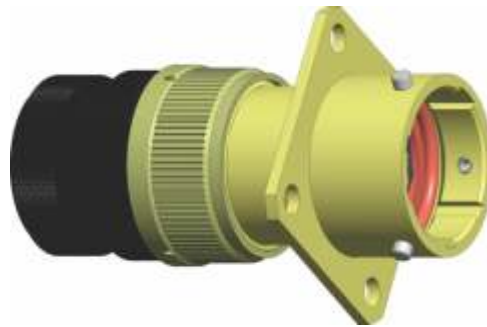
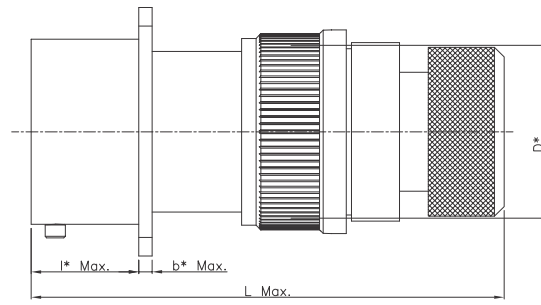
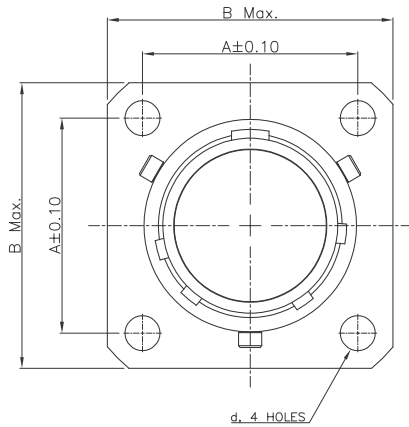
Plug (Receptacle) size	Contact arrangement in insulation as viewed from mounting face of receptacles	Designation of contact	Contact diameter, mm	Number of contacts	Rotation angle of insulator in relation to normal position (in degree) for position				Operating current per each contact, A	Max. permissible 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
36		⊕	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



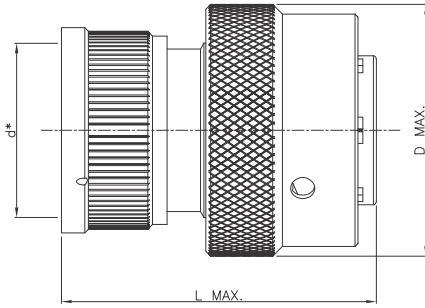
SL No.	Connector Part No.	Dimensions, mm							
		A	B Max.	D*	d	I* Max.	b* Max.	H Max.	L Max.
1	A SNTS23-4/14V(R)-4-V	16.5	21.7	M14x0.5	2.2	11.3	1.4	33	48
2	A SNTS23-3/14V(R)-4-V			M18x1				36	51
3	A SNTS23-10/18V(R)-4-V	19.5	25.9	M18x1	1.8		40	55	
4	A SNTS23-7/18V(R)-4-V						42	57	
5	A SNTS23-19/22V(R)-4-V	23	29.4	M22x1	3.2		1.8	45	60
6	A SNTS23-10/22V(R)-4-V							49	63
7	A SNTS23-7/22V(R)-4-V	25	31.4	M24x1	14.5		2	52	68
8	A SNTS23-19/24V(R)-4-V							55	70
9	A SNTS23-32/27V(R)-4-V	27	33.4	M27x1	15.3		2	57	73
10	A SNTS23-7/27V(R)-4-V							59	77
11	A SNTS23-28/27V(R)-4-V	31	37.8	M30x1	14.5	2	52	68	
12	A SNTS23-41/30V(R)-4-V						55	70	
13	A SNTS23-24/30V(R)-4-V	34	41.5	M33x1	15.3	2	57	73	
14	A SNTS23-55/33V(R)-4-V						59	77	
15	A SNTS23-32/33V(R)-4-V	36.5	44.5	M36x1	15.3	2	57	73	
16	A SNTS23-61/36V(R)-4-V						59	77	
17	A SNTS23-43/36V(R)-4-V	40	46.4	M39x1	15.3	2	57	73	
18	A SNTS23-45/39V(R)-4-V						59	77	

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

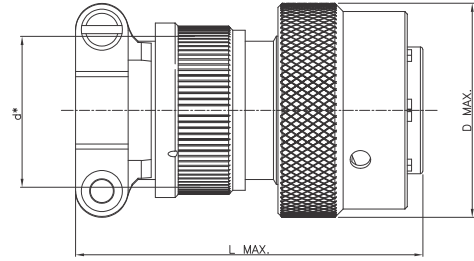


SL No.	Connector Part No.	Dimensions, mm						
		A	B Max.	D*	d	I* Max.	b* Max.	L Max.
1	A SNTS23-4/14V(R)-12-V	16.5	21.7	M14x0.5	2.2	11.3	1.4	50
2	A SNTS23-3/14V(R)-12-V			M18x1				
3	A SNTS23-10/18V(R)-12-V	19.5	25.9	M18x1				
4	A SNTS23-7/18V(R)-12-V			M22x1				
5	A SNTS23-19/22V(R)-12-V	23	29.4	M22x1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

CABLE PLUG (RECEPTACLE)



CABLE PLUG (RECEPTACLE)  
WITH STRAIGHT BACKSHELL

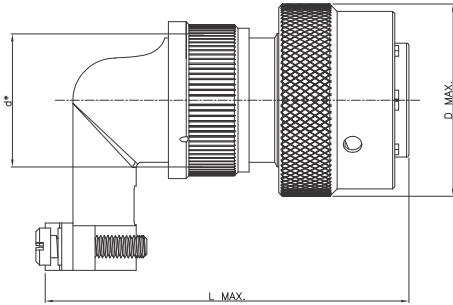


SL. No.	Connector Part No.	Dimensions, mm			
		D Max.	d*	L* Max.	
1	A SNTS23-4/14V(R)-11-V	22	M14x0.5	32	
2	A SNTS23-3/14V(R)-11-V				
3	A SNTS23-10/18V(R)-11-V	26	M18x1		
4	A SNTS23-7/18V(R)-11-V				
5	A SNTS23-19/22V(R)-11-V	29.5	M22x1		
6	A SNTS23-10/22V(R)-11-V				
7	A SNTS23-7/22V(R)-11-V				
8	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		

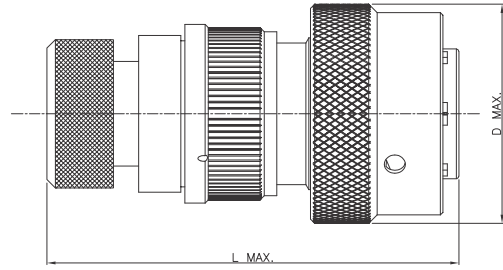
SL. No.	Connector Part No.	Dimensions, mm		
		D Max.	d*	L* Max.
1	A SNTS23-4/14V(R)-6-V	22	M14x0.5	42
2	A SNTS23-3/14V(R)-6-V			
3	A SNTS23-10/18V(R)-6-V	26	M18x1	
4	A SNTS23-7/18V(R)-6-V			
5	A SNTS23-19/22V(R)-6-V	29.5	M22x1	48
6	A SNTS23-10/22V(R)-6-V			
7	A SNTS23-7/22V(R)-6-V			
8	A SNTS23-19/24V(R)-6-V	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	50
13	A SNTS23-24/30V(R)-6-V			
14	A SNTS23-55/33V(R)-6-V	42	M33x1	
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**

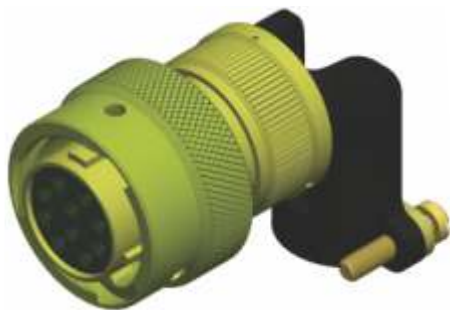


**CABLE PLUG (RECEPTACLE) WITH BACKSHELL FOR HEAT SLEEVING**



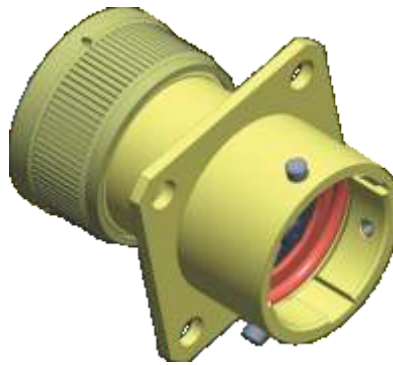
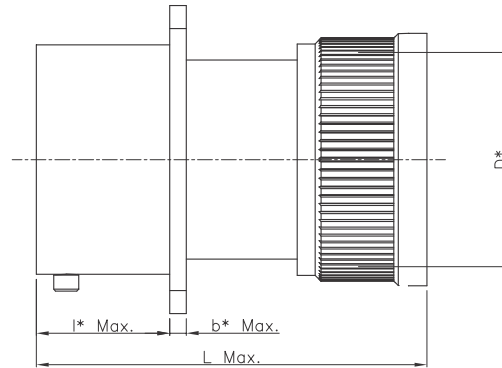
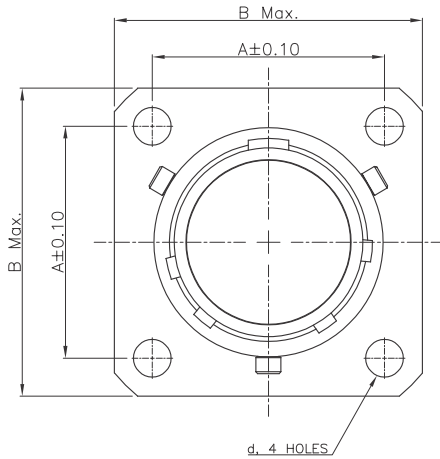
SL. No.	Connector Part No.	Dimensions, mm			
		D Max.	d*	H Max	L* Max.
1	A SNTS23-4/14V(R)-8-V	22	M14x0.5	32	48
2	A SNTS23-3/14V(R)-8-V				
3	A SNTS23-10/18V(R)-8-V	26	M18x1	36	51
4	A SNTS23-7/18V(R)-8-V				
5	A SNTS23-19/22V(R)-8-V	29.5	M22x1	40	55
6	A SNTS23-10/22V(R)-8-V				
7	A SNTS23-7/22V(R)-8-V				
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

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	



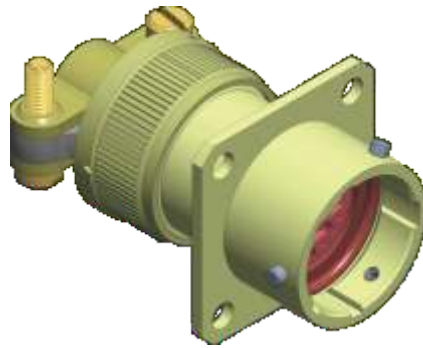
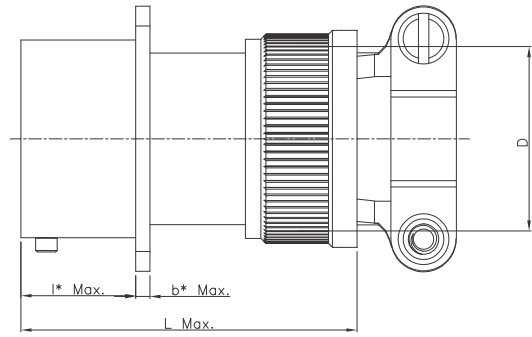
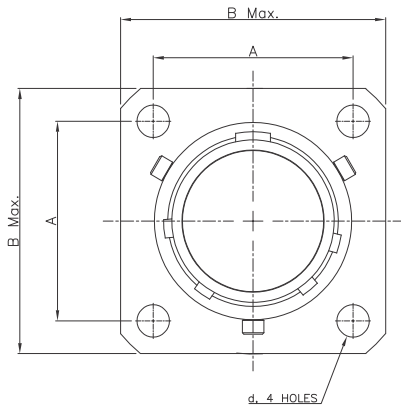


## EQUIPMENT PLUG (RECEPTACLE)



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

## EQUIPMENT PLUG (RECEPTACLE) WITH STRAIGHT BACKSHELL



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



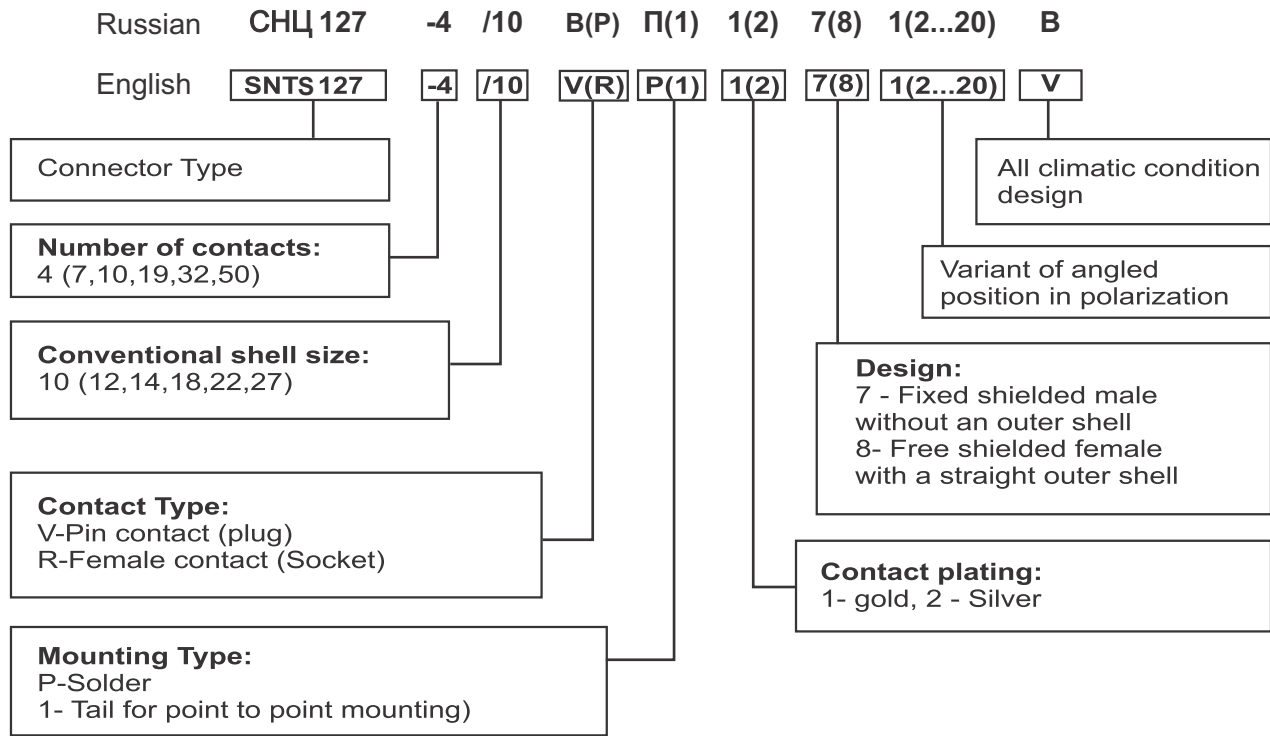
### SNTS 127 : (CHL-127)

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.


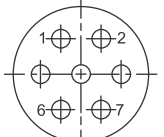
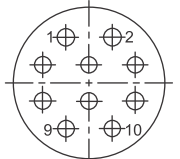
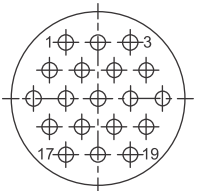
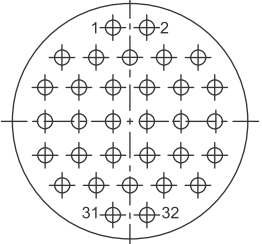
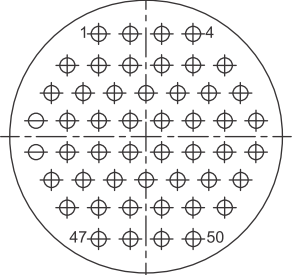
#### Technical Characteristics

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

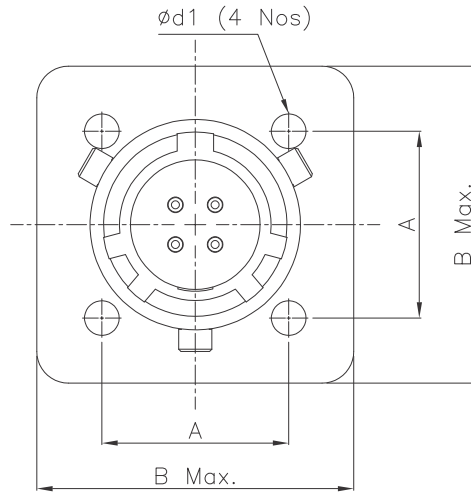
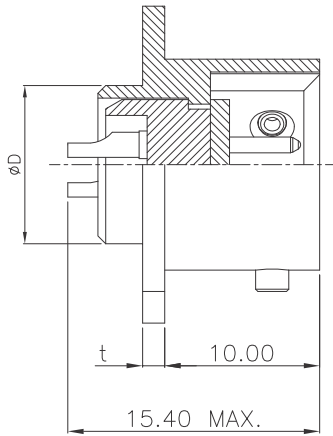
## ORDERING INFORMATION



## VIEW FOR SOCKET FROM THE MATING SIDE CONTACT LAYOUT AND ELECTRO-MECHANICAL PARAMETERS

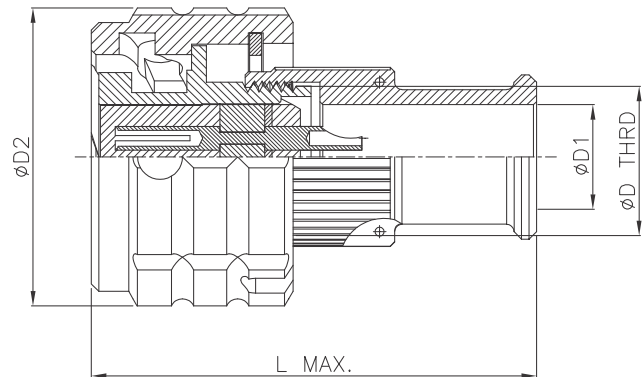
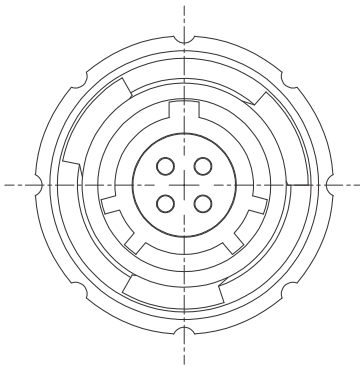
Conventional shell size	Contact layout	Number of contacts pcs.	Operating current per each contact, A	max current per contact, A
1	2	3	4	5
10		4	3.7	7
12		7	3.1	
14		10	3	
18		19	2.1	
22		32	1.8	
27		50	1.5	

## PIN CONNECTORS OF SNTS 127 TYPE WITHOUT OUTER SHELL



SHELL SIZE	$\phi D$	$\phi d1$	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	$\phi D1$	$\phi D2$	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

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	OHÇ-BC1 Series	ONTS-BS1 Series	BRO.364.030.TU
NA	CHÇ 13,14 Series	SNTS- 13,14 Series	GEO.364.345.TU
NA	CHÇ 23 Series	SNTS 23 Series	GEO.364.241.TU
NA	CHÇ 127 Series	SNTS 127 Series	NKTSS. 434410.511.TU

Notes:

Notice: All information, including illustrations given herein is believed to be accurate at the time of printing. In-lieu of design advances, Amphenol reserves the right to change specifications without notice. This publication RS 709 Connectors Rev. 03/20 supercedes all existing literature on RS 709 Connectors.





# Amphenol

## *A Global Company*



Pune Operations



Bangalore Operations

# Amphenol

## Interconnect India Pvt. Ltd.

### Manufacturing Locations

#### Corporate Office & Pune Factory

105, Bhosari Industrial Area, Pune - 411 026.  
Tel.: 91-20-6736 0302  
Fax : 91-20-6736 0321  
Email : rjohn@amphenol-in.com

#### Exports

Tel.: 91-20-6736 0305, 6736 0353  
Email : svpatil@amphenol-in.com

#### Bangalore Factory

61, Keonics Electronic City, Hosur Road,  
Bangalore - 560 102.  
Mobile : 91-6679 0900 /910 /937  
Email : shrikantgramopadhye@amphenol-in.com  
snagarahalli@amphenol-in.com

### Marketing Locations

#### Marketing Headquarters

Tel.: 91-20-6736 0303, 6736 0304  
Fax : 91-20-6736 0321  
Email : vbhavsar@amphenol-in.com  
Email : sales@amphenol-in.com

#### Western Region

Tel.: 91-20-6736 0334  
Email : sunilp@amphenol-in.com

#### Northern & Eastern Region

A-421, Pacific Business Park,  
Plot No. 37/1, Sahibabad Indst. Area  
Site IV, Ghaziabad (UP) - 201 010.  
Mobile : 91-99102 11399  
Email : sunily@amphenol-in.com

#### Southern Region

No. 1115, 22nd Main Road, 11th Cross,  
Sector -1, HSR Layout, Bangalore - 560 102.  
Tel.: 91-80-4953 0341, 4953 0345  
Fax: 91-80-4953 8697  
Email : kmanoj@amphenol-in.com

#### Central Region

107, 1st Floor, 'Am Sri Classic',  
Sarojinidevi Road, Secunderabad - 500 003.  
Telefax : 91-40-6633 2906  
Email : pprasad@amphenol-in.com

[www.amphenol-in.com](http://www.amphenol-in.com)