

BLITZConnect

2PM series circular electrical connectors mainly adopt Russian connector technology. It is widely used for electrical connection and signal transmission between electrical equipment in railway system, trams and trolley bus etc. Its unique structure can make up for the shortcomings of many other similar connectors, making it more convenient and scientific to use.

The cable plug and panel socket are threaded connection.

The panel socket also has a glass sintered sealed socket (M) and a glass sintered sealed bulkhead socket (C), which can simultaneously meet the user requirements in special environments such as vacuum, sealing, and high temperature. It can be matched and interchanged with original parts of Russian 2PM(T) / 2PMД(T) 、 2PMГ/2PMГД、 2PMГП/2PMГПД series.



Technical Performance

Connector type: Cable plug / panel socket

Orientation: Straight/Angled

Connection method: Thread connection

Shell Material: Aluminum alloy

Contact Material: Copper with silver/gold plated

Shell Size: 2PM14/18/22/24/27/30/33/36/39/42/45

Contacts: 4/7/8/10/19/20/22/24/32/45/50

Termination: Solder

Mating Cycles: 500 times

Working Voltage: ≤700V

Working Current: 5-40A

Insulator: Bakelite(Glass fiber mixed) /PBT

Operating temperature: -60°C - +200°C

Insulation resistance: Normal ≥1000MΩ Moistheat ≥20MΩ

Contact resistance: 0.8-5mΩ

Ø1.0	Ø1.5	Ø2.0	Ø3.0
5A	10A	20A	40A

Ø1.0	Ø1.5	Ø2.0	Ø3.0
≤5mΩ	≤2.5mΩ	≤1.6mΩ	≤0.8mΩ

Russian/ BLITZConnect P/N code Explanation

No.	Explanation of code	Russian code
1	Non-sealed	2PM, 2PMД
	Non-sealed heat resistant(T)	2PMТ, 2PMДТ
	Sealed(Г)	2PMГ, 2PMГД
	Sealed bulkhead(П)	2PMГП, 2PMГПД
2	Shell Size (mm)	14, 18, 22, 24, 27, 30, 33, 36, 39, 42, 45
3	Connector type	Б - Socket К - Cable Plug
4	Orientation of Tail attachment	П (Straight) / У (Angled)
5	Shielded or not of Tail attachment	Н (Unshielded) / З (Shielded)
6	Contacts	4, 7, 8, 10, 19, 20, 22, 24, 30, 32, 42, 45, 50
7	Gender	Ш (Male) / Г (Female)
8	Combination No. of contacts	1-Φ1 6-Φ1.5+Φ3 2-Φ1+Φ1.5 7-Φ1.5++Φ2+Φ3 3-Φ2+Φ3 8-Φ1.5++Φ2 4-Φ1+Φ3 9-Φ3 5-Φ1.5
9	Plating of contacts	А - Gold plated pin В - Silver plated pin Е - Nickel plated pin
10	Temperature resistance	1 £ 100°C) 2 £ 200°C)
11	All climate	В

No.	Explanation of code	BLITZConnect code
1	Non-sealed	2PM
	Non-sealed heat resistant(T)	2PM
	Sealed(Г)	2PM - М
	Sealed bulkhead(П)	2PM - С
2	Shell Size (mm)	14, 18, 22, 24, 27, 30, 33, 36, 39, 42, 45
3	Connector type	З - Unsealed Socket М - Sealed Socket С - Sealed Socket bulkhead Q/У - Straight/Angled Cable Plug
4	Tail attachment	А (Shielded) / В (Unshielded)
5	Contacts	4, 7, 8, 10, 19, 20, 22, 24, 30, 32, 42, 45, 50
6	Gender	Ж (Male) / К (Female)
7	Plating of contacts	1- Gold plated pin 2- Silver plated pin 3- Nickel plated pin
8	Combination No. of contacts	(1).(2).(3).(4).(5).(6).(7).(8).(9)

P/N Image Examples:



QB

КПН



WB

КУН



QA

КПЭ



WA

КУЭ



Z

2PM(T)/2PMД(T) -Б



M

2PMГ/2PMГД-Б



C

2PMГП/2PMГПД-Б



Z+A/B

2PM(T)/2PMД(T) -БП+Н/Э



M+A/B

2PMГ/2PMГД-БП+Н/Э



C+A/B

2PMГП/2PMГПД-БП+Н/Э

Note:

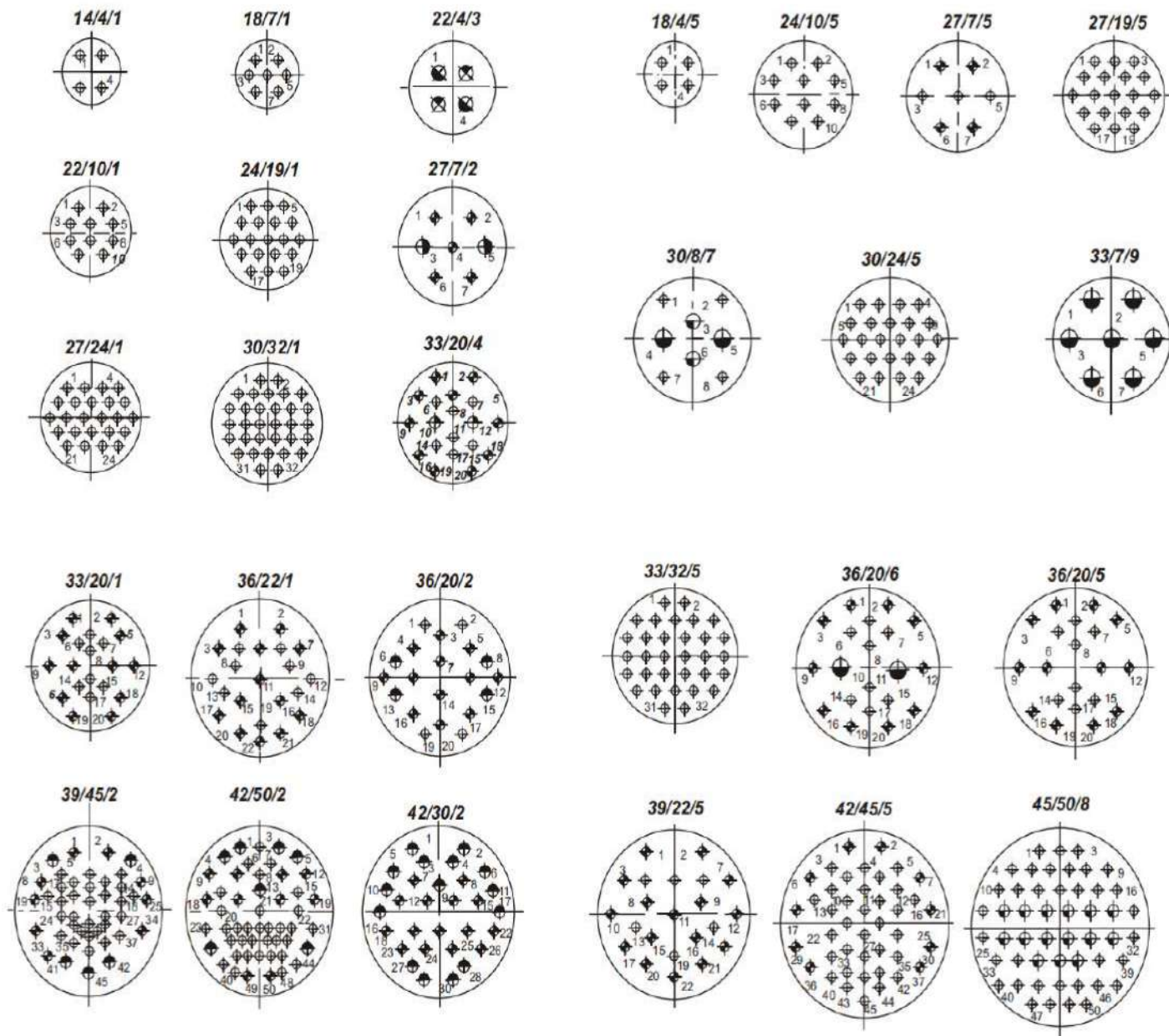
Sealed socket(M/C) : Stainless steel material, glass insulator process

Contacts arrangements (From female view)

Contact layout diagrams for 2PM(T)

Ex: Shell Size / No. of Contacts / Combination No.

Contact layout diagrams for 2PMД(T)

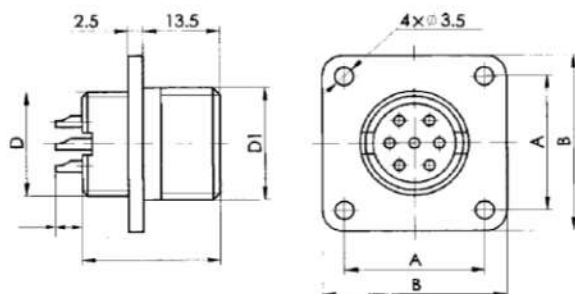


Contacts arrangements (From female view)

Combination No. Shell Size	Shell size/Contacts/Combination No. of contacts			Contact OD:	
	14/4/1			$\varnothing 1$ $\varnothing 1.5$ $\varnothing 2$ $\varnothing 3$ 	
14					
18	18/7/1	18/4/5	22	22/4/3	22/10/1
24	24/10/5	24/19/1			
27	27/7/5	27/7/2	27/19/5	27/24/1	
30	30/8/7	30/24/5	30/32/1		
33	33/7/9	33/20/4	33/20/1	33/32/5	
36	36/22/1	36/20/2	36/20/6	36/20/5	
39	39/22/5	39/45/2			
42	42/30/2	42/45/5	42/50/2	45	45/50/8

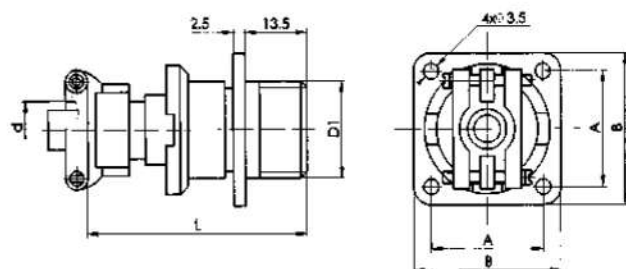
Appearance and installation dimensions

Socket without tail attachment(5)



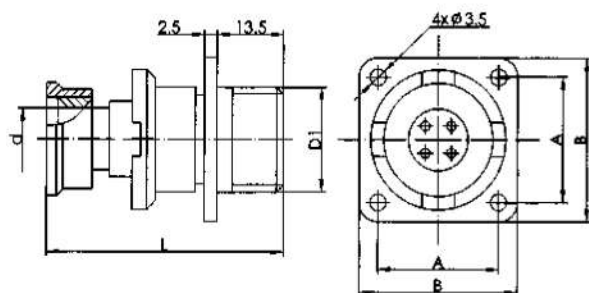
Size (mm)					
Shell Size	D(Left)	D ₁	A	B	B
14	M14×1	M16×1	17±0.1	24	24
18	M18×1	M20×1	20±0.1	27	
22	M22×1	M24×1	23±0.1	30	
24	M24×1	M27×1.5	26±0.1	33	
27	M27×1	M30×1.5	29±0.1	36	
30	M30×1	M33×1.5	31±0.1	38	
33	M33×1	M36×1.5	32±0.1	40	
36	M36×1	M39×1.5	35±0.1	43	
39	M39×1	M42×1.5	37±0.1	46	
42	M42×1	M45×1.5	40±0.1	49	
45	M45×1	M48×1.5	43±0.1	52	26

Socket with straight unshielded tail attachment(5FH)



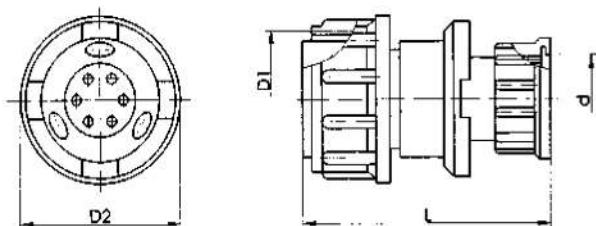
Size (mm)					
Shell Size	D1	d	A	B	L
14	M16×1	6.5	17±0.1	24	54
18	M20×1	10.5	20±0.1	27	54
22	M24×1	14.5	23±0.1	30	57
24	M27×1.5	16.5	26±0.1	33	62.5
27	M30×1.5	18.5	29±0.1	36	62.5
30	M33×1.5	20.5	31±0.1	38	62.5
33	M36×1.5	22.5	32±0.1	40	67.5
36	M39×1.5	22.5	35±0.1	43	67.5
39	M42×1.5	24.5	37±0.1	46	67.5
42	M45×1.5	30.5	40±0.1	49	67.5
45	M48×1.5	30.5	43±0.1	52	67.5

Socket with straight shielded tail attachment(5F3)



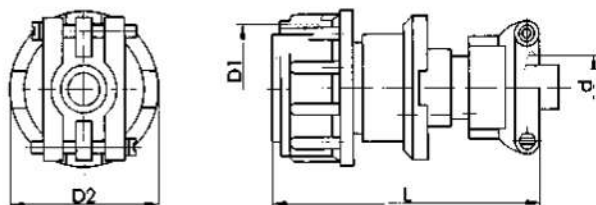
Size (mm)					
Shell Size	D1	d	A	B	L
14	M16×1	6.5	17±0.1	24	48
18	M20×1	10.5	20±0.1	27	48
22	M24×1	14	23±0.1	30	48
24	M27×1.5	16.5	26±0.1	33	54
27	M30×1.5	18	29±0.1	36	54
30	M33×1.5	20.5	31±0.1	38	54
33	M36×1.5	23.7	32±0.1	40	59
36	M39×1.5	22.5	35±0.1	43	59
39	M42×1.5	25	37±0.1	46	59
42	M45×1.5	29.5	40±0.1	49	59
45	M48×1.5	29.5	43±0.1	52	59

⊙ Cable plug with straight shielded tail attachment(КПЭ)



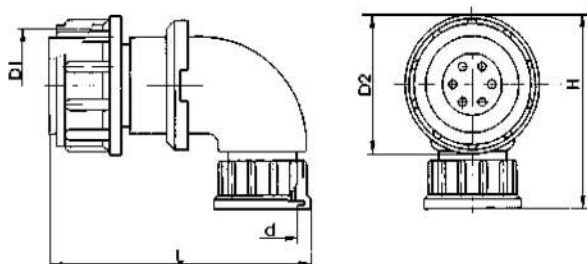
Size (mm)				
Shell Size	D1	D2	d	L
14	M16×1	22	6.5	48
18	M20×1	25	10.5	48
22	M24×1	29	14	48
24	M27×1.5	32	16.5	54
27	M30×1.5	35	18	54
30	M33×1.5	39	20.5	54
33	M36×1.5	42	23.7	59
36	M39×1.5	45	22.5	59
39	M42×1.5	48.5	25	59
42	M45×1.5	51	29.5	59
45	M48×1.5	54	29.5	59

⊙ Cable plug with straight unshielded tail attachment(КПН)



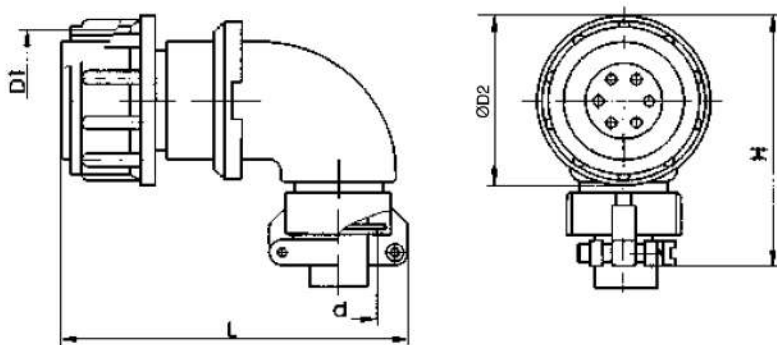
Size (mm)				
Shell Size	D1	D2	d	L
14	M16×1	22	6.5	54
18	M20×1	25	10.5	54
22	M24×1	29	14.5	57
24	M27×1.5	32	16.5	62.5
27	M30×1.5	35	18.5	62.5
30	M33×1.5	39	20.5	62.5
33	M36×1.5	42	22.5	67.5
36	M39×1.5	45	22.5	67.5
39	M42×1.5	48.5	24.5	67.5
42	M45×1.5	51	30.5	67.5
45	M48×1.5	54	30.5	67.5

⊙ Cable plug with angled shielded tail attachment(КΥЭ)



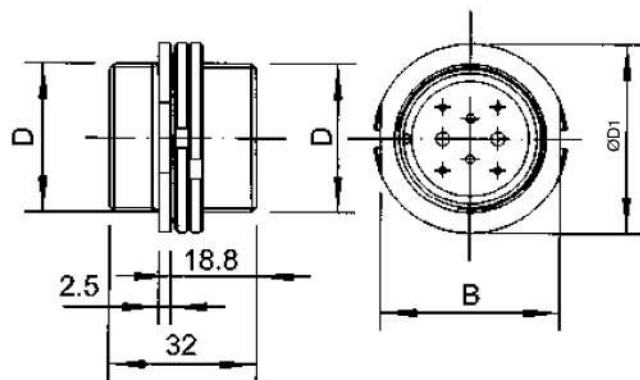
Size (mm)					
Shell Size	D1	D2	d	H	L
14	M16×1	22	6.5	30.8	48
18	M20×1	25	10.5	35	51
22	M24×1	29	14	38	54
24	M27×1.5	32	16.5	41	57
27	M30×1.5	35	18	44	59
30	M33×1.5	39	20.5	47.8	62
33	M36×1.5	42	23.7	50.8	65
36	M39×1.5	45	22.5	53.8	72
39	M42×1.5	48.5	25	56	72
42	M45×1.5	51	29.5	60	72

② Cable plug with angled unshielded tail attachment(КВН)



Size (mm)					
Shell Size	D1	D2	d	H	L
14	M16×1	22	6.5	40	51
18	M20×1	25	10.5	41	54
22	M24×1	29	14.5	47	59
24	M27×1.5	32	16.5	50	60
27	M30×1.5	35	18.5	53	64
30	M33×1.5	39	20.5	57	65
33	M36×1.5	42	22.5	60	69
36	M39×1.5	45	22.5	63	74
39	M42×1.5	48.5	24.5	66	73
42	M45×1.5	51	30.5	69	76

② Sealed socket bulkhead(ГП)



Size (mm)			
Shell Size	D	D1	B
14	M16×1	25	22
18	M20×1	29	26
22	M24×1	33	30
24	M27×1.5	36	33
27	M30×1.5	39	36
30	M33×1.5	42	39
33	M36×1.5	45	42
36	M39×1.5	48	45
39	M42×1.5	51	48
42	M45×1.5	54	51

Contact combination code list

Shell Size	Contact combination no.	Contacts	Contact OD(mm) and numbers			
			Ø1.0	Ø1.5	Ø2.0	Ø3.0
14	1	4	4			
18	1	7	7			
	5	4		4		
22	1	10	10			
	3	4			2	2
24	1	19	19			
	5	10		10		
27	1	24	24			
	2	7	5	2		
	5	7		7		
	5	19		19		
30	1	32	32			
	5	24		24		
	7	8		4	2	2

Shell Size	Contact combination no.	Contacts	Contact OD(mm) and numbers			
			Ø1.0	Ø1.5	Ø2.0	Ø3.0
33	1	20	20			
	4	20	18			2
	5	32		32		
	9	7				7
36	1	22	22			
	2	20	16	4		
	5	20		20		
	6	20		18		2
39	2	45	40	5		
	5	22		22		
42	2	30	15	15		
	2	50	43	7		
	5	45		45		
45	8	50		35	15	