

RENHOTEC



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Product Catalogue



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2PM SERIES

PRODUCT OVERVIEW



RENHOTEC GROUP LIMITED

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RENHOTEC
GROUP LIMITED



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 equirements inspecial environments such as vacuum,sealing,and high temperature.It can be matched and interchanged with original parts of Russian2PM(T) /2PMД(T) 、 2PMГ/2PMГД、 2PMГП/2PMГПД series.

Technical Performance

Connector type: Cable plug /panel socket	Termination: Solder
Orentation: Straight/Angled	Mating Cycles: 500 times
Connection method: Thread connection	Working Voltage: ≤700V
Shell Material: Aluminum alloy	Working Current: 5-40A
Contact Material: Copper with silver/gold plated	Insulater: Bakelite(Glass fiber mixed) /PBT
Shell Size: 2PM14/18/22/24/27/30/33/36/39/42/45	Operating temperature: -60℃ - +200℃
Contacts: 4/7/8/10/19/20/22/24/32/45/50	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/ RENHOTEK P/N code Explanation

No.	Explanation of code	Russian code
1	Non-sealed Non-sealed heat resistant(T) Sealed(Г) Sealed bulkhead(П)	2PM,2PMД 2PMТ,2PMДТ 2PMГ,2PMГД 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) / Э(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	(100℃) (200℃)
11	All cimate	В

No.	Explanation of code	Renhotec code
1	Non-sealed Non-sealed heat resistant(T) Sealed(Г) Sealed bulkhead(П)	2PM 2PM 2PM - M 2PM - C
2	Shell Size (mm)	14、18、22、24、27 30、33、36、39、42、45
3	Connector type	Z - Unsealed Socket M - Sealed Socket C - Sealed Socket bulkhead Q/W - Straight/Angled Cable Plug
4	Tail attachment	A (Shielded) / B (Unshielded)
5	Contacts	4、7、8、10、19、20、22、24、 30、32、42、45、50
6	Gender	J(Male) / K(Female)
7	Plating of contacts	1- Gold plated pin 2- Silver plated pin
8	Combination No. of contacts	(1).(2).(3).(4).(5).(6).(7).(8).(9)

P/N RULES

2PMДТ 18 К П Н 4 Г 5 В 2 (Б)

2PM(T) / 2PMД(T) - Non-sealed
2PMГ / 2PMГД - Sealed
2PMГП / 2PMГПД - Sealed bulkhead

Shell Size:
14.18.22.24.27.30.33.36.39.42.45

Connector type:
Б - Socket
К - Cable Plug

Orientation of Tail attachment:
П(Straight) У(Angled)

Shielded or not of Tail attachment:
Н(Unshielded) Э(Shielded)

Contacts:
4.7.8.10.19.20.22.24.30.32.42.45.50

Gender:
Ш(Male) / Г(Female)

Combination No. of contacts:
1.2.3.4.5.6.7.8.9

Plating of contacts:
А - Gold plated pin В - Silver plated pin Е - Nickel plated pin

Temperature resistance:
1 Е(100℃) 2 Е(200℃)

All cimate: В

RENHOTEK P/N

2PM 18 К 4 Q Б 2 (5)

Series:
2PM Unsealed
2PM-(M Sealed)
2PM-(C Sealed bulkhead)

Shell Size:
14.18.22.24.27.30.33.36.39.42.45

Gender:
К(Female) / J(Male)

Contacts:
4.7.8.10.19.20.22.24.30.32.42.45.50

Combination No. of contacts: 1.2.3.4.5.6.7.8.9

Plating of contacts:
1 - Gold plated pin 2 - Silver plated pin

Connector type:
Q: Straight cable plug W: Angled cable plug
Z: Unsealed socket M: Sealed socket C: Sealed socket bulkhead

Shielded or not of Tail attachment:
А(Shielded) В(Unshielded)

P/N Image Examples



QB
КПН



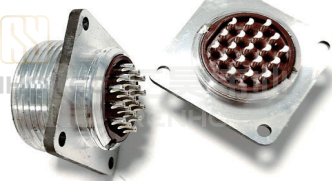
WB
КУН



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



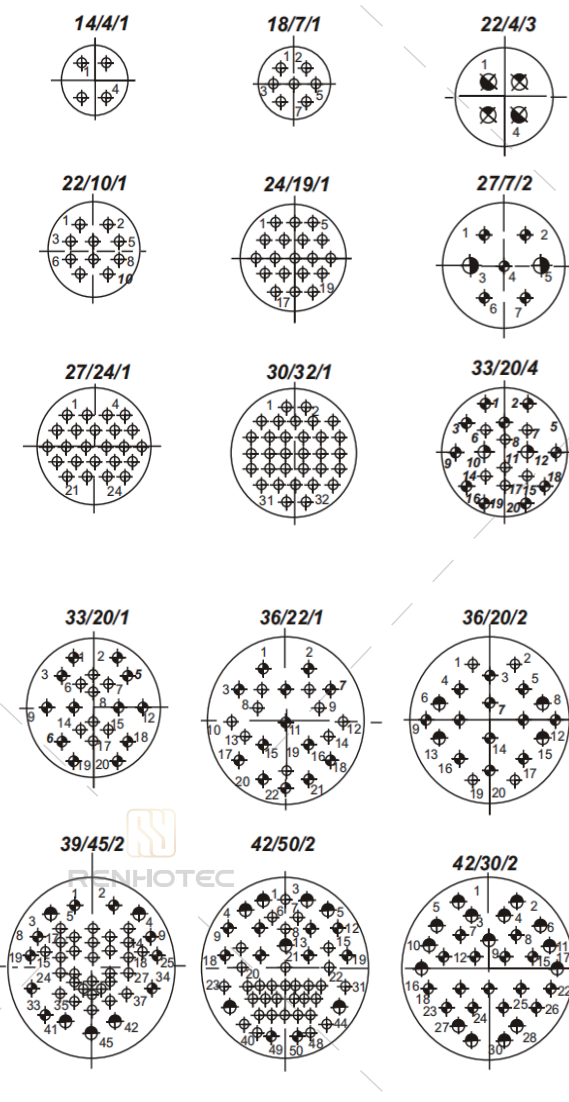
C+A/B
2PMГП/2PMГПД-БП+Н/Э

Note: Sealed Socket(M/C):Stainless Steel Material,glass Insulator Process

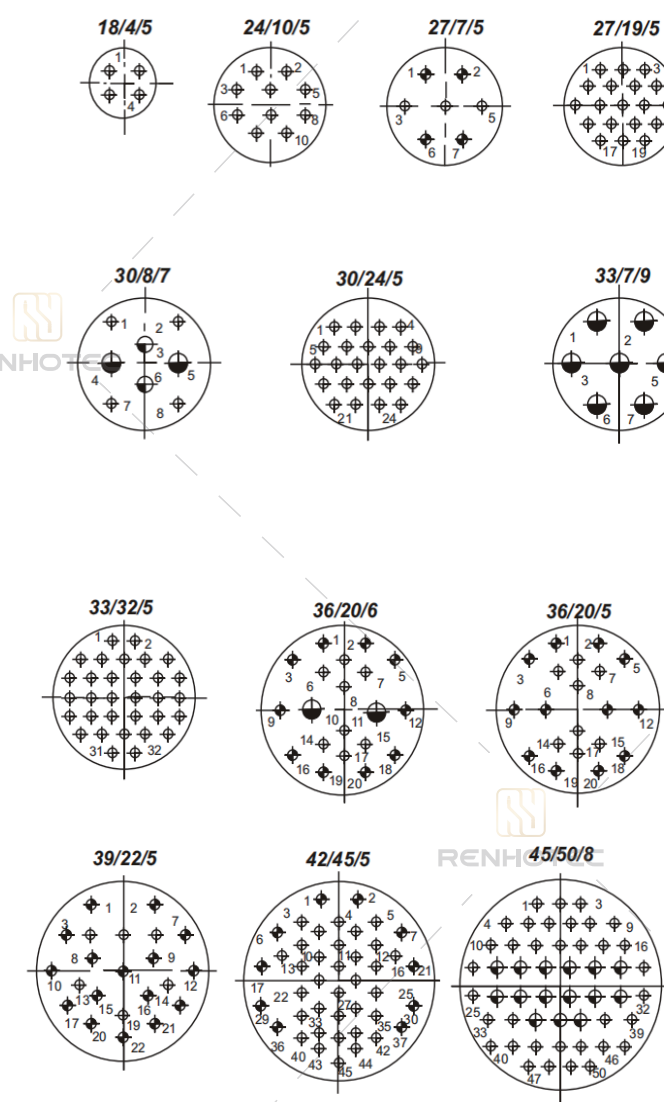
Contacts Arrangements (From Female View)

Contact Layout Diagrams For 2PM(T)

Ex: Shell Size/no.of Contacts/combination No.



Contact Layout Diagrams For 2PMД(T)

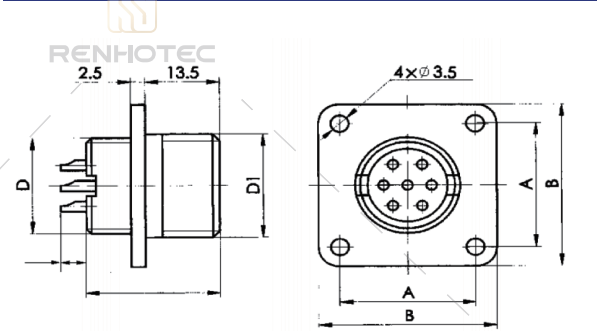


Contacts Arrangements (From Female View)

Combination No.		Shell size/Contacts/Combination No. of contacts		Contact OD:	
Shell Size		14/4/1		Ø1 Ø1.5 Ø2 Ø3	
14					
	18/7/1 18/4/5			22/4/3	22/10/1
18		22			
	24/10/5 24/19/1				
24					
	27/7/5 27/7/2 27/19/5 27/24/1				
27					
	30/8/7 30/24/5 30/32/1	RENHOTECH			
30					
	33/7/9 33/20/4 33/20/1 33/32/5				
33					
	36/22/1 36/20/2 36/20/6 36/20/5				
36					
	39/22/5 39/45/2	HOTECH			
39					
	42/30/2 42/45/5 42/50/2			45	45/50/8
42					

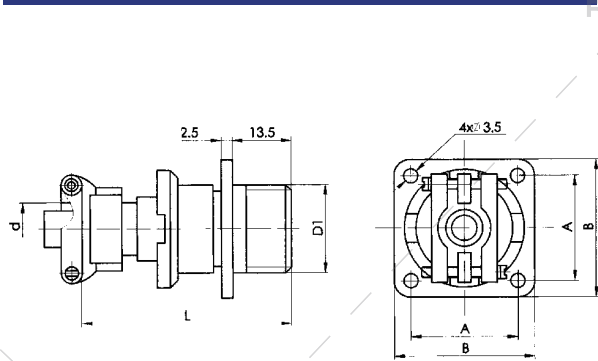
Appearance And Installtion Dimensions

Socket Without Tail Attachment(Б)



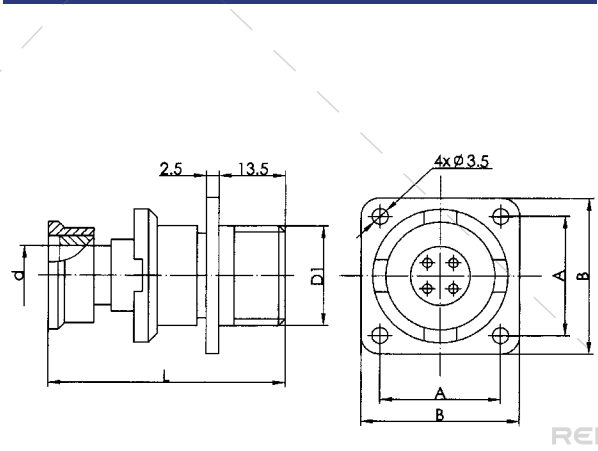
Size (mm)					
Shell Size	D(Left)	D1	A	B	B
14	M14x1	M16x1	17±0.1	24	24
18	M18x1	M20x1	20±0.1	27	
22	M22x1	M24x1	23±0.1	30	
24	M24x1	M27x1.5	26±0.1	33	
27	M27x1	M30x1.5	29±0.1	36	
30	M30x1	M33x1.5	31±0.1	38	
33	M33x1	M36x1.5	32±0.1	40	
36	M36x1	M39x1.5	35±0.1	43	
39	M39x1	M42x1.5	37±0.1	46	
42	M42x1	M45x1.5	40±0.1	49	
45	M45x1	M48x1.5	43±0.1	52	26

Socket With straight unshielded tail attachment(БПЭ)



Size (mm)					
Shell Size	D1	d	A	B	L
14	M16x1	6.5	17±0.1	24	54
18	M20x1	10.5	20±0.1	27	54
22	M24x1	14.5	23±0.1	30	57
24	M27x1.5	16.5	26±0.1	33	62.5
27	M30x1.5	18.5	29±0.1	36	62.5
30	M33x1.5	20.5	31±0.1	38	62.5
33	M36x1.5	22.5	32±0.1	40	67.5
36	M39x1.5	22.5	35±0.1	43	67.5
39	M42x1.5	24.5	37±0.1	46	67.5
42	M45x1.5	30.5	40±0.1	49	67.5
45	M48x1.5	30.5	43±0.1	52	67.5

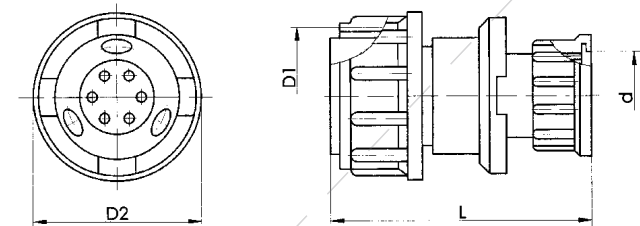
Socket With straight shielded tail attachment(БПН)



Size (mm)					
Shell Size	D1	d	A	B	L
14	M16x1	6.5	17±0.1	24	48
18	M20x1	10.5	20±0.1	27	48
22	M24x1	14	23±0.1	30	48
24	M27x1.5	16.5	26±0.1	33	54
27	M30x1.5	18	29±0.1	36	54
30	M33x1.5	20.5	31±0.1	38	54
33	M36x1.5	23.7	32±0.1	40	59
36	M39x1.5	22.5	35±0.1	43	59
39	M42x1.5	25	37±0.1	46	59
42	M45x1.5	29.5	40±0.1	49	59
45	M48x1.5	29.5	43±0.1	52	59

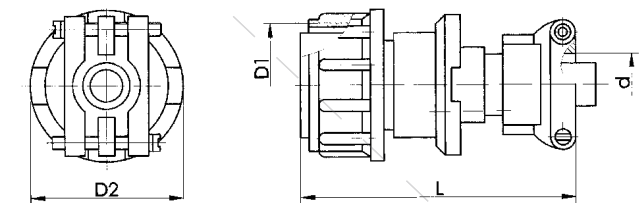
Appearance And Installtion Dimensions

cable plug with straight shielded tail attachment(КПЭ)



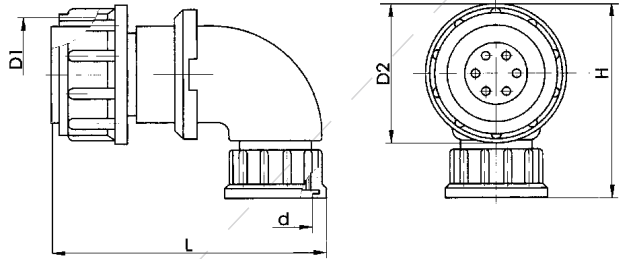
Size (mm)				
Shell Size	D1	D2	d	L
14	M16×1	22	6.5	48
18	M20×1	25	10.5	48
22	M24×1	29	14	48
24	M27×1.5	32	16.5	54
27	M30×1.5	35	18	54
30	M33×1.5	39	20.5	54
33	M36×1.5	42	23.7	59
36	M39×1.5	45	22.5	59
39	M42×1.5	48.5	25	59
42	M45×1.5	51	29.5	59
45	M48×1.5	54	29.5	59

cable plug with straight unshielded tail attachment(КПН)



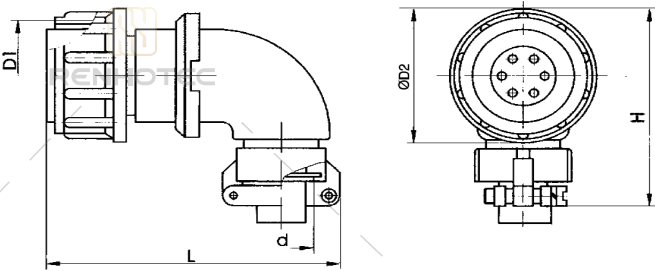
Size (mm)				
Shell Size	D1	D2	d	L
14	M16×1	22	6.5	54
18	M20×1	25	10.5	54
22	M24×1	29	14.5	57
24	M27×1.5	32	16.5	62.5
27	M30×1.5	35	18.5	62.5
30	M33×1.5	39	20.5	62.5
33	M36×1.5	42	22.5	67.5
36	M39×1.5	45	22.5	67.5
39	M42×1.5	48.5	24.5	67.5
42	M45×1.5	51	30.5	67.5
45	M48×1.5	54	30.5	67.5

cable plug with angled shielded tail attachment(КΥЭ)



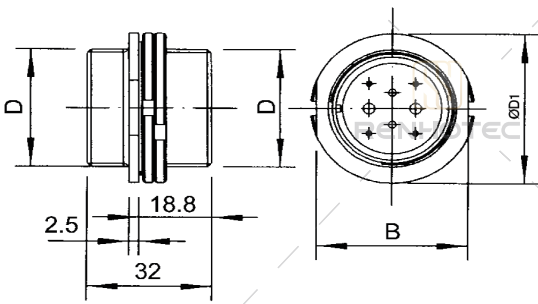
Size (mm)					
Shell Size	D1	D2	d	H	L
14	M16×1	22	6.5	30.8	48
18	M20×1	25	10.5	35	51
22	M24×1	29	14	38	54
24	M27×1.5	32	16.5	41	57
27	M30×1.5	35	18	44	59
30	M33×1.5	39	20.5	47.8	62
33	M36×1.5	42	23.7	50.8	65
36	M39×1.5	45	22.5	53.8	72
39	M42×1.5	48.5	25	56	72
42	M45×1.5	51	29.5	60	72

cable plug with angled unshielded tail attachment(КΥН)



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

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			
18	5	4		4		
22	1	10	10			
22	3	4			2	2
24	1	19	19			
24	5	10		10		
27	1	24	24			
27	2	7	5	2		
27	5	7		7		
27	5	19		19		
30	1	32	32			
30	5	24		24		
30	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			
33	4	20	18			2
33	5	32		32		
33	9	7				7
36	1	22	22			
36	2	20	16	4		
36	5	20		20		
36	6	20		18		2
39	2	45	40	5		
39	5	22		22		
42	2	30	15	15		
42	2	50	43	7		
42	5	45		45		
45	8	50		35	15	