



2PM SERIES

PRODUCT OVERVIEW

RENHOTEC GROUP LIMITED

☎ : 86-027-81296316

🌐 : www.renhotec.com ✉ : info@renhotec.com

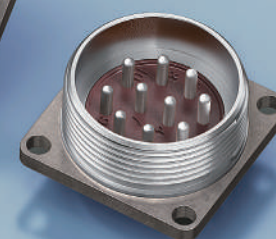
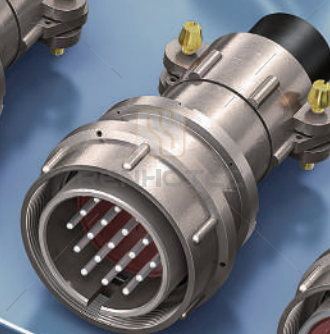
Headquarters(Wuhan): No.555 Wenhua Avenue, Hongshan District,Wuhan
430074, China

Factory(Dongguan): No.25 Ningjiang Road, Humen Town,Dongguan City
Guangdong Province, China

Factory(jiangmen): Building 5, Wanyang Zhongchuang City,Daze Industrial
Park, Jiangmen City, Guangdong Province, China

2PM SERIES

PRODUCT OVERVIEW



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
Orentation: 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
Insulater: 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

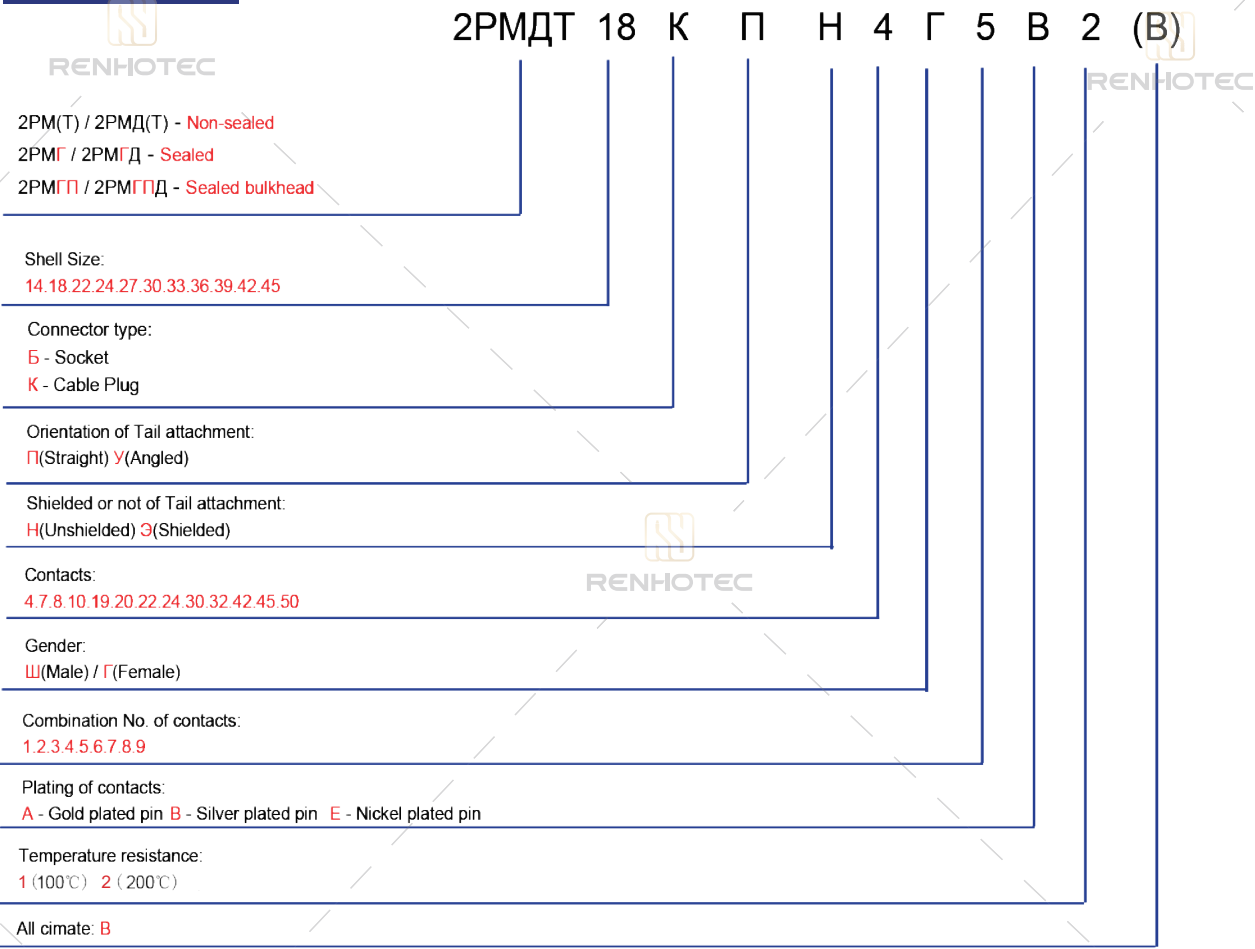
Russian/ RENHOTEC P/N code Explanation

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) / Y(Angled)
5	Shielded or not of Tail attachment	H(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	A - Gold plated pin B - Silver plated pin E - Nickel plated pin
10	Temperature resistance	1 (100℃) 2 (200℃)
11	All cimate	B

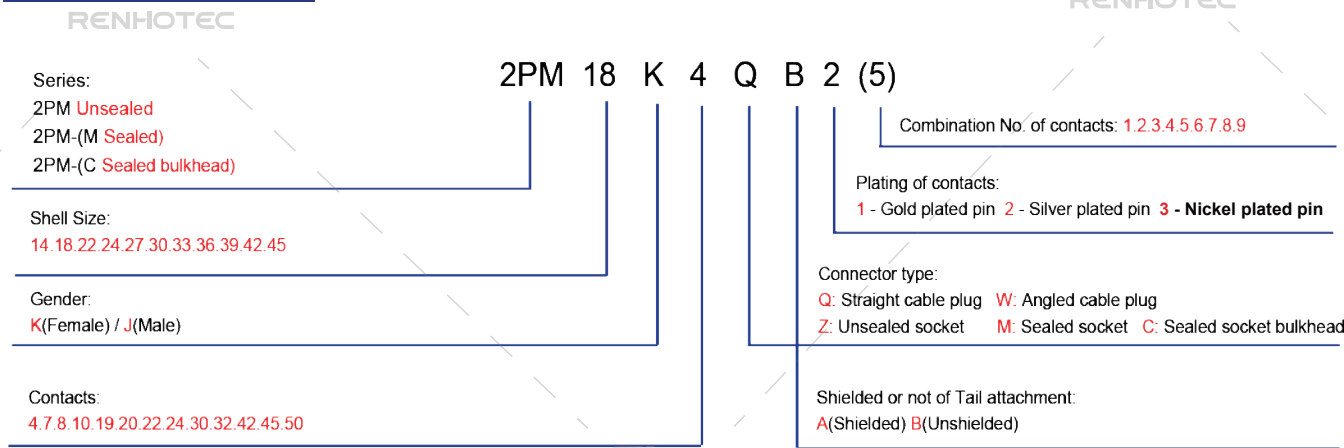
No.	Explanation of code	Renhotec code
1	Non-sealed Non-sealed heat resistant(T) Sealed(Г) Sealed bulkhead(П)	2PM 2PM 2PM - M 2PM - C
2	Shell Size (mm)	14, 18, 22, 24, 27 30, 33, 36, 39, 42, 45
3	Connector type	Z - Unsealed Socket M - Sealed Socket C - Sealed Socket bulkhead Q/W - Straight/Angled Cable 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 3- Nickel plated pin
8	Combination No. of contacts	(1).(2).(3).(4).(5).(6).(7).(8).(9)

P/N RULES

Russian P/N



RENHOTEC P/N



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



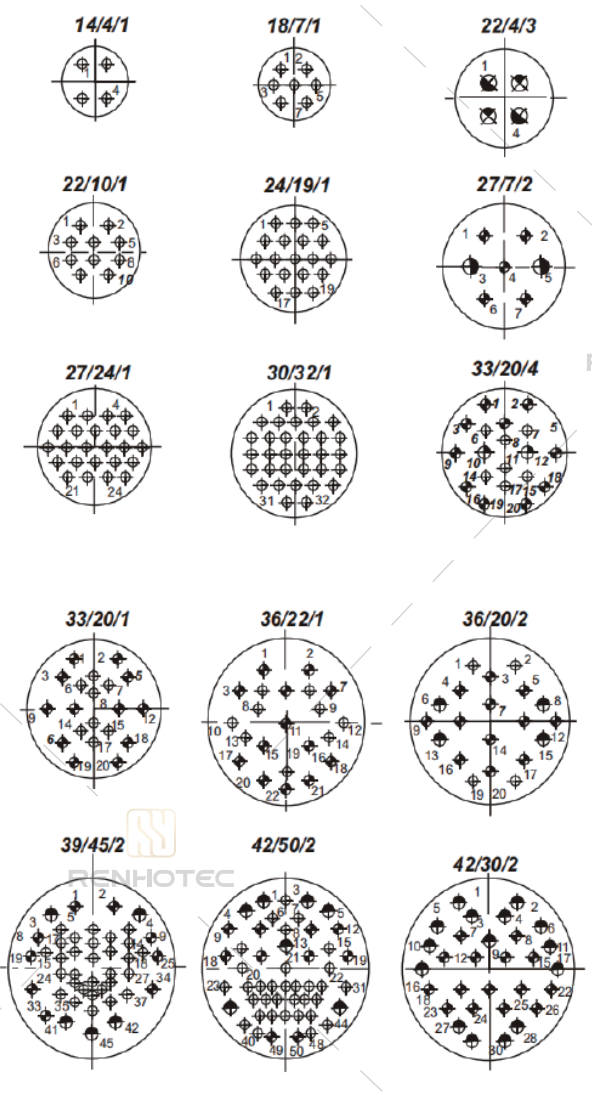
C+A/B
2PMГП/2PMГПД-БП+Н/Э

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

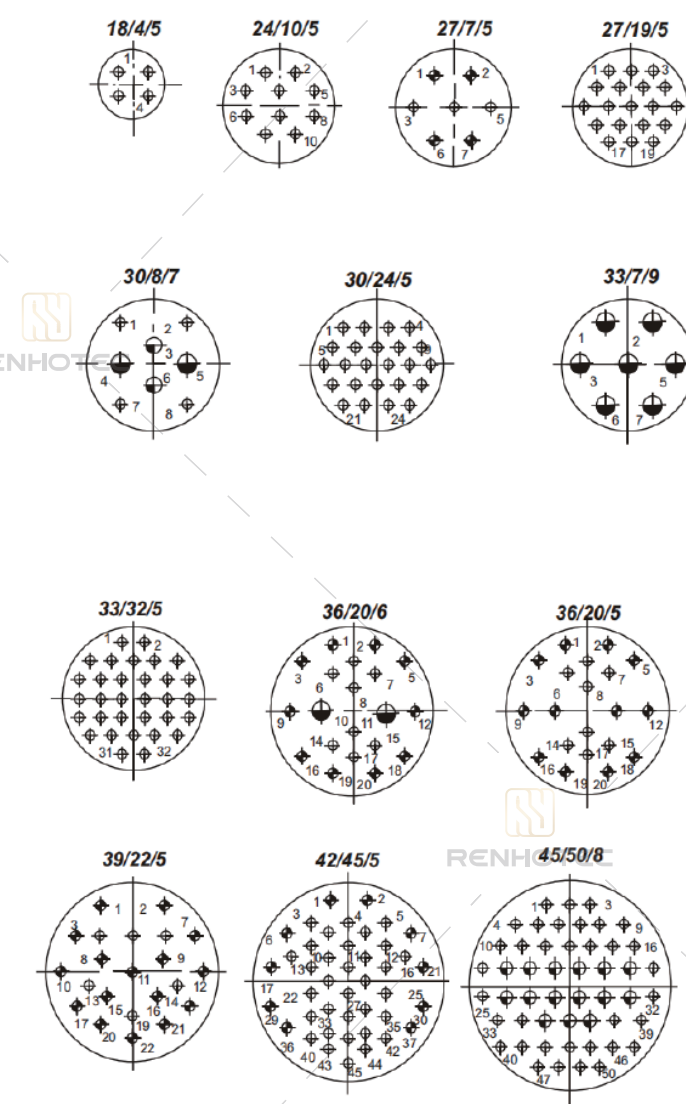
Contacts Arrangements (From Female View)

Contact Layout Diagrams For 2PM(T)

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



Contact Layout Diagrams For 2PMД(T)

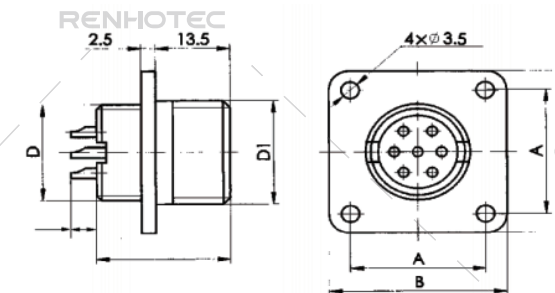


Contacts Arrangements (From Female View)

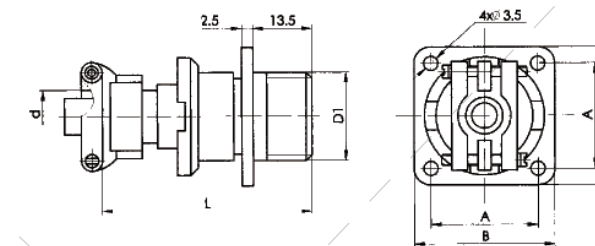
Combination No. Shell Size	Shell size/Contacts/Combination No. of contacts 14/4/1		Contact OD: ø 1 ø 1.5 ø 2 ø 3	
14				
18	18/7/1	18/4/5	22	22/4/3 22/10/1
24	24/10/5	24/19/1		
27	27/7/5	27/7/2	27/19/5	27/24/1
30	30/8/7	30/24/5	30/32/1	
33	33/7/9	33/20/4	33/20/1	33/32/5
36	36/22/1	36/20/2	36/20/6	36/20/5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

Appearance and Installation Dimensions

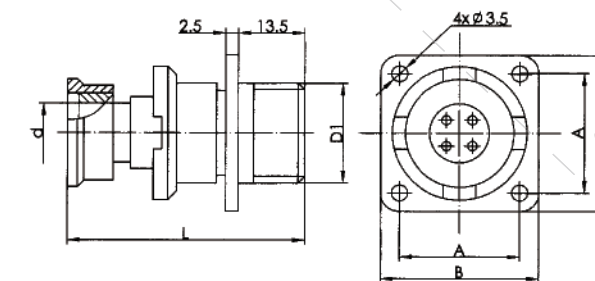
Socket without Tail Attachment(Б)



Socket with straight unshielded tail attachment(БПН)



Socket with straight shielded tail attachment(БПН)



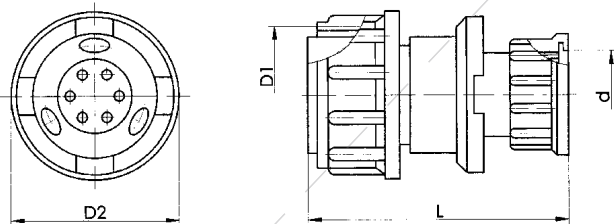
Size(mm)					
Shell Size	D(Left)	D1	A	B	B
14	M14x1	M16x1	17±0.1	24	24
18	M18x1	M20x1	20±0.1	27	
22	M22x1	M24x1	23±0.1	30	
24	M24x1	M27x1.5	26±0.1	33	
27	M27x1	M30x1.5	29±0.1	36	
30	M30x1	M33x1.5	31±0.1	38	
33	M33x1	M36x1.5	32±0.1	40	
36	M36x1	M39x1.5	35±0.1	43	
39	M39x1	M42x1.5	37±0.1	46	
42	M42x1	M45x1.5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

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

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

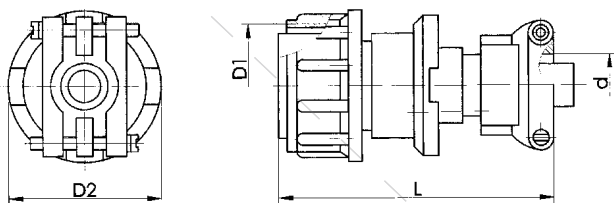
Appearance and Installtion Dimensions

Cable plug with straight shielded tail attachment(КПЭ)



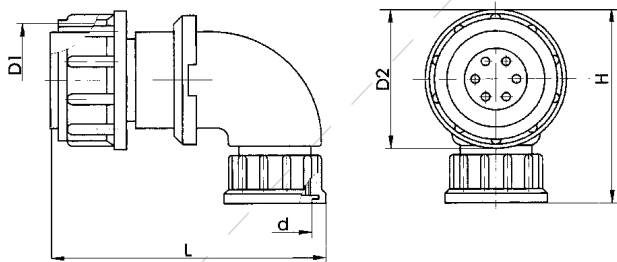
Size(mm)				
Shell Size	D1	D2	d	L
14	M16×1	22	6.5	48
18	M20×1	25	10.5	48
22	M24×1	29	14	48
24	M27×1.5	32	16.5	54
27	M30×1.5	35	18	54
30	M33×1.5	39	20.5	54
33	M36×1.5	42	23.7	59
36	M39×1.5	45	22.5	59
39	M42×1.5	48.5	25	59
42	M45×1.5	51	29.5	59
45	M48×1.5	54	29.5	59

Cable plug with straight unshielded tail attachment(КПН)



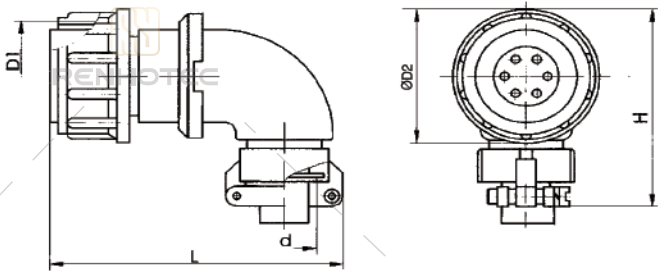
Size(mm)				
Shell Size	D1	D2	d	L
14	M16×1	22	6.5	54
18	M20×1	25	10.5	54
22	M24×1	29	14.5	57
24	M27×1.5	32	16.5	62.5
27	M30×1.5	35	18.5	62.5
30	M33×1.5	39	20.5	62.5
33	M36×1.5	42	22.5	67.5
36	M39×1.5	45	22.5	67.5
39	M42×1.5	48.5	24.5	67.5
42	M45×1.5	51	30.5	67.5
45	M48×1.5	54	30.5	67.5

Cable plug with angled shielded tail attachment(КΥЭ)



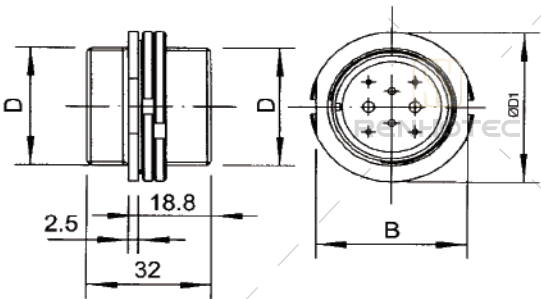
Size(mm)					
Shell Size	D1	D2	d	H	L
14	M16×1	22	6.5	30.8	48
18	M20×1	25	10.5	35	51
22	M24×1	29	14	38	54
24	M27×1.5	32	16.5	41	57
27	M30×1.5	35	18	44	59
30	M33×1.5	39	20.5	47.8	62
33	M36×1.5	42	23.7	50.8	65
36	M39×1.5	45	22.5	53.8	72
39	M42×1.5	48.5	25	56	72
42	M45×1.5	51	29.5	60	72

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 Sizd	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 Sizd	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	