### **2PX Series**

### **Electrical Connector**

2PM, 2PMД small circular electrical connector, used for circuit connections in electrical and radio devices, the plug and socket are connected through threaded connection nuts. 2PMГ, 2PMДГ is a sealed type, and 2PMГП, 2PMГПД is a sealed through wall type.

Localized model: 2PX

(The unified model of 2PM and 2PM $\mbox{\tt PM}\mbox{\tt J}$  series is 2PX, and the combination code is unified)

## Technical performance

- Environmental temperature: -60
   °C~+150°C; -60°C~+200°C (Sealed)
- Vibration acceleration: 10-5000Hz
   500g
- Impact acceleration: 500g (once);
   100g (multiple times)

Ø1.0

5A

Ø1.0

Ø1.5

10A

Ø1.5

Ø2.0

20A

Ø2.0

Ø3.0

40A

Ø3.0

- Working voltage: :
- Contact current:
- Contact resistanc ≤5mΩ ≤2.5mΩ ≤1.6mΩ ≤0.8mΩ

## Code Instruction

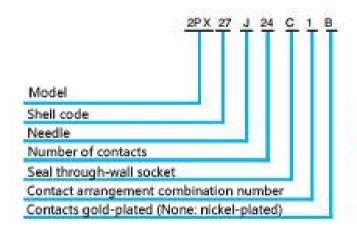
- Insulation resistance:
   ≥1000MΩ(normal),
   ≥20MΩ(dampness-heat)
- Mechanical and working life: 500
- times of plugging and unplugging
- Technical specification: Q/3E
   20006-200

	Meaning of code	Russian code	
1	Model Unsealed Unsealed heat-resistant T Sealed(Γ) Sealed through wall(Π)	2РМ, 2РМД 2РМТ, 2РМДТ 2РМГ, 2РМГД 2РМГП, 2РМГПД	
2	Shell standard size (mm)	14/18/22/24/27/30/33/36/3	39/42/45
3	Connector composition: Socket Plug	Б (fixed end) K (free end)	
4	Tail attachment: Straight/Angled	П(straight)/У(Angled)	No tail
5	Tail attachment: Shielded/Unshielded	Э(shielded)/H(unshielded)	attachments not marked
6	Number of contacts	4/7/8/10/19/20/22/24/30/3	2/42/45/50
7	Contact category: Needle/Hole	Щ(Needle) / Г(Hole)	
8	Contact arrangement combination number 1-9	1-both Φ1 2- Φ1+ Φ1.5 3- Φ2+ Φ3 4- Φ1+ Φ3 5-both Φ1.5 6- Φ1.5+ Φ3 7- Φ1.5+ Φ2+ Φ3 8- Φ1.5+ Φ2 9-both Φ3	[

	Meaning of code	Russian code
9	Plating of contact parts with gold, silver, and nickel	A(Gold); B(Silver); E(Nickel)
1 0	Temperature grade: 100°C、 200°C	1(100°C); 2(200°C)
-1	All weather	D
	Meaning of code	Chinese code
1	Model Unsealed Sealed(Γ) Sealed through wall(Π)	2PX 2PX-M 2PX-C
2	Shell standard size (mm)	14/18/22/24/27/30/33/36/39/42/45
3	Contact category: Needle/Hole	J (Needle) / K (Hole)
4	Number of contacts	4/7/8/10/19/20/22/24/30/32/42/45/50
5	Connector composition: Plug Unsealed Socket Sealed Socket (through wall)	None A M (C)
6	Tail attachment: Straight Shielded (Unshielded) Angled Shielded (Unshielded)	P (Q) R (S)
7	Contact arrangement combination number 1-9	1-both Φ1 2- Φ1+ Φ1.5 3- Φ2+ Φ3 4- Φ1+ Φ3 5-both Φ1.5 6- Φ1.5+ Φ3 7- Φ1.5+ Φ2+ Φ3 8- Φ1.5+ Φ2 9-both Φ3
8	Plating of contact parts	B (Gold); None (Silver) Note: M/ Hermetically sealed, nickel-plated; C/Through wall, nickel-plated
9	Left plug	U

Russian:	2PM	27	Б	П	н	24	щ	1	A	1	B (Socket)
	<u>2PM</u>	27	ĸ	<del>-</del>	H	24	f	1	A	1	B (Plug)
Model							Т	T		I	
Shell code								Т		L	
K-Plug; Б-Socket		10	÷.,					Т		L	
Straight								Т		L	
Unshielded tail attachment								Т		L	
Number of contacts								Т		L	
Г-Hole; Щ-Needle								Т		L	
Contact arrangement combination	on numbe	r								L	
Contacts gold-plated								-			
Temperature grade (100°C)											
All-weather										6	

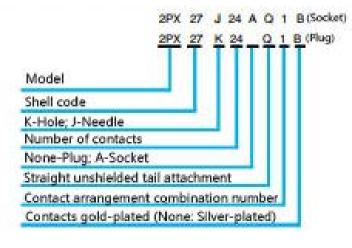
Chinese:



Sealed through wall socket

	2PX	27	1	24	M	+
Model	_					
Shell code						
Needle						
Number of contacts						
Sealed socket						
Contact arrangement o	ombina	rtion	nui	mbe	e	
Contacts gold-plated (I	None: n	ickel	-pla	ated	<u>۲</u>	

Sealed socket

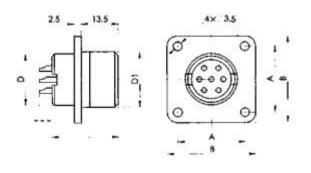


Non-sealed plug socket

# Insulator hole group arrangement (from the aspect of hole insulator mating surface)

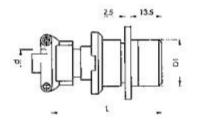
Arrangement combination number Shell code	14/4/1 (Shell code/Number of contacts/Arrangement combination number)				ø1	ø 1.5	ø2	<b>ø</b> 3	
14	(real)			Contact D	Nameter	٠	•	0	0
	18/7/1	18/4/5		4 B	1 - 3	22/4/	3	22	/10/1
18	(10 - 12) (30 - 10 - 15) (42 - 17)	(* *) *		22			en V	1	
	24/10/5	24/19/1							
24									
	27/7/5	27/7/2	27/19	/5	27/2	24/1			
27	(+ + +) (+ + +)	(H 22 (H 22 (H 22) (H 2		7 \ 012	/114 18383 80693 16693	ट~को; टटत§ ट:30			
	30/8/7	30/24/5	30/32	2/1					
30		3	8.000 8.0000 8.00000 8.00000 8.00000 8.00000 8.00000 8.00000 8.00000 8.00000 8.00000 8.000000000 8.0000000000	<ul> <li>○ 7 1</li> <li>□ ○ 13</li> <li>□ ○ 13</li> <li>○ 13</li> <li>○ 25</li> <li>○ 25</li> <li>□ □ 0/</li> </ul>					
	33/7/9	33/20/4	33/20	)/1	33/	/32/5			
33		10 02 03 10 02 03 10 00 10 10 00 10 10 00 10 10 00 10 00 1	/ <sup>36</sup> 63 83 (95, 100 (16) <sup>145</sup> 13	2 57 =5 011 -12 els_18 -20		•2			
	36/22/1	36/20/2	36/20	0/6	36	6/20/5	5		
36	1:	10 12 10	1 1 1 1 1 1 1 1 1 1 1 1 1 1	· · · · · · · · · · · · · · · · · · ·	14 14 14 14 14 14 14 14 14 14 14 14 14 1	2 13 17 20	•2		
	39/22/5	39/45/2							
39	10 02 30 0 07 00 0 0 02 10 0 0 0 10 0 1	10         10<							
	42/30/2	42/45/5	42	/50/2			4	5/50/8	
42	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		20k 501	-0 6 610 10 = 15 20	4	5	250 C  330  430		• • • • • • • • • • • • • • • • • • •

#### Socket without tail attachment (Б)

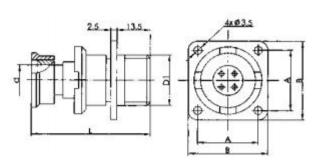


		Size (mi	m)		
Shell code	D (Left)	D 1	A	в	В
14	M14×1	M16×1	17±0.1	24	1
18	M18×1	M20×1	20±0.1	27	
22	M22×1	M24x1	23±0.1	30	
24	M24×1	M27×1.5	26±0.1	33	
27	M27×1	M30×1.5	29±0.1	36	24
30	M30×1	M33×1.5	31±0.1	38	
33	M33×1	M36×1.5	32±0.1	40	
36	M36×1	M39×1.5	35±0.1	43	
39	M39×1	M42×1.5	37±0.1	46	
42	M42×1	M45×1.5	40±0.1	49	1
45	M45×1	M48×1.5	43±0.1	52	26

# Socket with straight unshielded tail attachment (БПН)

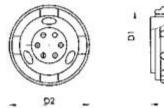


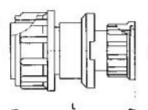
¥		Size (m	m)		
Shell code	D1	d	A	В	L
14	M16×1	6.5	17±0.1	24	54
18	M20×1	10.5	20±0.1	27	54
22	M24×1	14.5	23±0.1	30	57
24	M27×1.5	16.5	26±0.1	33	62.5
27	M30×1.5	18.5	29±0.1	36	62.5
30	M33×1.5	20.5	31±0.1	38	62.5
33	M36×1.5	22.5	32±0.1	40	67.5
36	M39×1.5	22.5	35±0.1	43	67.5
39	M42×1.5	24.5	37±0.1	46	67.5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



i		Size (n	nm)		
Shell code	D1	d	A	в	L
14	M16x1	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

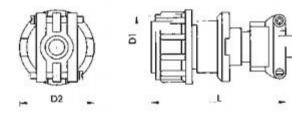
Plug with straight shielded tail attachment (ΚΠЭ)





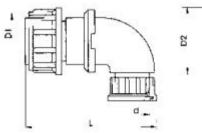
	Si	ze (mm)		-
Shell code	D1	D2	d	L
14	M16x1	22	6.5	48
18	M20×1	25	10.5	48
22	M24×1	29	14	48
24	M27x1.5	32	16.5	54
27	M30×1.5	35	18	54
30	M33×1.5	39	20.5	54
33	M36×1.5	42	23.7	59
36	M39×1.5	45	22.5	59
39	M42×1.5	48.5	25	59
42	M45×1.5	51	29.5	59
45	M48×1.5	54	29.5	59

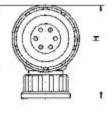
### Plug with straight unshielded tail attachment (KΠH)



	Size	e (mm)		
Shell code	D1	D2	d	L
14	M16x1	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	M42x1.5	48.5	24.5	67.5
42	M45×1.5	51	30.5	67.5
45	M48×1.5	54	30.5	67.5

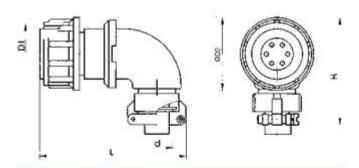
### Plug with curved shielded tail attachment (KY3)





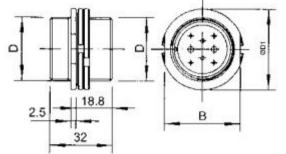
		Size (	mm)		
Shell code	D1	D2	d	н	L
14	M16x1	22	6.5	30.8	48
18	M20×1	25	10.5	35	51
22	M24×1	29	14	38	54
24	M27x1.5	32	16.5	41	57
27	M30×1.5	35	18	44	59
30	M33×1.5	39	20.5	47.8	62
33	M36×1.5	42	23.7	50.8	65
36	M39×1.5	45	22.5	53.8	72
39	M42×1.5	48.5	25	56	72
42	M45×1.5	51	29.5	60	72

### Plug with curved unshielded tail attachment (KYH)



		Size (m	nm)		
Shell code	D1	D2	d	н	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

Shielded through wall socket (ΓΠ)



	Size	(mm)		
Shell code	D	D1	В	
14	M16×1	25	22	
18	M20×1	29	26	
22	M24x1	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	

# List of arrangement and combination codes of contact pieces

Shell code	Contact combination code	Total number of contacts	Contact diameter (mm) and quantity			
			Ø1.0	Ø1.5	Ø2.0	Ø3.0
14	1	4	4			1
18	1	7	7			
	5	4		4		
22	1	10	10			
	3	4			2	2
24	1	19	19		1	
	5	10		10		17
27	1	24	24			1
	2	7	5	2		
	5	7		7	· · · · · ·	
	5	19		19	$\left  - \right $	-
30	1	32	32			
	5	24		24	_	1.
	7	8		4	2	2

Shell code	Contact combination code	Total number of contacts	Contact diameter (mm) and quantity			
			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	