

## AM series and derived series connector back shells

In order to extend the application range and give facilities for customers, except AM series plug and receptacle with straight shielding nut and straight, right angle cable clamps, there are many back shells listed below available:

No.	Back shell name and P/N	Features	Ordering
1	Straight cable clamp	Clamping cable with shielding function	Ordered along with the specific product P/N
2	Right angle cable clamp		
3	AM-FJA	Clamping cable with shielding function	Ordered separately
4	AM-FJC		
5	AM-FJD/ FJDP		
6	AM-FJHP		
7	AM-FJB/ FJBP(receptacle dust cap)	Protect plug or receptacle	
8	AM-FJE/ FJEP(plug dust cap)	Clamping cable with shielding function, waterproof	
9	AM-FJGP		
10	AM-FJGWP		
11	AM-FJJP、AM-FJJP01	Straight shielding, waterproof, memory ring available	
12	AM-FJLP、AM-FJLP01		
13	AM-FJMP	Straight cable clamp, anti-rotation	
14	FA back shell	Shielding, anti-rotation, big clamping strength	

### Cautions on back shells selection

- 1、 There are many plating types and shell materials available for back shells. During selection, one should keep the plating consistent with the applicable connector. Choose shielding plating when EMI shielding is required.
- 2、 According to cable diameter, choose back shells with suitable cable outlet diameters;
- 3、 Consider the installation position limitation when choosing back shells and choose different configuration back shells according to actual requirement;
- 4、 Generally, solder cup termination type connectors (such as XCH) cannot use back shells with changeable diameters (ID becoming smaller or changed suddenly) such as FJDP, FJDP01 and FJHP.

The table below lists the cross reference for AM series and derived series soldering connectors and applicable cable back shells. Because presently we have many modified connectors and back shells, the table is only for reference. Detailed information please contact us.

No.	Description	Applicable cable back shells P/N
1	XCH series plug and receptacle	1. straight cable clamp and right angle cable clamp (ordered with the connectors)



	end solder cup protrusion length from shell is 3.5	<ol style="list-style-type: none"> <li>2. AM-FJA / FJA-01 / FJA-02 / FJA-03 / FJA-04</li> <li>3. AM-FJC / FJC01 / FJC02 / FJC03</li> <li>4. AM-FJDP / FJDP01</li> <li>5. AM-FJGP / FJGWP</li> <li>6. AM-FJHP</li> <li>7. AM-FJJP / FJJP01</li> <li>8. AM-FJLP / FJLP01</li> <li>9. AM-FL1A</li> <li>10. XCH-FJKP / FJKP-01 / FJKP-02 / AM-FJKP-03</li> <li>11. FB1A / FB1AW / FB101</li> <li>12. FA back shell</li> </ol>
2	XCG series plug and receptacle, end solder cup protrusion length from shell is 3.5	<ol style="list-style-type: none"> <li>1. AM-FJA / FJA-01 / FJA-02 / FJA-03 / FJA-04</li> <li>2. AM-FJC / FJC01 / FJC02 / FJC03</li> <li>3. AM-FJDP / FJDP01</li> <li>4. AM-FJGP / FJGWP</li> <li>5. AM-FJHP</li> <li>6. AM-FJJP / FJJP01</li> <li>7. AM-FJLP / FJLP01</li> <li>8. AM-FL1A</li> <li>9. XCH-FJKP / FJKP-01 / FJKP-02 / AM-FJKP-03</li> <li>10. FB1A / FB1AW / FB101</li> <li>11. FA back shell</li> </ol>
3	XCE series plug and receptacle, end solder cup protrusion length from shell is 4.6	<ol style="list-style-type: none"> <li>1. straight cable clamp and right angle cable clamp (ordered with the connectors)</li> <li>2. AM-FJA / FJA-01 / FJA-02 / FJA-03 / FJA-04</li> <li>3. AM-FJC / FJC01 / FJC02 / FJC03</li> <li>4. AM-FJGP / FJGWP</li> <li>5. AM-FJHP</li> <li>6. AM-FJJP / FJJP01</li> <li>7. AM-FJLP / FJLP01</li> <li>8. XCE-FL1A</li> <li>9. XCE-FJKP / FJKP-01</li> <li>10. FB1A / FB1AW / FB101</li> <li>11. FA back shell</li> </ol>
4	XCD series plug and receptacle, end solder cup protrusion length from shell is 3.5~10.5	<ol style="list-style-type: none"> <li>1. straight cable clamp and right angle cable clamp (ordered with the connectors)</li> <li>2. AM-FJC / FJC03</li> <li>3. AM-FJGP / FJGWP</li> <li>4. AM-FJJP / FJJP01</li> <li>5. FB1A / FB1AW / FB101</li> <li>6. FA back shell</li> </ol>

### Ordering instruction

1. P/N of back shells ordered along with the specific product can be added after the connector P/N

and add “+” between them.

Example: receptacle with back shells: XC30F30ZP+FJC; plug with back shells:  
XC30T30KP+FJDP

2. when back shells are ordered separately, mark the cable back shells P/N

Example: backshell XC30FJDP

3. For back shells with shielding plating, add number after the last letter of basic part number to stand for plating. We specify that:

- 1) “1” means electroless nickel plating, such as AM-FJBP1-01 means nickel plated product;
- 2) “3” means olive green zinc plating, such as AM-FJBP3-01 means olive green zinc plated and passive product;
- 3) “40” means stainless steel passive plating, such as AM-FJJP40 means stainless steel passive product.

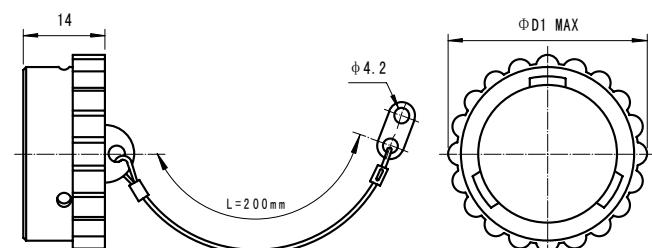
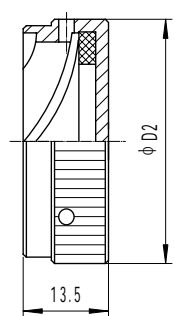
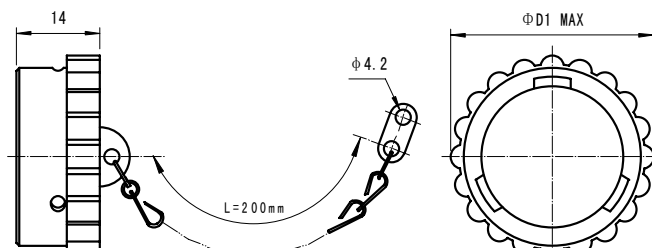
## Plug and receptacle dust cap back shells

[Receptacle dust cap back shells]

This back shell is for receptacle protection with metallic and composite shells for selection. Composite shell is more environmental resistant. There are two options of brocade silk rope and metallic chain at rear end.

[DESIGNATION]

<b>Basic series</b>	<b>AM</b>	<b>12</b>	<b>FJBP1</b>	<b>(J)</b>	<b>-01</b>
<b>Shell size</b>	12-14-18-22-24-27-30-33-36-39				
<b>Dust cap plating</b>	FJB-without plating (black, only for composite shell) FJBP1-electroless nickel plating				
<b>Shell material</b>	(J)-metallic shell(omitted when printing part number); blank-composite shell				
<b>Modification marks</b>					
For composite back shells; -01-with metallic chain; blank: with brocade silk rope					
For metallic back shells: -01- (J) - with metallic chain; -03- with brocade silk rope					
-03A-with stainless steel wire					

	Composite shell with brocade silk rope AM-FJB					Metallic shell AM-FJBP(J)				
										
										
Applicable shell size	12	14	18	22	24	27	30	33	36	39
D1	22.1	25.0	29.0	34.0	36.0	39.0	42.0	44.0	47.0	50.0
D2	20.0	23.0	27.0	31.0	33.0	36.0	39.0	42.0	45.0	48.0

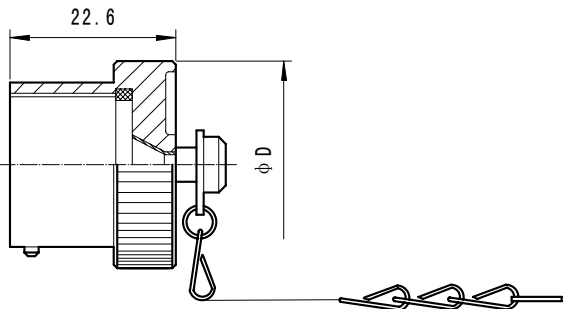
Note: applicable dust cap for XCF12 receptacle is XCF12FJBP-01(J) back shell

[Plug dust cap back shells AM-FJEP]

This back shell makes plug with moisture proof, corrosion proof, fungus proof, dustproof and rainproof functions.

[DESIGNATION]

<b>Shell size</b>	<b>14</b>	<b>FJEP1</b>	<b>-03A</b>
12-14-18-22-24-27-30-33-36-39			
<b>Dust cap plating</b>			
P1-electroless nickel plating			
P2-olive green cadmium plating, passive			
P3-olive green zinc plating, passive			
P40-stainless steel passive			
stainless steel chain at plug dust cap rear end			
<b>Chain type</b> -03A stainless steel wire at rear end L=127mm			
blank stainless steel twisted chain at rear end			

	Applicable shell size	<b>D</b>
	<b>14</b>	21.7
	<b>18</b>	25.7
	<b>22</b>	29.7
	<b>24</b>	31.7
	<b>27</b>	34.7
	<b>30</b>	37.7
	<b>33</b>	40.7
	<b>36</b>	43.7
	<b>39</b>	46.7

Note:

- 1) Applicable plug dust cap for XCF series is XCF-FJEP (with the same outline dimensions as ZE-FJEP) ;
- 2) Applicable plug dust cap for XCE14 plug is XCE14FJEP;
- 3) Applicable plug dust cap for XCD45-1plug is XCD45FJEP-01.

**General back shells**

[AM-FJA shielding cable back shells]

These back shells are for shielding cable clamping with braid and only applicable for shielding connectors with a bigger room. Cable shielding braid is between sleeve and pressing ring. Through the tightening of nut, tightly stick shielding braid and sleeve to achieve shielding. At the same time, clamp cable by pressing plate to release the force at cable and connector connection part.

[DESIGNATION]

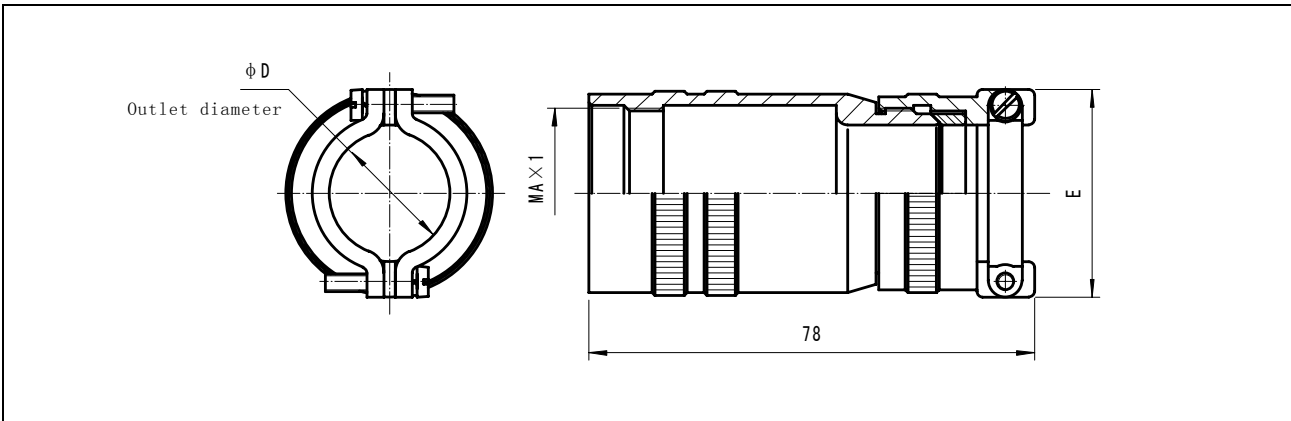
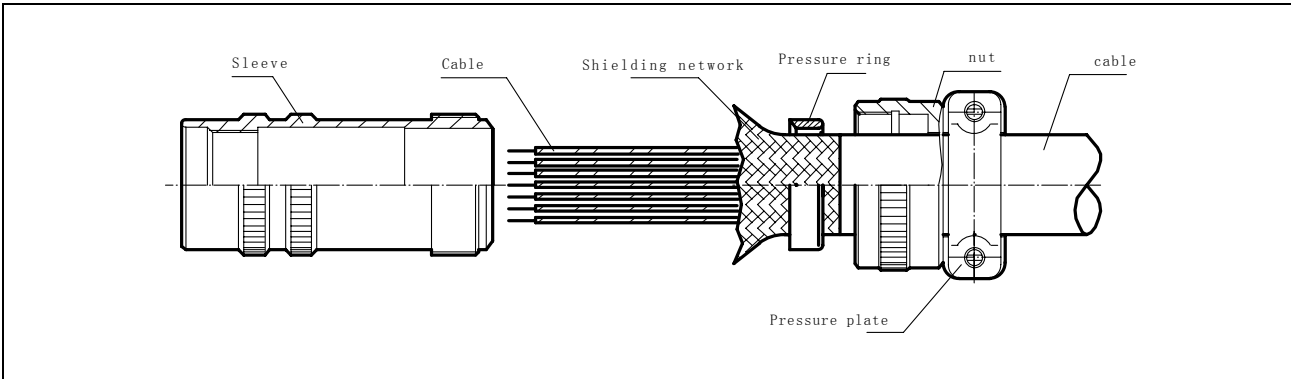
<b>Basic series</b>	<b>AM</b>	<b>12</b>	<b>FJA</b>	<b>03</b>	<b>-10</b>
<b>Shell size</b>	12-14-18-22-24-27-30-33-36-39-42-45-48-85				



**Back shells plating** FJA-iridescence zinc plating  
FJA1-electroless nickel plating FJA40-stainless steel passive  
FJAF-black anodization

**Modification mark** 03-add tighten screw

**Cable outlet diameter** -10

**Assembling illustration:**


Applicable shell size	A	D <sub>Min</sub>	D <sub>Max</sub>	E
18	18	13	16	29.5
22	22	10	22	33.0
24	24	10	20	33.0
		12	24	36.5
27	27	10	20	33.0
		12	24	36.5
30	30	10	20	33.0
		12	24	36.5
		14	28	40.0
33	33	12	24	36.5
		14	26	40.0
		16	30	44.0

Applicable shell size	A	D <sub>Min</sub>	D <sub>Max</sub>	E
36	36	10	20	33.0
		12	24	36.5
		16	30	44.0
39	39	18	32	46.0
		10	20	33.0
42	42	14	26	40.0
		20	34	48.0
45	45	22	38	58.0

Marking example: XC30FJA-240 means matching with 30# shell and the max. cable outlet diameter is  $\phi 20$ .

Note: 1. No FJA back shell applicable for XC14.

2. overall length for AM-FJA-01 back shell is 71.5mm; overall length for AM-FJA-02 back shells is 118mm;

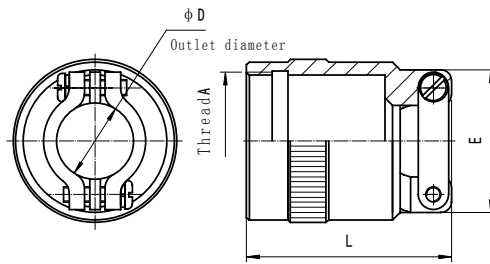
Cut the AM-FJA-03 back shells on the base of AM-FJA back shell and move thread to the end face; Length of AM-FJA-04 back shells is the same with AM-FJA and move thread to the end face.

[AM-FJC (zinc plating) shielding cable back shells]

This back shell is for cable tightening and with suitable installation space.

[DESIGNATION]

<b>Basic series</b>	<b>AM</b>	<b>12</b>	<b>FJC</b>	<b>03</b>	<b>-10</b>
<b>Shell size</b>	12-14-18-22-24-27-30-33-36-39-42-45-48-85				
<b>Back shells plating</b>	FJC-iridescence zinc plating FJC1-electroless nickel plating FJC40-stainless steel passive FJCF-black anodization				
<b>Modification mark</b>	03-add tighten screw				
<b>Cable outlet diameter</b>	-10				

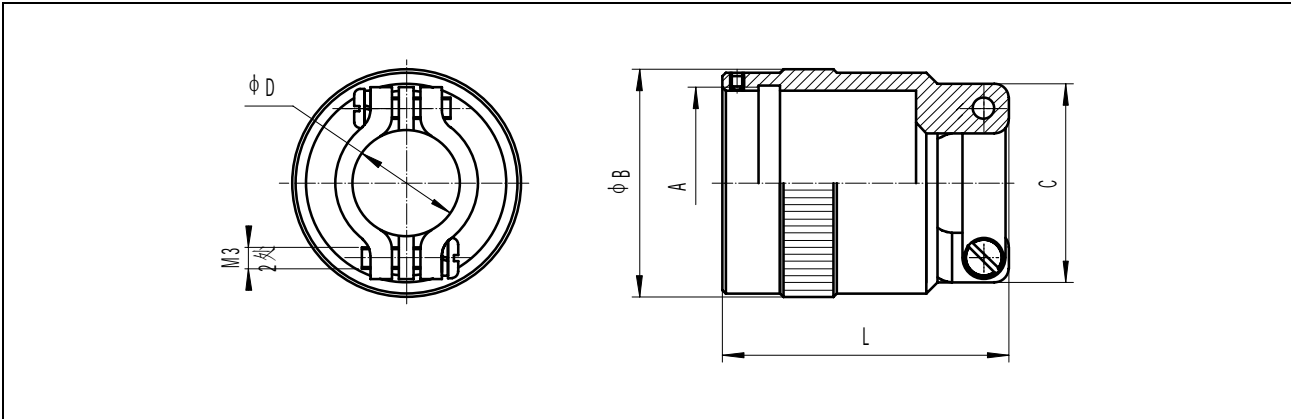


Applicable shell size	A	D <sub>Min</sub>	D <sub>Max</sub>	E	L	Applicable shell size	A	D <sub>Min</sub>	D <sub>Max</sub>	E	L
12	M12×1	5	10	25	30	33	M33×1	15	27	40	50
14	M14×1	4	7	18.5		36	M36×1	17	30	44	
		5	10	25		8		15	27		
18	M18×1	11	14	27		15		26	40		
		8	14	28		17	30	44			
		5	11	25		19	32	46			
22	M22×1	13	17	31		39	M39×1	15	26	40	
		6	10	25				17	30	44	
		8	15	28				21	34	48	
24	M24×1	9	18	32		42	M42×1	23	38	58	
		9	18	32				17	30	44	
		8	14	28				45	M45×1	8	
22	24	38	17	30	44	50					
8	14	28	23	40	58	65					
27	M27×1	9	18	32	48	M48×1.5	32	50	64	60	
		11	20	34			24	38	58	80	
		14	13	39			85	M85×2	35	45	70
		15	27	40					46	50	77
30	M30×1	9	19	32	58	70	106	120			
		14	23	38							
		17	30	44							



Marking example: AM27FJC-20 means matching with 27# shell and the max cable outlet diameter is  $\Phi 20$ .

**[AM-FJC03 (with tightening screw) ]**



Shell size	A	B	C	D	L
12	M12×1	19	25	10	30
14	M14×1	20	18.5	7	30
	M14×1	20	27	14	30
16	M16×1	22	28	14	30
18	M18×1	24	25.2	11	30
	M18×1	24	28	14	30
20	M20×1	26	27	15	30
	M20×1	26	32	18	30
22	M22×1	28	25	10	30
	M22×1	28	28	15	30
	M22×1	28	32	18	30
24	M24×1	29	28	14	40
	M24×1	29	32	18	40
	M24×1	29	38	24	40
27	M27×1	32	28	14	40
	M27×1	32	32	18	40
	M27×1	32	34	20	40
	M27×1	32	37	23	40
	M27×1	32	40	27	40

Shell size	A	B	C	D	L
30	M30×1	35	32	19	40
	M30×1	35	37	23	40
	M30×1	35	44	30	40
33	M33×1	39	40	27	50
	M33×1	39	44	30	50
36	M36×1	42	27	15	50
	M36×1	42	40	26	50
	M36×1	42	44	30	50
	M36×1	42	46	32	50
39	M39×1	45	40	26	50
	M39×1	45	44	30	50
	M39×1	45	48	34	50
	M39×1	45	58	38	50
85	M85×2	90	106	70	120

[AM-FJD non-shielding and AM-FJDP shielding cable back shells (Not applicable for soldering product) ]

This back shell is for cable clamping with small mounting room. Cable outlet direction from sleeve inner wall is a cone face and clamp cable through two pressing plates. Compared with FJC, FJD and FJDP are applicable for cables with smaller diameter.

[DESIGNATION]



<b>Basic series</b>	<b>AM</b>	<b>14</b>	<b>FJDP</b>	<b>05</b>
<b>Shell size</b> 12-14-18-22-24-27-30-33-36-39				
<b>Back shells plating</b> FJDP-iridescence zinc plating FJDP1-electroless nickel plating FJDP40-stainless steel passive FJD-black anodization				
<b>Modification mark 05-add tighten screw</b>				

	Applicable shell size	<b>A</b>	<b>B</b>	<b>D</b> Min	<b>D</b> Max	<b>H</b>	<b>L</b>
	<b>14</b>	14	16.5	7	8	22	23.5
	<b>18</b>	18	20.5	7	8	22	23.5
	<b>22</b>	22	24.5	10	13	27	27
	<b>24</b>	24	26.5	10	13	27	30
	<b>27</b>	27	30	10	13	27	30
	<b>30</b>	30	33	12	18	32	35.5
	<b>33</b>	33	36	12	18	32	35.5
	<b>36</b>	36	39	16	23	37	40.5
	<b>39</b>	39	42	16	23	37	40.5

### AM-FJDP05

	Applicable shell size	<b>A</b>	<b>B</b>	<b>L</b>	<b>H</b>
	<b>14</b>	16.5	14	23	21
	<b>18</b>	20.5	18	23	21
	<b>22</b>	24.5	22	27	26
	<b>24</b>	26.5	24	30	26
	<b>27</b>	30	27	30	26
	<b>30</b>	33	30	35.5	31.5
	<b>33</b>	36	33	35.5	31.5
	<b>36</b>	39	36	40.5	36.5
	<b>39</b>	42	39	40.5	36.5

[AM-FJHP shielding cable back shells (Not applicable for soldering product) ]

The back shells are the cable clamping back shells with the smallest mounting space presently.

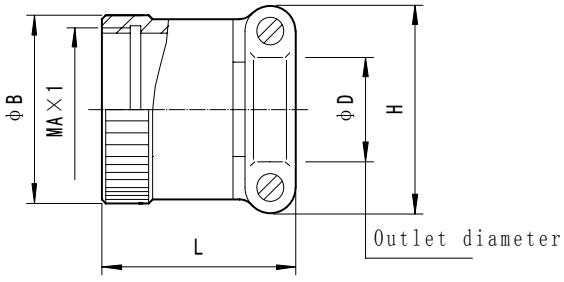
[DESIGNATION]

<b>Basic series</b>	<b>AM</b>	<b>14</b>	<b>FJHP</b>
<b>Shell size</b> 14-18-22-24-27-30-33-36-39			



**Back shells plating**

- FJHP-iridescence zinc plating
- FJHP1-electroless nickel plating
- FJDP40-stainless steel passive
- FJH-black anodization

	Applicable shell size	A	B	D Min	D Max	H	L
	<b>14</b>	14	16.5	6	8	22	22
<b>18</b>	18	20.5	9	13	27	22	
<b>22</b>	22	24.5	9	13	27	25	
<b>24</b>	24	26.5	11	18	32	25	
<b>27</b>	27	30	11	18	32	25	
<b>30</b>	30	33	15	23	37	30	
<b>33</b>	33	36	15	23	37	30	
<b>36</b>	36	39	21	28	42	30	
<b>39</b>	39	42	21	28	42	30	

### Special back shells

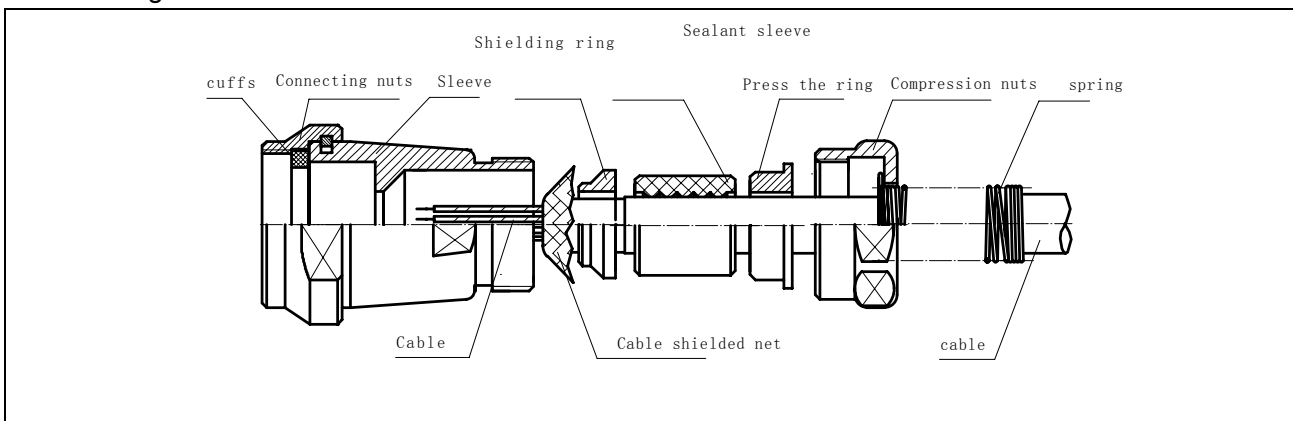
According to customer's special requirements, especially in marine industry, because of the severe operation environment, connectors must have corrosion resistance, rain proof and fungus proof functions. Also water proof function is required when using out of the cabin. For this reason, we recommend customers to choose the back shells below:

1) AM-FJJP and AM-FJJP01 shielding cable back shells

AM-FJJP is for flexible cable; AM-FJJP01 is for rigid cable.

These back shells have the watertight configuration and clamp cable by filling material with anti-rotation and big clamping force without hurt cable. Now it is the back shell with the biggest clamping force and also achieves 360° EMI shielding and applied both in outer shielding sleeve and inner shielding sleeve, especially for ocean, swamp and culvert with severity.

Assembling illustration:



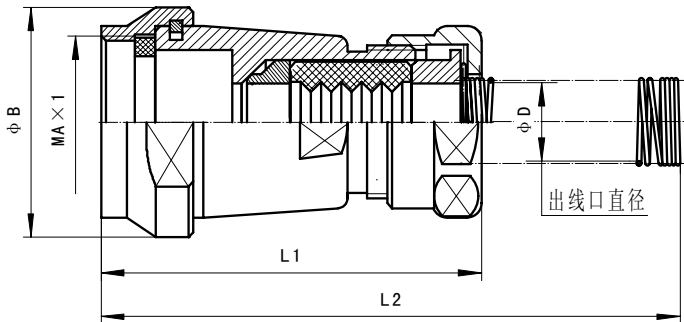
### Application instruction:

- 1) Pull through the cable from spring, tightening nut, pressing ring, sealing rubber sleeve and shielding ring, and turn over the cable shielding braid on the shielding ring.
- 2) Terminate the cable core and plug contact.

- 3) Screw down the coupling nut and plug end thread and seal with plug through sealing rubber ring
- 4) Tighten the tightening nut, and the pressed and deformed rubber ring **is tightly wrapped around the cable. Achieve back shell and cable sealing through clamping the cable. At the same time, tightly stick the shielding ring, shielding braid and sleeve to achieve electrical continuity between shielding braid and back shells.**
- 5) Spring sleeve is at the connection part of cable and back shells to avoid cable damage cause by violent bending.

[AM-FJJP]

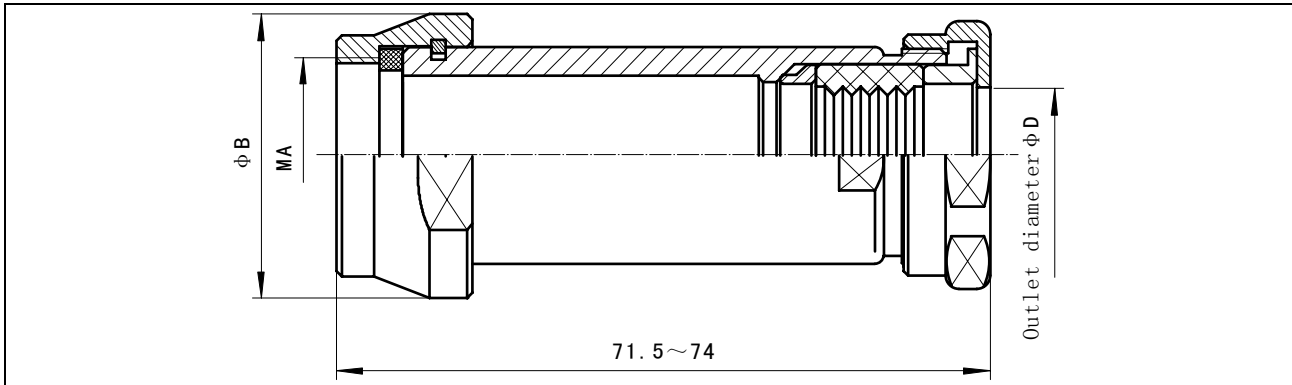
Applicable shell size	A	B	D	L1	L2
14	14	20	7.5	42	70
18	18	26	7.5	42	70
			10		
			14		
22	22	30	7.5	42	70
			10		
			14		
			16		
			18		
24	24	32	10	44	72
			12		87
			16		72
			18		86
			20		86
27	27	36.5	14	44	72
			18		86
			20		86
30	30	39.5	12	44	86
			20		
			22		
33	33	43	12	44	86
			22		
36	36	44	18	49	90
39	39	48	22	54	96



Note: generally, diameter range of cable is (D-2) ~D.

Marking example: AM27FJJP-20 means applicable back shells for 27# shell size. The max cable outlet diameter is Φ20.

[AM-FJJP01]



Applicable shell size	A	B	D	Applicable shell size	A	B	D	Applicable shell size	A	B	D
12	12×1	20	10	22	22×1	30	12	30	30×1	39.5	7.5
			12				12				
			14				14				
							16				
							18				
14	14×1	20	10	24	24×1	32	12	33	33×1	43	20
			12				22				
			14				24				
			16								
18	18×1	26	10	27	27×1	36.5	14	36	36×1	44	24
			12				39	39×1	48	18	
			14							24	
			16				42	42×1	50	30	

[AM-FJGP Straight shielding cable back shells and AM-FJGWP right angle shielding cable back shells]

The back shells are for shielding braid cable clamping and only for shielding connectors. There are two types: straight and right angle; and achieve sealing through adding heat shrink tube on interface rubber ring and rear end. This back shells use alloy memory technology and heat shrink to tighten the braid at back shell rear end to achieve electrical continuity between shielding braid and back shells.

**Application instruction:**

- 1) Pull the cable through heat shrink tube, Ti-Ni alloy memory ring and sleeve in turn.
- 2) Terminate the cable core and plug contact.
- 3) Screw down the coupling nut and plug end thread and seal with plug through sealing rubber ring
- 4) Wrap cable shielding braid at the back shell end and heat shrink through heating memory ring. Tighten the shielding braid on back shell end to achieve electrical continuity between shielding braid and back shells.
- 5) Tighten the locking screw
- 6) Heat shrink the cable and back shells and tightly wrap on the back shell and cable to ensure sealing between back shell and cable.

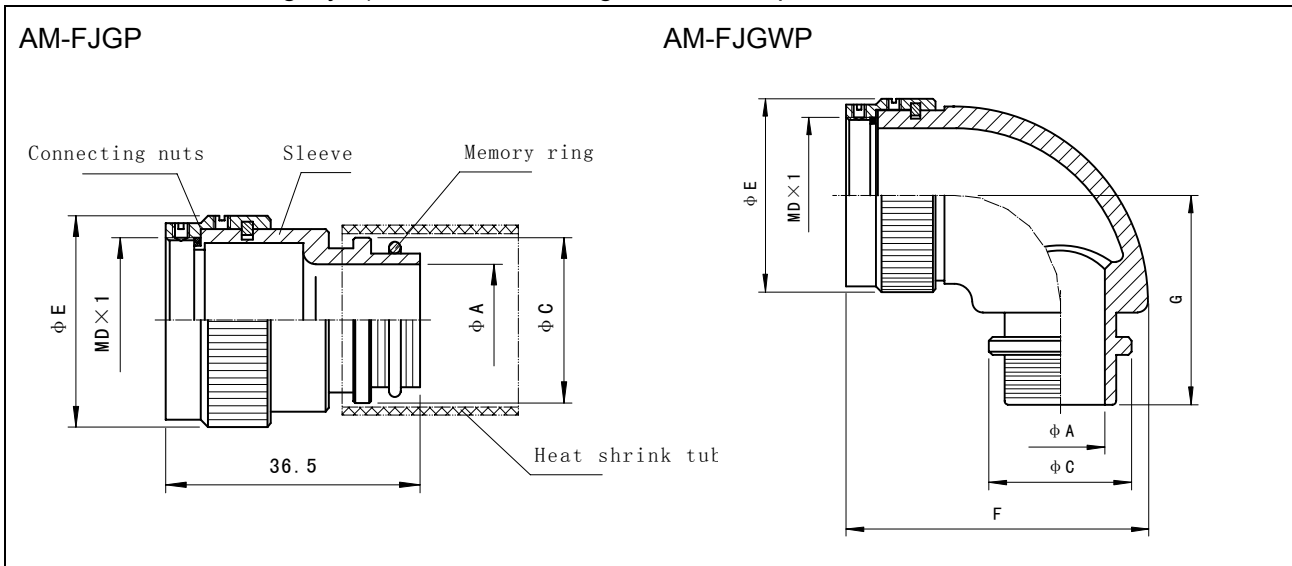
\* Heat shrinking for memory ring: use heat gun for about 45s to 1 min. when temperature indicator on the ring turns from green to black that means the ring is shrunk in place. Ring temperature is 165°C. Stop heating. And ensure heating

evenly on the ring.

Note: Ti-Ni ring is optional; if Ti-Ni ring is needed, add letter "A" behind "FJGP" or FJGWP that is: AM-FJGPA or AM-FJGWPA.

[How to select FJGP and FJGWP back shells]

Select applicable connectors and cables according to requirements and suitable Ti-Ni ring part number per connector shell size and cable OD in the table (better per cable OD after stripping cable outer insulator and shielding layer) and choose the right back shell part number in the table.



[Optional end cable outlet diameter]

Applicable shell size	configuration	End cable outlet diameter $\Phi A$												
		6.3	7.9	9.5	11.1	12.7	16.0	19.0	22.2	25.4	28.5	31.8	35.0	38.1
14	Straight	√	√	√	—	—	—	—	—	—	—	—	—	—
	Right angle	√	√	√	—	—	—	—	—	—	—	—	—	—
18	Straight	√	√	√	√	√	√	√	—	—	—	—	—	—
	Right angle	√	√	√	√	√	—	—	—	—	—	—	—	—
22	Straight	—	—	√	√	√	√	√	√	√	—	—	—	—
	Right angle	—	—	√	√	√	√	—	—	—	—	—	—	—
24	Straight	—	—	—	√	√	√	√	√	√	—	—	—	—
	Right angle	—	—	—	√	√	√	√	—	—	—	—	—	—
27	Straight	—	—	—	—	√	√	√	√	√	√	√	—	—
	Right angle	—	—	—	—	√	√	√	√	—	—	—	—	—
30	Straight	—	—	—	—	√	√	√	√	√	√	√	—	—
	Right angle	—	—	—	—	√	√	√	√	√	—	—	—	—
33	Straight	—	—	—	—	√	√	√	√	√	√	√	√	—
	Right angle	—	—	—	—	√	√	√	√	√	√	—	—	—
36	Straight	—	—	—	—	√	√	√	√	√	√	√	√	√
	Right angle	—	—	—	—	√	√	√	√	√	√	√	—	—
39	Straight	—	—	—	—	—	√	√	√	√	√	√	√	√
	Right angle	—	—	—	—	—	√	√	√	√	√	√	√	√

“√”optional value, “—”not applicable



[Other relevant dimensions]

shell size	F	D	E	G
14	37.0	14	22.5	26.5
18	41.8	18	26.0	29.5
22	44.7	22	30.5	29.5
24	49.2	24	32.5	33.5
27	50.7	27	35.5	33.5
30	51.1	30	38.5	39.0
33	55.2	33	41.5	39.0
36	61.5	36	46.0	44.0
39	63.7	39	48.0	44.0

End cable outlet diameter  $\Phi A$  applicable Ti-Ni ring size and shielding braid sizes:

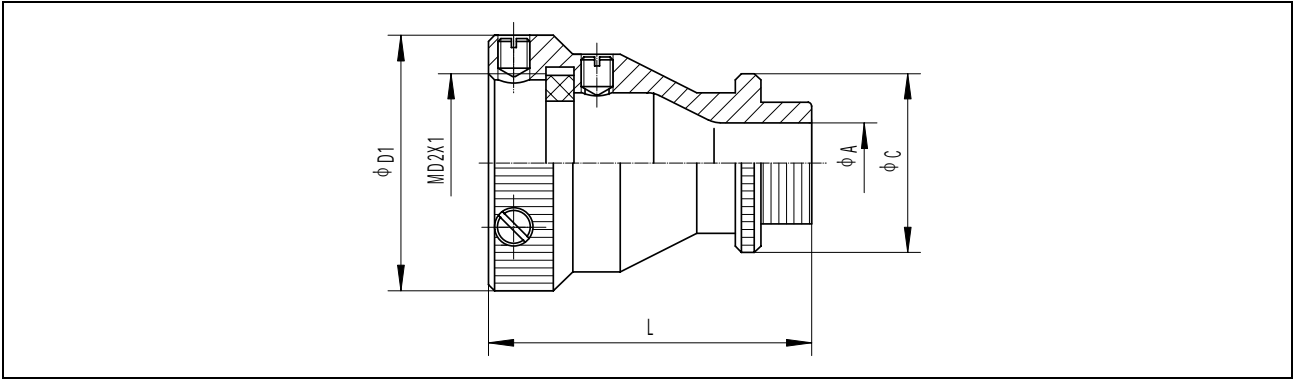
A	C	Applicable Ti-Ni ring size	Shielding braid size (tin plated copper wire nominal diameter)
6.3	14.0	TR-04	6×10 (0.15)
7.9	15.5	TR-05	10×16 (0.20)
9.5	17.1	TR-06	10×16 (0.20)
11.1	18.7	TR-07	10×16 (0.20)
12.7	20.3	TR-08	16×24 (0.30)
16.0	23.5	TR-10	16×24 (0.30)
19.0	26.7	TR-12	16×24 (0.30)
22.2	30.0	TR-14	24×30 (0.30)
25.4	33.0	TR-16	24×30 (0.30)
28.5	36.2	TR-18	30×40 (0.30)
31.8	39.4	TR-20	30×40 (0.30)
35.0	42.5	TR-22	30×40 (0.30)
38.1	45.0	TR-24	40×55 (0.30)

Marking example:

- 1) ZE24-FJGP- $\Phi 11.1$  means applicable straight shielding cable back shells for 24# shell size. Cable outlet diameter is  $\Phi 11.1$  and not supplied with Ti-Ni ring; if Ti-Ni ring is needed, add letter "A" behind "FJGP", that is: ZE24-FJGP- $\Phi 11.1$ .
- 2) ZE24-FJGWP- $\Phi 11.1$  means applicable right angle shielding cable back shells for 24# shell size. Cable outlet diameter is  $\Phi 11.1$  and not supplied with Ti-Ni ring; if Ti-Ni ring is needed, add letter "A" behind "FJGWP", that is: ZE24-FJGWPA- $\Phi 11.1$ .

### [AM-FJLP back shells]

AM-FJLP back shells of different cable outlet diameters can match different cables. Fix shielding braid by wrapping or using Ti-Ni- ring. 3 of the 4 screws are for fixation and the rest one is for sealing after glue filled.



AM-FJLP back shells P/N, dimensions and Ti-Ni ring size cross reference table

Applicable shell size	No.	Back shells P/N*	Applicable Ti-Ni ring size	A	C	D1	D2	L
12	1	AM12FJLP-6.3	TR-04	6.3	14.0	18	12	25.0
14	2	AM14FJLP-6.3	TR-04	6.3	14.0	20	14	25.3
	3	AM14FJLP-7.9	TR-05	7.9	15.5			
	4	AM14FJLP-9.5	TR-06	9.5	17.1			
	5	AM14FJLP-11.1	TR-07	11.1	18.7			
18	6	AM18FJLP-6.3	TR-04	6.3	14.0	24	18	27.3
	7	AM18FJLP-7.9	TR-05	7.9	15.5			
	8	AM18FJLP-9.5	TR-06	9.5	17.1			
	9	AM18FJLP-11.1	TR-07	11.1	18.7			
	10	AM18FJLP-12.7	TR-08	12.7	20.3			
	11	AM18FJLP-16	TR-10	16	23.5			
	12	AM18FJLP-19	TR-12	19	26.7			
22	13	AM22FJLP-9.5	TR-06	9.5	17.1	28	22	31.3
	14	AM22FJLP-11.1	TR-07	11.1	18.7			
	15	AM22FJLP-12.7	TR-08	12.7	20.3			
	16	AM22FJLP-16	TR-10	16	23.5			
	17	AM22FJLP-19	TR-12	19	26.7			
	18	AM22FJLP-22.2	TR-14	22.2	30			
	19	AM22FJLP-25.4	TR-16	25.4	33			
24	20	AM24FJLP-9.7	TR-06	9.7	17.1	30	24	32.3
	21	AM24FJLP-11.1	TR-07	11.1	18.7			
	22	AM24FJLP-12.7	TR-08	12.7	20.3			
	23	AM24FJLP-16	TR-10	16	23.5			
	24	AM24FJLP-19	TR-12	19	26.7			
	25	AM24FJLP-22.2	TR-14	22.2	30			



	26	AM24FJLP-25.4	TR-16	25.4	33			
<b>27</b>	27	AM27FJLP-11.3	TR-07	11.3	18.7	33	27	33.3
	28	AM27FJLP-12.7	TR-08	12.7	20.3			
	29	AM27FJLP-16	TR-10	16	23.5			
	30	AM27FJLP-19	TR-12	19	26.7			
	31	AM27FJLP-22.2	TR-14	22.2	30			
	32	AM27FJLP-25.4	TR-16	25.4	33			
	33	AM27FJLP-28.5	TR-18	28.5	36.2			
	34	AM27FJLP-31.8	TR-20	31.8	39.4			
<b>30</b>	35	AM30FJLP-12.7	TR-08	12.7	20.3	36	30	34.3
	36	AM30FJLP-16	TR-10	16	23.5			
	37	AM30FJLP-19	TR-12	19	26.7			
	38	AM30FJLP-22.2	TR-14	22.2	30			
	39	AM30FJLP-25.4	TR-16	25.4	33			
	40	AM30FJLP-28.5	TR-18	28.5	36.2			
	41	AM30FJLP-31.8	TR-20	31.8	39.4			
<b>33</b>	42	AM33FJLP-12.7	TR-08	12.7	20.3	39	33	35.3
	43	AM33FJLP-16	TR-10	16	23.5			
	44	AM33FJLP-19	TR-12	19	26.7			
	45	AM33FJLP-22.2	TR-14	22.2	30			
	46	AM33FJLP-25.4	TR-16	25.4	33			
	47	AM33FJLP-28.5	TR-18	28.5	36.2			
	48	AM33FJLP-31.8	TR-20	31.8	39.4			
	49	AM33FJLP-35	TR-22	35	42.5			
<b>36</b>	50	AM36FJLP-12.7	TR-08	12.7	20.3	42	36	36.3
	51	AM36FJLP-16	TR-10	16	23.5			
	52	AM36FJLP-19	TR-12	19	26.7			
	53	AM36FJLP-22.2	TR-14	22.2	30			
	54	AM36FJLP-25.4	TR-16	25.4	33			
	55	AM36FJLP-28.5	TR-18	28.5	36.2			
	56	AM36FJLP-31.8	TR-20	31.8	39.4			
	57	AM36FJLP-35	TR-22	35	42.5			
	58	AM36FJLP-38.1	TR-24	38.1	45.7			
<b>39</b>	59	AM39FJLP-16	TR-10	16	23.5	45	39	37.3
	60	AM39FJLP-19	TR-12	19	26.7			
	61	AM39FJLP-22.2	TR-14	22.2	30			
	62	AM39FJLP-25.4	TR-16	25.4	33			
	63	AM39FJLP-28.5	TR-18	28.5	36.2			
	64	AM39FJLP-31.8	TR-20	31.8	39.4			
	65	AM39FJLP-35	TR-22	35	42.5			
	66	AM39FJLP-38.1	TR-24	38.1	45.7			

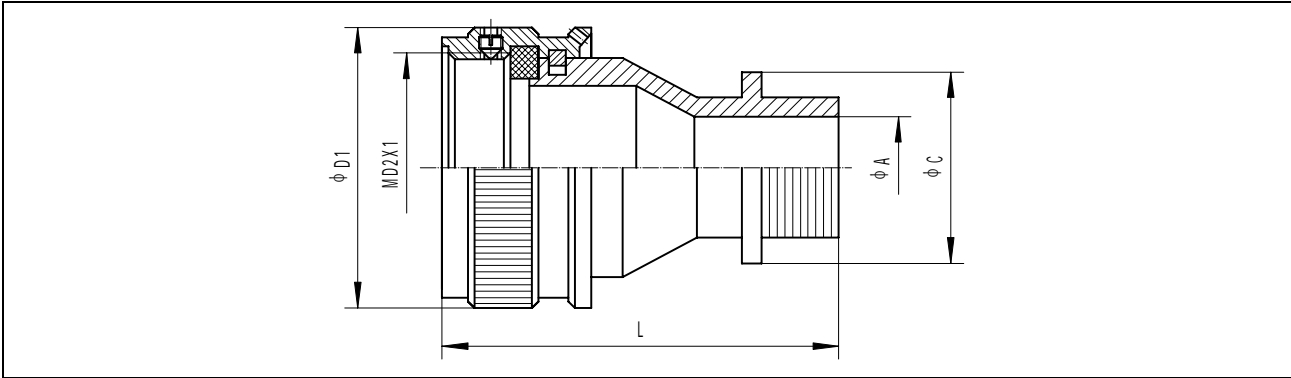
Marking example:

AM24FJLP- 11.1 means applicable straight shielding glue filled cable back shells for 24# shell size.

Cable outlet diameter is  $\Phi 11.1$  and not supplied with Ti-Ni ring; if Ti-Ni ring is needed, add letter “A” behind “FJLP”, that is: AM24FJLPA- 11.1.

### AM-FJLP01 back shells:

The difference between AM-FJLP01 and AM-FJLP back shells is that wire clamping nut of AM-FJLP01 is changed to two-piece with anti-rotation and canceled glue filled function.



AM-FJLP01 back shells P/N, dimensions and Ti-Ni ring size cross reference table

Applicable shell size	No.	Back shells P/N*	Applicable Ti-Ni ring size	A	C	D1	D2	L
12	1	AM12FJLP01- $\Phi 6.3$	TR-04	6.3	13.0	16	12	25.0
14	2	AM14FJLP01- $\Phi 6.3$	TR-04	6.3	13.0	18	14	25.0
	3	AM14FJLP01- $\Phi 7.9$	TR-05	7.9	15.5			
	4	AM14FJLP01- $\Phi 9.5$	TR-06	9.5	17.1			
18	5	AM18FJLP01- $\Phi 6.3$	TR-04	6.3	13.0	22	18	30.8
	6	AM18FJLP01- $\Phi 7.9$	TR-05	7.9	15.5			
	7	AM18FJLP01- $\Phi 9.5$	TR-06	9.5	17.1			
	8	AM18FJLP01- $\Phi 11.1$	TR-07	11.1	18.7			
	9	AM18FJLP01- $\Phi 12.7$	TR-08	12.7	20.3			
	10	AM18FJLP01- $\Phi 16$	TR-10	16	23.5			
22	11	AM18FJLP01- $\Phi 19$	TR-12	19	26.7	26	22	30.8
	12	AM22FJLP01- $\Phi 9.5$	TR-06	9.5	17.1			
	13	AM22FJLP01- $\Phi 11.1$	TR-07	11.1	18.7			
	14	AM22FJLP01- $\Phi 12$	TR-08	12.7	20.3			
	15	AM22FJLP01- $\Phi 16$	TR-10	16	23.5			
24	16	AM22FJLP01- $\Phi 19$	TR-12	19	26.7	28	24	32.3
	17	AM24FJLP01- $\Phi 9.7$	TR-06	9.7	18.0			
	18	AM24FJLP01- $\Phi 11.1$	TR-07	11.1	18.7			
	19	AM24FJLP01- $\Phi 12.7$	TR-08	12.7	20.3			
	20	AM24FJLP01- $\Phi 16$	TR-10	16	23.5			
	21	AM24FJLP01- $\Phi 19$	TR-12	19	26.7			
	22	AM24FJLP01- $\Phi 22.2$	TR-14	22.2	30			

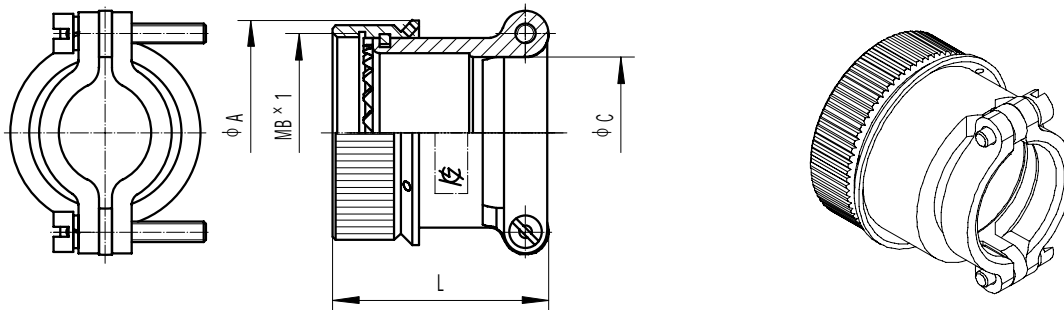
	23	AM24FJLP01-Φ25.4	TR-16	25.4	33			
<b>27</b>	24	AM27FJLP01-Φ11.3	TR-07	11.3	19.7	31	27	35.0
	25	AM27FJLP01-Φ12.7	TR-08	12.7	20.3			
	26	AM27FJLP01-Φ16	TR-10	16	23.5			
	27	AM27FJLP01-Φ19	TR-12	19	26.7			
	28	AM27FJLP01-Φ22	TR-14	22.2	30			
	29	AM27FJLP01-Φ25.4	TR-16	25.4	33			
	30	AM27FJLP01-Φ28.5	TR-18	28.5	36.2			
	31	AM27FJLP01-Φ31.8	TR-20	31.8	39.4			
	<b>30</b>	32	AM30FJLP01-Φ12.7	TR-08	12.7			
33		AM30FJLP01-Φ16	TR-10	16	23.5			
34		AM30FJLP01-Φ19	TR-12	19	26.7			
35		AM30FJLP01-Φ22.2	TR-14	22.2	30			
36		AM30FJLP01-Φ25.4	TR-16	25.4	33			
37		AM30FJLP01-Φ28.5	TR-18	28.5	36.2			
38		AM30FJLP01-Φ31.8	TR-20	31.8	39.4			
<b>33</b>	39	AM33FJLP01-Φ12.7	TR-08	12.7	19.7	37	33	36.0
	40	AM33FJLP01-Φ16	TR-10	16	23.5			
	41	AM33FJLP01-Φ19	TR-12	19	26.7			
	42	AM33FJLP01-Φ22.2	TR-14	22.2	30			
	43	AM33FJLP01-Φ25.4	TR-16	25.4	33			
	44	AM33FJLP01-Φ28.5	TR-18	28.5	36.2			
	45	AM33FJLP01-Φ31.8	TR-20	31.8	39.2			
	46	AM33FJLP01-Φ35	TR-22	35	42.5			

Marking example:

AM24FJLP01-Φ11.1 means applicable straight shielding glue filled cable back shells for 24# shell size. Cable outlet diameter is Φ11.1 and not supplied with Ti-Ni ring; if Ti-Ni ring is needed, add letter "A" behind "FJLP01", that is: AM24FJLP01A-Φ11.1.

### AM-FJMP back shells ( Only applicable for ZEA series connectors )

AM-FJMP back shells have anti-rotation teeth.



Back shells P/N	A	B	C	L	Back shells P/N	A	B	C	L
AM14FJMP	18	14	8	22.5	AM30FJMP	34	30	23	32.7
AM18FJMP	22	18	12	24.5	AM33FJMP	37	33	23	32.7



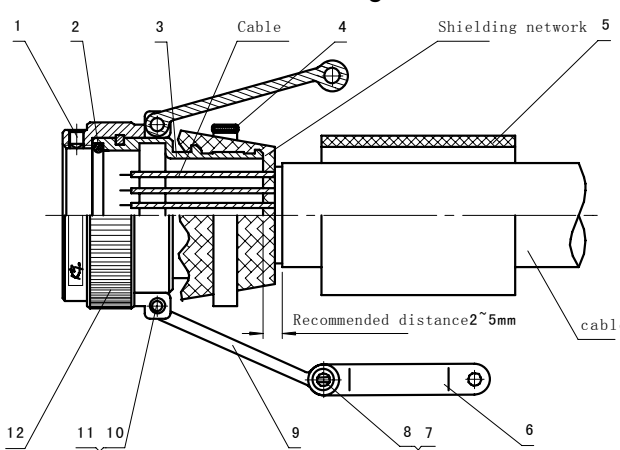
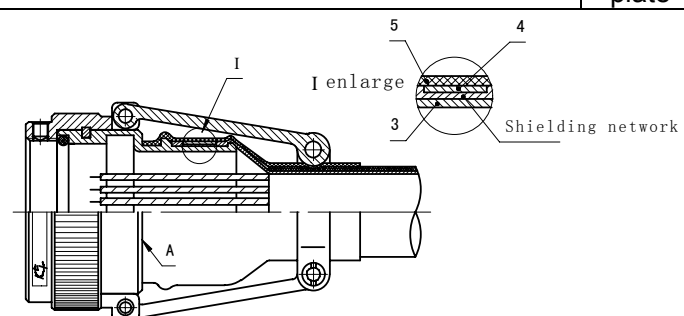
AM22FJMP	26	22	13	24.7	AM36FJMP	40	36	28	34.7
AM24FJMP	28	24	18	28.7	AM39FJMP	43	39	28	34.7
AM27FJMP	31	27	18	28.7					

## FA back shells

### Features

Presently, there are 12 shell sizes for FA back shells which can be used with our AM and the derivate series and YM series connectors. This back shells have features such as simple configuration, complete functions, environmental, and easy operation. They meet various requirements such as shielding, sealing, anti-rotation, big clamping force and not-hurt cable.

### Operation and application instruction

Assembling illustration	
	<p>1 : locking screw 2 : sealing rubber ring 3 : sleeve 4 : steeliness tape 5 : heat shrink tube 6 : pressing plate 7 : screw 8 : spring washer 9 : pull rod 10 : pin 11 : opening stopping ring 12 : coupling nut</p>
	

### Application instruction:

- 1) Keep the end face of cable outer insulator as even and smooth as possible during wire stripping. After ensuring the installation of cable core and back shells, the distance of insulator end face from the end face of sleeve 3 is 2~5mm.
- 2) Screw off the screw at pressing plate 6 side, release the pressing plating and one pull rod(to avoid screw missing and immediately screw into thread hole of pressing plate 6 loosening end after releasing the screw). Stretch the two pull rods 9, turn over the cable shielding braid backward to stick on the cable insulator, and pull through the cable from heat shrink tube 5(supplied with back shells), sleeve 3 and coupling nut 12 in turn.
- 3) Terminate the cable core and plug contact.
- 4) Screw down the coupling nut 12 and plug end thread and seal with plug through sealing rubber ring 2.
- 5) Turn over the cable shielding braid on the sleeve 3 and tie the shielding braid on sleeve 3 by steeliness 4. Tighten the tape by wire tightening pliers LQ-00 (ordered separately) to achieve

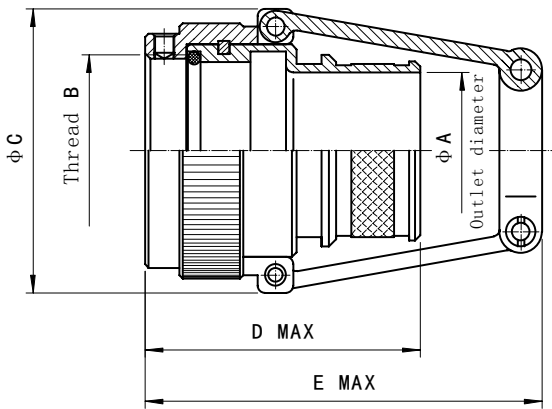
electrical continuity between shielding braid and back shells.

- 6) Trim the tied shielding braid evenly by scissors.
- 7) Heat shrink the tape 4 and shielding braid on the sleeve by heat shrink tube 5. Envelop sleeve 3 and cable stripping interface to ensure better heat shrink tube sealing effect. Please remember sealing the end face A of sleeve 3 during heat shrinking.
- 8) Connect the two pull rods 9 by pressing plating 6. Screw down the pressing plating, and clamp heat shrink tube 5 to seal the cable.
- 9) Tighten the locking screw 1 and lock the plug and back shells.

Note: if you don't need pressing plate 6 for clamping, remove the opening stopping ring of pin 10 to release the

Pin 10, pull rod 9 and pressing plate 6.

### Outline dimensions



### DESIGNATION

**30** **FA<sub>40</sub>** **-18**

Cable outlet diameter  $\Phi$  18

Back shell type, footprint "40" means stainless steel shell

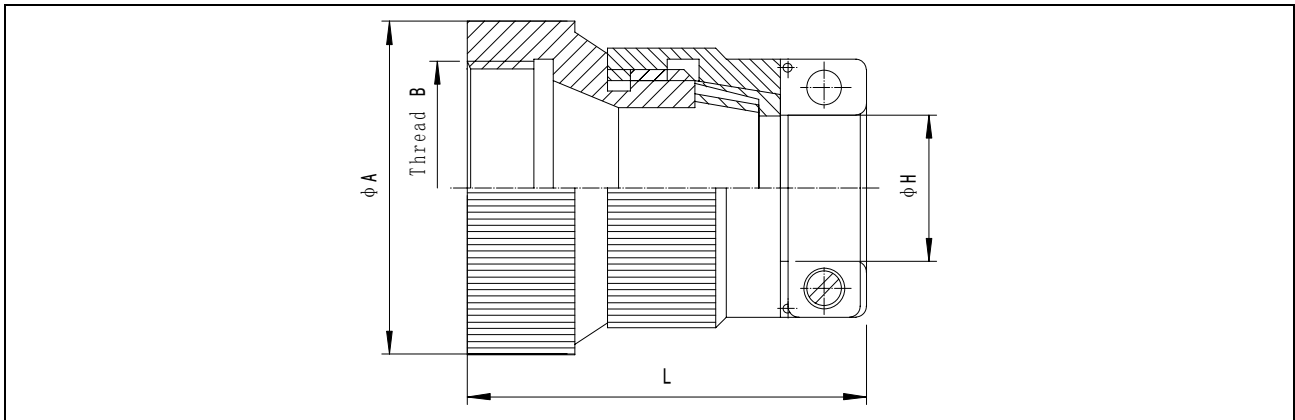
Applicable

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Shell size	Cable outlet diameter A	Thread B	C	D	E	Shell size	Cable outlet diameter A	Thread B	C	D	E
12	10	M12×1	22.5	38.4	54.4	24	15 22	M24×1	34.5	38.4	54.4
14	10	M14×1	24.5	38.4	54.4	27	17 23	M27×1	37.5	38.4	54.4
16	12	M16×1	26.0	38.4	54.4	30	18 25	M30×1	41.5	41.4	64.4
18	12	M18×1	28.5	38.4	54.4	33	18 23 28	M33×1	44.5	41.4	64.4
20	12	M20×1	30.5	38.4	54.4	36	20 25 30	M36×1	47.5	41.4	64.4
22	14 20	M22×1	32.5	38.4	54.4	39	22 27 32	M39×1	50.5	41.4	64.4



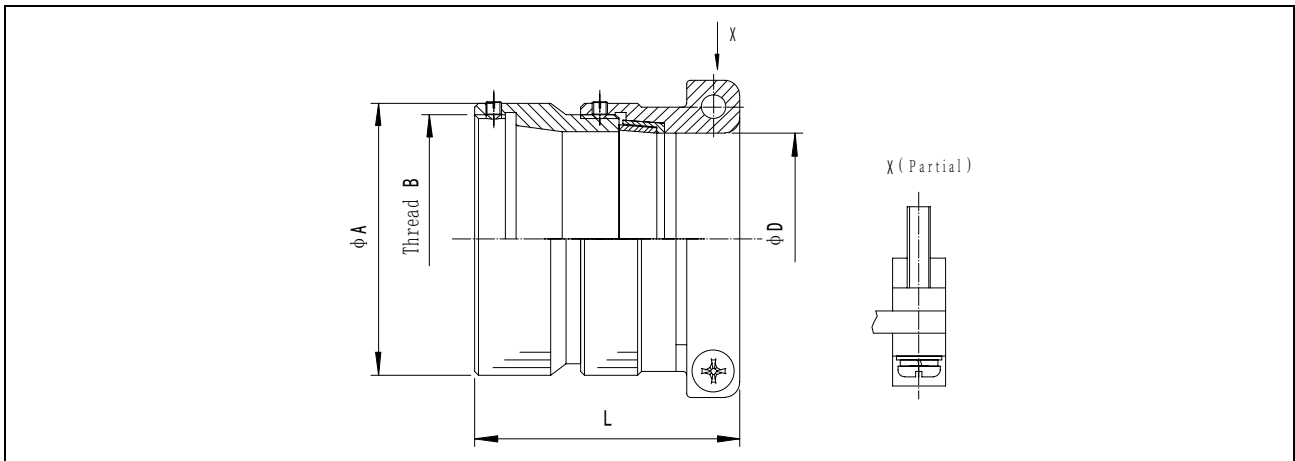
### [FB1 back shells]



No.	P/N	A	Thread B	H	L	P/N for used in Y11 series
1	14FB1-8	21	M14×1	8	35	—
2	14FB1-10	20	M14×1	10	37	Y11-0800-86
3	18FB1-10	23	M18×1	10	37	Y11-1000-86
4	20FB1-8	25.5	M20×1	8	37	—
5	20FB1-10	25.5	M20×1	10	37	—
6	20FB1-14.5	25.5	M20×1	14.5	37	Y11-1200-86
7	24FB1-16.5	29	M24×1	16.5	40	Y11-1400-86
8	27FB1-16.5	30	M27×1	16.5	40	Y11-1600-86
9	30FB1-20	33	M30×1	20	50	Y11-1800-86
10	33FB1-22.5	36	M33×1.5	22.5	50	Y11-2000-86
11	36FB1-22.5	39	M36×1.5	22.5	50	Y11-2200-86
12	39FB1-24	42	M39×1.5	24	50	Y11-2400-86

### [FB<sub>1</sub>01 back shells]

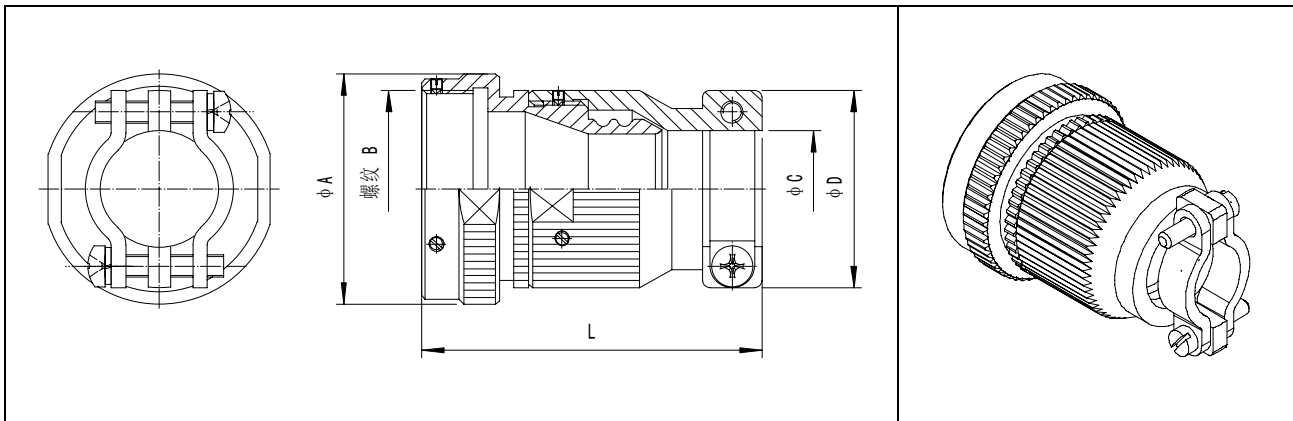
Applicable connectors: AM\XCA\XCG\XCE series connectors, 45FB (1) 01-40 backshells, Applicable ZED45 connectors.





No.	P/N	A	Thread B	D	L
1	12FB (1) 01-8	15	M12×1	8	28
2	14FB (1) 01-10	17	M14×1	10	28
3	18FB (1) 01-10	21	M18×1	10	29
4	18FB (1) 01-17	25	M18×1	17	31
5	22FB (1) 01-10	25	M22×1	10	31.5
6	22FB (1) 01-11.1	25	M22×1	11.1	31.5
7	22FB (1) 01-17	25	M22×1	17	32
8	24FB (1) 01-12.7	27	M24×1	12.7	32.5
9	24FB (1) 01-22	30	M24×1	22	32.5
10	27FB (1) 01-12.7	30	M27×1	12.7	32.5
11	27FB (1) 01-22	30	M27×1	22	32.5
12	30FB (1) 01-19	33	M30×1	19	33.5
13	33FB (1) 01-28	36	M33×1	28	33.5
14	36FB (1) 01-31	39	M36×1	31	34
15	39FB (1) 01-33	42	M39×1	33	34
16	45FB (1) 01-40	48	M45×1	40	37

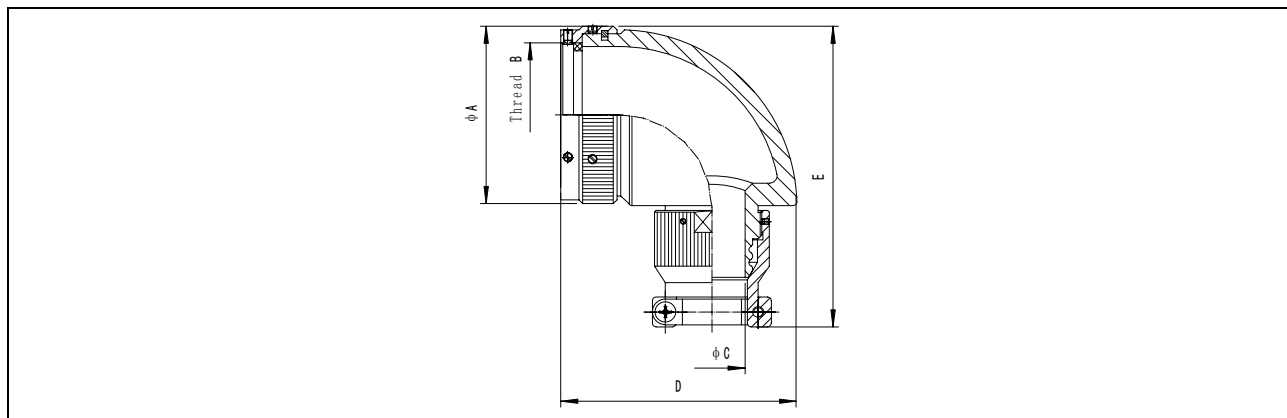
### [FB<sub>1</sub>A back shells]



No.	P/N	A	Thread B	C	D	L
1	14FB1A-8	18.5	M14×1	8	20	38.5
2	16FB1A-12	20.5	M16×1	12	25	39.5
3	18FB1A-10	22.5	M18×1	10	20	46.0
4	18FB1A-12			12	25	
5	18FB1A-16			16	27	
6	20FB1A-14	24.5	M20×1	14	27	46.0
7	22FB1A-12	26.5	M22×1	12	25	46.0
8	22FB1A-16			16	27	
9	24FB1A-14	28.5	M24×1	14	27	46.0
10	24FB1A-19			19	32	
11	24FB1A-22			22	33	

12	27FB1A-16	31.5	M27×1	16	27	46.0
13	27FB1A-22			22	33	
14	27FB1A-25			25	36.5	
15	30FB1A-19	34.5	M30×1	19	32	46.0
16	30FB1A-25			25	36.5	
17	30FB1A-28			28	40	
18	33FB1A-22	37.5	M33×1	22	33	46.0
19	33FB1A-25			25	36.5	
20	33FB1A-31			31	44	
21	36FB1A-25	40.5	M36×1	25	36.5	46.0
22	36FB1A-28			28	40	
23	39FB1A-28	43.5	M39×1	28	40	46.0
24	39FB1A-31			31	44	
25	42FB1A-31	46.5	M42×1	31	44	46.0

### [FB1AW back shells]



No.	P/N	A	Thread B	C	D (Reference)	E(Reference)
1	12FB1AW-8	21.0	M12×1	8	37.7	47.5
2	14FB1AW-10	22.5	M14×1	10	37.7	49.3
3	22FB1AW-18	30.5	M22×1	18	49.2	58.3
4	24FB1AW-20	32.5	M24×1	20	51.7	63.8
5	27FB1AW-18	35.5	M27×1	18	51.7	64.8
6	27FB1AW-23	35.5	M27×1	23	53.2	65.3
7	30FB1AW-26	38.5	M30×1	26	55.7	71.8
8	33FB1AW-30	41.5	M33×1	30	59.7	73.3
9	36FB1AW-18	46.0	M36×1	18	56.7	82.0
10	36FB1AW-32	46.0	M36×1	32	62.7	79.5
11	39FB1AW-18	48.0	M39×1	18	57.2	83.0
12	39FB1AW-34	48.0	M39×1	34	65.2	80.5
13	45FB1AW-38	52.0	M45×1	38	69.0	83.5