NJW Series

Waterproof equivalent to IP-67

Safety standard certified products available

RoHS

Overview

- Waterproof connectors based on NJC Series.
- As with NJC Series, a wide variety of types available.
- Proven performance in outdoor installations such as surveillance cameras, construction machines and outdoor measuring equipment.

Feature

RoHS	RoHS Directive compliant
Waterproof	Waterproof connector【Waterproof function equivalent to IP-67 when coupled】
Lock method	Thread lock
Features of mechanism/ material	○ Die cast shell with zinc alloy or aluminum alloy. ○ Smooth coupling thanks to employment of 5-key system guide. ○ Installation in a small space enabled by use of the L za.
Standards	○ UL・CSA standard certified connectors available.（UL : UL1977　CSA : C22.2 No.182.3） Note: The specifications of saftey standard certified products are slightly different from those of standard products. For the rated voltage, current and cable conductor cross sectional area, refer to A List of Standards Acquired (p.128).
Cable termination	Soldering

Characteristics

Insulation resistance , Withstand voltage , Contact resistance , Waterproof　p.92

The pin contact type has an exposed electrode. If it is used on the [power supply] side, it may cause electric shock or short-circuit accidents. To prevent such accidents, use the socket contact type on the [power supply] side and the pin contact type on the [equipment] side.

Product No. designation

NJW - 24 ■ - P M □ _ _ _
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

《Option》
・When using a plural number of same products at the same time, the guide position can be changed in order to prevent mis-insertion.
(For applicable products, see below.)
Product name example : NJW-2010-PFX
Guide position change symbol (X, Y, Z) in the red character part.

① Series designation
② Shell size
③ Number of contacts
④ Shell shape
⑤ Contact shape < Pin (male) contact : M , Socket (female) contact : F >
⑥ K type symbol (K) 《 Required only for products with settings 》
⑦ Guide position change symbol (X , Y , Z) 《 Required only when changing the guide position 》
⑧ Symbol indicating cable packing size. 《 Plug & adapter require symbol to be specified. 》
⑨ Safety standard specification (< UL・CSA >)
《 Required only when safety standard is to be specified. 》 For applicable products, see p.128.

Cable termination : Soldering

Material and Finish

	Material	Finish
Shell	Shell size 16 , 20 , 24 : Zinc alloy (Partially aluminum alloy) Shell size 28 , 32 : Aluminum alloy	Special treatment
Insulator	Synthetic resin	—
Contact	Copper alloy	Silver plating Gold plating
Packing	Synthetic rubber	—

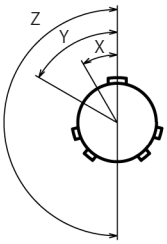
To change the guide position (Following number of contacts only)

Shell size	Number of Contacts	Guide Position Symbol		
		X	Y	Z
16	＊ 3	30°	60°	180°
	＊ 5	45°	90°	315°
20	7	30°	—	—
	＊ 10	45°	90°	315°
	12		95°	190°
24	10	45°	90°	315°
	14			
	16			
28	16	45°	90°	315°
	24			

＊ UL・CSA products supported also.

Operating temperature range

Shell size	Number of Contacts	Operating temperature range
16	3,5	-25℃ to +85℃
20	2 , 3 , 4 , 5 , 7 , 10 , 12	
24	2 , 3 , 4 , 5 , 10 , 14 , 16	
28	16 , 24	
32	3 , 4	
16	8	-25℃ to +60℃
20	14	
24	21 , 24	
28	31 , 37	
32	8 , 10 , 12	

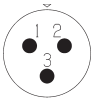
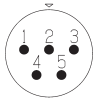
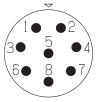


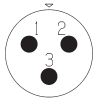
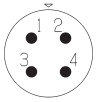
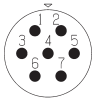
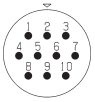
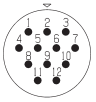
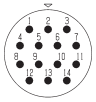
An image of guide position change

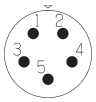
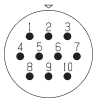
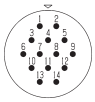
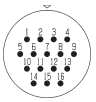
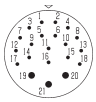
< When viewed from the pin (male) contact side coupling face >

Soldering Type Contact arrangement

[ ] : Gold plating contact

Shell size	Number of Contacts	3	5	8							
16	Contact arrangement <When viewed from the pin (male) contact coupling side>										
	Safety standard (Note-1)	UL・CSA		—							
	Rating (Allowable current for signals)	125V		—							
		10A	5A	[3A]							
	Withstand voltage (V r.m.s.)	1,500	1,000	500							
	Wire size (㎟)	1.25	0.5	0.3							
	Remarks	—		For signals							

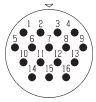
Shell size	Number of Contacts	2	3	4	5	7	10	12	14		
20	Contact arrangement <When viewed from the pin (male) contact coupling side>										
	Safety standard (Note-1)	UL・CSA							—		
	Rating (Allowable current for signals)	250V							—		
		15A		10A			5A		[3A]		
	Withstand voltage (V r.m.s.)	1,500				1,000			500		
	Wire size (㎟)	2		1.25			0.5		0.3		
	Remarks	—							For signals		

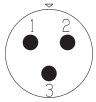
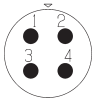
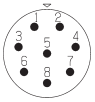
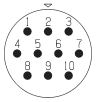
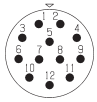
Shell size	Number of Contacts	2	3	4	5	10	14	16	21	24	
24	Contact arrangement <When viewed from the pin (male) contact coupling side>										
	Safety standard (Note-1)	UL・CSA							—		
	Rating (Allowable current for signals)	250V							—		
		20A		15A		10A	5A		3pcs=6A [18pcs=3A]	[3A]	
	Withstand voltage (V r.m.s.)	1,500				1,000			500		
	Wire size (㎟)	3.5		2		1.25	0.5		3pcs=0.75 18pcs=0.3	0.3	
	Remarks	—							For signals		

Note-1 : Specified separately. "Specified as a set of UL and CSA". For safety standards, see p.128.

Soldering Type Contact arrangement

[ ] : Gold plating contact

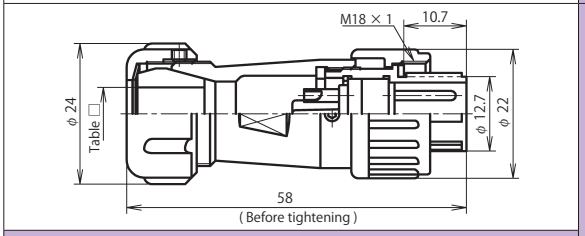
Shell size	Number of Contacts	16	24	31	37						
28	Contact arrangement <When viewed from the pin (male) contact coupling side>										
	Safety standard (Note-1)	UL・CSA		—							
	Rating (Allowable current for signals)	250V		—							
		10A	5A	3pcs=6A [28pcs=3A]	[3A]						
	Withstand voltage (V r.m.s.)	1,000		500							
	Wire size (㎟)	1.25	0.5	3pcs=0.75 28pcs=0.3	0.3						
	Remarks	—		For signals							

Shell size	Number of Contacts	3	4	8	10	12					
32	Contact arrangement <When viewed from the pin (male) contact coupling side>										
	Safety standard (Note-1)	UL・CSA									
	Rating (Allowable current for signals)	250V									
		30A		10A							
	Withstand voltage (V r.m.s.)	2,000		1,500							
	Wire size (㎟)	5.5 , 6		2							
	Remarks	—									

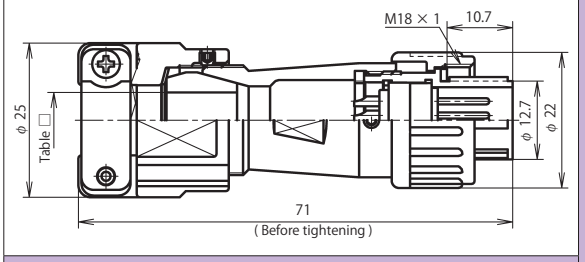
Note-1 : Specified separately. "Specified as a set of UL and CSA". For safety standards, see p.128.

G Type

【Power receiving side】< Pin (male) contact used >



NJW-16 ■ -PM □



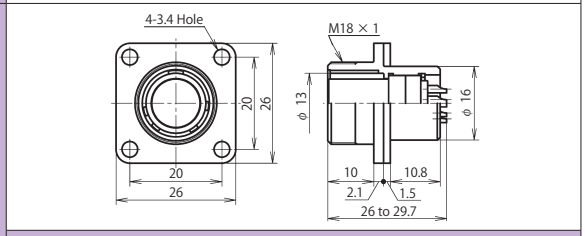
NJW-16 ■ -PMK □

Plug

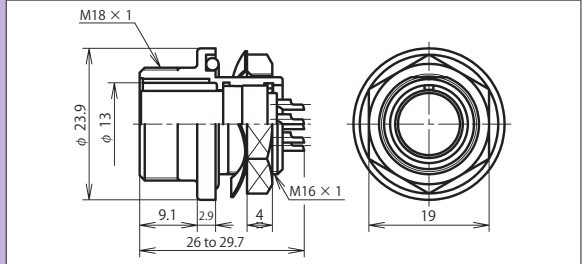
Coupled

Receptacle

【Power supply side】< Socket (female) contact used >

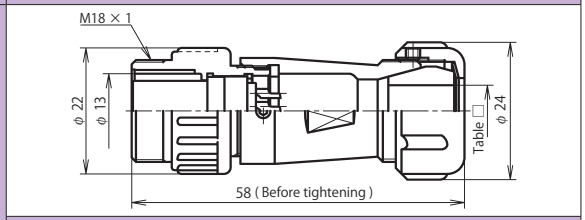


NJW-16 ■ -RF

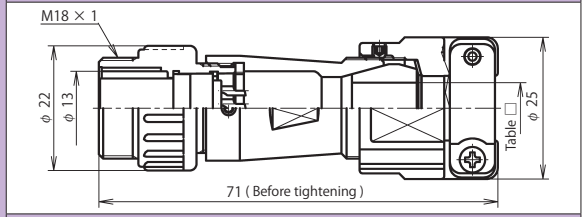


NJW-16 ■ -RBF

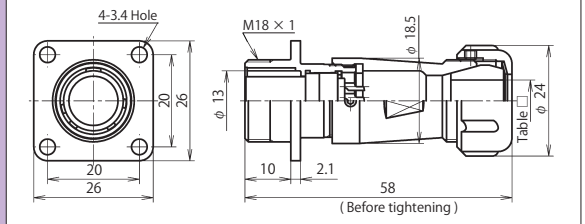
Adapter



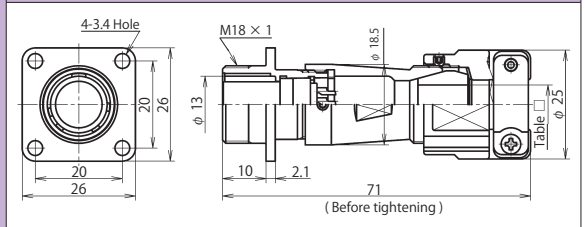
NJW-16 ■ -AdF □



NJW-16 ■ -AdFK □



NJW-16 ■ -Ad(F)F □



NJW-16 ■ -Ad(F)FK □

Cap・L za pp.90-91

For the plug and adapter , be sure to select □ (cable packing symbol).

Table □

In order to secure the intended waterproof function, a cable to be used for the plug/adapter should have an appropriate specification and structure.

Shell size	Symbol □	Outer diameter of cable used	Normal products		Safety standard	
			Standard	K Type	Standard	K Type
16	5	ϕ 4.0 to ϕ 4.8	●	—	—	—
	7	ϕ 5.7 to ϕ 6.8	●	●	—	—
	8	ϕ 6.9 to ϕ 7.9	●	●	—	—
	9	ϕ 8.0 to ϕ 9.4	●	●	●	—
	11	ϕ 9.5 to ϕ 11.0	●	●	●	—

■ indicates the number of contacts. Contact arrangement p.78.
The conductor cross sectional area is less than the following value.However, for safety standard compliant products, use a cable having a value shown on p.128.

[ ] : Gold plating contact

Shell size	Number of Contacts	3	5	8
16	Safety standard (Note-1)	UL・CSA		—
	Rating (Allowable current for signals)	125V 10A	125V 5A	[3A]
	Withstand voltage (V r.m.s.)	1,500	1,000	500
	Wire size (㎟)	1.25	0.5	0.3
	Remarks	—		For signals

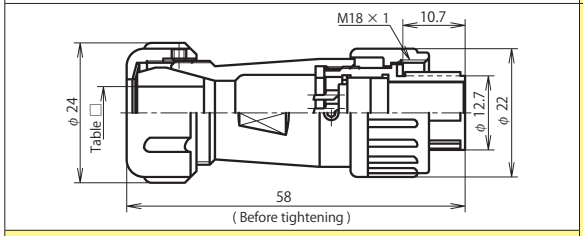
Note-1 : Specified separately. "Specified as a set of UL and CSA". For safety standards, see p.128.

【 Power supply side 】< Socket (female) contact used >

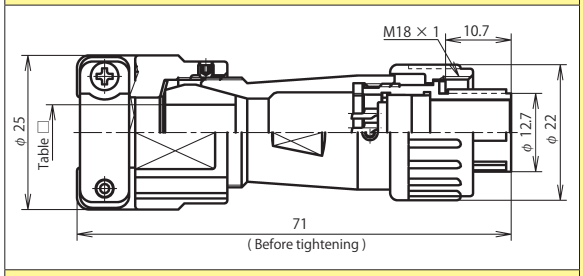
S Type

【 Power receiving side 】< Pin (male) contact used >

Plug



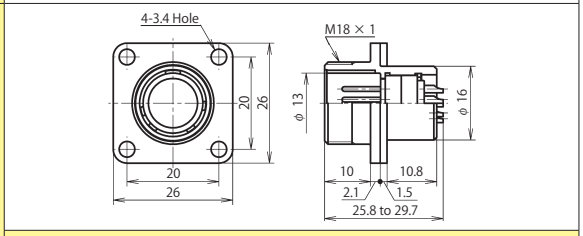
NJW-16 ■ -PF □



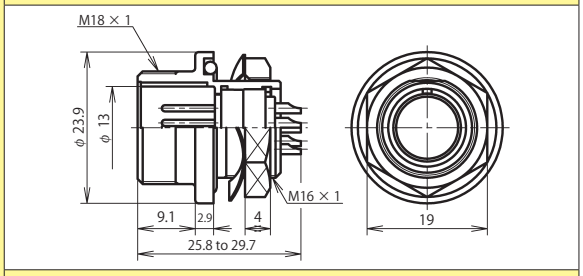
NJW-16 ■ -PFK □

Coupled

Receptacle

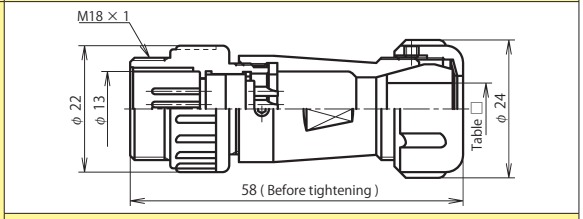


NJW-16 ■ -RM

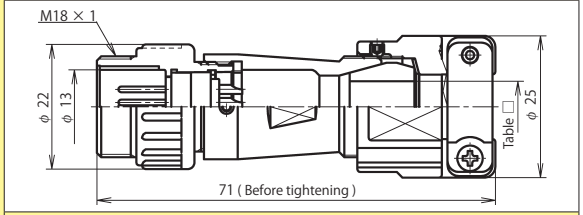


NJW-16 ■ -RBM

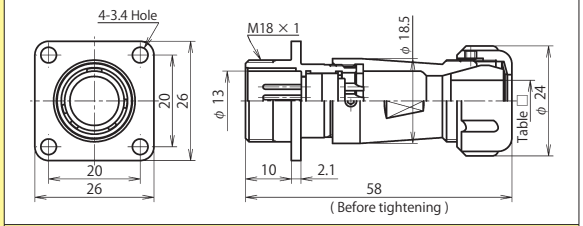
Adapter



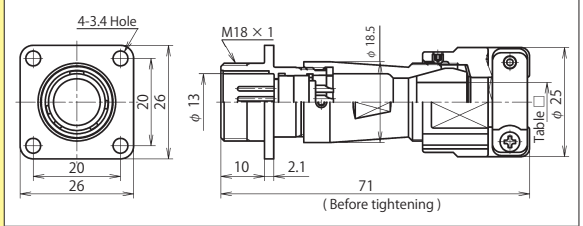
NJW-16 ■ -AdM □



NJW-16 ■ -AdMK □



NJW-16 ■ -Ad(F)M □



NJW-16 ■ -Ad(F)MK □

Cap・L za pp.90-91

For the plug and adapter , be sure to select □ (cable packing symbol).

Table □

In order to secure the intended waterproof function, a cable to be used for the plug/adapter should have an appropriate specification and structure.

Shell size	Symbol □	Outer diameter of cable used	Normal products		Safety standard	
			Standard	K Type	Standard	K Type
16	5	ϕ 4.0 to ϕ 4.8	●	—	—	—
	7	ϕ 5.7 to ϕ 6.8	●	●	—	—
	8	ϕ 6.9 to ϕ 7.9	●	●	—	—
	9	ϕ 8.0 to ϕ 9.4	●	●	●	—
	11	ϕ 9.5 to ϕ 11.0	●	●	●	—

■ indicates the number of contacts. Contact arrangement p.78.
The conductor cross sectional area is less than the following value.However, for safety standard certified products, use a cable having a value shown on p.128.

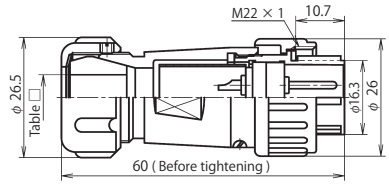
[ ] : Gold plating contact

Shell size	Number of Contacts	3	5	8
16	Safety standard (Note-1)	UL・CSA		—
	Rating (Allowable current for signals)	125V 10A	125V 5A	[3A]
	Withstand voltage (V r.m.s.)	1,500	1,000	500
	Wire size (㎟)	1.25	0.5	0.3
	Remarks	—		For signals

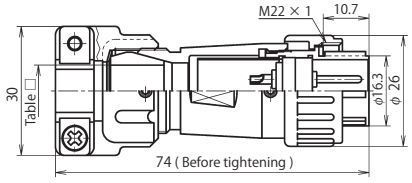
Note-1 : Specified separately. "Specified as a set of UL and CSA". For safety standards, see p.128.

G Type

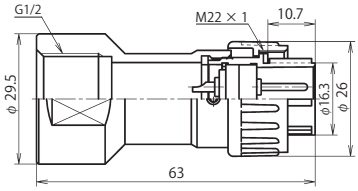
【Power receiving side】< Pin (male) contact used >



NJW-20 ■ -PM □



NJW-20 ■ -PMK □



NJW-20 ■ -GPM1/2 (Note)

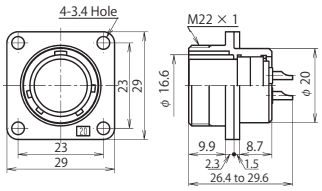
Plug

Coupled

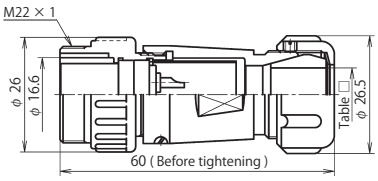
Receptacle

Adapter

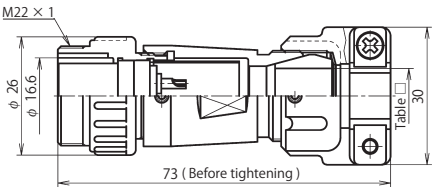
【Power supply side】< Socket (female) contact used >



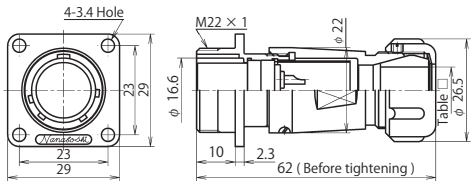
NJW-20 ■ -RF



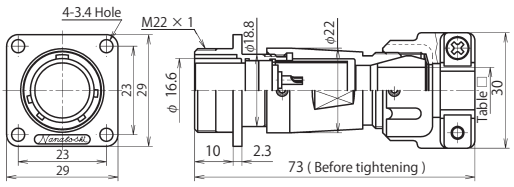
NJW-20 ■ -AdF □



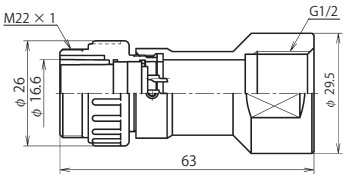
NJW-20 ■ -AdFK □



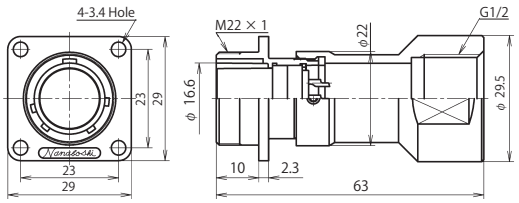
NJW-20 ■ -Ad(F)F □



NJW-20 ■ -Ad(F)FK □



NJW-20 ■ -GAdF1/2 (Note)



NJW-20 ■ -GAd(F)F1/2 (Note)

Note: We show sizes by the nominal "G(PF)" of parallel pipe threads. p.135
The waterproof of the conduit installation part depends on the conduit connecting components to use.

Cap・L za pp.90-91

For the plug and adapter , be sure to select □ (cable packing symbol).

Table □

In order to secure the intended waterproof function, a cable to be used for the plug/adapter should have an appropriate specification and structure.

Shell size	Symbol □	Outer diameter of cable used	Normal products		Safety standard	
			Standard	K Type	Standard	K Type
20	6	ϕ 5.5 to ϕ 6.3	●	—	—	—
	8	ϕ 7.0 to ϕ 8.5	●	●	●	—
	10	ϕ 8.6 to ϕ 10.5	●	●	●	—
	12	ϕ 10.6 to ϕ 12.5	●	●	●	—

■ indicates the number of contacts. Contact arrangement p.78.
The conductor cross sectional area is less than the following value.However, for safrty standard compliant products, use a cable having a value shown on p.128.

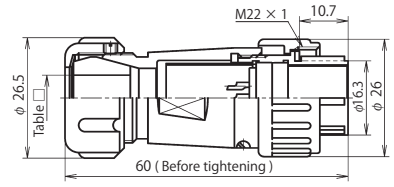
Shell size	Number of Contacts	2	3	4	5	7	10	12	14
20	Safety standard (Note-1)	UL・CSA							—
	Rating (Allowable current for signals)	250V 15A		250V 10A			250V 5A		[3A]
	Withstand voltage (V r.m.s.)	1,500				1,000			500
	Wire size (㎟)	2		1.25			0.5		0.3
	Remarks	—							For signals

Note-1 : Specified separately. "Specified as a set of UL and CSA". For safety standards, see p.128.

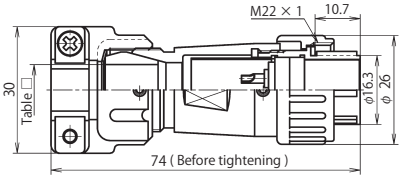
[ ] : Gold plating contact

S Type

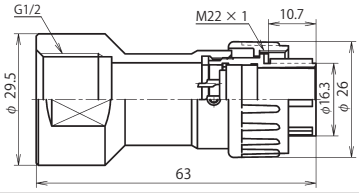
【Power supply side】< Socket (female) contact used >



NJW-20 ■ -PF □



NJW-20 ■ -PFK □



NJW-20 ■ -GPF1/2 (Note)

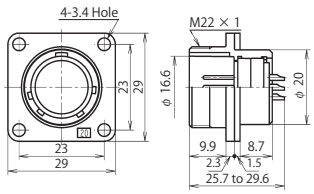
Plug

Coupled

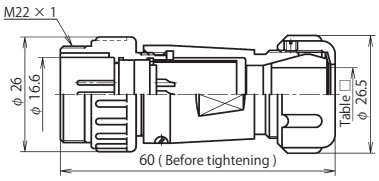
Receptacle

Adapter

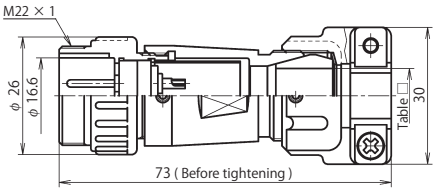
【Power receiving side】< Pin (male) contact used >



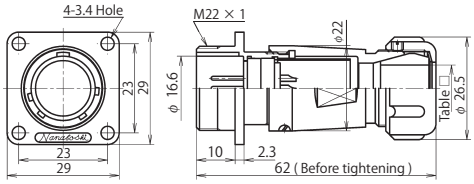
NJW-20 ■ -RM



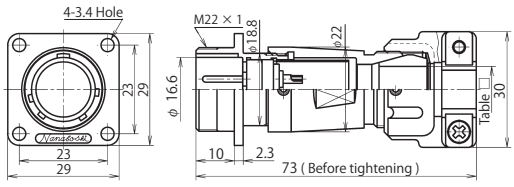
NJW-20 ■ -AdM □



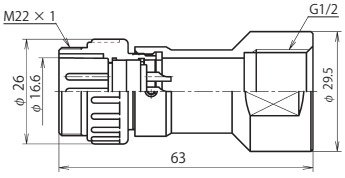
NJW-20 ■ -AdMK □



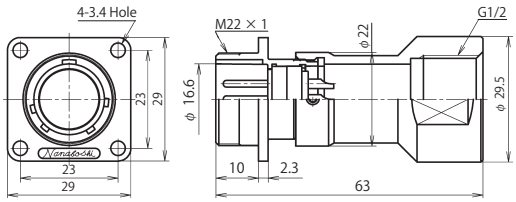
NJW-20 ■ -Ad(F)M □



NJW-20 ■ -Ad(F)MK □



NJW-20 ■ -GAdM1/2 (Note)



NJW-20 ■ -GAd(F)M1/2 (Note)

Note: We show sizes by the nominal "G(PF)" of parallel pipe threads. p.135
The waterproof of the conduit installation part depends on the conduit connecting components to use.

Cap・L za pp.90-91

For the plug and adapter , be sure to select □ (cable packing symbol).

Table □

In order to secure the intended waterproof function, a cable to be used for the plug/adapter should have an appropriate specification and structure.

Shell size	Symbol □	Outer diameter of cable used	Normal products		Safety standard	
			Standard	K Type	Standard	K Type
20	6	ϕ 5.5 to ϕ 6.3	●	—	—	—
	8	ϕ 7.0 to ϕ 8.5	●	●	●	—
	10	ϕ 8.6 to ϕ 10.5	●	●	●	—
	12	ϕ 10.6 to ϕ 12.5	●	●	●	—

■ indicates the number of contacts. Contact arrangement p.78.
The conductor cross sectional area is less than the following value.However, for safety standard certified products, use a cable having a value shown on p.128.

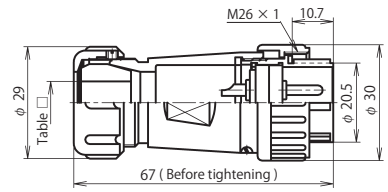
Shell size	Number of Contacts	2	3	4	5	7	10	12	14
20	Safety standard (Note-1)	UL・CSA							—
	Rating (Allowable current for signals)	250V 15A		250V 10A			250V 5A		[3A]
	Withstand voltage (V r.m.s.)	1,500				1,000			500
	Wire size (㎟)	2		1.25			0.5		0.3
	Remarks	—							For signals

Note-1 : Specified separately. "Specified as a set of UL and CSA". For safety standards, see p.128.

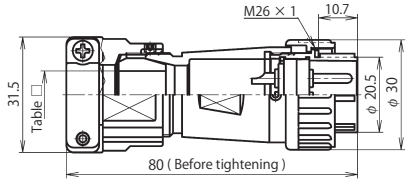
[ ] : Gold plating contact

G Type

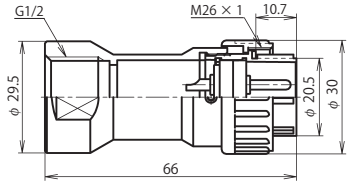
【Power receiving side】< Pin (male) contact used >



NJW-24 ■ -PM □



NJW-24 ■ -PMK □



NJW-24 ■ -GPM1/2 (Note)

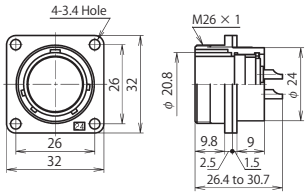
Plug

Coupled

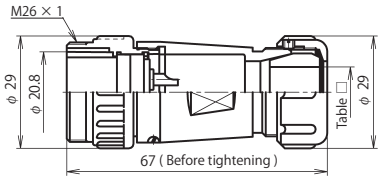
Receptacle

Adapter

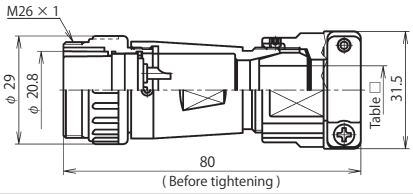
【Power supply side】< Socket (female) contact used >



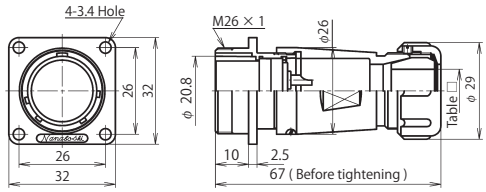
NJW-24 ■ -RF



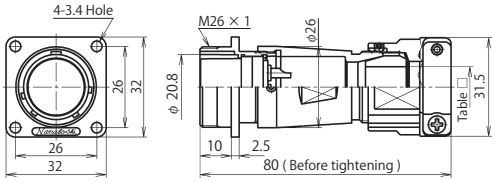
NJW-24 ■ -AdF □



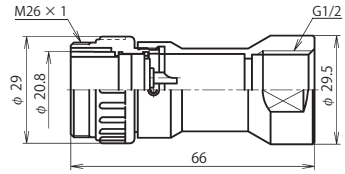
NJW-24 ■ -AdFK □



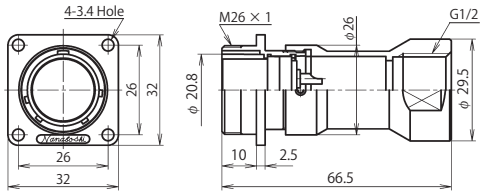
NJW-24 ■ -Ad(F)F □



NJW-24 ■ -Ad(F)FK □



NJW-24 ■ -GAdF1/2 (Note)



NJW-24 ■ -GAd(F)F1/2 (Note)

Note: We show sizes by the nominal "G(PF)" of parallel pipe threads. p.135
The waterproof of the conduit installation part depends on the conduit connecting components to use.

Cap・L za pp.90-91

For the plug and adapter , be sure to select □ (cable packing symbol).

Table □

In order to secure the intended waterproof function, a cable to be used for the plug/adapter should have an appropriate specification and structure.

Shell size	Symbol □	Outer diameter of cable used	Normal products		Safety standard	
			Standard	K Type	Standard	K Type
24	8	ϕ 6.8 to ϕ 8.0	●	●	—	—
	11	ϕ 9.5 to ϕ 11.0	●	●	●	—
	13	ϕ 11.1 to ϕ 13.0	●	●	●	—
	15	ϕ 13.1 to ϕ 15.0	●	●	●	—

■ indicates the number of contacts. Contact arrangement p.78.
The conductor cross sectional area is less than the following value.However, for safety standard certified products, use a cable having a value shown on p.128.

[ ] : Gold plating contact

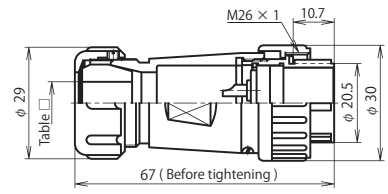
Shell size	Number of Contacts	2	3	4	5	10	14	16	21	24
24	Safety standard (Note-1)	UL・CSA							—	
	Rating (Allowable current for signals)	250V 20A		250V 15A		250V 10A	250V 5A		3pcs=6A [18pcs=3A]	[3A]
	Withstand voltage (V r.m.s.)	1,500				1,000			500	
	Wire size (㎟)	3.5		2		1.25	0.5		3pcs=0.75 18pcs=0.3	0.3
	Remarks	—							For signals	

Note-1 : Specified separately. "Specified as a set of UL and CSA". For safety standards, see p.128.

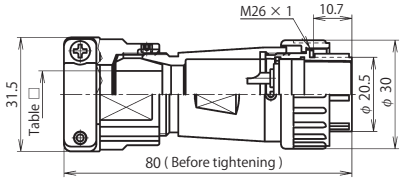
S Type

【 Power supply side 】< Socket (female) contact used >

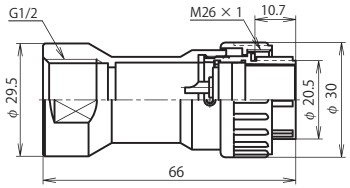
Plug



NJW-24 ■ -PF □



NJW-24 ■ -PFK □



NJW-24 ■ -GPF1/2 (Note)

Note: We show sizes by the nominal "G(PF)" of parallel pipe threads. p.135
The waterproof of the conduit installation part depends on the conduit connecting components to use.

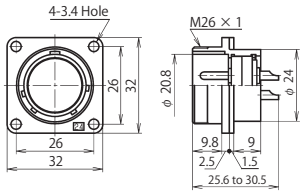
Cap・L za pp.90-91

For the plug and adapter , be sure to select □ (cable packing symbol).

Coupled

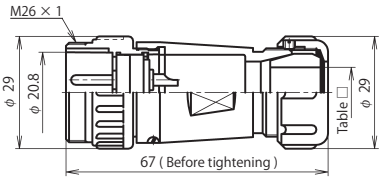
【 Power receiving side 】< Pin (male) contact used >

Receptacle

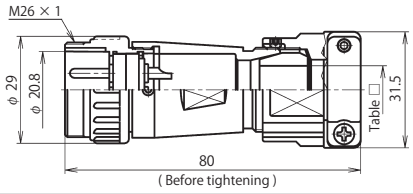


NJW-24 ■ -RM

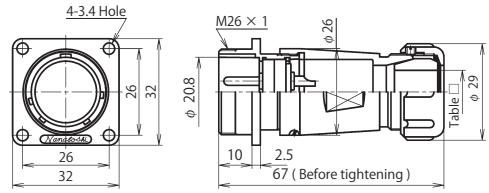
Adapter



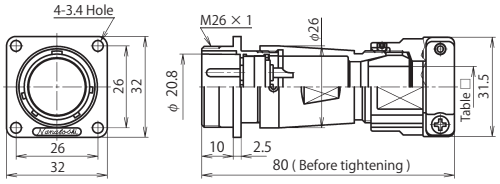
NJW-24 ■ -AdM □



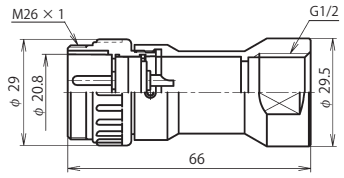
NJW-24 ■ -AdMK □



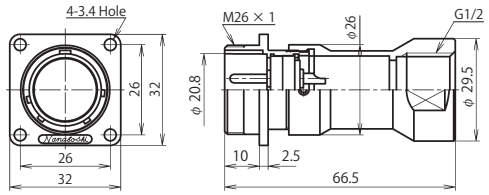
NJW-24 ■ -Ad(F)M □



NJW-24 ■ -Ad(F)MK □



NJW-24 ■ -GAdM1/2 (Note)



NJW-24 ■ -GAd(F)M1/2 (Note)

Table □

In order to secure the intended waterproof function, a cable to be used for the plug/adapter should have an appropriate specification and structure.

Shell size	Symbol □	Outer diameter of cable used	Normal products		Safety standard	
			Standard	K Type	Standard	K Type
24	8	ϕ 6.8 to ϕ 8.0	●	●	—	—
	11	ϕ 9.5 to ϕ 11.0	●	●	●	—
	13	ϕ 11.1 to ϕ 13.0	●	●	●	—
	15	ϕ 13.1 to ϕ 15.0	●	●	●	—

■ indicates the number of contacts. Contact arrangement p.78.
The conductor cross sectional area is less than the following value.However, for safety standard certified products, use a cable having a value shown on p.128.

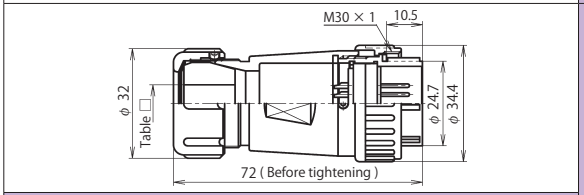
[ ] : Gold plating contact

Shell size	Number of Contacts	2	3	4	5	10	14	16	21	24
24	Safety standard (Note-1)	UL・CSA							—	
	Rating (Allowable current for signals)	250V 20A		250V 15A		250V 10A	250V 5A		3pcs=6A [18pcs=3A]	[3A]
	Withstand voltage (V r.m.s.)	1,500				1,000			500	
	Wire size (㎟)	3.5		2		1.25	0.5		3pcs=0.75 18pcs=0.3	0.3
	Remarks	—							For signals	

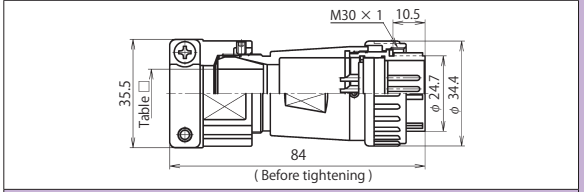
Note-1 : Specified separately. "Specified as a set of UL and CSA". For safety standards, see p.128.

G Type

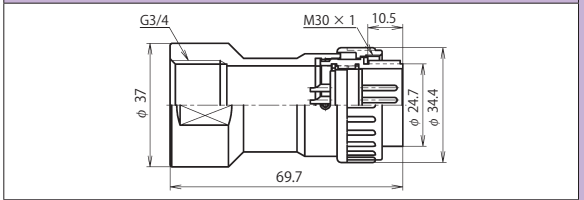
【Power receiving side】< Pin (male) contact used >



NJW-28 ■ -PM □



NJW-28 ■ -PMK □



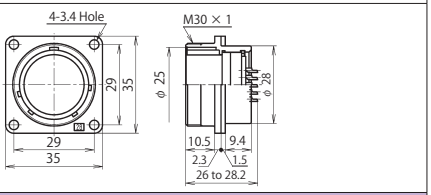
NJW-28 ■ -GPM3/4 (Note)

Plug

Coupled

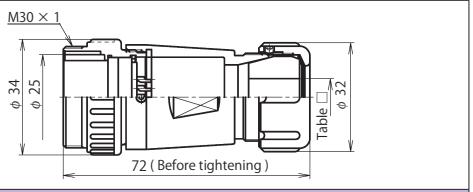
Receptacle

【Power supply side】< Socket (female) contact used >

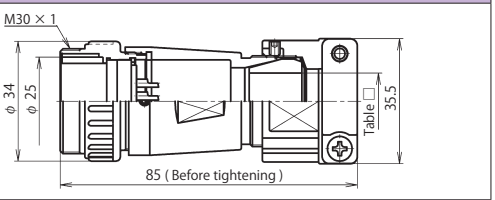


NJW-28 ■ -RF

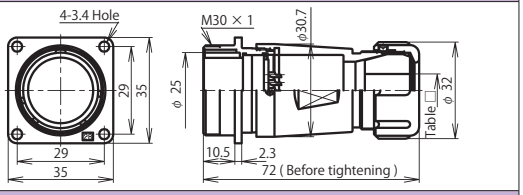
Adapter



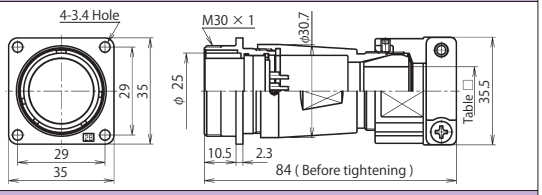
NJW-28 ■ -AdF □



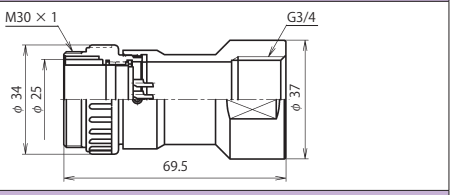
NJW-28 ■ -AdFK □



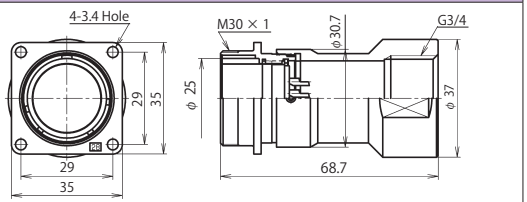
NJW-28 ■ -Ad(F)F □



NJW-28 ■ -Ad(F)FK □



NJW-28 ■ -GAdF3/4 (Note)



NJW-28 ■ -GAd(F)F3/4 (Note)

Note: We show sizes by the nominal "G(PF)" of parallel pipe threads. p.135
The waterproof of the conduit installation part depends on the conduit connecting components to use.

Cap・L za pp.90-91

For the plug and adapter , be sure to select □ (cable packing symbol).

Table □

In order to secure the intended waterproof function, a cable to be used for the plug/adapter should have an appropriate specification and structure.

Shell size	Symbol □	Outer diameter of cable used	Normal products		Safety standard	
			Standard	K Type	Standard	K Type
28	10	ϕ 9.0 to ϕ 10.9	●	●	—	—
	12	ϕ 11.0 to ϕ 12.4	●	●	—	—
	14	ϕ 12.5 to ϕ 14.0	●	●	●	—
	16	ϕ 14.1 to ϕ 16.0	●	●	●	—
	18	ϕ 16.1 to ϕ 18.0	●	●	●	—

■ indicates the number of contacts. Contact arrangement p.79.
The conductor cross sectional area is less than the following value.However, for safety standard certified products, use a cable having a value shown on p.128.

[ ] : Gold plating contact

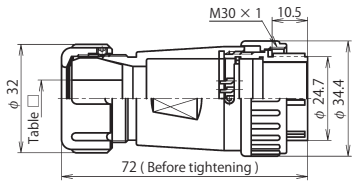
Shell size	Number of Contacts	16	24	31	37
28	Safety standard (Note-1)	UL・CSA		—	
	Rating (Allowable current for signals)	250V 10A	250V 5A	3pcs=6A [28pcs=3A]	[3A]
	Withstand voltage (V r.m.s.)	1,000		500	
	Wire size (㎟)	1.25	0.5	3pcs=0.75 28pcs=0.3	0.3
	Remarks	—		For signals	

Note-1 : Specified separately. "Specified as a set of UL and CSA". For safety standards, see p.128.

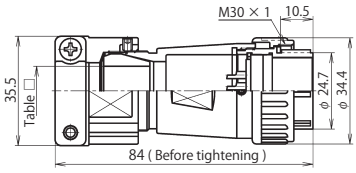
S Type

【Power supply side】< Socket (female) contact used >

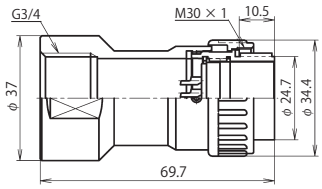
Plug



NJW-28 ■ -PF □



NJW-28 ■ -PFK □

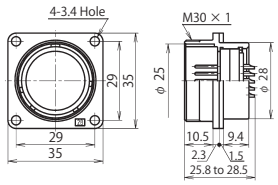


NJW-28 ■ -GPF3/4 (Note)

Coupled

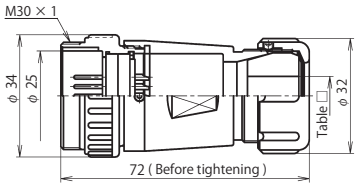
【Power receiving side】< Pin (male) contact used >

Receptacle

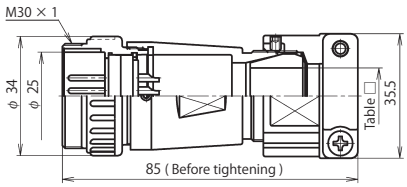


NJW-28 ■ -RM

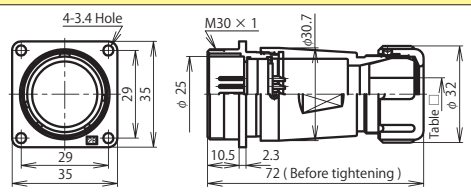
Adapter



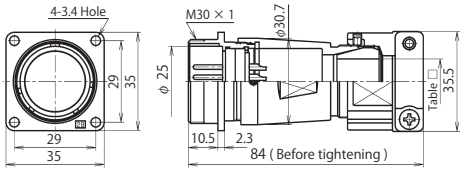
NJW-28 ■ -AdM □



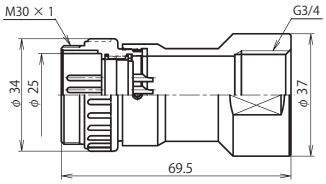
NJW-28 ■ -AdMK □



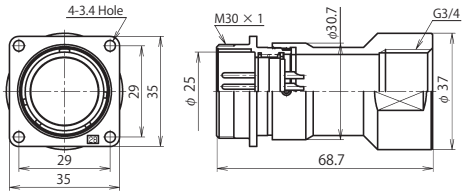
NJW-28 ■ -Ad(F)M □



NJW-28 ■ -Ad(F)MK □



NJW-28 ■ -GAdM3/4 (Note)



NJW-28 ■ -GAd(F)M3/4 (Note)

Note: We show sizes by the nominal "G(PF)" of parallel pipe threads. p.135
The waterproof of the conduit installation part depends on the conduit connecting components to use.

Cap・L za pp.90-91

For the plug and adapter , be sure to select □ (cable packing symbol).

Table □

In order to secure the intended waterproof function, a cable to be used for the plug/adapter should have an appropriate specification and structure.

Shell size	Symbol □	Outer diameter of cable used	Normal products		Safety standard	
			Standard	K Type	Standard	K Type
28	10	ϕ 9.0 to ϕ 10.9	●	●	—	—
	12	ϕ 11.0 to ϕ 12.4	●	●	—	—
	14	ϕ 12.5 to ϕ 14.0	●	●	●	—
	16	ϕ 14.1 to ϕ 16.0	●	●	●	—
	18	ϕ 16.1 to ϕ 18.0	●	●	●	—

■ indicates the number of contacts. Contact arrangement p.79.
The conductor cross sectional area is less than the following value.However, for safety standard certified products, use a cable having a value shown on p.128.

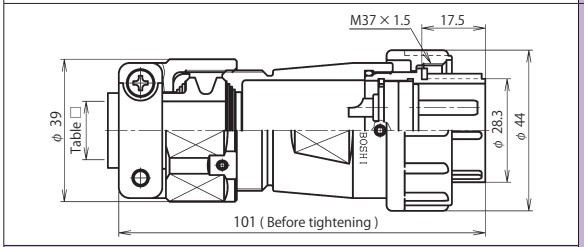
[ ] : Gold plating contact

Shell size	Number of Contacts	16	24	31	37
28	Safety standard (Note-1)	UL・CSA		—	
	Rating (Allowable current for signals)	250V 10A	250V 5A	3pcs=6A [28pcs=3A]	[3A]
	Withstand voltage (V r.m.s.)	1,000		500	
	Wire size (㎟)	1.25	0.5	3pcs=0.75 28pcs=0.3	0.3
	Remarks	—		For signals	

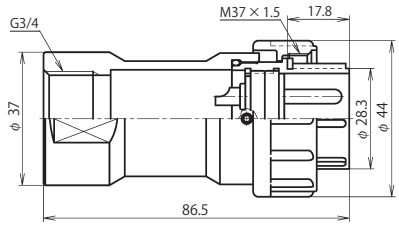
Note-1 : Specified separately. "Specified as a set of UL and CSA". For safety standards, see p.128.

G Type

【Power receiving side】< Pin (male) contact used >



NJW-32 ■ -PM □



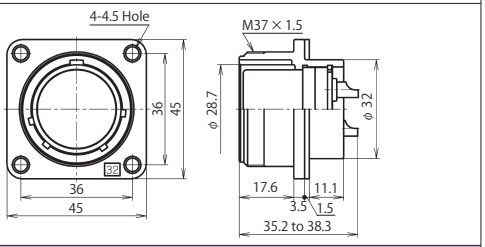
NJW-32 ■ -GPM3/4 (Note)

Plug

Coupled

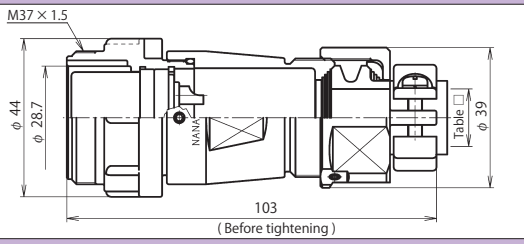
Receptacle

【Power supply side】< Socket (female) contact used >

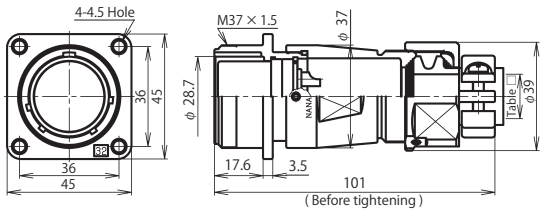


NJW-32 ■ -RF

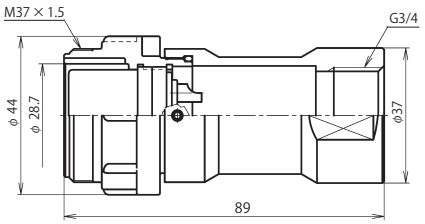
Adapter



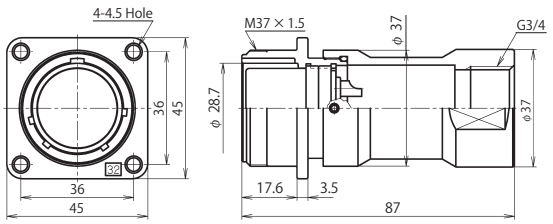
NJW-32 ■ -AdF □



NJW-32 ■ -Ad(F)F □



NJW-32 ■ -GAdF3/4 (Note)



NJW-32 ■ -GAd(F)F3/4 (Note)

Note: We show sizes by the nominal "G(PF)" of parallel pipe threads. p.135
The waterproof of the conduit installation part depends on the conduit connecting components to use.

Cap・L za pp.90-91

For the plug and adapter , be sure to select □ (cable packing symbol).

Table □

In order to secure the intended waterproof function, a cable to be used for the plug/adapter should have an appropriate specification and structure.

Shell size	Symbol □	Outer diameter of cable used	Normal products	Safety standard
32	16	ϕ 11.5 to ϕ 16.0	●	●
	20	ϕ 15.5 to ϕ 20.0	●	●

※ Size 32 is provided with cable clamp as a standard feature.

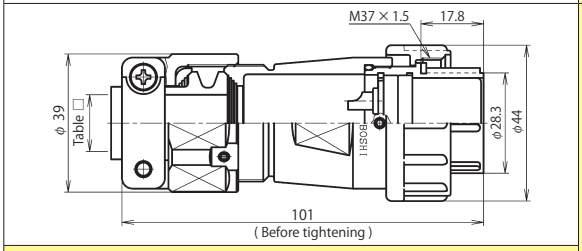
■ indicates the number of contacts. Contact arrangement p.79.
The conductor cross sectional area is less than the following value.However, for safety standard certified products, use a cable having a value shown on p.128.

Shell size	Number of Contacts	3	4	8	10	12
32	Safety standard (Note-1)	UL・CSA				
	Rating (Allowable current for signals)	250V 30A		250V 10A		
	Withstand voltage (V r.m.s.)	2,000		1,500		
	Wire size (㎟)	5.5 , 6		2		
	Remarks	—				

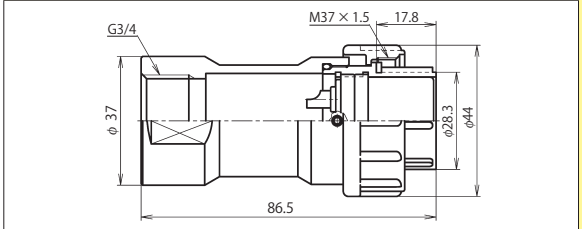
Note-1 : Specified separately. "Specified as a set of UL and CSA". For safety standards, see p.128.

S Type

【Power supply side】< Socket (female) contact used >



NJW-32 ■ -PF □



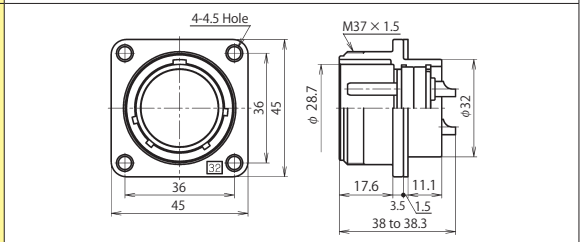
NJW-32 ■ -GPF3/4 (Note)

Plug

Coupled

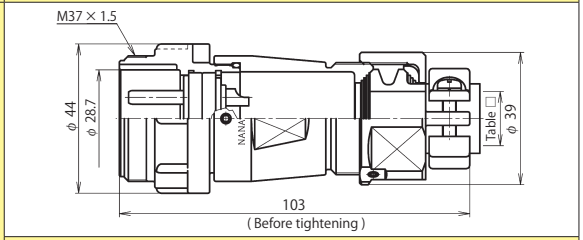
Receptacle

【Power receiving side】< Pin (male) contact used >

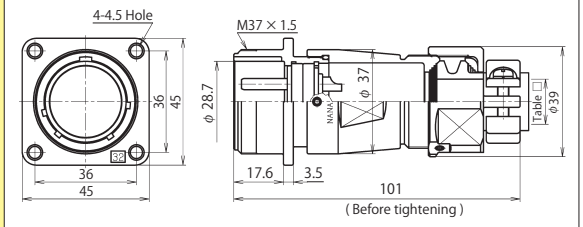


NJW-32 ■ -RM

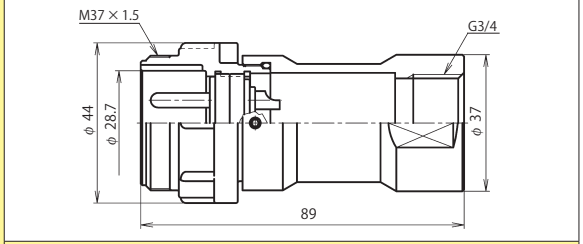
Adapter



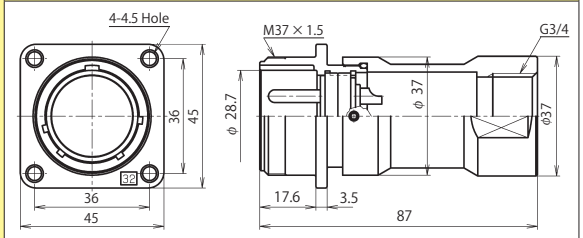
NJW-32 ■ -AdM □



NJW-32 ■ -Ad(F)M □



NJW-32 ■ -GAdM3/4 (Note)



NJW-32 ■ -GAd(F)M3/4 (Note)

Note: We show sizes by the nominal "G(PF)" of parallel pipe threads. p.135
The waterproof of the conduit installation part depends on the conduit connecting components to use.

Cap・L za pp.90-91

For the plug and adapter , be sure to select □ (cable packing symbol).

Table □

In order to secure the intended waterproof function, a cable to be used for the plug/adapter should have an appropriate specification and structure.

Shell size	Symbol □	Outer diameter of cable used	Normal products	Safety standard
32	16	φ 11.5 to φ 16.0	●	●
	20	φ 15.5 to φ 20.0	●	●

※ Size 32 is provided with cable clamp as a standard feature.

■ indicates the number of contacts. Contact arrangement p.79.
The conductor cross sectional area is less than the following value.However, for safety standard certified products, use a cable having a value shown on p.128.

Shell size	Number of Contacts	3	4	8	10	12
32	Safety standard (Note-1)	UL・CSA				
	Rating (Allowable current for signals)	250V 30A		250V 10A		
	Withstand voltage (V r.m.s.)	2,000		1,500		
	Wire size (㎟)	5.5 , 6		2		
	Remarks	—				

Note-1 : Specified separately. "Specified as a set of UL and CSA". For safety standards, see p.128.

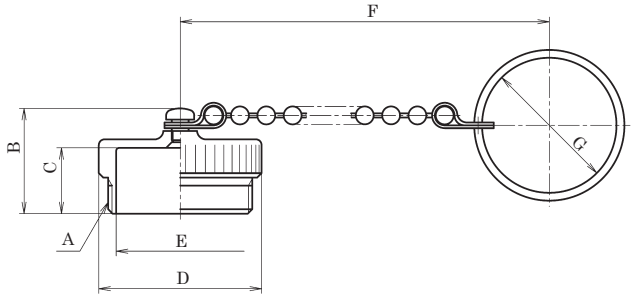
NJW Series

【PCa】 Plug cap

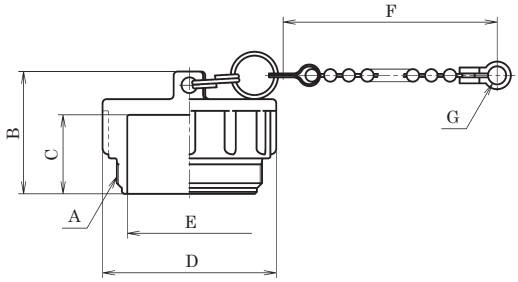
Caps used for plugs. Used to protect the contact part when they are not coupled with a receptacle/adapter.

Shell size	Designation	Standard dimensions						
		A	B	C	D	E	F	G
16	NJW-16-PCa	M18 × 1	19	12	ϕ 22	ϕ 14	160	ϕ 21
20	NJW-20-PCa	M22 × 1			ϕ 25	ϕ 18.6		
24	NJW-24-PCa	M26 × 1	18.7	11.7	ϕ 29	ϕ 22.8	165	ϕ 24
28	NJW-28-PCa	M30 × 1	19	12	ϕ 33	ϕ 27		ϕ 28
32	NJW-32-PCa	M37 × 1.5	31	20	ϕ 44	ϕ 31.5	180	4.5 Hole

NJW-16 to 28



NJW-32



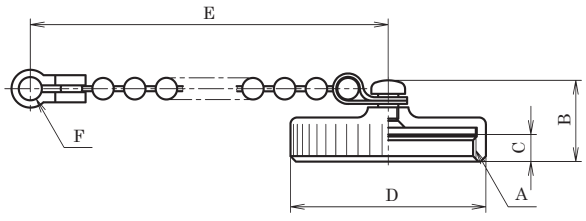
【RCa】 Receptacle cap

Caps used for receptacles and adapters. Used to protect the contact part when they are not coupled with a plug.

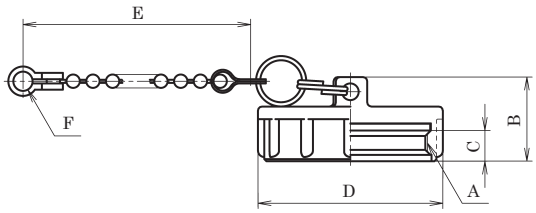
Shell size	Designation	Standard dimensions					
		A	B	C	D	E	F
16	NJW-16-RCa	M18 × 1	11.5	3.5	ϕ 22	150 (※1)	3.45 Hole
20	NJW-20-RCa	M22 × 1			ϕ 25		
24	NJW-24-RCa	M26 × 1	12	4	ϕ 29		
28	NJW-28-RCa	M30 × 1	12.5	4.5	ϕ 33		
32	NJW-32-RCa	M37 × 1.5	20	7.3	ϕ 44	80	4.5 Hole

(※1) Length 70 mm also available. (Example：NJW-16-RCa L70)

NJW-16 to 28



NJW-32



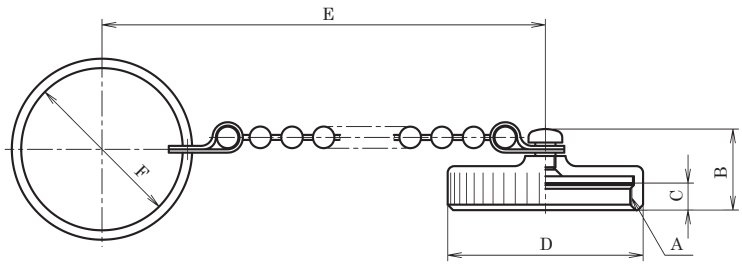
◆【AdCa】 Adapter cap

Caps used for adapters. Used to protect the contact part when they are not coupled with a plug.
For adapters with flange, RCa may also be used.

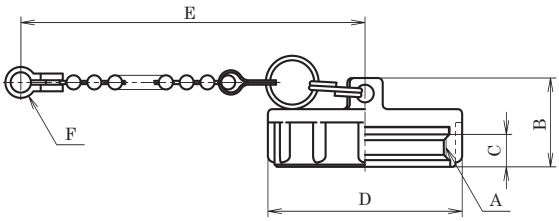

Photo shows Shell size 24

Shell size	Designation	Standard dimensions					
		A	B	C	D	E	F
16	NJW-16-AdCa	M18 × 1	11.5	3.5	ϕ 22	160	ϕ 21
20	NJW-20-AdCa	M22 × 1			ϕ 25		
24	NJW-24-AdCa	M26 × 1	12	4	ϕ 29	165	ϕ 24
28	NJW-28-AdCa	M30 × 1	12.5	4.5	ϕ 33		ϕ 28
32	NJW-32-AdCa	M37 × 1.5	20	7.3	ϕ 44	180	4.5 Hole

NJW-16 to 28



NJW-32



◆【L za】

An angle part used in the receptacle mounting place to change the direction of a receptacle.
The plug and cable can be installed parallel with the panel.

Used commonly for NJW, NAW, NRW and NEW.

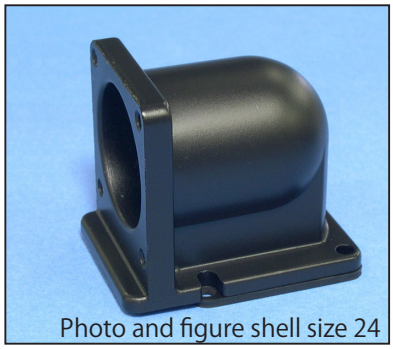
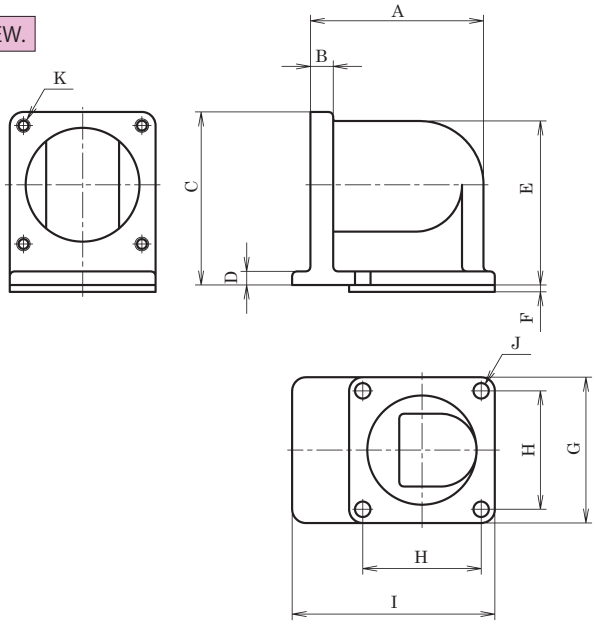
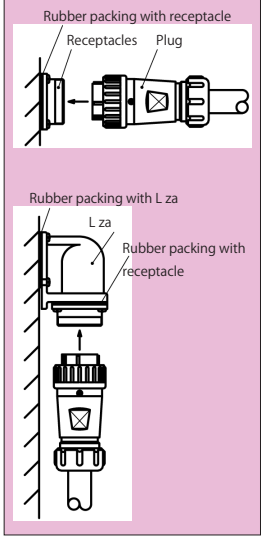


Photo and figure shell size 24



Example of use of L za



Shell size	Designation	Standard dimensions										
		A	B	C	D	E	F	G	H	I	J	K
16	NJW-16-L za	29.5	5	30.5	3	27.5	1.5	26	20	36.9	4-3.4 Hole	4-M3 tap
20	NJW-20-L za	32		35.3	5.3	32.8		29	23	38.4		
24	NJW-24-L za	38		38	3	36		32	26	44.5		
28	NJW-28-L za	41		41.5		40		35	29	46.8		

Number of contacts

Shell size	Contact	Insulation resistance (MΩ)		Contact resistance (mΩ)		Withstand voltage (V r.m.s.)	
		Normal products	Safety standard UL・CSA	Normal products	Safety standard UL・CSA	Normal products	Safety standard UL・CSA
16	3	DC 500V 2,000 min.		3 max.		1,500	
	5	DC 500V 1,000 min.		5 max.		1,000	
	8	DC 250V 1,000 min.	—	5 max.	—	500	—
20	2	DC 500V 2,000 min.		3 max.		1,500	
	3						
	4						
	5						
	7					1,000	
	10	DC 500V 1,000 min.		5 max.			
	12						
	14	DC 250V 1,000 min.	—	5 max.	—	500	—
24	2	DC 500V 5,000 min.	DC 500V 2,000 min.	3 max.		1,500	
	3						
	4						
	5						
	10	DC 500V 2,000 min.				1,000	
	14	DC 500V 1,000 min.		5 max.			
	16						
	21	DC 250V 1,000 min.	—	5 max.	—	500	—
	24						
28	16	DC 500V 2,000 min.		3 max.		1,000	
	24	DC 500V 1,000 min.		5 max.			
	31	DC 250V 1,000 min.	—	5 max.	—	500	—
	37						
32	3	DC 500V 2,000 min.		3 max.		2,000	
	4						
	8					1,500	
	10						
	12						

(Waterproof) No trace of water exposure after being kept at a water pressure of 40 kPa for 24 hours in the coupled state in its normal state of use.