

NEW Series



Waterproof IP-67

Safety standard certified products available

RoHS

Quick lock

Overview

- Safety standard certified, waterproof connectors based on NRW. Certified by UL • CSA standards also.
- Grounding of prioritized contact structure to make these connectors suitable for use in a wide variety of fields including semiconductor equipment and various outdoor equipment.

Feature

RoHS	RoHS Directive compliant
Waterproof	Waterproof connector 【 Waterproof function IP-67 when coupled 】
Lock method	Quick lock
Features of mechanism/ material	<ul style="list-style-type: none"> ○ Protection circuit structure: Ground contact of sequence structure. (prioritized contact) ○ Shell made of weather-resistant, high-strength plastic. ○ Light weight and sturdy. ○ Installation in a small space enabled by use of the L za.
Standards	<ul style="list-style-type: none"> ○ Safety standard certified connectors available. (EN61984 compliant , TÜV certified) ○ UL • CSA standard certified connectors available. (UL : UL1977 CSA : C22.2 No.182.3)
Cable termination	Soldering

Characteristics

Shell size	Contact	Number of contacts		
		Insulation resistance (M Ω)	Contact resistance (m Ω)	Withstand voltage (V r.m.s.)
20	3	DC 500V 2,000 min.	3 max.	1,500
24	3	DC 500V 2,000 min.	3 max.	1,500
	4			
28	4	DC 500V 2,000 min.	3 max.	1,500
	8			

(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.

NEW Series

Product No. designation

NEW - 24 ■ - P F □

① ② ③ ④ ⑤ ⑥

- 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 Symbol indicating cable packing size. 《 Plug & adapter require symbol to be specified. 》

All connectors are UL • CSA , TÜV certified. Not necessary to specify a standard by a product name. For safety standards, see pp.128 and 130.

Cable termination : Soldering

Material and Finish

	Material	Finish
Shell	Synthetic resin	—
Insulator		
Contact	Copper alloy	Silver plating
Packing	Synthetic rubber	—

Operating temperature range

Shell size	Number of Contacts	Operating temperature range	Upper limit of ambient temperature at rated current (Note)
20	3	-25°C to +85°C	+80°C
24	3		+74°C
	4		+80°C
28	4		+67°C
	8		+77°C

(Note) Max.ambient temp. at rated current

(Based on TÜV certification test results)

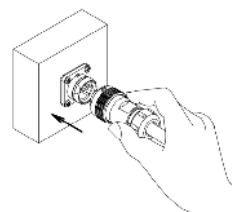


The pin contact type has an **exposed electrode**. If it is used on the [power supply] side, it may cause **electric shock** or **short-circuit accidents**. To prevent such accidents, use the socket contact type on the [power supply] side and the pin contact type on the [equipment] side.

Insertion

Align the plug and the guide of the mating connector (receptacle/adaptor) and push in straight.

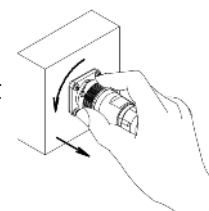
Caution: When inserting, do not turn the coupling nut.



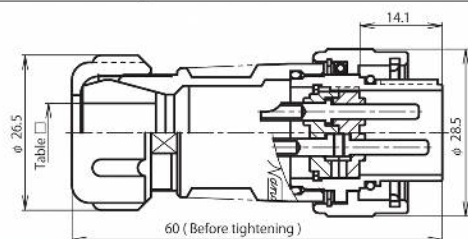
Extraction

With the coupling nut turned CCW 45 degrees in the arrow direction, extract the connector.

Caution: When extracting, do not turn the end bell.



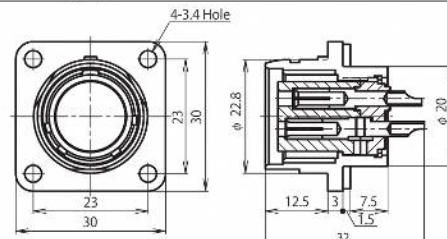
【 Power receiving side 】 < Pin (male) contact used >



NEW-20 ■ -PM □

G Type

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



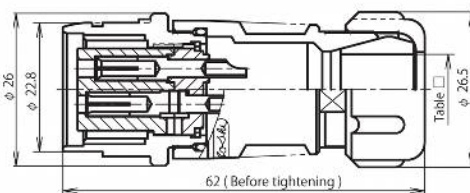
NEW-20 ■ -RF

Plug

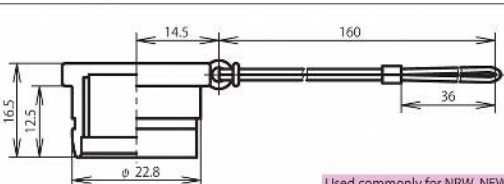
Receptacle



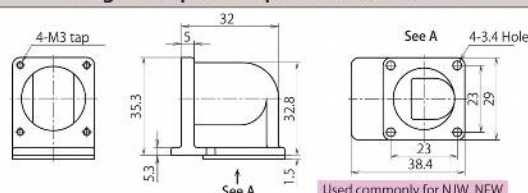
Adapter



NEW-20 ■ -AdF □



Plug waterproof cap : NRW-20-PCa • 1



NJW-20-L za

Accessory

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.

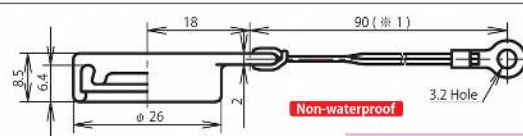
Shell size	Symbol	Outer diameter of cable used
20	8	φ 7.0 to φ 8.5
	10	φ 8.6 to φ 10.5
	12	φ 10.6 to φ 12.5

■ indicates the number of contacts.

Shell size	Number of Contacts	3
20	Contact arrangement <When viewed from the pin (male) contact coupling side>	
	Safety standard (Note-1)	UL • CSA , TÜV
	Rating	250V 15A
	Withstand voltage (V r.m.s.)	1,500
	Wire size AWG	#14

The cable to use should have a conductor cross sectional area shown in the left-side table.

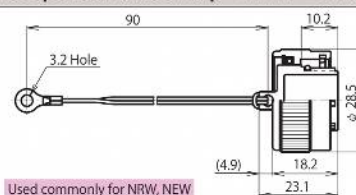
Note-1 : All connectors are UL • CSA , TÜV certified. Not necessary to specify a standard by a product name. For safety standards, see pp.128 and 130.



Used commonly for NRW, NEW

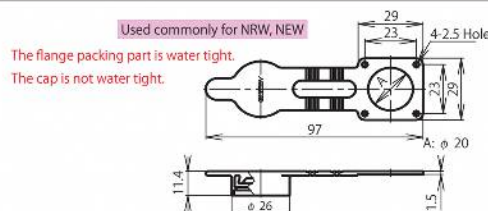
(※ 1) Length 35 mm also available. (Example : NRW-20-RCa L35)

Receptacle rubber cap : NRW-20-RCa

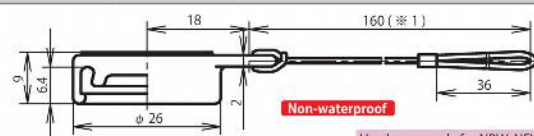


Used commonly for NRW, NEW

Receptacle waterproof cap : NRW-20-RCa • 1



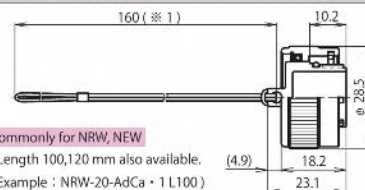
Receptacle rubber cap : NRW-20-RCa • 2



Used commonly for NRW, NEW

(※ 1) Length 100,120 mm also available. (Example : NRW-20-AdCa L100)

Adapter rubber cap : NRW-20-AdCa



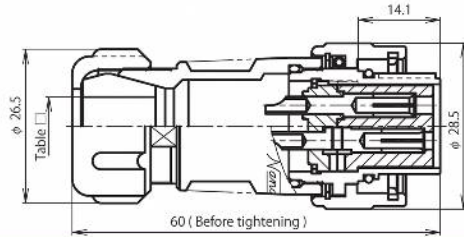
Used commonly for NRW, NEW

(※ 1) Length 100,120 mm also available. (Example : NRW-20-AdCa • 1 L100)

Adapter waterproof cap : NRW-20-AdCa • 1

Accessory

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



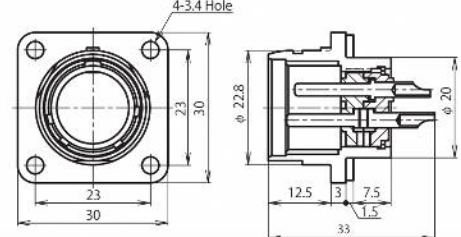
NEW-20 ■ -PF □

S Type

Plug



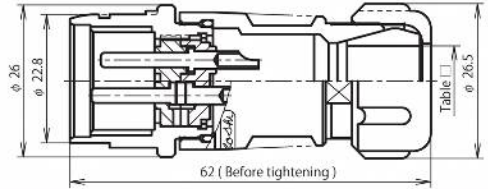
【 Power receiving side 】 < Pin (male) contact used >



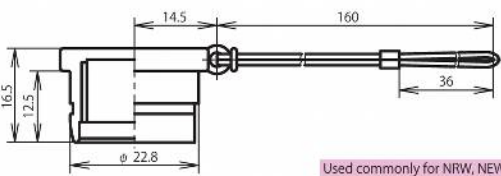
NEW-20 ■ -RM

Receptacle

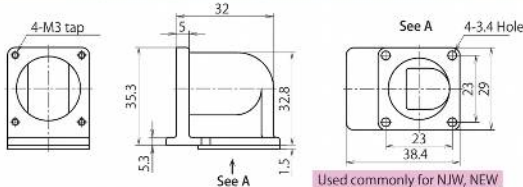
Adapter



NEW-20 ■ -AdM □



Plug waterproof cap : NRW-20-PCa • 1



NJW-20-L za

Accessory

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.

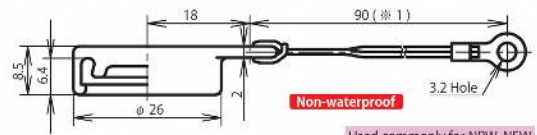
Shell size	Symbol	Outer diameter of cable used
20	8	φ 7.0 to φ 8.5
	10	φ 8.6 to φ 10.5
	12	φ 10.6 to φ 12.5

■ indicates the number of contacts.

Shell size	Number of Contacts	3
20	Contact arrangement <When viewed from the pin (male) contact coupling side>	
	Safety standard (Note-1)	UL • CSA , TÜV
	Rating	250V 15A
	Withstand voltage (V r.m.s.)	1,500
	Wire size AWG	#14

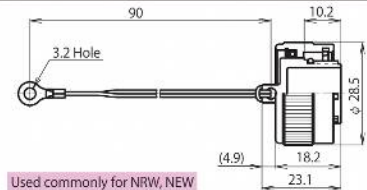
The cable to use should have a conductor cross sectional area shown in the left-side table.

Note-1 : All connectors are UL • CSA , TÜV certified. Not necessary to specify a standard by a product name. For safety standards, see pp.128 and 130.

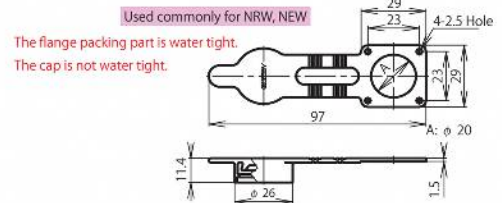


(※ 1) Length 35 mm also available. (Example : NRW-20-RCa L35)

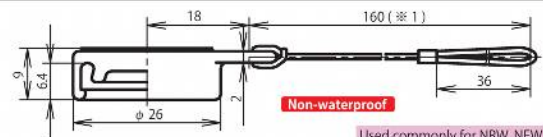
Receptacle rubber cap : NRW-20-RCa



Receptacle waterproof cap : NRW-20-RCa • 1

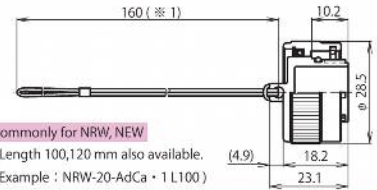


Receptacle rubber cap : NRW-20-RCa • 2



(※ 1) Length 100,120 mm also available. (Example : NRW-20-AdCa L100)

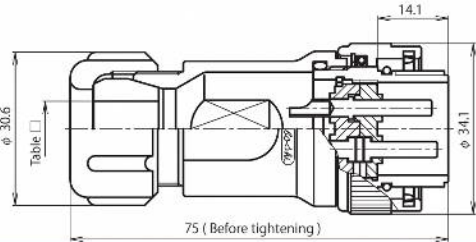
Adapter rubber cap : NRW-20-AdCa



Adapter waterproof cap : NRW-20-AdCa • 1

NEW Series Shell Size 24

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



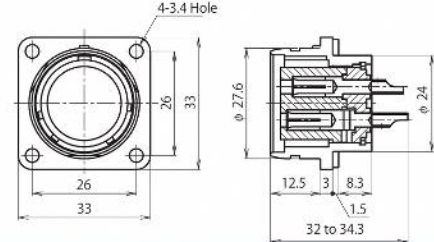
NEW-24 ■ -PM □

G Type

Plug



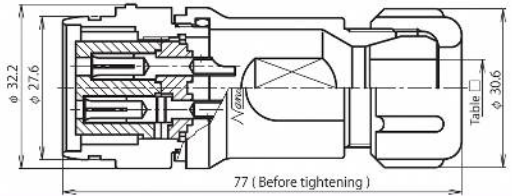
【 Power supply side 】 < Socket (female) contact used >



NEW-24 ■ -RF

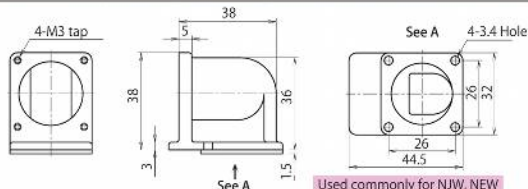
Receptacle

Adapter

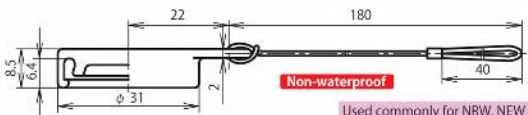


NEW-24 ■ -AdF □

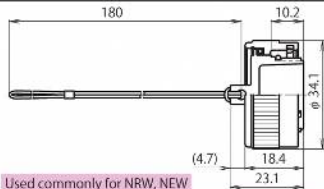
Plug waterproof cap : NRW-24-PCa • 1



NJW-24-L za



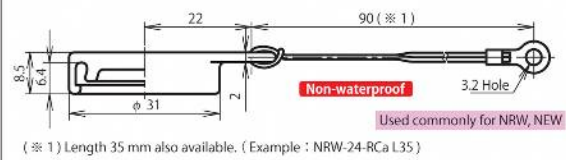
Adapter rubber cap : NRW-24-AdCa



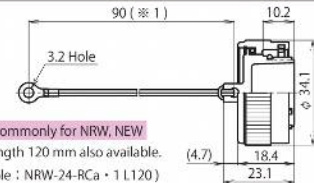
Adapter waterproof cap : NRW-24-AdCa • 1

Accessory

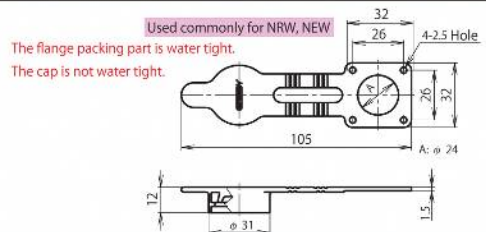
Accessory



Receptacle rubber cap : NRW-24-RCa



Receptacle waterproof cap : NRW-24-RCa • 1



Receptacle rubber cap : NRW-24-RCa • 2

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
24	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.

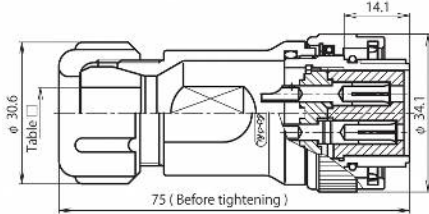
Shell size	Number of Contacts	3	4
24	Contact arrangement <When viewed from the pin (male) contact coupling side>		
	Safety standard (Note-1)	UL • CSA , TÜV	
	Rating	250V 20A	250V 15A
	Withstand voltage (V r.m.s.)	1,500	
	Wire size AWG	#12	#14

The cable to use should have a conductor cross sectional area shown in the left-side table.

Note-1 : All connectors are UL • CSA , TÜV certified. Not necessary to specify a standard by a product name. For safety standards, see pp.128 and 130.

NEW Series Shell Size 24

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

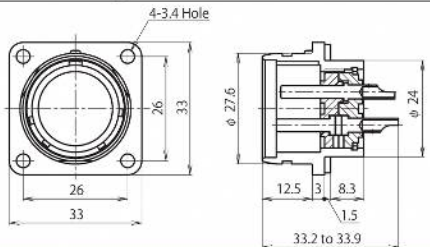


NEW-24 ■ -PF □

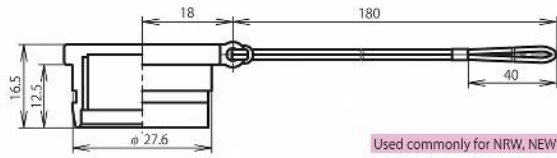
S Type

Plugged

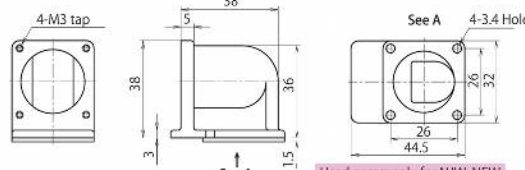
【 Power receiving side 】 < Pin (male) contact used >



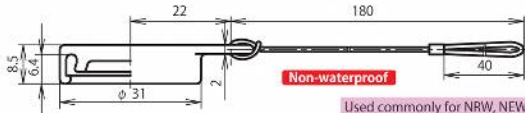
NEW-24 ■ -RM



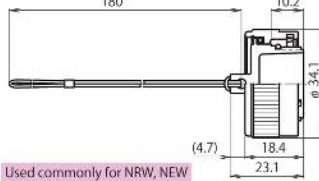
Plug waterproof cap : NRW-24-PCa • 1



NJW-24-L za

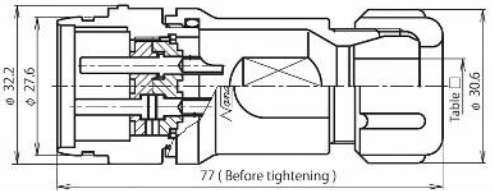


Adapter rubber cap : NRW-24-AdCa

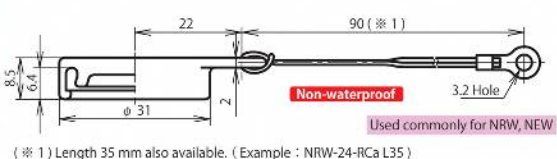


Adapter waterproof cap : NRW-24-AdCa • 1

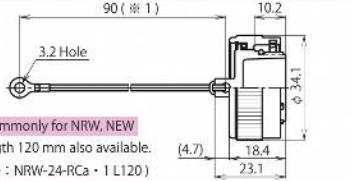
Accessory



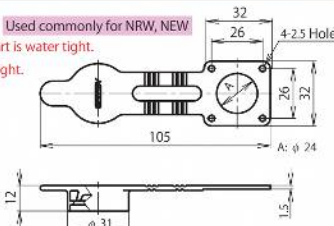
NEW-24 ■ -AdM □



Receptacle rubber cap : NRW-24-RCa



Receptacle waterproof cap : NRW-24-RCa • 1



Receptacle rubber cap : NRW-24-RCa • 2



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
24	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.

Shell size	Number of Contacts	3	4
24	Contact arrangement <When viewed from the pin (male) contact coupling side>		
	Safety standard (Note-1)	UL・CSA , TÜV	
	Rating	250V 20A	250V 15A
	Withstand voltage (V r.m.s.)	1,500	
	Wire size AWG	#12	#14

The cable to use should have a conductor cross sectional area shown in the left-side table.

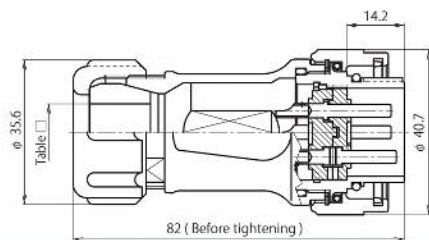
Note-1 : All connectors are UL・CSA , TÜV certified. Not necessary to specify a standard by a product name. For safety standards, see pp.128 and 130.

NEW

24

NEW Series Shell Size 28

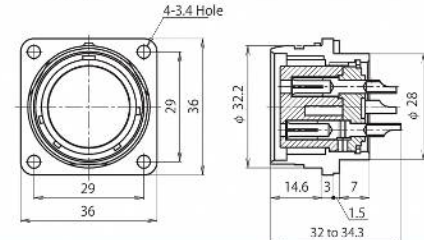
【 Power receiving side 】 < Pin (male) contact used >



NEW-28 ■ -PM □

G Type

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



NEW-28 ■ -RF

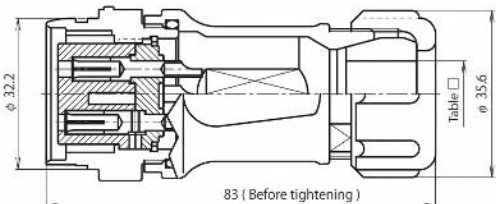
Plug

Receptacle

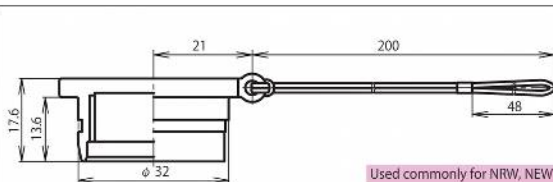


Accessory

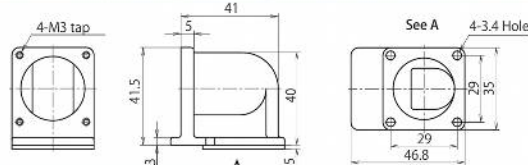
Adapter



NEW-28 ■ -AdF □



Plug waterproof cap : NRW-28-PCa • 1



NJW-28-L za

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.

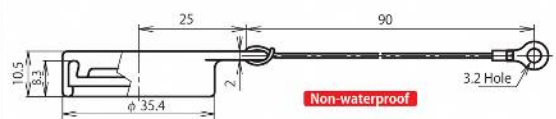
Shell size	Symbol	Outer diameter of cable used
28	10	φ 9.0 to φ 10.9
	12	φ 11.0 to φ 12.4
	14	φ 12.5 to φ 14.0
	16	φ 14.1 to φ 16.0
	18	φ 16.1 to φ 18.0

■ indicates the number of contacts.

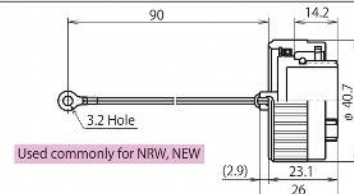
Shell size	Number of Contacts	4	8
28	Safety arrangement <When viewed from the pin (male) contact coupling side>		
	Safety standard (Note-1)	UL • CSA, TÜV	
	Rating	250V 20A	250V 15A
	Withstand voltage (V r.m.s.)	1,500	
	Wire size AWG	#12	#14

The cable to use should have a conductor cross sectional area shown in the left-side table.

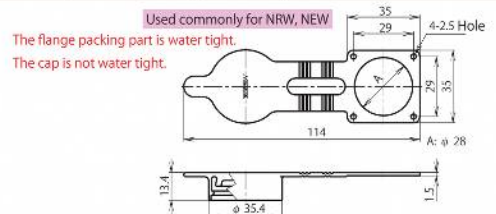
Note-1 : All connectors are UL • CSA, TÜV certified. Not necessary to specify a standard by a product name. For safety standards, see pp.128 and 130.



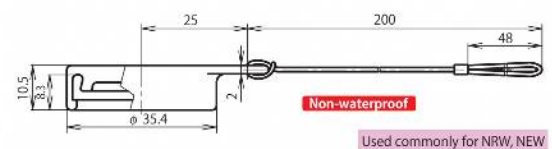
Receptacle rubber cap : NRW-28-RCa



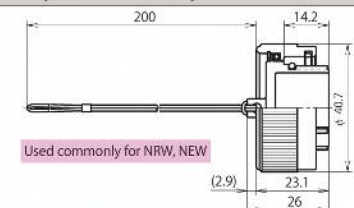
Receptacle waterproof cap : NRW-28-RCa • 1



Receptacle rubber cap : NRW-28-RCa • 2



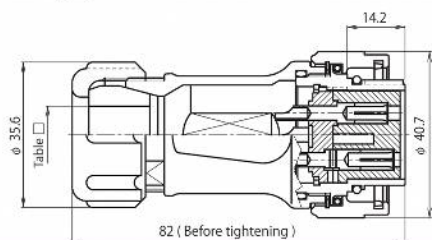
Adapter rubber cap : NRW-28-AdCa



Adapter waterproof cap : NRW-28-AdCa • 1

NEW Series Shell Size 28

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



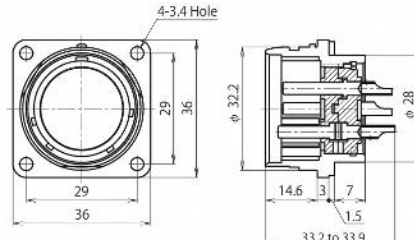
NEW-28 ■ -PF □

S Type

Plug



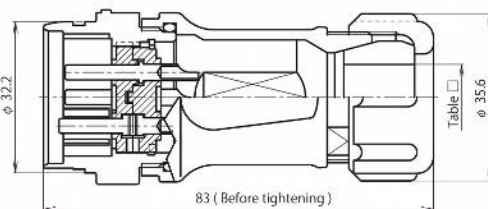
【 Power receiving side 】 < Pin (male) contact used >



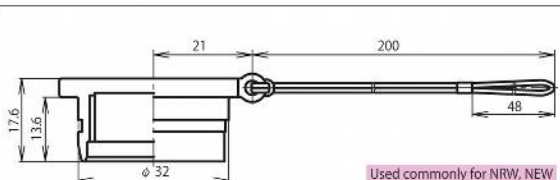
NEW-28 ■ -RM

Receptacle

Adapter

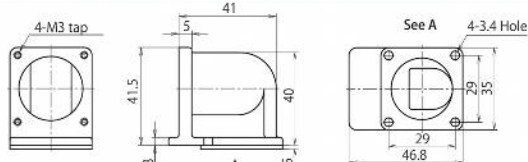


NEW-28 ■ -AdM □



Plug waterproof cap : NRW-28-PCa • 1

Accessory



NJW-28-L za

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
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.

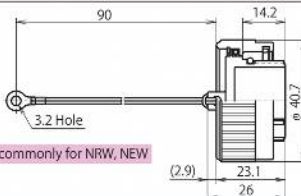
Shell size	Number of Contacts	4	8
28	Contact arrangement <When viewed from the pin (male) contact coupling side>		
	Safety standard (Note-1)	UL • CSA , TÜV	
	Rating	250V 20A	250V 15A
	Withstand voltage (V r.m.s.)	1,500	
	Wire size AWG	#12	#14

The cable to use should have a conductor cross sectional area shown in the left-side table.

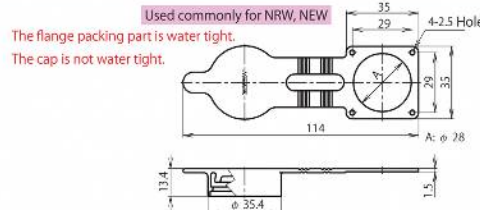
Note-1 : All connectors are UL • CSA , TÜV certified. Not necessary to specify a standard by a product name. For safety standards, see pp.128 and 130.



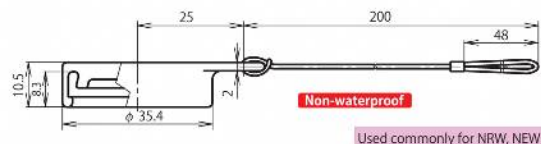
Receptacle rubber cap : NRW-28-RCa



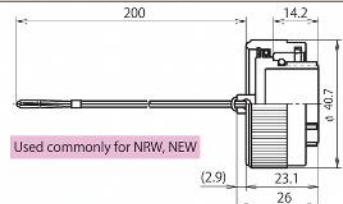
Receptacle waterproof cap : NRW-28-RCa • 1



Receptacle rubber cap : NRW-28-RCa • 2



Adapter rubber cap : NRW-28-AdCa



Adapter waterproof cap : NRW-28-AdCa • 1

NEW

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