

• General

Each connector consists of:

- an aluminium alloy (831/832) or stainless steel (8 N 35) shell
- one piece insulator, normal use (831) or one piece high temperature insulator (832 and 8 N 35)
- gold-plated contacts, crimp or solder ($\varnothing$ 1.5 mm and 2.5 mm).

The plug or the receptacle may be fitted with the male or female insulator.

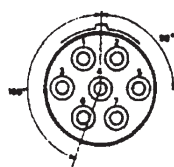
The contacts are removable and are supplied in a bag with the connector.

• Mechanical characteristics

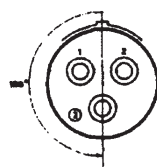
Model	831	832	8 N 35
Shell	aluminium alloy		stainless steel
Plating	cadmium-plated, yellow		passivated
Insulator and seal	neoprene elastomer	silicone elastomer	silicone elastomer
Temperature operating peak	- 40° C to + 85° C + 125° C	- 55° C to + 160° C + 200° C	- 55° C to + 160° C + 200° C
Sealing	under 2 m of water for 48 hours		mated connector with backshell under 0.5 MPa (5 bar) water pressure
Mechanical endurance	500 operations		500 operations
Radiation resistance			250 KGy
Resistance to spraying products for decontamination			yes
Salt spray resistance	48 h	48 h	168 hours

• Electrical characteristics (models 831 - 832 - 8 N 35)

- Maximum rating per contact : $\varnothing$ 1,5 mm - 11 A
 $\varnothing$ 2,5 mm - 25 A
- Contact resistance : $\varnothing$ 1,5 mm : $\leq 1,5$ m Ω
 $\varnothing$ 2,5 mm : $\leq 0,6$ m Ω
- Insulation resistance : $\geq 5\,000$ M Ω under 500 Vdc
- Withstanding voltage : 2 000 Vrms

• Contact layouts and orientation, male insulator front view


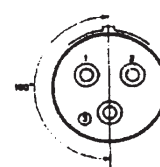
21 7 contacts $\varnothing$ 1,5 mm



23 3 contacts $\varnothing$ 2,5 mm



24
4 $\varnothing$ 2,5



26 3 contacts $\varnothing$ 1,5 mm

Issue
1

Date
11/93

EDF
Electricité
de France
Direction de l'Équipement
Service Études et Projets
Thermiques et Nucléaires

EQUIPMENT
IDENTIFICATION
SHEET

SEALED SCREW-TYPE CONNECTOR
SOURIAU MODELS 831, 832 AND 8 N 35

PAGE : 2/6

CONNECTORS WITH OR WITHOUT BACKSHELLS

Example : 832 21 1 5 0 SP2 X

Model	high temperature _____ 832 ____ 8N35
	environmental temperature _____ 831
Shell size	layout 21 _____
	23 <u>24</u> _____
	26 _____
Shell type	1 - flange receptacle
	round fixing, 4 screws _____
	8 - plug _____
Contact type	1 - male, crimp _____
	3 - male, solder _____
	5 - female, crimp _____
	7 - female, solder _____
Backshell type	0 - without backshell _____
	2 - backnut _____
	1 - straight backshell with collet & sealing gland _____
	7 - elbow backshell with collet & sealing gland _____
Specification index	Admissible cable diameter :
	ø 14 to 15 mm : index A _____
	ø 12 to 14 mm : index B _____
	ø 10 to 12 mm : index C _____
	ø 6 mm : index D _____
	ø 7,5 mm to 9 mm : index E _____
	In the case of a connector
	without backshell or with a backnut,
	nothing is indicated
	SP 2 mandatory index (for 832) _____
	For delivery with large barrel contacts : X = number of contacts _____

BACKSHELLS

(mandatory for 831 - 832)

Ex : 831 20 007 B

Model	_____
Shell size	20 - (for layouts 21-23-26) _____
Backshell type	002 - backnut _____
	001 - straight backshell with collet & sealing gland _____
	007 - elbow backshell with collet & sealing gland _____
Specification	for backshell with collet only
	cable outlet diameter :
	ø 14 to 15 mm : no specification _____
	index A _____
	ø 12 to 14 mm : index B _____
	ø 10 to 12 mm : index C _____
	ø 6 mm : index D _____
	ø 7,5 to 9 mm : index E _____

Issue

1

Date

11/93

EDF
Electricité
de FranceDirection de l'Équipement
Service Études et Projets
Thermiques et NucléairesEQUIPMENT
IDENTIFICATION
SHEETSEALED SCREW-TYPE CONNECTOR
SOURIAU MODELS 831, 832 AND 8 N 35

PAGE : 3/6

CONTACTS

3.2 - 4.1.02

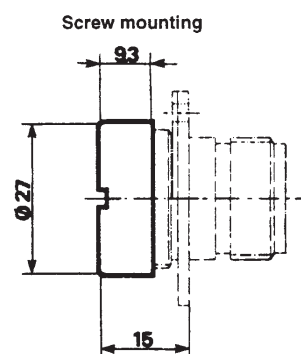
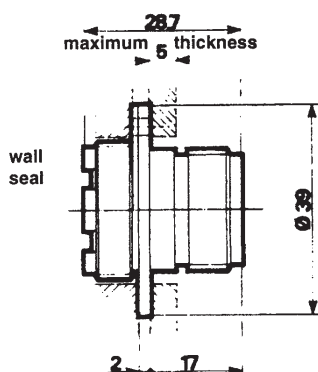
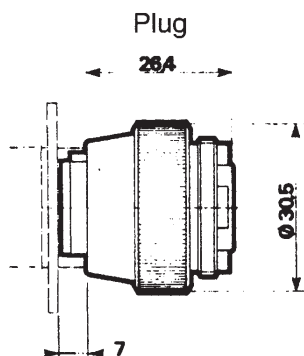
Type of contacts		Male contacts	Female contacts	Admissible section min/max (mm²)	max sleeving ø (mm)	End reducer Part number	Admissible section with end reducer (mm²)
ø 1,5	small barrels crimp	8400-307 AKM	8400-9019-900	0,38/0,93	3,30	63584-011	0,06/0,21
	large barrels crimp	8400-144 AKM	8400-9018-900	1,34/1,91	3,30		
	solder	8400-474 KM	8400-622 A 900	1,91	3,30		
ø 2,5	crimp	8400-270 AKM	8400-147 A 900	3,18/5,30	5,10	8400-1665-014	1,91
	solder	8300-235 KM	8300-236-900	5,30	5,10		

DIMENSIONS

Model 8 N 35

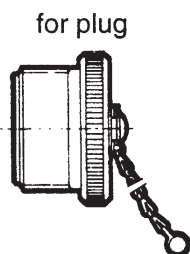
Type 1 receptacle - Screw mounting

Backnut type 2



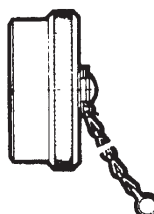
Caps

Panel cut-out for mounting of type 1 receptacle

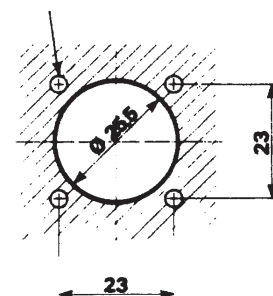


part number : 8 N 35 - 20 - 22

for receptacle



part number : 8 N 35 - 20 - 12



Panel Gasket for type 1 receptacle : part number 8300 - 474 (8 N 35)

Issue
1

Date
11/93

EDF
Electricité
de France

Direction de l'Équipement
Service Etudes et Projets
Thermiques et Nucléaires

EQUIPMENT
IDENTIFICATION
SHEET

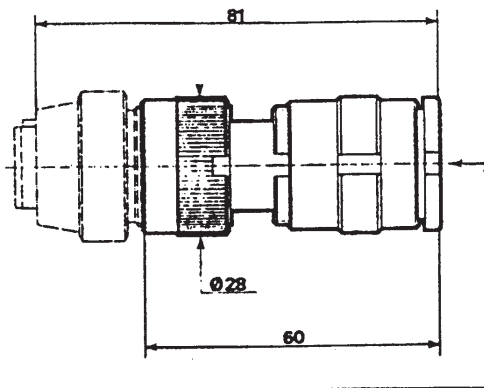
SEALED SCREW-TYPE CONNECTOR
SOURIAU MODELS 831, 832 AND 8 N 35

PAGE : 4/6

Model 8 N 35

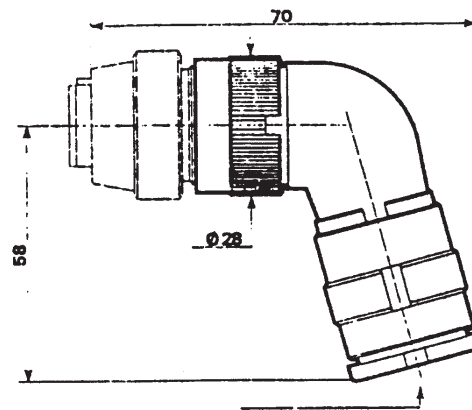
Backshells

Straight backshell with collet and sealing gland



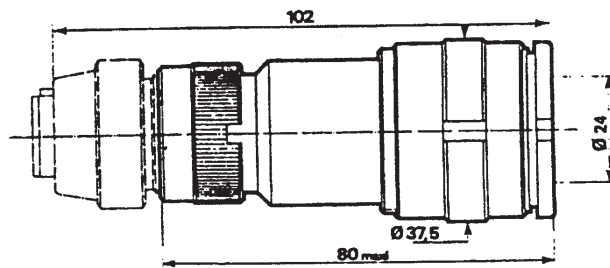
ø of admissible cable : see identification code

Elbow backshell with collet and sealing gland



ø of admissible cable : see identification code

SN type part number SN 860.21.102 *
straight backshell with collet and sealing gland
for ø 24 mm cable



* Société Nouvelle de Connexion supply.

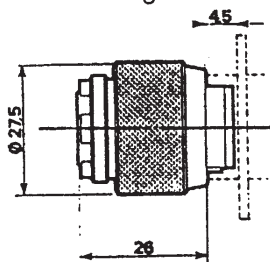
Models 831 - 832

receptacle

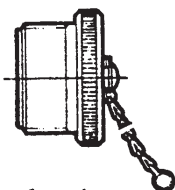
supplied with panel gasket

Panel cut-out for receptacle fixing

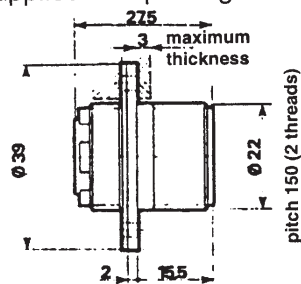
Plug



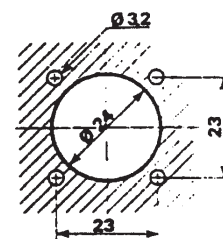
Caps



for plug
part number : 8300.22



for receptacle
part number : 8300.12



Flange seals for receptacle
connector 831 ref : 8300-124
(neoprene elastomer)

connector 832 ref : 8300-262
(silicone elastomer)

Issue

1

Date

11/93

EDF

Direction de l'Équipement
Service Études et Projets
Thermiques et Nucléaires

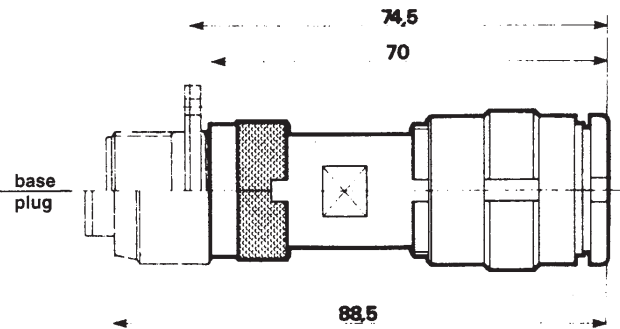
EQUIPMENT
IDENTIFICATION
SHEET

SEALED SCREW-TYPE CONNECTOR
SOURIAU MODELS 831, 832 AND 8 N 35

PAGE : 5/6

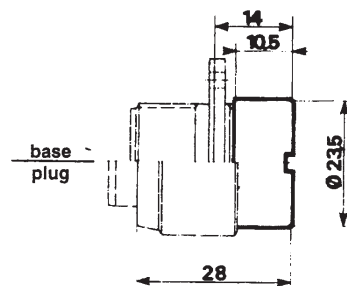
Backshells

Straight with collet

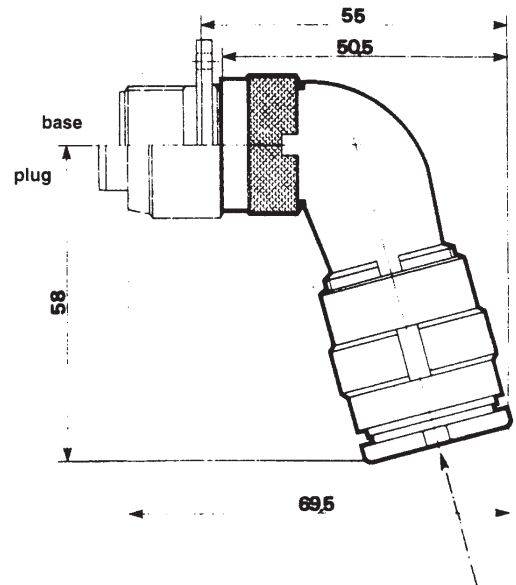


ø of admissible cable : see identification code

Backnut



Elbow with collet



ø of admissible cable : see identification code

TOOLS (models 8 N 35, 831 and 832)

Contact ø	Crimping tool	Locators	Insertion tools		Extraction tools	
			male contacts	female contacts	male contacts	female contacts
ø 1,5 small barrels	MS 3191-1 Souriau 8465	8400-1607	8400-482 A	8400-482 A	8400-448	8400-446
ø 1,5 large barrels	MS 3191-1 Souriau 8465	MS 3191-16 A	8400-482 A	8400-482 A	8400-448	8400-446
ø 2,5	MS 3191-1 Souriau 8465 ou 8476-200	8400-1610 8476-201	8400-482 A	8400-482 A	8400-448	8400-322
ø 1,5 small and large barrels	M22520/1.01 Souriau 8365	M22520/1.02 Souriau 8635-02				

Backshell tightening spanner

8201-400 or 8400-447

Issue
1

Date
11/93

EDF
Electricité
de France

Direction de l'Équipement
Service Etudes et Projets
Thermiques et Nucléaires

EQUIPMENT
IDENTIFICATION
SHEET

SEALED SCREW-TYPE CONNECTOR
SOURIAU MODELS 831, 832 AND 8 N 35

PAGE : 6/6