8STA/8TA SERIES

SOURIAU







Compact Circular Connectors

Derived from MIL-DTL-38999 & JN1003

Esterline
Connection Technologies



Presentation

SOURIAU is a recognized worldwide market leader in the design and manufacture of connectors and interconnect systems for harsh environments.

The relationship between the company and the motorsport industry goes back many years.

SOURIAU's main production facility is located in Le Mans and since 1990 we supply connectors to local racing teams for the world famous 24 Hours Endurance Racing.

The **Motorsport** activity is a market where more and more electronics are installed and where space and weight constraints become more critical. **8STA** and **8TA Series** are designed to be smaller and lighter with high reliability features to protect the driver and are used across the world of motorsport on 2 and 4 wheels.

8STA & **8TA** circular connectors are derived from international military specifications **MIL-DTL-38999** and **JN1003**, and are designed to withstand high levels of shock and vibration in harsh environments.

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8STA/8TA SERIES

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8STA/8TA Series

Overview

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Typical applications


© Nascarking

Engine


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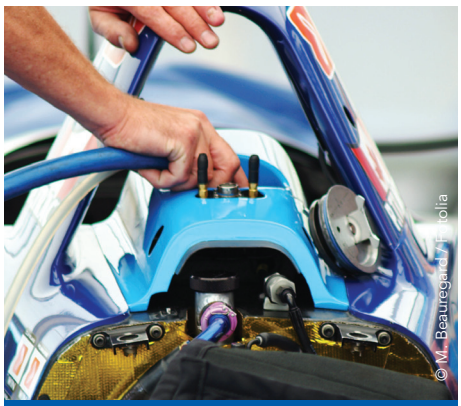
Data Acquisition System


© C. Debert / Fotolia

Steering Wheel


© EvrenKalinbacak / Fotolia

Telemetry & Network


© M. Beauregard / Fotolia

Fuel Tank


© Jaywarren79 / Shutterstock

Energy Recovery System


© Christophe Fouquin / Fotolia

Features & Benefits

ROBUST

Compact and Reliable

Compact circular range derived from MIL-DTL-38999 and JN1003.
Smallest removable contacts connector on the market: shell size 02.
Withstand high levels of shock and vibration in harsh environments.

ALL IN ONE

Integrated Backshell

Cost effective. Space and weight saving.
Right angle and straight version available.
Easy to implement with heat shrink boot.

SEALED

Environmental Resistant

Grommet and interfacial seal as MilAero products, IP67.
500 mating/unmating endurance.
Withstands most of motorsport fluids.

EASY TO USE

User Friendly

Quick bayonet locking: 1/3 turn to mate.
Secure mating with audible clic and visual color indication.
Up to 7 color coded keyway orientations.

LARGE OFFER

A Complete Range

Signal, power, coax and concentric twinax contacts.
12 shell sizes: from size 02 up to size 24.
More than 100 contact layouts. Many derived products.

A wide product range

3 Materials & Platings

Aluminum
- **Black Zinc** Conductive
- **Nickel** RoHS

Stainless Steel
- **Passivated** RoHS

Composite
- Without plating

Versatile & Robust

Reliable
MIL-DTL-38999 and **JN1003** derived

Compacity
Miniature sizes 02, 04, 06
Low profile version

High sealing solutions
Hermetic version
Fuel immersible version

a full Contact offer

Adaptability
Crimp / Solder / PC Tail

Versatility
Signal / Power / Coax
Concentric twinax

High density
#26 contact layouts

8STA/8TA Series comparison

8STA Series
Dedicated Characteristics

- Derived from **MIL-DTL-38999, JN1003** and **VG96912 Standard**
- **Miniature sizes** 02, 04, 06 Up to **shell size 24**
- **Scoop proof**
- **Nickel** plating

8STA 8TA Series
Common Characteristics

- Optimized **oval flange**
- **Conductive** black zinc or nickel plating
- **Rugged aluminum body** to ensure long service life in the harshest environments
- **Color-coded** keyway

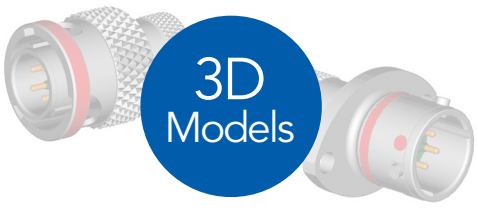
8TA Series
Dedicated Characteristics

- Derived from **MIL-DTL-38999 Series 2**
- Compact **low profile**

SOURIAU services



High levels of finished connector stock from our **worldwide distributors**



3D models **available online** on www.souriau.com
Registration is quick and the **downloads are free**!

Custom solutions

Let your need take the lead! Due to the constant innovative needs from the Motorsport market, **SOURIAU** is dedicated to produce derived products on demand.

One of the primary objectives with this product family, is to push the boundaries in terms of miniaturization and weight reduction, as demonstrated by the introduction of the world smallest motorsport connector with removable contacts: 8STA shell size 01.

Continuing on with this theme, several new products can be found in this catalogue, including receptacles with integrated clinch nuts eliminating the need for nut plates, connector designed for steering boss system for column using, single hole fixing solution for space and weight saving and 8STA High Density with pin contacts normally associated with much larger connectors.

Let's have a look on the lastest **SOURIAU** innovations:

ULTRA MINIATURE SIZE 01 see p.16



Smallest removable contacts connector

HIGH DENSITY see p.34



#26 removable contacts

CLINCH NUTS see p.38



Space and weight saving

SINGLE HOLE FIXING see p.40



Space and weight saving

STEERING BOSS SYSTEM see p.42



Designed for column using

BLIND MATING PLUG see p.44



Hard-to-reach areas solution

HERMETIC SIZE 02 see p.46



Weld mounting compact design

HERMETIC FEED-THROUGH see p.50



Solder contacts on both sides of bulkhead

THERMAL PROTECTION

A global solution with our sister company DARCHEM ENGINEERING

Esterline Engineered Materials

Click here for more information

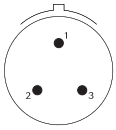
Contact layouts

S Signal · P Power · C Concentric Twinax (=Triax) or Coax · HD High Density · H Hermetic version developed · F Fuel Immersible version developed

Contact sizes: #26 · #22D · #20 · #16 · #12 · #8 Coax or Concentric Twinax - consult us · #8 Power · #4 Power

01

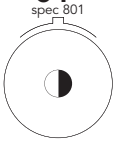
03



3#26
Service R
S HD

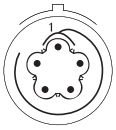
02

01* spec 801



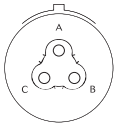
1#16
Service II
C

05



5#26
Service R
S HD H

35

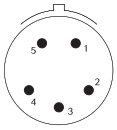


3#22D
Service S
S H

* Consult us

04

05



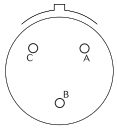
5#26
Service R
S F

06



6#26
Service R
S HD F

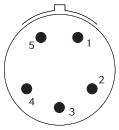
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3#22D
Service S
S F

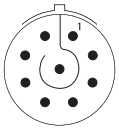
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05



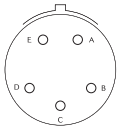
5#26
Service M
S

09



9#26
Service R
S HD

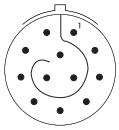
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5#22D
Service M
S

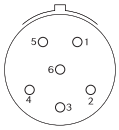
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12



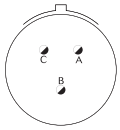
12#26
Service R
S HD

35*



6#22D
Service M
S F

98*

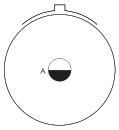


3#20
Service I
S F

* Available for 8TA Series

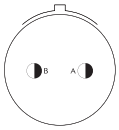
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01



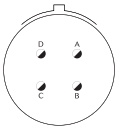
1#12
Service II
S

02



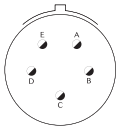
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Service I
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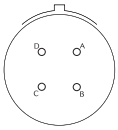
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Service I
S

05



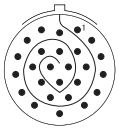
5#20
Service I
S F

22



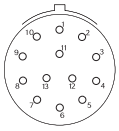
4#22D
Service M
S

26



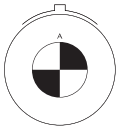
26#26
Service R
S HD

35



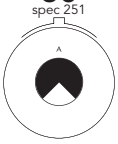
13#22D
Service M
S H F

80



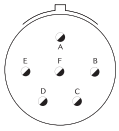
1#8
Service I
C

80 spec 251



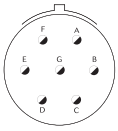
1#8
Service I
P

98



6#20
Service I
S H F

99



7#20
Service I
S

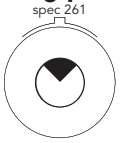
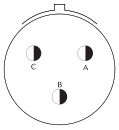
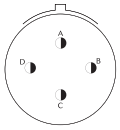
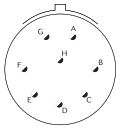
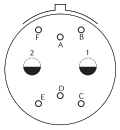
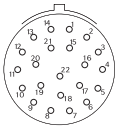
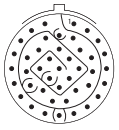
Sizes 01 and 02: Marking on shell.
Rear view of receptacle for male and female insulator. Opposite marking between plug and receptacle.
Sizes 04 to 24: Marking on insulator.
Front view of male insulator for plug and receptacle. Opposite marking between male and female insulator.

Contact layouts

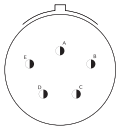
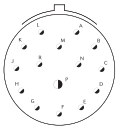
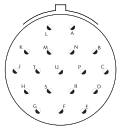
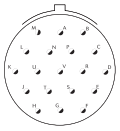
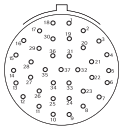
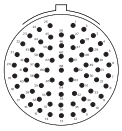
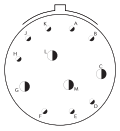
S Signal · P Power · C Concentric Twinax (=Triax) or Coax · HD High Density · H Hermetic version developed · F Fuel Immersible version developed

Contact sizes: #26 · #22D · #20 · #16 · #12 · #8 Coax or Concentric Twinax - consult us · #8 Power · #4 Power

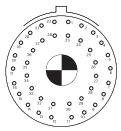
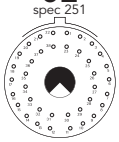
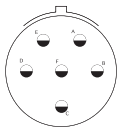
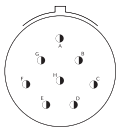
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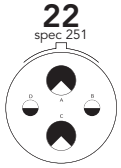
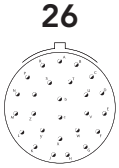
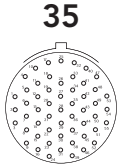
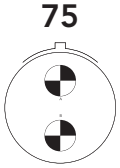
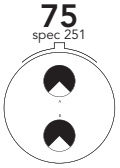
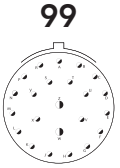
01 (spec 261)	03	04	08	26	35	43	98
							
1#4 Service M	3#16 Service I	4#16 Service I	8#20 Service I	6#22D, 2#12 Service M	22#22D Service M	43#26 Service R	10#20 Service I
P	S	S H	S	S	S H	S HD	S H F

14

05	15	18	19	35	68	97
						
5#16 Service II	14#20, 1#16 Service I	18#20 Service I	19#20 Service I	37#22D Service M	68#26 Service R	8#20, 4#16 Service I
S	S	S	S	S H F	S HD	S H

16

02	02 (spec 251)	06	08	20	22
					
38#22D, 1#8 Service M	38#22D, 1#8 Service N	6#12 Service I	8#16 Service II	16#22D, 4#12 Service II	2#12, 2#8 Service M
S C	S P	S	S	S	S C

22 (spec 251)	26	35	75	75 (spec 251)	99
					
2#12, 2#8 Service M	26#20 Service I	55#22D Service M	2#8 Service M	2#8 Service M	2#16, 21#20 Service I
S P	S	S	C	P	S

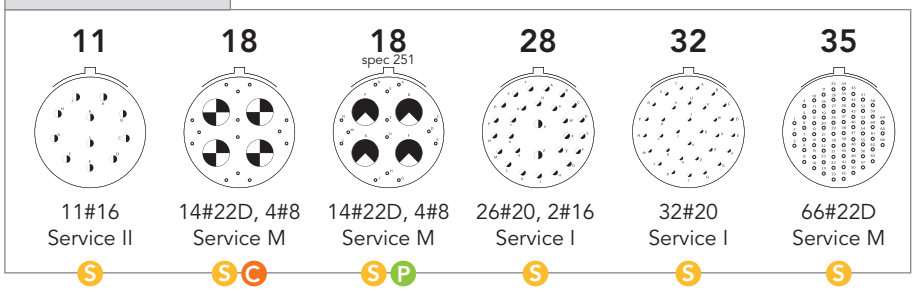
Sizes 04 to 24: Marking on insulator.
Front view of male insulator for plug and receptacle. Opposite marking between male and female insulator.

Contact layouts

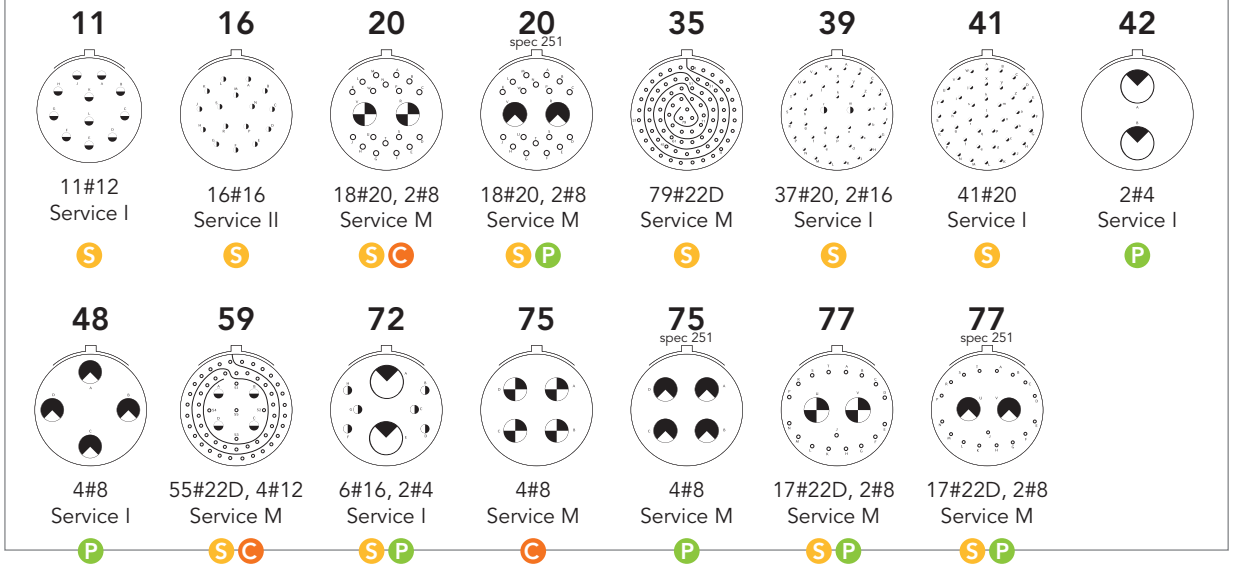
S Signal P Power C Concentric Twinax (=Triax) or Coax

Contact sizes #26 #22D #20 #16 #12 #8 Coax or Concentric Twinax - consult us #8 Power #4 Power

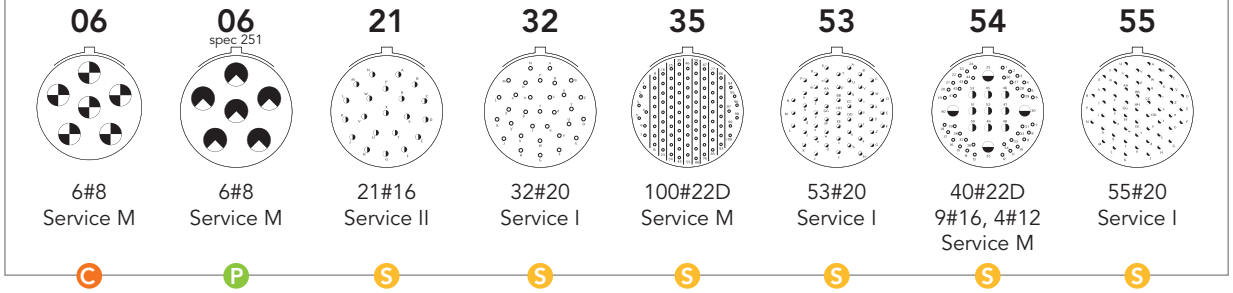
18



20



22



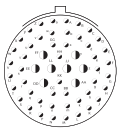
Sizes 04 to 24: Marking on insulator.
Front view of male insulator for plug and receptacle. Opposite marking between male and female insulator.

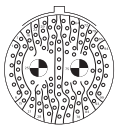
Contact layouts

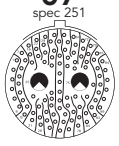
S Signal P Power C Concentric Twinax (=Triax) or Coax

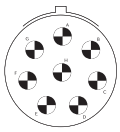
Contact sizes #26 #22D #20 #16 #12 #8 Coax or Concentric Twinax - consult us #8 Power #4 Power

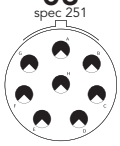
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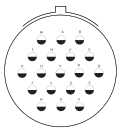
04

48#20, 8#16
Service I
S

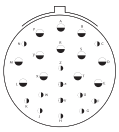
07

97#22D, 2#8
Service M
S C

07 spec 251

97#22D, 2#8
Service M
S P

08

8#8
Service M
C

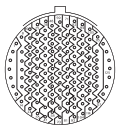
08 spec 251

8#8
Service M
P

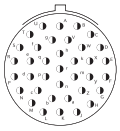
19

19#12
Service I
S

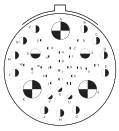
24

12#16, 12#12
Service II
S

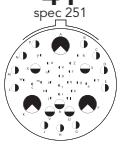
29

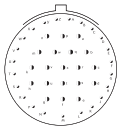
29#16
Service I
S

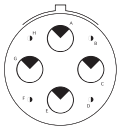
35

128#22D
Service M
S

37

37#16
Service I
S

41

22#22D,
3#20, 11#16,
2#12, 3#8
Service N
S C

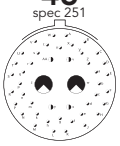
41 spec 251

22#22D,
3#20, 11#16,
2#12, 3#8
Service N
S P

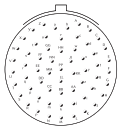
43

23#20,
20#16
Service I
S

44

4#16,
4#4
Service I
S P

46

40#20,
4#16, 2#8
Service I
S C

46 spec 251

40#20,
4#16, 2#8
Service I
S P

61

61#20
Service I
S

Test voltage rating (Vrms)

Service	Sea level	at 21 000 m
R	400	N/A
S	1,000	N/A
M	1,300	800
N	1,000	600
I	1,800	1,000
II	2,300	1,000

Sizes 04 to 24: Marking on insulator.
Front view of male insulator for plug and receptacle. Opposite marking between male and female insulator.

8STA/8TA SERIES

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8STA/8TA Series

Standard Ranges

- 8STA Series - Ultra miniature shell size 01 16
- 8STA Series - Miniature shell sizes 02, 04 & 06 18
- 8STA Series - Shell sizes 08 to 24 21
- 8TA Series - Compact low profile 25
- 8STA Series - PC Tail contacts 28
- 8STA Series - Power contacts 31
- 8STA Series - High density #26 contacts. 34



Description

- Ultra compact design and very lightweight connector
- Rugged aluminium body to ensure long service life in the harshest environment
- Positive locking mechanism with locked colour indicators
- Scoop proof
- 7 color coded keyway orientations
- Boot termination feature
- PCB option available
- Conductive black zinc or nickel plating

Technical features

Mechanical

- **Shell:** Aluminium alloy
- **Shell plating:** Conductive Black Zinc (F)
- **Insulator:** Thermoplastic
- **Grommet & seal:** Liquid silicone rubber
- **Contact:** Copper alloy
- **Contact plating:** Gold
- **Endurance:** 500 mating cycles
- **Shock:** Half sine mechanical shock, 50g/11ms
- **Vibration:** 147m/s², 10 to 2000Hz
- **Contact retention:** 20N Max.

Electrical

- **Test voltage rating (Vrms)**

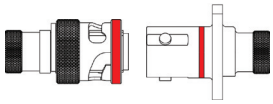
Service	Sea level
R	400

- **Contact resistance:** <16 mΩ
- **Insultation resitance:** ≥ 5000MΩ @ 400Vdc
- **Contact rating:** 3 Amp

Environmental

- **Operating temperature:** -55°C to +175°C
- **Sealing mated connectors:** IP67 (1 metre for 30 min minimum)
- **Salt spray:** 48 hours

Scale 1:1

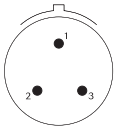


Contact layout - Marking on shell

Rear view of receptacle for male and female insulator.
Opposite marking between plug and receptacle.

01

03



3#26
Service R

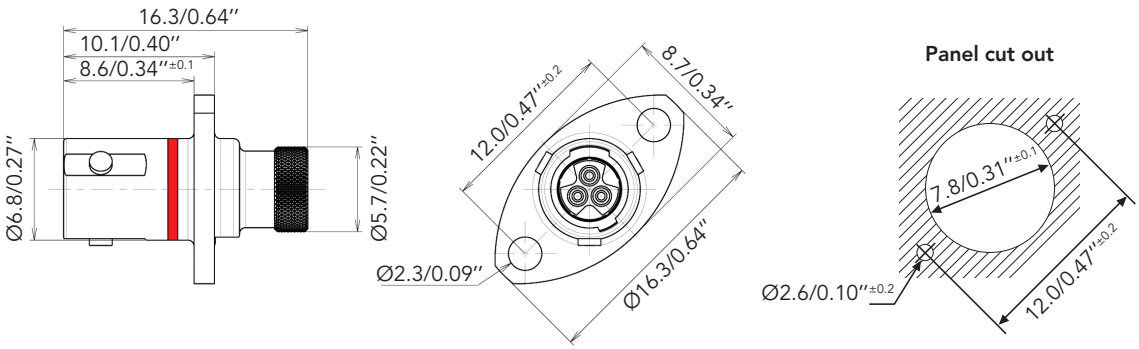
Ordering information

Basic series	8STA	0	01	03	P	N
Shell type **0:** Oval flange receptacle **6:** Plug						
Shell size **01**						
Contact layout **03:** 3 #26						
Type of contact **P:** Pin **S:** Socket						
Orientation **N:** Red / **A:** Yellow / **B:** Blue / **C:** Orange / **D:** Green / **E:** Grey / **U:** Universal						

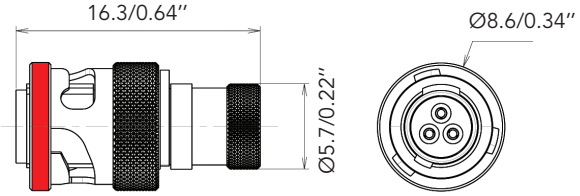
For any other configuration (clinch nuts, PC tail, ...), please consult us.

Dimensions

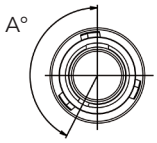
Oval flange receptacle



Plug



Orientations



View from front face of plug

Key positions	Angle A°
N	153°
A	51°
B	102°
C	204°
D	255°
E	306°
U	-

Note: All dimensions are in millimeters and inches (mm/inch).



Description

- Ultra compact design & very lightweight connector
- Rugged aluminium body to ensure long service life in the harshest environment
- Positive locking mechanism with locked colour indicators
- Scoop proof
- 7 color-coded keyway orientations
- Boot termination feature
- PCB option available
- Conductive black zinc or nickel plating

Technical features

Mechanical

- **Shell:**
  Aluminium alloy
  Glass fibre loaded plastic - composite (shell size 06 only)
- **Shell plating:**
  Aluminum: Conductive Black Zinc
  Nickel (F)
  Composite without plating (X)
- **Insulator:** Thermoplastic
- **Grommet & seal:** Liquid silicone rubber
- **Contact:** Copper alloy
- **Contact plating:** Gold
- **Endurance:** 500 mating cycles
- **Shock:** 300g for 3ms and EIA-364-27
- **Vibration:** 147m/s², 10 to 2000Hz
- **Contact retention:**
  35 N (size 26)
  45 N (size 22D)

Electrical

- **Test voltage:**
  Size 26: 400 Vrms
  Size 22D: 1000 Vrms (shell size 02 & 04)
  1300 Vrms (shell size 06)
- **Contact resistance:**
  Size 26: <16 mΩ
  Size 22D: <14.6 mΩ
- **Insultation resitance:**
  ≥ 5000MΩ @ 400Vdc / Size 26
  ≥ 5000MΩ @ 500Vdc / Size 22D
- **Contact rating:**
  Size 26: 3 Amp
  Size 22D: 5 Amp

Environmental

- **Operating temperature:**
  -55°C to +175°C
- **Sealing mated connectors:**
  IP67 (1 metre for 30 min minimum)
- **Salt spray:**
  Aluminum: 48 hours
  Composite: 500 hours

Ordering information

Basic series	8STA	0		04	05	P	N

Shell type
0: Oval flange receptacle - PCB version available, please see p.28
1: In-line receptacle
6: Plug
7: Jam nut receptacle (consult us)

Material & Plating
empty: Aluminum conductive Black zinc
F: Aluminum Nickel
X: Composite without plating (shell size 06 only)

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FREE 3D MODELS AVAILABLE **ONLINE**

Shell size
02, 04, 06

Contact layout
See page 10

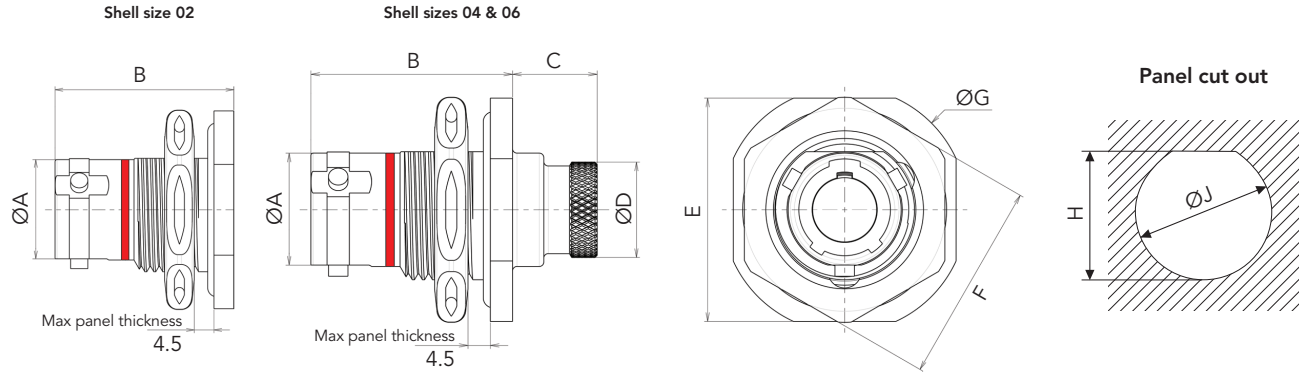
Type of contact
P: Pin
S: Socket

Orientation
N: Red / **A:** Yellow / **B:** Blue / **C:** Orange / **D:** Green / **E:** Grey (shell size 02 only) / **U:** Universal (aluminum alloy only)

Specification
None: Standard version
499: Integrated nut on the flange - M2 insert (only for shell type 0 and 2) - for more details, please see page 38
528: Integrated nut on the flange - M2.5 insert (only for shell type 0 and 2) - for more details, please see page 38
562: PCB version - for more details, please see page 28
022: Fuel immersible version (shell sizes 04 and 06 only) - for more details, please see page 52

Dimensions

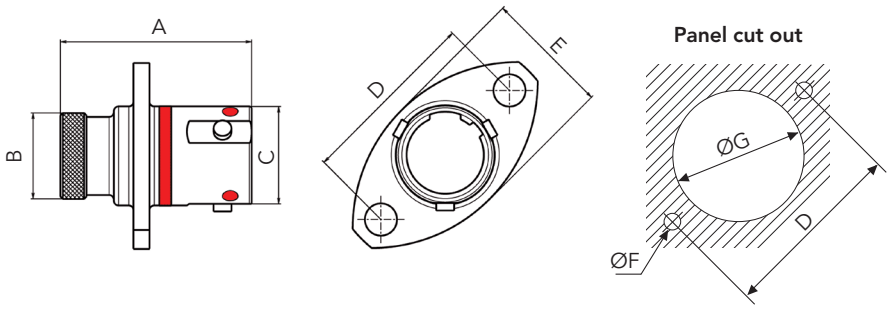
Jam nut receptacle



Shell size	ØA Max	B Max	C±0.15	ØD Max	E Max	F Max	ØG Max	H±0.2	ØJ±0.1
02	8.6	16.3 (02-05) 17.6 (02-35)	N/A	N/A	18.2	17	20.5	9.05	9.7
04	10.25	18.3	7.6	8.7	20.2	18.5	22.2	12	12.8
06	11.7	14.25	10.3	10.5	22.25	19.5	24.4	13.7	14.4

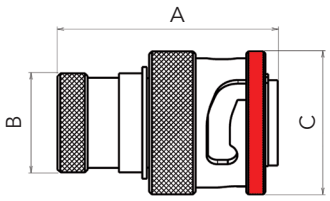
Note: All dimensions are in millimeters (mm)

Oval flange receptacle



Shell size	A±0.2	ØB±0.2	ØC±0.2	D±0.2	E Max	ØF±0.2	ØG±0.1
02	17.5	7.2	8.3	15.3	10.7	3.1	9.3
04	18.1	8.5	10.0	16.2	13.2	3.1	12.0
06	23.1	10.2	11.55	18.0	14.8	3.1	13.0

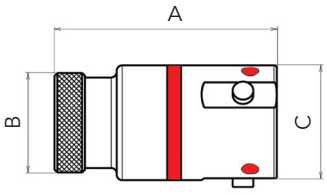
Plug



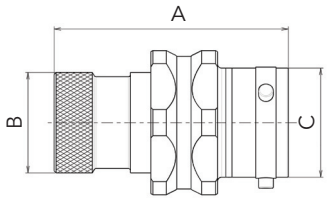
Shell size	A	ØB	ØC
02	17.5	7.2	10.4
04	18.3±0.2	8.5±0.1	13.4±0.1
06	22.1±0.1	10.25±0.1	15.05±0.2

In-line receptacle

Shell sizes 02 and 04



Shell size 06

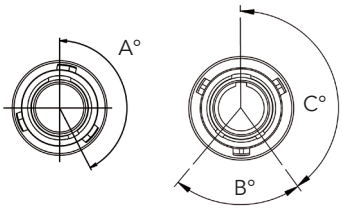


Shell size	A	ØB	ØC
02	17.5	7.2	8.3
04	18.1±0.2	8.5±0.1	10.0±0.2
06	23.2	10.05	10.8

Orientations

Size 2

Sizes 4 & 6



View from front face of plug.

Key positions	N	A	B	C	D	E	U
Angle A°	153°	51°	102°	204°	255°	306°	None
Angle B°	75°	120°	120°	115°	115°	-	None
Angle C°	145°	130°	110°	155°	90°	-	None
Color band	Red	Yellow	Blue	Orange	Green	Grey	None

Note: All dimensions are in millimeters (mm)



Description

- 5 shell styles:
- 100% scoop-proof
- EMI-RFI shielding and shell to shell continuity is provided by conductive plating and integral grounding ring fitting to the plug
- Environment sealing from interfacial seal and rear grommet (sealing IP67)
- Positive locking mechanism with locked colour indicator
- 6 color-coded keyway orientations
- Conductive black zinc or nickel plating

Technical features

Mechanical

- **Shell:** Aluminium alloy
- **Shell plating:**
  Conductive black zinc
  Nickel (F)
- **Insulator:** Thermoplastic
- **Grommet & seal:** Liquid silicone rubber
- **Contact:** Copper alloy
- **Contact plating:** Gold
- **Endurance:** 500 mating cycles
- **Shock:** 300g for 3ms and EIA-364-27
- **Vibration:** 147m/s², 10 to 2000Hz
- **Contact retention:**

Size 22D:	45 N
Size 20:	60N
Size 16:	100 N
Size 12:	100 N
Size 8:	110 N
Size 4:	200 N

Electrical

- **Test voltage:**

Service	M	N	I	II
Sea level	1,300	1,000	1,800	2,300

- **Contact resistance:**

Size 22D:	14.6 mΩ
Size 20:	7.3 mΩ
Size 16:	3.8 mΩ
Size 12:	3.5 mΩ
Size 8:	3 mΩ
Size 4:	2 mΩ

- **Insultation resitance:**
  ≥ 5000 MΩ (at 500 Vdc)
- **Contact rating:**

Size 22D:	5 A
Size 20:	7.5 A
Size 16:	13 A
Size 12:	23 A
Size 8:	45 A
Size 4:	80 A

- **Shell continuity:** ≤10 mΩ

Environmental

- **Operating temperature:**
  -55°C to +175°C
- **Sealing mated connectors:**
  IP67 (1 metre for 30 min minimum)
- **Salt spray:**
  Aluminum: 48 hours

Ordering information

Basic series	8STA	0		10	35	P	N

Shell type
- **0:** Oval flange receptacle front or rear mounting - PCB version available, please see p.28
- **1:** In-line receptacle
- **6:** Plug
- **7:** Jam nut receptacle

Material & Plating
- **None:** Aluminum Black zinc cobalt
- **F:** Aluminum Nickel

Shell size
- **08, 10, 12, 14, 16, 18, 20, 22, 24**

Contact layout: See pages 10 to 13

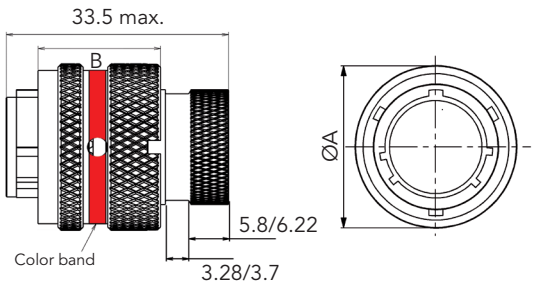
Type of contact
- **P:** Pin
- **S:** Socket

Orientation
- **N:** Red / **A:** Yellow / **B:** Blue / **C:** Orange / **D:** Green / **U:** Universal

Specification
- **None:** Standard version
- **499:** Integrated nut on the flange - M2 insert (only for shell style 0 & 2) - for more details, please see page 38
- **528:** Integrated nut on the flange - M2.5 insert (only for shell style 0 & 2) - for more details, please see page 38
- **523:** Lighweight In-line receptacle (shell type 1 only)
- **022:** Fuel immersible version - for more details, please see page 52

Dimensions

Plug

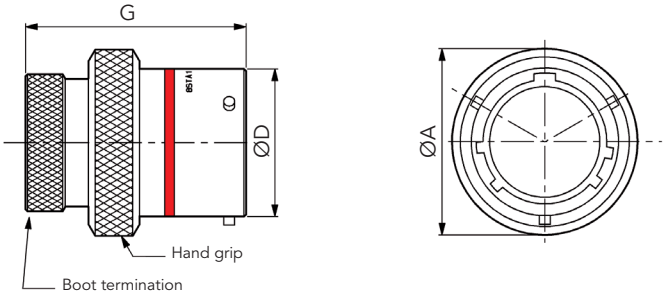


Shell size	ØA max.	B max.
08	18.70	18.55
10	21.50	
12	25.10	
14	29.00	
16	32.20	
18	35.40	
20	38.20	19.30
22	41.30	
24	44.50	19.05

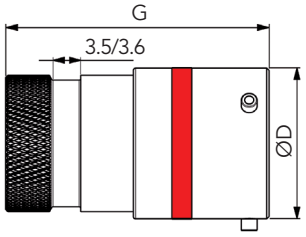
Note: All dimensions are in millimeters (mm)

In-line receptacle

Standard version

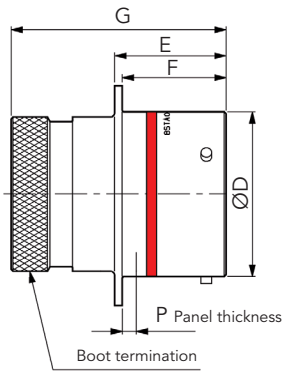


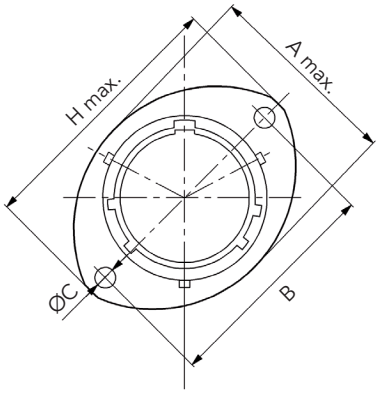
Lightweight version (specification 523)



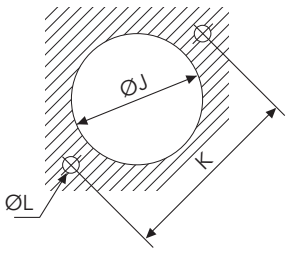
Shell size	8	10	12	14	16	18	20	22	24
ØA max.	17.6	20.7	25.1	28.3	31.4	34.7	38.1	41.2	44.7
ØD $^{+0.20}_{-0.13}$	12	15	19.05	22.22	25.4	28.57	31.75	34.92	38.1
G max.	33.5								

Oval flange receptacle





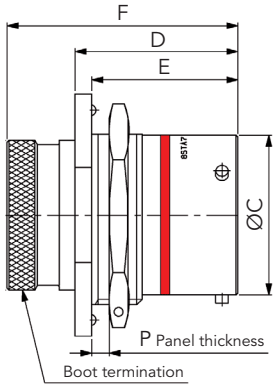
Panel cut out

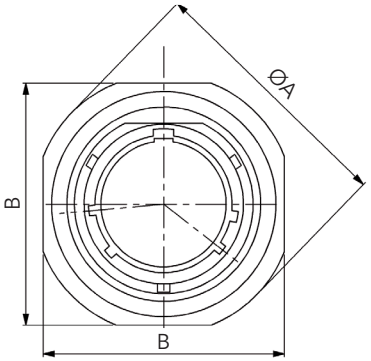


Shell size	A max.	B ±0.20	ØC $^{0}_{+0.1}$	ØD $^{+0.2}_{-0.13}$	E $^{0}_{+0.15}$	F $^{0}_{-0.13}$	G max.	H max.	P max.	ØJ ±0.10	K ±0.20	ØL ±0.20
08	16.50	21.40	3.20	12.00	17.21	16.05	33.50	27.20	3.00	14.50	21.40	3.60
10	19.50	25.90		15.00				32.00		17.40	25.90	
12	24.00	29.10		19.05				35.20		21.90	29.10	
14	27.00	32.50		22.22				38.40		25.00	32.50	
16	30.30	34.80		25.40				41.00		28.20	34.80	
18	33.70	38.20		28.57				44.70		31.40	38.20	
20	37.00	41.60		31.75		15.29		47.90		34.60	41.60	
22	40.40	45.00		34.90				51.00		37.60	45.00	
24	43.40	49.50	3.77	38.10	18.20			55.80		41.00	49.50	4.10

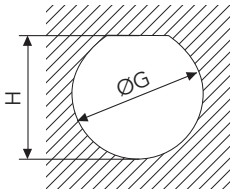
Note: All dimensions are in millimeters (mm)

Jam nut receptacle



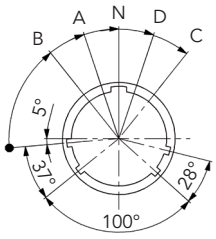


Panel cut out

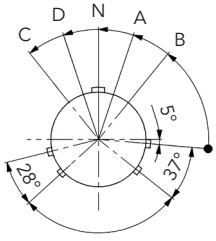


Shell size	ØA ±0.3	B ±0.24	ØC 0 -0.12	D ±0.10	E ±0.24	F ±0.3	P max.	ØG ±0.10	H ±0.20	Tightening torque (mN)
08	26.90	24.10	11.97	25.91	23.24	36.71	3.00	14.50	13.60	4
10	30.15	27.30	14.94					17.70	16.80	6
12	34.89	32.10	19.01					22.70	20.90	9
14	38.06	34.92	22.18					25.70	24.10	10
16	41.25	38.40	25.36					28.80	27.20	13
18	44.41	41.60	28.53	26.71		37.51		32.00	30.40	20
20	49.19	46.30	31.71					35.10	33.60	23
22	52.33	49.50	34.88					38.00	36.80	25
24	55.50	52.45	38.06					42.00	39.90	26

Orientations



Viewed from face of receptacle



Viewed from face of plug

Shell size	N Red	A Yellow	B Blue	C Orange	D Green
08	95°	77°	-	-	113°
10	95°	81°	67°	123°	109°
12	95°	75°	63°	127°	116°
14	95°	74°	61°	129°	116°
16	95°	77°	65°	125°	113°
18	95°	77°	65°	125°	113°
20	95°	77°	65°	125°	113°
22	95°	80°	69°	121°	110°
24	95°	80°	69°	121°	110°

For each shell size, U orientation can be mateable with any other orientations.

Note: All dimensions are in millimeters (mm)



Description

- Rugged aluminium body to ensure long service life in the harshest environment
- Compact low profile derived from MIL-DTL-38999 Series 2
- 6 gold plated #22D contacts
- Environment sealing from interfacial seal and rear grommet
- Positive locking mechanism with locked color indicators 3 keyway orientations
- Not scoop proof
- Conductive black zinc plating

Technical features

Mechanical

- **Shell:** Aluminium alloy
- **Shell plating:**
  Conductive black zinc
  Nickel (consult us)
- **Insulator:** Thermoplastic
- **Grommet & seal:** Liquid silicone rubber
- **Contact:** Copper alloy
- **Contact plating:** Gold
- **Endurance:** 500 mating cycles
- **Shock:** 300g for 3ms and EIA-364-27
- **Vibration:** Random 100 to 1000 Hz - 1 g²/Hz
- **Contact retention:** 45 N

Electrical

- **Test voltage:** 1300 Vrms (sea level)
- **Contact resistance:** <14.6 mΩ
- **Insultation resitance:**
  ≥ 5000 MΩ (at 500 Vdc)
- **Contact rating:** 5A
- **Shell continuity:** <60 mΩ

Environmental

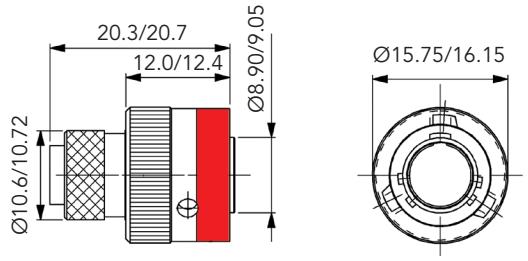
- **Operating temperature:** -55°C to +175°C
- **Sealing mated connectors:**
  IP67 (1 metre for 30 min minimum)
- **Salt spray:** 48 hours

Ordering information

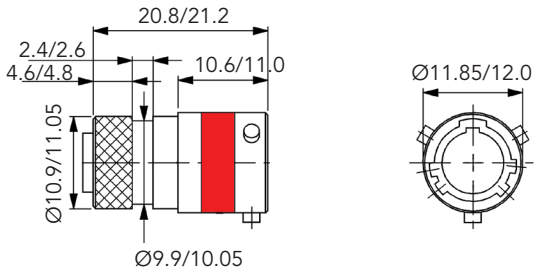
Basic series	8TA	0	08	35	P	N
Shell type **0:** Oval flange receptacle (for front or rear mounting) **1:** In-line receptacle **6:** Plug **7:** Jam nut receptacle						
Shell size **08**						
Contact layout: See page 10						
Type of contact **P:** Pin **S:** Socket						
Orientation **N:** Red / **A:** Yellow / **D:** Green						

Dimensions

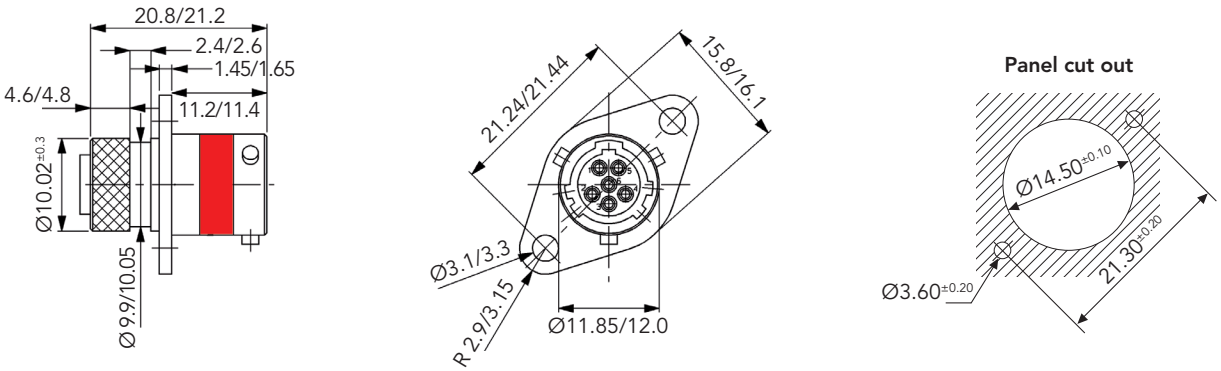
Plug



In-line receptacle

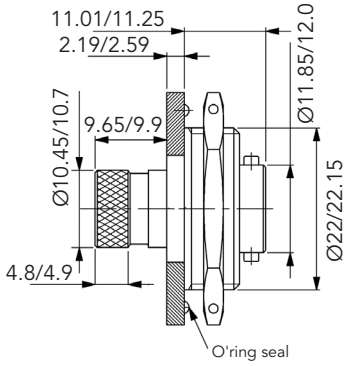


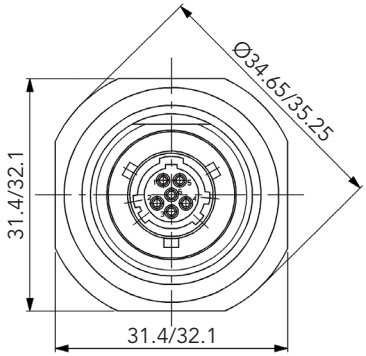
Oval flange receptacle

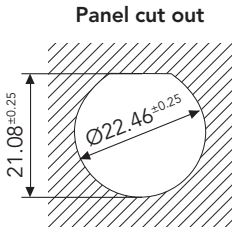


Note: All dimensions are in millimeters (mm)

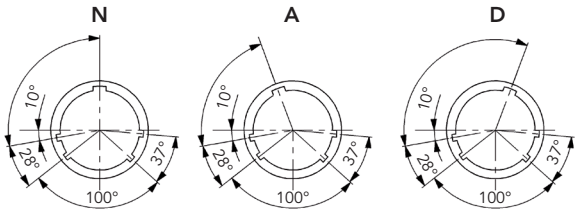
Jam nut receptacle



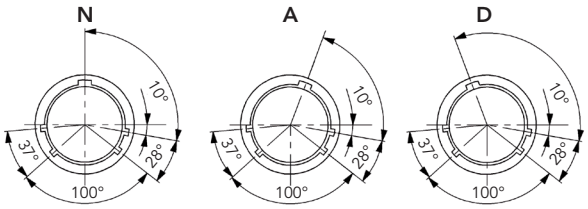




Orientations



Viewed from front face of receptacle



Viewed from front face of plug

Key positions	Alpha 1	Color band
N	100°	Red
A	82°	Yellow
D	118°	Green

Note: All dimensions are in millimeters (mm)



Description

- Rugged aluminium body to ensure long service life in the harshest environment
- 8STA PCB connectors are available in shell sizes 02 to 24 (12 sizes)
- 100% scoop proof
- Available with clinch nut
- 6 colour coded keyway orientations

Technical features

Mechanical

- **Shell:** Aluminium
- **Shell palting:** Conductive black zinc
- **Insulator:** Liquid silicone rubber
- **Seal:** Liquid silicone rubber
- **Contact:** Copper alloy
- **Contact plating:** Gold
- **Endurance:** 500 matings/unmatings
- **Shock:** 300g for 3ms and EIA-364-27
- **Vibration:** 147m/s², 10 to 2000 Hz

Electrical

- **Contact resistance:**
  Size 26: 16 mΩ
  Size 22D: 14.6 mΩ
  Size 20: 7.3 mΩ
  Size 16: 3.8 mΩ
- **Insulation resitance:**
  ≥ 5000MΩ (at 500Vdc)
- **Contact rating:**
  Size 26: 3 Amp
  Size 22D: 5 Amp
  Size 20: 7.5 Amp
  Size 16: 13 Amp
- **Shell continuity:** ≤ 10mΩ

Environmental

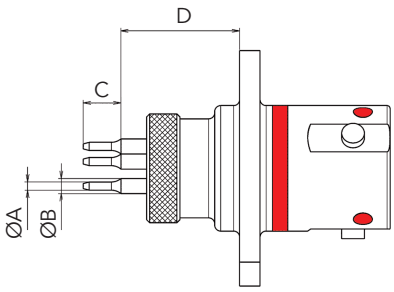
- **Temperature range:** -55°c to +175°c
- **Sealing mated connectors:**
  IP67 (1 metre for 30 min minimum)
- **Salt spray:** 48 hours

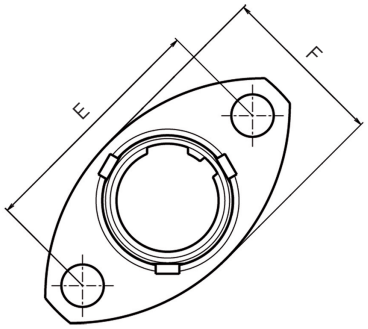
Ordering information

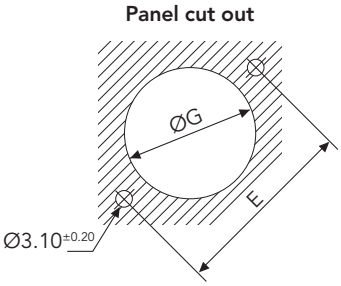
Basic series	8STA	2	12	35	P	N	-
Shell type **2:** Oval flange receptacle with PCB contacts							
Shell size **02, 06, 04, 08, 10, 12, 14, 16, 18, 20, 22, 24**							
Contact layout See pages 10 to 13							
Type of contact **P:** Pin **S:** Socket							
Orientation **N:** Red, **A:** Yellow, **B:** Blue, **C:** Orange, **D:** Green, **E:** Grey (shell size 02 only)							
Specification **None:** Standard version **499:** Integrated clinch nut on flange (M2 for sizes 02, 04 & 06; M3 for sizes 08 to 24) **528:** Integrated clinch nut on flange (M2.5 for sizes 02, 04 & 06) **571:** Specific PC tail (length = 4.6mm) - only available for sizes 08 to 24 (see next page) **625:** Specific PC tail (length = 8.5mm) - only available for sizes 08 to 24 (see next page)							

Dimensions

Shell sizes 02, 04 & 06





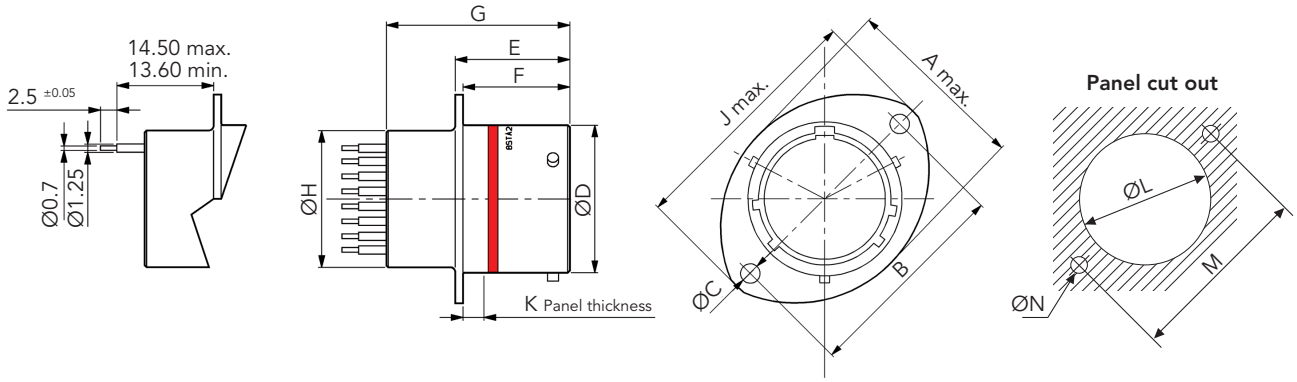


Contact size	ØA Max	ØB Max
#22D	0.70	1.25
#26	0.55	1.16

Shell size	C Max	D max	E	F Max	ØG
02	2.5	9.5	$15.3^{\pm0.2}$	10.7	$9.3^{\pm0.1}$
04	2.5	8.7	$16.2^{\pm0.2}$	13.2	$12.0^{\pm0.1}$
06	4.1	14.7	$18.0^{\pm0.2}$	14.8	$13.0^{\pm0.1}$

Note: All dimensions are in millimeters (mm)

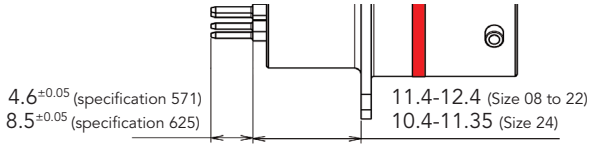
Shell sizes 08 to 24



Shell size	A Max	B±0.20	ØC	ØD+0.2	E	F	G Max	ØH Max	J Max	K Max	ØL±0.10	M±0.20	ØN±0.20
08	16.50	21.40	3.20	12.00	17.21	16.05	27.65	11.10	27.20	3.00	14.50	21.40	3.60
10	19.50	25.90		14.97				13.90	32.00		17.40	25.90	
12	24.00	29.10		19.05				17.35	35.20		21.90	29.10	
14	26.90	32.50		22.22				20.50	38.40		25.00	32.50	
16	30.30	34.80		25.40				23.70	41.00		28.20	34.80	
18	33.70	38.20		28.57				26.91	44.70		31.40	38.20	
20	37.00	41.60		31.77		15.29		30.11	47.80		34.60	41.60	
22	40.40	45.00		34.90				33.20	51.00		37.60	45.00	
24	43.40	49.50	3.77	38.10	18.20			36.40	55.80		41.00	49.50	4.10

Specific PC Tail version

Available with layouts using contacts #22D and/or #20
Also available with clinch nut: please consult us
Specification 571: PC tail length = 4.6 mm
Specification 625: PC tail length = 8.5 mm



Note: All dimensions are in millimeters (mm)



Description

- A #4 contact for a wide range of wire sizes: Size 8, 10, 16, 25 & 35 mm²
- Easy visual wire identification: colored band on contact
- Allow the use of small wire sections: Reducer for wires 8 & 10 mm² in contact barrel 16mm²
- Ideal for high power applications: Up to 200A continuous (12-01 specif. 261)
- Space & cost saving with mixed connectors: Only one connector instead of 2 to transmit signal & power

Technical features

Mechanical

- **Shell:** Aluminium alloy
- **Shell plating:** Conductive black zinc
- **Insulator:** Thermoplastic
- **Grommet & seal:** Liquid silicone rubber
- **Contact:** Copper alloy
- **Contact plating:** Gold over nickel
- **Endurance:** 500 mating cycles
- **Shock:** 300g for 3ms and EIA-364-27
- **Vibration:**147m/s², 10 to 2000Hz
- **Contact retention:**
  Size 22D: 45 N — Size 20: 60 N
  Size 16: 100 N — Size 12: 100 N
  Size 8: 110 N — Size 4: 200 N

Electrical

- **Test voltage:**

Service	M	N	I	II
Sea level	1300	1000	1800	2300

- **Contact resistance:**
  Size 22D: 14.6 mΩ
  Size 20: 7.3 mΩ
  Size 16: 3.8 mΩ
  Size 12: 3.5 mΩ
  Size 8: 3 mΩ
  Size 4: 2 mΩ
- **Insultation resitance:**
  ≥ 5000 MΩ (at 500 Vdc)
- **Contact rating:**
  Size 22D: 5 A
  Size 20: 7.5 A
  Size 16: 13 A
  Size 12: 23 A
  Size 8: 45 A
  Size 4: 80 A
- **Shell continuity:** ≤10 mΩ

Environmental

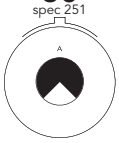
- **Operating temperature:** -55°C to +175°C
- **Sealing mated connectors:**
  IP67 (1 metre for 30 min minimum)
- **Salt spray:** 48 hours

Contact layouts viewed from front face of male insulator

Contact sizes ◯ #22D ◪ #20 ◑ #16 ◒ #12 ◓ #8 Power ◔ #4 Power

10

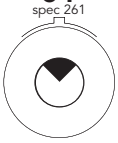
80 spec 251



1#8
Service I

12

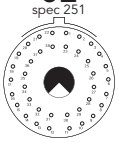
01 spec 261



1#4
Service M

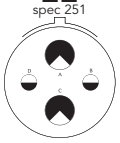
16

02 spec 251



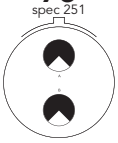
38#22D, 1#8
Service N

22 spec 251



2#12, 2#8
Service M

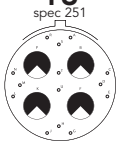
75 spec 251



2#8
Service M

18

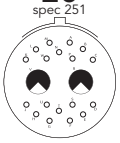
18 spec 251



14#22D, 4#8
Service M

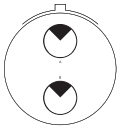
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20 spec 251



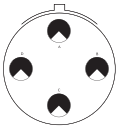
18#20, 2#8
Service M

42



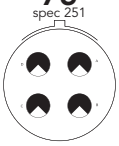
2#4
Service I

48



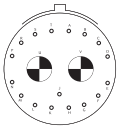
4#8
Service I

75 spec 251



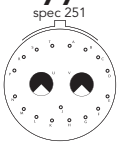
4#8
Service M

77



17#22D, 2#8
Service M

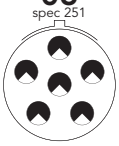
77 spec 251



17#22D, 2#8
Service M

22

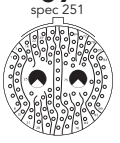
06 spec 251



6#8
Service M

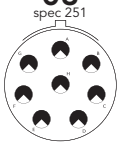
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07 spec 251



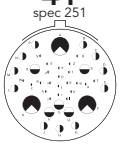
97#22D, 2#8
Service M

08 spec 251



8#8
Service M

41 spec 251



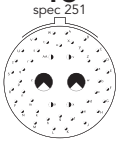
22#22D,
3#20, 11#16,
2#12, 3#8
Service N

44



4#16,
4#4
Service I

46 spec 251



40#20,
4#16, 2#8
Service I

Ordering information

Basic series	8STA	0	12	01	P	N	261

Shell type
- **0:** Oval flange receptacle (for front or rear mounting)
- **1:** In-line receptacle
- **6:** Plug
- **7:** Jam nut receptacle

Shell size: 10, 12, 16, 18, 20, 22, 24

Contact layout: See previous page

Type of contact
- **P:** Pin — **A:** without pin contacts (specifications 261 & 545 only)
- **S:** Socket — **B:** without socket contacts (specifications 261 & 545 only)

Orientation: N: Red / **A:** Yellow / **B:** Blue / **C:** Orange / **D:** Green / **U:** Universal

Specification
- **None:** for contact layouts 20-48 & 24-44
- **251:** for contact layouts 10-80, 16-02, 16-75, 18-18, 20-75, 20-78, 24-07, 24-41 & 24-46
- **261:** only for 12-01 - see note below
- **540:** Layout 12-01 with protected socket
- **545:** Only for layout 24-44 - delivered with contacts #16 & without power contacts #4, power contact #4 to be ordered separately according wire section to be used (see table below)

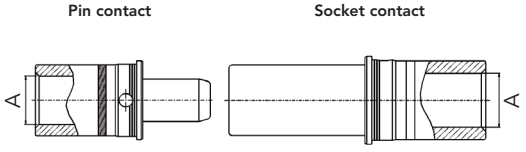
Note : Layout 12-01 specif. 261 only.
1) Standard connector (8STAx1201yz261 where x = shell type; y = type of cts; z = orientation) is provided with power contacts for 16mm² wire.
2) For 10mm² wire, order standard connector (note 1) + reducing sleeve 8400 2351 A separately.
3) For 25mm² wire, order connector without contact, see A & B details in type of contact (ex : 8STAx1201Az261 or Bz261) + contact separately (pin : 8599 7598 900 & socket : 8599 7599 900)
4) For 35mm² wire, order connector without contact, see A & B details in type of contact (ex : 8STAx1201Az261 or Bz261) + contact separately (pin : 8599 0313 & socket : 8599 0316)

Power contacts

Designation	Wire 16 mm²	Wire 25 mm²	Wire 35 mm²
	Removable contact		Non removable contact
Color band	Red	Blue	Green
Pin contact	8599 7520A 900	8599 7598 900	8599 0313
Socket contact	8599 7521A 900	8599 7599 900	8599 0316
Reducer - wire 8 & 10 mm²	8400 2351A	-	-
Crimping tool	M22520/23-01 + Die M22520/23-04 + Positionner M22520/23-11 And for widerner 50 mm²: M22520/23-01+ Die WA23-4 + Positionner WA23-176L	M22520/23-01 + Die M22520/23-04 + Positionner M22520/23-11	M22520/23-01 + Die 8599-0319 + Positionner 8599-0318 (male) + Positionner 8599-0317 (female)
Plastic extraction tool	M81969/14-07 (blue)		-

Specific wire dimensions

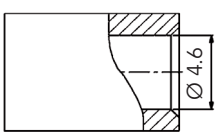
Power contact #4



Cable section	A		
	16 mm²	25 mm²	35 mm²
Contact Ø	6.5 Min.	7.33 Min.	8.65 Min.
Color band	Red	Blue	Green

Reducer for wire 8 and 10 mm²

Compatible with pin and socket contact, wire 16 mm²



Note: All dimensions are in millimeters (mm)



Description

- Derived from MIL-DTL-38999 & JN1003 standard
- Rugged aluminium body to ensure long service life in the harshest environment
- 100% scoop proof
- Available in 6 shell sizes:
  02-05; 04-06; 06-09; 08-12; 10-26; 12-43; 14-68
- Contacts #26 for AWG 24 to 30

Technical features

Mechanical

- **Shell:** Aluminium alloy
- **Shell plating:**
  Conductive black zinc
  Nickel (F)
- **Insulator:** Thermoplastic
- **Grommet & seal:** Liquid silicone rubber
- **Contact:** Copper alloy
- **Contact plating:** Gold
- **Endurance:** 500 mating cycles
- **Shock:** 300g for 3ms and EIA-364-27
- **Vibration:** 147m/s², 10 to 2000Hz

Electrical

- **Contact resistance:** Size 26: 16mΩ
- **Insultation resitance:**
  ≥5000MΩ (at 500Vdc)
- **Contact rating:** Size 26: 3 Amp
- **Shell continuity:** ≤10mΩ

Environmental

- **Operating temperature:**
  -55°C to +175°C
- **Sealing mated connectors:**
  IP67 (1 metre for 30 min minimum)
- **Salt spray:** 48 hours

Ordering information

Basic series	8STA	6	12	43	P	N

Shell type
- **0:** Oval flange receptacle
- **1:** In line receptacle
- **2:** Oval Flange receptacle with PCB contacts
- **6:** Plug
- **7:** Jam nut receptacle

Shell size
- **02, 04, 06, 08, 10, 12, 14**

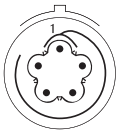
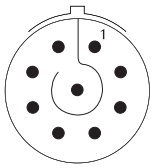
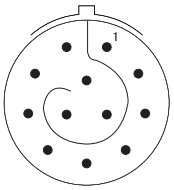
Contact layout: See below

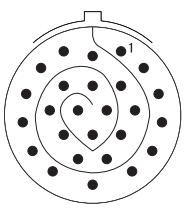
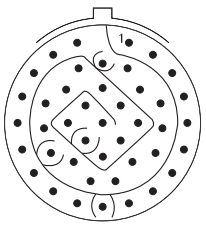
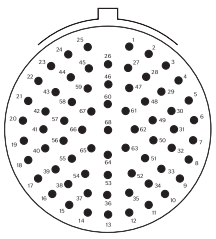
Type of contact
- **P:** Pin
- **S:** Socket

Orientation
- **N:** Red, **A:** Yellow, **B:** Blue, **C:** Orange, **D:** Green, **E:** Grey (shell size 02 only), **U:** Universal

Specification
- **None :** Standard crimp version
- **499:** Integrated clinch nut on the flange:
  - . M2 insert (shell type 0 & 2 only for shell sizes 04 & 06)
  - . M3 insert (shell type 0 & 2 only for shell sizes 08, 10 & 12)
- **523:** Light weight in line receptacle - for shell sizes 08 to 12 (shell type 1 only)
- **528:** Integrated clinch nut on the flange: M2.5 insert (shell type 0 & 2 only for shell sizes 04 & 06)
- **566:** Rackable plug - for shell sizes 10 & 12 (shell type 6 only)

Contact layouts (viewed from front face of male insulator)

02	04	06	08
05	06	09	12
			
5#26	6#26	9#26	12#26

10	12	14
26	43	68
		
26#26	43#26	68#26

8STA/8TA SERIES

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8STA/8TA Series

Derived Series

- 8STA Series - Integrated clinch nuts 38
- 8STA Series - Single hole fixing 40
- 8STA Series - Quick release for steering boss system 42
- 8STA Series - Blind mating plug 44
- 8STA Series - Hermetic shell size 02 46
- 8STA Series - Hermetic fuel tank 48
- 8STA Series - Hermetic feedthrough 50
- 8STA Series - Fuel immersible 52



Description

- A convenient and time saving feature - Weight saving opportunities: Elimination of nut plates
- SOURIAU's offer:
  . 12 shell sizes available, from size 02 to 24
  . Available with standard crimp contacts (shell type 0) and PCB contacts (shell type 2)

Technical features

Mechanical

- **Shell:** Aluminium alloy
- **Shell plating:** Conductive black zinc
- **Insulator:** Thermoplastic
- **Grommet & seal:** Liquid silicone rubber
- **Contact:** Copper alloy
- **Contact plating:** Gold
- **Endurance:** 500 mating cycles
- **Shock:** 300g for 3ms and EIA-364-27
- **Vibration:** 147m/s², 10 to 2000Hz
- **Contact retention:**

Size 26:	35 N
Size 22D:	45 N
Size 20:	60N
Size 16:	100 N
Size 12:	100 N
Size 8:	110 N
Size 4:	200 N

Electrical

- Please see details page 16 for sizes 02 to 06, and page 19 for sizes 08 to 24

Environmental

- **Operating temperature:** -55°C to +175°C
- **Sealing mated connectors:** IP67 (1 metre for 30 min minimum)
- **Salt spray:** 48 hours

Current solution:



Connector + extra nut plate fixed on the rear connector side.

NEW solution:



Integrated clinch nuts on the flange **= Cost and time saving!**

Ordering information

Basic series	8STA	0	10	35	P	N	499

Shell type
0: Oval flange receptacle
2: Oval flange receptacle with PCB contacts

Shell size
02, 04, 06, 08, 10, 12, 14, 16, 18, 20, 22, 24

Contact layout
See pages 10 to 13

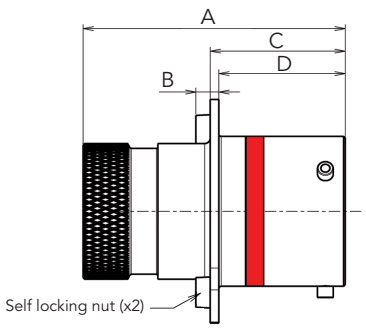
Type of contact
P: Pin
S: Socket

Orientation
N: Red / **A:** Yellow / **B:** Blue / **C:** Orange / **D:** Green / **U:** Universal

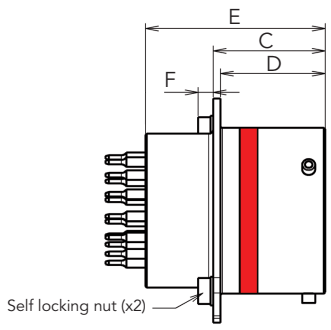
Specification (mandatory)
499: Integrated nut on the flange - M2 insert for sizes 02 to 06 / M3 insert for sizes 08 to 24
528: Integrated nut on the flange - M2.5 insert for sizes 02 to 06

Dimensions

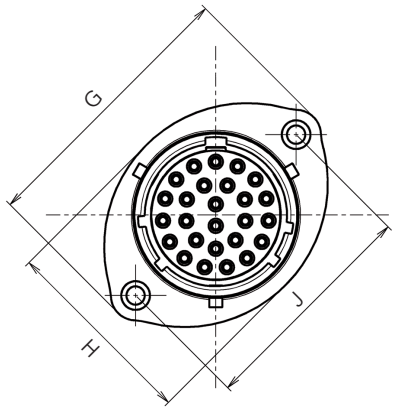
Oval flange receptacle



Standard version



PC Tail version



Shell size	A	B	C	D	E max.	F	G max.	H max.	J ±0.20
02	16.30	3.22	10.15	8.80	17.5	2.05	21.4	10.50	15.4
04	18.30	3.37	10.7	9.2	18.3		22.3	13.2	16.4
06	23.25	3.83	12.95	10.95	23.25		24.0	15.0	18.2
08	33.4	3.32	17.21	16.05	27.65	2.72	29.25	16.50	21.40
10							33.75	19.50	25.90
12							36.95	24.00	29.10
14							40.35	27.00	32.50
16							42.65	30.30	34.80
18							46.05	33.70	38.20
20				15.29			49.45	37.00	41.60
22							52.85	40.40	45.00
24			18.20				57.35	43.40	49.50

For other dimensions please see:
p.18 for Standard version sizes 02 to 06.
p.21 for Standard version sizes 08 to 24.
p.28 for PC Tail version sizes 02 to 24.

Note: All dimensions are in millimeters (mm)



Description

- Half flange weight saving connector
- Derived from MIL-DTL-38999 & JN1003 standard
- 100% scoop proof
- Available from 02 to 24 shell sizes
- Clinch nuts or PCB version available

Technical features

Mechanical

- **Shell:** Aluminium alloy
- **Shell plating:**
  Conductive black zinc:
  Nickel (F)
- **Insulator:** Thermoplastic
- **Grommet & seal:** Liquid silicone rubber
- **Contact:** Copper alloy
- **Contact plating:** Gold
- **Endurance:** 500 mating cycles
- **Shock:** 300g for 3ms and EIA-364-27
- **Vibration:** 147m/s², 10 to 2000Hz
- **Contact retention:**

Size 26:	35 N
Size 22D:	45 N
Size 20:	60N
Size 16:	100 N
Size 12:	100 N
Size 8:	110 N
Size 4:	200 N

Electrical

- **Test voltage:**

Service	Sea level	@21,000m
R	400	N/A
S	1,000	N/A
M	1,300	800
N	1,000	600
I	1,800	1,000
II	2,300	1,000

- **Contact resistance:**

Size 26:	<16 mΩ
Size 22D:	14.6 mΩ
Size 20:	7.3 mΩ
Size 16:	3.8 mΩ
Size 12:	3.5 mΩ
Size 8:	3 mΩ
Size 4:	2 mΩ

- **Insultation resitance:**
  ≥ 5000MΩ @ 400Vdc / Size 26
  ≥ 5000MΩ @ 500Vdc / All other sizes
- **Contact rating:**

Size 26:	3 Amp
Size 22D:	5 A
Size 20:	7.5 A
Size 16:	13 A
Size 12:	23 A
Size 8:	45 A
Size 4:	80 A

- **Shell continuity:** ≤10 mΩ

Environmental

- **Operating temperature:**
  -55°C to +175°C
- **Sealing mated connectors:**
  IP67 (1 metre for 30 min minimum)
- **Salt spray:**
  Aluminum Nickel: 48 hours
  Aluminum conductive Black Zinc: 48 hours

Ordering information

Basic series	**8STA**	**0**		**10**	**35**	**P**	**N**	**890**

Shell type
0: Half oval flange receptacle

Material & Plating
None: Aluminum Black zinc
F: Aluminum Nickel

Shell size
02, 04, 06, 08, 10, 12, 14, 16, 18, 20, 22, 24

Contact layout: See pages 10 to 13

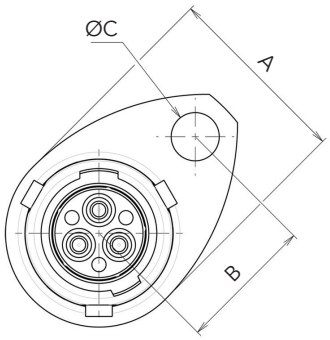
Type of contact
P: Pin
S: Socket

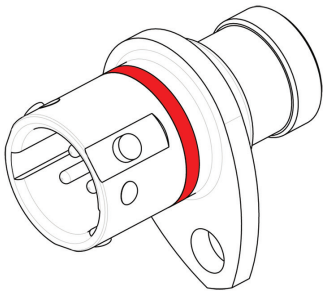
Orientation
N: Red / **A:** Yellow / **B:** Blue / **C:** Orange / **D:** Green / **E:** Grey (shell size 02 only) / **U:** Universal (consult us)

Specification
890: Single hole fixing - half oval flange receptacle

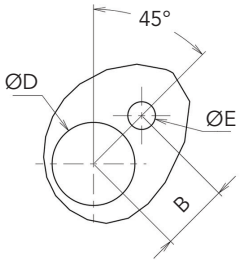
For any other configuration (clinch nuts, PC tail, ...), please consult us.

Dimensions





Panel cut out



Size	02	04	06	08	10	12	14	16	18	20	22	24
A max.	10.7/0.42″	13.2/0.52″	14.9/0.59″	16.5/0.65″	19.5/0.77″	24.0/0.94″	27.0/1.06″	30.3/1.19″	33.7/1.33″	37.0/1.46″	40.4/1.59″	43.4/1.71″
B$^{\pm 0.1}$	7.65/0.30″	8.1/0.32″	9.0/0.35″	10.7/0.42″	12.95/0.51′	14.55/0.57″	16.25/0.64″	17.4/0.69″	19.1/0.75″	20.8/0.82″	22.5/0.89″	24.75/0.97″
ØC max.	2.80/0.11″			3.20/0.13″								3.77/0.15″
ØD$^{\pm 0.1}$	9.3/0.37″	12.0/0.47″	13.0/0.51″	14.5/0.57″	17.4/0.69″	21.9/0.86″	25.0/0.98″	28.2/1.11″	31.4/1.24″	34.6/1.36″	37.6/1.48″	41.0/1.61″
ØE$^{\pm 0.2}$	3.10/0.12″			3.60/0.14″								4.10/0.16″

Note: All dimensions are in millimeters and inches (mm/inch).



Description

- Rugged aluminium body to ensure long service life in the harshest environment.
- 100% scoop proof.
- Available in 2 shell sizes: 10 and 12, please consult us for other sizes.
- Standard insulators shell sizes 10 and 12 available.

Technical features

Mechanical

- **Shell:** Aluminium
- **Shell plating:** Conductive black zinc
- **Insulator:** Thermoplastic
- **Grommet & seal:** Liquid silicone rubber
- **Contact:** Copper alloy
- **Contact plating:** Gold
- **Endurance:** 500 mating cycles
- **Shock:** 300g for 3ms and EIA-364-27
- **Vibration:** 147m/s², 10 to 2000Hz

Electrical

- **Contact resistance:**
  Size 22D: 14.6mΩ
- **Insultation resitance:** ≥ 5000MΩ @ 500Vdc
- **Contact rating:**
  Size 22D: 5 Amp
- **Shell continuity:** ≤ 10mΩ

Environmental

- **Operating temperature:**
  -55°C to +175°C
- **Sealing mated connectors:**
  IP67 (1 metre for 30 min minimum)
- **Salt spray:** 48 hours

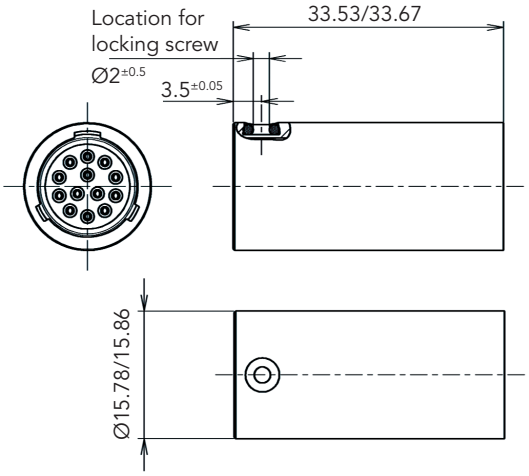
Ordering information

Basic series	**8STA**	**6**	**12**	**35**	**P**	**N**	**518**
Shell type **0:** Receptacle side **6:** Plug side							
Shell size: 08 (consult us)**, 10, 12**							
Contact layout: See pages 10 to 13							
Type of contact **P:** Pin **S:** Socket							
Orientation: N							
Specification (mandatory) **518:** Steering column							

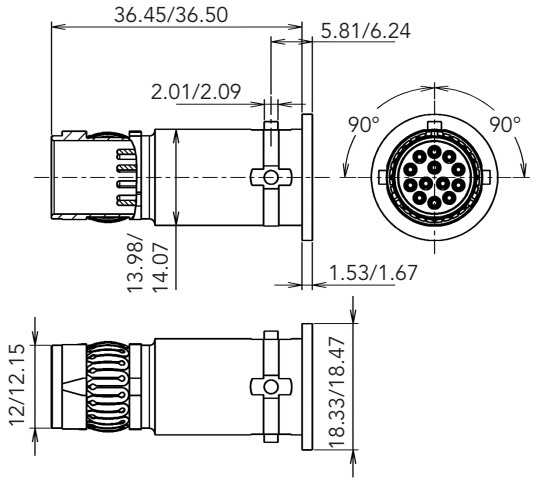
Dimensions

Shell size 10

Female Receptacle

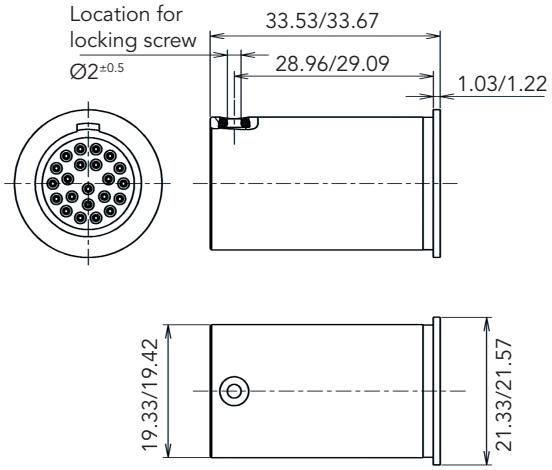


Male Plug

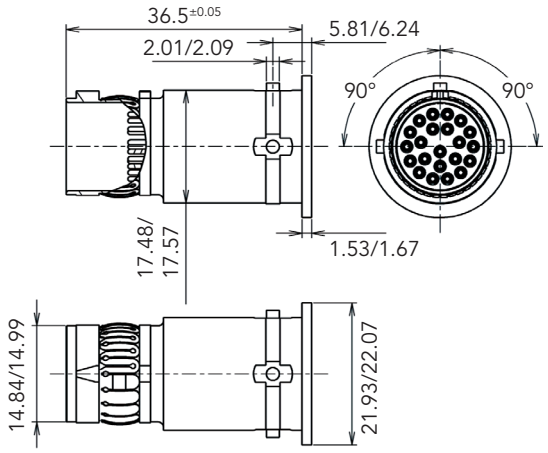


Shell size 12

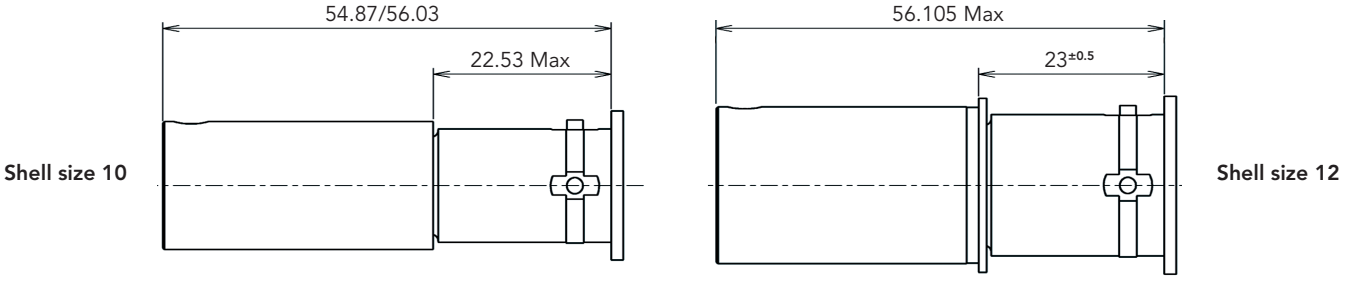
Female Receptacle



Male Plug



Mounting dimension requirement



Note: All dimensions are in millimeters (mm)



Description

- Blind mating solution for quick connection in hard-to-reach areas.
- Specific 8STA plug: compensating for misalignment in 3 axes.
- Blind connection:
  . Easy and fast connection without any coupling/uncoupling between float-mounting unit and fixed unit.
  . 100% Scoop proof.
- A versatile product:
  . Available in sizes 10, 12, 14 and16
  . All layouts according connector shell size.
  . Available in crimp contacts.
- Mandatory mating part: standard jam nut receptacle 8STA7

Technical features

Mechanical

- Shell: Aluminium alloy
- Shell plating: Conductive black zinc
- Insulator: Thermoplastic
- Grommet & seal: Liquid silicone rubber
- External cover: Green fluoro silicone
- Contact: Copper alloy
- Contact plating: Gold
- Contact retention:
  Size 22D: 45N Size 20: 60N
  Size 16: 100N Size 12: 100N
  Size 8: 110N Size 4: 200N
- Flange dimension:
  . Flange of plug size16 equivalent to flange of receptacle size 22
  . Flange of plug size14 equivalent to flange of receptacle size 20
  . Flange of plug size12 equivalent to flange of receptacle size 18
  . Flange of plug size10 equivalent to flange of receptacle size 16

Electrical

- Test voltage

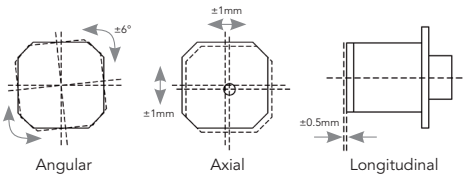
Service	M	N	I	II
Sea level	1300	1000	1800	2300

- Contact resistance:
  Size 22D: 4.6 mΩ
  Size 20: 7.3 mΩ Size 16: 3.8 mΩ
  Size 12: 3.5 mΩ Size 4: 2 mΩ
- Insulation resistance:
  ≥ 5000 MΩ (at 500 Vdc)
- Contact rating:
  Size 22D: 5A Size 20: 7.5A
  Size 16: 13A Size 12: 23A
  Size 8: 45A Size 4: 80A

Environmental

- Temperature range: -55°C to +175°C
- Sealing mated connectors:
  IP67 (1 meter for 30 min. minimum)
- Salt spray: 48 hours

Compensating for misalignment in 3 axes



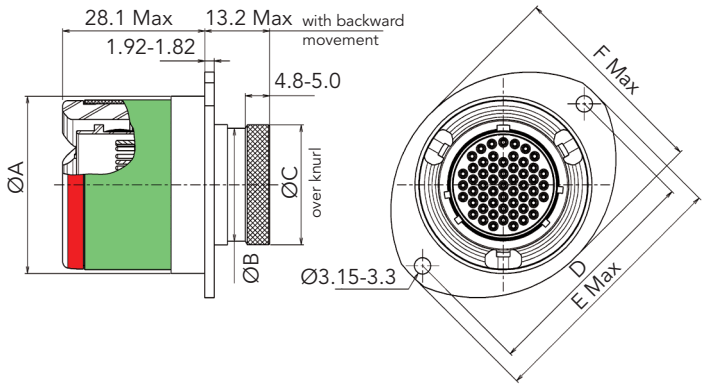
Ordering information

Basic series	8STA	6	12	35	S	N	566
Shell style **6:** Blind mating plug							
Shell size **10, 12, 14, 16**							
Contact layouts See pages 10 to 13							
Type of contacts **P:** Pin contacts **S:** Socket contacts							
Orientation **N:** Red							
Specification (mandatory) **566:** Rackable plug							

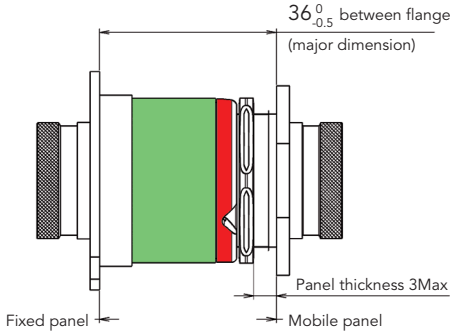
Note: Receptacle to be used with rackable plug = 8STA7xxxxx (standard jam nut version)

Dimensions

Plug type 6

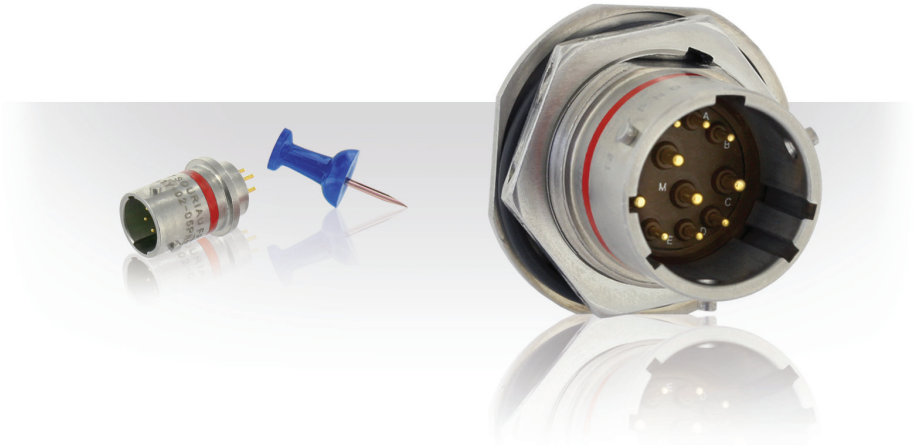


Mated Connector
(plug type 6 & jam nut receptacle type 7)



Shell size	ØA +0.3 -0	ØB +0.2 -0	ØC	D +0.4 -0	E	F
10	25.17	12.85	13.72	34.60	41.00	30.30
12	28.35	15.92	17.26	38.00	44.70	33.70
14	31.52	18.90	20.41	41.40	47.90	37.00
16	34.70	22.08	23.60	44.80	51.00	40.40

Note: All dimensions are in millimeters (mm)



Description

- Bayonet coupling connector
- Micro miniature connector based on MIL-DTL-38999 standard
- Glass sealed hermetic:
  . high hermeticity performance
  . compact low profile
- Various mounting styles:
  . compact solder mount receptacle
  . easy to replace jam nut receptacle
- Solder cup or PC tail contacts
- Specific fuel tank version for long term fuel immersion

Technical features

Mechanical

- **Shell:** Stainless steel
- **Shell plating:** Passivated
- **Insulator:** Glass bead
- **Contact:** Nickel iron
- **Contact plating:** Gold
- **Endurance:** 500 mating cycles

Electrical

- **Test voltage:**
  Service I: 1800V
  Service M: 1300V
- **Contact resistance:** 2 mΩ
- **Insulation resitance:**
  ≥ 5000MΩ (at 500Vdc)
- **Contact rating:**
  Size 16: 10 A
  Size 20: 5 A
  Size 22D: 3 A
  Size 26: 1.8 A

Environmental

- **Operating temperature:**
  -55°C to +175°C
- **Sealing mated connectors:**
  IP67 (1 meter for 30 min minimum)
- **Salt spray:** 48 hours
- **Hermeticity:**
  Leak rate < 1.10^{-7} atm.cm^3/s
  (helium gas test)

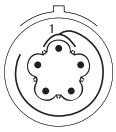
Ordering information

Basic series	8STA	1	Y	02	05	P	N	A73
Shell type **1:** Solder flange **7:** Jam nut receptacle								
Class **Y:** Hermetic version								
Shell size: 02, 04, 06, 08, 10, 12, 14								
Contact layout: See below for available layouts								
Type of contact **C:** Male PC tail contacts **P:** Male solder cup contacts								
Orientation **N:** Red / **A:** Yellow / **B:** Blue / **C:** Orange / **D:** Green								
Specification (mandatory) **022:** Fuel immersible version **A73:** Tin plating on contacts rear side and gold plating on contacts front side								

Contact layouts (viewed from front face of male insulator)

02

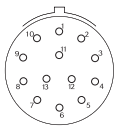
05



5#26
Service R

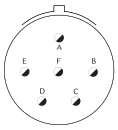
10

35



13 #22D
Service M

98

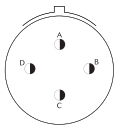


6 #20
Service I

Contact #26
Contact #22D
Contact #20
Contact #16

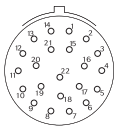
12

04



4 #16
Service I

35



22 #22D
Service M

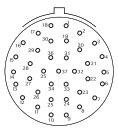
98



10 #20
Service I

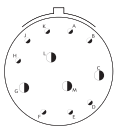
14

35



37 #22D
Service M

97



4 #16, 8 #20
Service I

Contact layouts (matrix)

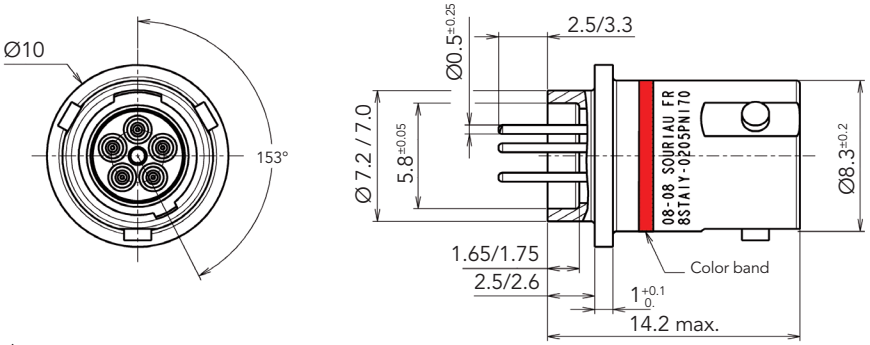
Shell size	Layout	Hermetic 8STA	Number of contacts			
			#26	#22D	#20	#16
02	02-05	OK	5			
	02-35	Available on request, please consult us		3		
04	04-05	Available on request, please consult us	5			
	04-06	Available on request, please consult us	6			
	04-35	Available on request, please consult us		3		
06	06-05	Available on request, please consult us	5			
	06-09	Available on request, please consult us	9			
	06-35	Available on request, please consult us		5		
08	08-12	Available on request, please consult us	12			
	08-35	Available on request, please consult us		6		
	08-98	Available on request, please consult us			3	
10	10-02	Available on request, please consult us				2
	10-04	Available on request, please consult us			4	
	10-05	Available on request, please consult us			5	
	10-22	Available on request, please consult us		4		
	10-26	Available on request, please consult us	26			
	10-35	OK		13		
	10-98	OK			6	

Shell size	Layout	Hermetic 8STA	Number of contacts				
			#26	#22D	#20	#16	#12
12	12-03	Available on request, please consult us				3	
	12-04	OK				4	
	12-08	Available on request, please consult us			8		
	12-26	Available on request, please consult us		6			2
	12-35	OK		22			
	12-43	Available on request, please consult us	43				
	12-98	OK			10		
14	14-05	Available on request, please consult us				5	
	14-15	Available on request, please consult us			14	1	
	14-18	Available on request, please consult us			18		
	14-19	Available on request, please consult us			19		
	14-35	OK		37			
	14-68	Available on request, please consult us	68				
	14-97	OK			8	4	

OK = SOURIAU's layout

Dimensions

Solder flange receptacle - size 02

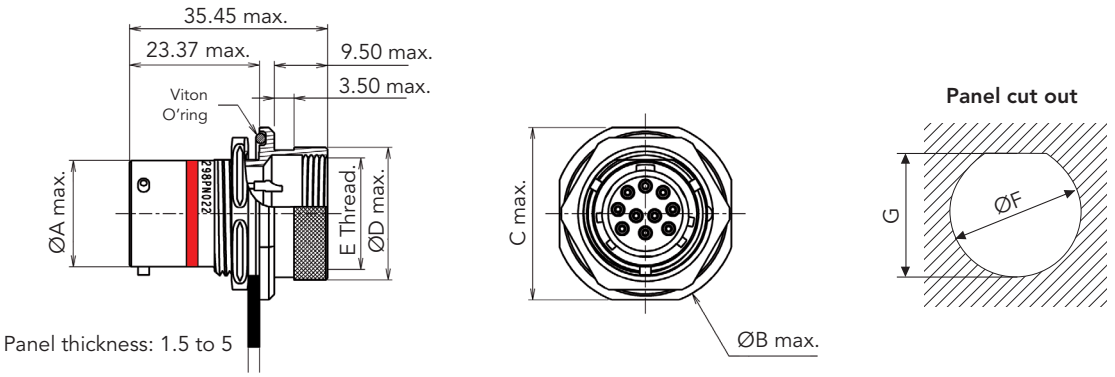


Please consult us for other shell sizes.

Note: All dimensions are in millimeters (mm)

Dimensions

Jam nut receptacle - sizes 10 to 14



Shell size	ø A max.	ø B max.	C max.	ø D max.	E Thread	Panel cut out	
						ø F ±0.10	G ±0.20
10	15.04	28.40	25.95	20.50	M18 x 1	17.70	16.80
12	19.09	33.00	30.75	23.67	M21 x 1	22.70	20.90
14	22.26	36.30	33.85	26.84	M24 x 1	25.70	24.10

Please consult us for other shell sizes.

Connector weight

Shell size	Receptacle type	Maximum weight in grams
02	In-line	2.5
10	Jam nut	35
12		52
14		63

Note: All dimensions are in millimeters (mm)



Description

- Solder contacts on both sides of bulkhead
- Designed for high vibration environment
- Wire soldered on both sides of the feed-through: no plugs needed
- Cost and space saving:
  . Adapted to space-constrained area
  . No plugs necessary
- Easy to solder:
  . Contacts fully tin plated
  . Different contact sizes available
- High performance sealing: $<1.10^{-7}$ atm.cm^3/s

Technical features

Mechanical

- **Shell:** Stainless steel
- **Shell plating:** Passivated
- **Insulator:** Glass bead
- **Contact:** Nickel iron, tin plated

Electrical

- **Test voltage:** Service M: 1300V
- **Contact resistance:** 2 mΩ
- **Insultation resitance:** ≥ 5000MΩ (at 500Vdc)
- **Contact rating:** Size 22D: 3 A

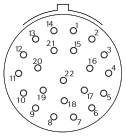
Environmental

- **Operating temperature:** -55°C to +175°C
- **Sealing mated connectors:** IP67 (1 meter for 30 min minimum)
- **Salt spray:** 48 hours
- **Hermeticity:** 1.10^{-7}cm^3/s

Contact layouts (viewed from front face of male insulator)

12

35



22#22D
Service M

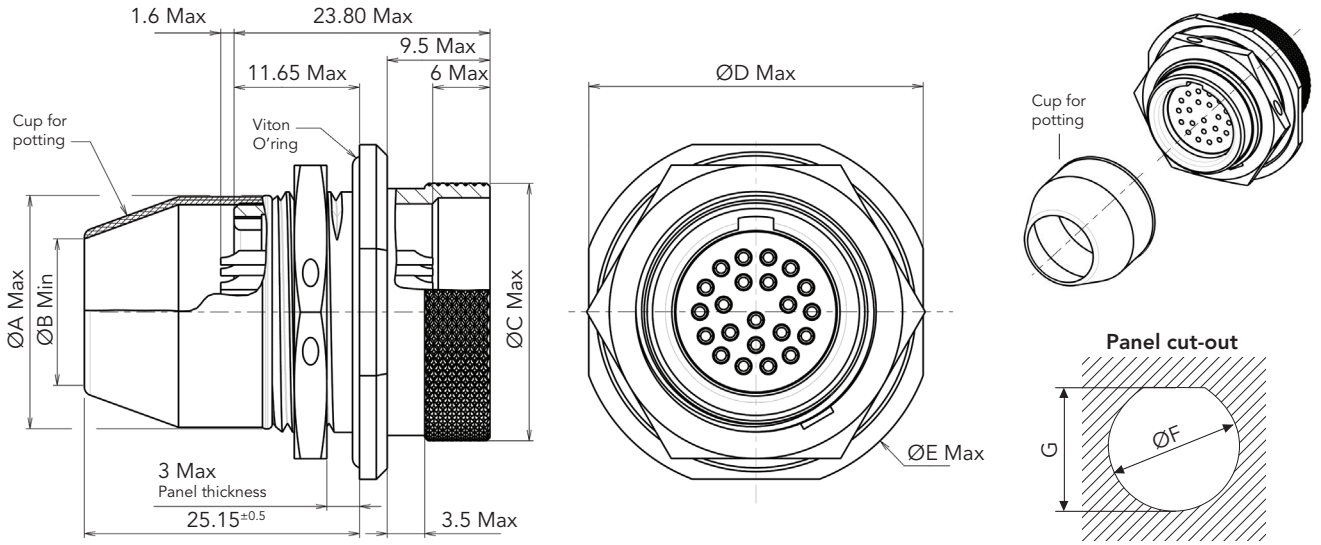
Consult us for other layouts or shell sizes.

Ordering information

Basic series	8STA	7	Y	12	35	199
Shell type **7:** Jam nut receptacle						
Class **Y:** Hermetic version						
Shell size **12**						
Contact layout **35**						
Specification **199:** #22 solder cup contacts on both sides						

Note: Delivery will contain the cup for potting and the jam nut receptacle not mounted.
Consult us for other layouts or shell sizes.

Dimension



Size	A	B	C	D	E	F	G
12	21.70	12.90	23.70	30.85	33.00	22.70	20.90

Note: All dimensions are in millimeters (mm)



Description

- Available for 8STA & 8TA Series
- Special fuel resistant insert: continuous immersion without loss of performance
- Excellent connector sealing on panels by using the jam nut version

Technical features

Mechanical

- **Shell:** Aluminium alloy
- **Shell plating:** Conductive black zinc
- **Insulator:** Thermoplastic
- **Grommet & seal:** Fluoroelastomer
- **Contact:** Copper alloy
- **Contact plating:** Gold
- **Endurance:** 500 mating cycles
- **Shock:** 300g for 3ms and EIA-364-27
- **Vibration:**
  8STA: 147m/s², 10 to 2000Hz
  8TA: random 100 to 1000 Hz - 1G²/Hz
- **Contact retention:** (8TA: Size 22D only)

Size 22D:	45 N
Size 20:	60N
Size 16:	100 N
Size 12:	100 N

Electrical

- **Test voltage:** 1300 Vrms
- **Contact resistance:** (8TA: Size 22D only)

Size 22D:	14.6 mΩ
Size 20:	7.3 mΩ
Size 16:	3.8 mΩ
Size 12:	3.5 mΩ

- **Insultation resitance:**
  ≥ 5000 MΩ (at 500 Vdc)
- **Contact rating:** (8TA: Size 22D only)

Size 22D:	5 A
Size 20:	7.5 A
Size 16:	13 A
Size 12:	23 A

- **Shell continuity:** ≤10 mΩ

Environmental

- **Operating temperature:**
  -55°C to +105°C
- **Sealing mated connectors:**
  IP67 (1 metre for 30 min minimum)
- **Salt spray:** 48 hours
- **Resistance to fluids:**
  Withstands most of Motorsport fluids

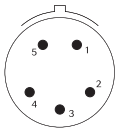
Ordering information

Basic series	**8STA** **8TA**	**0** **0**	**08** **08**	**35** **35**	**P** **P**	**N** **N**	**022** **022**
Shell type **0:** Oval flange receptacle **1:** In-line receptacle **6:** Plug **7:** Jam nut receptacle							
Shell size **04, 08, 10, 12, 14, 16**							
Contact layout See below for available layouts							
Type of contact **P:** Pin contacts **S:** Socket contacts							
Orientation **N:** Red **A:** Yellow **D:** Green							
Specification (mandatory) **022:** Fuel immersible version							

Contact layouts (viewed from front face of male insulator)

04

05



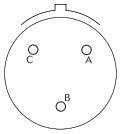
5 #26
Service R

06



6 #26
Service R

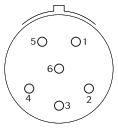
35



3 #22D
Service S

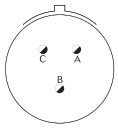
08

35



6 #22D
Service M

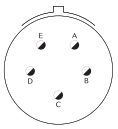
98



3 #20
Service I

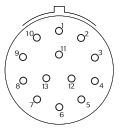
10

05



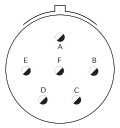
5 #20
Service I

35



13 #22D
Service M

98



6 #20
Service I

12

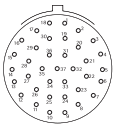
98



10 #20
Service I

14

35



37 #22D
Service M

For both 8STA & 8TA,
all others for 8STA only.

8STA/8TA SERIES

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8STA/8TA Series

Common Section

- Crimp contacts 56
- PC Tail contacts 57
- Wiring instructions 57
- Filler plugs 58
- Crimping tools 58
- Insertion and extraction tools 59
- Boots, Shrinkable termination detail 59
- Metal protective caps 60
- Nut plates, Gaskets 61

Contacts

Crimp contacts

Series	Contact size	Shell size & layout	Contact type	Contact Ø max.	Part numbers	Admissible wire section				External Ø over insulation (mm)	
						mm²		AWG			
						Min.	Max.	Min.	Max.	Min.	Max.
8STA Series	#26 High Density	06-05	Pin	0.50	8593 0998 A	0.055	0.215	30	24	0.60	0.83
			Socket		8593 0999 A						
		Shell sizes 08 to 24	Pin		8599-0297						
			Socket		8599-0298						
		04-05	Pin		8593-0947 A						
			Socket		8593-0948 A						
		02-05; 04-06 06-09	Pin		8599-1001						
			Socket		8599-1002						
		01-03	Pin		8599-0297						
			Socket		8593-2516A						
	#22D Signal contact	Shell sizes 08 to 24	Pin	0.76	8599-0702 JJ	0.090	0.380	28	22	0.76	1.37
			Socket		8599-0706 900						
		02-35; 04-35 06-35	Pin		8599-0702 JJ	0.090	0.380	28	22	0.71	1.37
			Socket		8599-0710 900						
	#20 Signal contact	Shell sizes 08 to 24	Pin	1.00	8599-0703 SA	0.215	0.600	24	20	1.02	2.11
			Socket		8599-0707 900						
	#16 Signal contact	Shell sizes 08 to 24	Pin	1.60	8599-0704 MJ	0.600	1.340	20	16	1.65	2.77
			Socket		8599-0708 900						
	#16 Coaxial contact	Shell sizes 08 to 24	Pin		M39029/76 424	RG 174; RG 179; RG 316				1.65	2.60
			Socket		M39029/77 428						
	#12 Signal contact	Shell sizes 08 to 24	Pin	2.40	8599-0705 MJ	1.910	3.180	14	12	2.46	3.61
			Socket		8599-0709 900						
	#12 Coaxial contact	Shell sizes 08 to 24	Pin		M39029/102 558	RG 174; RG 179; RG 316				2.40	2.60
			Socket		M39029/103 559						
	#08 Power contact	Shell sizes 08 to 24	Pin	3.64	8599-7580	-	8.980	-	8	4.50	6.50
			Socket		8599-7581						
			Boot		8599-4542						
			Reductor*		8599-7645						
	#08 Coaxial contact	Shell sizes 08 to 24	Pin		M39029/59 366	RG 188A/U				-	2.80
			Socket		M39029/60 367						
			Boot		8590-4571						
	#08 Triaxial contact	Shell sizes 08 to 24	Pin		M39029/90-529	MIL-C17/176 00002; FILECA F2703/14 RAYCHEM CHEMINAX 10612; FILOTEX M 17/176 00002				3.15	3.40
			Socket		M39029/91-530						
			Boot		8590-4571						
	#04 Power contact (see p.31)	Shell sizes 08 to 24	Pin	5.75	8599-7520A 900	7	10	According to wire used			
			Socket		8599-7521A 900						
			Boot		8599-4593						
			Reductor**		8400-2351A						
			Pin		8599-7520A 900	4	16				
			Socket		8599-7521A 900						
			Boot		8599-4594						
8TA Series	#22D Signal contact	08-35	Pin	0.76	8599-0702 JJ	0.090	0.380	28	22	0.71	1.37
			Socket		8599-0710 900						
	#20 Signal contact	08-98	Pin	1.00	8599-0703 SA	0.215	0.600	24	20	1.02	2.11
			Socket		8599-0711 900						

* Reductor must be used for wire 8 mm² ** Reductor must be used for wire 8 & 10 mm²

Note: All dimensions are in millimeters (mm)

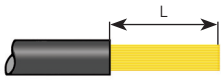
PC tail contacts

Contact size	Shell size & layout	Contact type	Contact Ø max.	Part numbers
#22D	02-35	Pin	0.76	8599 1031-JJ
		Socket		8599 1032-900
	04-35	Pin	0.76	F1P2P3C0004ALY
		Socket		F1P2ES32201A00
	Shell size 06	Pin	0.76	F1P1P3E0002AJJ
		Socket		F1P1ES32202A00
	Shell sizes 08 to 24	Pin	0.76	F1P1P3E0001ALY
		Socket		F1P1ES32201A00
#26	02-05	Pin	0.50	8593 0949 A
		Socket		8593 0950 A
	04-05	Pin		8593 0953 A
		Socket		8593 0951 A
	04-06	Pin		8593 0954 A
		Socket		8593 0952 A
	06-05	Pin		8593 1000 A
		Socket		8593 1001 A
	Shell sizes 08 to 24	Pin		8599 0292
		Socket		8599 0293
#20	Shell sizes 08 to 24	Pin	1.04	F1P1P3E0020ALY
		Socket		F1P1ES32001A00
#16	Shell sizes 08 to 24	Pin	1.61	F1P1P3E0016ALY
		Socket		F1P1ES31601A00

Wiring instruction

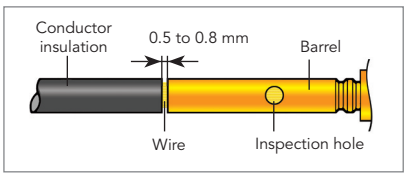
Cable preparation and wire stripping

Contact size	#26		#22D	#20	#16	#12	#8	#4
	Shell size 01	Other shell sizes						
L	3.5	4		6			12	



L = length of wire stripping

Insertion of wire in contact barrel



When inserting the stripped wire into the contact barrel check that no strands are left outside and that the wire is visible through the wire inspection hole in the barrel.

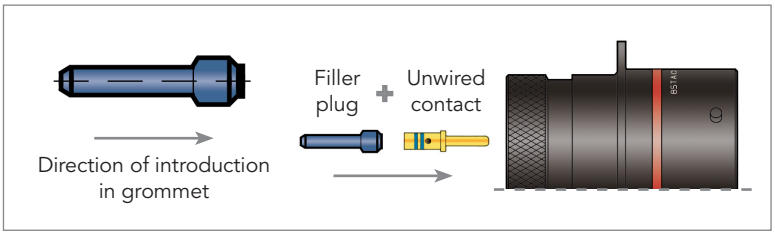
Important:
- Slide any accessories over wire strands before carrying out the following operations.
- Contacts are inserted and extracted from the rear of the connector.

Note: All dimensions are in millimeters (mm)

Filler plugs

These filler plugs are installed at the rear of unwired contacts to maintain connector sealing.

Contact size	MS Part number (Rev. N)	Color	SOURIAU Part number	Color
#22D	MS27488-22-2	Black	8660-212	Black
#20	MS27488-20-2	Red	8522-389A	Red
#16	MS27488-16-2	Green	8522-390A	Blue
#12	MS27488-12-2	Orange	8522-391A	Orange



Recommended tooling

Crimp contacts

8STA Series sizes 01, 02, 04, 06 and 8TA Series

Contact size	Contact type	Wire size	Shell size & layout	Locator part number		Tool part number	
				Norm	SOURIAU	Norm	SOURIAU
#22D	Pin	22 to 28	02-35 04-35 06-35 08-35 (8TA only)	M22520/2-09	8476-09	M22520/2-01	8476-01
	Socket			M22520/2-06	8476-06		
#26	Pin	24 to 30	06-05	-	8599-0048		
	Socket				8599-0049		
	Pin		04-05	-	8599-0050		
	Socket				8599-0051		
	Pin		02-05 04-06 06-09	-	640 088		
	Socket				640 089		
	Pin		01-03	-	8599-0397		
	Socket				8593-2556A		

Crimp contacts

8STA Series size 08 to 24

Contact size	Contact type	Plier M22520/1-01	Plier M22520/2-01 (SOURIAU 8476-01)	Plier M300BT	Pneumatic plier M22520/23-01	
		Turret Part number	Locator Part number	Locator Part number	Turret Part number	Locator Part number
#26	Pin	-	8599-0397	-	-	-
	Socket	-	8599-0398	-	-	-
#22D	Pin	-	M22520/2-09	-	-	-
	Socket	-	M22520/2-06	-	-	-
#20	Pin	M22520/1-04	M22520/2-10	-	-	-
	Socket			-	-	-
#16	Pin	M22520/1-04	-	-	-	-
	Socket		-	-	-	-
#12	Pin	M22520/1-04	-	-	-	-
	Socket		-	-	-	-
#8	Pin	-	-	SP 593	M22520/23-02	8599-9601
	Socket	-	-			
#4	Pin	-	-	-	M22520/23-04	M22520/23-11
	Socket	-	-	-		

Insertion and extraction tools

Contact size		Material	Part number		Color	
			Specification	SOURIAU	Insertion	Extraction
#26	Shells 02 to 06	Plastic	-	8599 0444 900	Blue	Red
	Shells 01 & 08 to 24	Plastic	-	8599 0394 900	Black	White
#22D		Plastic	M81969/14-01	-	Green	White
#20		Plastic	M81969/14-10	-	Red	Orange
#16		Plastic	M81969/14-03	-	Blue	White
#12		Plastic	M81969/14-04	-	Yellow	
#8		Plastic	M81969/14-06	-	-	Red
		Metallic	-	8660 197		-
#4		Plastic	M81969/14-07	-	-	Blue
		Metallic	-	8533 8175		-



Boots

8STA Series

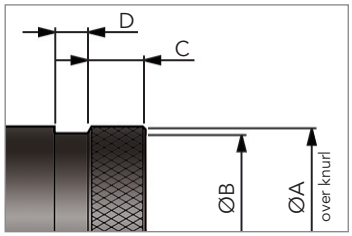
Shell size	Straight boot		90° boot	
	Raychem	Hellerman	Raychem	Hellerman
01	-	1038-4-G	-	1183-4-G
02	203W301-25-G02	1037-4-G	223W601-25	1182-4-G
04	204W221-25-G03	1037-4-G	224W221-25-G03	1182-4-G
06	204W221	1030-4-G	224W221	1181-4-G
08	202K121	152-42-G	222K121	1152-4-G
10	202K132	152-42-G	222K132	1152-4-G
12	202K142	154-42-G	222K142	1154-4-G
14	202K142	155-42-G	222K142	1155-4-G
16	202K153	156-42-G	222K153	1156-4-G
18	202K153	156-42-G	222K153	1156-4-G
20	202K163	157-43-G	222K163	1157-4-G
22	202K163	157-43-G	222K163	1157-4-G
24	202K174	157-43-G	222K174	1157-4-G

8TA Series

Shell size	Straight boot		90° boot	
	Raychem	Hellerman	Raychem	Hellerman
08	202K121	152-42-G	222K121	1152-4-G

Shrinkable termination detail

Shell size	8TA	8STA												
	08	01	02	04	06	08	10	12	14	16	18	20	22	24
ØA	8.65	5.60	7.20	8.65	9.90	10.62	13.72	17.26	20.41	23.6	26.76	29.93	33.11	36.3
ØB$^{\pm 0.15}$	8.00	5.05	6.55	8.00	9.25	9.70	12.65	16.02	19.00	22.23	25.22	28.37	31.86	34.67
C$^{\pm 0.15}$	2.70	2.20	2.20	2.70	4.20	6.00								
D	2.30	2.30	2.30	2.30	3.50	3.50								



Note: All dimensions are in millimeters (mm)

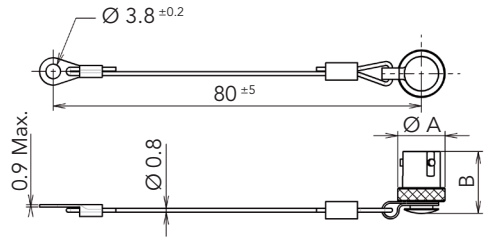
Metal protective caps with lanyard

Plug caps

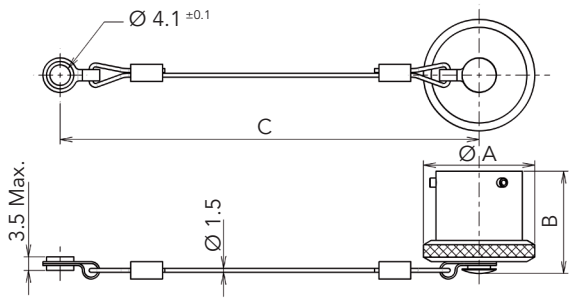
Cord material: Nylon
Cap plating: Conductive Black Zinc

Shell size & Layout	Part number	Ø A Max.	B Max.	C ±5
02	8STA802A	10.60	13.20	-
04	8STA804A	12.20	13.80	-
06-05	8STA806A	15.25	15.50	-
06-09 06-35	8STA8F06A	15.25	15.50	-
08	8STA808A	17.50	27.44	128
10	8STA810A	20.50		128
12	8STA812A	24.50		140
14	8STA814A	27.50		140
16	8STA816A	30.90		140
18	8STA818A	34.00		140
20	8STA820A	37.20		153
22	8STA822A	40.40		153
24	8STA824A	43.50		153

Size 02 to 06



Size 08 to 24

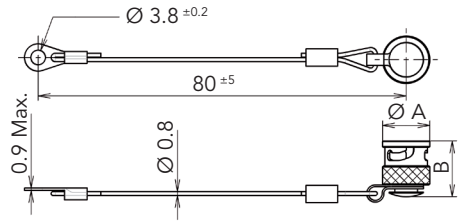


Receptacle caps

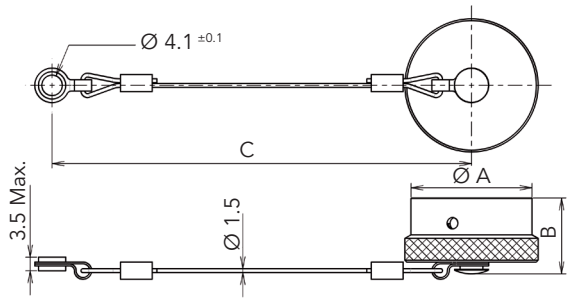
Cord material: Nylon
Cap plating: Conductive Black Zinc

Shell size & Layout	Part number	Ø A Max.	B Max.	C ±5
02	8STA902A	10.60	13.20	-
04	8STA904A	13.60	13.80	-
06-05	8STA906A	15.25	14.30	-
06-09 06-35	8STA9F06A	15.25	14.30	-
08	8STA908A	19.05	21.44	128
10	8STA910A	21.85		128
12	8STA912A	26.15		140
14	8STA914A	29.35		140
16	8STA916A	32.55		140
18	8STA918A	35.35		140
20	8STA920A	38.85		153
22	8STA922A	42.05		153
24	8STA924A	45.15	22.22	153

Size 02 to 06



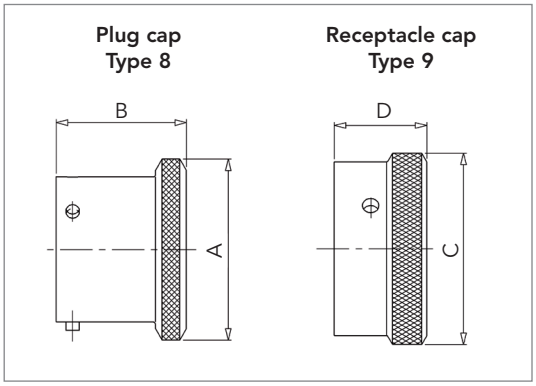
Size 08 to 24



Note: All dimensions are in millimeters (mm)

Metal protective caps without lanyard

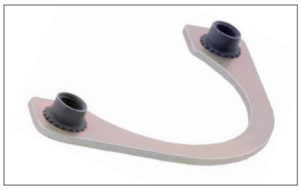
Shell size & Layout		Part numbers		Dimensions			
		Plug cap	Recep. cap	ØA Max.	B Max.	ØC Max.	D Max.
02		8STA802	8STA902	10.60	11.20	10.60	9.85
04		8STA804	8STA904	12.30	10.80	13.60	10.95
06-05		8STA806	8STA906	15.15	11.05	15.15	9.70
06-09 06-35		8STA8F06	8STA9F06	15.25	11.15	15.15	13.00
08	8TA	8TA808	8TA908	-	-	-	-
	8STA	8STA808	8STA908	17.50	21.00	19.00	14.20
10		8STA810	8STA910	20.50		21.80	
12		8STA812	8STA912	24.50		26.10	
14		8STA814	8STA914	27.70		29.30	
16		8STA816	8STA916	30.90		32.50	15.00
18		8STA818	8STA918	34.00		35.30	
20		8STA820	8STA920	37.20		38.80	
22		8STA822	8STA922	40.40		42.00	
24		8STA824	8STA924	43.50		45.10	15.85



Nut plates

Nut plates are available for all 8STA sizes.
Designed for oval flange receptacles with two holes.

Their design was specially made for motorsport market.

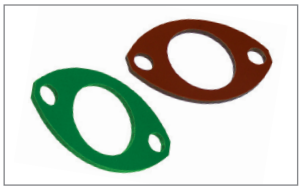


Shell size	Self-locking nut thread	Part number
02	M2	8STA-02 M20
	M2.5	8STA-02 M25
04	M2	8STA-04
	M2.5	8STA-04 M25
06	M2.5	8STA-06 M25
08	M3	8STA-08
10		8STA-10
12		8STA-12
14		8STA-14
16		8STA-16
18		8STA-18
20		8STA-20
22		8STA-22
24		8STA-24

Gaskets

Gaskets are available for all 8STA sizes.

They are available in Standard version (liquid silicone rubber) and Fuel tank version (fluorel).



Shell size	Part number Standard	Part number Fuel tank
02	8STA-G02	8STA-G02 022
04	8STA-G04	8STA-G04 022
06	8STA-G06	8STA-G06 022
08	8STA-G08	8STA-G08 022
10	8STA-G10	8STA-G10 022
12	8STA-G12	8STA-G12 022
14	8STA-G14	8STA-G14 022
16	8STA-G16	8STA-G16 022
18	8STA-G18	8STA-G18 022
20	8STA-G20	8STA-G20 022
22	8STA-G22	8STA-G22 022
24	8STA-G24	8STA-G24 022

Note: All dimensions are in millimeters (mm)

8STA/8TA SERIES

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8STA/8TA Series

Range Extension

- 209 Series 64
- High power contacts 64
- Composite connectors 65
- micro38999 Series break away 65
- *micro*Comp® Series 66
- 8D8/8D9 Series 66

Product range extension

209 Series

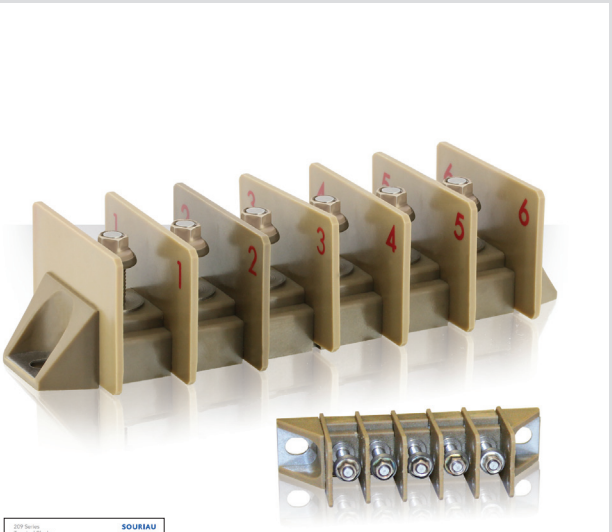
Terminal blocks for power distribution. Distribution of electrical current for aircraft equipment.

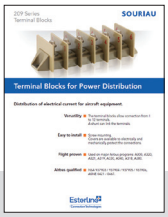
Versatility:
. The terminal blocks allow connection from 1 to12 terminals.
. A shunt can link the terminals.

Easy to install:
. Screw mounting.
. Covers are available to electrically and mechanically protect the connections.

Flight proven:
. Used on major Airbus programs: A300, A320, A321, A319, A330, A340, A318, A380.

Airbus qualified:
. NSA 937903 / 937904 / 937905 / 937906.
. ASNE 0421 / 0467.





See «209 Series Terminal Blocks» datasheet on www.souriau.com

High Power Contacts

High Power up to 850A. 38999 compliant design to meet the harshest military requirement where high power and shielding are needed.

3 aluminum shell sizes available:
. Size 19 (450A max); size 23 (650A max); size 25 (850A max).
. Different finish: cadmium, zinc nickel, electroless nickel.
. Threaded coupling.

Superior contact technology equipped with a silver plated braid:
. High contact endurance.
. Low contact resistance.
. No microcut under vibration.

Modular design for easy installation:
. Removable backshell: straight, right angle or bus bar.
. Backshell termination: for thread or shrink boot.
. Possible to crimp various cable (Ø from 50 to185mm).

Safety.



See «38999 Series III, High Power Contacts» datasheet on www.souriau.com

Product range extension

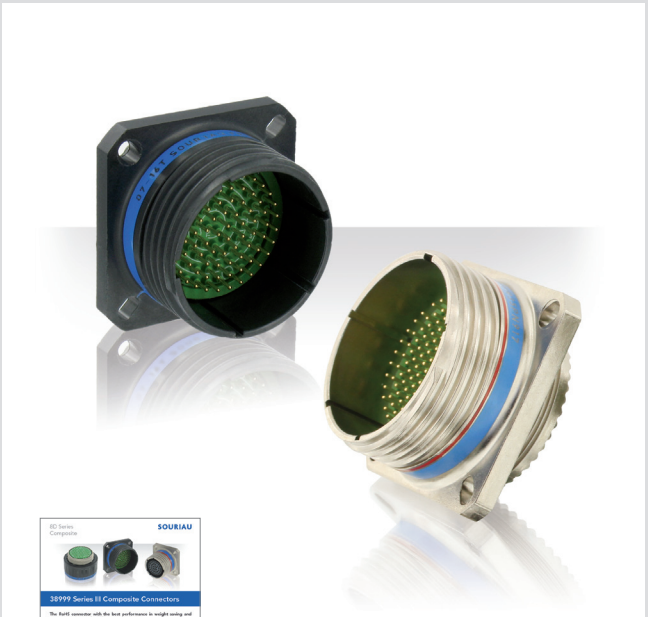
Composite Connectors

SOURIAU leader on composite circular connectors. Denser and lighter than MIL-C-26500 and 852. Better performances compared to 38999 Series III at similar price.

Low weight:
. Up to 25% weight saving compared to aluminum.

High performance:
. According to D38999 (QPL approuved).
. 1500 hours salt spray.

Superior design:
. Match the latest lightning strike and 230V requirement.





See «38999 Series III, Composite Connectors» datasheet on www.souriau.com

micro38999 Series Break Away

micro38999, 8BA Series: miniature product with a break away release. Space saving with scoop proof connector for harsh and EMI applications.

A compact and high density solution:
. Diameter up to 45% smaller than size 9 (D38999).
. Up to 50% shorter.
. Integrated backshell: Cost and space saving.
. #26 & #22 contacts

Excellent features:
. Designed for D38999 requirements.
. IP67 sealing when mated.
. Ballseal (EMI).
. Stainless steel (1500 matings) and aluminum (500 matings).

RoHS and Cadmium free:
. Available in zinc nickel (RoHS) plating.
. Nickel and olive drab cadmium plating available.





See «micro38999, 8BA Break Away» datasheet on www.souriau.com

Product range extension

*micro*Comp® Series

To respond to miniaturization and weight saving trends in aeronautical and defense applications SOURIAU has developed an innovative high density connector range.

Very light & high density:
. Shell in composite (or aluminum).
. Up to 66% lighter than HD D-Sub.
. Very high density up to 40% smaller than HD D-Sub.

Excellent features:
. With crimp removable contacts for wire AWG 24 to 28.
. Temperature up to 175°C.
. High vibration and shock withstanding.
. Standard MIL-STD 83513 accessories.
. Compatible with high speed data rates (Gigabit Ethernet...).

Quick connect version for harsh environment:
. 104 contacts push-push.





See «*micro*Comp® Series» datasheet on **www.souriau.com**

8D8/8D9 Series

8D8: high vibration push-pull connector.
8D9: lanyard quick release, high performance.

A wide range with excellent performances:
. MIL-DTL-38999 layouts and contacts
. MIL-DTL-38999 Series electric performances
. Scoop proof
. Compatible with standard backshells 38999 Series III
. Very high performance coupling with ball locking concept, check of locking by free ring when mated.

Easy to connect-disconnect:
. 8D8 Series: ideal for restricted space mating.
. 8D9 Series: simple push to connect - pull to disconnect.

High vibration performance:
. Up to 44g
. 8D8 Series: ideal for mil-aero and space applications.
. 8D9 Series: ideal for missiles, inter-stage separation, UAVs, space probes.



See «8D8/8D9 Series - 38999 Push-pull/Quick release» catalog on **www.souriau.com**

Reliable People, Reliable Solutions



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Connection Technologies

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