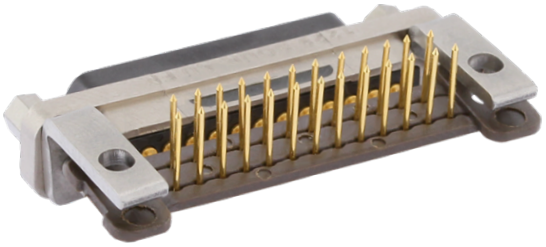
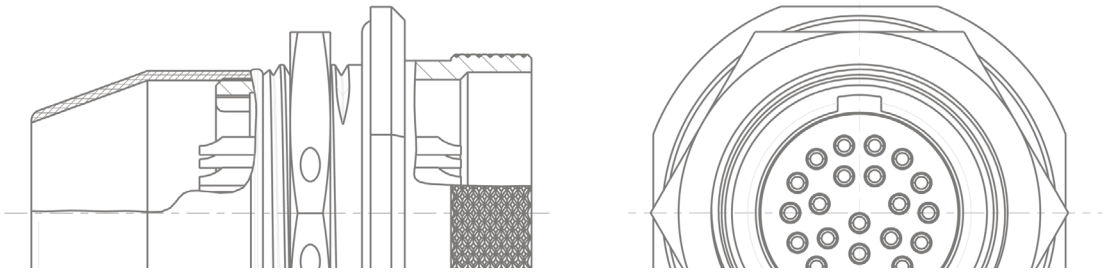
Motorsport and racing connectors
Souriau 8STA, 8TA and microComp® series



Powering Business Worldwide



8STA, 8TA and microComp® series connectors

Typical applications

Micro-miniature connectors with innovative quick-mating

The Souriau 8STA is ideal for motorsport applications with extreme space and weight constraints. Our high-performance connectors can be found on cars and motorcycles throughout the world of competitive motorsport—primarily for sensors and electric systems.

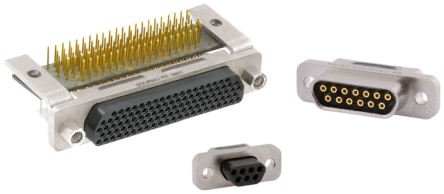
Reliability in harsh environments

The 8STA, 8TA and microComp series of miniature connectors incorporate high-reliability features to ensure driver safety and correct vehicle operation. Derived from international military specifications MIL-DTL-38999 and JN1003, our lightweight yet rugged connectors and can withstand high levels of shock and vibration.

Optimized for winning performance

We offer more than 100 derived versions of our motorsport connector series and we're continually expanding and enhancing our products to meet the market's complete interconnect needs. We also have the capabilities to produce derived products on demand, and our worldwide distributor network maintains high levels of finished connector stock to support fast turnarounds for customer orders.

Souriau 8STA, 8TA and microComp® series



From standard to specific solutions for motorsport

The motorsport market is driven by innovations, and we're dedicated to meet your needs. We have the capability to produce derived products on demand to help you take the lead. One of our primary objectives is to push the boundaries in terms of miniaturization and weight reduction, demonstrated by the introduction of the 8STA shell size 01, the world's smallest motorsport connector with removable contacts.

8STA series	8TA series	microComp®
Miniature sizes 02, 04, 06 Up to shell size 24	Compact low profile	Crimp removable contacts AWG 24 to 28
Scoop proof	Conductive black zinc or nickel plating	High density layouts from 7 to 104 ways
Conductive black zinc or nickel plating	Color-coded keyway	High vibration and shock withstanding
Color-coded keyway		Non magnetic

Reliable and customized solutions

Based on standard series:

- 8STA & 8TA series
- microComp® series

Lightweight
High density layouts, miniature sizes, integrated backshell, composite shell.

Power distribution
High voltage.
High current.

Custom solutions
Innovative solutions.
Let your need take the lead.

Fuel pump
Fuel, oils and lubricant immersion.

Extremely reliable in continuous immersion.

Engine control unit
High power load, critical function.

Extremely reliable in harsh environments.

Sensors
Extreme vibration.
Restricted areas.

Quick release
Frequent disconnect.
Difficult areas to reach.

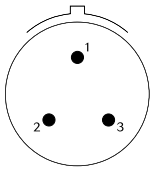
Contact layouts

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

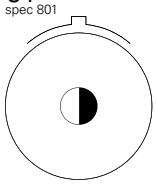
03



3#26
Service R
S HD

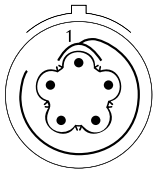
02

01 *
spec 801



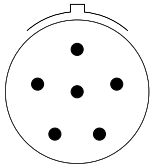
1#16
Service II
C

05



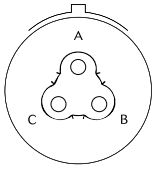
3#26
Service R
S HD H

06



6#26
Service R
S HD

35

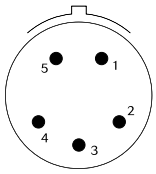


3#22D
Service S
S H

* Consult us

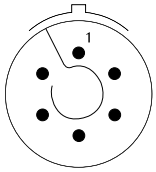
04

05



5#26
Service R
S F

06



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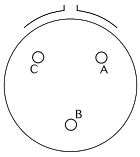
Service R
S HD F

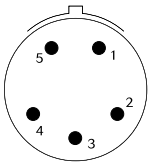
35



3#22D
Service S
S F

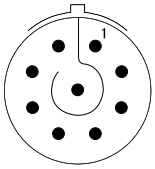
06

05



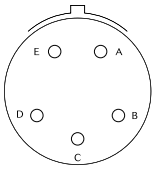
5#26
Service M
S

09



9#26
Service R
S HD

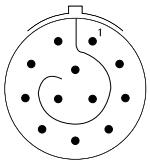
35



5#22D
Service M
S

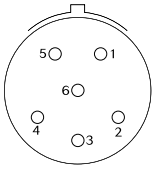
08

12



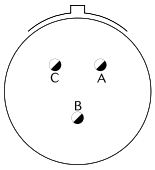
12#26
Service R
S HD

35*



6#22D
Service M
S F

98*



3#20
Service I
S F

* Available for 8TA Series

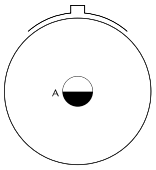
Sizes 01 and 02: Marking on shell.
Rear view of receptacle for male and female insulator. Opposite marking between plug and receptacle.
Sizes 04 to 24: Marking on insulator.
Front view of male insulator for plug and receptacle. Opposite marking between male and female insulator.

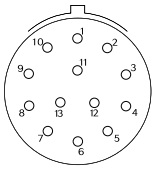
Contact layouts

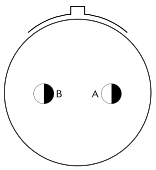
S Signal · P Power · C Concentric Twinax (=Triax) or Coax · HD High Density · H Hermetic version developed · F Fuel Immersible version developed

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

10

01

1#12
Service II
S

35

3#22D
Service S
S H F

02

2#16
Service I
S

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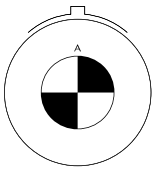
1#8
Service I
C

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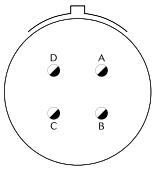
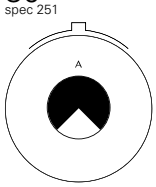
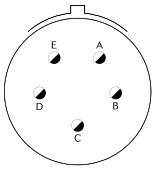

4#20
Service I
S

80 spec 251

1#8
Service I
P

05

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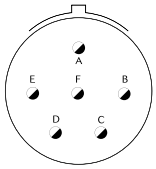
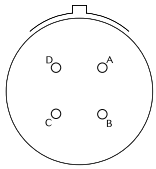
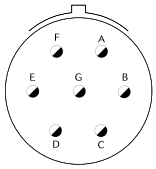
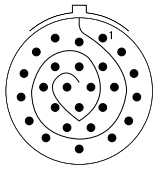
Service I
S F

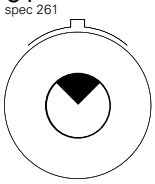
98

6#20
Service I
S H F

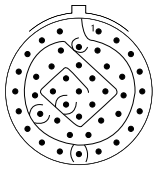
22

4#22D
Service M
S

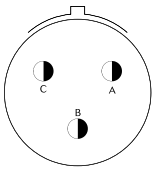
99

7#20
Service I
S

26

26#26
Service R
S HD

12

01 spec 261

1#4
Service M
P

43

43#26
Service R
S HD

03

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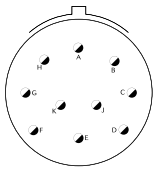
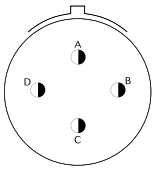
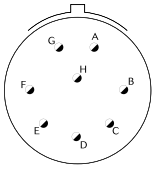
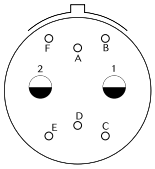
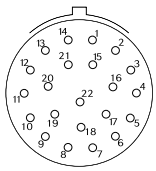
Service I
S

98

10#20
Service I
S H F

04

4#16
Service I
S H

08

8#20
Service I
S

26

6#22D, 2#12
Service M
S

35

22#22D
Service M
S H

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.

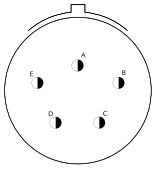
Contact layouts

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

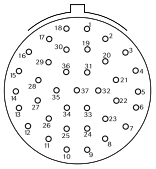
14

05



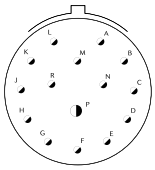
5#16
Service II
S

35



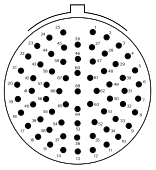
37#22D
Service M
S H F

15



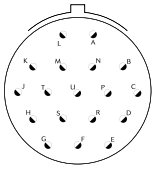
14#20, 1#16
Service I
S

68



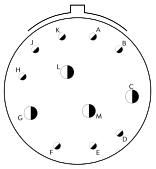
68#26
Service R
S HD

18



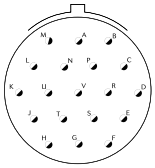
18#20
Service I
S

97



8#20, 4#16
Service I
S H

19



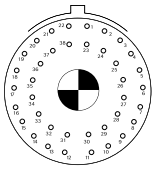
19#20
Service I
S

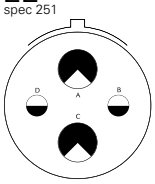
Contact layouts

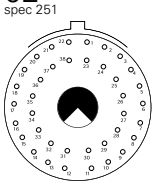
S Signal P Power C Concentric Twinax (=Triax) or Coax HD High Density H Hermetic version developed F Fuel Immersible version developed

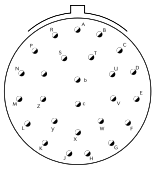
Contact sizes #26 #22D #20 #16 #12 #8 Coax or Concentric Twinax - consult us #8 Power #4 Power

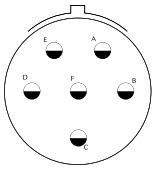
16

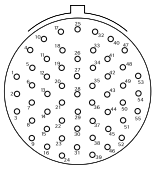
02

38#22D, 1#8
Service M
S C

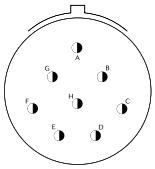
22 spec 251

2#12, 2#8
Service M
S P

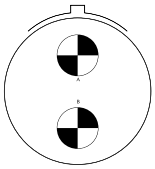
02 spec 251

38#22D, 1#8
Service N
S P

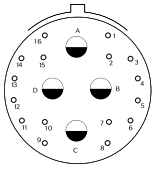
26

26#20
Service I
S

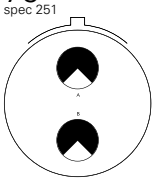
06

6#12
Service I
S

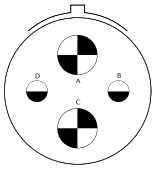
35

55#22D
Service M
S

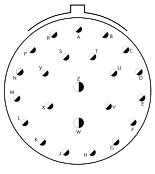
08

8#16
Service II
S

75

2#8
Service M
C

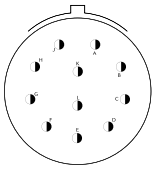
20

16#22D, 4#12
Service II
S

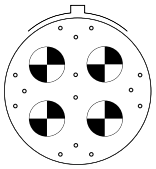
75 spec 251

2#8
Service M
P

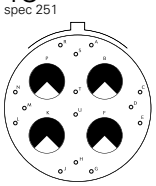
22

2#12, 2#8
Service M
S C

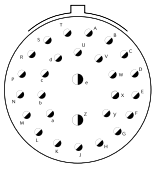
99

2#16, 21#20
Service I
S

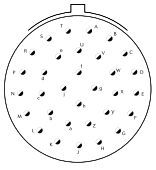
18

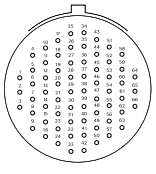
11

11#16
Service II
S

18

14#22D, 4#8
Service M
S C

18 spec 251

14#22D, 4#8
Service M
S P

28

26#20, 2#16
Service I
S

32

32#20
Service I
S

35

66#22D
Service M
S

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

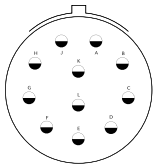
Contact layouts

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

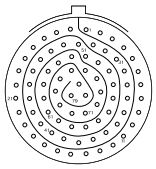
20

11



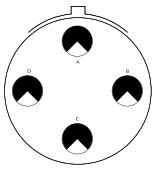
11#12
Service I
S

35



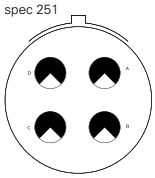
79#22D
Service M
S

48



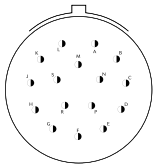
4#8
Service I
P

75 spec 251



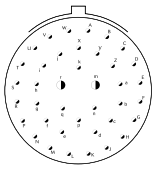
4#8
Service M
P

16



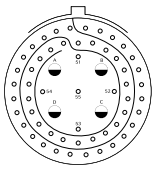
16#16
Service II
S

39



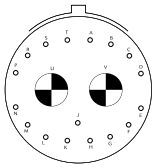
37#20, 2#16
Service I
S

59



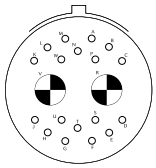
55#22D, 4#12
Service M
S C

77



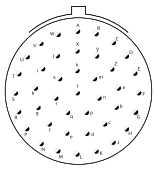
17#22D, 2#8
Service M
S P

20



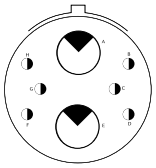
18#20, 2#8
Service M
S C

41



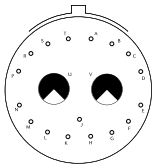
41#20
Service I
S

72



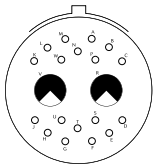
6#16, 2#4
Service I
S P

77 spec 251



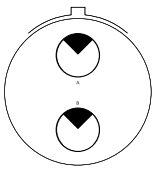
17#22D, 2#8
Service M
S P

20 spec 251



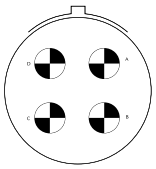
18#20, 2#8
Service M
S P

42



2#4
Service I
P

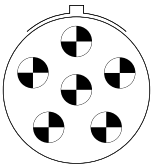
75



4#8
Service M
C

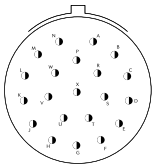
22

06



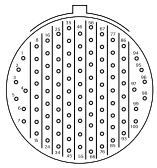
6#8
Service M
C

21



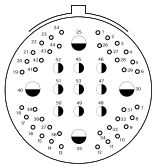
21#16
Service II
S

35



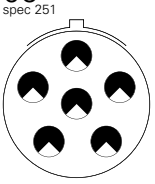
100#22D
Service M
S

54



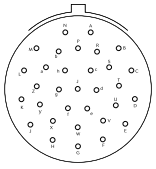
40#22D 9#16,
4#12 Service M
S

06 spec 251



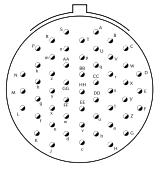
6#8
Service M
P

32



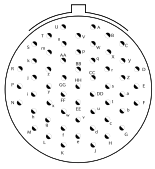
32#20
Service I
S

53



53#20
Service I
S

55



55#20
Service I
S

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

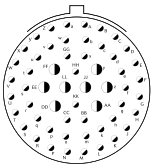
Contact layouts

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

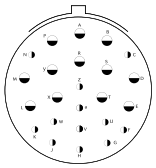
24

04



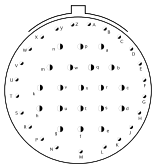
48#20, 8#16
Service I
S

24



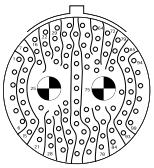
12#16, 12#12
Service II
S

43



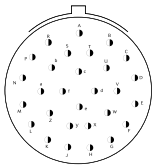
23#20, 20#16
Service I
S

07



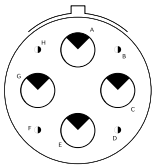
97#22D, 2#8
Service M
S C

29



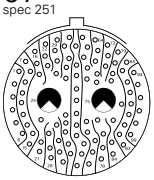
29#16
Service I
S

44



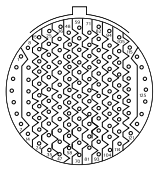
4#16, 4#4
Service I
S P

07 spec 251



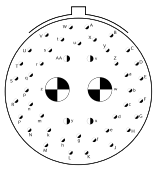
97#22D, 2#8
Service M
S P

35



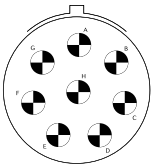
128#22D
Service M
S

46



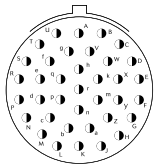
40#20, 4#16,
2#8 Service I
S C

08



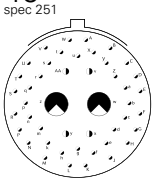
8#8
Service M
C

37



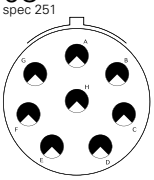
37#16
Service I
S

46 spec 251



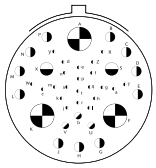
40#20, 4#16,
2#8 Service I
S P

08 spec 251



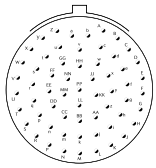
8#8
Service M
P

41



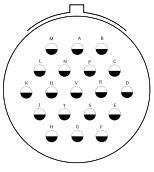
22#22D, 3#20,
11#16, 2#12,
3#8 Service N
S C

61



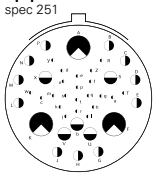
61#20
Service I
S

19



19#12
Service I
S

41 spec 251



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

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 series ultra miniature shell size 01

Technical specifications

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 color indicators
- Scoop proof
- 7 color coded keyway orientations
- Boot termination feature
- PCB option available
- Conductive black zinc or nickel plating

Technical specifications

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

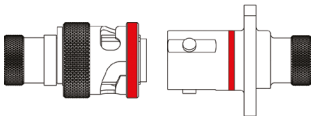
Environmental

Operating temperature
-55°C to +175°C

Sealing mated connectors
IP67 (1 meter for 30 min minimum)

Salt spray
48 hours

Scale 1:1

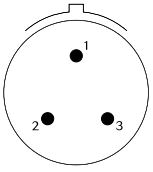


Contact layout - Marking on shell

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

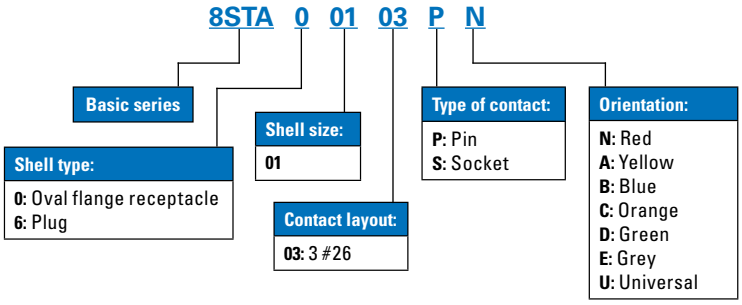
01

03



3#26
Service R

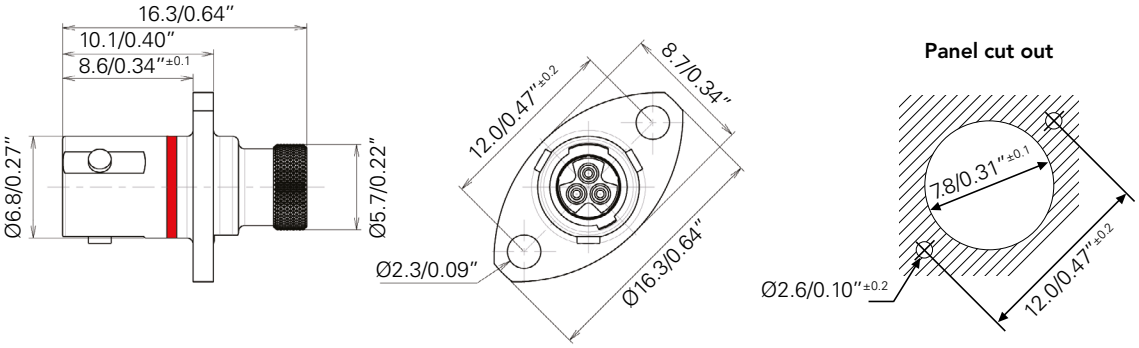
Part numbers



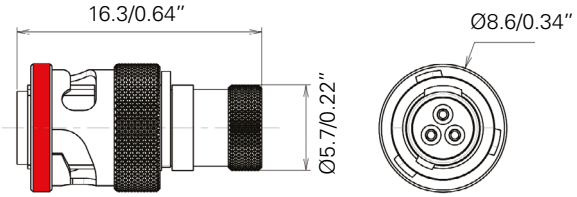
For any other configuration (i.e. clinch nuts, PC tail) please consult us.

Dimensions

Oval flange receptacle

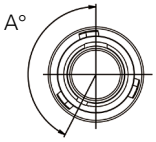


Plug



Orientations

Size 1



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).

8STA series miniature shell sizes 02, 04 & 06

Technical specifications

Description

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

Technical specifications

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 meter for 30 min minimum)

Salt spray
- Aluminum: 48 hours
- Composite: 500 hours

Part numbers

8STA 0 __ 04 05 P N __

Basic series

Shell type:
- **0:** Oval flange receptacle - PCB version available, please see **page 36**
- **1:** In-line receptacle
- **6:** Plug
- **7:** Jam nut receptacle (consult us)

Shell size:
02, 04, 06

Contact layout:
See **page 6 to 11**

Material & Plating:
- **None:** Aluminum conductive black zinc
- **F:** Aluminum nickel
- **X:** Composite without plating (shell size 06 only)

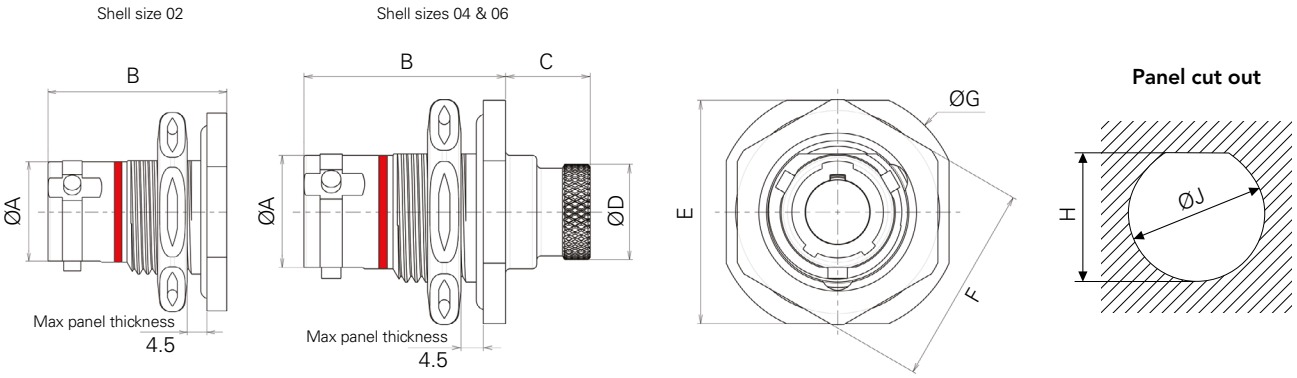
Type of contact:
- **P:** Pin
- **S:** Socket

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 22**
- **528:** Integrated nut on the flange - M2.5 insert (only for shell type 0 and 2) - for more details, please see **page 22**
- **562:** PCB version - for more details, please see **page 36**
- **022:** Fuel immersible version (shell sizes 04 and 06 only) - for more details, please see **page 39**

Dimensions

Jam nut receptacle



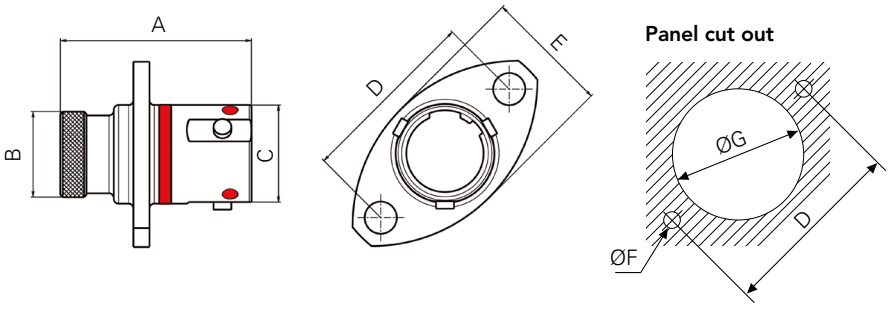
Shell size	ØA Max	B Max	C±0.15	ØD Max	E Max	F Max	ØG Max	H±0.2	ØJ±0.1
02	8.6	16.3 (02-05), 17.6 (02-35)	N/A	N/A	18.2	17	20.5	9.05	9.7
04	10.25	18.3	7.6	8.7	20.2	18.5	22.2	12	12.8
06	11.7	14.25	10.3	10.5	22.25	19.5	24.4	13.7	14.4

Note: All dimensions are in millimeters (mm)

8STA series miniature shell sizes 02, 04 & 06

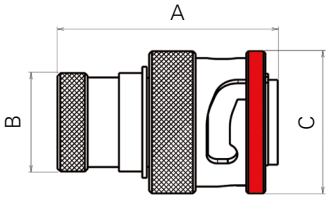
Ordering information

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	Panel tickness (max)	
								Rear mounting	Front mounting
02	17.5	7.2	8.3	15.3	10.7	3.1	9.3	1.5	1.5
02-06	16.7	7.7	8.5	15.3	10.7	3.1	9.3	1.5	1.5
04	18.1	8.5	10.0	16.2	13.2	3.1	12.0	1.0	2.5
06	23.1	10.2	11.55	18.0	14.8	3.1	13.0	1.5	2.5

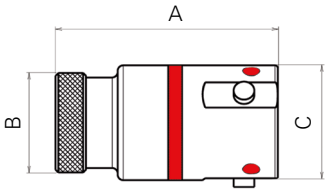
Plug



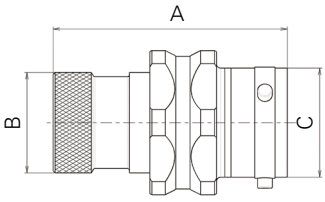
Shell size	A	ØB	ØC
02	17.5	7.2	10.4
02-06	16.7	7.7	10.6
04	18.3±0.2	8.5±0.1	13.4±0.1
06	22.1±0.1	10.25±0.1	15.05±0.2

In-line receptacle

Shell sizes 02 and 04



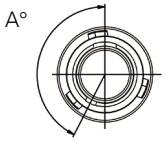
Shell size 06



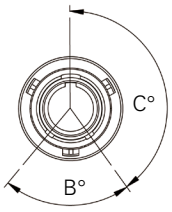
Shell size	A	ØB	ØC
02	17.5	7.2	8.3
02-06	16.7	7.7	10.6
04	18.1±0.2	8.5±0.1	10.0±0.2
06	23.2	10.05	10.8

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 color indicator
- 6 color-coded keyway orientations
- Conductive black zinc or nickel plating

Technical specifications

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 meter for 30 min minimum)

Salt spray
Aluminum: 48 hours

8STA series shell sizes 08 to 24

Ordering information

Part numbers

8STA 0 __ 10 35 P N __

Basic series

Shell type:
0: Oval flange receptacle front or rear mounting - PCB version available, please see **page 44**
1: In-line receptacle
6: Plug
7: Jam nut receptacle (consult us)

Material & Plating:
None: Aluminum black zinc cobalt
F: Aluminum nickel

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

Contact layout:
See **page 6 to 11**

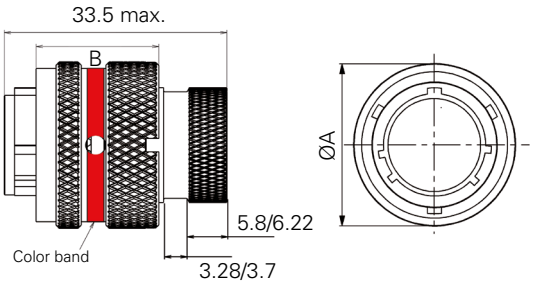
Type of contact:
P: Pin
S: Socket

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 22**
528: Integrated nut on the flange - M2.5 insert (only for shell style 0 & 2) - for more details, please see **page 22**
523: Lighweight In-line receptacle (shell type 1 only)
022: Fuel immersible version - for more details, please see **page 39**

Dimensions

Plug

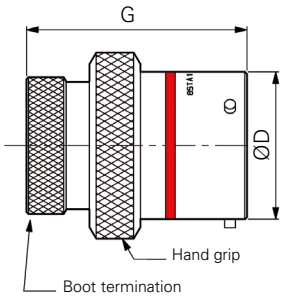


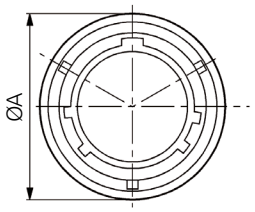
Shell size	ØA max.	B max.
08	18.70	18.55
10	21.50	18.55
12	25.10	18.55
14	29.00	18.55
16	32.20	18.55
18	35.40	18.55
20	38.20	19.30
22	41.30	19.30
24	44.50	19.05

Note: All dimensions are in millimeters (mm)

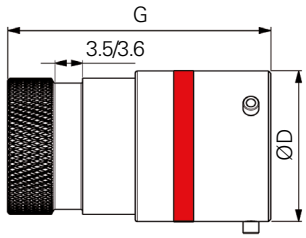
In-line receptacle

Standard version



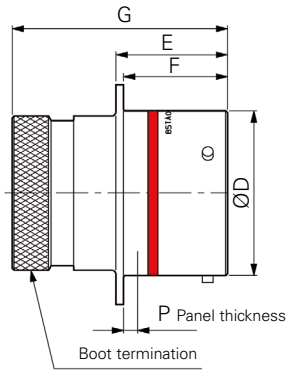


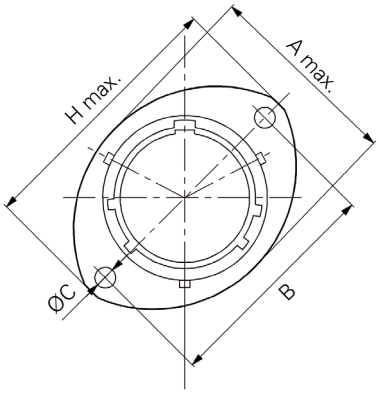
Lightweight version (specification 523)



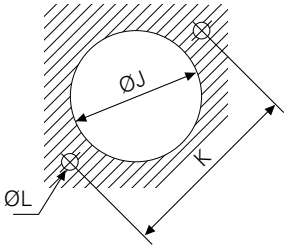
Shell size	8	10	12	14	16	18	20	22	24
ØA max.	17.6	20.7	25.1	28.3	31.4	34.7	38.1	41.2	44.7
ØD $^{+0.20}_{-0.13}$	12	15	19.05	22.22	25.4	28.57	31.75	34.92	38.1
G max.	33.5	33.5	33.5	33.5	33.5	33.5	33.5	33.5	33.5

Oval flange receptacle





Panel cut out



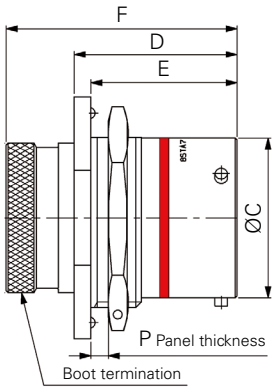
Shell size	A max.	B $^{\pm 0.20}$	ØC $^{0}_{+0.1}$	ØD $^{+0.2}_{-0.13}$	E $^{0}_{+0.15}$	F $^{0}_{-0.13}$	G max.	H max.	P max.	ØJ $^{\pm 0.10}$	K $^{\pm 0.20}$	ØL $^{\pm 0.20}$
08	16.50	21.40	3.20	12.00	17.21	16.05	33.50	27.20	3.00	14.50	21.40	3.60
10	19.50	25.90	3.20	15.00	17.21	16.05	33.50	32.00	3.00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

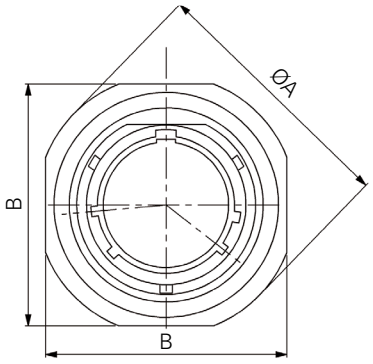
Note: All dimensions are in millimeters (mm)

8STA series shell sizes 08 to 24

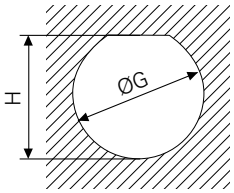
Ordering information

Jam nut receptacle



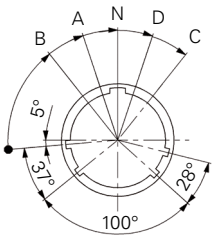


Panel cut out

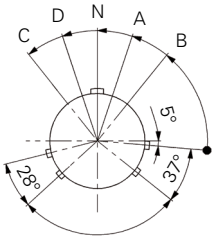


Shell size	ØA ±0.3	B ±0.24	ØC 0 -0.12	D ±0.10	E ±0.24	F ±0.3	P max.	ØG ±0.10	H ±0.20	Tightening torque (mN)
08	26.90	24.10	11.97	25.91	23.24	36.71	3.00	14.50	13.60	4
10	30.15	27.30	14.94	25.91	23.24	36.71	3.00	17.70	16.80	6
12	34.89	32.10	19.01	25.91	23.24	36.71	3.00	22.70	20.90	9
14	38.06	34.92	22.18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

- A #4 contact for a wide range of wire sizes: Size 8, 10, 16, 25 & 35 mm²
- Easy visual wire identification: Color 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 two to transmit signal & power

Technical specifications

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	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 meter for 30 min minimum)

Salt spray
48 hours

8STA series power contacts

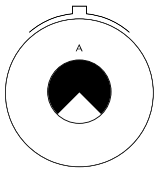
Contact layouts

Contact layouts viewed from front face of male insulator

Contact sizes ◯ #22D ◔ #20 ◑ #16 ◒ #12 ● #8 Power ◥ #4 Power

10

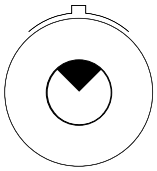
80
spec 251



1#8
Service I

12

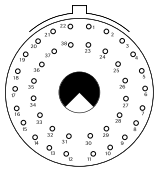
01
spec 261



1#4
Service M

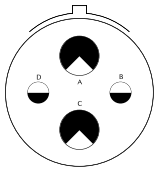
16

02
spec 251



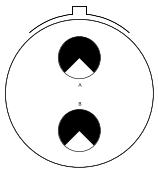
38#22D, 1#8
Service N

22
spec 251



2#12, 2#8
Service M

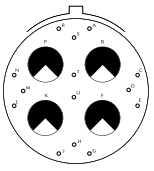
75
spec 251



2#8
Service M

18

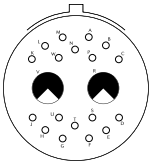
18
spec 251



14#22D, 4#8
Service M

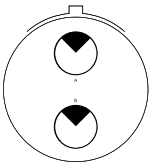
20

20
spec 251



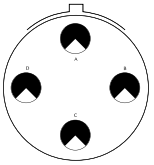
18#20, 2#8
Service M

42



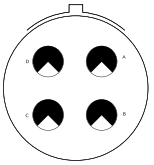
2#4
Service I

48



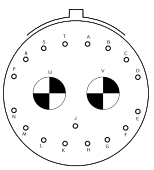
4#8
Service I

75
spec 251



4#8
Service M

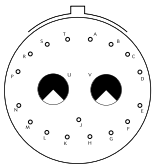
77



17#22D, 2#8
Service M

20

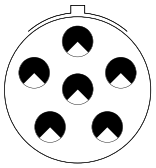
80



17#22D, 2#8
Service M

22

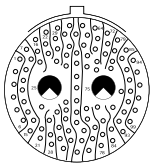
06
spec 251



6#8
Service M

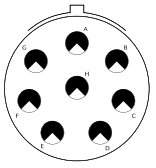
24

07
spec 251



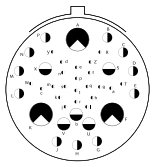
97#22D, 2#8
Service M

08
spec 251



8#8
Service M

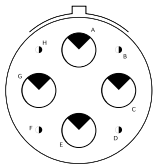
41
spec 251



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

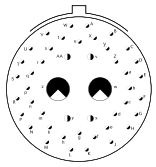
24

44



4#16,
4#4
Service I

46
spec 251



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

Part numbers

8STA 0 12 01 P N 261

Basic series

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
S: Socket

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

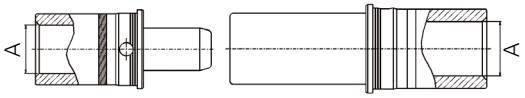
	Wire 16 mm²	Wire 25 mm²	Wire 35 mm²
Designation	**Removable contact**	**Removable contact**	**Non removable contact**
Color band	Red	Blue	Green
Pin contact	8599 7520A 900	8599 7598 900	8599 0313
Socket contact	8599 7521A 900	8599 7599 900	8599 0316
Reducer - wire 8 & 10 mm²	8400 2351A	-	-
Crimping tool	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)	M81969/14-07 (blue)	-

Specific wire dimensions

Power contact #4

Pin contact

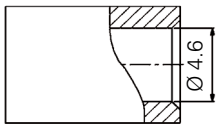
Socket contact



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)

8STA series high density

Technical specifications

Description

- 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 specifications

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
≤10 mΩ

Environmental

Operating temperature
-55°C to +175°C

Sealing mated connectors
IP67 (1 meter for 30 min minimum)

Salt spray
48 hours

Part numbers

8STA 6 12 43 P N

Basic series

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

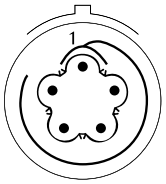
Specification:
None: Standard crimp version
499: Integrated clinch nut on the flange:
- M2 insert (shell type 0 & 2 only for shell sizes 04 & 06)
- M3 insert (shell type 0 & 2 only for shell sizes 08, 10 & 12)

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)

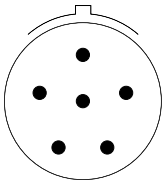
02

05



5#26

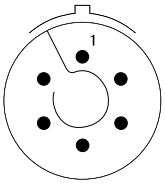
06



6#26

04

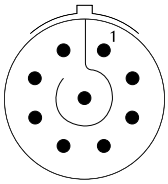
06



6#26

06

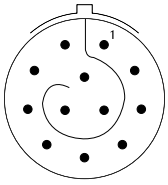
09



9#26

08

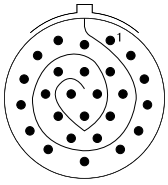
12



12#26

10

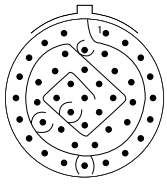
26



26#26

12

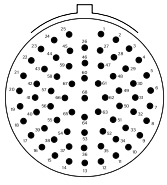
43



43#26

14

68



68#26

8STA series integrated clinch nuts

Technical specifications

Description

- A convenient and time saving feature - weight saving opportunities: elimination of nut plates
- Souriau offering:
  - 12 shell sizes available, from size 02 to 24
  - Available with standard crimp contacts (shell type 0) and PCB contacts (shell type 2)

Technical specifications

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:	60 N
Size 16:	100 N
Size 12:	100 N
Size 8:	110 N
Size 4:	200 N

Electrical

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

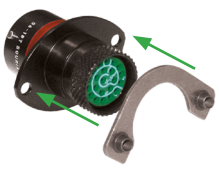
Environmental

Operating temperature
-55°C to +175°C

Sealing mated connectors
IP67 (1 meter 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!

Part numbers

8STA 0 10 35 P N 499

Basic series

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 **page 6 to 11**

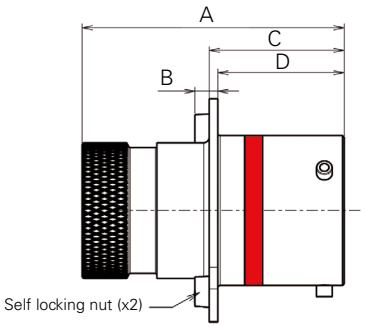
Type of contact:
P: Pin
S: Socket

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

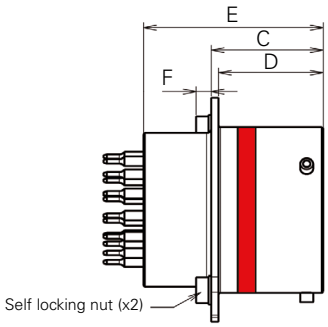
Specification (mandatory):
499: Integrated nut on the flange - M2 insert for sizes 02 to 06 / M3 insert for sizes 08 to 24
528: Integrated nut on the flange - M2.5 insert for sizes 02 to 06

Dimensions

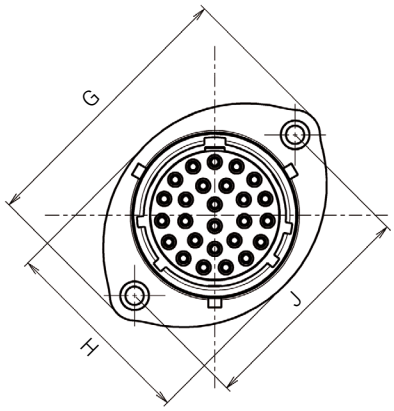
Oval flange receptacle



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	2.05	22.3	13.2	16.4
06	23.25	3.83	12.95	10.95	23.25	2.05	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	33.4	3.32	17.21	16.05	27.65	2.72	33.75	19.50	25.90
12	33.4	3.32	17.21	16.05	27.65	2.72	36.95	24.00	29.10
14	33.4	3.32	17.21	16.05	27.65	2.72	40.35	27.00	32.50
16	33.4	3.32	17.21	16.05	27.65	2.72	42.65	30.30	34.80
18	33.4	3.32	17.21	16.05	27.65	2.72	46.05	33.70	38.20
20	33.4	3.32	17.21	15.29	27.65	2.72	49.45	37.00	41.60
22	33.4	3.32	17.21	15.29	27.65	2.72	52.85	40.40	45.00
24	33.4	3.32	18.20	15.29	27.65	2.72	57.35	43.40	49.50

For other dimensions please see:
Page 18 for standard version sizes 02 to 06
Page 21 for standard version sizes 08 to 24
Page 44 for PC-tail version sizes 02 to 24

Note: All dimensions are in millimeters (mm)

8STA series single hole fixing

Technical specifications

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 specifications

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:	60 N
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

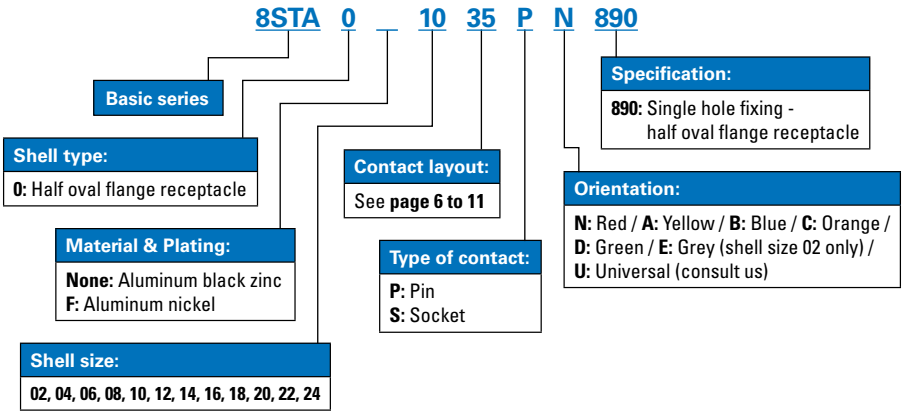
Environmental

Operating temperature
-55°C to +175°C

Sealing mated connectors
IP67 (1 meter for 30 min minimum)

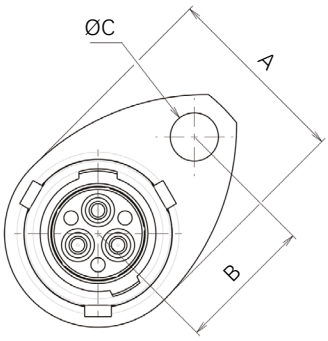
Salt spray
Aluminum nickel: 48 hours
Aluminum conductive black zinc: 48 hours

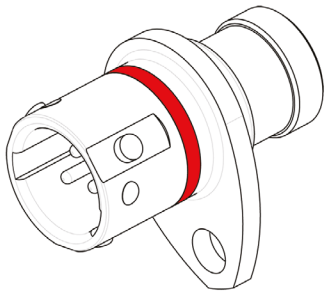
Part numbers



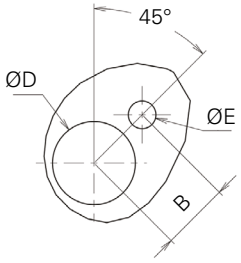
For any other configuration (clinch nuts, PC tail, etc.) please consult us.

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"	2.80/0.11"	2.80/0.11"	3.20/0.13"	3.20/0.13"	3.20/0.13"	3.20/0.13"	3.20/0.13"	3.20/0.13"	3.20/0.13"	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"	3.10/0.12"	3.10/0.12"	3.60/0.14"	3.60/0.14"	3.60/0.14"	3.60/0.14"	3.60/0.14"	3.60/0.14"	3.60/0.14"	3.60/0.14"	4.10/0.16"

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

8STA series quick release for steering boss system

Technical specifications

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 specifications

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: 14.6 mΩ

Insultation resitance
≥ 5000MΩ @ 500Vdc

Contact rating
Size 22D: 5 Amp

Shell continuity
≤10 mΩ

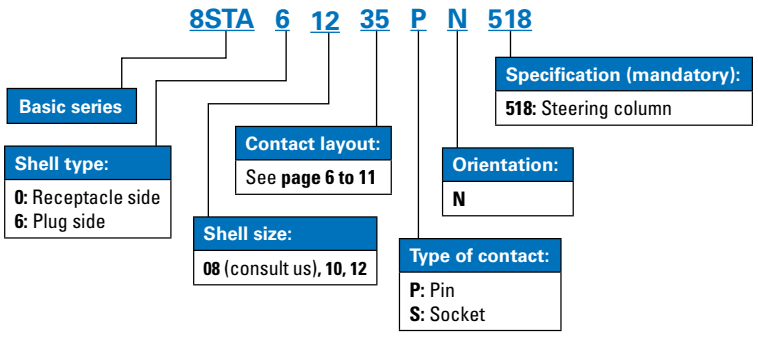
Environmental

Operating temperature
-55°C to +175°C

Sealing mated connectors
IP67 (1 meter for 30 min minimum)

Salt spray
48 hours

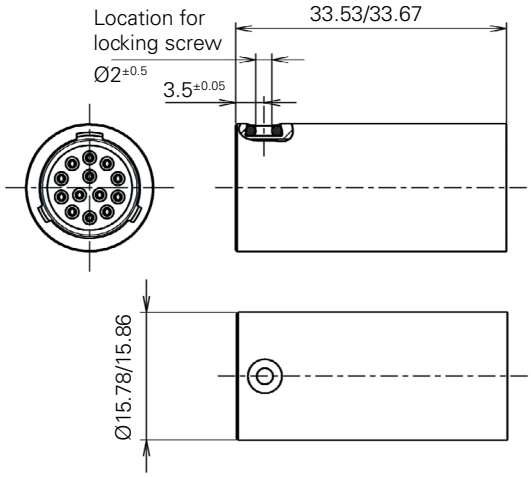
Part numbers



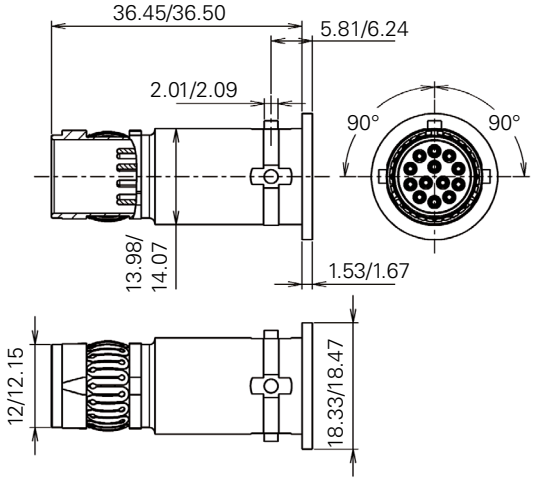
Dimensions

Shell size 10

Female Receptacle

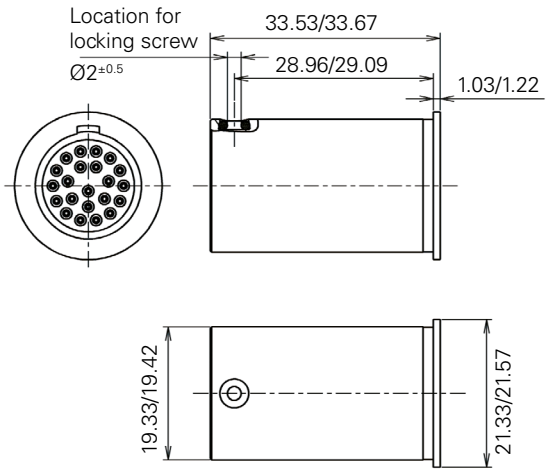


Male Plug

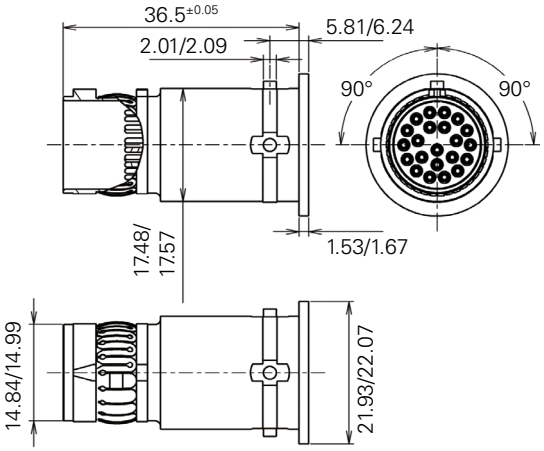


Shell size 12

Female Receptacle

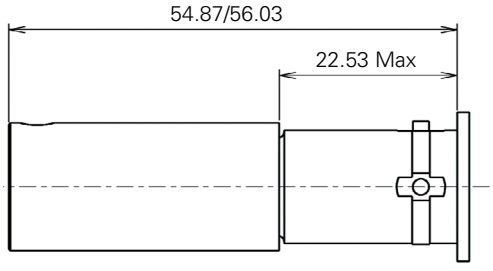


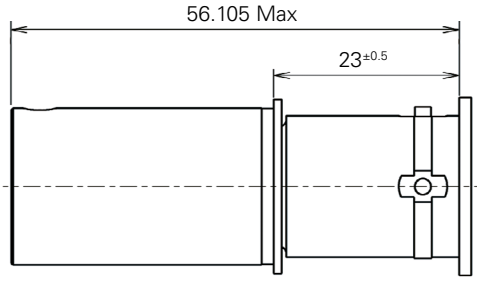
Male Plug



Mounting dimension requirement

Shell size 10





Shell size 12

Note: All dimensions are in millimeters (mm)

Blind mating plug sizes 08 to 24

Technical specifications

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 specifications

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

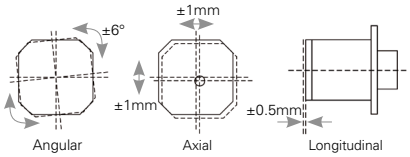
Environmental

Temperature range
-55°C to +175°C

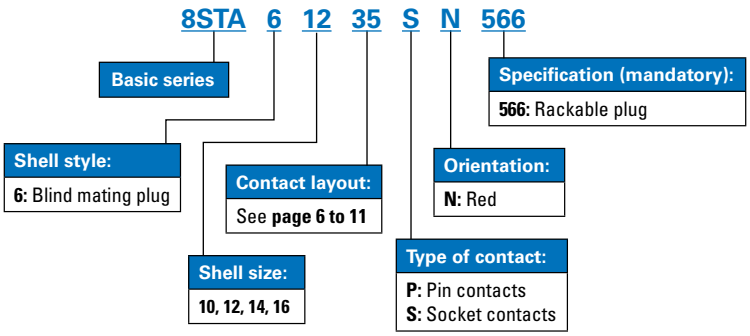
Sealing mated connectors
IP67 (1 meter for 30 min. minimum)

Salt spray:
48 hours

Compensating for misalignment in 3 axes



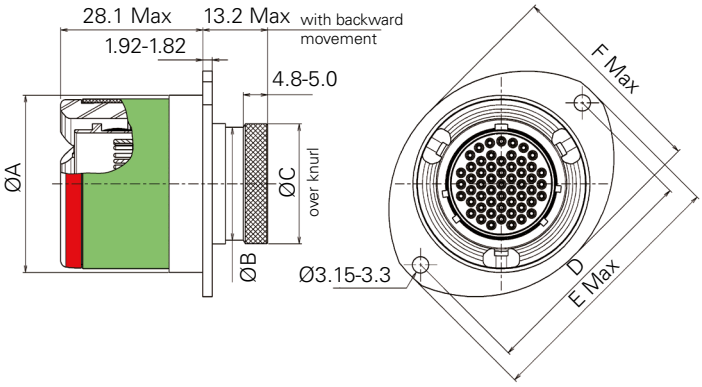
Part numbers



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

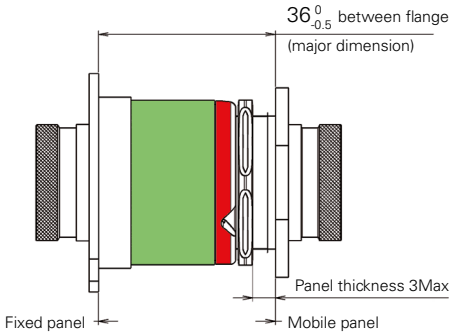
Dimensions

Plug type 6



Mated Connector

(plug type 6 & jam nut receptacle type 7)

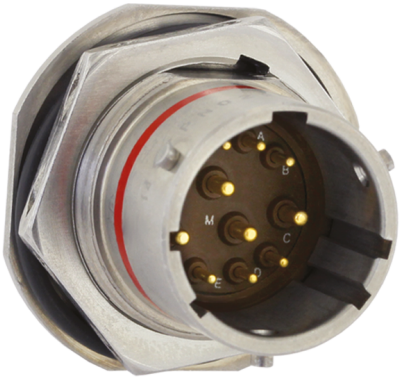


Shell size	ØA +0.3 -0	ØB +0.2 -0	ØC	D +0.4 -0	E	F
10	25.17	12.85	13.72	34.60	41.00	30.30
12	28.35	15.92	17.26	38.00	44.70	33.70
14	31.52	18.90	20.41	41.40	47.90	37.00
16	34.70	22.08	23.60	44.80	51.00	40.40

Note: All dimensions are in millimeters (mm)

8STA series hermetic connectors

Technical specifications



Description

- Bayonet coupling connector
- 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 specifications

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

Insultation 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.cm3/s
(helium gas test)

Part numbers

8STA 1 Y 02 05 P N A73

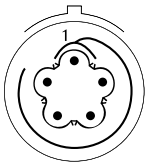
- **Basic series**
- **Shell type:**
  - **1:** Solder flange
  - **7:** Jam nut receptacle
- **Class:**
  - **Y:** Hermetic version
- **Shell size:**
  - **02, 04, 06, 08, 10, 12, 14**
- **Contact layout:**
  - See below for available layouts
- **Type of contact:**
  - **C:** Male PC tail contacts
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

Contact layouts (viewed from front face of male insulator)

● Contact #26 ○ Contact #22D ◪ Contact #20 ◑ Contact #16

02

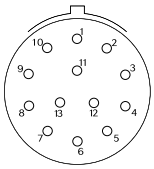
05



5#26
Service R

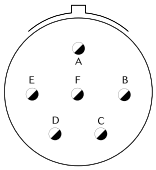
10

35



13 #22D
Service M

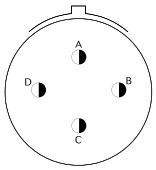
98



6 #20
Service I

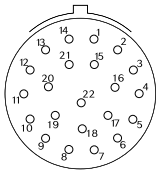
12

04



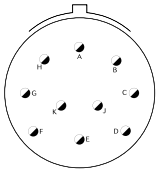
4 #16
Service I

35



22 #22D
Service M

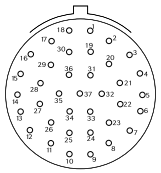
98



10 #20
Service I

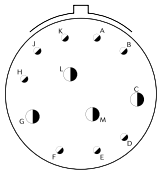
14

35



37 #22D
Service M

97



4 #16, 8 #20
Service I

8STA series hermetic connectors

Ordering informationw

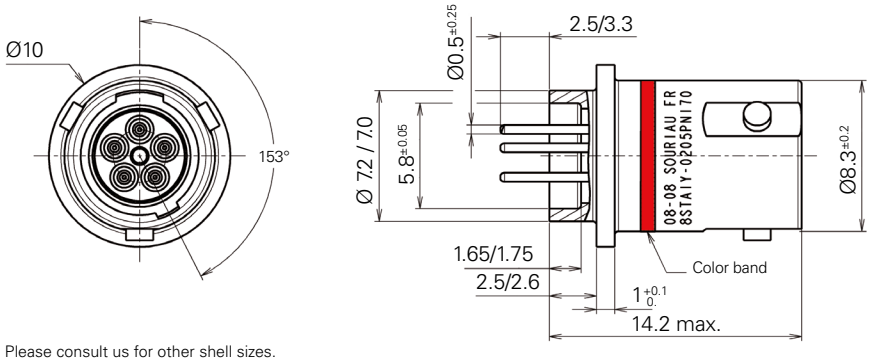
Contact layouts (matrix)

			Number of contacts				
Shell size	**Layout**	**Hermetic 8STA**	**#26**	**#22D**	**#20**	**#16**	**#12**
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		
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

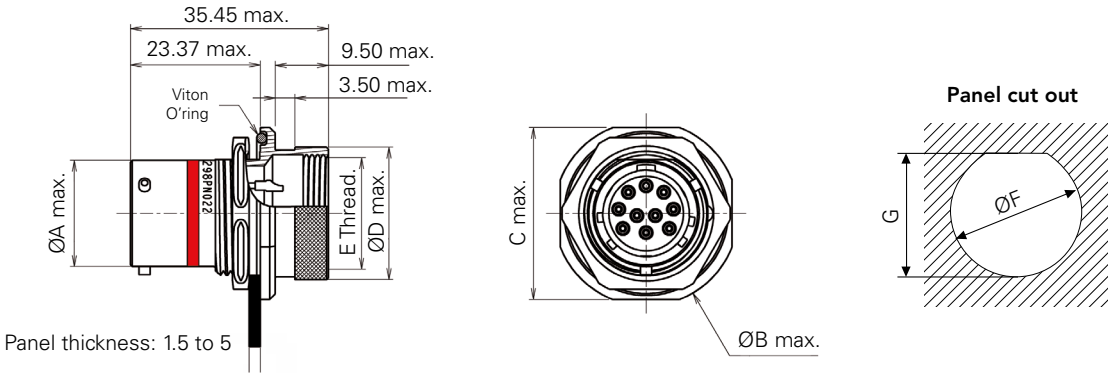


Please consult us for other shell sizes.

Note: All dimensions are in millimeters (mm)

Dimensions

Jam nut receptacle - sizes 10 to 14



						Panel cut out	
Shell size	**ø A max.**	**ø B max.**	**C max.**	**ø D max.**	**E Thread**	**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	Jam nut	52
14	Jam nut	63

Note: All dimensions are in millimeters (mm)

8STA series hermetic feedthrough

Technical specifications

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.cm3/s

Technical specifications

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)

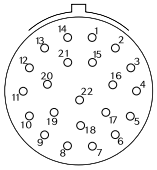
Salt spray
48 hours

Hermeticity
1.10-7cm3/s

Contact layouts (viewed from front face of male insulator)

12

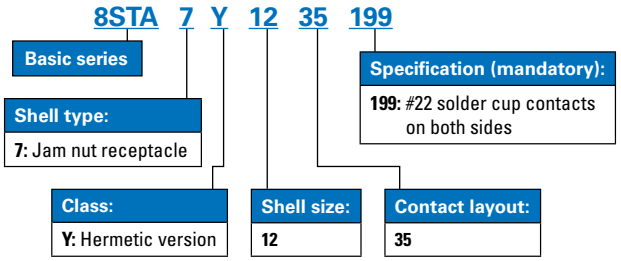
35



22#22D
Service M

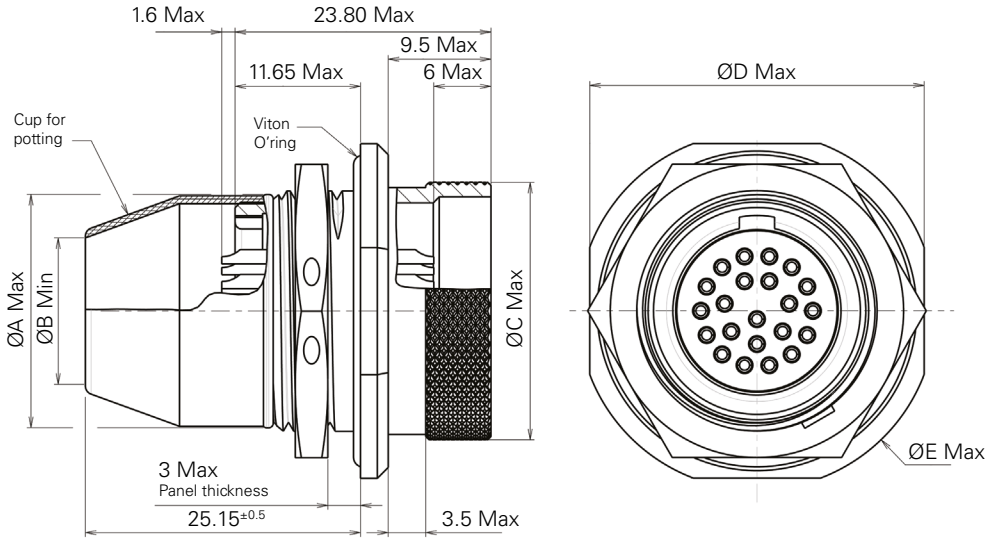
Consult us for other layouts or shell sizes.

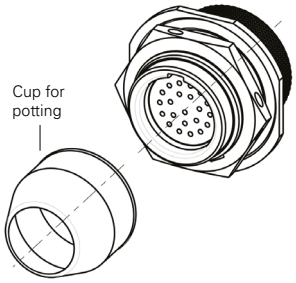
Part numbers



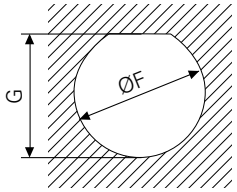
Note: Delivery will contain the cup for potting and the jam nut receptacle not mounted.
Consult us for other layouts or shell sizes.

Dimension





Panel cut-out

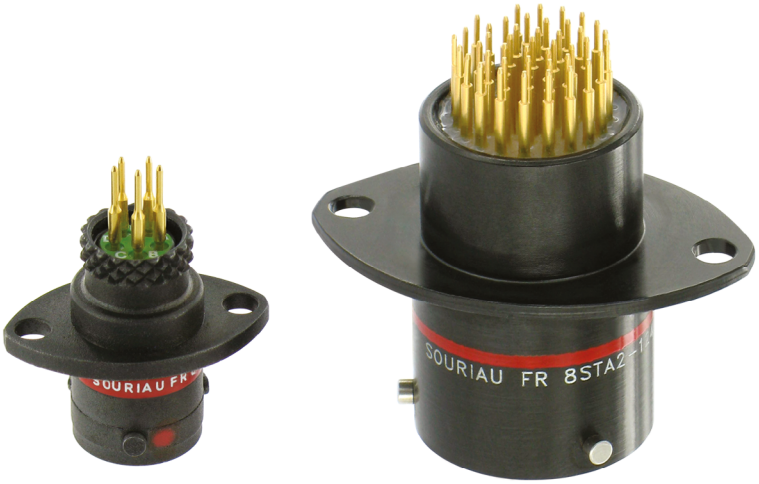


Size	A	B	C	D	E	F	G
12	21.70	12.90	23.70	30.85	33.00	22.70	20.90

Note: All dimensions are in millimeters (mm)

8STA series PC tail contacts

Technical specifications



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 color coded keyway orientations

Technical specifications

Mechanical

Shell
Aluminium

Shell plating
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 meter for 30 min minimum)

Salt spray
48 hours

Part numbers

8STA 2 12 35 P N _

Basic series

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 **page 6 to 11**

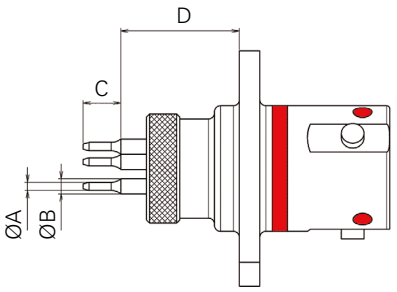
Type of contact:
P: Pin
S: Socket

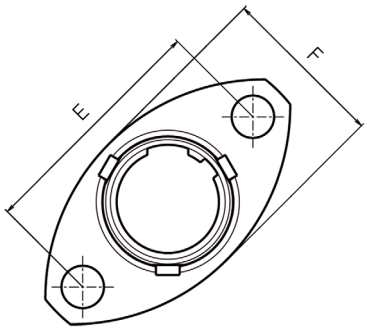
Orientation:
N: Red, **A:** Yellow, **B:** Blue, **C:** Orange, **D:** Green, **E:** Grey (shell size 02 only)

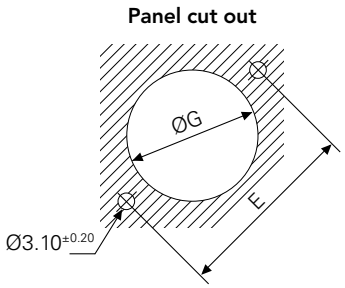
Specification:
None: Standard version
499: Integrated clinch nut on flange (M2 for sizes 02, 04 & 06; M3 for sizes 08 to 24)
528: Integrated clinch nut on flange (M2.5 for sizes 02, 04 & 06)
571: Specific PC tail (length = 4.6mm) - only available for sizes 08 to 24 **(see next page)**
625: Specific PC 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

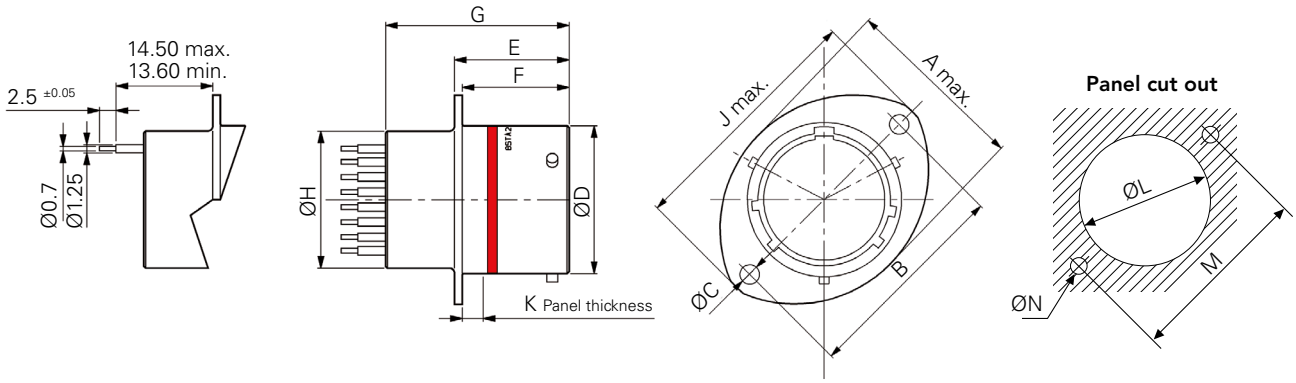
Shell size	C Max	D max	E	F Max	ØG
02	2.5	9.5	$15.3^{\pm 0.2}$	10.7	$9.3^{\pm 0.1}$
04	2.5	8.7	$16.2^{\pm 0.2}$	13.2	$12.0^{\pm 0.1}$
06	4.1	14.7	$18.0^{\pm 0.2}$	14.8	$13.0^{\pm 0.1}$

Note: All dimensions are in millimeters (mm)

8STA series PC tail contacts

Ordering information

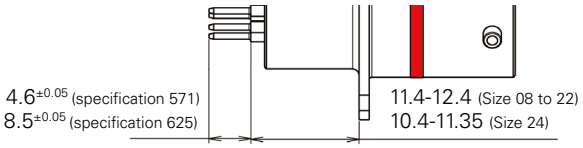
Shell sizes 08 to 24



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	3.20	14.97	17.21	16.05	27.65	13.90	32.00	3.00	17.40	25.90	3.60
12	24.00	29.10	3.20	19.05	17.21	16.05	27.65	17.35	35.20	3.00	21.90	29.10	3.60
14	26.90	32.50	3.20	22.22	17.21	16.05	27.65	20.50	38.40	3.00	25.00	32.50	3.60
16	30.30	34.80	3.20	25.40	17.21	16.05	27.65	23.70	41.00	3.00	28.20	34.80	3.60
18	33.70	38.20	3.20	28.57	17.21	16.05	27.65	26.91	44.70	3.00	31.40	38.20	3.60
20	37.00	41.60	3.20	31.77	17.21	15.29	27.65	30.11	47.80	3.00	34.60	41.60	3.60
22	40.40	45.00	3.20	34.90	17.21	15.29	27.65	33.20	51.00	3.00	37.60	45.00	3.60
24	43.40	49.50	3.77	38.10	18.20	15.29	27.65	36.40	55.80	3.00	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

- 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 specifications

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 meter for 30 min minimum)

Salt spray
48 hours

Resistance to fluids
Withstands most motorsport fluids

8STA/8TA series fuel immersible

Ordering information

Part numbers

8STA 0 08 35 P N 022
8TA 0 08 35 P N 022

Basic series

Shell type:
0: Oval flange receptacle
1: In-line receptacle
6: Plug
7: Jam nut receptacle

Shell size:
02, 04, 08, 10, 12, 14, 16

Contact layout:
See below for available layouts

Type of contact:
P: Pin contacts
S: Socket contacts

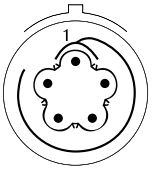
Orientation:
N: Red
A: Yellow
D: Green

Specification (mandatory):
022: Fuel immersible version

Contact layouts (viewed from front face of male insulator)

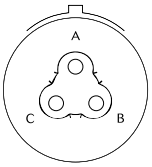
02

05



5#26
Service R

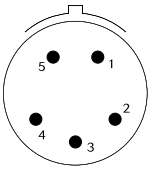
35



3#22D
Service S

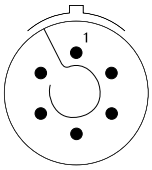
04

05



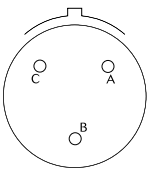
5 #26
Service R

06



6 #26
Service R

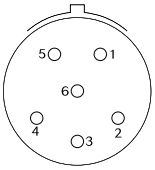
35



3 #22D
Service S

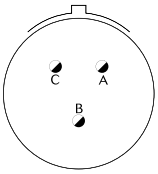
08

35



6 #22D
Service M

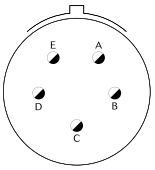
98



3 #20
Service I

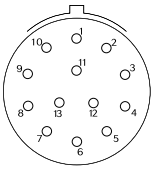
10

05



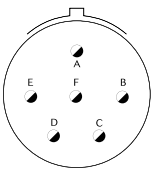
5 #20
Service I

35



13 #22D
Service M

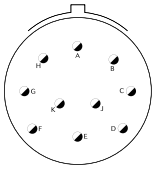
98



6 #20
Service I

12

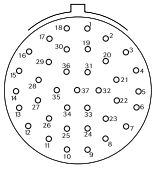
98



10 #20
Service I

14

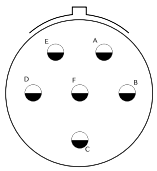
35



37 #22D
Service M

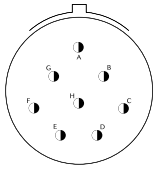
16

06



6#12
Service I

08



8#16
Service II

Description

- Rugged aluminium body to ensure long service life in the harshest environment
- Compact low profile
- 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 specifications

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

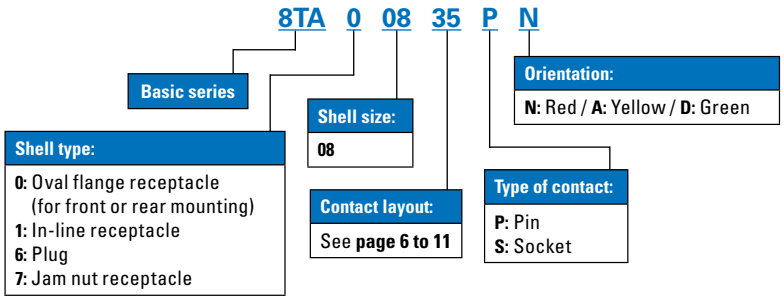
Sealing mated connectors
IP67 (1 meter for 30 min minimum)

Salt spray
48 hours

8TA series compact low profile

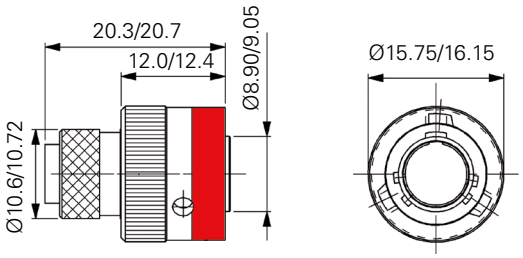
Ordering information

Part numbers

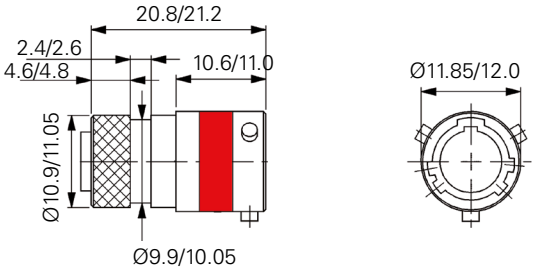


Dimensions

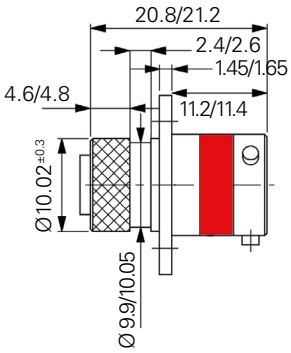
Plug

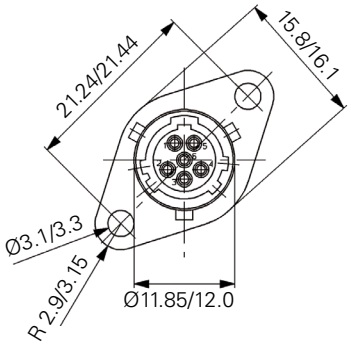


In-line receptacle

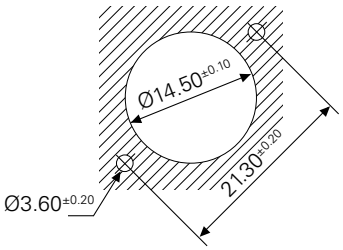


Oval flange receptacle



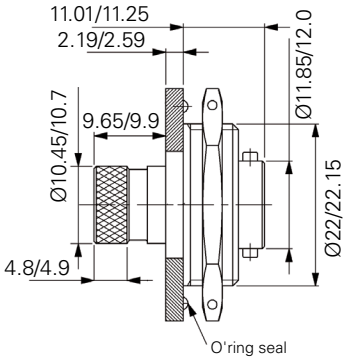


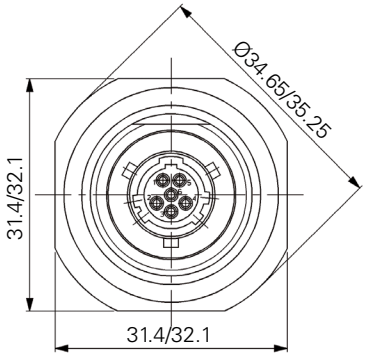
Panel cut out



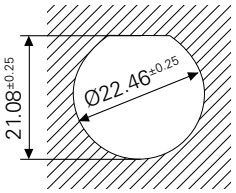
Note: All dimensions are in millimeters (mm)

Jam nut receptacle

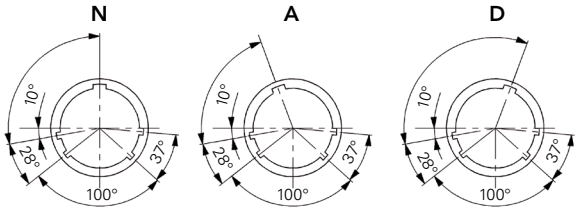




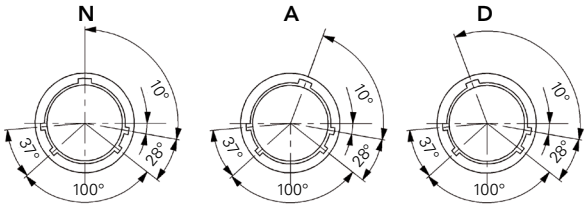
Panel cut out



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)

Contacts

Crimp contacts

Series	Contact size	Shell size & layout	Contact type	Contact Ø max.	Part numbers	Admissible wire section mm² Min.	mm² Max.	AWG Min.	AWG Max.	External Ø over insulation (mm) Min.	External Ø over insulation (mm) 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	0.50	8593 0999 A	0.055	0.215	30	24	0.60	0.83
		Shell sizes 08 to 24	Pin	0.50	8599-0297	0.055	0.215	30	24	0.60	0.83
			Socket	0.50	8599-0298	0.055	0.215	30	24	0.60	0.83
		04-05	Pin	0.50	8593-0947 A	0.055	0.215	30	24	0.60	0.83
			Socket	0.50	8593-0948 A	0.055	0.215	30	24	0.60	0.83
		02-05; 04-06; 06-09	Pin	0.50	8599-1001	0.055	0.215	30	24	0.60	0.83
			Socket	0.50	8599-1002	0.055	0.215	30	24	0.60	0.83
		01-03; 02-06	Pin	0.50	8599-0297	0.055	0.215	30	24	0.60	0.83
			Socket	0.50	8593-2516A	0.055	0.215	30	24	0.60	0.83
	#22D Signal contact	Shell sizes 08 to 24	Pin	0.76	8599-0702 900	0.090	0.380	28	22	0.76	1.37
			Socket	0.76	8599-0706 900	0.090	0.380	28	22	0.76	1.37
		02-35; 04-35; 06-35	Pin	0.76	8599-0702 900	0.090	0.380	28	22	0.71	1.37
			Socket	0.76	8599-0710 900	0.090	0.380	28	22	0.71	1.37
	#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	1.00	8599-0707 900	0.215	0.600	24	20	1.02	2.11
	#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	1.60	8599-0708 900	0.600	1.340	20	16	1.65	2.77
	#16 Coaxial contact	Shell sizes 08 to 24	Pin	1.60	M39029/76 424	RG 174; RG 179; RG 316				1.65	2.60
			Socket	1.60	M39029/77 428	RG 174; RG 179; RG 316				1.65	2.60
	#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	2.40	8599-0709 900	1.910	3.180	14	12	2.46	3.61
	#12 Coaxial contact	Shell sizes 08 to 24	Pin	2.40	M39029/102 558	RG 174; RG 179; RG 316				2.40	2.60
			Socket	2.40	M39029/103 559	RG 174; RG 179; RG 316				2.40	2.60
	#08 Power contact	Shell sizes 08 to 24	Pin	3.64	8599-7580	-	8.980	-	8	4.50	6.50
			Socket	3.64	8599-7581	-	8.980	-	8	4.50	6.50
			Boot	3.64	8599-4542	-	8.980	-	8	4.50	6.50
			Reductor*	3.64	8599-7645	-	8.980	-	8	4.50	6.50
	#08 Coaxial contact	Shell sizes 08 to 24	Pin	3.64	M39029/59 366	RG 188A/U	RG 188A/U	RG 188A/U	RG 188A/U	-	2.80
			Socket	3.64	M39029/60 367	RG 188A/U	RG 188A/U	RG 188A/U	RG 188A/U	-	2.80
			Boot	3.64	8590-4571	RG 188A/U	RG 188A/U	RG 188A/U	RG 188A/U	-	2.80
	#08 Triaxial contact	Shell sizes 08 to 24	Pin	3.64	M39029/90-529	MIL-C17/176 00002; FILECA F2703/14 RAYCHEM CHEMINAX 10612; FILOTEX M 17/176 00002				3.15	3.40
			Socket	3.64	M39029/91-530					3.15	3.40
			Boot	3.64	8590-4571					3.15	3.40
	#04 Power contact (see page 25)	Shell sizes 08 to 24	Pin	5.75	8599-7520A 900	7	10	According to wire used			
			Socket	5.75	8599-7521A 900	7	10	According to wire used			
			Boot	5.75	8599-4593	7	10	According to wire used			
			Reductor**	5.75	8400-2351A	7	10	According to wire used			
			Pin	5.75	8599-7520A 900	4	16	According to wire used			
			Socket	5.75	8599-7521A 900	4	16	According to wire used			
			Boot	5.75	8599-4594	4	16	According to wire used			
8TA Series	**#22D Signal contact**	08-35	Pin	0.76	8599-0702 900	0.090	0.380	28	22	0.71	1.37
			Socket	0.76	8599-0710 900	0.090	0.380	28	22	0.71	1.37
	#20 Signal contact	08-98	Pin	1.00	8599-0703 SA	0.215	0.600	24	20	1.02	2.11
			Socket	1.00	8599-0711 900	0.215	0.600	24	20	1.02	2.11

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

Note: All dimensions are in millimeters (mm)

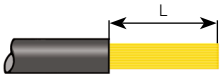
PC tail contacts

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

Wiring instruction

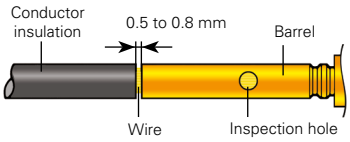
Cable preparation and wire stripping

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

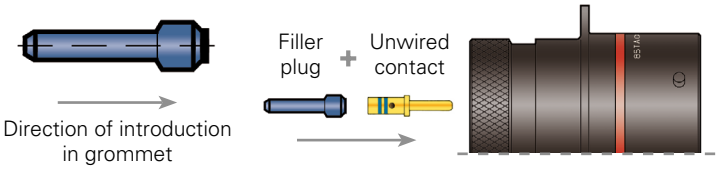
8STA/8TA series

Filler plugs & crimping tools

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	Yellow



Recommended tooling

Crimp contacts

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

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

Crimp contacts

8STA Series size 08 to 24

		Plier M22520/1-01	Plier M22520/2-01 (SOURIAU 8476-01)	Plier M300BT	Pneumatic plier M22520/23-01	
Contact size	**Contact type**	**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	M22520/1-04	M22520/2-10	-	-	-
#16	Pin	M22520/1-04	-	-	-	-
	Socket	M22520/1-04	-	-	-	-
#12	Pin	M22520/1-04	-	-	-	-
	Socket	M22520/1-04	-	-	-	-
#8	Pin	-	-	SP 593	M22520/23-02	8599-9601
	Socket	-	-	SP 593	M22520/23-02	8599-9601
#4	Pin	-	-	-	M22520/23-04	M22520/23-11
	Socket	-	-	-	M22520/23-04	M22520/23-11

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	White
#8		Plastic	M81969/14-06	-	-	Red
		Metallic	-	8660 197	-	-
#4		Plastic	M81969/14-07	-	-	Blue
		Metallic	-	8533 8175	-	-

Boots (recommended)

8STA Series

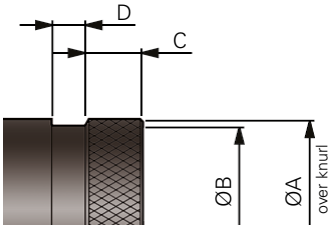
Shell size	Straight boot		90° boot	
	Raychem	Hellerman	Raychem	Hellerman
01	-	1038-4-G	-	1183-4-G
02	203W301-25-G02	1037-4-G	223W601-25	1182-4-G
04	204W221-25-G03	1037-4-G	224W221-25-G03	1182-4-G
06	204W221	1030-4-G	224W221	1181-4-G
08	202K121	152-42-G	222K121	1152-4-G
10	202K132	152-42-G	222K132	1152-4-G
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	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
D	2.30	2.30	2.30	2.30	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	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, except 02-06	8STA802A	10.60	13.20	80
04	8STA804A	12.20	13.80	80
06-05	8STA806A	15.25	15.50	80
06-09, 06-35	8STA8F06A	15.25	15.50	80
08	8STA808A	17.50	27.44	128
10	8STA810A	20.50	27.44	128
12	8STA812A	24.50	27.44	140
14	8STA814A	27.50	27.44	140
16	8STA816A	30.90	27.44	140
18	8STA818A	34.00	27.44	140
20	8STA820A	37.20	27.44	153
22	8STA822A	40.40	27.44	153
24	8STA824A	43.50	27.44	153

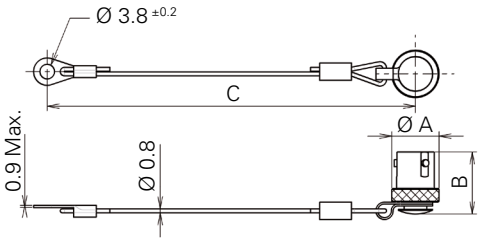
Receptacle caps

Cord material: Nylon

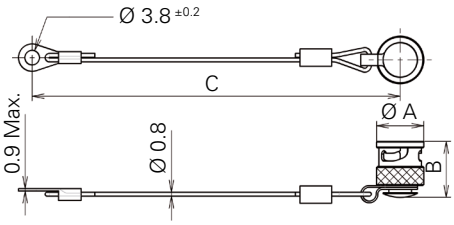
Cap plating: Conductive black zinc

Shell size & Layout	Part number	Ø A Max.	B Max.	C ±5
02, except 02-06	8STA902A	10.60	14.30	80
04	8STA904A	13.60	15.50	80
06-05	8STA906A	15.25	15.50	80
06-09, 06-35	8STA9F06A	15.25	15.50	80
08	8STA908A	18.90	21	128
10	8STA910A	21.90	21	128
12	8STA912A	26.20	21	140
14	8STA914A	29.40	21	140
16	8STA916A	32.60	22	140
18	8STA918A	35.40	22	140
20	8STA920A	38.90	22	153
22	8STA922A	42.10	22	153
24	8STA924A	45.20	23	153

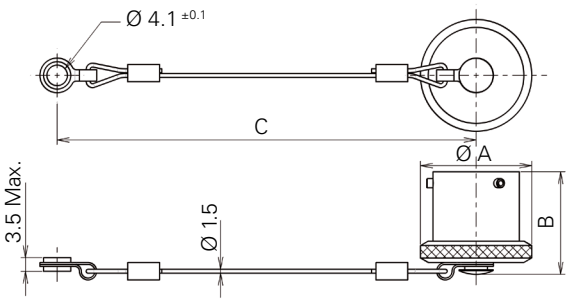
Size 02 to 06



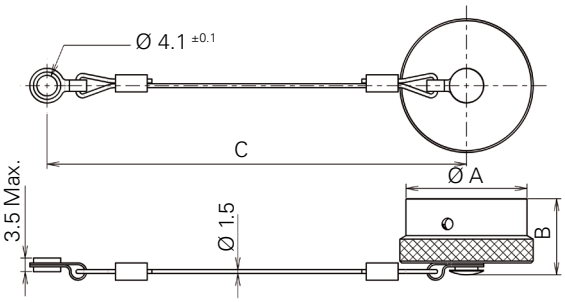
Size 02 to 06



Size 08 to 24



Size 08 to 24

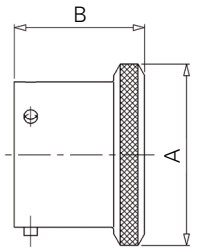


Note: All dimensions are in millimeters (mm)

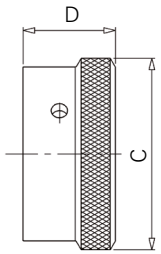
Metal protective caps without lanyard

Shell size & layout	Part numbers		Dimensions			
	Plug cap	Recep. cap	ØA Max.	B Max.	ØC Max.	D Max.
02, except 02-06	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	21.00	21.80	14.20
12	8STA812	8STA912	24.50	21.00	26.10	14.20
14	8STA814	8STA914	27.70	21.00	29.30	14.20
16	8STA816	8STA916	30.90	21.00	32.50	15.00
18	8STA818	8STA918	34.00	21.00	35.30	15.00
20	8STA820	8STA920	37.20	21.00	38.80	15.00
22	8STA822	8STA922	40.40	21.00	42.00	15.00
24	8STA824	8STA924	43.50	21.00	45.10	15.85

Plug cap Type 8



Receptacle cap Type 9



Nut plates

Nut plates are available for all 8STA sizes.
Designed for oval flange receptacles with two holes, specially made for the motorsport market.

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

Gaskets

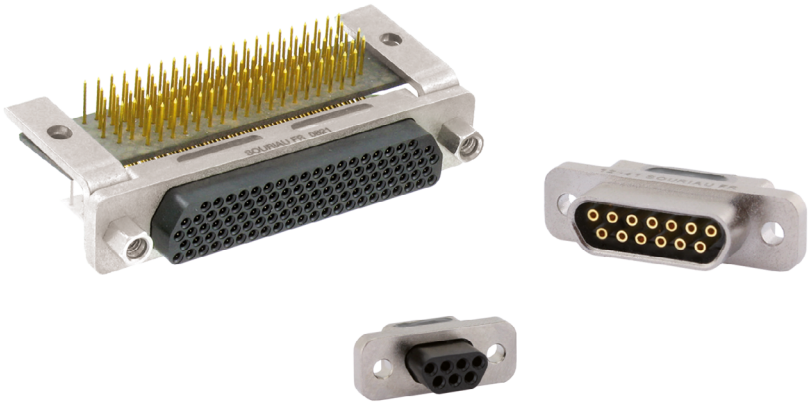
Gaskets are available for all 8STA sizes.
Available in standard version (liquid silicone rubber) and fuel tank version (fluorel).

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)

microComp® series

Technical specifications



Description

- Crimp removable contacts AWG 24 to 28
- High density layouts from 7 to 104 ways
- High vibration and shock withstanding
- Shell in composite and aluminium: very light and non magnetic

Technical specifications

Mechanical

Shell
Composite
(glass fiber reinforced, material for maximum mechanical resistance)
Aluminum

Shell plating
10µ Ni over Cu

Contact
Copper alloy

Contact plating
1.27 µm (50 µin) Au according to Type 2, Grade C of MIL-DTL-45204

Insulator
Thermoplastic

Mounting accessories (clips, jackscrews and jackposts)
Stainless steel, passivated per QQ-P-35

Grommet and seal
Silicone rubber

Drilled bar
Thermoplastic

Endurance/Durability
500 mating/unmating operations

Contact retention in insert
15 N

Vibration
Random: 44g
Sine: 20g

Shock
50g

Electrical

Contact size
#26

Contact pitch
2 mm

Current rating
2.5 Amps

Dielectric withstanding voltage
Sea level: 600 Vrms
70.000 feet: 200 Vrms

Insulation resistance
5,000 MΩ

Low level contact resistance
6 mΩ

Rated current contact resistance
<5 mΩ

Admissible wire gauge
AWG 24 to 28

Shielding effectiveness
> 60dB attenuation
from 1 to 500 MHz

Shell to shell continuity
Composite version: < 2mΩ
Aluminum version: < 2mΩ

Environmental

Operating temperature
-55°C to +175°C

Storage temperature range
-65°C to +125°C

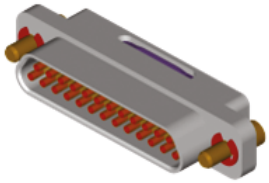
Soldering temperature
+260°C

Salt spray (corrosion)
Composite shell: 2,000 hrs
Aluminum shell: 48 hrs

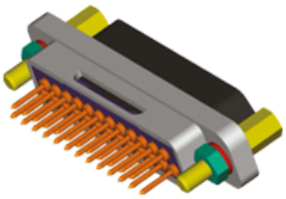
Flammability
UL 94V-0 (self-extinguishing materials)

RoHS compliant

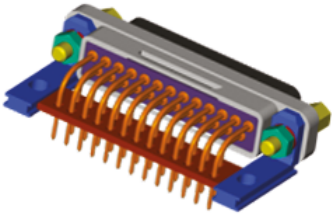
Product range



Crimp version



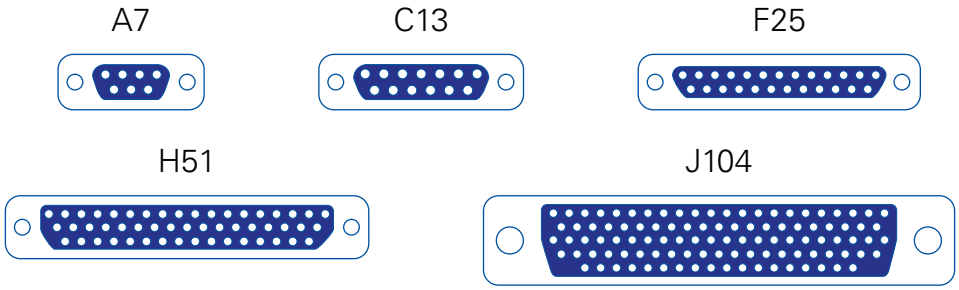
Straight PCB version



90° PCB version

Available layouts

Scale 1:1



Part numbers

8MC N F25 P

Part Number

Shell material:
A: Aluminum
None: Composite

Plating:
N: Electroless nickel plating
None: Without plating

Sealing:
E: Sealed version
- *for crimp pin contacts, sealing = grommet*
- *for crimp socket contacts, sealing = grommet + interfacial seal*
- *for PCB contacts = non standard, please consult us*

T: Sealed version, interfacial seal only
- *interfacial seal is always on female connector with socket contacts*

None: Without sealing

Shell size & Contact layout:
A7: 7 ways
C13: 13 ways
F25: 25 ways
H51: 51 ways
J104: 104 ways

Contact type:
P: Pin contacts for male connector
S: Socket contacts for female connector

Termination code:
L: Delivered without contacts
011: Crimp contacts for wire AWG 26 & 28
011B: Crimp contacts for wire AWG 24 & 26
OL3: Straight PCB contacts
1AON: 90° bent PCB male contacts, without bracket, with removable drilled bar
1A7N: 90° bent PCB male contacts, with bracket, with removable drilled bar and standard jackpost

Insertion/extraction tool 8MCIET is always included with -S011, -S011B, -P011B and -P011 versions, but not with -L versions.
Termination codes -011, -011B and -L are not marked on the connector (only for order). Jackscrews kits are never included.

For more information contact us:
eaton.com/interconnect-support

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March 2023