

8STA size 06-35

Circular miniature connector

Souriau has extended the 8STA connector range with the launch of a shell size 06 connector available with either a composite or an aluminium shell

Description

- ? Small size connector (shell size 06) with 5 contacts size 22, suitable for sensor connections in limited space
- ? 2 shell materials available:
 - ⊘ Composite, providing a light solution (5.24g for a set, contacts included)
 - ⊘ Aluminium, where additional mechanical strength is required
- ? 3 types of receptacle available
 - ⊘ Oval shaped flange receptacle
 - ⊘ In line receptacle
 - ⊘ Oval shaped receptacle with PCB contacts
- ? Share the design and performance of the race proven 8STA connector range as successfully used in F1, WRC , IRL, CART and MotoGP



Technical features

Mechanical

- ? Shell
 - Aluminium alloy, black conductive plated
 - Fiber glass loaded plastic, without plating
- ? Insulator: Thermoplastic
- ? Grommet and seal: Silicone elastomer
- ? Contact: Copper alloy, gold plated
- ? Endurance: 500 mating/unmating operations
- ? Shock: 300g for 3 ms and MIL-S-901 grade A
- ? Vibration: 147m/s², 10 to 2000 Hz
- ? Flash fire: > 2mn at 600°C
- ? Contact retention: 45N

Electrical

- ? Test voltage: 1300 Vrms
- ? Contact rating: 5A
- ? Shell continuity: <60mOhm (for aluminium shell only)
- ? Insulation resistance: >5000 MOhm (at 500 Vdc)
- ? Contact resistance: <14.6 mOhm

Environmental

- ? Temperature range: -55°C +175°C
- ? Sealing, mated connector: IP67
- ? Salt spray: 48 hours (aluminium)
500 hours (composite)
- ? Resistance to fluids:
 - ⊘ Lubricant (oil): Motul 300 competition
 - ⊘ Unleaded petrol (SP95)
 - ⊘ Motor car brake fluid: Lockheed DOT5

Ordering information (The contacts have to be ordered separately)

Basic series	8STA	0	X	04	35	P	N
Shell style	0: Oval flange receptacle; 1: In line receptacle; 2: Oval flange receptacle with PCB contact; 6: Plug						
Shell Material	X: composite; F: Aluminium (receptacle 0, 1 and 2); P: Aluminium version (plug)						
Shell size	06						
Contact layout	35: 5 contacts size 22						
Type of contacts	P: Male; S: Female						
Orientations	N:red; A: Yellow; B: Blue; C: Orange; D: Green; U: none						

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Contacts

Contact size	Contact type	Contact diameter (mm)	Admissible wire section				External dia. over insulation (mm)		Part number
			AWG		mm ²		Min.	Max.	
			Min.	Max.	Min.	Max.			
22D	Male Female	0.76	28	22	0.095	0.38	0.71	1.37	8599-0702 8599-0710

Crimp tooling

Contact size	Wire size		Type	Locator part number		Plier part number	
	mm ²	AWG		Spec.	Souriau	Spec.	Souriau
22D	0.38	22	Male	M22520/2-09	8476-09	M22520/2-01	8476-01
	0.24	24					
	0.15	26	Female	M22520/2-06	8476-06		
	0.095	28					

Insertion and extraction of wired contacts

Contact size	Part number		Colour	
	Spec.	Souriau	Insertion side	Extraction side
22D	M81969/14-01	M81969/14-01	Green	White

Filler plugs

Contact size	Part number		Colour
	Spec.	Souriau	
22D	MS27488-22	8660-212	Black

Protective caps

Plug	Receptacle
8STA8F06	8STA9F06