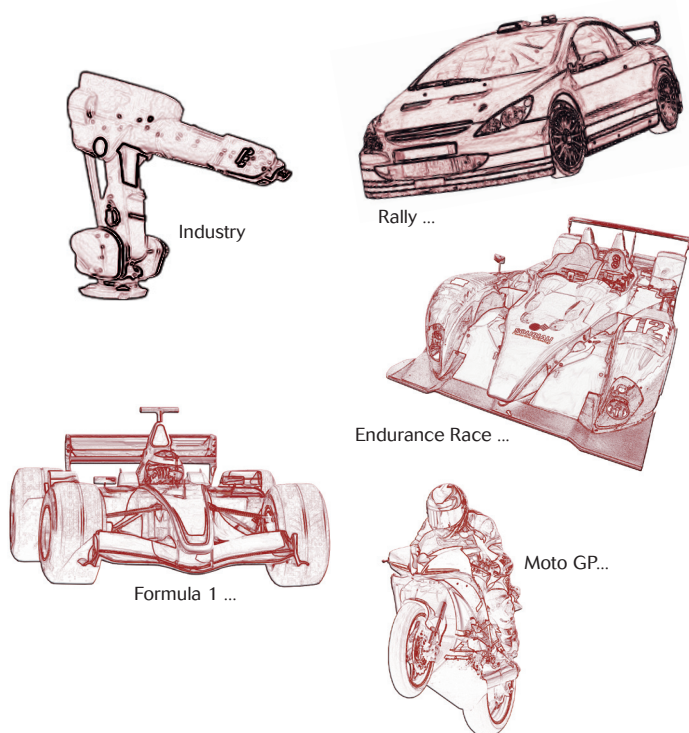


A new lightweight version !



Applications



The new 8STA In-line receptacle is recommended for following applications:

- where weight & space saving are a premium objective
- where a quick & easy fixing is requested

Benefits

Weight saving

- Elimination of knurl

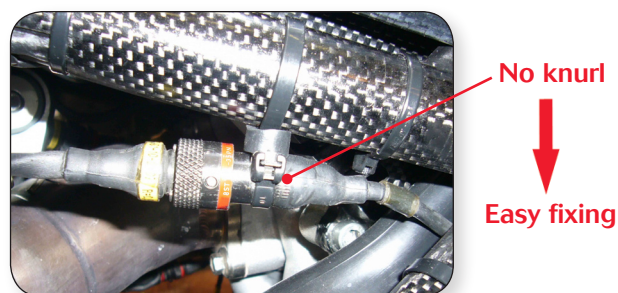
Cost Saving for end customer

- Elimination of secondary machining process for customers who modify standard flange receptacles themselves

No risk of corrosion

- No modification of standard flange receptacle (normally exposed as a result of machining)

Allows an easy fixing



Easy cable routing in tight space



Easy Identification with colour coded bands

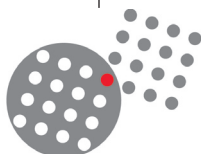
- 6 visual keyway orientations

SOURIAU's Offer

- Available in 9 shell sizes, from 08 to 24

Respect for environment

- RoHS compliant



8STA In-line receptacle



Technical characteristics

Mechanical

• Shell	Aluminium alloy
• Shell plating	Conductive black zinc
• Insulator	Thermoplastic
• Grommet & seal	Liquid silicone rubber
• Contact	Copper alloy
• Contact plating	Gold
• Endurance	500 matings/unmatings
• Shock	300 g for 3 ms and EIA-364-27
• Vibration resistance	147 m/s ² , 10 to 2000 Hz
• 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

Climatic

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

Electrical

• Test voltage

Service	M	N	I	II
Sea level	1300	1000	1800	2300

• Contact resistance

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

• Insulation resistance

≥ 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

How to order

Connector

Basic series	8STA	1	10	35	P	N	523
Shell style	1: In-line receptacle						
Shell size	08 - 10 - 12 - 14 - 16 - 18 - 20 - 22 - 24						
Contact layouts	All 8STA contact layouts for shell size above						
Type of contacts	P: Pin contacts S: Socket contacts						
Orientations	N: Red / A: Yellow / B: Blue / C: Orange / D: Green / U: Universal						
Specification*	523: Lightweight In-line receptacle						

*Mandatory

Protective cap

Basic series	8STA	9	10
Shell style	9: Receptacle protective cap		
Shell size	08 - 10 - 12 - 14 - 16 - 18 - 20 - 22 - 24		

8STA In-line receptacle



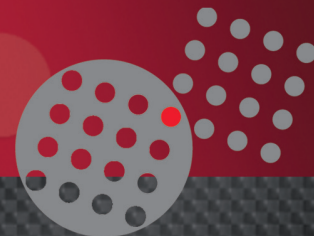
Range presentation

In-line receptacle			
Shell size	ø A max.	ø D ^{+0.20} _{-0.13}	G max.
08	17.60	12.00	33.50
10	20.70	15.00	
12	25.10	19.05	
14	28.30	22.22	
16	31.40	25.40	
18	34.70	28.57	
20	38.10	31.75	
22	41.20	34.92	
24	44.70	38.10	

Orientation					
Shell size	Orientations				
	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.

8STA In-line receptacle



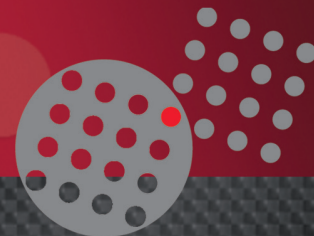
Contacts

Crimped contacts									
Contact size	Contact type	Contact Ø max.	Part numbers	Admissible wire section				External dia. over insulation (mm)	
				AWG		mm ²		Min.	Max.
				Min.	Max.	Min.	Max.		
Crimp contact				Min.	Max.	Min.	Max.	Min.	Max.
22D signal contact	Male	0.76	8599-0702 JJ	28	22	0.09	0.38	0.76	1.37
	Female		8599-0706 900						
20 signal contact	Male	1.00	8599-0703 SA	24	20	0.21	0.60	1.02	2.11
	Female		8599-0707 900						
16 signal contact	Male	1.60	8599-0704 MJ	20	16	0.60	1.34	1.65	2.77
	Female		8599-0708 900						
16 coaxial contact	Male	1.60	M39029/76 424	RG 174 RG 179 RG 316				1.65	2.60
	Female		M39029/77 428						
12 signal contact	Male	2.40	8599-0705 MJ	14	12	1.91	3.18	2.46	3.61
	Female		8599-0709 900						
12 coaxial contact	Male	2.40	M39029/28 211	RG 174 RG 179 RG 316				2.40	2.60
	Female		M39029/75 416						
08 power contact	Male	3.64	8599-7544	-	8	-	8.98	4.50	6.50
	Female		8599-7541						
	Boot		8599-4542						
	Reductor**		8599-7645						
08 coaxial contact	Male	3.64	M39029/59 366	RG 188A/U				-	2.80
	Female		M39029/60 367						
	Boot		8590-4571						
08 triaxial contact	Male	3.64	M39029/90-529	MIL-C 17/176 00002 FILECA F2703/14 RAYCHEM CHEMINAX 10612 FILOTEX M 17/176 00002				3.15	3.40
	Female		M39029/91-530						
	Boot		8590-4571						
04 power contact	Male	5.75	8599-7520A 900	7	10	According to wire used			
	Female		8599-7521A 900						
	Boot		8599-4590						
	Reductor*		8400-2351A						
	Male		8599-7520A 900	4	16				
	Female		8599-7521A 900						
	Boot		8599-4591						

* Reductor must be used for wire 8 & 10 mm²

** Reductor must be used for wire 8 mm²

8STA In-line receptacle



Crimping tools

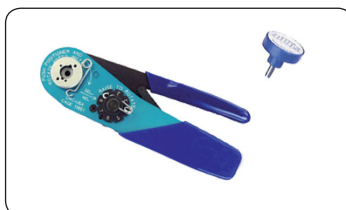
Contact size	Type	Pliers						
		M22520/1-01		M22520/2-01		M300BT	M22520/23-01*	
		Turret Part number		Locator Part number		Locator Part number	Die Part number	Locator Part number
		Spec.	SOURIAU	Spec.	SOURIAU	Spec.	Spec.	Spec.
22D	Male	-	-	M22520/2-09	8476-09			
	Female			M22520/2-07	8476-07			
20	Male	M22520/1-04	8365-04	M22520/2-10	8476-10	-	-	-
	Female							
16	Male							
	Female							
12	Male							
	Female							
8	Male					SP 593	M22520/23-02	8599-9601
	Female							
4	Male						M22520/23-04	M22520/23-11
	Female							

* Pneumatic pliers

M22520/1-01+ M22520/1-04



M22520/2-01 + M22520/2-09 & M22520/2-07



M22520/23-01



Wire stripping



	Contact size						
	26	22D	20	16	12	8	4
L (mm)	4		6			12	

8STA In-line receptacle



Accessories

Shrinkable termination detail

Shell size	øA	ø B ^{±0.05}	C ^{±0.05}	D
08	10.62	9.70	6	3.5
10	13.72	12.65		
12	17.26	16.02		
14	20.41	19.00		
16	23.60	22.23		
18	26.76	25.22		
20	29.93	28.37		
22	33.11	31.86		
24	36.30	34.67		

Metal protective cap

Receptacle cap Type 9

Shell size	øA	ø B	
08	19.00	14.20	
10	21.80		
12	26.10		
14	29.30		
16	32.50	15.00	
18	35.30		
20	38.80		
22	42.00		
24	45.10		15.85

Insertion & extraction tools

Contact size	Material	Part numbers		Colour	
		Spec.	SOURIAU	Insertion	Extraction
22D	Plastic	M81969/14-01	-	Green	White
20	Plastic	M81969/14-10	-	Red	Orange
16	Plastic	M81969/14-03	-	Blue	White
12	Plastic	M81969/14-04	-	Yellow	
8	Plastic	M81969/14-06	-	-	Red
	Metallic	-	8660-197		-
4	Plastic	M81969/14-07	-	-	Blue
	Metallic	-	8533-8175		-

Filler plug

Contact size	Part numbers		Colour
	Spec.	SOURIAU	
22D	MS27488-22	8660-212	Black
20	MS27488-20	8522-389A	Red
16	MS27488-16	8522-390A	Blue
12	MS27488-12	8522-391A	Yellow

For further information, visit our website www.motorsport-connectors.com or contact us at contactindustry@souriau.com