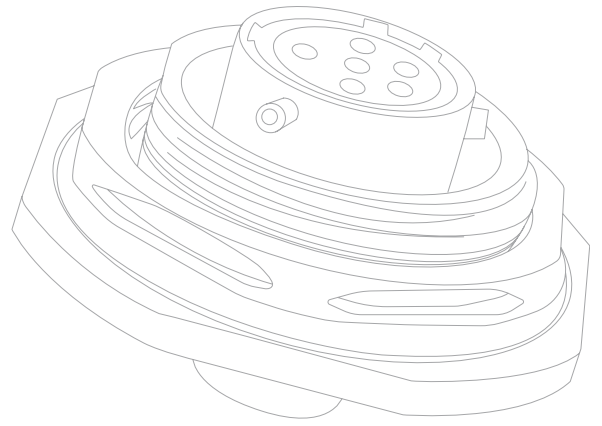


Space-grade circular connectors
Souriau 8LTS, 8TS and 8DS series





Souriau 8LTS, 8TS, 8DS series

Space-grade circular connectors

Typical applications

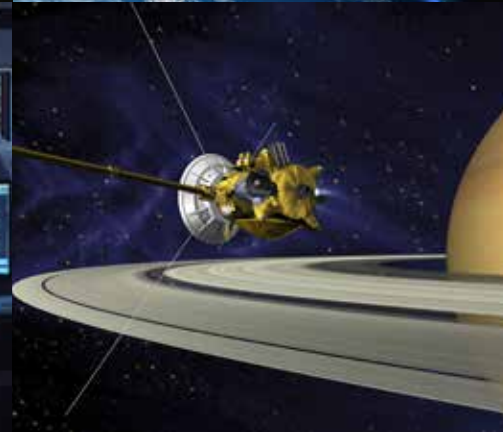
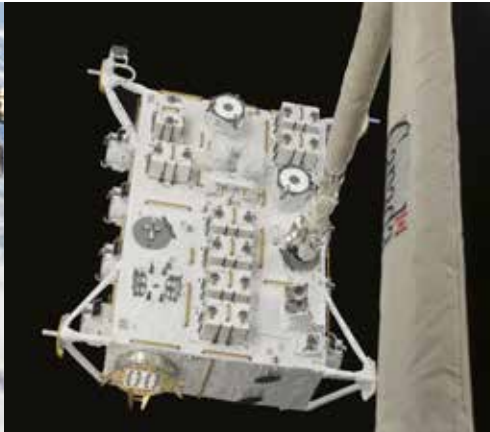


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- 8TS series 14
- 8DS series 18
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Space-grade circular connectors

QPL standard series



8LTS series -
MI-DTL-38999 Series I
Bayonet coupling **Page 10**



8TS series -
MI-DTL-38999 Series II
Low profile bayonet
coupling **Page 14**



8DS series -
MI-DTL-38999 Series III
Screw coupling **Page 18**

QPL 8DS derived series



Straight PC tails
Page 22



Mono-triax
Page 24



Hermetic receptacles
Page 26



Hermetic feedthroughs
Page 26

Backshells - Page 30



Backshell nuts

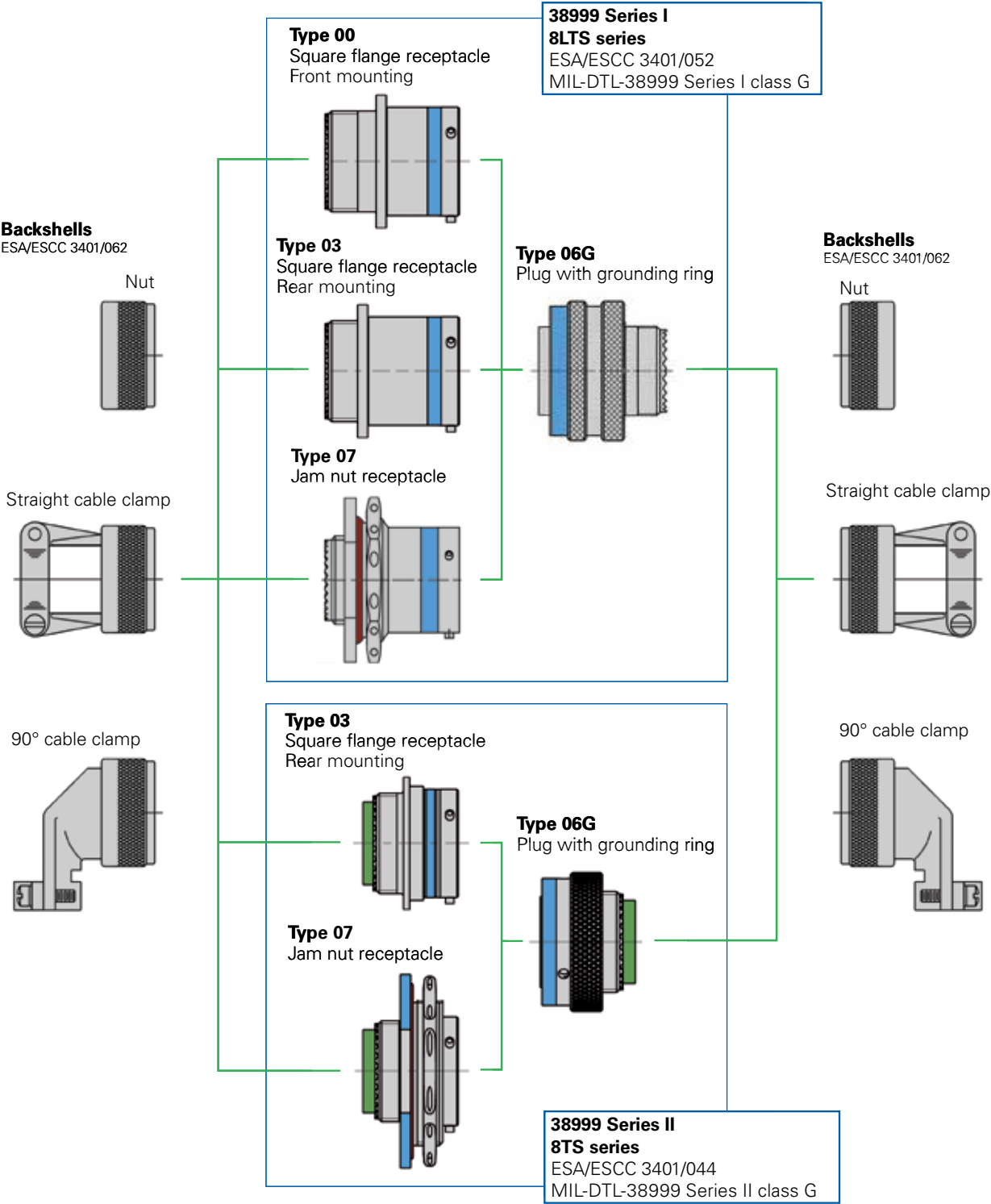


Straight cable
clamps



90° cable
clamps

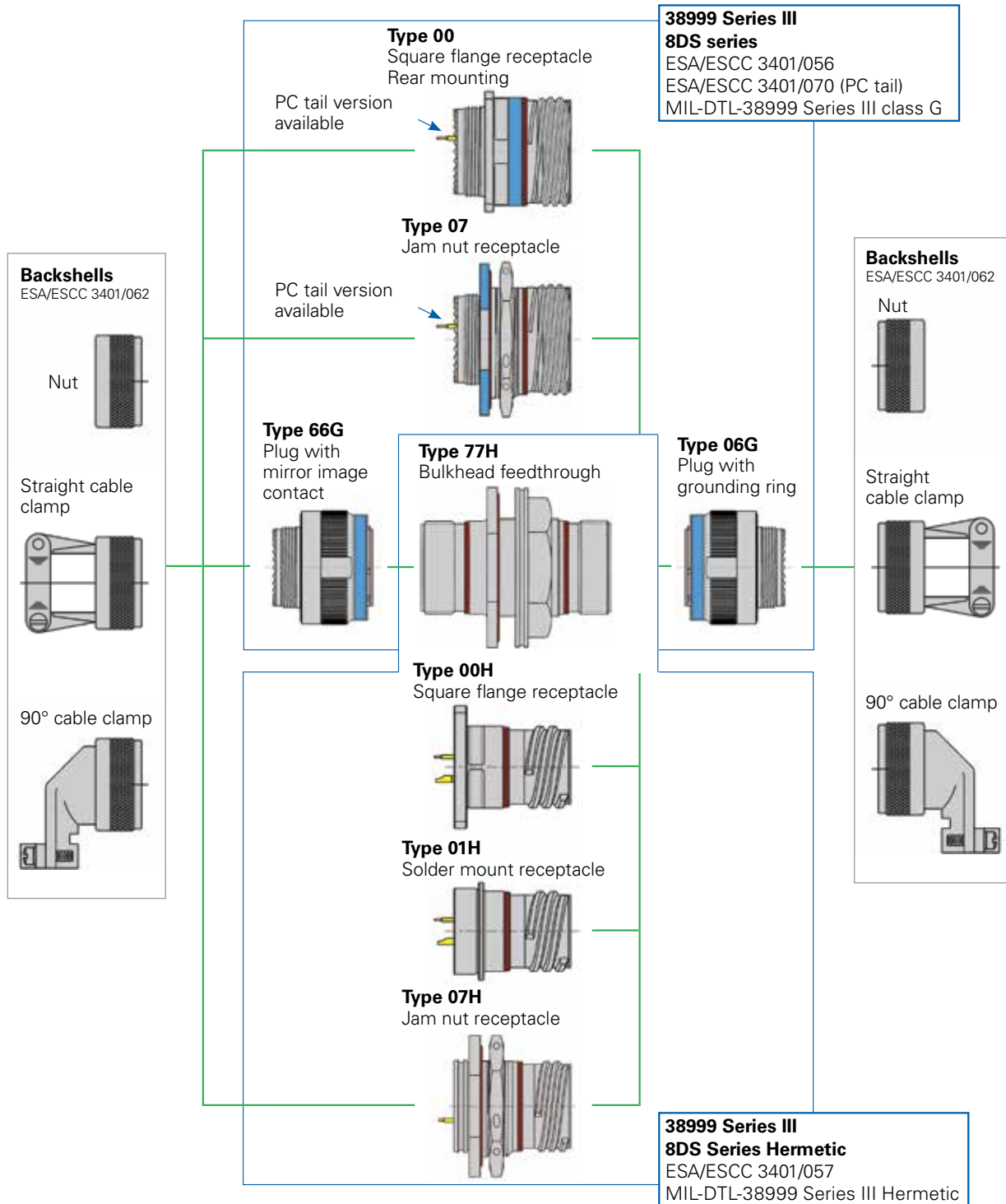
Bayonet coupling



Space-grade circular connectors

Overview

Screw coupling

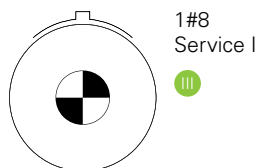


Contact layouts

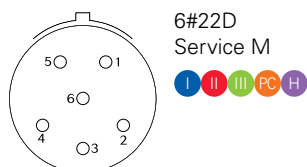
I 8LTS Series
 II 8TS Series
 III 8DS Series
 PC 8DS Series C Tail version
 H 8DS Series Hermetic version
 Contact sizes
 ○ #22D
 ◐ #20
 ◑ #16
 ◒ #12
 ◓ #8 Triax (=Concentric Twinax) or Coax - consult us

08 - 09/A

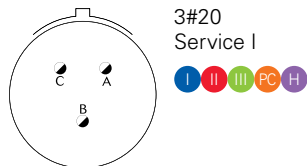
01 *



35

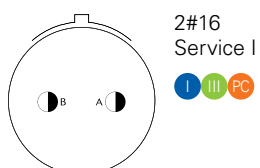


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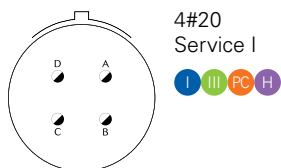


10 - 11/B

02

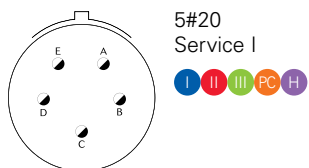


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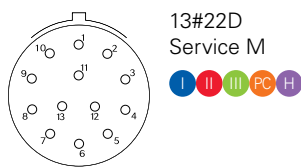


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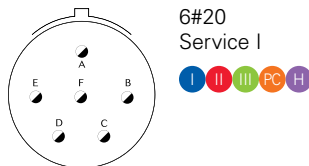
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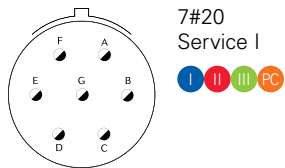
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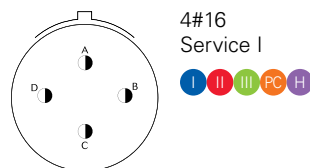


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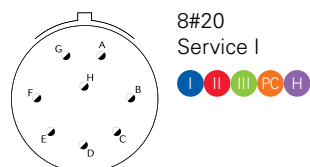


12 - 13/C

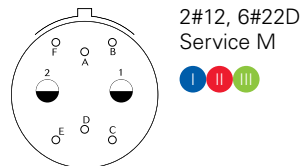
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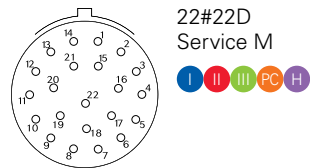
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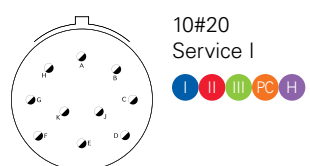
26 *



35

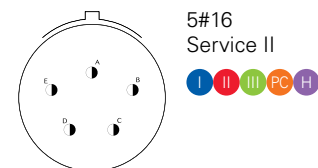


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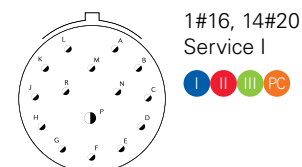


14 - 15/D

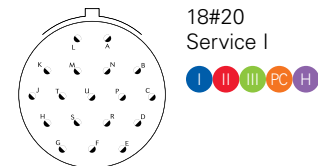
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15



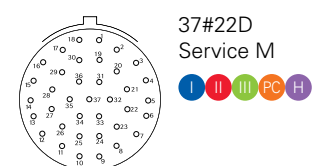
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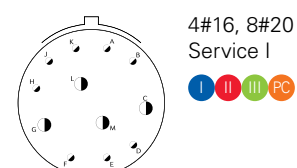
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35



97



* Not available in MIL class G

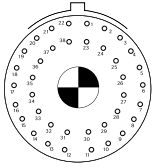
Space-grade circular connectors

Contact layouts

I 8LTS Series
 II 8TS Series
 III 8DS Series
 PC 8DS Series C Tail version
 H 8DS Series Hermetic version
 Contact sizes
 ○ #22D
 ◐ #20
 ◑ #16
 ◒ #12
 ◓ #8 Triax (=Concentric Twinax) or Coax - consult us

16 - 17/E

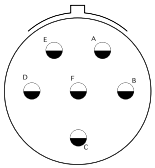
02*



38#22D
1#8 Triax
Service M

I III

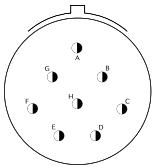
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6#12
Service I

I II III

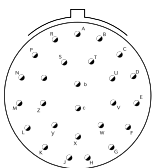
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8#16
Service II

I II III PC H

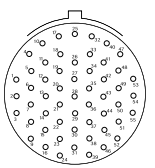
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26#20
Service I

I II III PC H

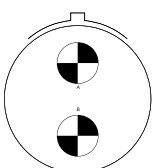
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55#22D
Service M

I II III PC H

75

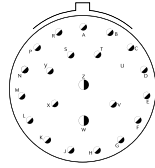


2#8 Triax
Service M

I III

16 - 17/E

99

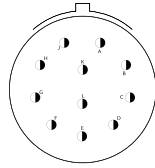


2#16, 21#20
Service I

I II III PC

18 - 19/F

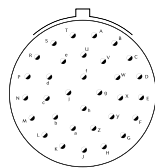
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Service II

I II III PC H

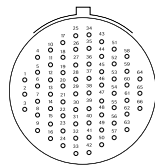
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32#20
Service I

I II III PC H

35

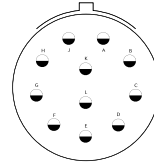


66#22D
Service M

I II III PC H

20 - 21/G

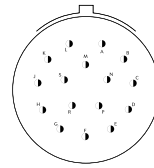
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11#12
Service I

I II III

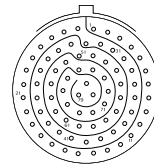
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16#16
Service II

I II III PC H

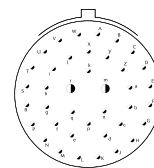
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79#22D
Service M

I II III PC H

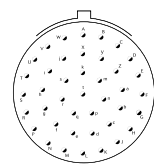
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2#16 37#20
Service I

I II III PC

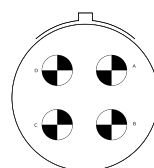
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41#20
Service I

I II III PC H

75*

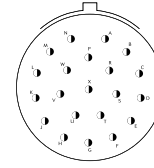


4#8 Triax
Service M

I III

22 - 23/H

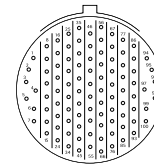
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21#16
Service II

I II III PC H

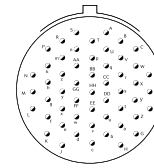
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100#22D
Service M

I II III PC H

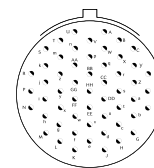
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53#20
Service I

I II III PC H

55



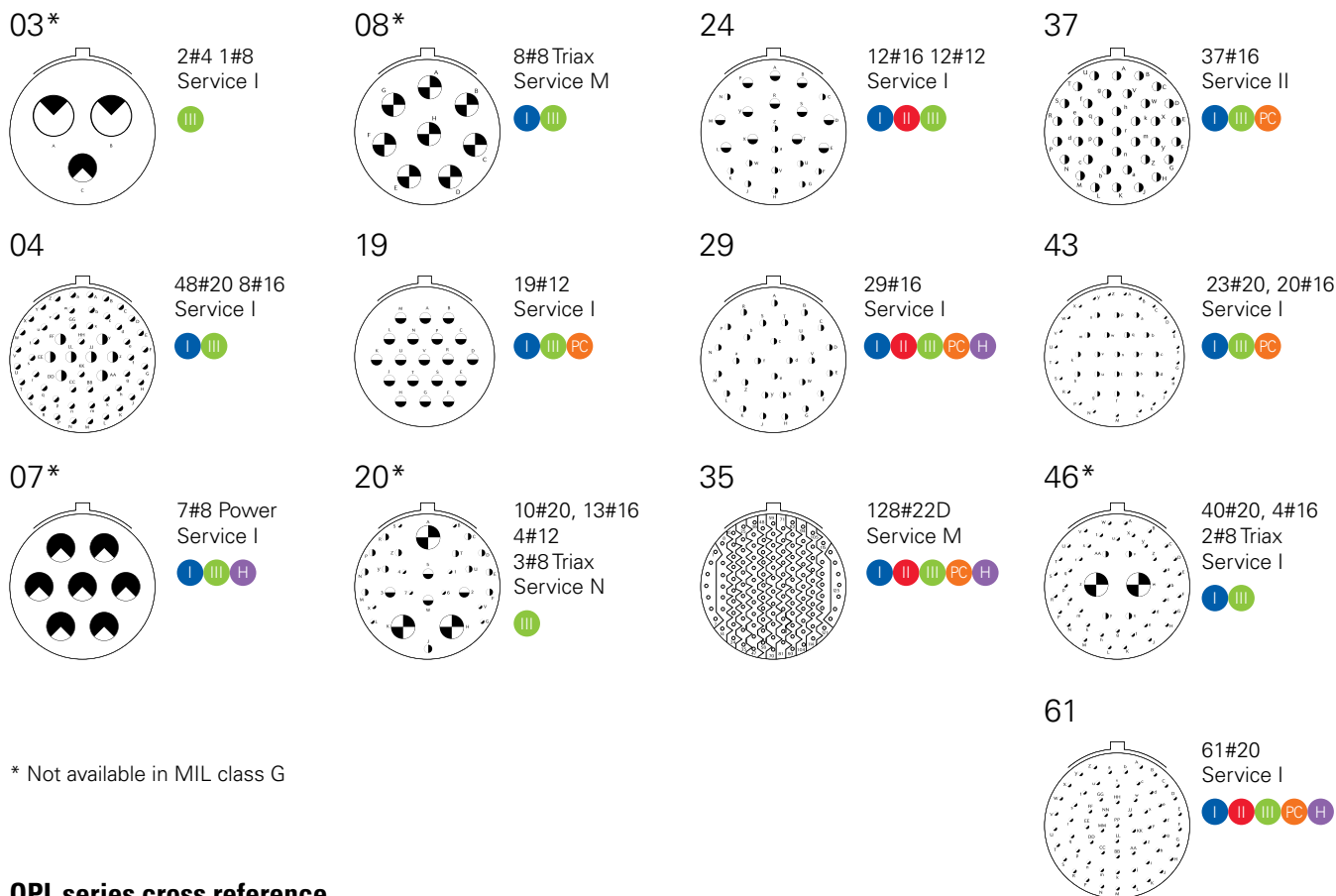
55#20
Service I

I II III PC

* Not available in MIL class G

I 8LTS Series
 II 8TS Series
 III 8DS Series
 PC 8DS Series C Tail version
 H 8DS Series Hermetic version
 Contact sizes
 ○ #22D
 ◐ #20
 ◑ #16
 ◒ #12
 ◓ #8 Triax (=Concentric Twinax) or Coax - consult us

24 - 25/J



* Not available in MIL class G

QPL series cross reference

Souriau	ESCC	MIL	Description
8LTS	3401/052	MS27456	38999 Series I connectors with removable crimp contacts
		MS27466	
		MS27467	
		MS27468	
8TS	3401/044	MS27473	38999 Series II connectors with removable crimp contacts
		MS27474	
		MS27497	
8DS	3401/056	D38999/20	38999 Series III connectors with removable crimp contacts
		D38999/24	
		D38999/26	
8DS	3401/070	-	38999 Series III connectors with straight spill contacts
8DS-H	3401/057	-	38999 Series III hermetic receptacles and feedthrough
-	3401/062	M85049	Backshells for 38999 Series I, II and III connectors
8975	3401/045	M39029/57	Crimp contacts for 8TS-3401/044
		M39029/58	
8975	3401/058	M39029/56	Crimp contacts for 8LTS-3401/052 and 8DS-3401/056
		M39029/58	
-	3401/066	-	Triax crimp contact for 8DS-3401/056

Souriau 8LTS series

Technical specifications



Description

- Standard profile bayonet coupling connector
- To be mounted with crimp contacts:
 - ESA/ESCC 3401/058
 - MIL/M39029
- To be mounted with backshells:
 - ESA/ESCC 3401/062
 - MIL/M85049
- Standards:
 - ESA/ESCC 3401/052 (QPL)
 - MIL-DTL-38999 Series I Class G (QPL)
- High contact density
- 100% Scoop-proof
- Shell sizes from 9 to 25
- NASA EEE-INST-002 screening level 1

Technical specifications

Material

Shell

Aluminum alloy
Dull low-reflective electroless nickel plated, burr free

Grounding

Beryllium copper

Insulator

Bonded sandwich thermoplastic

Grommet and interfacial seal

Non-outgassing silicone

Contacts retaining clip

Beryllium copper

Contacts

Copper alloy
Gold over nickel plating

Backshell

Aluminium alloy
Dull low-reflective electroless nickel plated, burr-free

Mechanical

According to ESA/ESCC 3401 test methods and applicable ESA/ESCC detail specifications

Endurance

500 mating cycles

Shock

75g, 11 milliseconds, half sine wave

Vibration

- Sinus
 - 10-55Hz at 8,25mm double amplitude displacement
 - 56-2000Hz at 50g

- Random
 - 20-100Hz at +6dB per octave
 - 100-2000Hz, constant at 1g2/Hz

Contact retention

Contacts size	22	20	16	12	8	4
Max force in N	44	67	111	111	150	180

Tightening torque for mounting nut

Receptacle size	Torque (Nm)	
	Min/Max.	
9	3.38/4.06	
11	4.52/5.20	
13	6.21/6.78	
15	7.90/8.47	
17	9.04/9.60	
19	10.17/10.73	
21	11.30/12.43	
23	12.43/13.56	
25	13.56/14.69	

Environmental

According to ESA/ESCC 3401 test methods and applicable ESA/ESCC detail specifications

Operating temperature

-65°C to +200°C

Storage temperature

1000h/200°C

Outgassing

TML < 1%; CVCM < 0.1%

Electrical

According to ESA/ESCC 3401 test methods and applicable ESA/ESCC detail specifications

Voltage proof (sea level)

Service rating	II	I	M	N
Vrms	2300	1800	1300	1000

Working voltage (sea level)

Service Rating	II	I	M	N
Vrms	575	450	325	250

Mated shell conductivity

Voltage drop max. 1 mV

Rated current

Contacts size	22	20	16	12	8	4
Rating (A)	5	7.5	13	23	46	80

Contact resistance Rcl max. (under 10 mA)

All contacts sizes: 8.0 mΩ

Contact resistance Rcr max. (at rated current)

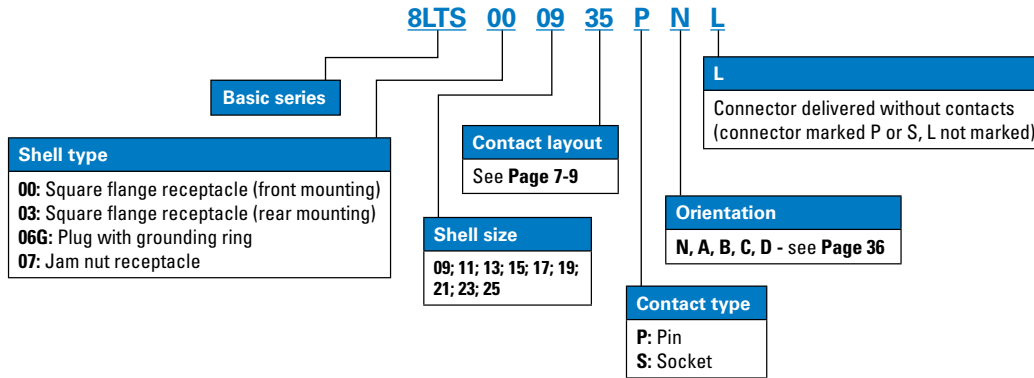
Contacts size	22	20	16	12	8	4
Resistance mΩ	14	7	4	3.5	0.55	0.45

Insulation resistance

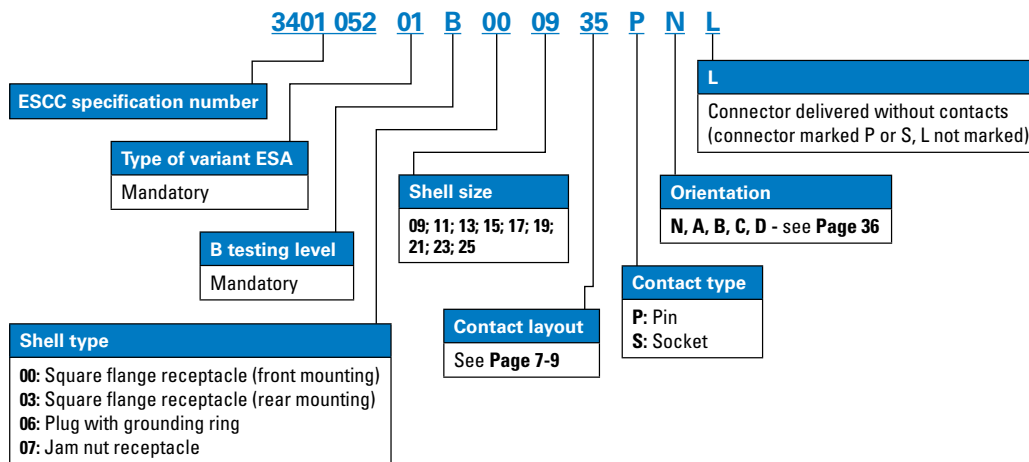
RI ≥ 10 000 MΩ

Ordering information

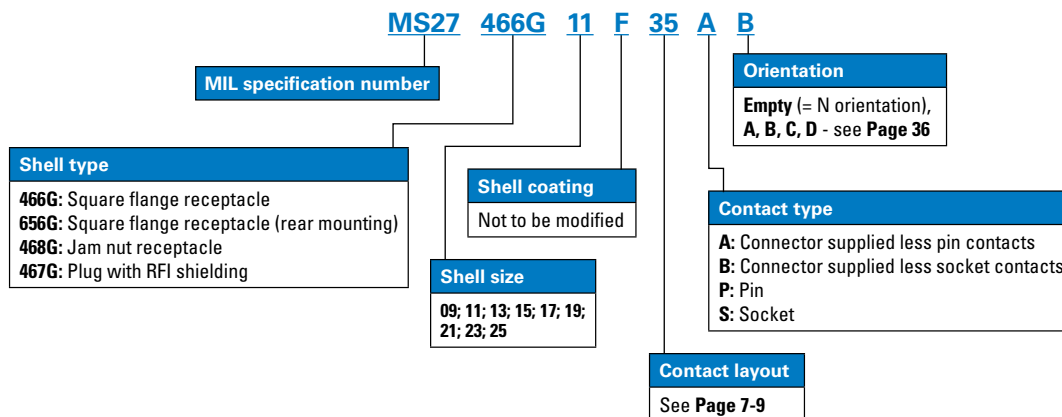
Souriau part number / engineering models



ESA/ESCC part number / flight model



MIL-DTL-38999 Class G part number / flight model

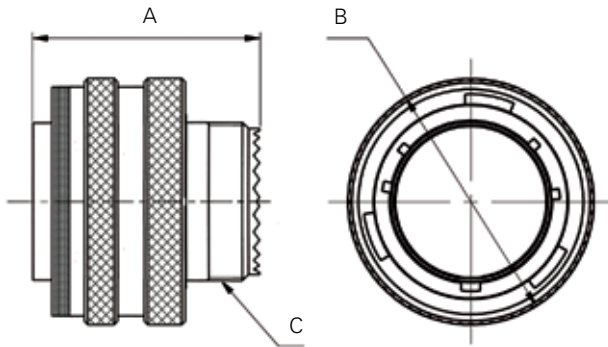


Souriau 8LTS series

Dimensions and weights

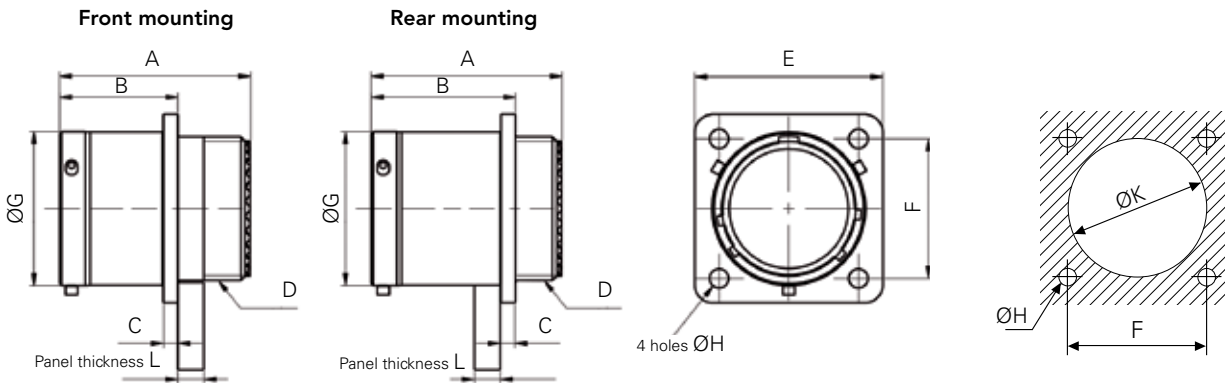
Dimensions

Type 06G - Plug with grounding ring



Shell size	A Max	B Max	ØC Thread UNEF-2A (inch/UNC)
9	31.32	21.8	0.4375 - 28
11	31.32	25	0.5625 - 24
13	31.32	29.4	0.6875 - 24
15	31.32	32.5	0.8125 - 20
17	31.32	35.7	0.9375 - 20
19	31.32	38.5	1.0625 - 18
21	31.32	41.7	1.1875 - 18
23	31.32	44.85	1.3125 - 18
25	31.32	48	1.4375 - 18

Type 00 (front mounting) & Type 03 (rear mounting) - Square flange receptacle

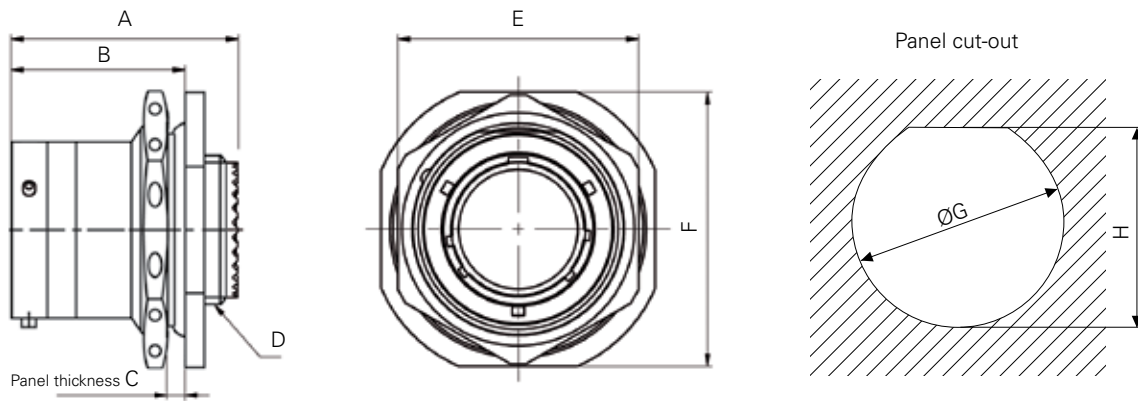


Shell size	A Max		B Max		C Max	ØD Thread UNEF-2A (inch/UNC)	E		F Max	ØG		ØH		ØK Min		L Max
	Front mounting	Rear mounting	Front mounting	Rear mounting			Min	Max		Min	Max	Min	Max	Front mounting	Rear mounting	
9	32.02	31.33	18.53	20.83	2.5	0.4375 - 28	23.95	24.55	18.26	14.41	14.53	3.15	3.45	15.70	16.66	2.5
11	32.02	31.33	18.53	20.83	2.5	0.5625 - 24	26.3	26.9	20.62	17.66	17.78	3.15	3.45	18.70	20.22	2.5
13	32.02	31.33	18.53	20.83	2.5	0.6875 - 24	28.7	29.3	23.01	21.47	21.59	3.15	3.45	21.80	23.42	2.5
15	32.02	31.33	18.53	20.83	2.5	0.8125 - 20	31.05	31.65	24.61	24.65	24.77	3.15	3.45	25.00	26.59	2.5
17	32.02	31.33	18.53	20.83	2.5	0.9375 - 20	33.45	34.05	26.97	27.82	27.94	3.15	3.45	28.30	30.96	2.5
19	32.02	31.33	18.53	20.83	2.5	1.0625 - 18	36.6	37.2	29.36	30.54	30.66	3.15	3.45	31.00	32.94	2.5
21	32.02	31.33	18.53	20.83	3.2	1.1875 - 18	39.8	40	31.75	33.71	33.83	3.15	3.45	34.20	36.12	2.5
23	32.02	31.33	18.53	20.83	3.2	1.3125 - 18	42.95	43.55	34.93	36.88	37	3.63	3.93	37.30	39.29	2.5
25	32.02	31.33	18.53	20.83	3.2	1.4375 - 18	46.2	46.7	38.1	40.06	40.18	3.63	3.93	40.50	42.47	2.5

Note: All dimensions are in millimeters (mm)

Dimensions

Type 07 - Jam nut receptacle



Shell size	A Max	B Max	C		ØD Thread UNEF-2A (inch/UNC)	E		ØF		ØG Min	H Min	Tightening Torque (Nm)
			Min	Max		Min	Max	Min	Max			
9	31.68	23.36	16.43	16.63	0.4375 - 28	22.25	22.45	26.95	27.75	17.78	17.02	4
11	31.68	23.36	18.97	19.17	0.5625 - 24	25.45	25.65	31.7	32.5	20.96	19.59	5
13	31.68	23.36	23.72	23.92	0.6875 - 24	30.2	30.4	34.91	35.71	25.65	24.26	7
15	31.68	23.36	26.87	27.07	0.8125 - 20	33.35	33.55	38.89	39.09	28.83	27.56	8
17	31.68	23.36	30.05	30.25	0.9375 - 20	36.55	36.75	41.23	42.03	32	30.73	9
19	31.68	23.36	33.22	33.42	1.0625 - 18	39.7	39.9	45.97	46.77	35.18	33.91	10
21	31.68	23.36	36.4	36.6	1.1875 - 18	42.9	43.1	49.18	49.98	38.35	37.08	12
23	31.68	23.36	39.57	39.77	1.3125 - 18	46.05	46.25	52.36	53.16	41.53	40.26	13
25	31.68	23.36	42.75	42.95	1.4375 - 18	50.85	51.05	55.53	56.33	44.7	43.45	14

Note: All dimensions are in millimeters (mm)

Connector weight - in grams (±15%)

Shell size	Shell type		
	00 & 03	07	06
9	11	15	17
11	17	20	23
13	22	26	28
15	25	34	34
17	38	44	44
19	40	49	49
21	52	60	60
23	54	63	63
25	58	75	70

8LTS Series without contact and backshell.

Souriau 8TS series

Technical specifications



Description

- Low profile bayonet coupling connector
- To be mounted with crimp contacts:
 - ESA/ESCC 3401/045
 - MIL/M39029
- To be mounted with backshells:
 - ESA/ESCC 3401/062
 - MIL/M85049
- Standards:
 - ESA/ESCC 3401/044
 - MIL-DTL-38999 Series II Class G
- Shell sizes from 8 to 24
- NASA EEE-INST-002 screening level 1

Technical specifications

Material

Shell

Aluminum alloy
Dull low-reflective electroless nickel plated, burr-free

Grounding

Beryllium copper

Insulator

Bonded sandwich thermoplastic

Grommet and interfacial seal

Non-outgassing silicone

Contacts retaining clip

Beryllium copper

Contacts

Copper alloy
Gold over nickel plating

Backshell

Aluminum alloy
Dull low-reflective electroless nickel plated, burr-free

Mechanical

According to ESA/ESCC 3401 test methods and applicable ESA/ESCC detail specifications

Endurance

500 mating cycles

Shock

75g, 11 milliseconds, half sine wave

Vibration

- Sinus
 - 10-55Hz at 8,25mm double amplitude displacement
 - 56-2000Hz at 50g

- Random
 - 20-100Hz at +6dB per octave
 - 100-2000Hz, constant at 1g²/Hz

Contact retention

Contacts size	22	20	16	12	8	4
Max force in N	44	67	111	111	150	180

Tightening torque for mounting nut

Receptacle size	
Torque (Nm)	Min/Max.
8	4.52/5.20
10	5.65/6.21
12	7.90/8.47
14	9.04/9.60
16	9.04/9.60
18	11.86/12.99
20	11.86/12.99
22	12.43/13.56
24	13.56/14.69

Environmental

According to ESA/ESCC 3401 test methods and applicable ESA/ESCC detail specifications

Operating temperature

-65°C to +200°C

Storage temperature

1000h/200°C

Outgassing

TML < 1%; CVCM < 0.1%

Electrical

According to ESA/ESCC 3401 test methods and applicable ESA/ESCC detail specifications

Voltage proof (sea level)

Service Rating	II	I	M	N
Vrms	2300	1800	1300	1000

Working voltage (sea level)

Service Rating	II	I	M	N
Vrms	575	450	325	250

Mated shell conductivity

Voltage drop max. 1 mV

Rated current

Contacts size	22	20	16	12	8	4
Rating (A)	5	7.5	13	23	46	80

Contact resistance Rcl max. (under 10 mA)

All contacts sizes: 8.0 mΩ

Contact resistance Rcr max. (at rated current)

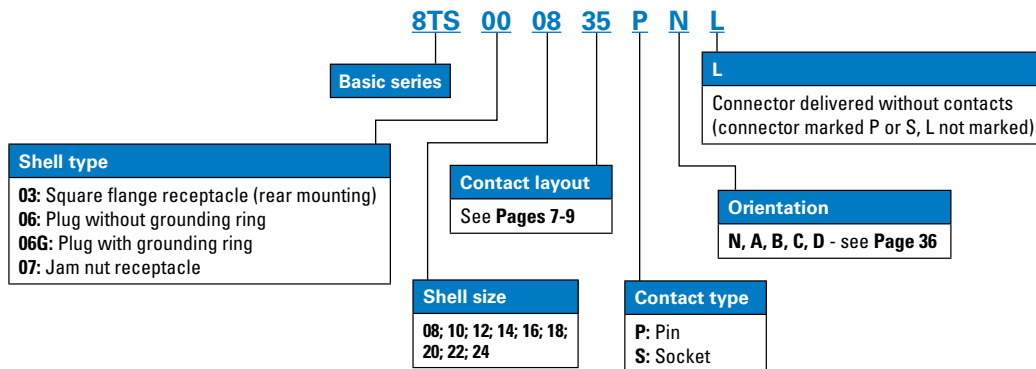
Contacts size	22	20	16	12	8	4
Resistance mΩ	14	7	4	3.5	0.55	0.45

Insulation resistance

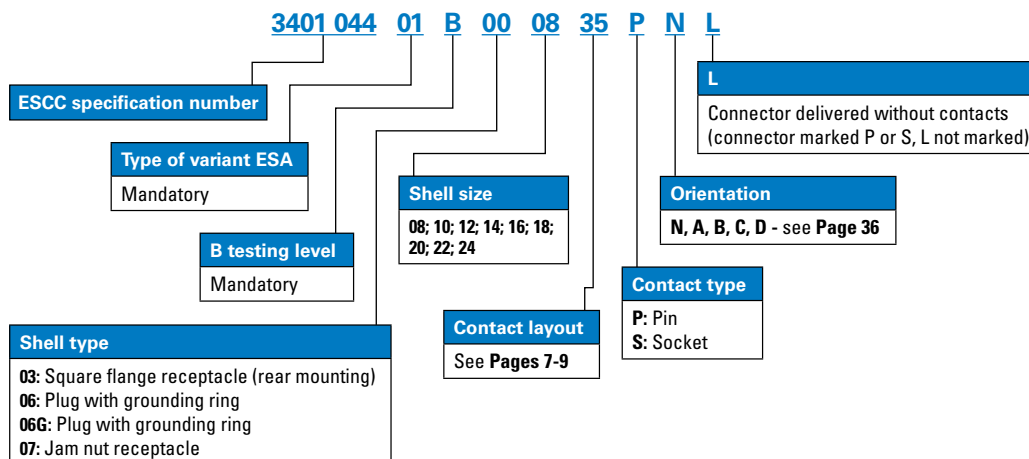
RI ≥ 10 000 MΩ

Ordering information

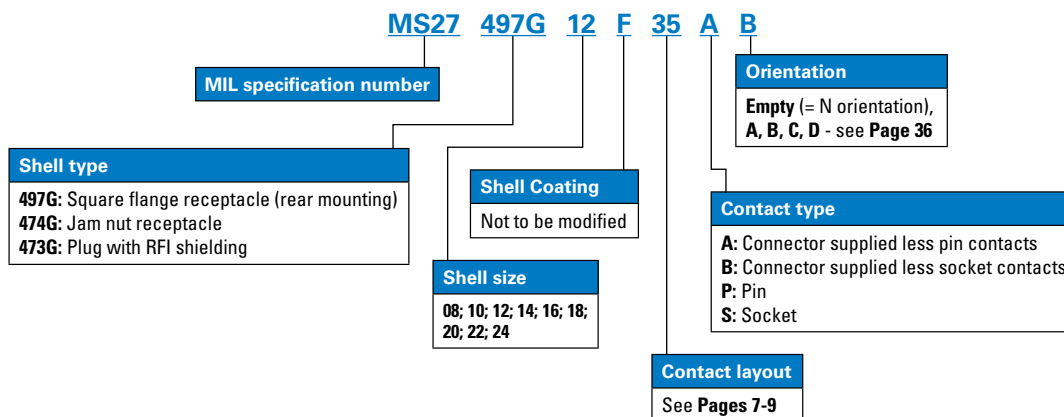
Souriau part number / engineering models



ESA/ESCC part number / flight model



MIL-DTL-38999 Class G part number / flight model

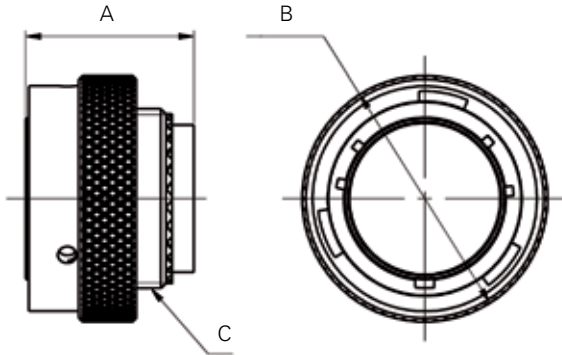


Souriau 8TS series

Dimensions and weights

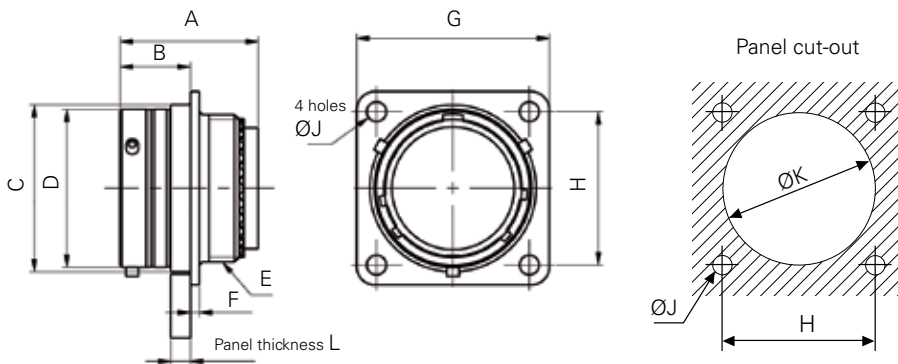
Dimensions

Type 06G (plug with grounding ring) and Type 06 (plug without grounding ring)



Shell size	A Max	B Max	ØC Thread UNEF-2A (inch/UNC)
8	23.27	19.05	0.4375 - 28
10	23.27	21.82	0.5625 - 24
12	23.27	26.19	0.6875 - 24
14	23.27	29.36	0.8125 - 20
16	23.27	32.54	0.9375 - 20
18	23.27	35.71	1.0625 - 18
20	23.27	38.89	1.1875 - 18
22	23.27	41.68	1.3125 - 18
24	25.00	44.86	1.4375 - 18

Type 03 - Square flange receptacle (rear mounting)

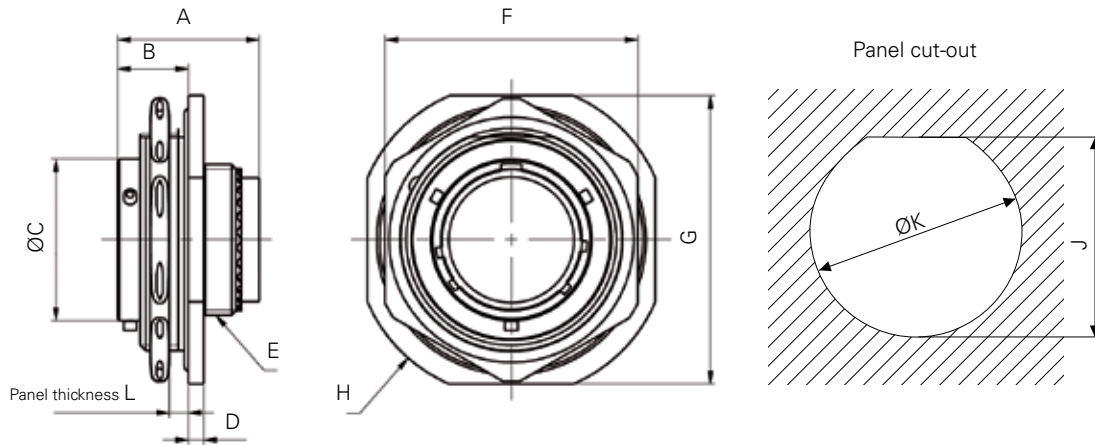


Shell size	A Max	B Max	C Max	D Max	ØE Thread UNEF-2A (inch/UNC)	F Max	G Max	H Max	ØJ Min	ØK Min	L Max
8	25.37	11.35	12.04	13.89	0.4375 - 28	1.75	21.03	15.09	3.25	14.15	3.71
10	25.37	11.35	15.02	17.07	0.5625 - 24	1.75	24.23	18.26	3.25	17.32	3.71
12	25.37	11.35	19.08	21.44	0.6875 - 24	1.75	26.59	20.62	3.25	21.69	3.71
14	25.37	11.35	22.25	24.61	0.8125 - 20	1.75	28.98	23.01	3.25	24.87	3.71
16	25.37	11.35	25.43	27.79	0.9375 - 20	1.75	31.34	24.61	3.25	28.04	3.71
18	25.37	11.35	28.61	30.96	1.0625 - 18	1.75	33.73	26.97	3.25	31.22	3.71
20	25.37	11.35	31.78	34.14	1.1875 - 18	1.75	36.91	29.36	3.25	34.39	4.27
22	25.37	11.35	34.95	37.31	1.3125 - 18	1.75	40.08	31.75	3.25	37.57	4.27
24	27.1	11.35	38.13	40.49	1.4375 - 18	1.75	43.26	34.93	3.91	40.74	4.27

Note: All dimensions are in millimeters (mm)

Dimensions

Type 07 - Jam nut receptacle



Shell size	A Max	B Max	ØC Max	D Max	ØE Thread UNEF-2A (inch/UNC)	F Max	G Max	H Min	J Max	ØK Min	L Max	Tightening Torque (Nm)
8	26.48	11.26	12.04	2.67	0.4375 - 28	27.4	32.16	35.34	21.08	22.46	2.90	5
10	26.48	11.26	15.02	2.67	0.5625 - 24	30.61	35.34	38.51	24.26	25.58	2.90	6
12	26.48	11.26	19.08	2.67	0.6875 - 24	33.75	38.51	41.69	27.53	28.8	2.90	8
14	26.48	11.26	22.25	2.67	0.8125 - 20	36.96	41.69	45.65	30.68	31.98	2.90	9
16	26.48	11.26	25.43	2.67	0.9375 - 20	40.1	45.65	48.42	33.86	35.15	2.90	10
18	26.48	11.26	28.61	2.67	1.0625 - 18	43.31	48.42	51.62	37.06	38.28	2.90	12
20	26.32	11.92	31.78	2.67	1.1875 - 18	46.45	51.62	54.79	40.03	41.5	2.90	13
22	26.32	11.92	34.95	2.67	1.3125 - 18	51.23	54.77	57.94	43.21	44.68	2.90	14
24	26.32	11.92	38.13	2.67	1.4375 - 18	54.41	57.94	61.12	46.38	47.85	2.90	16

Note: All dimensions are in millimeters (mm)

Connector weight - in grams ($\pm 15\%$)

Shell size	Shell type		
	03	07	06
8	6	12	9
10	8	16	11
12	12	21	16
14	14.5	25.5	20
16	17.5	31	24
18	22	35.5	29
20	27	42.5	34
22	32	49	39
24	37	56.6	46

8TS Series without contact and backshell.

Souriau 8DS series

Technical specifications



Description

- Standard profile screw coupling connector, intermateable with NATC (NASA thread coupling) connectors
- To be mounted with crimp contacts:
 - ESA/ESCC 3401/058
 - MIL/M39029
- To be mounted with backshells:
 - ESA/ESCC 3401/062
 - MIL/M85049
- Standards:
 - ESA/ESCC 3401/056 (QPL)
 - MIL-DTL-38999 Series III Class G (QPL)
 - SSQ21635 NATC (NASA thread coupling) intermateable
- Shell sizes from 9 to 25
- PC tail receptacle versions
- Hermetic and bulkhead feedthrough versions
- 100% scoop proof
- NASA EEE-INST-002 screening level 1

Technical specifications

Material

Shell

- Non-hermetic version
 - Aluminum alloy
 - Dull low-reflective electroless nickel plated, burr-free
- Hermetic version
 - Passivated stainless steel

Grounding

Beryllium copper

Insulator

- Non-hermetic version:
 - Bonded sandwich thermoplastic
- Hermetic version
 - Sintered glass

Grommet and interfacial seal

Non-outgassing silicone

Contacts retaining clip

Beryllium copper

Contacts

Copper alloy
Gold over nickel plating

Backshell

Aluminum alloy
Dull low-reflective electroless nickel plated, burr-free

Mechanical

According to ESA/ESCC 3401 test methods and applicable ESA/ESCC detail specifications

Endurance

500 mating cycles

Shock

75g, 11 milliseconds, half sine wave

Vibration

- Sinus
 - 10-55Hz at 8,25mm double amplitude displacement
 - 56-2000Hz at 50g
- Random
 - 20-100Hz at +6dB per octave
 - 100-2000Hz, constant at 1g2/Hz

Contact retention

Contacts size	22	20	16	12	8	4
Max force in N	44	67	111	111	150	180

Tightening torque for mounting nut

Receptacle size	Torque (Nm)	
	Min/Max.	
9	3.38/4.06	
11	4.52/5.20	
13	6.21/6.78	
15	7.90/8.47	
17	9.04/9.60	
19	10.17/10.73	
21	11.30/12.43	
23	12.43/13.56	
25	13.56/14.69	

Environmental

According to ESA/ESCC 3401 test methods and applicable ESA/ESCC detail specifications

Operating temperature

-65°C to +200°C

Storage temperature

1000h/200°C

Outgassing

TML < 1%; CVCM < 0.1%

Hermeticity (8DS-H version)

10⁻⁹ cm³/s of helium under a vacuum of 10⁻⁵ Torr

Electrical

According to ESA/ESCC 3401 test methods and applicable ESA/ESCC detail specifications

Voltage proof (sea level)

Service Rating	II	I	M	N
Vrms	2300	1800	1300	1000

Working voltage (sea level)

Service Rating	II	I	M	N
Vrms	575	450	325	250

Mated shell conductivity

Voltage drop max. 1 mV

Rated current

Contacts size	22	20	16	12	8	4
Rating (A)	5	7.5	13	23	46	80

Contact resistance Rcl max. (under 10 mA)

All contacts sizes: 8.0 mΩ

Contact resistance Rcr max. (at rated current)

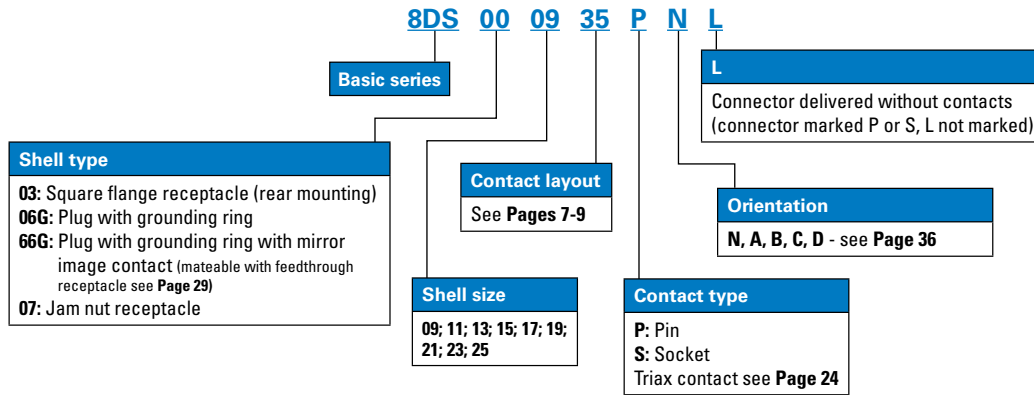
Contacts size	22	20	16	12	8	4
Resistance mΩ	14	7	4	3.5	0.55	0.45

Insulation resistance

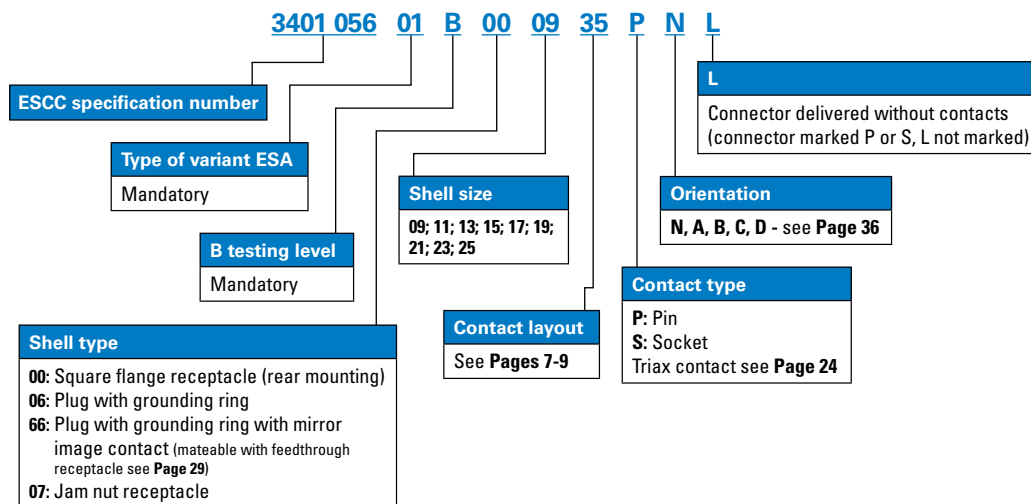
RI ≥ 10 000 MΩ

Ordering information

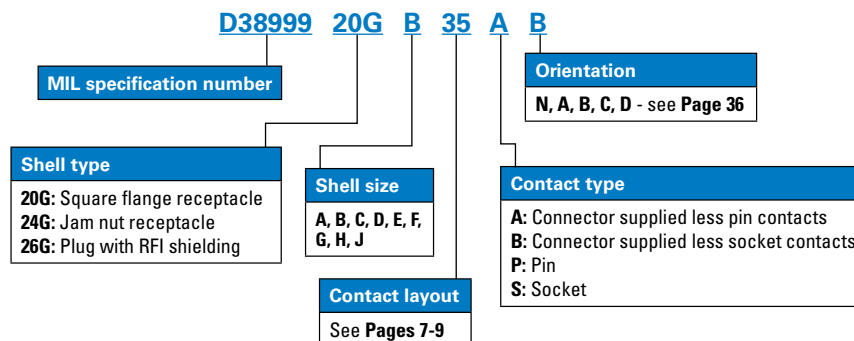
Souriau part number / engineering models



ESA/ESCC part number / flight model



MIL-DTL-38999 Class G part number / flight model

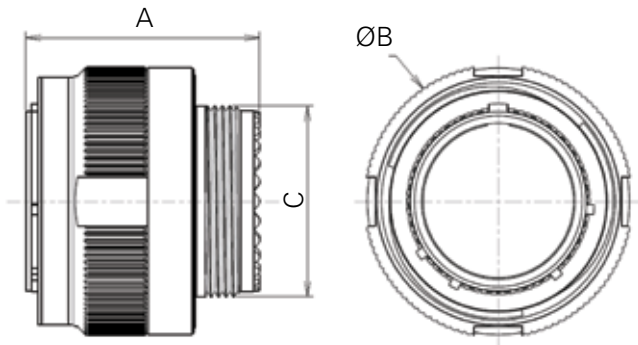


Souriau 8DS series

Dimensions and weights

Dimensions

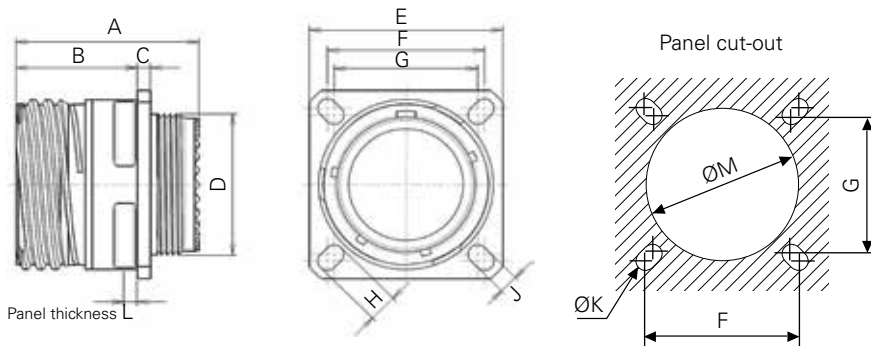
Type 06G & Type 66G - Plug with grounding ring



Shell size	A Max	B Max	ØC Thread
9	31.00	21.80	M12 x 1-6g
11	31.00	25.00	M15 x 1-6g
13	31.00	29.40	M18 x 1-6g
15	31.00	32.50	M22 x 1-6g
17	31.00	35.70	M25 x 1-6g
19	31.00	38.50	M28 x 1-6g
21	31.00	41.70	M31 x 1-6g
23	31.00	44.90	M34 x 1-6g
25	31.00	48.00	M37 x 1-6g

Type 66G: Plug with grounding ring with mirror image contact (mateable with feedthrough receptacle, see **Page 29**)

Type 00 - Square flange receptacle (rear mounting)

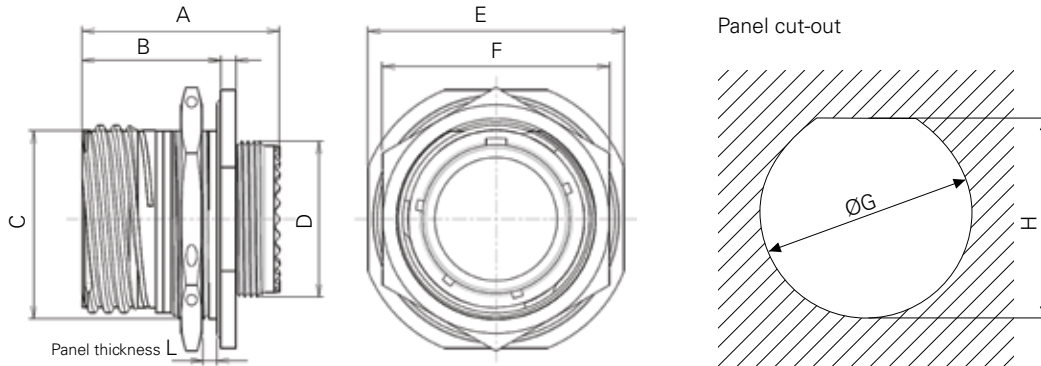


Shell size	A Max	B Max	C ^{±0.1}	ØD Thread	E Max	F Max	G Max	H ^{±0.2}	J ^{±0.2}	ØK Min	ØM Min	L Max
9	31.50	20.90	2.26	M12 x 1-6g	24.10	18.36	15.19	5.49	3.25	3.25	16.66	2.50
11	32.02	20.90	2.26	M15 x 1-6g	26.50	20.72	18.36	4.93	3.25	3.25	20.22	2.50
13	32.02	20.90	2.26	M18 x 1-6g	28.90	23.11	20.72	4.93	3.25	3.25	23.42	2.50
15	32.02	20.90	2.26	M22 x 1-6g	31.30	24.71	23.11	4.45	3.25	3.25	26.59	2.50
17	32.02	20.90	2.26	M25 x 1-6g	33.60	27.07	24.71	4.93	3.25	3.25	30.96	2.50
19	32.02	20.90	2.26	M28 x 1-6g	36.80	29.46	27.07	4.93	3.25	3.25	32.94	2.50
21	32.02	20.01	2.97	M31 x 1-6g	40.00	31.85	29.46	4.93	3.25	3.25	36.12	2.50
23	32.02	20.01	2.97	M34 x 1-6g	43.20	35.03	31.85	6.15	3.91	3.25	39.29	2.50
25	32.02	20.01	2.97	M37 x 1-6g	46.30	38.20	35.03	6.15	3.91	3.91	42.47	2.50

Note: All dimensions are in millimeters (mm)

Dimensions

Type 07 - Jam nut receptacle



Shell size	A Max	B Max	ØC Max	ØD Thread	E Max	F Max	ØG ^{±0.25}	H Max	L Max	Tightening Torque (Nm)
9	32.50	22.60	16.63	M12 x 1-6g	27.4	24.00	17.78	17.02	3.20	4
11	32.50	22.60	19.17	M15 x 1-6g	32.20	27.00	20.96	19.59	3.20	5
13	32.50	22.60	23.92	M18 x 1-6g	35.30	32.00	25.65	24.26	3.20	7
15	32.50	22.60	27.07	M22 x 1-6g	38.50	36.00	28.83	27.56	3.20	8
17	32.50	22.60	30.25	M25 x 1-6g	41.70	37.00	32.01	30.73	3.20	9
19	32.50	22.60	33.42	M28 x 1-6g	46.40	41.00	35.18	33.91	3.20	10
21	32.50	20.01	36.60	M31 x 1-6g	49.60	46.00	38.35	37.08	3.20	12
23	32.50	20.01	39.77	M34 x 1-6g	52.80	50.00	41.53	40.26	3.20	13
25	32.50	20.01	42.95	M37 x 1-6g	56.00	51.23	44.70	43.43	3.20	14

Note: All dimensions are in millimeters (mm)

Connector weight - in grams (±15%)

Shell size	Shell type		
	00	07	06 & 66
9	11	15	17
11	17	20	23
13	22	26	28
15	25	34	34
17	38	44	44
19	40	49	49
21	52	60	60
23	54	63	63
25	58	75	70

8DS series without contact and backshell.

Souriau 8DS series with PC tail contacts

Ordering information

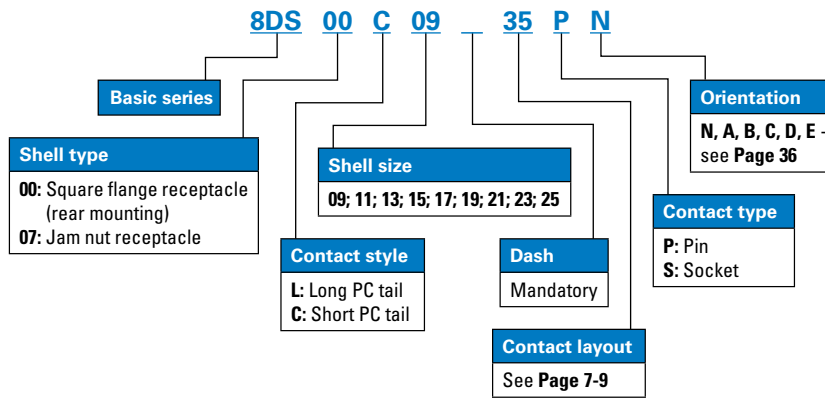


Description

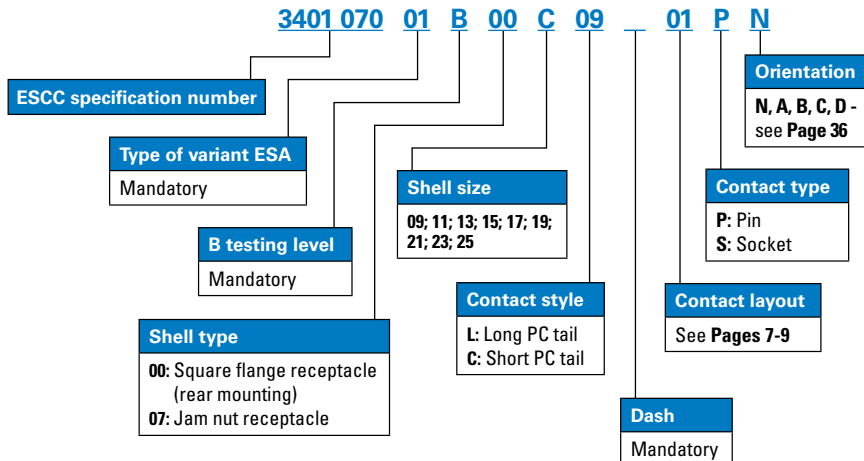
- Standard profile screw coupling connector with PC tail contacts
- Standards:
 - ESA/ESCC 3401/070 (QPL)
 - SSQ21635 NATC (NASA thread Coupling) intermateable
- Connector only, delivered with mounted contacts

Ordering information

Souriau part number / engineering models



ESA/ESCC part number / flight model



PC tail contact lengths

	Contact size	Contact type	Max	PC tail type	Shell size									
					09	11	13	15	17	19	21	23	25	
ØA	#22D	M & F	Max	L & C	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	
	#20	M & F	Max	L & C	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70		
	#16	M & F	Max	L & C	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15		
L1	#22D	M & F	Max	L	8.50	8.50	8.50	8.50	8.50	8.50	8.50	8.50	8.50	
		M & F	Max	C	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
	#20	M & F	Max	L	8.50	8.50	8.50	8.50	8.50	8.50	8.50	8.50	8.50	
		M & F	Max	C	5.10	5.10	5.10	5.10	5.10	5.10	5.10	5.10	5.10	
	#16	M & F	Max	L	8.50	8.50	8.50	8.50	8.50	8.50	8.50	8.50	8.50	
		M & F	Max	C	5.10	5.10	5.10	5.10	5.10	5.10	5.10	5.10	5.10	
L2	#22D	M	Min	L & C	10.52	10.52	10.34	10.34	10.34	10.34	10.34	10.34	10.34	
		M	Max	L & C	11.46	11.46	11.28	11.28	11.28	11.28	11.28	11.28	11.28	
		F	Min	L & C	10.19	10.19	10.01	10.01	10.01	10.01	10.01	10.01	10.01	
		F	Max	L & C	11.46	11.46	11.28	11.28	11.28	11.28	11.28	11.28	11.28	
	#20	M & F	Min	L & C	10.69	10.69	10.51	10.51	10.51	10.51	10.51	10.51	10.51	
		M & F	Max	L & C	11.63	11.63	11.45	11.45	11.45	11.45	11.45	11.45	11.45	
	#16	M & F	Min	L & C	10.69	10.69	10.51	10.51	10.51	10.51	10.51	10.51	10.51	
		M & F	Max	L & C	11.63	11.63	11.45	11.45	11.45	11.45	11.45	11.45	11.45	
	L3	#22D	M	Min	L & C	9.48	9.48	9.48	9.48	9.48	9.48	9.59	9.59	9.59
			M	Max	L & C	10.58	10.58	10.58	10.58	10.58	10.58	10.69	10.69	10.69
			F	Min	L & C	9.15	9.15	9.15	9.15	9.15	9.15	9.26	9.26	9.26
			F	Max	L & C	10.58	10.58	10.58	10.58	10.58	10.58	10.69	10.69	10.69
#20		M & F	Min	L & C	9.65	9.65	9.65	9.65	9.65	9.65	9.76	9.76	9.76	
		M & F	Max	L & C	10.75	10.75	10.75	10.75	10.75	10.75	10.86	10.86	10.86	
#16		M & F	Min	L & C	9.65	9.65	9.65	9.65	9.65	9.65	9.76	9.76	9.76	
		M & F	Max	L & C	10.75	10.75	10.75	10.75	10.75	10.75	10.86	10.86	10.86	

Note: All dimensions are in millimeters (mm)

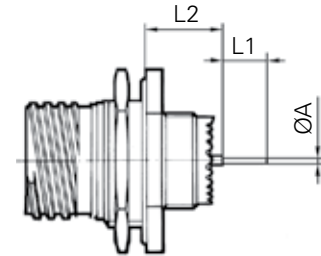
Connector weight with PC tail contacts - in grams (±15%)

Shell size	Shell type	
	00	07
9	14	18
11	20	23
13	27	31
15	35	44
17	40	56
19	55	64
21	70	80
23	78	95
25	88	100

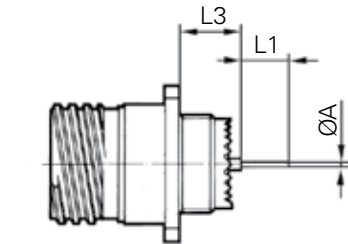
M: Male contact
F: Female contact

L: Long PC tail
C: Short PC tail

Receptacle type 07



Receptacle type 00



Souriau 8DS series with triax contacts

Ordering information

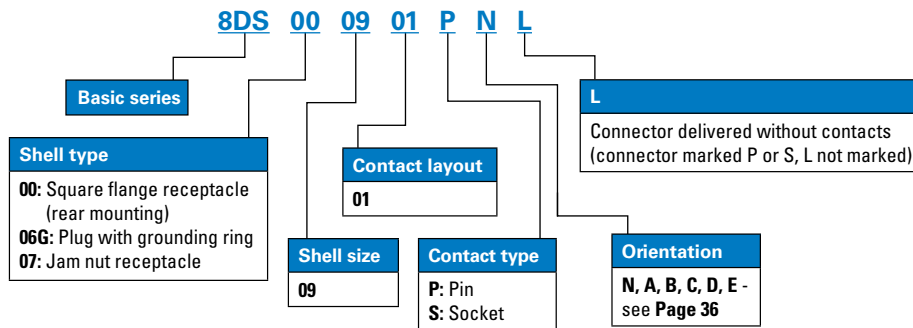


Description

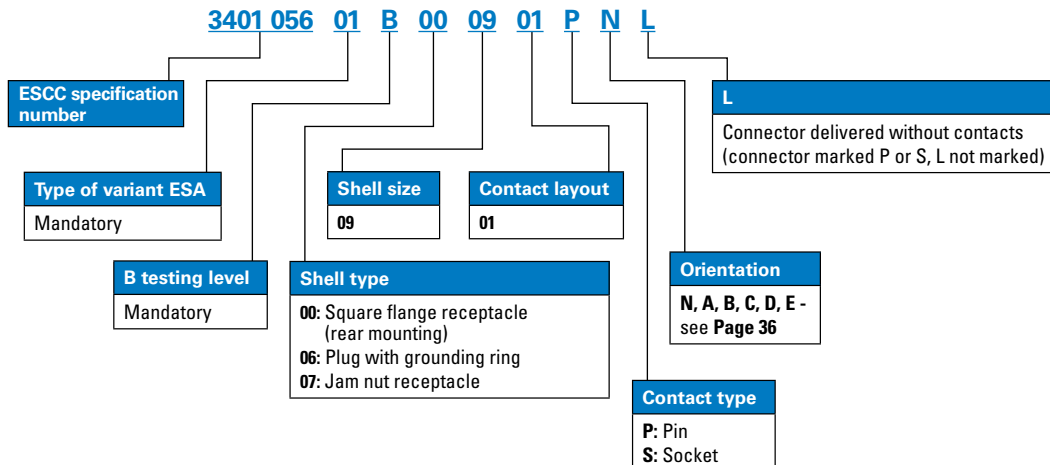
- Single #8 triax contact connector for databus
- Connector with removable crimp triax contacts according to MIL-DTL-38999 Series III
- To be mounted with:
 - ESA/ESCC 3401/066 triax contacts
 - ESA/ESCC 3401/062 backshells
- Standards:
 - ESA/ESCC 3401/056 (QPL)

Ordering information

Souriau part number / engineering models



ESA/ESCC part number / flight model



Backshells Souriau part number

8975-66 50A

Basic series

MonoTriax backshell type:

50A: Straight short backshell
 41A: Straight shield termination backshell
 44A: 90° shield termination backshell

Backshells ESA/ESCC part number

3401 062 65B

Basic series

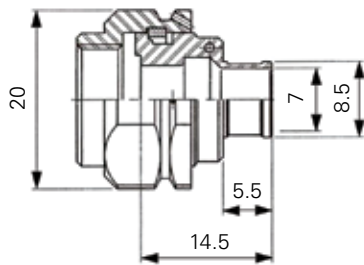
MonoTriax backshell type:

65B: Straight short backshell
 66B: Straight shield termination backshell
 67B: 90° shield termination backshell

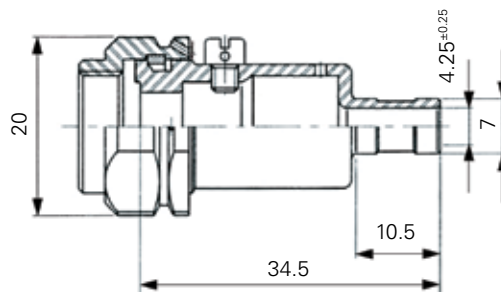
Dimensions

MonoTriax backshells

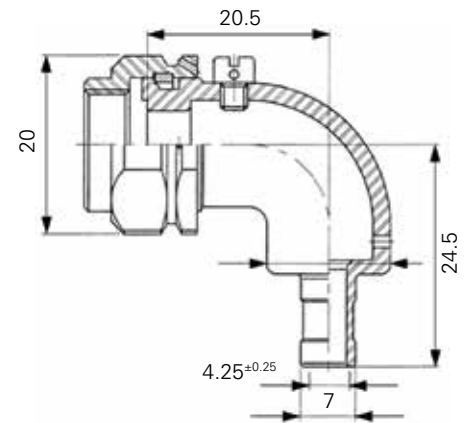
Straight short backshell



Straight shield termination backshell



90° shield termination backshell



Note: All dimensions are in millimeters (mm)

Connector and backshell weight - in grams (±15%)

Shell size	Shell type			Backshell type		
	00	07	06 & 66	50A	41A	44A
9	11	15	17	11.5	12	13

Souriau 8DS series hermetic

Ordering information

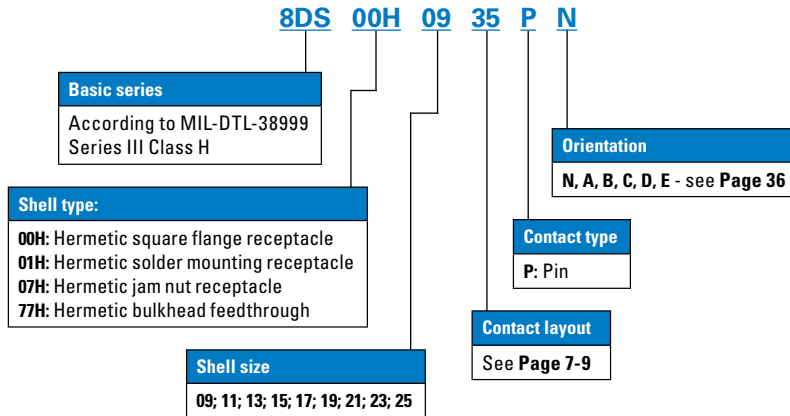


Description

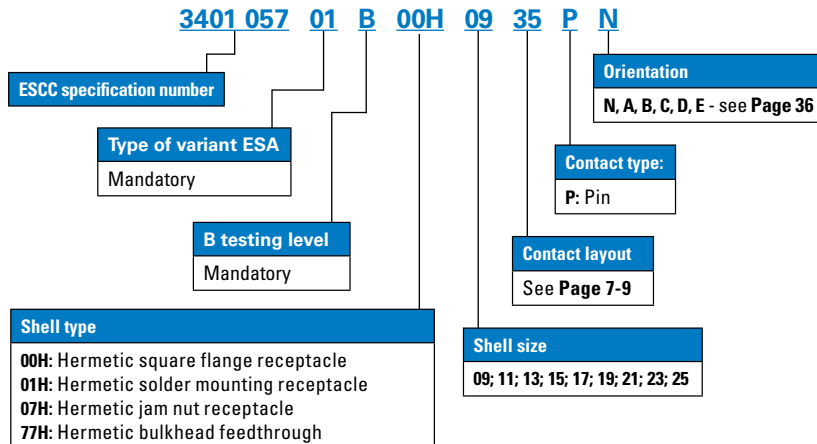
- Hermetic screw coupling receptacle and feedthrough
- To be mated with:
 - ESA/ESCC 3401/056 plugs
- Standards:
 - ESA/ESCC 3401/057 (QPL)
 - SSQ21635 NATC (NASA thread coupling)
 - MIL-DTL-38999 Series III Class H

Ordering information

Souriau part number / engineering models

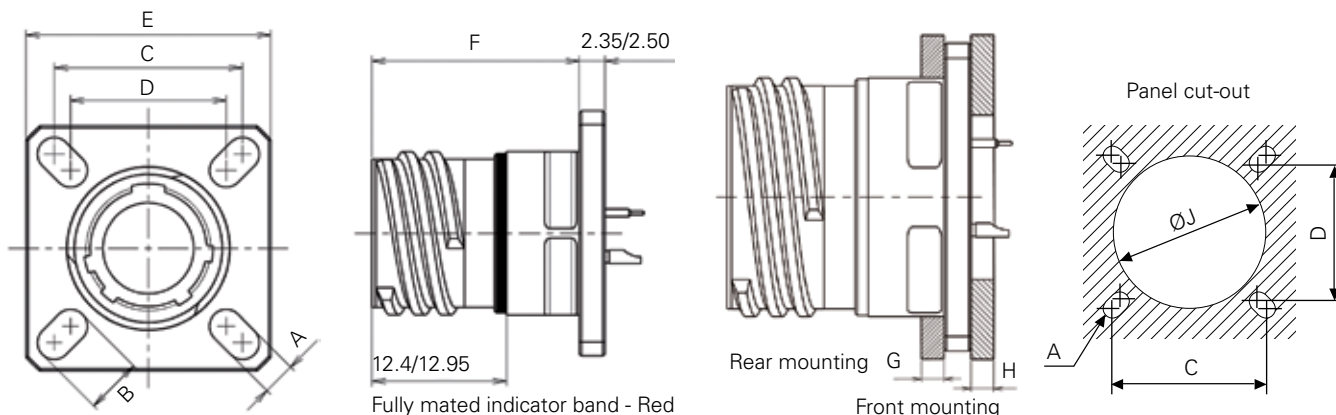


ESA/ESCC part number / flight model



Dimensions

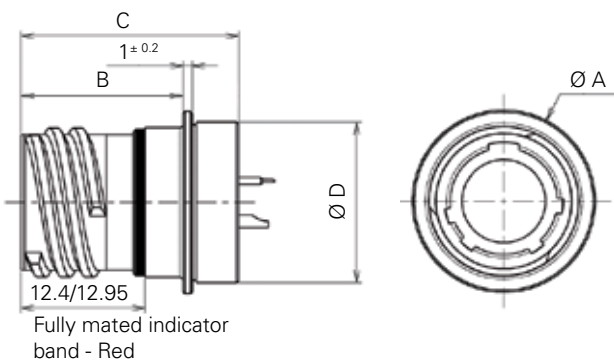
Type 00H - Hermetic square flange receptacle



Shell size	A ± 0.20	B ± 0.20	C	D	E ± 0.30	F max	G max	H max	ØJ	
									Front mounting	Rear mounting
9	3.25	5.49	18.26	15.09	23.80	20.40	2.5	3.2	13.11	16.66
11	3.25	4.93	20.62	18.26	26.20	20.40	2.5	3.2	15.88	20.22
13	3.25	4.93	23.01	20.62	28.60	20.40	2.5	3.2	19.05	23.42
15	3.25	4.39	24.61	23.01	31.00	20.40	2.5	3.2	23.01	26.59
17	3.25	4.93	26.97	24.61	33.30	20.40	2.5	3.2	25.81	30.96
19	3.25	4.93	29.36	26.97	36.50	20.40	2.5	3.2	28.98	32.94
21	3.25	4.93	31.75	29.36	39.70	20.40	2.5	3.2	32.16	36.12
23	3.91	6.15	34.93	31.75	42.90	20.40	2.5	3.2	34.93	39.29
25	3.91	6.15	38.10	34.93	46.00	20.40	2.5	3.2	37.69	42.47

Note: All dimensions are in millimeters (mm)

Type 01H - Hermetic solder mounting receptacle



Shell size	Ø A max	B max	C max	D max
9	19.40	17.80	23.80	17.10
11	21.80	17.80	23.80	19.90
13	24.90	17.80	23.80	23.10
15	28.10	17.80	23.80	26.20
17	31.30	17.80	23.80	29.40
19	33.60	17.80	23.80	31.80
21	36.80	17.80	23.80	35.00
23	40.00	17.80	24.60	38.20
25	43.20	17.80	24.60	41.30

Souriau 8DS series hermetic

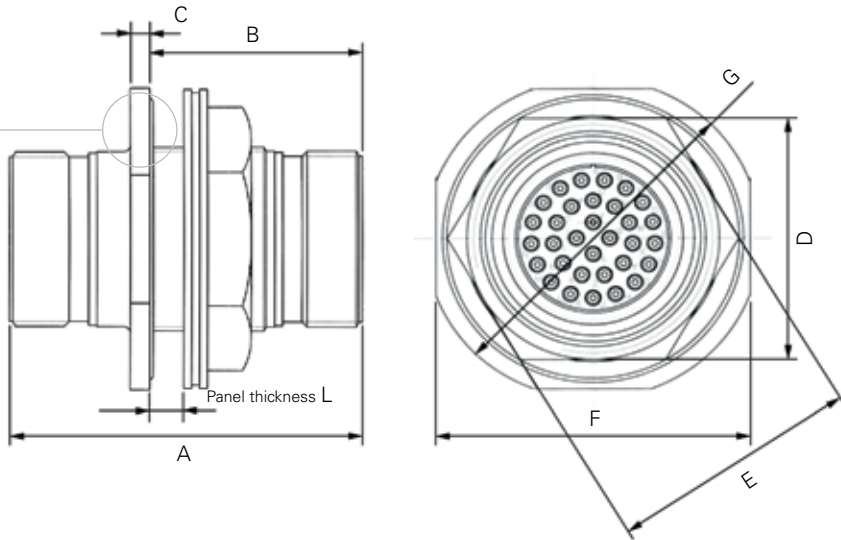
Dimensions and weights

Dimensions

Type 77H - Hermetic bulkhead feedthrough

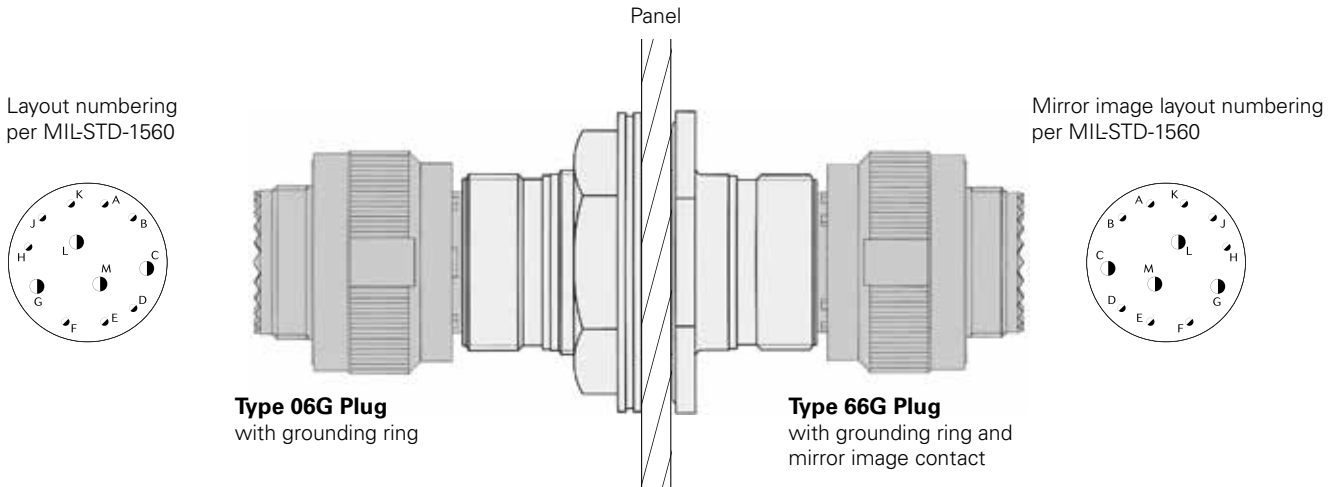


Two sealing gaskets



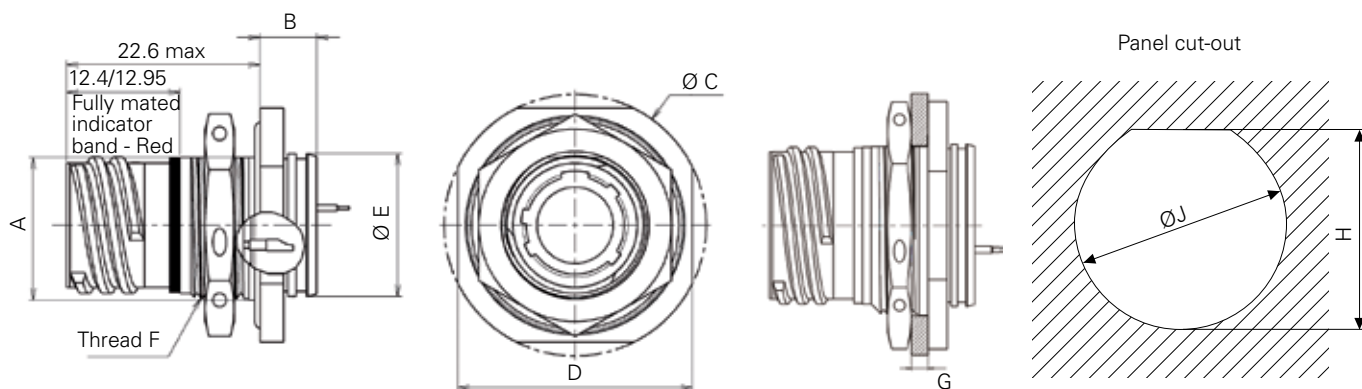
Shell size	A		B		C		D		E		F		ØG	L		Thread	Tightening Torque (Nm)
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min		Max			
9	52.80	31.40	2.50	2.90	16.38	16.63	22.27	22.50	33.00	33.59	36.88	1.57	6.35	M17 x 1-6g	11.5		
11	52.80	31.40	2.50	2.90	18.92	19.17	24.88	25.83	37.85	38.38	41.58	1.57	6.35	M20 x 1-6g	15.7		
13	52.80	32.00	2.50	2.90	23.67	23.92	29.77	30.60	41.02	41.55	44.75	1.57	6.35	M25 x 1-6g	16.8		
15	52.80	32.00	2.50	2.90	26.82	27.07	32.92	33.76	44.20	44.79	47.93	1.57	6.35	M28 x 1-6g	17.9		
17	52.80	32.00	2.50	2.90	30.00	30.25	36.12	37.06	47.37	47.90	51.10	1.57	6.35	M32 x 1-6g	20		
19	52.80	32.00	2.50	2.90	33.17	33.42	39.27	40.11	50.55	51.09	54.28	1.57	6.35	M35 x 1-6g	23.1		
21	52.80	32.00	2.50	2.90	36.35	36.60	42.47	43.31	53.72	54.25	57.48	1.57	6.35	M38 x 1-6g	25.2		
23	52.80	32.00	2.50	2.90	39.52	39.77	45.62	46.46	56.90	57.43	60.63	1.57	6.35	M41 x 1-6g	28.3		
25	52.80	32.00	2.50	2.90	42.70	42.95	50.39	51.23	60.07	60.50	63.80	1.57	6.35	M44 x 1-6g	30.4		

Note: All dimensions are in millimeters (mm)



Dimensions

Type 07H - Hermetic jam nut receptacle



Shell size	A flat $\begin{smallmatrix} +0.10 \\ -0.15 \end{smallmatrix}$	B max	Ø C ± 0.30	D ± 0.40	Ø E $\pm 0.30/0$	F thread	G	Ø J $\begin{smallmatrix} +0.25 \\ -0.25 \end{smallmatrix}$	H $\begin{smallmatrix} +0.25 \\ -0.25 \end{smallmatrix}$	Tightening Torque (Nm)
9	16.53	9.10	30.20	27.00	16.30	M17 x 1-6g	3.2	17.60	16.70	4
11	19.07	9.10	34.90	31.80	19.40	M20 x 1-6g	3.2	20.96	19.59	5
13	23.82	9.10	38.10	34.90	22.70	M25 x 1-6g	3.2	25.65	24.26	7
15	26.97	9.10	41.30	38.10	25.90	M28 x 1-6g	3.2	28.83	27.56	8
17	30.15	9.10	44.50	41.30	29.00	M32 x 1-6g	3.2	32.01	30.73	9
19	33.32	9.70	49.20	46.00	32.20	M35 x 1-6g	3.2	35.18	33.91	10
21	36.50	9.70	52.40	49.20	35.40	M38 x 1-6g	3.2	38.35	37.08	12
23	39.67	9.70	55.60	52.40	38.60	M41 x 1-6g	3.2	41.53	40.26	13
25	42.85	9.70	58.70	55.60	41.70	M44 x 1-6g	3.2	44.70	43.43	14

Note: All dimensions are in millimeters (mm)

Connector weight - in grams ($\pm 15\%$)

Shell size	Shell type			
	00H	01H	77H	07H
9	25	20	90	33
11	35	30	115	44
13	42	37	140	54
15	48	42	160	58
17	57	50	200	68
19	62	55	220	74
21	70	63	260	83
23	75	68	290	85
25	83	75	320	92

Space-grade backshells

Technical specifications

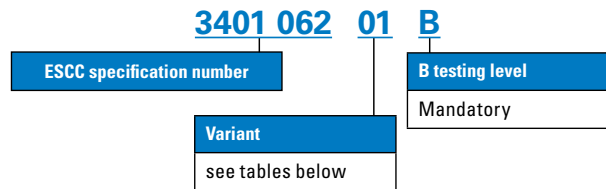


Description

- Space-grade circular backshells
 - 8LTS/8TS/8DS
 - ESA/ESCC 3401/062
 - MIL 85049

Ordering information

ESA/ESCC part number



Variant	Backshell type	For connectors	Shell size
01	Backnut	/052 (Series I)	09
		/054 (Series II)	08
02	Backnut	/052 (Series I)	11
		/054 (Series II)	10
03	Backnut	/052 (Series I)	13
		/054 (Series II)	12
04	Backnut	/052 (Series I)	15
		/054 (Series II)	14
05	Backnut	/052 (Series I)	17
		/054 (Series II)	16
06	Backnut	/052 (Series I)	19
		/054 (Series II)	18
07	Backnut	/052 (Series I)	21
		/054 (Series II)	20
08	Backnut	/052 (Series I)	23
		/054 (Series II)	22
09	Backnut	/052 (Series I)	25
		/054 (Series II)	24

Variant	Backshell type	For connectors	Shell size
10	Straight cable clamp	/052 (Series I)	09
		/054 (Series II)	08
11	Straight cable clamp	/052 (Series I)	11
		/054 (Series II)	10
12	Straight cable clamp	/052 (Series I)	13
		/054 (Series II)	12
13	Straight cable clamp	/052 (Series I)	15
		/054 (Series II)	14
14	Straight cable clamp	/052 (Series I)	17
		/054 (Series II)	16
15	Straight cable clamp	/052 (Series I)	18
		/054 (Series II)	19
16	Straight cable clamp	/052 (Series I)	20
		/054 (Series II)	21
17	Straight cable clamp	/052 (Series I)	23
		/054 (Series II)	22
18	Straight cable clamp	/052 (Series I)	25
		/054 (Series II)	24

Variant	Backshell type	For connectors	Shell size
19	90° cable clamp	/052 (Series I)	09
		/054 (Series II)	08
20	90° cable clamp	/052 (Series I)	11
		/054 (Series II)	10
21	90° cable clamp	/052 (Series I)	13
		/054 (Series II)	12
22	90° cable clamp	/052 (Series I)	15
		/054 (Series II)	14
23	90° cable clamp	/052 (Series I)	17
		/054 (Series II)	16
24	90° cable clamp	/052 (Series I)	19
		/054 (Series II)	18
25	90° cable clamp	/052 (Series I)	21
		/054 (Series II)	20
26	90° cable clamp	/052 (Series I)	23
		/054 (Series II)	22
27	90° cable clamp	/052 (Series I)	25
		/054 (Series II)	24

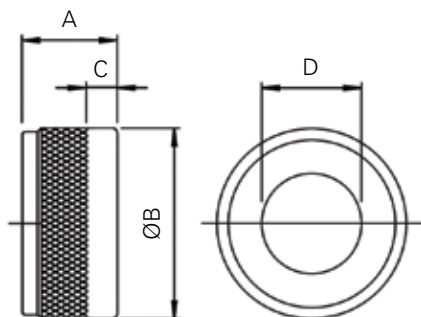
Variant	Backshell type	For connectors	Shell size
28	Backnut	/056 (Series III)	09
29	Backnut	/056 (Series III)	11
30	Backnut	/056 (Series III)	13
31	Backnut	/056 (Series III)	15
32	Backnut	/056 (Series III)	17
33	Backnut	/056 (Series III)	19
34	Backnut	/056 (Series III)	21
35	Backnut	/056 (Series III)	23
36	Backnut	/056 (Series III)	25

Variant	Backshell type	For connectors	Shell size
37	Straight cable clamp	/056 (Series III)	09
38	Straight cable clamp	/056 (Series III)	11
39	Straight cable clamp	/056 (Series III)	13
40	Straight cable clamp	/056 (Series III)	15
41	Straight cable clamp	/056 (Series III)	17
42	Straight cable clamp	/056 (Series III)	19
43	Straight cable clamp	/056 (Series III)	21
44	Straight cable clamp	/056 (Series III)	23
45	Straight cable clamp	/056 (Series III)	25

Variant	Backshell type	For connectors	Shell size
46	90° cable clamp	/056 (Series III)	09
47	90° cable clamp	/056 (Series III)	11
48	90° cable clamp	/056 (Series III)	13
49	90° cable clamp	/056 (Series III)	15
50	90° cable clamp	/056 (Series III)	17
51	90° cable clamp	/056 (Series III)	19
52	90° cable clamp	/056 (Series III)	21
53	90° cable clamp	/056 (Series III)	23
54	90° cable clamp	/056 (Series III)	25

Dimensions

Backnut backshell



Shell size	A Max		ØB Max		C Max	Thread		ØD Min
	Variants 01 to 09	Variants 28 to 36	Variants 01 to 09	Variants 28 to 36		UNEF-2B	B	
						Variants 01 to 09	Variants 28 to 36	
8/9	13.70	16.80	19.1	21.79	6.60	0.4375-28	M12 x 1-6h	6.7
10/11	13.70	16.80	21.5	24.99	6.60	0.5624-25	M15 x 1-6h	9.9
12/13	13.70	16.80	25.4	29.39	6.60	0.6875-24	M18 x 1-6h	12.8
14/15	13.70	16.80	27.9	32.49	6.60	0.8125-20	M22 x 1-6h	16
16/17	13.70	16.80	31.8	35.71	6.60	0.9375-20	M25 x 1-6h	19.2
18/19	13.70	16.80	35.6	38.5	6.60	1.0625-18	M28 x 1-6h	21.4
20/21	13.70	16.80	38.1	41.7	6.60	1.1875-18	M31 x 1-6h	24.6
22/23	13.70	16.80	41.9	44.91	6.60	1.3125-18	M34 x 1-6h	27.7
24/25	13.70	16.80	44.5	47.98	6.60	1.4375-18	M37 x 1-6h	30.9

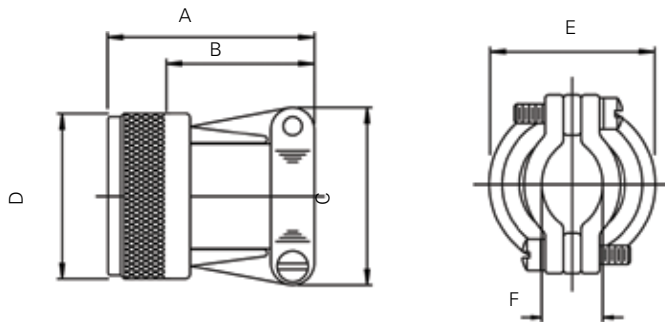
Note: All dimensions are in millimeters (mm)

Space-grade backshells

Dimensions

Dimensions

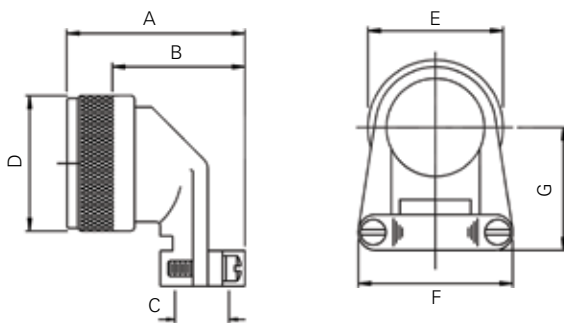
Straight cable clamp backshell



Shell size	A		B Max	C Max	Thread ØD		F		ØE	
	Variants 01 to 09	Variants 28 to 36			UNEF-2B	B	Min	Max	Variants 01 to 09	Variants 28 to 36
	Max	Max			Variants 01 to 09	Variants 28 to 36				
8/9	27.5		23.1	21.6	0.4375-28	M12 x 1-6h	2.49	5.94	19.1	21.79
10/11	27.5		23.1	22.5	0.5624-25	M15 x 1-6h	3.87	5.94	21.5	24.99
12/13	30.5		25.7	27.9	0.6875-24	M18 x 1-6h	4.83	8.33	25.4	29.39
14/15	31.8		26.9	29.2	0.8125-20	M22 x 1-6h	6.60	11.61	27.9	32.49
16/17	34.3		29.5	33.0	0.9375-20	M25 x 1-6h	7.19	15.6	31.8	35.71
18/19	40.6		35.8	38.1	1.0625-18	M28 x 1-6h	8.26	16.10	35.6	38.50
20/21	43.2		38.4	40.6	1.1875-18	M31 x 1-6h	8.71	17.73	38.1	41.70
22/23	47.0		42.2	43.2	1.3125-18	M34 x 1-6h	9.68	20.9	41.9	44.91
24/25	49.5		44.7	45.7	1.4375-18	M37 x 1-6h	10.62	21.67	44.5	47.98

Note: All dimensions are in millimeters (mm)

90° cable clamp backshell



Shell size	A Max		B Max		C		Thread ØD		ØE Max		F Max	G Max
	Variants 01 to 09	Variants 28 to 36	Variants 01 to 09	Variants 28 to 36	Min	Max	UNEF-2B	B	Variants 01 to 09	Variants 28 to 36		
							Variants 01 to 09	Variants 28 to 36				
8/9	30.5	35.1	25.7	29.5	2.49	5.94	0.4375-28	M12 x 1-6h	19.1	21.79	21.6	25.4
10/11	30.5	35.1	25.7	29.5	3.89	5.49	0.5624-25	M15 x 1-6h	21.5	24.99	22.5	27.9
12/13	35.6	37.1	30.7	31.5	4.83	8.33	0.6875-24	M18 x 1-6h	25.4	29.39	27.9	27.9
14/15	36.8	41.4	32	35.8	6.6	11.61	0.8125-20	M22 x 1-6h	27.9	32.49	29.2	29.2
16/17	40.6	45.7	35.8	40.1	7.19	15.6	0.9375-20	M25 x 1-6h	31.8	35.71	33.0	33.0
18/19	43.2	46.2	38.4	40.6	8.26	16.1	1.0625-18	M28 x 1-6h	35.6	38.5	38.1	38.1
20/21	47	48.3	42.2	42.7	8.71	17.73	1.1875-18	M31 x 1-6h	38.1	41.7	40.6	40.6
22/23	49.5	51.1	44.7	46.2	9.68	20.9	1.3125-18	M34 x 1-6h	41.9	44.91	43.2	44.5
24/25	53.3	54.6	48.5	49	10.62	21.67	1.4375-18	M37 x 1-6h	44.5	47.98	45.7	47

Note: Wire bundle accommodation range dimension is defined as the envelope area of the wire bundle. This dimension is not meant to define the clamp hardware limits. All dimensions are in millimeters (mm)

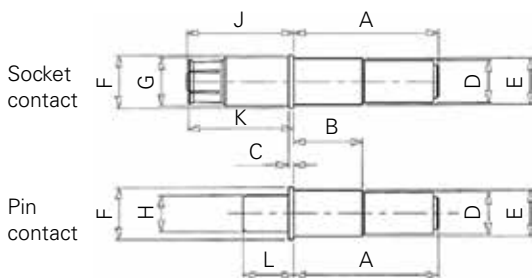
Crimp contacts

Signal and power contacts

Contact size	Conductor section AWG	Variant	Contact type	Part number				Mating end size	Crimp barrel size	Rated current (A)	Max. weight (g)	
				8LTS & 8DS Series	ESCC 3401 052 & 056	8TS Series	ESCC 3401 44				8LTS & 8DS	8TS
#22	#22, #24, & #26	1	Pin	8975 - 2123	3401 058 01B	8975 - 2123	3401 045 01B	22	22	5	0.08	0.08
		2	Socket	8975 - 2130	3401 058 02B	8975 - 2137	3401 045 02B	22	22	5	0.26	11
#20	#20, #22, & #24	3	Pin	8975 - 2124	3401 058 03B	8975 - 2124	3401 045 03B	20	20	7.5	0.16	0.16
		4	Socket	8975 - 2131	3401 058 04B	8975 - 2138	3401 045 04B	20	20	7.5	0.48	0.21
#16	#16, #18, & #20	5	Pin	8975 - 2125	3401 058 05B	8975 - 2125	3401 045 05B	16	16	13	0.33	0.33
		6	Socket	8975 - 2132	3401 058 06B	8975 - 2139	3401 045 06B	16	16	13	0.87	0.42
#12	#12 & #14	7	Pin	8975 - 2126	3401 058 07B	8975 - 2126	3401 045 07B	12	12	23	0.68	0.68
		8	Socket	8975 - 2133	3401 058 08B	8975 - 2140	3401 045 08B	12	12	23	1.6	0.82
#8	#8 & #10	9	Pin	8975 - 2127	3401 058 09B	N/A	N/A	8	8	45	3.5	N/A
		10	Socket	8975 - 2134	3401 058 10B	N/A	N/A	8	8	45	5	N/A
#4	#8 & #10	11	Pin	8975 - 2128	3401 058 11B	N/A	N/A	4	4	80	6	N/A
		12	Socket	8975 - 2135	3401 058 12B	N/A	N/A	4	4	80	7.5	N/A
#4 & #6	#4 & #6	13	Pin	8975 - 3779	3401 058 13B	N/A	N/A	4	8	45	6	N/A
		14	Socket	8975 - 3780	3401 058 14B	N/A	N/A	4	8	45	7.5	N/A

Triax contacts

Contact size	Accept wire AWG	Variant	Contact type	Part number		Working voltage (V)	Frequency range (MHz)	Rated current (A)	Max. weight (g)
				ESA / ESCC	8DS Series				
#8	22	1	Pin	3401 066 01B	SN1767K 988-A	500	0 to 20	1	6.6
	24	1	Pin	3401 066 01B	SN1767K 988-A	500	0 to 20	1	6.6
	26	2	Socket	3401 066 02B	SN 1767K 998-A	500	0 to 20	1	9.2



	A	B	C	D	E*	F	G	H	J	K	L
Min	21.34	10.00	0.74	6.93	N/A	7.95	7.22	5.515	15.80	15.88	7.49
Max	22.86	11.00	0.84	7.01	6.53	8.03	7.32	5.565	16.43	16.03	7.74

Note: All dimensions are in millimeters (mm). *After crimping.

Contacts for hermetic connectors

Contact size	Shell type	Contact type	Mating end size	Solder bucket size	Accept wire
#22D	Receptacle	Pin	22	22	22, 24, 26
#20	Receptacle	Pin	30	20	20, 22, 24
#22D	Feedthrough	Pin	22***	N/A	N/A
#20	Feedthrough	Pin	20***	N/A	N/A
#16	Feedthrough	Pin	16***	N/A	N/A
#12	Feedthrough	Pin	12***	N/A	N/A
#8	Feedthrough	Pin	8***	N/A	N/A

Contacts for MIL Class G

Contact size	Pin contact	Socket contact	
	Series I, II & III	Series I & III	Series II
#22D	M39029/58.360	M39029/56.348	M39029/57.354
#20	M39029/58.363	M39029/56.351	M39029/57.357
#16	M39029/58.364	M39029/56.352	M39029/57.358
#12	M39029/58.365	M39029/56.353	M39029/57.359

Space-grade connectors

Tooling

Tooling

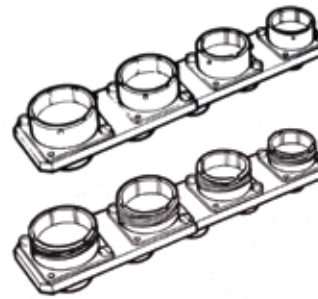
Contact size	Conductor section AWG	Contact type	Crimping tool		Insertion and extraction plastic tool
			Plier	Locator	
#22	#22, #24, & #26	Pin	M22520/1-02	M22520/1-02	M81969/14-01
			M22520/1-02	M22520/1-09	M81969/14-01
		Socket	M22520/1-02	M22520/1-02	M81969/14-01
			M22520/1-02	M22520/1-07	M81969/14-01
#20	#20, #22, & #24	Pin	M22520/1-01	M22520/1-04	M81969/14-02
		Socket	M22520/1-01	M22520/1-04	M81969/14-02
#16	#16, #18, & #20	Pin	M22520/1-01	M22520/1-04	M81969/14-03
		Socket	M22520/1-01	M22520/1-04	M81969/14-03
#12	#12 & #14	Pin	M22520/1-01	M22520/1-04	M81969/14-04
		Socket	M22520/1-01	M22520/1-04	M81969/14-04
#8	#8 & #10	Pin	M22520/23-01	M22520/23-09	M81969/14-12
		Socket	M22520/23-01	M22520/2-09	M81969/14-12
#4	#8 & #10	Pin	M22520/23-01	M22520/23	M81969/14-12
		Socket	M22520/23-01	Point: M22520/23-02	M81969/14-12
	#4 & #6	Pin	M22520/23-01	M22520/23-06	M81969/14-07
		Socket	M22520/23-01	Point: M22520/23-04	M81969/14-07

Backshell tightening tools



Backshell tightening pliers, part number: 8522-9267A

Tightening support



This tool is made up of dummy receptacles housings of all 9 sizes for all key polarization, and secures free connectors during wiring and fitting of rear accessories.

8LTS and 8TS part number: 8599-0802

8DS part number: 8599-0831

Slackening tools



Strap clamp, part number: 8498-04

Spare strap, part number: 8498-103

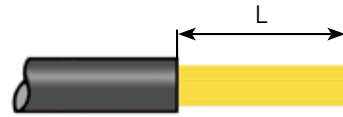
Tightening of rear accessories:

	8	10	12	14	16	18	20	22	24
Shell size	9	11	13	15	17	19	21	23	25
Max torque in m/daN	0.62	0.62	0.62	0.62	0.62	0.62	1.24	1.24	1.24

Wiring instruction

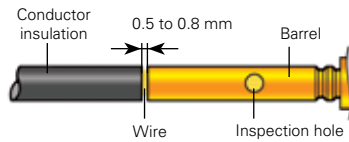
Cable preparation and wire stripping

Contact size	#22D	#20	#16	#12	#8	#4
L	4	6			12	



L = length of wire stripping

Insertion of wire in contact barrel



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

Important:

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

Insertion of the contacts



1 - Engage the crimp cable/contact assembly into the longitudinal slot of the plastic tool (colored tip). Slide the tool down the cable until the tip of the tool abuts the contact retention shoulder.



2 - Introduce the contact into the required contact cavity in the insulator, pushing tool axially, until the contact snaps into position in clip.



3 - Withdraw the tool from rear. Check that contact is firmly locked by pulling wire gently. When connector is fully loaded, check the position of contact tips. They should all be in the same plane. Note: For larger sizes of cable, which are stiff enough, manual insertion without the tool is preferable.

Extraction of the contacts



1 - Engage the appropriate cable into the longitudinal slot of the tool with the white tip towards connector.



2 - Slide the tool down towards the contact. Insert the tool in the insulator until it abuts the contact shoulder.



3 - Holding the tool, contact and cable assembly together, remove them simultaneously.

Note: All dimensions are in millimeters (mm)

Space-grade connectors

Orientation

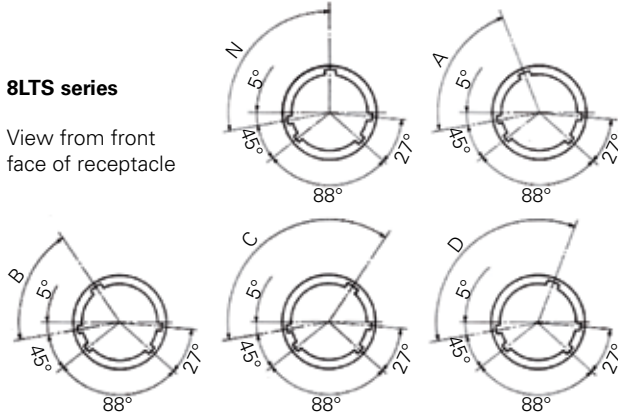
Orientation

8LTS and 8TS series

Polarization is determined by the master keyway position. The secondary keyway positions remain fixed.

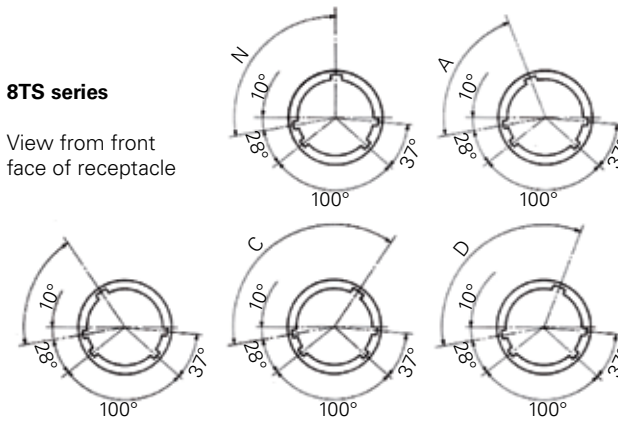
8LTS series

View from front face of receptacle

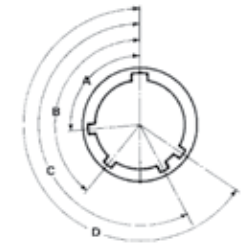


8TS series

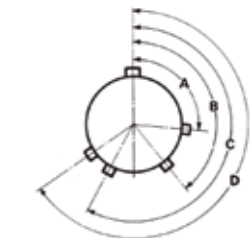
View from front face of receptacle



8DS series



View from front face of receptacle



View from front face of plug

8LTS series - Angles (degrees)

Shell size	N	A	B	C	D
09	95	77	-	-	113
11	95	81	67	123	109
13	95	75	63	127	115
15	95	74	61	129	116
17	95	77	65	125	113
19	95	77	65	125	113
21	95	77	65	125	113
23	95	80	69	121	110
25	95	80	69	121	110

8TS series - Angles (degrees)

Shell size	N	A	B	C	D
08	100	82	-	-	118
10	100	86	72	128	114
12	100	80	68	132	120
14	100	79	66	134	121
16	100	82	70	130	118
18	100	82	70	130	118
20	100	82	70	130	118
22	100	85	74	126	115
24	100	85	74	126	115

Shell size	Angles	N	A	B	C	D	E	T	V
9	A°	105	102	80	35	64	91	-	-
	B°	140	132	118	140	155	131	-	-
	C°	215	248	230	205	234	197	-	-
	D°	265	320	312	275	304	240	-	-
11	A°	95	113	90	53	119	51	-	-
	B°	141	156	145	156	146	141	-	-
	C°	208	182	195	220	176	184	-	-
	D°	236	292	252	255	298	242	-	-
13	A°	95	113	90	53	119	51	70	75
	B°	141	156	145	156	146	141	136	138
	C°	208	182	195	220	176	184	218	224
	D°	236	292	252	255	298	242	261	268
17	A°	80	135	49	66	62	79	58	85
	B°	142	170	169	140	145	153	162	150
	C°	196	200	200	200	180	197	188	191
	D°	293	310	244	257	280	272	316	307
19	A°	80	135	49	66	62	79	-	-
	B°	142	170	169	140	145	153	-	-
	C°	196	200	200	200	180	197	-	-
	D°	293	310	244	257	280	272	-	-



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