

# 8T Series



## Applications

Compact profile and high density connectors for all military and aeronautical purposes

## Standards

MIL-C 38999 Series II - QPL approved  
 NFC 93422 HE 309  
 VG 96912 series II  
 PAN 6433-1  
 BS 9522 N 003



## Description

- High density connectors from 1 to 128 contacts
- Sizes 22D, 20, 16, 12
- A compact profile
- Bayonet locking system
- An excellent shock vibration and fluid resistance

## Characteristics

### Mechanical

- Shell : aluminum alloy
- Plating :
  - olive green cadmium (G and B)
  - nickel (F) - hard anodized (C)
- Insulator : thermoplastic
- Grommet and seal : silicone elastomer
- Contact : copper alloy
- Plating : gold over nickel
- Endurance :
  - 500 mating/unmating operations
- Shock : 300 g during 3 ms
- Vibration :
  - random 100 to 1000 Hz - 1 g<sup>2</sup>/Hz
- Contact retention (mini force in N) :
  - size 22D : 44 N    size 20 : 67 N
  - size 16 : 110 N    size 12 : 110 N

### Electrical

- Test voltage (Vrms)

Service	sea level	at 21000 m
M	1300	800
I	1800	1000
II	2300	1000

- Contact resistance :
  - size 22 D : 14.6 mΩ    size 16 : 3.8 mΩ
  - size 20 : 7.3 mΩ
- Insulation resistance :
  - ≥ 5000 MΩ (at 500 Vdc)
- Contact rating :
  - size 22 D : 5 A    size 16 : 13 A
  - size 20 : 7.5 A    size 12 : 23 A
- Shell continuity :
  - olive green plating : 2.5 mΩ
  - nickel plating : 1 mΩ

### Climatic

- Temperature range :
  - cadmium plating (G)    -65°C +175°C
  - (B)    -65°C +175°C
  - nickel plating (F)    -65°C +200°C
  - hard anodized (C)    -65°C +200°C
- Sealing : mated connectors  
 differential pressure 1 bar ; leakage ≤ 8 cm<sup>3</sup>/hr
- Salt spray to :
  - MIL-STD 1344 method 1001
  - 500 hours (plating B)
  - 48 hours (plating F-C)
  - NFC 93422
  - 48 hours (plating G-F-C)
- Damp heat :
  - MIL-C 38999 : 10 cycles (24 hours)
  - NFC 93422 : 56 days

### Resistance to fluids

To MIL-L 38999 :  
 MIL-L 7808, MIL-L 23699, MIL-H 5606,  
 MIL-A 8243, MIL-L 25769, MIL-G 3056,  
 MIL-T 5624 (JP5) ; hydraulic fluids ; solvents  
 To NFC 93422 :  
 F 46, F 54, 0/180, H 515, H 542, XH 45

## Ordering information

### FCI Souriau - Part numbers

<b>basic series</b>			<b>8 T</b>	<b>3</b>	<b>-</b>	<b>14</b>	<b>G</b>	<b>35</b>	<b>P</b>	<b>N</b>		
<b>shell type</b>	<b>2</b>	- square flange receptacle not accepting backshells										
	<b>3</b>	- square flange receptacle (rear mounting)										
	<b>7</b>	- jam nut receptacle										
	<b>1</b>	- cable connecting receptacle										
	<b>6</b>	- plug										
<b>designator</b>	- connectors with standard crimp contacts											
	<b>L</b>	- receptacle with long spill (male and female # 22D)										
	<b>C</b>	- receptacle with short spill (male # 22D - # 20 - # 16)										
<b>shell size</b>	<b>08-10-12-14-16-18-20-22-24</b>											
<b>plating</b>	<b>G</b>	- olive green cadmium (HE 309)										
	<b>F</b>	- nickel										
	<b>B</b>	- olive green cadmium (MIL-C 38999)										
	<b>C</b>	- hard anodized										
<b>contact layout</b>	- see table p 120											
<b>contact type</b>	<b>P</b>	- male								<b>A</b>	- male connector without contact or with special contacts	
	<b>S</b>	- female								<b>B</b>	- female connector without contact or with special contacts	
<b>polarization</b>	<b>N-A-B-C-D</b> - see table p 100											

Note : connectors supplied with standard contacts

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## MIL-C 38999 Series II

<b>basic series</b>	<b>MS</b>	<b>27497</b>	<b>T</b>	<b>14</b>	<b>B</b>	<b>35</b>	<b>P</b>	<b>•</b>
<b>shell type</b>	<b>27508</b> - square flange receptacle without thread for back fitting <b>27497</b> - square flange receptacle (rear mounting) <b>27474</b> - jam nut receptacle <b>27473</b> - plug							
<b>class</b>	<b>T</b> - with thread for backshell, supplied without backshell <b>E</b> - without thread for backshell only for MS 27508							
<b>shell size</b>	<b>08-10-12-14-16-18-20-22-24</b>							
<b>plating</b>	<b>B</b> - olive green cadmium		<b>F</b> - nickel		<b>C</b> - hard anodized			
<b>contact layout</b>	- see table p 120							
<b>contact type</b>	<b>P</b> - male		<b>A</b> - male connector supplied without contact or with special contacts					
	<b>S</b> - female		<b>B</b> - female connector supplied without contact or with special contacts					
<b>polarization</b>	<b>N</b> - Normal (not included in part number) <b>A-B-C-D</b> - see table p 100							

## backshells

<b>basic series</b>										<b>8LST</b>	<b>104</b>	<b>G</b>	<b>01</b>
<b>shell size</b>	08	10	12	14	16	18	20	22	24				
<b>index number</b>	101	102	103	104	105	106	107	108	109				
<b>plating</b>	<b>B</b> - olive green cadmium (MIL. C 38999)												
	<b>F</b> - nickel												
<b>backshell type</b>	<b>01</b> - backnut					<b>03</b> - elbow cable clamp							
	<b>02</b> - straight cable clamp												

## Cross reference list - part numbers cross reference list FCI Souriau and MIL-C 38999 NFC 93422 - PAN 6433-1

	FCI Souriau	MIL-C 38999 Series II	NFC 93422 / HE 309	PAN 6433-1
Square flange receptacle without thread for back fitting	8T2 - •• G •• P □		HE 309-05T •• - •• P □ 7	PAN 6433-1E •• - •• P □
	8T2 - •• G •• A □		HE 309-05T •• - •• P □ 7L	
	8T2 - •• G •• S □		HE 309-05T •• - •• S □ 7	PAN 6433-1E •• - •• S □
	8T2 - •• G •• B □		HE 309-05T •• - •• S □ 7L	
	8T2 - •• B •• P □	MS27508E •• B •• P □		
	8T2 - •• B •• A □	MS27508E •• B •• A □		
	8T2 - •• B •• S □	MS27508E •• B •• S □		
	8T2 - •• B •• B □	MS27508E •• B •• B □		
	8T2 - •• F •• P □	MS27508E •• F •• P □	HE 309-05T •• - •• P □ 6	
	8T2 - •• F •• A □	MS27508E •• F •• A □	HE 309-05T •• - •• P □ 6L	
	8T2 - •• F •• S □	MS27508E •• F •• S □	HE 309-05T •• - •• S □ 6	
	8T2 - •• F •• B □	MS27508E •• F •• B □	HE 309-05T •• - •• S □ 6L	
	8T2 - •• C •• P □	MS27508E •• C •• P □	HE 309-05T •• - •• P □ 8	
	8T2 - •• C •• A □	MS27508E •• C •• A □	HE 309-05T •• - •• P □ 8L	
	8T2 - •• C •• S □	MS27508E •• C •• S □	HE 309-05T •• - •• S □ 8	
	8T2 - •• C •• B □	MS27508E •• C •• B □	HE 309-05T •• - •• S □ 8L	
Square flange receptacle with thread for back fitting	8T3 - •• G •• P □		HE 309-03T •• - •• P □ 7	PAN 6433-1B •• - •• P □
	8T3 - •• G •• A □		HE 309-03T •• - •• P □ 7L	
	8T3 - •• G •• S □		HE 309-03T •• - •• S □ 7	PAN 6433-1B •• - •• S □
	8T3 - •• G •• B □		HE 309-03T •• - •• S □ 7L	
	8T3 - •• B •• P □	MS27497T •• B •• P □		
	8T3 - •• B •• A □	MS27497T •• B •• A □		
	8T3 - •• B •• S □	MS27497T •• B •• S □		
	8T3 - •• B •• B □	MS27497T •• B •• B □		
	8T3 - •• F •• P □	MS27497T •• F •• P □	HE 309-03T •• - •• P □ 6	
	8T3 - •• F •• A □	MS27497T •• F •• A □	HE 309-03T •• - •• P □ 6L	
	8T3 - •• F •• S □	MS27497T •• F •• S □	HE 309-03T •• - •• S □ 6	
	8T3 - •• F •• B □	MS27497T •• F •• B □	HE 309-03T •• - •• S □ 6L	
	8T3 - •• C •• P □	MS27497T •• C •• P □	HE 309-03T •• - •• P □ 8	
	8T3 - •• C •• A □	MS27497T •• C •• A □	HE 309-03T •• - •• P □ 8L	
	8T3 - •• C •• S □	MS27497T •• C •• S □	HE 309-03T •• - •• S □ 8	
	8T3 - •• C •• B □	MS27497T •• C •• B □	HE 309-03T •• - •• S □ 8L	

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## Cross reference list - FCI Souriau part numbers and MIL-C 38999, NFC 93422 - PAN 6433-1 standard

	FCI Souriau	MIL-C 38999 Series II	NFC 93422 / HE 309	PAN 6433-1
Jam nut receptacle	8T7 - ●● G ●● P □ 8T7 - ●● G ●● A □ 8T7 - ●● G ●● S □ 8T7 - ●● G ●● B □ 8T7 - ●● B ●● P □ 8T7 - ●● B ●● A □ 8T7 - ●● B ●● S □ 8T7 - ●● B ●● B □ 8T7 - ●● F ●● P □ 8T7 - ●● F ●● A □ 8T7 - ●● F ●● S □ 8T7 - ●● F ●● B □ 8T7 - ●● C ●● P □ 8T7 - ●● C ●● A □ 8T7 - ●● C ●● S □ 8T7 - ●● C ●● B □	MS27474T ●● B ●● P □ MS27474T ●● B ●● A □ MS27474T ●● B ●● S □ MS27474T ●● B ●● B □ MS27474T ●● F ●● P □ MS27474T ●● F ●● A □ MS27474T ●● F ●● S □ MS27474T ●● F ●● B □ MS27474T ●● C ●● P □ MS27474T ●● C ●● A □ MS27474T ●● C ●● S □ MS27474T ●● C ●● B □	HE 309-07T ●● - ●● P □ 7 HE 309-07T ●● - ●● P □ 7L HE 309-07T ●● - ●● S □ 7 HE 309-07T ●● - ●● S □ 7L HE 309-07T ●● - ●● P □ 6 HE 309-07T ●● - ●● P □ 6L HE 309-07T ●● - ●● S □ 6 HE 309-07T ●● - ●● S □ 6L HE 309-07T ●● - ●● P □ 8 HE 309-07T ●● - ●● P □ 8L HE 309-07T ●● - ●● S □ 8 HE 309-07T ●● - ●● S □ 8L	PAN 6433-1A ●● - ●● P □ PAN 6433-1A ●● - ●● S □
Cable connecting receptacle	8T1 - ●● G ●● P □ 8T1 - ●● G ●● A □ 8T1 - ●● G ●● S □ 8T1 - ●● G ●● B □ 8T1 - ●● B ●● P □ 8T1 - ●● B ●● A □ 8T1 - ●● B ●● S □ 8T1 - ●● B ●● B □ 8T1 - ●● F ●● P □ 8T1 - ●● F ●● A □ 8T1 - ●● F ●● S □ 8T1 - ●● F ●● B □ 8T1 - ●● C ●● P □ 8T1 - ●● C ●● A □ 8T1 - ●● C ●● S □ 8T1 - ●● C ●● B □			
Plug without RFI shielding	8T6 - ●● G ●● P □ 8T6 - ●● G ●● A □ 8T6 - ●● G ●● S □ 8T6 - ●● G ●● B □ 8T6 - ●● B ●● P □ 8T6 - ●● B ●● A □ 8T6 - ●● B ●● S □ 8T6 - ●● B ●● B □ 8T6 - ●● F ●● P □ 8T6 - ●● F ●● A □ 8T6 - ●● F ●● S □ 8T6 - ●● F ●● B □ 8T6 - ●● C ●● P □ 8T6 - ●● C ●● A □ 8T6 - ●● C ●● S □ 8T6 - ●● C ●● B □	MS27473T ●● B ●● P □ MS27473T ●● B ●● A □ MS27473T ●● B ●● S □ MS27473T ●● B ●● B □ MS27473T ●● F ●● P □ MS27473T ●● F ●● A □ MS27473T ●● F ●● S □ MS27473T ●● F ●● B □ MS27473T ●● C ●● P □ MS27473T ●● C ●● A □ MS27473T ●● C ●● S □ MS27473T ●● C ●● B □	HE 309-06T ●● - ●● P □ 7 HE 309-06T ●● - ●● P □ 7L HE 309-06T ●● - ●● S □ 7 HE 309-06T ●● - ●● S □ 7L HE 309-06T ●● - ●● P □ 6 HE 309-06T ●● - ●● P □ 6L HE 309-06T ●● - ●● S □ 6 HE 309-06T ●● - ●● S □ 6L HE 309-06T ●● - ●● P □ 8 HE 309-06T ●● - ●● P □ 8L HE 309-06T ●● - ●● S □ 8 HE 309-06T ●● - ●● S □ 8L	PAN 6433-1F ●● - ●● P □ PAN 6433-1F ●● - ●● S □
Contacts - filler plugs - tools	8599-0902 8599-0903 8599-0904 8599-0905 8599-0910 8599-0911 8599-0912 8599-0913 8660-212 8522-389A 8522-390A 8599-0022 8522-20 8522-16	M39029/58-360 M39029/58-363 M39029/58-364 M39029/58-365 M39029/57-354 M39029/57-357 M39029/57-358 M39029/57-359 M27488-22 M27488-20 M27488-16 M81969/14-01 M81969/14-02 M81969/14-03		PAN 6433-1P PAN 6433-1S PAN 6433-1N
Backshells	8LST ●●● G01 8LST ●●● B01 8LST ●●● F01	M85049/27 ●● W M85049/27 ●● N	HE 309-17 ●● 7 HE 309-17 ●● 6	

# 8T Series



## Polarization

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



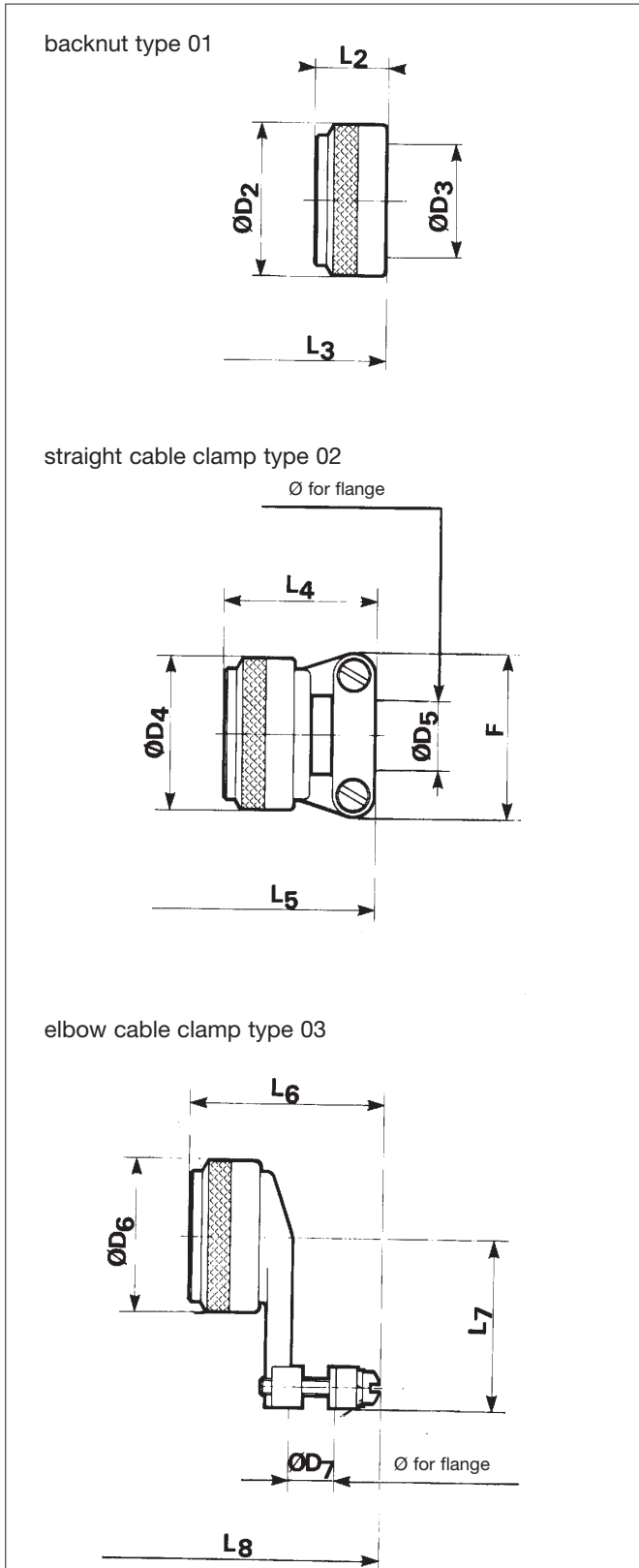
shell size	contacts layout	service			number of contacts				angle in degrees				
		M	I	II	# 22D Ø 0,76	# 20 Ø 1	# 16 Ø 1,6	# 12 Ø 2,4	N	A	B	C	D
08	35	X			6				100	82	-	-	118
10	35	X			13				100	86	72	128	114
12	35	X							100	80	68	132	120
14	35	X			37				100	79	66	134	121
	18		X			18			100	79	66	134	121
16	35	X			55				100	82	70	130	118
	08			X			8		100	82	70	130	118
	06		X					6	100	82	70	130	118
18	35	X			66				100	82	70	130	118
20	35	X			79				100	82	70	130	118
	41		X			41			100	82	70	130	118
	16			X			16		100	82	70	130	118
	11			X				11	100	82	70	130	118
22	35	X			100				100	85	74	126	115
24	35	X			128				100	85	74	126	115
	61		X			61			100	85	74	126	115
	29		X				29		100	85	74	126	115
	24		X				12	12	100	85	74	126	115

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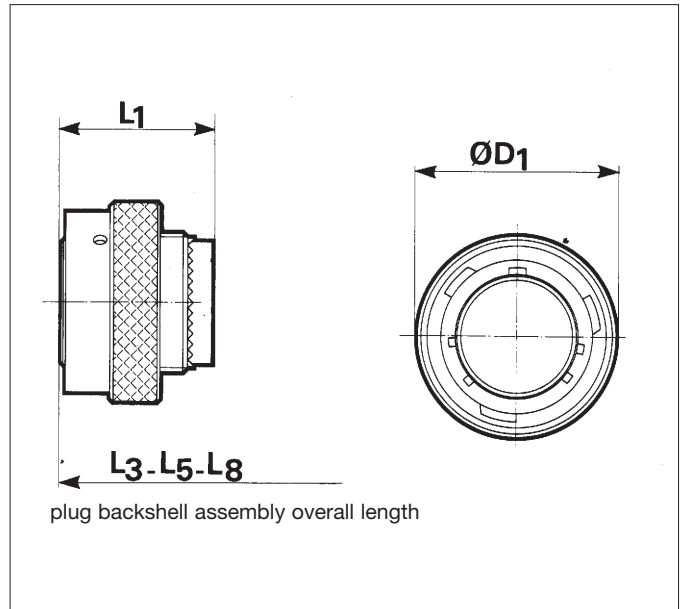


## Dimensions

### backshells



### plug type 6



shell size	08	10	12	14	16	18	20	22	24
D 1 Max	19.05 .750	21.82 .859	26.19 1.031	29.36 1.156	32.54 1.281	35.71 1.406	38.89 1.531	41.68 1.641	44.86 1.766
L1 Max	23.27 .916	23.27 .916	23.27 .916	23.27 .916	23.27 .916	23.27 .916	23.27 .916	23.27 .916	25.00 .984
D2 Max	15.67 .617	18.64 .734	21.79 .858	24.99 .984	28.24 1.112	30.94 1.218	34.16 1.345	37.29 1.468	40.46 1.593
D3 Max	6.96 .274	10.46 .412	13.36 .526	16.53 .651	19.71 .776	22.40 .882	25.56 1.006	28.75 1.132	31.93 1.257
L2 Max	11.30 .445	11.30 .445	11.30 .445	11.30 .445	11.30 .445	11.30 .445	11.30 .445	11.30 .445	11.30 .445
L3 Max	25.16 .991	25.16 .991	25.16 .991	25.16 .991	25.16 .991	25.16 .991	25.16 .991	25.16 .991	27.14 1.069
D4 Max	15.67 .617	18.64 .734	21.79 .858	24.99 .984	28.24 1.112	30.94 1.218	34.16 1.345	37.29 1.468	40.46 1.593
D5	min	1.40 .055	1.40 .055	2.40 .094	5.60 .220	5.60 .220	8.80 .346	11.90 .469	15.10 .594
	Max	3.20 .126	4.80 .189	6.40 .252	9.50 .374	12.70 .500	15.90 .626	19.10 .752	22.20 .874
F Max	21.03 .828	22.63 .891	25.81 1.016	28.98 1.141	30.56 1.203	37.31 1.469	37.31 1.469	42.06 1.656	44.45 1.750
L4 Max	22.22 .875	22.22 .875	22.22 .875	28.57 1.125	28.57 1.125	28.57 1.125	28.57 1.125	31.75 1.250	31.75 1.250
L5 Max	41.26 1.624	41.26 1.624	41.26 1.624	47.16 1.857	47.16 1.857	47.16 1.857	47.16 1.857	50.76 1.998	50.76 1.998
D6 Max	15.67 .617	18.64 .734	21.79 .858	24.99 .984	28.24 1.112	30.94 1.218	34.16 1.345	37.29 1.468	40.46 1.593
D7	min	3.20 .126	4.00 .157	4.80 .189	5.50 .217	6.40 .252	7.90 .311	9.50 .374	10.30 .406
	Max	6.40 .252	9.50 .374	11.10 .437	14.30 .563	15.90 .626	19.10 .752	22.20 .874	23.80 .937
L6 Max	35.32 1.391	35.32 1.391	37.30 1.469	41.67 1.641	46.04 1.813	46.45 1.829	48.43 1.907	51.98 2.046	54.78 2.157
L7 Max	25.40 1.000	26.19 1.031	27.79 1.094	30.96 1.219	32.54 1.281	34.14 1.344	34.93 1.375	34.53 1.359	43.66 1.719
L8 Max	48.82 1.922	48.82 1.922	50.80 2.000	55.17 2.172	59.54 2.344	59.95 2.360	61.93 2.438	65.48 2.578	70.26 2.766

# 8T Series

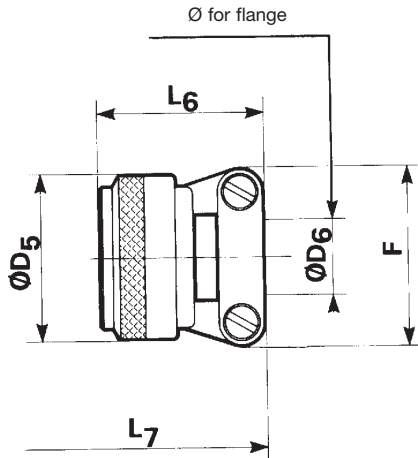


## backshells

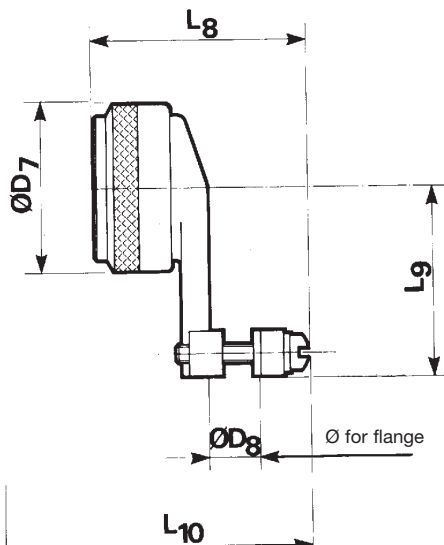
backnut type 01



straight cable clamp type 02



elbow cable clamp type 03



## receptacle type 3



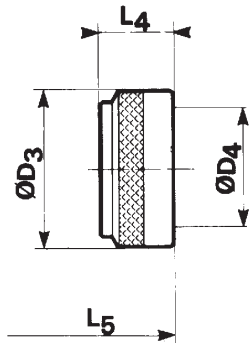
shell size		08	10	12	14	16	18	20	22	24
B1	Max	21.03 .828	24.23 .954	26.59 1.047	28.98 1.141	31.34 1.234	33.73 1.328	36.91 1.453	40.08 1.578	43.26 1.703
	E1	15.09 .594	18.26 .719	20.62 .812	23.01 .906	24.61 .969	26.97 1.062	29.36 1.156	31.75 1.250	34.93 1.375
D1	Max	12.04 .474	15.02 .591	19.08 .751	22.25 .876	25.43 1.001	28.61 1.126	31.78 1.251	34.95 1.376	38.13 1.501
	D2	Max	13.89 .547	17.07 .672	21.44 .844	24.61 .969	27.79 1.094	30.96 1.219	34.14 1.344	37.31 1.469
L1	Max	11.35 .447	11.35 .447	11.35 .447	11.35 .447	11.35 .447	11.35 .447	11.35 .447	11.35 .447	11.35 .447
	L2	Max	12.27 .483	12.27 .483	12.27 .483	12.27 .483	12.27 .483	12.27 .483	12.27 .483	14.00 .551
L3	Max	1.75 .069	1.75 .069	1.75 .069	1.75 .069	1.75 .069	1.75 .069	1.75 .069	1.75 .069	1.75 .069
	J	Max	3.30 .130	3.30 .130	3.30 .130	3.30 .130	3.30 .130	3.30 .130	3.30 .130	3.30 .130
D3	Max	15.67 .617	18.64 .734	21.79 .858	24.99 .984	28.24 1.112	30.94 1.218	34.16 1.345	37.29 1.468	40.46 1.593
	D4	Max	6.96 .274	10.46 .412	13.36 .526	16.53 .651	19.71 .776	22.40 .882	25.56 1.006	28.75 1.132
L4	Max	11.30 .445	11.30 .445	11.30 .445	11.30 .445	11.30 .445	11.30 .445	11.30 .445	11.30 .445	11.30 .445
	L5	Max	15.63 .615	15.63 .615	15.63 .615	15.63 .615	15.63 .615	15.63 .615	15.63 .615	15.63 .615
D5	Max	15.67 .617	18.64 .734	21.79 .858	24.99 .984	28.24 1.112	30.94 1.218	34.16 1.345	37.29 1.468	40.46 1.593
	min	1.40 .055	1.40 .055	2.40 .094	5.60 .220	5.60 .220	8.80 .346	11.90 .469	15.10 .594	15.10 .594
D6	Max	3.20 .126	4.80 .189	6.40 .252	9.50 .374	12.70 .500	15.90 .626	19.10 .752	22.20 .874	25.40 1.000
	F	Max	21.03 .828	22.63 .891	25.81 1.016	28.98 1.141	30.56 1.203	37.31 1.469	37.31 1.469	42.06 1.656
L6	Max	22.22 .875	22.22 .875	22.22 .875	28.57 1.125	28.57 1.125	28.57 1.125	28.57 1.125	31.75 1.250	31.75 1.250
	L7	Max	31.73 1.249	31.73 1.249	31.73 1.249	37.68 1.483	37.68 1.483	37.68 1.483	37.68 1.483	41.23 1.623
D7	Max	15.67 .617	18.64 .734	21.79 .858	24.99 .984	28.24 1.112	30.94 1.218	34.16 1.345	37.29 1.468	40.46 1.593
	min	3.20 .126	4.00 .157	4.80 .189	5.50 .217	6.40 .252	7.90 .311	9.50 .374	10.30 .406	14.30 .563
D8	Max	6.40 .252	9.50 .374	11.10 .437	14.30 .563	15.90 .626	19.10 .752	22.20 .874	23.80 .937	25.40 1.000
	L8	Max	35.32 1.391	35.32 1.391	37.30 1.469	41.67 1.641	46.04 1.813	46.45 1.829	48.43 1.907	51.98 2.046
L9	Max	25.40 1.000	26.19 1.031	27.79 1.094	30.96 1.219	32.54 1.281	34.14 1.344	34.93 1.375	36.53 1.438	43.66 1.719
	L10	Max	39.29 1.547	39.29 1.547	42.27 1.664	45.64 1.797	50.01 1.969	50.42 1.985	52.40 2.063	55.95 2.203
L11	Max	3.71 .146	3.71 .146	3.71 .146	3.71 .146	3.71 .146	3.71 .146	4.27 .168	4.27 .168	4.27 .168

# 8T Series

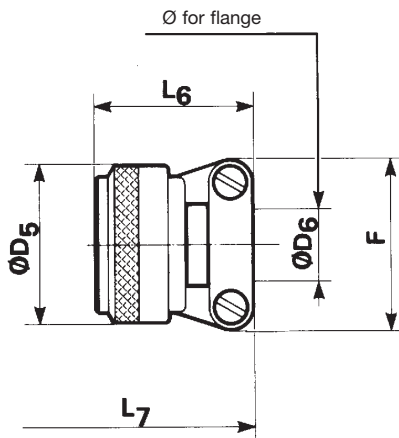


## Backshells

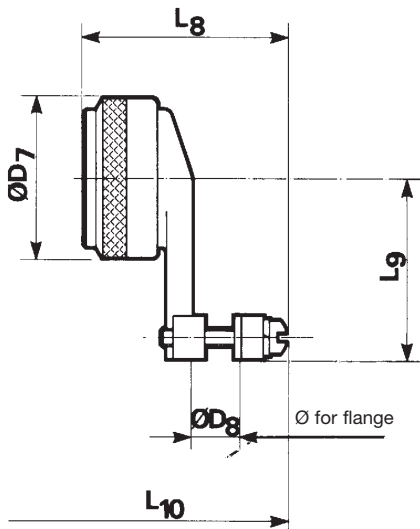
backnut type 01



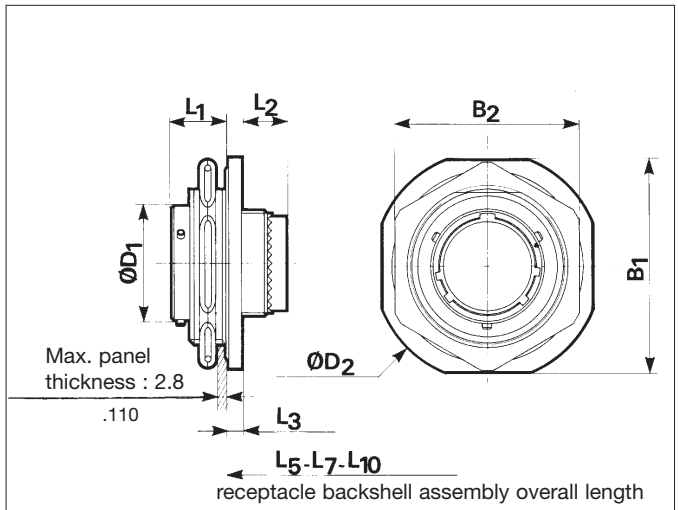
straight cable clamp type 02



elbow cable clamp type 03



## Receptacle type 7



shell size		08	10	12	14	16	18	20	22	24
B1	Max	32.16	35.34	38.51	41.69	45.65	48.42	51.62	54.77	57.94
		1.266	1.391	1.516	1.641	1.797	1.906	2.032	2.156	2.281
B2	Max	27.40	30.61	33.75	36.96	40.10	43.31	46.45	51.23	54.41
		1.079	1.205	1.329	1.455	1.579	1.705	1.829	2.017	2.142
D1	Max	12.04	15.02	19.08	22.25	25.43	28.61	31.78	34.95	38.13
		.474	.591	.751	.876	1.001	1.126	1.251	1.376	1.501
D2	Max	35.34	38.51	41.69	44.86	49.64	51.62	54.79	57.94	61.12
		1.391	1.516	1.641	1.766	1.954	2.032	2.157	2.281	2.406
L1	Max	11.26	11.26	11.26	11.26	11.26	11.26	11.92	11.92	11.92
		.443	.443	.443	.443	.443	.443	.469	.469	.469
L2	Max	12.55	12.55	12.55	12.55	12.55	12.55	11.73	11.73	13.08
		.494	.494	.494	.494	.494	.494	.462	.462	.515
L3	Max	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67
		.105	.105	.105	.105	.105	.105	.105	.105	.105
D3	Max	15.67	18.64	21.79	24.99	28.24	30.94	34.16	37.29	40.46
		.617	.734	.858	.984	1.112	1.218	1.345	1.468	1.593
D4	Max	6.96	10.46	13.36	16.53	19.71	22.40	25.56	28.75	31.93
		.274	.412	.526	.651	.776	.882	1.006	1.132	1.257
L4	Max	11.30	11.30	11.30	11.30	11.30	11.30	11.30	11.30	11.30
		.445	.445	.445	.445	.445	.445	.445	.445	.445
L5	Max	14.44	14.44	14.44	14.44	14.44	14.44	13.62	13.62	15.22
		.569	.569	.569	.569	.569	.569	.536	.536	.599
D5	Max	15.67	18.64	21.79	24.99	28.24	30.94	34.16	37.29	40.46
		.617	.734	.858	.984	1.112	1.218	1.345	1.468	1.593
D6	min	1.40	1.40	2.40	5.60	5.60	8.80	11.90	15.10	15.10
		.055	.055	.094	.220	.220	.346	.469	.594	.594
D6	Max	3.20	4.80	6.40	9.50	12.70	15.90	19.10	22.20	25.40
		.126	.189	.252	.374	.500	.626	.752	.874	1.000
F	Max	21.03	22.63	25.81	28.98	30.56	37.31	37.31	42.06	44.45
		.828	.891	1.016	1.141	1.203	1.469	1.469	1.656	1.750
L6	Max	22.22	22.22	22.22	28.57	28.57	28.57	28.57	31.75	31.75
		.875	.875	.875	1.125	1.125	1.125	1.125	1.250	1.250
L7	Max	30.54	30.54	30.54	36.44	36.44	36.44	35.62	39.22	38.82
		1.202	1.202	1.202	1.435	1.435	1.435	1.402	1.544	1.528
D7	Max	15.67	18.64	21.79	24.99	28.24	30.94	34.16	37.29	40.46
		.617	.734	.858	.984	1.112	1.218	1.345	1.468	1.593
D8	min	3.20	4.00	4.80	5.50	6.40	7.90	9.50	10.30	14.30
		.126	.157	.189	.217	.252	.311	.374	.406	.563
D8	Max	6.40	9.50	11.10	14.30	15.90	19.10	22.20	23.80	25.40
		.252	.374	.437	.563	.626	.752	.874	.937	1.000
L8	Max	35.32	35.32	37.30	41.67	46.04	46.45	48.43	51.98	54.78
		1.391	1.391	1.469	1.641	1.813	1.829	1.907	2.046	2.157
L9	Max	25.40	26.19	27.79	30.96	32.54	34.14	34.93	36.53	43.66
		1.000	1.031	1.094	1.219	1.281	1.344	1.375	1.438	1.719
L10	Max	38.10	38.10	40.08	44.45	48.82	49.23	50.39	53.94	58.34
		1.500	1.500	1.578	1.750	1.922	1.938	1.984	2.124	2.297

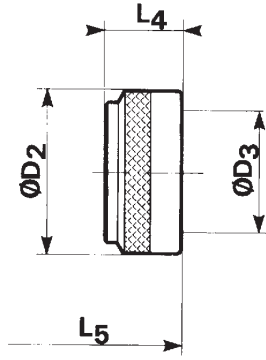


# 8T Series

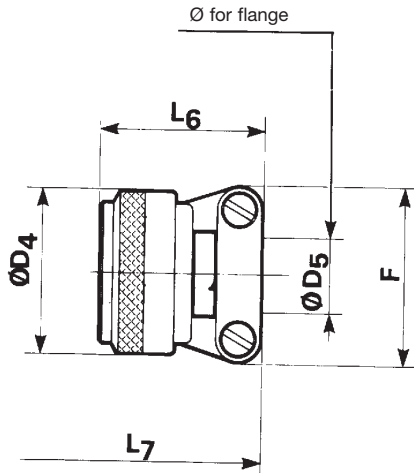


## Backshells

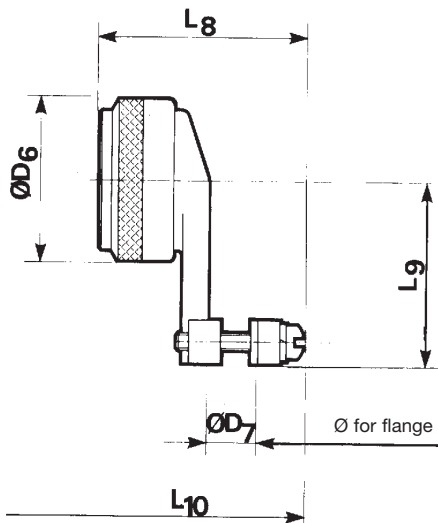
backnut type 01



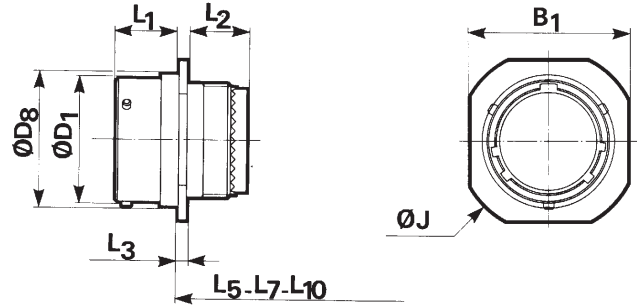
straight cable clamp type 02



elbow cable clamp type 03



## Cable connecting receptacle type 1



cable connecting receptacle backshell assembly overall length

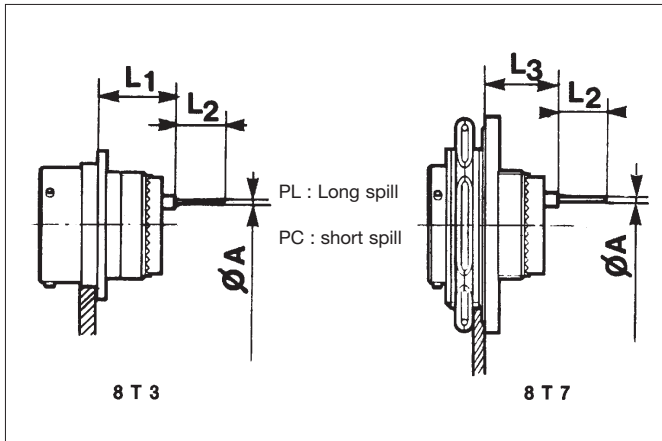
shell size		08	10	12	14	16	18	20	22	24
B1	Max	14.62 .576	18.92 .745	22.22 .875	25.62 .969	27.82 1.009	31.35 1.095	34.62 1.234	38.02 1.363	42.02 1.654
	D1	Max	12.04 .474	15.02 .591	19.08 .751	22.25 .876	25.43 1.001	28.61 1.126	31.78 1.251	34.95 1.376
D8	Max	13.89 .547	17.07 .672	21.44 .844	24.61 .969	27.79 1.094	30.96 1.219	34.14 1.344	37.31 1.469	40.49 1.594
	J	Max	24.51 .965	27.60 1.087	30.04 1.183	32.43 1.277	34.82 1.371	37.21 1.465	40.36 1.589	43.56 1.715
L1	Max	11.35 .447	11.35 .447	11.35 .447	11.35 .447	11.35 .447	11.35 .447	11.35 .447	11.35 .447	11.35 .447
	L2	Max	12.27 .483	12.27 .483	12.27 .483	12.27 .483	12.27 .483	12.27 .483	12.27 .483	12.27 .483
L3	Max	1.75 .069	1.75 .069	1.75 .069	1.75 .069	1.75 .069	1.75 .069	1.75 .069	1.75 .069	1.75 .069
	D2	Max	15.67 .617	18.64 .734	21.79 .858	24.99 .984	28.24 1.112	30.94 1.218	34.16 1.345	37.29 1.468
D3	Max	6.96 .274	10.46 .412	13.36 .526	16.53 .651	19.71 .776	22.40 .882	25.56 1.006	28.75 1.132	31.93 1.257
	L4	Max	11.30 .445	11.30 .445	11.30 .445	11.30 .445	11.30 .445	11.30 .445	11.30 .445	11.30 .445
L5	Max	15.63 .615	15.63 .615	15.63 .615	15.63 .615	15.63 .615	15.63 .615	15.63 .615	15.63 .615	17.61 .693
	D4	Max	15.67 .617	18.64 .734	21.79 .858	24.99 .984	28.24 1.112	30.94 1.218	34.16 1.345	37.29 1.468
D5	min	1.40 .055	1.40 .055	2.40 .094	5.60 .220	5.60 .220	8.80 .346	11.90 .469	15.10 .594	15.10 .594
	Max	3.20 .126	4.80 .189	6.40 .252	9.50 .374	12.70 .500	15.90 .626	19.10 .752	22.20 .874	25.40 1.000
F	Max	21.03 .828	22.63 .891	25.81 1.016	28.98 1.141	30.56 1.203	37.31 1.469	37.31 1.469	42.06 1.656	44.45 1.750
	L6	Max	22.22 .875	22.22 .875	22.22 .875	28.57 1.125	28.57 1.125	28.57 1.125	28.57 1.125	31.75 1.250
L7	Max	31.73 1.249	31.73 1.249	31.73 1.249	37.68 1.483	37.68 1.483	37.68 1.483	37.68 1.483	41.23 1.623	41.21 1.622
	D6	Max	15.67 .617	18.64 .734	21.79 .858	24.99 .984	28.24 1.112	30.94 1.218	34.16 1.345	37.29 1.468
D7	min	3.20 .126	4.00 .157	4.80 .189	5.50 .217	6.40 .252	7.90 .311	9.50 .374	10.30 .406	14.30 .563
	Max	6.40 .252	9.50 .374	11.10 .437	14.30 .563	15.90 .626	19.10 .752	22.20 .874	23.80 .937	25.40 1.000
L8	Max	35.32 1.391	35.32 1.391	37.30 1.469	41.67 1.641	46.04 1.813	46.45 1.829	48.43 1.907	51.98 2.046	54.78 2.157
	L9	Max	25.40 1.000	26.19 1.031	27.79 1.094	30.96 1.219	32.54 1.281	34.14 1.344	34.93 1.375	36.53 1.438
L10	Max	39.29 1.547	39.29 1.547	42.27 1.664	45.64 1.797	50.01 1.969	50.42 1.985	52.40 2.063	55.95 2.203	60.73 2.391



# 8T Series



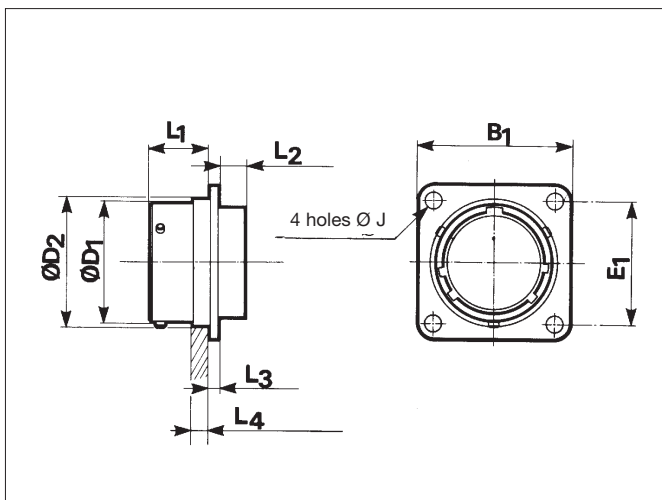
## Contacts



Contact size	Contact type	Part numbers
22D	long spill male	8599-0720
	long spill female	8599-7707
	short spill male	8599-0730
20	short spill male	8599-0724
16	short spill male	8599-0726

shell size		08	10	12	14	16	18	20	22	24
A	#22D/#20	0.70 .028	0.70 .028	0.70 .028	0.70 .028	0.70 .028	0.70 .028	0.70 .028	0.70 .028	0.70 .028
	#16	1.15 .045	1.15 .045	1.15 .045	1.15 .045	1.15 .045	1.15 .045	1.15 .045	1.15 .045	1.15 .045
L1	male #22D PC/PL	13.40 .528	13.40 .528	13.40 .528	13.40 .528	13.40 .528	13.40 .528	13.40 .528	13.40 .528	13.40 .528
	female #22D PL	13.40 .528	13.40 .528	13.40 .528	13.40 .528	13.40 .528	13.40 .528	13.40 .528	13.40 .528	13.40 .528
	male #20PC ; #16 PC	13.57 .534	13.57 .534	13.57 .534	13.57 .534	13.57 .534	13.57 .534	13.57 .534	13.57 .534	13.57 .534
L2	PL #22D	8.50 .335	8.50 .335	8.50 .335	8.50 .335	8.50 .335	8.50 .335	8.50 .335	8.50 .335	8.50 .335
	PC #22D	4.00 .157	4.00 .157	4.00 .157	4.00 .157	4.00 .157	4.00 .157	4.00 .157	4.00 .157	4.00 .157
	PC #20 / PC #16	5.10 .201	5.10 .201	5.10 .201	5.10 .201	5.10 .201	5.10 .201	5.10 .201	5.10 .201	5.10 .201
L3	male #22D PC/PL	13.61 .536	13.61 .536	13.61 .536	13.61 .536	13.61 .536	13.61 .536	12.95 .510	12.95 .510	12.95 .510
	female #22D PL	13.61 .536	13.61 .536	13.61 .536	13.61 .536	13.61 .536	13.61 .536	12.95 .510	12.95 .510	12.95 .510
	male #20 PC ; 16 PC	13.78 .543	13.78 .543	13.78 .543	13.78 .543	13.78 .543	13.78 .543	13.12 .517	13.12 .517	13.12 .517

## Receptacle type 2



shell size		08	10	12	14	16	18	20	22	24
B1	Max	21.03 .828	24.24 .954	26.72 1.052	29.01 1.142	31.37 1.235	33.73 1.328	36.91 1.453	40.08 1.578	43.26 1.70
	E1	15.10 .594	18.26 .719	20.62 .812	23.01 .906	24.61 .969	26.97 1.062	29.36 1.156	31.75 1.250	34.93 1.375
D1	Max	12.01 .473	15.00 .591	19.06 .750	22.23 .875	25.41 1.000	28.61 1.126	31.78 1.251	34.95 1.376	38.13 1.501
	D2	Max	13.24 .521	16.19 .637	20.48 .806	23.70 .933	26.83 1.056	30.96 1.219	34.14 1.344	37.31 1.469
J	Max	3.30 .130	3.30 .130	3.30 .130	3.30 .130	3.30 .130	3.30 .130	3.30 .130	3.30 .130	3.99 .157
	L1	Max	11.35 .447	11.35 .447	11.35 .447	11.35 .447	11.35 .447	11.35 .447	11.35 .447	11.35 .447
L2	Max	4.77 .188	4.77 .188	4.77 .188	4.77 .188	4.77 .188	4.77 .188	4.77 .188	4.77 .188	4.77 .188
	L3	Max	1.75 .069	1.75 .069	1.75 .069	1.75 .069	1.75 .069	1.75 .069	1.75 .069	1.75 .069
L4	Max	3.71 .146	3.71 .146	3.71 .146	3.71 .146	3.71 .146	3.71 .146	4.27 .168	4.27 .168	4.27 .168

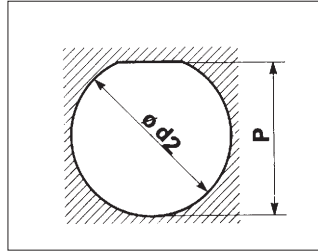
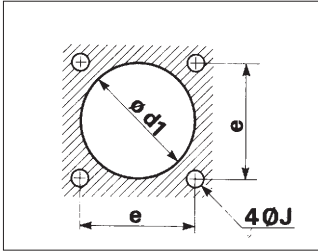
# 8T Series



## Panel cut-out

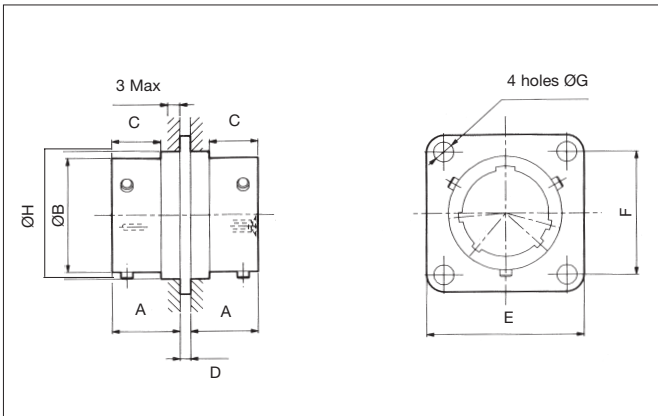
square flange receptacle

jam nut receptacle



shell size	08	10	12	14	16	18	20	22	24
d1 min	14.15 .557	17.32 .682	21.69 .854	24.87 .979	28.04 1.104	31.22 1.229	34.39 1.354	37.57 1.479	40.74 1.604
d2	22.46 .884	25.58 1.007	28.80 1.134	31.98 1.259	35.15 1.384	38.28 1.507	41.50 1.634	44.68 1.759	47.85 1.884
J	3.25 .128	3.25 .128	3.25 .128	3.25 .128	3.25 .128	3.25 .128	3.25 .128	3.25 .128	3.91 1.54
e	15.09 .594	18.26 .719	20.62 .812	23.01 .906	24.61 .969	26.97 1.062	29.36 1.156	31.75 1.250	34.93 1.375
P	21.08 .830	24.26 .955	27.53 1.084	30.68 1.208	33.86 1.333	37.06 1.459	40.03 1.576	43.21 1.701	46.38 1.826

## Through bulkhead receptacle



shell size	A Max	B Max	C Max	D Max	E Max	F	G Max	H Max
08	11.35 .447	12.04 .474	8.18 .322	1.75 .069	21.03 .828	15.09 .594	3.30 .130	13.89 .547
10	11.35 .447	15.02 .591	8.18 .322	1.75 .069	24.23 .954	18.26 .719	3.30 .130	17.07 .672
12	11.35 .447	19.08 .751	8.18 .322	1.75 .069	26.59 1.047	20.62 .812	3.30 .130	21.44 .844
14	11.35 .447	22.25 .876	8.18 .322	1.75 .069	28.98 1.141	23.01 .906	3.30 .130	24.61 .969
16	11.35 .447	25.43 1.001	8.18 .322	1.75 .069	31.34 1.234	24.61 .969	3.30 .130	27.79 1.094
18	11.35 .447	28.61 1.126	8.18 .322	1.75 .069	33.73 1.328	26.97 1.062	3.30 .130	30.96 1.219
20	11.35 .447	31.78 1.251	8.18 .322	1.75 .069	36.91 1.453	29.36 1.156	3.30 .130	34.14 1.344
22	11.35 .447	34.95 1.376	8.18 .322	1.75 .069	40.08 1.578	31.75 1.250	3.30 .130	37.31 1.469
24	11.35 .447	38.13 1.501	8.18 .322	1.75 .069	43.26 1.703	34.92 1.375	3.98 .157	40.49 1.594

## Ordering information

basic series	SN1738	04	T	••	••	PS	N	7
shell type	04 - through bulkhead receptacle							
class	T - sealed							
shell size	08-10-12-14-16-18-20-22-24							
contact layout	- see standard layout for 8T Series p 120							
contact type	PS - male/female contact							
polarization	N - normal							
plating	7 - olive green cadmium							

## Accessories

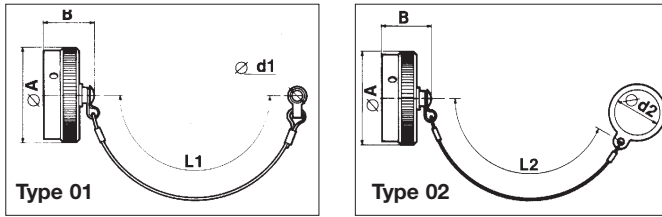
### protective caps

basic series	8T	E	01	G	14
cap type	E - cap for receptacle F - cap for plug				
fixing type	cap for receptacle 01 - plastic sleeved metal cord with eyelet 02 - plastic sleeved metal cord with ring		cap for plug 01 - plastic sleeved metal cord with eyelet		
plating	B - olive green cadmium (MIL-C 38999) F - nickel				
shell size	08-10-12-14-16-18-20-22-24				

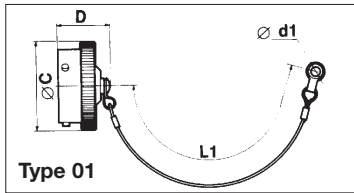
# 8T Series



## Protective caps for receptacles

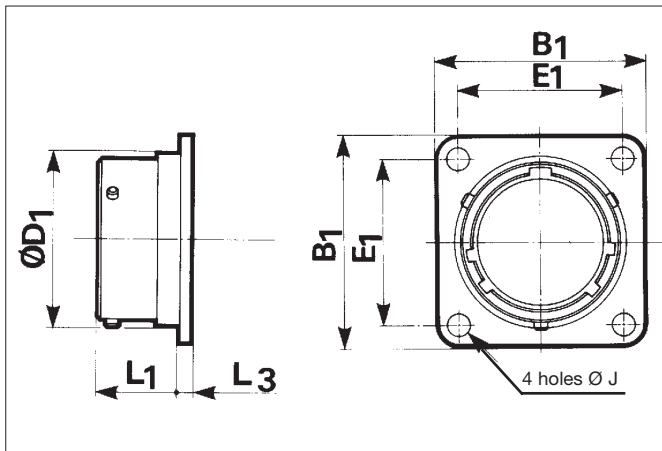


## Protective caps for plugs



shell size	A Max	B Max	C Max	D Max	d1 min	d2 min	L1	L2
08	19.05 .750	20.83 .820	18.29 .720	20.83 .820	3.12 .123	22.61 .890	76.20 3.000	76.20 3.000
10	21.82 .859	20.83 .820	21.59 .850	20.83 .820	3.12 .123	25.65 1.010	76.20 3.000	76.20 3.000
12	26.19 1.031	20.83 .820	25.40 1.000	20.83 .820	3.12 .123	28.96 1.140	88.90 3.500	88.90 3.500
14	29.36 1.156	20.83 .820	28.70 1.130	20.83 .820	3.12 .123	32.00 1.260	88.90 3.500	88.90 3.500
16	32.54 1.281	20.83 .820	31.75 1.250	20.83 .820	3.12 .123	35.31 1.390	88.90 3.500	88.90 3.500
18	35.71 1.406	20.83 .820	35.05 1.380	20.83 .820	3.12 .123	38.35 1.510	88.90 3.500	88.90 3.500
20	38.89 1.531	20.83 .820	38.10 1.500	20.83 .820	3.12 .123	41.66 1.640	101.60 4.000	101.60 4.000
22	41.68 1.641	20.83 .820	41.40 1.630	20.83 .820	3.12 .123	44.70 1.760	101.60 4.000	101.60 4.000
24	44.86 1.766	20.83 .820	44.45 1.750	20.83 .820	3.53 .139	48.01 1.890	101.60 4.000	101.60 4.000

## Dummy receptacle



shell size	part number	L1 Max	L3 Max	D1 Max	B1 Max	E1	J
08	8T3-08•UR	11.35 .447	1.75 .069	12.04 .474	21.03 .828	15.09 .594	3.30 .130
10	8T3-10•UR	11.35 .447	1.75 .069	15.02 .591	24.23 .954	18.26 .719	3.30 .130
12	8T3-12•UR	11.35 .447	1.75 .069	19.08 .751	26.59 1.047	20.62 .812	3.30 .130
14	8T3-14•UR	11.35 .447	1.75 .069	22.25 .876	28.98 1.141	23.01 .906	3.30 .130
16	8T3-16•UR	11.35 .447	1.75 .069	25.43 1.001	31.34 1.234	24.61 .969	3.30 .130
18	8T3-18•UR	11.35 .447	1.75 .069	28.61 1.126	33.73 1.328	26.97 1.062	3.30 .130
20	8T3-20•UR	11.35 .447	1.75 .069	31.78 1.251	36.91 1.453	29.36 1.156	3.30 .130
22	8T3-22•UR	11.35 .447	1.75 .069	34.95 1.376	40.08 1.578	31.75 1.250	3.30 .130
24	8T3-24•UR	11.35 .447	1.75 .069	38.13 1.501	43.26 1.703	34.93 1.375	3.99 .157

• : G olive green cadmium  
F nickel

## Gaskets

Shell size	Part numbers	
	gasket for receptacle type 3 (ordered separately)	O. ring for receptacle type 7
08	8525-1431	MS9068-022
10	8525-1432	MS9068-024
12	8525-1433	MS9068-026
14	8525-1434	MS9068-028
16	8525-1435	MS9068-029
18	8525-1436	MS9068-030
20	8525-1437	MS9068-031
22	8525-1438	MS9068-032
24	8525-1439	MS9068-033

## Plastic protective caps

Shell size	Part numbers	
	cap for receptacles	cap for plug
08	8500-5585A	8500-5594
10	8500-5586A	71120
12	8500-5587A	8500-5596
14	8500-5588A	8500-5597
16	8500-5589A	8500-5598
18	8500-5590A	8500-5589
20	8500-5591A	8500-5600
22	8500-5592A	8500-5601
24	8500-5593A	8500-5602

## Reusable fixing plate

Two, three or four-holes self-locking fixing-plates are available at SHTP. See page 126.

# 8LT-8D-8ST-8T



## Contact layouts for 8LT-8D-8ST-8T - viewed from front face of male insulator

shell size		8LT-8D		8ST-8T															
09	08	35 6 # 22D		8LT 8D 8ST 8T	98 3 # 20		8LT 8D 8ST												
11	10	35 13 # 22D		8LT 8D 8ST 8T	98 6 # 20		8LT 8D 8ST	01 1 # 12		8LT 8D 8ST	05 5 # 20		8LT 8D 8ST	04 4 # 20		8LT 8D 8ST			
13	12	35 22 # 22D		8LT 8D 8ST 8T	98 10 # 20		8LT 8D 8ST	08 8 # 20		8LT 8D 8ST	26 2 # 12 6 # 22D		8D	04 4 # 16		8D 8ST 8LT			
15	14	35 37 # 22D		8LT 8D 8ST 8T	19 19 # 20		8LT 8D 8ST	05 5 # 16		8LT 8D 8ST	97 8 # 20 4 # 16		8LT 8D 8ST	18 18 # 20		8LT 8D 8ST 8T			
17	16	35 55 # 22D		8LT 8D 8ST 8T	26 26 # 20		8LT 8D 8ST	06 6 # 12		8LT 8D 8ST 8T	08 8 # 16		8LT 8D 8ST 8T	99 2 # 16 21 # 20		8LT 8D 8ST 8T	75 2 # 8		8LT 8D 8ST
19	18	35 66 # 22D		8LT 8D 8ST 8T	32 32 # 20		8LT 8D 8ST	11 11 # 16		8LT 8D 8ST									
21	20	35 79 # 22D		8LT 8D 8ST 8T	41 41 # 20		8LT 8D 8ST 8T	16 16 # 16		8LT 8D 8ST 8T	11 11 # 12		8LT 8D 8ST 8T	75 4 # 8		8LT 8D 8ST	39 37 # 20 2 # 16		8LT 8D 8ST
23	22	35 100 # 22D		8LT 8D 8ST 8T	53 53 # 20		8LT 8D 8ST	21 21 # 16		8LT 8D 8ST									
25	24	35 126 # 22D		8LT 8D 8ST 8T	61 61 # 20		8LT 8D 8ST 8T	46 40 # 20 4 # 16 - 2 # 8		8LT 8D 8ST	19 19 # 12		8LT 8D 8ST						
25	24	29 29 # 16		8LT 8D 8ST 8T	43 23 # 20 20 # 16		8LT 8D 8ST	24 12 # 16 12 # 12		8LT 8D 8ST 8T	08 8 # 8 triaxial		8D	04 48 # 20 8 # 16		8D			

- size 22 contacts
- size 20 contacts
- size 16 contacts
- size 12 contacts
- size 8 triaxial contacts
- size 8 coaxial contacts
- \* not QPL approved to date
- contact layouts available with receptacle type 2

Please consult us for the composite version