



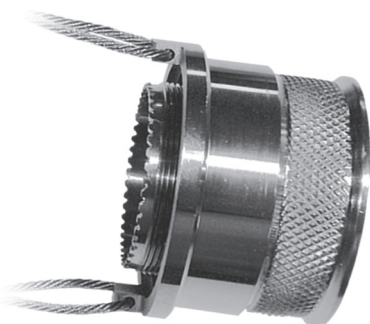
Range overview

Push pull plug = 8D8P series



- Launcher
- Armored vehicle
- Military A/C
- Radio communications

Quick disconnect plug = 8D9P series



- Launcher
- Artillery
- UAV
- Military A/C and helicopter

Receptacle: same for 8D8P and 8D9P series = 8D8R



All possible configurations:

- Cable receptacle
- PCB receptacle
- Jam Nut & Square Flange
- Compatible with standard backshell

8D8 / 8D9 Series



Features & benefits

Housing with all SOURIAU's 38999 layouts

Signal, power, coax, triax, fiber optics, quadrx Ethernet

example:



18-08
8 ELIO® optical ways



25-20
MIL-STD-1760 interface



Highest contact density available in 38999 Push-Pull design

Thanks to a special Low Insertion Force contact size #22 design (MIL-38999 qualified), 8D8/8D9 series can provide:

- 79 contacts in shell size 21
- 100 contacts in shell size 23
- 128 contacts in shell size 25

with an unmating force between 130 and 180 Newtons

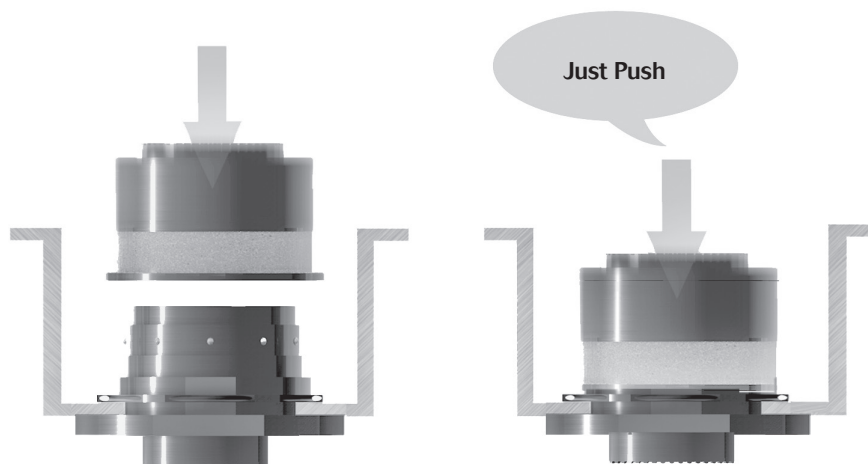




Features & benefits

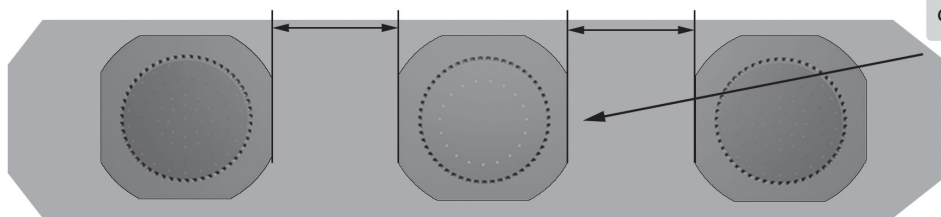
Connection in restricted space

Where screw or bayonet coupling are not possible

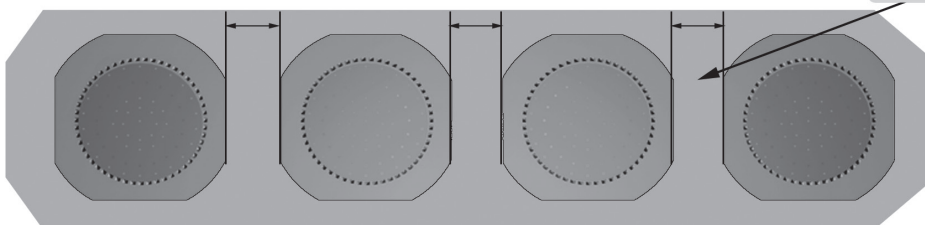


Shortest distance between connectors

With screw or bayonet connectors



With 8D8 - 8D9 series

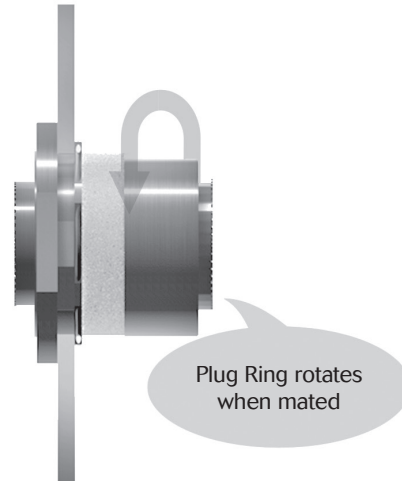
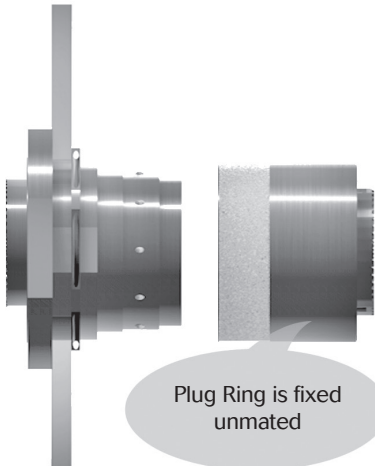


HIGHER CONNECTOR DENSITY POSSIBLE

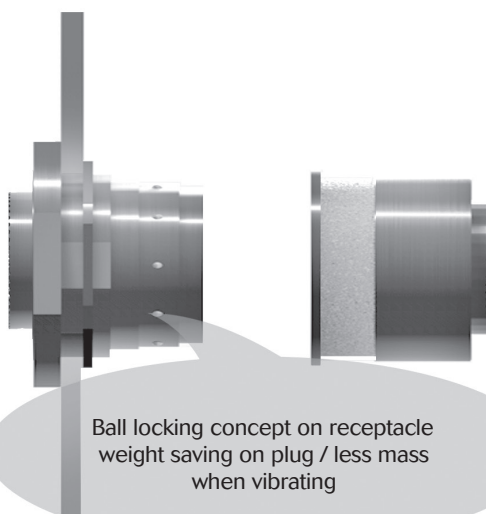


Features & benefits

Check of locking when mated = Safety and Reliability



High vibration performances



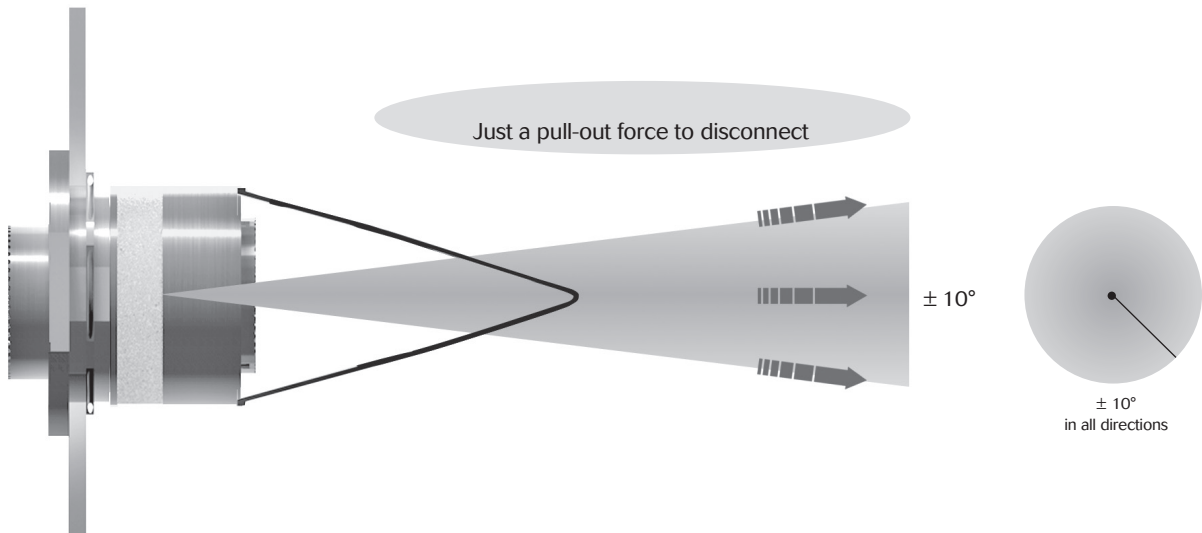
44 G RMS / 3 axis



Features & benefits

Quick disconnect with angle of separation

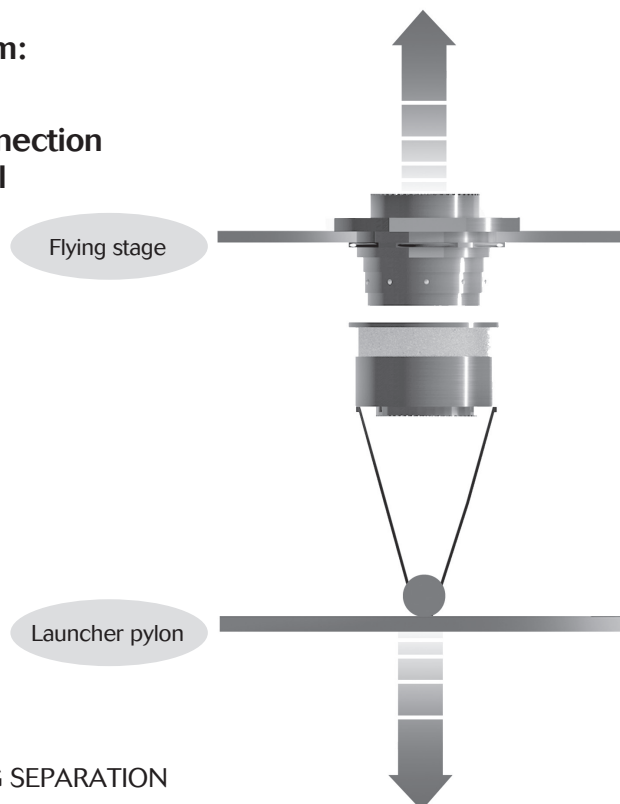
Quick disconnect with lanyard = 8D9P series



Lowest disconnect force required compared to competition

Thanks to an optimised unlocking system:
Half disconnection force is needed
compared to standard quick release connection
(MIL-DTL 38999/31, /36 or any Push-Pull
with lanyard solution)

Maximum velocity for "flying stage"



➡ ENSURE MAXIMUM ACCELERATION DURING SEPARATION

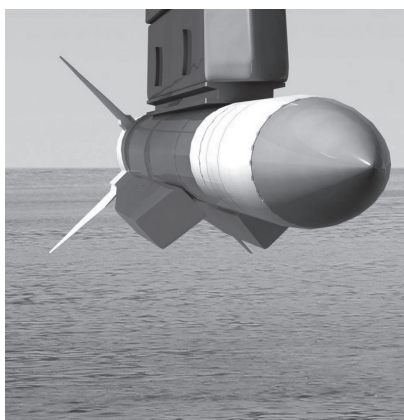


Applications

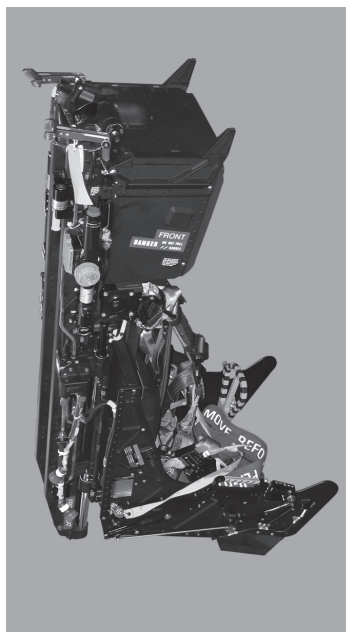
Defence & Aerospace: Launchers & Missiles



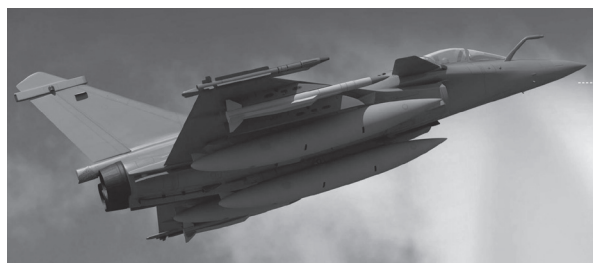
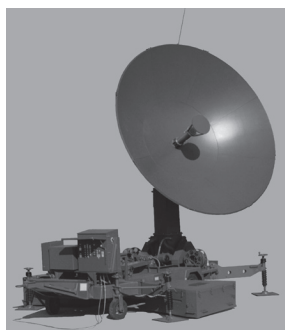
Launcher umbilical
Interstage and bottom umbilicals
Booster separation
Missile umbilicals
UAV



Defence & Aerospace: Miscellaneous



Ejection seat
Removable pods
Auxiliary fuel tanks
Portable radars
Armored vehicles





8D8 / 8D9 Series



Description

Performances upon MIL-DTL-38999

- MIL-DTL-38999 Layouts and Contacts
- MIL-DTL-38999 Series electric performances
- Scoop Proof
- Easy Mating (Push mating).
- Push Pull plug (8D8) or Push Pull plug lanyard release (8D9) available
- Lanyard Release up to $\pm 10^\circ$ (Demating by pulling)
- Blind Mating Provision (Provision to ensure Proper mating of connector even in Blind mating condition)
- Small Envelope
- Backshells: compatible with standard backshells 38999 series III

Technical Features

Mechanical

- Shell: Aluminum Alloy
- Shell plating: Nickel (F)
Olive drab cadmium (W)
- Insulator: Thermoplastic or Thermoset
- Grommet and Interfacial seal: Silicone elastomer
- Contact: Copper alloy
- Contact plating: Gold over Nickel plated
- Lanyard: Stainless steel cable crimped
- Endurance:
500 Mating / Demating
- Random vibrations:
44 G RMS / 3 axis / 5'
6 dB / oct (50-100 Hz)
1 G² / Hz (100-200Hz)
- Sinus vibrations (expect for ELIO® optical):
1,5 mm pp (10-80 Hz) / 3 axis / 4 hours
20 g (80-2000 Hz) / 3 axis / hours
- Shocks: ± 150 G / 11 ms / 3 axis

Resistance to fluids

According to MIL-DTL-38999 standard:

- Gasoline: JP5 (OTAN F44)
- Mineral hydraulic fluid: MIL-H-5606 (OTAN H515)
- Synthetic hydraulic fluid: Skydrol 500 B4

LD4 (SAE AS 1241)

- Mineral lubricating: MIL-L-7870A (OTAN 0142)
- Synthetic lubricating: MIL-L-23699 (OTAN 0156), MIL-L-7808
- Cleaning fluid: MIL-DTL-25769 diluted
- De-icing fluid: MIL-A-8243
- Extinguishing fluid: Chlorobromethane
- Cooling fluid: Coolanol

Climatics

- Temperature range:
Nickel plating (F): -65°C + 200°C
Cadmium plating (W): -65°C + 175°C
- Salt spray:
Nickel plating (F): 48 hours
Cadmium plating (W): 500 hours
- RoHS
Shell plating Nickel (F): RoHS
Shell plating Olive drab cadmium (W): No RoHS

Electrical

- Test Voltage rating (Vrms)

Service	Sea level	At 21 000 m
M	1 300 V	800 V
N	1 000 V	600 V
I	1 800 V	1 000 V
II	2 300 V	1 000 V

- Insulation resistance: > 5000 M Ω (at 500 Vdc)
- EMI enhanced protection by shielding ring
- Contact resistance (as per SAE AS39029):
Wire resistance included in measurement:

Size	
22D	14.6 m Ω
20	7.3 m Ω
16	3.8 m Ω
12	3.5 m Ω
8	3 m Ω

- Contact rating (as per SAE AS39029):

Size	
22D	5 A
20	7.5 A
16	13 A
12	23 A
8	45 A

- Wiring Tools: compatible with standard 38999



8D8 / 8D9 Series

Ordering information/Connector Part number

Push Pull Plug		8D8P	15	W	35	S	N	...
Shell size	13, 15, 17, 19, 21, 23, 25							
Plating	F: Nickel W: Olive drab cadmium							
Contact layouts	See pages 803 to 804							
Contact type	S: Socket B: Connector supplied without socket contact P: Pin A: Connector supplied without pin contact							
Key polarization	N: Normal A - B - C - D (see table page 807)							
Specification for contact #8	251: delivered with power contact #8 Nothing: delivered with contacts defined in the standard layout							

Quick Release Plug		8D9 P	15	W	35	S	N	D	...
Shell size	13, 15, 17, 19, 21, 23, 25								
Plating	F: Nickel W: Olive drab cadmium								
Contact layouts	See pages 803 to 804								
Contact type	S: Socket B: Connector supplied without socket contact P: Pin A: Connector supplied without pin contact								
Key polarization	N: Normal A - B - C - D (see table page 807)								
Lanyard length	D - E - F - G - H - I - J - K - L								
Specification for contact #8	251: delivered with power contact #8 Nothing: delivered with contacts defined in the standard layout								

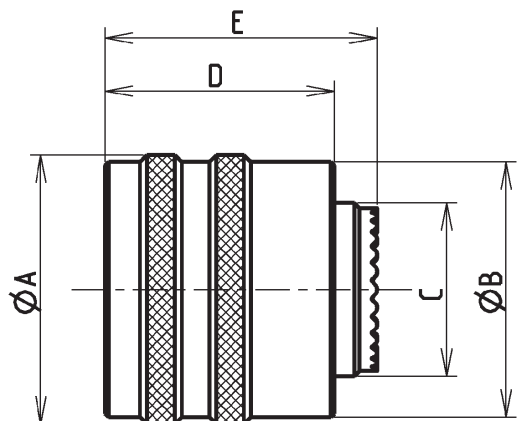
Receptacle (for Push-pull and Quick release plugs)		8D8 R	J	-	15	W	35	P	N	...
Style	J: Jam Nut S: Square Flange									
Type	-: Connecteur with standard crimp contacts L: with long PC Tails (male and female # 22D) C: with short PC Tails (male and female # 22D, #20, #16)									
Shell size	13, 15, 17, 19, 21, 23, 25									
Plating	F: Nickel W: Olive drab cadmium									
Contact layouts	See pages 803 to 804									
Contact type	S: Socket B: Connector supplied without socket contact P: Pin A: Connector supplied without pin contact									
Key polarization	N: Normal A - B - C - D (see table page 807)									
Specification for contact #8	251: delivered with power contact #8 Nothing: delivered with contacts defined in the standard layout									

* Layouts 21-35, 23-35, 25-07, 25-35 and 25-82 only available with Low Insertion Force AWG 22 socket contacts.

8D8 / 8D9 Series

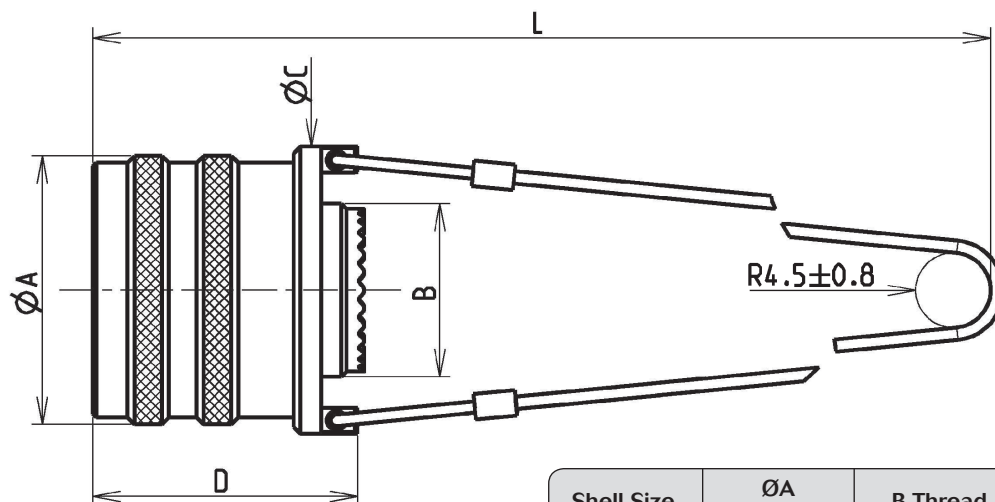


8D8 Push pull plug (8D8P Type)



Shell Size	ØA max.	ØB max.	C Thread	D max.	E max.
13 (C)	32,35	30,35	M18 x 1 - 6g	33,30	39,50
15 (D)	35,50	33,50	M22 x 1 - 6g		
17 (E)	39,00	37,00	M25 x 1 - 6g		
19 (F)	41,35	39,35	M28 x 1 - 6g		
21 (G)	44,50	42,50	M31 x 1 - 6g		
23 (H)	47,70	45,70	M34 x 1 - 6g		
25 (J)	50,50	48,50	M37 x 1 - 6g		

8D9 Push pull lanyard plug (8D9P Type)



Shell Size	ØA max.	B Thread	ØC max.	D max.
13 (C)	32,35	M18 x 1 - 6g	35,05	38,75
15 (D)	35,50	M22 x 1 - 6g	38,20	
17 (E)	39,00	M25 x 1 - 6g	41,70	
19 (F)	41,35	M28 x 1 - 6g	44,00	
21 (G)	44,50	M31 x 1 - 6g	47,20	
23 (H)	47,70	M34 x 1 - 6g	50,35	
25 (J)	50,50	M37 x 1 - 6g	53,20	

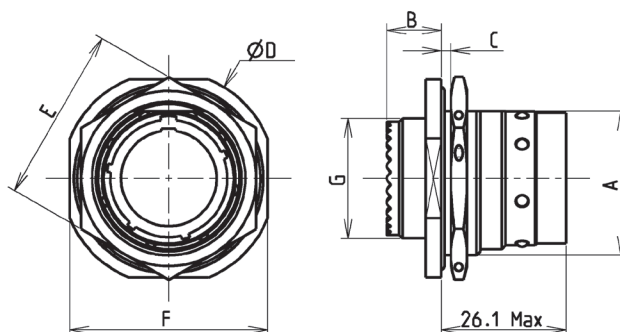
Code	D	E	F	G	H	I	J	K	L
L ± 3	135	148	161	173	186	198	211	224	237

Note : All dimensions are in millimeters (mm).



8D8 / 8D9 Series

8D8 Jam nut receptacle (8D8RJ Type)

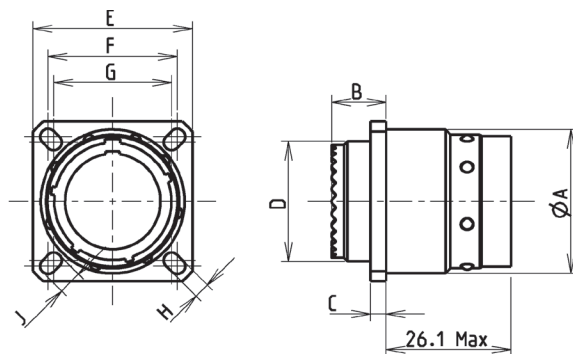


Shell Size	A ± 0,15	B max.	C max.	D max.	E max.	F max.	G Thread
13 (C)	23,87	12,16	2,50	38,35	31,00	34,90	M18 x 1 - 6g
15 (D)	27,02			41,55	34,00	38,10	M22 x 1 - 6g
17 (E)	30,20			44,75	37,00	41,30	M25 x 1 - 6g
19 (F)	33,37			49,45	41,00	46,00	M28 x 1 - 6g
21 (G)	36,55			52,65	46,00	49,20	M31 x 1 - 6g
23 (H)	39,72			55,85	47,00	52,40	M34 x 1 - 6g
25 (J)	42,90			58,95	51,23	55,60	M37 x 1 - 6g

Recommended coupling torque on panel for jam nut

Shell	09 (A)	11 (B)	13 (C)	15 (D)	17 (E)	19 (F)	21 (G)	23 (H)	25 (J)
(± 0.5 N.m)	4	5	7	8	9	10	12	13	14

8D8 Square flange receptacle (8D8RS Type)



Shell Size	ØA max.	B max.	C max.	D Thread	E ± 0,3	F	G	H ± 0,2	J ± 0,2
13 (C)	26,10	12,16	3,56	M18 x 1 - 6g	31,00	23,01	20,62	3,30	4,98
15 (D)				M22 x 1 - 6g	34,00	24,61	23,01		
17 (E)				M25 x 1 - 6g	37,00	26,97	24,61		
19 (F)				M28 x 1 - 6g	41,00	29,36	26,97		
21 (G)				M31 x 1 - 6g	46,00	31,75	29,36		
23 (H)				M34 x 1 - 6g	47,00	34,93	31,75	3,96	6,20
25 (J)				M37 x 1 - 6g	51,23	38,10	34,93		

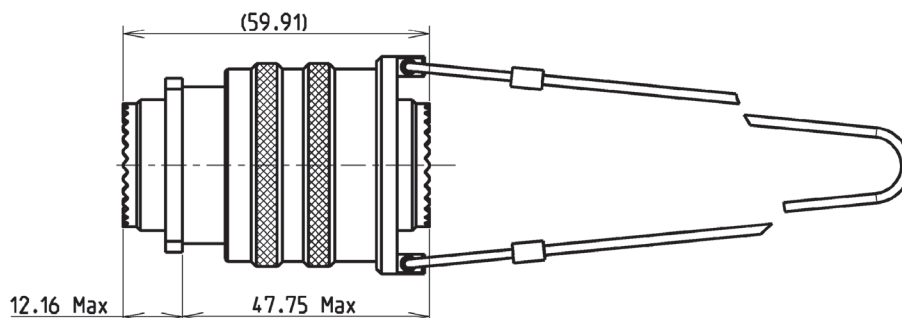
Note : All dimensions are in millimeters (mm).

8D8 / 8D9 Series

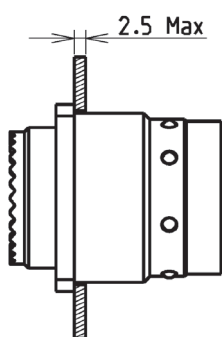


Mounting information

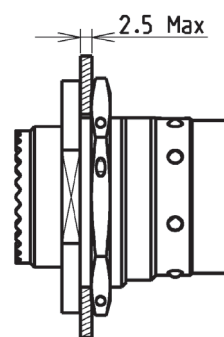
Mated dimensions



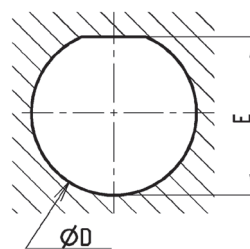
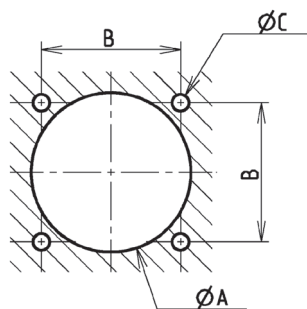
Panel cut-out (Rear panel mounting)



Sq. Flange Receptacle (RS Type)



Jam Nut Receptacle (RJ Type)



Shell Size	ØA min.	B	ØC ± 0,13	ØD	+ 0,25 0	E	0 - 0,06
13 (C)	23,42	23,01	3,25	25,65		24,26	
15 (D)	26,59	24,61		28,83		27,56	
17 (E)	30,96	26,97		32,01		30,73	
19 (F)	32,94	29,36		35,18		33,91	
21 (G)	36,12	31,75	3,91	38,35		37,08	
23 (H)	39,29	34,93		41,53		40,26	
25 (J)	42,47	38,10		44,70		43,43	

Note : All dimensions are in millimeters (mm).

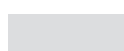


8D8 / 8D9 Series

Contact layouts



Standard



QPL qualified (Contacts and Insulators)



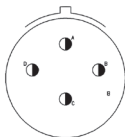
Elio fiber optics



Ethernet Quadrax

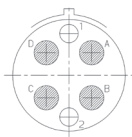
13 (C)

04



4#16
Service I

04*



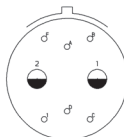
4
Optical ways

08



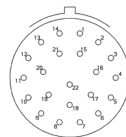
8#20
Service I

26



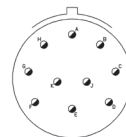
2#12
6#22D
Service M

35



22#22D
Service M

98



10#20
Service I



Contact #22D



Contact #8 Triax



Contact #20



Contact #8 Power



Contact #16



Contact #8 Quadrax



Contact #12



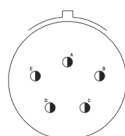
Contact #4 Power



Contact #10

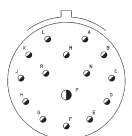
15 (D)

05



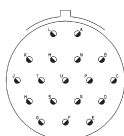
5#16
Service II

15



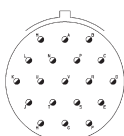
1#16
14#20
Service I

18



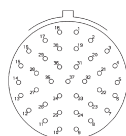
18#20
Service I

19



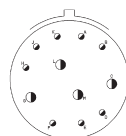
19#20
Service I

35



37#22D
Service M

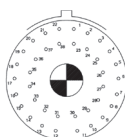
97



4#16
8#20
Service I

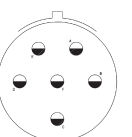
17 (E)

02



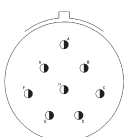
38#22D
1#8 Triax
Service M

06



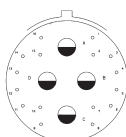
6#12
Service I

08



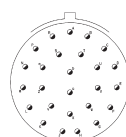
8#16
Service II

20



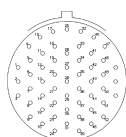
4#12
16#22D
Service M

26



26#20
Service I

35



55#22D
Service M

75
Spec 251



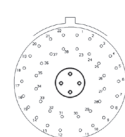
2#8 Power
Service I

75



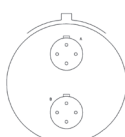
2#8 Triax
Service M

81



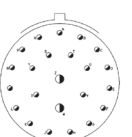
38#22D
1#8 Quadrax

82



2 Quadrax

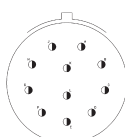
99



2#16
21#20
Service I

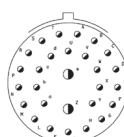
19 (F)

11



11#16
Service II

28



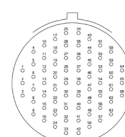
26#20
2#16
Service I

32



32#20
Service I

35



66#22D
Service M

* For these layouts, please consult us

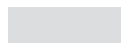


8D8 / 8D9 Series

Contact layouts



Standard



QPL qualified (Contacts and Insulators)



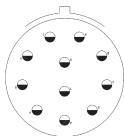
Elio fiber optics



Ethernet Quadrax

21 (G)

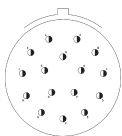
11



11#12

Service I

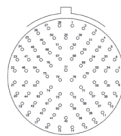
16



16#16

Service II

35



79#22D

Service M

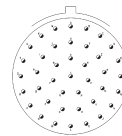
39



2#16
37#20

Service I

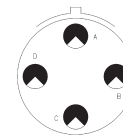
41



41#20

Service I

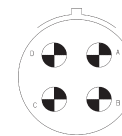
48



4#8 Power

Service I

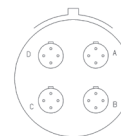
75



4#8 Triax

Service M

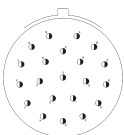
84



4 Quadrax

23 (H)

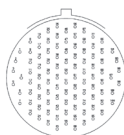
21



21#16

Service II

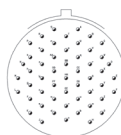
35



100#22D

Service M

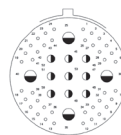
53



53#20

Service I

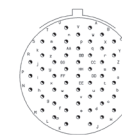
54



4#12,
9#16
40#22D

Service M

55

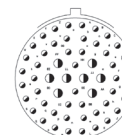


55#20

Service I

25 (J)

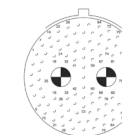
04



8#16
48#20

Service I

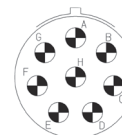
07*



2#8 Triax
97#22D

Service M

08



8#8 Triax

Service M

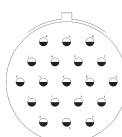
11



2#20
9#10

Service N

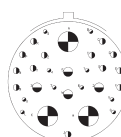
19



19#20

Service I

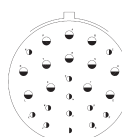
20



#20
#12 Coax
13#16
#8 Triax

Service I

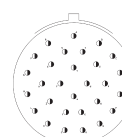
24



12#16
12#12

Service II

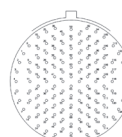
29



29#16

Service I

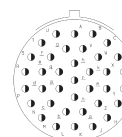
35



128#22D

Service M

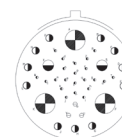
37



37#16

Service II

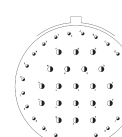
41



22#22D
3#20
11#16
2#12
3#8 Triax

Service M

43



23#20
20#16

Service I

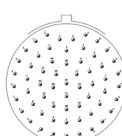
46



40#20
4#16
2#8 Coax

Service I

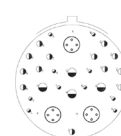
61



61#20

Service I

80



10#20
13#16
4#12
3#8 Quadrax

Service N

81



22#22D
3#20
11#16
2#12
3#8 Quadrax

Service N

82*



97#22D
2#8 Quadrax

Service M

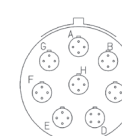
86



40#20
4#16
2#8 Quadrax

Service I

88



8 Quadrax

8D8 / 8D9 Series



Contact layouts matrix

Shell Size	Layout	Service	Number of contacts	#22D	#20	#16	#12	#10	#8
13 (C)	13 - 04	I	4			4			
	13 - 04	-	4						
	13 - 08	I	8		8				
	13 - 26	M	8	6			2		
	13 - 35	M	22	22					
	13 - 98	I	10		10				
15 (D)	15 - 05	II	5			5			
	15 - 15	I	15		14	1			
	15 - 18	I	18		18				
	15 - 19	I	19		19				
	15 - 35	M	37	37					
	15 - 97	I	12		8	4			
17 (E)	17 - 02	M	39						1 Triax
	17 - 06	I	6				6		
	17 - 08	II	8			8			
	17 - 20	M	20	16			4		
	17 - 26	I	26		26				
	17 - 35	M	55						
	17 - 75	I	2						2 Triax
	17 - 75 (Spec. 251)	M	2						2
	17 - 81	-	39	38					1 Quadrax
	17 - 82	-	2						2 Quadrax
19 (F)	17 - 99	I	23		21	2			
	19 - 11	II	11			11			
	19 - 28	I	28		26	2			
	19 - 32	I	32		32				
	19 - 35	M	66	66					
21 (G)	21 - 11	I	11				11		
	21 - 16	II	16			16			
	21 - 35	M	79	79**					
	21 - 39	I	39		37	2			
	21 - 41	I	41		41				
	21 - 48	I	4						4 Power
	21 - 75	-	4						4 Triax
23 (H)	21 - 84	-	4						4 Quadrax
	23 - 21	II	21			21			
	23 - 35	M	100	100**					
	23 - 53	I	53		53				
	23 - 54	M	53	40		9	4		
26 (J)	23 - 55	I	55		55				
	25 - 04	I	56		48	8			
	25 - 07	M	99	97**					2 Triax
	25 - 08	-	8						8 Triax
	25 - 11	N	11		2			9	
	25 - 19	I	19				19		
	25 - 20	N	30		10	13	4 Coax		3 Triax
	25 - 24	II	24			12	12		
	25 - 29	I	29			29			
	25 - 35	M	128	128**					
	25 - 37	II	37			37			
	25 - 41	M	41	22	3	11	2		
	25 - 43	I	43		23	20			
	25 - 46	I	46		40	4			2 Coax
	25 - 61	I	61		61				
	25 - 80	N	30		10	13	4		2 Quadrax
	25 - 81	N	41	22	3	11	2		3 Quadrax
	25 - 82	M	99	97**					2 Quadrax
	25 - 86	I	46		40	4			2 Quadrax
	25 - 88	-	8						8 Quadrax

** Low Insertion Force #22 Socket contacts

8D8 / 8D9 Series



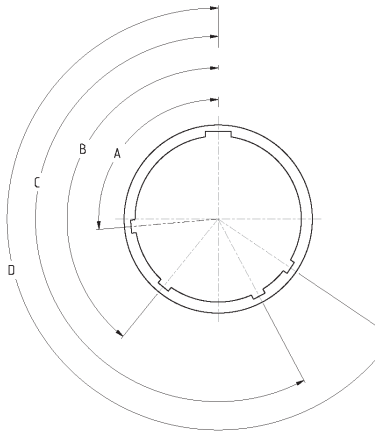
Connector weight (Mass in g +/-15%)																	
SHELL SIZE	LAYOUT	WITH CONTACTS								WITHOUT CONTACTS							
		8D8P PLUG		8D9P PLUG*		8D8RS RECEPTACLE		8D8RJ RECEPTACLE		8D8P PLUG		8D9P PLUG*		8D8RS RECEPTACLE		8D8RJ RECEPTACLE	
		MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
13	13-04	51,13	54,71	60,30	63,88	22,84	26,42	29,95	33,53	49,89	51,59	59,06	60,76	21,60	23,30	28,71	30,41
	13-08	51,31	56,49	60,48	65,66	23,02	28,20	30,13	35,31	50,19	53,29	59,36	62,46	21,90	25,00	29,01	32,11
	13-26	51,68	57,33	60,85	66,50	23,39	29,04	30,50	36,15	49,94	52,63	59,11	61,80	21,65	24,34	28,76	31,45
	13-35	51,11	56,88	60,28	66,05	22,82	28,59	29,93	35,70	49,57	51,38	58,74	60,55	21,28	23,09	28,39	30,20
	13-98	50,97	55,59	60,14	64,76	22,68	27,30	29,79	34,41	49,57	51,59	58,74	60,76	21,28	23,30	28,39	30,41
15	15-05	59,25	64,59	68,67	74,01	26,39	31,73	34,83	40,17	57,70	60,69	67,12	70,11	24,84	27,83	33,28	36,27
	15-15	60,05	67,21	69,47	76,63	27,19	34,35	35,63	42,79	57,78	60,83	67,20	70,25	24,92	27,97	33,36	36,41
	15-18	60,26	69,14	69,68	78,56	27,40	36,28	35,84	44,72	57,74	61,94	67,16	71,36	24,88	29,08	33,32	37,52
	15-19	59,79	67,52	69,21	76,94	26,93	34,66	35,37	43,10	57,13	59,92	66,55	69,34	24,27	27,06	32,71	35,50
	15-35	59,89	69,13	69,31	78,55	27,03	36,27	35,47	44,71	57,30	59,88	66,72	69,30	24,44	27,02	32,88	35,46
	15-97	59,72	66,77	69,14	76,19	26,86	33,91	35,30	42,35	57,36	60,45	66,78	69,87	24,50	27,59	32,94	36,03
17	17-02	73,77	87,11	83,46	96,80	37,84	51,18	46,97	60,31	66,61	70,61	76,30	80,30	30,68	34,68	39,81	43,81
	17-06	70,71	80,31	80,40	90,00	34,78	44,38	43,91	53,51	66,75	70,71	76,44	80,40	30,82	34,78	39,95	43,91
	17-08	69,70	78,43	79,39	88,12	33,77	42,50	42,90	51,63	67,22	72,19	76,91	81,88	31,29	36,26	40,42	45,39
	17-26	70,28	81,07	79,97	90,76	34,35	45,14	43,48	54,27	66,64	70,67	76,33	80,36	30,71	34,74	39,84	43,87
	17-35	70,52	84,07	80,21	93,76	34,59	48,14	43,72	57,27	66,67	70,32	76,36	80,01	30,74	34,39	39,87	43,52
	17-75	76,12	87,41	85,81	97,10	40,19	51,48	49,32	60,61	67,12	73,41	76,81	83,10	31,19	37,48	40,32	46,61
	17-99	70,33	80,89	80,02	90,58	34,40	44,96	43,53	54,09	66,77	70,93	76,46	80,62	30,84	35,00	39,97	44,13
19	19-11	78,74	92,33	88,63	102,22	38,89	52,48	49,13	62,72	75,33	83,75	85,22	93,64	35,48	43,90	45,72	54,14
	19-32	77,95	91,35	87,84	101,24	38,10	51,50	48,34	61,74	73,47	78,55	83,36	88,44	33,62	38,70	43,86	48,94
	19-35	78,26	94,71	88,15	104,60	38,41	54,86	48,65	65,10	73,64	78,21	83,53	88,10	33,79	38,36	44,03	48,60
21	21-11	90,09	109,93	100,25	120,09	46,74	66,58	57,40	77,24	82,83	92,33	92,99	102,49	39,48	48,98	50,14	59,64
	21-16	87,19	102,47	97,35	112,63	43,84	59,12	54,50	69,78	82,23	89,99	92,39	100,15	38,88	46,64	49,54	57,30
	21-35	87,47	108,13	97,63	118,29	44,12	64,78	54,78	75,44	81,94	88,38	92,10	98,54	38,59	45,03	49,25	55,69
	21-39	88,85	109,18	99,01	119,34	45,50	65,83	56,16	76,49	83,05	92,82	93,21	102,98	39,70	49,47	50,36	60,13
	21-41	87,39	104,76	97,55	114,92	44,04	61,41	54,70	72,07	81,65	88,36	91,81	98,52	38,30	45,01	48,96	55,67
	21-75	99,16	116,04	109,32	126,20	55,81	72,69	66,47	83,35	81,16	88,04	91,32	98,20	37,81	44,69	48,47	55,35
23	23-21	99,80	123,05	110,23	133,48	52,12	75,37	63,04	86,29	93,29	106,67	103,72	117,10	45,61	58,99	56,53	69,91
	23-35	98,16	124,31	108,59	134,74	50,48	76,63	61,40	87,55	91,16	99,31	101,59	109,74	43,48	51,63	54,40	62,55
	23-53	98,22	120,41	108,65	130,84	50,54	72,73	61,46	83,65	90,80	99,21	101,23	109,64	43,12	51,53	54,04	62,45
	23-55	98,97	122,04	109,40	132,47	51,29	74,36	62,21	85,28	91,27	100,04	101,70	110,47	43,59	52,36	54,51	63,28
25	25-04	110,12	139,97	121,30	151,15	61,00	90,85	71,19	101,04	100,92	114,53	112,10	125,71	51,80	65,41	61,99	75,60
	25-07	113,90	146,15	125,08	157,33	64,78	97,03	74,97	107,22	98,11	107,90	109,29	119,08	48,99	58,78	59,18	68,97
	25-08	132,70	164,53	143,88	175,71	83,58	115,41	93,77	125,60	96,70	108,53	107,88	119,71	47,58	59,41	57,77	69,60
	25-11	115,55	138,06	126,73	149,24	66,43	88,94	76,62	99,13	97,81	110,80	108,99	121,98	48,69	61,68	58,88	71,87
	25-19	111,46	143,47	122,64	154,65	62,34	94,35	72,53	104,54	98,92	113,07	110,10	124,25	49,80	63,95	59,99	74,14
	25-24	110,96	142,32	122,14	153,50	61,84	93,20	72,03	103,39	99,32	113,76	110,50	124,94	50,20	64,64	60,39	74,83
	25-29	109,28	138,25	120,46	149,43	60,16	89,13	70,35	99,32	100,29	115,63	111,47	126,81	51,17	66,51	61,36	76,70
	25-35	107,96	139,90	119,14	151,08	58,84	90,78	69,03	100,97	99,00	107,90	110,18	119,08	49,88	58,78	60,07	68,97
	25-37	109,62	139,53	120,80	150,71	60,50	90,41	70,69	100,60	98,15	110,67	109,33	121,85	49,03	61,55	59,22	71,74
	25-43	109,32	140,00	120,50	151,18	60,20	90,88	70,39	101,07	99,90	115,20	111,08	126,38	50,78	66,08	60,97	76,27
	25-46	111,62	135,46	122,80	146,64	62,50	86,34	72,69	96,53	96,98	107,14	108,16	118,32	47,86	58,02	58,05	68,21
	25-61	102,10	123,97	113,28	135,15	52,98	74,85	63,17	85,04	97,83	108,72	109,01	119,90	48,71	59,60	58,90	69,79



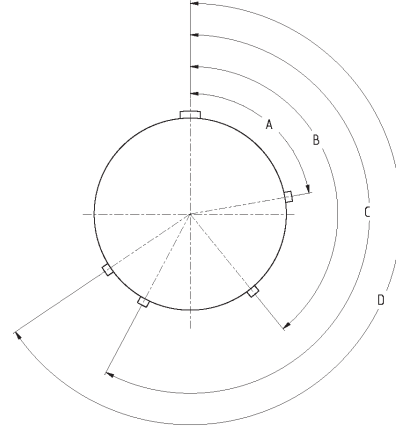
8D8 / 8D9 Series

Key polarisation

Viewed from face of receptacle



Viewed from front of plug



Contact size	MS Shell size	Angles	N	A	B	C	D
13	C	A°	95	113	90	53	119
		B°	141	156	145	156	146
		C°	208	182	195	220	176
		D°	236	292	252	255	298
15	D	A°	95	113	90	53	119
		B°	141	156	145	156	146
		C°	208	182	195	220	176
		D°	236	292	252	255	298
17	E	A°	80	135	49	66	62
		B°	142	170	169	140	145
		C°	196	200	200	200	180
		D°	293	310	244	257	280
19	F	A°	80	135	49	66	62
		B°	142	170	169	140	145
		C°	196	200	200	200	180
		D°	293	310	244	257	280
21	G	A°	80	135	49	66	62
		B°	142	170	169	140	145
		C°	196	200	200	200	180
		D°	293	310	244	257	280
23	H	A°	80	135	49	66	62
		B°	142	170	169	140	145
		C°	196	200	200	200	180
		D°	293	310	244	257	280
25	J	A°	80	135	49	66	62
		B°	142	170	169	140	145
		C°	196	200	200	200	180
		D°	293	310	244	257	280