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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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DEUTSCH 984 Series Filter Connectors

MIL-DTL-83723 SERIES III



DEUTSCH 984 Series connectors are intermateable and interchangeable with ESC11 and ESC16 connectors. With medium-density insert arrangements, fine threaded coupling, and corrosion resistant stainless steel shells, they are designed for the harsh environments of engines. They offer different keying options.

SPECIFICATIONS

Environmental

- **Temperature Range:** -55°C to 125°C
- **Physical Shock:** Typical to EIA-364-27
- **Vibration:** Typical to EIA-364-28
- **Fungus Resistance:** Based on MIL-STD-810
- **Fluid Immersion:** Typically tested to EIA-364-10
- **Salt Spray:** Typically based on EIA/ECA-364-26
- **Humidity:** Typically EIA-364-31 test method IV
- **Durability:** 500 cycles per MIL-DTL-83723

Electrical

- **Grounded Line Resistance (Typ.):** 15 mΩ
- **Insulation Resistance (Typ.):** >5 GΩ
- **Dielectric Withstand (Typ.):** <5 μA
- **DWV:** up to 2000 VDC
- **Working Voltage:** up to 2000 VDC
- **Typical Test Specifications Used:**
 - MIL-STD-810: Test Method Standard
 - MIL-STD-202: Electrical & Electronic Component Parts
 - RTCA DO-160: Test Procedures for Airborne Equipment
 - EIA-364: Electrical Connector & Socket Test Procedures

Filtering

- **Capacitance Range:** 20 pF to 4 μF
- **Capacitance Tolerance:** Typically 20%
- **Unfiltered Line Cap (Typ.):** 15 pF
- **Filtering Topologies:** L, C, LC, CL, Pi, T, Double T

Transient protection available as per RTCA Publication DO 160 (see page 55).

MATING COMPATIBILITY

- MIL-DTL-83723 Series 3 connectors
- ESC11 and ESC16 Connectors

RUGGED

- Designed specifically for engines
- Antivibration screw coupling connectors

RELIABLE

- 100% scoop proof
- RFI shell-to-shell continuity

VERSATILE

- Wide range of connector shell configurations
- Configurable filter topologies

DESIGNED FOR HARSH ENVIRONMENTS

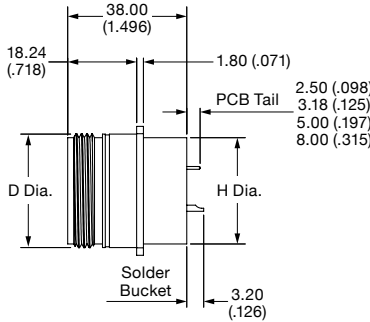
- Vibration and shock
- Temperature extremes
- High humidity
- Altitude
- Salt spray



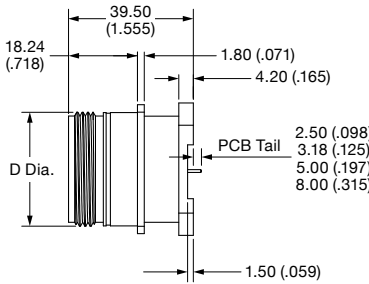
DEUTSCH 984 Series Filter Connectors

MIL-DTL-83723 SERIES III

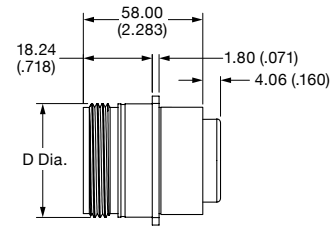
Square Flange Receptacles



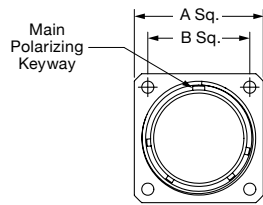
Single Flange



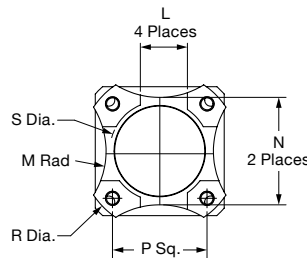
Double Flange



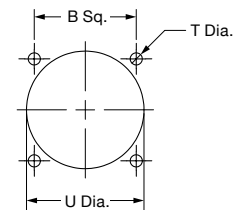
Single Flange, Crimp Contacts



Front View



Double Flange Footprint



Square Flange Mounting

Shell Size	A Sq. Max.	B Sq.	D Dia. Max.	H Dia. Max.	L Ref.	M Rad Ref.	N Ref.	P Sq.	R Dia.	S Dia.	Mounting Holes	
											T Dia.	U Dia.
8	20.75 (0.817)	15.09 (0.594)	14.27 (0.562)	12.70 (0.500)	8.00 (0.315)	9.00 (0.354)	15.50 (0.610)	14.00 (0.551)	27.06 (1.065)	14.34 (0.565)		15.80 (0.622)
10	23.93 (0.942)	18.26 (0.719)	17.47 (0.688)	15.88 (0.625)	8.00 (0.315)	9.00 (0.354)	15.50 (0.610)	14.00 (0.551)	27.06 (1.065)	14.34 (0.565)		18.70 (0.736)
12	26.32 (1.036)	20.62 (0.812)	22.22 (0.875)	19.05 (0.750)	8.00 (0.315)	12.00 (0.472)	18.65 (0.734)	17.00 (0.669)	32.06 (1.262)	17.42 (0.686)		23.40 (0.921)
14	28.71 (1.130)	23.01 (0.906)	23.82 (0.938)	22.23 (0.875)	12.00 (0.472)	18.00 (0.709)	22.00 (0.866)	19.00 (0.748)	35.06 (1.380)	20.72 (0.816)	3.05 (0.120)	24.90 (0.980)
16	31.88 (1.255)	24.61 (0.969)	26.97 (1.062)	25.40 (1.000)	12.00 (0.472)	20.00 (0.787)	25.25 (0.994)	22.00 (0.866)	39.06 (1.538)	23.89 (0.941)		28.30 (1.114)
18	34.24 (1.348)	26.97 (1.062)	30.18 (1.188)	26.97 (1.062)	16.00 (0.630)	22.00 (0.866)	28.40 (1.118)	25.00 (0.984)	42.06 (1.656)	26.43 (1.041)		31.10 (1.224)
20	36.63 (1.442)	29.36 (1.156)	33.32 (1.312)	30.18 (1.187)	16.00 (0.630)	22.00 (0.866)	31.55 (1.242)	27.00 (1.063)	45.06 (1.774)	29.58 (1.165)		34.50 (1.358)
22	39.80 (1.567)	31.75 (1.250)	36.53 (1.438)	33.32 (1.312)	16.00 (0.630)	22.00 (0.866)	34.50 (1.358)	29.00 (1.142)	48.06 (1.892)	32.76 (1.290)		37.50 (1.476)
24	43.39 (1.708)	34.92 (1.375)	39.67 (1.562)	36.53 (1.437)	16.00 (0.630)	24.00 (0.945)	37.30 (1.469)	31.00 (1.221)	51.06 (2.010)	35.83 (1.411)	3.80 (0.150)	40.60 (1.598)
28	50.93 (2.005)	39.67 (1.562)	46.02 (1.812)	44.45 (1.750)	18.00 (0.709)	24.00 (0.945)	44.50 (1.752)	35.00 (1.378)	56.06 (2.207)	39.01 (1.536)		48.00 (1.890)

See page 48 for insert arrangements and back cover for configuration sheet.

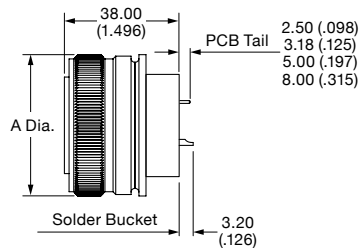


DEUTSCH 984 Series Filter Connectors

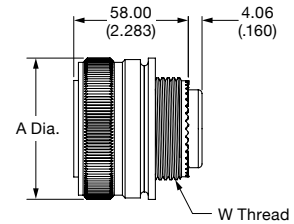
MIL-DTL-83723 SERIES III

Plug Connectors

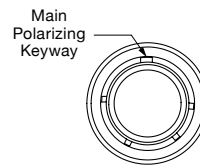
Shell Size	A Dia. Max.	W Thread Class 2B
8	21.30 (0.838)	0.5000-20 UNF
10	24.89 (0.980)	0.6250-24 UNEF
12	29.59 (1.165)	0.7500-20 UNEF
14	31.24 (1.230)	0.8750-20 UNEF
16	34.42 (1.355)	1.0000-20 UNEF
18	37.34 (1.470)	1.0625-18 UNEF
20	41.91 (1.650)	1.1875-18 UNEF
22	44.07 (1.735)	1.3125-18 UNEF
24	47.24 (1.860)	1.4375-18 UNEF
28	55.24 (2.175)	1.7500-18 UNS



PCB/Solder Bucket Contacts



Crimp Contacts



Front View

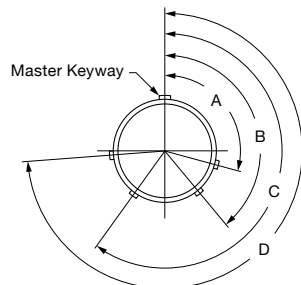
Insert Arrangements

- Filter Connector Series: 984
- Industry Specification: EN4067
- Insert Arrangement Specification: MIL-STD-1554

Shell Size	Arrangement	Size 20 Contacts
14	14-15	15
16	16-24	24
18	18-31	31
20	20-41	41
22	22-55	55
24	24-61	61

Keying Options

(Plug Mating Face Shown)



Key/Keyway	Keyway (In Degrees)											
	Size 8				Size 10				Size 12 to 28			
	A	B	C	D	A	B	C	D	A	B	C	D
N (Normal)	105	140	215	265	105	140	215	265	105	140	215	265
6	102	132	248	320	102	132	248	320	18	148	192	259
7	80	118	230	312	80	118	230	312	92	152	222	342
8	35	140	205	275	35	140	205	275	84	152	204	334
9	64	155	234	304	64	155	234	304	24	135	199	240
Y	—	—	—	—	25	115	220	270	98	152	268	338