

the
Xtreme
High-Speed
Xperts



**MIL-C-38999 Shell with
embedded SFF-8470 Plug**

Meritec's 4X (SFF-8470) Plug Termination with LSZH cable and its Receptacle embedded in the mating rugged circular MIL-C-38999 shells provides both a durable and high bandwidth interconnect scheme suitable for many Military, Airborne and Medical applications not previously accommodated by industry standard interconnects.



**MIL-C-38999 Shell with
embedded SFF-8470
Receptacle to Pigtail**



**MIL-C-38999 Shell with
embedded SFF-8470
Feed-Thru Receptacle**

Meritec's LSZH cable assemblies support differential pair signaling with low-skew pairs and with shielding for maximum EMI/RFI protection. Meritec's cable technology allows data rates in excess of 6.0 Gb/s and meets or exceeds SAS, InfiniBand[®], Ethernet CX4 and SATA requirements. Reduced crosstalk and low insertion loss enhance the scalability.

Features & Benefits

- LSZH (Low Smoke Zero Halogen) jacketed cable
- Available in 24, 26, 28, and 30 AWG cable
- Optional connectors are available for both Cable assemblies and Pigtail assemblies
- Durable SFF-8470 Receptacles
- Rugged lightweight Aluminum MIL-C-38999-Series III Size 23, Circular Shells
- Supports data rates in excess of 6.0 Gb/s
- Meets or exceeds SAS, InfiniBand[®], Ethernet CX4 and SATA specifications
- Matched impedance design of 100 ohm \pm 10%
- Mated cycles – 250 minimum
- Fully electrically tested
- Available lengths built to order

Cable Specifications

Electrical

- Impedance: 100 \pm 10 ohms differential at 100ps rise time
- Crosstalk (NEXT): < 2% at 100ps (multiple aggressors)
- Plug Cable Assembly
Insertion loss: 1-M 28-AWG cable – 1.3 dB at 1.5 GHz
connectors – 0.8 dB per pair at 1.5 GHz
- Skew:< 10ps/meter
- Feed-Through Receptacle Insertion loss: 1 dB at 1.5 GHz
- Signal Integrity data available upon request

Mechanical SFF-8470

- Contact material: Copper Alloy
- Standard contact finish: 30- μ m Au / 50- μ m Ni
- Plating: Die cast shell with Ni
- Durability: 250 cycles

Environmental

- Cable insulating material: LSZH jacket
- Operating temperature: -20 °C to 75 °C
- UL Recognized materials

Ordering information – Build to order – Consult factory

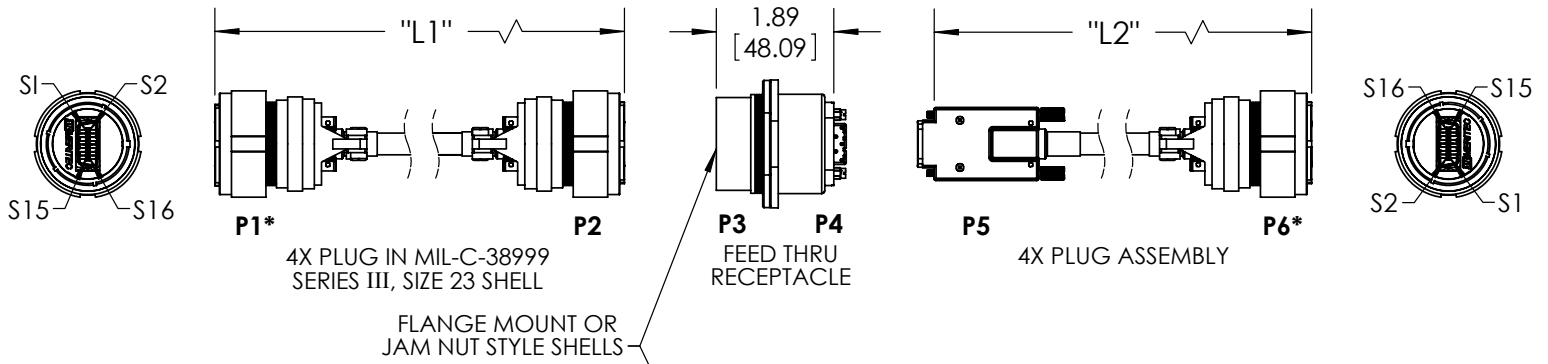
**Meritec's Hercules 38999 is now approved
as a VITA 76 (High-Performance Cable) Standard**

Members
VITA **SOSA**
Open Standards, Open Markets
Sense Open System Architecture

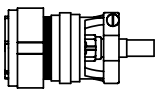

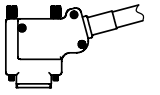
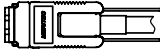
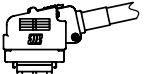
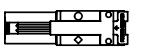
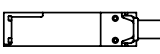
[Data Sheet PDF](#)

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* OPTIONS (P1, P4, P6)

- A.  CIRCULAR 38999 (AS SHOWN)
- B.  4X STRAIGHT TS
- C.  4X ANGLED TS
- D.  4X STRAIGHT LATCH
- E.  4X ANGLED LATCH
- F.  MINI-SAS
- G.  QSFP
- H. OTHER (RJ, SFP+, HM 2mm, ETC.)

WIRING DIAGRAM 4X TO 4X*					
P1 END	P2 END	P3 END	P4 END	P5 END	P6 END
S1	S16	S1	S16	S1	S16
S2	S15	S2	S15	S2	S15
S3	S14	S3	S14	S3	S14
S4	S13	S4	S13	S4	S13
S5	S12	S5	S12	S5	S12
S6	S11	S6	S11	S6	S11
S7	S10	S7	S10	S7	S10
S8	S9	S8	S9	S8	S9
S9	S8	S9	S8	S9	S8
S10	S7	S10	S7	S10	S7
S11	S6	S11	S6	S11	S6
S12	S5	S12	S5	S12	S5
S13	S4	S13	S4	S13	S4
S14	S3	S14	S3	S14	S3
S15	S2	S15	S2	S15	S2
S16	S1	S16	S1	S16	S1
G1-G9 SIGNAL GROUNDS					

* FOR PINOUT TERMINATIONS OPTIONS F THRU H CONSULT FACTORY

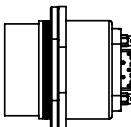


PART NUMBER ORDERING SPECIFICATION:

CIRCULAR 4X FEED-THRU **9842** -

MOUNTING STYLE	RETENTION TYPE
A	TS

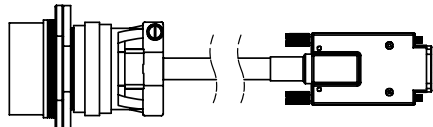
A = JAM NUT	TS = THUMBSCREW
B = FLANGE	LT = LATCH



CIRCULAR 4X FEED-THRU WITH PIGTAIL **9843** -

MOUNTING STYLE	WIRE AWG	LENGTH IN METERS	TERMINATION STYLE
A	24	00.0	A

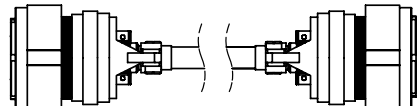
A = JAM NUT	24 = 24 AWG		A = CIR 4X PLUG-STANDARD CUSTOM OPTIONS: B = 4X STRAIGHT TS C = 4X ANGLED TS D = 4X STRAIGHT LATCH E = 4X ANGLED LATCH F = MINI-SAS G = QSFP H = OTHER (RJ,SFP+,HM2mm,etc.)
B = FLANGE	26 = 26 AWG		
	28 = 28 AWG		
	30 = 30 AWG		



CIRCULAR 4X PLUG TO OPTIONAL PLUG CABLE ASSY **9844** -

PLUG STYLE	WIRE AWG	LENGTH IN METERS	TERMINATION STYLE
A	24	00.0	A

A = CIR 4X PLUG	24 = 24 AWG		A = CIR 4X PLUG-STANDARD CUSTOM OPTIONS: B = 4X STRAIGHT TS C = 4X ANGLED TS D = 4X STRAIGHT LATCH E = 4X ANGLED LATCH F = MINI-SAS G = QSFP H = OTHER (RJ,SFP+,HM2mm,etc.)
	26 = 26 AWG		
	28 = 28 AWG		
	30 = 30 AWG		



CIRCULAR 4X FEED-THRU DUST COVER **984520-01**



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