

AGNOSTIC EMBEDDED RUGGED MEDIA CONVERTERS



Amphenol's Agnostic Embedded Rugged Media Converters utilize Amphenol's long-time trusted MIL-DTL-38999 connectors and receive data over a Samtec HQDP ribbon for attachment into a subsystem. These converters output to a MIL-DTL-38999 connector embedded with high performance Amphenol contacts. These units can be configured with any plating, shell rotation, HQDP ribbon length, and HQDP connector type. These features are a perfect fit for any application being used in harsh environment avionics, ground systems, or naval applications.

AVAILABLE OPTIONS:

- 2 Channel Copper/Fiber and Fiber/Copper
- 4 Channel Copper/Fiber and Fiber/Copper
- 4 Channel Copper to Fiber
- 6 Channel Copper to Fiber

FEATURES & BENEFITS:

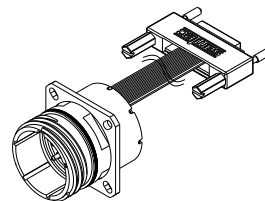
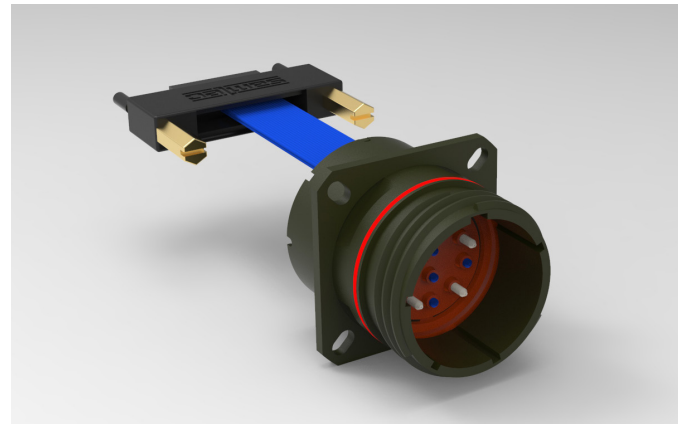
- 3.3V Power
- Agnostic to Encoded data protocols
- 850nm multi-mode technology



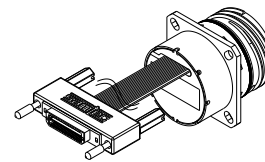
2 CHANNEL COPPER/FIBER AND FIBER/COPPER

CF-020400-34X

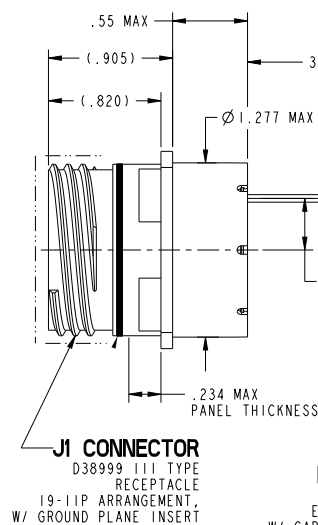
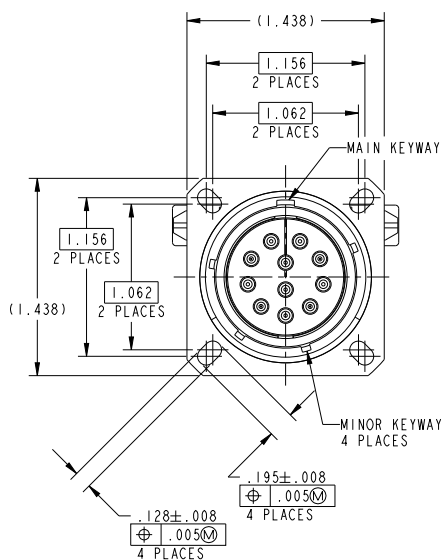
- 2X channels of (2X fiber transmitters; 2X fiber receivers) of up to 4.25G of encoded data copper/fiber and fiber/copper
- AC Coupled SML inputs/outputs
- Transmit disable and loss of signal discretes
- MIL-DTL-38999 Shell Size 19
- M29504/4 fiber contacts



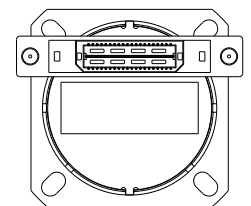
FRONT ISOMETRIC VIEW



REAR ISOMETRIC VIEW



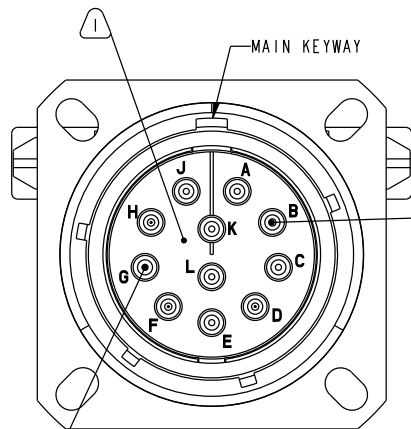
AA
AA



2 CHANNEL COPPER/FIBER AND FIBER/COPPER PINOUT

J1 I/O CHART	
CAVITY ID	SIGNAL
B	TX1
D	TX2
F	TX3
H	TX4
A	N/C
C	
E	
G	
J	
K	
L	

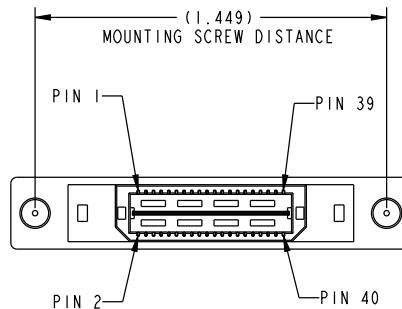
P1 I/O CHART			
PIN ID	SIGNAL	PIN ID	SIGNAL
1	TXDIS1	21	N/C
2	RX1-	22	N/C
3	3.3V	23	N/C
4	RX1+	24	N/C
5	GND	25	N/C
6	TXDIS2	26	N/C
7	RX2-	27	N/C
8	3.3V	28	N/C
9	RX2+	29	N/C
10	GND	30	N/C
11	TXDIS3	31	N/C
12	RX3-	32	N/C
13	3.3V	33	N/C
14	RX3+	34	N/C
15	GND	35	N/C
16	TXDIS4	36	N/C
17	RX4-	37	N/C
18	3.3V	38	N/C
19	RX4+	39	N/C
20	GND	40	N/C



FRONT VIEW
J1 CONNECTOR
NORMAL KEY SHOWN
SCALE 3.000

SEALING PLUG,
99-587093-016 OR EQUIV.
CAVITIES A,C,E,G,J,K,AND L
7 PLACES

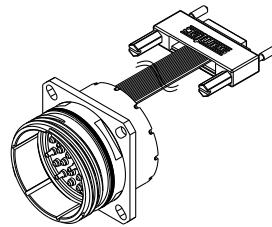
CONTACT, PIN, TOSA
AMPHENOL M29504/4 EQUIVALENT
CAVITIES B,D,F,AND H
4 PLACES



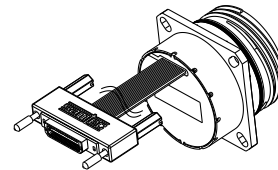
4 CHANNEL COPPER/FIBER AND FIBER/COPPER

CF-020400-35X

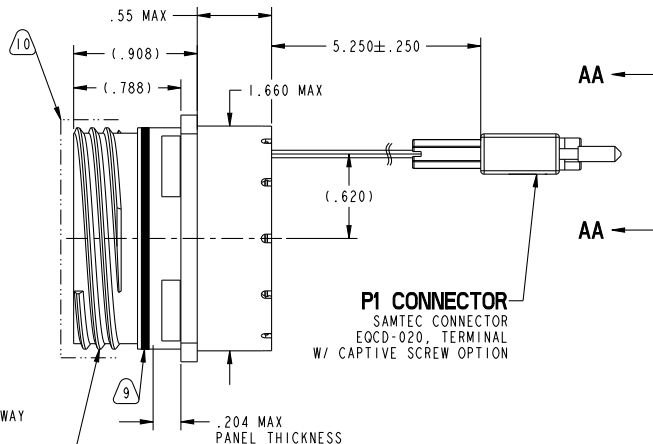
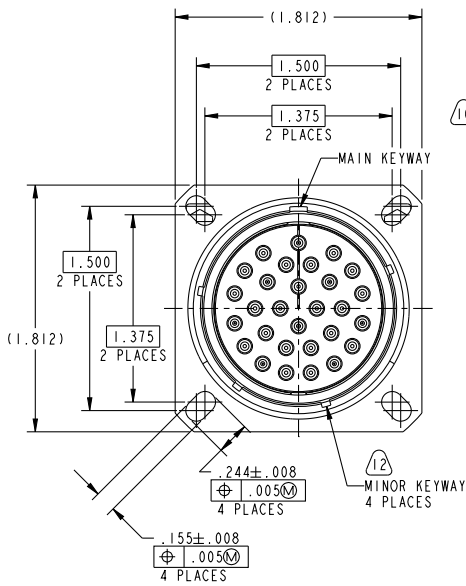
- 4X channels of (4X fiber transmitters; 4X fiber receivers) of up to 4.25G of encoded data copper/fiber and fiber/copper
- AC Coupled SML inputs
- Transmit disable and loss of signal discretes
- MIL-DTL-38999 Shell Size 25
- M29504/4 fiber contacts



FRONT ISOMETRIC VIEW
SCALE 1.000

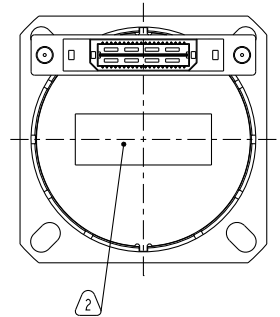


REAR ISOMETRIC VIEW
SCALE 1.000



J1 CONNECTOR
D38999 III TYPE
RECEPTACLE
25-29P ARRANGEMENT
W/ GROUND PLANE INSERT

P1 CONNECTOR
SAMTEC CONNECTOR
EQCD-020, TERMINAL
W/ CAPTIVE SCREW OPTION

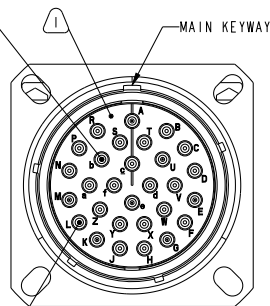


4 CHANNEL COPPER/FIBER AND FIBER/COPPER PINOUT CHARTS

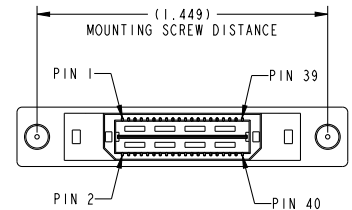
I/O CHART	
CAVITY ID	SIGNAL
A	TX1
U	RX1
G	TX2
E	RX2
K	TX3
M	RX3
e	TX4
b	RX4
B	N/C
C	
D	
F	
H	
J	
L	
N	
P	
R	
S	
T	
V	
W	
X	
Y	
Z	
a	
c	
d	
f	

P1 I/O CHART			
PIN ID	SIGNAL	PIN ID	SIGNAL
1	TXDIS1	21	TXDIS3
2	RX1-	22	RX3-
3	3.3V	23	3.3V
4	RX1+	24	RX3+
5	GND	25	GND
6	LOS1	26	LOS3
7	TX1-	27	TX3-
8	3.3V	28	3.3V
9	TX1+	29	TX3+
10	GND	30	GND
11	TXDIS2	31	TXDIS4
12	RX2-	32	RX4-
13	3.3V	33	3.3V
14	RX2+	34	RX4+
15	GND	35	GND
16	LOS2	36	LOS4
17	TX2-	37	TX4-
18	3.3V	38	3.3V
19	TX2+	39	TX4+
20	GND	40	GND

CONTACT, PIN, TOSA,
AMPHENOL M29504/4
EQUIVALENT CAVITTIES
A, G, K, e 4 PLACES, AND PIN,
ROSA, AMPHENOL M29504/4
EQUIVALENT CAVITTIES
U, E, M AND b 4 PLACES



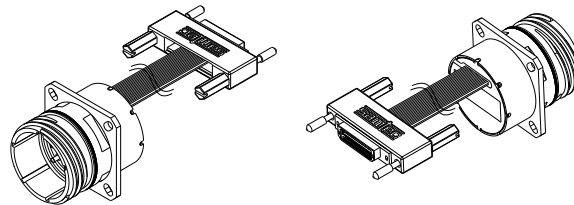
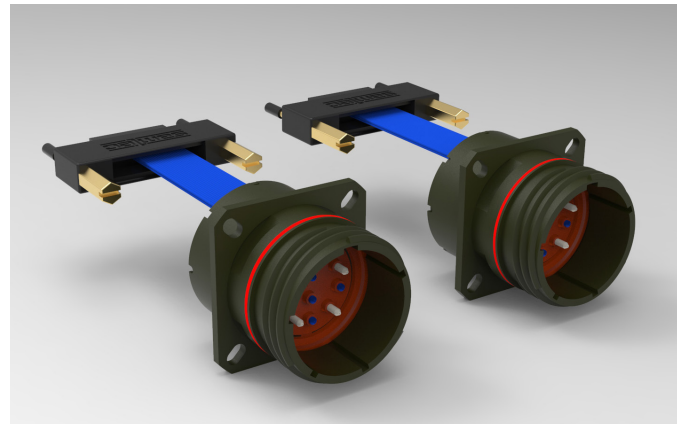
SEALING PLUG,
99-587093-016,
OR EQUIV.
ALL UNUSED CAVITIES



4 CHANNEL COPPER TO FIBER

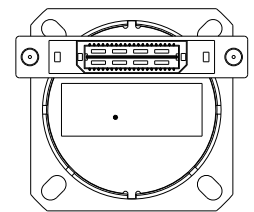
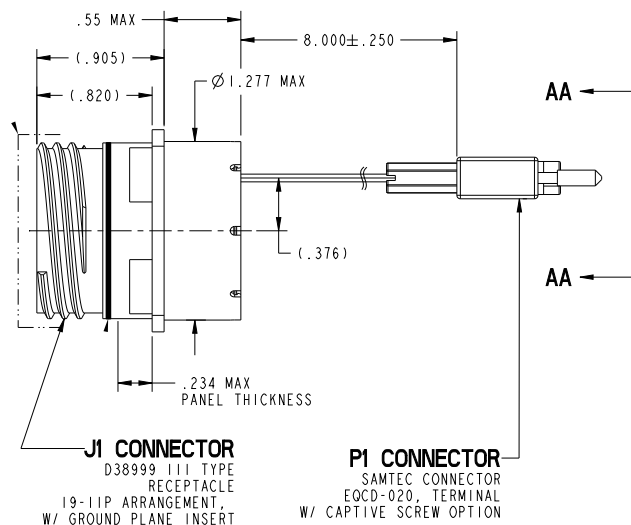
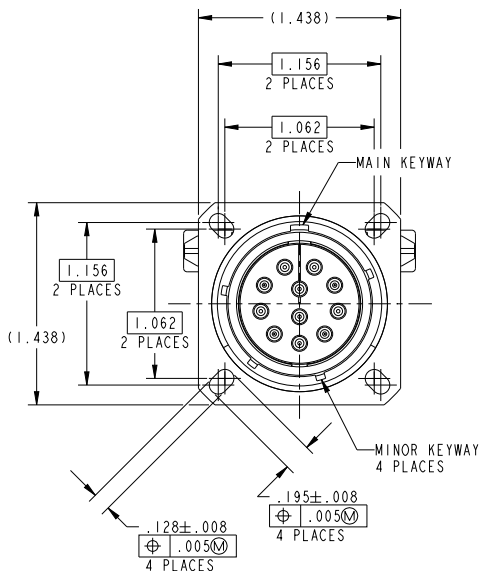
CF-020400-38X

- 4X lanes of (4X copper receivers; 4X fiber transmitters) of up to 4.25G of encoded data copper to fiber
- AC Coupled CML inputs
- Transmit disable discretes
- MIL-DTL-38999 Shell Size 19
- M29504/4 fiber contacts



FRONT ISOMETRIC VIEW

REAR ISOMETRIC VIEW

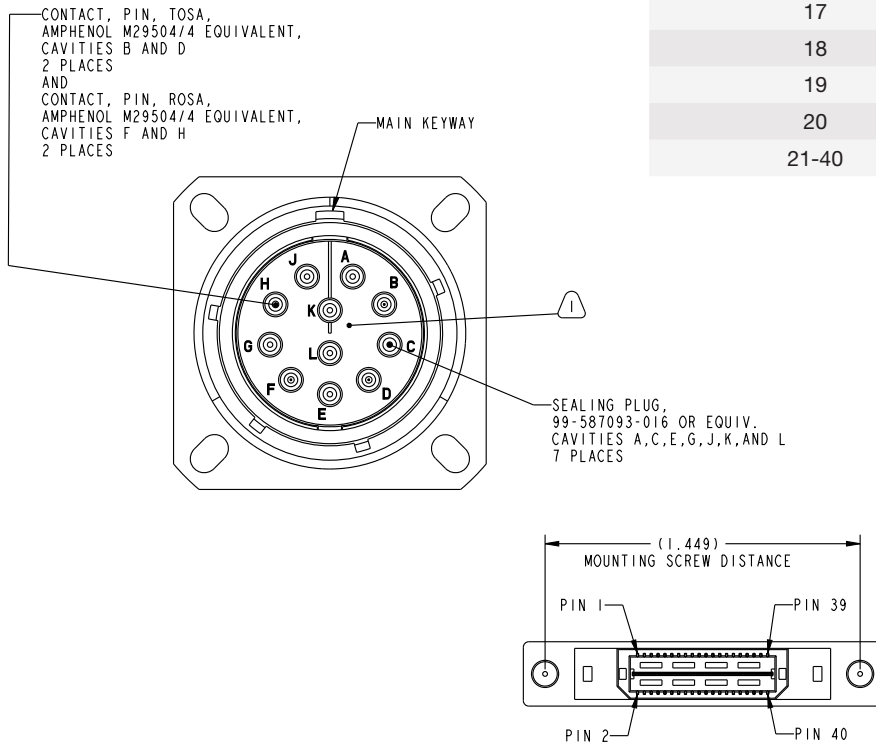


4 CHANNEL COPPER TO FIBER

PINOUT

P1 I/O CHART	
CAVITY ID	SIGNAL
A	N/C
B	TX2
C	N/C
D	TX1
E	N/C
F	RX1
G	N/C
H	RX2
J	N/C
K	N/C
L	N/C

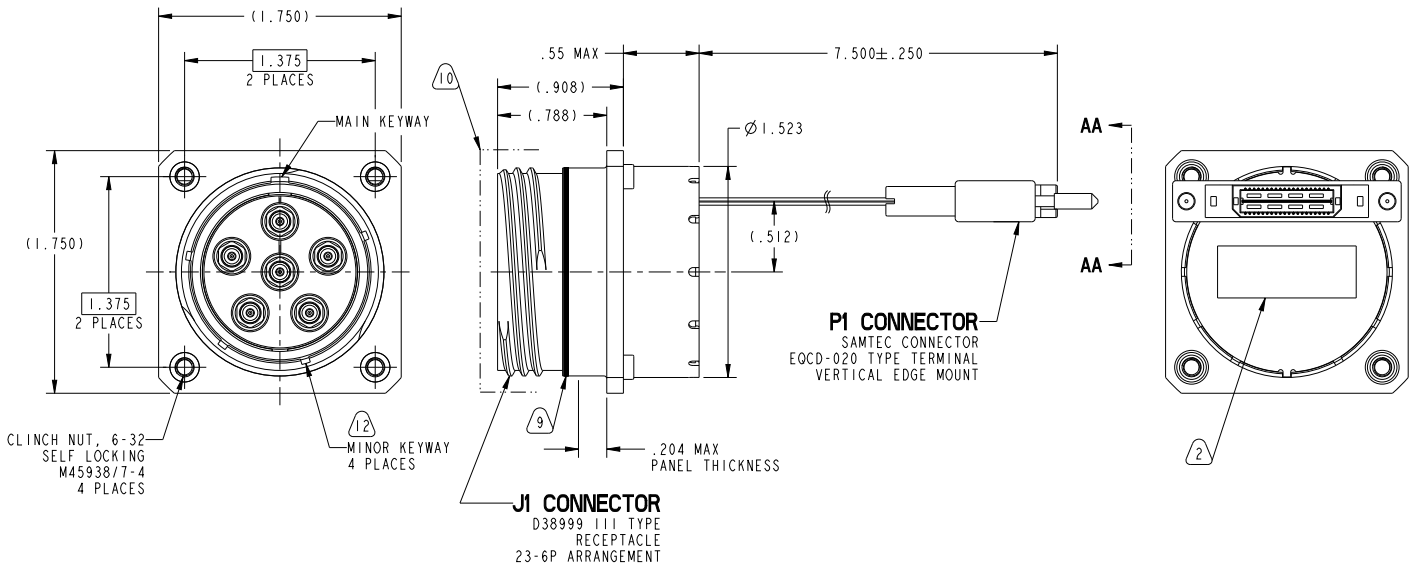
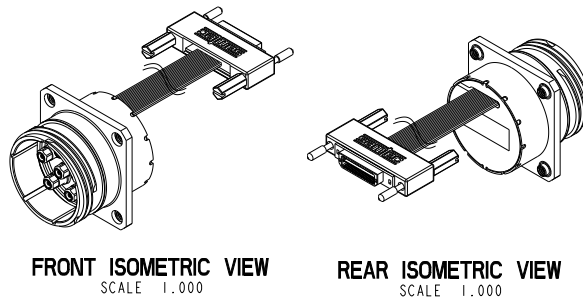
P2 I/O CHART	
PIN NUMBER	SIGNAL NAME
1	LOS1
2	GND
3	TX1-
4	N/C
5	TX1+
6	TXDIS1
7	RX1-
8	3.3V
9	RX1+
10	3.3V
11	LOS2
12	GND
13	TX2-
14	N/C
15	TX2+
16	TXDIS2
17	RX2-
18	3.3V
19	RX2+
20	3.3V
21-40	NOT CONNECTED



6 CHANNEL COPPER TO FIBER

CF-020400-36X

- 5X fiber transmitter lanes (5X copper receiver; 5X fiber transmitter) of up to 10.3125Gbps of encoded data copper to fiber
- 1X Fiber receiver lanes (1X copper transmitters; 1X fiber receivers) of up to 10.2135Gbps of encoded data copper to fiber
- AC Coupled CML inputs
- Transmit disable and loss of signal discrettes
- MIL-DTL-38999 Shell Size 23
- CTF-Quad Contacts (Quadrax form factor embedded fiber optic transmitters and receivers)

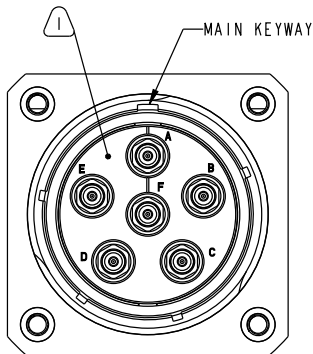


6 CHANNEL COPPER TO FIBER

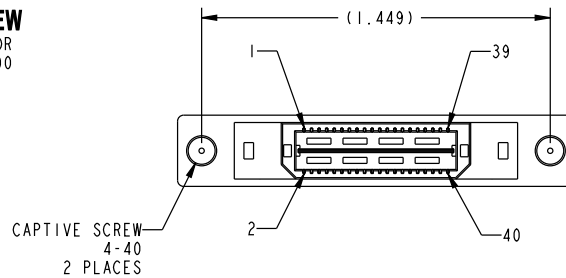
PINOUT

J1 I/O CHART	
CAVITY ID	SIGNAL
A	10G_RX1
B	10G_TX1
C	10G_TX2
D	10G_TX3
E	10G_TX4
F	10G_TX5

P1 I/O CHART			
PIN ID	SIGNAL	PIN ID	SIGNAL
1	LOS_RX1	21	TX_DIS_TX4
2	GND	22	GND
3	COPPER_TX1+	23	COPPER_RX4+
4	N/C	24	FAULT_TX4
5	COPPER_TX1-	25	COPPER_RX4-
6	TX_DIS_TX1	26	TX_DIS_TX5
7	GND	27	GND
8	COPPER_RX1+	28	COPPER_RX5+
9	FAULT_TX1	29	FAULT_TX5
10	COPPER_RX1-	30	COPPER_RX5-
11	TX_DIS_TX2	31	3.3V
12	GND	32	GND
13	COPPER_RX2+	33	3.3V
14	FAULT_TX2	34	GND
15	COPPER_RX2-	35	N/C
16	TX_DIS_TX3	36	3.3V
17	GND	37	GND
18	COPPER_RX3+	38	3.3V
19	FAULT_TX3	39	N/C
20	COPPER_RX3-	40	GND



FRONT VIEW
J1 CONNECTOR
SCALE 2.000



Notice: Specifications are subject to change without notice. Contact your nearest Amphenol Corporation Sales Office for the latest specifications. All statements, information and data given herein are believed to be accurate and reliable but are presented without guarantee, warranty, or responsibility of any kind expressed or implied. Statements or suggestions concerning possible use of our products are made without representation or warranty that any such use is free of patent infringement and are not recommendations to infringe any patent. The user should not assume that all safety measures are indicated or that other measures may not be required. Specifications are typical and may not apply to all connectors.

© 2021 Amphenol Corp.

Printed in U.S.A. 9-2021