



**NOTES UNLESS OTHERWISE SPECIFIED:**

1. INTERPRET DRAWING PER MIL-STD-100.
2. CONNECTOR: WILLIAMS INTERNATIONAL, SCD 24235/ST88652-01, SCD 24235/ST88652-03  
BACKSHELL: WILLIAMS INTERNATIONAL, SCD 24235/ST88678-01, SCD 24235/ST88678-03
3. MATERIALS:  
ALL MATERIAL SHALL BE JP-10 COMPATIBLE.  
A. O-RING - PARKER SEALS COMPOUND V835-75 OR EQUIVALENT LOW TEMP VITON.  
B. PAVE-Seal HOUSING - ALUMINUM 6061-T6  
ELECTROLESS NICKEL PLATE PER ASTM B733-90.  
C. WIRE - MIL-W-16878/4 OR MIL-W-22759/11 OR /44.  
D. SHIELDING - P/N QQB575R34T781 PER QQ-B-575 FROM HOUSING TO CONNECTOR P2.  
P/N QQB575R34T203 PER QQ-B-575 CABLE JUNCTION TO CONNECTOR P3.  
TWISTED PAIR SHIELDING PER QQ-B-575 OR EQUIVALENT.  
E. SLEEVING - MIL-DTL-25053/13.  
F. CABLE JACKET - BENTLEY HARRIS (CAGE CODE 81851) EXPANDO FR DM SLEEVING.
4. HERMETIC SEALED PAVE-Seal REQUIREMENTS:  
A. MEDIA TO BE SEALED - AIR, UP TO 67 PSI.  
B. TEMP REQUIREMENTS - -40°C TO 125°C  
C. VOLTAGE/AMPERAGE DUTY CYCLE - 200VDC/9.2A DC.  
D. LEAK RATE ≤ 5 X 10<sup>-6</sup>CC/SEC HELIUM AT 1 ATM, 25°C.  
E. BULKHEAD THICKNESS APPROXIMATELY 0.10 INCHES.
5. TEST REQUIREMENTS:  
A. VERIFY RESISTANCE < 50mΩ FOR EACH WIRE. USE 4-WIRE MEASUREMENT METHOD FROM STRIPPED WIRE END TO CONNECTOR PIN OR PIN TO PIN AS APPROPRIATE.  
B. BONDING RESISTANCE SHALL BE < 2.0mΩ FROM CABLE SHIELDING TO PAVE-Seal HOUSING AND SHIELDING TO BACKSHELL.  
C. HIPOT TEST AT 630VDC FOR 0.01 SEC MIN., VERIFY RESISTANCE ≥ 500MΩ, WIRE TO WIRE AND HOUSING, WITH MATING CONNECTORS.  
D. THERMAL CYCLE -40°C TO 125°C WITH 1 HOUR DWELL AT TEMPERATURE EXTREMES, 3 CYCLES.  
E. VERIFY LEAK RATE: ≤ 5 X 10<sup>-6</sup>CC/SEC HELIUM AT 1 ATM, 25° C MAX.

6. TWISTED PAIRS SHALL BE APPROXIMATELY 1 TWIST/INCH AND START AT THE DIMENSION SHOWN.
7. O-RING GROOVE DESIGN SHALL BE TO NOTE 3A MANUFACTURERS SPECIFICATIONS AND ALLOW FOR A 35% COMPRESSION NOMINAL.
8. IMPRINT LABEL WITH CONNECTOR REFERENCE DESIGNATOR (AS INDICATED), USING CONTRASTING PERMANENT INK, AND LOCATE ON CABLE WITHIN 2" OF BACKSHELL. MARKER SHALL BE EITHER: (A) PANDUIT MP200-C WITH TIE WRAPS PLT1M-76 OR (B) RAYCHEM HT-SCE-1-2.0-9 (HEAT-SHRINKABLE).
9. PART MARKING: AS A MINIMUM BAG OR TAG AND IDENTIFY WITH PART NO. "21562/1135802-1" PER MIL-STD-130 AND DATE CODE (YRWK) PER MIL-STD-1285.
10. ATTACH SHIELDING AND JACKETING USING RETAINING SPRING SUPPLIED WITH BACKSHELL.
11. IDENTIFY WIRE LEADS WITH BRADY MARKERS PER SCHEMATIC PAGE 2 WITHIN 1 INCH OF WIRE ENDS.
12. CABLE TO BE SHIELDED FROM PAVE-Seal HOUSING TO BACKSHELL.  
CABLE TO BE JACKETED FROM BACKSHELL SPRING CLAMP TO WITHIN 0.55 FROM PAVE-Seal HOUSING.
13. CABLE SHIELD TO BE CLAMPED BETWEEN TWO PIECE PAVE-Seal HOUSING.
14. OPTIONAL URETHANE BOOT TO FIT WITHIN VOLUME INDICATED. BOOT TO BE UNDER SHIELDING.
15. SHIELD TO BE FASTENED USING NASM20426AD3-4 OR EQUIVALENT.  
ALTERNATIVELY, CRES THREADED FASTENERS MAY BE USED WITH A LOCKING DEVICE.
16. SLEEVE SHIELD BEADS.
17. CABLE BUNDLE SHALL BE TWISTED WITH 2 TO 3 TURNS PER FOOT.
18. SHIELD AND JACKET FOR CABLE BREAKOUT TO CONNECTOR P3 SHALL RUN UNDER THE MAIN CABLE SHIELD FOR A MINIMUM DISTANCE OF 2 INCHES.
19. WRAP THE SEAM BETWEEN THE SHIELDING AND THE JACKETING ONCE WITH FIBERGLASS TAPE 4617-1/2W, ADHERING WITH URETHANE.
20. NO END-STRIP THIS END.

ALL DIMENSIONS AND TOLERANCES APPLY TO FINISHED PART IN INCHES  
 ALLOWABLE TOLERANCES UNLESS SPECIFIED OTHERWISE: NONE +/-0.5  
 .X DECIMAL +/- 0.1 .XX DECIMAL +/- 0.02 .XXX DECIMAL +/-0.005  
 ANGLES +/- 1 DEG SURFACE FINISH 128 microinch RMS

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		DESCRIPTION <i>PAVE-Seal® Cable Harnesses</i> <b>GD22-AL-150-32/3/5-TE18/20/22-6-26T</b>	
PART NUMBER	REVISION LEVEL	PROJECTION	
<b>2301</b>	<b>A</b>		