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DWG NO KW01.PHG.2B | SH 1 | REV D

REVISIONS

REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	9/4/2010	B.GRANT
B	REVISED ASSY INSTRUCTIONS	11/12/2011	A.CLARK
C	REMOVED LABEL	11/19/2011	A.CLARK
D	ADDED 2, 3 & 5 SOCKETS	7/1/2012	A.CLARK

NOTES: UNLESS OTHERWISE SPECIFIED

1. MECHANICAL PROPERTIES
   - 1.1. OPERATING TEMPERATURE RANGE: −50 °C to +125 °C
   - 1.2. MATING CYCLES: 5000 CYCLES MIN
   - 1.3. INGRESS PROTECTION RATING: IP50
   - 1.4. HUMIDITY: UP TO 95% AT 60 °C
   - 1.5. WEIGHT: 0.100 LBS MAX (INCLUDING BEND RELIEF)
   - 1.6. VIBRATION: 10−2000 HZ, 15G
   - 1.7. SHOCK: 100G, 6 MILLISECONDS
   - 1.8. SALT SPRAY CORROSION TEST: >144 HOURS
   - 1.9. TABLE 1: CABLE JACKET DIAMETER

PART NUMBER (ENDING WITH)	CABLE JACKET DIAMETER (INCHES)
D42Z	0.121−0.158
D52Z	0.161−0.197
D62Z	0.200−0.237
D72Z	0.240−0.276
D92Z	0.318−0.355

2. ELECTRICAL PROPERTIES
   - 2.1. INSULATION RESISTANCE: >5000MΩ
   - 2.2. TABLE 2: MAXIMUM CURRENT AND WIRE GAUGE

# OF SOCKETS	MAXIMUM CURRENT (A)	RECOMMENDED MAX. CONDUCTOR AWG
2	25	16
3	17	18
4	15	20
5	14	20
6	12	20
8	10	22
10	8	22
12	7	22
14	6.5	22
16	6	22
19	5	22

   - 2.3. TABLE 3: RATED AND TESTED VOLTAGES

# OF SOCKETS	RATED VOLTAGE VDC/VAC	TESTED VOLTAGE VDC/VAC
2	900/600	2700/1800
3	750/500	2250/1500
4	900/600	2700/1800
5	830/560	2500/1700
6	830/560	2500/1700
8	750/500	2250/1500
10	600/400	1800/1200
12	600/400	1800/1200
14	550/350	1500/900
16	500/300	1200/850
19	500/300	1200/850

   - 2.4. TABLE 4: CONTACT DIAMETER AND RESISTANCE

# OF SOCKETS	CONTACT DIAMETER (INCHES)	NOMINAL CONTACT RESISTANCE (mΩ)
2	0.0787	2.5
3	0.0630	2.5
4	0.0512	4
5	0.0512	4
6	0.0512	4
8	0.0354	7.5
10	0.0354	7.5
12	0.0276	7.5
14	0.0276	7
16	0.0276	7
19	0.0276	7

3. ASSEMBLY INSTRUCTIONS (SEE ONLINE DATASHEET FOR ASSEMBLY VIDEO):
   1. SLIP THE BEND RELIEF (ITEM NO.7), COLLET NUT (ITEM NO.6) AND CABLE COLLET (ITEM NO.5) IN THIS SEQUENCE THRU THE FRONT END OF THE ELECTRICAL CABLE THAT WILL BE SOLDERED.
   2. AFTER SOLDERING WIRES TO THE CONTACTS ON THE INSULATOR (ITEM NO.2), MATE THE INSULATOR TO BOTH HALVES OF INSULATOR SHELL (ITEM NO.3 & NO.4) ENSURING THAT THE PROTRUDING KEY ON THE PLASTIC INSULATOR SITS WITHIN THE SQUARE CUTOUT ON THE INSULATOR SHELL AS SHOWN IN FIGURE 2.
   3. INSERT THE PRE−ASSEMBLED INSULATOR AND INSULATOR SHELLS INTO THE CONNECTOR SHELL (ITEM NO.1) MAKING SURE THAT THE KEY OF THE INSULATOR SHELL IS IN−LINE WITH RED DOT ON THE CONNECTOR SHELL (CRITICAL). BE CAREFUL DURING THE INSERTION THAT THE KEYS ON THE INSULATOR AND THE INSULATOR SHELL REMAINS MATED WITH ONE ANOTHER OR THE CONTACT POSITIONS WILL NOT BE KEYED CORRECTLY AND WILL NOT MATE WITH ANOTHER CONNECTOR.
   4. INSERT THE CABLE COLLET (ITEM NO.5) INTO THE CONNECTOR SHELL (ITEM NO.1) AND MATE IT TO THE INSULATOR SHELL. ROTATE THE CABLE COLLET ±15° AND NOT MORE THAN THIS UNTIL THE KEY OF THE INSULATOR SHELLS HAS MATED WITH THE INTERNAL KEY WITHIN THE CONNECTOR SHELL (ITEM NO.1). THE CABLE COLLET SHALL NOT BE ABLE TO BE ROTATED ANYMORE AT THIS POINT.
   5. TEMPORARY PULL OUT THE CABLE COLLET TO VISUALLY VERIFY THAT THE KEY OF THE INSULATOR SHELL IS IN−LINE WITH THE RED DOT. RE−INSERT THE CABLE COLLET IF SO.
   6. VISUALLY VERIFY FROM THE FRONT−FACE OF THE CONNECTOR THAT THE CONTACTS ARE ALIGNED CORRECTLY PER FIGURE 3. MATE WITH A MATING CONNECTOR IF NEEDED.
   7. SCREW ON THE COLLET NUT AND TIGHTEN TO 53 IN−LBS.
   8. INSTALL THE BEND RELIEF (ITEM NO.7) ONTO THE LIP OF THE COLLET NUT (ITEM NO.6).

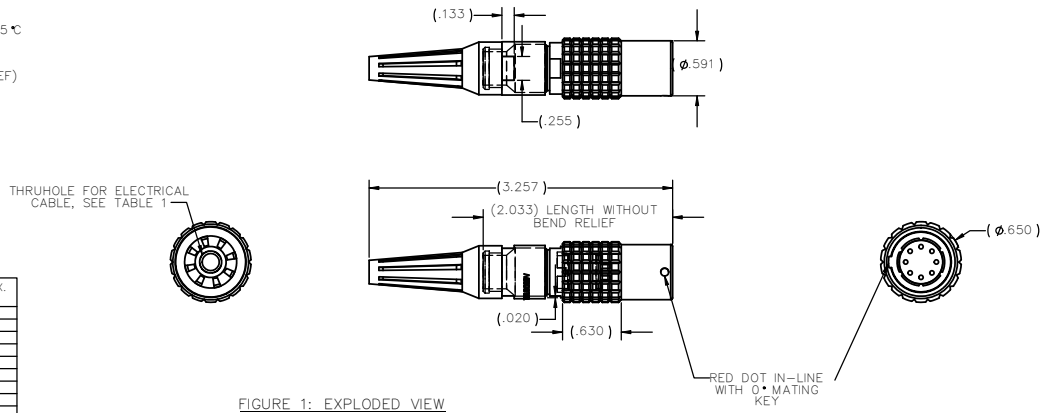
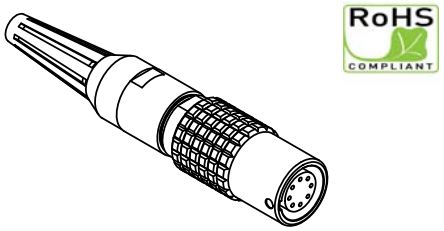


FIGURE 1: EXPLODED VIEW



KW01.PHG.2B.308.CXAD42Z SHOWN

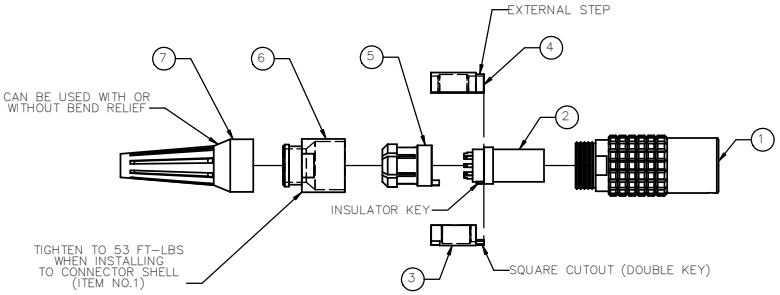


FIGURE 2: INSULATOR AND INSULATOR SHELL MATING

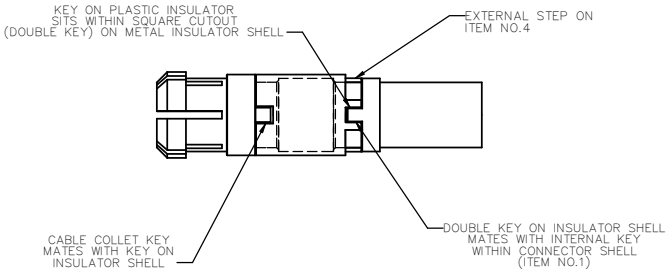
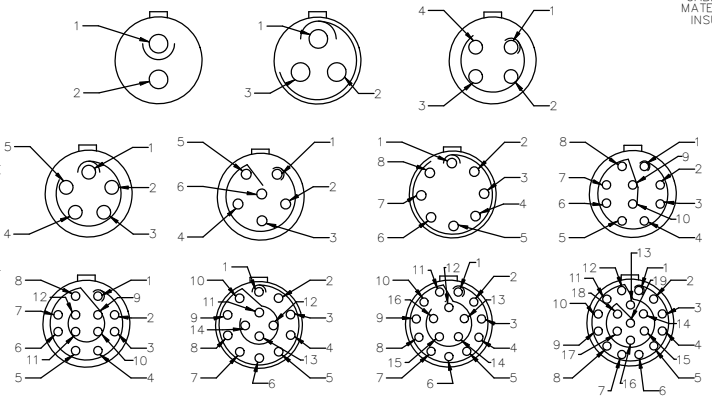


FIGURE 3: PIN ASSIGNMENT (SOLDER−SIDE SHOWN)



SEE ONLINE DATASHEET FOR PART NUMBER CONFIGURATION

QTY	ITEM NO	DESCRIPTION	MATERIAL
1	7	BEND RELIEF	THERMOPLASTIC ELASTOMER (TPE)
1	6	COLLET NUT	CHROME−PLATED BRASS
1	5	CABLE COLLET	NICKEL−PLATED BRASS
1	4	INSULATOR SHELL, NO KEY	NICKEL−PLATED BRASS
1	3	INSULATOR SHELL, KEY	NICKEL−PLATED BRASS
1	2	INSULATOR, FEMALE SOCKETS	POLYPHENYLENE SULFIDE (PPS) WITH GOLD−PLATED COPPER ALLOY SOCKETS
1	1	CONNECTOR SHELL, 2B	CHROME−PLATED BRASS

PARTS LIST

ALL DIMENSIONS FOR REFERENCE ONLY

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES DO NOT SCALE DRAWING
TOLERANCES: ANGLES ± 1/2° .XX ± .03 .XXX ± .010 BREAK SHARP EDGES .005−.015 MACHINED FILLET R .005−.015 INTRP DWG PER MIL−STD−100 DIMENSIONS AND TOLERANCES PER ASME Y14.5M

MATERIAL | HEAT TREAT | FINISH

APVD A.CLARK
ENGINEER D.JACKSON
CHECKED V.WONG
DRAWN R.WILSON

keywolf™ LOS ANGELES, CA

FEMALE SOLDER CABLE RECEPTACLE METAL

SIZE D | WWW.KEYWOLF.COM | DWG NO KW01.PHG.2B | REV D
SCALE | WT/LB SEE NOTES | SHEET 1 OF 1

SOLIDWORKS