

REVISIONS					
REV	ECO	DESCRIPTION	DATE	BY	APPR
A1	-	TECHNICAL DATA SHEET RELEASE	-	-	-
A2	-	ADDED DESCRIPTION	10/27/17	-	-

**TECHNICAL DATA:**

**1) MATERIALS:**

CONNECTOR: MB2CKN0900 CHECKMATE  
OVERMOLD: TPE  
CABLE: KA-56646

**2) ELECTRICAL:**

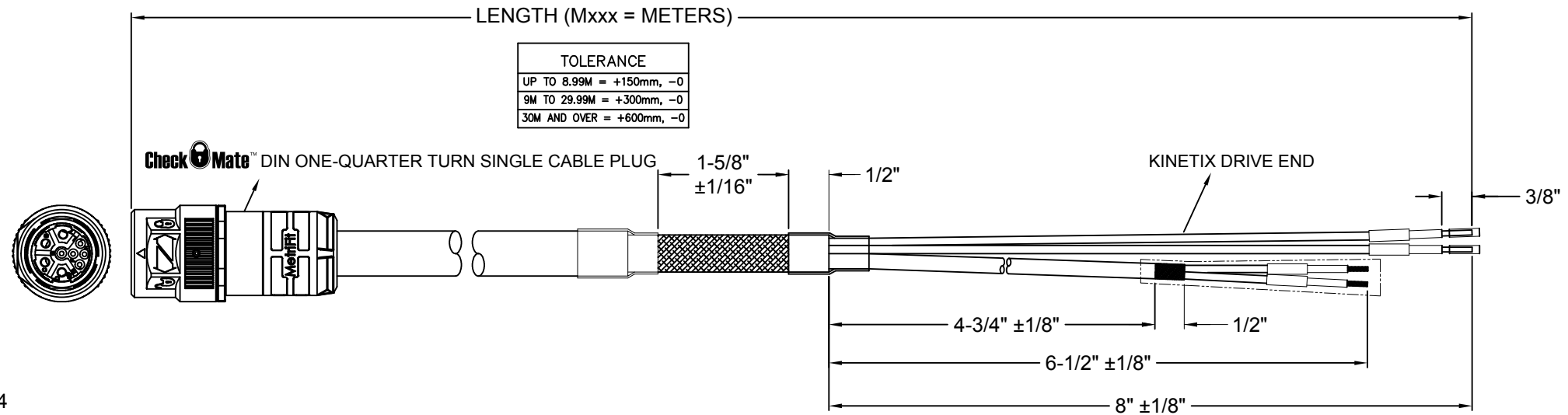
INSULATION RESISTANCE (MIN): 5000M OHMS  
DIELECTRIC TEST VOLTAGE: 2200V

**3) MECHANICAL:**

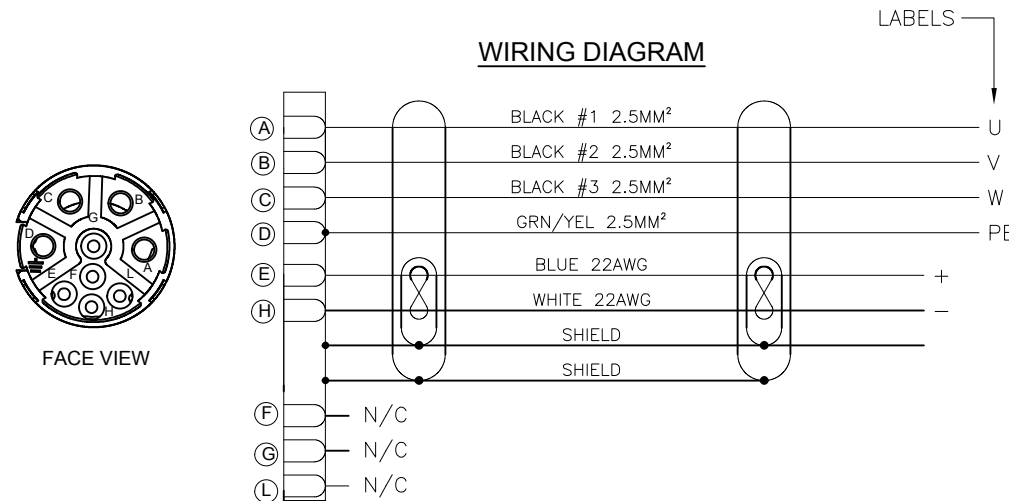
MATING CYCLES: >500  
VIBRATION RESISTANCE PER MIL-STD-202 METHOD 204  
THERMAL SHOCK PER MIL-STD-202 METHOD 207  
48 HOUR SALT SPRAY PER MIL-STD-202 METHOD 101

**4) CABLE SPECIFICATIONS:**

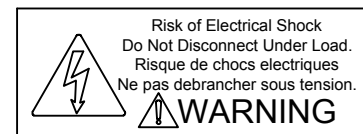
- NOMINAL O.D., 0.51" (12.5MM), JACKET COLOR: ORANGE  
DESINA RAL 2003, JACKET MATERIAL: POLYURETHANE (PUR).
  - Operating Voltage: 600V/1000V
  - Conductor Resistance at 20°C: 22AWG: max. 51 Ω/km  
2.5mm<sup>2</sup>: max. 8.5 Ω/km (EN 50289-1-2) Insulation Resistance at 20°C: ≤ 1 GΩxkm. (EN 50289-1-4)
  - Dielectric strength test duration 1 min. test voltage core/core 4 kV, core/screen 2.5 kV: no breakdown (EN 50289-1-3)
  - Impedance at 1MHz  
(CAN bus, pair 22AWG): 110 ± 10 Ω (EN 50289-1-11)
  - Operating Temp:
    - Fixed Installation: -40°C to +80°C,
    - Moved Application: -20°C to +80°C
    - For high mechanical stress (example drag chain) max. 60°C
  - Max Tensile Strength
    - Static: 50 N/mm<sup>2</sup> conductor cross section
    - Dynamic: 20 N/mm<sup>2</sup> conductor cross section
  - Single Bend: 5 x cable diameter
  - Multiple Bend: 7.5 x cable diameter
  - Trailing Chain
    - Min Bend Radius: 7.5 x cable diameter,
    - Max Acceleration: 10 m/s<sup>2</sup>. Max Speed: 180 m/min, Max Horizontal.
  - Operating Way: 5 m
  - Number of Bendings: 5 million
  - Max Torsion: ± 30 °/m
  - Halogen Free: EN 50267-2-1
  - Oil Resistance: EN 60811-2-1
  - Flame Retardant: EN 60332-1-2
- 5) RoHS COMPLIANT



**WIRING DIAGRAM**



ROCKWELL P/N	AMPHENOL P/N
2090-CSWM1DF-14AAxx	P30628-Mxx
2090-CSWM1DF-14AA03	P30628-M3
2090-CSWM1DF-14AA05	P30628-M5
2090-CSWM1DF-14AA09	P30628-M9
2090-CSWM1DF-14AA10	P30628-M10
2090-CSWM1DF-14AA15	P30628-M15
2090-CSWM1DF-14AA20	P30628-M20



DO NOT SCALE DRAWING

QUANTITY	PART NUMBER	DESCRIPTION	ITEM
<b>MATERIALS LIST</b>			
UNLESS OTHERWISE SPECIFIED		SIGNATURES DATE	
1) All dimensions are in metric(mm).		DRAWN: MRF	10AUG15
2) Tolerances are as follows:		CHECKED: AA	10AUG15
1 PL DEC ±0.30		ENGINEER: RO	
2 PL DEC ±0.15		APPROVAL: WS	26OCT17
3 PL DEC ±0.08		CUSTOMER:	
3) Note reference = X		THIS DRAWING IS SUPPLIED FOR INFORMATION ONLY. DESIGN FEATURES, SPECIFICATIONS AND PERFORMANCE DATA SHOWN HEREON ARE THE PROPERTY OF THE AMPHENOL CORPORATION. NO RIGHTS OF REPRODUCTION ARE IMPLIED. ALL DIMENSIONS ARE SUBJECT TO NORMAL MANUFACTURING VARIATIONS.	
MATERIAL SPECIFICATIONS:		SINGLE MOTOR CABLE, 23 CHECKMATE, 1000V HYBRID CABLE WITH 4 POWER (14 AWG), 2 FEEDBACK (DIGITAL COMMUNICATION), DROVE-END FLYING LEADS	
PROCESS SPECIFICATIONS:		SIZE	TYPE
NEXT ASSY:		C-	P30628-Mxx
		DWG NO:	A2
		SCALE: NONE	SHEET 1 OF 1

TITLE: CABLE ASSEMBLY  
DWG NO: C-P30628-Mxx  
REV: A2  
SH: 1  
OF: 1