

## MIL-DTL-38999 Series III Type

### Pulse Width Modulation (PWM) connectors IAW EN3645-01:23

#### TECHNICAL CHARACTERISTICS AND MATERIALS

- Shell size according to EN3645-001: 23
- Four size #8 crimp contacts
- Working voltage: 1000 Vac RMS/Vdc
- Voltage proof test: see table below
- Contact current rating (4 contacts loaded): 125A @20°C; 70A @ 135°C
- Max. contact resistance: 2 mΩ
- Min. insulating resistance: 5000 MΩ
- Working temperature (continuous): (-65 to +200) °C
- Max. working temperature for short time (60s): 260°C
- Max. ambient temperature: 135°C
- IP rating (mated): IP67 IAW EN 60529
- 500 mating cycles

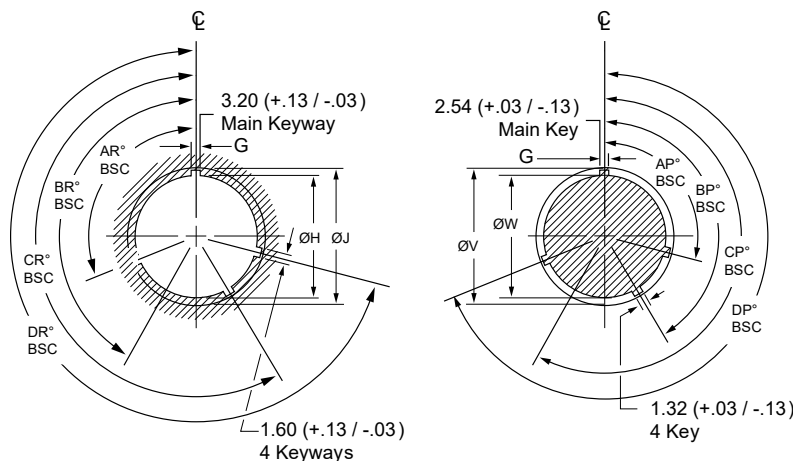
Materials	
Component	Material
Contacts	High Conductivity Copper Alloy Gold Over Nickel Plated
Insert	Plastic Peek Material
Interfacial Seal and Grommet	Silicone Elastomer
Metallic Parts	Passivated Stainless Steel

#### ELECTRICAL PERFORMANCE

Voltage Proof Test	Rating	
	Mated (Vac RMS)	Unmated (Vac RMS)
Pressure		
Sea Level	3000	3000
12.1 kPa (15000 meters)	1000	900
4.7 kPa (21000 meters)	1000	540
1.1 kPa (30000 meters)	1000	270

Voltage Proof with Partial Discharge Measurement	
Description	Requirement
Measurement of partial discharge (one minute at 1.5 kVac RMS)	< 10 pC
PDIV (Partial discharge ignition voltage)	> 1080 Vac RMS
PDEV (Partial discharge extinction voltage)	> 950 Vac RMS

#### ALTERNATE POLARIZATIONS IAW MIL-DTL-38999 SERIES III



Alternate Key and Keyway Receptacles

Alternate Key and Keyway Plugs

Series III Alternate Key and Keyway Polarization					
Shell Size	Key and Keyway Code	AR° or AP° BSC	BR° or BP° BSC	CR° or CP° BSC	DR° or DP° BSC
23	N	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272

ENVIRONMENTAL CONNECTORS