



Designed for intermediate power requirements, these rugged connectors are completely waterproof. Plug and receptacle connectors are available with 4, 9, or 18 molded-in contacts (Size 12 and Size 20) and are engineered with double lead jackscrews to facilitate mating and unmating.

How to Order

M 55181 /1 - 01

Cable Size Accommodation

Cable Size Code	Cable dia. inches (mm)
01	.292 to .343 (7.41 to 8.71)
02	.323 to .406 (8.20 to 10.31)
03	.448 to .531 (11.38 to 13.48)
04	.511 to .593 (12.98 to 15.06)
05	.386 to .468 (9.80 to 11.88)

Specification Sheet Number

Sheet Number	Description
/1	4 contact female plug
/2	4 contact male receptacle
/3	4 contact male plug
/4	4 contact female receptacle
/5	9 contact male plug
/6	9 contact female receptacle
/7	18 contact male plug
/8	18 contact female receptacle

Basic specification

M prefix

Cross Reference

New MIL Part Number	Previous Part Number	New MIL Part Number	Previous Part Number
M55181/1-xx Plug	MW10F(M)Axx	M55181/2-01 Receptacle	MW20M(M)A00
M55181/3-xx Plug	MW10M(M)Axx	M55181/4-01 Receptacle	MW20F(M)A00
M55181/5-xx Plug	MW10M(M)Bxx	M55181/6-01 Receptacle	MW20F(M)B00
M55181/7-xx Plug	MW10M(M)Dxx	M55181/8-01 Receptacle	MW20F(M)D00

Technical Data

Materials & Finishes

Shell	Plug Receptacle Nosepiece	Aluminum alloy, cadmium plate with olive drab chromate Brass, cadmium plate with olive drab chromate Alloy steel, cadmium plate with olive drab chromate
Contact	Pin Socket	Copper alloys, gold plated High conductivity copper alloy with beryllium copper spring element, gold plated
Insulator		Neoprene and/or glass filled diallyl phthalate
Jack Screw and Handle		Stainless steel, passivated

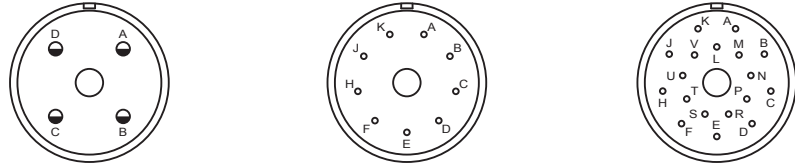
Electrical

Number of Contact	Dielectric Strength	Voltage Drop	Insulation Resistance
4	2000 V r.m.s.	20 mV at 35 Amps	Min. 1000 Megohms at 500 VDC
9, 18	1500 V r.m.s.	25 mV at 7.5 Amps	

Mechanical

Air Leakage	2.5 psi.
Water Immersion	48 hours at 6 ft.
Durability	500 cycles with a coupling torque of 12 in.-lbs.
Contact Retention	10 lbs.
Insert Strength	400 lbs.

Insert Arrangement

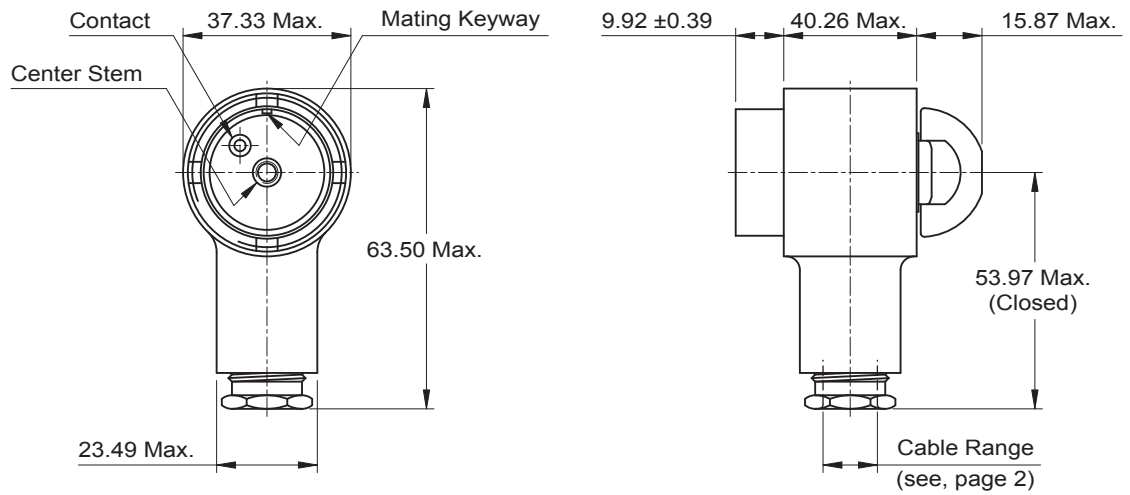


Insert Arrangement	A	B	D
Number of Contacts	4	9	18
Contact Size	12 AWG	20 AWG	20 AWG
Current Rating	35.0 Amps	7.5 Amps	7.5 Amps

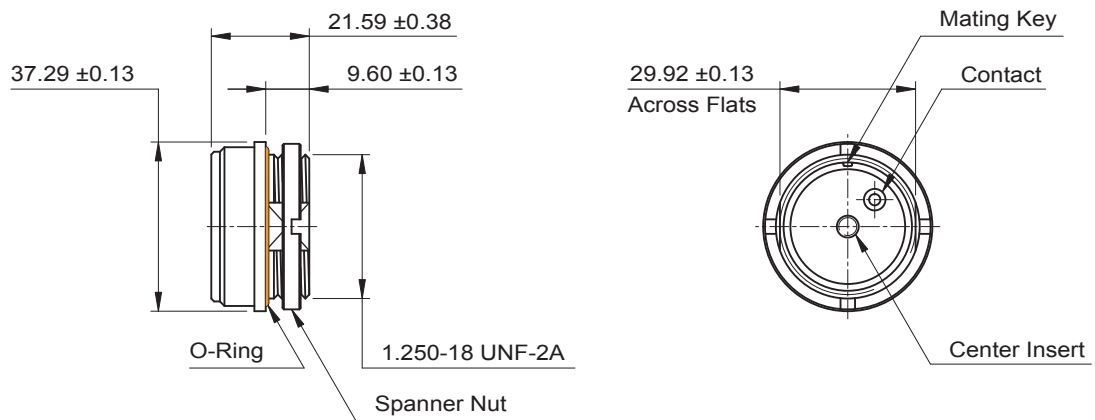
* front face of pin inserts illustrated

Layout

Plug Assembly



Receptacle Assembly



Notes

