



Deutsch DM Series of miniature – cylindrical – quick – disconnect – environmental connectors – with bonded-in contacts

The DM Miniature connector meets or exceeds MIL-C-26482, so you can freely design it into all military systems as well as commercial applications. Included in the DM line are:

- DM9600 series – push-pull receptacles
- DM9700 series – push-pull plugs
- DM6500 series – rack-and-panel plugs
- DM5600 series – hermetic receptacles

Available in 3, 7, 12, 19, 27, 37 and 61* shell sizes, the DM Series is particularly suited for crowded, remote or blind installations on missiles, rockets, supersonic aircraft and ground support equipment. Operating at high altitudes and in a temperature range of from -67°F. to 257°F. , these connectors

*61 size not available in DM 5600 Series

are corrosion resistant, vibration dampened, unaffected by variations in pressure, and seal before contact (when sockets are in plug).

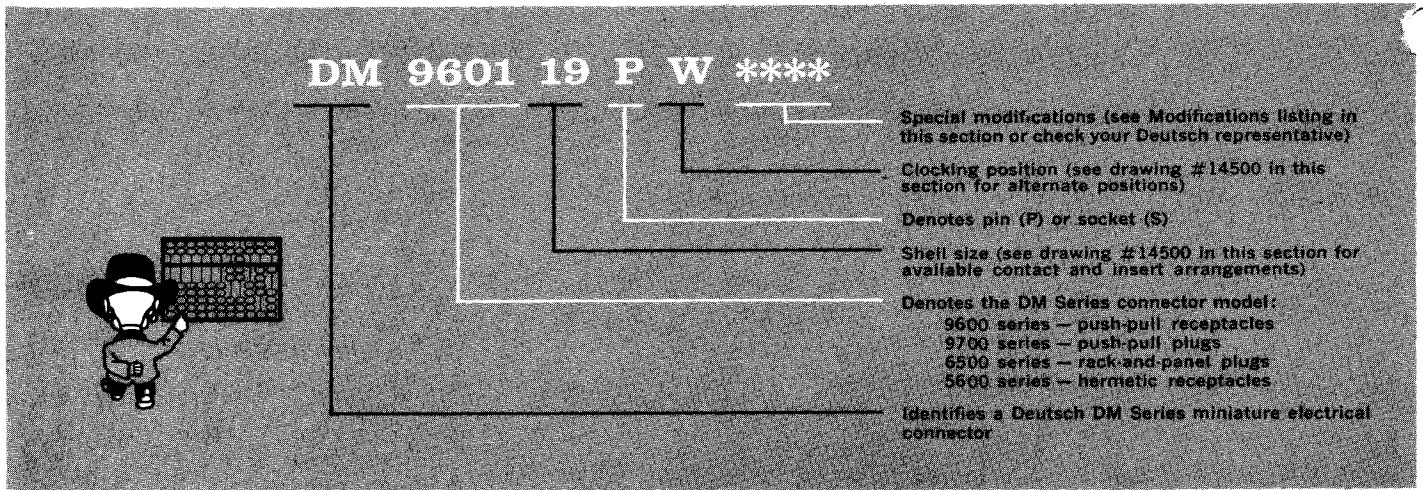
An additional significant feature of the DM is the exclusive Deutsch-designed ball lock coupling ring ... simply push in for positive lock and seal ... pull back for instant disconnect. There's no lock-wiring or twisting ... no bayonet or screw-type coupling. Operation is always *in the direction of plug travel*. And mating can be checked visually as well as by probe.

The DM Series includes a wide range of insert arrangements with several alternate clocking positions. See drawing #14500 in this section.

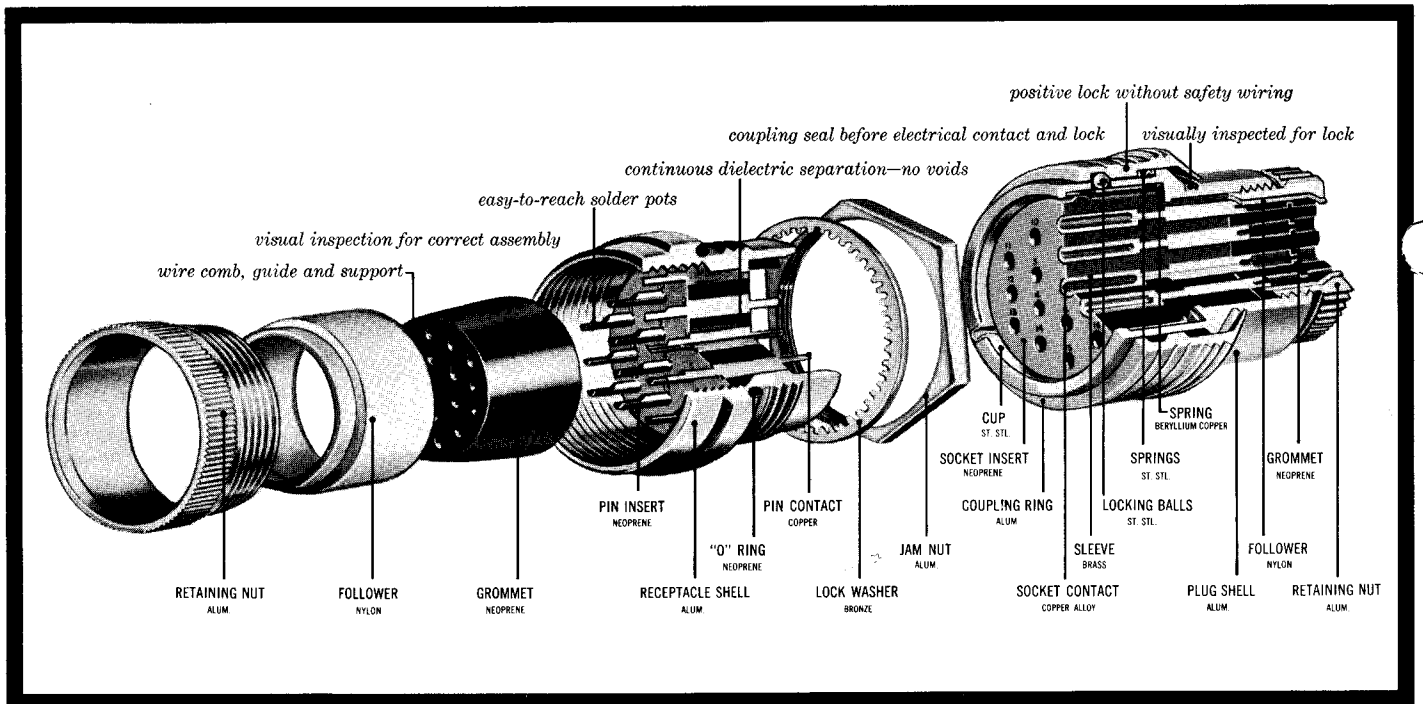


DM Series Numbering System

A wide range of Deutsch DM Series miniature electrical connectors is available to suit the requirements of many different applications. The following is a key to the numbering system used to describe each part:



Construction and Specifications



FLASHOVER VOLTAGE (Sea Level)

#20 Contacts — Flashover 2500 V DC and 2000 V @ 60 cps (RMS)

#16 Contacts — with min. spacing for inst. service, same as above

#12 Contacts — with min. spacing for inst. service, same as above

CONTACT SPACING

#20 Contacts — .138 min. ctrs.

#16 Contacts — .170 min. ctrs.

#12 Contacts — .232 min. ctrs.

CREEPAGE

.045 inch creepage

CURRENT

#20 Contacts — 7.5 amps

#16 Contacts — 25 amps

#12 Contacts — 40 amps

PHYSICAL SHOCK

Deceleration force of 100 G's

CONTACT MILLIVOLT DROP

#20 Contacts — 9.7 millivolts @ 7.5 amps or equiv. to 1.3 millivolts @ 1 amp

#16 Contacts — 18 millivolts @ 25 amps or equiv. to .75 millivolts @ 1 amp

#12 Contacts — 13 millivolts @ 40 amps or equiv. to .325 millivolts @ 1 amp

INSULATION RESISTANCE

Minimum 5,000 megohms

DURABILITY

500 cycles of engagement

USABLE WIRE SIZE

#20 Contacts — Conductor size AWG 24 thru AWG 18. Insulation O.D. .060 thru .115. Solder pot I.D. .052/.057

#16 Contacts — Conductor size AWG 18 thru AWG 16. Insulation O.D. .115 thru .150. Solder Pot I.D. .069/.077

#12 Contacts — Conductor size AWG 14 thru AWG 12. Insulation O.D. .150 thru .200. Solder Pot I.D. .111/.121

HUMIDITY

Meets requirements of MIL-C-26482

CORROSION

48 hours salt spray per MIL STD 202A Method 101

ALTITUDE

750V (RMS) 60 cps at 50,000 feet or 600V (RMS) 60 cps at 100,000 feet

TEMPERATURE

Operative from —67°F. to +257°F.

VIBRATION

Exceeds procedure 1 MIL-E-5272

AIR LEAKAGE

Less than 1 cu. in/hr at 30 psi diff. per MIL-C-26482

(Consult factory for time / temp. data)

THE DEUTSCH DM SERIES MEETS ALL REQUIREMENTS OF MIL-C-26482