

# DEUTSCH

## Hermetic Receptacles



### MIL-C-26482 Series 2 Qualified Miniature

Cylindrical • Bayonet Coupling • Solder pot Type, Eyelets,  
Extended Pin Terminations

Deutsch high performance metal shelled DBC hermetic receptacles are qualified to Mil-C-26482 Series 2. The Deutsch DBC series intermates with all qualified Series 2 plugs. Qualified receptacles feature Deutsch developed direct glass-to-metal sealing and solder pot or eyelet terminated pin type contacts.

As a major manufacturer of hermetic interconnectors, Deutsch also offers special application receptacles including: socket type contacts, total and patterned bussed contacts and contacts to terminate flex tape and printed circuit boards. Consult factory for the availability of these products.

#### Vibration

Exceeds requirements of MIL-STD-1344, method 2005 per MIL-C-26482

#### Physical Shock

No unlocking or electrical discontinuity when tested per MIL-STD-1344, method 2004 at half sine wave of 300 gs

#### Air Leakage

Less than 0.1 micron cu. ft./hr. at 15 psi differential per MIL-C-26482 and MIL-STD-2002, method 112, condition C, procedure 1

#### Durability

500 cycles of engagement per MIL-C-26482

#### Moisture Resistance

Meet all requirements of MIL-C-26482

#### Temperature

Operative at temperatures from -67°F to +392°F

#### Corrosion

Exceeds requirements of MIL-STD-1344 method 1001 per MIL-C-26482 using standard plating

#### Dielectric withstanding Voltage at sea level

#20	Contacts	1,500 VAC rms @ 60 Hz
#16	Contacts	2,300 VAC rms @ 60 Hz
#12	Contacts	2,300 VAC rms @ 60 Hz

#### Current Rating

#20	Contacts	7.5 amps
#16	Contacts	25 amps
#12	Contacts	40 amps

#### Contact Resistance

#20	60 mV @ 5 Amps
#16	85 mV @ 10 Amps
#12	85 mV @ 17 Amps

#### Insulation Resistance

5,000 Meg ohms min @ 75°F per MIL-C-26482

#### Thermal Shock

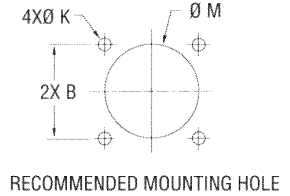
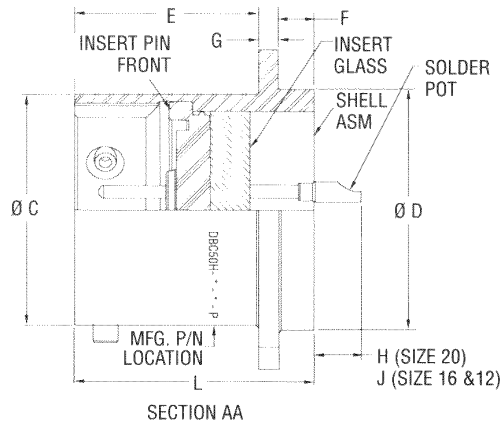
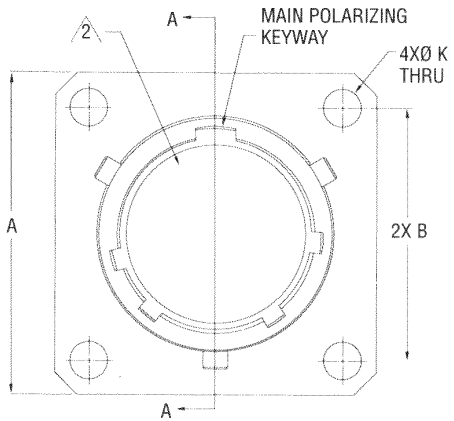
No deterioration or failure after 5 cycles @ -67°F to 392°F

#### Contact Wire Size

#20	= AWG 20, 22, 24
#16	= AWG 16, 18, 20
#12	= AWG 12 and 14



# NARROW FLANGE MOUNT - DBC50H OR DBA50H



PART NUMBER	A MAX.	B± .005	+ .001 C-.005	+ .001 D-.005	E± .010	F± .010	G± .016	H± .030	J± .030	K± .005	L MAX. REF.	+ .010 M-.000	WEIGHT MAX (lb.)
DBC50H - 8 - *P*	.828	.594	.473	.562	.588	.115	.062	.148	.218	.120	.801	.572	.038
DBC50H - 10 - *P*	.954	.719	.590	.672	.588	.115	.062	.148	.218	.120	.801	.682	.044
DBC50H - 12 - *P*	1.047	.812	.750	.781	.588	.115	.062	.148	.218	.120	.801	.791	.052
DBC50H - 14 - *P*	1.141	.906	.875	.906	.588	.115	.062	.148	.218	.120	.801	.916	.070
DBC50H - 16 - *P*	1.234	.969	1.000	1.031	.588	.115	.062	.148	.218	.120	.801	1.041	.085
DBC50H - 18 - *P*	1.328	1.062	1.125	1.156	.588	.115	.062	.148	.218	.120	.801	1.166	.098
DBC50H - 20 - *P*	1.453	1.156	1.250	1.250	.650	.083	.093	.148	.218	.120	.863	1.260	.110
DBC50H - 22 - *P*	1.578	1.250	1.375	1.375	.650	.115	.093	.116	.186	.120	.895	1.385	.150
DBC50H - 24 - *P*	1.703	1.375	1.500	1.500	.650	.115	.093	.116	.186	.147	.895	1.510	.280

1. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED.

2. INSERT ARRANGEMENT PER MIL-STD-1669.

3. MATES WITH AFD56-\*S\* PLUGS.

4. MATERIAL:  
SHELL - MILD-STEEL FOR DBC;  
STAINLESS STEEL FOR DBA  
INSULATOR - GLASS INSERT  
CONTACT - 52 HIGH NICKEL / IRON ALLOY  
INSERT PIN FRONT - FLUOROSILICONE

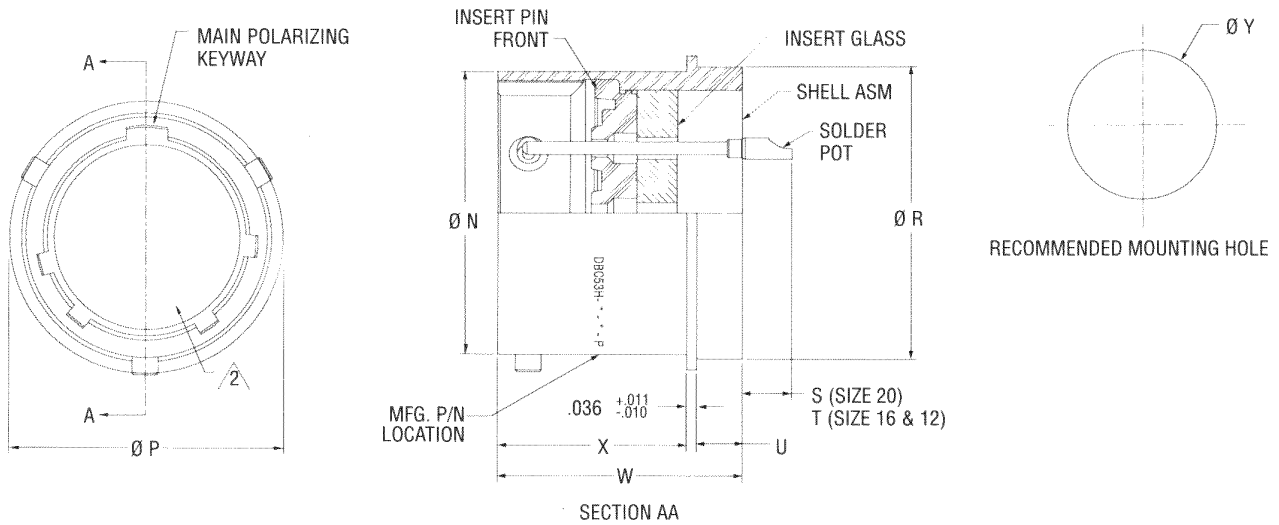
5. FINISH:  
SHELL - TIN OVER NICKEL PLATED FOR DBC;  
PASSIVATED STAINLESS STEEL FOR DBA  
CONTACT - GOLD OVER NICKEL PLATE

6. SHELL DIMENSIONS SHOWN FOR PIN UNIT ONLY

*Information contained herein is for reference only.  
Consult factor for new envelope drawings, updated  
specifications, and additions to product lines.*



# SOLDER MOUNT - DBC53H OR DBA53H



PART NUMBER	+0.001 N-.005	P± .010	+0.001 R-.005	S± .030	T± .030	+0.000 U-.040	W MAX. REF.	X± .010	+0.010 Y-.000	WEIGHT MAX (lb.)
DBC53H - 8 - *P*	.473	.625	.562	.148	.218	.156	.801	.588	.570	.031
DBC53H - 10 - *P*	.590	.750	.672	.148	.218	.156	.801	.588	.680	.034
DBC53H - 12 - *P*	.750	.844	.781	.148	.218	.156	.801	.588	.789	.040
DBC53H - 14 - *P*	.875	.969	.906	.148	.218	.156	.801	.588	.914	.051
DBC53H - 16 - *P*	1.000	1.094	1.031	.148	.218	.156	.801	.588	1.039	.062
DBC53H - 18 - *P*	1.125	1.218	1.156	.148	.218	.156	.801	.588	1.164	.082
DBC53H - 20 - *P*	1.250	1.312	1.250	.148	.218	.156	.863	.650	1.258	.100
DBC53H - 22 - *P*	1.375	1.438	1.375	.116	.186	.188	.895	.650	1.383	.115
DBC53H - 24 - *P*	1.500	1.564	1.500	.116	.186	.188	.895	.650	1.508	.268

SEE NOTES ABOVE

1. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED.

2. INSERT ARRANGEMENT PER MIL-STD-1669.

3. MATES WITH AFD56-\*\*-S\* PLUGS.

4. MATERIAL:  
SHELL - MILD-STEEL FOR DBC;  
STAINLESS STEEL FOR DBA  
INSULATOR - GLASS INSERT  
CONTACT - 52 HIGH NICKEL / IRON ALLOY  
INSERT PIN FRONT - FLUOROSILICONE

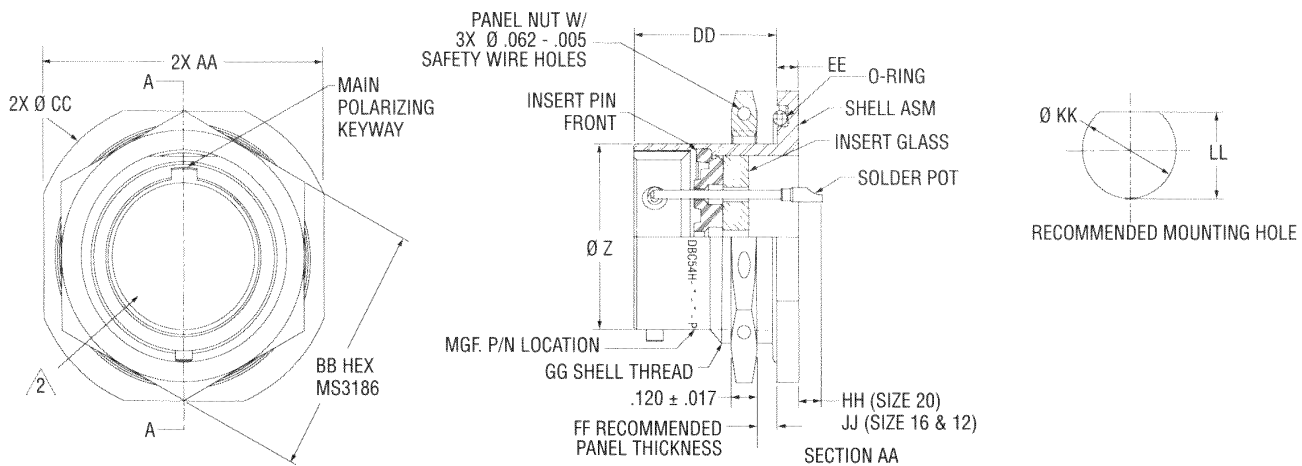
5. FINISH:  
SHELL - TIN OVER NICKEL PLATED FOR DBC;  
PASSIVATED STAINLESS STEEL FOR DBA  
CONTACT - GOLD OVER NICKEL PLATE

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# JAM NUT MOUNT - DBC54H OR DBA54H



PART NUMBER	$\pm .001$ Z-.005	AA $\pm .015$	BB $\pm .017$	CC $\pm .015$	DD $\pm .008$	EE $\pm .008$	FF PANEL THK.		GG THREAD	HH $\pm .030$	JJ $\pm .030$	$\pm .010$ KK-.000	$\pm .010$ LL-.000	WEIGHT MAX (lb.)
							MIN	MAX	CLASS 2A					
DBC54H - 8 - *P*	.473	.938	.750	1.062	.699	.105	.062	.187	.5625 - 24UNEF	.104	.174	.572	.537	.043
DBC54H - 10 - *P*	.590	1.062	.875	1.187	.699	.105	.062	.187	.6875 - 24UNEF	.104	.174	.697	.661	.061
DBC54H - 12 - *P*	.750	1.250	1.062	1.375	.699	.105	.062	.187	.8750 - 20UNEF	.104	.174	.895	.824	.088
DBC54H - 14 - *P*	.875	1.375	1.188	1.500	.699	.105	.062	.187	1.0000 - 20UNEF	.104	.174	1.010	.948	.110
DBC54H - 16 - *P*	1.000	1.500	1.312	1.625	.699	.105	.062	.187	1.1250 - 18UNEF	.104	.174	1.135	1.072	.131
DBC54H - 18 - *P*	1.125	1.625	1.438	1.750	.699	.105	.062	.187	1.2500 - 18UNEF	.104	.174	1.260	1.197	.172
DBC54H - 20 - *P*	1.250	1.812	1.562	1.938	.763	.138	.062	.250	1.3750 - 18UNEF	.069	.139	1.385	1.322	.211
DBC54H - 22 - *P*	1.375	1.938	1.688	2.062	.763	.138	.062	.250	1.5000 - 18UNEF	.069	.139	1.510	1.447	.242
DBC54H - 24 - *P*	1.500	2.062	1.812	2.187	.794	.138	.062	.250	1.6250 - 18UNEF	.069	.139	1.635	1.572	.293

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3. MATES WITH AFD56-\*S\* PLUGS.

4. MATERIAL:  
SHELL - MILD-STEEL FOR DBC;  
STAINLESS STEEL FOR DBA  
INSULATOR - GLASS INSERT  
CONTACT - 52 HIGH NICKEL / IRON ALLOY  
INSERT PIN FRONT - FLUOROSILICONE

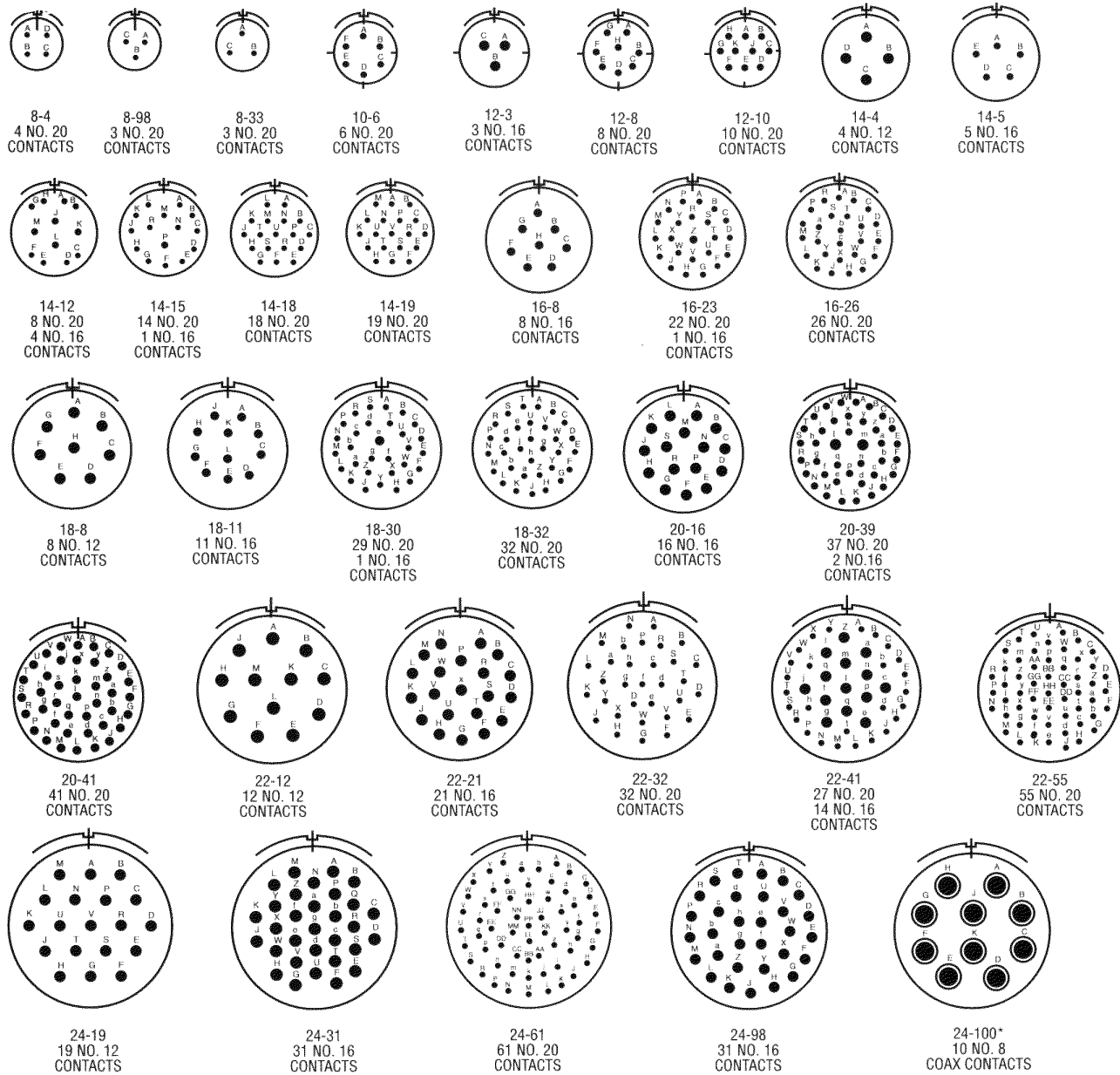
5. FINISH:  
SHELL - TIN OVER NICKEL PLATED FOR DBC;  
PASSIVATED STAINLESS STEEL FOR DBA  
CONTACT - GOLD OVER NICKEL PLATE

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# MIL-C-26482 MIL-STD-1669 INSERT ARRANGEMENTS



\*Consult factory for cable/contact selection.

Insert arrangement shown front face of "pin" style receptacle

## ORDERING INFORMATION

### DBC 50H - 22 - 55 P N



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**DEUTSCH CONNECTORS**  
A Step Ahead

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