

Contents

DRB Series Overview92

Performance Specifications92

Material Specifications.....92

Dimensions 93

Configurations..... 93

Ordering Information..... 94

Required Components..... 95-96

Accessories.....97

How To Instructions97-98

DRB Series Overview

DEUTSCH DRB series connectors are heavy duty connectors suitable for bulkhead applications. They are designed to accommodate multiple wire gauges and feature high pin counts, including 48, 60, 102, and 128 cavities. To increase the design flexibility, the DRB series offers several mounting flange options and wire arrangements. The DRB series is suited for on- and off-highway applications, marine, industrial, and agriculture markets in harsh environments.



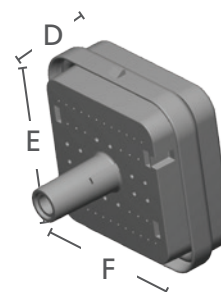
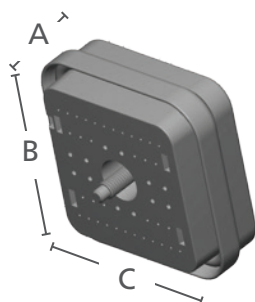
DEUTSCH CONNECTOR PERFORMANCE SPECIFICATIONS

Temperature:	Operating at temperatures -55°C to +125°C
Durability:	No electrical or mechanical defects after 100 cycles of engagement and disengagement.
Vibration:	No unlocking or unmating and exhibits no mechanical or physical damage after sinusoidal vibration levels of 20 G's at 10 to 2000 Hz in each of the three mutually perpendicular planes. No electrical discontinuities longer than 1 microsecond.
Fluid Resistance:	Connectors show no damage when exposed to most fluids used in industrial applications.
Insulation Resistance:	1000 megohms minimum at 25°C.
Immersion:	IP68 rating
Moisture Resistance:	Properly wired and mated connections will withstand immersion under three feet of water without loss of electronic qualities or leakage.
Dielectric Withstanding Voltage:	Current leakage less than 2 milliamps at 1500 volts AC.
Thermal Cycle:	No cracking, chipping or leaking after 20 test cycles from -55°C to +125°C.

MATERIAL SPECIFICATIONS

Flange Body:	Glass filled PA
Flange Clip:	Spring steel
Grommet:	Silicone rubber
Jackscrew:	Stainless steel
Shell:	Glass filled PA
Wedgelocks:	Glass filled PBT

DIMENSIONS



DRB Plug

DRB Receptacle

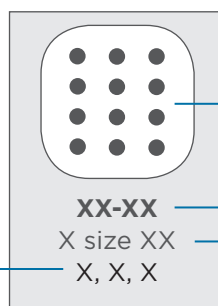
Cavity	Overall Length A	Overall Height B	Overall Width C	Overall Length D	Overall Height E	Overall Width F
48 & 60	1.406 (35.71)	2.606 (66.19)	2.606 (66.19)	2.077 (52.76)	2.606 (66.19)	2.606 (66.19)
102	1.778 (45.16)	2.966 (75.34)	4.951 (125.76)	2.291 (58.19)	2.966 (75.34)	4.951 (125.76)
128	1.748 (44.40)	2.966 (75.34)	4.951 (125.76)	2.291 (58.19)	2.966 (75.34)	4.951 (125.76)

Dimensions are for reference only.

CONFIGURATIONS

Keying Options

A	A key
B	B key
C	C key
D	D key



Insert Arrangement

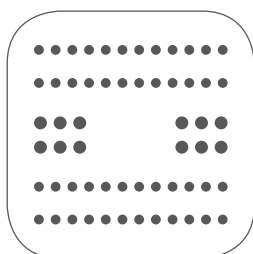
Part Number

Number and Size of Cavities



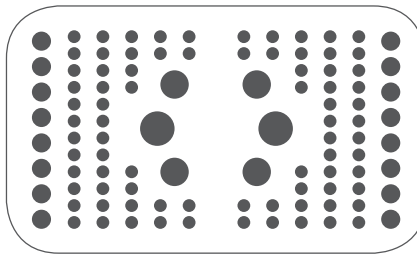
DRB1*-48**

12 size 12
12 size 16
24 size 20
A, B, C, D



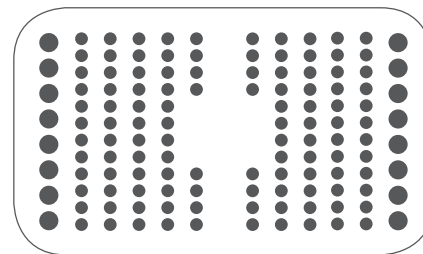
DRB1*-60**

12 size 16
48 size 20
A, B, C, D



DRB1*-102***

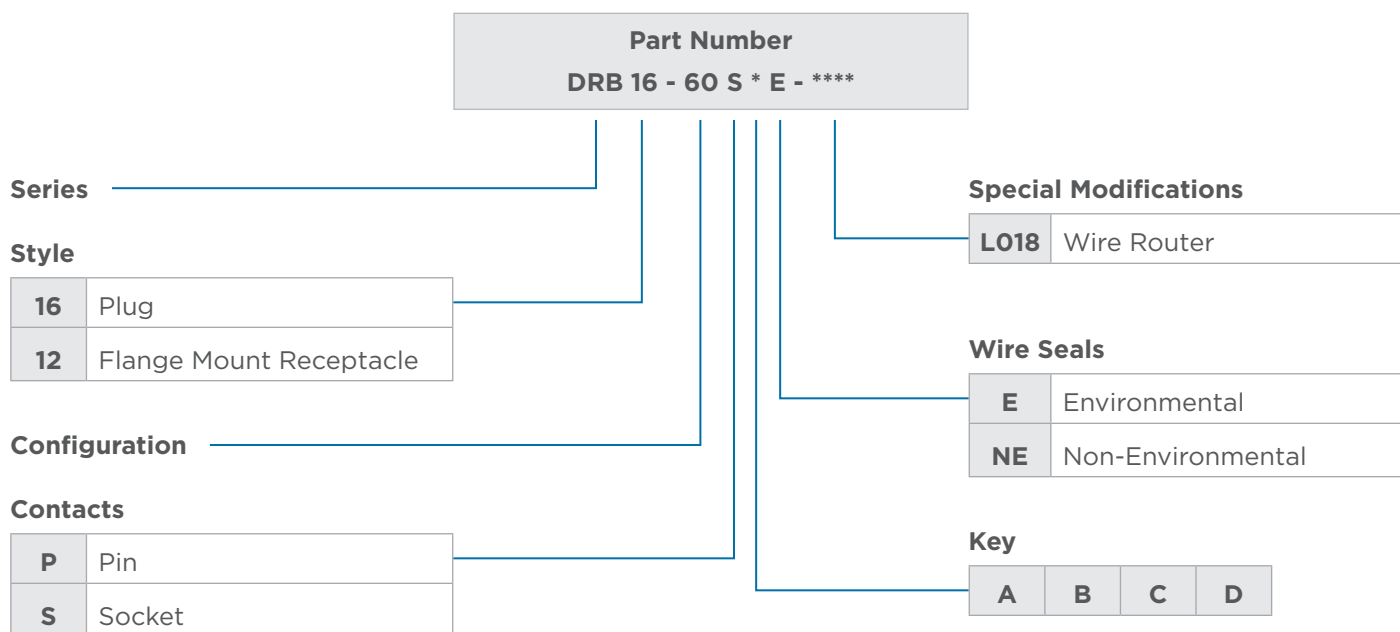
2 size 4
4 size 8
16 size 12
80 size 16
A, B, C, D



DRB1*-128***

16 size 12
112 size 16
A, B, C, D

PART NUMBERING SYSTEM



ORDERING INFORMATION

Here are some of the common part numbers in the DRB series. Several additional connectors may be available.

Position	Keying	Plug	Receptacle
48	Key A	DRB16-48SAE-L018	DRB12-48PAE-L018
	Key B	DRB16-48SBE-L018	DRB12-48PBE-L018
	Key C	DRB16-48SCE-L018	DRB12-48PCE-L018
	Key D	DRB16-48SDE-L018	DRB12-48PDE-L018
60	Key A	DRB16-60SAE-L018	DRB12-60PAE-L018
	Key B	DRB16-60SBE-L018	DRB12-60PBE-L018
	Key C	DRB16-60SCE-L018	DRB12-60PCE-L018
	Key D	DRB16-60SDE-L018	DRB12-60PDE-L018
102	Key A	DRB16-102SAE-L018	DRB12-102PAE-L018
	Key B	DRB16-102SBE-L018	DRB12-102PBE-L018
	Key C	DRB16-102SCE-L018	DRB12-102PCE-L018
	Key D	DRB16-102SDE-L018	DRB12-102PDE-L018
128	Key A	DRB16-128SAE-L018	DRB12-128PAE-L018
	Key B	DRB16-128SBE-L018	DRB12-128PBE-L018
	Key C	DRB16-128SCE-L018	DRB12-128PCE-L018
	Key D	DRB16-128SDE-L018	DRB12-128PDE-L018



WIRE SEALING RANGE

The wire sealing range is the recommended outside diameter of the wire insulation required to maintain an environmental seal in the rear connector cavities.

Contact Size	Standard Seal	Extra Thin Seal E-Seal
20 16-22 AWG (1.0-0.35mm ²)	.040-.095 (1.02-2.41)	.040-.095 (1.02-2.41)
16 14-20 AWG (2.0-0.5mm ²)	.100-.134 (2.54-3.40)	.053-.120 (1.35-3.05)
12 10-14 AWG (5.0-2.0mm ²)	.134-.170 (3.40-4.32)	.097-.158 (2.46-4.01)
8 8-10 AWG (8.0-5.0mm ²)	.190-.240 (4.83-6.10)	.135-.220 (3.43-5.59)
4 6 AWG (13.0mm ²)	.280-.292 (7.11-7.42)	.261-.292 (6.63-7.42)

Required Components

A complete DRB assembly requires a wedgelock for each plug and receptacle and a mounting flange. There are several flange options to accommodate design requirements. The wedgelocks are required to confirm proper contact placement.

				
Plug	Plug Wedgelock(s)	Flange	Receptacle Wedgelock(s)	Receptacle

FLANGE OPTIONS



Part Number	Accepts Connectors	Description
DRBF-2*	(1) DRB 48 or 60 way	Single mounting flange for one 48 or 60 way DRB plug and receptacle mated pair
DRBF-3**	(2) DRB 48 or 60 ways	Double mounting flange for any combination of two 48 or 60 way DRB plug and receptacle mated pairs
DRBF-1*	(1) DRB 102 way or (1) DRB 128 way	Single mounting flange for the 102 or 128 way DRB plug and receptacle mated pair
DRBM-3*	(1) DRB 102 way or (1) DRB 128 way	Single mounting flange for the 102 or 128 way DRB plug and receptacle mated pair, includes two 125 amp mounting posts

*A, B, C, D keying available, contact your representative

SECONDARY WEDGELOCKS

DEUTSCH DRB electrical connectors require secondary wedgelocks which are sold separately. The wedgelocks confirm proper contact alignment and offer keying options within each connector. Secondary wedgelocks are assembled at the mating interfaces and click into place.

Receptacle Wedgelocks

WB-48P*	Wedgelock for 48 way receptacle
WB-60P*	Wedgelock for 60 way receptacle
WB-51P*L	Left wedgelock for 102 way receptacle
WB-51P*R	Right wedgelock for 102 way receptacle
WB-64P*	Wedgelock for 128 way receptacle (requires two)

*A, B, C, D keying available

Plug Wedgelocks

WB-48S*	Wedgelock for 48 way plug
WB-60S*	Wedgelock for 60 way plug
WB-51S*L	Left wedgelock for 102 way plug
WB-51S*R	Right wedgelock for 102 way plug
WB-64S*	Wedgelock for 128 way plug (requires two)

*A, B, C, D keying available



Accessories

BOOTS



Boots provide a professional looking finishing touch for DEUTSCH DRB series connectors. Made of durable plastisol, these slip-on boots are not only aesthetically appealing, but also provide increased protection from dirt, paint overspray, and pressure washing. The plastisol boots are rated from -20°F to +212°F (-28°C to +100°C) and offer a slip-on design making installation quick and easy.

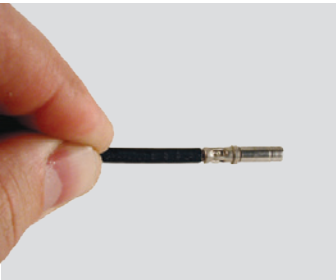


Part Number	Description
DRB48-60-BT	48 way plug or receptacle boot, black
DRB48-60-BT	60 way plug or receptacle boot, black
DRB102-BT	102/128 way plug or receptacle boot, black
DRB102-BT-90DEG	102/128 way plug or receptacle boot, 90° bend, black

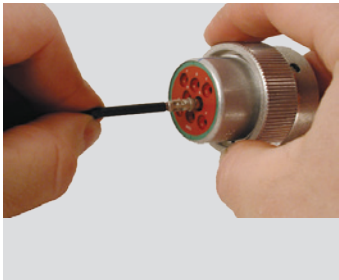
*Distorting the boots can lessen their longevity

How To Instructions

CONTACT INSERTION



Step 1:
Hold connector with rear grommet/wire router cap facing you.

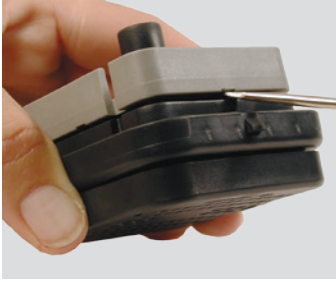


Step 2:
Push contact straight into contact cavity until a click is heard/felt. A slight tug will confirm the contact is inserted correctly.



Step 3:
Once all contacts are in place, insert wedge-lock by lining up the keyway. The wedgelock will press into place.

CONTACT REMOVAL



Step 1:

Remove wedgelock using a screwdriver. Pull wedgelock straight out.



Step 2:

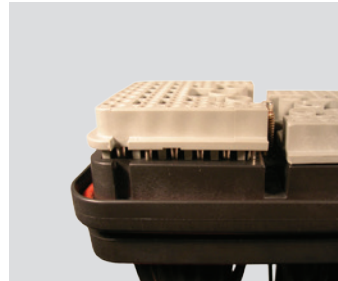
To remove contacts, gently pull wire backwards, while at the same time releasing the locking finger by moving it away from the contact with a screwdriver.

ASSEMBLY



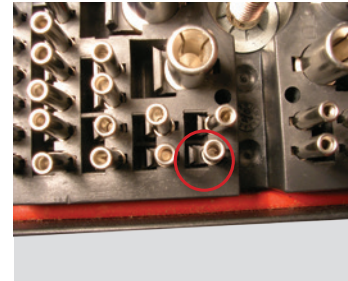
Step 1:

Wedgelocks should be pressed firmly in place, with only a slight gap showing between the wedgelock and connector.



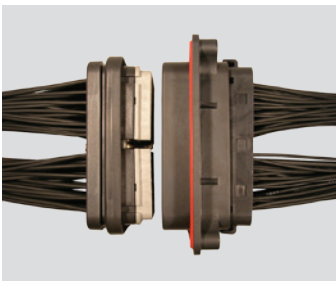
Step 2:

If the wedgelock will not go all the way in, check to make sure all of the contacts are properly seated.



Step 3:

Contacts should be fully inserted into the connector, with the locking fingers in place under the shoulder of the contact. If a contact is not fully inserted, the retention finger will prevent the wedgelock from pressing into place.



Step 4:

When mating the plug with the receptacle, confirm that the plug is not being pulled into the receptacle at an angle by the jackscrew.

Improper assembly can cause the jackscrew to be stripped during assembly. To prevent damage, the jackscrew will strip out before the threads in the connector are damaged. If the jackscrew becomes stripped, please replace the jackscrew and the push nut.

Note

Do not over torque jackscrew. The recommended torque rating for the DRB series plug jackscrew when tightening is 30-35 IN-LB (3.38-3.95 N.M.).