



SIMPLE, RELIABLE WIRE BUSSING

- Internal pc board connects contacts for grounding distribution and power distribution
- Range of standard and custom bussing configurations

WEIGHT AND SPACE SAVING

- Composite and aluminum shells
- Eliminates external bussing components
- Shell sizes 9 through 25

DEUTSCH CBC Series Circuit Board Connectors



38999 Series III Style Connectors with Bussed Contacts

DEUTSCH CBC connectors contain an internal printed circuit board used to bus contacts. A number of bussing arrangements are available. The lightweight connectors are available with either composite or aluminum shells. They offer an integrated solution for bussing needs by eliminating the need for external components.

Specifications

- **Current:** Traces and sockets carry current levels up to the threshold of a: MS22073-3 circuit breaker for contact size 22
MS22073-5 circuit breaker for contact size 20
MS22073-7.5 circuit breaker for contact size 16
- **Conformal Coating:** per MIL-I-46058 and able to withstand 100 VDC for two seconds
- **Insulation Resistance:** greater than 100 megohms when tested at 45 VDC
- **Applicable Specifications:**
IPC-600C
IPC O-275
MIL-P-55110
MS22073
MIL-I-46058
MIL-STD-1560
- **Frequency:** maximum of 3200 Hz (analog circuit) and 100 kb/s (for ARINC 429 signals)
- **Circuit-to-Circuit Crosstalk Rejection:** minimum of 60 dB, nominal 80 dB
- **Temperature:** 125°C maximum continuous operating temperature for finished circuit board



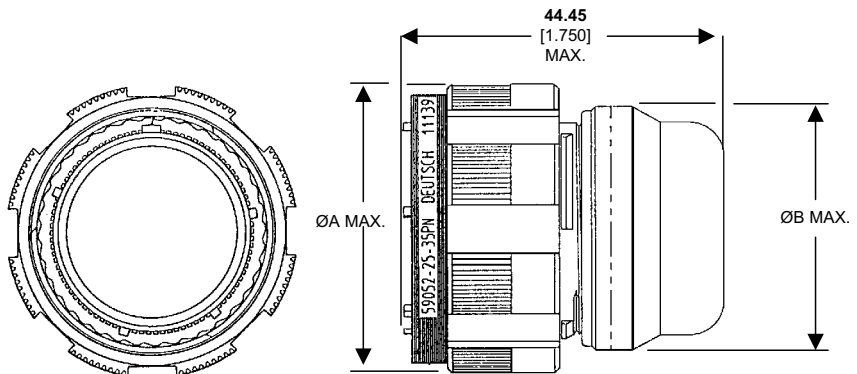
DEUTSCH CBC Series Circuit Board Connectors

	CBC Connector Base Typical Part No.			
	59052	59108	66363	59091
Shell Sizes	13, 15, 19, 25	15	9, 11, 13, 15, 17, 19, 23, 25	25
Shell Material	Composite	Composite	Aluminum	Nickel-Plated Composite
Backpack Cover	Composite or Aluminum			Nickel-Plated Composite
Contacts	Copper Alloy			Copper Alloy
Contact Plating	DEUTSCH COAT V			Gold over Nickel
Resilient Inserts	Silicone Elastomers			
Plastic Inserts	Thermoplastic			

Dimensions

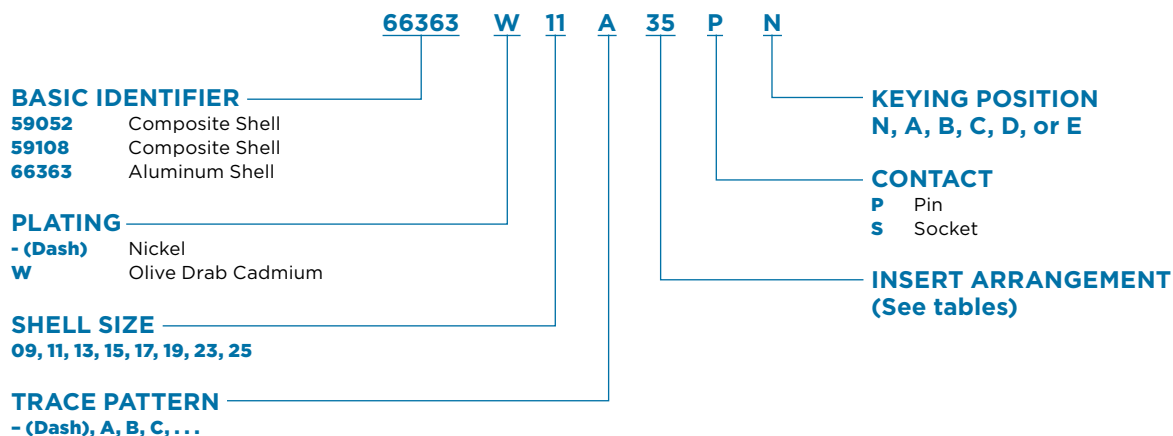
Shell Size	ØA Max.	ØB Max.
9	21.79 0.858	18.29 0.720
11	24.99 0.984	21.21 0.835
13	29.39 1.157	24.21 0.953
15	32.49 1.279	28.19 1.110
17	35.69 1.405	31.19 1.228
19	38.48 1.515	34.21 1.347
23	44.91 1.768	40.21 1.583
25	47.98 1.889	43.18 1.700

Millimeters Inches



Part Numbering

See each product family for availability of different options. Consult TE for configurations not shown here.





59052 Composite Plug

**Insert Arrangement 13-98
Trace Pattern A
Typical Part No. 59052-13A98PN**

Buss Size	Contact Numbers
2 Bussed Contacts	A, B C, F D, E
Spare	G, H, J, K

**Insert Arrangement 13-98
Trace Pattern B
Typical Part No. 59052-13B98PN**

Buss Size	Contact Numbers
2 Bussed Contacts	E, H F, G
3 Bussed Contacts	A, B, J
Spare	C, D, K

**Insert Arrangement 19-32
Trace Pattern A
Typical Part No. 59052-19A32SN**

Buss Size	Contact Numbers
3 Bussed Contacts	D, E, F
4 Bussed Contacts	U, V, W, X
5 Bussed Contacts	d, e, f, g, h
Spare	A, B, C, G, H J, K, L, M, N P, R, S, T, Y Z, a, b, c, j

**Insert Arrangement 25-04
Trace Pattern C
Typical Part No. 59052-25C04SA**

Buss Size	Contact Numbers
3 Bussed Contacts	M, N, P
4 Bussed Contacts	A, B, C, D DD, EE, FF, JJ
6 Bussed Contacts	E, F, G, J, K, L
Spare	H, R, S, T, U, V W, X, Y, Z, a, b c, d, e, l, g, h k, m, n, p, q, r s, l, u, v, w, x y, z, AA, BB, CC GG, HH, KK, LL

**Insert Arrangement 25-35
Trace Pattern - (Dash)
Typical Part No. 59052-25-35PN**

Buss Size	Contact Numbers
3 Bussed Contacts	1, 2, 3 4, 5, 6 8, 9, 10 11, 12, 13 14, 24, 35 23, 34, 46 47, 57, 58 59, 60, 61 62, 63, 64 65, 66, 67 68, 69, 70 80, 81, 93 92, 103, 113 104, 114, 121 115, 116, 117 118, 119, 120 122, 123, 124 125, 126, 127

4 Bussed Contacts	15, 16, 17, 18 19, 20, 21, 22 26, 27, 28, 29 30, 31, 32, 33 95, 96, 97, 98 99, 100, 101, 102 105, 106, 107, 108 109, 110, 111, 112
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5 Bussed Contacts	25, 37, 38, 39, 40 41, 42, 43, 44, 45 36, 48, 49, 50, 51 52, 53, 54, 55, 56 82, 71, 72, 73, 74 75, 76, 77, 78, 79 94, 83, 84, 85, 86 87, 88, 89, 90, 91
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Spare	7, 28
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**Insert Arrangement 25-61
Trace Pattern - (Dash)
Typical Part No. 59052-25-61PN**

Buss Size	Contact Numbers
4 Bussed Contacts	G, H, g, h J, l, y, z P, m, CC, MM R, n, DD, EE S, T, U, V W, X, Y, I Z, u, HH, JJ a, v, w, x p, q, r, s

5 Bussed Contacts	A, B, C, D, E, b, c, d, e, f K, L, j, AA, KK M, N, k, BB, LL
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Spare	F
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59108 Composite Plug

Insert Arrangement 15-35 Trace Pattern C 59108-15C35PN Bussing Arrangements	
Buss Size	Contact Numbers
21 Bussed Contacts	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 32, 33, 34
15 Bussed Contacts	19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 36, 37
Spare	35

66363 Aluminum

Insert Arrangement 09-35 Trace Pattern A Typical Part No. 66363W09A35PA	
Buss Size	Contact Numbers
2 Bussed Contacts	1, 2 3, 4
Spare	5, 6

Insert Arrangement 09-35 Trace Pattern B Typical Part No. 66363W09B35PN	
Buss Size	Contact Numbers
2 Bussed Contacts	1, 2 3, 4
Spare	5, 6

Insert Arrangement 09-35 Trace Pattern C Typical Part No. 66363W09C35PN	
Buss Size	Contact Numbers
2 Bussed Contacts	5, 6
Spare	1, 2, 3, 4

Insert Arrangement 11-35 Trace Pattern A Typical Part No. 66363W11A35PN	
Buss Size	Contact Numbers
3 Bussed Contacts	1, 3, 6 2, 4, 5 9, 10, 11
Spare	7, 8, 12, 13

Insert Arrangement 11-35 Trace Pattern B Typical Part No. 66363W11B35PN	
Buss Size	Contact Numbers
3 Bussed Contacts	1, 6, 8 2, 5, 7
2 Bussed Contacts	9, 10 11, 12
Spare	3, 4, 13

Insert Arrangement 11-35 Trace Pattern C Typical Part No. 66363W11C35PN	
Buss Size	Contact Numbers
2 Bussed Contacts	3, 7 4, 8 6, 10 5, 9
Spare	1, 2, 11, 12, 13

Insert Arrangement 11-35 Trace Pattern D Typical Part No. 66363W11D35PN	
Buss Size	Contact Numbers
3 Bussed Contacts	1, 7, 9 2, 8, 19
Spare	3, 4, 5, 6, 11, 12, 13

Insert Arrangement 11-35 Trace Pattern E Typical Part No. 66363W11E35PN	
Buss Size	Contact Numbers
2 Bussed Contacts	4, 10 5, 9
Spare	1, 2, 3, 6, 7, 8, 11, 12, 13



66363 Aluminum (continued)

Insert Arrangement 11-35 Trace Pattern F Typical Part No. 66363W11F35PN	
Buss Size	Contact Numbers
2 Bussed Contacts	1, 10
	2, 9
	3, 8
	4, 7
	5, 6
Spare	11, 12, 13
Insert Arrangement 15-35 Trace Pattern A Typical Part No. 66363W15A35PN	
Buss Size	Contact Numbers
2 Bussed Contacts	1, 7
	2, 11
	3, 15
4 Bussed Contacts	4, 8, 12, 16
	5, 9, 13, 17
	6, 10, 14, 18
Spare	19 through 37
Insert Arrangement 15-35 Trace Pattern B Typical Part No. 66363W15B35PN	
Buss Size	Contact Numbers
2 Bussed Contacts	4, 8, 12, 16
	5, 9, 13, 17
	6, 10, 14, 18
4 Bussed Contacts	4, 8, 12, 16
	5, 9, 13, 17
	6, 10, 14, 18
Spare	21 through 37
Insert Arrangement 17-35 Trace Pattern A Typical Part No. 66363W17A35PN	
Buss Size	Contact Numbers
2 Bussed Contacts	1, 33
	5, 34
	9, 35
	13, 36
	17, 37
	21, 38
	25, 39
	29, 40
	9 Bussed Contacts
3, 7, 11, 15, 19, 23, 27, 31, 42	
4, 8, 12, 16, 20, 24, 28, 32, 43	
Spare	

Insert Arrangement 23-55 Trace Pattern A Typical Part No. 66363W23A55PN	
Buss Size	Contact Numbers
2 Bussed Contacts	D, V
	E, U
	F, T
	G, S
	H, R
	J, P
	K, N
	L, M
	w, z
	x, y
	Spare
Insert Arrangement 23-55 Trace Pattern B Typical Part No. 66363W23B55PN	
Buss Size	Contact Numbers
2 Bussed Contacts	A, C
	M, d
	N, c
	S, b
	T, o
	P, Z
	R, Y
	U, X
	V, W
	e, p
	y, AA
z, BB	
Spare	B, D, E, F, G, H, J, K, L, q, n, r, h, u, w, x, CC, DD, FF, GG, HH, EE, m, s, k, l, j, v, f, g, i
Insert Arrangement 25-35 Trace Pattern A Typical Part No. 66363W25A35PN	
Buss Size	Contact Numbers
3 Bussed Contacts	54, 66, 77
	55, 67, 78
	61, 62, 63
	72, 73, 74
4 Bussed Contacts	52, 64, 75, 87
	53, 65, 76, 88
Spare	1 through 51, 56, 57, 58, 59, 60, 68, 69, 70, 71, 79 through 86, 89 through 128