



3010 South Tech Blvd.
Miamisburg, Ohio 45342
P: 1.877.CDI.8771
F: 937.746.9710
info@cdinc.us
www.connectivedesign.com

A photograph of a row of white wind turbines in a flat, open field under a clear sky. The turbines are arranged in a line that recedes into the distance.

MIL-DTL-22992 Commercial Compatible Class-L Series

Our L-Series connectors are form, fit and function compatible with and meet all requirements of the MIL-DTL-22992 commercial Class-L series.



Custom Manufacturing Solutions - Quality You Can Rely On

POWER CONNECTORS

POWER CONNECTORS

For all the most rugged
high reliability power needs !

INDEX

Class L

	<u>page #</u>
ORDERING INFORMATION	
Part Number Designation	2
Key / Keyway Positions	3 & 4
Insert Arrangements	5 thru 9
CONNECTORS	
Wall Mount Receptacle	10
Straight Plug	11
In-Line Receptacle	12
Wall Mount Plug	13
ASSESSORIES	
Pin Contacts	14
Socket Contacts	15
Contact Bushings	16
Receptacle Cap	17
Plug Cap	18
Cable Grip	19
Sealing Gland	20

**ORDERING
INFORMATION**
Part Numbers

CD 90555 C 32 4 12 S X

**CONNECTIVE
DESIGN, INC.**

SHELL STYLE
See Table below

- FINISH**
- C** Conductive olive drab
cadmium plate over nickel
 - N** Nonconductive hard
black anodize

- SHELL SIZE**
Related directly to
current carrying capability
- 28** 40 Amperes
 - 32** 60 Amperes
 - 44** 100 Amperes
 - 52** 200 Amperes

ALTERNATE INSERT POSITION
BLANK (normal), **W, X, Y, Z**
See page 5

- CONTACT STYLE**
- P** Pin contacts, (page 14)
CD90556 & CD90558 only
 - S** Socket contacts, (page 15)
CD90555 & CD90557 only

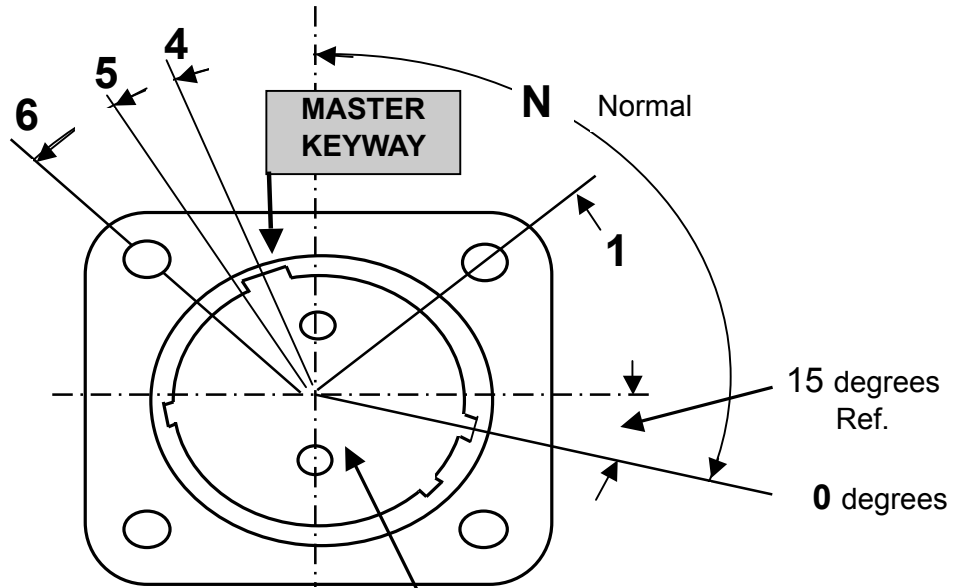
INSERT CONFIGURATION
See pages 6 thru 9

**MASTER KEY / KEYWAY
POSITION OF SHELL**
N (normal), **1, 4, 5, 6**
See pages 3 and 4

TABLE 1. SHELL STYLE

CONNECTIVE DESIGN #	DESCRIPTION	SEE PAGE
CD90555	Wall mount receptacle	10
CD90556	Straight plug	11
CD90557	In-line receptacle	12
CD90558	Wall mount plug	13

**ORDERING
INFORMATION**
Keyway Positions



(Front face of receptacle shown)

Typical socket arrangement.
Note that insert arrangement does not rotate with master key/keyway.

MASTER KEY/KEYWAY POSITIONS:

N designates normal position. Four other positions (1, 4, 5 and 6) of the master key/keyway prevent mating of incompatible voltages. Refer to the illustration above for applicability.

CDI

CONNECTIVE DESIGN, INC.

3010 South Tech Blvd.

TEL: 813-941-1111 FAX: 813-941-1112

ORDERING INFORMATION

Keyway Position

NON-GROUNDING ASSEMBLIES:

Finish N

SHELL SIZE	CURRENT RATING AMPS	SHELL MASTER KEY KEYWAY POSITION
		DC 2Wire 28VDC
28	40	N (105 degress)
32	60	N (105 degress)
44	100	N (105 degress)
52	200	N (105 degress)

GROUNDING ASSEMBLIES:

Finish C

SHELL MASTER KEY/KEYWAY POSITION								
SHELL SIZE	CURRENT RATING AMPS	60 Hz & 400Hz						
		1 PHASE			3 PHASE			
		2 WIRE		3 WIRE	3 WIRE	4 WIRE		
		120 VAC	240 VAC	120/240 VAC	450-480 VAC	120/208 VAC	240/416 VAC	277/480 VAC
28	40	4 120 deg.	5 135 deg.	4 120 deg.	1 60 deg.	4 120 deg.	5 135 deg.	6 150 deg.
32	60	4 120 deg.	5 135 deg.	4 120 deg.	1 60 deg.	4 120 deg.	5 135 deg.	6 150 deg.
44	100	4 120 deg.	-	4 120 deg.	1 60 deg.	4 120 deg.	5 135 deg.	6 150 deg.
52	200	-	-	4 120 deg.	1 60 deg.	4 120 deg.	5 135 deg.	6 150 deg.

CDI

CONNECTIVE DESIGN, INC.

3010 South Tech Blvd.

Tel: 813-940-4111

INSERT ARRANGEMENTS

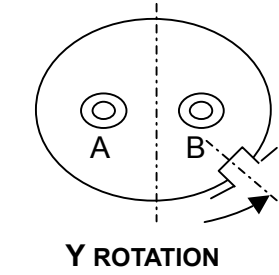
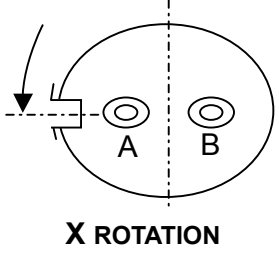
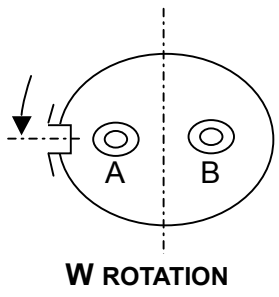
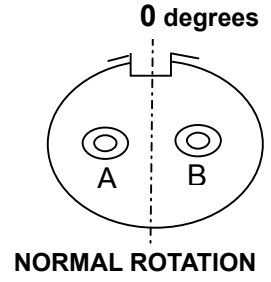
ALTERNATE ROTATIONS

INSERT ARRANGEMENT	DC or 60 Hz NORMAL	KEY POSITION (Degrees from normal position)		
		W	400 Hz X	Y
28-02, 28-03	0	--	--	--
28-04, 28-05	0	--	--	180
28-06, 28-07	0	45	--	--
28-12, 28-13	0	--	--	180

INSERT ARRANGEMENT	DC or 60 Hz NORMAL	W	400 Hz X	Y
32-02, 32-03	0	--	--	--
32-04, 32-05	0	--	90	--
32-06, 32-07	0	--	90	--
32-12, 32-13	0	--	--	180

INSERT ARRANGEMENT	DC or 60 Hz NORMAL	W	400 Hz X	Y
44-02, 44-03	0	--	--	--
44-04, 44-05	0	45	--	--
44-06	0	25	--	--
44-12, 44-13	0	60	--	--

INSERT ARRANGEMENT	DC or 60 Hz NORMAL	W	400 Hz X	Y
52-02	0	--	--	--
52-06	0	25	--	--
52-12, 52-13	0	60	--	--



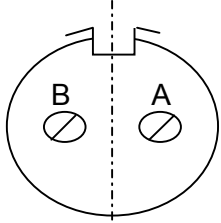
ALL VIEWS ARE LOOKING INTO FRONT OF PIN INSERT OR REAR OF SOCKET INSERT

INSERT ARRANGEMENTS

ALTERNATE ROTATIONS

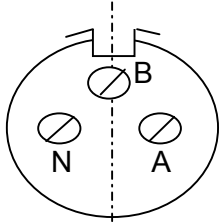
28-02, 28-03 / 28 Volts DC / 2 Wire

Contacts:			
POSITION	SIZE	PIN CD39029/48	SOCKET CD39029/49
A	6	-317	-329
N	6N	-318	-329



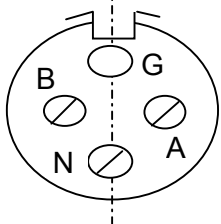
28-04, 28-05 / Single Phase AC / 2 Wire / Grounding

Contacts:			
POSITION	SIZE	PIN CD39029/48	SOCKET CD39029/49
A	6	-317	-329
G, N	6N	-318	-329



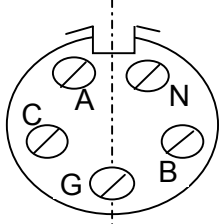
28-06, 28-07 / Single Phase AC / 3 Wire / Grounding

Contacts:			
POSITION	SIZE	PIN CD39029/48	SOCKET CD39029/49
A, B	6	-317	-329
N	6N	-318	-329
G	4N	-321	-331



28-12, 28-13 / Three Phase AC / 4 Wire / Grounding

Contacts:			
POSITION	SIZE	PIN CD39029/48	SOCKET CD39029/49
A, B, C	6	-317	-329
N, G	6N	-318	-329



CONNECTIVE DESIGN, INC.

3010 South Tech Blvd.

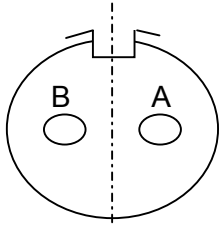
Tel: 813-941-1111 Fax: 813-941-1112

INSERT ARRANGEMENTS

SHELL SIZE 32, 60 AMP RATING

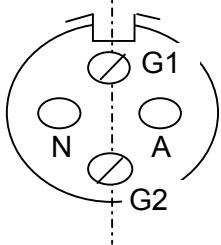
32-02, 32-03 / 28 Volts DC / 2 Wire

Contacts:			
POSITION	SIZE	PIN CD39029/48	SOCKET CD39029/49
A	4	-320	-331
N	4N	-321	-331



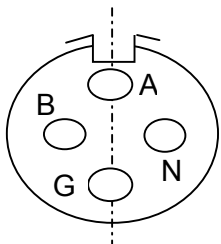
32-04, 32-05 / Single Phase AC / 2 Wire / Grounding

Contacts:			
POSITION	SIZE	PIN CD39029/48	SOCKET CD39029/49
A	4	-320	-331
N	4N	-321	-331
G1, G2	6N	-318	-329



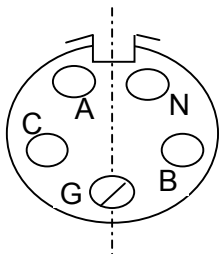
28-06, 28-07 / Single Phase AC / 3 Wire / Grounding

Contacts:			
POSITION	SIZE	PIN CD39029/48	SOCKET CD39029/49
A, B	6	-317	-329
N	6N	-318	-329
G	4N	-321	-331



32-12, 32-13 / Three Phase AC / 4 Wire / Grounding

Contacts:			
POSITION	SIZE	PIN CD39029/48	SOCKET CD39029/49
A, B, C	4	-320	-331
N	4N	-321	-331
G	6N	-318	-329



CONNECTIVE DESIGN, INC.

3010 South Tech Blvd.

Tel: 800-541-4646

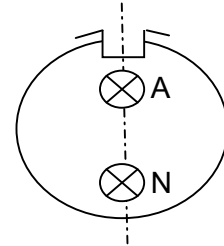
INSERT ARRANGEMENTS

LAST REVISION: ISSUED 7/15/07

SHELL SIZE 44, 100 AMP RATING

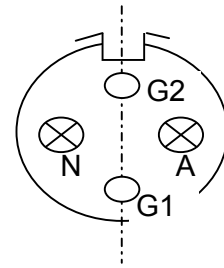
44-02, 44-03 / 28 Volts DC / 2 Wire

Contacts:			
POSITION	SIZE	PIN CD39029/48	SOCKET CD39029/49
A	1/0-1	-323	-333
N	1/0N-1	-324	-333



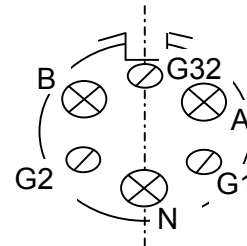
44-04, 44-05 / Single Phase AC / 2 Wire / Grounding

Contacts:			
POSITION	SIZE	PIN CD39029/48	SOCKET CD39029/49
A	1/0-1	-323	-333
N	1/0N-1	-324	-333
G1, G2	6G	-322	-332



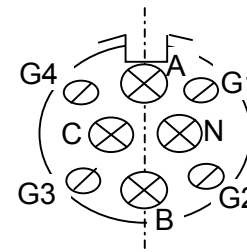
44-06 / Single Phase AC / 3 Wire / Grounding

Contacts:			
POSITION	SIZE	PIN CD39029/48	SOCKET CD39029/49
A, B	1/0-1	-323	-333
N	1/0N-1	-324	-333
G1, G2, G3	6G	-319	-330



44-12, 44-13 / Three Phase AC / 4 Wire / Grounding

Contacts:			
POSITION	SIZE	PIN CD39029/48	SOCKET CD39029/49
A, B, C	1/0-1	-323	-333
N	1/0N-1	-324	-333
G1, G2, G3, G4	6G	-319	-330



CDI

CONNECTIVE DESIGN, INC.

3010 South Tech Blvd.

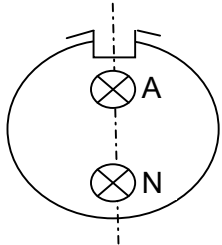
Tel: 800-368-4444

INSERT ARRANGEMENTS

SHELL SIZE 52, 200 AMP RATING

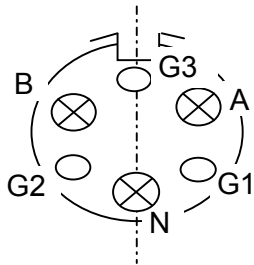
52-02 / 28 Volts DC / 2 Wire

Contacts:			
POSITION	SIZE	PIN CD39029/48	SOCKET CD39029/49
A	4/0	-327	-335
N	4/0N	-328	-335



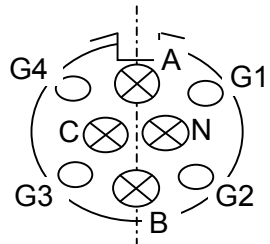
52-06 / Single Phase AC / 3 Wire / Grounding

Contacts:			
POSITION	SIZE	PIN CD39029/48	SOCKET CD39029/49
A, B	1/0-1	-323	-333
N	1/0N-1	-324	-333
G1, G2, G3	6G	-322	-332



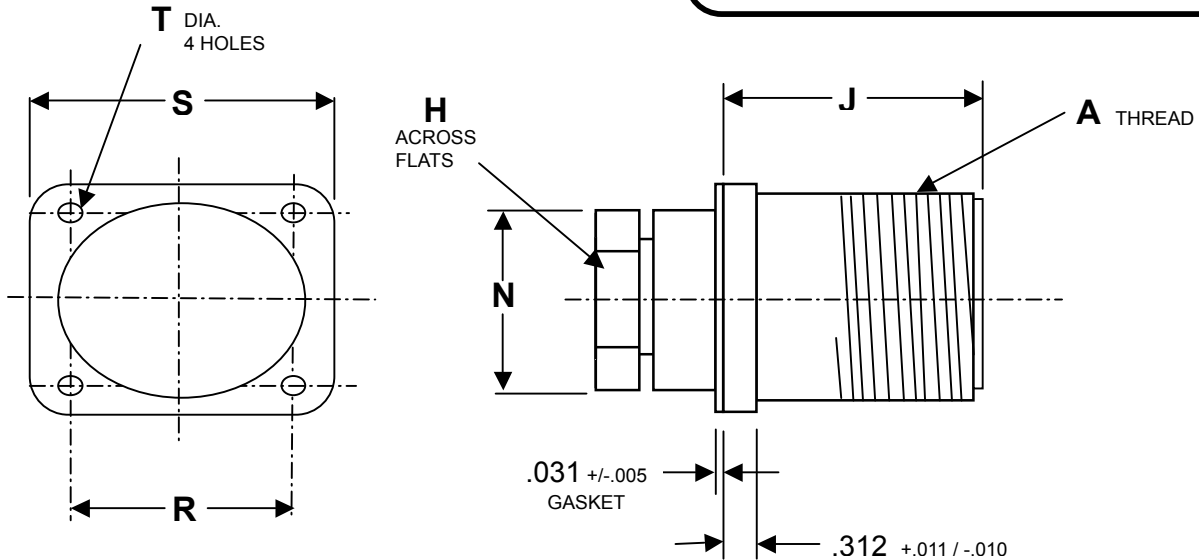
52-12, 52-13 / Three Phase AC / 4 Wire / Grounding

Contacts:			
POSITION	SIZE	PIN CD39029/48	SOCKET CD39029/49
A, B	4/0	-327	-335
N	4/0N	-328	-335
G1, G2, G3, G4	4G	-322	-332



CD90555-xx

WALL MOUNT RECEPTACLE



MATES WITH CD90556

SHELL SIZE	A THREAD CLASS 2A	H +.001 -.010	J +.016 -.000	N +.011 -.020	R (BSC)	S +.021 -.020	T +.005 -.005
28	2.000- 1428P- 2857L	1.812	2.188	2.000 DIA.	1.719	2.375	0.177
32	2.250- 1428P- 2857L	2.062	2.188	2.250 DIA.	1.906	2.625	0.209
44	3.000- 1428P- 2857L	2.812	2.188	3.125 DIA.	2.656	3.375	0.281
52	3.500- 1428P- 2857L	3.312	2.532	3.625 DIA.	3.156	3.875	0.281

DIMENSIONS IN INCHES



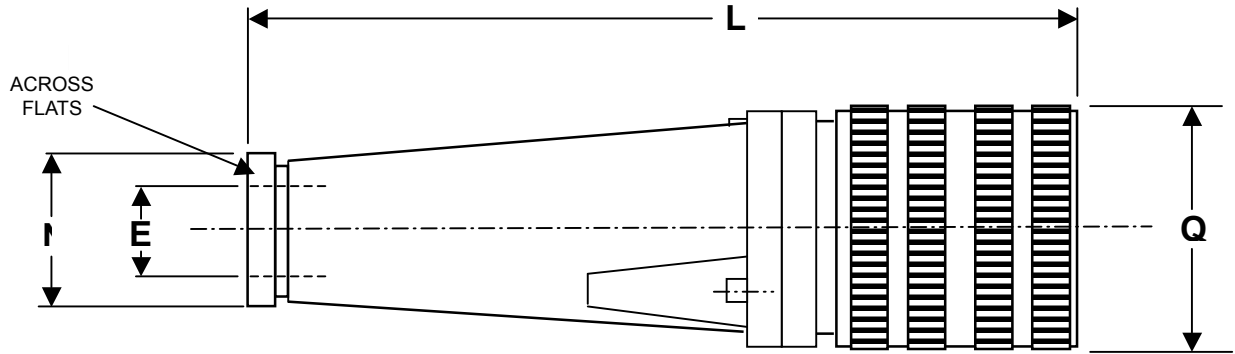
CONNECTIVE DESIGN, INC.

3010 South Tech Blvd.

Tel: 813-940-4111

CD90556-xx STRAIGHT PLUG

LAST REVISION: ISSUED 7/15/07



MATES WITH CD90555

SHELL SIZE	ARRANGEMENT NUMBER	E CABLE RANGE	H FLATS	L LENGTH	N DIA.	Q DIA.
28	-02	.969 - .844	1.750	8.188	2.000	2.312
	-03	1.130 - 1.005	+0.01	MAX.	+0.01	MAX.
	-04	1.130 - 1.005	-0.010		-0.020	
	-05	1.130 - 1.005				
32	-08, -12	1.130 - 1.005	1.750	8.188	2.000	2.562
	-09	1.260 - 1.135	+0.01	MAX.	+0.01	MAX.
	-10	1.260 - 1.135	-0.010		-0.020	
	-11	1.260 - 1.135				
44	-12	1.531 - 1.406	2.438	8.625	2.750	3.531
	-21	1.969 - 1.824	+0.01	MAX.	+0.01	MAX.
			-0.010		-0.020	
52	-12	2.328 - 2.183	2.750	9.047	3.125	4.016
	-13	2.453 - 2.308	+0.01	MAX.	+0.01	MAX.
			-0.010		-0.020	

DIMENSIONS IN INCHES

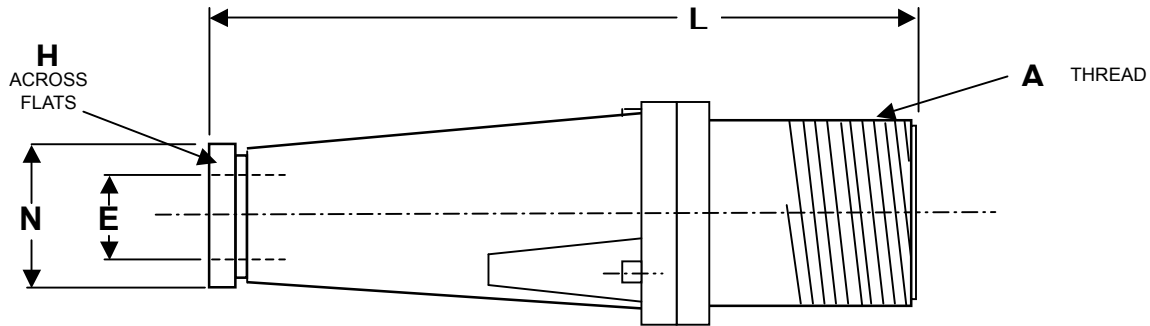
CDI

CONNECTIVE DESIGN, INC.

3010 South Tech Blvd.

Tel: 813-941-1111

CD90557-xx IN-LINE RECEPTACLE



MATES WITH CD90558

SHELL SIZE	ARRANGEMENT NUMBER	A THREAD CLASS 2A	E CABLE RANGE	H FLATS	L LENGTH	N DIA.
28	-02	2.000- .1428- .2857L	.969 - .844	1.750	8.156 MAX.	2.000
	-03		1.130 - 1.005	+001		+001
	-04		1.130 - 1.005	-010		-020
	-05		1.130 - 1.005			
32	-08, -12	2.250- .1428- .2857L	1.130 - 1.005	1.750	8.156 MAX.	2.000
	-09		1.260 - 1.135	+001		+001
	-10		1.260 - 1.135	-010		-020
	-11		1.260 - 1.135			
44	-12	3.000- .1428- .2857L	1.531 - 1.406	2.438	8.594 MAX.	2.750
	-21		1.969 - 1.824	+001		+001
				-010		-020
52	-12	3.500- .1428- .2857L	2.328 - 2.183	2.750	9.000 MAX.	3.125
	-13		2.453 - 2.308	+001		+001
				-010		-020

DIMENSIONS IN INCHES



CONNECTIVE DESIGN, INC.

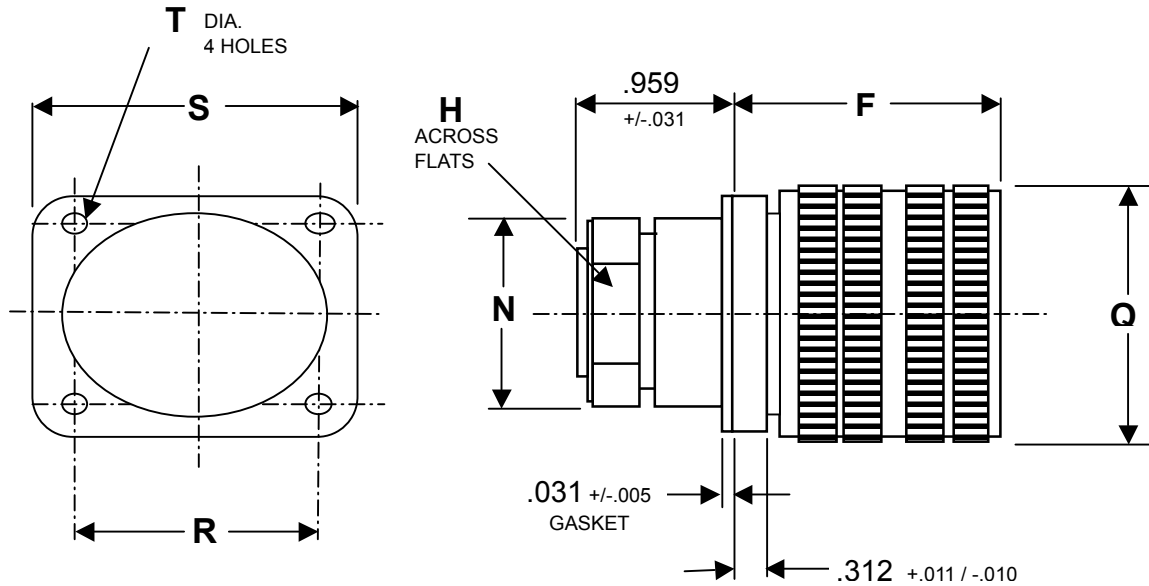
3010 South Tech Blvd.

Tel: 813-941-1111 Fax: 813-941-1112

CD90558-xx

WALL MOUNT PLUG

LAST REVISION: ISSUED 7/15/07



MATES WITH CD90557

SHELL SIZE	F +.016 -.000	H +.001 -.010	N +.011 -.020	Q MAX.	R (BSC)	S +.021 -.020	T +.005 -.005
28	2.639	1.812	2.000	2.312	1.719	2.375	0.177
32	2.639	2.062	2.250	2.562	1.906	2.625	0.209
44	2.639	2.812	3.125	3.531	2.656	3.375	0.281
52	2.938	3.312	3.625	4.016	3.156	3.875	0.281

DIMENSIONS IN INCHES

CDI

CONNECTIVE DESIGN, INC.

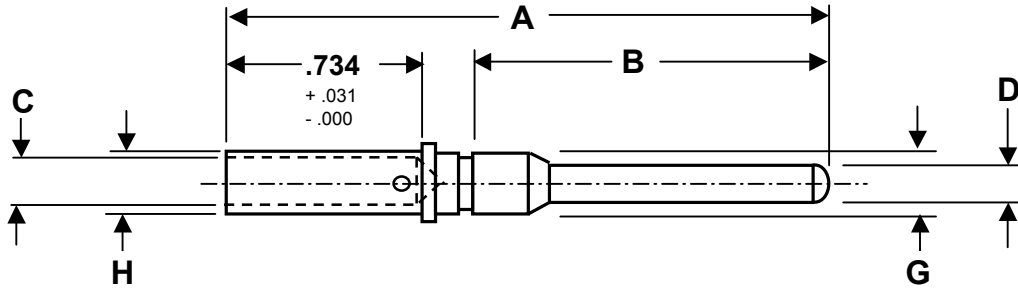
3010 South Tech Blvd.

Tel: 813-941-1111 Fax: 813-941-1112

ACCESSORIES

PIN CONTACTS

LAST REVISION: ISSUED 7/15/07



PIN PART #	CONTACT SIZE	WIRE WELL SIZE	A REF.	B +/- .005	C DIA.	D +/- .005	G DIA.	H DIA.
CD39029/48 - 327	4/0	4/0	3.207	2.097	0.641 + .004 / - .003	0.500	0.781 +/- .003	0.750 + .004 / - .003
CD39029/48 -328	4/0N	4/0	3.325	2.215	0.641 + .004 / - .003	0.500	0.781 +/- .003	0.750 + .004 / - .003
CD39029/48 - 325	2/0	2/0	3.207	2.097	0.500 + .004 / - .003	0.406	0.688 +/- .003	0.609 + .004 / - .003
CD39029/48 -326	2/0N	2/0	3.325	2.215	0.500 + .004 / - .003	0.406	0.688 +/- .003	0.609 + .004 / - .003
CD39029/48 - 323	1/0	1	3.207	2.097	0.406 + .004 / - .003	0.357	0.609 +/- .003	0.506 + .004 / - .003
CD39029/48 -324	1/0N	1	3.325	2.215	0.406 + .004 / - .003	0.357	0.609 +/- .003	0.506 + .004 / - .003
CD39029/48 - 320	4	4	2.786	1.738	0.281 +/- .002	0.225	0.417 +/- .002	0.417 +/- .002
CD39029/48 -321	4N	4	2.904	1.856	0.281 +/- .002	0.225	0.417 +/- .002	0.417 +/- .002
CD39029/48 - 317	6	6	2.786	1.738	0.234 +/- .002	0.178	0.342 +/- .002	0.312 +/- .002
CD39029/48 -318	6N	6	2.904	1.856	0.234 +/- .002	0.178	0.342 +/- .002	0.312 +/- .002
CD39029/48 - 322	4G	4	2.856	1.746	0.281 +/- .002	0.225	0.417 +/- .002	0.374 +/- .002
CD39029/48 -319	6G	6	2.856	1.746	0.234 +/- .002	0.178	0.342 +/- .002	0.312 +/- .002

DIMENSIONS IN INCHES

CDI

CONNECTIVE DESIGN, INC.

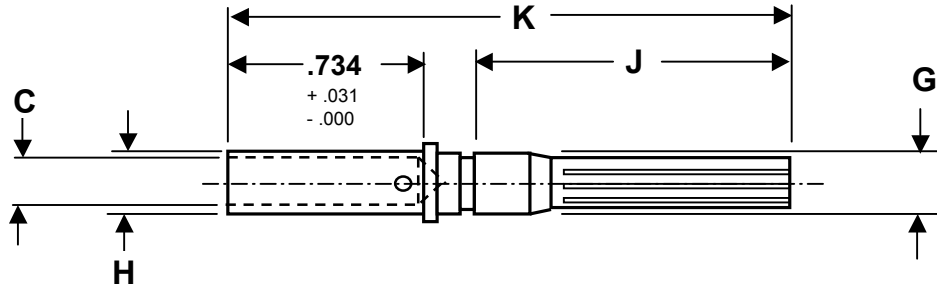
3010 South Tech Blvd.

Tel: 813-941-1111

ACCESSORIES

SOCKET CONTACTS

LAST REVISION: ISSUED 7/15/07



SOCKET PART #	CONTACT SIZE	WIRE WELL SIZE	C DIA.	G DIA.	H DIA.	J DIA.	K REF.
CD39029/49-335	4/0	4/0	0.641 + .004 / - .003	0.781 +/- .003	0.750 + .004 / - .003	1.283	2.393
CD39029/49-334	2/0	2/0	0.500 + .004 / - .003	0.688 +/- .003	0.609 + .004 / - .003	1.283	2.393
CD39029/49-333	1/0	1	0.406 + .004 / - .003	0.609 +/- .003	0.506 + .004 / - .003	1.283	2.393
CD39029/49-331	4	4	0.282 +/- .002	0.417 +/- .002	0.374 + .004 / - .003	1.158	2.206
CD39029/49-329	6	6	0.234 +/- .002	0.342 +/- .002	0.312 +/- .002	1.158	2.206
CD39029/49-332	4G	4	0.281 +/- .002	0.417 +/- .002	0.374 +/- .002	1.752	2.862
CD39029/49-330	6G	6	0.234 +/- .002	0.342 +/- .002	0.312 +/- .002	1.752	2.862

DIMENSIONS IN INCHES

CDI

CONNECTIVE DESIGN, INC.

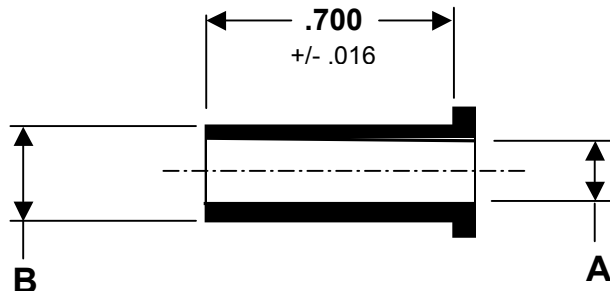
3010 South Tech Blvd.

Tel: 813-941-1111

ACCESSORIES

CONTACT BUSHING

LAST REVISION: ISSUED 7/15/07



BUSHING PART #	A DIA. + .010 / - .003	B DIA. + .002 / - .003	WIRE SIZE REF.	CONTACT WIRE BARREL SIZE
CD3348 - 1 - 2L	0.359	0.396	2	1
CD3348 - 4 - 5L	0.250	0.272	5	4
CD3348 - 4 - 6L	0.225	0.272	6	4
CD3348 - 6 - 8L	0.185	0.225	8	6
CD3348 - 6 - 9L	0.155	0.225	9	6
CD3348 - 1 - 6L	0.225	0.396	6	1
CD3348 - 4 - 8L	0.185	0.272	8	4
CD3348 - 6 - 10L	0.136	0.225	10	6
CD3348 - 4/0 - 2/0	0.500	0.629	2/0	4/0

DIMENSIONS IN INCHES

CDI

CONNECTIVE DESIGN, INC.

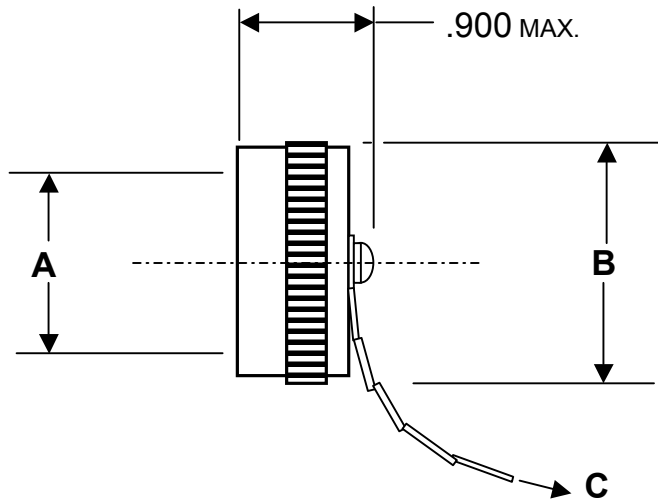
3010 South Tech Blvd.

Tel: 813-940-1111

ACCESSORIES

RECEPTACLE CAP

LAST REVISION: ISSUED 7/15/07



MATES WITH CD90555 & CD90557

SHELL SIZE	PART NUMBER	A Thread Class 2-B	B DIA. MAX.	C +/- 1 Link	D Chain Eyelet
28	CD90563-1C	2.000	2.219	6.000	0.164
32	CD90563-3C	2.250	2.469	4.500	0.190
44	CD90563-7C	3.000	3.219	7.500	0.250
52	CD90563-11C	3.500	3.750	7.500	0.250

DIMENSIONS IN INCHES

CDI

CONNECTIVE DESIGN, INC.

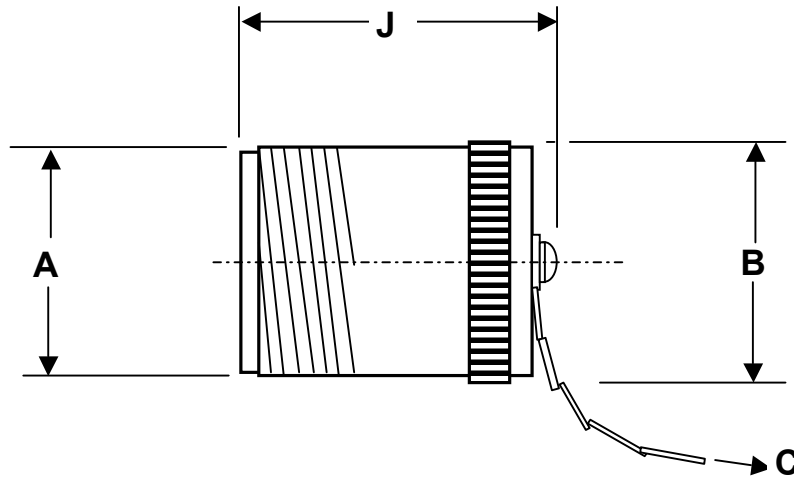
3010 South Tech Blvd.

TEL: 813-281-1111 FAX: 813-281-1112

ACCESSORIES

PLUG CAP

LAST REVISION: ISSUED 7/15/07



MATES WITH CD90556 & CD90558

SHELL SIZE	PART NUMBER	A Thread Class 2-B	B DIA. MAX.	C +/- 1 Link	D Chain Eyelet	J MAX.
28	CD90564-1C	2.000	2.000	7.500	0.164	0.164
32	CD90564-3C	2.250	2.250	6.000	0.164	0.164
44	CD90564-7C	3.000	3.000	8.500	0.250	0.250
52	CD90564-11C	3.500	3.500	8.500	0.250	0.250

DIMENSIONS IN INCHES

CDI

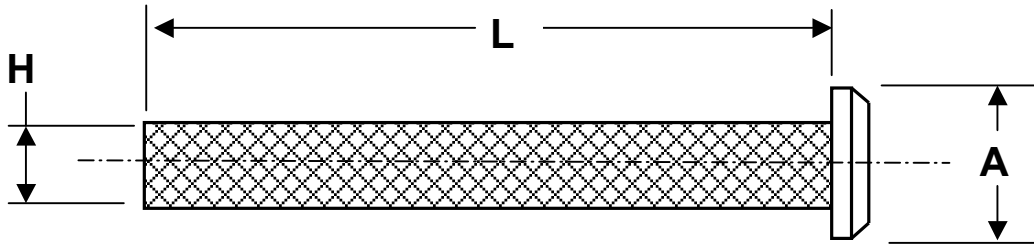
CONNECTIVE DESIGN, INC.

3010 South Tech Blvd.

Tel: 813-940-1111

ACCESSORIES CABLE GRIP

LAST REVISION: ISSUED 7/15/07



CABLE GRIP PART #	INSERT ARRANGEMENT	A DIA. +.000 -.010	H DIA. CABLE RANGE		L APPROX.
			MAX.	MIN.	
CD90561-1	28-03, -05, -06, 32-02, -04	1.797	0.969	0.832	8.000
CD90561-2	28-13 32-03, -05, -12	1.797	1.145	1.003	8.000
CD90561-3	32-07	1.797	1.260	1.055	9.000
CD90561-4	28-02, -04	1.797	0.844	0.688	7.500
CD90561-5	44-02, -04	2.235	1.312	1.156	11.500
CD90561-6	44-06	2.235	1.375	1.219	10.500
CD90561-8	52-03	2.922	1.703	1.414	14.500
CD90561-9	52-06	2.922	1.797	1.508	14.500
CD90561-12	28-07, -12 32-06	1.797	1.047	0.891	8.000
CD90561-13	32-13	1.797	1.342	1.185	9.500
CD90561-14	44-03, -05	2.235	1.438	1.282	10.500
CD90561-15	44-12	2.235	1.516	1.360	11.500
CD90561-16	44-13	2.235	1.688	1.531	13.500
CD90561-17	52-12	2.922	2.328	2.039	18.000
CD90561-18	52-13	2.235	2.500	2.211	19.000
CD90561-19	44-51	2.235	1.750	1.550	12.500
CD90561-20	44-52	2.235	1.578	1.375	12.000
CD90561-21	44-56	2.235	1.160	1.010	8.000

DIMENSIONS IN INCHES

CDI

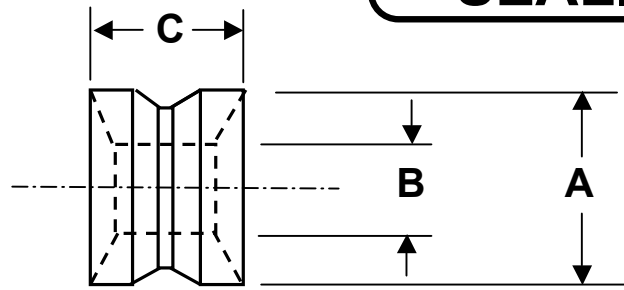
CONNECTIVE DESIGN, INC.

3010 South Tech Blvd.

Tel: 813-940-4111

ACCESSORIES SEALING GLAND

LAST REVISION: ISSUED 7/15/07



GLAND PART #	INSERT ARRANGEMENT	A DIA. +.000 -.020	B DIA. +.020 -.000	C +.010	MIN. CABLE DIA. REF.
CD23747-1	28-03, -05, -06, 32-02, -04	1.805	0.969	1.034	0.844
CD23747-2	28-03, -05, -06, 32-02, -04	1.805	1.130	1.034	1.005
CD23747-3	32-07	1.805	1.260	1.034	1.135
CD23747-4	28-02, -04	1.805	0.844	1.034	0.719
CD23747-5	44-02, -04	2.242	1.312	1.160	1.187
CD23747-6	44-06	2.242	1.375	1.160	1.250
CD23747-7	52-02	2.927	1.703	1.284	1.558
CD23747-8	52-06	2.927	1.797	1.284	1.652
CD23747-12	28-07, -12 32-06	1.805	1.047	1.034	0.922
CD23747-13	32-13	1.805	1.342	1.034	1.217
CD23747-14	44-03, -05	2.242	1.438	1.160	1.313
CD23747-15	44-12	2.242	1.516	1.160	1.391
CD23747-16	44-13	2.242	1.627	1.160	1.547
CD23747-18	52-12	2.927	2.328	1.284	2.830
CD23747-19	52-13	2.927	2.453	1.284	2.308
CD23747-20	44-51	2.242	1.734	1.160	1.609
CD23747-21	44-52	2.242	1.562	1.160	1.437
CD23747-22	44-56	2.242	1.150	1.160	1.025

DIMENSIONS IN INCHES

CDI

CONNECTIVE DESIGN, INC.

3010 South Tech Blvd.

Tel: 800-368-4444