

Ordering Information

MIL-C-22992 connectors are supplied with removable contacts. Contacts are supplied unassembled. Also supplied are applicable accessories as shown on pages 73 through 76.

Additional contacts may be ordered separately by part number (see page 74 for more information).
Connectors can be ordered by Burndy part number or military part number as shown below.

Typical Military Part Number: MS90555 C 44 4 12 S Z

Connector Designation

- MS 90555 Wall Mount Receptacle (Power Source)
- MS 90556 Straight Plug
- MS 90557 Cable Connecting Plug without Coupling Ring
- MS 90558 Wall Mounting Receptacle with Coupling Ring (Equipment End)

Shell Finish C:Conductive for Grounded Assy's.

Shell Size(32, 44, 52) Related to current carrying capacity

- 32 – 60 amperes
- 44 – 100 amperes
- 52 – 200 amperes

Shell Key/Keyway Position

1, 4, 5 and 6 positions are available to prevent cross mating of dissimilar voltages

Insert Arrangement

Refer to insert arrangements, page 77

Contact Type

- P: Pin
- S: Socket

Alternate Insert Position

Discrimination of 60 Hz & 400 Hz assemblies is accomplished by alternate positioning of inserts. See page 78.

Typical Burndy Part Number: B555 C 44 4 12 S Z

Connector Designation

- MS 90555 Wall Mount Receptacle (Power Source)
- MS 90556 Straight Plug
- MS 90557 Cable Connecting Plug without Coupling Ring
- MS 90558 Wall Mounting Receptacle with Coupling Ring (Equipment End)

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1, 4, 5 and 6 positions are available to prevent cross mating of dissimilar voltages

Insert Arrangement

Refer to insert arrangements, page 77

Contact Type

- P: Pin
- S: Socket

Alternate Insert Position

Discrimination of 60 Hz & 400 Hz assemblies is accomplished by alternate positioning of inserts. See page 78.

Shell sizes 28 (40 amp) and 48 (150 amp) covered by the military specifications are not currently available from Burndy. Suggest using shell sizes 32 (60 amp) and 52 (200 amp) as available substitutes. Consult Burndy Representative or factory directly if other details are required.

The Burndy Class "L" connector line is a power connector with current ratings ranging from 60 through 200 amperes. The connectors are designed to meet or exceed the requirements of military specification MIL-C-22992 Class "L." These connectors are required for all ground power equipment by MIL-STD-454, and are considered the preferred connector under MIL-STD-1453, which mandates its use in all equipment procured by the military. The selection of Class "L" connectors was primarily based on maximum user safety and equipment protection.

Design Features:

Safety

- Burndy Class "L" connectors are equipped with arc quenching chambers to minimize damage to cable or connector and reduce the hazard of live circuit rupture to personnel during the most severe field conditions.
- Designed with a coupling sequence that engages both the neutral and ground contacts before the power contacts.
- Socket contacts are recessed well within the dielectric face, which represents a "dead face" to the outside world.

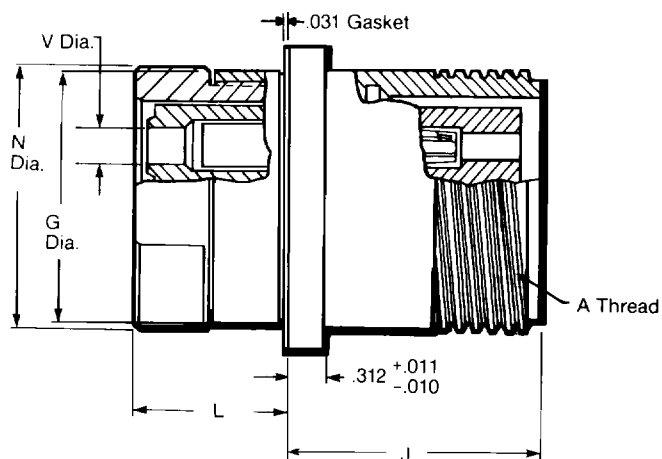
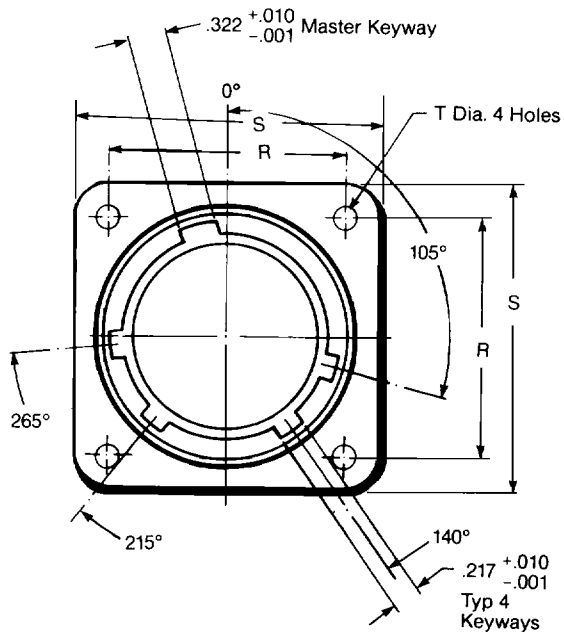
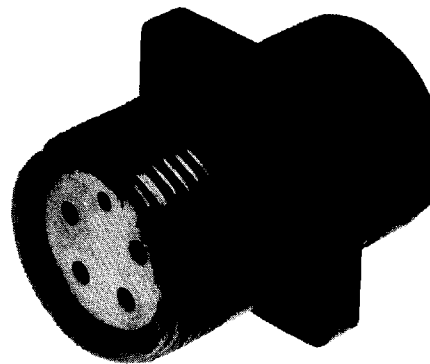
Equipment Protection

- Connectors are shell polarized (key/keyway) for alternate voltage and phase requirements.
- Discrimination of 60 Hz & 400 Hz accomplished by alternate insert positions.
- Current rating controlled by shell size.
- Connectors are fully grounded for all AC applications.

Additional Design features:

- Shells are machined from high strength aluminum and are supplied with conductive finish.
- Equipped with necessary seals for waterproofing whether mated, unmated, capped or uncapped.
- Crimped or soldered contacts, hand insertable and removable.
- Quick connect/disconnect for mating and unmating during severe field conditions.

Condition	Description	Test Method
Durability	Mated and Unmated 500 Cycles	MIL-C-22992
Moisture Resistance	Mated - 10 Continuous Cycles at Specified Temperature and Relative Humidity	MIL-STD-202 Method 106
Fluid Immersion	Unmated - 20 Hours Min. Immersion in Hydraulic Fluid and Lubricating Oil.	MIL-C-22992
Water Immersion	Mated and Unmated - 4 Hours Min. Immersion at Specified Atmospheric Pressure Differential	MIL-C-22992
Salt Spray	Unmated - 48 Hours Exposure to Atomized 5% Saline Solution at 35° C	MIL-STD-1344 Method 1001
Thermal Shock	Unmated - 5 Complete Cycles of -55° C to 25° C	MIL-STD-1344 Method 1003
High Impact Shock	Withstands Specified Shocks Through Each of the 3 Principal Mutually Perpendicular Planes	MIL-STD-202 Method 207



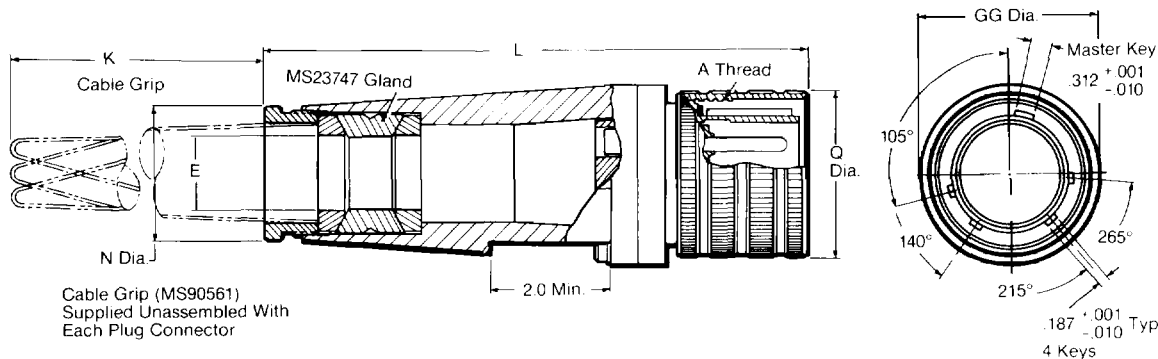
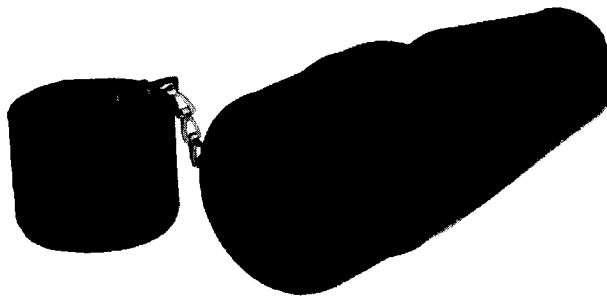
Contact Size	V Dia. Wire Sealing Range
4/0	.700/ .790
2/0	.530/ .655
1/0-1	.457/ .585
4	.356/ .430
6	.300/ .360

Table of Dimensions

Size	A Thread (Per MIL STD 1373)	G Dia. x .006 .010	J x .016 .001	.031	N Dia. x .011 .020	R BSC	S x .021 .020	T Dia
32	2.250-7 DS2A	2.188	2.188	1.376	2.250	2.062	2.625	.209
44	3.000-7 DS2A	3.062	2.532	1.438	3.125	2.812	3.375	.281
52	3.500-7 DS2A	3.562	2.532	1.438	3.625	3.156	3.875	.281

Straight Plug Connector with Coupling Ring B556

MS 90556



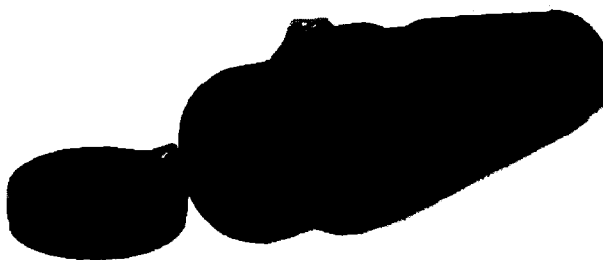
Size	Arrangement Number	A Thread (Per MIL-STD 1373)	L Cable Range	K Approx. Free Length	L Max. Free Length	N Dia. +.011-.020	Q Dia. Max	GG Dia.
32	-06	2.250-7-DS-2B	1.047/1.992	7.188	8.188	2.000	2.562	2.689
	-07		1.259/1.135	8.188				
	-12		1.130/1.005	7.188				
	-13		1.342/1.217	8.688				
44	-06	3.000-7-DS-2B	1.375/1.250	9.638	10.172	2.500	3.531	3.667
	-12		1.516/1.391	10.688				
	-13		1.672/1.547	12.688				
	-51		1.734/1.609	11.688				
	-52		1.525/1.435	11.188				
	-56		1.135/1.065	7.188				
52	-12	3.500-7-DS-2B	2.328/2.183	17.188	11.109	3.250	4.016	4.167
	-13		2.453/2.308	18.188				

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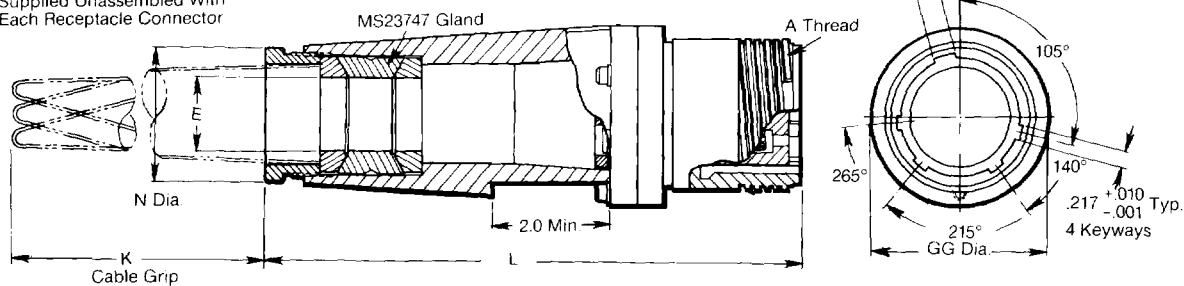
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Cable Connecting Plug Connector Without Coupling Ring

MS 90557



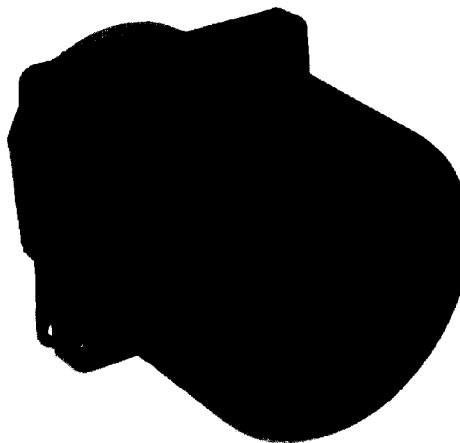
Cable Grip (MS90561)
Supplied Unassembled With
Each Receptacle Connector



Size	Arrangement Number	A Thread (Per MIL STD 1373)	Cable Range	K Approx. Free Length	L Max. Free Length	N Dia. +0.011-0.020	GG Dia.
32	-06	2.250-7 DS-2A	1.047/0.992	7.188	8.156	2.000	2.689
	-07		1.259/1.135	8.188			2.678
	-12		1.130/1.005	7.188			
	-13		1.342/1.217	8.688			
44	-06	3.000-7 DS-2A	1.375/1.250	9.638	10.125	2.500	3.667
	-12		1.516/1.391	10.688			3.646
	-13		1.672/1.547	12.688			
	-51		1.734/1.609	11.688			
52	-12	3.500-7 DS-2A	2.328/2.183	17.188	11.062	3.250	4.167
	-13		2.453/2.308	18.188			4.146

Wall Mount Receptacle
Connector With Coupling Ring
Equipment End

MS 90558



Contact Size	V Dia. Wire Sealing Range
4/0	.700/.790
2/0	.530/.655
1/0-1	.457/.585
4	.356/.430
6	.300/.360

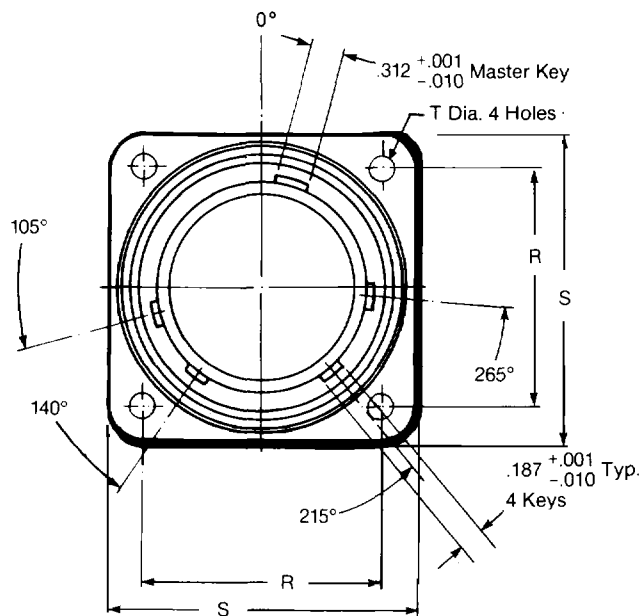
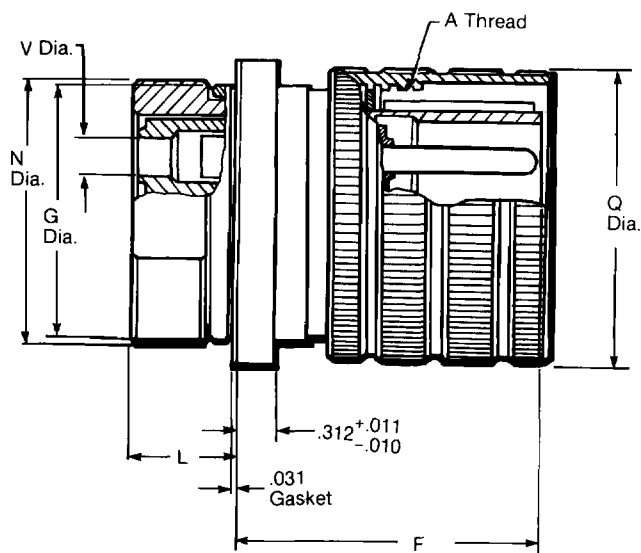


Table of Dimensions

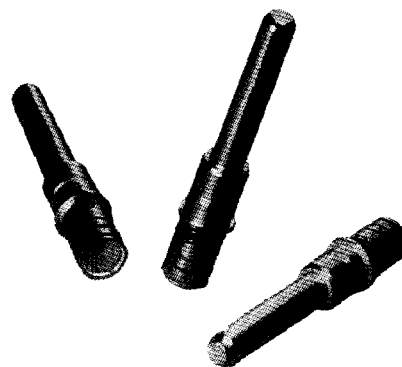
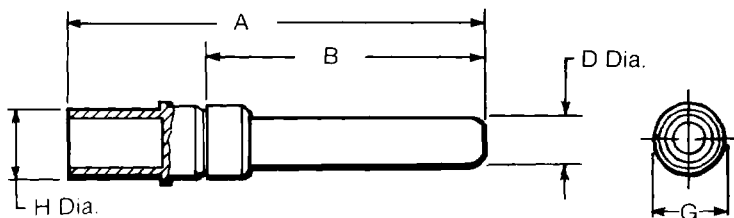
Size	A Thread (Per MIL-STD-1373)	I +.006-.010	G Dia. +.016-.000	I .031	N +.011-.020	Q Dia. Min.	R BSC	S +.021-.020	F Dia.
32	2.250-7 DS-2B	2.639	2.188	.959	2.250	2.562	2.062	2.625	.209
44	3.000-7 DS-2B	2.998	3.062	1.021	3.125	3.531	2.812	3.375	.281
52	3.500-7 DS-2B	2.998	3.562	1.021	3.625	4.016	3.156	3.875	.281

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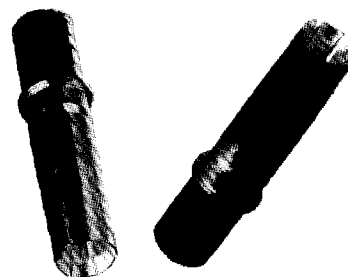
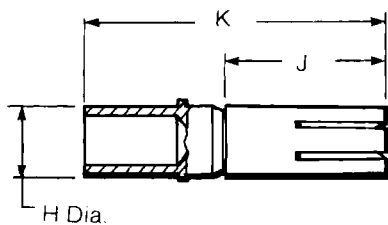
Accessories

Pin Contact* MS 90556 (B556) MS 90558 (B558)



Burndy Part No	MS Part No	Contact Size	A Rel	B	D Dia	G Dia	H Dia
B559-01-1	M39029/48-320	4	2.786	1.738	.225	.419/.415	.376/.372
B559-01-2	M39029/48-321	4N	2.904	1.856	.225	.419/.415	.376/.372
B559-01-3	M39029/48-318	6N	2.904	1.856	.178	.344/.340	.314/.310
B559-01-4	M39029/48-323	1/0	3.207	2.097	.357	.612/.606	.510/.503
B559-01-5	M39029/48-324	1/0N	3.325	2.215	.357	.612/.606	.510/.503
B559-01-6	M39029/48-319	6G	2.856	1.746	.178	.344/.340	.314/.310
B559-01-8	M39029/49-327	4/0	3.207	2.097	.500	.784/.778	.754/.747
B559-01-9	M39029/48-328	4/0N	3.325	2.215	.500	.784/.778	.754/.747
B559-01-10	M39029/48-322	4G	2.856	1.746	.225	.419/.415	.376/.372

Socket Contact* MS 90555 (B555) MS 90557 (B557)



Burndy Part No	MS Part No	Contact Size	G Dia	H Dia	J	K Rel
B560-01-1	M39029/49-331	4	.419/.415	.376/.372	1.158	2.206
B560-01-2	M39029/49-329	6N	.344/.340	.314/.310	1.158	2.206
B560-01-3	M39029/49-333	1/0	.612/.606	.510/.503	1.283	2.393
B560-01-4	M39029/49-330	6G	.344/.340	.314/.310	1.752	2.862
B560-01-5	M39029/49-335	4/0	.784/.778	.754/.747	1.283	2.393
B560-01-6	M39029/49-332	4G	.419/.415	.376/.372	1.752	2.862

*Appropriate contacts are supplied when ordering the finished connector.
Contacts can be ordered separately upon request.

Accessories

Contact Information

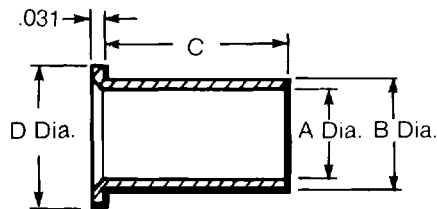
Insert Arrangement	Contact Information				Crimp & Extraction Tools**				
	Qty	Contact	Size	Pin Data (A, B)	Socket Data (G, H)	M22520 Crimping Tool/s	M22520 Locator	M22520 Die Assembly	M81959/ Removal Tool
32-06	2	A,B	4	B559-01-1	B560-01-1	23-01	23-12	23-04	27-05
32-07	2	N,G	4N	B559-01-2	B560-01-1	23-01	23-12	23-04	27-05
32-12	3	A,B,C	4	B559-01-1	B560-01-1	23-01	23-12	23-04	27-05
32-13	1	N	4N	B559-01-2	B560-01-1	23-01	23-12	23-04	27-05
	1	G	6N	B559-01-3	B560-01-2	23-01	23-10	23-03	27-06
44-06	2	A,B	1/0	B559-01-4	B560-01-3	23-01	23-14	23-05	27-03
	1	N	1/0N	B559-01-5	B560-01-3	23-01	23-14	23-05	27-03
	3	G1,G2,G3	6G	B559-01-6	B560-01-4	23-01	23-10	23-03	27-06
44-12	3	A,B,C	1/0	B559-01-4	B560-01-3	23-01	23-14	23-05	27-03
44-13	1	N	10N	B559-01-5	B560-01-3	23-01	23-14	23-05	27-03
	4	G1,G2,G3,G4	6G	B559-01-6	B560-01-4	23-01	23-10	23-03	27-06
44-50,* 44-51	3	A,B,C	1/0	B559-01-4	B560-01-3	23-01	23-14	23-05	27-03
44-52,** 44-56**	1	G	1/0N	B559-01-5	B560-01-3	23-01	23-14	23-05	27-03
52-12	3	A,B,C	4/0	B559-01-8	B560-01-5	23-01	23-16	23-07	27-01
52-13	1	N	4/0N	B559-01-9	B560-01-5	23-01	23-16	23-07	27-01
	4	G1,G2,G3,G4	4G	B559-01-10	B560-01-5	23-01	23-12	23-04	27-05

*44-50 for MS 90555 and MS 90558 only

**44-52 & 44-56 for MS 90556 only

***Not supplied by Burndy. Order per MIL SPEC No. Consult QPL Listing for manufacturer.

Contact Bushing* MS 3348



Burndy Part No.	MS Part No.	A Dia. ± .002-.003	B Dia. ± .002-.003	C .015	D Dia. .015
B348-01-1	MS3348-1-2L	.359	.396	.700	.516
B348-01-3	MS3348-4-6L	.225	.272	.700	.344
B348-01-4	MS3348-6-8L	.185	.225	.700	.297
B348-01-5	MS3348-6-9L	.155	.225	.700	.297
B348-01-6	MS3348-1-6L	.225	.396	.700	.516
B348-01-10	MS3348-4-8L	.185	.272	.700	.344

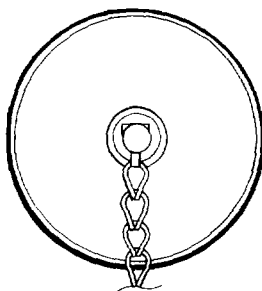
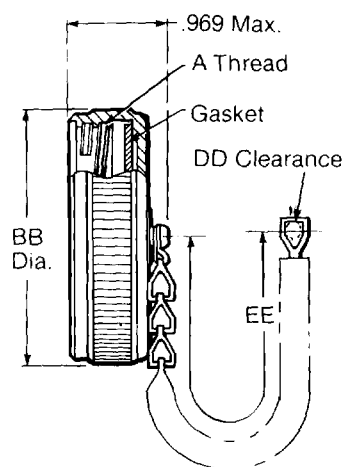
*When required by insert arrangement, appropriate size and quantity of bushings are supplied (unassembled) with the connector and contacts.

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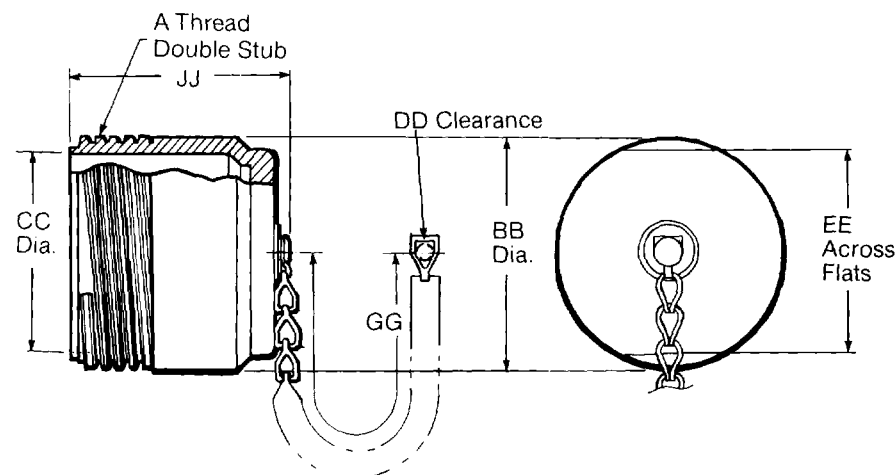
Accessories

*Protective Covers (MS 90563)



MS Part Number	Size	A Thread Class 2H	BB Dia. Max	DD Min	EE
MS 90563-3C	32	2.250-7 DS2B	2.469	.200	4.50
MS 90563-4C	32	2.250-7 DS2B	2.469	.200	6.00
MS 90563-7C	44	3.000-7 DS2B	3.219	.250	7.50
MS 90563-11C	52	3.500-7 DS2B	3.750	.250	7.50

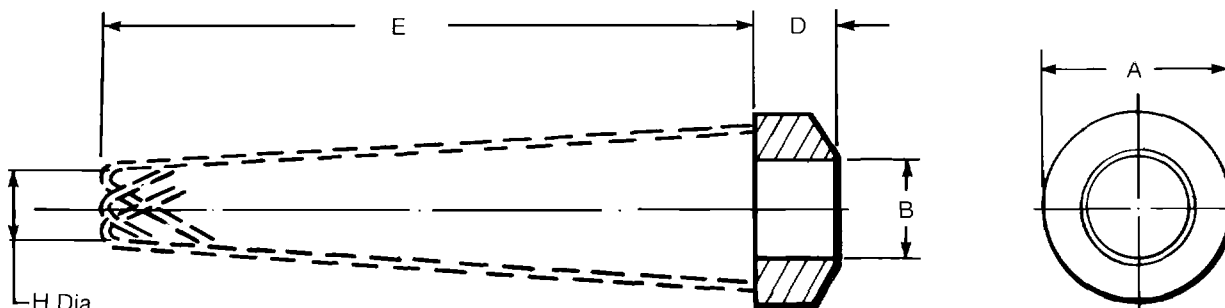
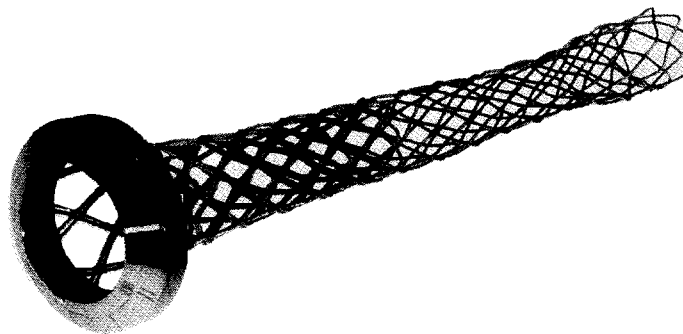
*Protective Covers (MS90564) MS 90556



MS Part Number	Size	A Thread Per MIL STD 1373	BB Dia. Max	CC Dia. Min	DD Min	FI Ø10	GG	JJ Max
MS 90564-3C	32	2.250-7 DS2A	2.250	1.942	.200	2.000	6.00	2.266
MS 90564-4C	32	2.250-7 DS2A	2.250	1.942	.200	2.000	7.50	2.266
MS 90564-7C	44	3.000-7 DS2A	3.000	2.692	.250	2.750	8.50	2.484
MS 90564-11C	52	3.500-7 DS2A	3.500	3.161	.250	3.250	8.50	2.484

*Appropriate protective covers are supplied with the finished connector. They are not supplied separately.

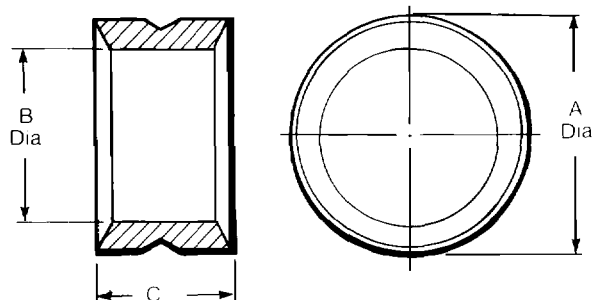
*Cable Grip (MS 90561-____)



Burndy Part No	MS Part No	Arrangement No	A Dia + 0.00 - 0.10	B Dia + 0.20 - 0.00	Rel D	I Approx	H Dia Cable Range Max	Min
B561-01-1	MS90561-2	32-03, 32-05, 32-12	1.797	1.145	.413	8.000	1.145	1.003
B561-01-2	MS90561-13	32-13	1.797	1.342	.366	9.500	1.342	1.185
B561-01-3	MS90561-15	44-12	2.235	1.516	.419	11.500	1.516	1.360
B561-01-4	MS90561-16	44-13	2.235	1.688	.375	13.500	1.688	1.531
B561-01-5	MS90561-21	44-56	2.235	1.160	.340	8.000	1.160	1.010
B561-01-6	MS90561-20	44-52	2.235	1.578	.406	12.000	1.578	1.375
B561-01-7	MS90561-19	44-51	2.235	1.750	.325	12.500	1.750	1.550
B561-01-8	MS90561-17	52-12	2.922	2.328	.497	18.00	2.328	2.039
B561-01-9	MS90561-18	52-13	2.922	2.500	.453	19.00	2.500	2.211
B561-01-10	MS90561-12	32-06	1.797	1.047	.428	8.000	1.047	.891
B561-01-11	MS90561-3	32-07	1.797	1.260	.368	9.000	1.260	1.055
B561-01-13	MS90561-6	44-06	2.235	1.375	.459	10.500	1.375	1.219

*Cable grip supplied unassembled with MS 90556 and MS 90557 connectors

Cable Sealing Gland MS 23747



Burndy Part No	A Dia + 0.00 - 0.20	B Dia + 0.20 - 0.00	C 0.10	MS Part No	Insert Arrangement No Rel
B747-01-10	1.805	1.047	1.034	23747-12	32-06
B747-01-1	1.805	1.130	1.034	23747-2	32-12
B747-01-2	1.805	1.342	1.034	23747-13	32-13
B747-01-3	2.242	1.516	1.160	23747-15	44-12
B747-01-4	2.242	1.672	1.160	23747-16	44-13
B747-01-5	2.242	1.734	1.160	23747-20	44-51
B747-01-6	2.242	1.562	1.160	23747-21	44-52
B747-01-7	2.242	1.150	1.160	23747-22	44-56
B747-01-8	2.927	2.328	1.284	23747-18	52-12
B747-01-9	2.927	2.453	1.284	23747-19	52-13
B747-01-11	1.805	1.260	1.034	23747-3	32-07
B747-01-12	2.242	1.375	1.160	23747-6	44-06

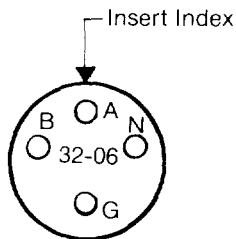
**Cable Sealing Gland supplied unassembled with MS90556 and MS90557 connectors

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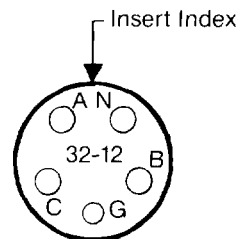
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Insert Arrangements

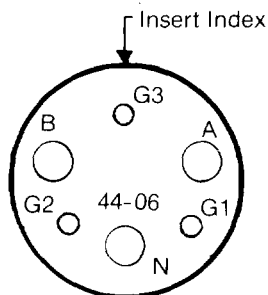
Insert Arrangements*†
Front Face of Pin Insert Shown
Socket Insert Opposite



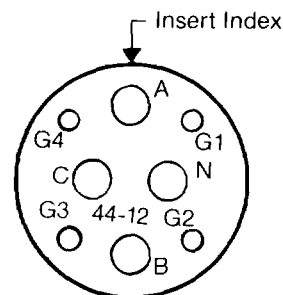
32-06 and 32-07 Insert
Arrangement AC Single
Phase, Three Wire, Grounding
(32-06 Will Appear on 32-07 Insert)



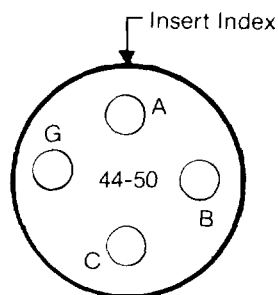
32-12 and 32-13 Insert
Arrangement AC Three
Phase, Four Wire, Grounding
(32-12 Will Appear on 32-13 Insert)



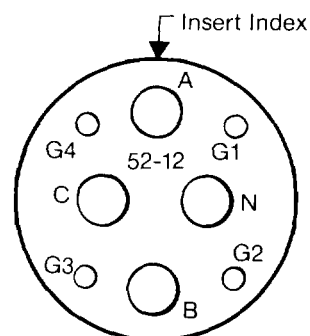
44-06 Insert Arrangement
AC Single Phase, Three
Wire, Grounding



44-12 and 44-13 Insert
Arrangement AC Three
Phase, Four Wire, Grounding
(44-12 Will Appear on 44-13 Insert)



44-50, 51, 52 and 56 Insert
Arrangement AC Three
Phase, Three Wire, Grounding
For Navy Ground Support
Equipment Only
(44-50 Will Appear on
44-51, -52, -56 Inserts)



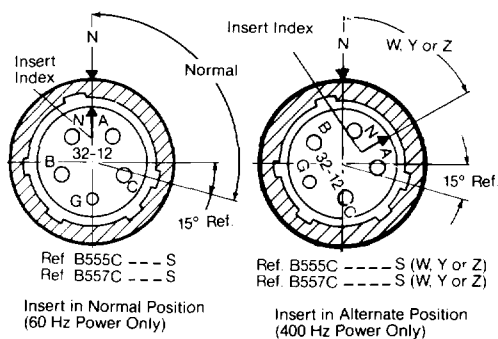
52-12 and 52-13 Insert
Arrangement AC Three
Phase, Four Wire, Grounding
(52-12 Will Appear on 52-13 Insert)

*For contact accommodations, see page 74.
†For shell size current rating, see page 67.

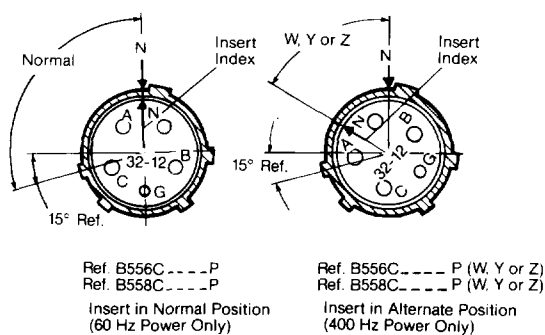
†MIL-C-22992 includes other insert arrangement.
Contact Bundy Corp. for further information.

Insert Arrangement	Cable Accommodations
32-06	ICEA 3—No. 6 Conductor Round, Type G
32-07	CO-03-HDF (3/4-3/10R) 1210 Per Mil-C-3432
32-12	ICEA 4—No. 6 Conductor, Round Type G
32-13	CO-04-HDF (4/4-4/12R) 1290 Per Mil-C-3432
44-06	ICEA 3—No. 2 Conductor, Round, Type G (0-600 volts)
44-12	ICEA 4—No. 2 Conductor, Round, Type G (0-600 volts)
44-13	CO-04-HDF (4/1-4/8R) 1620 Per Mil-C-3432
44-50	4 Each—No. 1 Wire (Receptacles Only)
44-51	ICEA 4—No. 1 Conductor, Round Type W 600 Volts—1.58 inch O.D.
44-52	ICEA 4—No. 2 Conductor, Round Type W 600 Volts—1.48 inch O.D.
44-56	ICEA 4—No. 6 Conductor, Round Type W 600 Volts—1.10 inch O.D.
52-12	ICEA 4—No. 4/0 Conductor, Round Type G (0-600 Volts)
52-13	CO-04 HDF (4/0000-4/4R) 2380 Per Mil-C-3432

Insert Positioning



Front of Socket Insert Shown

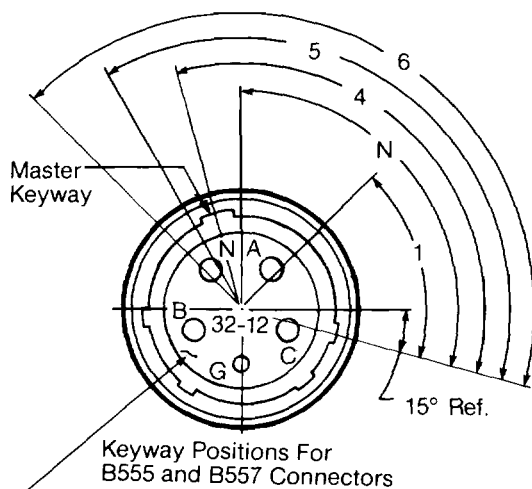


Front of Pin Insert Shown

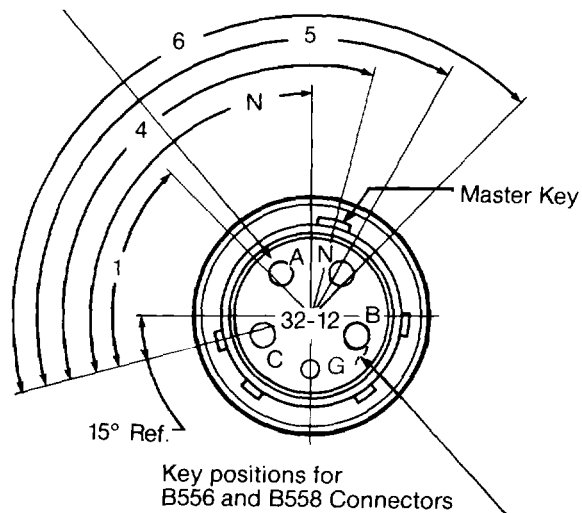
Insert Positioning Table

Arrangement Number	Insert Relative (Degrees From Normal)				
	Normal 60 Hz	Alternate 400 Hz	X	Y	Z
32-06, 32-07	0°	—	—	—	—
32-12, 32-13	0°	—	—	180°	—
44-06	0°	—	—	—	—
44-12, 44-13	0°	—	—	—	60°
44-50, 44-51	0°	—	—	—	—
44-52, 44-56	0°	—	—	—	—
52-12, 52-13	0°	300°	—	—	—

Main Keyway Positions



Typical pin/socket insert arrangement.
Insert arrangement does not rotate
with main keyway.



Typical pin/socket insert arrangement.
Insert arrangement does not rotate
with main keyway.

Main Key Keyway Positioning Table								
Shell Size	Current Rating Amps	60 Hz & 400 Hz		3 Phase		3 Phase		3 Wire
		1 Phase	2 Wire	3 Wire	4 Wire	4 Wire	4 Wire	
32	60	4 (120°)	5 (135°)	4 (120°)	4 (120°)	5 (135°)	6 (150°)	—
44	100	4 (120°)	—	4 (120°)	4 (120°)	5 (135°)	6 (150°)	1 (60°)
52	200	—	—	4 (120°)	4 (120°)	5 (135°)	6 (150°)	—

Only positions shown are available by military specification

*Discrimination of 60 Hz and 400 Hz assembled is accomplished by alternate positioning of inserts
See page 67 for frequency discriminations.