Amphenol® 97 Series Standard Cylindrical Connector

12-022-14

MIL-5015 Style Connectors widely used for:

- **Factory Automation, Robotics**
- **Machine Tool, Instrumentation**
- **Welding Equipment**
- **Medical Equipment**







Amphenol® 97 Series Connectors are UL recognized and CSA recognized.









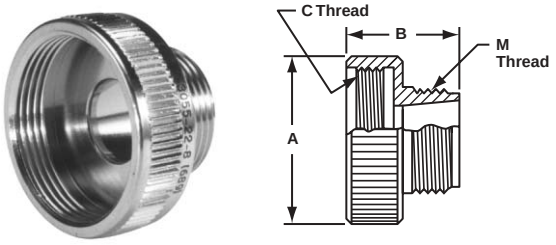


Amphenol

97 series accessories
connector adapters

97-3055 Adapter

Used as reducing or extending bushing.
Note: 97-3055 supersedes part number AN-3055.

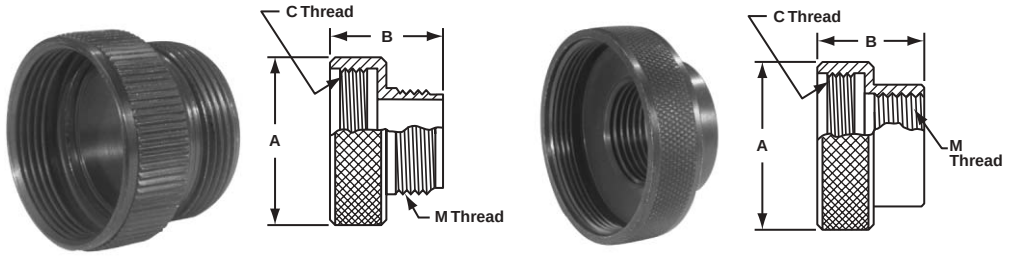


Note: Knurl design is manufacturer's

Conduit Size		AN Number	Used on Connector Size	A		B		C Threads	M Threads	Weight Lbs. per 100
Inch	mm			Inch	mm	Inch	mm			
1/4	6.35	97-3055-12-4 97-3055-14-4	12S, 12 14S, 14	25/32 29/32	18.24 23.01	7/8 7/8	22.23 22.23	5/8-24 3/4-24	5/8-24 5/8-24	1.37 1.42
3/8	9.53	97-3055-14-6 97-3055-16-6 97-3055-18-6	14S, 14 16S, 16 18	29/32 1-1/16 1-3/16	23.01 26.97 30.15	7/8 7/8 7/8	22.23 22.23 22.23	3/4-20 7/8-20 1 -20	3/4-20 3/4-20 3/4-20	1.60 1.90 2.00
1/2	12.70	97-3055-16-8 97-3055-18-8 97-3055-22-8	16S, 16 18 20, 22	1-1/16 1-3/16 1-3/8	26.97 30.15 34.93	7/8 7/8 7/8	22.23 22.23 22.23	7/8-20 1 -20 1-3/16-18	7/8-20 7/8-20 7/8-20	2.35 2.53 2.70
5/8	17.88	97-3055-18-10 97-3055-22-10 97-3055-28-10	18 20, 22 24, 28	1-3/16 1-3/8 1-5/8	30.15 34.93 41.28	7/8 7/8 7/8	22.23 22.23 22.23	1 -20 1-3/16-18 1-7/16-18	1 -20 1 -20 1 -20	2.82 3.00 3.15
3/4	19.05	97-3055-22-12 97-3055-28-12	20, 22 24, 28	1-3/8 1-5/8	34.93 41.28	7/8 7/8	22.23 22.23	1-3/16-18 1-7/16-18	1-3/16-18 1-3/16-18	4.80 5.01
1	25.40	97-3055-28-16 97-3055-32-16 97-3055-36-16	24, 28 32 36	1-5/8 1-15/16 2-3/16	41.28 49.20 55.55	7/8 15/16 1-1/16	22.23 23.80 26.97	1-7/16-18 1-3/4-18 2 -18	1-7/16-18 1-7/16-18 1-7/16-18	5.42 5.60 5.73

97-3055-120 Adapter, Type II
97-3055-121 Adapter, Type I

Used to terminate pipe threads.



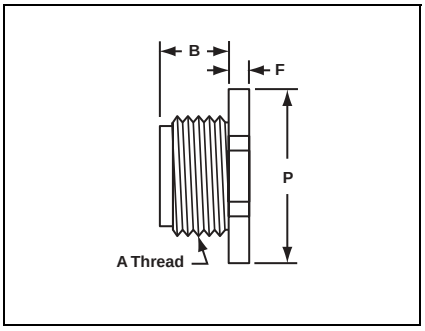
Note: Knurl design is manufacturer's option.

M Thread Size	Type	Part Number	Shell Sizes	A Ref.		B Max.		C Thread
				Inch	mm	Inch	mm	
1/2 NPT	II	97-3055-120-18002 97-3055-120-22002 97-3055-120-28002	18, 20, 22 24, 28	1-3/16 1-3/8 1-5/8	30.15 34.93 41.28	1-1/8 1-1/8 1-1/8	22.23 22.23 22.23	1 -20 1-3/16-18 1-7/16-18
	I	97-3055-121-18002 97-3055-121-22002 97-3055-121-28002	18, 20, 22 24, 28	1-3/16 1-3/8 1-5/8	30.15 34.93 41.28	1-1/8 1-1/8 1-1/8	22.23 22.23 22.23	1 -20 1-3/16-18 1-7/16-18
3/4 NPT	II	97-3055-120-28003	24-28	1-15/16	49.20	1-3/16	28.30	1-7/16-18
	I	97-3055-121-28003	24-28	1-15/16	49.20	1-3/16	28.30	1-7/16-18
3/4 NPT	II	97-3055-120-32003	32	1-15/16	49.20	1-3/16	23.80	1-3/4-18
	I	97-3055-121-32003	32	1-15/16	49.20	1-3/16	23.80	1-3/4-18

97 series accessories
conduit box connectors, conduit coupling nuts

97-3064 Conduit Box Connector

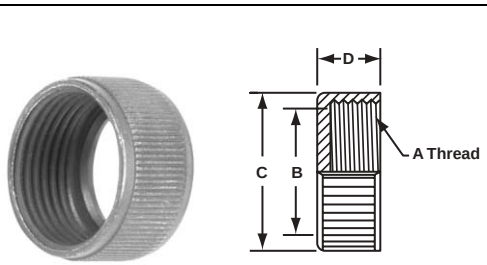
Used with AN3066 locknut to form termination at conduit boxes or panel. May be used with AN3057 clamp to relieve strain on wiring cable terminals.
Note: 97-3064 supersedes AN3064.



Max. Conduit Size		Part Number	Use Conduit Coupling Lock Nut Size	Use Conduit Coupling Nut Size	A Thread	B		F		P		Weight Lbs. per 100
Inch	mm					Inch	mm	Inch	mm	Inch	mm	
1/4	6.35	97-3064-4	97-3066-4	97-3054-4	5/8-24	5/8	19.05	1/8	3.18	13/16	20.62	1.75
3/8	9.53	97-3064-6	97-3066-6	97-3054-6	3/4-20	5/8	19.05	1/8	3.18	15/16	23.80	2.18
1/2	12.70	97-3064-8	97-3066-8	97-3054-8	7/8-20	11/16	22.23	3/16	4.75	1-1/16	26.97	3.15
5/8	17.88	97-3064-10	97-3066-10	97-3054-10	1 -20	11/16	22.23	3/16	4.75	1-1/4	31.75	3.94
3/4	19.05	97-3064-12	97-3054-12	97-3054-12	1-3/16-18	11/16	22.23	3/16	4.75	1-3/8	34.93	4.98

97-3054 Conduit Coupling Nut

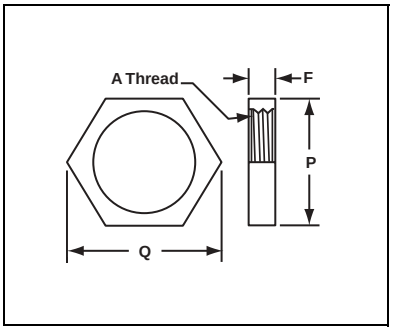
Note: 97-3054 supersedes AN3054.



Max. Conduit Size		Part Number	MS Connector Size	AN Conduit Fitting Size	A Thread	B		C		D		Weight Lbs. per 100
Inch	mm					Inch	mm	Inch	mm	Inch	mm	
3/8	9.53	97-3054-6	14, 14S	6	3/4-20	.583	14.81	27/32	21.41	7/16	11.10	.70
5/8	17.88	97-3054-10	18	10	1 -20	.833	21.16	1-1/8	28.58	7/16	11.10	1.31
3/4	19.05	97-3054-12	20, 22	12	1-3/16-18	.933	23.70	1-5/16	33.32	7/16	11.10	1.60
1	25.40	97-3054-16	24, 28	16	1-7/16-18	1.278	32.46	1-9/16	39.67	7/16	11.10	1.90

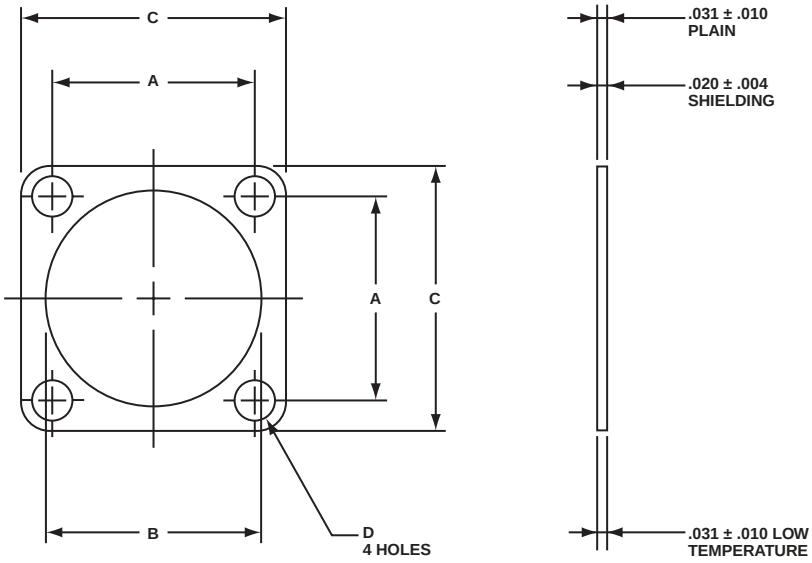
97-3066 Conduit Coupling Lock Nut

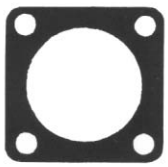
Note: 97-3066 supersedes AN3066.



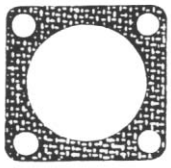
Conduit Size		Part Number	A Thread	F		P		Q		Weight Lbs. per 100
Inch	mm			Inch	mm	Inch	mm	Inch	mm	
1/4	6.35	97-3066-4	5/8-24	1/8	3.18	13/16	20.62	15/16	23.80	.36
3/8	9.53	97-3066-6	3/4-20	1/8	3.18	15/16	23.80	1-3/32	27.76	.41
1/2	12.70	97-3066-8	7/8-20	3/16	4.75	1-1/16	26.97	1-15/64	31.34	.72
5/8	15.88	97-3066-10	1 -20	3/16	4.75	1-1/4	31.75	1-7/16	34.21	.86
3/4	19.05	97-3066-12	1-3/16-18	3/16	4.75	1-3/8	34.93	1-19/32	40.46	1.01

97 series accessories
sealing gaskets





The Amphenol® plain flat gasket of synthetic rubber material is provided to take complete advantage of waterproof and pressure sealing features. It is for use with the flange mounted receptacle.



This flat gasket is provided to give the maximum in connector performance. Its special feature is in providing the maximum radio shielding under difficult conditions of high receiver sensitivity and low signal strength while retaining the sealing characteristics of the plain gasket. This gasket is for use with the flange mounting receptacle.



This gasket is provided for applications where the major requirement is resistance to the injurious effects of extremely low temperature. Even at temperatures as low as –67°F this gasket retains its resiliency and will seal a pressure differential of 30 psi.

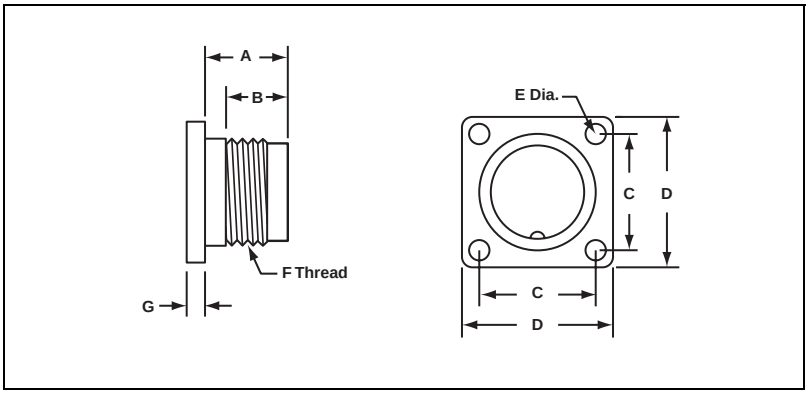
Installation Dimensions					Order Data		
Shell Size	A ±.010	B +.016 –.000	C +.016 –.000	D ±.010	Plain	Shielding	Low Temperature
8S	.594	.500	.875	.172	10-40450-8	10-40450-8S	10-36675-8
10S	.719	.625	1.000	.172	10-40450-10	10-40450-10S	10-36675-10
10SL	.719	.625	1.000	.172	10-40450-10	10-40450-10S	10-36675-10
12S	.813	.750	1.094	.172	10-40450-12	10-40450-12S	10-36675-12
12	.813	.750	1.094	.172	10-40450-12	10-40450-12S	10-36675-12
14S	.906	.875	1.188	.172	10-40450-14	10-40450-14S	10-36675-14
14	.906	.875	1.188	.172	10-40450-14	10-40450-14S	10-36675-14
16S	.969	1.000	1.281	.172	10-40450-16	10-40450-16S	10-36675-16
16	.969	1.000	1.281	.172	10-40450-16	10-40450-16S	10-36675-16
18	1.063	1.125	1.375	.203	10-40450-18	10-40450-18S	10-36675-18
20	1.156	1.250	1.500	.203	10-40450-20	10-40450-20S	10-36675-20
22	1.250	1.375	1.625	.203	10-40450-22	10-40450-22S	10-36675-22
24	1.375	1.500	1.750	.203	10-40450-24	10-40450-24S	10-36675-24
28	1.563	1.750	2.000	.203	10-40450-28	10-40450-28S	10-36675-28
32	1.750	2.000	2.250	.219	10-40450-32	10-40450-32S	10-36675-32
36	1.938	2.188	2.500	.219	10-40450-36	10-40450-36S	10-36675-36
40	2.188	2.438	2.750	.219	10-40450-40	10-40450-40S	10-36675-40

All dimensions for reference only.

97 series accessories
dummy receptacles

97-181 Dummy Receptacle Shells

Same as MS receptacle less insert and contacts.
Used to anchor MS plugs when not in use.



For Connector Size	Amphenol Part Number	A		B		C		D		E Dia.		F Thread	G Mounting Flange Thickness				Weight Lbs. per 100
													Max.		Min.		
		Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm		Inch	mm	Inch	mm	
10S	97-181-10S	.562	14.27	.375	9.53	.719	18.26	1.000	25.40	.120	3.05	5/8-24	.156	3.96	.078	1.98	1.10
12S	97-181-12S	.562	14.27	.375	9.53	.812	20.62	1.094	27.79	.120	3.05	3/4-20	.156	3.96	.078	1.98	1.73
14S	97-181-14S	.562	14.27	.375	9.53	.906	23.01	1.188	30.18	.120	3.05	7/8-20	.156	3.96	.078	1.98	2.00
16S	97-181-16S	.562	19.05	.375	9.53	.969	24.61	1.281	32.54	.120	3.05	1 -20	.156	3.96	.078	1.98	2.35
16	97-181-16	.750	19.05	.625	15.88	.969	24.61	1.281	32.54	.120	3.05	1 -20	.156	3.96	.078	1.98	3.10
18	97-181-18	.750	19.05	.625	15.88	1.062	26.97	1.375	34.93	.120	3.05	1-1/8-16	.203	5.16	.094	2.39	3.18
20	97-181-20	.750	19.05	.625	15.88	1.156	29.36	1.500	38.10	.120	3.05	1-1/4-18	.203	5.16	.094	2.39	3.80
22	97-181-22	.750	19.05	.625	15.88	1.250	31.75	1.625	41.28	.120	3.05	1-3/8-18	.203	5.16	.094	2.39	4.50
24	97-181-24	.812	20.62	.625	15.88	1.375	34.92	1.750	44.45	.147	3.73	1-1/2-18	.203	5.16	.094	2.39	5.00
28	97-181-28	.812	20.62	.625	15.88	1.562	39.67	2.000	50.80	.147	3.73	1-3/4-18	.203	5.16	.094	2.39	6.58
32	97-181-32	.875	22.23	.625	15.88	1.750	44.45	2.250	57.15	.173	4.39	2 -18	.359	9.12	.125	3.18	9.75

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Amphenol:

97-3057-1004-1 97-3057-1007 97-3057-1007-1 97-3057-1008-1 97-3057-1010 97-3057-1012 97-3057-1016 97-3057-20 97-3055-28-12(621) 97-3055-120-18002 97-3055-121-28003 97-3055-28-10 97-3055-22-10 97-3057-24 97-3055-22-8 97-3055-18-6 97-3055-18-8 97-3055-18-10 97-3055-14-6 97-3055-16-6 97-3055-22-12 97-3055-28-12 97-3055-22-12(621) 97-3055-121-22002 97-3055-120-22002 97-3055-14-4(621) 97-3055-120-28002 97-3055-120-28003 97-3055-12-4 97-3055-14-4 97-3055-16-4 97-3055-16-8 97-3055-28-16 97-3055-36-16 97-3054-10(621) 97-3055-121-28002 97-282-28-11 97-282-28-6 97-3055-22-8(639) 97-3055-18-10(639) 97-3055-22-10(676) 97-3055-28-12(676) 97-3055-18-10(676) 97-3055-16-8(639) 97-3055-36-16(676) 97-3055-28-16(676) 97-3055-28-10(639) 97-3055-12-4(676) 97-3055-32-16(676) 97-3055-18-6(676) 97-3055-12-4(639) 97-3057-1004-1(676) 97-3055-18-8(676) 97-3055-16-4(676) 97-3055-14-4(676) 97-3055-28-12(639) 97-3055-18-6(639) 97-3055-22-12(676) 97-3055-32-16(639) 97-3055-28-16(639) 97-3055-22-10(640) 97-3055-16-6(676) 97-3055-22-8(676) 97-3055-36-16(639) 97-3055-18-8(639) 97-3055-14-6(676) 97-3055-22-12(639) 97-3055-16-8(676) 97-3055-16-4(639) 97-3055-28-10(676) 97-3055-14-6(639) 97-3055-16-6(639) 97-3055-14-4(639) 97-3055-22-10(639) 97-3055-120-32003 97-3055-32-16(621)