

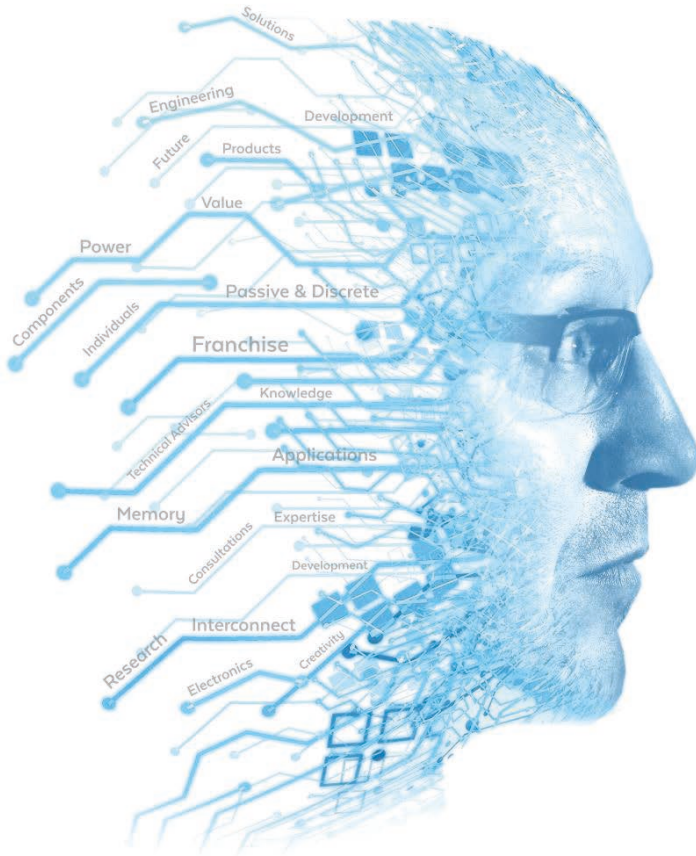


## **BACKSHELLS & ACCESSORIES**

PRODUCT  
CATALOGUE



## FRANCHISED ELECTRONICS



## “Design The Future”

Astute provides component engineering support across our franchises, modifying & adapting for your projects and supporting you throughout the design cycle with experienced technical advisers.

- High Rel Franchised Distribution
- Technical F.A.E Support
- Engineering Value Clinics
- Technical Workshops
- NPI Support programs



## TURBO INDIA

### INTERCONNECT SOLUTIONS

Founded in 1996, Turbo India Interconnect Solutions, a subsidiary of Turbo India, is a privately held company specialized in the precision manufacture of connector backshells, protective covers and related accessories for military, aerospace and industrial applications.

## PRODUCT RANGE

PRODUCT SERIES CODE	DESCRIPTION
21	21 EMI/RFI BANDING ADAPTOR
31	31 EMI/RFI MEMORY RING ADAPTOR
41	41 O-RING SEALED SHRINK BOOT ADAPTOR
51	51 SHIELD SOCK SHRINK BOOT ADAPTOR
61	61 EMI/RFI - LAMP BASE THREAD ADAPTOR
64	64 TIE STRAP ADAPTOR
110-01	SUBMERSIBLE CABLE CLAMP ADAPTOR - ENVIRONMENTAL, NON SCREENED
110-02	CABLE CLAMP ADAPTOR, NON ENVIRONMENTAL, NON SCREENED
110-03	SUBMERSIBLE CABLE CLAMP ADAPTOR - ENVIRONMENTAL, SCREENED
110-04	CABLE CLAMP ADAPTOR, NON ENVIRONMENTAL, SCREENED
160-01	BAND-IN-A-CAN BACKSHELL, ENVIRONMENTAL
12 & 13	MIL-DTL-38999 SERIES I PROTECTIVE COVERS
22 & 23	MIL-DTL-38999 SERIES II PROTECTIVE COVERS
32 & 33	MIL-DTL-38999 SERIES III PROTECTIVE COVERS
42 & 43	MIL-DTL-38999 SERIES IV PROTECTIVE COVERS
52 & 53	AS5015 PROTECTIVE COVERS
62 & 63	MIL-DTL-26482 SERIES I & II PROTECTIVE COVERS
DS BND	DSUB BAND TERMINATION BACKSHELL
ARC-P-X	ARINC 600 - RECTANGULAR BACKSHELL








## CONNECTOR INTERFACE DESIGNATORS

CONNECTOR INTERFACE DESIGNATOR	
DESIGNATOR	DESCRIPTION
H	MIL-DTL-38999 SERIES III & IV
F	MIL-DTL-38999 SERIES I & II
A	MIL-DTL-26482 SERIES II
A	AS50151 CRIMP
A	MIL-DTL-83723 SERIES I & III
D	MIL-DTL-26482 SERIES I



## COUPLING RING OPTIONS

CODE	PHOTO	DESCRIPTION
1		<b>DIRECT COUPLING</b> – The coupling nut is eliminated in this design, and the backshell threads directly onto the connector.
3		<b>FREE SPINNING</b> – Free spinning adaptors make the assembly of the backshell to the connector easy without turning the entire backshell body. The coupling nut is free to rotate in this design.
5		<b>SELF LOCK (DETENT)</b> – The movement of the coupling nut is locked by means of an anti- decoupling device in this design.
7		<b>SELF LOCK (NONDETENT)</b> – The coupling nut is locked in a pre-tensioned conditioned to achieve the self-lock feature.
9		<b>WRENCH FLAT</b> - Wrench flats option is available in our backshell, allowing for an easier way of tightening the coupling ring using a wrench / spanner, when working with reduced accessibility.

## MATERIAL & FINISH

CODE	MATERIAL	FINISH	DESCRIPTION	ROHS
A	ALUMINIUM	ANODIZING BLACK	AMS-A-8625 Type II Class 2, 336 Hour Salt Spray, Non-Conductive -65 to +175°C	YES
AH	ALUMINIUM	ANODIZE - HARDCOAT BLACK	AMS-A-8625 Type III, Class 2, .001" thick, 336 Hour Salt Spray, Non-Conductive - 65 to +200°C	YES
N	ALUMINIUM	ELECTROLESS NICKEL	AMS-C-26074 Class 4 Grade B; ASTM B 733, SC 2, Type IV, 96 Hour Salt Spray, Conductive -65 to +200°C	YES
W	ALUMINIUM	CADMIUM - OLIVE DRAB	SAE-AMS-QQ-P-416 Type II Class 2 over electroless nickel 500 Hour Salt Spray, Conductive -65 to +175°C	NO
WS	ALUMINIUM	CADMIUM - OLIVE DRAB	SAE-AMS-QQ-P-416 Type II Class 2 over electroless nickel 1000 Hour Salt Spray, Conductive -65 to +175°C	NO
Z	ALUMINIUM	ZINC NICKEL - BLACK	ASTM B841 Grade 5 over electroless nickel 500 Hour Salt Spray, Conductive -65 to +175°C	YES
VB	ALUMINIUM	ZINC COBALT - BLACK	ASTM B 840 Grade 6 Type D over electroless nickel 350 Hour Salt Spray, Conductive -65 to +175°C	YES
VO	ALUMINIUM	ZINC COBALT - OLIVE DRAB	ASTM B 840 Grade 6 Type D over electroless nickel, 350 Hour Salt Spray, Conductive -65 to +175°C	YES
NU	MARINE BRONZE	UNPLATED	1000 Hour Salt Spray, Conductive -65 to +200°C	YES
NS	MARINE BRONZE	SHOT BLASTED	1000 Hour Salt Spray, Conductive -65 to +200°C	YES
S	STAINLESS STEEL	PASSIVATION	SAE-AMS-SAE-AMS-QQ-P-35 Type VI 1000 Hour Salt Spray, Conductive -65 to +200°C	YES

## STANDARD MATERIALS

STANDARD MATERIALS	
PART DESCRIPTION	MATERIAL
COUPLING RINGS	ALUMINIUM 6061
BARRELS/BODY	ALUMINIUM 6061
CABLE CLAMP BODY	ALUMINIUM ALLOY A380, ALUMINIUM 6061
CABLE CLAMP SADDLES	ALUMINIUM ALLOY A380, ALUMINIUM 6061
FERRULE	ALUMINIUM 6061
FOLLOWERS	ALUMINIUM 6061
RETAINER RINGS	300 SERIES STAINLESS STEEL
FASTENERS AND WASHERS	300 SERIES STAINLESS STEEL
BRAID	TINNED COPPER PER QQB-575
O-RINGS	SILICONE RUBBER
GROMMET AND BUSHING	NEOPRENE, SILICONE RUBBER
SELF-LOCK CLIPS	NON CORROSIVE MATERIAL



## LANYARD OPTIONS

### LANYARD OPTIONS



SC- Stainless Steel Sash Chain



Stainless Steel rope with various Jacket Option\*\*



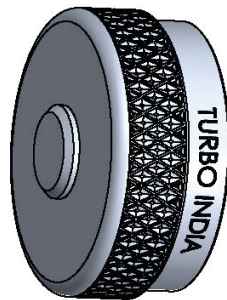
NB- Nylon Rope - Black



CF - Crimp Ferrule Option



FERRULE  
SUPPLIED LOOSE



NA -No Accessory

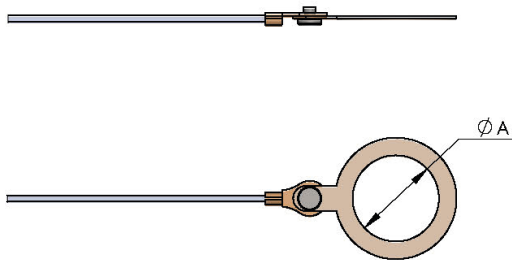
CODE	JACKET OPTION **
Y	Stainless Steel Wire Rope, Nylon Jacket
T	Stainless Steel Wire Rope, Teflon Jacket
P	Stainless Steel Wire Rope, PVC Jacket



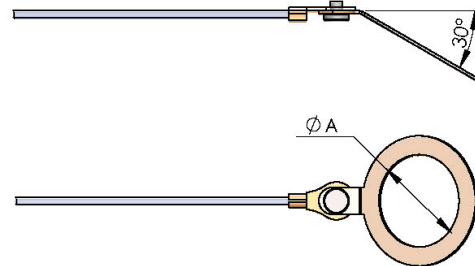
## SOLID RING OPTIONS

### SOLID RINGS

STRAIGHT RING



BEND RING



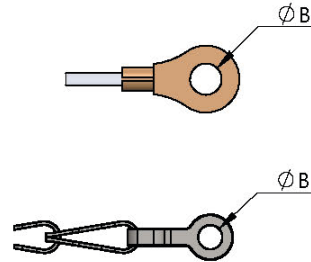
SOLID RING OPTION					
STRAIGHT RING			BEND RING		
DASH NO	Ø A ± 0.40 (mm)	Ø A ±0.015 (inch)	DASH NO	Ø A ± 0.40 (mm)	Ø A ±0.015 (inch)
150	15.00	0.590	150B	15.00	0.590
184	18.40	0.724	184B	18.40	0.724
232	23.20	0.913	232B	23.20	0.913
265	26.50	1.043	265B	26.50	1.043
303	30.30	1.192	303B	30.30	1.192
326	32.60	1.283	326B	32.60	1.283
365	36.50	1.437	365B	36.50	1.437
393	39.30	1.547	393B	39.30	1.547
429	42.90	1.688	429B	42.90	1.688
450	45.00	1.771	450B	45.00	1.771

\*STANDARD SIZES ARE LISTED. CUSTOMIZATION IS POSSIBLE FOR RING AND EYELET. CONTACT BACKSHELLS@ASTUTE.GLOBAL

SUGGESTED STRAIGHT SOLID RING FOR MILDTL-38999 SERIES III (ADD 'B' TO END OF DASH NO. FOR BEND RING)		
SHELL SIZE	PLUG DASH NO.	RECEPTACLE DASH NO.
9 / A	150	184
11 / B	184	232
13 / C	232	265
15 / D	232	303
17 / E	265	326
19 / F	303	365
21 / G	326	393
23 / H	365	429
25 / J	393	450

## EYELET OPTIONS

### EYELET



EYELET OPTION		
DASH NO	Ø B ± 0.25 (mm)	Ø B ± 0.01 (inch)
01	3.60	0.140
02	4.60	0.182
03	4.90	0.191
04	5.00	0.197
05	4.20	0.167
06	3.20	0.125
07	5.50	0.218
08	4.00	0.156
00	NO EYELET	

## INTERFACE TABLE

A - INTERFACE		
SHELL SIZE	A THREAD	MAX ENTRY
08	1/2 - 20 UNEF	04
10	5/8 - 24 UNEF	06
12	3/4 - 20 UNEF	08
14	7/8 - 20 UNEF	09
16	1 - 20 UNEF	11
18	1 1/16 - 18 UNEF	12
20	1 3/16 - 18 UNEF	14
22	1 5/16 - 18 UNEF	16
24	1 7/16 - 18 UNEF	18

D - INTERFACE		
SHELL SIZE	A THREAD	MAX ENTRY
08	7/16 - 28 UNEF	04
10	9/16 - 24 UNEF	06
12	11/16 - 24 UNEF	08
14	13/16 - 20 UNEF	10
16	15/16 - 18 UNEF	12
18	1 -1/16 - 18 UNEF	14
20	1 -3/16-18UNEF	16
22	1 -5/16 - 18 UNEF	18
24	1 -7/16 - 18 UNEF	20

F - INTERFACE		
SHELL SIZE	A THREAD	MAX ENTRY
08	7/16 - 28 UNEF	04
10	9/16 - 24 UNEF	06
12	11/16 - 24 UNEF	08
14	13/16 - 20 UNEF	10
16	15/16 - 18 UNEF	12
18	1 -1/16 - 18 UNEF	14
20	1 -3/16-18UNEF	16
22	1 -5/16 - 18 UNEF	18
24	1 -7/16 - 18 UNEF	20

H - INTERFACE		
SHELL SIZE	A THREAD	MAX ENTRY
09	M12 x 1.0	05
11	M15 x 1.0	07
13	M18 x 1.0	09
15	M22 x 1.0	11
17	M25 x 1.0	13
19	M28 x 1.0	14
21	M31 x 1.0	16
23	M34 x 1.0	18
25	M37 x 1.0	20



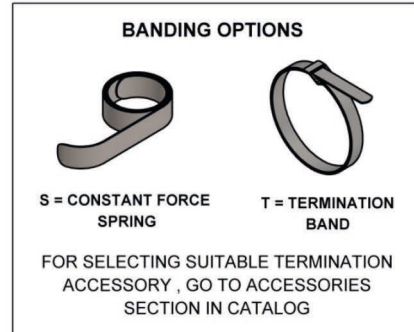
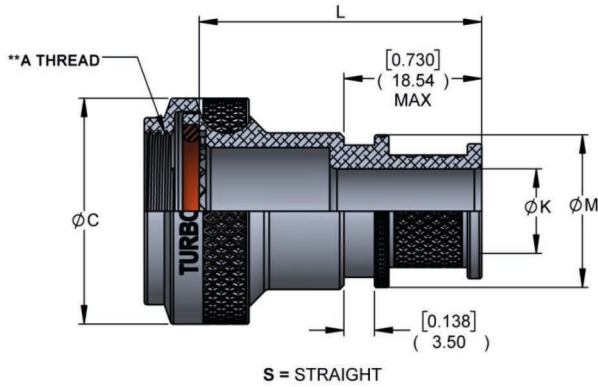


## CIRCULAR BACKSHELLS PRODUCT CATALOGUE

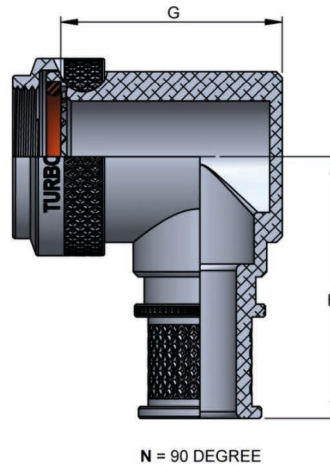
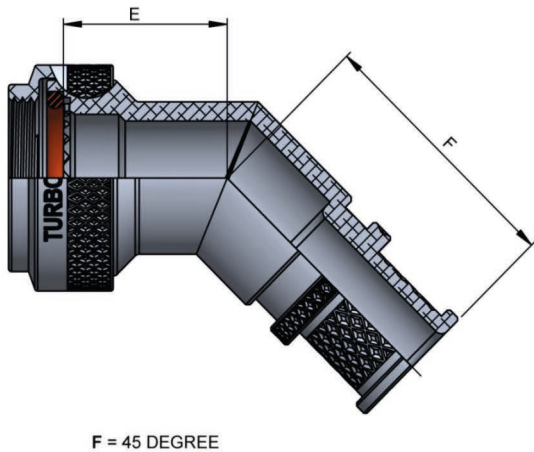


## SERIES 21

### EMI/RFI Banding /Spring Adaptor

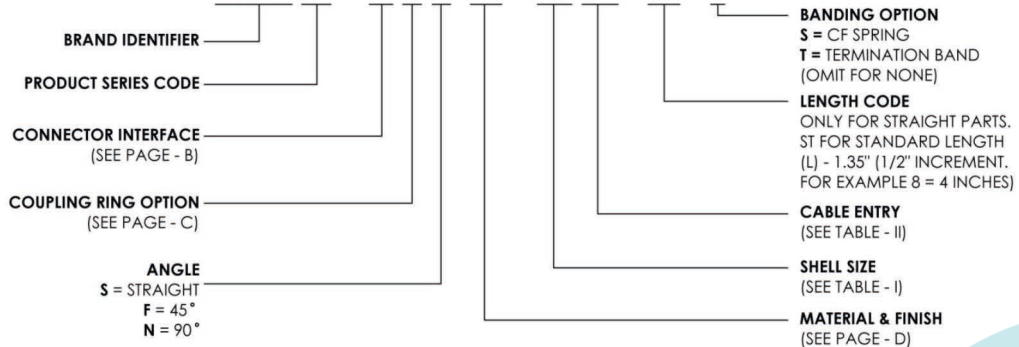


\*\*FOR A-THREAD DIMENSIONS & MAX ENTRY SIZES, REFER PAGE H.



## ORDERING INFORMATION

**ASTB 21 - A 3 N VB - 18 07 - ST - T**



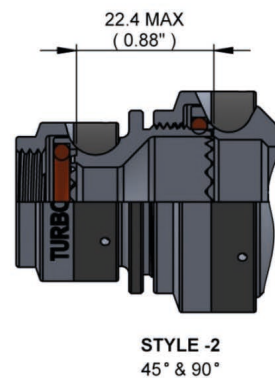
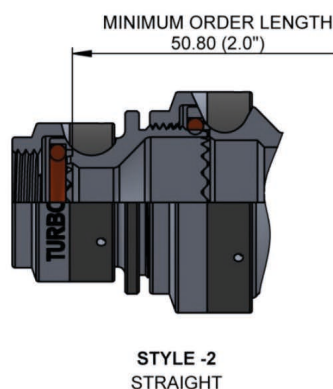
## SERIES 21

### EMI/RFI Banding /Spring Adaptor

TABLE - I SHELL SIZE							
CONNECTOR DESIGNATOR			RING DIMENSION	ELBOW DIMENSIONS			
A	F&D	H	Ø C MAX	E MAX	F MAX	G MAX	H MAX
08	08	09	22.48	26.50	30.30	35.73	36.79
10	10	11	25.65	27.00	31.00	37.30	38.39
12	12	13	28.83	27.70	31.50	40.47	40.25
14	14	15	32.00	28.20	32.30	43.65	41.80
16	16	17	35.18	29.00	32.80	45.25	43.42
18	18	19	38.35	29.20	33.10	48.43	45.83
20	20	21	41.53	30.00	33.80	50.03	46.42
22	22	23	44.70	30.50	34.60	53.17	48.02
24	24	25	47.88	31.30	35.10	54.78	49.54

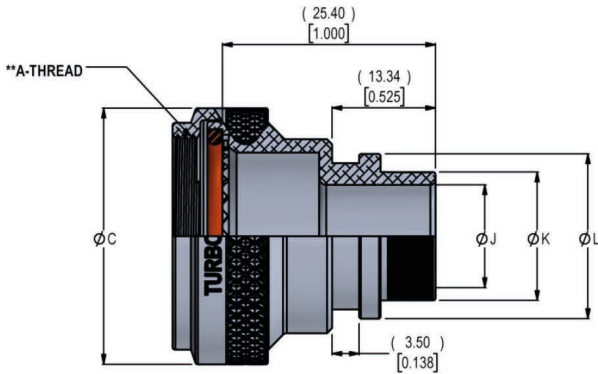
TABLE- II CABLE ENTRY		
DASH NO	Ø K +0.20	Ø M MAX
02	3.2	10.41
03	4.7	11.91
04	6.3	13.51
05	7.9	15.11
06	9.5	16.71
07	11.1	18.31
08	12.7	19.91
09	14.2	21.41
10	15.8	23.01
11	17.4	24.61
12	19.0	26.21
13	20.6	27.81
14	22.2	29.41
15	23.8	31.01
16	25.4	32.61
18	28.6	35.81
20	31.8	39.01
22	35.0	42.21
24	38.1	45.31

1. WHEN MAXIMUM CABLE ENTRY IS EXCEEDED, STYLE-2 WILL BE SUPPLIED. IN THAT CONDITION, DIMENSIONS E, F, G AND H WILL NOT APPLY.
2. FOR ANY KIND OF CUSTOMISATION ON THIS BACKSHELL PLEASE CONTACT [BACKSHELLS@ASTUTE.GLOBAL](mailto:BACKSHELLS@ASTUTE.GLOBAL)

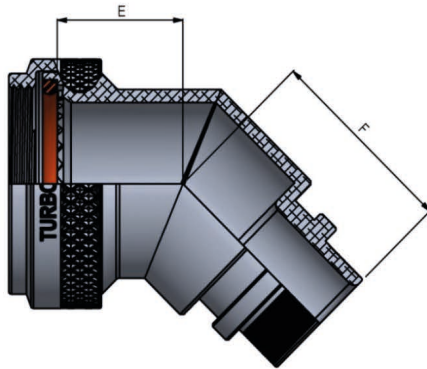


## SERIES 31

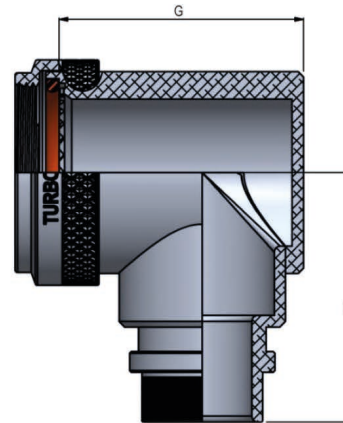
### EMI/RFI Memory Ring Adaptor



S = STRAIGHT



F = 45 DEGREE



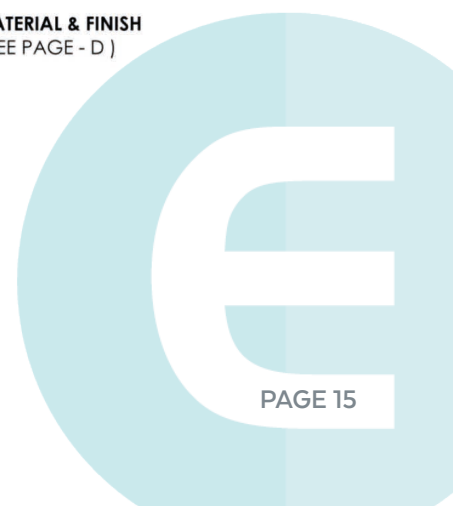
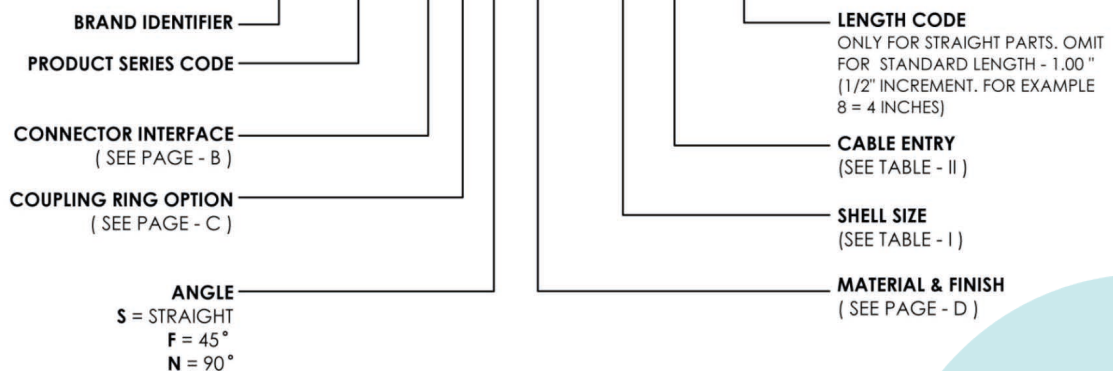
N = 90 DEGREE



\*\*FOR A-THREAD DIMENSIONS & MAX ENTRY SIZES, REFER PAGE H.

### ORDERING INFORMATION

**ASTB 31 - H 3 S VB - 15 10 - 8**



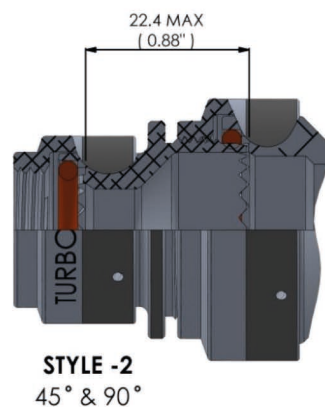
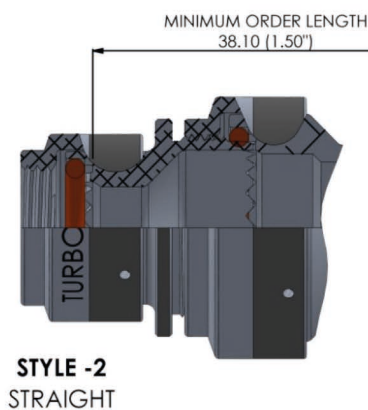
## SERIES 31

### EMI/RFI Memory Ring Adaptor

TABLE - I SHELL SIZE							
CONNECTOR DESIGNATOR			RING DIMENSION	ELBOW DIMENSIONS			
A	F & D	H	ØC MAX	E MAX	F MAX	G MAX	H MAX
08	08	09	22.48	17.10	27.30	25.00	26.70
10	10	11	25.65	17.30	28.00	27.00	28.50
12	12	13	28.83	17.80	28.50	29.50	30.00
14	14	15	32.00	18.60	29.50	31.00	30.80
16	16	17	35.18	19.50	30.20	34.50	33.20
18	18	19	38.35	19.70	31.00	37.50	33.20
20	20	21	41.53	20.60	31.40	42.50	34.80
22	22	23	44.70	20.80	31.60	44.50	36.30
24	24	25	47.88	22.30	32.60	45.50	37.90

TABLE- II CABLE ENTRY			
DASH NO	ØJ +0.20	ØK MAX	ØL MAX
04	6.30	9.64	14.14
05	7.90	11.24	15.74
06	9.50	12.84	17.34
07	11.10	14.44	18.94
08	12.70	16.04	20.54
10	15.80	19.14	23.64
12	19.00	22.34	26.84
14	22.20	25.54	30.04
16	25.40	28.74	33.24
18	28.60	31.94	36.44
20	31.80	35.14	39.64
22	35.00	38.34	42.84
24	38.10	41.44	45.94

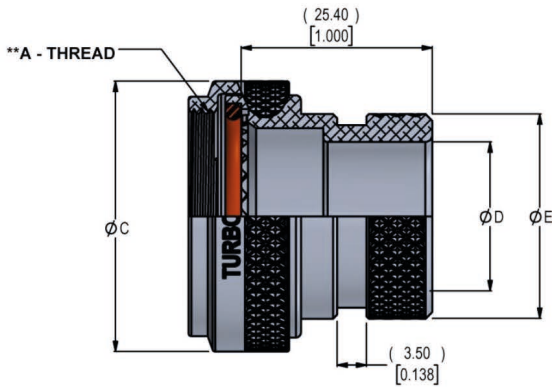
1. WHEN MAXIMUM CABLE ENTRY IS EXCEEDED, STYLE-2 WILL BE SUPPLIED. IN THAT CONDITION, DIMENSIONS E, F, G AND H WILL NOT APPLY.
2. FOR ANY KIND OF CUSTOMISATION ON THIS BACKSHELL, TERMINATION BANDS OR ACCESSORIES PLEASE CONTACT [BACKSHELLS@ASTUTE.GLOBAL](mailto:BACKSHELLS@ASTUTE.GLOBAL)





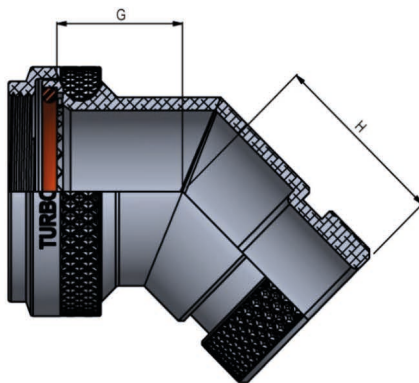
## SERIES 41

### Shrink Boot Adaptor - O Ring Sealed

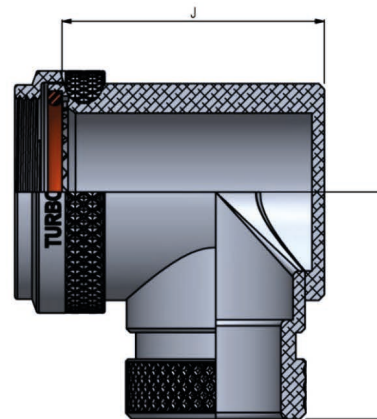


\*\*FOR A-THREAD DIMENSIONS & MAX ENTRY SIZES, REFER PAGE H.

S = STRAIGHT



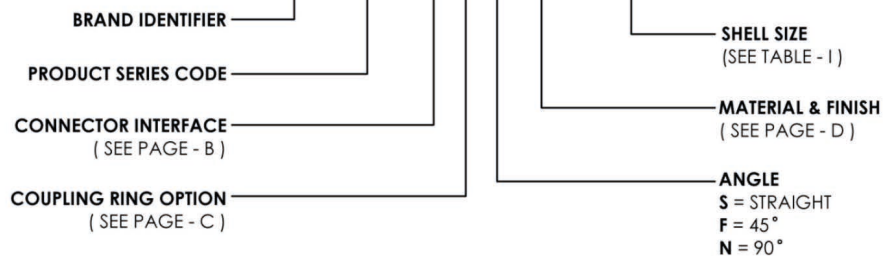
F = 45 DEGREE



N = 90 DEGREE

### ORDERING INFORMATION

**ASTB 41 - H 3 S VO - 11**



## SERIES 41

### Shrink Boot Adaptor - O Ring Sealed

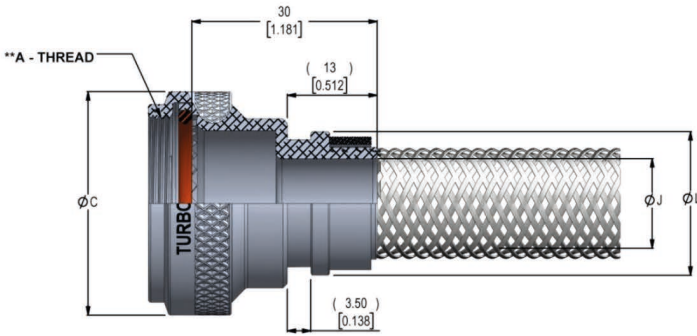
TABLE - I SHELL SIZE									
CONNECTOR DESIGNATOR			RING DIMENSION	ENTRY DIMENSIONS		ELBOW DIMENSIONS			
A	F & D	H	Ø C MAX	Ø D MIN	Ø E MAX	G MAX	H MAX	J MAX	K MAX
08	08	09	22.48	6.3	13.50	17.00	21.40	25.70	24.20
10	10	11	25.65	9.5	15.40	17.70	22.10	26.70	25.70
12	12	13	28.83	12.7	19.70	18.30	22.60	31.20	27.20
14	14	15	32.00	14.2	21.30	18.70	23.40	37.20	29.00
16	16	17	35.18	17.4	24.50	19.40	23.90	40.20	30.50
18	18	19	38.35	19.0	26.50	19.80	24.20	44.70	31.00
20	20	21	41.53	22.2	30.90	20.40	24.70	49.20	32.60
22	22	23	44.70	25.4	34.40	21.10	25.70	51.70	34.60
24	24	25	47.88	28.6	36.70	21.70	26.50	53.20	36.40

FOR ANY KIND OF CUSTOMISATION ON THIS BACKSHELL, TERMINATION BANDS OR ACCESSORIES PLEASE CONTACT [BACKSHELLS@ASTUTE.GLOBAL](mailto:BACKSHELLS@ASTUTE.GLOBAL)

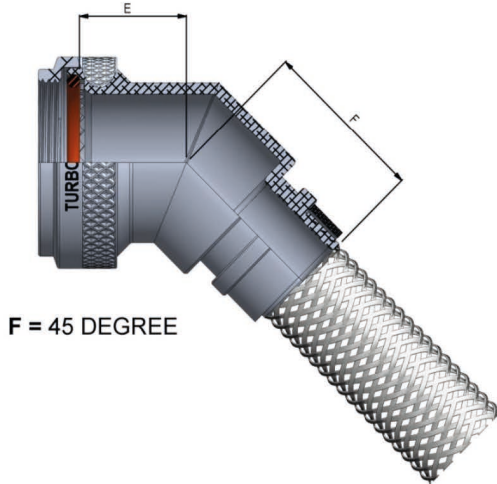


## SERIES 51

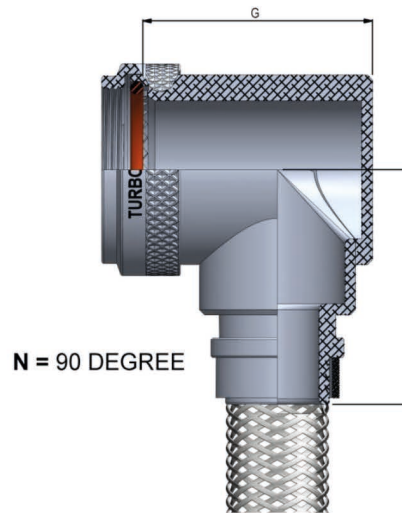
### Shield Sock Shrink Boot Adaptor



**S = STRAIGHT**



**F = 45 DEGREE**



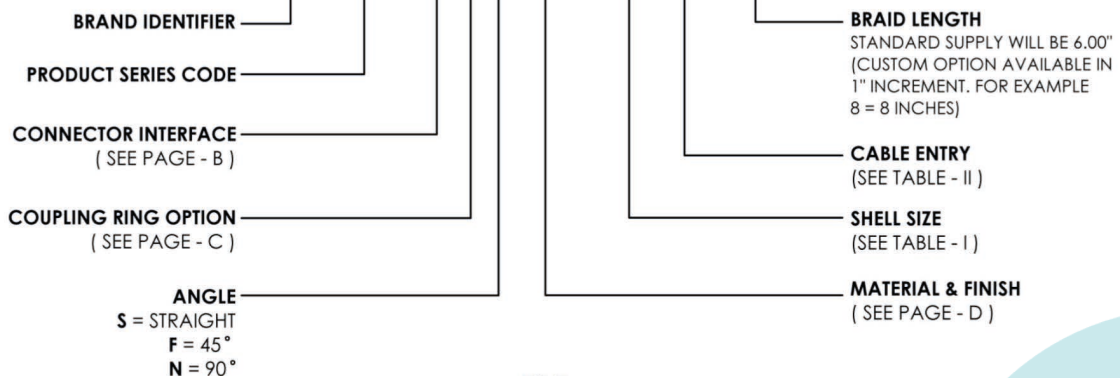
**N = 90 DEGREE**



**\*\*FOR A-THREAD DIMENSIONS & MAX ENTRY SIZES, REFER PAGE H.**

### ORDERING INFORMATION

**ASTB 51 - H 3 F VB - 17 08 - 8**



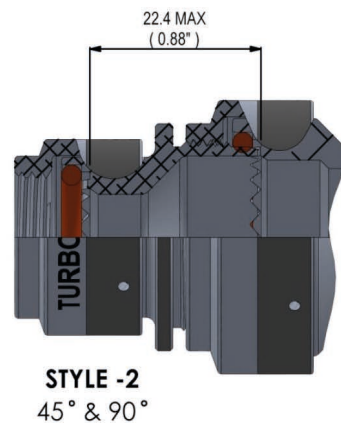
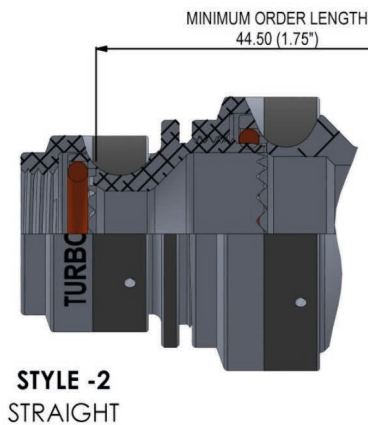
## SERIES 51

### Shield Sock Shrink Boot Adaptor

TABLE - I SHELL SIZE							
CONNECTOR DESIGNATOR			RING DIMENSION	ELBOW DIMENSIONS			
A	F & D	H	Ø C MAX	E MAX	F MAX	G MAX	H MAX
08	08	09	22.48	21.90	27.30	25.70	30.10
10	10	11	25.65	22.70	28.10	26.70	31.90
12	12	13	28.83	23.20	28.70	31.20	33.40
14	14	15	32.00	23.70	29.40	37.20	35.00
16	16	17	35.18	24.40	29.90	40.20	36.50
18	18	19	38.35	24.90	30.40	44.70	37.80
20	20	21	41.53	25.70	31.20	49.20	39.50
22	22	23	44.70	26.20	31.70	51.70	40.80
24	24	25	47.88	27.00	32.40	53.20	42.60

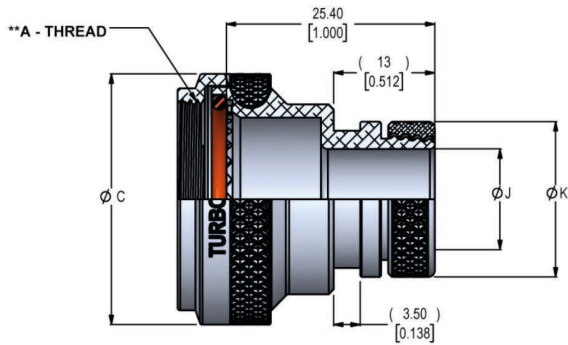
TABLE- II CABLE ENTRY		
DASH NO	Ø J +0.20	Ø L MAX
03	4.8	12.50
04	6.3	14.00
05	7.9	15.60
06	9.5	17.20
07	11.1	18.80
08	12.7	20.40
09	14.2	21.90
10	15.8	23.50
11	17.4	25.10
12	19.0	26.70
13	20.6	28.30
14	22.2	29.90
15	23.8	31.50
16	25.4	33.10
20	31.8	39.50
24	38.1	45.80

1. WHEN MAXIMUM CABLE ENTRY IS EXCEEDED, STYLE-2 WILL BE SUPPLIED. IN THAT CONDITION, DIMENSIONS E, F, G AND H WILL NOT APPLY.
2. FOR ANY KIND OF CUSTOMISATION ON THIS BACKSHELL, TERMINATION BANDS OR ACCESSORIES PLEASE CONTACT [BACKSHELLS@ASTUTE.GLOBAL](mailto:BACKSHELLS@ASTUTE.GLOBAL)



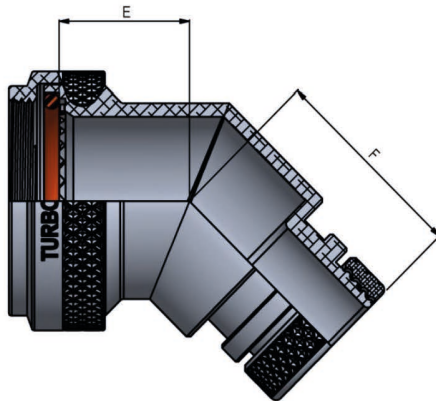
## SERIES 61

### EMI/RFI Lamp Base Thread Adaptor

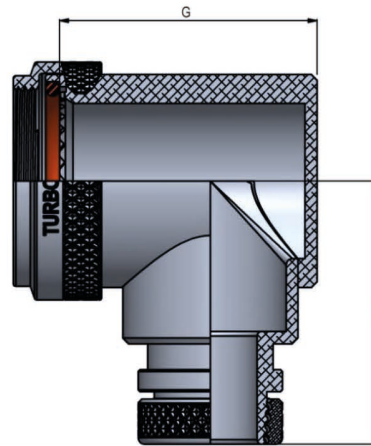


\*\*FOR A-THREAD DIMENSIONS & MAX ENTRY SIZES, REFER PAGE H.

S = STRAIGHT



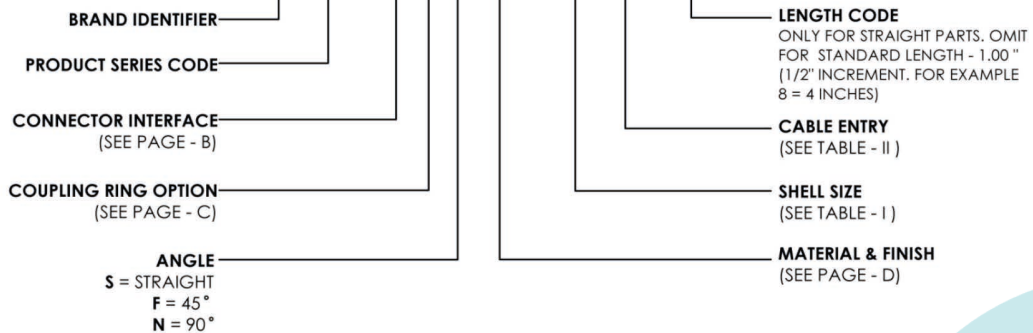
F = 45 DEGREE



N = 90 DEGREE

#### ORDERING INFORMATION

**ASTB 61 - H 3 S VB - 17 08 - 8**



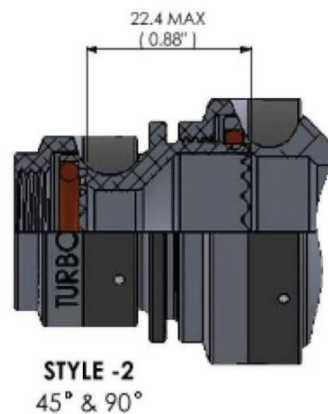
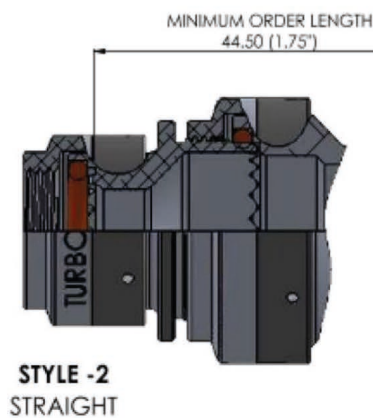
## SERIES 61

### EMI/RFI Lamp Base Thread Adaptor

TABLE - I SHELL SIZE							
CONNECTOR DESIGNATOR			RING DIMENSION	ELBOW DIMENSIONS			
A	F & D	H	Ø C MAX	E MAX	F MAX	G MAX	H MAX
08	08	09	22.48	17.10	19.90	25.00	26.50
10	10	11	25.65	17.30	20.60	27.00	28.20
12	12	13	28.83	17.80	21.10	29.50	32.70
14	14	15	32.00	18.60	21.90	31.00	31.20
16	16	17	35.18	19.50	22.70	34.50	32.90
18	18	19	38.35	19.70	23.00	37.50	34.60
20	20	21	41.53	20.60	23.90	42.50	36.20
22	22	23	44.70	20.80	24.30	44.50	37.60
24	24	25	47.88	22.30	25.10	45.50	39.10

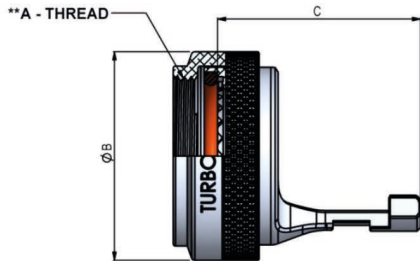
TABLE- II CABLE ENTRY		
DASH NO	Ø J +0.20	Ø K MAX
03	4.7	15.2
04	6.3	15.2
05	7.9	16.8
06	9.5	18.4
07	11.1	20.0
08	12.7	21.6
09	14.2	23.2
10	15.8	24.8
11	17.4	26.4
12	19.0	27.9
13	20.6	29.5
14	22.2	31.1
15	23.8	32.7
16	25.4	34.3
17	27.0	35.9
18	28.6	37.5
19	30.2	39.3
20	31.8	40.6
21	33.3	42.2
22	35.0	43.8
23	36.5	45.4
24	38.1	47.0

1. WHEN MAXIMUM CABLE ENTRY IS EXCEEDED, STYLE-2 WILL BE SUPPLIED. IN THAT CONDITION, DIMENSIONS E, F, G AND H WILL NOT APPLY.
2. FOR ANY KIND OF CUSTOMISATION ON THIS BACKSHELL, TERMINATION BANDS OR ACCESSORIES PLEASE CONTACT [BACKSHELLS@ASTUTE.GLOBAL](mailto:BACKSHELLS@ASTUTE.GLOBAL)

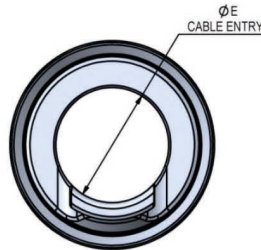


## SERIES 64

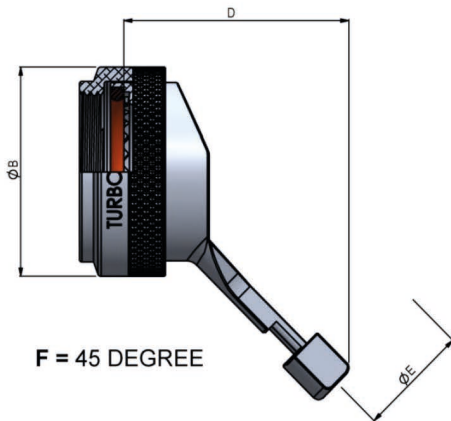
### Tie Strap Adaptor



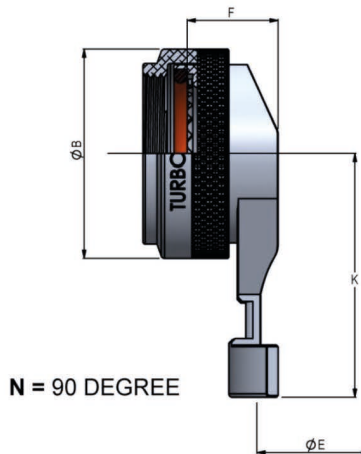
S = STRAIGHT



FOR A-THREAD DIMENSIONS & MAX ENTRY SIZES , REFER PAGE H.



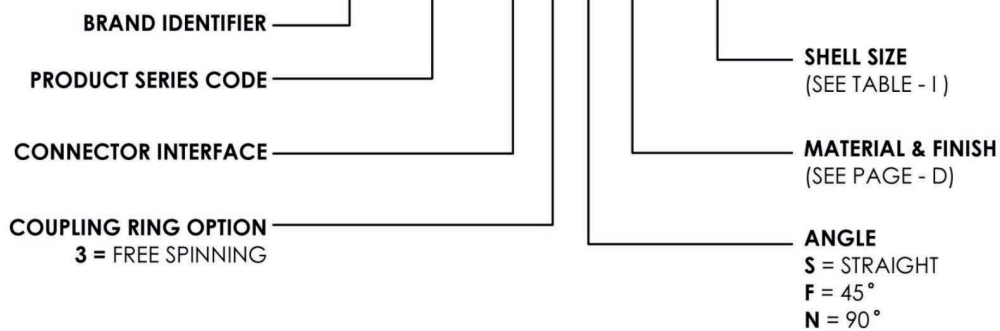
F = 45 DEGREE



N = 90 DEGREE

### ORDERING INFORMATION

**ASTB 64 - H 3 S W - 17**



## SERIES 64

### Tie Strap Adaptor

TABLE - I SHELL SIZE								
CONNECTOR DESIGNATOR			RING DIMENSION	CABLE ENTRY ID	ELBOW DIMENSIONS			
A	F&D	H	Ø B MAX	Ø E +0.20	C MAX	D MAX	F MAX	K MAX
08	08	09	18.90	6.40	22.80	27.90	17.50	22.60
10	10	11	21.70	9.70	22.80	27.90	17.50	24.10
12	12	13	25.30	12.70	24.30	27.90	17.50	27.20
14	14	15	29.20	16.00	28.80	31.00	17.50	33.80
16	16	17	31.90	19.10	28.80	31.90	17.50	35.30
18	18	19	35.30	21.30	30.70	31.90	17.50	37.60
20	20	21	39.20	24.60	34.00	31.90	17.50	42.20
22	22	23	41.45	27.70	37.00	31.90	17.50	47.00
24	24	25	46.02	31.00	40.30	31.90	17.50	48.50



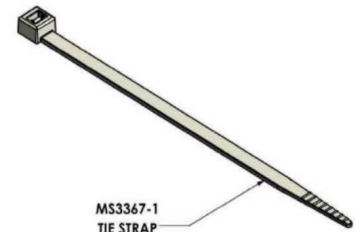
S = STRAIGHT



F = 45 DEGREE



N = 90 DEGREE



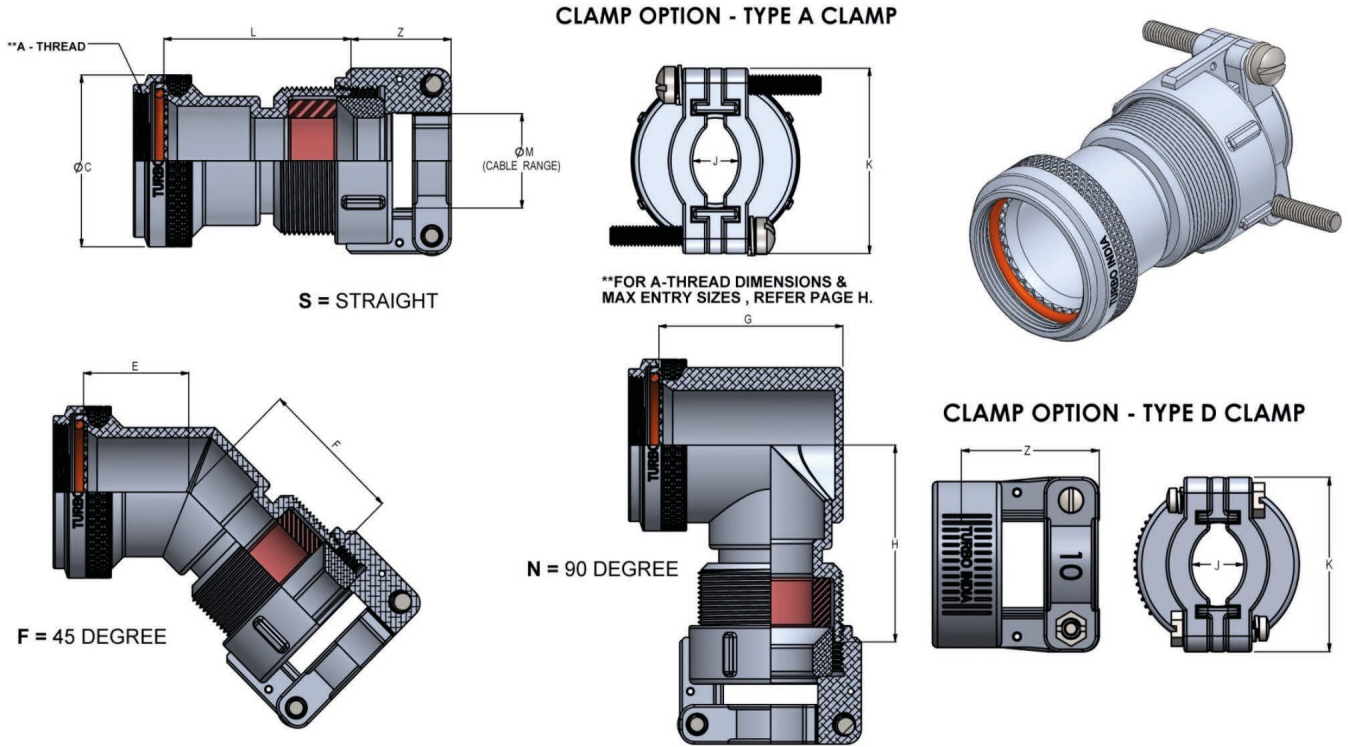
MS3367-1  
TIE STRAP

1. FOR ANY KIND OF CUSTOMISATION ON THIS BACKSHELL, OR ANY OTHER REQUIREMENTS PLEASE CONTACT [BACKSHELLS@ASTUTE.GLOBAL](mailto:BACKSHELLS@ASTUTE.GLOBAL).
2. AVAILABLE ON COUPLING RING OPTIONS 1 & 3 ONLY.
3. USE MS3367-1 TIE-STRAP OR EQUIVALENT WITH THIS BACKSHELL.



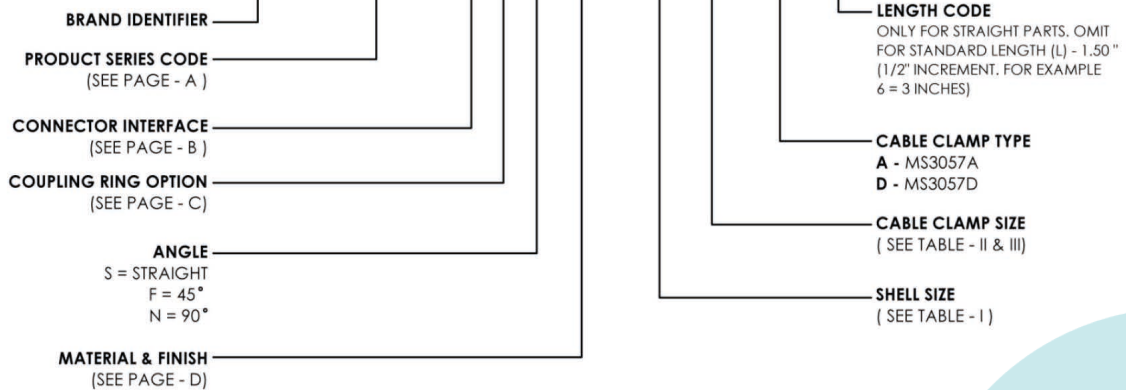
## SERIES 110-01

### Submersible Cable Clamp Adaptor Non Screened, Environmental



### ORDERING INFORMATION

**ASTB 110-01 - H 3 N VB - 15 08 - A - 6**



## SERIES 110-01

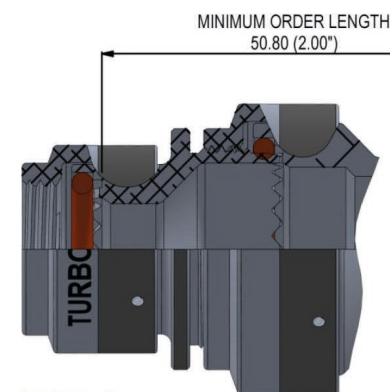
### Submersible Cable Clamp Adaptor Non Screened, Environmental

TABLE - I SHELL SIZE							
CONNECTOR DESIGNATOR			RING DIMENSION	ELBOW DIMENSIONS			
A	F & D	H	Ø C MAX	E MAX	F MAX	G MAX	H MAX
08	08	09	22.48	14.40	27.40	24.20	34.30
10	10	11	25.65	15.20	28.20	27.10	36.10
12	12	13	28.83	15.60	28.70	30.20	37.60
14	14	15	32.00	16.10	29.50	31.70	39.10
16	16	17	35.18	16.70	30.20	34.90	40.60
18	18	19	38.35	17.20	30.50	36.20	41.40
20	20	21	41.53	17.80	31.00	39.40	43.20
22	22	23	44.70	18.50	31.80	42.60	44.70
24	24	25	47.88	19.30	32.50	45.80	46.20

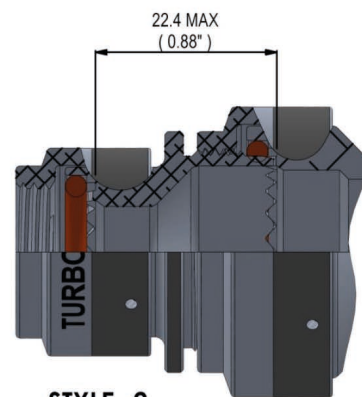
TABLE - II TYPE A - CABLE CLAMP SIZE				
DASH NO	Ø M +0.20	K MAX	J MAX	Z MAX
04	6.3	21.4	4.0	20.2
05	7.9	23.0	4.8	20.2
07	11.1	27.8	7.1	21.8
09	14.2	30.1	8.7	23.4
10	15.8	32.5	9.5	23.4
12	19.0	38.1	11.1	23.4
15	23.8	43.7	14.3	25.8

TABLE - III TYPE D - CABLE CLAMP SIZE				
DASH NO	Ø M +0.20	K MAX	J MAX	Z MAX
05	7.9	24.3	4.2	28.5
07	11.1	29.1	7.3	28.5
09	14.2	33.8	8.7	28.5
10	15.8	33.8	9.5	28.5
12	19.0	39.4	13.2	29.3
15	23.8	45.0	16.3	31.7

1. WHEN MAXIMUM CABLE ENTRY IS EXCEEDED, STYLE-2 WILL BE SUPPLIED. IN THAT CONDITION, DIMENSIONS E, F, G AND H WILL NOT APPLY.
2. FOR ANY KIND OF CUSTOMISATION ON THIS BACKSHELL, TERMINATION BANDS OR ACCESSORIES PLEASE CONTACT [BACKSHELLS@ASTUTE.GLOBAL](mailto:BACKSHELLS@ASTUTE.GLOBAL)



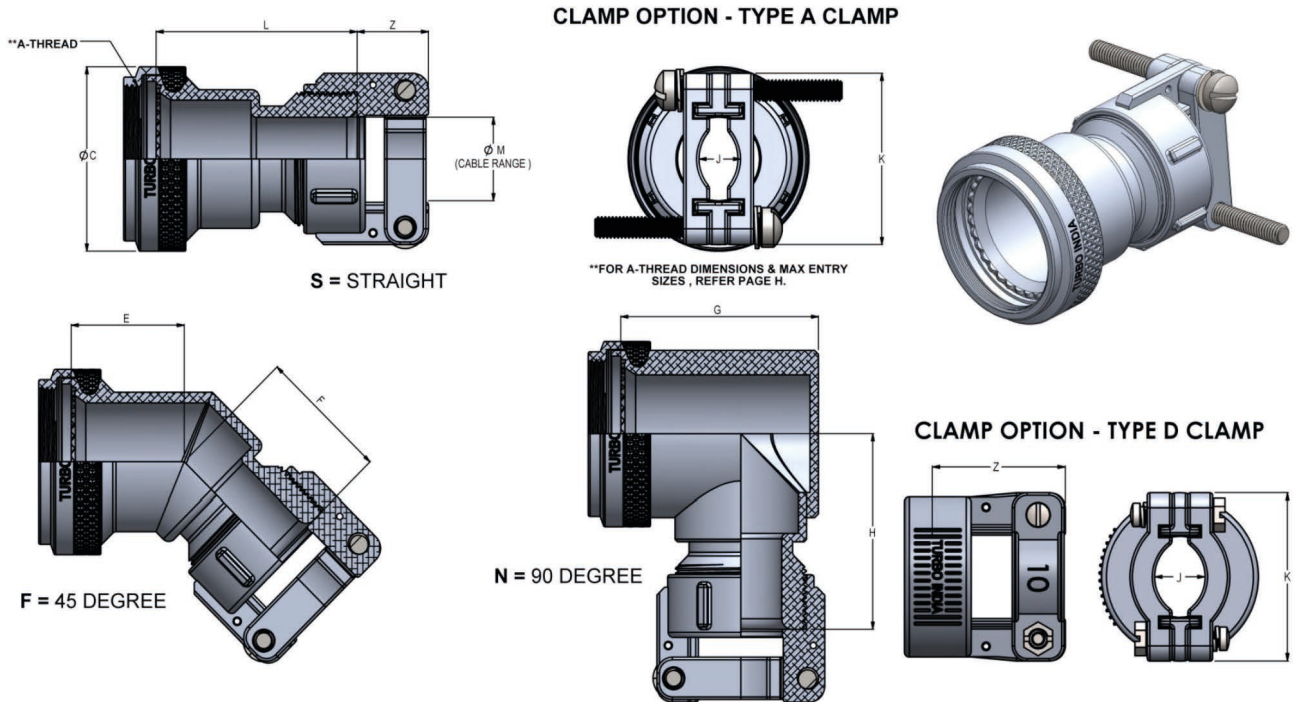
STYLE -2  
STRAIGHT



STYLE -2  
45° & 90°

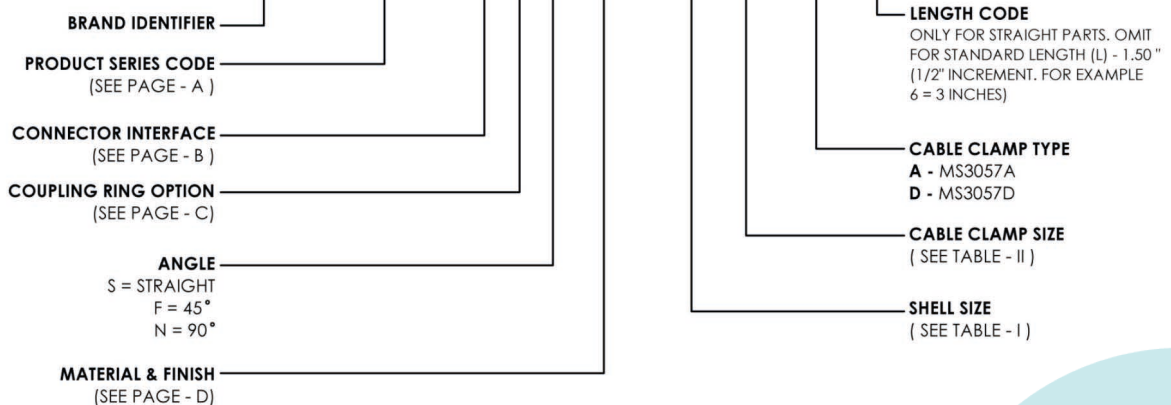
## SERIES 110-02

### Cable Clamp Adaptor Non Screened, Non-Environmental



### ORDERING INFORMATION

**ASTB 110-02 - A 3 N VO - 19 09 - A - 6**



## SERIES 110-02

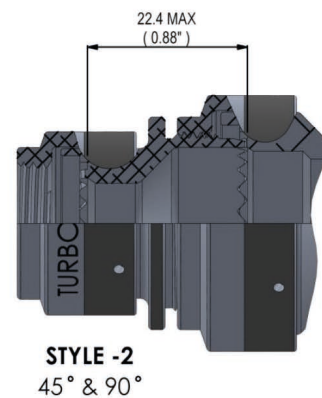
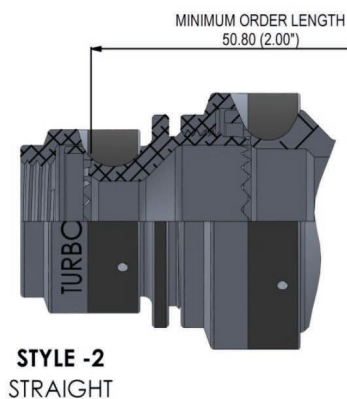
### Cable Clamp Adaptor Non Screened, Non-Environmental

TABLE - I SHELL SIZE							
CONNECTOR DESIGNATOR			RING DIMENSION	ELBOW DIMENSIONS			
A	F & D	H	Ø C MAX	E MAX	F MAX	G MAX	H MAX
08	08	09	22.48	14.40	22.40	24.20	29.70
10	10	11	25.65	15.20	23.10	27.10	31.20
12	12	13	28.83	15.60	23.60	30.20	32.80
14	14	15	32.00	16.10	24.40	31.70	34.30
16	16	17	35.18	16.70	24.90	34.90	36.10
18	18	19	38.35	17.20	25.40	36.20	36.80
20	20	21	41.53	17.80	25.90	39.40	38.40
22	22	23	44.70	18.50	26.70	42.60	39.90
24	24	25	47.88	19.30	27.20	45.80	41.40

TABLE- II TYPE A - CABLE CLAMP SIZE				
DASH NO	ØM +0.20	K MAX	J MAX	Z MAX
04	6.3	21.4	4.0	11.5
05	7.9	23.0	4.8	11.5
07	11.1	27.8	7.1	13.1
09	14.2	30.1	8.7	14.7
10	15.8	32.5	9.5	14.7
12	19.0	38.1	11.1	14.7
15	23.8	43.7	14.3	17.1

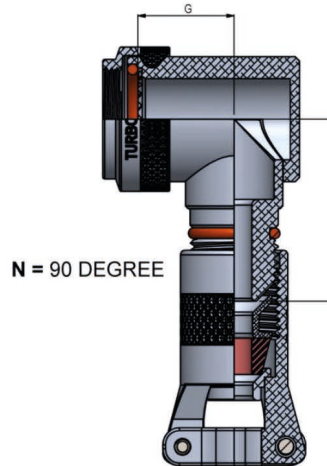
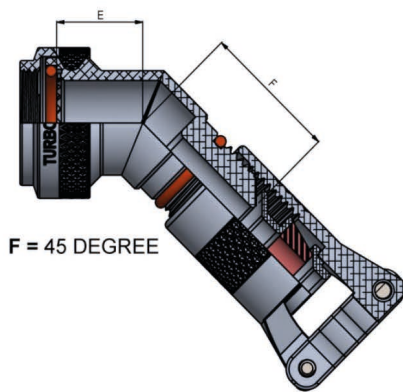
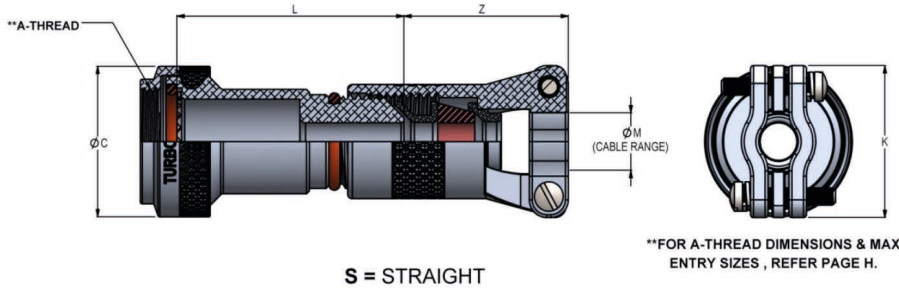
TABLE- II TYPE D - CABLE CLAMP SIZE				
DASH NO	ØM+ 0.20	K MAX	J MAX	Z MAX
05	7.9	24.3	4.2	19.8
07	11.1	29.1	7.3	19.8
09	14.2	33.8	8.7	19.8
10	15.8	33.8	9.5	19.8
12	19.0	39.4	13.2	20.6
15	23.8	45.0	16.3	23.0

1. WHEN MAXIMUM CABLE ENTRY IS EXCEEDED, STYLE-2 WILL BE SUPPLIED. IN THAT CONDITION, DIMENSIONS E, F, G AND H WILL NOT APPLY.
2. FOR ANY KIND OF CUSTOMISATION ON THIS BACKSHELL, TERMINATION BANDS OR ACCESSORIES PLEASE CONTACT [BACKSHELLS@ASTUTE.GLOBAL](mailto:BACKSHELLS@ASTUTE.GLOBAL)



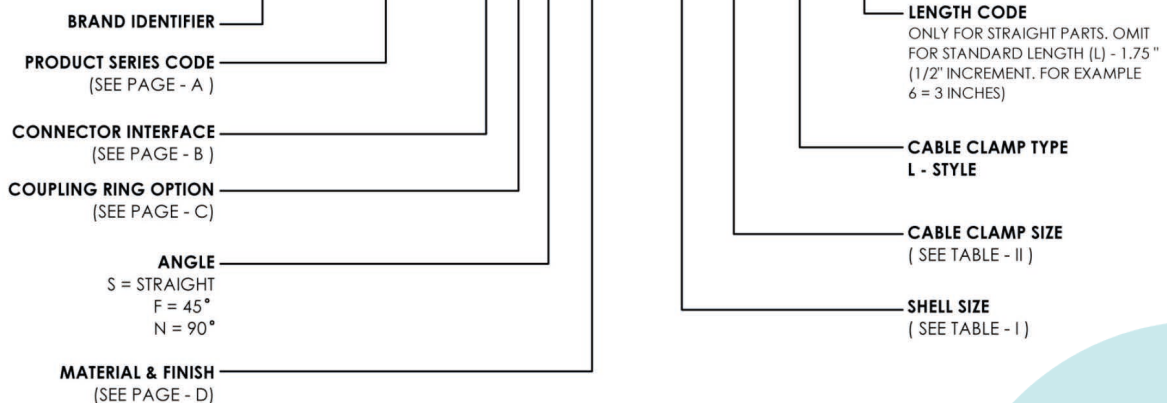
## SERIES 110-03

### Submersible Cable Clamp Adaptor Screened, Environmental



### ORDERING INFORMATION

**ASTB 110-03 - H 3 F VO - 13 04 - L - 6**



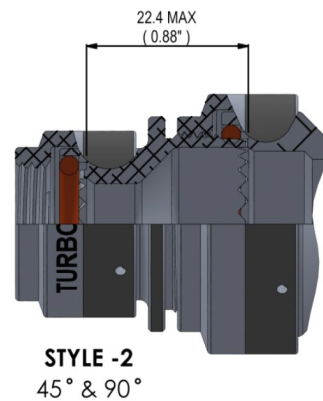
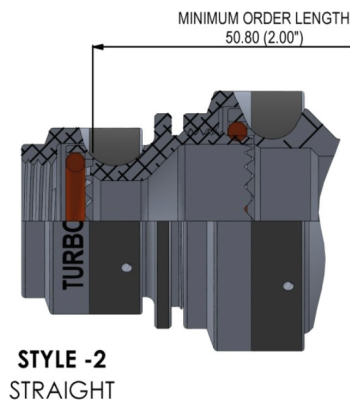
## SERIES 110-03

### Submersible Cable Clamp Adaptor Screened, Environmental

TABLE - I SHELL SIZE							
CONNECTOR DESIGNATOR			RING DIMENSION	ELBOW DIMENSIONS			
A	F & D	H	Ø C MAX	E MAX	F MAX	G MAX	H MAX
08	08	09	22.48	21.00	48.20	23.80	44.90
10	10	11	25.65	21.60	49.80	25.30	45.90
12	12	13	28.83	22.20	51.30	26.90	45.20
14	14	15	32.00	22.70	53.60	28.10	45.20
16	16	17	35.18	23.40	56.40	29.70	46.20
18	18	19	38.35	23.80	61.20	30.70	49.30
20	20	21	41.53	24.40	61.20	32.20	47.50
22	22	23	44.70	25.10	65.00	33.70	49.00
24	24	25	47.88	25.70	65.00	35.20	47.20

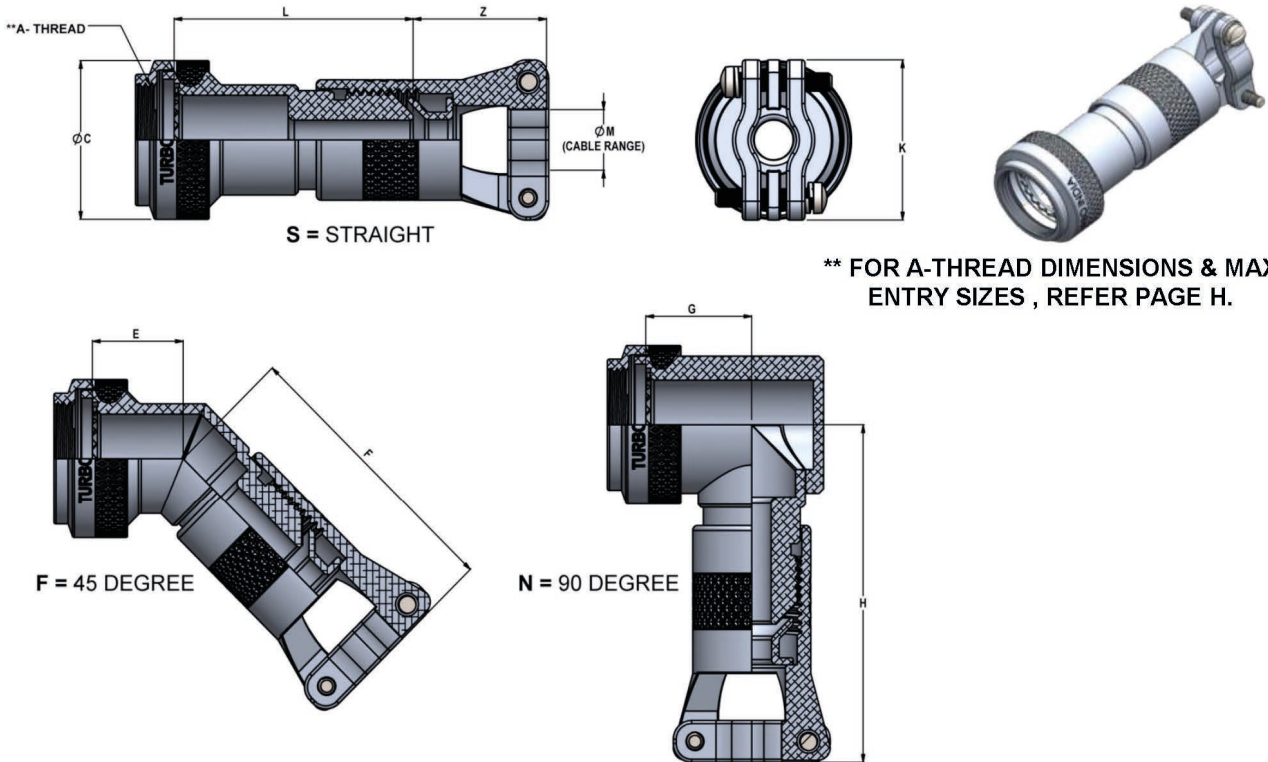
TABLE- II CABLE CLAMP SIZE				
DASH NO	Ø M MIN	Ø M MAX	K MAX	Z MAX
01	1.6	3.2	19.8	29.5
02	3.2	6.3	24.6	29.5
04	6.3	9.5	26.6	29.5
06	9.5	12.7	29.4	29.5
08	12.7	15.8	30.9	29.5
10	15.8	19.0	34.1	29.5
12	19.0	22.2	37.3	29.5
14	22.2	25.4	40.5	29.5
16	25.4	28.6	43.6	29.5
18	28.6	31.8	46.8	29.5

1. WHEN MAXIMUM CABLE ENTRY IS EXCEEDED, STYLE-2 WILL BE SUPPLIED. IN THAT CONDITION, DIMENSIONS E, F, G AND H WILL NOT APPLY.
2. FOR ANY KIND OF CUSTOMISATION ON THIS BACKSHELL, TERMINATION BANDS OR ACCESSORIES PLEASE CONTACT [BACKSHELLS@ASTUTE.GLOBAL](mailto:BACKSHELLS@ASTUTE.GLOBAL)



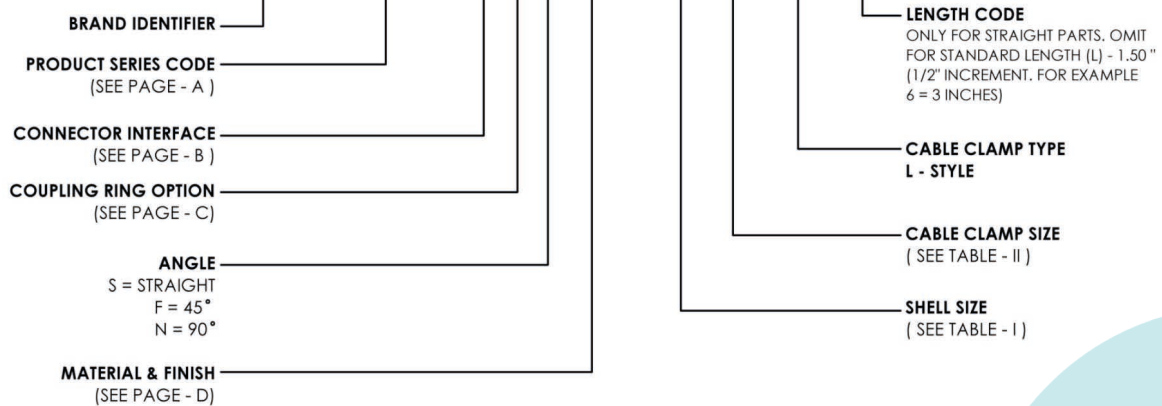
## SERIES 110-04

Cable Clamp Adaptor - Screened,  
Non - Environmental



### ORDERING INFORMATION

**ASTB 110-04 - H 3 F VO - 13 04 - L - 6**



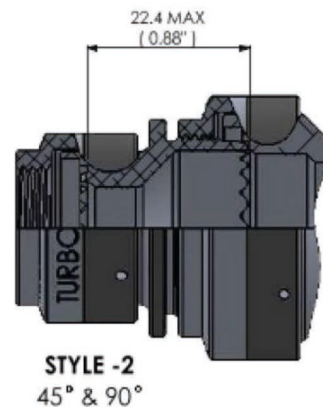
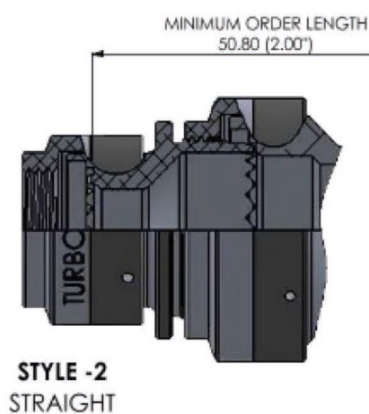
## SERIES 110-04

Cable Clamp Adaptor - Screened,  
Non - Environmental

TABLE - I SHELL SIZE							
CONNECTOR DESIGNATOR			RING DIMENSION	ELBOW DIMENSIONS			
A	F & D	H	ØC MAX	E MAX	F MAX	G MAX	H MAX
08	08	09	22.48	11.68	80.01	17.53	87.88
10	10	11	25.65	13.21	81.53	19.81	90.93
12	12	13	28.83	14.73	83.06	20.32	91.44
14	14	15	32.00	16.51	85.34	22.35	93.22
16	16	17	35.18	18.80	88.14	23.62	95.50
18	18	19	38.35	23.62	92.96	25.65	99.82
20	20	21	41.53	23.62	92.96	26.92	99.82
22	22	23	44.70	25.91	96.77	29.72	102.62
24	24	25	47.88	25.91	96.77	29.97	102.62

TABLE- II CABLE CLAMP SIZE				
DASH NO	ØM MIN	ØM MAX	K MAX	Z MAX
01	1.6	3.2	19.8	31.75
02	3.2	6.4	24.6	31.75
04	6.4	9.5	26.6	31.75
06	9.5	12.7	29.4	31.75
08	12.7	15.9	30.9	33.27
10	15.9	19.1	34.1	35.05
12	19.1	22.2	37.3	38.10
14	22.2	25.4	40.5	41.40
16	25.4	28.6	43.6	41.40
18	28.6	31.8	46.8	41.40

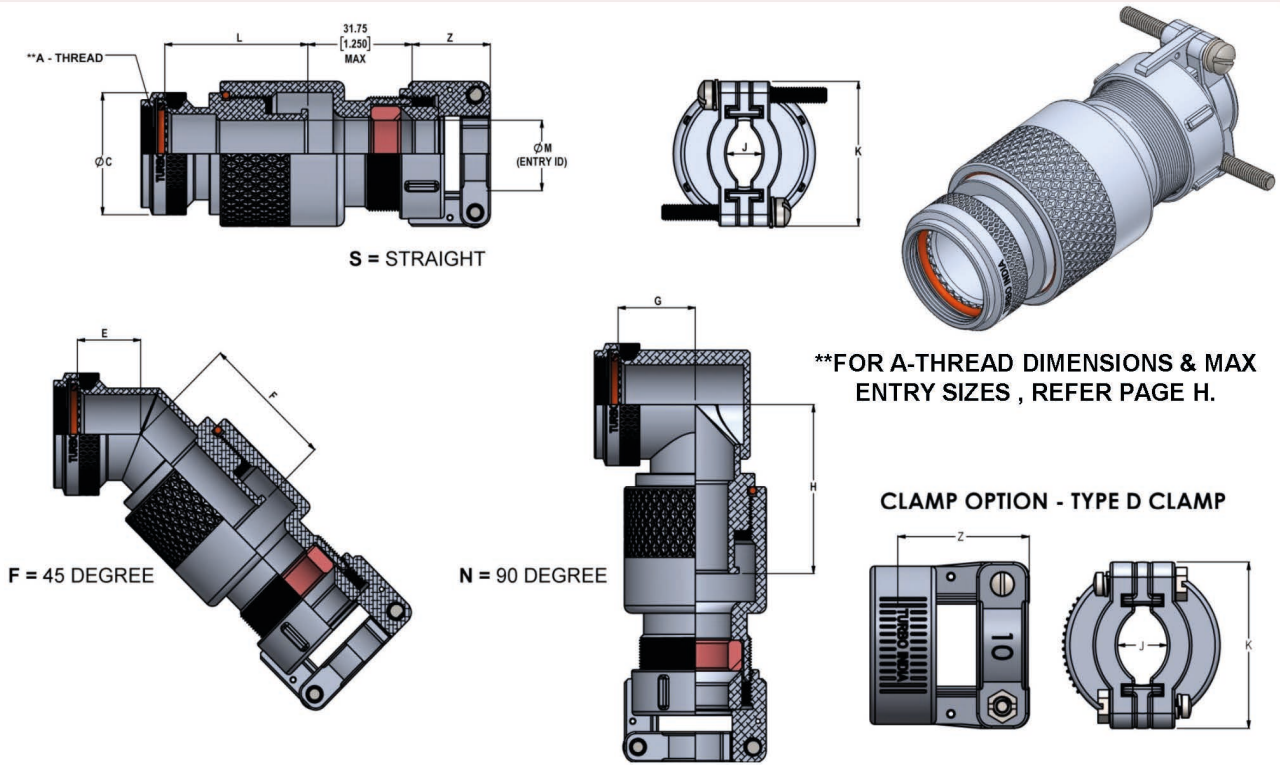
1. WHEN MAXIMUM CABLE ENTRY IS EXCEEDED, STYLE-2 WILL BE SUPPLIED. IN THAT CONDITION, DIMENSIONS E, F, G AND H WILL NOT APPLY.
2. FOR ANY KIND OF CUSTOMISATION ON THIS BACKSHELL, TERMINATION BANDS OR ACCESSORIES PLEASE CONTACT [BACKSHELLS@ASTUTE.GLOBAL](mailto:BACKSHELLS@ASTUTE.GLOBAL)





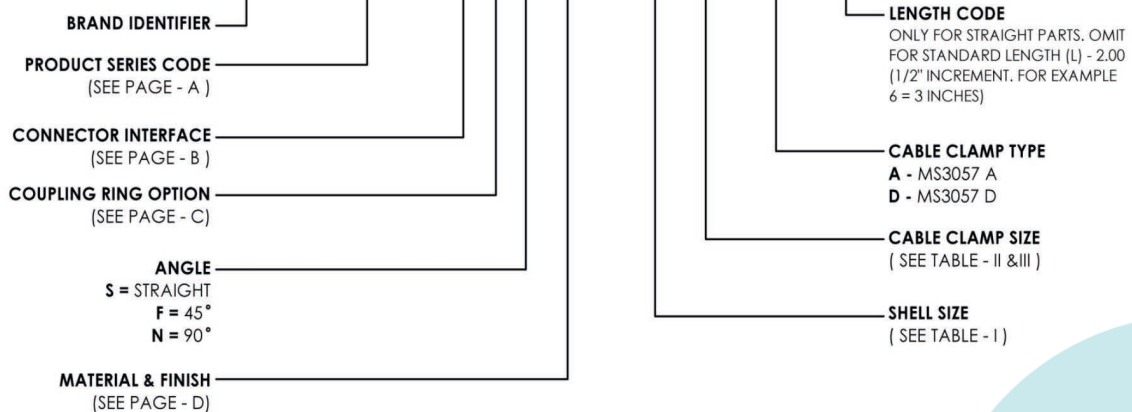
## SERIES 160-01

### Band-in-a-Can Backshell, Environmental



### ORDERING INFORMATION

**ASTB 160-01 - H 3 F VO - 17 10 - A - 6**



## SERIES 160-01

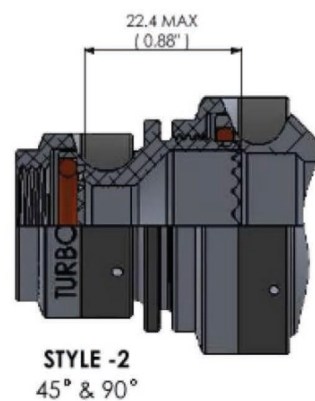
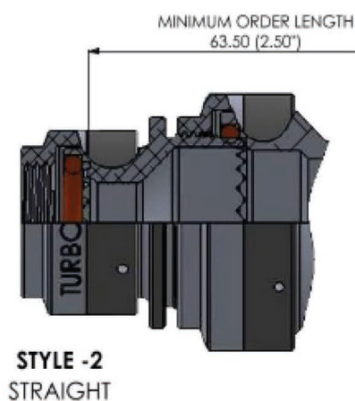
Band-in-a-Can Backshell,  
Environmental

TABLE - I SHELL SIZE							
CONNECTOR DESIGNATOR			RING DIMENSION	ELBOW DIMENSIONS			
A	F & D	H	∅ C MAX	E MAX	F MAX	G MAX	H MAX
08	08	09	22.48	21.00	35.10	23.80	38.10
10	10	11	25.65	21.60	35.80	25.30	39.40
12	12	13	28.83	22.20	36.30	26.90	40.90
14	14	15	32.00	22.70	37.10	28.10	42.70
16	16	17	35.18	23.40	37.60	29.70	44.20
18	18	19	38.35	23.80	37.80	30.70	44.70
20	20	21	41.53	24.40	38.40	32.20	46.20
22	22	23	44.70	25.10	39.40	33.70	48.30
24	24	25	47.88	25.70	40.10	35.20	50.00

1. WHEN MAXIMUM CABLE ENTRY IS EXCEEDED, STYLE-2 WILL BE SUPPLIED. IN THAT CONDITION, DIMENSIONS E, F, G AND H WILL NOT APPLY.
2. FOR ANY KIND OF CUSTOMISATION ON THIS BACKSHELL, TERMINATION BANDS OR ACCESSORIES PLEASE CONTACT [BACKSHELLS@ASTUTE.GLOBAL](mailto:BACKSHELLS@ASTUTE.GLOBAL)

TABLE - II TYPE A - CABLE CLAMP SIZE				
DASH NO	∅ M +0.20	K MAX	J MAX	Z MAX
04	6.3	21.4	4.0	20.2
05	7.9	23.0	4.8	20.2
07	11.1	27.8	7.1	21.8
09	14.2	30.1	8.7	23.4
10	15.8	32.5	9.5	23.4
12	19.0	38.1	11.1	23.4
15	23.8	43.7	14.3	25.8

TABLE - III TYPE D - CABLE CLAMP SIZE				
DASH NO	∅ M +0.20	K MAX	J MAX	Z MAX
05	7.9	24.3	4.2	28.5
07	11.1	29.1	7.3	28.5
09	14.2	33.8	8.7	28.5
10	15.8	33.8	9.5	28.5
12	19.0	39.4	13.2	29.3
15	23.8	45.0	16.3	31.7



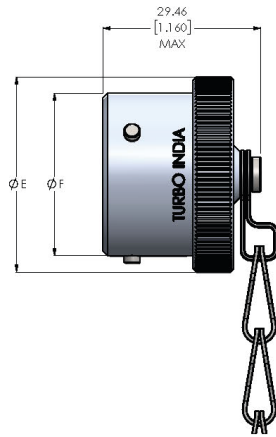


## PROTECTIVE COVERS PRODUCT CATALOGUE

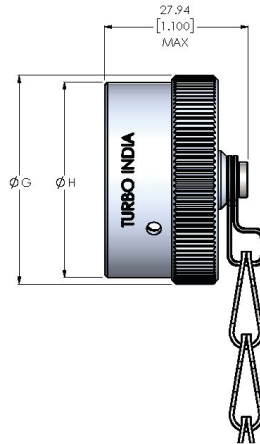


## SERIES 12 & 13

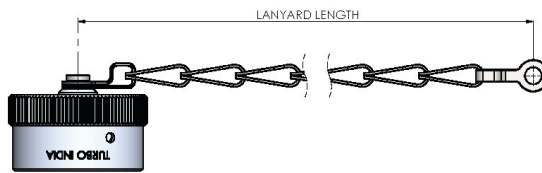
### Protective Cover MIL-DTL-38999 Series I



12 - PLUG COVER



13 - RECEPTACLE COVER



### ASTB 12 - 19 W - Y 5 - 03

BRAND IDENTIFIER

PRODUCT SERIES CODE

SHELL SIZE  
(SEE PAGE - I)

MATERIAL & FINISH  
(SEE PAGE - D)

EYELET / SOLID RING OPTION  
(SEE PAGE - G)

LANYARD LENGTH  
(IN INCHES, MEASURED FROM  
CENTRE OF COVER TO  
CENTRE OF EYELET OR  
RIVETING DIA CENTRE OF  
SOLID RING).

**LANYARD OPTIONS**

- SC - Stainless Steel Sash Chain
- Y - Stainless Steel Wire Rope, Nylon Jacket
- T - Stainless Steel Wire Rope, Teflon Jacket
- P - Stainless Steel Wire Rope, PVC Jacket
- NB - Nylon Rope, Black
- CF - Crimp Ferrule Option
- NA - No Accessory  
(SEE PAGE - F)

## SERIES 12 & 13

### Protective Cover MIL-DTL-38999 Series I

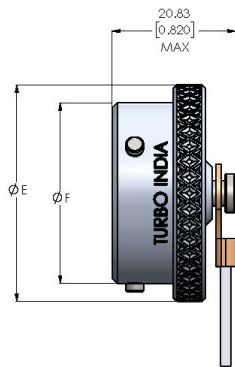
TABLE I – SHELL SIZE DIMENSIONS					
SHELL SIZE	E MAX	F MAX	G MAX	H MAX	STANDARD LANYARD LENGTH
09	20.80 (0.820")	14.53 (0.572")	21.80 (0.860")	20.80 (0.820")	76.20 (3.00")
11	23.90 (0.940")	17.78 (0.700")	24.90 (0.980")	23.90 (0.940")	76.20 (3.00")
13	27.20 (1.075")	21.59 (0.850")	29.50 (1.160")	27.90 (1.100")	88.90 (3.50")
15	30.20 (1.190")	24.76 (0.975")	32.50 (1.280")	31.00 (1.220")	88.90 (3.50")
17	33.50 (1.320")	27.94 (1.100")	35.80 (1.410")	34.00 (1.340")	88.90 (3.50")
19	36.60 (1.440")	30.66 (1.207")	38.60 (1.520")	37.10 (1.460")	88.90 (3.50")
21	39.90 (1.570")	33.83 (1.332")	41.90 (1.650")	40.10 (1.580")	101.60 (4.00")
23	42.90 (1.690")	37.01 (1.457")	45.00 (1.770")	43.20 (1.700")	101.60 (4.00")
25	46.20 (1.820")	40.18 (1.582")	48.00 (1.890")	46.50 (1.830")	101.60 (4.00")

- 1. DIMENSION IN PARENTHEIS ARE IN INCHES**
- 2. FOR ANY OTHER REQUIRMENTS PLEASE CONTACT BACKSHELLS@ASTUTE.GLOBAL**

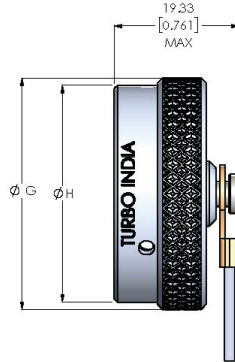


## SERIES 22 & 23

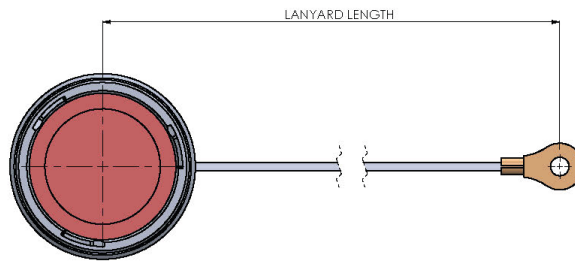
### Protective Cover MIL-DTL-38999 Series II



22 - PLUG COVER

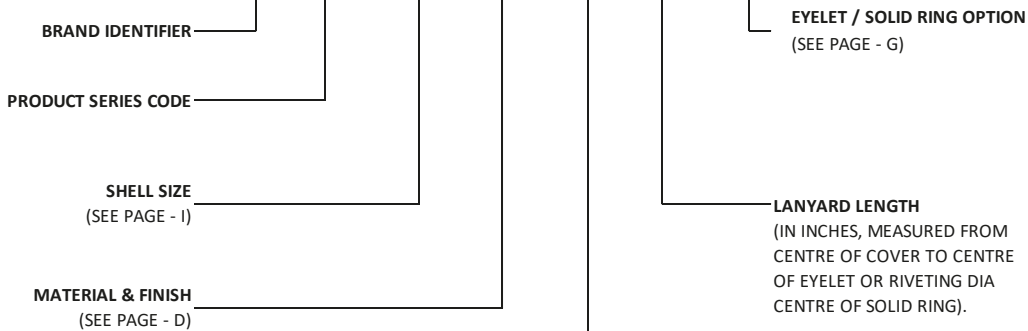


23 - RECEPTACLE COVER



#### ORDERING INFORMATION

**ASTB 23 - 18 W - Y 5 - 365B**



#### LANYARD OPTIONS

- SC - Stainless Steel Sash Chain
- Y - Stainless Steel Wire Rope, Nylon Jacket
- T - Stainless Steel Wire Rope, Teflon Jacket
- P - Stainless Steel Wire Rope, PVC Jacket
- NB - Nylon Rope, Black
- CF - Crimp Ferrule Option
- NA - No Accessory (SEE PAGE - F)

## SERIES 22 & 23

### Protective Cover MIL-DTL-38999 Series II

TABLE I – SHELL SIZE DIMENSIONS					
SHELL SIZE	E MAX	F MAX	G MAX	H MAX	STANDARD LANYARD LENGTH
08	18.30 (0.720")	12.00 (0.473")	19.05 (0.750")	16.00 (0.630")	76.20 (3.00")
10	21.60 (0.850")	15.00 (0.590")	21.82 (0.859")	19.33 (0.761")	76.20 (3.00")
12	25.40 (1.000")	19.10 (0.750")	26.19 (1.031")	23.77 (0.936")	88.90 (3.50")
14	28.70 (1.130")	22.20 (0.875")	29.36 (1.156")	27.28 (1.074")	88.90 (3.50")
16	31.80 (1.250")	25.40 (1.000")	32.54 (1.281")	29.77 (1.172")	88.90 (3.50")
18	35.10 (1.380")	28.60 (1.125")	35.71 (1.406")	33.12 (1.304")	88.90 (3.50")
20	38.10 (1.500")	31.80 (1.250")	38.89 (1.531")	36.45 (1.435")	101.60 (4.00")
22	41.40 (1.630")	34.90 (1.375")	41.68 (1.640")	39.62 (1.560")	101.60 (4.00")
24	44.50 (1.750")	38.10 (1.500")	44.86 (1.766")	42.88 (1.688")	101.60 (4.00")

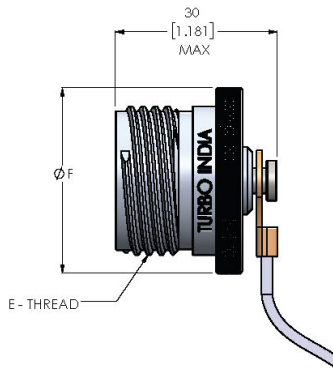
1. DIMENSION IN PARENTHESIS ARE IN INCHES

2. FOR ANY OTHER REQUIREMENTS PLEASE CONTACT [BACKSHELLS@ASTUTE.GLOBAL](mailto:BACKSHELLS@ASTUTE.GLOBAL)

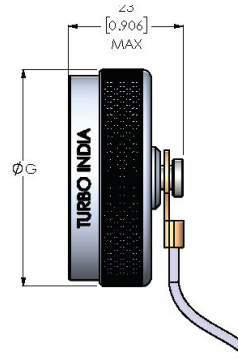


## SERIES 32 & 33

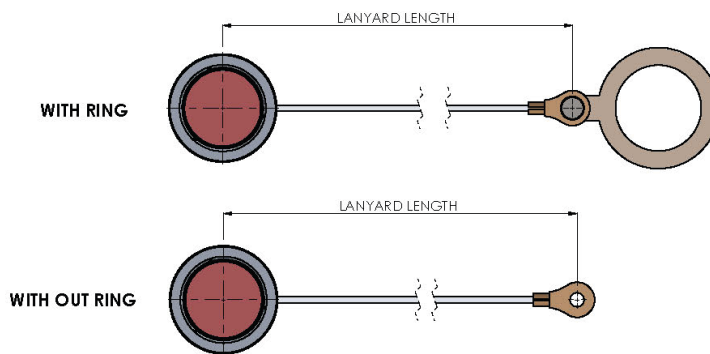
### Protective Cover MIL-DTL-38999 Series III



**32 - PLUG COVER**

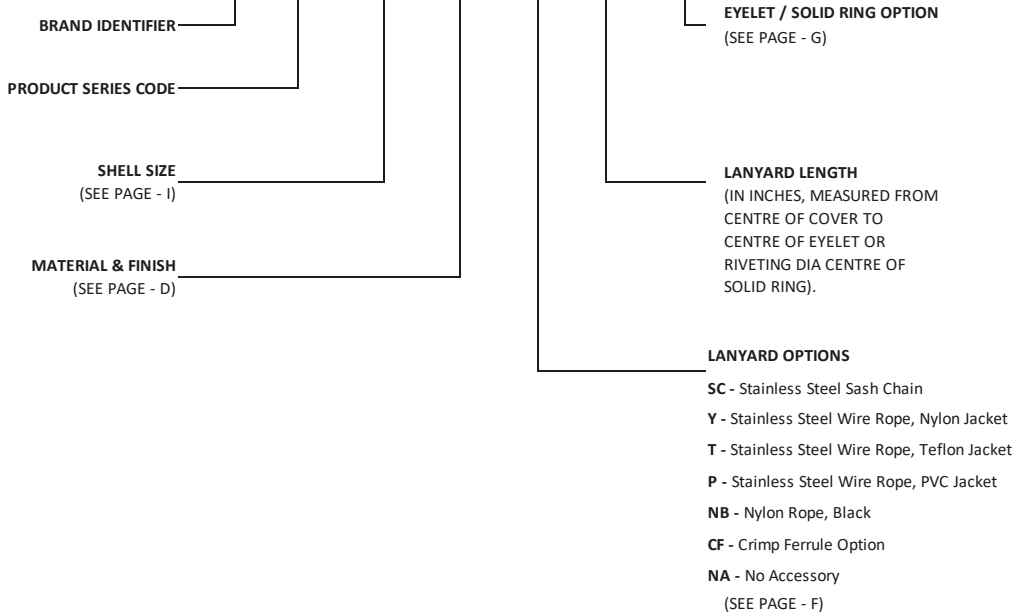


**33 - RECEPTACLE COVER**



#### ORDERING INFORMATION

**ASTB 33 - 19 W - Y 5 - 03**





## SERIES 32 & 33

### Protective Cover MIL-DTL-38999 Series III

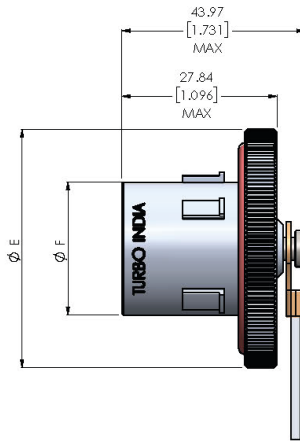
TABLE I – SHELL SIZE DIMENSIONS				
SHELL SIZE	E - THREAD	F MAX	G MAX	STANDARD LANYARD LENGTH
09	0.6250-0.1P-0.3L-TS	23.00 (0.906")	23.00 (0.906")	127 (5.00")
11	0.7500-0.1P-0.3L-TS	26.00 (1.024")	28.00 (1.102")	127 (5.00")
13	0.8750-0.1P-0.3L-TS	31.00 (1.220")	31.00 (1.220")	127 (5.00")
15	1.000-0.1P-0.3L-TS	33.00 (1.300")	32.00 (1.260")	127 (5.00")
17	1.1875-0.1P-0.3L-TS	37.00 (1.457")	37.00 (1.457")	127 (5.00")
19	1.2500-0.1P-0.3L-TS	40.00 (1.575")	39.00 (1.535")	127 (5.00")
21	1.3750-0.1P-0.3L-TS	44.00 (1.732")	42.00 (1.654")	127 (5.00")
23	1.5000-0.1P-0.3L-TS	46.00 (1.811")	45.00 (1.772")	127 (5.00")
25	1.6250-0.1P-0.3L-TS	50.00 (1.969")	49.00 (1.929")	127 (5.00")

1. THREAD DIMENSIONS AND DIMENSIONS IN PARENTHESIS ARE IN INCHES.
2. THREAD DIMENSION COMMON FOR PLUG AND RECEPTACLES.
3. FOR ANY OTHER REQUIRMENTS PLEASE CONTACT BACKSHELLS@ASTUTE.GLOBAL

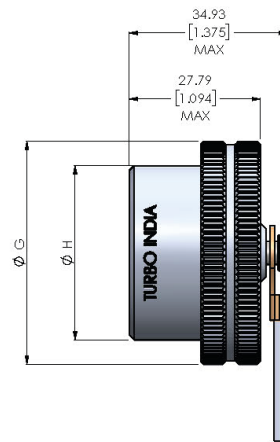


## SERIES 42 & 43

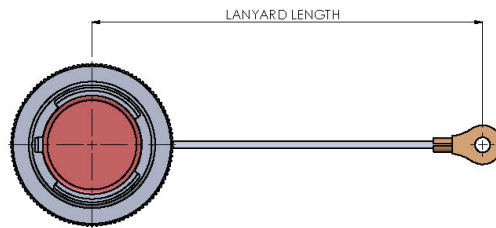
### Protective Cover MIL-DTL-38999 Series IV



42 - PLUG COVER

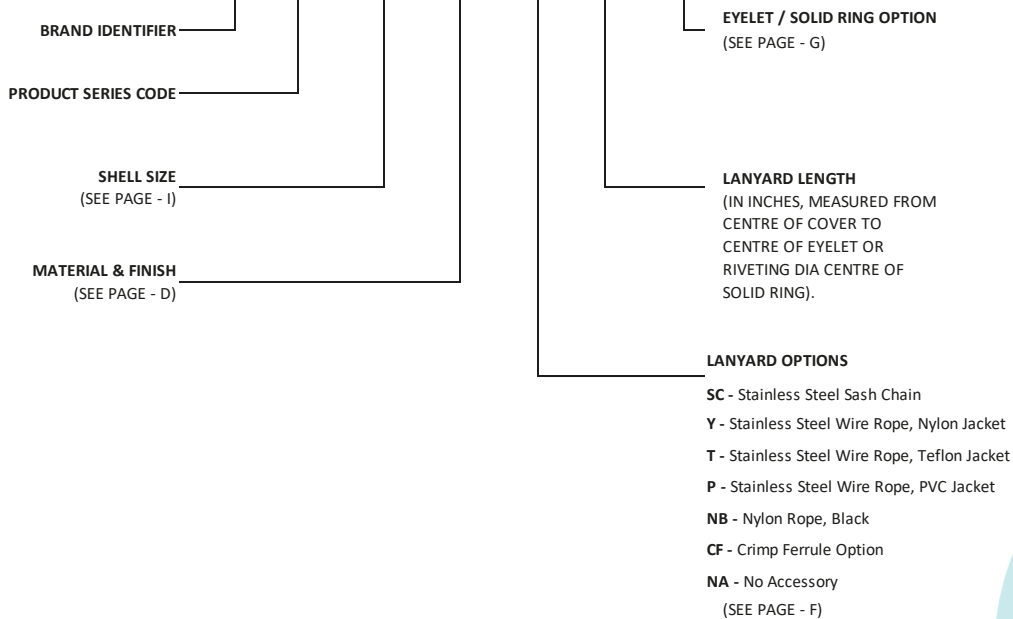


43 - RECEPTACLE COVER



### ORDERING INFORMATION

**ASTB 43 - 17 W - Y 5 - 365B**



## SERIES 42 & 43

### Protective Cover MIL-DTL-38999 Series IV

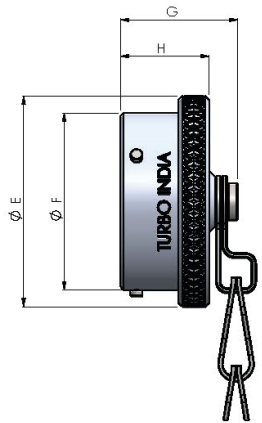
TABLE I – SHELL SIZE DIMENSIONS					
SHELL SIZE	E MAX	F MAX	G MAX	H MAX	STANDARD LANYARD LENGTH
11	35.05 (1.380")	12.92 (0.509")	26.59 (1.047")	19.18 (0.775")	127.00 (5.00")
13	39.88 (1.570")	16.10 (0.634")	30.99 (1.220")	22.86 (0.900")	127.00 (5.00")
15	42.17 (1.660")	19.28 (0.759")	34.19 (1.346")	26.42 (1.040")	127.00 (5.00")
17	45.46 (1.790")	22.48 (0.885")	37.39 (1.472")	29.21 (1.150")	127.00 (5.00")
19	48.77 (1.920")	25.63 (1.009")	40.21 (1.583")	32.39 (1.275")	127.00 (5.00")
21	52.33 (2.060")	28.80 (1.134")	43.31 (1.705")	35.56 (1.400")	127.00 (5.00")
23	57.15 (2.250")	31.98 (1.259")	46.50 (1.831")	38.74 (1.525")	127.00 (5.00")
25	60.45 (2.380")	35.15 (1.384")	49.71 (1.957")	41.91 (1.650")	127.00 (5.00")

1. THREAD DIMENSIONS IN PARENTHEIS ARE IN INCHES.
2. FOR ANY OTHER REQUIRMENTS PLEASE CONTACT BACKSHELLS@ASTUTE.GLOBAL

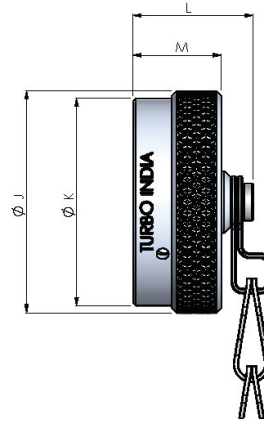


## SERIES 52 & 53

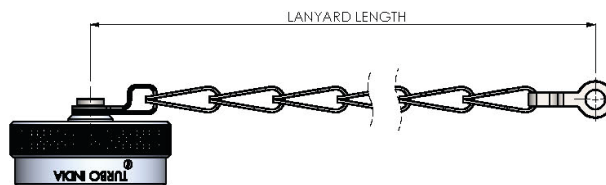
### Protective Cover AS5015



52 - PLUG COVER



53 - RECEPTACLE COVER



#### ORDERING INFORMATION

**ASTB 52 - 18 W - SC 3.5 - 365B**

BRAND IDENTIFIER

PRODUCT SERIES CODE

SHELL SIZE  
(SEE PAGE - I)

MATERIAL & FINISH  
(SEE PAGE - D)

EYELET / SOLID RING OPTION  
(SEE PAGE - G)

LANYARD LENGTH  
(IN INCHES, MEASURED FROM  
CENTRE OF COVER TO  
CENTRE OF EYELET OR  
RIVETING DIA CENTRE OF  
SOLID RING).

#### LANYARD OPTIONS

SC - Stainless Steel Sash Chain

Y - Stainless Steel Wire Rope, Nylon Jacket

T - Stainless Steel Wire Rope, Teflon Jacket

P - Stainless Steel Wire Rope, PVC Jacket

NB - Nylon Rope, Black

CF - Crimp Ferrule Option

NA - No Accessory

(SEE PAGE - F)

## SERIES 52 & 53

### Protective Cover AS5015

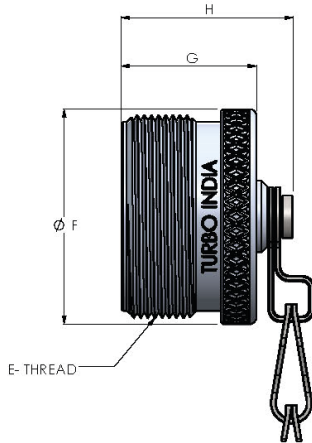
**TABLE I – SHELL SIZE DIMENSION**

SHELL SIZE	Ø E MAX	Ø F MAX	Ø G MAX	Ø H MAX	Ø J MAX	Ø K MAX	Ø L MAX	Ø M MAX	STANDARD LANYARD LENGTH
08	18.26 (0.719")	12.01 (0.473")	19.84 (0.781")	14.27 (0.562")	18.64 (0.734")	16.14 (0.635")	21.44 (0.844")	14.27 (0.562")	76.20 (3.00")
10	21.44 (0.844")	14.99 (0.590")	19.84 (0.781")	14.27 (0.562")	21.82 (0.859")	19.32 (0.761")	21.44 (0.844")	14.27 (0.562")	76.20 (3.00")
12	25.40 (1.000")	19.05 (0.750")	19.84 (0.781")	14.27 (0.562")	25.40 (1.000")	22.90 (0.902")	21.44 (0.844")	14.27 (0.562")	88.90 (3.50")
14	28.58 (1.125")	22.22 (0.875")	19.84 (0.781")	14.27 (0.562")	28.58 (1.125")	26.08 (1.027")	21.44 (0.844")	14.27 (0.562")	88.90 (3.50")
16	31.75 (1.250")	25.40 (1.000")	19.84 (0.781")	14.27 (0.562")	31.75 (1.250")	29.25 (1.152")	21.44 (0.844")	14.27 (0.562")	88.90 (3.50")
18	34.92 (1.375")	28.58 (1.125")	19.84 (0.781")	14.27 (0.562")	34.92 (1.375")	32.42 (1.276")	21.44 (0.844")	14.27 (0.562")	88.90 (3.50")
20	38.10 (1.500")	31.75 (1.250")	21.44 (0.844")	15.88 (0.625")	38.10 (1.500")	35.60 (1.402")	21.44 (0.844")	14.27 (0.562")	101.60 (4.00")
22	41.28 (1.625")	34.92 (1.375")	21.44 (0.844")	15.88 (0.625")	41.28 (1.625")	38.78 (1.527")	21.44 (0.844")	14.27 (0.562")	101.60 (4.00")
24	44.45 (1.750")	38.10 (1.500")	22.22 (0.875")	16.71 (0.658")	44.45 (1.750")	41.95 (1.652")	22.22 (0.875")	15.29 (0.602")	101.60 (4.00")

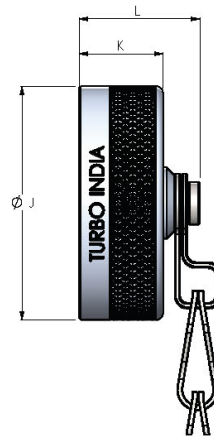
1. THREAD DIMENSIONS IN PARENTHESIS ARE IN INCHES.
2. FOR ANY OTHER REQUIRMENTS PLEASE CONTACT [BACKSHELLS@ASTUTE.GLOBAL](mailto:BACKSHELLS@ASTUTE.GLOBAL)

## SERIES 62 & 63

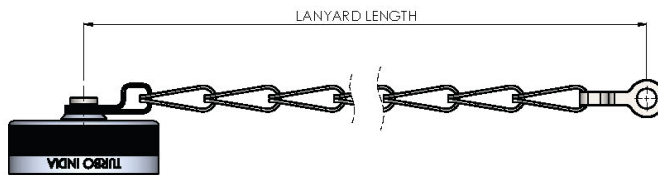
### Protective Cover MIL-DTL-26482 Series I and II



**62 - PLUG COVER**

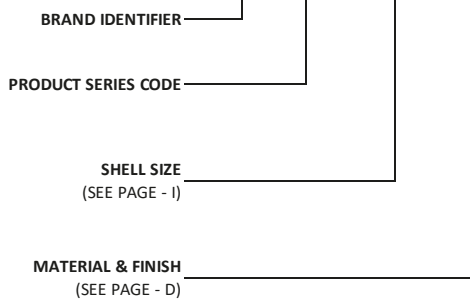


**63 - RECEPTACLE COVER**



### ORDERING INFORMATION

**ASTB 63 - 18 W - Y 4.5 - 365B**



**EYELET / SOLID RING OPTION**  
(SEE PAGE - G)

**LANYARD LENGTH**  
(IN INCHES, MEASURED FROM CENTRE OF COVER TO CENTRE OF EYELET OR RIVETING DIA CENTRE OF SOLID RING).

**LANYARD OPTIONS**

- SC - Stainless Steel Sash Chain
- Y - Stainless Steel Wire Rope, Nylon Jacket
- T - Stainless Steel Wire Rope, Teflon Jacket
- P - Stainless Steel Wire Rope, PVC Jacket
- NB - Nylon Rope, Black
- CF - Crimp Ferrule Option
- NA - No Accessory  
(SEE PAGE - F)



## SERIES 62 & 63

### Protective Cover MIL-DTL-26482 Series I and II

TABLE I – SHELL SIZE DIMENSIONS								
SHELL SIZE	E - THREAD	F MAX	G MAX	H MAX	J MAX	K MAX	L MAX	STANDARD LANYARD LENGTH
08	1/2 – 28 UNEF	14.30 (0.562")	16.70 (0.656")	24.61 (0.969")	17.50 (0.688")	11.80 (0.465")	19.05 (0.750")	101.60 (4.00")
10	5/8 – 24 UNEF	17.40 (0.687")	16.70 (0.656")	24.61 (0.969")	20.70 (0.815")	11.80 (0.465")	19.05 (0.750")	101.60 (4.00")
12	3/4 - 20 UNEF	20.60 (0.812")	21.40 (0.844")	29.36 (1.156")	25.40 (1.000")	11.80 (0.465")	19.05 (0.750")	114.30 (4.50")
14	7/8 – 20 UNEF	23.80 (0.937")	21.40 (0.844")	29.36 (1.156")	28.60 (1.125")	11.80 (0.465")	19.05 (0.750")	114.30 (4.50")
16	1 – 20 UNEF	27.00 (1.062")	21.40 (0.844")	29.36 (1.156")	30.20 (1.188")	11.80 (0.465")	19.05 (0.750")	114.30 (4.50")
18	1 1/8 – 18 UNEF	30.10 (1.187")	21.40 (0.844")	29.36 (1.156")	34.10 (1.344")	11.80 (0.465")	19.05 (0.750")	114.30 (4.50")
20	1 1/4 – 18 UNEF	33.30 (1.312")	21.40 (0.844")	29.36 (1.156")	37.30 (1.469")	11.80 (0.465")	19.05 (0.750")	127.00 (5.00")
22	1 3/8 – 18 UNEF	36.50 (1.437")	21.40 (0.844")	29.36 (1.156")	40.50 (1.594")	11.80 (0.465")	19.05 (0.750")	127.00 (5.00")
24	1 1/2 – 18 UNEF	39.70 (1.562")	21.40 (0.844")	29.36 (1.156")	43.70 (1.719")	11.80 (0.465")	19.05 (0.750")	139.70 (5.50")
28	1 3/4 – 18 UNS	46.00 (1.812")	21.40 (0.844")	29.36 (1.156")	50.00 (1.969")	13.50 (0.531")	20.62 (0.812")	196.85 (7.75")
32	2 – 18 UNS	52.40 (2.062")	21.40 (0.844")	29.36 (1.156")	56.40 (2.219")	13.50 (0.531")	20.62 (0.812")	196.85 (7.75")
36	2 1/4 - 16 UN	58.70 (2.312")	21.40 (0.844")	29.36 (1.156")	62.70 (2.469")	13.50 (0.531")	20.62 (0.812")	196.85 (7.75")
40	2 1/2 - 16 UN	65.10 (2.562")	21.40 (0.844")	29.36 (1.156")	69.10 (2.719")	13.50 (0.531")	20.62 (0.812")	196.85 (7.75")
44	2 3/4 – 16 UN	71.40 (2.812")	21.40 (0.844")	29.36 (1.156")	75.40 (2.969")	13.50 (0.531")	20.62 (0.812")	196.85 (7.75")
48	3 – 16 UN	77.80 (3.062")	21.40 (0.844")	29.36 (1.156")	81.00 (3.188")	13.50 (0.531")	20.62 (0.812")	196.85 (7.75")

- 1. THREAD DIMENSIONS AND DIMENSIONS IN PARENTHESIS ARE IN INCHES.**
- 2. THREAD DIMENSION COMMON FOR PLUG AND RECEPTACLES.**
- 3. FOR ANY OTHER REQUIRMENTS PLEASE CONTACT BACKSHELLS@ASTUTE.GLOBAL**



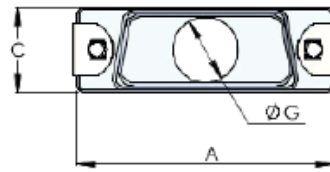
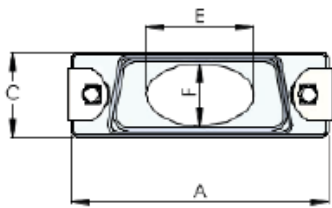
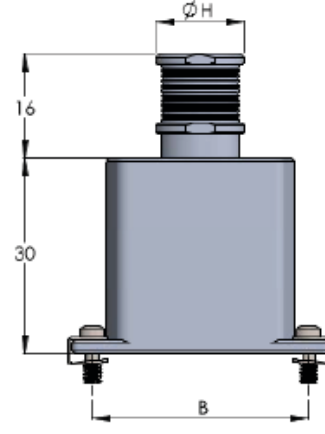
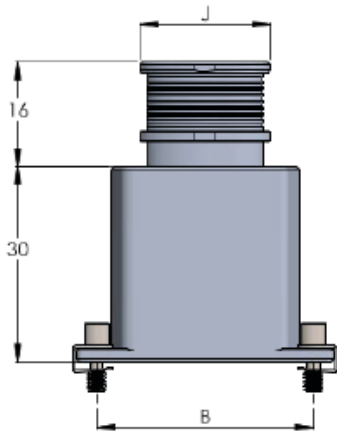
## RECTANGULAR BACKSHELLS PRODUCT CATALOGUE





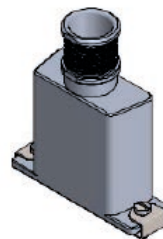
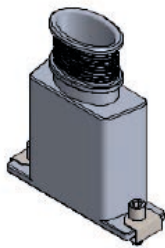
## DS BND Series

### M24308 Type Rectangular Backshell



**E = ELLIPTICAL ENTRY**

**C = CIRCULAR ENTRY**

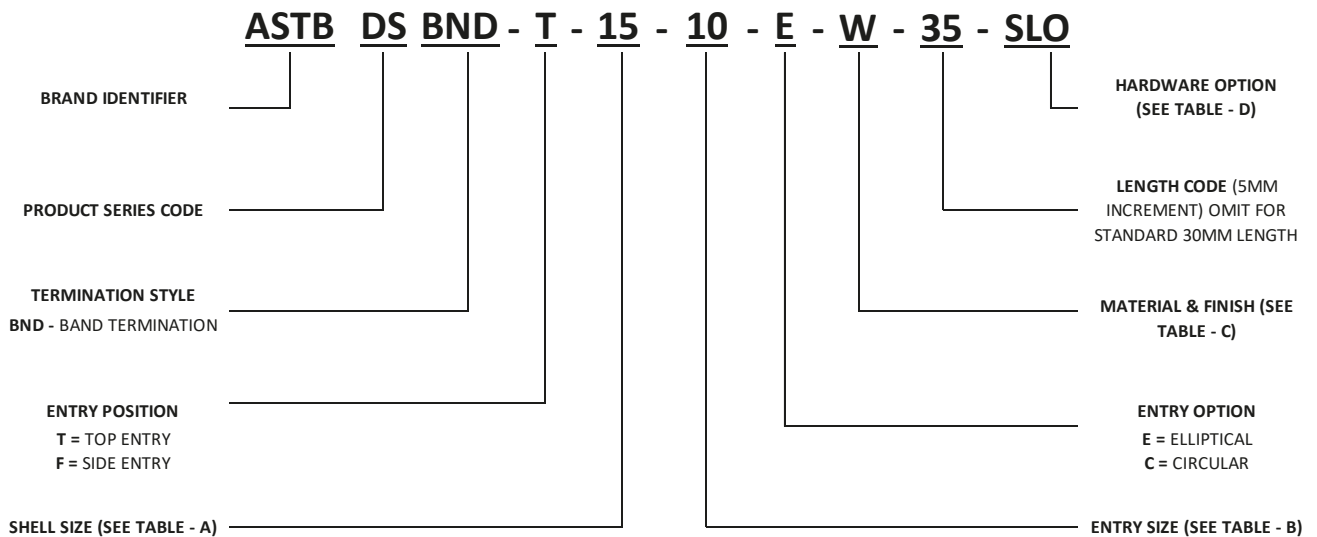


**TABLE – A (SHELL SIZE)**

SHELL SIZE	A	B	C	MAX ENTRY CIRCULAR	MAX ENTRY ELLIPTICAL
09	31.20	25.00	12.93	06	11
15	39.50	33.30	12.93	06	13
25	53.45	47.00	12.93	06	15
37	69.80	63.50	12.93	06	18
50	67.30	61.12	15.75	08	19
104	69.70	63.50	17.35	09	21

## DS BND Series

### M24308 Type Rectangular Backshell

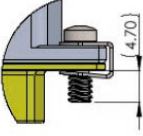

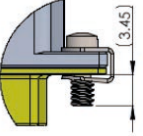

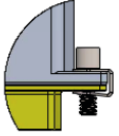



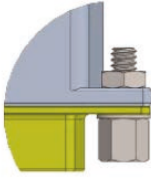
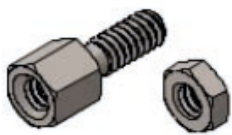


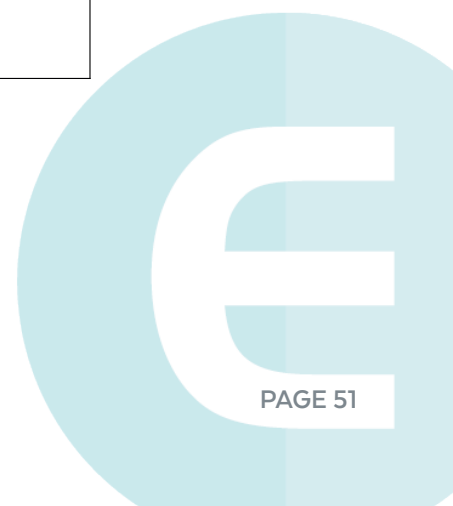
ENTRY CODE (CIRCULAR)	Ø G	Ø H MAX	ENTRY CODE (ELLIPTICAL)	E MIN	F MIN	J
01	3.20	9.00	10	13.00	9.50	16.60
02	4.75	9.00	11	16.50	9.50	20.10
03	6.86	11.30	12	20.50	9.50	24.10
04	7.37	13.10	13	24.70	9.50	28.30
05	7.92	13.10	14	29.40	9.50	33.00
06	10.03	13.63	15	34.60	9.50	38.20
07	10.67	14.27	16	40.20	9.50	43.80
08	12.70	16.30	17	46.20	9.50	49.80
09	14.27	17.90	18	52.70	9.50	56.30
			19	50.00	12.00	53.60
			20	49.20	13.90	52.80
			21	54.90	13.90	58.50

FINISH CODE	BASE MATERIAL	FINISH
U	ALUMINIUM	UNPLATED
W	ALUMINIUM	CADMIUM OLIVE DRAB OVER ELECTROLESS NICKEL
N	ALUMINIUM	ELECTROLESS NICKEL
VO	ALUMINIUM	ZINC COBALT – OLIVE DRAB OVER ELECTROLESS NICKEL
Z	ALUMINIUM	ZINC NICKEL – BLACK OVER ELECTROLESS NICKEL



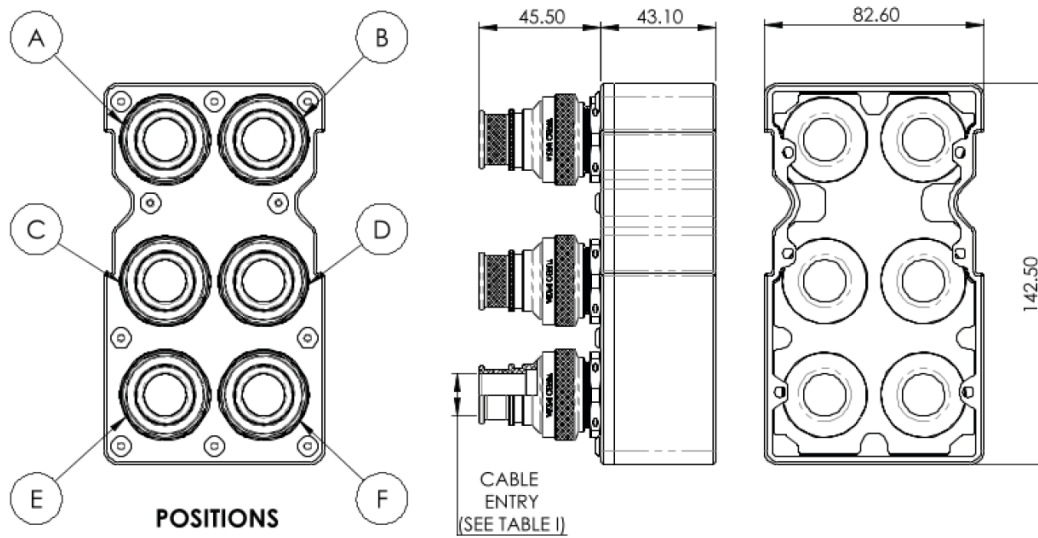
## DS BND Series

TABLE – D (HARDWARE OPTION)			
CODE	DESCRIPTION	ASSEMBLED VIEW	KIT ELEMENTS
SLO	SLOTTED HEAD SCREW		
SLS	SLOTTED HEAD SCREW - SHORT		
HSH	HEX SOCKET HEADED SCREW		
EXS	EXTENDED SCREW		
JPS	JACKPOST 4-40 UNC		
WOH	WITHOUT HARDWARE	N/A	N/A

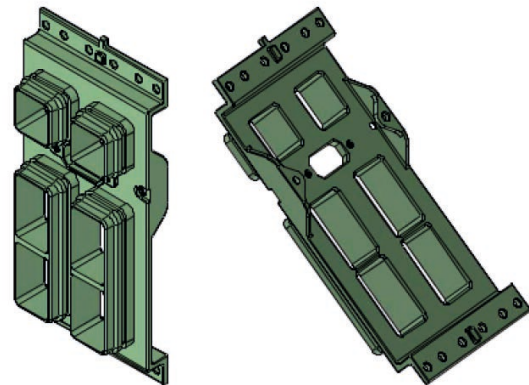


## ASTB-ARC-P-X Series

### ARINC 600 Type Rectangular Backshell



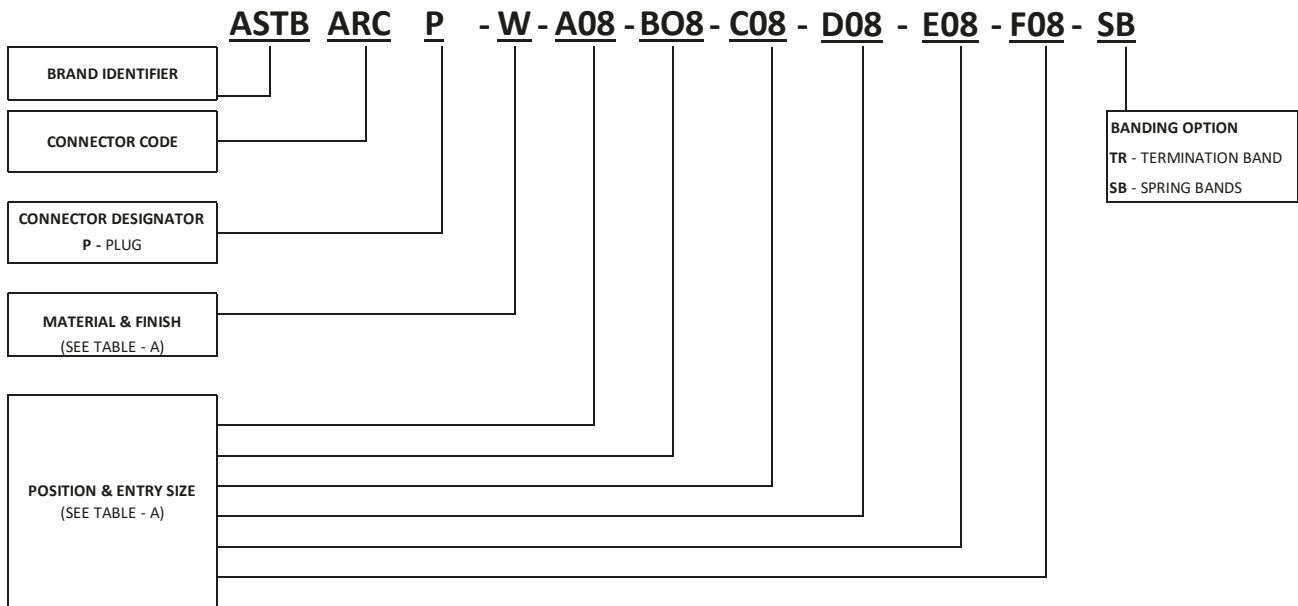
ASSEMBLY USED ON : PLUG - SHELL SIZE 3



## ASTB-ARC-P-X Series

### ARINC 600 Type Rectangular Backshell

#### ORDERING INFORMATION



ENTRY SIZE	ENTRY DIA
08	12.70
10	16.00
12	19.10
14	22.40
16	25.40
18	28.70

FINISH CODE	BASE MATERIAL	FINISH
U	ALUMINIUM	UNPLATED
W	ALUMINIUM	CADMIUM OLIVE DRAB OVER ELECTROLESS NICKEL
N	ALUMINIUM	ELECTROLESS NICKEL
VO	ALUMINIUM	ZINC COBALT – OLIVE DRAB OVER ELECTROLESS NICKEL
Z	ALUMINIUM	ZINC NICKEL – BLACK OVER ELECTROLESS NICKEL



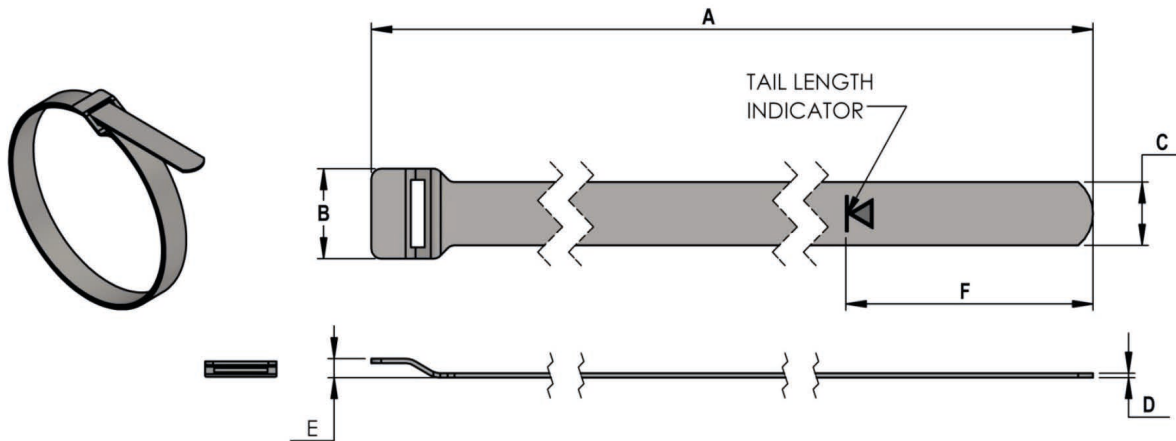


## BACKSHELL ACCESSORIES PRODUCT CATALOGUE

## SERIES 128

### Termination Bands

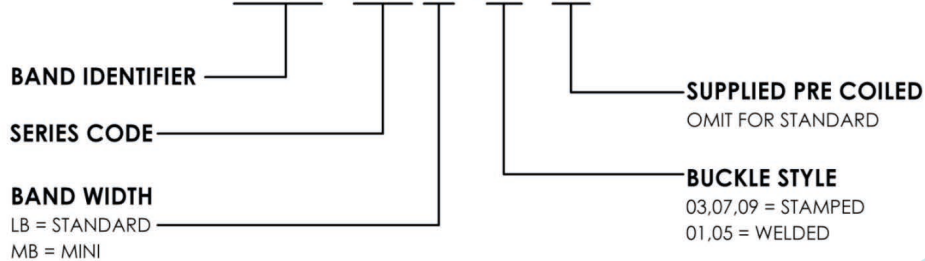
#### STAMPED BUCKLE OPTION



PART NUMBER	A ±0.060"/1.52mm	B ±0.031"/0.79mm	C ±0.010"/0.26mm	D REF	E REF	F REF
ASTB-128LB-03	14.25 361.95	0.350 8.89	0.250 6.35	0.020 0.51	0.130 3.30	2.031 51.59
ASTB-128LB-03-01	14.25 361.95	0.350 8.89	0.250 6.35	0.020 0.51	0.130 3.30	2.031 51.59
ASTB-128MB-07	8.125 206.38	0.195 4.95	0.120 3.05	0.015 0.38	0.053 1.35	2.031 51.59
ASTB-128MB-07-01	8.125 206.38	0.195 4.95	0.120 3.05	0.015 0.38	0.053 1.35	2.031 51.59
ASTB-128MB-09	14.25 361.95	0.195 4.95	0.120 3.05	0.015 0.38	0.053 1.35	2.031 51.59
ASTB-128MB-09-01	14.25 361.95	0.195 4.95	0.120 3.05	0.015 0.38	0.053 1.35	2.031 51.59

#### ORDERING INFORMATION

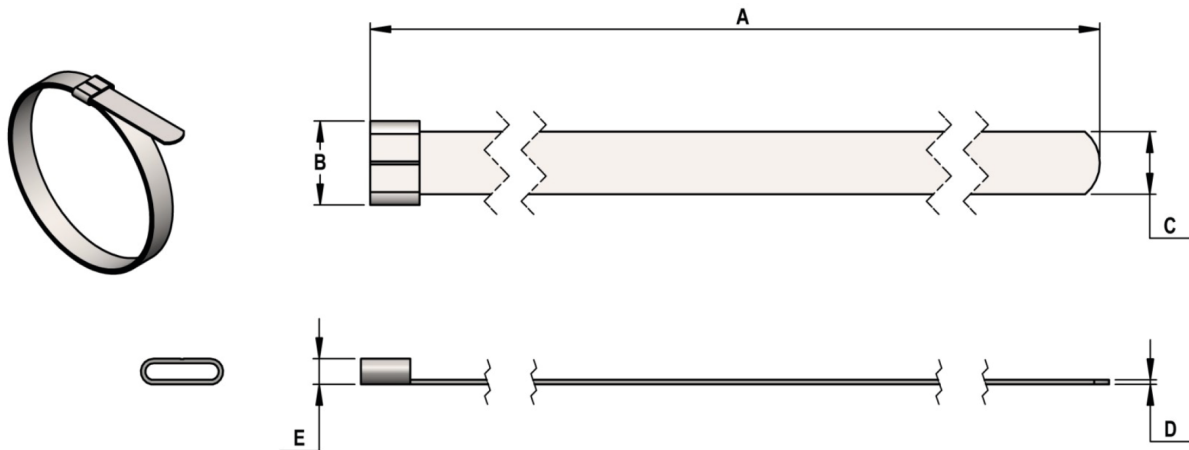
### ASTB-128LB-03-01



## SERIES 128

### Termination Bands

#### WELDED BUCKLE OPTION



PART NUMBER	A ±0.060"/1.52mm	B ±0.031"/0.79mm	C ±0.010"/0.26mm	D REF	E REF
ASTB-128LB-01	14.00 355.60	0.328 8.33	0.245 6.22	0.019 0.50	0.100 2.54
ASTB-128LB-01-01	14.00 355.60	0.328 8.33	0.245 6.22	0.019 0.50	0.100 2.54
ASTB-128MB-05	9.50 241.30	0.198 5.03	0.118 2.99	0.015 0.40	0.080 2.03
ASTB-128MB-05-01	9.50 241.30	0.198 5.03	0.118 2.99	0.015 0.40	0.080 2.03

1. FOR ANY KIND OF CUSTOMISATION ON THIS TERMINATION BANDS OR ACCESSORIES PLEASE CONTACT [BACKSHELLS@ASTUTE.GLOBAL](mailto:BACKSHELLS@ASTUTE.GLOBAL)
2. MATERIAL SUPPLIED WILL BE STAINLESS STEEL 300 SERIES - PASSIVATED





## SERIES 128

### Termination Bands

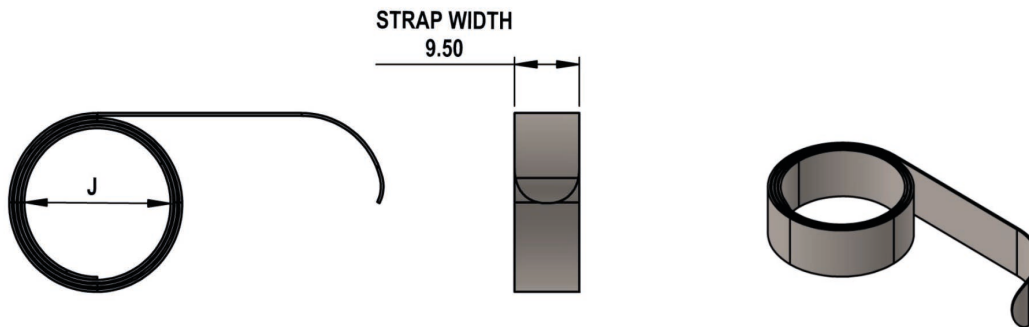
#### CROSS REFERENCE TABLE FOR BANDS

DESCRIPTION	TURBO INDIA	M85049/128
STAMPED BUCKLE STANDARD BAND STRAIGHT	TB-128LB-03	-3
STAMPED BUCKLE STANDARD BAND PRE COILED	TB-128LB-03-01	-4
STAMPED BUCKLE MINI BAND STRAIGHT	TB-128MB-07	-7
STAMPED BUCKLE MINI BAND PRE COILED	TB-128MB-07-01	-8
STAMPED BUCKLE MINI BAND EXTENDED STRAIGHT	TB-128MB-09	-
STAMPED BUCKLE MINI BAND EXTENDED & PRE COILED	TB-128MB-09-01	-
WELDED BUCKLE STANDARD BAND STRAIGHT	TB-128LB-01	-1
WELDED BUCKLE STANDARD BAND PRE COILED	TB-128LB-01-01	-2
WELDED BUCKLE MINI BAND STRAIGHT	TB-128MB-05	-5
WELDED BUCKLE MINI BAND PRE COILED	TB-128MB-05-01	-6



## SERIES SB

### Spring Bands



#### Stainless Steel Spring Band Option

- Re-usable and self-tensioning to secure both overall and individual braid termination.
- Easy to install - requires no tooling while providing a high level of tensile strength to the assembly.
- Suitable for corrosive environments and are not affected by vibration, shock or extreme temperatures.

Use **TURBO INDIA Order Code 'S'** to have a constant spring band included with the adapter. We will determine the appropriate size needed based on the Cable Entry called out on the part number.

## SERIES SB

### Spring Bands

#### SPRING BAND SELECTION CHART AS PER ENTRY

BACKSHELL ENTRY CODE	ENTRY DIA IN MM	SPRING CODE	JMAX (UNCONSTRAINED)
03	4.70	ASTB 050	7.50
04	6.30	ASTB 050	7.50
05	7.90	ASTB 100	9.10
06	9.50	ASTB 100	9.10
07	11.10	ASTB 100	9.10
08	12.70	ASTB 200	12.80
09	14.20	ASTB 200	12.80
10	15.80	ASTB 200	12.80
11	17.40	ASTB 200	12.80
12	19.00	ASTB 300	17.90
13	20.60	ASTB 300	17.90
14	22.20	ASTB 300	17.90
15	23.80	ASTB 300	17.90
16	25.40	ASTB 300	17.90
17	27.00	ASTB 400	21.80
18	28.60	ASTB 400	21.80
19	30.20	ASTB 400	21.80
20	31.80	ASTB 400	21.80
21	33.30	ASTB 400	21.80
22	35.00	ASTB 400	21.80
23	36.50	ASTB 400	21.80
24	38.10	ASTB 400	21.80



## CUSTOM SOLUTIONS

Standard backshells and accessories often need slight modifications in order to suit the application, whether this is a slight increase in size, cable entry, angle etc.

Astute, in partnership with Turbo Interconnect, can assist with full design support no matter how challenging your requirements!

Please contact [backshells@astute.global](mailto:backshells@astute.global) to discuss your requirement with our engineers.



# ASTUTE

**TURBO INDIA**  
INTERCONNECT SOLUTIONS



# ASTUTE

Astute Electronics Ltd

[www.astute.global](http://www.astute.global)

+44 (0)1438 909 909

[backshells@astute.global](mailto:backshells@astute.global)