

CUSTOM COMPONENT DESIGN



CARLISLE
INTERCONNECT TECHNOLOGIES

The combination of **Tensolite®** and **Carlyle, Inc.**

SMALL DETAILS CAN MAKE A BIG DIFFERENCE

LIGHTWEIGHTS



- 60% LIGHTER THAN COMPARABLE INDUSTRY STANDARD PRODUCTS
- COMPACT AND EFFICIENT DESIGN MAXIMIZES INTERNAL SPACE
- FRONT PANEL MOUNT CAPABILITY
- SLOTS FOR MOUNTING STABILITY

NEW PRODUCT INNOVATION FROM CARLISLE

THE LIGHTWEIGHT ADVANTAGE

Carlisle is proud to introduce a new line of high quality products based on technology, engineering expertise and our valued customers' feedback. Our new connectivity solutions offer reliable, more compact components leaving you more space and less weight.



www.carlisleit.com

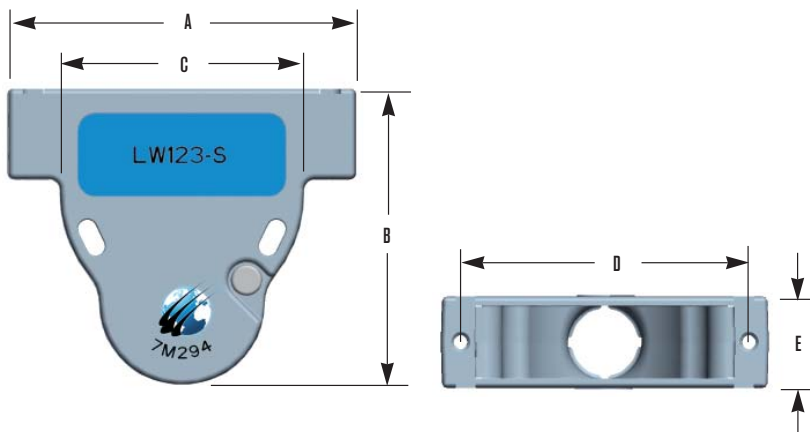
QUALITY • ON-TIME DELIVERY • TRACEABILITY • AOG SUPPORT • CUSTOM PACKAGING • TECHNICAL SUPPORT

STRAIGHT EXIT ANGLE BACKSHELL

COMPRESSION STYLE
ROHS AND ELV COMPLIANT

PRODUCT FACTS

- STRAIGHT CABLE EXIT
- EXTREMELY COMPACT AND LIGHTWEIGHT
(UP TO 60% LIGHTER THAN COMPARABLE INDUSTRY STANDARD PRODUCTS)
- UNIQUE FRONT PANEL MOUNT FEATURE
- SLOTS FOR 4-40 SCREW OR TIE STRAP TO PROVIDE MORE MOUNTING STABILITY
- BODY TAPPED STYLE WITH SIDE MOUNT CAPABILITY
- ACCOMMODATES CONVENTIONAL AND MOISTURE PROOF D-SUB CONNECTORS
- DESIGNED FOR EASE OF MANUFACTURING AND REWORK IN THE FIELD
- HIGH PRECISION WITH A MINIMAL AIR GAP
- VERY EFFECTIVE EMI SHIELDING



IDEAL APPLICATION:

- AEROSPACE VIDEO AND ETHERNET
- EMI AND WEIGHT SENSITIVE

EACH KIT CONTAINS:

- 2 SHELL HALVES WITH SCREWS (MS51957)

STANDARD MATERIAL AND FINISH:

- SHELL - ALUMINUM ALLOY WITH ELECTROLESS NICKEL PLATING
- 4-40 PAN HEAD SCREWS - STAINLESS STEEL

OPTIONAL MATERIAL:

- ZINC ALLOY OR METALIZED PLASTIC FOR BACKSHELLS
- ADDITIONAL PLATING UPON CUSTOMER'S REQUEST

TECHNICAL DOCUMENT:

DRAWING FOR INDIVIDUAL PART
AVAILABLE UPON REQUEST

SHELL SIZE	DIMENSIONS IN INCH					CABLE DIA (MIN-MAX) IN INCH	WEIGHT (GRAMS)	CARLISLE P/N
	A	B	C	D	E			
1/E	1.230	1.500	0.740	.984	0.560	0.1-0.3	18.0	LW091C-S
2/A	1.550	1.800	1.000	1.541	0.580	0.1-0.3	25.0	LW092C-S
3/B	2.100	1.800	1.475	1.852	0.580	0.2-0.4	28.5	LW123C-S
4/C	2.750	2.000	2.155	2.500	0.580	0.3-0.6	36.0	LW154C-S
5/D	2.650	2.000	2.085	2.406	0.680	0.3-0.6	38.0	LW165C-S

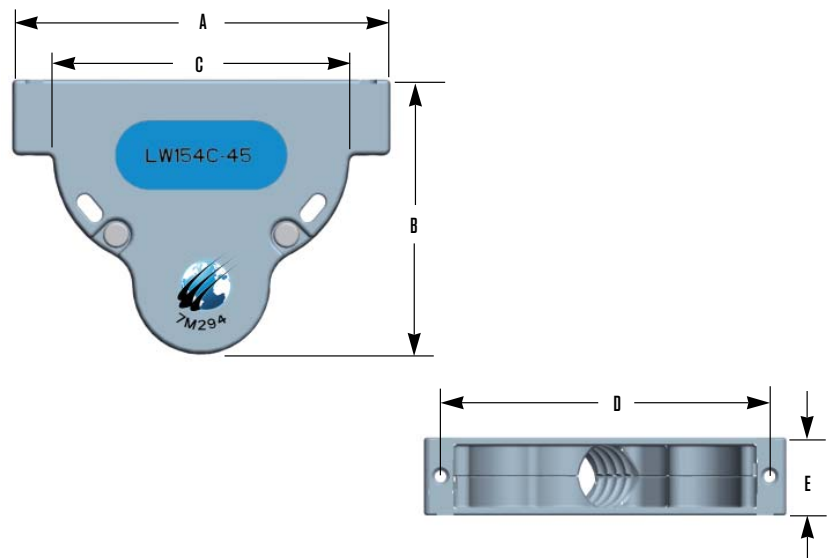
NOTES: 1. THE PARTS SHOWN IN THE ABOVE TABLE ARE STANDARD ITEMS, OTHER STRAIN RELIEF DIAMETERS WILL BE AVAILABLE UPON REQUEST. 2. PARTS ARE PACKAGED UNASSEMBLED.

45 DEGREE EXIT ANGLE BACKSHELL

COMPRESSION STYLE
ROHS AND ELV COMPLIANT

PRODUCT FACTS

- 45 DEGREE CABLE EXIT
- EXTREMELY COMPACT AND LIGHTWEIGHT
(UP TO 60% LIGHTER THAN COMPARABLE INDUSTRY STANDARD PRODUCTS)
- UNIQUE FRONT PANEL MOUNT FEATURE
- SLOTS FOR 4-40 SCREW OR TIE STRAP TO PROVIDE MORE MOUNTING STABILITY
- BODY TAPPED STYLE WITH SIDE MOUNT CAPABILITY
- ACCOMMODATES CONVENTIONAL AND MOISTURE PROOF D-SUB CONNECTORS
- DESIGNED FOR EASE OF MANUFACTURING AND REWORK IN THE FIELD
- HIGH PRECISION WITH A MINIMAL AIR GAP
- VERY EFFECTIVE EMI SHIELDING



IDEAL APPLICATION:

- AEROSPACE VIDEO AND ETHERNET
- EMI AND WEIGHT SENSITIVE

EACH KIT CONTAINS:

- 1 LEFT SHELL, 1 RIGHT SHELL AND SCREWS (MS51957)

STANDARD MATERIAL AND FINISH:

- SHELL - ALUMINUM ALLOY WITH ELECTROLESS NICKEL PLATING
- 4-40 PAN HEAD SCREWS - STAINLESS STEEL

OPTIONAL MATERIAL:

- ZINC ALLOY OR METALIZED PLASTIC FOR BACKSHELLS
- ADDITIONAL PLATING UPON CUSTOMER'S REQUEST

TECHNICAL DOCUMENT:

- DRAWING FOR INDIVIDUAL PART AVAILABLE UPON REQUEST

SHELL SIZE	DIMENSIONS IN INCHES					CABLE DIA. (MIN-MAX) IN.	WEIGHT (GRAMS)	CARLISLE P/N
	A	B	C	D	F			
1/E	1.230	1.500	0.740	0.984	0.560	0.10-0.30	18.0	LW091C-45
2/A	1.550	1.800	1.000	1.312	0.590	0.20-0.48	25.0	LW122C-45
3/B	2.100	1.800	1.475	1.852	0.580	0.20-0.40	28.5	LW123C-45
4/C	2.750	2.000	2.155	2.500	0.580	0.30-0.50	35.0	LW154C-45
5/D	2.650	2.000	2.085	2.406	0.690	0.30-0.60	38.0	LW165C-45

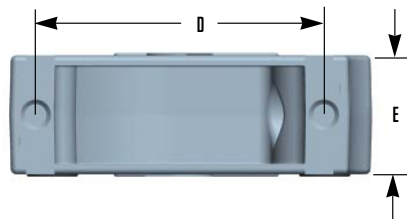
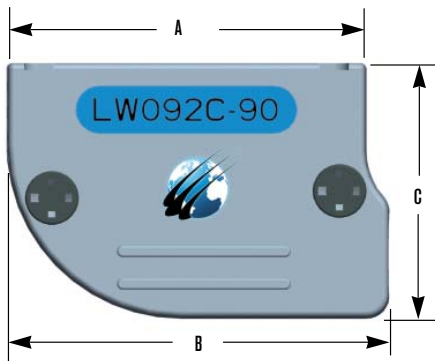
NOTES: 1. THE PARTS SHOWN IN THE ABOVE TABLE ARE STANDARD ITEMS, OTHER STRAIN RELIEF DIAMETERS WILL BE AVAILABLE UPON REQUEST. 2. PARTS ARE PACKAGED UNASSEMBLED.

90 DEGREE EXIT ANGLE BACKSHELL

COMPRESSION STYLE
ROHS AND ELV COMPLIANT

PRODUCT FACTS

- 90 DEGREE CABLE EXIT
- EXTREMELY COMPACT AND LIGHTWEIGHT
(UP TO 60% LIGHTER THAN COMPARABLE INDUSTRY STANDARD PRODUCTS)
- ACCOMMODATES CONVENTIONAL AND MOISTURE PROOF D-SUB CONNECTORS
- BODY TAPPED STYLE
- DESIGNED FOR EASE OF MANUFACTURING AND REWORK IN THE FIELD
- HIGH PRECISION WITH A MINIMAL AIR GAP
- VERY EFFECTIVE EMI SHIELDING



SHELL SIZE	DIMENSIONS IN INCH					CABLE DIA (MIN-MAX) IN INCH	WEIGHT (GRAMS)	CARLISLE P/N
	A	B	C	D	E			
1/E	1.230	1.330	0.95	.984	0.540	0.10-0.25	12	LW071C-90
2/A	1.550	1.650	1.10	1.541	0.540	0.15-0.35	15	LW092C-90
3/B	2.100	2.200	1.20	1.852	0.540	0.20-0.40	18	LW123C-90
4/C	2.750	2.850	1.50	2.500	0.540	0.30-0.60	30	LW164C-90
5/D	2.650	2.750	1.50	2.406	0.680	0.35-0.65	34	LW165C-90



IDEAL APPLICATION:

- AEROSPACE VIDEO AND ETHERNET
- EMI AND WEIGHT SENSITIVE

EACH KIT CONTAINS:

1 LEFT SHELL, 1 RIGHT SHELL AND SCREWS (MS24693)

STANDARD MATERIAL AND FINISH:

- SHELL - CAST ALUMINUM ALLOY WITH ELECTROLESS NICKEL PLATING
- FLAT HEAD SCREWS - STAINLESS STEEL

OPTIONAL MATERIAL:

- ZINC ALLOY OR METALIZED PLASTIC FOR BACKSHELLS
- ADDITIONAL PLATING UPON CUSTOMER'S REQUEST

TECHNICAL DOCUMENT:

DRAWING FOR INDIVIDUAL PART AVAILABLE UPON REQUEST

NOTES: 1. THE PARTS SHOWN IN THE ABOVE TABLE ARE STANDARD ITEMS; OTHER STRAIN RELIEF DIAMETERS WILL BE AVAILABLE UPON REQUEST. 2. PARTS ARE PACKAGED UNASSEMBLED.

HIGHLY FLEXIBLE BACKSHELL WITH CONVOLUTED TUBING

COMPRESSION STYLE
ROHS AND ELV COMPLIANT



PRODUCT FACTS

- FLEXIBLE CABLE EXIT
- EXTREMELY TIGHT BENDING RADIUS IN 90 DEGREE CONFIGURATION
- PROVIDES HIGH DEGREE OF STABILITY IN TERMS OF STRAIN RELIEF WITH MINIMAL DEFORMATION OF WIRE INSULATION
- COMPACT AND LIGHTWEIGHT
- BODY TAPPED STYLE
- DESIGNED FOR EASE OF MANUFACTURING AND REWORK IN THE FIELD
- HIGH PRECISION WITH A MINIMAL AIR GAP
- VERY EFFECTIVE EMI SHIELDING

IDEAL APPLICATION:

- AEROSPACE VIDEO AND ETHERNET
- EMI AND WEIGHT SENSITIVE

EACH KIT CONTAINS:

- 2 SHELL HALVES, 2 PAN 4-40 SCREWS, 1 TIE BUSHING, AND 1 CONVOLUTED TUBE

STANDARD MATERIAL AND FINISH:

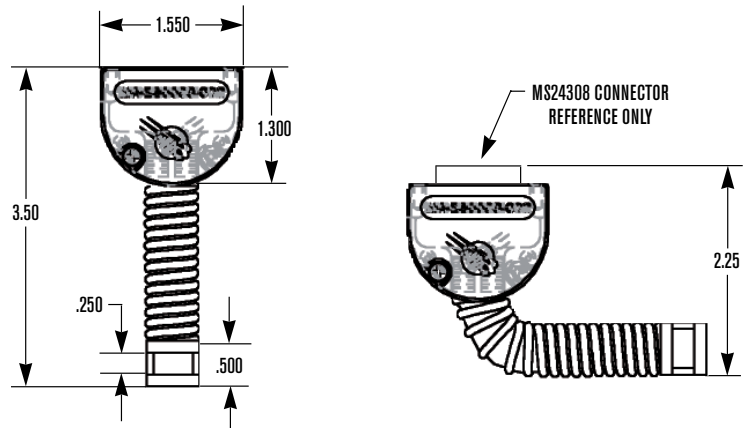
- SHELL - ALUMINUM ALLOY WITH NICKEL PLATING
- TIE BUSHING - ALUMINUM ALLOY WITH NICKEL PLATING
- CONVOLUTED TUBE - ETFE OR PTFE
- 4-40 PAN HEAD SCREWS - STAINLESS STEEL

OPTIONAL MATERIAL:

ZINC ALLOY OR METALIZED PLASTIC FOR BACKSHELLS

TECHNICAL DOCUMENT:

DRAWING AVAILABLE UPON REQUEST



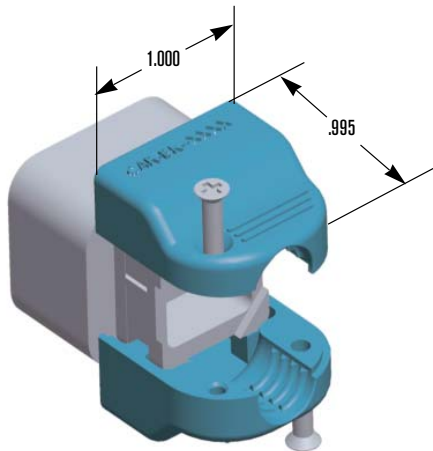
NOTES 1. THE PARTS SHOWN IN THE ABOVE TABLE ARE DESIGNED FOR M24308 CONNECTOR TYPE WITH STANDARD DENSITY OF 15 POSITIONS AND HIGH DENSITY OF 26 POSITIONS. OTHER SHELL SIZES, STRAIN RELIEF DIAMETERS AND DIFFERENT LENGTHS OF CONVOLUTED TUBES WILL BE AVAILABLE UPON REQUEST. 2. PARTS ARE PACKAGED UNASSEMBLED.

EN4165/BACC65 SERIES BACKSHELLS

ROHS AND ELV COMPLIANT

PRODUCT FACTS

- PARTS ARE MARKED WITH CARLISLE PART #
- COMPATIBLE WITH EN4165/BACC65/ARINC809 CONNECTORS
- COMPRESSION STYLE SHIELDING METHOD
- ADDITIONAL PLATING OPTIONS ARE AVAILABLE UPON CUSTOMER REQUEST/BUSINESS CASE.
- EXTREMELY COMPACT AND LIGHTWEIGHT
- DESIGNED FOR EASE OF MANUFACTURING AND REWORK IN THE FIELD
- HIGH PRECISION WITH MINIMAL AIR GAP
- VERY EFFECTIVE EMI SHIELDING



CAR-BK-10XP

CAR-BK-10XM

CAR-BK-10XC

Carlisle P/N	Exit Angle	Accommodated Cable Entry Dia. (in.)	Screw P/N	Screw Qty.	Weight (grams)	Shell
CAR-BK-10XP-S	Straight	.0150-.400	MS51959-5	2	9.5	Composite
CAR-BK-10XP-45	45 deg.	.0150-.400	2C31PPMS	2	9.5	Composite
CAR-BK-10XP-90	90 deg.	.0150-.400	2C31PPMS	2	10.0	Composite
CAR-BK-10XM-S	Straight	.0150-.400	MS24693-C4	2	13.0	Machined
CAR-BK-10XM-45	45 deg.	.0150-.400	MS51957-14	2	13.0	Machined
CAR-BK-10XM-90	90 deg.	.0150-.400	MS51957-15	2	15.0	Machined
CAR-BK-NEXM	No Entry	No Cable Entry	MS24693-C4	2	12.0	Machined
CAR-BK-10XC-S	Straight	.0150-.400	MS51959-5	2	13.0	Die Cast
CAR-BK-10XC-45	45 deg.	.0150-.400	2C31PPMS	2	13.0	Die Cast
CAR-BK-10XC-90	90 deg.	.0150-.400	2C31PPMS	2	15.0	Die Cast

IDEAL APPLICATION:

- AEROSPACE, VIDEO AND ETHERNET
- EMI AND WEIGHT SENSITIVE

EACH KIT CONTAINS:

- 2 SHELL HALVES
- 2 SCREWS

STANDARD MATERIAL AND FINISH:

- SHELL:
 - DIE CAST: A380 ALUMINUM WITH ELECTROLESS NICKEL PLATING
 - MACHINED: T6-6061 ALUMINUM WITH ELECTROLESS NICKEL PLATING
- COMPOSITE: GLASS-FILLED PC/ABS WITH UNDERCOAT OF ELECTROLESS NICKEL AND TOP COAT OF ELECTROLYTIC NICKEL
- SCREWS - STAINLESS STEEL

TECHNICAL DOCUMENT:

DRAWING AVAILABLE UPON REQUEST

STRAIGHT EXIT ANGLE BACKSHELL

COMPRESSION STYLE
ROHS AND ELV COMPLIANT



PRODUCT FACTS

- STRAIGHT CABLE EXIT
- EXTREMELY COMPACT AND LIGHTWEIGHT
- BODY TAPPED STYLE
- DESIGNED FOR EASE OF MANUFACTURING AND REWORK IN THE FIELD
- HIGH PRECISION WITH A MINIMAL AIR GAP
- VERY EFFECTIVE EMI SHIELDING

IDEAL APPLICATION:

- AEROSPACE VIDEO AND ETHERNET
- EMI AND WEIGHT SENSITIVE

EACH KIT CONTAINS:

- 2 SHELL HALVES AND
- 2 SCREWS (MS51957)

STANDARD MATERIAL AND FINISH:

- SHELL - ALUMINUM ALLOY, WITH ELECTROLESS NICKEL PLATED

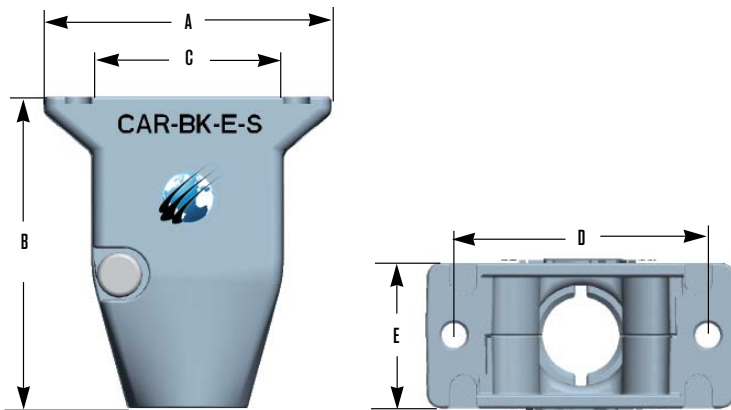
- 4-40 PAN HEAD SCREWS - STAINLESS STEEL

OPTIONAL MATERIAL:

- ZINC ALLOY OR METALIZED PLASTIC FOR BACKSHELLS
- ADDITIONAL PLATING UPON CUSTOMER'S REQUEST

TECHNICAL DOCUMENT:

DRAWING FOR INDIVIDUAL PART
AVAILABLE UPON REQUEST



SHELL SIZE	DIMENSIONS IN INCH					CABLE DIA (MIN-MAX) IN INCH	CARLISLE P/N
	A	B	C	D	E		
1/E	1.230	1.300	0.800	.984	0.560	0.10-0.30	CAR-BK-E-S
2/A	1.550	1.500	1.120	1.312	0.560	0.15-0.35	CAR-BK-A-S
3/B	2.100	1.750	1.670	1.852	0.560	0.20-0.40	CAR-BK-B-S
4/C	2.750	1.750	2.320	2.500	0.560	0.30-0.60	CAR-BK-C-S
5/D	2.650	1.750	2.220	2.406	0.650	0.35-0.65	CAR-BK-D-S

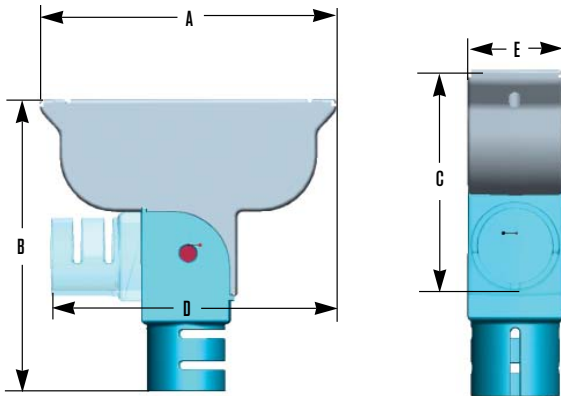
NOTES: 1. THE PARTS SHOWN IN THE ABOVE TABLE ARE STANDARD ITEMS, OTHER STRAIN RELIEF DIAMETERS WILL BE AVAILABLE UPON REQUEST. 2. PARTS ARE PACKAGED UNASSEMBLED.

MULTI-EXIT EXIT ANGLE BACKSHELL UNIBODY STYLE

ROHS AND ELV COMPLIANT
PATENT #7029315

PRODUCT FACTS

- CONFIGURABLE FOR BOTH STRAIGHT AND 90 DEGREE CABLE EXITS
- COMPACT AND LIGHTWEIGHT
- VERY EFFECTIVE EMI SHIELDING
- ACCOMMODATES MANY TYPES OF SHIELD TERMINATIONS
- ACCOMMODATES A WIDE RANGE OF CABLE DIAMETERS
- DESIGNED FOR EASE OF MANUFACTURING AND REWORK IN THE FIELD



SHELL SIZE	DIMENSIONS IN INCH					CABLE DIA (MIN-MAX) IN INCH	STRAIN RELIEF (STANDARD-STRAIGHT)	SHELL	PACKAGE
	A	B	C	D	E				
E	1.23	1.35	0.98	1.20	0.52	0.1-0.3	CAR-SR-8-S	CAR-BK-E	CAR-BK-E-P
A	1.55	1.65	1.20	1.56	0.52	0.1-0.3	CAR-SR-8-S	CAR-BK-A	CAR-BK-A-P
B	2.10	1.75	1.30	2.12	0.60	0.2-0.4	CAR-SR-10-S	CAR-BK-B	CAR-BK-B-P
C	2.75	2.60	1.70	2.70	0.75	0.3-0.6	CAR-SR-15-S	CAR-BK-C	CAR-BK-C-P
D	2.65	2.60	1.70	2.65	0.75	0.3-0.6	CAR-SR-15-S	CAR-BK-D	CAR-BK-D-P

IDEAL APPLICATION:

- VIDEO AND ETHERNET SIGNALS
- EMI AND HI POT SENSITIVE

EACH KIT CONTAINS:

- 1-SHELL
- 1-STRAIN RELIEF
- 2 FLAT HEAD 2-56 SCREWS

STANDARD MATERIAL AND FINISH:

- SHELL - ALUMINUM ALLOY WITH NICKEL PLATED FINISH
- STRAIN RELIEF - SAME AS ABOVE
- 2-56 FLAT HEAD SCREWS - STAINLESS STEEL

OPTIONAL MATERIAL:

- ZINC ALLOY OR METALIZED PLASTIC
- ADDITIONAL PLATING UPON CUSTOMER'S REQUEST

TECHNICAL DOCUMENT:

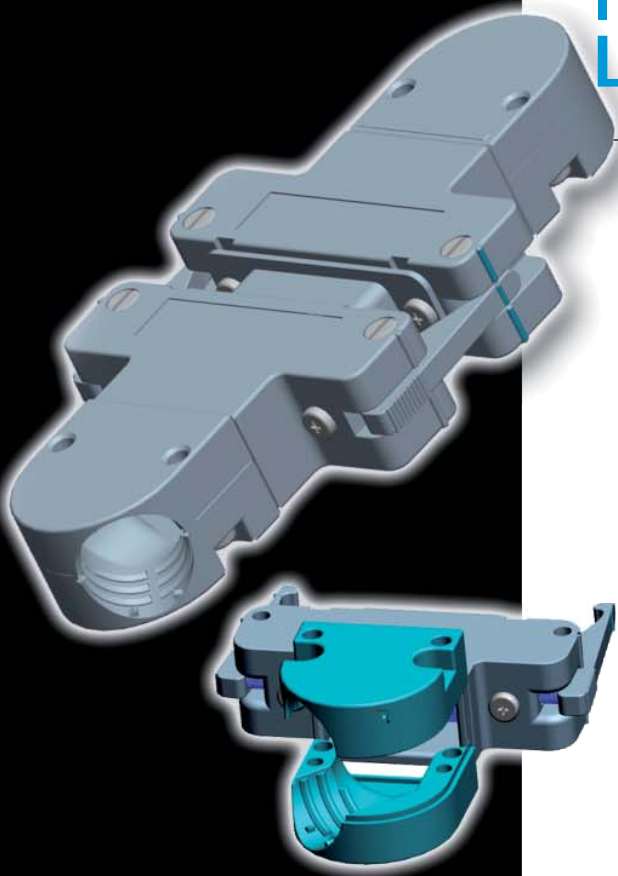
- MANUFACTURING INSTRUCTIONS FOR SHIELDING TERMINATIONS

NOTES: 1. ALL PARTS ARE PACKAGED UNASSEMBLED.
2. STRAIN RELIEFS SHOWN IN ABOVE TABLE ARE STANDARD AND CAN BE USED IN A STRAIGHT AND 90 DEGREE CONFIG. DIFFERENT ANGLES AND DIAMETERS CAN BE CUSTOMIZED TO SUIT YOUR APPLICATIONS.

INTERCHANGEABLE STRAIN RELIEF WITH THE INTEGRAL SPRING LATCH SYSTEM

COMPRESSION STYLE

ROHS AND ELV COMPLIANT



PRODUCT FACTS

- INTERCHANGEABLE STRAIN RELIEF FROM SIZE 2 - SIZE 5
- ACCOMMODATES A WIDE RANGE OF CABLE DIAMETERS WITH MINIMAL NUMBER OF PARTS
- INEXPENSIVE AND FAST DESIGN ALTERATIONS
- ROBUST INTEGRATED SPRING LATCH SYSTEM: PROVIDES A BLIND MATEABLE FUNCTIONALITY AND THE AUDIBLE "CLICK"
- VISUAL AND TACTILE FEATURES CONFIRM ENGAGEMENT
- ROBUST LOCKING SYSTEM
- CONVENIENT AND ERGONOMICAL RELEASE
- HIGH PRECISION WITH A MINIMAL AIR GAP
- COMPACT AND LIGHTWEIGHT
- VERY EFFECTIVE EMI SHIELDING

IDEAL APPLICATION:

- AEROSPACE VIDEO AND ETHERNET.
- EMI AND WEIGHT SENSITIVE

EACH KIT CONTAINS:

- 1 LEFT SHELL, 1SET OF STRAIN RELIEF AND 2 ROUND 4-40 SCREWS

STANDARD MATERIAL AND FINISH:

- SHELL - ALUMINUM ALLOY WITH ELECTROLESS NICKEL PLATING

- STRAIN RELIEF - SAME AS ABOVE

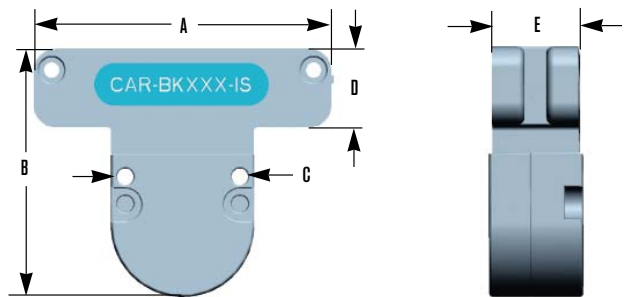
- LOCK LATCH - SAME AS ABOVE

- SPRING - STAINLESS STEEL

- 4-40 PAN HEAD SCREWS - STAINLESS STEEL

TECHNICAL DOCUMENT:

- INSTRUCTION SHEETS FOR SHIELDING TERMINATIONS



SHELL SIZE	DIMENSIONS IN INCH					CABLE DIA (MIN-MAX) IN INCH	STRAIN RELIEF (STANDARD-STRAIGHT)	SHELL	PACKAGE
	A	B	C	D	E				
A	2.00	1.75	1.00	0.55	0.68	0.1-0.3	CAR-SR-8-C-X	CAR-BK-002	CAR-BK-002-IS
B	2.50	1.75	1.00	0.55	0.68	0.2-0.4	CAR-SR-10-C-X	CAR-BK-003	CAR-BK-003-IS
C	3.15	2.00	1.00	0.55	0.68	0.3-0.6	CAR-SR-15-C-X	CAR-BK-004	CAR-BK-004-IS
D	2.65	2.00	1.00	0.55	0.68	0.3-0.6	CAR-SR-15-C-X	CAR-BK-005	CAR-BK-005-IS

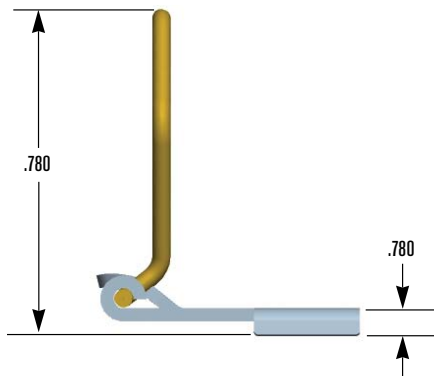
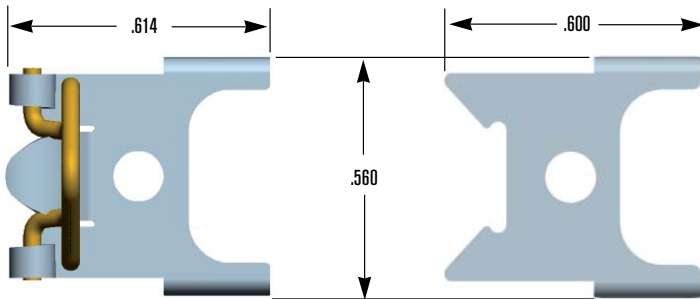
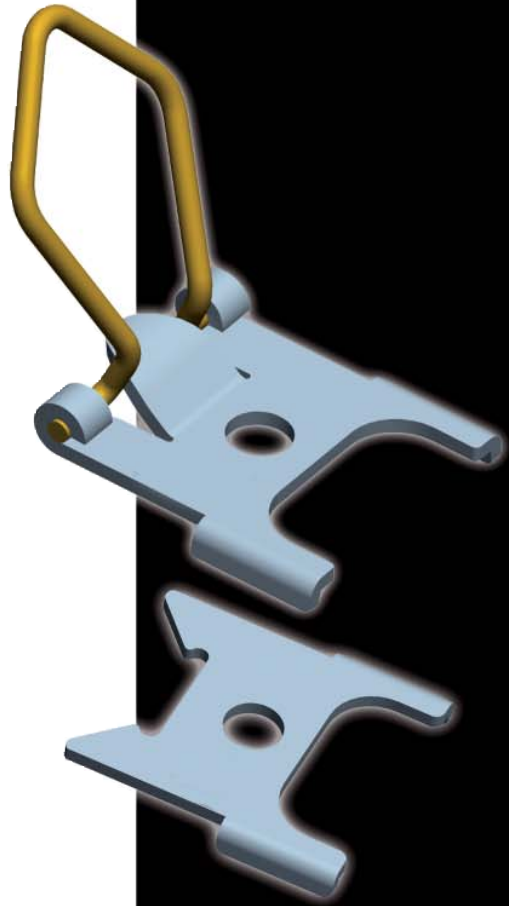
NOTES: 1. ALL PARTS ARE PACKAGED UNASSEMBLED.
2. STRAIN RELIEFS SHOWN IN ILLUSTRATIONS ARE 45 DEGREE CABLE EXIT. OTHER STRAIN RELIEF CONFIGURATIONS CAN BE CUSTOMIZED TO SUIT YOUR APPLICATIONS.

UNIVERSAL SPRING LATCHES

HIGH STABILITY LOCKING IN PANEL
AND INLINE APPLICATION
ROHS AND ELV COMPLIANT

PRODUCT FACTS

- PROVIDES ENHANCED LOCKING STABILITY IN PANEL AND INLINE APPLICATIONS COMPARED TO INDUSTRY STANDARD PRODUCTS
- HIGH STRENGTH STAINLESS STEEL PROVIDES EXCELLENT CORROSION AND STRESS RESISTANCE
- ACCOMMODATES CONVENTIONAL AND MOISTURE PROOF M24308 CONNECTOR TYPES
- COMPACT AND LIGHTWEIGHT
- ECONOMICAL



IDEAL APPLICATION:

- AEROSPACE VIDEO AND ETHERNET.
- EMI AND WEIGHT SENSITIVE

EACH KIT CONTAINS:

- SLUM: ONE MALE LATCH PLATE, ONE COIL SPRING, ONE ROUND HEAD SCREW AND ONE LOCK WASHER
- SLUF: TWO FEMALE LATCH PLATES, TWO ROUND HEAD SCREWS AND TWO LOCK WASHERS

STANDARD MATERIAL AND FINISH:

- LATCH PLATE - PASSIVATED STAINLESS STEEL
- LATCH SPRING - PASSIVATED STAINLESS STEEL
- FLAT HEAD SCREWS - STAINLESS STEEL

OPTIONAL FINISH:

SURFACE FINISH CAN BE NICKEL PLATED OR ANODIZED UPON REQUEST

TECHNICAL DOCUMENT:

DRAWING FOR INDIVIDUAL PART
AVAILABLE UPON REQUEST



CARLISLE

INTERCONNECT TECHNOLOGIES

The combination of **Tensolite®** and **Carlyle, Inc.**

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