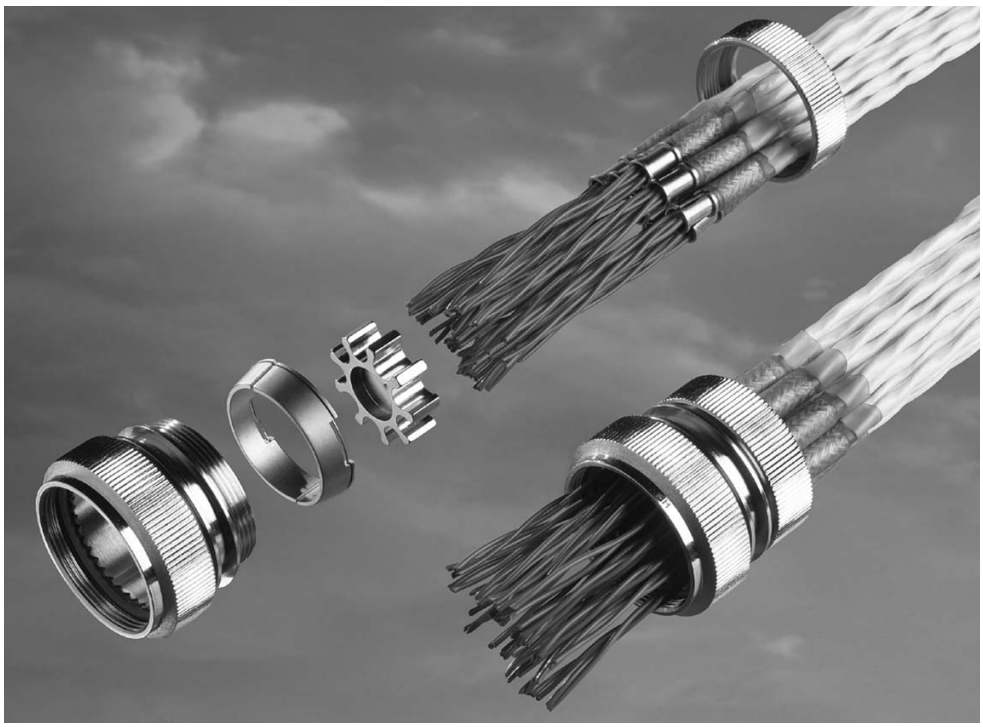
Product Facts

- Superior EMC/EMI Shielding Performance
- Simple installation
- Easy reentry
- Simplified maintenance and repair
- Excellent mechanical and environmental resistance
- Efficient strain relief
- Flexibility
- Versatility



Applications

Tyco Electronics, a longtime leader in harnessing technology, has written a new chapter in EMC shielding with the introduction of the Raychem HexaShield EMC adapter.

Designed to provide EMC protection solutions for both commercial and military applications, HexaShield adapters represent a significant improvement over pigtail termination methods. By providing 360-degree EMC shielding on the termination area of each individual cable, HexaShield adapters provide outstanding shielding effectiveness.

HexaShield adapters are simple to install, easy to maintain, and dependably resistant to mechanical and environmental stresses.

Principal points and features

- Easy reentry: To insert or remove ferrules from the HexaShield adapter, simply loosen the back nut.
- Superior protection: No degradation of shielding performance.
- Up to four shielded cables accommodated by each ferrule.
- Mechanical and environmental protection equal to backshells complying with MIL-C-85049 Category 3B.
- Strain relief on each individual cable.
- Weight reduction, by possibly eliminating the need for overall shielding.
- Compact size - not exceeding outer diameter of connector.
- Available in straight, 45° and 90° angles, as well as swept and long bodies.

Simple, one-piece assembly and installation

1. Solder cable or wire shield to a ferrule with a Raychem heat-shrinkable SolderShield terminator.
2. Clip ferrule into one of the grounding star cavities.
3. Secure the back nut of the HexaShield adapter-so that the conic ring assembly automatically compresses the ferrules.

Designed to corresponding connector specifications.

Platings Available*	Raychem Product Specifications
Electroless nickel (MIL-DTL-26074)	RB-110 and RB-114
Olive drab cadmium (QQ-P-416 Type II Class 3)	—

*Contact Tyco Electronics for additional platings

Installation Procedures

Installation procedure for HET-A-02X and HET-A-04X (RPIP-696-00)	Installation procedure for HET-03X (RPIP-696-03)	General procedure for cylindrical connectors, right-angle body (RPIP-696-07)
General procedure for ARINC 600 Size II connectors (RPIP-696-01)	General procedure for cylindrical connectors, straight body (RPIP-696-04)	—
General procedure for ARINC 600 Size III connectors (RPIP-696-02)	—	—

Catalog 1654507
Revised 5-03

www.tycoelectronics.com

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are U.S. equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

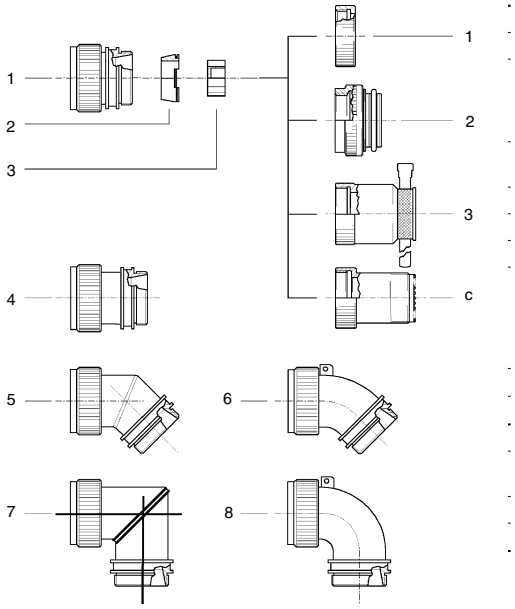
South America: 55-11-3611-1514
Japan: 81-44-900-5102
Singapore: 65-4866-151
UK: 44-1793-528171

Kit Descriptions

Hexashield Adapters for Circular Connectors: Straight, 45°and 90° Assemblies

Item	Description
1	Straight adapter assembly
2	Conic ring assembly
3	Star Plain (Standard) Drilled (Option) Split (Option) _
4	Straight adapter assembly - "L" version - nominally 0.5" [12.7] longer body
5	45° adapter assembly - welded
6	45° adapter assembly - swept
7	90° adapter assembly - welded
8	90° adapter assembly - swept Standard products shown. Variants available on request. Split star assemblies are shown on relevant S.C.D's where applicable.

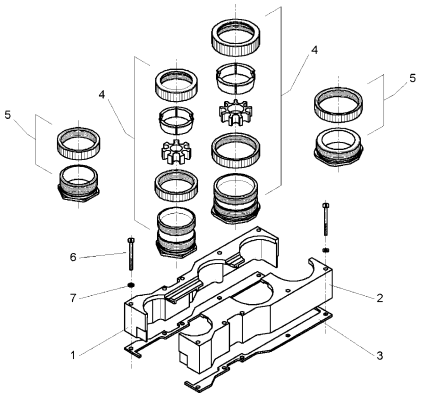
Item	HexaShield Version
-1	Back Nut
-2	Tinel adapter assembly Tinel-Lock ring for single braid
-3	Bandstrap adapter assembly
-C	Conduit adapter



HexaShield Adapters for ARINC 404/600 Connectors: Sizes 1, 2, 3 and 4 Assemblies

Item	Description
1	Left side support
2	Right side support
3	Retention bars
4	Body assemblies Body Holding nut Conic ring assembly Star _ Back nut
5	Cavity plug assemblies Plug Holding nut
6	Pan head screws - 4-40 UNC
7	Spring washers

ARINC 600 Size 2 shown
Stars are available as plain, drilled or split.
See relevant S.C.D's for further information



Catalog 1654507
Revised 5-03

www.tycoelectronics.com

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are U.S. equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Japan: 81-44-900-5102
Singapore: 65-4866-151
UK: 44-1793-528171

Ordering Information

Part Numbering for Standard Products

HexaShield Adapter for Circular Connectors

HEXYY L -AY -00 S -YY -AY -Y -DS

Drilled Star:
*See applicable SCD for star options

Type of Back Nut:
1 = Standard back nut
2 = Clamping nut for tinel ring (for overbraid protection)
3 = Clamping nut with bandstrap
C = Clamping nut for conduit applicator

Max. number of ferrules that can be accommodated
*See applicable SCD for options

Hexashield Size Code:
*See applicable SCD for order number (shell size)

S = Swept version

Configuration:
00 = Straight body
45 = 45 degree angle body
90 = 90 degree angle body

Type of Plating:
B = Cadmium plated
C = Electroless nickel

L = Long body
*See applicable SCD for availability

Connector Code Number:
21 = MIL-C-26482 Series 1
40 = MIL-DTL-38999 Series 3 and 4
41 = MIL-DTL-38999 Series 1 and 2
54 = MIL-DTL-38723 Series 1 and 3
MIL-C-25482 Series 2

Catalog 1654507
Revised 5-03

www.tycoelectronics.com

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are U.S. equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Japan: 81-44-900-5102
Singapore: 65-4866-151
UK: 44-1793-528171

Ordering Information (Continued)

HexaShield Adapter for Collins Connectors

HEXDB-AC-00-A9-1

00 = Straight body
90 = Right-angle body

HexaShield Adapter for ARINC 600 Connectors

HEXA6-AY-00-YY-AY-Y

Clamping nut version:
1 = Clamping nut alone
2 = Clamping nut for tinel ring

Number of ferrules:
18 for ARINC 600 size II (A and B cavities)
25 for ARINC 600 size II (A, B and C cavities)
18 for ARINC 600 size III (A and B cavities)
*See applicable SCD for options

ARINC Connector Size:
02 = ARINC 600 size II
03 = ARINC 600 size III

Configuration:
00 = Straight body
90 = Right-angle body

Plating:
B = Cadmium plated
C = Electroless nickel

Part Numbering of Ferrule Kits

HET-A-02X for small-size cable with SolderShield terminator
HET-A-03X for connection of unshielded cables ferrules with heat-shrinkable tubing (no shield)
HET-A-04X for large-size cables with SolderShield terminator

Type of Plating:
B = Cadmium plated
C = Electroless nickel

HEX07-AX ferrule - solid blank for use when a HET-A is not needed

Type of Plating:
B = Cadmium plated
C = Electroless nickel

*Not all part numbers are standard; your local Tyco Electronics representative will assist you in selecting the appropriate standard product

Trim off for 3-hole punch

Catalog 1654507
Revised 5-03

www.tycoelectronics.com

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are U.S. equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

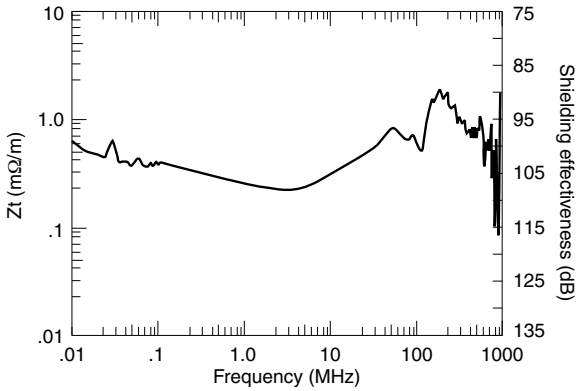
South America: 55-11-3611-1514
Japan: 81-44-900-5102
Singapore: 65-4866-151
UK: 44-1793-528171

EMC Performance

Product Facts

- **Outperforms traditional pigtail termination, especially in HIRF performance**
- **Withstands 10-kA peak current lightning transients of SAE AE4L-87-3**

Transfer Impedance



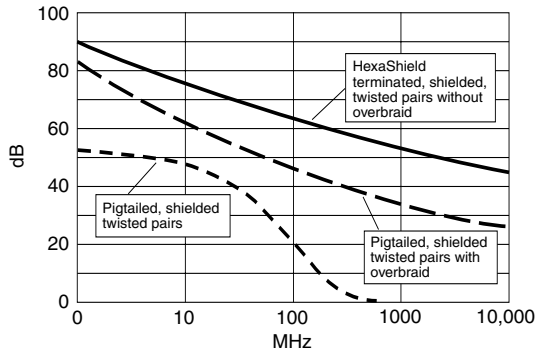
HexaShield size: 23

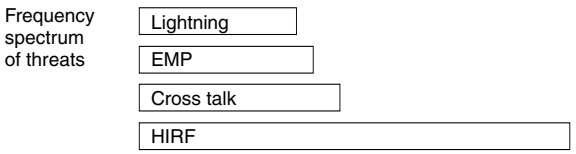
Cable: Raychem 5024H8424 (one cable installed)

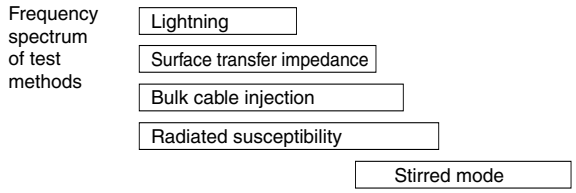
Test method: CEI 96-1

Protection Level

Generalized system performance (Actual system performance in any one test method may differ.)







Trim off for 3-hole punch

Catalog 1654507
Revised 5-03

www.tycoelectronics.com

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are U.S. equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Japan: 81-44-900-5102
Singapore: 65-4866-151
UK: 44-1793-528171

Typical HexaShield Applications

Civilian and military aircraft
Avionics
Fighter aircraft
Missiles and launch support systems
Armored and military support vehicles
Navy ships (total shipboard hardening)
Military communications
Engines (FADEC harness hardening)

HexaShield Product Range

Accommodates the following connector types*:
MIL-C-26482 Series 1
MIL-DTL-38999 Series 1, 2, 3, and 4
MIL-C-26482 Series 2
MIL-DTL-83723 Series 1 and 3
DBAD
ARINC 600
ARINC 404

*Please contact Tyco Electronics for other connector types and special requests.

Support Services

	United States	Canada	Mexico	Central America	South America	Other Latin/South American Countries
Technical Support	1-800-522-6752	1-905-470-4425	01-800-733-8926	52-55-5-729-0425	55-11-3611-1514	57-1-240-9396
Tooling Assistance	1-800-522-6752	1-905-470-4425	01-800-733-8926	52-55-5-366-0224	55-11-4034-6021	57-1-240-9396
Customer Service	1-800-522-6752	1-905-475-6222	01-800-733-8926	52-55-5-729-0431	55-11-3611-1311	57-1-240-9396
Product Information by FAX	1-800-522-6752	1-800-245-4356	01-800-733-8926	52-55-5-729-0431	1-717-986-3500	57-1-240-9396

Catalog 1654507
Revised 5-03

www.tycoelectronics.com

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are U.S. equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425
South America: 55-11-3611-1514
Japan: 81-44-900-5102
Singapore: 65-4866-151
UK: 44-1793-528171