



MILITARY & DEFENSE EDITION

NS Series
MIL-DTL-28840
MILITARY STYLE CONNECTORS

- Front-Release Contacts
- EMI-RFI Environmental Backshells
- Covers, Gaskets, Contacts, Tooling

Milnec Interconnect Systems

High-Performance Cylindrical Connectors

About Us

MILNEC INTERCONNECT SYSTEMS is a leader in the design, manufacture, and supply of high-performance cylindrical interconnect systems. From research stations in the Antarctic to spacecraft on the plains of Mars, our high-reliability connector systems conquer the most demanding environments. Milnec is a supplier to leading companies in 24 countries in the following industries:

- Military & Defense
- Aerospace & Space
- Railway & Mass Transit
- Industrial & Heavy Equipment
- Alternative Energy, Nuclear, Oil & Gas



Logistics Solutions for Global Applications

Global logistics and support means we deliver products on time every time to any destination. To support your immediate requirements, we have extensive inventories, making most systems readily available for today's compressed design and production schedules. On average, custom connector solutions made to your exact configuration ship within seven days from the time of order placement.

- Worldwide shipping (restricted to NATO countries only)
- Web access to inventory, prices, & delivery information
- A large stock of popular parts for greater availability
- Competitive pricing and short lead times
- Impeccable customer service & technical support

Milnec Interconnect Systems

3947 West Lincoln Highway #192
Downingtown, PA 19335

1-855-4MILNEC Toll Free
(1-855-464-5632)

technical-support@milnec.com

U.S. Military Cage Code: 6STX5

NAICS Code: 423690

High Reliability—Simplified

Just because your interconnect problem is complicated does not mean acquiring the solution has to be. Milnec connector systems and our "all-in-one" kits provide engineers the most complete and professional connector solutions with ease and technical clarity.

- Complete, high-reliability solutions
- Simple to understand technical data & configurations
- Online part builder tools, drawings, & documentation
- Field installable & serviceable



Performance With Environmental Responsibility

RoHS compliant products are available to support environmental responsibility and legislative conformity. Through simple modification codes, Milnec provides a wide variety of material options to easily provide customers with fully compliant and eco-friendly connector components.

- RoHS compliant materials & finishes
- Simple material modification codes
- Lead-free solder contacts



Highest Manufacturing Quality

We invest in the finest equipment and modern production processes to ensure that our connectors will exceed your quality and performance expectations. Our production processes include advanced computer numerical control machining, cosmetic and metal finishing, heat treatment, and stainless steel passivation.

- Traceability on 100% of the parts
- Quick production lead times
- Quantity support from R&D to production
- "Just-in-time" delivery, kitting, & special packaging
- Rapid tooling & prototyping for custom designs



Rev. 2211

MIL-DTL-28840 Compliant Connectors

The NS Series of connectors is based on the popular MIL-DTL-28840 standard and is designed to meet or exceed all of the specifications for performance and durability. M28840 connectors were designed for use in shipboard applications by the U.S. Navy. Milnec continues that tradition with the NS Series, a high density environmental connector with a shock-resistant threaded coupling system and front release crimp contacts. NS Series connectors feature a splined backshell interface and a wire sealing grommet that improve mechanical and environmental performance. Connector shells are scoop proof and EMI/RFI shielded and are made from corrosion resistant materials and finishes. The NS Series is ready for your rugged application.



Rugged Connector Systems
NS Series connectors feature improved EMI shells with a shock resistant coupling system for performance in harsh environments.

Complete IP67 Rated Waterproof Connector Kits

NS Series connectors can be easily configured as complete kits that include a full range of protective accessories for a reliable, IP67 rated environmental interconnect solution. Simply select the desired kit option on the part builder and your connector will come with all the matching sealing accessories you need for complete protection, right out of the box!

Table of Contents

About Us	Z-1
Features & Benefits	Z-2
Series Specifications	Z-3
Contact Specifications	Z-5
Alternate Key Positions	Z-5
Insert Arrangement Drawings	Z-6
Part Builder	Z-7
(NS06) Plug	Z-9
(NS06) Plug With Straight Strain Relief Backshell	Z-10
(NS06) Plug With 45° Strain Relief Backshell	Z-11
(NS06) Plug With 90° Strain Relief Backshell	Z-12
(NS06) Plug With Straight Backshell & Clamp	Z-13
(NS06) Plug With 45° Backshell & Clamp	Z-15
(NS06) Plug With 90° Backshell & Clamp	Z-17
(NS00) Wall Mount Receptacle	Z-19
(NS02) Box Mount Receptacle	Z-20
(NS07) Jam Nut Receptacle	Z-21
(NS01) Cable Mount Receptacle	Z-22
(NS00) Wall Mount Recept. With Backshell & Clamp	Z-23
(NS01) Cable Mount Recept. With Backshell & Clamp	Z-25
(NS22) Wall Mount Thru-Bulkhead Receptacle	Z-27
(NS24) Jam Nut Thru-Bulkhead Receptacle	Z-28
(NSB2) Straight Strain Relief Backshell	Z-29
(NSB3) 45° Strain Relief Backshell	Z-30
(NSB4) 90° Strain Relief Backshell	Z-31
(NSEN) Environmental Nut (E-Nut)	Z-32
(NSE2) Straight Environmental Backshell	Z-33
(NSE3) 45° Environmental Backshell	Z-35
(NSE4) 90° Environmental Backshell	Z-37
(NSR2) Straight EMI/Environmental Backshell	Z-39
(NSR3) 45° EMI/Environmental Backshell	Z-41
(NSR4) 90° EMI/Environmental Backshell	Z-43
(NSC2) Straight Metal Core Conduit Backshell	Z-45
(NSC3) 45° Metal Core Conduit Backshell	Z-47
(NSC4) 90° Metal Core Conduit Backshell	Z-49
(NSCT) Metal Core Conduit	Z-51
(NSCB) Conduit Bushing	Z-52
(NSCP) Protective Covers	Z-53
(NSCD) Stowage Receptacle	Z-54
(NSGE) Mounting Gasket	Z-55
(NSMB) Mounting Bracket & Screws	Z-56
Hand Crimpers & Positioners	Z-57



Series Specifications

NS Series • MIL-DTL-28840 Type Connectors

Performance Specifications

Built to meet or exceed MIL-DTL-28840 specifications
Guaranteed fully compatible and interchangeable with physical and performance characteristics with all existing MIL-DTL-28840 military and commercial derivatives

Environmental Characteristics

Temperature Range

-67 to +392°F (-55° to +200°C)

Service life varies with the maximum internal hot spot temperature resulting from any combination of electrical load or ambient temperature:

77°F (25°C): Continuous

221°F (105°C): 35,000 hours

392°F (200°C): 1,000 hours

Water Pressure

IP67 rating (environmental sealing)

Fully submersible to 6 ft (1.8m) for 48 hours

Fluid Immersion

Per test method EIA-364-10

Humidity

Mated connectors shall maintain an insulation resistance of 100 megohms or greater at 77°F (25°C) per test procedure EIA-364-31

Physical Characteristics

Coupling

Threaded

Polarization

Single master key and keyway on top position of shell

Insert Arrangements

9 standard, custom inserts available

Key/Keyway Polarizations

Normal polarization (1), plus five alternate keyway polarizations (2, 3, 4, 5, 6)

Endurance Characteristics

Coupling Cycles

500 coupling cycles (minimum)

Shock

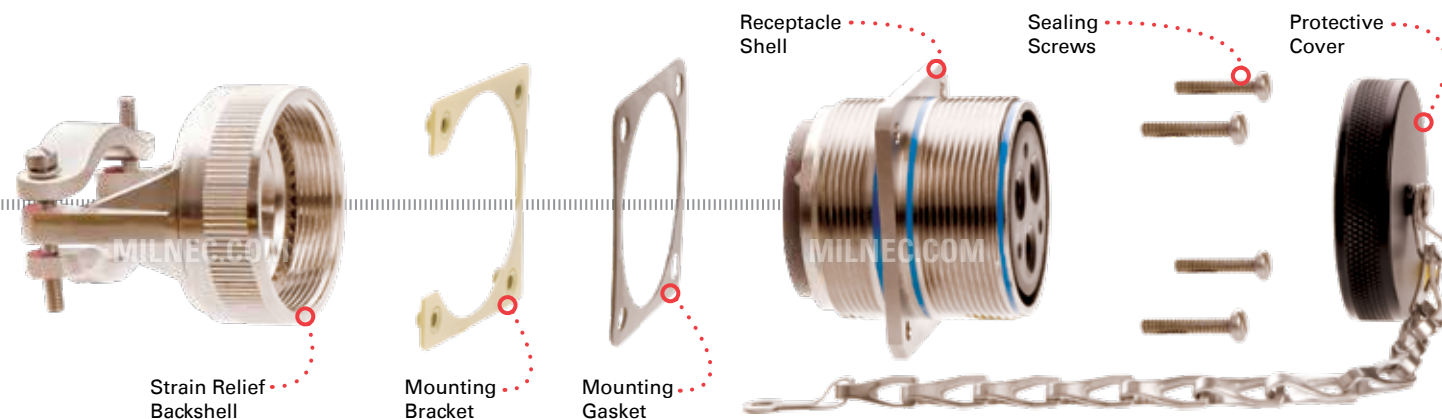
In accordance with MIL-S-901, Grade A

Vibration

Per EIA-364-28 test procedure

Magnetic Permeability

2.0 μ (aluminum), 5.0 μ (stainless steel) maximum;
ASTM-A342/A342M



Connectors shown for illustrative purposes only, actual design may differ.

Rev. 2211

Material Characteristics

Shell

Aluminum alloy per ASTM B211, or stainless steel, Class 316, per AMS-QQ-S-763

Shell Plating (Standard Finishes)

W Finish

Electrically conductive cadmium plate finish with an olive drab chromate after-treat for additional corrosion resistance (500 hr salt spray rating)

D Finish

Stainless steel, Class 316, black cadmium plate (1,000 hr salt spray rating)

Shell Conductivity

Mated connectors are electrically conductive from the plug accessory thread to the receptacle mounting flange or the accessory thread on the cable receptacle. The overall DC resistance shall not exceed 0.005 Ω

Insert

High-grade engineering plastic per ASTM D5948
Non-removable and mechanically bonded to shell

Sealing Grommet

Blended elastomer, 30% silicone per ZZ-R-765, 70% fluorosilicone per MIL-R-25988

O-Ring Seal

Neoprene or silicone

Mounting Gasket

Neoprene or silicone

Mounting Bracket

Aluminum alloy with SST locking nuts

Sealing Screws

SST steel with silicone O-rings

Contact Characteristics

Contact Design

Removable, front-release crimp contacts

Contact Size

#20

Contact Material & Plating

Copper alloy, 50 μ inch gold plated per ASTM B488 Type 3, Code C, Class 1, 27 over nickel underplate per QQ-N-290 Class 2

Socket contact hood: stainless steel, passivated

Max Number of Contacts

7 to 155 standard

Max Contact Resistance

Per SAE-AS39029

Max Voltage Drop

55 millivolts maximum

Contact Retention Clip

Beryllium copper

Electrical Characteristics

Max Current Rating

Size #20 Contact: 20 AWG 7.5A, 22 AWG 5.0A, 28 AWG 1.5A, 30 AWG 1.0A

Max Operating Voltage

1,000 VAC (RMS) at sea level

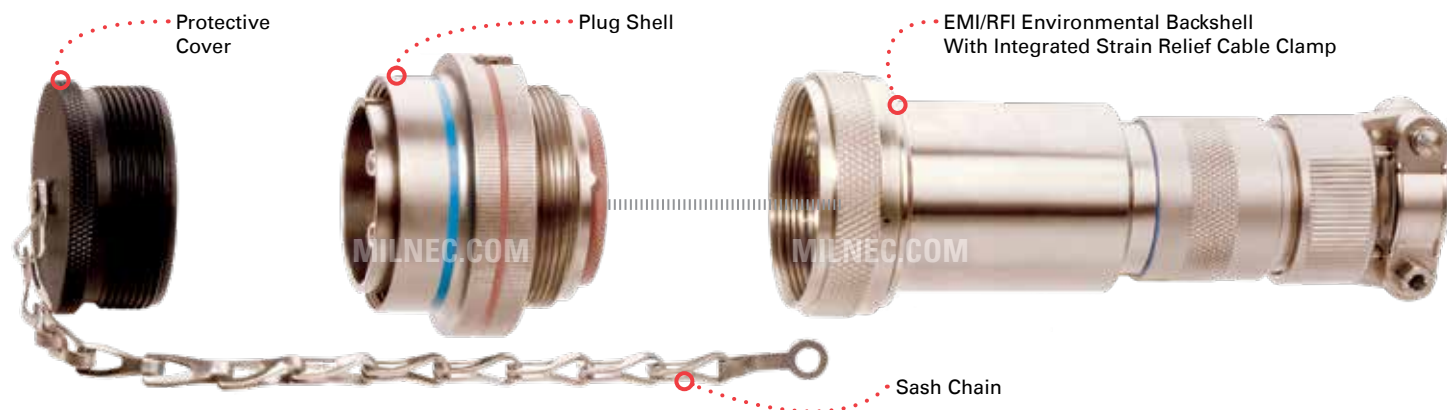
Test per EIA-364-20

Insulation Resistance

>5,000 megohms at 77°F (25°C) per EIA-364-21

Wire Size

20 to 32 AWG



Contact Specifications & Alternate Key Positions

NS Series • MIL-DTL-28840 Type Connectors

Standard Contacts, Sealing Plugs, & Tooling

Contact Size	Contact Style	Part Number	Wire Size (AWG)	Wire Range (Dia)	Crimping Tool	Positioner (Turret)	Straight Insertion Tool	Offset Insertion Tool	Extraction Tool
#20	Pin	NSPP20D	28, 30, 32	.008-.013 (.20-.32)	TK401	TP402	TN301	TN302	TX401
	Pin	NSPP20P	22, 24, 26	.016-.025 (.41-.64)					
	Pin	NSPP20F	20, 22, 24	.020-.032 (.51-.81)					
	Socket	NSSS20E	28, 30, 32	.008-.013 (.20-.32)					
	Socket	NSSS20S	22, 24, 26	.016-.025 (.41-.64)					
	Socket	NSSS20G	20, 22, 24	.020-.032 (.51-.81)					
	Sealing Plug	NSSP20	—	—					

Dimensions are in inches (mm) unless otherwise noted.

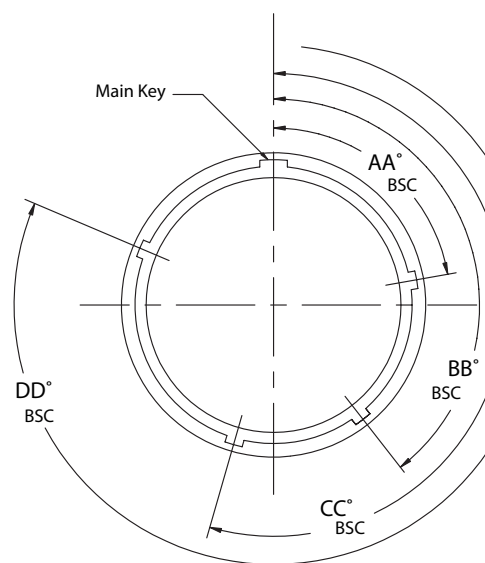
Contact Dimensions & Performance

Contact Size	Potential Drop (Millivolts) Max	Dielectric Strength VAC (RMS)		Finished Wire Diameter Sealing Range		Contact Retention Min Axial Load Pounds (Newtons)	Separation Force (Min oz.)	Engagement Force (Max oz.)
		Sea Level	70,000 ft Altitude	Min	Max			
#20	55	1,000	375	.040 (1.02)	.070 (1.78)	20 (89.0)	0.6	22

Dimensions are in inches (mm) unless otherwise noted. * Contact reducing bushings are required for crimp barrel to accommodate 10, 6, and 2 AWG wire gauges. Bushings are ordered separately, see Contact Reducing Bushing table below.

Alternate Key Positions

Shell Size	Key & Keyway Arrangement	AA° BSC	BB° BSC	CC° BSC	DD° BSC
11, 13	1	95	141	208	236
	2	113	156	182	292
	3	90	145	195	252
	4	53	156	220	255
	5	119	146	176	298
	6	51	141	184	242
15, 17	1	80	142	196	293
	2	135	170	200	310
	3	49	169	200	244
	4	66	140	200	257
	5	62	145	180	280
	6	79	153	197	272
19, 23, 25, 29, 33	1	80	142	196	293
	2	135	170	200	310
	3	49	169	200	244
	4	66	140	200	257
	5	62	145	180	280
	6	79	153	197	272



Plug Face View

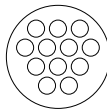
Rev. 2211

Insert Arrangement Drawings

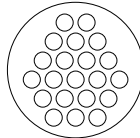
NS Series • MIL-DTL-28840 Type Connectors



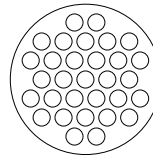
11-7
(A1)
7 x #20



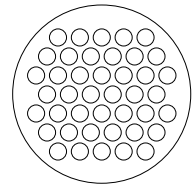
13-12
(B1)
12 x #20



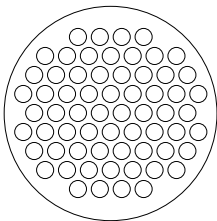
15-21
(C1)
21 x #20



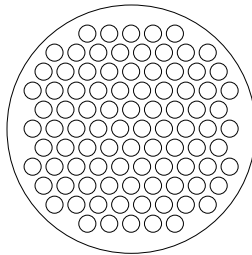
17-31
(D1)
31 x #20



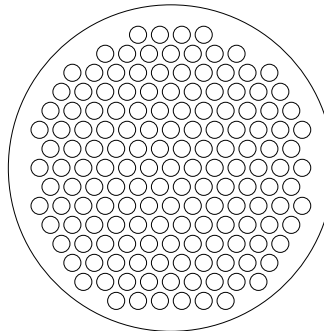
19-42
(E1)
42 x #20



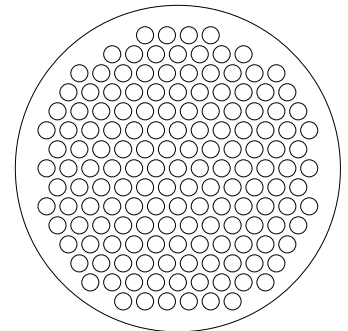
23-64
(F1)
64 x #20



25-92
(G1)
92 x #20



29-121
(H1)
121 x #20



33-155
(J1)
155 x #20

**MILNEC SHIPS CONNECTORS
WORLDWIDE IN ONE WEEK**



World Class Service, Worldwide

We know your project can't wait, so we provide tailor-made flexibility with off-the-shelf lead times. We employ the latest assembly and quality-control processes to build and test every connector we ship.

- Standard connector kits ship in just one week
- No order minimums, credit cards accepted
- Average ship time is 7 days
- Expedited builds available for critical requirements

Rev. 2211

How to Build Your NS Connector Part Number

A part number is comprised of a string of characters that represent the different elements of a connector. High-performance connectors are built to order from component form using a unique part number as a blueprint to specify particular characteristics. Each modifier of the part number represents a particular configuration.

Below is an example part number for a NS Series connector that designates, 1) NS Series wall mount receptacle, 2) olive drab cadmium finish on aluminum, 3) 15-21 insert arrangement, 4) pin contacts, 5) normal rotation, 6) EMI/RFI environmental backshell (dash number indicates backshell size), and 7) integrated accessory kit. ■

NS00 W 15-21 P 1 - R2(150) - 03

1 2 3 4 5 6 7

1 Series Shell Style

Standard Environmental Shells

NS06 Plug, p. Z-9

NS00 Wall mount receptacle, p. Z-19

NS01 Cable mount receptacle, p. Z-22

NS02 Box mount receptacle, p. Z-20

NS07 Jam nut receptacle, p. Z-21

For non-standard shell styles, including thru-bulkhead receptacles, please see specific datasheet for part numbering and kitting options.

2 Material & Finish

W Olive drab cadmium (aluminum)
500 hr. salt spray rating

D Black cadmium (stainless steel)
1,000 hr. salt spray rating

3 Shell Size & Insert Arrangement

See Insert Arrangement Drawings, p. Z-6

4 Contact Style

Standard Crimp Contacts

P Pin (20–24 AWG)

S Socket (20–24 AWG)

D Pin (22–26 AWG)

E Socket (22–26 AWG)

F Pin (28–32 AWG)

G Socket (28–32 AWG)

5 Key Position

Normal Position

1 Normal

Alternate Positions

2, 3, 4, 5, 6 Alternate positions

See Alternate Key Positions table on p. Z-5.

6 Optional Backshell Kit (Omit for None)

Strain Relief Backshell

B2 Straight, p. Z-29

B4 90°, p. Z-31

Environmental Backshell

E2 () Straight, p. Z-33

E3 () 45°, p. Z-35

E4 () 90°, p. Z-37

Supply specific Dash No. on referenced datasheet page for appropriate connector shell size.

EMI/Environmental Backshell

R2 () Straight, p. Z-39

R3 () 45°, p. Z-41

R4 () 90°, p. Z-43

Supply specific Dash No. on referenced datasheet page for appropriate connector shell size.

EMI/Non-Environmental Conduit Backshell

C2 () Straight, p. Z-45

C3 () 45°, p. Z-47

C4 () 90°, p. Z-49

Supply specific Dash No. on referenced datasheet page for appropriate connector shell size.

EMI/Environmental Conduit Backshell

C5 () Straight, p. Z-45

C6 () 45°, p. Z-47

C7 () 90°, p. Z-49

Supply specific Dash No. on referenced datasheet page for appropriate connector shell size.

7 Optional Accessory Kit (Omit for None)

01 For Plugs:

Protective cover, p. Z-53

02 For Receptacles:

Protective cover, p. Z-53 +
Mounting gasket, p. Z-55

03 For Receptacles:

Protective cover, p. Z-53 +
Mounting gasket, p. Z-55 +
Mounting bracket, p. Z-56
with (4x) sealing screws

Kits with EMI/RFI Backshells will be supplied with NSGS RFI shielding gaskets.

CONNECTOR SELECTION IS CRITICAL MAKE THE RIGHT CALL



Connectors For Military Applications

We specialize in providing engineers with ruggedized cylindrical connectors built to meet military specifications. In addition, we offer a wide selection of protective accessories, backshells, and mounting hardware for even greater battlefield reliability. When specifying connectors for your next application, make the right call — Milnec.



M28840/16 Connector Type Datasheet

NS Series • MIL-DTL-28840 Type Connectors



NS06 Cross Reference & Compatibility

Compatible Brands	Equivalent	Mates
MIL-DTL-28840	MS28840/16	MS28840/10, MS28840/11, MS28840/12, MS28840/14
Delphi	GT6A	GT0, GT1, GT2, GT4

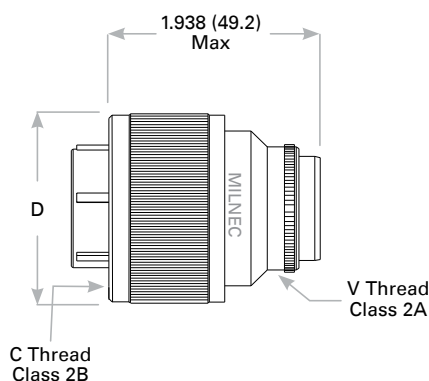
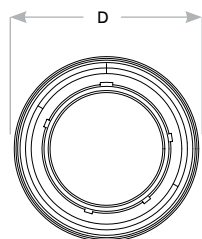
NS06 W 15-21 S 1 - R2(007) - 01

- 1 **BASIC PART NUMBER**
NS06 Plug
- 2 **MATERIAL & FINISH**
W Aluminum, olive drab cadmium
D Stainless steel, black cadmium plate
- 3 **SHELL SIZE & INSERT ARRANGEMENT**
See Insert Arrangement Drawings, p. Z-6
- 4 **CONTACT STYLE**
F Pin (20–24 AWG)
G Socket (20–24 AWG)
P Pin (22–26 AWG)
S Socket (22–26 AWG)
D Pin (28–32 AWG)
E Socket (28–32 AWG)
- 5 **ALTERNATE KEYING**
1 or 2, 3, 4, 5, 6, see p. Z-5 for availability
- 6 **OPTIONAL BACKSHELL KIT (OMIT FOR NONE)**
B2 Straight strain relief, p. Z-29
R2() Straight EMI/RFI environmental, p. Z-39
(Add dash number for appropriate shell size, see p. Z-39)
C2 Straight EMI/RFI non-env. conduit, p. Z-45
(Add dash number for appropriate shell size, see p. Z-45)
- 7 **OPTIONAL ACCESSORY KIT (OMIT FOR NONE)**
01 Protective cover

Plug Dimensions

Shell Size	D Max	V Thread Class 2A	C Thread Class 2B
11	1.028 (26.1)	.7500-20 UNEF	.750-.1P-.2L -D.S.
13	1.141 (29.0)	.8750-20 UNEF	.875-.1P-.2L -D.S.
15	1.263 (32.1)	1.0000-20 UNEF	1.062-.1P-.2L -D.S.
17	1.387 (35.2)	1.1250-18 UNEF	1.125-.1P-.2L -D.S.
19	1.513 (38.4)	1.2500-18 UNEF	1.312-.1P-.2L -D.S.
23	1.703 (43.3)	1.4375-18 UNEF	1.500-.1P-.2L -D.S.
25	1.825 (46.4)	1.5625-18 UNEF	1.625-.1P-.2L -D.S.
29	2.143 (54.4)	1.8750-16 UN	1.812-.1P-.2L -D.S.
33	2.329 (59.2)	2.0625-16 UN	2.000-.1P-.2L -D.S.

Dimensions are in inches (mm).



Rev. 2211

M28840/17 Connector Type Datasheet

NS Series • MIL-DTL-28840 Type Connectors

NS06 W 15-21 S 1 - B2 - 01

- 1 **BASIC PART NUMBER**
NS06 Plug with straight strain relief backshell
- 2 **MATERIAL & FINISH**
W Aluminum, olive drab cadmium
D Stainless steel, black cadmium plate
- 3 **SHELL SIZE & INSERT ARRANGEMENT**
See Insert Arrangement Drawings, p. Z-6
- 4 **CONTACT STYLE**
F Pin (20–24 AWG)
G Socket (20–24 AWG)
P Pin (22–26 AWG)
S Socket (22–26 AWG)
D Pin (28–32 AWG)
E Socket (28–32 AWG)
- 5 **ALTERNATE KEYING**
1 or 2, 3, 4, 5, 6, see p. Z-5 for availability
- 6 **BACKSHELL KIT**
B2 Straight strain relief
- 7 **OPTIONAL ACCESSORY KIT (OMIT FOR NONE)**
01 Protective cover



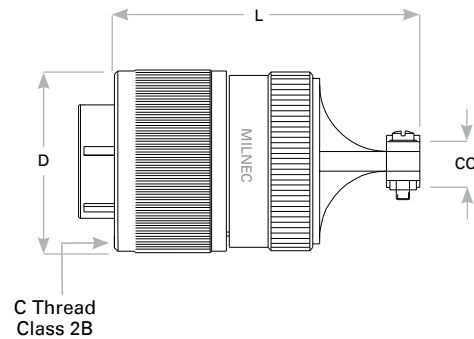
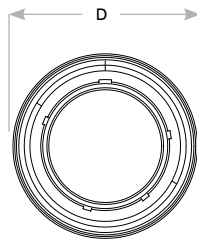
NS06 Compatibility

Compatible Brands	Equivalent	Mates
MIL-DTL-28840	MS28840/17	MS28840/10, MS28840/11, MS28840/12, MS28840/14
Delphi	GT6B	GT0, GT1, GT2, GT4

Plug Dimensions

Shell Size	D Max	L Max	Max OD Over Rear Clamps	C Thread Class 2B	CC Cable Clearance	
					Min	Max
11	1.028 (26.1)	2.438 (61.9)	.832 (21.1)	.750-.1P-.2L -D.S.	.177 (4.5)	.286 (7.3)
13	1.141 (29.0)	2.438 (61.9)	.832 (21.1)	.875-.1P-.2L -D.S.	.177 (4.5)	.286 (7.3)
15	1.263 (32.1)	2.438 (61.9)	.989 (25.1)	1.062-.1P-.2L -D.S.	.250 (6.4)	.416 (10.6)
17	1.387 (35.2)	2.688 (68.3)	1.094 (27.8)	1.125-.1P-.2L -D.S.	.291 (7.4)	.476 (12.1)
19	1.513 (38.4)	2.812 (71.4)	1.319 (33.5)	1.312-.1P-.2L -D.S.	.348 (8.8)	.626 (15.9)
23	1.703 (43.3)	2.938 (74.6)	1.557 (39.6)	1.500-.1P-.2L -D.S.	.429 (10.9)	.831 (21.1)
25	1.825 (46.4)	3.062 (77.8)	1.653 (42.0)	1.625-.1P-.2L -D.S.	.523 (13.3)	.956 (24.3)
29	2.143 (54.4)	3.188 (81.0)	1.819 (46.2)	1.812-.1P-.2L -D.S.	.643 (16.3)	1.081 (27.5)
33	2.329 (59.2)	3.375 (85.7)	2.020 (51.3)	2.000-.1P-.2L -D.S.	.704 (17.9)	1.187 (30.2)

Dimensions are in inches (mm).



Rev. 2211

M28840/19 Connector Datasheet

NS Series • MIL-DTL-28840 Type Connectors



NS06 Compatibility

Compatible Brands	Equivalent	Mates
MIL-DTL-28840	MS28840/19	MS28840/10, MS28840/11, MS28840/12, MS28840/14
Delphi	GT6D	GT0, GT1, GT2, GT4

NS06 W 15-21 S 1 - B3 - 01

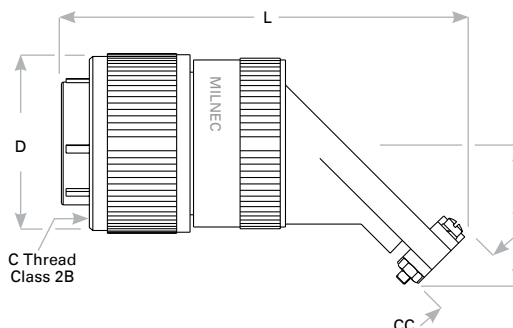
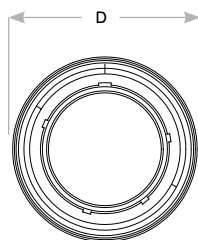
- 1 **BASIC PART NUMBER**
NS06 Plug with 45° strain relief backshell
- 2 **MATERIAL & FINISH**
W Aluminum, olive drab cadmium
D Stainless steel, black cadmium plate
- 3 **SHELL SIZE & INSERT ARRANGEMENT**
See Insert Arrangement Drawings, p. Z-6
- 4 **CONTACT STYLE**
F Pin (20–24 AWG)
G Socket (20–24 AWG)
P Pin (22–26 AWG)
S Socket (22–26 AWG)
D Pin (28–32 AWG)
E Socket (28–32 AWG)
- 5 **ALTERNATE KEYING**
1 or 2, 3, 4, 5, 6, see p. Z-5 for availability
- 6 **BACKSHELL KIT**
B3 45° strain relief backshell
- 7 **OPTIONAL ACCESSORY KIT** (OMIT FOR NONE)
01 Protective cover

Note: See part builder (p. Z-7) for additional kit options.

Plug Dimensions

Shell Size	D Max	C Thread Class 2B	L Max	V Max	CC Cable Clearance	
					Min	Max
11	1.028 (26.1)	.750-.1P-.2L -D.S.	3.125 (79.4)	.928 (23.6)	.177 (4.5)	.286 (7.3)
13	1.141 (29.0)	.875-.1P-.2L -D.S.	3.125 (79.4)	.928 (23.6)	.177 (4.5)	.286 (7.3)
15	1.263 (32.1)	1.062-.1P-.2L -D.S.	3.250 (82.6)	.991 (25.2)	.250 (6.4)	.416 (10.6)
17	1.387 (35.2)	1.125-.1P-.2L -D.S.	3.312 (84.1)	1.110 (28.2)	.291 (7.4)	.476 (12.1)
19	1.513 (38.4)	1.312-.1P-.2L -D.S.	3.375 (85.7)	1.172 (29.8)	.348 (8.8)	.626 (15.9)
23	1.703 (43.3)	1.500-.1P-.2L -D.S.	3.438 (87.3)	1.235 (31.4)	.429 (10.9)	.831 (21.1)
25	1.825 (46.4)	1.625-.1P-.2L -D.S.	3.500 (88.9)	1.297 (32.9)	.523 (13.3)	.956 (24.3)
29	2.143 (54.4)	1.812-.1P-.2L -D.S.	3.750 (95.3)	1.543 (39.2)	.643 (16.3)	1.081 (27.5)
33	2.329 (59.2)	2.000-.1P-.2L -D.S.	3.875 (98.4)	1.668 (42.4)	.704 (17.9)	1.187 (30.2)

Dimensions are in inches (mm).



Rev. 2211

M28840/18 Connector Type Datasheet

NS Series • MIL-DTL-28840 Type Connectors

NS06 W 15-21 P 1 - B4 - 01

- 1 **BASIC PART NUMBER**
NS06 Plug with 90° strain relief backshell
- 2 **MATERIAL & FINISH**
W Aluminum, olive drab cadmium
D Stainless steel, black cadmium plate
- 3 **SHELL SIZE & INSERT ARRANGEMENT**
See Insert Arrangement Drawings, p. Z-6
- 4 **CONTACT STYLE**
F Pin (20–24 AWG)
G Socket (20–24 AWG)
P Pin (22–26 AWG)
S Socket (22–26 AWG)
D Pin (28–32 AWG)
E Socket (28–32 AWG)
- 5 **ALTERNATE KEYING**
1 or 2, 3, 4, 5, 6, see p. Z-5 for availability
- 6 **BACKSHELL KIT**
B4 90° strain relief backshell
- 7 **OPTIONAL ACCESSORY KIT (OMIT FOR NONE)**
01 Protective cover



NS06 Cross Reference & Compatibility

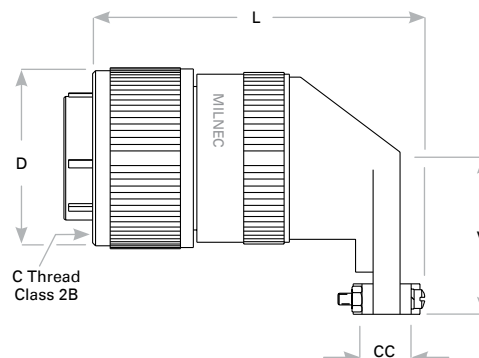
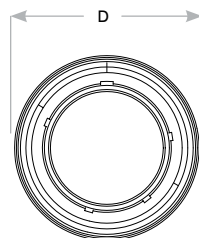
Compatible Brands	Equivalent	Mates
MIL-DTL-28840	MS28840/18	MS28840/10, MS28840/11, MS28840/12, MS28840/14
Delphi	GT6C	GT0, GT1, GT2, GT4

Note: See part builder (p. Z-7) for additional kit options.

Plug Dimensions

Shell Size	D Max	L Max	V Max	C Thread Class 2B	CC Cable Clearance	
					Min	Max
11	1.028 (26.1)	2.562 (65.1)	.929 (23.6)	.750-.1P-.2L -D.S.	.177 (4.5)	.286 (7.3)
13	1.141 (29.0)	2.562 (65.1)	.929 (23.6)	.875-.1P-.2L -D.S.	.177 (4.5)	.286 (7.3)
15	1.263 (32.1)	2.750 (69.9)	1.056 (26.8)	1.062-.1P-.2L -D.S.	.250 (6.4)	.416 (10.6)
17	1.387 (35.2)	2.875 (73.0)	1.233 (31.3)	1.125-.1P-.2L -D.S.	.291 (7.4)	.476 (12.1)
19	1.513 (38.4)	3.000 (76.2)	1.296 (32.9)	1.312-.1P-.2L -D.S.	.348 (8.8)	.626 (15.9)
23	1.703 (43.3)	3.125 (79.4)	1.358 (34.5)	1.500-.1P-.2L -D.S.	.429 (10.9)	.831 (21.1)
25	1.825 (46.4)	3.250 (82.6)	1.420 (36.1)	1.625-.1P-.2L -D.S.	.523 (13.3)	.956 (24.3)
29	2.143 (54.4)	3.375 (85.7)	1.634 (41.5)	1.812-.1P-.2L -D.S.	.643 (16.3)	1.081 (27.5)
33	2.329 (59.2)	3.438 (87.3)	1.859 (47.2)	2.000-.1P-.2L -D.S.	.704 (17.9)	1.187 (30.2)

Dimensions are in inches (mm).



Rev. 2211

M28840/26 Connector Type Datasheet

NS Series • MIL-DTL-28840 Type Connectors

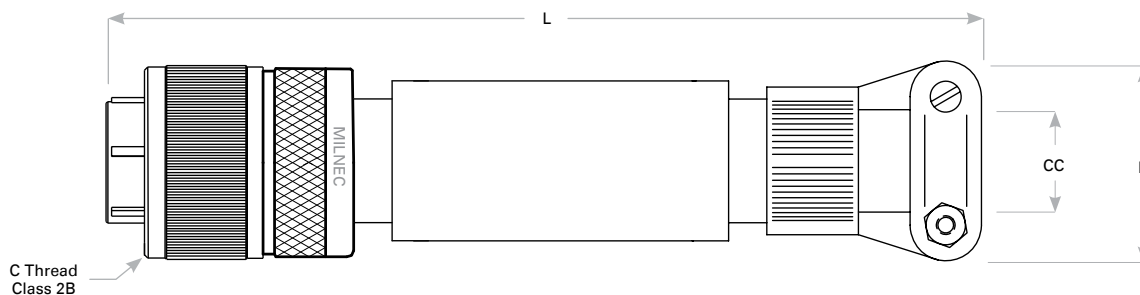


NS06 Cross Reference & Compatibility

Compatible Brands	Equivalent	Mates
MIL-DTL-28840	MS28840/26	MS28840/10, MS28840/11, MS28840/12, MS28840/14
Delphi	GT6E, GT6F	GT0, GT1, GT2, GT4

NS06 W 15-21 P 1 - R2(007) - 01

- 1 **BASIC PART NUMBER**
NS06 Plug with backshell & clamp
- 2 **MATERIAL & FINISH**
W Aluminum, olive drab cadmium
D Stainless steel, black cadmium plate
- 3 **SHELL SIZE & INSERT ARRANGEMENT**
See Insert Arrangement Drawings, p. Z-6
- 4 **CONTACT STYLE**
F Pin (20–24 AWG)
G Socket (20–24 AWG)
P Pin (22–26 AWG)
S Socket (22–26 AWG)
D Pin (28–32 AWG)
E Socket (28–32 AWG)
- 5 **ALTERNATE KEYING**
1 or 2, 3, 4, 5, 6, see p. Z-5 for availability
- 6 **BACKSHELL KIT**
E2() Environmental backshell, p. Z-33
(Add dash number for appropriate shell size, see p. Z-33)
R2() EMI/RFI environmental backshell, p. Z-39
(Add dash number for appropriate shell size, see p. Z-39)
- 7 **OPTIONAL ACCESSORY KIT (OMIT FOR NONE)**
01 Protective cover



Shown With R2 Backshell

Plug Dimensions

Shell Size	Dash No.	C Thread Class 2B	L Max	B Max	CC Cable Clearance	
					Min	Max
11	001	.750-1P-.2L -D.S.	6.500 (165.1)	.938 (23.8)	.188 (4.8)	.312 (7.9)
	002	.750-1P-.2L -D.S.	6.500 (165.1)	1.125 (28.6)	.281 (7.1)	.438 (11.1)
	003	.750-1P-.2L -D.S.	6.500 (165.1)	1.312 (33.3)	.344 (8.7)	.562 (14.3)
13	004	.875-1P-.2L -D.S.	6.500 (165.1)	.938 (23.8)	.188 (4.8)	.312 (7.9)
	005	.875-1P-.2L -D.S.	6.500 (165.1)	1.125 (28.6)	.281 (7.1)	.438 (11.1)
	006	.875-1P-.2L -D.S.	6.500 (165.1)	1.312 (33.3)	.344 (8.7)	.562 (14.3)
	007	.875-1P-.2L -D.S.	7.000 (177.8)	1.312 (33.3)	.375 (9.5)	.625 (15.9)

Dimensions are in inches (mm).

(Continued on next page)

Rev. 2211

M28840/26 Connector Type Datasheet

NS Series • MIL-DTL-28840 Type Connectors

Plug Dimensions (Continued from previous page)

Shell Size	Dash No.	C Thread Class 2B	L Max	B Max	CC Cable Clearance	
					Min	Max
15	008	1.062-.1P-.2L -D.S.	7.000 (177.8)	.938 (23.8)	.188 (4.8)	.312 (7.9)
	009	1.062-.1P-.2L -D.S.	6.500 (165.1)	1.125 (28.6)	.281 (7.1)	.438 (11.1)
	010	1.062-.1P-.2L -D.S.	6.500 (165.1)	1.312 (33.3)	.344 (8.7)	.562 (14.3)
	011	1.062-.1P-.2L -D.S.	7.000 (177.8)	1.312 (33.3)	.375 (9.5)	.625 (15.9)
	012	1.062-.1P-.2L -D.S.	7.000 (177.8)	1.593 (40.5)	.438 (11.1)	.750 (19.1)
17	013	1.125-.1P-.2L -D.S.	7.000 (177.8)	1.312 (33.3)	.375 (9.5)	.625 (15.9)
	014	1.125-.1P-.2L -D.S.	7.000 (177.8)	1.593 (40.5)	.438 (11.1)	.750 (19.1)
	015	1.125-.1P-.2L -D.S.	7.000 (177.8)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
19	016	1.312-.1P-.2L -D.S.	7.500 (190.5)	1.312 (33.3)	.375 (9.5)	.625 (15.9)
	017	1.312-.1P-.2L -D.S.	7.625 (193.7)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
23	018	1.500-.1P-.2L -D.S.	7.812 (198.4)	1.593 (40.5)	.438 (11.1)	.750 (19.1)
	019	1.500-.1P-.2L -D.S.	7.625 (193.7)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
	020	1.500-.1P-.2L -D.S.	8.312 (211.1)	2.093 (53.2)	.812 (20.6)	1.188 (30.2)
25	021	1.625-.1P-.2L -D.S.	8.312 (211.1)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
	022	1.625-.1P-.2L -D.S.	8.312 (211.1)	2.093 (53.2)	.812 (20.6)	1.188 (30.2)
	023	1.625-.1P-.2L -D.S.	8.312 (211.1)	2.093 (53.2)	.875 (22.2)	1.250 (31.8)
	024	1.625-.1P-.2L -D.S.	8.312 (211.1)	2.343 (59.5)	1.000 (25.4)	1.380 (35.1)
29	025	1.812-.1P-.2L -D.S.	8.312 (211.1)	2.093 (53.2)	.812 (20.6)	1.188 (30.2)
	026	1.812-.1P-.2L -D.S.	8.312 (211.1)	2.343 (59.5)	1.000 (25.4)	1.380 (35.1)
33	027	2.000-.1P-.2L -D.S.	8.312 (211.1)	2.343 (59.5)	1.000 (25.4)	1.380 (35.1)
	028	2.000-.1P-.2L -D.S.	8.625 (219.1)	2.750 (69.9)	1.250 (31.8)	1.625 (41.3)

Dimensions are in inches (mm).

M28840/29 Connector Type Datasheet

NS Series • MIL-DTL-28840 Type Connectors

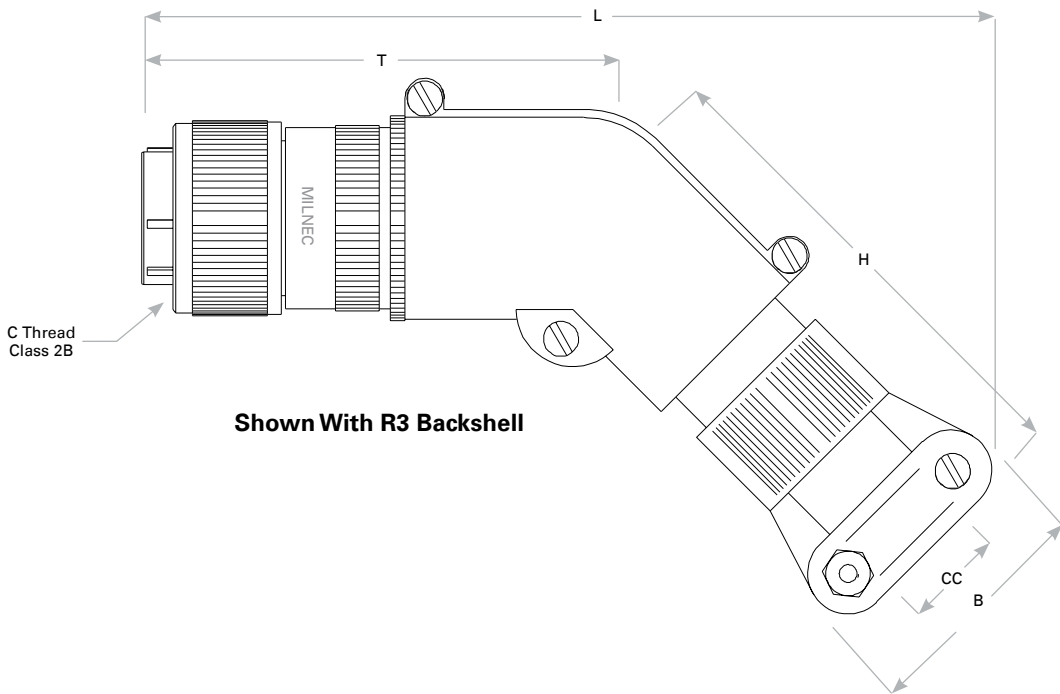


NS06 Cross Reference & Compatibility

Compatible Brands	Equivalent	Mates
MIL-DTL-28840	MS28840/29	MS28840/10, MS28840/11, MS28840/12, MS28840/14
Delphi	GT6J, GT6K	GT0, GT1, GT2, GT4

NS06 W 15-21 P 1 - R3(007) - 01

- BASIC PART NUMBER**
NS06 Plug with 45° backshell & clamp
- MATERIAL & FINISH**
W Aluminum, olive drab cadmium
D Stainless steel, black cadmium plate
- SHELL SIZE & INSERT ARRANGEMENT**
See Insert Arrangement Drawings, p. Z-6
- CONTACT STYLE**
F Pin (20–24 AWG)
G Socket (20–24 AWG)
P Pin (22–26 AWG)
S Socket (22–26 AWG)
D Pin (28–32 AWG)
E Socket (28–32 AWG)
- ALTERNATE KEYING**
1 or 2, 3, 4, 5, 6, see p. Z-5 for availability
- BACKSHELL KIT**
E3() 45° environmental backshell
(Add dash number for appropriate shell size, see p. Z-35)
R3() 45° EMI/environmental backshell w/ cable clamp
(Add dash number for appropriate shell size, see p. Z-41)
- OPTIONAL ACCESSORY KIT (OMIT FOR NONE)**
01 Protective cover



(Continued on next page)

Rev. 2211

M28840/29 Connector Type Datasheet

NS Series • MIL-DTL-28840 Type Connectors

Plug Dimensions (Continued from previous page)

Shell Size	Dash No.	C Thread Class 2B	L Max	T Max	H Max	B Max	CC Cable Clearance	
							Min	Max
11	001	.750-1P-.2L -D.S.	7.404 (188.1)	3.250 (82.6)	5.432 (138.0)	.938 (23.8)	.188 (4.8)	.312 (7.9)
	002	.750-1P-.2L -D.S.	7.457 (189.4)	3.250 (82.6)	5.432 (138.0)	1.125 (28.6)	.281 (7.1)	.438 (11.1)
	003	.750-1P-.2L -D.S.	7.727 (196.3)	3.375 (85.7)	5.557 (141.1)	1.312 (33.3)	.344 (8.7)	.562 (14.3)
13	004	.875-1P-.2L -D.S.	7.457 (189.4)	3.250 (82.6)	5.432 (138.0)	1.125 (28.6)	.281 (7.1)	.438 (11.1)
	005	.875-1P-.2L -D.S.	7.727 (196.3)	3.375 (85.7)	5.557 (141.1)	1.312 (33.3)	.344 (8.7)	.562 (14.3)
	006	.875-1P-.2L -D.S.	7.938 (201.6)	3.500 (88.9)	5.682 (144.3)	1.312 (33.3)	.375 (9.5)	.625 (15.9)
15	007	1.062-1P-.2L -D.S.	7.671 (194.8)	3.375 (85.7)	5.557 (141.1)	1.125 (28.6)	.281 (7.1)	.438 (11.1)
	008	1.062-1P-.2L -D.S.	7.727 (196.3)	3.375 (85.7)	5.557 (141.1)	1.312 (33.3)	.344 (8.7)	.562 (14.3)
	009	1.062-1P-.2L -D.S.	7.938 (201.6)	3.500 (88.9)	5.682 (144.3)	1.312 (33.3)	.375 (9.5)	.625 (15.9)
	010	1.062-1P-.2L -D.S.	8.058 (204.7)	3.500 (88.9)	5.713 (145.1)	1.593 (40.5)	.438 (11.1)	.750 (19.1)
17	011	1.125-1P-.2L -D.S.	7.938 (201.6)	3.500 (88.9)	5.682 (144.3)	1.312 (33.3)	.375 (9.5)	.625 (15.9)
	012	1.125-1P-.2L -D.S.	8.058 (204.7)	3.500 (88.9)	5.713 (145.1)	1.593 (40.5)	.438 (11.1)	.750 (19.1)
19	014	1.312-1P-.2L -D.S.	7.938 (201.6)	3.500 (88.9)	5.682 (144.3)	1.312 (33.3)	.375 (9.5)	.625 (15.9)
	015	1.312-1P-.2L -D.S.	8.371 (212.6)	3.625 (92.1)	5.932 (150.7)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
23	016	1.500-1P-.2L -D.S.	8.272 (210.1)	3.625 (92.1)	5.838 (148.3)	1.593 (40.5)	.438 (11.1)	.750 (19.1)
	017	1.500-1P-.2L -D.S.	8.371 (212.6)	3.625 (92.1)	5.932 (150.7)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
	018	1.500-1P-.2L -D.S.	8.628 (219.2)	3.625 (92.1)	6.119 (155.4)	2.093 (53.2)	.812 (20.6)	1.188 (30.2)
25	019	1.625-1P-.2L -D.S.	8.371 (212.6)	3.625 (92.1)	5.932 (150.7)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
	020	1.625-1P-.2L -D.S.	8.628 (219.2)	3.625 (92.1)	6.119 (155.4)	2.093 (53.2)	.812 (20.6)	1.188 (30.2)
	021	1.625-1P-.2L -D.S.	8.841 (224.6)	3.750 (95.3)	6.244 (158.6)	2.093 (53.2)	.875 (22.2)	1.250 (31.8)
	022	1.625-1P-.2L -D.S.	8.950 (227.3)	3.750 (95.3)	6.276 (159.4)	2.343 (59.5)	1.000 (25.4)	1.380 (35.1)
29	023	1.812-1P-.2L -D.S.	8.841 (224.6)	3.750 (95.3)	6.244 (158.6)	2.093 (53.2)	.812 (20.6)	1.188 (30.2)
	024	1.812-1P-.2L -D.S.	8.950 (227.3)	3.750 (95.3)	6.276 (159.4)	2.343 (59.5)	1.000 (25.4)	1.380 (35.1)
33	025	2.000-1P-.2L -D.S.	9.937 (252.4)	4.000 (101.6)	6.526 (165.8)	2.343 (59.5)	1.000 (25.4)	1.380 (35.1)
	026	2.000-1P-.2L -D.S.	9.659 (245.3)	4.000 (101.6)	6.801 (172.8)	2.750 (69.9)	1.250 (31.8)	1.625 (41.3)

Dimensions are in inches (mm).

M28840/28 Connector Type Datasheet

NS Series • MIL-DTL-28840 Type Connectors

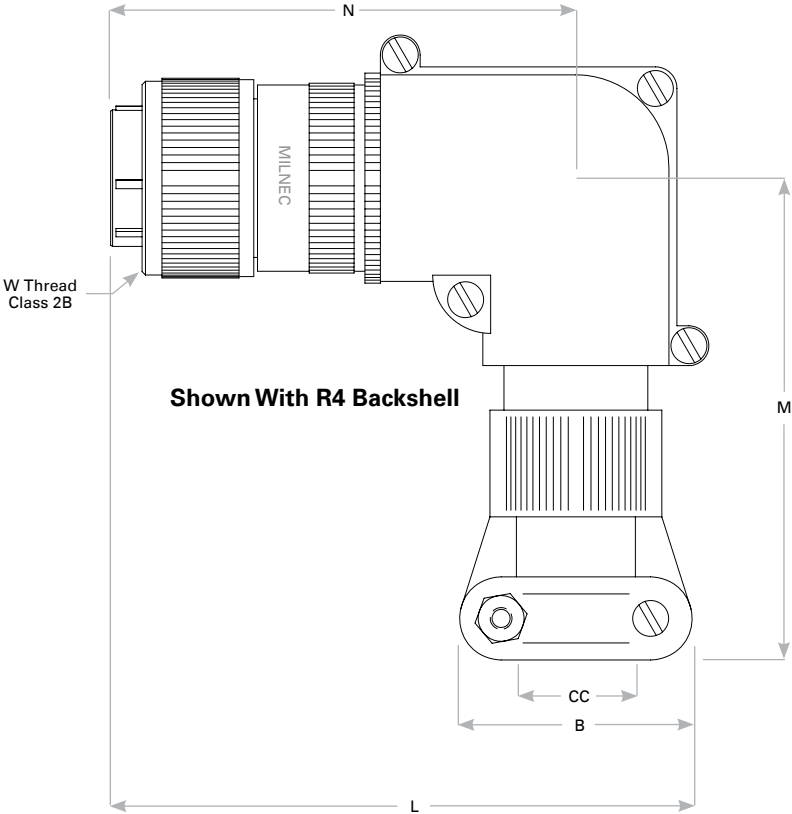


NS06 Cross Reference & Compatibility

Compatible Brands	Equivalent	Mates
MIL-DTL-28840	MS28840/28	MS28840/10, MS28840/11, MS28840/12, MS28840/14
Delphi	GT6G, GT6H	GT0, GT1, GT2, GT4

NS06 W 15-21 P 1 - R4(008) - 01

- BASIC PART NUMBER**
NS06 Plug with 90° backshell & clamp
- MATERIAL & FINISH**
W Aluminum, olive drab cadmium
D Stainless steel, black cadmium plate
- SHELL SIZE & INSERT ARRANGEMENT**
See Insert Arrangement Drawings, p. Z-6
- CONTACT STYLE**
F Pin (20–24 AWG)
G Socket (20–24 AWG)
P Pin (22–26 AWG)
S Socket (22–26 AWG)
D Pin (28–32 AWG)
E Socket (28–32 AWG)
- ALTERNATE KEYING**
1 or 2, 3, 4, 5, 6, see p. Z-5 for availability
- BACKSHELL KIT**
E4() 90° environmental backshell
(Add dash number for appropriate shell size, see p. Z-37)
R4() 90° EMI/environmental backshell w/ cable clamp
(Add dash number for appropriate shell size, see p. Z-43)
- OPTIONAL ACCESSORY KIT (OMIT FOR NONE)**
01 Protective cover



(Continued on next page)

Rev. 2211

M28840/28 Connector Type Datasheet

NS Series • MIL-DTL-28840 Type Connectors

Plug Dimensions (Continued from previous page)

Shell Size	Dash No.	W Thread Class 2B	L Max	N Max	M Max	B Max	CC Cable Clearance	
							Min	Max
11	001	.750-1P-.2L -D.S.	3.812 (96.8)	3.250 (82.6)	5.332 (135.4)	.938 (23.8)	.188 (4.8)	.312 (7.9)
	002	.750-1P-.2L -D.S.	3.812 (96.8)	3.250 (82.6)	5.332 (135.4)	1.125 (28.6)	.281 (7.1)	.438 (11.1)
	003	.750-1P-.2L -D.S.	4.000 (101.6)	3.375 (85.7)	5.457 (138.6)	1.312 (33.3)	.344 (8.7)	.562 (14.3)
13	004	.875-1P-.2L -D.S.	3.812 (96.8)	3.250 (82.6)	5.332 (135.4)	1.125 (28.6)	.281 (7.1)	.438 (11.1)
	005	.875-1P-.2L -D.S.	4.000 (101.6)	3.375 (85.7)	5.457 (138.6)	1.312 (33.3)	.344 (8.7)	.562 (14.3)
	006	.875-1P-.2L -D.S.	4.250 (108.0)	3.500 (88.9)	5.682 (144.3)	1.312 (33.3)	.375 (9.5)	.625 (15.9)
15	007	1.062-1P-.2L -D.S.	4.000 (101.6)	3.375 (85.7)	5.457 (138.6)	1.125 (28.6)	.281 (7.1)	.438 (11.1)
	008	1.062-1P-.2L -D.S.	4.000 (101.6)	3.375 (85.7)	5.457 (138.6)	1.312 (33.3)	.344 (8.7)	.562 (14.3)
	009	1.062-1P-.2L -D.S.	4.250 (108.0)	3.500 (88.9)	5.682 (144.3)	1.312 (33.3)	.375 (9.5)	.625 (15.9)
	010	1.062-1P-.2L -D.S.	4.125 (104.8)	3.500 (88.9)	5.713 (145.1)	1.593 (40.5)	.438 (11.1)	.750 (19.1)
17	011	1.125-1P-.2L -D.S.	4.250 (108.0)	3.500 (88.9)	5.682 (144.3)	1.312 (33.3)	.375 (9.5)	.625 (15.9)
	012	1.125-1P-.2L -D.S.	4.250 (108.0)	3.500 (88.9)	5.713 (145.1)	1.593 (40.5)	.438 (11.1)	.750 (19.1)
19	014	1.312-1P-.2L -D.S.	4.250 (108.0)	3.500 (88.9)	5.682 (144.3)	1.312 (33.3)	.375 (9.5)	.625 (15.9)
	015	1.312-1P-.2L -D.S.	4.375 (111.2)	3.625 (92.1)	5.832 (148.1)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
23	016	1.500-1P-.2L -D.S.	4.500 (114.3)	3.625 (92.1)	5.738 (145.8)	1.593 (40.5)	.438 (11.1)	.750 (19.1)
	017	1.500-1P-.2L -D.S.	4.500 (114.3)	3.625 (92.1)	5.832 (148.1)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
	018	1.500-1P-.2L -D.S.	4.688 (119.1)	3.625 (92.1)	6.019 (152.9)	2.093 (53.2)	.812 (20.6)	1.188 (30.2)
25	019	1.625-1P-.2L -D.S.	4.500 (114.3)	3.625 (92.1)	5.832 (148.1)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
	020	1.625-1P-.2L -D.S.	4.688 (119.1)	3.625 (92.1)	6.019 (152.9)	2.093 (53.2)	.812 (20.6)	1.188 (30.2)
	021	1.625-1P-.2L -D.S.	4.688 (119.1)	3.750 (95.3)	6.144 (156.1)	2.093 (53.2)	.875 (22.2)	1.250 (31.8)
	022	1.625-1P-.2L -D.S.	4.938 (125.4)	3.750 (95.3)	6.176 (156.9)	2.343 (59.5)	1.000 (25.4)	1.380 (35.1)
29	023	1.812-1P-.2L -D.S.	4.812 (122.2)	3.750 (95.3)	6.144 (156.1)	2.093 (53.2)	.812 (20.6)	1.188 (30.2)
	024	1.812-1P-.2L -D.S.	4.938 (125.4)	3.750 (95.3)	6.176 (156.9)	2.343 (59.5)	1.000 (25.4)	1.380 (35.1)
33	025	2.000-1P-.2L -D.S.	5.188 (131.8)	4.000 (101.6)	6.426 (163.2)	2.343 (59.5)	1.000 (25.4)	1.380 (35.1)
	026	2.000-1P-.2L -D.S.	5.375 (136.5)	4.000 (101.6)	6.701 (170.2)	2.750 (69.9)	1.250 (31.8)	1.625 (41.3)

Dimensions are in inches (mm).

M28840/10 Connector Type Datasheet

NS Series • MIL-DTL-28840 Type Connectors



NS00 Cross Reference & Compatibility

Compatible Brands	Equivalent	Mates
MIL-DTL-28840	MS28840/10	MS28840/16
Delphi	GT0A	GT6

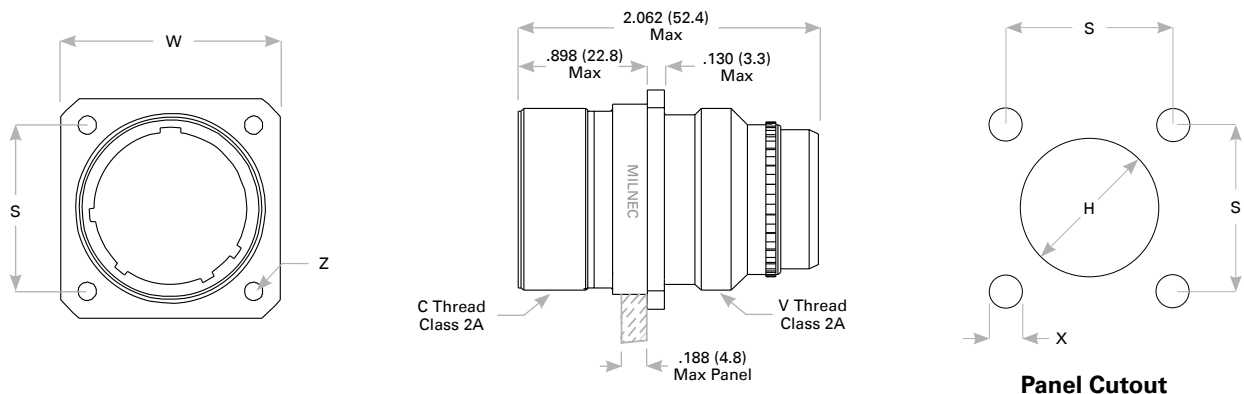
NS00 W 15-21 S 1 - R2(007) - 02

- 1 **BASIC PART NUMBER**
NS00 Wall mount receptacle
- 2 **MATERIAL & FINISH**
W Aluminum, olive drab cadmium
D Stainless steel, black cadmium plate
- 3 **SHELL SIZE & INSERT ARRANGEMENT**
See Insert Arrangement Drawings, p. Z-6
- 4 **CONTACT STYLE**
F Pin (20–24 AWG)
G Socket (20–24 AWG)
P Pin (22–26 AWG)
S Socket (22–26 AWG)
D Pin (28–32 AWG)
E Socket (28–32 AWG)
- 5 **ALTERNATE KEYING**
1 or 2, 3, 4, 5, 6, see p. Z-5 for availability
- 6 **OPTIONAL BACKSHELL KIT (OMIT FOR NONE)**
B2 Straight strain relief, p. Z-29
R2() Straight EMI/RFI environmental, p. Z-39
(Add dash number for appropriate shell size, see p. Z-39)
C2 Straight metal core conduit, p. Z-45
(Add dash number for appropriate shell size, see p. Z-45)
- 7 **OPTIONAL ACCESSORY KIT (OMIT FOR NONE)**
02 Protective cover + mounting gasket
03 02 kit + mounting bracket + sealing screws

Receptacle Dimensions

Shell Size	W Max	S	Z Max	C Thread Class 2A	V Thread Class 2A	X	H
11	1.043 (26.5)	.750 (19.1)	.130 (3.3)	.750-1P-.2L -D.S.	.7500-20 UNEF	.140 (3.6)	.812 (20.6)
13	1.158 (29.4)	.843 (21.4)	.130 (3.3)	.875-1P-.2L -D.S.	.8750-20 UNEF	.140 (3.6)	.937 (23.8)
15	1.278 (32.5)	.968 (24.6)	.130 (3.3)	1.062-1P-.2L -D.S.	1.0000-20 UNEF	.140 (3.6)	1.124 (28.6)
17	1.403 (35.6)	1.015 (25.8)	.130 (3.3)	1.125-1P-.2L -D.S.	1.1250-18 UNEF	.140 (3.6)	1.187 (30.2)
19	1.528 (38.8)	1.140 (29.0)	.130 (3.3)	1.312-1P-.2L -D.S.	1.2500-18 UNEF	.140 (3.6)	1.374 (34.9)
23	1.738 (44.2)	1.281 (32.5)	.130 (3.3)	1.500-1P-.2L -D.S.	1.4375-18 UNEF	.140 (3.6)	1.562 (39.7)
25	1.838 (46.7)	1.392 (35.4)	.157 (4.0)	1.625-1P-.2L -D.S.	1.5625-18 UNEF	.167 (4.2)	1.687 (42.9)
29	2.158 (54.8)	1.568 (39.8)	.157 (4.0)	1.812-1P-.2L -D.S.	1.8750-16 UN	.167 (4.2)	1.874 (47.6)
33	2.348 (59.6)	1.734 (44.0)	.183 (4.7)	2.000-1P-.2L -D.S.	2.0625-16 UN	.193 (4.9)	2.062 (52.4)

Dimensions are in inches (mm).



Panel Cutout

Rev. 2211

M28840/12 Connector Type Datasheet

NS Series • MIL-DTL-28840 Type Connectors

NS02 W 15-21 S 1 - 02



NS02 Compatibility

Compatible Brands	Equivalent	Mates
MIL-DTL-28840	MS28840/12	MS28840/16
Delphi	GT2A	GT6

- 1 **BASIC PART NUMBER**
NS02 Box mount receptacle (Figure 1, Standard)
NS03 Box mount receptacle (Figure 2, Long)
- 2 **MATERIAL & FINISH**
W Aluminum, olive drab cadmium
D Stainless steel, black cadmium plate
- 3 **SHELL SIZE & INSERT ARRANGEMENT**
 See Insert Arrangement Drawings, p. Z-6
- 4 **CONTACT STYLE**
F Pin (20–24 AWG)
G Socket (20–24 AWG)
P Pin (22–26 AWG)
S Socket (22–26 AWG)
D Pin (28–32 AWG)
E Socket (28–32 AWG)
- 5 **ALTERNATE KEYING**
1 or 2, 3, 4, 5, 6, see p. Z-5 for availability
- 6 **OPTIONAL ACCESSORY KIT (OMIT FOR NONE)**
02 Protective cover + mounting gasket
03 02 kit + mounting bracket + sealing screws

Receptacle Dimensions

Shell Size	W Max	S	Z Max	G Max	C Thread Class 2A	X	H
11	1.043 (26.5)	.750 (19.1)	.130 (3.3)	.758 (19.3)	.750-.1P-.2L -D.S.	.140 (3.6)	.812 (20.6)
13	1.158 (29.4)	.843 (21.4)	.130 (3.3)	.880 (22.4)	.875-.1P-.2L -D.S.	.140 (3.6)	.937 (23.8)
15	1.278 (32.5)	.968 (24.6)	.130 (3.3)	1.005 (25.5)	1.062-.1P-.2L -D.S.	.140 (3.6)	1.124 (28.6)
17	1.403 (35.6)	1.015 (25.8)	.130 (3.3)	1.130 (28.7)	1.125-.1P-.2L -D.S.	.140 (3.6)	1.187 (30.2)
19	1.528 (38.8)	1.140 (29.0)	.130 (3.3)	1.255 (31.9)	1.312-.1P-.2L -D.S.	.140 (3.6)	1.374 (34.9)
23	1.738 (44.2)	1.281 (32.5)	.130 (3.3)	1.443 (36.7)	1.500-.1P-.2L -D.S.	.140 (3.6)	1.562 (39.7)
25	1.838 (46.7)	1.392 (35.4)	.157 (4.0)	1.567 (39.8)	1.625-.1P-.2L -D.S.	.167 (4.2)	1.687 (42.9)
29	2.158 (54.8)	1.568 (39.8)	.157 (4.0)	1.880 (47.8)	1.812-.1P-.2L -D.S.	.167 (4.2)	1.874 (47.6)
33	2.343 (59.6)	1.734 (44.0)	.183 (4.7)	2.067 (52.5)	2.000-.1P-.2L -D.S.	.193 (4.9)	2.062 (52.4)

Dimensions are in inches (mm).

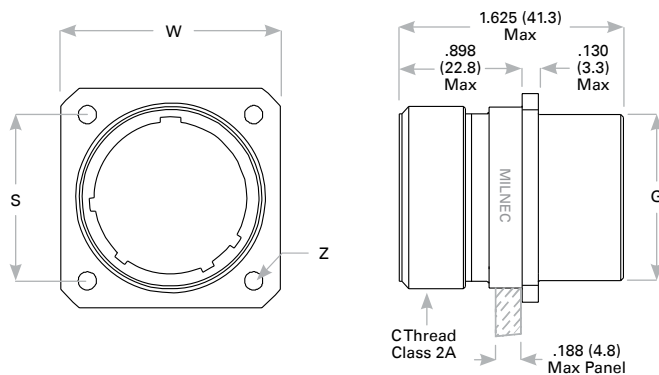


Figure 1,
Standard

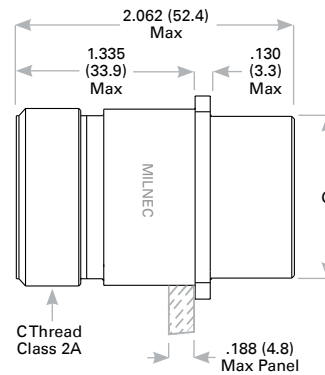
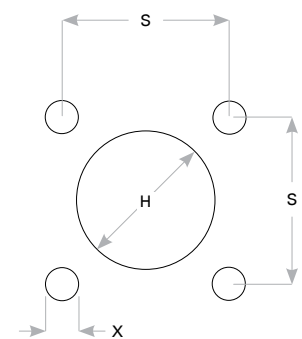


Figure 2,
Long



Panel Cutout

Rev. 2211

M28840/14 Connector Type Datasheet

NS Series • MIL-DTL-28840 Type Connectors



NS07 Cross Reference & Compatibility

Compatible Brands	Equivalent	Mates
MIL-DTL-28840	MS28840/14	MS28840/16
Delphi	GT4A	GT6

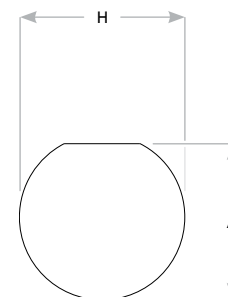
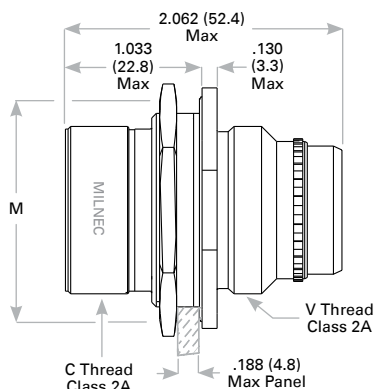
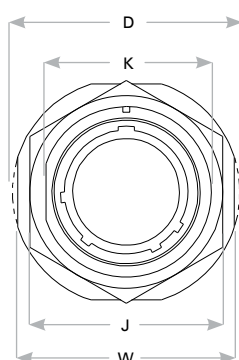
NS07 W 15-21 S 1 - R2(007) - 02

- 1 **BASIC PART NUMBER**
NS07 Jam nut receptacle
- 2 **MATERIAL & FINISH**
W Aluminum, olive drab cadmium
D Stainless steel, black cadmium plate
- 3 **SHELL SIZE & INSERT ARRANGEMENT**
See Insert Arrangement Drawings, p. Z-6
- 4 **CONTACT STYLE**
F Pin (20–24 AWG)
G Socket (20–24 AWG)
P Pin (22–26 AWG)
S Socket (22–26 AWG)
D Pin (28–32 AWG)
E Socket (28–32 AWG)
- 5 **ALTERNATE KEYING**
1 or 2, 3, 4, 5, 6, see p. Z-5 for availability
- 6 **OPTIONAL BACKSHELL KIT (OMIT FOR NONE)**
B2 Straight strain relief, p. Z-29
R2() Straight EMI/RFI environmental, p. Z-39
(Add dash number for appropriate shell size, see p. Z-39)
C2 Straight metal core conduit, p. Z-45
(Add dash number for appropriate shell size, see p. Z-45)
- 7 **OPTIONAL ACCESSORY KIT (OMIT FOR NONE)**
02 Protective cover

Receptacle Dimensions

Shell Size	D Max	W Max	J	K Max	M Max	V Thread Class 2A	C Thread Class 2A	H Max	A Max
11	1.368 (34.8)	1.274 (32.4)	1.062 (27.0)	.841 (21.4)	.979 (24.9)	.7500-20 UNEF	.750-.1P-.2L -D.S.	.890 (22.6)	.853 (21.7)
13	1.508 (38.3)	1.399 (35.5)	1.188 (30.2)	.966 (24.5)	1.104 (28.0)	.8750-20 UNEF	.875-.1P-.2L -D.S.	1.015 (25.8)	.978 (24.8)
15	1.681 (42.7)	1.587 (40.3)	1.375 (34.9)	1.156 (29.3)	1.292 (32.8)	1.0000-20 UNEF	1.062-.1P-.2L -D.S.	1.203 (30.6)	1.165 (29.6)
17	1.743 (44.3)	1.649 (41.9)	1.438 (36.5)	1.216 (30.9)	1.354 (34.4)	1.1250-18 UNEF	1.125-.1P-.2L -D.S.	1.265 (32.1)	1.228 (31.2)
19	1.931 (49.1)	1.837 (46.7)	1.625 (41.3)	1.403 (35.6)	1.542 (39.2)	1.2500-18 UNEF	1.312-.1P-.2L -D.S.	1.453 (36.9)	1.415 (35.9)
23	2.118 (53.8)	2.024 (51.4)	1.812 (46.0)	1.591 (40.4)	1.729 (43.9)	1.4375-18 UNEF	1.500-.1P-.2L -D.S.	1.640 (41.7)	1.603 (40.7)
25	2.243 (57.0)	2.149 (54.6)	2.000 (50.8)	1.716 (43.6)	1.854 (47.1)	1.5625-18 UNEF	1.625-.1P-.2L -D.S.	1.765 (44.8)	1.728 (43.9)
29	2.435 (61.9)	2.337 (59.4)	2.188 (55.6)	1.903 (46.3)	2.042 (51.9)	1.8750-16 UN	1.812-.1P-.2L -D.S.	1.953 (49.6)	1.915 (48.6)
33	2.618 (66.5)	2.524 (64.1)	2.375 (60.3)	2.091 (53.1)	2.229 (56.6)	2.0625-16 UN	2.000-.1P-.2L -D.S.	2.140 (54.4)	2.103 (53.4)

Dimensions are in inches (mm).



Panel Cutout

Rev. 2211

M28840/11 Connector Type Datasheet

NS Series • MIL-DTL-28840 Type Connectors

NS01 W 15-21 S 1 - R2(007) - 02



NS01 Compatibility

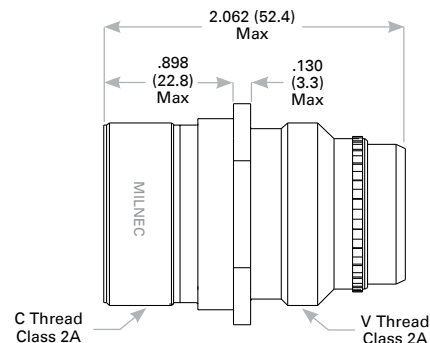
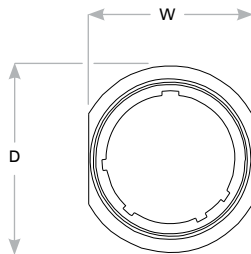
Compatible Brands	Equivalent	Mates
MIL-DTL-28840	MS28840/11	MS28840/16
Delphi	GT1A	GT6

- 1 **BASIC PART NUMBER**
NS01 Cable mount receptacle
- 2 **MATERIAL & FINISH**
W Aluminum, olive drab cadmium
D Stainless steel, black cadmium plate
- 3 **SHELL SIZE & INSERT ARRANGEMENT**
See Insert Arrangement Drawings, p. Z-6
- 4 **CONTACT STYLE**
F Pin (20–24 AWG)
G Socket (20–24 AWG)
P Pin (22–26 AWG)
S Socket (22–26 AWG)
D Pin (28–32 AWG)
E Socket (28–32 AWG)
- 5 **ALTERNATE KEYING**
1 or 2, 3, 4, 5, 6, see p. Z-5 for availability
- 6 **OPTIONAL BACKSHELL KIT** (OMIT FOR NONE)
B2 Straight strain relief, p. Z-29
R2() Straight EMI/RFI environmental, p. Z-39
(Add dash number for appropriate shell size, see p. Z-39)
C2 Straight metal core conduit, p. Z-45
(Add dash number for appropriate shell size, see p. Z-45)
- 7 **OPTIONAL ACCESSORY KIT** (OMIT FOR NONE)
02 Protective cover

Receptacle Dimensions

Shell Size	W Max	D Max	V Thread Class 2A	C Thread Class 2A
11	.768 (19.5)	.963 (24.5)	.7500-20 UNEF	.750-.1P-.2L -D.S.
13	.893 (22.7)	1.088 (27.6)	.8750-20 UNEF	.875-.1P-.2L -D.S.
15	1.080 (27.4)	1.275 (32.4)	1.0000-20 UNEF	1.062-.1P-.2L -D.S.
17	1.143 (29.0)	1.338 (34.0)	1.1250-18 UNEF	1.125-.1P-.2L -D.S.
19	1.330 (33.8)	1.525 (38.7)	1.2500-18 UNEF	1.312-.1P-.2L -D.S.
23	1.515 (38.6)	1.713 (43.5)	1.4375-18 UNEF	1.500-.1P-.2L -D.S.
25	1.643 (41.7)	1.838 (46.7)	1.5625-18 UNEF	1.625-.1P-.2L -D.S.
29	1.893 (48.1)	2.088 (53.0)	1.8750-16 UN	1.812-.1P-.2L -D.S.
33	2.080 (52.8)	2.275 (57.8)	2.0625-16 UN	2.000-.1P-.2L -D.S.

Dimensions are in inches (mm).



Rev. 2211

M28840/20 Connector Type Datasheet

NS Series • MIL-DTL-28840 Type Connectors

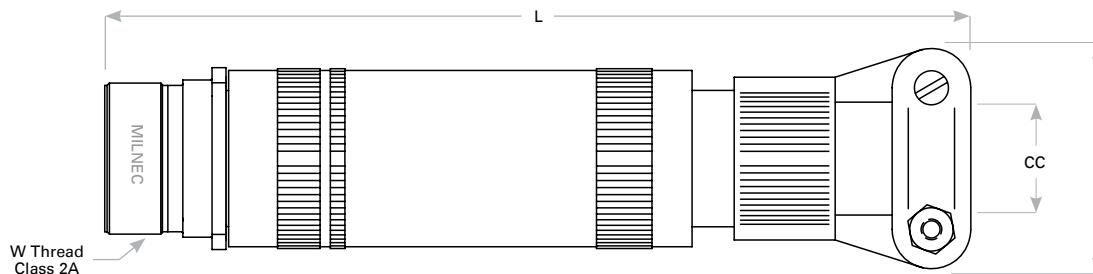


NS20 Compatibility

Compatible Brands	Equivalent	Mates
MIL-DTL-28840	MS28840/20	MS28840/16
Delphi	—	GT6

NS00 W 15-21 S 1 - R2(007) - 02

- 1 **BASIC PART NUMBER**
NS00 Wall mount receptacle w/ backshell & clamp
- 2 **MATERIAL & FINISH**
W Aluminum, olive drab cadmium
D Stainless steel, black cadmium plate
- 3 **SHELL SIZE & INSERT ARRANGEMENT**
See Insert Arrangement Drawings, p. Z-6
- 4 **CONTACT STYLE**
F Pin (20–24 AWG)
G Socket (20–24 AWG)
P Pin (22–26 AWG)
S Socket (22–26 AWG)
D Pin (28–32 AWG)
E Socket (28–32 AWG)
- 5 **ALTERNATE KEYING**
1 or 2, 3, 4, 5, 6, see p. Z-5 for availability
- 6 **BACKSHELL KIT**
E2() Environmental backshell, p. Z-33
(Add dash number for appropriate shell size, see p. Z-33)
R2() EMI/RFI environmental backshell, p. Z-39
(Add dash number for appropriate shell size, see p. Z-39)
- 7 **OPTIONAL ACCESSORY KIT** (OMIT FOR NONE)
02 Protective cover + mounting gasket
03 02 kit + mounting bracket + sealing screws



Receptacle & Backshell Dimensions

Shell Size	Dash No.	W Thread Class 2A	L Max	B Max	CC Cable Clearance	
					Min	Max
11	001	.750-.1P-.2L -D.S.	6.625 (168.3)	.938 (23.8)	.188 (4.8)	.312 (7.9)
	002	.750-.1P-.2L -D.S.	6.625 (168.3)	1.125 (28.6)	.281 (7.1)	.438 (11.1)
	003	.750-.1P-.2L -D.S.	6.625 (168.3)	1.312 (33.3)	.344 (8.7)	.562 (14.3)
13	004	.875-.1P-.2L -D.S.	6.625 (168.3)	.938 (23.8)	.188 (4.8)	.312 (7.9)
	005	.875-.1P-.2L -D.S.	6.625 (168.3)	1.125 (28.6)	.281 (7.1)	.438 (11.1)
	006	.875-.1P-.2L -D.S.	6.625 (168.3)	1.312 (33.3)	.344 (8.7)	.562 (14.3)
	007	.875-.1P-.2L -D.S.	7.125 (181.0)	1.312 (33.3)	.375 (9.5)	.625 (15.9)

(Continued on next page)

Rev. 2211

M28840/20 Connector Type Datasheet

NS Series • MIL-DTL-28840 Type Connectors

Receptacle & Backshell Dimensions (Continued from previous page)

Shell Size	Dash No.	W Thread Class 2A	L Max	B Max	CC Cable Clearance	
					Min	Max
15	008	1.062-.1P-.2L -D.S.	6.625 (168.3)	.938 (23.8)	.188 (4.8)	.312 (7.9)
	009	1.062-.1P-.2L -D.S.	6.625 (168.3)	1.125 (28.6)	.281 (7.1)	.438 (11.1)
	010	1.062-.1P-.2L -D.S.	6.625 (168.3)	1.312 (33.3)	.344 (8.7)	.562 (14.3)
	011	1.062-.1P-.2L -D.S.	7.125 (181.0)	1.312 (33.3)	.375 (9.5)	.625 (15.9)
	012	1.062-.1P-.2L -D.S.	7.188 (182.6)	1.593 (40.5)	.438 (11.1)	.750 (19.1)
17	013	1.125-.1P-.2L -D.S.	7.125 (181.0)	1.312 (33.3)	.375 (9.5)	.625 (15.9)
	014	1.125-.1P-.2L -D.S.	7.188 (182.6)	1.593 (40.5)	.438 (11.1)	.750 (19.1)
	015	1.125-.1P-.2L -D.S.	7.188 (182.6)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
19	016	1.312-.1P-.2L -D.S.	7.125 (181.0)	1.312 (33.3)	.375 (9.5)	.625 (15.9)
	017	1.312-.1P-.2L -D.S.	7.250 (184.2)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
23	018	1.500-.1P-.2L -D.S.	7.688 (195.3)	1.593 (40.5)	.438 (11.1)	.750 (19.1)
	019	1.500-.1P-.2L -D.S.	7.812 (198.4)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
	020	1.500-.1P-.2L -D.S.	7.938 (201.6)	2.093 (53.2)	.812 (20.6)	1.188 (30.2)
25	021	1.625-.1P-.2L -D.S.	7.750 (196.9)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
	022	1.625-.1P-.2L -D.S.	8.438 (214.3)	2.093 (53.2)	.812 (20.6)	1.188 (30.2)
	023	1.625-.1P-.2L -D.S.	8.438 (214.3)	2.093 (53.2)	.875 (22.2)	1.250 (31.8)
	024	1.625-.1P-.2L -D.S.	8.500 (215.9)	2.343 (59.5)	1.000 (25.4)	1.380 (35.1)
29	025	1.812-.1P-.2L -D.S.	8.438 (214.3)	2.093 (53.2)	.812 (20.6)	1.188 (30.2)
	026	1.812-.1P-.2L -D.S.	8.500 (215.9)	2.343 (59.5)	1.000 (25.4)	1.380 (35.1)
33	027	2.000-.1P-.2L -D.S.	8.500 (215.9)	2.343 (59.5)	1.000 (25.4)	1.380 (35.1)
	028	2.000-.1P-.2L -D.S.	8.750 (222.3)	2.750 (69.9)	1.250 (31.8)	1.625 (41.3)

Dimensions are in inches (mm).

M28840/21 Connector Type Datasheet

NS Series • MIL-DTL-28840 Type Connectors

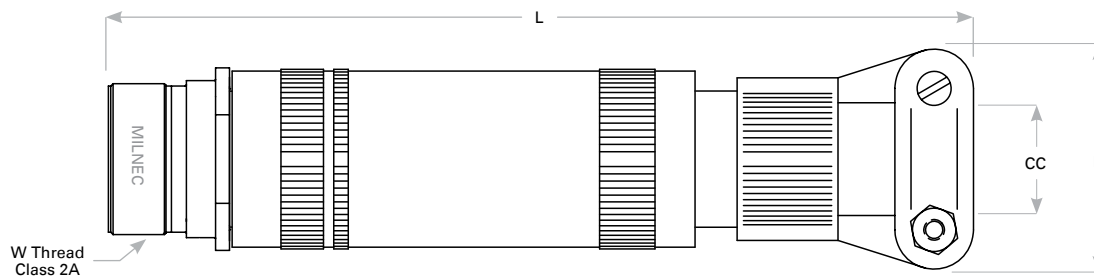


NS01 Compatibility

Compatible Brands	Equivalent	Mates
MIL-DTL-28840	MS28840/21	MS28840/16
Delphi	—	GT6

NS01 W 15-21 S 1 - R2(001) - 02

- 1 **BASIC PART NUMBER**
NS01 Cable mount receptacle w/ backshell & clamp
- 2 **MATERIAL & FINISH**
W Aluminum, olive drab cadmium
D Stainless steel, black cadmium plate
- 3 **SHELL SIZE & INSERT ARRANGEMENT**
See Insert Arrangement Drawings, p. Z-6
- 4 **CONTACT STYLE**
F Pin (20–24 AWG)
G Socket (20–24 AWG)
P Pin (22–26 AWG)
S Socket (22–26 AWG)
D Pin (28–32 AWG)
E Socket (28–32 AWG)
- 5 **ALTERNATE KEYING**
1 or 2, 3, 4, 5, 6, see p. Z-5 for availability
- 6 **BACKSHELL KIT**
E2() Environmental backshell, p. Z-33
(Add dash number for appropriate shell size, see p. Z-33)
R2() EMI/RFI environmental backshell, p. Z-39
(Add dash number for appropriate shell size, see p. Z-39)
- 7 **OPTIONAL ACCESSORY KIT** (OMIT FOR NONE)
02 Protective cover + mounting gasket
03 02 kit + mounting bracket + sealing screws



Receptacle & Backshell Dimensions

Shell Size	Dash No.	W Thread Class 2A	L Max	B Max	CC Cable Clearance	
					Min	Max
11	001	.750-.1P-.2L -D.S.	6.625 (168.3)	.938 (23.8)	.188 (4.8)	.312 (7.9)
	002	.750-.1P-.2L -D.S.	6.625 (168.3)	1.125 (28.6)	.281 (7.1)	.438 (11.1)
	003	.750-.1P-.2L -D.S.	6.625 (168.3)	1.312 (33.3)	.344 (8.7)	.562 (14.3)
13	004	.875-.1P-.2L -D.S.	6.625 (168.3)	.938 (23.8)	.188 (4.8)	.312 (7.9)
	005	.875-.1P-.2L -D.S.	6.625 (168.3)	1.125 (28.6)	.281 (7.1)	.438 (11.1)
	006	.875-.1P-.2L -D.S.	6.625 (168.3)	1.312 (33.3)	.344 (8.7)	.562 (14.3)
	007	.875-.1P-.2L -D.S.	7.125 (181.0)	1.312 (33.3)	.375 (9.5)	.625 (15.9)

(Continued on next page)

M28840/21 Connector Type Datasheet

NS Series • MIL-DTL-28840 Type Connectors

Receptacle & Backshell Dimensions (Continued from previous page)

Shell Size	Dash No.	W Thread Class 2A	L Max	B Max	CC Cable Clearance	
					Min	Max
15	008	1.062-.1P-.2L -D.S.	6.625 (168.3)	.938 (23.8)	.188 (4.8)	.312 (7.9)
	009	1.062-.1P-.2L -D.S.	6.625 (168.3)	1.125 (28.6)	.281 (7.1)	.438 (11.1)
	010	1.062-.1P-.2L -D.S.	6.625 (168.3)	1.312 (33.3)	.344 (8.7)	.562 (14.3)
	011	1.062-.1P-.2L -D.S.	7.125 (181.0)	1.312 (33.3)	.375 (9.5)	.625 (15.9)
	012	1.062-.1P-.2L -D.S.	7.188 (182.6)	1.593 (40.5)	.438 (11.1)	.750 (19.1)
17	013	1.125-.1P-.2L -D.S.	7.125 (181.0)	1.312 (33.3)	.375 (9.5)	.625 (15.9)
	014	1.125-.1P-.2L -D.S.	7.188 (182.6)	1.593 (40.5)	.438 (11.1)	.750 (19.1)
	015	1.125-.1P-.2L -D.S.	7.188 (182.6)	1.593 (40.5)	.625 (15.9)	.938 (23.8)
19	016	1.312-.1P-.2L -D.S.	7.125 (181.0)	1.312 (33.3)	.375 (9.5)	.625 (15.9)
	017	1.312-.1P-.2L -D.S.	7.250 (184.2)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
23	018	1.500-.1P-.2L -D.S.	7.688 (195.3)	1.593 (40.5)	.438 (11.1)	.750 (19.1)
	019	1.500-.1P-.2L -D.S.	7.812 (198.4)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
	020	1.500-.1P-.2L -D.S.	7.938 (201.6)	2.093 (53.2)	.812 (20.6)	1.188 (30.2)
25	021	1.625-.1P-.2L -D.S.	7.750 (196.9)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
	022	1.625-.1P-.2L -D.S.	8.438 (214.3)	2.093 (53.2)	.812 (20.6)	1.188 (30.2)
	023	1.625-.1P-.2L -D.S.	8.438 (214.3)	2.093 (53.2)	.875 (22.2)	1.250 (31.8)
	024	1.625-.1P-.2L -D.S.	8.500 (215.9)	2.343 (59.5)	1.000 (25.4)	1.380 (35.1)
29	025	1.812-.1P-.2L -D.S.	8.438 (214.3)	2.093 (53.2)	.812 (20.6)	1.188 (30.2)
	026	1.812-.1P-.2L -D.S.	8.500 (215.9)	2.343 (59.5)	1.000 (25.4)	1.380 (35.1)
33	027	2.000-.1P-.2L -D.S.	8.500 (215.9)	2.343 (59.5)	1.000 (25.4)	1.380 (35.1)
	028	2.000-.1P-.2L -D.S.	8.750 (222.3)	2.750 (69.9)	1.250 (31.8)	1.625 (41.3)

Dimensions are in inches (mm).

M28840 Thru-Bulkhead Receptacle

NS Series • MIL-DTL-28840 Type Connectors



NS22 Compatibility

Compatible Brands	Mates
MIL-DTL-28840	MS28840/16, MS28840/17, MS28840/18, MS28840/19, MS28840/26, MS28840/27, MS28840/28

NS22 W 19-11 P 1 - 02

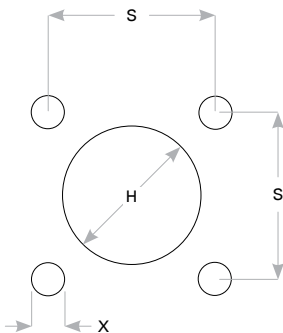
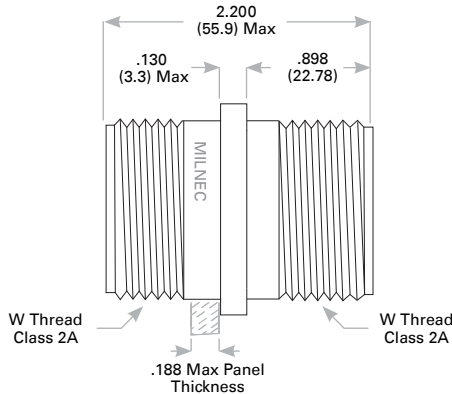
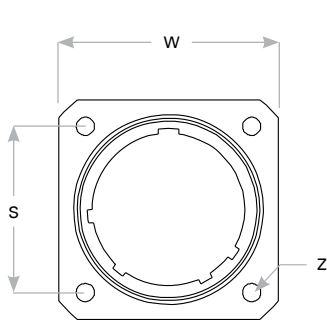
- BASIC PART NUMBER**
NS22 Thru-bulkhead receptacle
- MATERIAL & FINISH**
W Aluminum, olive drab cadmium
D Stainless steel, black cadmium plate
- SHELL SIZE & INSERT ARRANGEMENT**
See Insert Arrangement Drawings, p. Z-6
- CONTACT STYLE**
P Pins on thru-panel side, sockets opposite
S Sockets on thru-panel side, pins opposite
- ALTERNATE KEYING**
1 or 2, 3, 4, 5, 6, see p. Z-5 for availability
- OPTIONAL ACCESSORY KIT (OMIT FOR NONE)**
02 Protective covers (2x) + mounting gasket
03 02 kit + mounting bracket + sealing screws

Note: See part builder (p. Z-7) for additional kit options.

Receptacle Dimensions

Shell Size	W Max	S	Z Max	W Thread Class 2A	H	X
11	1.043 (26.5)	.750 (19.1)	.130 (3.3)	.750-.1P-.2L -D.S.	.812 (20.6)	.140 (3.6)
13	1.158 (29.4)	.843 (21.4)	.130 (3.3)	.875-.1P-.2L -D.S.	.937 (23.8)	.140 (3.6)
15	1.278 (32.5)	.968 (24.6)	.130 (3.3)	1.062-.1P-.2L -D.S.	1.124 (28.6)	.140 (3.6)
17	1.403 (35.6)	1.015 (25.8)	.130 (3.3)	1.125-.1P-.2L -D.S.	1.187 (30.2)	.140 (3.6)
19	1.528 (38.8)	1.140 (29.0)	.130 (3.3)	1.312-.1P-.2L -D.S.	1.374 (34.9)	.140 (3.6)
23	1.738 (44.2)	1.281 (32.5)	.130 (3.3)	1.500-.1P-.2L -D.S.	1.562 (39.7)	.140 (3.6)
25	1.838 (46.7)	1.392 (35.4)	.157 (4.0)	1.625-.1P-.2L -D.S.	1.687 (42.9)	.167 (4.2)
29	2.158 (54.8)	1.568 (39.8)	.157 (4.0)	1.812-.1P-.2L -D.S.	1.874 (47.6)	.167 (4.2)
33	2.348 (59.6)	1.734 (44.0)	.183 (4.7)	2.000-.1P-.2L -D.S.	2.062 (52.4)	.193 (4.9)

Dimensions are in inches (mm). ‡ Max panel thickness applies only to rear mount applications to ensure proper coupling clearance.



Panel Cutout

M28840 Jam Nut Thru-Bulkhead Receptacle

NS Series • MIL-DTL-28840 Type Connectors

NS24 W 15-21 P 1 - 02

- 1 **BASIC PART NUMBER**
NS24 Jam Nut Thru-Bulkhead Receptacle
- 2 **MATERIAL & FINISH**
W Aluminum, olive drab cadmium
D Stainless steel, black cadmium plate
- 3 **SHELL SIZE & INSERT ARRANGEMENT**
See Insert Arrangement Drawings, p. Z-6
- 4 **CONTACT STYLE**
P Pins on thru-panel side, sockets opposite
S Sockets on thru-panel side, pins opposite
- 5 **ALTERNATE KEYING**
1 or 2, 3, 4, 5, 6, see p. Z-5 for availability
- 6 **OPTIONAL ACCESSORY KIT (OMIT FOR NONE)**
02 Protective cover (2x)



Photo for example only

NS24 Compatibility

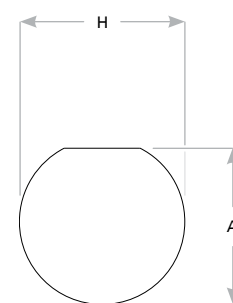
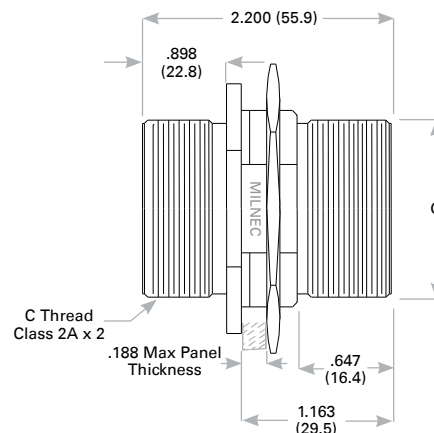
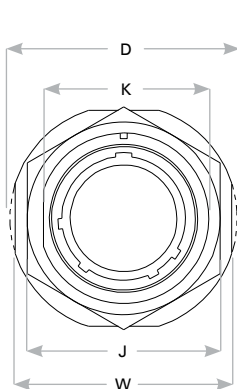
Compatible Brands	Mates
MIL-DTL-28840	MS28840/16, MS28840/17, MS28840/18, MS28840/19, MS28840/26, MS28840/27, MS28840/28

Note: See part builder (p. Z-7) for additional kit options.

Receptacle Dimensions

Shell Size	D	W	J	K	W Thread Class 2A	H Max	A Max
11	1.358 (34.5)	1.264 (32.1)	1.062 (27.0)	.837 (21.3)	.750-.1P-.2L -D.S.	.890 (22.6)	.853 (21.7)
13	1.498 (38.1)	1.389 (35.3)	1.188 (30.2)	.962 (24.4)	.875-.1P-.2L -D.S.	1.015 (25.8)	.978 (24.8)
15	1.671 (42.4)	1.577 (40.1)	1.375 (34.9)	1.149 (29.2)	1.062-.1P-.2L -D.S.	1.203 (30.6)	1.165 (29.6)
17	1.733 (44.0)	1.639 (41.6)	1.438 (36.5)	1.212 (30.8)	1.125-.1P-.2L -D.S.	1.265 (32.1)	1.228 (31.2)
19	1.921 (48.8)	1.827 (46.4)	1.625 (41.3)	1.399 (35.5)	1.312-.1P-.2L -D.S.	1.453 (36.9)	1.415 (35.9)
23	2.108 (53.5)	2.014 (51.2)	1.812 (46.0)	1.587 (40.3)	1.500-.1P-.2L -D.S.	1.640 (41.7)	1.603 (40.7)
25	2.233 (56.7)	2.139 (54.3)	2.000 (50.8)	1.712 (43.5)	1.625-.1P-.2L -D.S.	1.765 (44.8)	1.728 (43.9)
29	2.425 (61.6)	2.327 (59.1)	2.188 (55.6)	1.899 (48.2)	1.812-.1P-.2L -D.S.	1.953 (49.6)	1.915 (48.6)
33	2.608 (66.2)	2.514 (63.9)	2.375 (60.3)	2.087 (53.0)	2.000-.1P-.2L -D.S.	2.140 (54.4)	2.103 (53.4)

Dimensions are in inches (mm).



Panel Cutout

Rev. 2211

M28840 Straight Strain Relief Backshell

NS Series • MIL-DTL-28840 Type Connectors



NSB2 - 15 W

- 1 **BASIC PART NUMBER**
NSB2 Straight strain relief backshell
- 2 **SHELL SIZE**
See Strain Relief Dimensions table below
- 3 **MATERIAL & FINISH**
W Aluminum, olive drab cadmium
D Stainless steel, black cadmium plate

Note: See part builder (p. Z-7) for additional kit options.

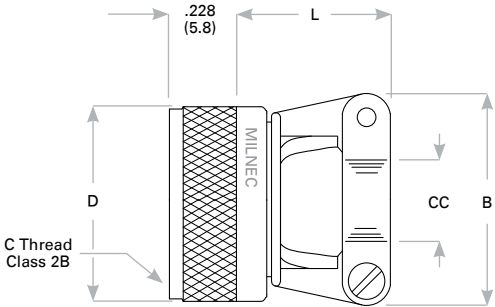
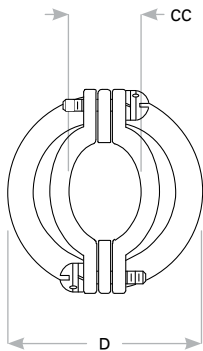
NSB2 Compatibility

Compatible Brands	Connectors
MIL-DTL-28840	M28840/10, M28840/11, M28840/14, M28840/16

Strain Relief Dimensions

Shell Size	D Max	C Thread Class 2B	L Max	B Max	CC Cable Clearance	
					Min	Max
11	1.028 (26.1)	.750-20 UNEF	1.091 (27.7)	.903 (22.9)	.177 (4.5)	.286 (7.7)
13	1.141 (29.0)	.875-20 UNEF	1.091 (27.7)	.977 (24.8)	.177 (4.5)	.286 (7.3)
15	1.263 (32.1)	1.000-20 UNEF	1.091 (27.7)	1.151 (29.2)	.250 (6.4)	.416 (10.6)
17	1.387 (35.2)	1.125-18 UNEF	1.206 (30.6)	1.281 (32.5)	.291 (7.4)	.476 (12.1)
19	1.513 (38.4)	1.250-18 UNEF	1.320 (33.5)	1.406 (35.7)	.348 (8.8)	.626 (15.9)
23	1.703 (43.3)	1.438-18 UNEF	1.445 (36.7)	1.576 (40.0)	.429 (10.9)	.831 (21.1)
25	1.825 (46.4)	1.562-18 UNEF	1.570 (39.9)	1.666 (42.3)	.523 (13.3)	.956 (24.3)
29	2.143 (54.4)	1.875-16 UN	1.721 (43.7)	2.046 (52.0)	.643 (16.3)	1.081 (27.5)
33	2.329 (59.2)	2.062-16 UNS	1.908 (48.5)	2.209 (56.1)	.704 (17.9)	1.187 (30.2)

Dimensions are in inches (mm).



Rev. 2211

M28840 45° Strain Relief Backshell

NS Series • MIL-DTL-28840 Type Connectors

NSB3 - 15 W

- 1
- 2
- 3
- 1
- 2
- 3
- BASIC PART NUMBER**
NSB3 45° strain relief backshell
- SHELL SIZE**
See Strain Relief Dimensions table below
- MATERIAL & FINISH**
W Aluminum, olive drab cadmium
D Stainless steel, black cadmium plate

Note: See part builder (p. Z-7) for additional kit options.



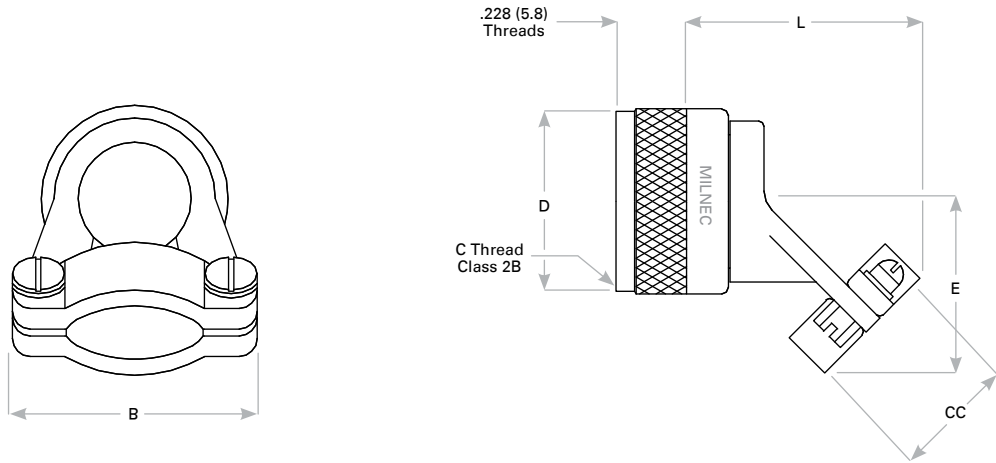
NSB3 Compatibility

Compatible Brands	Connectors
MIL-DTL-28840	M28840/10, M28840/11, M28840/14, M28840/16

Strain Relief Dimensions

Shell Size	D Max	C Thread Class 2B	L Max	B Max	E Max	CC Cable Clearance	
						Min	Max
11	1.028 (26.1)	.750-20 UNEF	1.091 (27.7)	.903 (22.9)	.929 (23.6)	.177 (4.5)	.286 (7.7)
13	1.141 (29.0)	.875-20 UNEF	1.091 (27.7)	.977 (24.8)	.929 (23.6)	.177 (4.5)	.286 (7.3)
15	1.263 (32.1)	1.000-20 UNEF	1.091 (27.7)	1.151 (29.2)	1.056 (26.8)	.250 (6.4)	.416 (10.6)
17	1.387 (35.2)	1.125-18 UNEF	1.206 (30.6)	1.281 (32.5)	1.233 (31.3)	.291 (7.4)	.476 (12.1)
19	1.513 (38.4)	1.250-18 UNEF	1.320 (33.5)	1.406 (35.7)	1.296 (32.9)	.348 (8.8)	.626 (15.9)
23	1.703 (43.3)	1.438-18 UNEF	1.445 (36.7)	1.576 (40.0)	1.358 (34.5)	.429 (10.9)	.831 (21.1)
25	1.825 (46.4)	1.562-18 UNEF	1.570 (39.9)	1.666 (42.3)	1.420 (36.1)	.523 (13.3)	.956 (24.3)
29	2.143 (54.4)	1.875-16 UN	1.721 (43.7)	2.046 (52.0)	1.634 (41.5)	.643 (16.3)	1.081 (27.5)
33	2.329 (59.2)	2.062-16 UNS	1.908 (48.5)	2.209 (56.1)	1.859 (47.2)	.704 (17.9)	1.187 (30.2)

Dimensions are in inches (mm).



Rev. 2211

M28840 90° Strain Relief Backshell

NS Series • MIL-DTL-28840 Type Connectors



NSB4 - 15 W

- 1 **BASIC PART NUMBER**
NSB4 90° strain relief backshell
- 2 **SHELL SIZE**
See Strain Relief Dimensions table below
- 3 **MATERIAL & FINISH**
W Aluminum, olive drab cadmium
D Stainless steel, black cadmium plate

Note: See part builder (p. Z-7) for additional kit options.

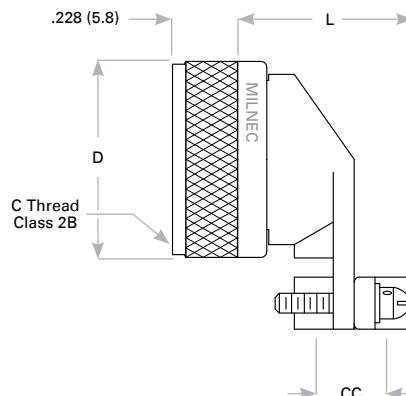
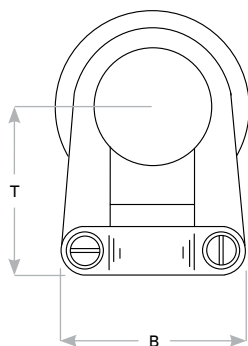
NSB4 Compatibility

Compatible Brands	Connectors
MIL-DTL-28840	M28840/10, M28840/11, M28840/14, M28840/16

Strain Relief Dimensions

Shell Size	D Max	C Thread Class 2B	L Max	B Max	T Max	CC Cable Clearance	
						Min	Max
11	1.028 (26.1)	.750-20 UNEF	1.071 (27.2)	.903 (22.9)	.929 (23.6)	.177 (4.5)	.286 (7.7)
13	1.141 (29.0)	.875-20 UNEF	1.071 (27.2)	.977 (24.8)	.929 (23.6)	.177 (4.5)	.286 (7.3)
15	1.263 (32.1)	1.000-20 UNEF	1.280 (32.5)	1.151 (29.2)	1.056 (26.8)	.250 (6.4)	.416 (10.6)
17	1.387 (35.2)	1.125-18 UNEF	1.392 (35.4)	1.281 (32.5)	1.233 (31.3)	.291 (7.4)	.476 (12.1)
19	1.513 (38.4)	1.250-18 UNEF	1.517 (38.5)	1.406 (35.7)	1.296 (32.9)	.348 (8.8)	.626 (15.9)
23	1.703 (43.3)	1.438-18 UNEF	1.642 (41.7)	1.576 (40.0)	1.358 (34.5)	.429 (10.9)	.831 (21.1)
25	1.825 (46.4)	1.562-18 UNEF	1.767 (44.9)	1.666 (42.3)	1.420 (36.1)	.523 (13.3)	.956 (24.3)
29	2.143 (54.4)	1.875-16 UN	1.905 (48.4)	2.046 (52.0)	1.634 (41.5)	.643 (16.3)	1.081 (27.5)
33	2.329 (59.2)	2.062-16 UNS	1.968 (50.0)	2.209 (56.1)	1.859 (47.2)	.704 (17.9)	1.187 (30.2)

Dimensions are in inches (mm).



Rev. 2211

M28840 Environmental Nut (E-Nut)

NS Series • MIL-DTL-28840 Type Connectors

NSEN - 15 W

- 1 **BASIC PART NUMBER**
NSEN Environmental nut
- 2 **SHELL SIZE**
See Backshell Dimensions table below
- 3 **MATERIAL & FINISH**
W Aluminum, olive drab cadmium
D Stainless steel, black cadmium plate

Note: See part builder (p. Z-7) for additional kit options.



Photo for example only

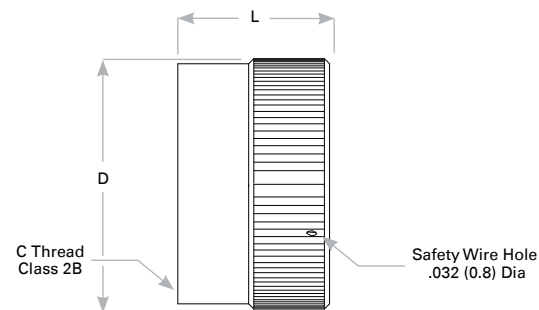
NSEN Compatibility

Compatible Brands	Connectors
MIL-DTL-28840	M28840/10, M28840/11, M28840/14, M28840/16

Backshell Dimensions

Shell Size	D Max	C Thread Class 2B	L
11	1.028 (26.1)	.750-20 UNEF	.718 (18.2)
13	1.141 (29.0)	.875-20 UNEF	.718 (18.2)
15	1.263 (32.1)	1.000-20 UNEF	.718 (18.2)
17	1.387 (35.2)	1.125-18 UNEF	.718 (18.2)
19	1.513 (38.4)	1.250-18 UNEF	.718 (18.2)
23	1.703 (43.3)	1.438-18 UNEF	.718 (18.2)
25	1.825 (46.4)	1.562-18 UNEF	.718 (18.2)
29	2.143 (54.4)	1.875-16 UN	.718 (18.2)
33	2.329 (59.2)	2.062-16 UNS	.718 (18.2)

Dimensions are in inches (mm).



Rev. 2211

M28840 Straight Environmental Backshell

NS Series • MIL-DTL-28840 Type Connectors



NSE2 - 009 W

- 1

2

3
- 1

2

3
- BASIC PART NUMBER**
NSE2 Straight environmental backshell

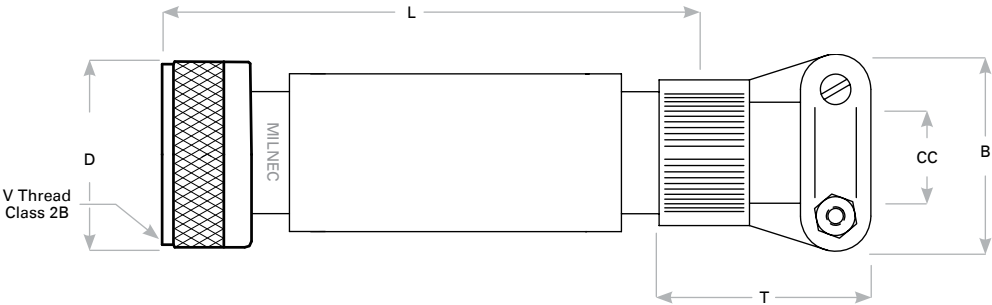
DASH NO.
See Backshell Dimensions table below

MATERIAL & FINISH
W Aluminum, olive drab cadmium
D Stainless steel, black cadmium plate

Note: See part builder (p. Z-7) for additional kit options.

NSE2 Compatibility

Compatible Brands	Connectors
MIL-DTL-28840	M28840/10, M28840/11, M28840/14, M28840/16



Backshell Dimensions

Dash No.	Shell Size	Military Shell Size	V Thread Class 2B	D Max	T Max	B	L	CC Cable Clearance	
								Min	Max
001	11	A	.750-20 UNEF	1.028 (26.11)	1.281 (32.5)	.938 (23.8)	3.620 (91.9)	.188 (4.8)	.312 (7.9)
002	11	A	.750-20 UNEF	1.028 (26.11)	1.281 (32.5)	1.125 (28.6)	3.620 (91.9)	.281 (7.1)	.438 (11.1)
003	11	A	.750-20 UNEF	1.028 (26.11)	1.281 (32.5)	1.312 (33.3)	3.620 (91.9)	.344 (8.7)	.562 (14.3)
004	13	B	.875-20 UNEF	1.141 (28.98)	1.281 (32.5)	.938 (23.8)	3.620 (91.9)	.188 (4.8)	.312 (7.9)
005	13	B	.875-20 UNEF	1.141 (28.98)	1.281 (32.5)	1.125 (28.6)	3.620 (91.9)	.281 (7.1)	.438 (11.1)
006	13	B	.875-30 UNEF	1.141 (28.98)	1.281 (32.5)	1.312 (33.3)	3.620 (91.9)	.344 (8.7)	.562 (14.3)
007	13	B	.875-30 UNEF	1.141 (28.98)	1.281 (32.5)	1.312 (33.3)	4.120 (104.6)	.375 (9.5)	.625 (15.9)
008	15	C	1.000-20 UNEF	1.263 (32.08)	1.281 (32.5)	.938 (23.8)	3.620 (91.9)	.188 (4.8)	.312 (7.9)
009	15	C	1.000-20 UNEF	1.263 (32.08)	1.281 (32.5)	1.125 (28.6)	3.620 (91.9)	.281 (7.1)	.438 (11.1)
010	15	C	1.000-20 UNEF	1.263 (32.08)	1.281 (32.5)	1.312 (33.3)	3.620 (91.9)	.344 (8.7)	.562 (14.3)
011	15	C	1.000-20 UNEF	1.263 (32.08)	1.281 (32.5)	1.312 (33.3)	4.120 (104.6)	.375 (9.5)	.625 (15.9)
012	15	C	1.000-20 UNEF	1.263 (32.08)	1.312 (33.3)	1.593 (40.5)	4.120 (104.6)	.438 (11.1)	.750 (19.1)
013	17	D	1.125-18 UNEF	1.387 (35.23)	1.281 (32.5)	1.312 (33.3)	4.120 (104.6)	.375 (9.5)	.625 (15.9)
014	17	D	1.125-18 UNEF	1.387 (35.23)	1.312 (33.3)	1.593 (40.5)	4.120 (104.6)	.438 (11.1)	.750 (19.1)
015	17	D	1.125-18 UNEF	1.387 (35.23)	1.406 (35.7)	1.750 (44.5)	4.120 (104.6)	.625 (15.9)	.938 (23.8)

Dimensions are in inches (mm).

(Continued on next page)

Rev. 2211

M28840 Straight Environmental Backshell

NS Series • MIL-DTL-28840 Type Connectors

Backshell Dimensions (Continued from previous page)

Dash No.	Shell Size	Military Shell Size	V Thread Class 2B	D Max	T Max	B	L	CC Cable Clearance	
								Min	Max
016	19	E	1.250-18 UNEF	1.513 (38.43)	1.281 (32.5)	1.312 (33.3)	4.120 (104.6)	.375 (9.5)	.625 (15.9)
017	19	E	1.250-18 UNEF	1.513 (38.43)	1.406 (35.7)	1.750 (44.5)	4.120 (104.6)	.625 (15.9)	.938 (23.8)
018	23	F	1.438-18 UNEF	1.703 (45.51)	1.312 (33.3)	1.593 (40.5)	4.620 (117.3)	.438 (11.1)	.750 (19.1)
019	23	F	1.438-18 UNEF	1.703 (45.51)	1.406 (35.7)	1.750 (44.5)	4.620 (117.3)	.625 (15.9)	.938 (23.8)
020	23	F	1.438-18 UNEF	1.703 (45.51)	1.593 (40.5)	2.093 (53.2)	4.620 (117.3)	.812 (20.6)	1.188 (30.2)
021	25	G	1.562-18 UNEF	1.825 (46.35)	1.406 (35.7)	1.750 (44.5)	4.620 (117.3)	.625 (15.9)	.938 (23.8)
022	25	G	1.562-18 UNEF	1.825 (46.35)	1.593 (40.5)	2.093 (53.2)	5.120 (130.0)	.812 (20.6)	1.188 (30.2)
023	25	G	1.562-18 UNEF	1.825 (46.35)	1.593 (40.5)	2.093 (53.2)	5.120 (130.0)	.875 (22.2)	1.250 (31.8)
024	25	G	1.562-18 UNEF	1.825 (46.35)	1.625 (41.3)	2.343 (59.5)	5.120 (130.0)	1.000 (25.4)	1.380 (35.1)
025	29	H	1.875-16 UNS	2.143 (54.43)	1.593 (40.5)	2.093 (53.2)	5.120 (130.0)	.812 (20.6)	1.188 (30.2)
026	29	H	1.875-16 UNS	2.143 (54.43)	1.625 (41.3)	2.343 (59.5)	5.120 (130.0)	1.000 (25.4)	1.380 (35.1)
027	33	J	2.062-16 UNS	2.329 (59.16)	1.625 (41.3)	2.343 (59.5)	5.120 (130.0)	1.000 (25.4)	1.380 (35.1)
028	33	J	2.062-16 UNS	2.329 (59.16)	1.900 (48.3)	2.750 (69.9)	5.120 (130.0)	1.250 (31.8)	1.625 (41.3)

Dimensions are in inches (mm).

Dimensions are in inches (mm).

Rev. 2211

M28840 45° Environmental Backshell

NS Series • MIL-DTL-28840 Type Connectors



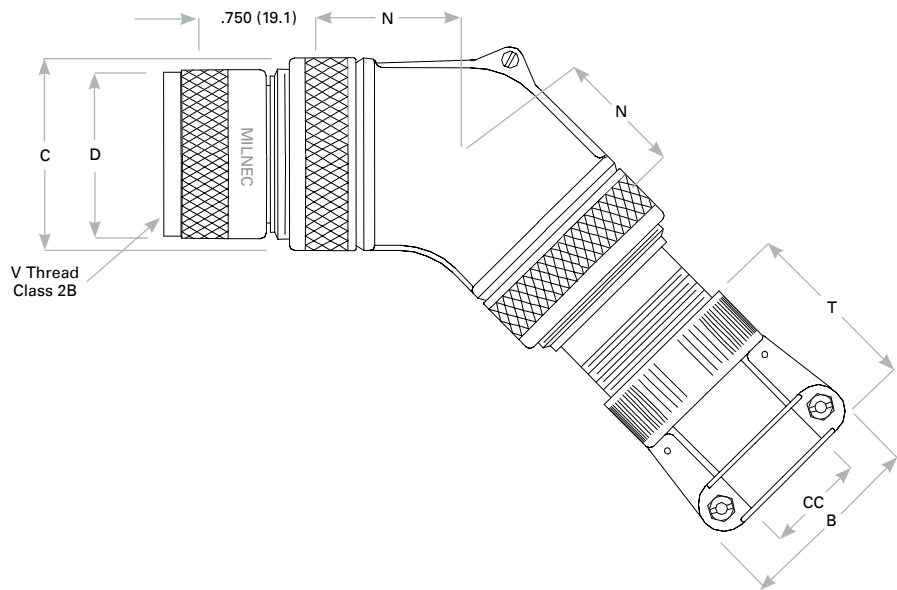
NSE3 - 009 W

- 1
- 2
- 3
- 1
- 2
- 3
- BASIC PART NUMBER**
NSE3 45° environmental backshell
- DASH NO.**
See Backshell Dimensions table below
- MATERIAL & FINISH**
W Aluminum, olive drab cadmium
D Stainless steel, black cadmium plate

Note: See part builder (p. Z-7) for additional kit options.

NSE3 Compatibility

Compatible Brands	Connectors
MIL-DTL-28840	M28840/10, M28840/11, M28840/14, M28840/16



Backshell Dimensions

Dash No.	Shell Size	Military Shell Size	V Thread Class 2B	N Max	T	C Max	D Max	B	CC Cable Clearance	
									Min	Max
001	11	A	.750-20 UNEF	1.031 (26.2)	1.281 (32.5)	1.188 (30.2)	1.028 (26.1)	.938 (23.8)	.188 (4.8)	.312 (7.9)
002	11	A	.750-20 UNEF	1.031 (26.2)	1.281 (32.5)	1.188 (30.2)	1.028 (26.1)	1.125 (28.6)	.281 (7.1)	.438 (11.1)
003	11	A	.750-20 UNEF	1.156 (29.4)	1.281 (32.5)	1.438 (36.5)	1.028 (26.1)	1.312 (33.3)	.344 (8.7)	.562 (14.3)
004	13	B	.875-20 UNEF	1.031 (26.2)	1.281 (32.5)	1.188 (30.2)	1.141 (29.0)	.938 (23.8)	.188 (4.8)	.312 (7.9)
005	13	B	.875-20 UNEF	1.031 (26.2)	1.281 (32.5)	1.188 (30.2)	1.141 (29.0)	1.125 (28.6)	.281 (7.1)	.438 (11.1)
006	13	B	.875-30 UNEF	1.156 (29.4)	1.281 (32.5)	1.438 (36.5)	1.141 (29.0)	1.312 (33.3)	.344 (8.7)	.562 (14.3)
007	13	B	.875-30 UNEF	1.281 (32.5)	1.281 (32.5)	1.688 (42.9)	1.141 (29.0)	1.312 (33.3)	.375 (9.5)	.625 (15.9)

Dimensions are in inches (mm). (Continued on next page)

M28840 45° Environmental Backshell

NS Series • MIL-DTL-28840 Type Connectors

Backshell Dimensions (Continued from previous page)

Dash No.	Shell Size	Military Shell Size	V Thread Class 2B	N Max	T	C Max	D Max	B	CC Cable Clearance	
									Min	Max
008	15	C	1.000-20 UNEF	1.156 (29.4)	1.281 (32.5)	1.438 (36.5)	1.263 (32.1)	.938 (23.8)	.188 (4.8)	.312 (7.9)
009	15	C	1.000-20 UNEF	1.156 (29.4)	1.281 (32.5)	1.438 (36.5)	1.263 (32.1)	1.125 (28.6)	.281 (7.1)	.438 (11.1)
010	15	C	1.000-20 UNEF	1.156 (29.4)	1.281 (32.5)	1.438 (36.5)	1.263 (32.1)	1.312 (33.3)	.344 (8.7)	.562 (14.3)
011	15	C	1.000-20 UNEF	1.281 (32.5)	1.281 (32.5)	1.688 (42.9)	1.263 (32.1)	1.312 (33.3)	.375 (9.5)	.625 (15.9)
012	15	C	1.000-20 UNEF	1.281 (32.5)	1.312 (33.3)	1.688 (42.9)	1.263 (32.1)	1.593 (40.5)	.438 (11.1)	.750 (19.1)
013	17	D	1.125-18 UNEF	1.281 (32.5)	1.281 (32.5)	1.688 (42.9)	1.387 (35.2)	1.312 (33.3)	.375 (9.5)	.625 (15.9)
014	17	D	1.125-18 UNEF	1.281 (32.5)	1.312 (33.3)	1.688 (42.9)	1.387 (35.2)	1.593 (40.5)	.438 (11.12)	.750 (19.1)
015	17	D	1.125-18 UNEF	1.281 (32.5)	1.406 (35.7)	1.688 (42.9)	1.387 (35.2)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
016	19	E	1.250-18 UNEF	1.281 (32.5)	1.281 (32.5)	1.688 (42.9)	1.513 (38.4)	1.312 (33.3)	.375 (9.5)	.625 (15.9)
017	19	E	1.250-18 UNEF	1.406 (35.7)	1.406 (35.7)	1.938 (49.2)	1.513 (38.4)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
018	23	F	1.438-18 UNEF	1.406 (35.7)	1.312 (33.3)	1.938 (49.2)	1.703 (45.5)	1.593 (40.5)	.438 (11.1)	.750 (19.1)
019	23	F	1.438-18 UNEF	1.406 (35.7)	1.406 (35.7)	1.938 (49.2)	1.703 (45.5)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
020	23	F	1.438-18 UNEF	1.406 (35.7)	1.593 (40.5)	1.938 (49.2)	1.703 (45.5)	2.093 (53.2)	.812 (20.6)	1.188 (30.2)
021	25	G	1.562-18 UNEF	1.406 (35.7)	1.406 (35.7)	1.938 (49.2)	1.825 (46.4)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
022	25	G	1.562-18 UNEF	1.406 (35.7)	1.593 (40.5)	1.938 (49.2)	1.825 (46.4)	2.093 (53.2)	.812 (20.6)	1.188 (30.2)
023	25	G	1.562-18 UNEF	1.531 (38.9)	1.593 (40.5)	2.188 (55.6)	1.825 (46.4)	2.093 (53.2)	.875 (22.2)	1.250 (31.8)
024	25	G	1.562-18 UNEF	1.531 (38.9)	1.625 (41.3)	2.188 (55.6)	1.825 (46.4)	2.343 (59.5)	1.000 (25.4)	1.380 (35.1)
025	29	H	1.875-16 UNS	1.531 (38.9)	1.593 (40.5)	2.188 (55.6)	2.143 (54.4)	2.093 (53.2)	.812 (20.6)	1.188 (30.2)
026	29	H	1.875-16 UNS	1.531 (38.9)	1.625 (41.3)	2.188 (55.6)	2.143 (54.4)	2.343 (59.5)	1.000 (25.4)	1.380 (35.1)
027	33	J	2.062-16 UNS	1.781 (45.2)	1.625 (41.3)	2.688 (68.3)	2.329 (59.2)	2.343 (59.5)	1.000 (25.4)	1.380 (35.1)
028	33	J	2.062-16 UNS	1.781 (45.2)	1.900 (48.3)	2.688 (68.3)	2.329 (59.2)	2.750 (69.9)	1.250 (31.8)	1.625 (41.3)

Dimensions are in inches (mm).

M28840 90° Environmental Backshell

NS Series • MIL-DTL-28840 Type Connectors



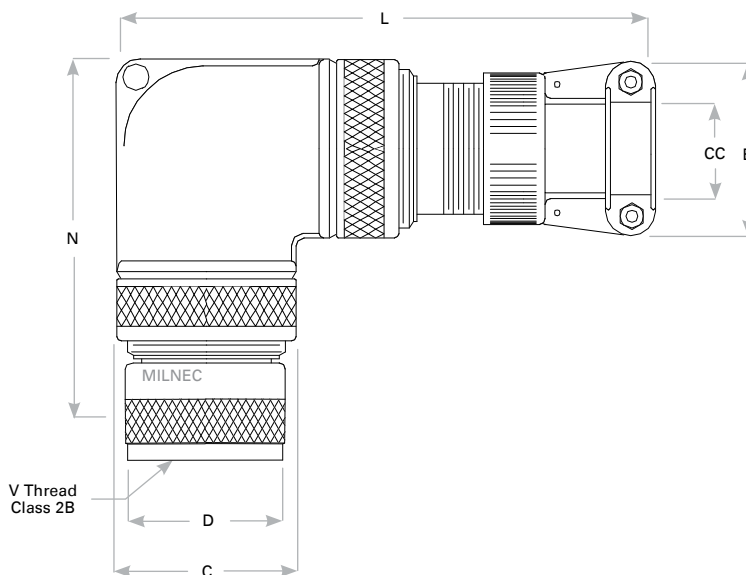
NSE4 - 009 W

- 1 **BASIC PART NUMBER**
NSE4 90° environmental backshell
- 2 **DASH NO.**
See Backshell Dimensions table below
- 3 **MATERIAL & FINISH**
W Aluminum, olive drab cadmium
D Stainless steel, black cadmium plate

Note: See part builder (p. Z-7) for additional kit options.

NSE4 Compatibility

Compatible Brands	Connectors
MIL-DTL-28840	M28840/10, M28840/11, M28840/14, M28840/16



Backshell Dimensions

Dash No.	Shell Size	Military Shell Size	V Thread Class 2B	L Max	N Max	C Max	D Max	B	CC Cable Clearance	
									Min	Max
001	11	A	.750-20 UNEF	2.962 (75.2)	2.614 (66.4)	1.188 (30.2)	1.028 (26.11)	.938 (23.8)	.188 (4.8)	.312 (7.9)
024	11	A	.750-20 UNEF	2.962 (75.2)	2.614 (66.4)	1.028 (26.1)	1.188 (30.2)	1.125 (28.6)	.281 (7.1)	.438 (11.1)
025	11	A	.750-20 UNEF	3.087 (78.4)	2.864 (72.7)	1.028 (26.1)	1.438 (36.5)	1.312 (33.3)	.344 (8.7)	.562 (14.3)
002	13	B	.875-20 UNEF	2.962 (75.2)	2.614 (66.4)	1.188 (30.2)	1.141 (28.98)	.938 (23.8)	.188 (4.8)	.312 (7.9)
003	13	B	.875-20 UNEF	2.962 (75.2)	2.614 (66.4)	1.188 (30.2)	1.141 (28.98)	1.125 (28.6)	.281 (7.1)	.438 (11.1)
026	13	B	.875-30 UNEF	3.087 (78.4)	2.864 (72.7)	1.141 (29.0)	1.438 (36.5)	1.312 (33.3)	.344 (8.7)	.562 (14.3)
027	13	B	.875-30 UNEF	3.312 (84.1)	3.114 (79.1)	1.141 (29.0)	1.688 (42.9)	1.312 (33.3)	.375 (9.5)	.625 (15.9)

Dimensions are in inches (mm).

(Continued on next page)

Rev. 2211

M28840 90° Environmental Backshell

NS Series • MIL-DTL-28840 Type Connectors

Backshell Dimensions (Continued from previous page)

Dash No.	Shell Size	Military Shell Size	V Thread Class 2B	L Max	N Max	C Max	D Max	B	CC Cable Clearance	
									Min	Max
004	15	C	1.000-20 UNEF	3.087 (78.4)	2.864 (72.7)	1.438 (36.5)	1.263 (32.08)	.938 (23.8)	.188 (4.8)	.312 (7.9)
005	15	C	1.000-20 UNEF	3.087 (78.4)	2.864 (72.7)	1.438 (36.5)	1.263 (32.08)	1.125 (28.6)	.281 (7.1)	.438 (11.1)
006	15	C	1.000-20 UNEF	3.087 (78.4)	2.864 (72.7)	1.438 (36.5)	1.263 (32.08)	1.312 (33.3)	.344 (8.7)	.562 (14.3)
028	15	C	1.000-20 UNEF	3.312 (84.1)	3.114 (79.1)	1.263 (32.1)	1.688 (42.9)	1.312 (33.3)	.375 (9.5)	.625 (15.9)
007	15	C	1.000-20 UNEF	3.312 (84.1)	3.114 (79.1)	1.688 (42.9)	1.263 (32.08)	1.593 (40.5)	.438 (11.1)	.750 (19.1)
008	17	D	1.125-18 UNEF	3.312 (84.1)	3.114 (79.1)	1.387 (35.2)	1.688 (42.9)	1.312 (33.3)	.375 (9.5)	.625 (15.9)
009	17	D	1.125-18 UNEF	3.343 (84.9)	3.114 (79.1)	1.387 (35.2)	1.688 (42.9)	1.593 (40.5)	.438 (11.1)	.750 (19.1)
010	17	D	1.125-18 UNEF	3.437 (87.3)	3.114 (79.1)	1.387 (35.2)	1.688 (42.9)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
011	19	E	1.250-18 UNEF	3.312 (84.1)	3.114 (79.1)	1.513 (38.4)	1.688 (42.9)	1.312 (33.3)	.375 (9.5)	.625 (15.9)
012	19	E	1.250-18 UNEF	3.462 (87.9)	3.364 (85.4)	1.513 (38.4)	1.938 (49.2)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
013	23	F	1.438-18 UNEF	3.368 (85.5)	3.364 (85.4)	1.703 (45.5)	1.938 (49.2)	1.593 (40.5)	.438 (11.1)	.750 (19.1)
014	23	F	1.438-18 UNEF	3.462 (87.9)	3.364 (85.4)	1.703 (45.5)	1.938 (49.2)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
015	23	F	1.438-18 UNEF	3.649 (92.7)	3.364 (85.4)	1.703 (45.5)	1.938 (49.2)	2.093 (53.2)	.812 (20.6)	1.188 (30.2)
016	25	G	1.562-18 UNEF	3.462 (87.9)	3.364 (85.4)	1.825 (46.4)	1.938 (49.2)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
017	25	G	1.562-18 UNEF	3.649 (92.7)	3.364 (85.4)	1.825 (46.4)	1.938 (49.2)	2.093 (53.2)	.812 (20.6)	1.188 (30.2)
018	25	G	1.562-18 UNEF	3.774 (95.9)	3.614 (91.8)	1.825 (46.4)	2.188 (54.4)	2.093 (53.2)	.875 (22.2)	1.250 (31.8)
019	25	G	1.562-18 UNEF	3.806 (96.7)	3.614 (91.8)	1.825 (46.4)	2.188 (54.4)	2.343 (59.5)	1.000 (25.4)	1.380 (35.1)
020	29	H	1.875-16 UNS	3.774 (95.9)	3.614 (91.8)	2.143 (54.4)	2.188 (54.4)	2.093 (53.2)	.812 (20.6)	1.188 (30.2)
021	29	H	1.875-16 UNS	3.806 (96.7)	3.614 (91.8)	2.143 (54.4)	2.188 (54.4)	2.343 (59.5)	1.000 (25.4)	1.380 (35.1)
022	33	J	2.062-16 UNS	4.056 (103.0)	4.114 (104.5)	2.329 (59.2)	2.688 (68.3)	2.343 (59.5)	1.000 (25.4)	1.380 (35.1)
023	33	J	2.062-16 UNS	4.331 (110.0)	4.114 (104.5)	2.329 (59.2)	2.688 (68.3)	2.750 (69.9)	1.250 (31.8)	1.625 (41.3)

Dimensions are in inches (mm).

M28840 Straight EMI/Environmental Backshell

NS Series • MIL-DTL-28840 Type Connectors



NSR2 - 009 W

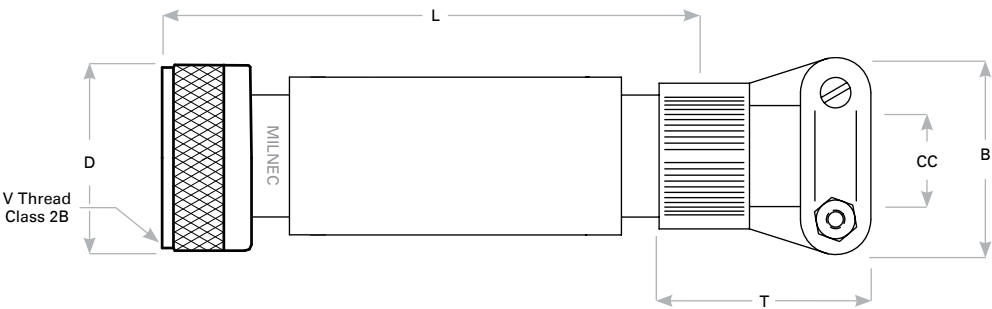
- 1 **BASIC PART NUMBER**
NSR2 Straight EMI/environmental backshell
- 2 **DASH NO.**
See Backshell Dimensions table below
- 3 **MATERIAL & FINISH**

W Aluminum, olive drab cadmium
D Stainless steel, black cadmium plate

Note: See part builder (p. Z-7) for additional kit options.

NSR2 Compatibility

Compatible Brands	Connectors
MIL-DTL-28840	M28840/10, M28840/11, M28840/14, M28840/16



Backshell Dimensions

Dash No.	Shell Size	Military Shell Size	V Thread Class 2B	D	T Max	B Max	L	CC Cable Clearance	
								Min	Max
001	11	A	.750-20 UNEF	1.028 (26.11)	1.281 (32.5)	.938 (23.8)	3.620 (91.9)	.188 (4.8)	.312 (7.9)
002	11	A	.750-20 UNEF	1.028 (26.11)	1.281 (32.5)	1.125 (28.6)	3.620 (91.9)	.281 (7.1)	.438 (11.1)
003	11	A	.750-20 UNEF	1.028 (26.11)	1.281 (32.5)	1.312 (33.3)	3.620 (91.9)	.344 (8.7)	.562 (14.3)
004	13	B	.875-20 UNEF	1.141 (28.98)	1.281 (32.5)	.938 (23.8)	3.620 (91.9)	.188 (4.8)	.312 (7.9)
005	13	B	.875-20 UNEF	1.141 (28.98)	1.281 (32.5)	1.125 (28.6)	3.620 (91.9)	.281 (7.1)	.438 (11.1)
006	13	B	.875-30 UNEF	1.141 (28.98)	1.281 (32.5)	1.312 (33.3)	3.620 (91.9)	.344 (8.7)	.562 (14.3)
007	13	B	.875-30 UNEF	1.141 (28.98)	1.281 (32.5)	1.312 (33.3)	4.120 (104.6)	.375 (9.5)	.625 (15.9)
008	15	C	1.000-20 UNEF	1.263 (32.08)	1.281 (32.5)	.938 (23.8)	3.620 (91.9)	.188 (4.8)	.312 (7.9)
009	15	C	1.000-20 UNEF	1.263 (32.08)	1.281 (32.5)	1.125 (28.6)	3.620 (91.9)	.281 (7.1)	.438 (11.1)
010	15	C	1.000-20 UNEF	1.263 (32.08)	1.281 (32.5)	1.312 (33.3)	3.620 (91.9)	.344 (8.7)	.562 (14.3)
011	15	C	1.000-20 UNEF	1.263 (32.08)	1.281 (32.5)	1.312 (33.3)	4.120 (104.6)	.375 (9.5)	.625 (15.9)
012	15	C	1.000-20 UNEF	1.263 (32.08)	1.312 (33.3)	1.593 (40.5)	4.120 (104.6)	.438 (11.1)	.750 (19.1)
013	17	D	1.125-18 UNEF	1.387 (35.23)	1.281 (32.5)	1.312 (33.3)	4.120 (104.6)	.375 (9.5)	.625 (15.9)
014	17	D	1.125-18 UNEF	1.387 (35.23)	1.312 (33.3)	1.593 (40.5)	4.120 (104.6)	.438 (11.1)	.750 (19.1)
015	17	D	1.125-18 UNEF	1.387 (35.23)	1.406 (35.7)	1.750 (44.5)	4.120 (104.6)	.625 (15.9)	.938 (23.8)

Dimensions are in inches (mm). (Continued on next page)
Rev. 2211

M28840 Straight EMI/Environmental Backshell

NS Series • MIL-DTL-28840 Type Connectors

Backshell Dimensions (Continued from previous page)

Dash No.	Shell Size	Military Shell Size	V Thread Class 2B	D	T Max	B Max	L	CC Cable Clearance	
								Min	Max
016	19	E	1.250-18 UNEF	1.513 (38.43)	1.281 (32.5)	1.312 (33.3)	4.120 (104.6)	.375 (9.5)	.625 (15.9)
017	19	E	1.250-18 UNEF	1.513 (38.43)	1.406 (35.7)	1.750 (44.5)	4.120 (104.6)	.625 (15.9)	.938 (23.8)
018	23	F	1.438-18 UNEF	1.703 (45.51)	1.312 (33.3)	1.593 (40.5)	4.620 (117.3)	.438 (11.1)	.750 (19.1)
019	23	F	1.438-18 UNEF	1.703 (45.51)	1.406 (35.7)	1.750 (44.5)	4.620 (117.3)	.625 (15.9)	.938 (23.8)
020	23	F	1.438-18 UNEF	1.703 (45.51)	1.593 (40.5)	2.093 (53.2)	4.620 (117.3)	.812 (20.6)	1.188 (30.2)
021	25	G	1.562-18 UNEF	1.825 (46.35)	1.406 (35.7)	1.750 (44.5)	4.620 (117.3)	.625 (15.9)	.938 (23.8)
022	25	G	1.562-18 UNEF	1.825 (46.35)	1.593 (40.5)	2.093 (53.2)	5.120 (130.0)	.812 (20.6)	1.188 (30.2)
023	25	G	1.562-18 UNEF	1.825 (46.35)	1.593 (40.5)	2.093 (53.2)	5.120 (130.0)	.875 (22.2)	1.250 (31.8)
024	25	G	1.562-18 UNEF	1.825 (46.35)	1.625 (41.3)	2.343 (59.5)	5.120 (130.0)	1.000 (25.4)	1.380 (35.1)
025	29	H	1.875-16 UNS	2.143 (54.43)	1.593 (40.5)	2.093 (53.2)	5.120 (130.0)	.812 (20.6)	1.188 (30.2)
026	29	H	1.875-16 UNS	2.143 (54.43)	1.625 (41.3)	2.343 (59.5)	5.120 (130.0)	1.000 (25.4)	1.380 (35.1)
027	33	J	2.062-16 UNS	2.329 (59.16)	1.625 (41.3)	2.343 (59.5)	5.120 (130.0)	1.000 (25.4)	1.380 (35.1)
028	33	J	2.062-16 UNS	2.329 (59.16)	1.900 (48.3)	2.750 (69.9)	5.120 (130.0)	1.250 (31.8)	1.625 (41.3)

Dimensions are in inches (mm).

M28840 45° EMI/Environmental Backshell

NS Series • MIL-DTL-28840 Type Connectors



Photo for example only

NSR3 - 009 W

- 1

2

3
- 1

2

3
- BASIC PART NUMBER**

NSR3 45° EMI/environmental backshell

DASH NO.

See Backshell Dimensions table below

MATERIAL & FINISH

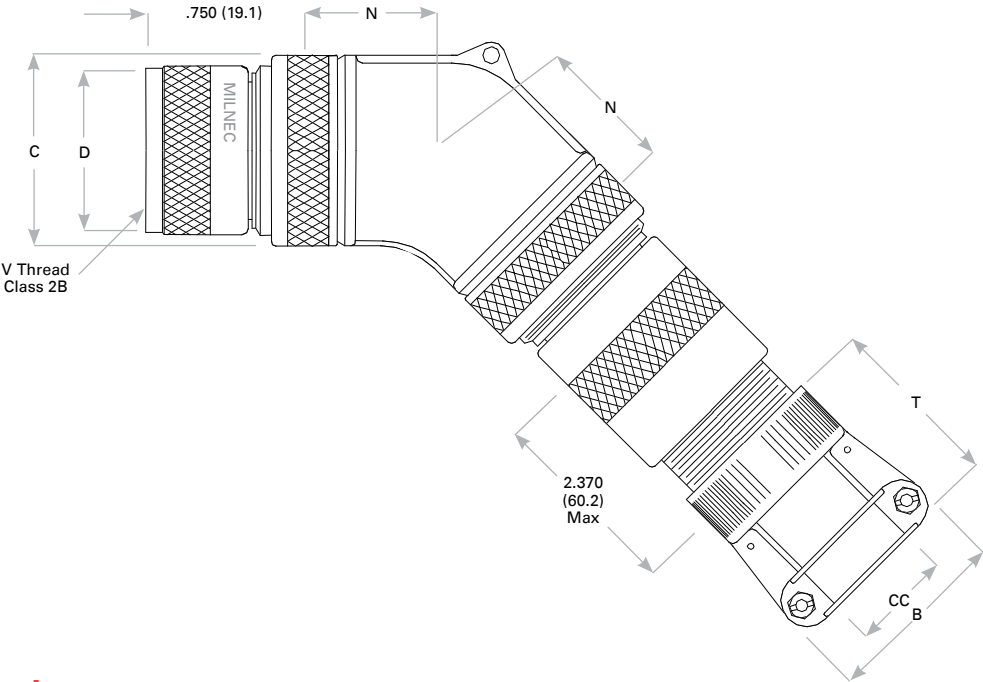
W Aluminum, olive drab cadmium

D Stainless steel, black cadmium plate

Note: See part builder (p. Z-7) for additional kit options.

NSR3 Compatibility

Compatible Brands	Connectors
MIL-DTL-28840	M28840/10, M28840/11, M28840/14, M28840/16



Backshell Dimensions

Dash No.	Shell Size	Military Shell Size	V Thread Class 2B	N Max	T	C Max	D	B	CC Cable Clearance	
									Min	Max
001	11	A	.750-20 UNEF	1.031 (26.2)	1.281 (32.5)	1.188 (30.2)	1.028 (26.1)	.938 (23.8)	.188 (4.8)	.312 (7.9)
024	11	A	.750-20 UNEF	1.031 (26.2)	1.281 (32.5)	1.188 (30.2)	1.028 (26.11)	1.125 (28.6)	.281 (7.1)	.438 (11.1)
025	11	A	.750-20 UNEF	1.156 (29.4)	1.281 (32.5)	1.438 (36.5)	1.028 (26.11)	1.312 (33.3)	.344 (8.7)	.562 (14.3)
002	13	B	.875-20 UNEF	1.031 (26.2)	1.281 (32.5)	1.188 (30.2)	1.141 (29.0)	.938 (23.8)	.188 (4.8)	.312 (7.9)
003	13	B	.875-20 UNEF	1.031 (26.2)	1.281 (32.5)	1.188 (30.2)	1.141 (29.0)	1.125 (28.6)	.281 (7.1)	.438 (11.1)
026	13	B	.875-30 UNEF	1.156 (29.4)	1.281 (32.5)	1.438 (36.5)	1.141 (28.98)	1.312 (33.3)	.344 (8.7)	.562 (14.3)
027	13	B	.875-30 UNEF	1.281 (32.5)	1.281 (32.5)	1.688 (42.9)	1.141 (28.98)	1.312 (33.3)	.375 (9.5)	.625 (15.9)

Dimensions are in inches (mm).

(Continued on next page)

Rev. 2211

M28840 45° Environmental Backshell

NS Series • MIL-DTL-28840 Type Connectors

Backshell Dimensions (Continued from previous page)

Dash No.	Shell Size	Military Shell Size	V Thread Class 2B	N Max	T	C Max	D	B	CC Cable Clearance	
									Min	Max
004	15	C	1.000-20 UNEF	1.156 (29.4)	1.281 (32.5)	1.438 (36.5)	1.263 (32.1)	.938 (23.8)	.188 (4.8)	.312 (7.9)
005	15	C	1.000-20 UNEF	1.156 (29.4)	1.281 (32.5)	1.438 (36.5)	1.263 (32.1)	1.125 (28.6)	.281 (7.1)	.438 (11.1)
006	15	C	1.000-20 UNEF	1.156 (29.4)	1.281 (32.5)	1.438 (36.5)	1.263 (32.1)	1.312 (33.3)	.344 (8.7)	.562 (14.3)
028	15	C	1.000-20 UNEF	1.281 (32.5)	1.281 (32.5)	1.688 (42.9)	1.263 (32.08)	1.312 (33.3)	.375 (9.5)	.625 (15.9)
007	15	C	1.000-20 UNEF	1.281 (32.5)	1.312 (33.3)	1.688 (42.9)	1.263 (32.1)	1.593 (40.5)	.438 (11.1)	.750 (19.1)
008	17	D	1.125-18 UNEF	1.281 (32.5)	1.281 (32.5)	1.688 (42.9)	1.387 (35.23)	1.312 (33.3)	.375 (9.5)	.625 (15.9)
009	17	D	1.125-18 UNEF	1.281 (32.5)	1.312 (33.3)	1.688 (42.9)	1.387 (35.23)	1.593 (40.5)	.438 (11.1)	.750 (19.1)
010	17	D	1.125-18 UNEF	1.281 (32.5)	1.406 (35.7)	1.688 (42.9)	1.387 (35.23)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
011	19	E	1.250-18 UNEF	1.281 (32.5)	1.281 (32.5)	1.688 (42.9)	1.513 (38.43)	1.312 (33.3)	.375 (9.5)	.625 (15.9)
012	19	E	1.250-18 UNEF	1.406 (35.7)	1.406 (35.7)	1.938 (49.2)	1.513 (38.43)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
013	23	F	1.438-18 UNEF	1.406 (35.7)	1.312 (33.3)	1.938 (49.2)	1.703 (45.51)	1.593 (40.5)	.438 (11.1)	.750 (19.1)
014	23	F	1.438-18 UNEF	1.406 (35.7)	1.406 (35.7)	1.938 (49.2)	1.703 (45.51)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
015	23	F	1.438-18 UNEF	1.406 (35.7)	1.593 (40.5)	1.938 (49.2)	1.703 (45.51)	2.093 (53.2)	.812 (20.6)	1.188 (30.2)
016	25	G	1.562-18 UNEF	1.406 (35.7)	1.406 (35.7)	1.938 (49.2)	1.825 (46.35)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
017	25	G	1.562-18 UNEF	1.406 (35.7)	1.593 (40.5)	1.938 (49.2)	1.825 (46.35)	2.093 (53.2)	.812 (20.6)	1.188 (30.2)
018	25	G	1.562-18 UNEF	1.531 (38.9)	1.593 (40.5)	2.188 (55.6)	1.825 (46.35)	2.093 (53.2)	.875 (22.2)	1.250 (31.8)
019	25	G	1.562-18 UNEF	1.531 (38.9)	1.625 (41.3)	2.188 (55.6)	1.825 (46.35)	2.343 (59.5)	1.000 (25.4)	1.380 (35.1)
020	29	H	1.875-16 UNS	1.531 (38.9)	1.593 (40.5)	2.188 (55.6)	2.143 (54.43)	2.093 (53.2)	.812 (20.6)	1.188 (30.2)
021	29	H	1.875-16 UNS	1.531 (38.9)	1.625 (41.3)	2.188 (55.6)	2.143 (54.43)	2.343 (59.5)	1.000 (25.4)	1.380 (35.1)
022	33	J	2.062-16 UNS	1.781 (45.2)	1.625 (41.3)	2.688 (68.3)	2.329 (59.16)	2.343 (59.5)	1.000 (25.4)	1.380 (35.1)
023	33	J	2.062-16 UNS	1.781 (45.2)	1.900 (48.3)	2.688 (68.3)	2.329 (59.16)	2.750 (69.9)	1.250 (31.8)	1.625 (41.3)

Dimensions are in inches (mm).

M28840 90° EMI/Environmental Backshell

NS Series • MIL-DTL-28840 Type Connectors



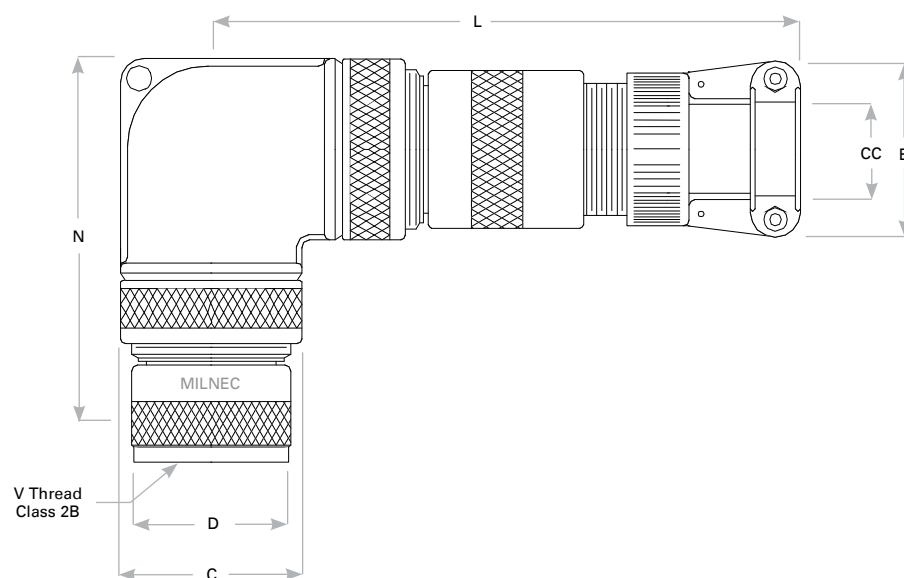
NSR4 - 009 W

- 1 **BASIC PART NUMBER**
NSR4 90° EMI/environmental backshell
- 2 **DASH NO.**
See Backshell Dimensions table below
- 3 **MATERIAL & FINISH**
W Aluminum, olive drab cadmium
D Stainless steel, black cadmium plate

Note: See part builder (p. Z-7) for additional kit options.

NSR4 Compatibility

Compatible Brands	Connectors
MIL-DTL-28840	M28840/10, M28840/11, M28840/14, M28840/16



Backshell Dimensions

Dash No.	Shell Size	Military Shell Size	V Thread Class 2B	L Max	N Max	D Max	C Max	B	CC Cable Clearance	
									Min	Max
001	11	A	.750-20 UNEF	5.332 (135.4)	2.614 (66.4)	1.028 (26.1)	1.188 (30.2)	.938 (23.8)	.188 (4.8)	.312 (7.9)
002	11	A	.750-20 UNEF	5.332 (135.4)	2.614 (66.4)	1.028 (26.1)	1.188 (30.2)	1.125 (28.6)	.281 (7.1)	.438 (11.1)
003	11	A	.750-20 UNEF	5.457 (138.6)	2.864 (72.8)	1.028 (26.1)	1.438 (36.5)	1.312 (33.3)	.344 (8.7)	.562 (14.3)
004	13	B	.875-20 UNEF	5.332 (135.4)	2.614 (66.4)	1.141 (29.0)	1.188 (30.2)	.938 (23.8)	.188 (4.8)	.312 (7.9)
005	13	B	.875-20 UNEF	5.332 (135.4)	2.614 (66.4)	1.141 (29.0)	1.188 (30.2)	1.125 (28.6)	.281 (7.1)	.438 (11.1)
006	13	B	.875-20 UNEF	5.457 (138.6)	2.864 (72.8)	1.141 (29.0)	1.438 (36.5)	1.312 (33.3)	.344 (8.7)	.562 (14.3)
007	13	B	.875-20 UNEF	5.682 (144.3)	3.114 (79.1)	1.141 (29.0)	1.688 (42.9)	1.312 (33.3)	.375 (9.5)	.625 (15.9)

Dimensions are in inches (mm).

(Continued on next page)

Rev. 2211

M28840 90° EMI/Environmental Backshell

NS Series • MIL-DTL-28840 Type Connectors

Backshell Dimensions (Continued from previous page)

Dash No.	Shell Size	Military Shell Size	V Thread Class 2B	L Max	N Max	D Max	C Max	B	CC Cable Clearance	
									Min	Max
008	15	C	1.000-20 UNEF	5.457 (138.6)	2.864 (72.7)	1.263 (32.1)	1.438 (36.5)	.938 (23.8)	.188 (4.8)	.312 (7.9)
009	15	C	1.000-20 UNEF	5.457 (138.6)	2.864 (72.7)	1.263 (32.1)	1.438 (36.5)	1.125 (28.6)	.281 (32.5)	.438 (11.1)
010	15	C	1.000-20 UNEF	5.457 (138.6)	2.864 (72.7)	1.263 (32.1)	1.438 (36.5)	1.312 (33.3)	.344 (8.7)	.562 (14.3)
011	15	C	1.000-20 UNEF	5.682 (144.3)	3.114 (79.1)	1.263 (32.1)	1.688 (42.9)	1.593 (40.5)	.438 (11.1)	.750 (19.1)
012	15	C	1.000-20 UNEF	5.682 (144.3)	3.114 (79.1)	1.263 (32.08)	1.688 (42.9)	1.312 (33.3)	.375 (9.5)	.625 (15.9)
013	17	D	1.125-18 UNEF	5.682 (144.3)	3.114 (79.1)	1.387 (35.23)	1.688 (42.9)	1.312 (33.3)	.375 (9.5)	.625 (15.9)
014	17	D	1.125-18 UNEF	5.713 (145.1)	3.114 (79.1)	1.387 (35.23)	1.688 (42.9)	1.593 (40.5)	.438 (11.1)	.750 (19.1)
015	17	D	1.125-18 UNEF	5.807 (147.5)	3.114 (79.1)	1.387 (35.23)	1.688 (42.9)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
016	19	E	1.250-18 UNEF	5.682 (144.3)	3.114 (79.1)	1.513 (38.43)	1.688 (42.9)	1.312 (33.3)	.375 (9.5)	.625 (15.9)
017	19	E	1.250-18 UNEF	5.832 (148.1)	3.364 (85.4)	1.513 (38.43)	1.938 (49.2)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
018	23	F	1.438-18 UNEF	5.738 (145.7)	3.364 (85.4)	1.703 (45.51)	1.938 (49.2)	1.593 (40.5)	.438 (11.1)	.750 (19.1)
019	23	F	1.438-18 UNEF	5.832 (148.1)	3.364 (85.4)	1.703 (45.51)	1.938 (49.2)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
020	23	F	1.438-18 UNEF	6.019 (152.9)	3.364 (85.4)	1.703 (45.51)	1.938 (49.2)	2.093 (53.2)	.812 (20.6)	1.188 (30.2)
021	25	G	1.562-18 UNEF	5.832 (148.1)	3.364 (85.4)	1.825 (46.35)	1.938 (49.2)	1.750 (44.5)	.625 (15.9)	.938 (23.8)
022	25	G	1.562-18 UNEF	6.019 (152.9)	3.364 (85.4)	1.825 (46.35)	1.938 (49.2)	2.093 (53.2)	.812 (20.6)	1.188 (30.2)
023	25	G	1.562-18 UNEF	6.144 (156.1)	3.614 (91.8)	1.825 (46.35)	2.188 (54.4)	2.093 (53.2)	.875 (22.2)	1.250 (31.8)
024	25	G	1.562-18 UNEF	6.176 (156.9)	3.614 (91.8)	1.825 (46.35)	2.188 (54.4)	2.343 (59.5)	1.000 (25.4)	1.380 (35.1)
025	29	H	1.875-16 UNS	6.144 (156.1)	3.614 (91.8)	2.143 (54.43)	2.188 (54.4)	2.093 (53.2)	.812 (20.6)	1.188 (30.2)
026	29	H	1.875-16 UNS	6.176 (156.9)	3.614 (91.8)	2.143 (54.43)	2.188 (54.4)	2.343 (59.5)	1.000 (25.4)	1.380 (35.1)
027	33	J	2.062-16 UNS	6.426 (163.2)	4.114 (104.5)	2.329 (59.16)	2.688 (68.3)	2.343 (59.5)	1.000 (25.4)	1.380 (35.1)
028	33	J	2.062-16 UNS	6.701 (170.2)	4.114 (104.5)	2.329 (59.16)	2.688 (68.3)	2.750 (69.9)	1.250 (31.8)	1.625 (41.3)

Dimensions are in inches (mm).

M28840 Metal Core Conduit Backshell

NS Series • MIL-DTL-28840 Type Connectors



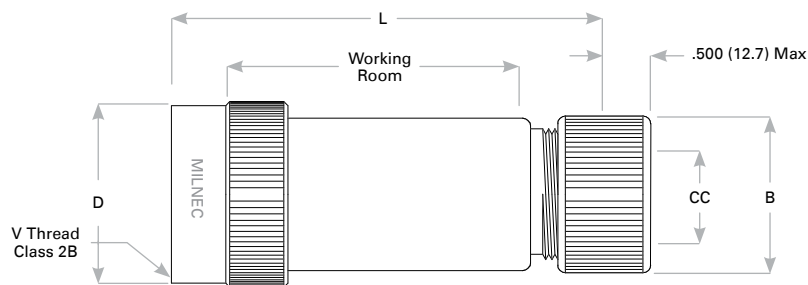
NSC2 - 009 W

- 123
- 1
- BASIC PART NUMBER
- NSC2Straight EMI/non-environmental backshell (plain conduit)
- NSC5Straight EMI/environmental backshell (jacketed conduit)
- 2
- DASH NO.
- See Backshell Dimensions table
- 3
- MATERIAL & FINISH
- WAluminum, olive drab cadmium
- DStainless steel, black cadmium plate

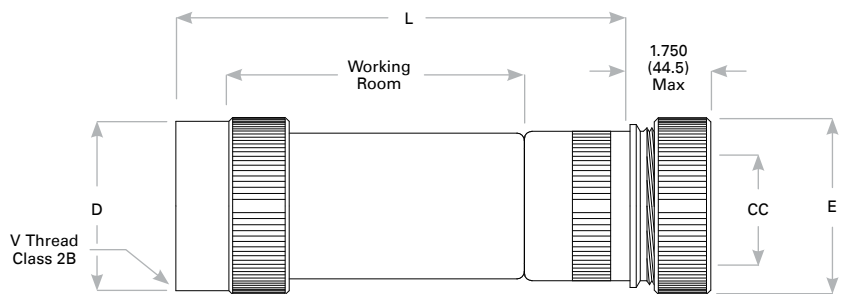
Note: See part builder (p. Z-7) for additional kit options.

NSC2 & NSC5 Compatibility

Compatible Brands	Connectors
MIL-DTL-28840	M28840/10, M28840/11, M28840/14, M28840/16



NSC2: EMI/Non-Environmental
(Plain Conduit)



NSC5: EMI/Environmental
(Jacketed Conduit)

(Continued on next page)

Rev. 2211

M28840 Metal Core Conduit Backshell

NS Series • MIL-DTL-28840 Type Connectors

Backshell Dimensions (Continued from previous page)

Dash No.	Shell Size	Conduit Size	V Thread Class 2B	D Max	B Max	E Max	Working Room	L	CC Sealing Range	
									Min	Max
001	11	03	.750-20 UNEF	1.028 (26.11)	1.120 (28.5)	1.190 (30.2)	1.000 (25.4)	1.750 (44.5)	.500 (12.7)	.630 (16.0)
002	11	04	.750-20 UNEF	1.028 (26.11)	1.250 (31.8)	1.378 (35.0)	1.000 (25.4)	1.750 (44.5)	.630 (16.0)	.750 (19.1)
003	13	03	.875-20 UNEF	1.141 (28.98)	1.120 (28.5)	1.190 (30.2)	1.000 (25.4)	1.750 (44.5)	.500 (12.7)	.630 (16.0)
004	13	04	.875-20 UNEF	1.141 (28.98)	1.250 (31.8)	1.378 (35.0)	1.000 (25.4)	1.750 (44.5)	.630 (16.0)	.750 (19.1)
005	15	03	1.000-20 UNEF	1.263 (32.08)	1.120 (28.5)	1.190 (30.2)	1.000 (25.4)	1.750 (44.5)	.500 (12.7)	.630 (16.0)
006	15	04	1.000-20 UNEF	1.263 (32.08)	1.250 (31.8)	1.378 (35.0)	1.000 (25.4)	1.750 (44.5)	.630 (16.0)	.750 (19.1)
007	15	05	1.000-20 UNEF	1.263 (32.08)	1.430 (36.3)	1.630 (41.4)	1.000 (25.4)	1.750 (44.5)	.750 (19.1)	.880 (22.4)
008	15	06	1.000-20 UNEF	1.263 (32.08)	1.620 (41.2)	1.941 (49.3)	1.000 (25.4)	3.000 (76.2)	.880 (22.4)	1.000 (25.4)
009	17	05	1.125-18 UNEF	1.387 (35.23)	1.430 (36.3)	1.630 (41.4)	1.500 (38.1)	2.250 (57.2)	.750 (19.1)	.880 (22.4)
010	17	06	1.125-18 UNEF	1.387 (35.23)	1.620 (41.2)	1.941 (49.3)	1.500 (38.1)	2.250 (57.2)	.880 (22.4)	1.000 (25.4)
011	17	08	1.125-18 UNEF	1.387 (35.23)	1.810 (46.0)	2.189 (55.6)	2.000 (50.8)	2.250 (57.2)	1.190 (30.2)	1.380 (35.1)
012	19	05	1.250-18 UNEF	1.513 (38.43)	1.430 (36.3)	1.630 (41.4)	1.500 (38.1)	2.250 (57.2)	.750 (19.1)	.880 (22.4)
013	19	06	1.250-18 UNEF	1.513 (38.43)	1.620 (41.2)	1.941 (49.3)	1.500 (38.1)	2.250 (57.2)	.880 (22.4)	1.000 (25.4)
014	19	08	1.250-18 UNEF	1.513 (38.43)	1.810 (46.0)	2.189 (55.6)	1.500 (38.1)	2.250 (57.2)	1.190 (30.2)	1.380 (35.1)
015	23	06	1.438-18 UNEF	1.703 (45.5)	1.620 (41.2)	1.941 (49.3)	2.000 (50.8)	2.750 (69.9)	.880 (22.4)	1.000 (25.4)
016	23	08	1.438-18 UNEF	1.703 (45.5)	1.810 (46.0)	2.189 (55.6)	2.000 (50.8)	2.750 (69.9)	1.190 (30.2)	1.380 (35.1)
017	23	10	1.438-18 UNEF	1.703 (45.5)	2.180 (55.4)	2.441 (62.0)	2.000 (50.8)	3.500 (88.9)	1.440 (36.6)	1.630 (41.4)
018	25	06	1.562-18 UNEF	1.825 (46.4)	1.620 (41.2)	1.941 (49.3)	2.000 (50.8)	2.750 (69.9)	.880 (22.4)	1.000 (25.4)
019	25	08	1.562-18 UNEF	1.825 (46.4)	1.810 (46.0)	2.189 (55.6)	2.000 (50.8)	2.750 (69.9)	1.190 (30.2)	1.380 (35.1)
020	25	10	1.562-18 UNEF	1.825 (46.4)	2.180 (55.4)	2.441 (62.0)	2.000 (50.8)	2.750 (69.9)	1.440 (36.6)	1.630 (41.4)
021	25	12	1.562-18 UNEF	1.825 (46.4)	2.560 (65.0)	2.689 (68.3)	2.500 (63.5)	4.000 (101.6)	1.630 (41.4)	1.880 (47.8)
022	29	10	1.875-16 UNS	2.143 (54.4)	2.180 (55.4)	2.441 (62.0)	2.500 (63.5)	3.250 (82.6)	1.440 (36.6)	1.630 (41.4)
023	29	12	1.875-16 UNS	2.143 (54.4)	2.560 (65.0)	2.689 (68.3)	2.500 (63.5)	3.250 (82.6)	1.630 (41.4)	1.880 (47.8)
024	33	12	2.062-16 UNS	2.329 (59.2)	2.560 (65.0)	2.689 (68.3)	2.500 (63.5)	3.250 (82.6)	1.630 (41.4)	1.880 (47.8)
025	33	16	2.062-16 UNS	2.329 (59.2)	3.060 (77.8)	3.189 (81.0)	2.500 (63.5)	3.250 (82.6)	2.130 (54.1)	2.380 (60.5)

Dimensions are in inches (mm).

M28840 45° Metal Core Conduit Backshell

NS Series • MIL-DTL-28840 Type Connectors



Photo for example only

NSC3 - 010 W

- 1

2

3
- 1

BASIC PART NUMBER
NSC3 45° EMI/non-environmental backshell (plain conduit)
NSC6 45° EMI/environmental backshell (jacketed conduit)
- 2

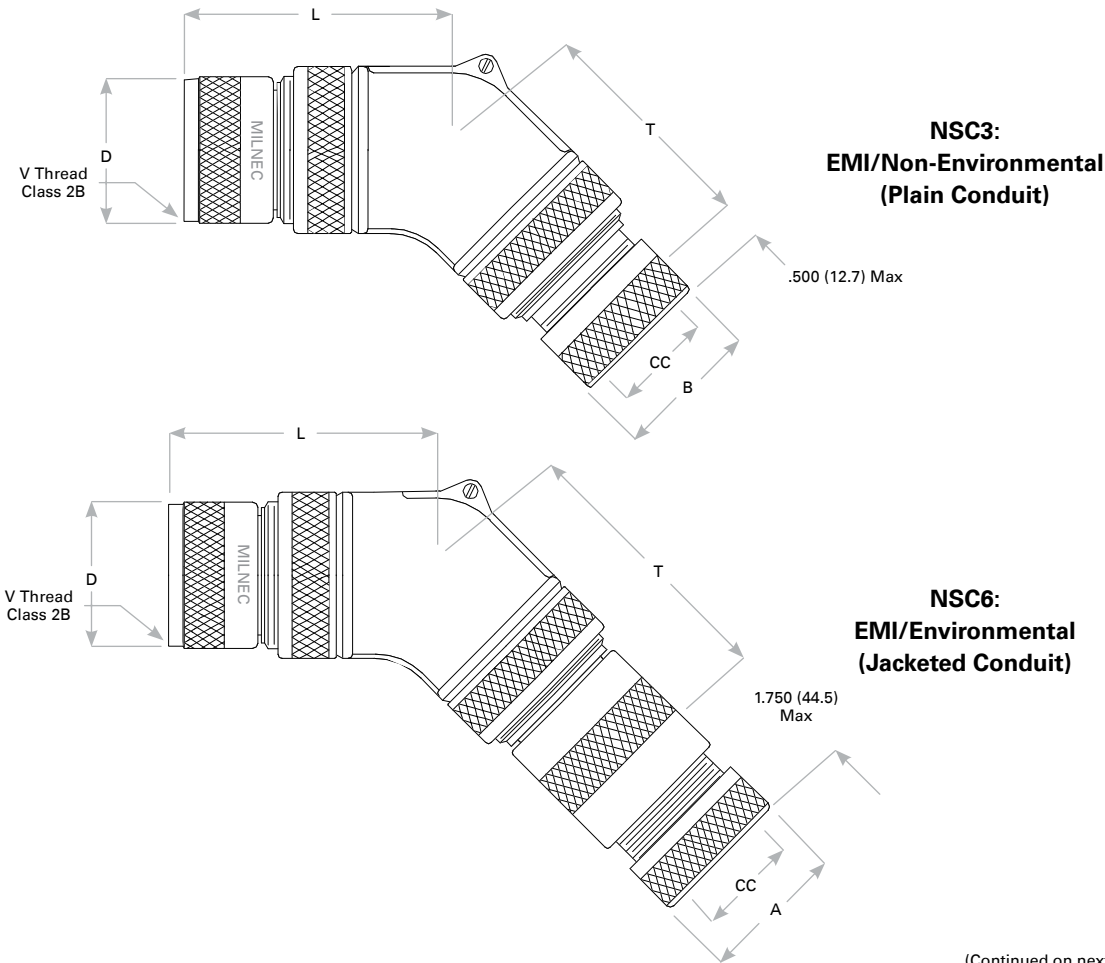
DASH NO.
See Backshell Dimensions table
- 3

MATERIAL & FINISH
W Aluminum, olive drab cadmium
D Stainless steel, black cadmium plate

Note: See part builder (p. Z-7) for additional kit options.

NSC3 & NSC6 Compatibility

Compatible Brands	Connectors
MIL-DTL-28840	M28840/10, M28840/11, M28840/14, M28840/16



(Continued on next page)

Rev. 2211

M28840 45° Metal Core Conduit Backshell

NS Series • MIL-DTL-28840 Type Connectors

Backshell Dimensions (Continued from previous page)

Dash No.	Shell Size	Military Shell Size	V Thread Class 2B	D	B Max	A Max	T Max	L Max	CC Sealing Range	
									Min	Max
001	11	A	.750-20 UNEF	1.028 (26.11)	1.120 (28.5)	1.190 (30.2)	3.500 (88.9)	2.360 (59.9)	.500 (12.7)	.630 (16.0)
002	11	A	.750-20 UNEF	1.028 (26.11)	1.250 (31.8)	1.380 (35.1)	3.500 (88.9)	2.360 (59.9)	.630 (16.0)	.750 (19.1)
003	13	B	.875-20 UNEF	1.141 (28.98)	1.120 (28.5)	1.190 (30.2)	3.500 (88.9)	2.360 (59.9)	.500 (12.7)	.630 (16.0)
004	13	B	.875-20 UNEF	1.141 (28.98)	1.250 (31.8)	1.380 (35.1)	3.500 (88.9)	2.360 (59.9)	.630 (16.0)	.750 (19.1)
005	15	C	1.000-20 UNEF	1.263 (32.08)	1.120 (28.5)	1.190 (30.2)	3.690 (93.7)	2.560 (65.0)	.500 (12.7)	.630 (16.0)
006	15	C	1.000-20 UNEF	1.263 (32.08)	1.250 (31.8)	1.380 (35.1)	3.690 (93.7)	2.560 (65.0)	.630 (16.0)	.750 (19.1)
007	15	C	1.000-20 UNEF	1.263 (32.08)	1.430 (36.3)	1.630 (41.4)	3.690 (93.7)	2.560 (65.0)	.750 (19.1)	.880 (22.4)
008	15	C	1.000-20 UNEF	1.263 (32.08)	1.620 (41.2)	1.940 (49.3)	3.810 (96.7)	2.670 (67.8)	.880 (22.4)	1.000 (25.4)
009	17	D	1.125-18 UNEF	1.387 (35.23)	1.430 (36.3)	1.630 (41.4)	3.810 (96.7)	2.670 (67.8)	.750 (19.1)	.880 (22.4)
010	17	D	1.125-18 UNEF	1.387 (35.23)	1.620 (41.2)	1.940 (49.3)	3.810 (96.7)	2.670 (67.8)	.880 (22.4)	1.000 (25.4)
011	17	D	1.125-18 UNEF	1.387 (35.23)	1.810 (46.0)	2.190 (55.6)	3.810 (96.7)	2.670 (67.8)	1.190 (30.2)	1.380 (35.1)
012	19	E	1.250-18 UNEF	1.513 (38.43)	1.430 (36.3)	1.630 (41.4)	3.810 (96.7)	2.670 (67.8)	.750 (19.1)	.880 (22.4)
013	19	E	1.250-18 UNEF	1.513 (38.43)	1.620 (41.2)	1.940 (49.3)	3.810 (96.7)	2.670 (67.8)	.880 (22.4)	1.000 (25.4)
014	19	E	1.250-18 UNEF	1.513 (38.43)	1.810 (46.0)	2.190 (55.6)	4.190 (106.4)	3.050 (77.5)	1.190 (30.2)	1.380 (35.1)
015	23	F	1.438-18 UNEF	1.703 (45.5)	1.620 (41.2)	1.940 (49.3)	4.190 (106.4)	3.050 (77.5)	.880 (22.4)	1.000 (25.4)
016	23	F	1.438-18 UNEF	1.703 (45.5)	1.810 (46.0)	2.190 (55.6)	4.190 (106.4)	3.050 (77.5)	1.190 (30.2)	1.380 (35.1)
017	23	F	1.438-18 UNEF	1.703 (45.5)	2.180 (55.4)	2.440 (62.0)	4.190 (106.4)	3.050 (77.5)	1.440 (36.6)	1.630 (41.4)
018	25	G	1.562-18 UNEF	1.825 (46.4)	1.620 (41.2)	1.940 (49.3)	4.190 (106.4)	3.050 (77.5)	.880 (22.4)	1.000 (25.4)
019	25	G	1.562-18 UNEF	1.825 (46.4)	1.810 (46.0)	2.190 (55.6)	4.190 (106.4)	3.050 (77.5)	1.190 (30.2)	1.380 (35.1)
020	25	G	1.562-18 UNEF	1.825 (46.4)	2.180 (55.4)	2.440 (62.0)	4.190 (106.4)	3.050 (77.5)	1.440 (36.6)	1.630 (41.4)
021	25	G	1.562-18 UNEF	1.825 (46.4)	2.560 (65.0)	2.690 (68.3)	4.500 (114.3)	3.330 (84.6)	1.630 (41.4)	1.880 (47.8)
022	29	H	1.875-16 UNS	2.143 (54.4)	2.180 (55.4)	2.440 (62.0)	4.500 (114.3)	3.330 (84.6)	1.440 (36.6)	1.630 (41.4)
023	29	H	1.875-16 UNS	2.143 (54.4)	2.560 (65.0)	2.690 (68.3)	4.500 (114.3)	3.330 (84.6)	1.630 (41.4)	1.880 (47.8)
024	33	J	2.062-16 UNS	2.329 (59.2)	2.560 (65.0)	2.690 (68.3)	4.830 (122.6)	3.700 (94.0)	1.630 (41.4)	1.880 (47.8)
025	33	J	2.062-16 UNS	2.329 (59.2)	3.060 (77.8)	3.190 (81.0)	4.830 (122.6)	3.700 (94.0)	2.130 (54.1)	2.380 (60.5)

Dimensions are in inches (mm).

M28840 90° Metal Core Conduit Backshell

NS Series • MIL-DTL-28840 Type Connectors



NSC4 - 010 W

- 1

2

3
- 1

BASIC PART NUMBER
NSC4 90° EMI/non-environmental backshell (plain conduit)
NSC7 90° EMI/environmental backshell (jacketed conduit)
- 2

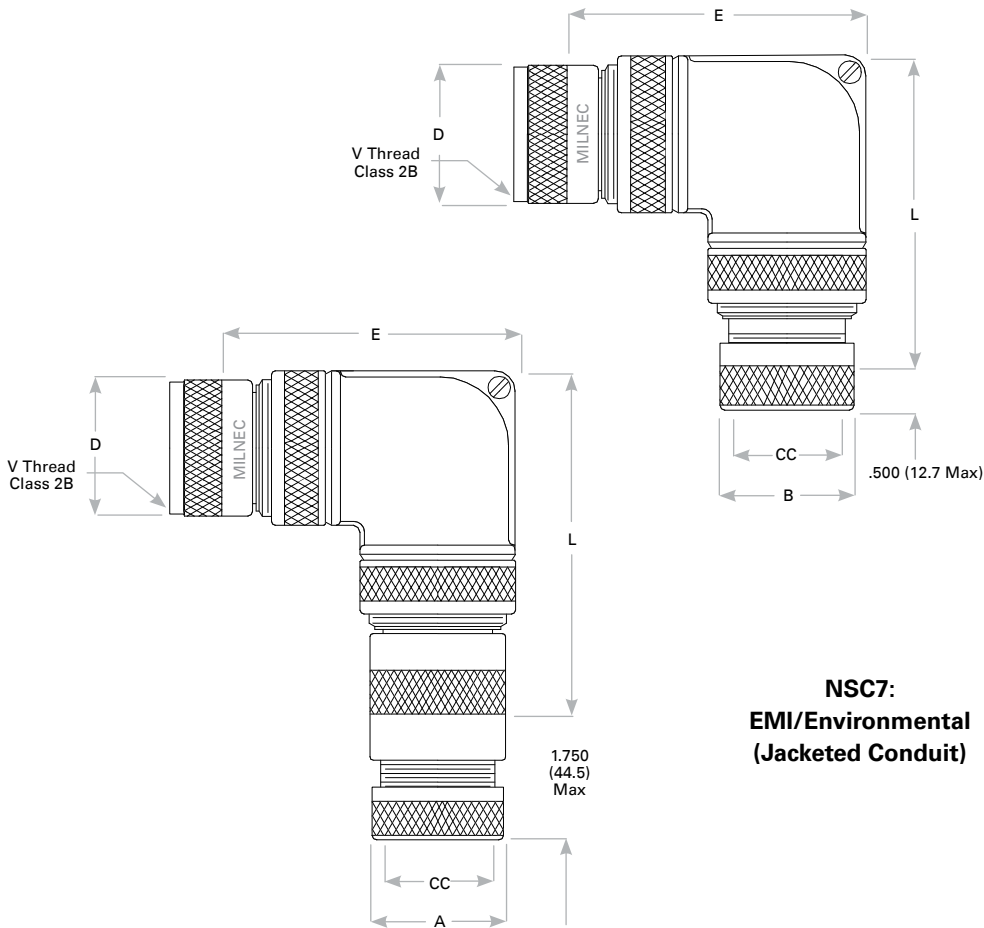
DASH NO.
See Backshell Dimensions table
- 3

MATERIAL & FINISH
W Aluminum, olive drab cadmium
D Stainless steel, black cadmium plate

Note: See part builder (p. Z-7) for additional kit options.

NSC4 & NSC7 Compatibility

Compatible Brands	Connectors
MIL-DTL-28840	M28840/10, M28840/11, M28840/14, M28840/16



NSC4:
EMI/Non-Environmental
(Plain Conduit)

NSC7:
EMI/Environmental
(Jacketed Conduit)

(Continued on next page)

Rev. 2211

M28840 90° Metal Core Conduit Backshell

NS Series • MIL-DTL-28840 Type Connectors

Backshell Dimensions (Continued from previous page)

Dash No.	Shell Size	Military Shell Size	V Thread Class 2B	E Max	L Max	D Max	B Max	A Max	CC Cable Clearance	
									Min	Max
001	11	A	.750-20 UNEF	2.358 (59.9)	3.654 (92.8)	1.028 (26.11)	1.122 (28.5)	1.190 (30.2)	.500 (12.7)	.630 (16.0)
002	11	A	.750-20 UNEF	2.358 (59.9)	3.654 (92.8)	1.028 (26.11)	1.252 (31.8)	1.382 (35.1)	.630 (16.0)	.752 (19.1)
003	13	B	.875-20 UNEF	2.358 (59.9)	3.654 (92.8)	1.141 (28.98)	1.122 (28.5)	1.190 (30.2)	.500 (12.7)	.630 (16.0)
004	13	B	.875-20 UNEF	2.358 (59.9)	3.654 (92.8)	1.141 (28.98)	1.252 (31.8)	1.382 (35.1)	.630 (16.0)	.752 (19.1)
005	15	C	1.000-20 UNEF	2.559 (65.0)	3.854 (97.9)	1.263 (32.08)	1.122 (28.5)	1.390 (35.3)	.500 (12.7)	.630 (16.0)
006	15	C	1.000-20 UNEF	2.559 (65.0)	3.854 (97.9)	1.263 (32.08)	1.252 (31.8)	1.382 (35.1)	.630 (16.0)	.752 (19.1)
007	15	C	1.000-20 UNEF	2.559 (65.0)	3.854 (97.9)	1.263 (32.08)	1.429 (36.3)	1.630 (41.4)	.752 (19.1)	.882 (22.4)
008	15	C	1.000-20 UNEF	2.669 (67.8)	3.976 (101.0)	1.263 (32.08)	1.622 (41.2)	1.941 (49.3)	.882 (22.4)	1.000 (25.4)
009	17	D	1.125-18 UNEF	2.669 (67.8)	3.976 (101.0)	1.387 (35.23)	1.429 (36.3)	1.630 (41.4)	.752 (19.1)	.882 (22.4)
010	17	D	1.125-18 UNEF	2.669 (67.8)	3.976 (101.0)	1.387 (35.23)	1.622 (41.2)	1.941 (49.3)	.882 (22.4)	1.000 (25.4)
011	17	D	1.125-18 UNEF	2.669 (67.8)	3.976 (101.0)	1.387 (35.23)	1.811 (46.0)	2.189 (55.6)	1.189 (30.2)	1.382 (35.1)
012	19	E	1.250-18 UNEF	2.669 (67.8)	3.976 (101.0)	1.513 (38.43)	1.429 (36.3)	1.630 (41.4)	.752 (19.1)	.882 (22.4)
013	19	E	1.250-18 UNEF	2.669 (67.8)	3.976 (101.0)	1.513 (38.43)	1.622 (41.2)	1.941 (49.3)	.882 (22.4)	1.000 (25.4)
014	19	E	1.250-18 UNEF	3.051 (77.5)	4.374 (111.1)	5.043 (128.1)	1.811 (46.0)	2.189 (55.6)	1.189 (30.2)	1.382 (35.1)
015	23	F	1.438-18 UNEF	3.051 (77.5)	4.374 (111.1)	1.703 (45.51)	1.622 (41.2)	1.941 (49.3)	.882 (22.4)	1.000 (25.4)
016	23	F	1.438-18 UNEF	3.051 (77.5)	4.374 (111.1)	1.703 (45.51)	1.811 (46.0)	2.189 (55.6)	1.189 (30.2)	1.382 (35.1)
017	23	F	1.438-18 UNEF	3.051 (77.5)	4.374 (111.1)	1.703 (45.51)	2.181 (55.4)	2.441 (62.0)	1.441 (36.6)	1.630 (41.4)
018	25	G	1.562-18 UNEF	3.051 (77.5)	4.374 (111.1)	1.825 (46.35)	1.622 (41.2)	1.941 (49.3)	.882 (22.4)	1.000 (25.4)
019	25	G	1.562-18 UNEF	3.051 (77.5)	4.374 (111.1)	1.825 (46.35)	1.811 (46.0)	2.189 (55.6)	1.189 (30.2)	1.382 (35.1)
020	25	G	1.562-18 UNEF	3.051 (77.5)	4.374 (111.1)	1.825 (46.35)	2.181 (55.4)	2.441 (62.0)	1.441 (36.6)	1.630 (41.4)
021	25	G	1.562-18 UNEF	3.331 (84.6)	4.701 (119.4)	1.825 (46.35)	2.559 (65.0)	2.697 (68.5)	1.630 (41.4)	1.882 (47.8)
022	29	H	1.875-16 UNS	3.331 (84.6)	4.701 (119.4)	2.143 (54.43)	2.181 (55.4)	2.189 (55.6)	1.441 (36.6)	1.630 (41.4)
023	29	H	1.875-16 UNS	3.331 (84.6)	4.701 (119.4)	2.143 (54.43)	2.559 (65.0)	2.441 (62.0)	1.630 (41.4)	1.882 (47.8)
024	33	J	2.062-16 UNS	3.701 (94.0)	5.043 (128.1)	2.329 (59.16)	2.559 (65.0)	2.697 (68.5)	1.630 (41.4)	1.882 (47.8)
025	33	J	2.062-16 UNS	3.701 (94.0)	5.043 (128.1)	2.329 (59.16)	3.063 (77.8)	3.189 (81.0)	2.130 (54.1)	2.382 (60.5)

Dimensions are in inches (mm).

M28840/4 Type Metal Core Conduit

NS Series • MIL-DTL-28840 Type Connectors



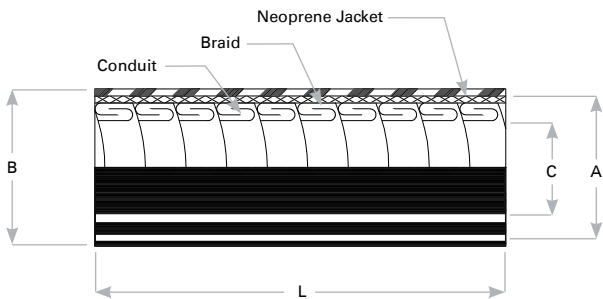
NSCT Compatibility

Compatible Brands	Backshells
MIL-DTL-28840	M28840/5, M28840/25, M28840/27

NSCT - 08 C A - 10

- 12345
- 1
BASIC PART NUMBER
NSCT Metal core conduit
- 2
CONDUIT SIZE
See Conduit Dimensions table below
- 3
MATERIAL & FINISH
C Brass
E Nickel-iron
- 4
CONDUIT STYLE
A Plain
B Insulator jacket
- 5
CONDUIT LENGTH
10 Order length in feet (50 foot max)

Note: See part builder (p. Z-7) for additional kit options.



Conduit Dimensions

Conduit Size	C Internal Diameter	A Diameter Over Shield	B Diameter Over Jacket	L
03	.375 (9.5)	.525 (13.3)	.688 (17.5)	Length in Feet (50 Feet Max)
04	.500 (12.7)	.650 (16.5)	.812 (206)	
05	.625 (15.9)	.765 (19.4)	.937 (23.8)	
06	.750 (19.1)	.925 (23.5)	1.078 (27.4)	
08	1.000 (25.4)	1.210 (30.7)	1.437 (36.5)	
10	1.250 (31.8)	1.455 (37.0)	1.695 (43.1)	
12	1.500 (38.1)	1.725 (43.8)	1.956 (49.7)	
16	2.000 (50.8)	2.200 (55.9)	2.469 (62.7)	

Dimensions are in inches (mm).

M28840/22 Type Conduit Bushing

NS Series • MIL-DTL-28840 Type Connectors

NSCB - 10 S

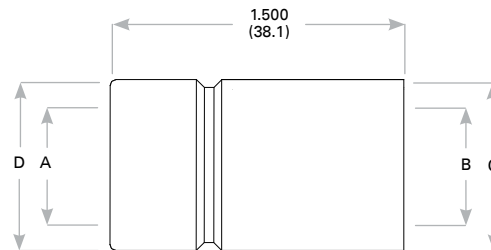
- 1 **BASIC PART NUMBER**
NSCB Conduit bushing
- 2 **SHELL SIZE**
See Bushing Dimensions table below
- 3 **MATERIAL & FINISH**
S Steel, corrosion resistant passivate per IAW SAE-AMS-QQ-P-35



Photo for example only

NSCB Compatibility

Compatible Brands	Connectors
MIL-DTL-28840	M28840/10, M28840/11, M28840/14, M28840/16



Bushing Dimensions

Bushing Size	NSCT Conduit Size	A	B	C	D
03	03	.375 (9.5)	.540 (13.7)	.625 (15.9)	.525 (13.3)
04	04	.500 (12.7)	.665 (16.9)	.750 (19.1)	.650 (16.5)
05	05	.625 (15.9)	.780 (19.8)	.875 (22.2)	.775 (19.7)
06	06	.750 (19.1)	.940 (23.9)	1.000 (25.4)	.900 (22.9)
08	08	1.000 (25.4)	1.225 (31.1)	1.375 (34.9)	1.275 (32.4)
10	10	1.250 (31.8)	1.470 (37.3)	1.625 (41.3)	1.525 (38.7)
12	12	1.500 (38.1)	1.740 (44.2)	1.875 (47.7)	1.775 (45.1)
16	16	2.000 (50.8)	2.215 (56.3)	2.375 (60.3)	2.275 (57.8)

Dimensions are in inches (mm).

Rev. 2211

M28840 Protective Covers

NS Series • MIL-DTL-28840 Type Connectors



NSCP - 15 D - A

- 1 **BASIC PART NUMBER**
NSCP Plug cover w/ sash chain
NSCR Receptacle cover w/ sash chain
- 2 **SHELL SIZE**
 See Protective Cover Dimensions table below
- 3 **MATERIAL & FINISH**
W Aluminum, olive drab cadmium
D Stainless steel, black cadmium plate
- 4 **ATTACHMENT TYPE**
A Eyelet attachment on chain
B Jam nut ring attachment on chain
 (For use with NS07)
C Plug ring attachment on chain
 (For use with NS06)
D Cable mount ring attachment on chain
 (For use with NS01)

NSCP & NSCR Compatibility

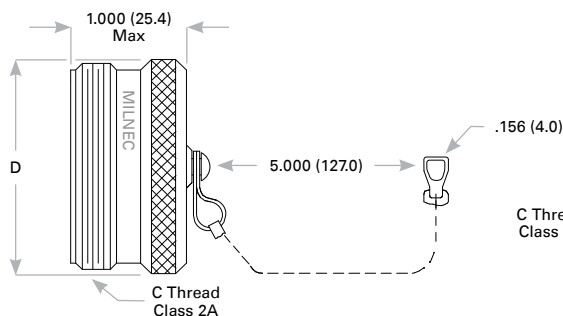
Compatible Brands	Plugs	Receptacles
MIL-DTL-28840	MS28840/16	MS28840/10, MS28840/11, MS28840/12, MS28840/14
Delphi	GT6A	GT0, GT1, GT2, GT4

Note: See part builder (p. Z-7) for additional kit options.

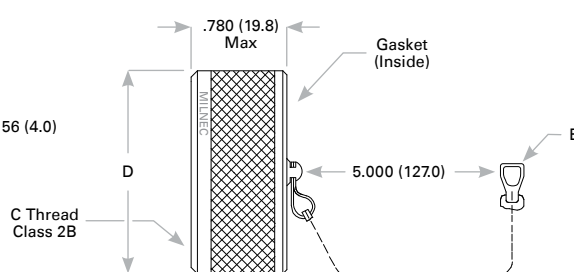
Protective Cover Dimensions

Shell Size	Military Shell Size	C Thread Class 2A	D Max	E	C Thread Class 2B	G	H
11	A	.750-.1P-.2L -D.S.	1.028 (26.1)	.130 (3.3)	.750-.1P-.2L -D.S.	.890 (22.6)	.765 (19.4)
13	B	.875-.1P-.2L -D.S.	1.141 (29.0)	.130 (3.3)	.875-.1P-.2L -D.S.	1.015 (25.8)	.890 (22.6)
15	C	1.062-.1P-.2L -D.S.	1.263 (32.1)	.130 (3.3)	1.062-.1P-.2L -D.S.	1.203 (30.6)	1.015 (25.8)
17	D	1.125-.1P-.2L -D.S.	1.387 (35.2)	.130 (3.3)	1.125-.1P-.2L -D.S.	1.265 (32.1)	1.140 (29.0)
19	E	1.312-.1P-.2L -D.S.	1.513 (38.4)	.130 (3.3)	1.312-.1P-.2L -D.S.	1.453 (36.9)	1.265 (32.1)
23	F	1.500-.1P-.2L -D.S.	1.703 (43.3)	.130 (3.3)	1.500-.1P-.2L -D.S.	1.640 (41.7)	1.453 (36.9)
25	G	1.625-.1P-.2L -D.S.	1.825 (46.4)	.130 (3.3)	1.625-.1P-.2L -D.S.	1.765 (44.8)	1.577 (40.1)
29	H	1.812-.1P-.2L -D.S.	2.143 (54.4)	.156 (4.0)	1.812-.1P-.2L -D.S.	1.953 (49.6)	1.890 (48.0)
33	J	2.000-.1P-.2L -D.S.	2.329 (59.2)	.193 (4.9)	2.000-.1P-.2L -D.S.	2.140 (54.4)	2.077 (52.8)

Dimensions are in inches (mm).

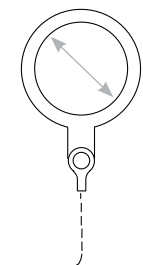


Plug Cover



Receptacle Cover

G for Attachment B
H for Attachment C & D



M28840 Type Stowage Receptacle

NS Series • MIL-DTL-28840 Type Connectors

NSCD - 15 W 1 - 02

- 1
- 2
- 3
- 4
- 5
- 1

BASIC PART NUMBER
NSCD Stowage receptacle
- 2

SHELL SIZE
See Stowage Receptacle Dimensions table below
- 3

MATERIAL & FINISH
W Aluminum, olive drab cadmium
- 4

ALTERNATE KEYING
1 or 2, 3, 4, 5, 6, see p. Z-5 for availability
- 5

OPTIONAL ACCESSORY KIT (OMIT FOR NONE)
02 Protective cover + mounting gasket
03 02 kit + mounting bracket + sealing screws

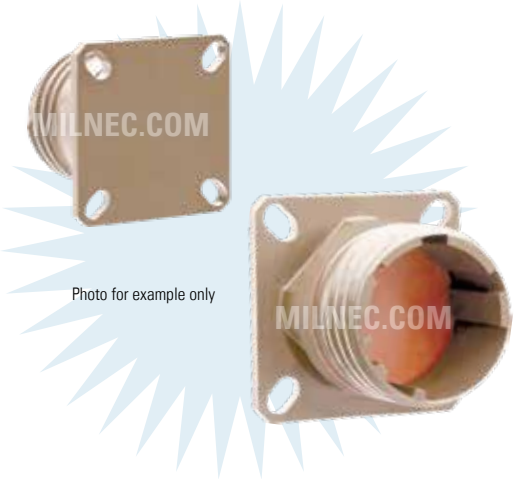


Photo for example only

Note: See part builder (p. Z-7) for additional kit options.

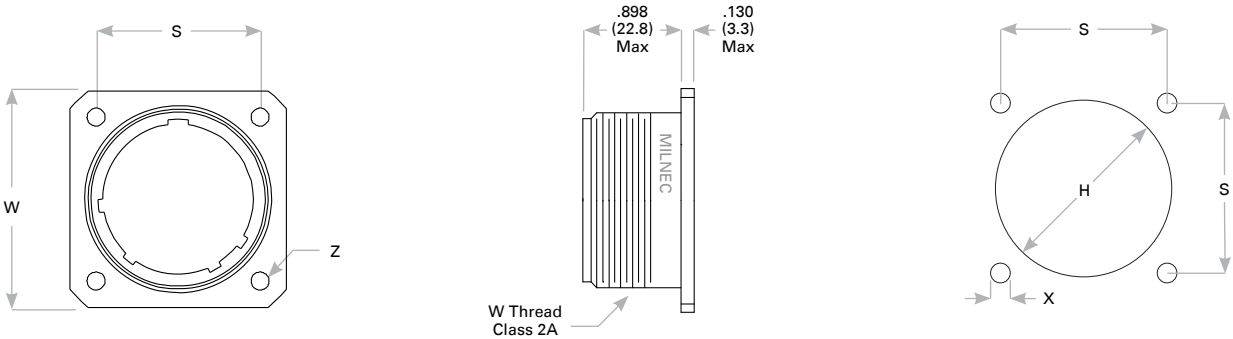
NSCD Compatibility

Compatible Brands	Plugs
MIL-DTL-28840	MS28840/16
Delphi	GT6

Stowage Receptacle Dimensions

Shell Size	W Max	S	Z Max	W Thread Class 2A	H	X
11	1.043 (26.5)	.750 (19.1)	.130 (3.3)	.750-.1P-.2L -D.S.	.812 (20.6)	.140 (3.6)
13	1.158 (29.4)	.843 (21.4)	.130 (3.3)	.875-.1P-.2L -D.S.	.937 (23.8)	.140 (3.6)
15	1.278 (32.5)	.968 (24.6)	.130 (3.3)	1.062-.1P-.2L -D.S.	1.124 (28.6)	.140 (3.6)
17	1.403 (35.6)	1.015 (25.8)	.130 (3.3)	1.125-.1P-.2L -D.S.	1.187 (30.2)	.140 (3.6)
19	1.528 (38.8)	1.140 (29.0)	.130 (3.3)	1.312-.1P-.2L -D.S.	1.374 (34.9)	.140 (3.6)
23	1.738 (44.2)	1.281 (32.5)	.130 (3.3)	1.500-.1P-.2L -D.S.	1.562 (39.7)	.140 (3.6)
25	1.838 (46.7)	1.392 (35.4)	.157 (4.0)	1.625-.1P-.2L -D.S.	1.687 (42.9)	.167 (4.2)
29	2.158 (54.8)	1.568 (39.8)	.157 (4.0)	1.812-.1P-.2L -D.S.	1.874 (47.6)	.167 (4.2)
33	2.348 (59.6)	1.734 (44.0)	.183 (4.7)	2.000-.1P-.2L -D.S.	2.062 (52.4)	.193 (4.9)

Dimensions are in inches (mm). ‡ Max panel thickness applies only to rear mount applications to ensure proper coupling clearance.



Panel Cutout

M28840 Mounting Gasket

NS Series • MIL-DTL-28840 Type Connectors



NSGE Compatibility

Compatible Brands	Receptacles
MIL-DTL-28840	MS28840/10, MS28840/12
Delphi	GT0, GT2

NSGE - 15

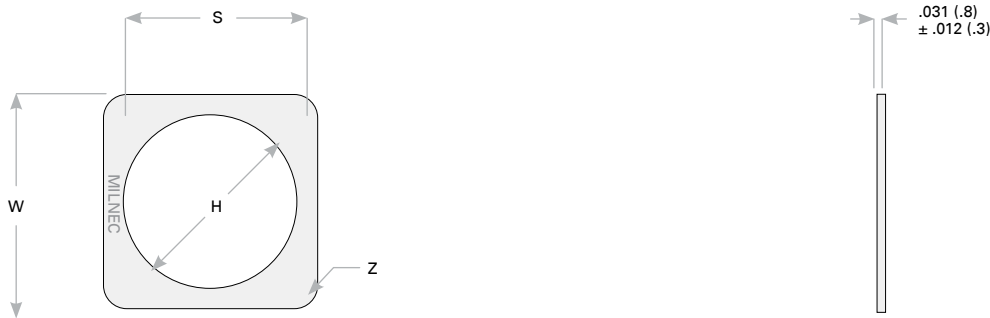
- 1
- 2
- 1
- 2
- BASIC PART NUMBER**
NSGE Neoprene environmental (weather resistant)
Temp. range -40°F to +230°F (-40°C to +110°C)
NSGS Conductive EMI-RFI neoprene, Ni-Cu mesh
Temp. range -40°F to +230°F (-40°C to +110°C)
NSGL Fluorosilicone (jet fuel & oil resistant)
Temp. range -70°F to +392°F (-56°C to +200°C)
Per MIL-DTL-25988, Class 1, Grade 6
NSGD Conductive EMI-RFI fluorosilicone, Al-Ag filled
Temp. range -70°F to +392°F (-56°C to +200°C)
Shielding effectiveness at 90 dB @ 10 GHz
Per MIL-DTL-83528, Type D
- SHELL SIZE**
See Gasket Dimensions table below

Note: See part builder (p. Z-7) for additional kit options.

Gasket Dimensions

Shell Size	Military Shell Size	W Max	S Max	Z Max	H Max
11	A	1.039 (26.4)	.760 (19.3)	.130 (3.3)	.766 (19.5)
13	B	1.154 (29.3)	.853 (21.7)	.130 (3.3)	.891 (22.6)
15	C	1.274 (32.4)	.978 (24.8)	.130 (3.3)	1.078 (27.4)
17	D	1.399 (35.5)	1.025 (26.0)	.130 (3.3)	1.141 (29.0)
19	E	1.524 (38.7)	1.150 (29.2)	.130 (3.3)	1.338 (34.0)
23	F	1.734 (44.4)	1.291 (32.8)	.130 (3.3)	1.516 (38.5)
25	G	1.834 (46.6)	1.402 (35.6)	.157 (4.0)	1.641 (41.7)
29	H	2.154 (54.7)	1.578 (40.1)	.157 (4.0)	1.891 (48.0)
33	J	2.344 (59.5)	1.744 (44.3)	.183 (4.7)	2.078 (52.8)

Dimensions are in inches (mm).



Rev. 2211

M28840 Mounting Bracket & Screws

NS Series • MIL-DTL-28840 Type Connectors

NSMB - 15 - A

1 2 3

1 BASIC PART NUMBER

NSMB Mounting bracket, aluminium alloy
with SST locking nuts

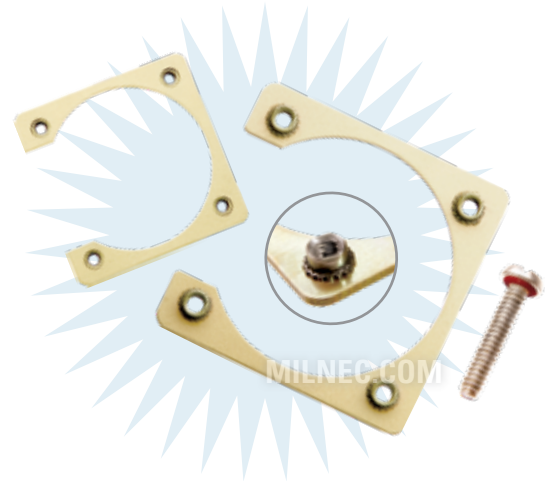
2 SHELL SIZE

See Bracket Dimensions table below

3 OPTIONAL ACCESSORY KIT (OMIT FOR NONE)

- A** Self-sealing SST fillister head screws (4x)
- B** A kit + environmental gasket
- D** A kit + fluorosilicone EMI/RFI gasket

Note: See part builder (p. Z-7) for additional kit options.



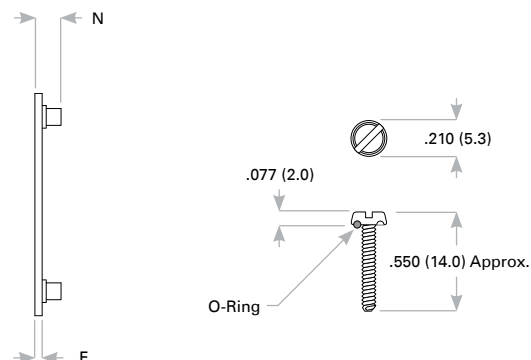
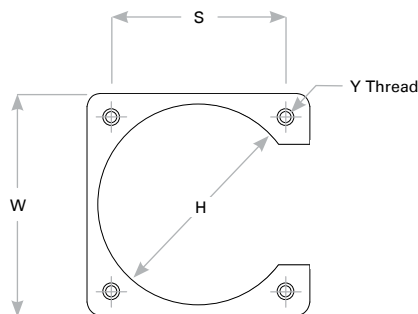
NSMB Compatibility

Compatible Brands	Receptacles
MIL-DTL-28840	MS28840/10, MS28840/12
Delphi	GT0, GT2

Bracket Dimensions

Shell Size	Military Shell Size	W Max	S Max	H Max	N	F	Screw Size	Y Thread
11	A	1.039 (26.4)	.760 (19.3)	.766 (19.5)	.136 (3.5)	.040 (1.0)	#4	4-40 UNJC-3B
13	B	1.154 (29.3)	.853 (21.7)	.891 (22.6)	.136 (3.5)	.040 (1.0)	#4	4-40 UNJC-3B
15	C	1.274 (32.4)	.978 (24.8)	1.078 (27.4)	.136 (3.5)	.040 (1.0)	#4	4-40 UNJC-3B
17	D	1.399 (35.5)	1.025 (26.0)	1.141 (29.0)	.136 (3.5)	.040 (1.0)	#4	4-40 UNJC-3B
19	E	1.524 (38.7)	1.150 (29.2)	1.338 (34.0)	.136 (3.5)	.040 (1.0)	#4	4-40 UNJC-3B
23	F	1.734 (44.4)	1.281 (32.8)	1.516 (38.5)	.136 (3.5)	.040 (1.0)	#4	4-40 UNJC-3B
25	G	1.834 (46.6)	1.402 (35.6)	1.641 (41.7)	.153 (3.9)	.040 (1.0)	#6	6-32 UNJC-3B
29	H	2.154 (54.7)	1.578 (40.1)	1.891 (48.0)	.153 (3.9)	.040 (1.0)	#6	6-32 UNJC-3B
33	J	2.344 (59.5)	1.744 (44.3)	2.078 (52.8)	.153 (3.9)	.040 (1.0)	#6	6-32 UNJC-3B

Dimensions are in inches (mm).



Rev. 2211

Hand Crimpers & Positioners

NS Series • MIL-DTL-28840 Type Connectors



Precision Hand Crimpers

A crimp tool provides reliable crimp termination of contacts for mission-critical applications. A hand crimper is suitable for contacts from size #12 to #22D. For production environments, pneumatic crimpers are also available.

Our tools feature an 8-impession crimp, which ensures maximum tensile strength between wire and contact. Their cycle controlled ratchets are consistent and accurate and do not permit half crimps, ensuring complete and precise crimping every time.

The tool frames have a built-in 8-step selector knob for easy adjustment of crimp depth to accommodate the size of wire being used. Data plates on positioners provide setting information specific to the size of wires and contacts being used.

There are a variety of crimp tools and positioners available to fit the various sized contacts within each connector series. We have paired our most popular models with their required positioner(s) to ensure complete compatibility.

Hand Crimper & Positioner Kits

Part Number	Kit Includes the Following Items	Contacts Sizes	Milnec Series Compatibility	Mil-Spec Series Compatibility
TK101-KIT	TK101 crimp tool with TP104 turret positioner	#20, #16, #12	DL Series, DS, Series, TX Series	MIL-DTL-38999 Series I, II, III
TK101B-KIT	TK101 crimp tool with TP102 turret positioner	#20, #16, #12	BM Series, EV Series, TM Series, TF Series, HR Series	MIL-DTL-26482 Series I, II MIL-DTL-83723 Series III MIL-DTL-5015 Crimp*
TK201-KIT	TK201 crimp tool with the following positioners: TP209 (for pins), TP207 (for sockets)	#22, #22M, #22D	DL Series, TX Series	MIL-DTL-38999 Series I MIL-DTL-38999 Series III
TK201B-KIT	TK201 crimp tool with the following positioners: TP209 (for pins), TP206 (for sockets)	#22, #22M, #22D	DS Series	MIL-DTL-38999 Series II
TK401-KIT	TK401 crimp tool with TP402 positioner	#20	NS Series	MIL-DTL-28840

* Contacts size #8 and larger require pneumatic crimper. When this is not an option, wires may be soldered directly into contact wire well. For mission critical applications, crimping is preferred termination method.

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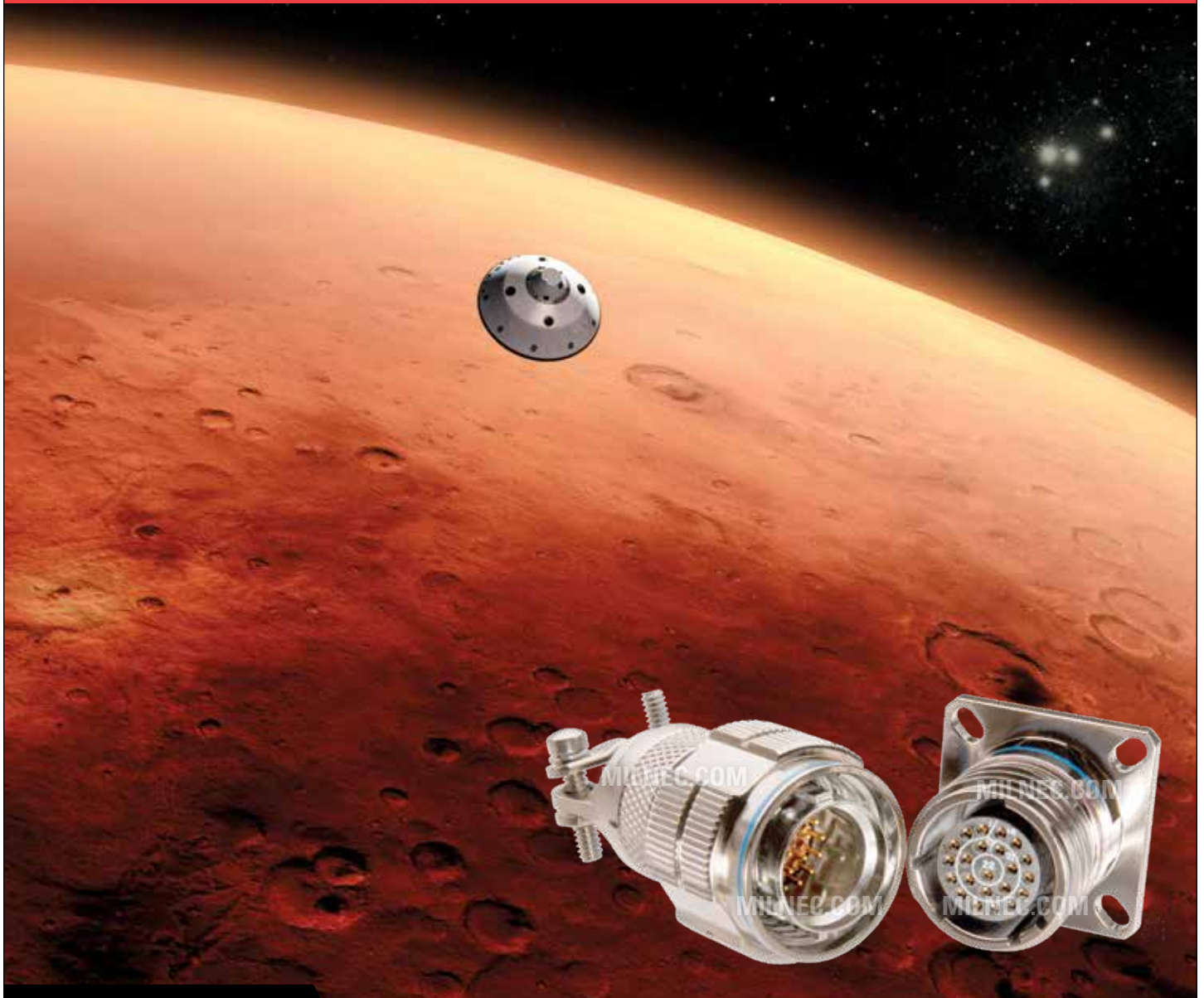


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