

A white electronic plug with a rainbow-colored cable is shown against a green background. The plug has a blue arrow pointing to a screw on its side. The text "Electronic Products Ordering Guide" is overlaid on the image.

Electronic Products Ordering Guide

Plugs

3M *Innovation*


Plug Connectors

3M plug connectors can be used with either flat cable or discrete wire and are the ideal interface for standard sockets. They can be used as a T-tap from a cable bus, a splice connector or an I/O interface. Tough sidewall construction boosts durability. Our polarizing key allows easy polarization and increases socket retention, reducing the likelihood of sockets vibrating out of plug connectors during shipment. Plug connectors are available with or without mounting flanges and lock/ejector latches.

Plug Connector

Accessories and Mating Cable

Accessories

Plugs		Accessories			EMI System	
Pin Qty	Part Number	Strain Relief	Pull Tab	Polar. Keys	Receptacle Kit	Shell and Receptacle Kit
10	4610-XXXX	3448-4610	3490-1	 For all 3518 or M3518		
14	4614-XXXX	3448-4614	3490-2			
16	4616-XXXX	3448-4616	3490-2			
20	4620-XXXX	3448-4620	3490-2		3706-5020	3706-5220
24	4624-XXXX	3448-4624	3490-3			
26	4626-XXXX	3448-4626	3490-3		3706-5026	3706-5226
30	4630-XXXX	3448-4630	3490-3			
34	4634-XXXX	3448-4634	3490-4		3706-5034	3706-5234
36	4636-XXXX	3448-4636	3490-4			
40	4640-XXXX	3448-4640	3490-4		3706-5040	3706-5240
50	4650-XXXX	3448-4650	3490-5		3706-5050	3706-5250
60	4660-XXXX	3448-4660	3490-6		3706-5060	3706-5260
64	4664-XXXX	3448-4664	3490-6			

Mating Cable

Conductor Size: 26 and 28 AWG Solid or Stranded; and 30 AWG Solid

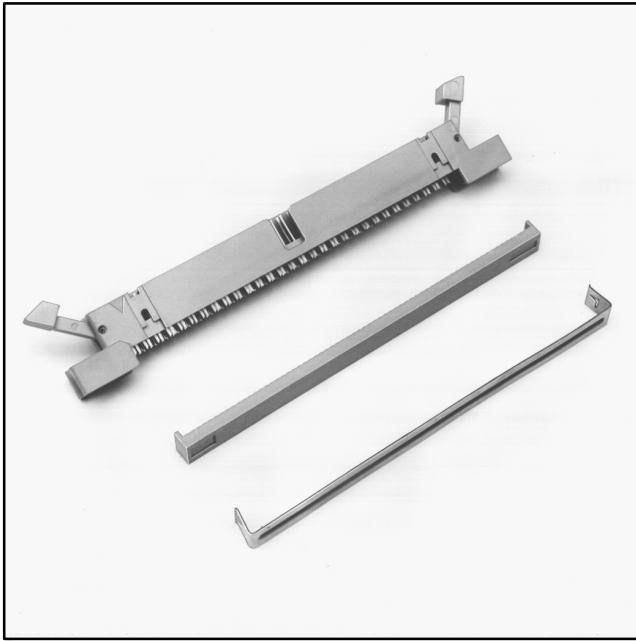
Discrete Wire: Compatible with all of the above gauges of wire, but it is recommended that a strain relief be used.

Conductor Pitch: .050" (1.27 mm)

Cable Style: Round conductor flat, high flex, color coded, ground plane, jacketed, jacketed shielded and pleated foil cable

.100" x .100" Plug

4600 Series



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IMPORTANT NOTICE TO PURCHASER

ALL STATEMENTS, TECHNICAL INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE BASED ON TESTS WE BELIEVE TO BE RELIABLE, BUT THE ACCURACY OR COMPLETENESS THEREOF IS NOT GUARANTEED, AND THE FOLLOWING IS MADE IN LIEU OF ALL WARRANTIES, EXPRESSED OR IMPLIED:

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Date Issued: March 8, 1995

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Physical

Insulation

Material: Glass Filled Polyester (PBT)

Flammability: UL 94V-0

Color: Gray

Contact

Material: Beryllium Copper (C172)

Plating

Underplate & U-Slot: 100 μ " (2.54 μ m) Nickel — QQ-N-290, Class 2

Wiping Area: 30 μ " (0.76 μ m) Gold — MIL-G-45204, Type II, Grade C

Wire Accommodation: 26 & 28 AWG Solid or Stranded, 30 AWG Solid

Marking: 3M Logo, Part Identification Number, and Contact Position Numbers

Electrical

Current Rating: 1 A

Insulation Resistance: $> 1 \times 10^9 \Omega$ at 500 Vdc

Withstanding Voltage: 1000 Vrms at Sea Level

Environmental

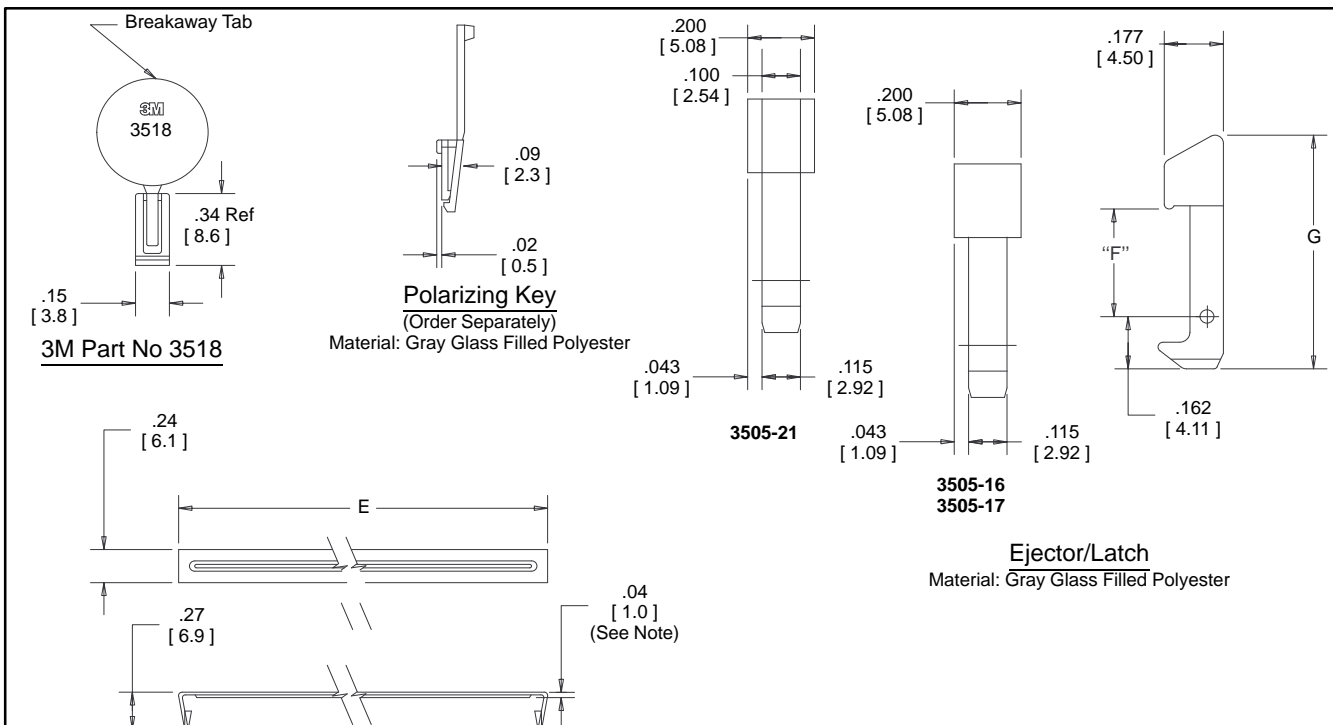
Temperature Rating: -55°C to $+105^\circ\text{C}$

UL File No.: E68080
CSA File No.: LR 40791

3M Electronic Products Division

6801 River Place Blvd.
Austin, TX 78726-9000

For technical, sales or ordering information call
800-225-5373



Note:
The distance the strain relief is below the connector is equal to this .04 [1.0] plus the cable thickness.

Strain Relief
Material: .012" [0.31] Thick
Stainless Steel

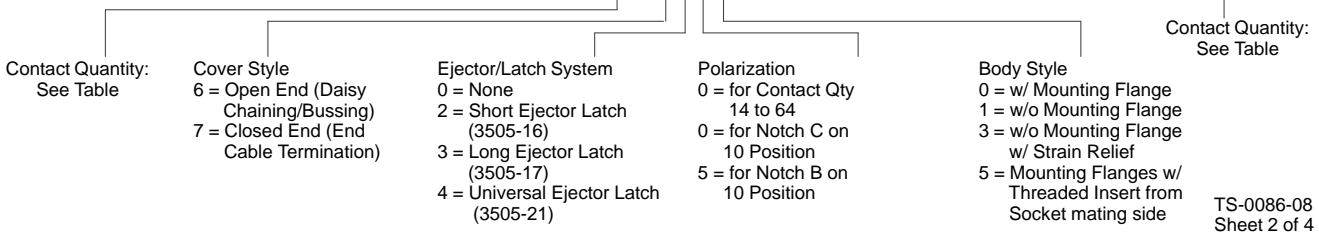
Ejector/Latch Option	Part Number	Dimensions			
		F	G	H	I
Short	3505-16	.335 [8.51]	.726 [18.44]	0.92 [23.4]	.41 [10.4]
Long	3505-17	.484 [12.29]	.875 [22.23]	1.07 [27.2]	.56 [14.2]
Universal	3505-21	.484 [12.29]	.809 [20.55]	1.01 [25.65]	.56 [14.2]

Contact Quantity	Dimensions						Polarizing Notches Provided
	A	A'	B	C	D	E	
10	1.50 [38.1]	0.90 [22.9]	0.71 [18.0]	1.20 [30.5]	0.77 [19.6]	0.85 [21.7]	B or C (See Note 1)
14	1.70 [43.2]	1.10 [27.9]	0.91 [23.1]	1.40 [35.6]	0.97 [24.6]	1.05 [26.8]	BC
16	1.80 [45.7]	1.20 [30.5]	1.01 [25.7]	1.50 [38.1]	1.07 [27.2]	1.15 [29.3]	ABC
20	2.00 [50.8]	1.40 [35.5]	1.21 [30.7]	1.70 [43.2]	1.27 [32.3]	1.35 [34.4]	ABC
24	2.20 [55.9]	1.60 [40.6]	1.41 [35.8]	1.90 [48.3]	1.47 [37.3]	1.55 [39.5]	ABC
26	2.30 [58.4]	1.70 [43.2]	1.51 [38.4]	2.00 [50.8]	1.57 [39.9]	1.65 [42.0]	ABC
30	2.50 [63.5]	1.90 [48.3]	1.71 [43.4]	2.20 [55.9]	1.77 [45.0]	1.85 [47.1]	ABC
34	2.70 [68.6]	2.10 [53.3]	1.91 [48.5]	2.40 [61.0]	1.97 [50.0]	2.05 [52.2]	ABC
36	2.80 [71.1]	2.20 [55.9]	2.01 [51.1]	2.50 [63.5]	2.07 [52.6]	2.15 [54.7]	ABC
40	3.00 [76.2]	2.40 [61.0]	2.21 [56.1]	2.70 [68.6]	2.27 [57.7]	2.35 [59.8]	ABC
50	3.50 [88.9]	2.90 [73.7]	2.71 [68.8]	3.20 [81.3]	2.77 [70.4]	2.85 [72.5]	ABC
60	4.00 [101.6]	3.40 [86.4]	3.21 [81.5]	3.70 [94.0]	3.27 [83.1]	3.35 [85.1]	ABC
64	4.20 [106.7]	3.60 [91.4]	3.41 [86.6]	3.90 [99.1]	3.47 [88.1]	3.55 [90.2]	ABC

Ordering Information

Strain Relief (Order Separately) 3448-46XX

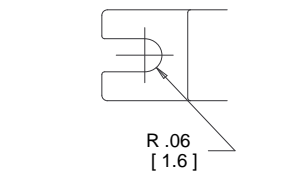
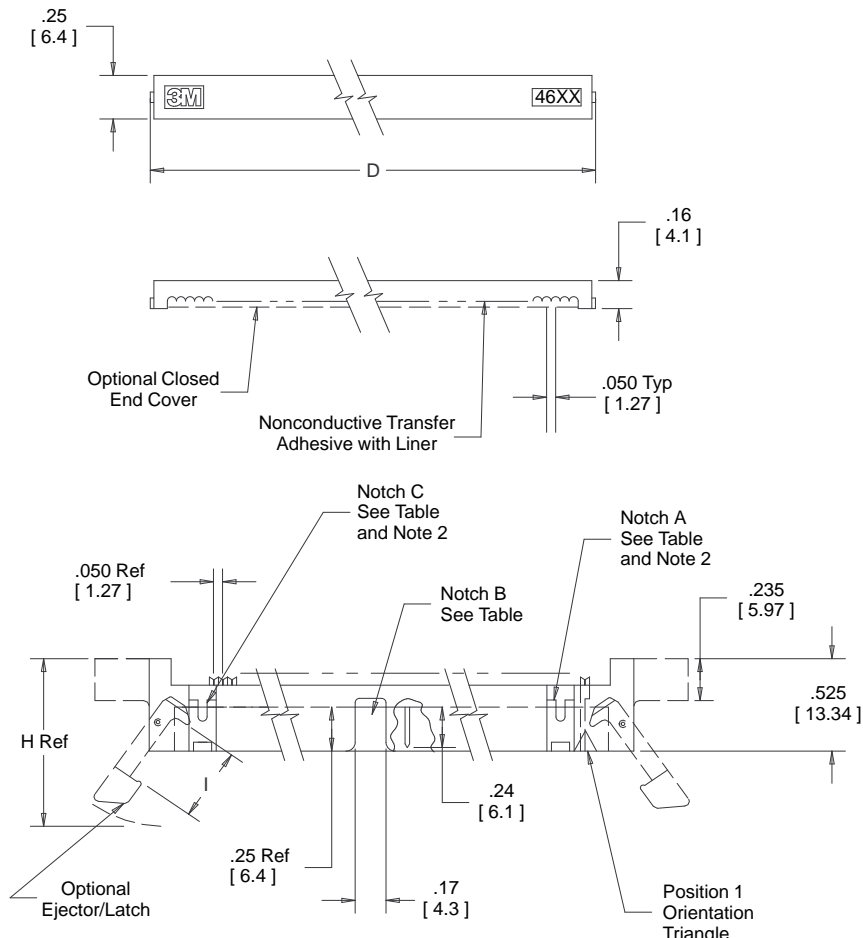
46XX-XXXX



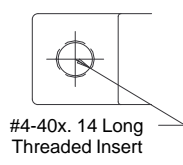
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.100" x .100" Plug

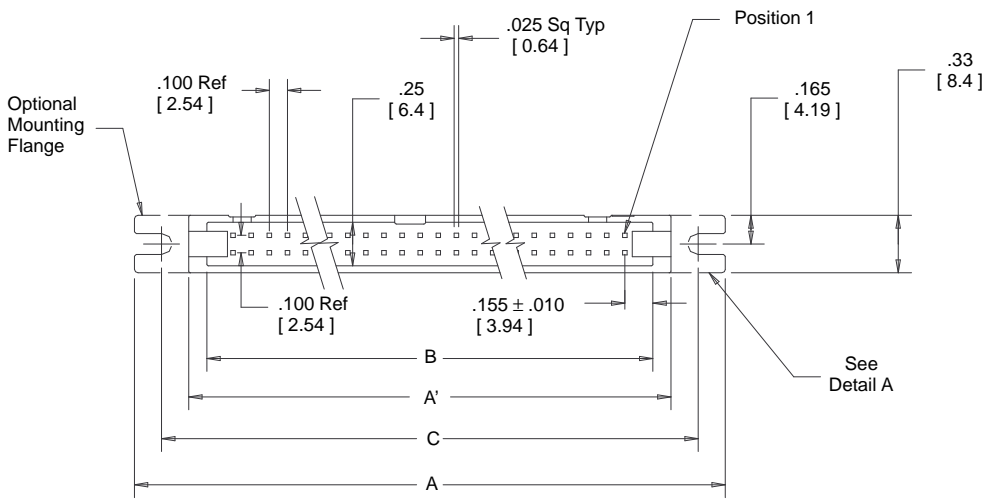
4600 Series



Slotted Mounting Flange
46XX-XXX0



Threaded Mounting Flange
46XX-XXX5
Detail A



Inch
[mm]

Tolerance Unless Noted			
	.0	.00	.000
Inch	±.1	±.01	±.005

[] Dimensions for Reference only

- Notes:
1. Polarization of 10 position product can be either: Center notch: B-4610-XX5X or the Left notch "C"-4610-XX0X.
 2. Notches A and C will accommodate 3M Polarization keys (Part Number 3518 or M3518).

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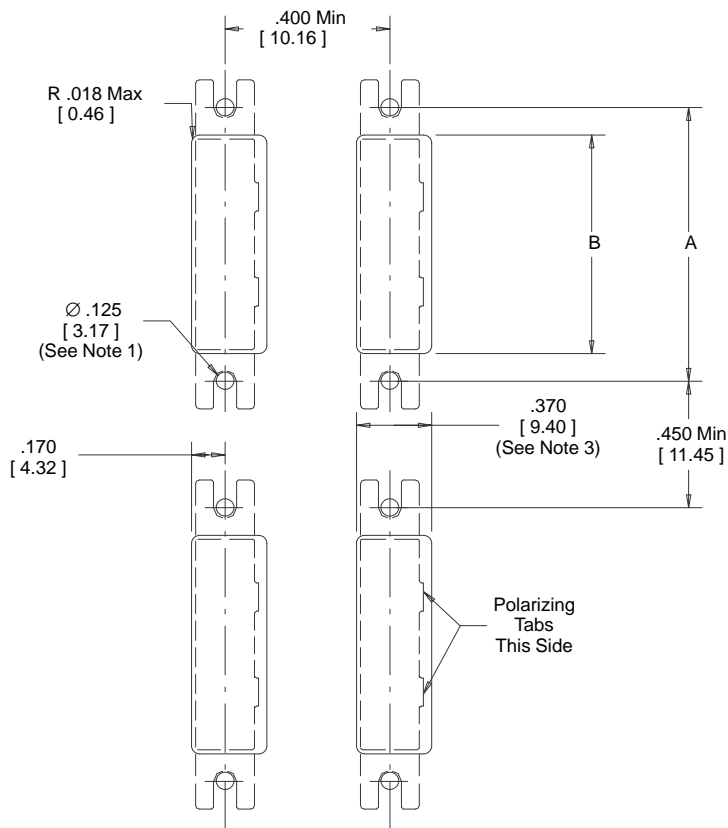
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Table 3

Contact Quantity	3M Part Number Series	Dimension A	Dimension B
10	4610	1.200 [30.48]	0.945 [24.00]
14	4614	1.400 [35.56]	1.145 [29.08]
16	4616	1.500 [38.10]	1.245 [31.62]
20	4620	1.700 [43.18]	1.445 [36.70]
24	4624	1.900 [48.26]	1.645 [41.78]
26	4626	2.000 [50.80]	1.745 [44.32]
30	4630	2.200 [55.88]	1.945 [49.40]
34	4634	2.400 [60.96]	2.145 [54.48]
36	4636	2.500 [63.50]	2.245 [57.02]
40	4640	2.700 [68.58]	2.445 [62.10]
50	4650	3.200 [81.28]	2.945 [74.80]
60	4660	3.700 [93.98]	3.445 [87.50]
64	4664	3.900 [99.06]	3.645 [92.58]



Rear Mount Panel Cutout

Inch
[mm]

Tolerance Unless Noted			
	.0	.00	.000
Inch	± .1	± .01	± .005

[] Dimensions for Reference only

Notes:

1. Accepts #4 pan head machine screw.
2. For a rear mount plug connector with Ejector/Latches the recommended maximum panel thickness is .125" [3.16 mm].
3. Without polarizing tabs .340 [8.64].