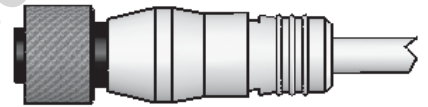




Ethernet Series

Etherplug 108-113



Etherlink V3 114-116



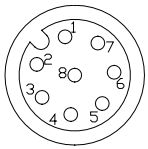
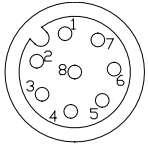
Etherlink V1 117-120



Specifications.. 121-122

Ethernet Series Etherplug Cordsets

PVC & PUR Cable ❖ 8 Pole

PVC Version					
Face View of Male	# of Poles	Wire AWG Rating	Length	Part Number	
				Male	Female
	8	24 60V 2A	2M 5M 10M	MDE45-8MP-2M MDE45-8MP-5M MDE45-8MP-10M	MDE45-8FP-2M MDE45-8FP-5M MDE45-8FP-10M
Polyurethane Version					
Face View of Male	# of Poles	Wire AWG Rating	Length	Part Number	
				Male	Female
	8	24 60V 2A	2M 5M 10M	MDE45P-8MP-2M MDE45P-8MP-5M MDE45P-8MP-10M	MDE45P-8FP-2M MDE45P-8FP-5M MDE45P-8FP-10M

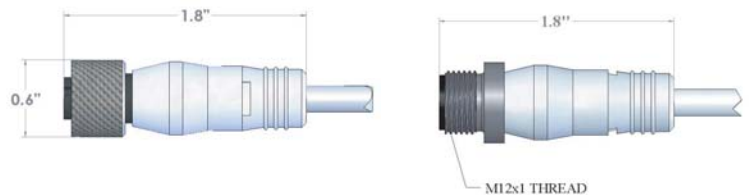
For Cross-Over Color Code, add a "-CC" suffix (e.g. MDE45-8MP-2M-CC). Other cable lengths are available. Please consult the factory.

Specifications:

Body: Oil Resistant Black PVC
Yellow PUR
Insulator: Polyamide
Contacts: Copper Alloy with Gold Plating
Coupling Nut: Nickel Plated Brass
Cable: See Page 121 for specs.
Protection: IP 67
Approvals: U.S.: UL Recognized
Canada: C-UL Recognized

Female Straight

Male Straight



Mencom Standard Cable Color Code

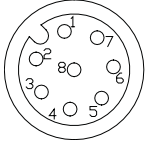
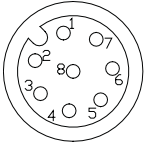
Cross-Over Cable Color Code

Micro	Color	Micro
6 4	White/Orange Orange	6 4
1 7	White/Blue Blue	1 7
5 8	White/Green Green	5 8
2 3	White/Brown Brown	2 3

Micro	Color	Micro
6 4	White/Orange Orange	5 8
1 7	White/Blue Blue	1 7
5 8	White/Green Green	6 4
2 3	White/Brown Brown	2 3

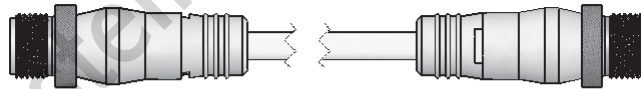
Ethernet Series Etherplug Extension Cables

PVC & PUR Cable ❖ Male to Male ❖ Male to Female

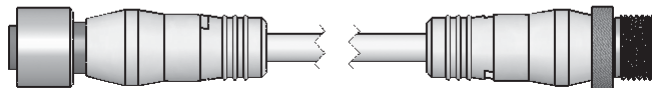
PVC Version					
Face View of Male	# of Poles	Wire AWG Rating	Length	Part Number	
				Male to Male	Male to Female
	8	24 60V 2A	2M 5M 10M	MDE45-8MMP-2M MDE45-8MMP-5M MDE45-8MMP-10M	MDE45-8MFP-2M MDE45-8MFP-5M MDE45-8MFP-10M
Polyurethane Version					
Face View of Male	# of Poles	Wire AWG Rating	Length	Part Number	
				Male to Male	Male to Female
	8	24 60V 2A	2M 5M 10M	MDE45P-8MMP-2M MDE45P-8MMP-5M MDE45P-8MMP-10M	MDE45P-8MFP-2M MDE45P-8MFP-5M MDE45P-8MFP-10M

Other cable lengths are available. Please consult the factory.

Male to Male

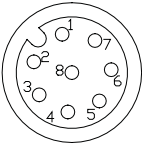
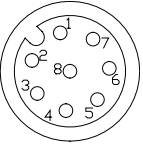
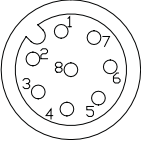
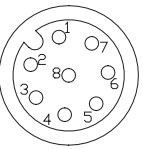
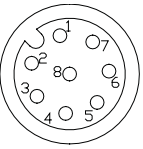
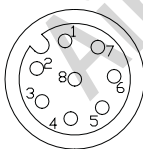


Female to Male



Ethernet Series Etherplug Receptacles

1/2"-14 NPT & 1/4"-18 NPT Threads ❖ PG Threads ❖ Metric Threads

Etherplug Receptacles with 12" Leads						
Face View of Male	# of Poles	Wire AWG Rating	Part Number		Thread Type	
			Male Receptacle	Female Receptacle		
	8	24 60V 2A	MDE45-8MR-4 MDE45-8MR-2 MDE45-8MR-PG9 MDE45-8MR-M16 MDE45-8MR-M20	MDE45-8FR-4 MDE45-8FR-2 MDE45-8FR-PG9 MDE45-8FR--M16 MDE45-8FR--M20	1/4" - 18 NPT 1/2" - 14 NPT PG 9 M16 x 1.5 M20 x 1.5	
Etherplug Receptacles with Cat 5 Cable						
Face View of Male	# of Poles	Wire AWG Rating	Length	Part Number		Thread Type
				Male Receptacle	Female Receptacle	
	8	24 60V 2A	2M 5M 10M	MDE45-8MR-4-2M MDE45-8MR-4-5M MDE45-8MR-4-10M	MDE45-8FR-4-2M MDE45-8FR-4-5M MDE45-8FR-4-10M	1/4" - 18 NPT
	8	24 60V 2A	2M 5M 10M	MDE45-8MR-2-2M MDE45-8MR-2-5M MDE45-8MR-2-10M	MDE45-8FR-2-2M MDE45-8FR-2-5M MDE45-8FR-2-10M	1/2" - 14 NPT
	8	24 60V 2A	2M 5M 10M	MDE45-8MR-PG9-2M MDE45-8MR-PG9-5M MDE45-8MR-PG9-10M	MDE45-8FR-PG9-2M MDE45-8FR-PG9-5M MDE45-8FR-PG9-10M	PG 9
	8	24 60V 2A	2M 5M 10M	MDE45-8MR-M16-2M MDE45-8MR-M16-5M MDE45-8MR-M16-10M	MDE45-8FR-M16-2M MDE45-8FR-M16-5M MDE45-8FR-M16-10M	M16 x 1.5
	8	24 60V 2A	2M 5M 10M	MDE45-8MR-M20-2M MDE45-8MR-M20-5M MDE45-8MR-M20-10M	MDE45-8FR-M20-2M MDE45-8FR-M20-5M MDE45-8FR-M20-10M	M20 x 1.5

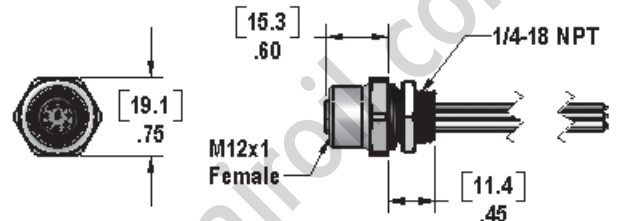
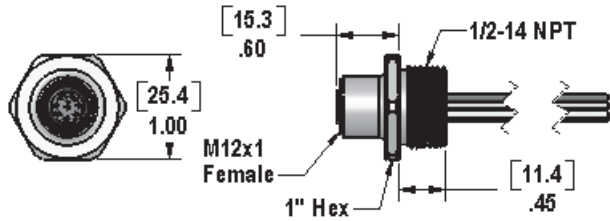
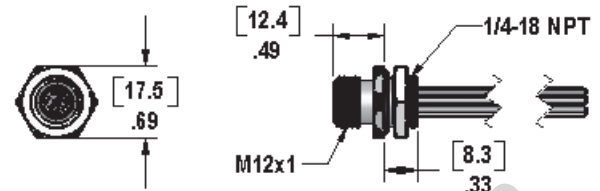
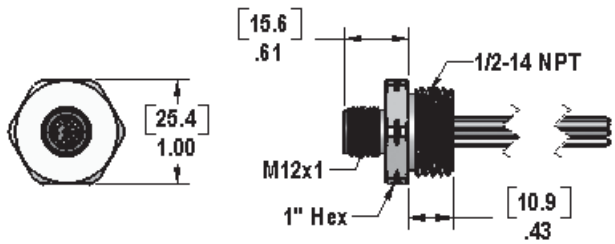
Other cable lengths are available. Please consult the factory. For Color Code, see page 108.

Specifications:

Shell:	1/4" NPT & PG 9: Nickel Plated Brass; 1/2" NPT, M16 & M20: Clear Anodized Aluminum	Wires:	24 AWG 60V, 80°C
Insulator:	Polyamide	Contacts:	Copper Alloy with Gold Plating
Cable:	See PVC Cable specifications on page 121	O-Ring:	BUNA-N
		Temperature:	-40°C to +80°C (-40°F to +176°F)
		Protection:	IP 67

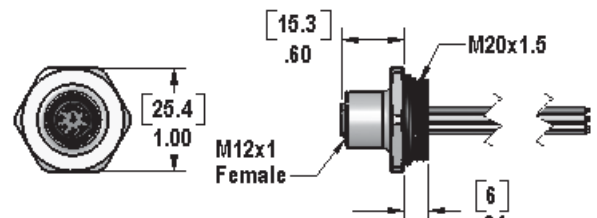
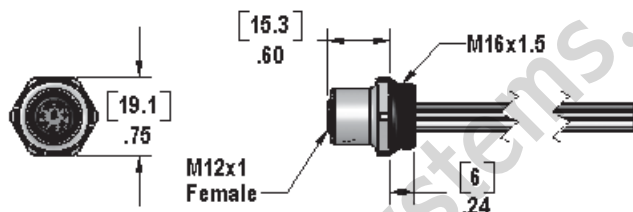
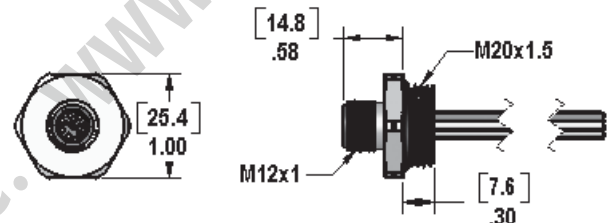
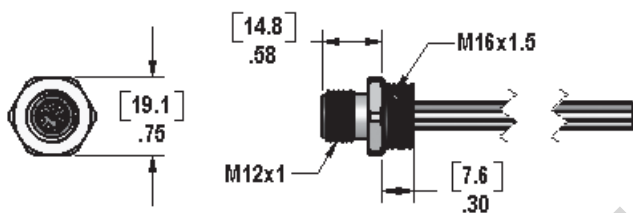
Ethernet Series Etherplug Receptacles

1/2"-14 NPT & 1/4"-18 NPT Threads ❖ PG Threads ❖ Metric Threads



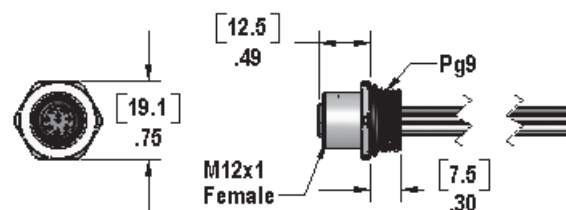
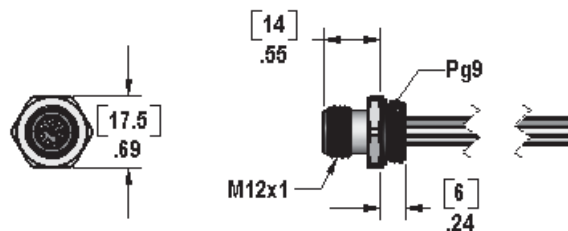
1/2"-14 NPT Male and Female Receptacles

1/4"-18 NPT Male and Female Receptacles



M16 x 1.5 Male and Female Receptacles

M20 x 1.5 Male and Female Receptacles



PG 9 Male and Female Receptacles

Ethernet Series

Ethernet Series Etherplug Receptacles

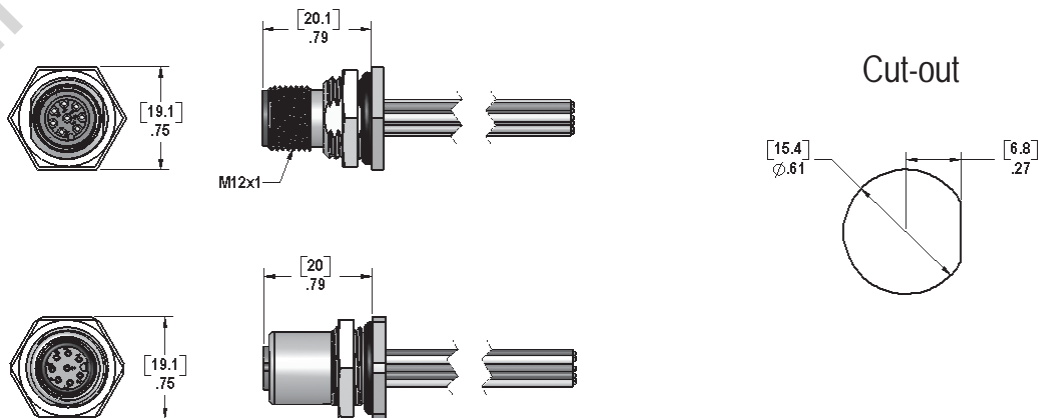
Back Mount with 12" Leads ❖ Back Mount with Cat 5 Cable

Etherplug Receptacle Back Mount with 12" Leads					
Face View of Female	# of Poles	Wire AWG Rating	Part Number		
			Male	Female	
	8	24 60V 2A	MDE45-8MR-BM	MDE45-8FR-BM	
Etherplug Receptacle Back Mount with Cat 5 Cable					
Face View of Female	# of Poles	Wire AWG Rating	Length	Part Number	
				Male	Female
	8	24 60V 1.5A	2M 5M 10M	MDE45-8MR-BM-2M MDE45-8MR-BM-5M MDE45-8MR-BM-10M	MDE45-8FR-BM-2M MDE45-8FR-BM-5M MDE45-8FR-BM-10M

Other cable lengths are available. Please consult the factory. For Color Code, see page 108.

Specifications:

Shell: Nickel Plated Brass
 Insulator: Polyamide
 Cable: See specifications on page 121
 Wires: 24 AWG 60V, 80°C
 Contacts: Copper Alloy with Gold Plating
 O-Ring: BUNA-N
 Temperature: -40°C to +80°C (-40°F to +176°F)
 Protection: IP 67
 Approvals: U.S.: UL Recognized
 Canada: C-UL Recognized



Ethernet Series Etherplug Receptacles

Back Mount to RJ45 with Cable ❖ 1/2"-14 NPT to RJ45 with Cat 5 Cable

Etherplug Back Mount Receptacle to RJ45 with Cat 5 Cable						
Face View of Female	# of Poles	Wire AWG Rating	Wiring	Length	Part Number	
			MDC to RJ45		Male	Female
	8	24 60V 1.5A	1 to 5 2 to 7 3 to 8 4 to 2 5 to 3 6 to 1 7 to 4 8 to 6	2M 5M 10M	MDE45-8MR-RJ45-BM-2M MDE45-8MR-RJ45-BM-5M MDE45-8MR-RJ45-BM-10M	MDE45-8FR-RJ45-BM-2M MDE45-8FR-RJ45-BM-5M MDE45-8FR-RJ45-BM-10M

Etherplug 1/2" - 14 NPT Receptacle to RJ45 with Cat 5 Cable						
Face View of Female	# of Poles	Wire AWG Rating	Wiring	Length	Part Number	
			MDC to RJ45		Male	Female
	8	24 60V 1.5A	1 to 5 2 to 7 3 to 8 4 to 2 5 to 3 6 to 1 7 to 4 8 to 6	2M 5M 10M	MDE45-8MR-RJ45-2-2M MDE45-8MR-RJ45-2-5M MDE45-8MR-RJ45-2-10M	MDE45-8FR-RJ45-2-2M MDE45-8FR-RJ45-2-5M MDE45-8FR-RJ45-2-10M

Other cable lengths are available. Please consult the factory.

Specifications:

Shell: Back Mount : Nickel Plated Brass;
1/2" NPT: Clear Anodized Aluminum

Insulator: Polyamide

Cable: See specifications on page 121

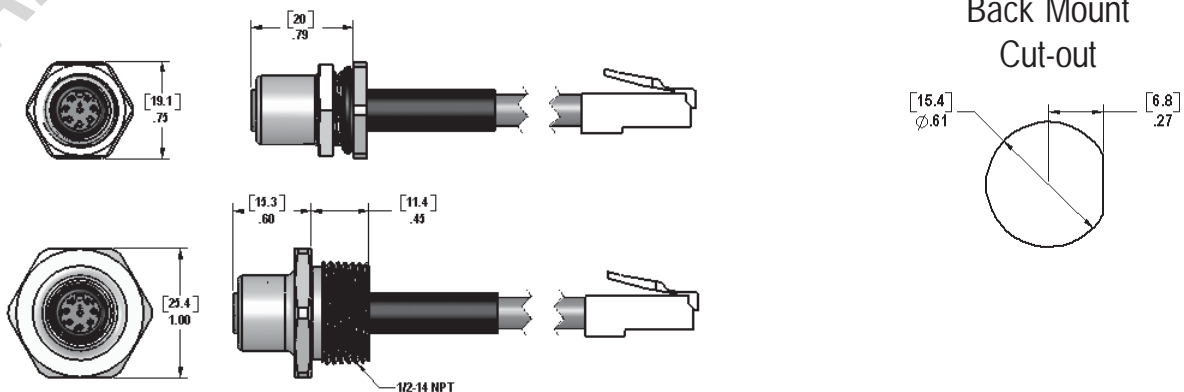
Contacts: Copper Alloy with Gold Plating

O-Ring: BUNA-N

Temperature: -40°C to +80°C (-40°F to +176°F)



Protection: IP 67

Approvals: U.S.: UL Recognized; Canada: C-UL Recognized



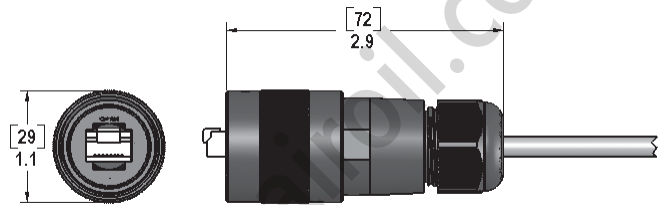
Ethernet Series Etherlink V3 Field Wireable

Male Plug

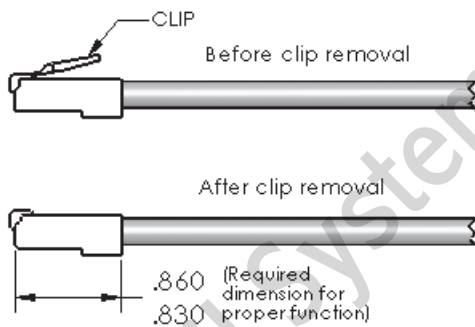
Etherlink V3 Field Wireable Male Plug			
Front View	# of Poles	Part Number	Side View
	8	E45V3-8MP-FW	

Specifications:

Body: Black Polyamide
 Coupling Nut: Black Anodized Aluminum
 O-Ring: BUNA-N
 Grommets: NBR & TPE
 Protection: IP 67



It is recommended that quality Mencom cables are used with the field wireable connectors to assure an accurate fit. However, if using another brand, the dimensions of the connector must meet the dimensions shown below.

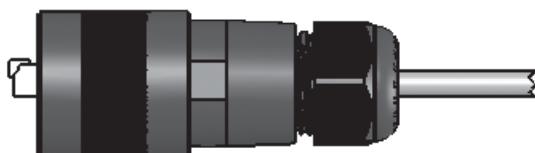


STEP 1.) Remove clip by cutting or by bending it back and forth until it breaks.

STEP 2.) With connector unassembled, push cable through dome nut, split apart the grommet and wrap it around the cable, then push the cable through the remainder of the connector.





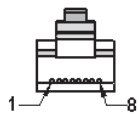


STEP 3.) Push grommet back into the "fingers" of the shell. Rotate cable 90 degrees and pull it back into connector until it stops. With slight tension on cable, tighten dome nut (3.75Nm recommended).



Ethernet Series Etherlink V3 Cordsets

Male Plugs ❖ Male to Male Extension Cables ❖ RJ45 to Male Plug ❖ PVC & PUR Cable

PVC Version					
Front View	# of Poles	Length	Part Number		Side View
			Male	Male to Male Extension	
	8	2M 5M 10M	E45V3-8MP-2M E45V3-8MP-5M E45V3-8MP-10M	E45V3-8MMP-2M E45V3-8MMP-5M E45V3-8MMP-10M	
Polyurethane Version					
Front View	# of Poles	Length	Part Number		Side View
			Male	Male to Male Extension	
	8	2M 5M 10M	E45V3P-8MP-2M E45V3P-8MP-5M E45V3P-8MP-10M	E45V3P-8MMP-2M E45V3P-8MMP-5M E45V3P-8MMP-10M	
RJ45 Male to Male Plug					
Face View	# of Poles	Wire AWG Rating	Length	Part Number	
				PVC**	PUR
	8	24 60V 1.5A	3 FT 7 FT 10 FT 15 FT 25 FT	RJ45-3 RJ45-7 RJ45-10 RJ45-15 RJ45-25	RJ45P-3 RJ45P-7 RJ45P-10 RJ45P-15 RJ45P-25

Other cable lengths are available. Please consult the factory.

**Cable Specifications on Page 121 do not apply to these cables.

Ethernet Series Etherlink V3 Receptacles

Female Receptacle to Male Plug with Cable ❖ Female Receptacle to 110 Punchdown Block
 ❖ Female Receptacle to Female Receptacle ❖ Field Wireable Female Receptacle

Etherlink V3 Female Receptacle to Male Plug with Cat 5 Cable					
Front View	# of Poles	Wire AWG Rating	Length	Part Number	Side View
	8	24 60V 1.5A	1 FT 3 FT 7 FT	E45V3-8FMR-1-M25 E45V3-8FMR-3-M25 E45V3-8FMR-7-M25	

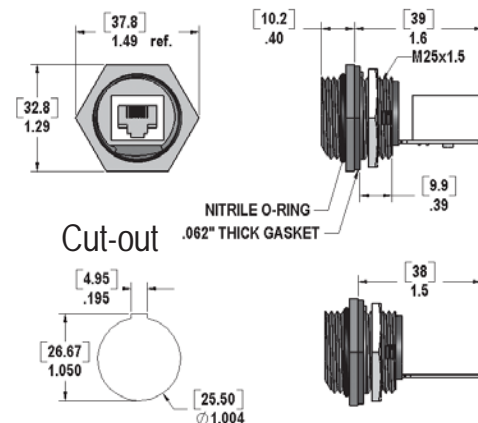
Etherlink V3 Female Receptacle to 110 Punchdown Block				
Front View	# of Poles	Acceptable Wire Range	Part Number	Side View
	8	20 – 26AWG Solid Copper Wire	E45V3-8FR-110-M25	

Etherlink V3 Female Receptacle to Female Receptacle			
Front View	# of Poles	Part Number	Side View
	8	E45V3-8FFR-M25	

Etherlink V3 Field Wireable Female Receptacle			
Front View	# of Poles	Part Number	Side View
	8	E45V3-8FR-FW-M25	



Specifications:

Insulator: Polyamide
 Cable: CAT 5 with PVC Jacket
 Contacts: Copper Alloy with Gold Plating
 O-Ring: BUNA-N
 Temperature: -40°C to +80°C (-40°F to +176°F)
 Protection: IP 67
 Approvals: U.S.: UL Recognized-Pending
 Canada: C-UL Recognized-Pending



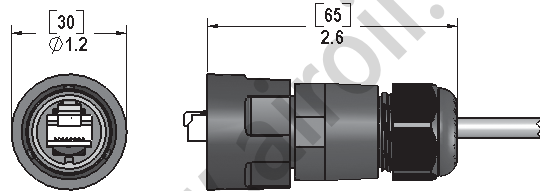
Ethernet Series Etherlink V1 Field Wireable

Male Plug

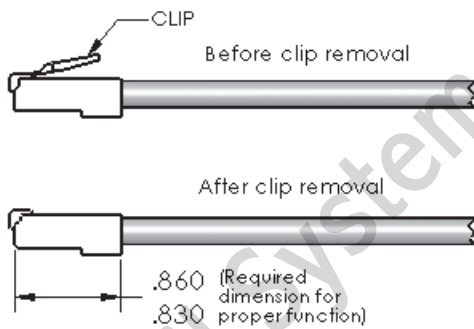
Etherlink V1 Field Wireable Male Plug			
Front View	# of Poles	Part Number	Side View
	8	E45V1-8MP-FW	

Specifications:

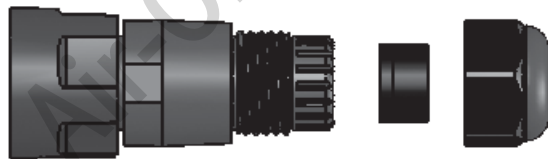
Body: Black Polyamide
 Coupling Nut: Black Anodized Aluminum
 O-Ring: BUNA-N
 Grommets: NBR & TPE
 Protection: IP 67



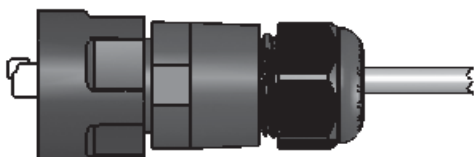
It is recommended that quality Mencom cables are used with the field wireable connectors to assure an accurate fit. However, if using another brand, the dimensions of the connector must meet the dimensions shown below.



STEP 1.) Remove clip by cutting or by bending it back and forth until it breaks.







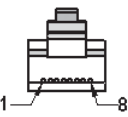
STEP 2.) With connector unassembled, push cable through dome nut, split apart the grommet and wrap it around the cable, then push the cable through the remainder of the connector.



STEP 3.) Push grommet back into the "fingers" of the shell. Rotate cable 90 degrees and pull it back into connector until it stops. With slight tension on cable, tighten dome nut (3.75Nm recommended).

Ethernet Series Etherlink V1 Cordsets

Male Plugs ❖ Male to Male Extension Cables ❖ RJ45 to Male Plug ❖ PVC & PUR Cable

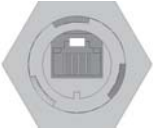
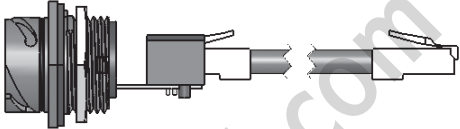
PVC Version					
Front View	# of Poles	Length	Part Number		Side View
			Male	Male to Male Extension	
	8	2M 5M 10M	E45V1-8MP-2M E45V1-8MP-5M E45V1-8MP-10M	E45V1-8MMP-2M E45V1-8MMP-5M E45V1-8MMP-10M	
Polyurethane Version					
Front View	# of Poles	Length	Part Number		Side View
			Male	Male to Male Extension	
	8	2M 5M 10M	E45V1P-8MP-2M E45V1P-8MP-5M E45V1P-8MP-10M	E45V1P-8MMP-2M E45V1P-8MMP-5M E45V1P-8MMP-10M	
RJ45 Male to Male Plug					
Face View	# of Poles	Wire AWG Rating	Length	Part Number	
				PVC**	PUR
	8	24 60V 1.5A	3 FT 7 FT 10 FT 15 FT 25 FT	RJ45-3 RJ45-7 RJ45-10 RJ45-15 RJ45-25	RJ45P-3 RJ45P-7 RJ45P-10 RJ45P-15 RJ45P-25

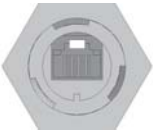
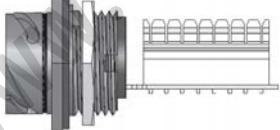
Other cable lengths are available. Please consult the factory.

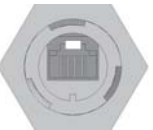
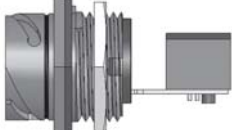
**Cable Specifications on Page 121 do not apply to these cables.



Ethernet Series Etherlink V1 Receptacles

Female Receptacle to Male Plug with Cable ❖ Female Receptacle to 110 Punchdown Block
❖ Female Receptacle to Female Receptacle ❖ Field Wireable Female Receptacle

Etherlink V1 Female Receptacle to Male Plug with Cat 5 Cable					
Front View	# of Poles	Wire AWG Rating	Length	Part Number	Side View
	8	24 60V 1.5A	1 FT 3 FT 7 FT	E45V1-8FMR-1-M25 E45V1-8FMR-3-M25 E45V1-8FMR-7-M25	

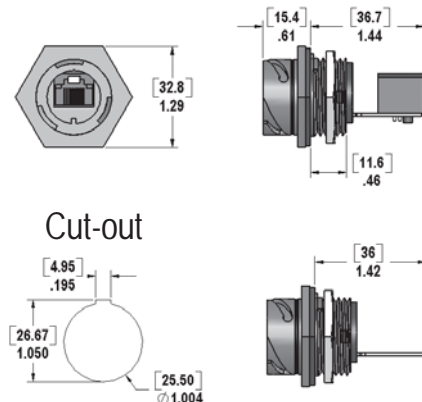
Etherlink V1 Female Receptacle to 110 Punchdown Block				
Front View	# of Poles	Acceptable Wire Range	Part Number	Side View
	8	20 – 26AWG Solid Copper Wire	E45V1-8FR-110-M25	

Etherlink V1 Female Receptacle to Female Receptacle			
Front View	# of Poles	Part Number	Side View
	8	E45V1-8FFR-M25	

Etherlink V1 Field Wireable Female Receptacle			
Front View	# of Poles	Part Number	Side View
	8	E45V1-8FR-FW-M25	


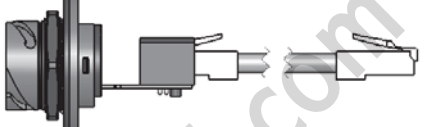
Specifications:

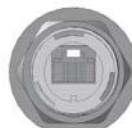
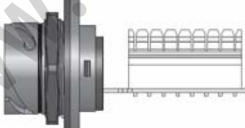
Insulator: Polyamide
 Cable: CAT 5 with PVC Jacket
 Contacts: Copper Alloy with Gold Plating
 O-Ring: BUNA-N
 Temperature: -40°C to +80°C (-40°F to +176°F)
 Protection: IP 67
 Approvals: U.S.: UL Recognized-Pending
 Canada: C-UL Recognized-Pending







Ethernet Series Etherlink V1 Receptacles

Back Mount to Male Plug with Cable ❖ Back Mount to 110 Punchdown Block
 ❖ Back Mount to Female Receptacle ❖ Field Wireable Female Receptacle Back Mount

Etherlink V1 Female Receptacle Back Mount to Male Plug with Cat 5 Cable					
Front View	# of Poles	Wire AWG Rating	Length	Part Number	Side View
	8	24 60V 1.5A	1 FT 3 FT 7 FT	E45V1-8FMR-1-BM E45V1-8FMR-3-BM E45V1-8FMR-7-BM	

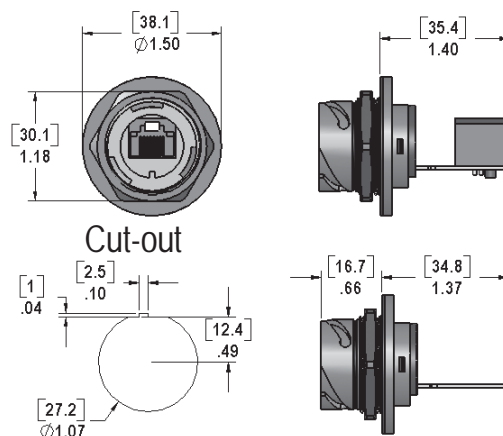
Etherlink V1 Female Receptacle Back Mount to 110 Punchdown Block				
Front View	# of Poles	Acceptable Wire Range	Part Number	Side View
	8	20 – 26AWG Solid Copper Wire	E45V1-8FR-110-BM	

Etherlink V1 Female Receptacle Back Mount to Female Receptacle			
Front View	# of Poles	Part Number	Side View
	8	E45V1-8FFR-BM	

Etherlink V1 Field Wireable Female Receptacle Back Mount			
Front View	# of Poles	Part Number	Side View
	8	E45V1-8FR-FW--BM	

Specifications:

Insulator: Polyamide
 Cable: CAT 5 with PVC Jacket
 Contacts: Copper Alloy with Gold Plating
 O-Ring: BUNA-N
 Temperature: -40°C to +80°C (-40°F to +176°F)
 Protection: IP 67
 Approvals: U.S.: UL Recognized-Pending
 Canada: C-UL Recognized-Pending



Ethernet Series Cable Specifications

PVC ❖ Polyurethane

	PVC Cable	Polyurethane Cable
Cable Construction:		
Conductors:	24 AWG, 7/32 Tinned copper. 0.61mm dia. nom.	24 AWG, 7/32 Tinned copper. 0.61mm dia. nom.
Conductor Insulation:	High density polyethylene. 1.05mm max dia.	High density polyethylene. 1.05mm max dia.
Conductor Pairing:	Color coded singles twisted into pairs. 2.10mm max dia.	Color coded singles twisted into pairs. 2.10mm max dia.
Cable:	4 pairs twisted together with tissue wrap. 4.14mm dia. nom.	4 pairs twisted together with tissue wrap. 4.14mm dia. nom.
Jacketing:	Teal PVC. .64mm nom. thickness. Cable dia. 5.7mm nom.	Black PUR. .51mm nom. thickness. Cable dia. 5.6mm nom.
Physical Properties:		
Operating Temperature:	Min -40°C, Max 60°C	Min -40°C, Max 75°C
Weight kg/km:	38	31
Resistance:	UV and oil resistant jacketing	UV and oil resistant jacketing
Electrical Characteristics:		
Capacitance, Mutual:	13.5Pf/ft @ 1 MHz	13.5Pf/ft @ 1 MHz
Dielectric Withstanding, min:	900V RMS	1500V RMS
Voltage Rating, max:	30V	300V
DC Resistance, max:	26.0 Ohms	26.0 Ohms
Impedance		
1-100 MHz	100 +/- 15 Ohms	100 +/- 15 Ohms
100-350 MHz	100 +/- 20 Ohms	100 +/- 20 Ohms
SRL		
1-20 MHz	23 dB	23 dB
20-100 MHz	23 - 10 Log(F/20)	23 - 10 Log(F/20)
Return Loss		
1-10 MHz	20 + 5 Log(F) dB min	20 + 5 Log(F) dB min
10-20 MHz	25 Db min	25 Db min
20-100 MHz	25 - 8.6 Log(F/20) dB min	25 - 8.6 Log(F/20) dB min
PS Next		
1-100 MHz	71 - 15 Log(F/.772) min	71 - 15 Log(F/.772) min
Next		
1-100 MHz	73 - 15 Log(F/.772) min	73 - 15 Log(F/.772) min
PS Elfext		
1-100 MHz	67 - 20 Log(F/.772) min	67 - 20 Log(F/.772) min
Elfext		
1-100 MHz	67 - 20 Log(F/.772) min	67 - 20 Log(F/.772) min
Delay		
1-100 MHz	534 + 36/Sqrt(F)	534 + 36/Sqrt(F)
Delay Skew		
1-100 MHz	<25Ns	<25Ns
LCL		
1-100 MHz	-38dB min	-38dB min

Ethernet Series Cable Specifications & RJ45 Kits

PVC ❖ Polyurethane

PVC Cable

Polyurethane Cable

Attenuation:

Frequency	spec 70m of cable (Cat 5e channel)	Attenuation Per meter
1.0	2.5	0.36
4.0	4.5	0.64
8.0	6.3	0.9
10.0	7.0	0.1
16.0	9.2	0.13
20.0	10.3	0.15
25.0	11.4	0.16
31.25	12.8	0.18
62.5	18.5	0.26
100.0	24.0	0.343

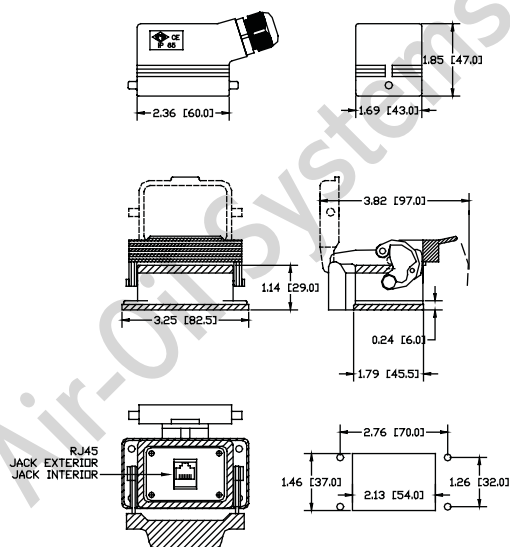
Frequency	spec 70m of cable (Cat 5e channel)	Attenuation Per meter
1.0	2.5	0.36
4.0	4.5	0.64
8.0	6.3	0.9
10.0	7.0	0.1
16.0	9.2	0.13
20.0	10.3	0.15
25.0	11.4	0.16
31.25	12.8	0.18
62.5	18.5	0.26
100.0	24.0	0.343

Note: All testing is conducted off the reel and without connectors attached.

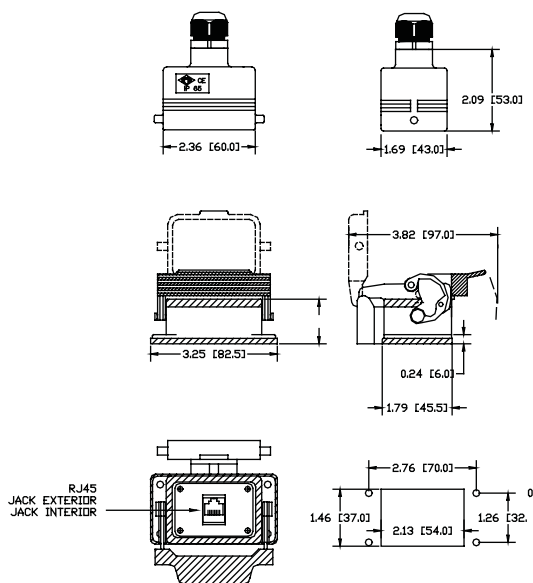
Complete Ethernet Connection System

Ethernet has become a more popular and accepted method of communication on the industrial plant floor. Mencom now offers a complete connection set that allows use of standard double-ended Ethernet cables.

Part Number: RJ45-CKIT



Part Number: RJ45-CVKIT



These units are designed to be used with Mencom RJ45 Patch Cords.

- Part Numbers: RJ45-03 3 foot patch cord
- RJ45-07 7 foot patch cord
- RJ45-10 10 foot patch cord
- RJ45-15 15 foot patch cord

Other lengths are available, please consult the factory.