

# Gigabit Ethernet Connectivity

Innovative connectivity for demanding high-speed data transfer in industrial applications

## Features and Benefits

### Gigabit M12 X-code and RJ45 Ethernet Connectivity

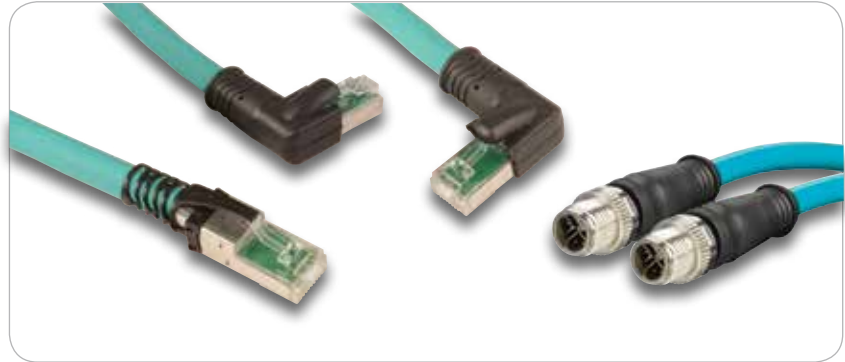
- Ideal for high-speed data transfer in industrial applications (1 Gigabit per second)
- Complete 360 degree shield coverage provides optimal signal performance without system noise interference
- Cat 6, UL Listed. Conforms to ISO IEC 11801, ANSI/TIA-1005, TIA-568-C.2. Flex-rated TPE cables for various applications.

### M12 X-code Gigabit Ethernet

- X-code key alignment allows for blind-mating
- Recessed male pins within die-cast metal X-code shield prevents damage to pins when coupling
- Overmolded housing is rated IP67 for harsh industrial environments where extreme vibration, shock, chemicals, and temperature are found. Suitable for M<sub>3</sub>I<sub>3</sub>C<sub>3</sub>E<sub>3</sub>
- Shielded straight connectors. Cable lengths up to 100 m (328.08 ft)

### RJ45 Gigabit Ethernet

- Fixed-position front contacts ensure plug quality and consistent mating with outlets
- Rugged strain relief and latch mechanism for secure connection
- Ideal for IP20 industrial applications. Suitable for M<sub>1</sub>I<sub>1</sub>C<sub>2</sub>E<sub>2</sub>
- Shielded straight and right angle connectors. Cable lengths up to 100 m (328.08 ft)



Gigabit Ethernet is quickly becoming the standard in industrial networking as more video applications, sensors and other devices require faster, higher-volume voice, video and data transfer.

To respond to this growing demand, Rockwell Automation® is proud to introduce the Allen-Bradley® M12 X-code and RJ45 Gigabit Ethernet. These next generation cordsets and patchcords achieve Ethernet speeds of 1 Gigabit per second – a vast improvement compared to the 100 megabits per second of conventional connectivity – and are ideal for high-speed data transfer in industrial applications. The 360 degree shield design of these innovative cordsets and patchcords provides optimal signal performance without system noise interference.

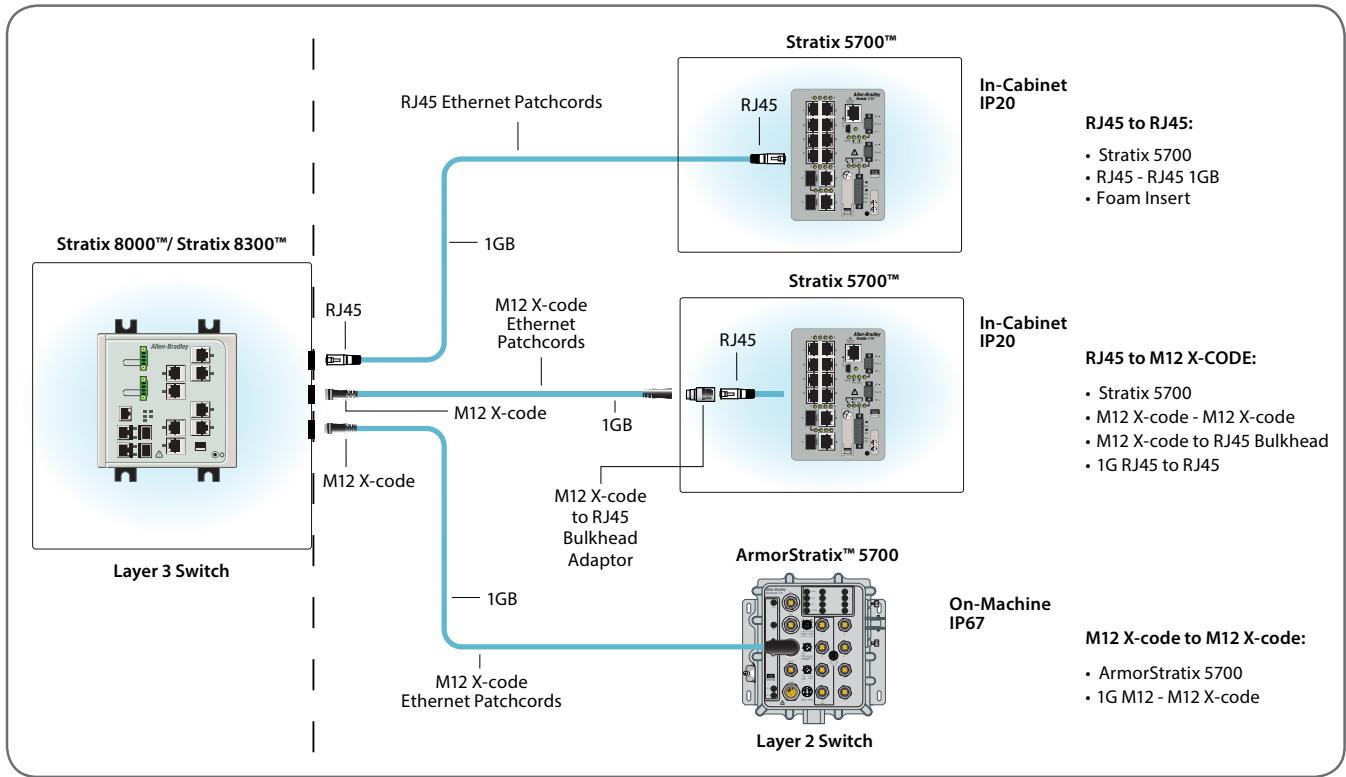
The male M12 connector features X-code keying alignment which allows for blind-mating while the recessed pins within the die-cast metal shield prevent damage to the pins during coupling. Equipped with an overmolded housing, these tough cordsets and patchcords are rated IP67 and can withstand harsh industrial environments where extreme vibration, shock, chemicals, and temperature are found.

The fixed-position front contacts of the RJ45 connectors ensure plug quality and consistent mating with outlets. Suitable for IP20 industrial applications, the RJ45 features a rugged strain relief and latch mechanism for secure connection.

Our Ethernet media connects with Allen-Bradley Stratix™ Ethernet switches, programmable controllers, PanelView™ graphic terminals and drives. We offer a complete portfolio of industrial-grade Ethernet physical media that provide seamless connectivity for your Integrated Architecture and components.

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## Customer Application



RJ45 Gigabit Cordset				
Shielding	Connector Style	Cable Type	Cable Length	Catalog Number*
Foil and braided shield	Straight male	8-conductor, teal high-flex TPE	2 m (6.56 ft)	1585J-M8TG-2
Foil and braided shield	Right angle male	8-conductor, teal high-flex TPE	2 m (6.56 ft)	1585J-E8TG-2
RJ45 Gigabit Patchcords				
Foil and braided shield	RJ45 straight male	8-conductor (4 pair), teal high-flex TPE	2 m (6.56 ft)	1585J-M8TGJM-2
Foil and braided shield	RJ45 straight male to right angle male	8-conductor (4 pair), teal high-flex TPE	2 m (6.56 ft)	1585J-M8TGJE-2
Foil and braided shield	RJ45 right angle male to right angle male	8-conductor (4 pair), teal high-flex TPE	2 m (6.56 ft)	1585J-E8TGJE-2

\*Replace -2 (6.56 ft) with 5 (16.4 ft) or 10 m (32.8 ft) for additional standard cable lengths.

M12 X-code to M12 X-code Patchcords				
Shielding	Connector Style	Cable Type	Cable Length	Catalog Number**
Foil and braided shield	Straight male	Shielded teal PUR, 4 twisted pairs, 26 AWG, Industrial Cat 6, UL Listed, sun light and oil resistant	1 m (3.28 ft)	1585D-M8UGDM-1
M12 X-code to RJ45 Patchcord				
Foil and braided shield	Straight male	Shielded teal PUR, 4 twisted pairs, 26 AWG, Industrial Cat 6, UL Listed, sun light and oil resistant	1 m (3.28 ft)	1585D-M8UGJM-1

\*\*Replace -1 (desired length in meters i.e., 1585D-M8UGDM-1 for a 1 m (3.28 ft) cable) with 2 m (6.56 ft), 3 m (9.84 ft), 4 m (13.1 ft), 5 m (16.4 ft), 10 m (32.8 ft), 15 m (49.5 ft), 20 m (65.6 ft), 30 m (98.42 ft), or 40 m (131.23 ft) for additional standard cable lengths.

Accessories	
Description	Catalog Number
Female M12 X-code receptacle to RJ45 female adaptor right angle	1585A-DD8JD

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