



## SENSOR/ACTUATOR M8M12 CABLE ASSEMBLIES

M8M12 cable assemblies are designed for applications such as sensors, robotics & production machinery & equipment, where extreme temperatures and harsh environments are likely to be encountered. These cable assemblies are also ideal for non-industrial applications where compact, robust and reliable connections are required to withstand rigorous environmental elements.

TE provides a full solution with shielded and non-shielded cable assembly options that help customers easily connect to advanced industrial networks. The new product line meets the IP67 rating for protection against dust and water ingress; they also provide protection against electromagnetic radiation, chemicals and mechanical stress commonly found in industrial environments.

Designed as industry standard solutions, these quick-turn cable assemblies help to reduce unnecessary downtime and help maintain continuous operations in critical conditions. TE's cross-industry expertise allows it to offer customized solutions through a broad cable assembly portfolio that includes connectivity to many industry standards serving various customer needs.

TE's M8/M12 cable assemblies are available as single-ended or double-ended, in straight and angled versions, with shielded and un-shielded variants. Various cable types are offered depending on the application requirements. Cable sheathing is in PVC or PUR. The predefined offering in length of 0.5, 1, 1.5, 3, 5, 7 and 10 meters covers a vast range of customer needs on the market. Customized cable assemblies in different lengths provide a solution for specific needs. All can be used in combination with TE's male/female connectors and I/O Modules.

## KEY FEATURES

- IP67 rated: dust and waterproof
- Overmolded PVC or PUR cable assemblies/Shielded & non shielded versions
- Key options: A coded
- M12 Positions: 2, 3, 4, 5 & 8 poles
- M8 Positions: 3 & 4 poles
- M8 & M12 single ended cable assemblies
- M8 & M12 double ended cable assemblies
- M8 to M12 cable assemblies
- Cable length options: 0.5 m, 1 m, 1.5 m, 3 m, 5 m, 7 m, and 10 m

## BENEFITS

- M12 Cable Assemblies are IP67 sealed and tested in TE's factory to eliminate the possibility of false wiring & to ensure robust connection
- Reduce downtime in harsh environments with reliable industry standard solution that includes quick turn, prototype cable assemblies.
- Full solution offering including customized and general market cable assemblies enables 1-stopshopping and reduced TCO

## APPLICATIONS

- Industrial Communications
- Industrial Machinery
- Industrial automation
- Robotics
- Machine tools
- Semiconductor manufacturing
- Manufacturing of solenoid and sensor valves
- Process control systems
- Vision systems
- Electronics manufacturing

## MECHANICAL

- Durability: 100 cycles
- Degree of protection: IP67
- Temperature Ratings:
  - PVC:
    - Fixed: -40°C to +80°C
    - Flexible: -25°C to +80°C
  - PUR:
    - Fixed: -10°C to +80°C
    - Flexible: -5°C to +80°C

## ELECTRICAL

- Voltage rating
  - M12:
    - 250V ( $\leq 4$  way)
    - 60V (5 way)
    - 30V ( $> 5$  way)
  - M8:
    - 60V (3 way)
    - 30V (4 & 5 pos)
- Current rating
  - M12 A Coding
    - 2 - 5 ways = 4A
    - 6 - 8 ways = 2 A
  - M8: 3A
- Insulation Resistance: 100M $\Omega$  Min.

## MATERIALS

- Contact: Brass, Gold Flash Plating
- Nut: Brass, Nickel plating
- O-ring: Silicon rubber
- Spring: Stainless steel
- Over-molding: TPU
- Housing: PA
- M12 Cable: 22 AWG, 2/3/4/5 core, with or without Foil, Drain, Braid Shield RoHS; Cable Jacket material: PVC or PUR
- M12 Cable: 24 AWG, 8 core, with or without Foil, Drain, Braid Shield RoHS; Cable Jacket material: PVC or PUR
- M8 Cable: 24 AWG, 3/4 core, with or without Foil, Drain, Braid Shield RoHS; Cable Jacket material: PVC or PUR

## STANDARDS & APPLICATIONS

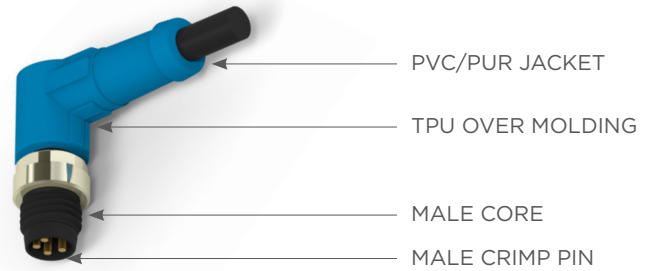
- Product Specification: 108-106140
- Application Specification: 114-137144
- UL Standard: UL2238
- IEC 61076-2-101: Detail specification for M12 connectors with screw-locking
- IEC 61076-2-104: Detail specification with M8 screw-locking or snap-locking
- IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
- IEC-60529: Degree of protection provided by enclosures (IP Code)

# Sensor/Actuator M8M12 Cable Assemblies

## M8 Single Ended Cable Assembly

M8 cable assemblies T405/T406 series

STANDARD: IEC61076-2-104



# T40 S A X W Y O MN -00L

S	Application Type - Shield/Unshielded
5	Unshielded
6	Shield

A	Single/Double
1	Single end
2	Double end

X	Connector Type for Single End
1	M8 Straight, Male
2	M8 Right angle, Male
3	M8 Straight, Female
4	M8 Right angle, Female

W	Cable Material Type
1	Black PVC
2	Gray PUR

MN	Position
03	3P
04	4P

Y	Connector Type for Double End
0	N/A
1	M8 Straight, Male
2	M8 Right angle, Male
3	M8 Straight, Female
4	M8 Right angle, Female
5	M12 Straight, Male
6	M12 Right angle, Male
7	M12 Straight, Female
8	M12 Right angle, Female

-00L	Cable Length
-001	0.5M
-002	1.0M
-003	1.5M
-004	3.0M
-005	5.0M
-006	7.0M
-007	10.0M
-XXX	Customized Cable Length
-XX0	XX M
-XX5	XX.5 M

Wiring Diagram-M8 cable assembly Unshielded*			
From Pin	Poles		To Pin
	3	4	
1	Brown	Brown	1
2	-	White	2
3	Blue	Blue	3
4	Black	Black	4

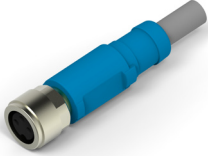
Wiring Diagram-M8 cable assembly Shielded*			
From Pin	Poles		To Pin
	3	4	
1	Brown	Brown	1
2	-	White	2
3	Blue	Blue	3
4	Black	Black	4
Shielded	Metal Nut	Metal Nut	Shielded

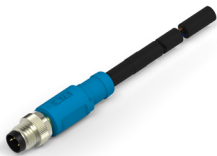
\* This wire diagram is applicable to all M8 cable assemblies listed in this flyer.

## Sensor/Actuator M8M12 Cable Assemblies

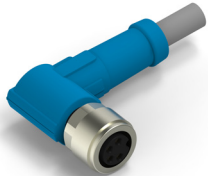
### PRODUCT OFFERINGS - M8 Single Ended Cable Assembly

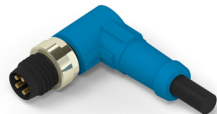
#### M8 STR SINGLE ENDED CABLE ASSEMBLY

PN	Part Description	Pos	Type	Cable Material	Shielded/Unshielded
T4051320003-001	M8 FS 3P PUR CABLE 0.5M	3	Female Straight	PUR	Unshielded
T4061320003-001	M8 FS 3P PUR CABLE 0.5M SH				Shielded
T4051310003-001	M8 FS 3P PVC CABLE 0.5M			PVC	Unshielded
T4061310003-001	M8 FS 3P PVC CABLE 0.5M SH				Shielded
T4051320004-001	M8 FS 4P PUR CABLE 0.5M	4		PUR	Unshielded
T4061320004-001	M8 FS 4P PUR CABLE 0.5M SH				Shielded
T4051310004-001	M8 FS 4P PVC CABLE 0.5M			PVC	Unshielded
T4061310004-001	M8 FS 4P PVC CABLE 0.5M SH				Shielded

PN	Part Description	Pos	Type	Cable Material	Shielded/Unshielded
T4051120003-001	M8 MS 3P PUR CABLE 0.5M	3	Male Straight	PUR	Unshielded
T4061120003-001	M8 MS 3P PUR CABLE 0.5M SH				Shielded
T4051110003-001	M8 MS 3P PVC CABLE 0.5M			PVC	Unshielded
T4061110003-001	M8 MS 3P PVC CABLE 0.5M SH				Shielded
T4051120004-001	M8 MS 4P PUR CABLE 0.5M	4		PUR	Unshielded
T4061120004-001	M8 MS 4P PUR CABLE 0.5M SH				Shielded
T4051110004-001	M8 MS 0.5M 4P PVC CABLE 0.5M			PVC	Unshielded
T4061110004-001	M8 MS 4P PVC CABLE 0.5M SH				Shielded

#### M8 R/A SINGLE ENDED CABLE ASSEMBLY

PN	Part Description	Pos	Type	Cable Material	Shielded/Unshielded
T4051420003-001	M8 FR 3P PUR CABLE 0.5M	3	Female Right Angle	PUR	Unshielded
T4061420003-001	M8 FR 3P PUR CABLE 0.5M SH				Shielded
T4051410003-001	M8 FR 3P PVC CABLE 0.5M			PVC	Unshielded
T4061410003-001	M8 FR 3P PVC CABLE 0.5M SH				Shielded
T4051420004-001	M8 FR 4P PUR CABLE 0.5M	4		PUR	Unshielded
T4061420004-001	M8 FR 4P PUR CABLE 0.5M SH				Shielded
T4051410004-001	M8 FR 4P PVC CABLE 0.5M			PVC	Unshielded
T4061410004-001	M8 FR 4P PVC CABLE 0.5M SH				Shielded

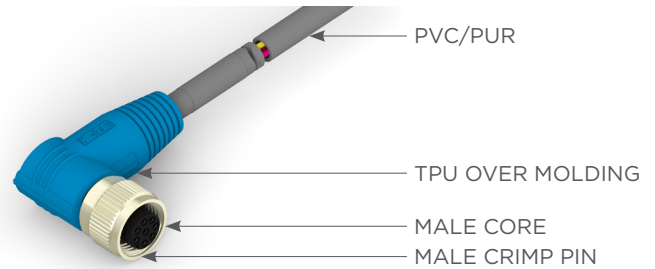
PN	Part Description	Pos	Type	Cable Material	Shielded/Unshielded
T4051220003-001	M8 MR 3P PUR CABLE 0.5M	3	Male Right Angle	PUR	Unshielded
T4061220003-001	M8 MR 3P PUR CABLE 0.5M SH				Shielded
T4051210003-001	M8 MR 3P PVC CABLE 0.5M			PVC	Unshielded
T4061210003-001	M8 MR 3P PVC CABLE 0.5M SH				Shielded
T4051220004-001	M8 MR 4P PUR CABLE 0.5M	4		PUR	Unshielded
T4061220004-001	M8 MR 4P PUR CABLE 0.5M SH				Shielded
T4051210004-001	M8 MR 4P PVC CABLE 0.5M			PVC	Unshielded
T4061210004-001	M8 MR 4P PVC CABLE 0.5M SH				Shielded

# Sensor/Actuator M8M12 Cable Assemblies

## M12 Single Ended Cable Assembly

M12 cable assemblies T415/T416 series

STANDARD: IEC61076-2-101



# T41 S A X W Y C MN -00L

S	Shield/Unshielded
5	Unshielded
6	Shield

A	Single/Double End
1	Single end
2	Double end

X	Connector Type for Single End
1	M12 Straight, Male
2	M12 Right angle, Male
3	M12 Straight, Female
4	M12 Right angle, Female

W	Cable Material Type
1	Black PVC
2	Gray PUR

MN	Position
03	3P
04	4P
05	5P
08	8P

Y	Connector Type for Double End
0	N/A
1	M12 Straight, Male
2	M12 Right angle, Male
3	M12 Straight, Female
4	M12 Right angle, Female

C	Code
0	A Code

-00L	Cable Length
-001	0.5M
-002	1.0M
-003	1.5M
-004	3.0M
-005	5.0M
-006	7.0M
-007	10.0M
-XXX	Customized Cable Length
-XX0	XX M
-XX5	XX.5 M

### Wiring Diagram-M12 cable assembly Unshielded\*

From Pin	Poles					To Pin
	2	3	4	5	8	
1	Brown	Brown	Brown	Brown	White	1
2	-	-	White	White	Brown	2
3	Blue	Blue	Blue	Blue	Green	3
4	-	Black	Black	Black	Yellow	4
5	-	-	-	Gray	Gray	5
6	-	-	-	-	Pink	6
7	-	-	-	-	Blue	7
8	-	-	-	-	Red	8

### Wiring Diagram-M12 cable assembly Shielded\*

From Pin	Poles					To Pin
	2	3	4	5	8	
1	Brown	Brown	Brown	Brown	White	1
2	-	-	White	White	Brown	2
3	Blue	Blue	Blue	Blue	Green	3
4	-	Black	Black	Black	Yellow	4
5	-	-	-	Gray	Gray	5
6	-	-	-	-	Pink	6
7	-	-	-	-	Blue	7
8	-	-	-	-	Red	8
Shielded	Metal Nut	Metal Nut	Metal Nut	Metal Nut	Metal Nut	Shielded

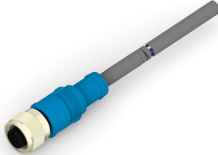
\* This wire diagram is applicable to all M12 cable assemblies listed in this flyer.

## Sensor/Actuator M8M12 Cable Assemblies


### PRODUCT OFFERINGS - M12 A-Code Single Ended Cable Assembly

#### M12 A-CODE STR SINGLE ENDED CABLE ASSEMBLY

PN	Part Description	Code	Pos	Type	Cable Materials	Shield/Unshielded
T4151320002-001	M12 FS 2P PUR CABLE 0.5M	A	2	Female Straight	PUR	Unshielded
T4161320002-001	M12 FS 2P PUR CABLE 0.5M SH					Shielded
T4151310002-001	M12 FS 2P PVC CABLE 0.5M		PVC		Unshielded	
T4161310002-001	M12 FS 2P PVC CABLE 0.5M SH				Shielded	
T4151320003-001	M12 FS 3P PUR CABLE 0.5M		3		PUR	Unshielded
T4161320003-001	M12 FS 3P PUR CABLE 0.5M SH					Shielded
T4151310003-001	M12 FS 3P PVC CABLE 0.5M		PVC		Unshielded	
T4161310003-001	M12 FS 3P PVC CABLE 0.5M SH				Shielded	
T4151320004-001	M12 FS 4P PUR CABLE 0.5M		4		PUR	Unshielded
T4161320004-001	M12 FS 4P PUR CABLE 0.5M SH					Shielded
T4151310004-001	M12 FS 4P PVC CABLE 0.5M		PVC		Unshielded	
T4161310004-001	M12 FS 4P PVC CABLE 0.5M SH				Shielded	
T4151320005-001	M12 FS 5P PUR CABLE 0.5M		5		PUR	Unshielded
T4161320005-001	M12 FS 5P PUR CABLE 0.5M SH					Shielded
T4151310005-001	M12 FS 5P PVC CABLE 0.5M		PVC		Unshielded	
T4161310005-001	M12 FS 5P PVC CABLE 0.5M SH				Shielded	
T4151320008-001	M12 FS 8P PUR CABLE 0.5M		8		PUR	Unshielded
T4161320008-001	M12 FS 8P PUR CABLE 0.5M SH					Shielded
T4151310008-001	M12 FS 8P PVC CABLE 0.5M		PVC		Unshielded	
T4161310008-001	M12 FS 8P PVC CABLE 0.5M SH				Shielded	



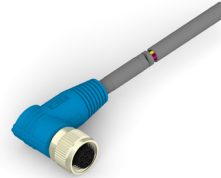
PN	Part Description	Code	Pos	Type	Cable Materials	Shield/Unshielded
T4151120002-001	M12 MS 2P PUR CABLE 0.5M	A	2	Male Straight	PUR	Unshielded
T4161120002-001	M12 MS 2P PUR CABLE 0.5M SH					Shielded
T4151110002-001	M12 MS 2P PVC CABLE 0.5M		PVC		Unshielded	
T4161110002-001	M12 MS 2P PVC CABLE 0.5M SH				Shielded	
T4151120003-001	M12 MS 3P PUR CABLE 0.5M		3		PUR	Unshielded
T4161120003-001	M12 MS 3P PUR CABLE 0.5M SH					Shielded
T4151110003-001	M12 MS 3P PVC CABLE 0.5M		PVC		Unshielded	
T4161110003-001	M12 MS 3P PVC CABLE 0.5M SH				Shielded	
T4151120004-001	M12 MS 4P PUR CABLE 0.5M		4		PUR	Unshielded
T4161120004-001	M12 MS 4P PUR CABLE 0.5M SH					Shielded
T4151110004-001	M12 MS 4P PVC CABLE 0.5M		PVC		Unshielded	
T4161110004-001	M12 MS 4P PVC CABLE 0.5M SH				Shielded	
T4151120005-001	M12 MS 5P PUR CABLE 0.5M		5		PUR	Unshielded
T4161120005-001	M12 MS 5P PUR CABLE 0.5M SH					Shielded
T4151110005-001	M12 MS 5P PVC CABLE 0.5M		PVC		Unshielded	
T4161110005-001	M12 MS 5P PVC CABLE 0.5M SH				Shielded	
T4151120008-001	M12 MS 8P PUR CABLE 0.5M		8		PUR	Unshielded
T4161120008-001	M12 MS 8P PUR CABLE 0.5M SH					Shielded
T4151110008-001	M12 MS 8P PVC CABLE 0.5M		PVC		Unshielded	
T4161110008-001	M12 MS 8P PVC CABLE 0.5M SH				Shield	



## Sensor/Actuator M8M12 Cable Assemblies

### M12 A-CODE R/A SINGLE ENDED CABLE ASSEMBLY

PN	Part Description	Code	Pos	Type	Cable Materials	Shield/Unshielded
T4151420002-001	M12 FR 2P PUR CABLE 0.5M	A	2	Female	PUR	Unshielded
T4161420002-001	M12 FR 2P PUR CABLE 0.5M SH					Shield
T4151410002-001	M12 FR 2P PVC CABLE 0.5M		PVC		Unshielded	
T4161410002-001	M12 FR 2P PVC CABLE 0.5M SH				Shield	
T4151420003-001	M12 FR 3P PUR CABLE 0.5M		3		PUR	Unshielded
T4161420003-001	M12 FR 3P PUR CABLE 0.5M SH					Shield
T4151410003-001	M12 FR 3P PVC CABLE 0.5M				PVC	Unshielded
T4161410003-001	M12 FR 3P PVC CABLE 0.5M SH					Shield
T4151420004-001	M12 FR 4P PUR CABLE 0.5M		4		PUR	Unshielded
T4161420004-001	M12 FR 4P PUR CABLE 0.5M SH					Shield
T4151410004-001	M12 FR 4P PVC CABLE 0.5M				PVC	Unshielded
T4161410004-001	M12 FR 4P PVC CABLE 0.5M SH					Shield
T4151420005-001	M12 FR 5P PUR CABLE 0.5M		5		PUR	Unshielded
T4161420005-001	M12 FR 5P PUR CABLE 0.5M SH					Shield
T4151410005-001	M12 FR 5P PVC CABLE 0.5M				PVC	Unshielded
T4161410005-001	M12 FR 5P PVC CABLE 0.5M SH					Shield
T4151420008-001	M12 FR 8P PUR CABLE 0.5M	8	PUR	Unshielded		
T4161420008-001	M12 FR 8P PUR CABLE 0.5M SH			Shield		
T4151410008-001	M12 FR 8P PVC CABLE 0.5M		PVC	Unshielded		
T4161410008-001	M12 FR 8P PVC CABLE 0.5M SH			Shield		





PN	Part Description	Code	Pos	Type	Cable Materials	Shield/Unshielded
T4151220002-001	M12 MR 2P PUR CABLE 0.5M	A	2	Male	PUR	Unshielded
T4161220002-001	M12 MR 2P PUR CABLE 0.5M SH					Shield
T4151210002-001	M12 MR 2P PVC CABLE 0.5M		PVC		Unshielded	
T4161210002-001	M12 MR 2P PVC CABLE 0.5M SH				Shield	
T4151220003-001	M12 MR 3P PUR CABLE 0.5M		3		PUR	Unshielded
T4161220003-001	M12 MR 3P PUR CABLE 0.5M SH					Shield
T4151210003-001	M12 MR 3P PVC CABLE 0.5M				PVC	Unshielded
T4161210003-001	M12 MR 3P PVC CABLE 0.5M SH					Shield
T4151220004-001	M12 MR 4P PUR CABLE 0.5M		4		PUR	Unshielded
T4161220004-001	M12 MR 4P PUR CABLE 0.5M SH					Shield
T4151210004-001	M12 MR 4P PVC CABLE 0.5M				PVC	Unshielded
T4161210004-001	M12 MR 4P PVC CABLE 0.5M SH					Shield
T4151220005-001	M12 MR 5P PUR CABLE 0.5M		5		PUR	Unshielded
T4161220005-001	M12 MR 5P PUR CABLE 0.5M SH					Shield
T4151210005-001	M12 MR 5P PVC CABLE 0.5M				PVC	Unshielded
T4161210005-001	M12 MR 5P PVC CABLE 0.5M SH					Shield
T4151220008-001	M12 MR 8P PUR CABLE 0.5M	8	PUR	Unshielded		
T4161220008-001	M12 MR 8P PUR CABLE 0.5M SH			Shield		
T4151210008-001	M12 MR 8P PVC CABLE 0.5M		PVC	Unshielded		
T4161210008-001	M12 MR 8P PVC CABLE 0.5M SH			Shield		



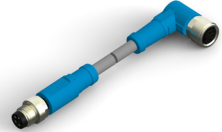
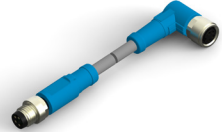
## Sensor/Actuator M8M12 Cable Assemblies

### PRODUCT OFFERINGS - M8 to M8 Double Ended Cable Assembly

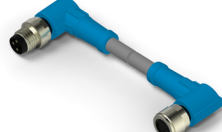
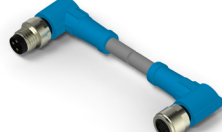
#### M8 MALE STR - FEMALE STR DOUBLE ENDED CABLE ASSEMBLY

PN	Part Description	Pos	Type	Cable Materials	Shield/Unshielded	
T4052123003-001	M8 MS 3P - M8 FS 3P PUR CABLE 0.5M	3	 MS-FS	PUR	Unshielded	
T4062123003-001	M8 MS 3P - M8 FS 3P PUR CABLE 0.5M SH				Shield	
T4052113003-001	M8 MS 3P - M8 FS 3P PVC CABLE 0.5M			PVC	Unshielded	
T4062113003-001	M8 MS 3P - M8 FS 3P PVC CABLE 0.5M SH				Shield	
T4052123004-001	M8 MS 4P - M8 FS 4P PUR CABLE 0.5M	4		 MS-FS	PUR	Unshielded
T4062123004-001	M8 MS 4P - M8 FS 4P PUR CABLE 0.5M SH					Shield
T4052113004-001	M8 MS 4P - M8 FS 4P PVC CABLE 0.5M				PVC	Unshielded
T4062113004-001	M8 MS 4P - M8 FS 4P PVC CABLE 0.5M SH					Shield



#### M8 MALE STR - FEMALE R/A DOUBLE ENDED CABLE ASSEMBLY

PN	Part Description	Pos	Type	Cable Materials	Shield/Unshielded	
T4052124003-001	M8 MS 3P - M8 FR 3P PUR CABLE 0.5M	3	 MS-FR	PUR	Unshielded	
T4062124003-001	M8 MS 3P - M8 FR 3P PUR CABLE 0.5M SH				Shield	
T4052114003-001	M8 MS 3P - M8 FR 3P PVC CABLE 0.5M			PVC	Unshielded	
T4062114003-001	M8 MS 3P - M8 FR 3P PVC CABLE 0.5M SH				Shield	
T4052124004-001	M8 MS 4P - M8 FR 4P PUR CABLE 0.5M	4		 MS-FR	PUR	Unshielded
T4062124004-001	M8 MS 4P - M8 FR 4P PUR CABLE 0.5M SH					Shield
T4052114004-001	M8 MS 4P - M8 FR 4P PVC CABLE 0.5M				PVC	Unshielded
T4062114004-001	M8 MS 4P - M8 FR 4P PVC CABLE 0.5M SH					Shield

#### M8 MALE R/A - FEMALE R/A DOUBLE ENDED CABLE ASSEMBLY

PN	Part Description	Pos	Type	Cable Materials	Shield/Unshielded	
T4052224003-001	M8 MR 3P - M8 FR 3P PUR CABLE 0.5M	3	 MR-FR	PUR	Unshielded	
T4062224003-001	M8 MR 3P - M8 FR 3P PUR CABLE 0.5M SH				Shield	
T4052214003-001	M8 MR 3P - M8 FR 3P PVC CABLE 0.5M			PVC	Unshielded	
T4062214003-001	M8 MR 3P - M8 FR 3P PVC CABLE 0.5M SH				Shield	
T4062224004-001	M8 MR 4P - M8 FR 3P PUR CABLE 0.5M	4		 MR-FR	PUR	Unshielded
T4052224004-001	M8 MR 4P - M8 FR 3P PUR CABLE 0.5M SH					Shield
T4062214004-001	M8 MR 4P - M8 FR 3P PVC CABLE 0.5M				PVC	Unshielded
T4052214004-001	M8 MR 4P - M8 FR 3P PVC CABLE 0.5M SH					Shield

#### M8 MALE R/A - FEMALE STR DOUBLE ENDED CABLE ASSEMBLY

PN	Part Description	Pos	Type	Cable Materials	Shield/Unshielded	
T4062223003-001	M8 MR 3P - M8 FS 3P PUR CABLE 0.5M	3	 MR-FS	PUR	Unshield	
T4052223003-001	M8 MR 3P - M8 FS 3P PUR CABLE 0.5M SH				Shielded	
T4062213003-001	M8 MR 3P - M8 FS 3P PVC CABLE 0.5M			PVC	Unshield	
T4052213003-001	M8 MR 3P - M8 FS 3P PVC CABLE 0.5M SH				Shielded	
T4052223004-001	M8 MR 4P - M8 FS 3P PUR CABLE 0.5M	4		 MR-FS	PUR	Unshielded
T4062223004-001	M8 MR 4P - M8 FS 3P PUR CABLE 0.5M SH					Shield
T4052213004-001	M8 MR 4P - M8 FS 3P PVC CABLE 0.5M				PVC	Unshielded
T4062213004-001	M8 MR 4P - M8 FS 3P PVC CABLE 0.5M SH					Shield



## Sensor/Actuator M8M12 Cable Assemblies

### PRODUCT OFFERINGS - M12 to M12 A-Code Double Ended Cable Assembly

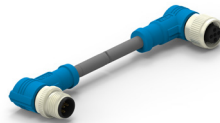
#### M12 A-CODE MALE STR - FEMALE STR DOUBLE ENDED CABLE ASSEMBLY

PN	Part Description	Pos	Type	Code	Cable Materials	Shield/Unshielded
T4152123002-001	M12 MS 2P - M12 FS 2P PUR CABLE 0.5M	2	MS-FS	A	PUR	Unshielded
T4162123002-001	M12 MS 2P - M12 FS 2P PUR CABLE 0.5M SH					Shield
T4152113002-001	M12 MS 2P - M12 FS 2P PVC CABLE 0.5M	PVC			Unshielded	
T4162113002-001	M12 MS 2P - M12 FS 2P PVC CABLE 0.5M SH				Shield	
T4152123003-001	M12 MS 3P - M12 FS 3P PUR CABLE 0.5M	3			PUR	Unshielded
T4162123003-001	M12 MS 3P - M12 FS 3P PUR CABLE 0.5M SH					Shield
T4152113003-001	M12 MS 3P - M12 FS 3P PVC CABLE 0.5M	PVC			Unshielded	
T4162113003-001	M12 MS 3P - M12 FS 3P PVC CABLE 0.5M SH				Shield	
T4152123004-001	M12 MS 4P - M12 FS 4P PUR CABLE 0.5M	4			PUR	Unshielded
T4162123004-001	M12 MS 4P - M12 FS 4P PUR CABLE 0.5M SH					Shield
T4152113004-001	M12 MS 4P - M12 FS 4P PVC CABLE 0.5M	PVC			Unshielded	
T4162113004-001	M12 MS 4P - M12 FS 4P PVC CABLE 0.5M SH				Shield	
T4152123005-001	M12 MS 5P - M12 FS 5P PUR CABLE 0.5M	5	PUR	Unshielded		
T4162123005-001	M12 MS 5P - M12 FS 5P PUR CABLE 0.5M SH			Shield		
T4152113005-001	M12 MS 5P - M12 FS 5P PVC CABLE 0.5M	PVC	Unshielded			
T4162113005-001	M12 MS 5P - M12 FS 5P PVC CABLE 0.5M SH		Shield			



#### M12 A-CODE MALE R/A - FEMALE R/A DOUBLE ENDED CABLE ASSEMBLY





PN	Part Description	Pos	Type	Code	Cable Materials	Shield/Unshielded
T4152224002-001	M12 MR 2P - M12 FR 2P PUR CABLE 0.5M	2	MS-FS	A	PUR	Unshielded
T4162224002-001	M12 MR 2P - M12 FR 2P PUR CABLE 0.5M SH					Shield
T4152214002-001	M12 MR 2P - M12 FR 2P PVC CABLE 0.5M	PVC			Unshielded	
T4162214002-001	M12 MR 2P - M12 FR 2P PVC CABLE 0.5M SH				Shield	
T4152224003-001	M12 MR 3P - M12 FR 3P PUR CABLE 0.5M	3			PUR	Unshielded
T4162224003-001	M12 MR 3P - M12 FR 3P PUR CABLE 0.5M SH					Shield
T4152214003-001	M12 MR 3P - M12 FR 3P PVC CABLE 0.5M	PVC			Unshielded	
T4162214003-001	M12 MR 3P - M12 FR 3P PVC CABLE 0.5M SH				Shield	
T4152224004-001	M12 MR 4P - M12 FR 4P PUR CABLE 0.5M	4			PUR	Unshielded
T4162224004-001	M12 MR 4P - M12 FR 4P PUR CABLE 0.5M SH					Shield
T4152214004-001	M12 MR 4P - M12 FR 4P PVC CABLE 0.5M	PVC			Unshielded	
T4162214004-001	M12 MR 4P - M12 FR 4P PVC CABLE 0.5M SH				Shield	
T4152224005-001	M12 MR 5P - M12 FR 5P PUR CABLE 0.5M	5	PUR	Unshielded		
T4162224005-001	M12 MR 5P - M12 FR 5P PUR CABLE 0.5M SH			Shield		
T4152214005-001	M12 MR 5P - M12 FR 5P PVC CABLE 0.5M	PVC	Unshielded			
T4162214005-001	M12 MR 5P - M12 FR 5P PVC CABLE 0.5M SH		Shield			







## Sensor/Actuator M8M12 Cable Assemblies

### PRODUCT OFFERINGS - M12 to M12 A-Code Double Ended Cable Assembly

#### M12 A-CODE MALE STR - FEMALE R/A DOUBLE ENDED CABLE ASSEMBLY

PN	Part Description	Pos	Type	Code	Cable Materials	Shield/Unshielded				
T4152124002-001	M12 MS 2P - M12 FR 2P PUR CABLE 0.5M	2		A	PUR	Unshielded				
T4162124002-001	M12 MS 2P - M12 FR 2P PUR CABLE 0.5M SH					Shield				
T4152114002-001	M12 MS 2P - M12 FR 2P PVC CABLE 0.5M	3			MS-FR	PUR	Unshielded			
T4162114002-001	M12 MS 2P - M12 FR 2P PVC CABLE 0.5M SH						Shield			
T4152124003-001	M12 MS 3P - M12 FR 3P PUR CABLE 0.5M	3				A	PUR	Unshielded		
T4162124003-001	M12 MS 3P - M12 FR 3P PUR CABLE 0.5M SH							Shield		
T4152114003-001	M12 MS 3P - M12 FR 3P PVC CABLE 0.5M	4					PVC	Unshielded		
T4162114003-001	M12 MS 3P - M12 FR 3P PVC CABLE 0.5M SH							Shield		
T4152124004-001	M12 MS 4P - M12 FR 4P PUR CABLE 0.5M	4						A	PUR	Unshielded
T4162124004-001	M12 MS 4P - M12 FR 4P PUR CABLE 0.5M SH									Shield
T4152114004-001	M12 MS 4P - M12 FR 4P PVC CABLE 0.5M	5							PVC	Unshielded
T4162114004-001	M12 MS 4P - M12 FR 4P PVC CABLE 0.5M SH									Shield
T4152124005-001	M12 MS 5P - M12 FR 5P PUR CABLE 0.5M	5		A					PUR	Unshielded
T4162124005-001	M12 MS 5P - M12 FR 5P PUR CABLE 0.5M SH									Shield
T4152114005-001	M12 MS 5P - M12 FR 5P PVC CABLE 0.5M	5							PVC	Unshielded
T4162114005-001	M12 MS 5P - M12 FR 5P PVC CABLE 0.5M SH									Shield


#### M12 A-CODE MALE R/A - FEMALE STR DOUBLE ENDED CABLE ASSEMBLY

PN	Part Description	Pos	Type	Code	Cable Materials	Shield/Unshielded				
T4152223002-001	M12 MR 2P - M12 FS 2P PUR CABLE 0.5M	2		A	PUR	Unshielded				
T4162223002-001	M12 MR 2P - M12 FS 2P PUR CABLE 0.5M SH					Shield				
T4152213002-001	M12 MR 2P - M12 FS 2P PVC CABLE 0.5M	3			MR-FS	PUR	Unshielded			
T4162213002-001	M12 MR 2P - M12 FS 2P PVC CABLE 0.5M SH						Shield			
T4152223003-001	M12 MR 3P - M12 FS 3P PUR CABLE 0.5M	3				A	PUR	Unshielded		
T4162223003-001	M12 MR 3P - M12 FS 3P PUR CABLE 0.5M SH							Shield		
T4152213003-001	M12 MR 3P - M12 FS 3P PVC CABLE 0.5M	4					PVC	Unshielded		
T4162213003-001	M12 MR 3P - M12 FS 3P PVC CABLE 0.5M SH							Shield		
T4152223004-001	M12 MR 4P - M12 FS 4P PUR CABLE 0.5M	4						A	PUR	Unshielded
T4162223004-001	M12 MR 4P - M12 FS 4P PUR CABLE 0.5M SH									Shield
T4152213004-001	M12 MR 4P - M12 FS 4P PVC CABLE 0.5M	5							PVC	Unshielded
T4162213004-001	M12 MR 4P - M12 FS 4P PVC CABLE 0.5M SH									Shield
T4152223005-001	M12 MR 5P - M12 FS 5P PUR CABLE 0.5M	5		A					PUR	Unshielded
T4162223005-001	M12 MR 5P - M12 FS 5P PUR CABLE 0.5M SH									Shield
T4152213005-001	M12 MR 5P - M12 FS 5P PVC CABLE 0.5M	5							PVC	Unshielded
T4162213005-001	M12 MR 5P - M12 FS 5P PVC CABLE 0.5M SH									Shield

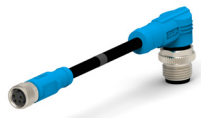
## Sensor/Actuator M8M12 Cable Assemblies

### PRODUCT OFFERINGS - M8 to M12 Double Ended Cable Assembly


#### M8 FEMALE STR - M12 MALE STR DOUBLE ENDED CABLE ASSEMBLY

PN	Part Description	Pos	Type	Cable Materials	Shield/Unshielded
T4052325003-001	M8 3P FS - M12 3P MS PUR CABLE 0.5M	3		PUR	Unshielded
T4052315003-001	M8 3P FS - M12 3P MS PVC CABLE 0.5M			PVC	
T4052325004-001	M8 4P FS - M12 4P MS PUR CABLE 0.5M	4		PUR	
T4052315004-001	M8 4P FS - M12 4P MS PVC CABLE 0.5M			PVC	


#### M8 FEMALE STR - M12 MALE R/A DOUBLE ENDED CABLE ASSEMBLY

PN	Part Description	Pos	Type	Cable Materials	Shield/Unshielded
T4052326003-001	M8 3P FS - M12 3P MR PUR CABLE 0.5M	3		PUR	Unshielded
T4052316003-001	M8 3P FS - M12 3P MR PVC CABLE 0.5M			PVC	
T4052326004-001	M8 4P FS - M12 4P MR PUR CABLE 0.5M	4		PUR	
T4052316004-001	M8 4P FS - M12 4P MR PVC CABLE 0.5M			PVC	

#### M8 FEMALE R/A - M12 MALE STR DOUBLE ENDED CABLE ASSEMBLY

PN	Part Description	Pos	Type	Cable Materials	Shield/Unshielded
T4052425003-001	M8 3P FR - M12 3P MS PUR CABLE 0.5M	3		PUR	Unshielded
T4052415003-001	M8 3P FR - M12 3P MS PVC CABLE 0.5M			PVC	
T4052425004-001	M8 4P FR - M12 4P MS PUR CABLE 0.5M	4		PUR	
T4052415004-001	M8 4P FR - M12 4P MS PVC CABLE 0.5M			PVC	


#### M8 FEMALE R/A - M12 MALE R/A DOUBLE ENDED CABLE ASSEMBLY

PN	Part Description	Pos	Type	Cable Materials	Shield/Unshielded
T4052426003-001	M8 3P FR - M12 3P MR PUR CABLE 0.5M	3		PUR	Unshielded
T4052416003-001	M8 3P FR - M12 3P MR PVC CABLE 0.5M			PVC	
T4052426004-001	M8 4P FR - M12 4P MR PUR CABLE 0.5M	4		PUR	
T4052416004-001	M8 4P FR - M12 4P MR PVC CABLE 0.5M			PVC	


## Sensor/Actuator M8M12 Cable Assemblies

### PRODUCT OFFERINGS - M8 to M12 Double Ended Cable Assembly


#### M8 MALE STR - M12 FEMALE STR DOUBLE ENDED CABLE ASSEMBLY

PN	Part Description	Pos	Type	Cable Materials	Shield/Unshielded
T4052127003-001	M8 3P MS - M12 3P FS PUR CABLE 0.5M	3	 M8 MS -M12 FS	PUR	Unshielded
T4052117003-001	M8 3P MS - M12 3P FS PVC CABLE 0.5M			PVC	
T4052127004-001	M8 4P MS - M12 4P FS PUR CABLE 0.5M	4		PUR	
T4052117004-001	M8 4P MS - M12 4P FS PVC CABLE 0.5M			PVC	


#### M8 MALE STR - M12 FEMALE R/A DOUBLE ENDED CABLE ASSEMBLY

PN	Part Description	Pos	Type	Cable Materials	Shield/Unshielded
T4052128003-001	M8 3P MS - M12 3P FR PUR CABLE 0.5M	3	 M8 MS -M12 FR	PUR	Unshielded
T4052118003-001	M8 3P MS - M12 3P FR PVC CABLE 0.5M			PVC	
T4052128004-001	M8 4P MS - M12 4P FR PUR CABLE 0.5M	4		PUR	
T4052118004-001	M8 4P MS - M12 4P FR PVC CABLE 0.5M			PVC	

#### M8 MALE R/A - M12 FEMALE STR DOUBLE ENDED CABLE ASSEMBLY

PN	Part Description	Pos	Type	Cable Materials	Shield/Unshielded
T4052227003-001	M8 3P MR - M12 3P FS PUR CABLE 0.5M	3	 M8 MR -M12 FS	PUR	Unshielded
T4052217003-001	M8 3P MR - M12 3P FS PVC CABLE 0.5M			PVC	
T4052227004-001	M8 4P MR - M12 4P FS PUR CABLE 0.5M	4		PUR	
T4052217004-001	M8 4P MR - M12 4P FS PVC CABLE 0.5M			PVC	

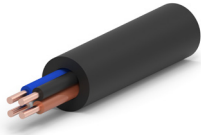
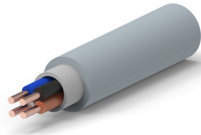
#### M8 MALE R/A - M12 FEMALE R/A DOUBLE ENDED CABLE ASSEMBLY

PN	Part Description	Pos	Type	Cable Materials	Shield/Unshielded
T4052228003-001	M8 3P MR - M12 3P FR PUR CABLE 0.5M	3	 M8 MR - M12 FR	PUR	Unshielded
T4052218003-001	M8 3P MR - M12 3P FR PVC CABLE 0.5M			PVC	
T4052228004-001	M8 4P MR - M12 4P FR PUR CABLE 0.5M	4		PUR	
T4052218004-001	M8 4P MR - M12 4P FR PVC CABLE 0.5M			PVC	


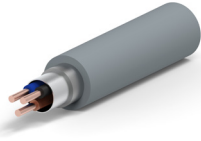
## Sensor/Actuator M8M12 Cable Assemblies

### Cable Specifications

#### M8 UNSHIELDED CABLE ASSEMBLIES

	M8 cable assembly unshielded PVC series		M8 cable assembly unshielded PUR series	
Image	<p>PVC</p> 		<p>PUR</p> 	
No. of conductors	3	4	3	4
Jacket material	PVC		PUR	
Jacket color	Black		Gray	
Cross section	24AWG		24AWG	
Construction	32/0.10mm		32/0.10mm	
Temp range-Fixed	-10°C-80°C		-40°C-80°C	
Temp range-Flexible	-5°C-80°C		-25°C-80°C	
Features	Flame Retardant, Rohs		Flame Retardant, oil resistant, Rohs	
Standards	UL758, UL1581, UL2464		UL758, UL1581, UL20549	

#### M8 SHIELDED CABLE ASSEMBLIES


	M8 cable assembly shielded PVC series		M8 cable assembly shielded PUR series	
Image	<p>PVC</p> 		<p>PUR</p> 	
No. of conductors	3	4	3	4
Jacket material	PVC		PUR	
Jacket color	Black		Gray	
Cross section	24AWG		24AWG	
Construction	Construction: 32/0.10mm Shield1: AL/Mylar Shield2: Tinned copper braid		Construction: 32/0.10mm Shield1: AL/Mylar Shield2: Tinned copper braid	
Temp range-Fixed	-10°C-80°C		-40°C-80°C	
Temp range-Flexible	-5°C-80°C		-25°C-80°C	
Features	Flame Retardant, Rohs		Flame Retardant, oil resistant, Rohs	
Standards	UL758, UL1581, UL2464		UL758, UL1581, UL20549	

# Sensor/Actuator M8M12 Cable Assemblies

## M12 UNSHIELDED CABLE ASSEMBLIES

	M12 PVC cable assembly unshielded series					M12 PUR cable assembly unshielded series				
Image										
No. of conductors	2	3	4	5	8	2	3	4	5	8
Jacket material	PVC					PUR				
Jacket color	Black					Gray				
Cross section	22AWG					22AWG	22AWG	22AWG	22AWG	24AWG
Construction	43/0.10mm	43/0.10mm	43/0.10mm	43/0.10mm	32/0.10mm	43/0.10mm	43/0.10mm	43/0.10mm	43/0.10mm	32/0.10mm
Temp range-Fixed	-10°C-80°C					-40°C-80°C				
Temp range-Flexible	-5°C-80°C					-25°C-80°C				
Features	Flame Retardant, Rohs					Flame Retardant, oil resistant, Rohs				
Standards	UL758, UL1581, UL2464					UL758, UL1581, UL20549				

## M12 SHIELDED CABLE ASSEMBLIES

	M12 cable assembly shielded series					M12 cable assembly shielded series				
Image										
No. of conductors	2	3	4	5	8	2	3	4	5	8
Jacket material	PVC					PUR				
Jacket color	Black					Gray				
Cross section	22AWG	22AWG	22AWG	22AWG	24AWG	22AWG	22AWG	22AWG	22AWG	24AWG
Construction	Construction: 43/0.10mm Shield1: AL/Mylar Shield2: Tinned copper braid			Construction: 32/0.10mm Shield1: AL/Mylar Shield2: Tinned copper braid		Construction: 43/0.10mm Shield1: AL/Mylar Shield2: Tinned copper braid			Construction: 2/0.10mm Shield1: AL/Mylar Shield2: Tinned copper braid	
Temp range-Fixed	-10°C-80°C					-40°C-80°C				
Temp range-Flexible	-5°C-80°C					-25°C-80°C				
Features	Flame Retardant, Rohs					Flame Retardant, oil resistant, Rohs				
Standards	UL758, UL1581, UL2464					UL758, UL1581, UL20549				

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