M8/M12 Connector Cable

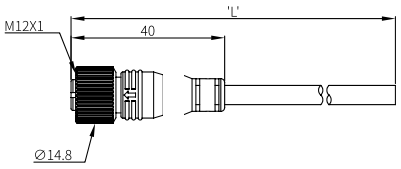
M12 Connector 4-Pin

Power	Connector 1		Connector 2	Wire spec.	Connection	Length	Feature	Application	Model
AC	M12 (Socket-Female)	4-pin 	2-wire	AWG 22 (0.08 mm, 60-core), Insulator diameter: Ø1.3 mm	Pin no. 1 → Wiring Brown; Pin no. 4 → Wiring Brown; Pin no. 2 → Wiring Blue; Pin no. 3 → Wiring Blue	2 m	PVC	Photoelectric sensors/ Proximity sensors / Safety door switches	GD-CIA2-2
						5 m			GD-CIA2-5
						2 m	Oil resistant PVC		GD-CIAH2-2
						5 m			GD-CIAH2-5
	M12 (Socket-Female), L type					2 m	PVC		GD-CLA2-2
						3 m			GD-CLA2-3
						5 m			GD-CLA2-5
						2 m	Oil resistant PVC		GD-CLAH2-2
						5 m			GD-CLAH2-5
	M12 (Plug-Male)	4-pin 	2-wire	AWG 22 (0.08 mm, 60-core), Insulator diameter: Ø1.3 mm	Pin no. 1 → Wiring Brown; Pin no. 4 → Wiring Brown; Pin no. 2 → Wiring Blue; Pin no. 3 → Wiring Blue	2 m	PVC		GD-CIA2-2P
						5 m			GD-CIA2-5P
						2 m	Oil resistant PVC		GD-CIAH2-2P
						5 m			GD-CIAH2-5P
	M12 (Plug-Male), L type					2 m	PVC		GD-CLA2-2P
						5 m			GD-CLA2-5P
						2 m	Oil resistant PVC		GD-CLAH2-2P
						5 m			GD-CLAH2-5P

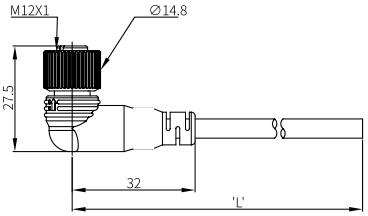
■ Dimensions

- Unit: mm.
- Cable thickness is different by cable material. (PVC: Ø 5 mm / Oilresistant PVC: Ø 6 mm)

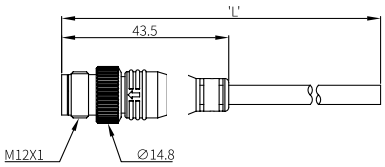
• Socket-Female



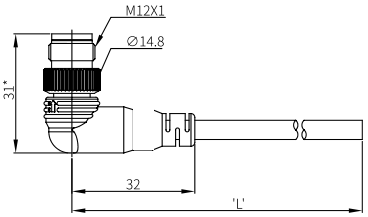
• Socket-Female, L type



• Plug-Male



• Plug-Male, L type



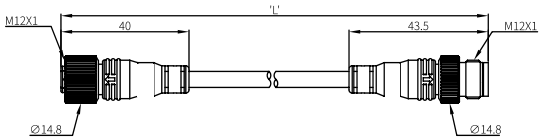
* Oil resistant PVC Model: 31.3

Power	Connector 1		Connector 2		Connection	Length	Feature	Application	Model
AC	M12 (Socket-Female)	4-pin 	M12 (Plug-Male)	4-pin 	Connector 1 Pin no. → Connector 2 Pin no. 2 3 → 2 3 1 4 → 1 4 • Pin 2 / 3, 1 / 4 are connected inside.	2 m	PVC	Photoelectric sensors/ Proximity sensors / Safety door switches	GD-C1A4-2
						5 m			GD-C1A4-5
	M12 (Socket-Female), L type		M12 (Plug-Male), L type			2 m			GD-C2A4-2
						5 m			GD-C2A4-5
	M12 (Socket-Female)		M12 (Plug-Male), L type			2 m			GD-C3A4-2
						5 m			GD-C3A4-5
	M12 (Socket-Female), L type		M12 (Plug-Male)			2 m			GD-C4A4-2
						5 m			GD-C4A4-5
	M12 (Plug-Male)	4-pin 	M12 (Plug-Male)	4-pin 	Connector 1 Pin no. → Connector 2 Pin no. 2 3 → 2 3 1 4 → 1 4 • Pin 2 / 3, 1 / 4 are connected inside.	2 m			GD-C1A4-2P
						5 m			GD-C1A4-5P

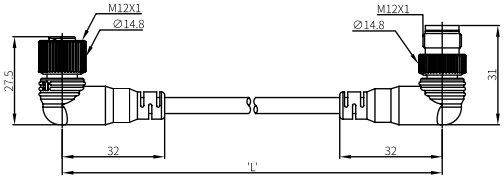
■ Dimensions

- Unit: mm.
- Cable thickness is different by cable material. (PVC: Ø 5 mm / Oil resistant PVC: Ø 6 mm)

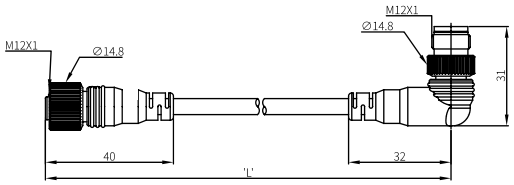
• Socket-Female : Plug-Male



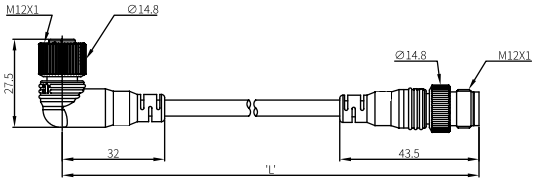
• Socket-Female, L type : Plug-Male, L type



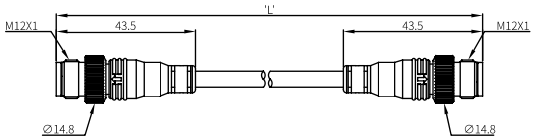
• Socket-Female : Plug-Male, L type



• Socket-Female, L type : Plug-Male



• Plug-Male: Plug-Male



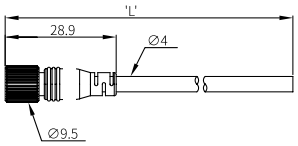
M8 Connector 4-Pin

Power	Connector 1		Connector 2	Wire spec.	Connection	Length	Feature	Application	Model
DC	M8 (Socket-Female)	4-pin 	4-wire	AWG 22 (0.08 mm, 60-core), Insulator diameter: Ø1.65 mm	Pin no. → Wiring 1 → Brown 2 → White 3 → Blue 4 → Black	2 m	PVC	Photoelectric sensors/ Proximity sensors	GD-CID408-2
						5 m			GD-CID408-5
						2 m	Oil resistant PVC		GD-CIDH408-2
						5 m			GD-CIDH408-5
	M8 (Socket-Female), L type					2 m	PVC		GD-CLD408-2
						5 m			GD-CLD408-5
						2 m	Oil resistant PVC		GD-CLDH408-2
						5 m			GD-CLDH408-5

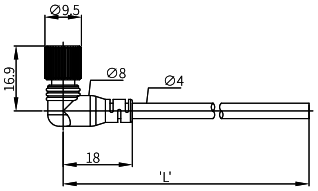
■ Dimensions

- Unit: mm.
- Cable thickness is different by cable material. (PVC: Ø 4 mm / Oil resistant PVC: Ø 6 mm)

• Socket-Female



• Socket-Female, L type

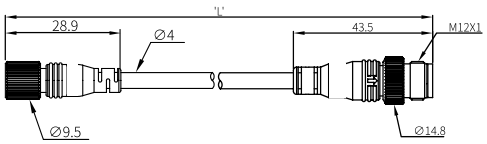


Power	Connector 1		Connector 2		Connection	Length	Feature	Application	Model
DC	M8 (Socket-Female)	4-pin 	M12 (Plug-Male)	4-pin 	Connector 1 Pin no. → Connector 2 Pin no. 1 → 1 2 → 2 3 → 3 4 → 4	2 m	PVC	Linear positioning sensors	GD-C1D4-2EB
						5 m			GD-C1D4-5EB
	M8 (Socket-Female), L type		M12 (Plug-Male), L type			2 m			GD-C2D4-2EB
						5 m			GD-C2D4-5EB
	M8 (Socket-Female)		M12 (Plug-Male), L type			2 m			GD-C3D4-2EB
						5 m			GD-C3D4-5EB
	M8 (Socket-Female), L type		M12 (Plug-Male)			2 m			GD-C4D4-2EB
						5 m			GD-C4D4-5EB
	M8 (Socket-Female)	4-pin 	M12 (Plug-Male)	4-pin 	Connector 1 Pin no. → Connector 2 Pin no. 1 → 1 2 → 2 3 → 3 4 → 4	2 m	Oil resistant PVC		GD-C1DH4-2EB
						5 m			GD-C1DH4-5EB
	M8 (Socket-Female), L type		M12 (Plug-Male), L type			2 m			GD-C2DH4-2EB
						5 m			GD-C2DH4-5EB
	M8 (Socket-Female)		M12 (Plug-Male), L type			2 m			GD-C3DH4-2EB
						5 m			GD-C3DH4-5EB
	M8 (Socket-Female), L type		M12 (Plug-Male)			2 m			GD-C4DH4-2EB
						5 m			GD-C4DH4-5EB

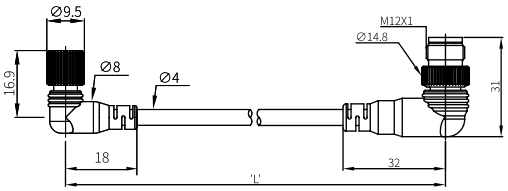
■ Dimensions

- Unit: mm.
- Cable thickness is different by cable material. (PVC: Ø 4 mm / Oil resistant PVC: Ø 6 mm)

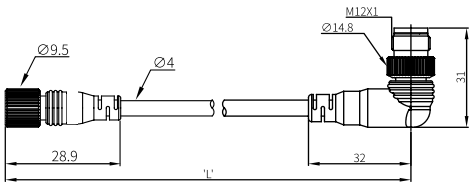
• Socket-Female : Plug-Male



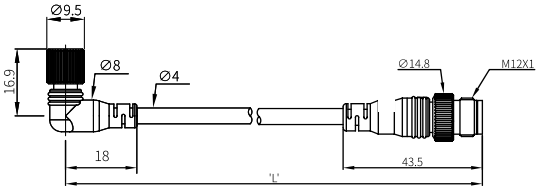
• Socket-Female, L type : Plug-Male, L type



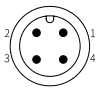
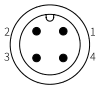
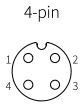
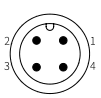
• Socket-Female : Plug-Male, L type



• Socket-Female, L type : Plug-Male



M12 Connector 4-Pin

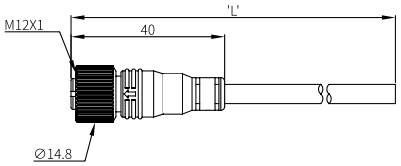
Power	Connector 1		Connector 2	Wire spec.	Connection	Length	Feature	Application	Model
DC	M12 (Socket-Female)	4-pin 	2-wire	AWG 22 (0.08 mm, 60-core), Insulator diameter: Ø1.3 mm	Pin no. 1: — Pin no. 2: — Pin no. 3 → Blue Pin no. 4 → Brown	2 m	PVC	Photoelectric sensors/ Proximity sensors / Safety door switches	GD-CID2-2
						5 m			GD-CID2-5
						2 m	Oil resistant PVC		GD-CIDH2-2
						5 m			GD-CIDH2-5
	M12 (Socket-Female), L type					2 m	PVC		GD-CLD2-2
						5 m			GD-CLD2-5
						2 m	Oil resistant PVC		GD-CLDH2-2
						5 m			GD-CLDH2-5
	M12 (Socket-Female)	4-pin 	2-wire	AWG 22 (0.08 mm, 60-core), Insulator diameter: Ø1.3 mm	IEC standard Pin no. 1: Brown Pin no. 2 → Blue Pin no. 4: — Pin no. 3: —	2 m	PVC		GD-CID2-2-I
						5 m			GD-CID2-5-I
						2 m	Oil resistant PVC		GD-CIDH2-2-I
						5 m			GD-CIDH2-5-I
	M12 (Socket-Female), L type					2 m	PVC		GD-CLD2-2-I
						5 m			GD-CLD2-5-I
						2 m	Oil resistant PVC		GD-CLDH2-2-I
						5 m			GD-CLDH2-5-I
	M12 (Plug-Male)	4-pin 	2-wire	AWG 22 (0.08 mm, 60-core), Insulator diameter: Ø1.3 mm	Pin no. 1: — Pin no. 2: — Pin no. 3 → Blue Pin no. 4 → Brown	2 m	PVC		GD-CID2-2P
						5 m			GD-CID2-5P
						2 m	Oil resistant PVC		GD-CIDH2-2P
						5 m			GD-CIDH2-5P
	M12 (Plug-Male), L type					2 m	PVC		GD-CLD2-2P
						5 m			GD-CLD2-5P
						2 m	Oil resistant PVC		GD-CLDH2-2P
						5 m			GD-CLDH2-5P
	M12 (Socket-Female)	4-pin 	3-wire	AWG 22 (0.08 mm, 60-core), Insulator diameter: Ø1.3 mm	Pin no. 1 → Brown Pin no. 2: — Pin no. 3 → Blue Pin no. 4 → Black	2 m	PVC		GD-CID3-2
						5 m			GD-CID3-5
						2 m	Oil resistant PVC		GD-CIDH3-2
						5 m			GD-CIDH3-5
	M12 (Socket-Female), L type					2 m	PVC		GD-CLD3-2
						5 m			GD-CLD3-5
						2 m	Oil resistant PVC		GD-CLDH3-2
						5 m			GD-CLDH3-5
	M12 (Plug-Male)	4-pin 	3-wire	AWG 22 (0.08 mm, 60-core), Insulator diameter: Ø1.3 mm		2 m	PVC		GD-CID3-2P
						5 m			GD-CID3-5P
						2 m	Oil resistant PVC		GD-CIDH3-2P
						5 m			GD-CIDH3-5P
	M12 (Plug-Male), L type					2 m	PVC		GD-CLD3-2P
						5 m			GD-CLD3-5P
						2 m	Oil resistant PVC		GD-CLDH3-2P
						5 m			GD-CLDH3-5P
	M12 (Socket-Female)	4-pin 	4-wire	AWG 22 (0.08 mm, 60-core), Insulator diameter: Ø1.65 mm	Pin no. 1 → Brown Pin no. 2 → White Pin no. 3 → Blue Pin no. 4 → Black • Be careful of connection, because color is different when DC 4-wire connector cable is used for DC 2-wire sensor.	2 m	Oil resistant PVC		GD-CIDH4-2
						3 m			GD-CIDH4-3
						5 m			GD-CIDH4-5
						7 m			GD-CIDH4-7
						2 m	Oil resistant PVC cULus		GD-CIDH4-2-A
						3 m			GD-CIDH4-3-A
						5 m			GD-CIDH4-5-A
						7 m			GD-CIDH4-7-A
	M12 (Socket-Female), L type					2 m	Oil resistant PVC		GD-CLDH4-2
						3 m			GD-CLDH4-3
						5 m			GD-CLDH4-5
						7 m			GD-CLDH4-7
						2 m	Oil resistant PVC cULus		GD-CLDH4-2-A
						3 m			GD-CLDH4-3-A
						5 m			GD-CLDH4-5-A
						7 m			GD-CLDH4-7-A
	M12 (Plug-Male)	4-pin 	4-wire	AWG 22 (0.08 mm, 60-core), Insulator diameter: Ø1.65 mm		2 m	Oil resistant PVC		GD-CIDH4-2P
						3 m			GD-CIDH4-3P
						5 m			GD-CIDH4-5P
						7 m			GD-CIDH4-7P
	M12 (Plug-Male), L type					2 m			GD-CLDH4-2P
						3 m			GD-CLDH4-3P
						5 m			GD-CLDH4-5P
						7 m			GD-CLDH4-7P

Power	Connector 1		Connector 2	Wire spec.	Connection	Length	Feature	Application	Model
DC	M12 (Socket-Female)	4-pin 	4-wire	AWG 22 (0.08 mm, 60-core), Insulator diameter: Ø1.25 mm	Pin no. → Wiring 1 → Brown 2 → White 3 → Blue 4 → Black	3 m	Black (transmitter)	Area sensors GD-BW Series / GD-BWC Series	GD-CID4-3T
							Gray (receiver)		GD-CID4-3R
						5 m	Black (transmitter)		GD-CID4-5T
							Gray (receiver)		GD-CID4-5R
						7 m	Black (transmitter)		GD-CID4-7T
							Gray (receiver)		GD-CID4-7R
						10 m	Black (transmitter)		GD-CID4-10T
							Gray (receiver)		GD-CID4-10R
						15 m	Black (transmitter)		GD-CID4-15T
							Gray (receiver)		GD-CID4-15R

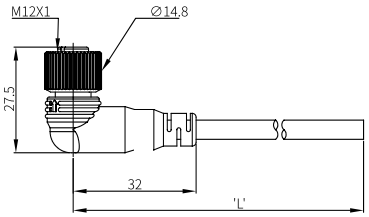
■ Dimensions

- Unit: mm.
- Cable thickness is different by cable material. (PVC: Ø 5 mm (For area sensors: Ø 6 mm) / Oil resistant PVC: Ø 6 mm)

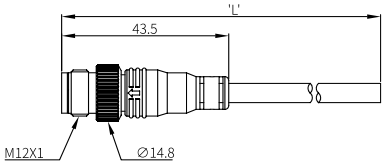
• Socket-Female



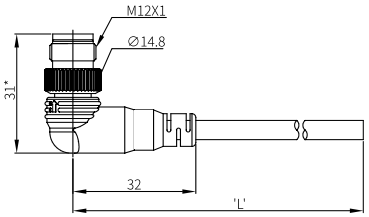
• Socket-Female, L type



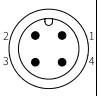
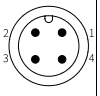
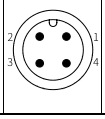
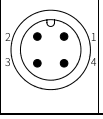
• Plug-Male



• Plug-Male, L type



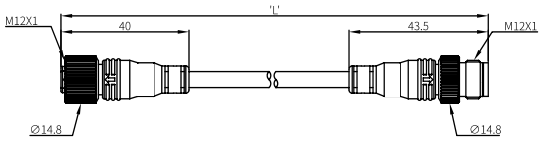
* Oil resistant PVC model: 31.3

Power	Connector 1		Connector 2		Connection	Length	Feature	Application	Model
DC	M12 (Socket-Female)	4-pin 	M12 (Plug-Male)	4-pin 	Connector 1 Pin no. → Connector 2 Pin no. 1 → 1 2 3 → 3 4 → 4	2 m	PVC	Photoelectric sensors / Proximity sensors / Linear positioning sensors / Safety door switches	GD-C1D4-2
						5 m			GD-C1D4-5
	M12 (Socket-Female), L type		M12 (Plug-Male), L type			2 m			GD-C2D4-2
						5 m			GD-C2D4-5
	M12 (Socket-Female)		M12 (Plug-Male), L type			2 m			GD-C3D4-2
						5 m			GD-C3D4-5
	M12 (Socket-Female), L type		M12 (Plug-Male)			2 m			GD-C4D4-2
						5 m			GD-C4D4-5
	M12 (Socket-Female)	4-pin 	M12 (Plug-Male)	4-pin 	Connector 1 Pin no. → Connector 2 Pin no. 1 → 1 2 → 2 3 → 3 4 → 4	1 m	Oil resistant PVC		GD-C1DH4-1
						3 m			GD-C1DH4-3
						5 m			GD-C1DH4-5
						7 m			GD-C1DH4-7
	M12 (Socket-Female), L type		M12 (Plug-Male), L type			1 m			GD-C2DH4-1
						3 m			GD-C2DH4-3
						5 m			GD-C2DH4-5
						7 m			GD-C2DH4-7
	M12 (Socket-Female)		M12 (Plug-Male), L type			1 m			GD-C3DH4-1
						3 m			GD-C3DH4-3
						5 m			GD-C3DH4-5
						7 m			GD-C3DH4-7
	M12 (Socket-Female), L type		M12 (Plug-Male)			1 m			GD-C4DH4-1
						3 m			GD-C4DH4-3
						5 m			GD-C4DH4-5
						7 m			GD-C4DH4-7
	M12 (Plug-Male)	4-pin 	M12 (Plug-Male)	4-pin 	Connector 1 Pin no. → Connector 2 Pin no. 1 → 1 2 → 2 3 → 3 4 → 4	2 m	PVC	Photoelectric sensors / Proximity sensors / Safety door switches	GD-C1D4-2P
						5 m			GD-C1D4-5P

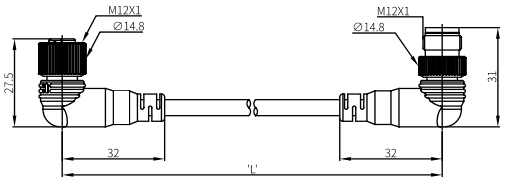
■ Dimensions

- Unit: mm.
- Cable thickness is different by cable material. (PVC: Ø 5 mm / Oil resistant PVC: Ø 6 mm)

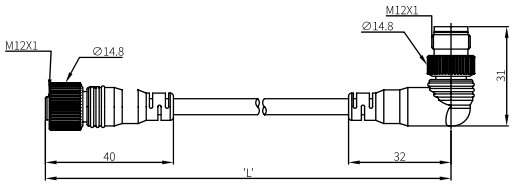
• Socket-Female : Plug-Male



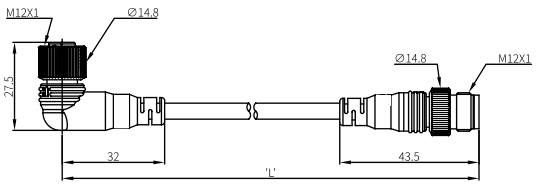
• Socket-Female, L type : Plug-Male, L type



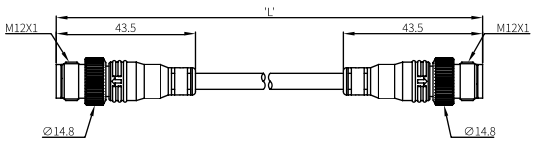
• Socket-Female : Plug-Male, L type



• Socket-Female, L type : Plug-Male



• Plug-Male: Plug-Male



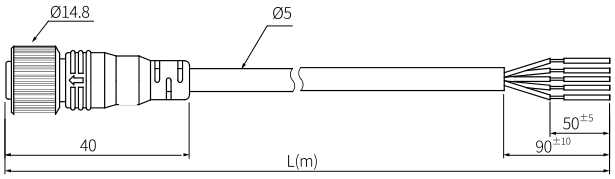
M12 Connector 5-Pin

Power	Connector 1		Connector 2	Wire spec.	Connection	Length	Feature	Application	Model
DC	M12 (Socket-Female)	5-pin	5-wire	AWG 26 (0.08 mm, 28-core), Insulator diameter: Ø0.74 mm	Pin no. → Wiring 1 → Brown 2 → White 3 → Blue 4 → Black 5 → Yellow	1 m	PVC	Safety non-contact door switches	GD-CID5-1
						2 m			GD-CID5-2
						3 m			GD-CID5-3
						5 m			GD-CID5-5
						7 m			GD-CID5-7
	M12 (Plug-Male)	5-pin				1 m			GD-CID5-1P
						2 m			GD-CID5-2P
						3 m			GD-CID5-3P
						5 m			GD-CID5-5P
						7 m			GD-CID5-7P

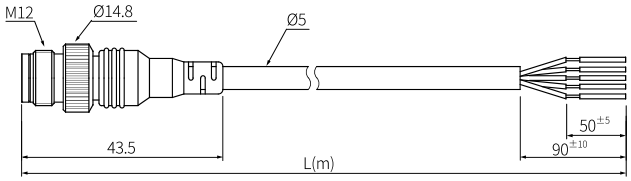
■ Dimensions

• Unit: mm.

• Socket-Female



• Plug-Male

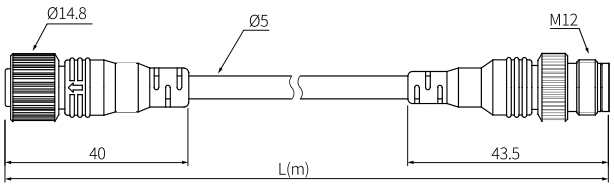


Power	Connector 1		Connector 2		Connection	Length	Feature	Application	Model
DC	M12 (Socket-Female)	5-pin	M12 (Plug-Male)	5-pin	Connector 1 Pin no. → Connector 2 Pin no. 1 → 1 2 → 2 3 → 3 4 → 4 5 → 5	1 m	PVC	Safety non-contact door switches	GD-C1D5-1
						2 m			GD-C1D5-2
						3 m			GD-C1D5-3
						5 m			GD-C1D5-5
						7 m			GD-C1D5-7

■ Dimensions

• Unit: mm.

• Socket-Female : Plug-Male



M12 Connector 8-Pin

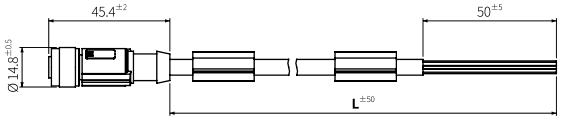
Power	Connector 1		Connector 2	Wire spec.	Connection	Length	Feature		Application	Model
DC	M12 (Socket-Female)	8-pin 	8-wire	AWG 24 (0.1 mm, 32-core), Insulator diameter: Ø1.17 mm	Pin no. → Color 1 → White 2 → Brown 3 → Green 4 → Yellow 5 → Gray 6 → Pink 7 → Blue 8 → Red	2 m	• Drag chain type (2 million) • IP65 / IP67 • PUR • cULus EAC		Smart cameras	GD-CIDM8-2-A
						5 m				GD-CIDM8-5-A
						10 m				GD-CIDM8-10-A
	M12 (Socket-Female), L type					2 m				GD-CLDM8-2-A
						5 m				GD-CLDM8-5-A
						10 m				GD-CLDM8-10-A
	M12 (Socket-Female)	8-pin 	8-wire	AWG 24 (0.1 mm, 32-core), Insulator diameter: Ø1.17 mm	Pin no. → Color 1 → Blue 2 → Orange 3 → Yellow 4 → Red 5 → Pink 6 → Black 7 → White 8 → Brown	3 m	Transmitter	PUR or PVC	Safety light curtains 01)	GD-CID8-3T
							Receiver			GD-CID8-3R
						5 m	Transmitter			GD-CID8-5T
							Receiver			GD-CID8-5R
						7 m	Transmitter			GD-CID8-7T
							Receiver			GD-CID8-7R
						10 m	Transmitter			GD-CID8-10T
							Receiver			GD-CID8-10R

01) To ordering the cable for safety light curtains, select the material specification.

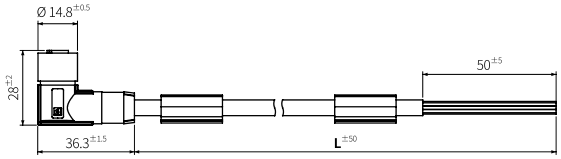
■ Dimensions

• Unit: mm.

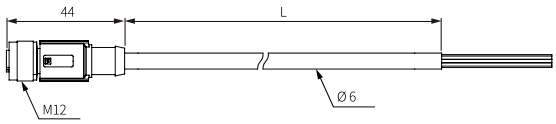
• Socket-Female (for smart cameras, drag chain type, PUR)



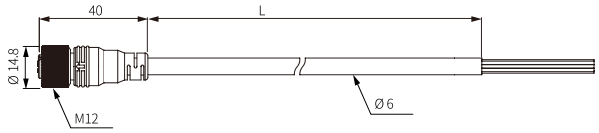
• Socket-Female, L type (for smart cameras, drag chain type, PUR)



• Socket-Female (for safety light curtains, PUR)



• Socket-Female (for safety light curtains, PVC)



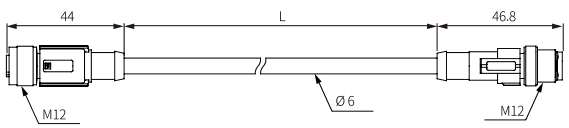
Power	Connector 1		Connector 2		Connection	Length	Feature		Application	Model
DC	M12 (Socket-Female)	8-pin 	M12 (Plug-Male)	8-pin 	Connector 1 Pin no. → Connector 2 Pin no. 1 → 1 2 → 2 3 → 3 4 → 4 5 → 5 6 → 6 7 → 7 8 → 8	3 m	Transmitter	PUR or PVC	Safety light curtains 01)	GD-C1D8-3T
							Receiver			GD-C1D8-3R
						5 m	Transmitter			GD-C1D8-5T
							Receiver			GD-C1D8-5R
						7 m	Transmitter			GD-C1D8-7T
							Receiver			GD-C1D8-7R
						10 m	Transmitter			GD-C1D8-10T
							Receiver			GD-C1D8-10R
						15 m	Transmitter			GD-C1D8-15T
							Receiver			GD-C1D8-15R
						20 m	Transmitter			GD-C1D8-20T
							Receiver			GD-C1D8-20R

01) To ordering the cable for safety light curtains, select the material specification.

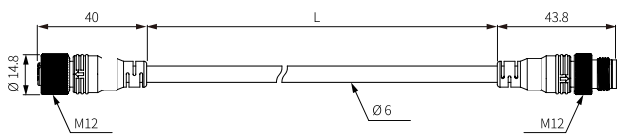
■ Dimensions

• Unit: mm.

• Socket-Female : Plug-Male (for safety light curtains, PUR)



• Socket-Female : Plug-Male (for safety light curtains, PVC)



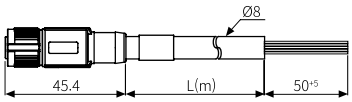
M12 Connector 12-Pin

<table>
<tr><th>Power</th><th colspan="2">Connector 1</th><th>Connector 2</th><th>Wire spec.</th><th>Connection</th><th>Length</th><th>Feature</th><th>Application</th><th>Model</th></tr>
<tr><td rowspan="12">DC</td><td rowspan="6">M12 (Socket-Female)</td><td rowspan="6">12-pin
</td><td rowspan="6">12-wire</td><td rowspan="6">AWG 26 (0.1 mm, 18-core), Insulator diameter: Ø1 mm</td><td rowspan="6"><table><tr><th>Pin no.</th><th>Wiring</th><th>Pin no.</th><th>Wiring</th></tr><tr><td>1</td><td>Brown</td><td>7</td><td>Black</td></tr><tr><td>2</td><td>Blue</td><td>8</td><td>Gray</td></tr><tr><td>3</td><td>White</td><td>9</td><td>Red</td></tr><tr><td>4</td><td>Green</td><td>10</td><td>Purple</td></tr><tr><td>5</td><td>Pink</td><td>11</td><td>Gray/Pink</td></tr><tr><td>6</td><td>Yellow</td><td>12</td><td>Red/Blue</td></tr></table></td><td>2 m</td><td rowspan="6">• Drag chain type (2 million)
• IP65 / IP67
• PUR</td><td rowspan="12">LiDAR
LSC Series
/ Vision sensors</td><td>GD-CID-2-VG</td></tr>
<tr><td>5 m</td><td>GD-CID-5-VG</td></tr>
<tr><td>10 m</td><td>GD-CID-10-VG</td></tr>
<tr><td>2 m</td><td>GD-CLD-2-VG</td></tr>
<tr><td>5 m</td><td>GD-CLD-5-VG</td></tr>
<tr><td>10 m</td><td>GD-CLD-10-VG</td></tr>
<tr><td rowspan="6">M12 (Socket-Female), L type</td><td rowspan="6">12-pin
</td><td rowspan="6">12-wire</td><td rowspan="6">AWG 24 (0.16 mm, 11-core), Insulator diameter: Ø1.15 mm</td><td rowspan="6"><table><tr><th>Pin no.</th><th>Wiring</th><th>Pin no.</th><th>Wiring</th></tr><tr><td>1</td><td>Brown</td><td>7</td><td>Black</td></tr><tr><td>2</td><td>Blue</td><td>8</td><td>Gray</td></tr><tr><td>3</td><td>White</td><td>9</td><td>Red</td></tr><tr><td>4</td><td>Green</td><td>10</td><td>Purple</td></tr><tr><td>5</td><td>Orange</td><td>11</td><td>Sky</td></tr><tr><td>6</td><td>Yellow</td><td>12</td><td>Light green</td></tr></table></td><td>2 m</td><td rowspan="6">PVC</td><td>GD-CID12-2</td></tr>
<tr><td>5 m</td><td>GD-CID12-5</td></tr>
<tr><td>10 m</td><td>GD-CID12-10</td></tr>
<tr><td>2 m</td><td>GD-CLD12-2</td></tr>
<tr><td>5 m</td><td>GD-CLD12-5</td></tr>
<tr><td>10 m</td><td>GD-CLD12-10</td></tr>
</table>

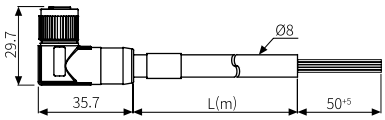
■ Dimensions

• Unit: mm.

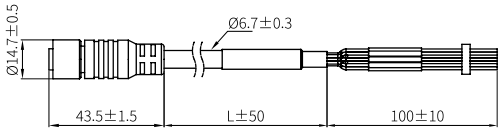
• Socket-Female (drag chain type, PUR)



• Socket-Female, L type (drag chain type, PUR)



• Socket-Female (PVC)



• Socket-Female, L type (PVC)

