



Science.
Applied to Life.™

3M™ CoaXPress Industrial Camera Cable Assembly, 1CX Series

Exploring the fast, flexible
future of machine vision





The CoaXPress (CXP) interface is expected to become the mainstream interface for high-speed and high-bandwidth camera systems. Allowing video, camera control and real-time triggering over a single coaxial cable, CXP can accommodate a range of needs in machine vision – long transmission distances, high resolution, durability for repetitive-motion applications and more.

With the recent release of CoaXPress 2.0, CXP can deliver transmission speed up a maximum of 12.5 Gbps/channel.

Two CXP assemblies. Countless possibilities.

With the 3M™ CoaXPress Industrial Camera Cable Assembly, 1CX Series, 3M offers two types of CoaXPress-compatible cable assemblies that comply with CoaXPress 2.0. These versatile assemblies allow for performance in a wide range of fixed and motion applications in machine vision, from general motion systems to high-performance applications requiring long transmission distance and very high bending durability.

The 3M™ CoaXPress Industrial Camera Cable Assembly, 1CX Series features:

- High-speed data transfer up to 12.5 Gbps/channel (CXP-12, Micro-BNC, BNC connector specification)
- Available DIN 1.0/2.3 connector specification (CXP-6, up to 6.25 Gbps)
- CoaXPress 2.0 compliant
- Compliant with CE marking



Key features:

Longer transmission distance.

The 3M™ CoaXPress Industrial Camera Cable Assembly, 1CX Series delivers transmission distance from 8 meters to 13 meters depending on specific cable and equipment.

Dynamic bending durability.

The 3M™ CoaXPress Industrial Camera Cable Assembly, 1CX Series features movable cables excellent for repetitive-motion applications. The series features repeated bending durability up to >45 million cycles.

3M™ CoaXPress Industrial Camera Cable Assembly, 1CXx-xx-0S

Excellent for a wide range of applications, from fixed to general motion camera application

- Flexible cable that is easy to handle
- Cable diameter: $\Phi 4.2$ mm
- CXP transmission distance up to 8M (CXP12), up to 11M (CXP-6)
- Repeated bending durability >10 million cycles¹

3M™ CoaXPress Industrial Camera Cable Assembly, 1CXx-xx-0G

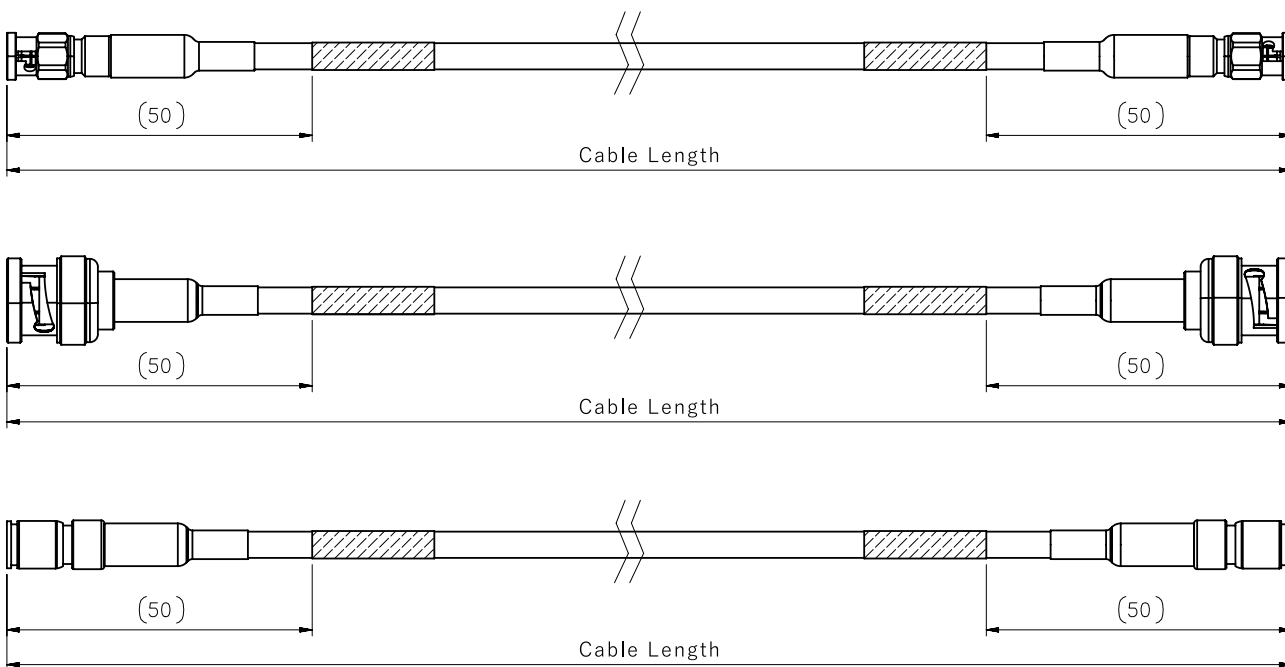
High performance thin cable achieves both high bending durability and long-distance transmission performance

- Premium flexible cable for applications requiring extended bending durability
- Cable diameter: $\Phi 4.3$ mm
- CXP transmission distance: up to 10M (CXP-12), up to 13M (CXP-6)
- Repeated bending durability >45 million cycles¹

¹ Durability testing continuing



Dimensions: 3M™ CoaXPress Industrial Camera Cable Assembly, 1CX Series



Ordering information

Part Number

1CXx-xx-0G-xxx.x

Cable length (m)

CXP type (bit rate)

CX6 = up to 6.25 Gbps
CX12 = up to 12.5 Gbps

Cable type

0S = Standard flex durable cable for motion application (Φ4.2)
0G = Premium flex durable cable for motion application (Φ4.3)

Connector type (end A)

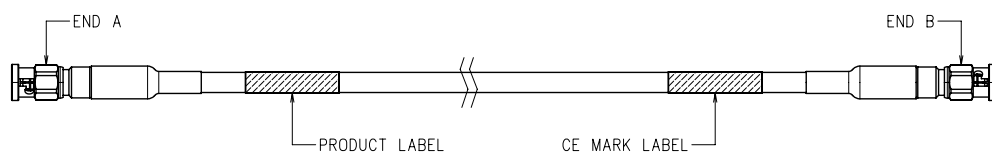
1 = 1.0/2.3 DIN*
2 = BNC
3 = Micro BNC

Connector type (end B)

1 = 1.0/2.3 DIN*
2 = BNC
3 = Micro-BNC

*1.0/2.3 DIN is not available for CX12

Connectors of different types can be combined. Contact 3M for more information.



3M™ CoaXPress Industrial Camera Cable Assembly, 1CXx-xx-0S



	Part Number		
3m	1CX12-33-0S-003.0	1CX12-22-0S-003.0	1CX6-11-0S-003.0
4m	1CX12-33-0S-004.0	1CX12-22-0S-004.0	1CX6-11-0S-004.0
5m	1CX12-33-0S-005.0	1CX12-22-0S-005.0	1CX6-11-0S-005.0
6m	1CX12-33-0S-006.0	1CX12-22-0S-006.0	1CX6-11-0S-006.0
7m	1CX12-33-0S-007.0	1CX12-22-0S-007.0	1CX6-11-0S-007.0
8m	1CX12-33-0S-008.0	1CX12-22-0S-008.0	1CX6-11-0S-008.0
9m	1CX12-33-0S-009.0	1CX12-22-0S-009.0	1CX6-11-0S-009.0

3M™ CoaXPress Industrial Camera Cable Assembly, 1CXx-xx-0G



	Part Number
Harness Length	Micro-BNC Connector (both A and B)
3m	1CX12-33-0G-003.0
4m	1CX12-33-0G-004.0
5m	1CX12-33-0G-005.0
6m	1CX12-33-0G-006.0
7m	1CX12-33-0G-007.0
8m	1CX12-33-0G-008.0
9m	1CX12-33-0G-009.0
10m	1CX12-33-0G-010.0

Safety Data Sheet: Consult Safety Data Sheet before use.

Regulatory: For regulatory information about this product, contact your 3M representative.

Technical Information: The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

Product Use: Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.

Warranty, Limited Remedy, and Disclaimer: Unless a different warranty is specifically stated on the applicable 3M product packaging or product literature, 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. **3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE.** If a 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement or repair of the 3M product or refund of the purchase price.

Limitation of Liability: Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental, or consequential, regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability.

Disclaimer: For industrial use only. Not intended, labeled or packaged for consumer sale or use.



Electronics Materials Solutions Division

3M Center, Building 223-3S-32
St. Paul, MN 55144-1000

Phone: 1-800-251-8634
www.3M.com/factoryautomation

3M is a trademark of 3M Company.
USB3 Vision® is a trademark owned by A3.
Please recycle.
©3M 2023. All rights reserved.
60-5005-0442-2