

Corning Cabelcon

Rev. May 2012



CX3™ Compression Catalogue

General Information



Index	page
General Information	2-3
CX3™ RG6/59	4-8
CX3™ Accessories	9
CX3™ Mini	10-11
CX3™ RG11	12-13
Tools	14-15

Cabelcon introduced the CX3™ in 2001 - the first high quality compression connectors designed and manufactured in Europe. Our extensive range of CX3™ connectors are presently being used by leading cable operators all over Europe and abroad.

Cabelcon's range of CX3™ compression connectors covers a wide variety of applications such as CATV, TriplePlay, SMATV, satellite, broadcast, security and telecommunications applications.

In the following pages you will find much more information and details on our compression connectors including some technical specifications.

For further information on the displayed products, please visit our website at www.cabelcon.dk, or contact Cabelcon's Customer Service department.

How to find the right tools

1. The catalogue is divided in sections referring to cable types. Each section has an order information matrix, where you will find a reference number, to the left of each item.

2. Find the corresponding reference number in the order information matrix and identify the matching tools on page 14-15



CX3™ QuickMount™

Installation of quality connectors on hard PE cables can be a tough job, especially in low temperatures, but with Cabelcon's unique quickmount technology a very low insertion force is needed to insert the cable, while still maintaining an excellent pull strength (typical 480N/48 Kg). Installation is as easy as can be - just strip and mount. Connectors with QuickMount technology are available for RG59/6, Mini and RG11 cables and they are all waterproof. Find more information in the corresponding section of the catalogue.



NiTin-6™

All Cabelcon's CX3™ connectors are plated with our unique NiTin-6™ plating for the finest protection against environmental impacts and corrosion.

You can find much more information on NiTin-6™ on our website at www.cabelcon.dk

Coloured labels/Stripping guide

Cabelcon's full range of CX3™ connectors are born with colour coded labels for easy and convenient determination of cable and connector sizes.

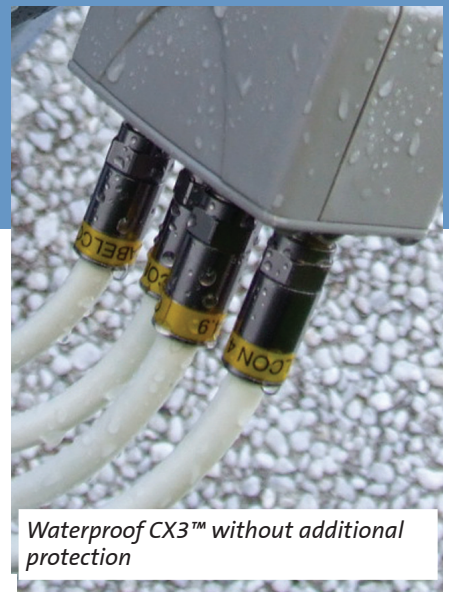
The labels can also be used as a guide for proper stripping lengths – which is 6.5 mm for both the inner- and outer conductors on all CX3™ connectors.

Cabelcon Sizes CX3™/ Self-Install™	Label Colour
3.7	CABELCON
3.9	CABELCON
3.9 HEC+6.0	CABELCON
4.9 + 7.5 + 10.5	CABELCON
5.1 + 7.0	CABELCON
4.5	CABELCON
5.0	CABELCON
5.7	CABELCON
7.5Q	CABELCON
4.0	CABELCON

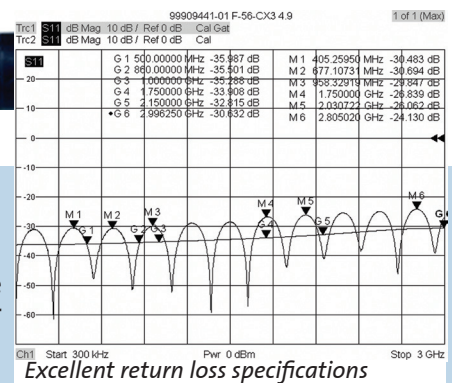


Halogen Free

All Cabelcon's CX3™ connectors are made with a Halogen Free High Tech Polymer for maximum performance and safety.



Waterproof CX3™ without additional protection

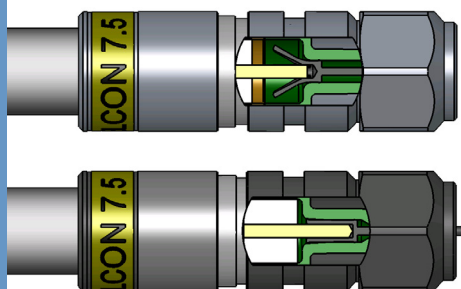


Excellent return loss specifications

PushPin™

Cabelcon's patented PushPin™ system is the easy and secure way to a perfect connection. The PushPin™ system has three main functions:

- The pin is protected in the body during transport (except CX3 5/8M) and is automatically pushed forward in place during installation of the cable - before compression.
- The PushPin™ system grips and locks the inner conductor.
- The PushPin™ eliminates blind entry when installing (visible indication of properly installed cable).
- Cabelcon PushPin™ technology is implemented in our full range of CX3™ RG7/11 connectors, CX3™ Mini's and in some of our RG6/59 types. Also our BNC and RCA connectors are featuring our unique PushPin™ system.



Position one:

The pin grips the inner conductor and makes sure that the cable is always inserted correctly in the connector

Position two:

The pin locks the inner conductor as the cable is inserted while the pin is pushed forward in place – indicating that the cable is correctly installed

The shown example is our CX3™ RG11 F-connector but the principle is the same for our other CX3™ types. See also the CX3™ Mini PushPin™ pictures on page 11.

CX3™ RG59/6



CX3™ Compression Connectors

Corning Cabelcon's wide range of CX3-RG59/6 compression connectors has been developed for high performance digital multimedia applications and meets the standards of SCTE and IEC. All specifications are excellent – among the best available in the market.

All CX3™ types are plated with Cabelcon's unique Nitin-6™ plating to ensure excellent protection against environmental impact. The compression bush is made from a halogen free High Tech Polymer with superior performance.

Easy identification of cable series and cable sizes can be done on location through the colour labelling on the body. The label also serves as a stripping guide (see page 3). The stripping dimensions meet the standard preparation lengths 6.5/6.5 mm.

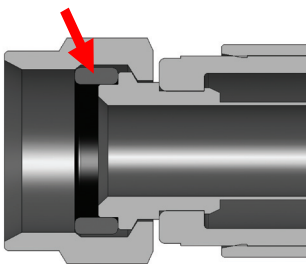
CX3™ F

The CX3™ F-connectors are available for all cable sizes and also in many special versions besides the standard type. The one-piece F-connector comes with a free spinning nut - hex 11mm - for easy and reliable installation.

The standard CX3™ F-connector can be used for all applications – indoor and outdoor - without any additional protection.



With and without a wide nut



*Corning Cabelcon CX3™ compression has a specially designed sealing ring in the front to secure a watertight connection. *(30 m water / 8 hours).*

Waterproof CX3™ F

CX3™ F is 100 % waterproof – no additional protection needed. All types with integrated sealing ring in the front part secure a watertight connection according to IPX8* . Due to it's unique design, the sealing ring does not interfere with RF connection.

Cabelcon's special sealing ring is recommended by most key operators in Europe.

CX3™ is Nitin-6™ plated for perfect corrosion resistance. And the performance is excellent.

CX3™ F Special versions

Short versions are available for easy installation on hard PE cables. Other versions can be supplied without O-rings for indoor and head-end applications. Different versions are also available with wide nuts and PushPin™ system for safe and reliable installation. Push-on versions can be supplied for use where quick connection/ disconnection is required.



CX3™ short versions

CX3™ IEC

The IEC male connectors can be installed with optional M14 nut and an O-ring for a secure and watertight connection to active components. Available in male & female in several sizes for RG6 & 59 cables.



Optional nut and O-ring for CX3™ IEC Male.



CX3™ IEC versions

CX3™ BNCM

Corning Cabelcon BNC male connectors are developed for use in RF, broadcast, video, security and digital multimedia applications. All the well-known weaknesses with ordinary BNC connectors such as time consuming installation, many loose parts to assemble, poor pull-off strength and poor return loss (VSWR) have been eliminated with the Cabelcon CX3™ BNC.



CX3™ BNCM collection

CX3™ HP

With the same superb electrical and mechanical characteristics of the original CX3™, HP offers a more competitive solution where the brass shell is replaced by a shell of UV stabilised High Tech Polymer. The shell is supported by a brass ring at the end - still keeping it strong and resistant to corrosion and UV radiation. As all other CX3™ products the brass sleeve and nut are Nitin-6™ plated



CX3™ HP

CX3™ Self-Install™

Cabelcon Self-Install™ is a unique quality product, developed for replacement of low quality screw-on connectors. It is easy and simple to install and once it is on it is impossible to pull off. With excellent electrical and mechanical performance this connector is for the professional installer as well as for home installations. Self-Install is available for indoor and outdoor installations. When installed outdoor, we recommend the external rubber sealing ring to ensure complete waterproofness. Self-Install™ is available with F and IEC interfaces.



CX3™ Self-Install™ F interface



CX3™ F-56-CX3 4.9

Technical Data (typical) F-56-CX3 4.9

Operational to 3 GHz	
Impedance	75 Ohm
Shielding Eff. 30-862 MHz	100 dB*
Return loss@1000 MHz	38 dB*
Return loss@3000 MHz	24 dB*
IMD (3rd order@2x100mW)	-120 dBc*
IMD (IP3 value)	+80 dBm*
AMP rating	Cable data
Max. Tensile strength (overall)	120 N
Sealing test (IPX8 30 m/8 hours)	Passed
* Depending on the used cable	

CX3™ RG59/6 ...continued



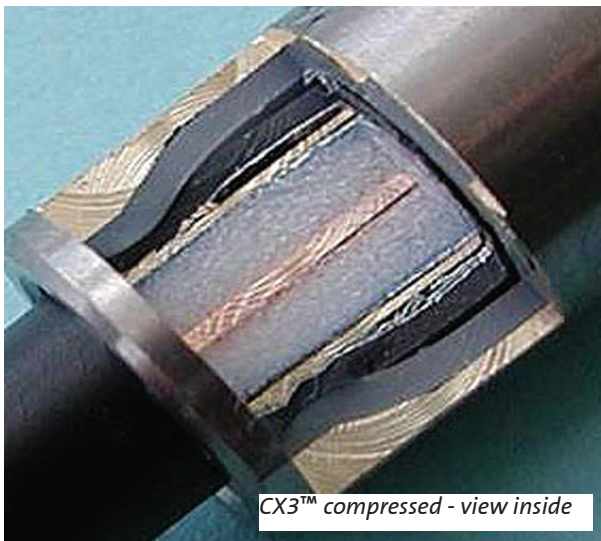
CX3™ Self-Install™ selection

CX3™ 6.0 and 7.0 QuickMount™

CX3™ 6.0 and 7.0 QuickMount™ are the perfect fit for RG59/6 cable. Installation is incredibly easy - simply strip the cable and mount the connector. It is not even necessary to fold back the braid. The installation remains completely waterproof and the performance specifications are impressive.



CX3™ QuickMount™ 6.0 and 7.0



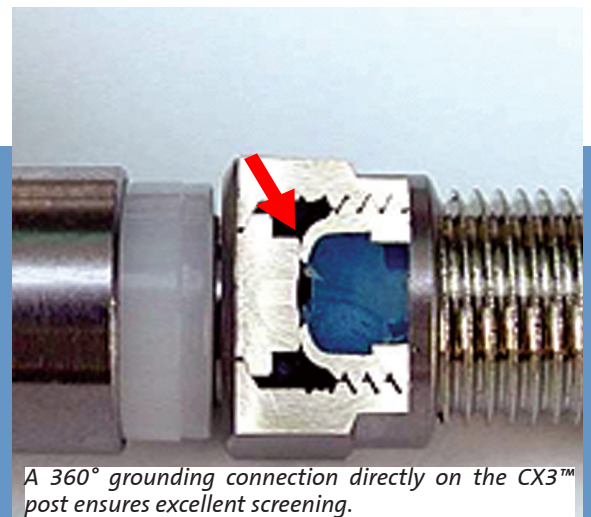
CX3™ compressed - view inside

Built-in strain relief

Cabelcon CX3™ is constructed to maintain a superior support of the cable - eliminating the need for external strain reliefs!

Technical Data (typical) 7.0 QuickMount™

Operational to 3 GHz	
Impedance	75 Ohm
Shielding Eff. 30-862 MHz	111 dB*
Return loss@1000 MHz	35 dB*
Return loss@3000 MHz	32 dB*
IMD (3rd order@2x100mW)	-130 dBc*
IMD (IP3 value)	+92 dBm*
AMP rating	Cable data
Max. Tensile strength (overall)	480 N
* Depending on the used cable	



A 360° grounding connection directly on the CX3™ post ensures excellent screening.

Detailed datasheets for all types and sizes are available on request

CX3™ Spring-Connect™

Cabelcon's CX3™ Spring-Connect™ features a unique, Secure Spring technology that is safe to use in all CATV installations, satellite receiver installations, set-top boxes and on modem cables. With a disconnect pull-off value of more than 3 kg and excellent mechanical and electrical specifications it offers great screening capabilities and class A+ shielding. Due to the secure spring technology, continuity is ensured until the connector is completely disconnected from the interface.



CX3™ Spring-Connect™



CX3™ Spring-Connect™ jumper cable

CX3™ Spring-Connect™ Jumper cables

CX3™ Spring-Connect™ is also available as ready made jumper cables for modems and other applications.

The unique technology of the Spring-Connect™ jumper has already proven its reliability and excellent performance in the market, as it has been put into use by large European operators.

CX3™ Spring-Connect™ Jumper cables features

- Custom made lenght from 20 cm
- Optional branding
- Available in white (RAL9010) and black
- Customized packing/labeling solutions
- Class A+



CX3™ Spring-Connect™



Reliable and secure connections. Easy to push on. Superb screening efficiency.

Technical Data (typical) Spring-Connect™

Operational to 3 GHz	
Impedance	75 Ohm
Shielding Eff. 30-862 MHz	>100 dB*
Return loss@1000 MHz	45 dB*
Return loss@3000 MHz	40 dB*
IMD (3rd order@2x100mW)	-152 dBc*
IMD (IP3 value)	+103 dBm*
AMP rating	Cable data
Max. Tensile strength (overall)	300 N

* Depending on the used cable

CX3™ RG59/6 ...continued

RG 59/6 Order information

1	F-59-CX3 3.7	99909416-01
1	F-59-CX3 3.9	99909421-01
1	F-59-CX3 3.9 HEC	99909435-01
1	F-56-CX3 4.9	99909441-01
1	F-56-CX3 5.1	99909446-01
1	F-56-CX3 5.3	99909450-01
1	F-56-CX3 5.7	99909460-01
1	F-59-CX3 B 3.7	99939416-01
1	F-59-CX3 B 3.9	99939421-01
2	F-59-CX3 B 3.9 SHORT	99939420
1	F-56-CX3 B 4.9	99939441-01
1	F-56-CX3 B 5.1	99939445-01
1	F-56-CX3 B 5.3 SHORT	99939451
2	F-56-CX3 5.1 SHORT	99939445-01
2	F-56-CX3 B 5.1 SHORT	99939446-01
2	F-56-CX3 H 4.9 SHORT	99949442
5	F-56-CX3 7.0 QM	99909407-01
5	F-59-CX3 6.0 QM	99909427
6	F-59 3.7 Self-Install	99909637
6	F-59 3.9 Self-Install	99909646
6	F-56 4.9 Self-Install	99909643-01
6	F-56 4.9W Self-Install	99909647-01
6	F-56 4.9 Q Self-Install	99909645-01
6	F-56 5.1 Self-Install	99909644-01
6	F-56 5.1W Self-Install	99909648-01
10	IECM-56 5.1 Self-Install	99909686
10	IECF-56 5.1 Self-Install	99909690
7	F SC-59-CX3 3.9 Short	99909523
7	F SC-59-CX3 4.9 Short	99909549
7	F SC-59-CX3 5.1 Short	99909553
8	F-59-CX3 HP 3,7	99909016
8	F-59-CX3 HP 3.9	99909021
8	F-56-CX3 HP 4.9	99909041
8	F-56-CX3 HP 5.1	99909046
3	FM-56-CX3 4.9 Wide	99909517-01
3	FM-56-CX3 5.1 Wide	99909519-01
15	E-56-CX3 4.9	99909540-01
15	E-56-CX3 5.1	99909545-01

Corning Cabelcon CX3™ compression is also the professional solution for satellite dish installations.



9	BNCM-59-CX3 3.7	99909472-01
9	BNCM-59-CX3 3.9	99909473-01
9	BNCM-59-CX3 3.9 HEC	99909474-01
9	BNCM-56-CX3 4.9	99909475-01
9	BNCM-56-CX3 5.1	99909476-01

10	IECM-59-CX3 3.9	99909482-01
10	IECM-56-CX3 4.9	99909484-02
10	IECM-56-CX3 5.1	99909486-02
10	IECF-59-CX3 3.9	99909492-01
10	IECF-56-CX3 4.9	99909494-01
10	IECF-56-CX3 5.1	99909496-01

M14 nut and O-ring for IECM	99900570-01
M13 nut and O-ring for CX3	99900569

CX3™ Spring-Connect™ jumper cables are available in various lengths. Please contact our Customer Service department for more information on item numbers etc.

Abbreviations

W= Water tight, P = Push On versions.
H = Head End (no O-rings), B = O-ring behind the nut
Q = Quad shield, SC = Spring-Connect

CX3™ Accessories



Color marking on Mini Cable

CX3™ Color markings

Cabelcon color markings are the perfect choice for marking audio/video cables and connectors in broadcast and security racks. They feature a flexible, slotted design to allow easy mouting, also after installation of the connector.

The color markers fit RG59/6 and Mini cables and are made from a very rugged and flexible polymer. They are available in eleven colors.



Available in 11 different colors



CX3™ Spring-Connect™ with additional seal ring

CX3™ Seal ring for F-connectors

For a 100% waterproof connection, Cabelcon offers the additional seal ring for all F-connectors in the CX3™ program that are not waterproof by standard.



Seal Ring for F-connectors



Color markings - for easy recognition

Accessories Order information

Seal ring for F-connectors 99900902

Color Markings (100 pcs)

Black	99004001
Brown	99904003
Red	99004005
Orange	99004007
Yellow	99004009
Green	99004011
Blue	99004013
Violet	99004015
Grey	99004017
White	99004019
Turquoise	99004021

CX3™ for MINI cables



F-CX3™ Quickmount™ Collection

Cabelcon CX3™ M is the perfect choice for HDTV, Digital Video, Broadcast & Security applications

The unique, patented compression system makes the installation easier than ever before.

All the well-known installation difficulties with most other brands of mini crimp- and compression connectors have now been eliminated as the cable slides smoothly into our unique one piece connector, without damaging the cable. Cabelcon CX3™ for Mini cables offers the perfect solution for head-end applications.

CX3™ M compression features

- Easy and safe installation in seconds
- Covers a large range of MINI cable sizes
- PushPin™ System – for safe and visible installation
- Nitin-6™ plated for excellent corrosion resistance
- Unique, patented compression system
- One-piece connectors – no loose parts
- New waterproof versions available (QM)
- Operational to 3 GHz



CX3™ pocket tools available for CX3 M

Mini size markings

The size marking for Cabelcon mini connectors such as M 5.0 indicates that this connector covers most mini cables with a jacket diameter close to 5.0 mm.

Unique PushPin™ System

Cabelcon's PushPin™ System ensures perfect installation result every time. The pin is pushed forward in proper position as the cable is inserted, while it grips and locks the inner conductor when proper pin positions have been reached.



FM-60-CX3™ M 5.0

Safe connections with PushPin™

Cabelcon's unique 0.9 mm F-PushPin™ makes a proper and safe connection to female ports – sensitive to thin inner conductors.

CX3™ M 4.5 FT version

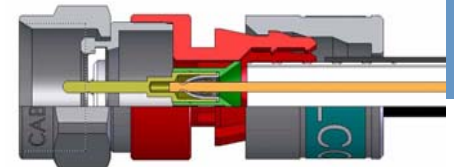
M 4.5 is also available as FT (feed through) type without the PushPin™ system. The FT version is equipped with two special designed O-rings to make M 4.5 FT completely waterproof.



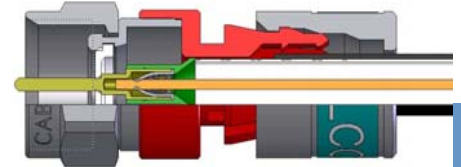
FM-60-CX3™ M 4.5 (PushPin™)
- before and after compression



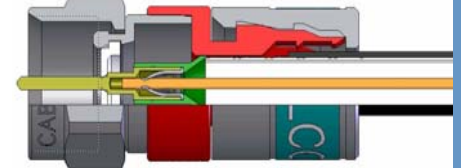
F 60-CX3™ M 4.5 (feed through)
- before and after compression



Cable partly inserted - not compressed



Cable fully inserted - not compressed



Cable fully inserted and compressed



FM & BNCM - RG60-CX3™ M 3.1

Available with a large variety of interfaces

The CX3™ M are available with BNCM, IECM and FM interfaces and with QuickMount™ technology. All parts, including the inner conductor, are NiTin-6™ plated to ensure long-time resistance and reliable contacts.



MCX-60-CX3™ M 4.0

Order information

11 F 60-CX3 M 4.5	99909409
11 FM-60-CX3 M 3.1	99909402-02
11 FM-60-CX3 M 4.0	99909403-02
11 FM-60-CX3 M 4.5	99909404-05
11 FM-60-CX3 M 5.0	99909406-02
13 F-CX3 4.0 QM Short	99909401
13 F-CX3 4.5 QM Short	99909409
13 F-CX3 5.0 QM Short	99909410
11 IECM-60-CX3 M 4.5	99909487-02
12 BNCM-60-CX3 M 3.1	99909462
12 BNCM-60-CX3 M 4.0	99909463
12 BNCM-60-CX3 M 4.5	99909464-02
14 MCX-60-CX3 M 4.0	99909803
14 MCX-60-CX3 M 4.5	99909804-01

Technical Data (typical) FM-60-CX3™ M

Operational to 3 GHz	
Impedance	75 Ohm
Shielding Eff. 30-862 MHz	100 dB*
Return loss@1000 MHz (typ)	36 dB*
Return loss@3000 MHz (typ)	32 dB*
IMD (3rd order@2x100mW)	-120 dBc*
IMD (IP3 value)	+80 dBm*
AMP rating	5 A
Max. Tensile strength (overall)	120 N

* Depending on the used cable

Detailed datasheets for all types and sizes are available on request

CX3™ RG7/11



CX3™ RG7/11 compression connectors

Corning Cabelcon's wide range of CX3-RG7/11 compression connectors are developed for high performance digital multimedia applications and meet the standards of SCTE and IEC. All specifications are excellent – among the best available in the market.



CX3™ QuickMount™

CX3™ RG11 compression features

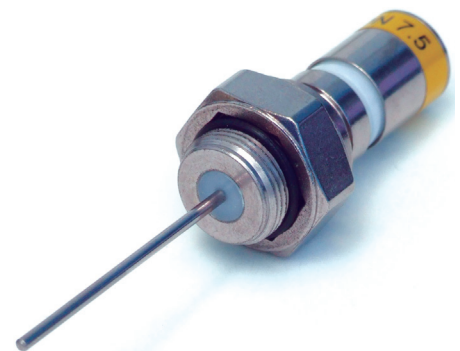
- Available with QuickMount™ technology
- Available with PushPin™ System
- Waterproof design
- Easy & safe installation
- Excellent specifications
- Replaces hardline RG11 connectors
- Available in FM, 3.5/15M&F, 5/8MU, IEC14M & BNC



3.5/12M-RG11-CX3 7.5



CX3™ replaces hardline RG11 connectors



5/8MU-RG11-CX3 7.5



All RG7/11 connectors come with a free spinning nut for easy installation

Coloured labels to indicate size and as a guide for proper stripping dimensions (6.5/6.5 mm)

No need for additional sealing. O-rings in the front part secure a watertight connection according to IPX8 (BNC excluded)

Wide range of tools available for easy and secure installation



PushPin™ System
For safe indication of proper cable installation before compression takes place

The CX3™ RG7/11 connectors features Cabelcon's unique patented PushPin™ (movable pin) system. The pin is protected in the body during transportation (except 5/8M) and is automatically pushed forward in place during installation of the cable before compression takes place.

This is an easy way to ensure a perfect connection (read more about Push-Pin™ on page 3 & 11).



CX3™ Type 220

CX3™ - Built to last

All Cabelcon's CX3™ connectors have passed an extended environmental test. Where most manufacturers follow the standard of measuring performance in temperature cycles between -40 and +70 degrees Celsius, Cabelcon extends the limits and have measured CX3™ to perform perfectly at temperatures of -60 degrees Celsius.



FM-RG11 connectors in the "Arctic" test

Technical Data (typical) FM-RG11-CX3

Operational to 3 GHz	
Impedance	75 Ohm
Shielding Eff. 30-862 MHz	100 dB*
Return loss@1000 MHz	36 dB*
Return loss@3000 MHz	28 dB*
IMD (3rd order@2x100mW)	-135 dBc*
IMD (IP3 value)	+92 dBm*
AMP rating	7.5 A
Max. Tensile strength (overall)	200 N
Sealing test (IPX8 30 m/8 hours)	Passed
* Depending on the used cable	

Detailed datasheets are available on request

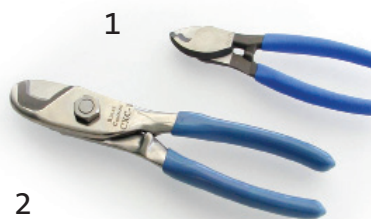
Order information

16	FM-RG7-CX3 6.0	99909500-01
16	FM-RG11-CX3 7.5	99909510-01
16	FM-RG11Q-CX3 7.5	99909515-01
22	FM-RG11-CX3 QM 10.5	99909538-01
17	3.5/12M-RG11-CX3 7.5	99909520-01
18	3.5/12F-RG11-CX3 7.5	99909530-01
19	5/8MU-RG11-CX3 7.5	99909525
19	5/8MU-RG11Q-CX3 7.5	99909527
20	IEC14M-RG11-CX3 7.5	99909535-01
21	BNCM-RG11Q CX3 7.5	99909536

*16	FM-220-CX3	99909511
*17	3.5/12M-220-CX3	99909521
*18	5/8MU-220-CX3	99909526

* Coring/strip tool 220 STI, item no.98120102-01 is required for type 220 cable preparation

CX3™ Tools



29



Tool Guide

1. Find the reference number in the order information boxes on the previous pages
2. Choose the corresponding reference number in the tools matrix and identify the matching tools

Reference number	Tools Matrix	picture number
1	Select your connector below	
2	CX3 F-series RG 59/6 (ex. short)	
3	CX3 F-series all short versions	
4	CX3 FM-series RG 59/6 (with pin)	
5	CX3 F Push-on Short RG 59/6	
6	CX3 F-series RG59/6 QM	
7	CX3 F-series RG59/6 SI	
8	CX3 F-series RG59/6 SC	
9	CX3 F-series RG59/6 HP	
10	CX3 BNCM series RG 59/6	
11	CX3 IECM/IECF series RG 59/6	
12	CX3 Mini Series F & IEC	
13	CX3 Mini Series BNC	
14	CX3 Mini Series QM	
15	CX3 Mini Series MCX	
16	CX3 E-series RG 59/6	
17	CX3 FM-series RG 7/11 6.0/7.5	
18	CX3 3.5/12M RG11 7.5	
19	CX3 3.5/12F RG11 7.5	
20	CX3 5/8MU RG11 7.5	
21	CX3 IEC14M RG11 7.5	
22	CX3 BNCM RG11 7.5	
23	CX3 QM RG11 10.5	
24	CX3 NM/50 - RG 58 (50 Ohm)	
		1
	Cable cutter drop RG 59/6/11 CC for copper clad steel 98028619	
		2
	Cable cutter drop RG59/6/7/11 98028621-01	
		3
	Rotary cable stripper LDT Mini 98500995	
		4
	Rotary Cable stripper EUR LDT 98501004	
		5
	Rotary cable stripper RG 6/59 98501010	
		6
	Rotary cable stripper RG11 98501102	
		7
	CAT-AS-IEC/RCA-FX 98029049	
		8
	G-CAT Multimedia tool 98029064	
		9
	Pocket Installer RG6/59 98501040-01	
		10
	CX3 pocket tool 59/6 98029070	
		11
	CX3 pocket tool 59/6 BNC 98029074 (98029048 for MCX)	
		12
	Compression tool RG 6/59, mini universal 98029071	
		13
	Compression tool RG11 Universal 98029073	
		14
	Compression tool CX3 all size 98029072-01	
		15
	Multimedia Compression Tool 98029075	
		16
	Mounting tool for BNCM connectors 98028782	
		17
	Mounting tool for 3.5/12F 98028783	
		18
	Mounting tool for IEC 14mm 98028784	
		19
	Mounting tool for 3.5/12M 98028787-01	
		20
	Mounting tool for NM 98028788	
		21
	Mounting tool for UltraEase GF-UE (F series) 98028804	
		22
	Mounting tool for F connectors 98028805-01	
		23
	Torque wrench AH HEX 11mm 4.5 Nm 98029080-01	
		24
	Torque wrench 14 mm 4.5 Nm 98029095	
		25
	Torque wrench 22 mm 3.5/12M 9 Nm 98029110	
		26
	Installation tool HT-2206 for BNC 98028796	
		27
	Installation tool HT-2206F for F 98028798-01	
		28
	Rubber tool for cable support 98028785	
		29
	Tool for security shield ø 20 mm 98028794-01	

Changes, errors and omissions

Corning Cabelcon strives to provide the most complete and accurate information on all products and services. However our product program is under continuous development.

We can not be held responsible for any changes, errors or omissions in this catalogue.

Please contact our service department or checkout our website for the latest information.