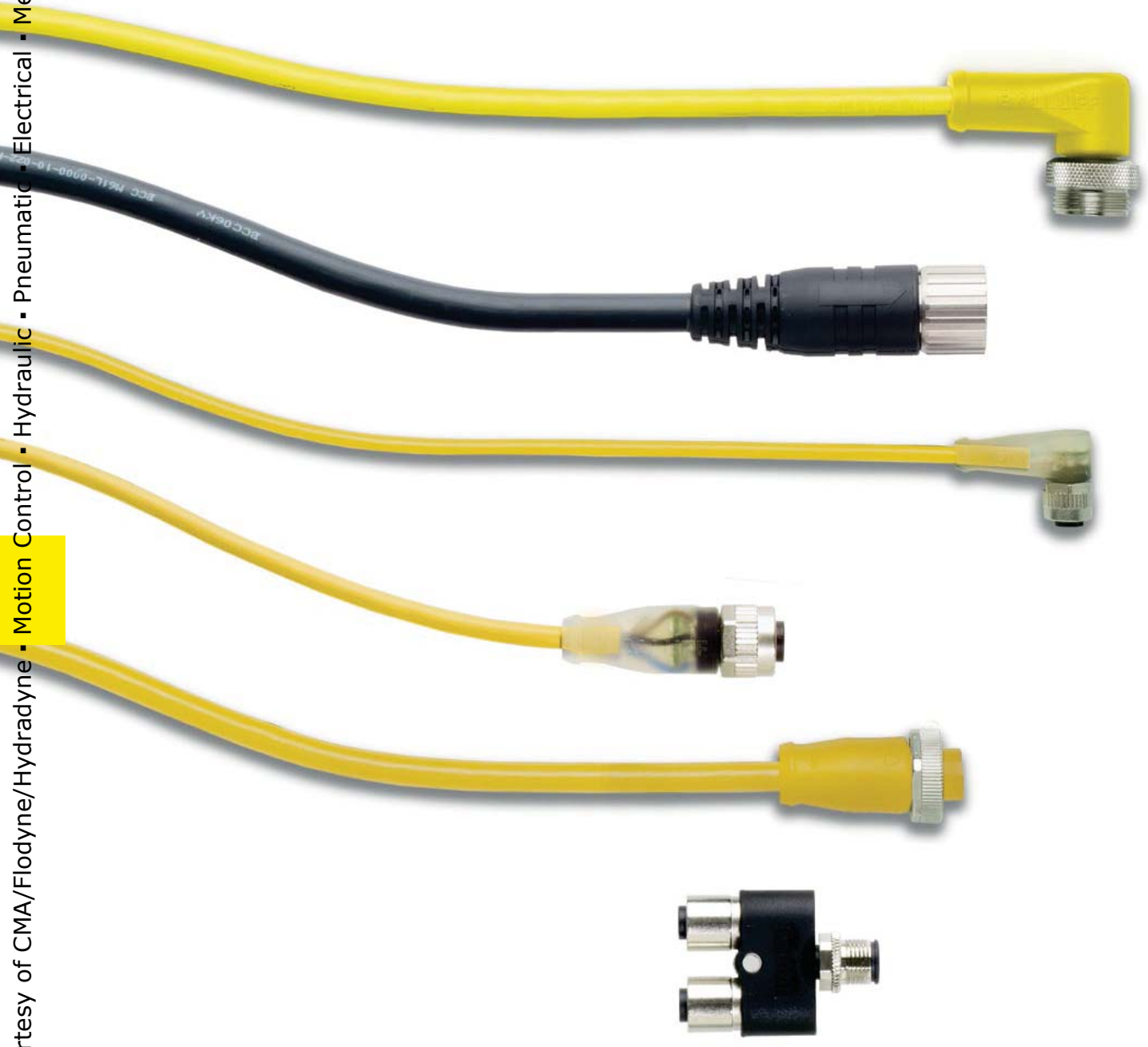


Connectors and Valve Connectors



Connectivity Solutions

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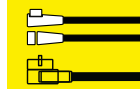
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Connectors and cables

Balluff's line of passive connectivity products offers a full compliment of options to establish standard sensor and actuator solutions in the automation environment. These components provide a high level of reliability and confidence, enabling accurate and repeatable connection IP ratings during maintenance. Many combinations of solutions are available and are presented below to facilitate future connectivity designs.



Cables and Accessories



Connectivity Solutions

Passive connectivity overview

Balluff's line of sensor cordsets offers many benefits to the automation world. Balluff can globally offer cordsets that fit almost any standard sensor or actuator application. This offering includes features such as consistent and accurate IP ratings, a wide range of cable jackets, a full range of overmold configurations, and high quality rugged materials.

Hex Nut and Wrench
Maintain IP rating by applying the correct tightening torque every time

Alignment Mark
Arrow symbol aligns cordset with sensor keyways

TPU Overmold Strain Relief
Durable material that offers strain relief when required

Bright LEDs
LEDs shine bright even in difficult applications. Available with 2 or 3 LEDs

M8 and M12 Cordsets
Standard industrial connector sizes

Cable Materials
High grade, industry standard jacket materials

PVC
Standard automation and washdown

PUR
Abrasion and fluid resistant, halogen free

TPE
High-flex and weld slag resistant

Black PUR



Gray PVC



Yellow PVC, PUR, and TPE



PVC, PUR, and TPE with LEDs



Connectivity Solutions

Passive connectivity overview

Multiple Interface Blocks (MIB)

Balluff multiple interface blocks allow multiple sensors and actuator signals to be easily routed back to a control system. These fully potted blocks with metal threaded ports carry high shock and vibration ratings and are well-suited for many types of environments. The combination of Balluff's multiple interface blocks, cordsets and torque wrenches, provides a robust IP67 solution for a wet environment.

Quick Disconnect and Cable-out

Rated for integrated drag chain and available with a homerun cordset or metric quick disconnect threads for fast changeouts.



PNP LEDs

For use in verifying signal status

Hex Nut and Wrench

Maintain IP rating by applying the correct tightening torque

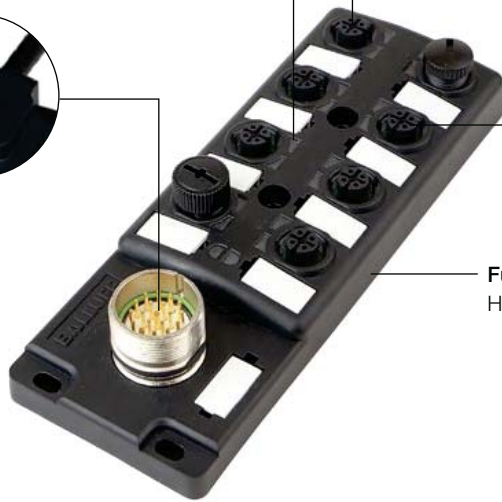


Variety of sizes

M8 - 3-wire and 4-wire
M12 - 4-wire and 5-wire

Fully Potted Housing

High shock and vibration ratings



By incorporating passive technology, these blocks concentrate signals into one homerun cordset. The dual density connectors allow for two signals per port. A typical application would include a Balluff V-Twin™ magnetic field sensor used with pneumatic cylinders. The V-Twin provides two sensors with a single connector, which sends both signals through the single cordset back to the high density MIB. This solution reduces sensor and cabling costs without sacrificing reliability or quality.

Valve Connectors

From sensors to cordsets, Balluff offers an extensive line, which includes valve connectors. These valve connectors cover all standard DIN connections, while also offering drag chain rated cables, rugged housings, and an option of protective circuits. Balluff can essentially complete any valve connector solution.

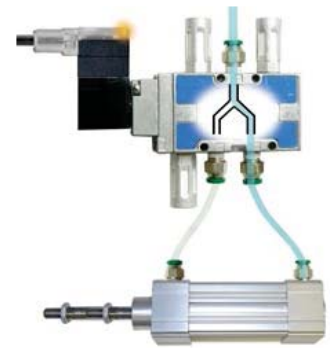
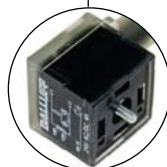
LEDs

LEDs shine bright, even in difficult lighting situations



Overmolded Connectors

Maintain IP rating even in the roughest conditions



Cables and Accessories



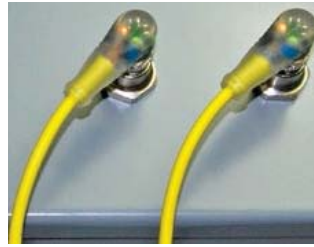
While DIN & Industry style connectors are used in many industrial automation applications, the most popular uses are with simple motors and solenoid valves. As with most solenoid valve applications a DIN or Industry style connector is required to switch the valve's position. Whether the application is clamping a part or moving an object, the Balluff valve connector can be used to pass the control signal to the valve. Integrated LEDs allow for easy recognition of solenoid position.

Connectivity Solutions

Passive connectivity applications



Welding and Rugged Environments
 When working in rugged environments, it's important to choose a cordset that will stand up to the harshest situations – TPE is the cable jacket of choice. The use of LED cordsets is also beneficial for troubleshooting.



I/O Verification for Troubleshooting
 Selecting LEDs on the male ends of your cordsets allows for the sensor and output signals to be easily viewable and allows for simpler input or output indication for the operator.

Cordset Options and Solutions

Balluff's line of passive connectivity products offers a full compliment of options to establish standard sensor and actuator solutions in the automation environment. These components provide a high level of reliability and confidence, enabling accurate and repeatable connection IP ratings during maintenance. Many combinations of solutions are available and are presented below to facilitate future connectivity designs.

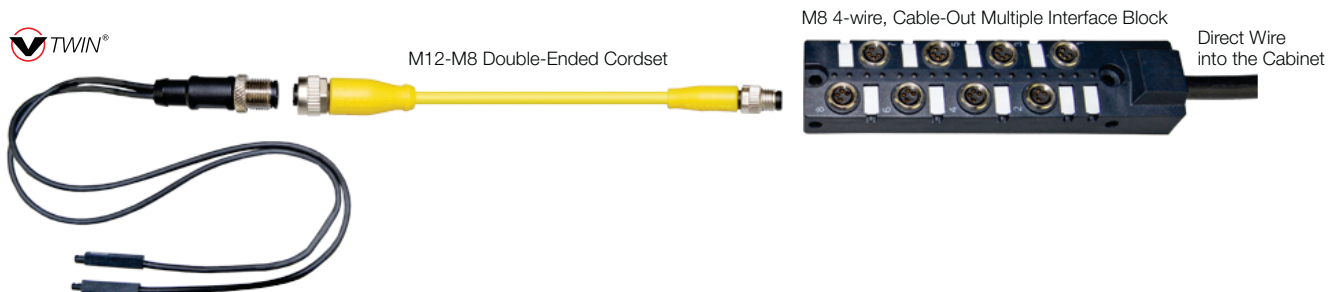
Basic Connectivity Solution: Used in simple, low sensor count applications



Sacrifice Cordset Solution: Used in extremely rugged applications to reduce cordset replacement downtime



Distributed I/O Solution: Used when many sensors and actuators are installed in various clumps around the machine



Connectivity Solutions

Passive connectivity applications



Washdown and Wet Applications

Fluids and sensor signals do not mix. By using a calibrated IP67 torque wrench on the hex nut of every cordset, you can ensure the IP67 rating of the multiple interface block with the cordset – and keep your signals dry.

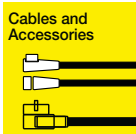
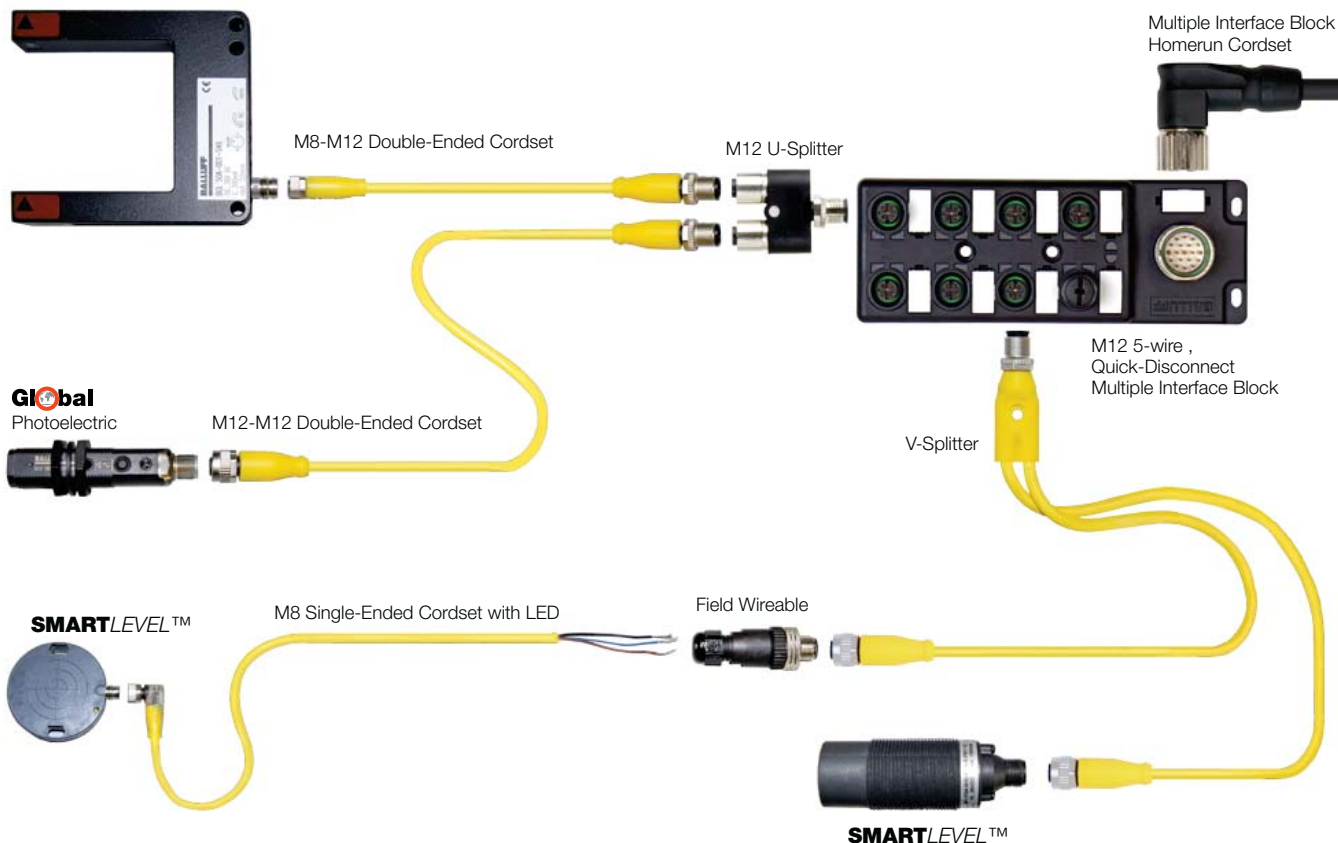


Packaging and Assembly Automation

When quality is as important as speed in your application, select a PUR cordset, which provides flexibility as well as abrasion and fluid resistance. In a standard automation application, select a PVC cordset that is reliable and cost effective.

High Density Distributed I/O: Used when many sensor and actuator signals are needed for a production line or a highly automated machine

ULTRAFRAME™



Connectivity Solutions

Overview quick selector



Sensor & Actuator Cables

Size	M5	M8	M12	M8 and M12 Specialty
Configurations	Single-Ended & Double-Ended	Single-Ended & Double-Ended	Single-Ended & Double-Ended	High Temp, Coil Cable, Stainless, IP69K, ECOLAB, Global cable
Conductors	3-wire, 4-wire	3-wire, 4-wire	3, 4, 4+PE, 5, 8, 12-wire	3-wire, 4-wire, 4+PE
LED Versions	No	Yes	Yes	Yes
Shielded Versions	No	Yes	Yes	No
Page Number	124	125-127	128-137	138-141, 149



Mini Size Cables

Size	7/8"	1"	1 1/8"
Configurations	Single-Ended, Double-Ended, Tees, Bulkheads, Converters	Single-Ended, Double-Ended	Single-Ended, Double-Ended
Conductors	US Color Code: 3 & 4-wire DC Color Code: 4 & 5-wire	6, 7, 8-wire	9, 10, 12, 19-wire
Color Codes Available	US AC, DC	---	---
Shielded Versions	No	No	No
Page Number	156-159	162	163



Junction Blocks (MIBs)

Size	M8	M12	M12, M16, M23
Configurations	Quick Disconnect, Cable Out	Quick Disconnect, Cable Out, Terminal Blocks	Homerun Cables
Conductors	4-port & 8-port, 3-wire & 4-wire	4-port & 8-port, 3+PE & 4+PE	8-wire, 12-wire, 19-wire
LED Versions	Yes	Yes	No
Shielded Versions	No	No	No
Page Number	164-165	166-167	152-153, 166, 169

Connectivity Solutions

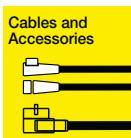
Overview quick selector



M8 and M12 High Durability Silicone, Silicone tube, PTFE	Splitters M8 & M12, V & U Styles	1/2" AC Single-Ended, Double-Ended	DIN A, DIN B, IND B, DIN C, IND C Single-Ended, Pigtail, V-Splitter
3, 4-wire	3-wire, 3+PE	3, 4, 5, 6-wire	2+PE
Yes	Yes	No	Yes
No	No	Yes	Yes
142-148	145-146, 150-151	154-155	184-185



Receptacles			
M8 M8x0.5	M12 1/4"-18NPT, 1/2"-14NPT, M16x1.5	1/2" AC, 7/8", 1", 1 1/8" 1/4"-18NPT, 1/2"-14NPT, M16x1.5, M20x1.5	M23 M20x1.5
3-wire, 4-wire	3, 4, 4+PE, 5, 8-wire	3, 4, 5, 6-wire, 7, 8, 9, 10-wire 12, 19-wire	12-wire, 19-wire
DC	DC	US AC, DC	---
Metal	Metal	Metal	Metal
170	171	172-175	170



Field Attachables			
M8 Piercon, Screw Terminal, Soldercup	M12 Insulation Displacement, Screw Terminal, Spring Clamp	1/2" AC, 7/8" Screw Terminal	M23 Solder Cup
3-wire, 4-wire	3, 4, 5, 8, 12-wire	3, 4, 5-wire	12, 19-wire
No	No	No	No
No	Yes	No	No
176-177	178-181	182	183

Connectivity Solutions

M8 Nano, M12 Micro - Single & Double-Ended Cables

BCC M415 - M424 - 3A - 304 - VX44T2 - 020 - C008
 Head 1 Head 2 Code Wiring Raw Cable Length Custom

Head 1 and Head 2 Configuration

Connector size and type

M3	M8 Nano DC – Ni Plated Brass
M4	M12 Micro DC – Ni Plated Brass
S3	M8 Nano DC – Stainless 1.4404
S4	M12 Micro DC – Stainless 1.4404
0000	(Head 2) Single-Ended Cable

Connector direction

1	Straight Plastic Overmolded
2	Right Angle Plastic Overmolded

Number of visible connections

5	M12 Female
----------	------------

No. poles Any other configuration

Code Configuration

Gender Type

1	Female Internal Threads
2	Male External Threads
3	Female Int – Male Ext
5	Female Int – Female Int
6	Male Ext – Male Ext

Connector Coding

A	M12 Sensor Cables (typical) (A-coded)
0	M8 Sensor Cables (typical) (No coding)
B	M12 Profibus Cables (B-coded)
D	M12 Ethernet Cables (D-coded) (Profinet, EtherNet/IP)
E	M8-M12 Double-Ended Cables
F	M12-M8 Double-Ended Cables

Wiring Configurations

See next page for configurations

Custom Configurations

Custom Values

C002	Grey Overmold
C008	Weld Repel™ Applied
C013	GlobalLine, Black Overmold

Raw Cable Configuration

Jacket Material

V	PVC
P	PUR
E	TPE

Special Designator

X	Nothing
C	Coiled Cable
H	High Temperature
S	Shielded
W	Weld Resistant / High Shore
I	Economy (non-UL/CSA)
M	Solid Conductor, Unshielded

Jacket Color

0	Black	2	Red (CC-Link)
3	Orange	4	Yellow (standard)
5	Green (Profinet)	6	Blue (EtherNet/IP)
7	Violet (Profibus)	8	Grey (standard/DeviceNet)

Number of Poles

#	3-pole thru 9-poles
A	10-pole
C	12-pole

Conductor Profile

T2	22 AWG	W8	18 AWG
25	0.25mm2	34	0.34mm2
50	0.50mm2	N1	Profibus
N2	Profinet	N6	DeviceNet thin
N7	CC-Link	N8	ethernet
N9	EtherNet/IP		

Length Configuration

Cable Length

003	0.3 meters
020	2.0 meters
100	10.0 meters

Special Lengths

05/14	0.5 m coiled, 1.4 m stretch
2D5	.25 meters (25 cm)
10X	100 meters

Note: Part Number Matrix is designed for information purposes only. Not all configurations are possible. Consult factory for part number availability.

Connectivity Solutions

M8 Nano, M12 Micro - Single & Double-Ended Cables

Standard Cordsets

Wiring	Poles	Shield	Head 1	Head 2
001	3-wire	---	N/O	---
002	3-wire	---	N/C	---
003	4-wire	---	Comp.	---
004	3-wire	---	N/O PNP LED	---
005	3-wire	---	N/C PNP LED	---
006	3-wire	---	N/O NPN LED	---
007	3-wire	---	N/C NPN LED	---
008	4-wire	---	N/O PNP LED	---
009	4-wire	---	N/O NPN LED (M12 Female Only)	---
010	4-wire	---	Comp. PNP LED	---
300	3-wire	---	N/O	N/O
302	3-wire	---	N/O PNP LED	N/O PNP LED
304	4-wire	---	Comp.	Comp.
306	4-wire	---	N/O PNP LED	N/O PNP LED
313	5-wire	---	Comp. and Gnd	---
602	3-wire	---	N/O PNP LED	N/O
603	3-wire	---	N/O NPN LED	N/O
606	4-wire	---	N/O PNP LED	Comp.
607	4-wire	---	N/O NPN LED	Comp.
650	4-wire	---	Comp. PNP LED	Comp.
651	4-wire	---	Comp. PNP LED	N/O PNP LED

Shielded Cordsets and High Conductor Counts

014	4-wire	Nut	BN,WH,BU,BK	---
016	5-wire	Nut	BN,WH,BU,BK,GY	---
017	5-wire	---	BN,WH,BU,BK,GY	---
034	4-wire+PE	---	BN,WH,BU,BK,GNYE	---
036	3-wire	Nut	BN,BU,BK (N/O)	---
037	3-wire	Nut	BN,BU,BK (N/C)	---
039	5-wire	---	Comp. PNP LED	---
040	4-wire+PE	---	Comp. PNP LED	---
043	4-wire+PE	Nut	BN,WH,BU,BK,GNYE	---
044	8-wire	---	WH,GN,YE,GY,BN,PK,BU,RD	---
046	8-wire	Nut	WH,BN,GN,YE,GY,PK,BU,RD	---
049	12-wire	---	BN,BU,WH,GN,PK,YE,BK,GY,RD,VI,GYPK,RDBU	---
325	12-wire	---	BN,BU,WH,GN,PK,YE,BK,GY,RD,VI,GYPK,RDBU	---

Network Cordsets

031	2-pole	Nut	Profibus	---
068	4-pole	Pin	CC-Link	---
329	2-pole	Nut	Profibus	Profibus
331	4-pole	Nut	Profinet	Profinet
337	4-pole	Pin	CC-Link	CC-Link
338	2x2pair	Nut	ethernet	ethernet

Cables and Accessories



Connectivity Solutions

M8 Nano, M12 Micro - Splitter Cables

BCC M414 - M425 - M425 - U2010 - 003

Head 1 (Splitter) Head 2 (Head A) Head 3 (Head B) Splitter Code Length

Head 1 Configuration

Connector Size & Type

M4 M12 Micro DC – Ni Plated Brass

Connector Direction

1 Straight Plastic Overmolded

Number of Visible Connections

3-pole thru 8-poles

Head 2 & Head 3 Configuration

Connector Size & Type

M3 M8 Nano DC – Ni Plated Brass

M4 M12 Micro DC – Ni Plated Brass

0000 (Head 2, Head 3) Open Splitter

Connector Direction

1 Straight Plastic Overmolded

2 Right Angle Plastic Overmolded

Number of Visible Connections

5 M12 Female

no. poles Any other configuration

Splitter Code

Code	Type	Wiring	Head 1	Head 2	Head 3	Cable	Body
U0003	U Splitter	A00	M12 Male	M12 Female	M12 Female	---	BK PVC
U0014	U Splitter	A00	M12 Male	M8 3-pole Female	M8 3-pole Female	---	BK PVC
U2002	V Splitter	A00	M12 Male	M12 Female	M12 Female	YE TPE	YE TPU
U2009	V Splitter	A13	M12 Male	Leads	Leads	YE PVC	YE TPU
U2010	V Splitter	A00	M12 Male	M12 Female	M12 Female	YE PVC	YE TPU
U2011	V Splitter	A07	M12 Male	M12 Female	M12 Female	YE TPE	YE TPU
U2012	V Splitter	A00	M12 Male	M8 Female	M8 Female	YE PVC	YE TPU

Wiring Configuration

Wiring	Head 1	Head 2	Head 3	Logic	LED
A00	4-wire	3-wire N/O (H1=pin 4)	3-wire N/O (H1=pin 2)	Splitter	---
A07	4-wire	3-wire N/O (H1=pin 4)	3-wire N/O (H1=pin 2)	Splitter	(H2&H3) PNP
A13	4-wire	BN,BU,BK (H1=pin 4)	BN,BU,BK (H1=pin 2)	Splitter	---

Length Configuration

Cable Length

003 0.3 meters

006 0.6 meters

020 2.0 meters

*Head 2 & Head 3 lengths are equal

Note: Part Number Matrix is designed for information purposes only. Not all configurations are possible. Consult factory for part number availability.


Connectivity Solutions
Mini Sizes: 7/8", 1", 1 1/8" - Single & Double-Ended Cables

BCC A315 - A325 - 30 - 335 - VX45W6 - 020
 Head 1 Head 2 Code Wiring Raw Cable Length

Head 1 & Head 2 Configuration

Connector Size & Type

A3	7/8" MINI Size I
A4	1" MINI Size II
A5	1 1/8" MINI Size III
0000	(Head 2) Single-Ended Cable

Connector Direction

1	Straight Plastic Overmolded
2	Right Angle Plastic Overmolded

Number of Visible Connections

#	3-pole thru 9-poles
A	10-pole
C	12-pole
L	19-pole

Code Configuration

Gender Type

1	Female Internal Threads
2	Male External Threads
3	Female Int – Male Ext
7	Female Int – Male Int
C	Male Internal Threads
D	Female External Threads

Connector Coding

0	All configurations (typical)
----------	------------------------------

Raw Cable Configuration

Jacket Material

V	PVC
P	PUR
E	TPE

Special Designator

X	nothing
S	Shielded

Jacket Color

0	Black
4	Yellow (standard)
8	Grey

Number of Poles

#	1-pole thru 9-poles
A	10-pole
C	12-pole
L	19-pole

Conductor Profile

W6	16 AWG
W8	18 AWG
A5	1.50mm 2m ²
N4	DeviceNet Thick*
N5	DeviceNet Mid
N6	DeviceNet Thin*

*For DeviceNet a jacket material of PUR is flex rated

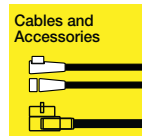
Length Configuration

Cable Length

003	0.3 meters
020	2.0 meters
100	10.0 meters

Wiring Configurations

Single-Ended	Double-Ended	Poles
003	304	4-wire DC
063	335	5-wire DC
071	345	3-wire AC
072	346	4-wire AC
085	357	6-wire
086	358	7-wire
087	359	8-wire
088	360	9-wire
089	355	10-wire
090	362	12-wire
091	363	19-wire
030	330	DeviceNet



Note: Part Number Matrix is designed for information purposes only. Not all configurations are possible. Consult factory for part number availability.

BCC M434 - 0000 - 2A - 000 - 55X450 - 000
 Connector (Place Holder) Code (Place Holder) Configuration (Place Holder)

Field Attachable Connector

Connector Size & Type

M3	M8 Nano DC
M4	M12 Micro DC
S3	M8 Nano DC – Stainless
S4	M12 Micro DC – Stainless
A2	1/2" Micro AC
A3	7/8" MINI Size I

Connector Direction

3	Straight Plastic Field Attachable
4	Right Angle Plastic Field Attachable
7	Straight Metal Field Attachable
8	Right Angle Metal Field Attachable

Number of Visible Connections

5	M12 Female
No. poles	Any other configuration

Code Configuration

Gender Type

1	Female Internal Threads
2	Male External Threads

Connector Coding

A	M12 Sensor Connectors (typical)
0	M8 & 7/8" (typical)
B	M12 Profibus Connectors
C	1/2 AC (typical)
D	M12 Ethernet Connectors (Profinet, EtherNet/IP)

Configuration Breakdown

Cable Gland Minimum Diameter

1	min Ø 2.5mm	2	min Ø 3.0mm
3	min Ø 3.5mm	4	min Ø 4.0mm
5	min Ø 6.0mm	6	min Ø 8.0mm
7	min Ø 10mm	8	min Ø 12mm
9	min Ø 14mm	0	min Ø 5.0mm
A	min Ø 2.1mm or 4.0mm		

Connection Technology

1	Screw Terminals
2	Piercon Terminals
3	Insulation Displacement Terminals
4	Solder Cup Terminals
5	Spring Type Terminals

Cable Type

X	no cable
----------	----------

Number of Poles

#	1-pole thru 9-poles
A	10-pole
C	12-pole

Maximum Conductor Profile

25	0.25mm ²	34	0.34mm ²
50	0.50mm ²	75	0.75mm ²
A5	1.50mm ²		

Note: Part Number Matrix is designed for information purposes only. Not all configurations are possible. Consult factory for part number availability.

Connectivity Solutions

Bulk Raw Cable

BCC 0000 - 0000 - 00 - 001 - EX43T2 - 10X
 (Place Holder) (Place Holder) (Place Holder) Wiring Raw Cable Length

Wiring Configuration

Wiring	Poles	Shield	Color Code
001	3-wire DC	---	BN,BU,BK
003	4-wire DC	---	BN,WH,BU,BK
030	5-wire	Yes	DeviceNet
063	5-wire DC	---	BN,WH,BU,BK,GNYE
071	3-wire AC	---	WH,BK,GN
072	4-wire AC	---	BK,WH,RD,GN
102	2x2 Twisted Pair	---	OR, WH/OR, GN, WH/GN
168	2x2 Twisted Pair	Yes	OR, WH/OR, GN, WH/GN
000	---	---	Contact Technical Support

Length Configuration

Cable Length

300	30 meters
10X	100 meters (standard)

Raw Cable Configuration

Jacket Material

V	PVC
P	PUR
E	TPE

Special Designator

X	nothing
S	Shielded

Jacket Color

0	Black	2	Red (CC-Link)
4	Yellow (standard)	5	Green (Profinet)
7	Violet (Profibus)	6	Teal (Ethernet)
8	Grey (standard/DeviceNet)		

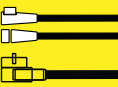
Number of Poles

#	2-pole thru 5-poles
---	---------------------

Conductor Profile

T2	22 AWG	W6	16 AWG
34	0.34mm ²	A5	1.50mm ²
N1	Profibus	N2	Profinet
N4	DeviceNet Thick	N5	DeviceNet Mid
N6	DeviceNet Thin	N7	CC-Link
N9	EtherNet/IP		

Cables and Accessories



Note: Part Number Matrix is designed for information purposes only. Not all configurations are possible. Consult factory for part number availability.

Connectivity Solutions

Valve Connectors - DIN & IND Styles

BCC VA04 - M413 - 3E - 665 - VX8350 - 006
 Head 1 Head 2 Code Wiring Raw Cable Length

Head 1 Configuration

Connector Size & Type

VA0	Type A – DIN (18mm) – 0°
VB0	Type B – DIN (10mm) – 0°
VB2	Type B – DIN (10mm) – 180°
VB4	Type B – IND (11mm) – 0°
VB6	Type B – IND (11mm) – 180°
VC0	Type C – DIN (8mm) – 0°
VC4	Type C – IND (9.4mm) – 0°

Number of Visible Connections

4	A & C Types
3	B Type

Head 2 Configuration

Connector Size & Type

M4	M12 Micro DC – Ni Plated Brass
0000	(Head 2) Single-Ended Cable

Connector Direction

1	Straight Plastic Overmolded
2	Right Angle Plastic Overmolded

Number of Visible Connections

#	3-pole thru 5-poles
----------	---------------------

Code Configuration

Gender Type

1	Female
3	Female – Male

Connector Coding

0	Single-Ended Cables (typical)
E	Double-Ended Cables (with M12)

Wiring Configuration

Wiring	Poles	Bridged	H1/H2 LED
053	3	Yes	Diode & PNP LED/---
054	3	Yes	No/---
055	3	---	Diode & PNP LED/---
056	3	---	No/---
664	3	Yes	Diode & PNP LED/No
665	3	Yes	No/No
666	3	---	Diode & PNP LED/No
667	3	---	No/No

Raw Cable Configuration

Jacket Material

V	PVC
P	PUR

Special Designator

X	nothing
----------	---------

Jacket Color

0	Black
8	Grey

Number of Poles

#	3-pole thru 5-poles
----------	---------------------

Conductor Profile

50	0.50mm ²
-----------	---------------------

Length Configuration

Cable Length

003	0.3 meters
020	2.0 meters
100	10.0 meters

Note: Part Number Matrix is designed for information purposes only. Not all configurations are possible. Consult factory for part number availability.



BCC W425 - W414 - 3A - 304 - SW0434 - 020

Head 1

Head 2

Code

Wiring

Raw Cable

Length

Head 1 & Head 2 Configuration

Connector Size & Type

- W3** M8 Nano DC – PTFE coated
- W4** M12 Micro DC – PTFE coated
- 0000** (Head 2) Single-Ended Cable

Connector Direction

- 1** Straight Plastic Overmolded
- 2** Right Angle Plastic Overmolded

Number of Visible Connections

- 5** M12 Female
- no. poles** Any other configuration

Code Configuration

Gender Type

- 1** Female Internal Threads
- 2** Male External Threads
- 3** Female Int – Male Ext

Connector Coding

- A** M12 Sensor Cables (typical) (A-coded)
- 0** M8 Sensor Cables (typical) (No coding)
- E** M8-M12 Double-Ended Cables
- F** M12-M8 Double-Ended Cables

Wiring Configuration – Standard Cordsets

Single-Ended	Double-Ended	Poles	H1/H2
001	300	3-wire	N/O
002	- - -	3-wire	N/C
003	304	4-wire	Comp.
- - -	606	4-wire	N/O PNP LED/Comp

Raw Cable Configuration

Jacket Material

- B** Thermoplast
 - F** Fiberglass jacket*
 - M** Stainless steel jacket
 - N** Silicon tube*
 - S** Silicone
 - T** PTFE
- *Max length 2 meters

Special Designator

- W** Weld Resistant / High Shore

Jacket Color

- 0** Black
- 4** Yellow
- 8** Grey
- 9** White

Number of Poles

- 3** 3-pole
- 4** 4-pole

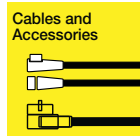
Conductor Profile

- T2** 22 AWG
- 34** 0.34mm²

Length Configuration

Cable Length

- 003** 0.3 meters
- 015** 1.5 meters
- 020** 2.0 meters



Note: Part Number Matrix is designed for information purposes only. Not all configurations are possible. Consult factory for part number availability.

Connectivity Solutions

Sensor cable part builder

Balluff's line of sensor cordsets offers many benefits to the automation world. Balluff can globally offer cordsets that fit almost any standard sensor or actuator application. This offering includes features such as consistent and accurate IP ratings, a wide range of cable jackets, a full range of overmold configurations, and high quality rugged materials.



Select your cordset in 4 easy steps:

1. Pick your connector types (single/double, right angle/straight)
2. Pick your electrical information and LEDs
3. Pick your jacket material and color
4. Pick your cordset length

Complete Part Number Example:

BCC M415-0000-1A-008-VX44T2-050

- M12 single ended, straight female (M415-0000-1A)
- 4-wire, 2x PNP LED (008)
- Yellow PVC, 4-wire (VX44T2)
- 5 m cable (050)

Single Ended Cordsets

Head 1 and 2	3-wire N/O	3-wire N/C	4-wire
No LED	001	002	003
2x PNP LED	004	005	008
3x PNP LED**			010
2x NPN LED	006	007	009

Double Ended Cordsets

Head 1	Head 2	3-wire N/O	4-wire
No LED	No LED	300	304
2x PNP LED	No LED	602	606
3x PNP LED**	No LED		650
2x NPN LED	No LED	603	607
2x PNP LED	2x PNP LED*	302	306
2x NPN LED	2x NPN LED*	303	307
3x PNP LED**	2x PNP LED*		651

2x = 1 power LED and 1 signal LED
3x = 1 power LED and 2 signal LEDs

*M12 right angle male only
**M12 right angle female only



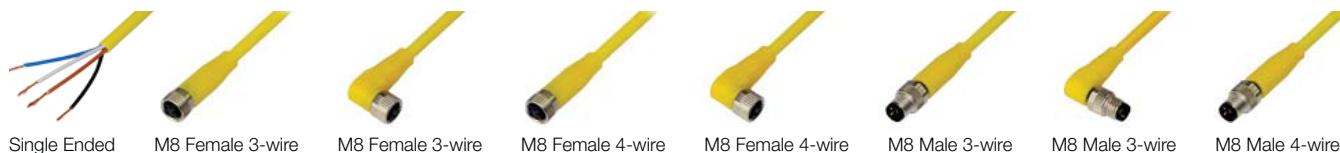
Cordset Connector Selection

Single-ended and double-ended cordsets can be made using the chart below. Available in industry standard M8 and M12 sizes, these cordsets come in a variety of head combinations; single-ended, straight to straight, right angle to straight, and right angle to right angle. To select your cordset, start by selecting the female connector that will match your sensor. Next, follow the row across until you find the required end that will go back to your controller, homerun cordset, MIB, etc.

Cordset Wiring and LEDs

Both 3- and 4-wire cordsets are available in single- and double-ended cordsets, as well as two and three LEDs. To select your cordset, start with Step 1. Then decide if you need 3- or 4-wire and whether or not you want an LED in the overmolded head.

		Male (controller, homerun cable, MIB end)			
Female (sensor end)	Connector Types	Single Ended	3-wire	3-wire	4-wire
		Female	M8 Straight Male	M8 Right Angle Male	M8 Straight Male
Single-Ended Male			M313-0000-20	M323-0000-20	M314-0000-20
M8 Straight Female 3-wire	M313-0000-10		M313-M313-30	M313-M323-30	
M8 Right Angle Female 3-wire	M323-0000-10		M323-M313-30	M323-M323-30	
M8 Straight Female 4-wire	M314-0000-10				M314-M314-30
M8 Right Angle Female 4-wire	M324-0000-10				M324-M314-30
M12 Straight Female	M415-0000-1A		M415-M313-3F	M415-M323-3F	M415-M314-3F
M12 Right Angle Female	M425-0000-1A		M425-M313-3F	M425-M323-3F	M425-M314-3F



Connectivity Solutions

Sensor cable part builder



PVC, PUR, TPE



PVC



PUR



Jacket Color and Material

Material	Color	Conductor	3-wire	4-wire
PVC	Yellow	22 AWG	VX43T2	VX44T2
PVC	Gray	0.34 mm ²	VX8334	VX8434
PUR	Yellow	22 AWG	PX43T2	PX44T2
PUR	Black	0.34 mm ²	PX0334	PX0434
TPE	Yellow	22 AWG	EX43T2	EX44T2

Single Length Options

Length	Ordering Information
2 m	020
5 m	050
10 m	100

Double Length Options

Length	Ordering Information
0.3 m	003
0.6 m	006
1 m	010
1.5 m	015
2 m	020
3 m	030
5 m	050



Raw Cable Type

To select your raw cable, first decide on the correct jacket for the application and then on a jacket color.

- PVC: For standard automation applications
- PUR: For abrasion and extreme fluid resistance
- TPE: For High-flex and for use in heavy duty environments



Cordset Length

Select from our standard cordset lengths above. Contact the factory for custom cordset length selections

4-wire M8 Right Angle Male M324-0000-20	3-wire M12 Straight Male M413-0000-2A M313-M413-3E M323-M413-3E	3-wire M12 Right Angle Male M423-0000-2A M313-M423-3E M323-M423-3E	4-wire M12 Straight Male M414-0000-2A	4-wire M12 Right Angle Male M424-0000-2A
M314-M324-30 M324-M324-30			M314-M414-3E M324-M414-3E	M314-M424-3E M324-M424-3E
M415-M324-3F M425-M324-3F	M415-M413-3A M425-M413-3A	M415-M423-3A M425-M423-3A	M415-M414-3A M425-M414-3A	M415-M424-3A M425-M424-3A



M8 Male 4-wire



M12 Female



M12 Female



M12 Male 3-wire



M12 Male 3-wire

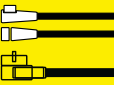


M12 Male 4-wire



M12 Male 4-wire

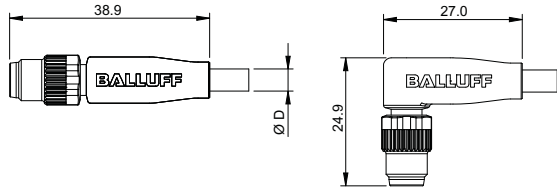
Cables and Accessories



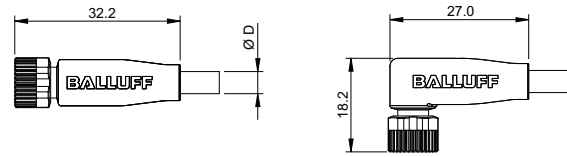
Connectivity Solutions

Technical specifications

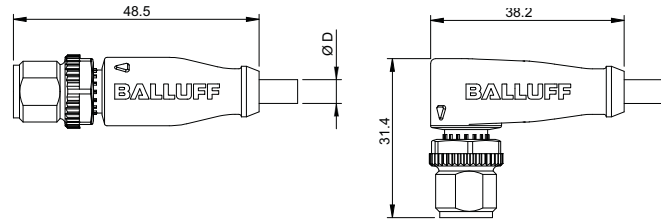
M8 connectors, male straight and right-angle



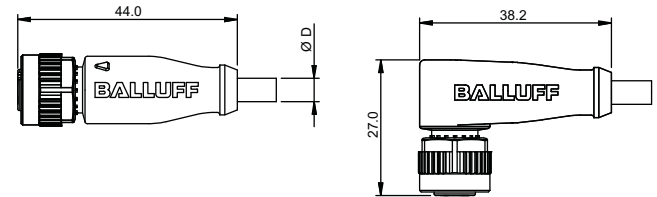
M8 connectors, female straight and right-angle



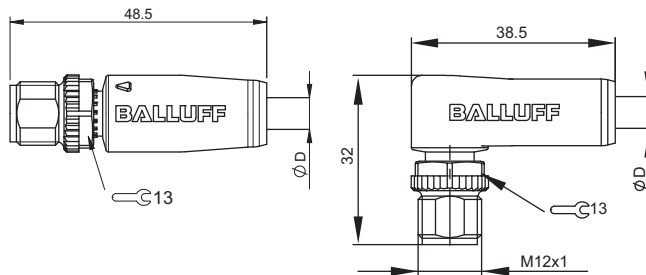
M12 connectors, male straight and right-angle



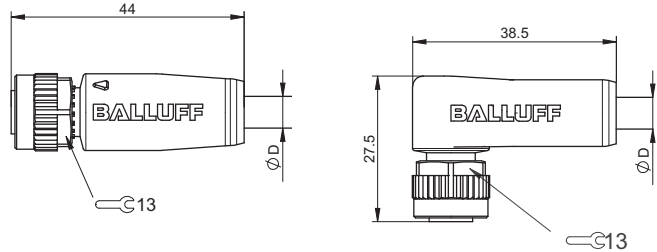
M12 connectors, female straight and right-angle



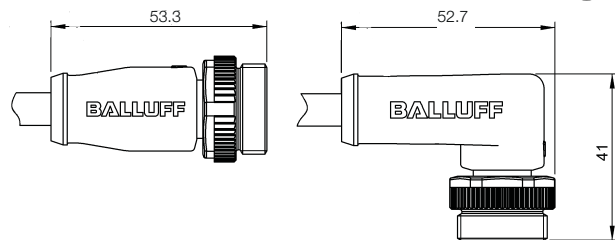
M12 connectors, male straight and right-angle Fatbody



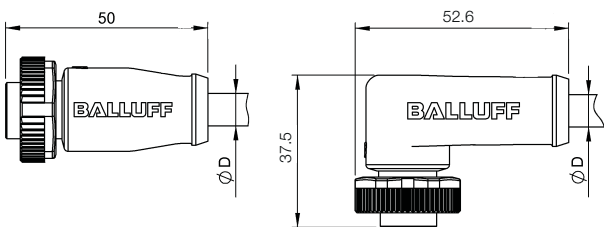
M12 connectors, female straight and right-angle Fatbody



7/8" connectors, male straight and right-angle



7/8" connectors, female straight and right-angle



Note: For face views and wiring diagrams see the technical reference section.

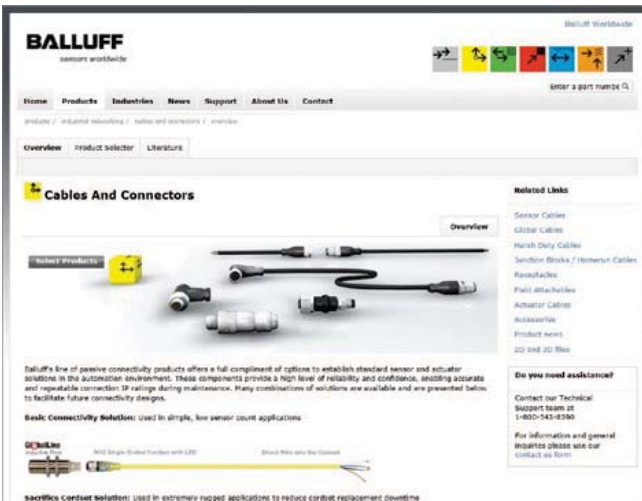
Connectivity Solutions

Bulk sensor cable



Bulk Cable Specifications

Jacket Material	PVC	PUR	TPE			
Application	General Automation	Cut & Fluid Resistant, Halogen Free	High Flex, Weld Slag Resistant, PLTC			
Jacket Color	Yellow	Yellow	Yellow			
Conductor Gauge	22AWG	22AWG	22AWG			
Ambient temp. (moving)	-5...105°C	-25...80°C	-40...105°C			
Ambient temp. (fixed)	-40...105°C	-50...80°C	-50...105°C			
Bending Cycles	> 2 Million	> 2 Million	> 10 Million			
Bulk Cable (100 m)	BCC0AE7	BCC0AE8	BCC0AE9	BCC0AEA	BCC0AEC	BCC0AEE
Number of Conductors	3	4	3	4	3	4
Cable Diameter (mm)	4.7 ± 0.15	5.0 ± 0.15	4.3 ± 0.20	4.7 ± 0.20	5.3 ± 0.13	5.3 ± 0.13

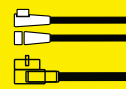


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Cables and Accessories



Connectivity Solutions
M5 single-ended cordsets
M5-M8 double-ended cordsets



M5 Single-Ended

Type	M5 Female	M5 Female
Configuration	Straight	Right Angle
Voltage Rating	30 VAC/VDC	30 VAC/VDC
Amperage	1 A	1 A
Cable Length	3 meters	3 meters
3-wire, non-LED	BCC0HEL	BCC0HEU
4-wire, non-LED	BCC0FLL	BCC0FLU



M5-M8 Double-Ended

Type	M5 Female - M8 Male	M5 Female - M8 Male
Configuration	Straight - Straight	Right Angle - Straight
Voltage Rating	30 VAC/VDC	30 VAC/VDC
Amperage	1 A	1 A
Cable Length	1 meter	1 meter
3-wire, non-LED	BCC0HET	BCC0HEW

For list of order codes and available lengths, see the index.

Connectivity Solutions

M8 single-ended cordsets



M8 Single-Ended Female

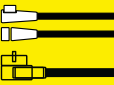
Type	M8 Female	M8 Female
Configuration	Straight	Right Angle
Voltage Rating	60 VAC/VDC (3-wire), 30 VAC/VDC (4-wire)	60 VAC/VDC (3-wire), 30 VAC/VDC (4-wire), 10-30 VDC (LED)
Amperage	4 A	4 A
3-wire, non-LED	BCC M313-0000-10-001- ^① - ^② - - - -	BCC M323-0000-10-001- ^① - ^② - - - -
3-wire, non-LED, shielded	BCC M313-0000-10-036- - - - -	BCC M323-0000-10-036- - - - -
3-wire, PNP-LED, N/O signal	BCC M313-0000-10-004- - - - -	BCC M323-0000-10-004- - - - -
3-wire, NPN-LED, N/O signal	BCC M314-0000-10-003- - - - -	BCC M324-0000-10-003- - - - -
4-wire, non-LED	BCC M314-0000-10-003- - - - -	BCC M324-0000-10-003- - - - -
4-wire, PNP-LED, N/O signal	BCC M314-0000-10-014- - - - -	BCC M324-0000-10-014- - - - -
4-wire, non-LED, shielded	BCC M314-0000-10-014- - - - -	BCC M324-0000-10-014- - - - -



M8 Single-Ended Male

Type	M8 Male	M8 Male
Configuration	Straight	Right Angle
Voltage Rating	60 VAC/VDC (3-wire), 30 VAC/VDC (4-wire)	60 VAC/VDC (3-wire), 30 VAC/VDC (4-wire)
Amperage	4 A	4 A
3-wire, non-LED	BCC M313-0000-20-001- ^① - ^② - - - -	BCC M323-0000-20-001- ^① - ^② - - - -
4-wire, non-LED	BCC M314-0000-20-003- - - - -	BCC M324-0000-20-003- - - - -

Cables and Accessories



Jacket Color and Material			Lengths	
Material	Color	Conductor	3-wire	4-wire
PVC	Yellow	22 AWG	VX43T2	VX44T2
PVC	Gray	0.34 mm ²	VX8334	VX8434
PUR	Yellow	22 AWG	PX43T2	PX44T2
PUR	Black	0.34 mm ²	PX0334	PX0434
TPE	Yellow	22 AWG	EX43T2	EX44T2
PVC shielded	Gray	0.34 mm ²	VS8334	VS8434
PUR shielded	Black	0.34 mm ²	PS0334	PS0434

Lengths
020 = 2 meters
050 = 5 meters
100 = 10 meters

For list of order codes and available lengths, see the index.

Connectivity Solutions

M8-M8 double-ended cordsets

M8-M12 double-ended cordsets



M8-M8 Double-Ended

Type	M8 Female - M8 Male	M8 Female - M8 Male
Configuration	Straight - Straight	Right Angle - Straight
Voltage Rating	60 VAC/VDC (3wire), 30 VAC/VDC (4wire)	60 VAC/VDC (3wire), 30 VAC/VDC (4wire), 10-30 VDC (LED)
Amperage	4 A	4 A
3-wire, non-LED	BCC M313-M313-30-300- ^① ----- ^② -----	BCC M323-M313-30-300- ^① ----- ^② -----
3-wire, PNP-LED, N/O, Head 1		BCC M323-M313-30-602- ^① ----- ^② -----
3-wire, NPN-LED, N/O, Head 1		BCC M323-M313-30-603- ^① ----- ^② -----
4-wire, non-LED	BCC M314-M314-30-304- ^① ----- ^② -----	BCC M324-M314-30-304- ^① ----- ^② -----



M8-M12 Double-Ended

Type	M8 Female - M12 Male	M8 Female - M12 Male
Configuration	Straight - Straight	Right Angle - Straight
Voltage Rating	60 VAC/VDC (3wire), 30 VAC/VDC (4wire)	60 VAC/VDC (3wire), 30 VAC/VDC (4wire), 10-30 VDC (LED)
Amperage	4 A	4 A
3-wire, non-LED	BCC M313-M413-3E-300- ^① ----- ^② -----	BCC M323-M413-3E-300- ^① ----- ^② -----
3-wire, PNP-LED, N/O, Head 1		BCC M323-M413-3E-602- ^① ----- ^② -----
3-wire, NPN-LED, N/O, Head 1		BCC M323-M413-3E-603- ^① ----- ^② -----
4-wire, non-LED	BCC M314-M414-3E-304- ^① ----- ^② -----	BCC M324-M414-3E-304- ^① ----- ^② -----

Jacket Color and Material			^①		^②		Lengths
Material	Color	Conductor	3-wire	4-wire	003 =	006 =	
PVC	Yellow	22 AWG	VX43T2	VX44T2	010 =	015 =	0.3 meters
PVC	Gray	0.34 mm ²	VX8334		020 =	030 =	0.6 meters
PUR	Yellow	22 AWG	PX43T2	PX44T2	050 =		1.0 meters
PUR	Black	0.34 mm ²	PX0334	PX0434			1.5 meters
TPE	Yellow	22 AWG	EX43T2	EX44T2			2 meters
							3 meters
							5 meters

For list of order codes and available lengths, see the index.

Connectivity Solutions

M8-M8 double-ended cordsets

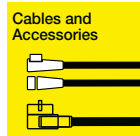
M8-M12 double-ended cordsets



M8 Female - M8 Male	M8 Female - M8 Male
Straight - Right Angle	Right Angle - Right Angle
60 VAC/VDC (3wire), 30 VAC/VDC (4wire)	60 VAC/VDC (3wire), 30 VAC/VDC (4wire), 10-30 VDC (LED)
4 A	4 A
① ②	① ②
BCC M313-M323-30-300- - - - -	BCC M323-M323-30-300- - - - -
	BCC M323-M323-30-602- - - - -
	BCC M323-M323-30-603- - - - -
BCC M314-M324-30-304- - - - -	BCC M324-M324-30-304- - - - -



M8 Female - M12 Male	M8 Female - M12 Male
Straight - Right Angle	Right Angle - Right Angle
60 VAC/VDC (3wire), 30 VAC/VDC (4wire)	60 VAC/VDC (3wire), 30 VAC/VDC (4wire), 10-30 VDC (LED)
4 A	4 A
① ②	① ②
BCC M313-M423-3E-300- - - - -	BCC M323-M423-3E-300- - - - -
	BCC M323-M423-3E-602- - - - -
	BCC M323-M423-3E-603- - - - -
BCC M314-M424-3E-304- - - - -	BCC M324-M424-3E-304- - - - -



For list of order codes and available lengths, see the index.

Connectivity Solutions

M12 single-ended cordsets



M12 Single-Ended

Type	M12 Female	M12 Female
Configuration	Straight	Right Angle
Voltage Rating	250 VAC/VDC (3&4wire), 36 VDC (LED)	250 VAC/VDC (3&4wire), 36 VDC (LED)
Amperage	4 A	4 A
	① ②	① ②
3-wire, non-LED, N/O signal	BCC M415-0000-1A-001- - - - -	BCC M425-0000-1A-001- - - - -
3-wire, non-LED, N/C signal	BCC M415-0000-1A-002- - - - -	BCC M425-0000-1A-002- - - - -
3-wire, PNP-LED, N/O signal	BCC M415-0000-1A-004- - - - -	BCC M425-0000-1A-004- - - - -
3-wire, PNP-LED, N/C signal	BCC M415-0000-1A-005- - - - -	BCC M425-0000-1A-005- - - - -
3-wire, NPN-LED, N/O signal	BCC M415-0000-1A-006- - - - -	BCC M425-0000-1A-006- - - - -
3-wire, NPN-LED, N/C signal	BCC M415-0000-1A-007- - - - -	BCC M425-0000-1A-007- - - - -
4-wire, non-LED, N/O and N/C signal	BCC M415-0000-1A-003- - - - -	BCC M425-0000-1A-003- - - - -
4-wire, PNP-LED, N/O signal	BCC M415-0000-1A-008- - - - -	BCC M425-0000-1A-008- - - - -
4-wire, NPN-LED, N/O signal	BCC M415-0000-1A-009- - - - -	BCC M425-0000-1A-009- - - - -
4-wire, PNP-LED, N/O and N/C signal	BCC M415-0000-1A-010- - - - -	BCC M425-0000-1A-010- - - - -
4-wire+PE, non-LED, N/O and N/C signal	BCC M415-0000-1A-034- - - - -	BCC M425-0000-1A-034- - - - -

Jacket Color and Material

Material	Color	Conductor	①		
			3-wire	4-wire	5-wire
PVC	Yellow	22 AWG	VX43T2	VX44T2	
PVC	Gray	0.34 mm ²	VX8334	VX8434	
PUR	Yellow	22 AWG	PX43T2	PX44T2	
PUR	Black	0.34 mm ²	PX0334	PX0434	
TPE	Yellow	22 AWG	EX43T2	EX44T2	EX45T2
TPE	Yellow	18 AWG		EX44W8*	

②		Lengths
020	=	2 meters
050	=	5 meters
100	=	10 meters

*non-LED versions

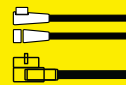
For list of order codes and available lengths, see the index.

Connectivity Solutions M12 single-ended cordsets



M12 Male Straight	M12 Male Right Angle
250 VAC/VDC (3&4wire), 36 VDC (LED)	250 VAC/VDC (3&4wire), 36 VDC (LED)
4 A	4 A
BCC M413-0000-2A-001- BCC M413-0000-2A-002-	BCC M423-0000-2A-001- BCC M423-0000-2A-002- BCC M423-0000-2A-004- BCC M423-0000-2A-006-
BCC M414-0000-2A-003-	BCC M424-0000-2A-003- BCC M424-0000-2A-008-
	BCC M425-0000-2A-034-

Cables and
Accessories



For list of order codes and available lengths, see the index.

Connectivity Solutions

M12-M12 double-ended cordsets



M12-M12 Double-Ended

Type	M12 Female - M12 Male		
Configuration	Straight - Straight		
Voltage Rating	250 VAC / VDC (non-LED), 10-30 VDC (LED)		
Amperage	4 A		
	Female LED	Male LED	
3-wire, non-LED	---	---	BCC M415-M413-3A-300- ^① ----- ^②
3-wire, PNP-LED, Head 1	N/O	---	BCC M415-M413-3A-602------
3-wire, PNP-LED, Head 1&2	N/O	N/O	
3-wire, NPN-LED, Head 1	N/O	---	BCC M415-M413-3A-603------
4-wire, non-LED	---	---	BCC M415-M414-3A-304------
4-wire, PNP-LED, Head 1	N/O	---	BCC M415-M414-3A-606------
4-wire, PNP-LED, Head 1	N/O and N/C	---	
4-wire, PNP-LED, Head 1 & 2	N/O	N/O	
4-wire, PNP-LED, Head 1 & 2	N/O and N/C	N/O	
4-wire, NPN-LED, Head 1	N/O	---	BCC M415-M414-3A-607------
4-wire+PE, non-LED	---	---	BCC M415-M415-3A-313------

Jacket Color and Material			^①			^② Lengths	
Material	Color	Conductor	3-wire	4-wire	5-wire		
PVC	Yellow	22 AWG	VX43T2	VX44T2		003	= 0.3 meters
PVC	Gray	0.34 mm ²	VX8334	VX8434		006	= 0.6 meters
PUR	Yellow	22 AWG	PX43T2	PX44T2		010	= 1.0 meters
PUR	Black	0.34 mm ²	PX0334	PX0434		015	= 1.5 meters
TPE	Yellow	22 AWG	EX43T2	EX44T2	EX45T2	020	= 2 meters
TPE	Yellow	18 AWG		EX44W8*		030	= 3 meters
						050	= 5 meters

*non-LED versions

For list of order codes and available lengths, see the index.

Connectivity Solutions

M12-M12 double-ended cordsets



M12 Female - M12 Male

Right Angle - Straight

250 VAC / VDC (non-LED), 10-30 VDC (LED)

4 A



BCC M425-M413-3A-300- - - - -

BCC M425-M413-3A-602- - - - -

BCC M425-M413-3A-603- - - - -

BCC M425-M414-3A-304- - - - -

BCC M425-M414-3A-606- - - - -

BCC M425-M414-3A-650- - - - -

BCC M425-M414-3A-651- - - - -

BCC M425-M414-3A-607- - - - -

BCC M425-M415-3A-313- - - - -

M12 Female - M12 Male

Straight - Right Angle

250 VAC / VDC (non-LED), 10-30 VDC (LED)

4 A



BCC M415-M423-3A-300- - - - -

BCC M415-M423-3A-602- - - - -

BCC M415-M423-3A-603- - - - -

BCC M415-M424-3A-304- - - - -

BCC M415-M424-3A-606- - - - -

BCC M415-M424-3A-306- - - - -

BCC M415-M424-3A-607- - - - -

M12 Female - M12 Male

Right Angle - Right Angle

250 VAC / VDC (non-LED), 10-30 VDC (LED)

4 A



BCC M425-M423-3A-300- - - - -

BCC M425-M423-3A-602- - - - -

BCC M425-M423-3A-302- - - - -

BCC M425-M423-3A-603- - - - -

BCC M425-M424-3A-304- - - - -

BCC M425-M424-3A-606- - - - -

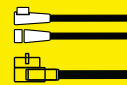
BCC M425-M424-3A-650- - - - -

BCC M425-M424-3A-306- - - - -

BCC M425-M424-3A-651- - - - -

BCC M425-M424-3A-607- - - - -

Cables and Accessories



For list of order codes and available lengths, see the index.

Connectivity Solutions

M12-M8 double-ended cordsets



M12-M8 Double-Ended

Type	M12 Female - M8 Male		
Configuration	Straight - Straight		
Voltage Rating	60 VAC/VDC (3wire)		
	30 VAC/VDC (4wire)		
	10-30 VDC (LED)		
Amperage	4 A		
	Female LED	Male LED	
3-wire, non-LED	---	---	BCC M415-M313-3F-300- ^① ----- ^②
3-wire, PNP-LED, Head 1	N/O	---	BCC M415-M313-3F-602------
3-wire, NPN-LED, Head 1	N/O	---	BCC M415-M313-3F-603------
4-wire, non-LED	---	---	BCC M415-M314-3F-304------
4-wire, PNP-LED, Head 1	N/O	---	BCC M415-M314-3F-606------
4-wire, PNP-LED, Head 1	N/O and N/C	---	
4-wire, NPN-LED, Head 1	N/O	---	BCC M415-M314-3F-607------

Jacket Color and Material					Lengths	
Material	Color	Conductor				
			3-wire	4-wire		
PVC	Yellow	22 AWG	VX43T2	VX44T2	003	= 0.3 meters
PVC	Gray	0.34 mm ²	VX8334	VX8434	006	= 0.6 meters
PUR	Yellow	22 AWG	PX43T2	PX44T2	010	= 1.0 meters
PUR	Black	0.34 mm ²	PX0334	PX0434	015	= 1.5 meters
TPE	Yellow	22 AWG	EX43T2	EX44T2	020	= 2 meters
					030	= 3 meters
					050	= 5 meters

For list of order codes and available lengths, see the index.

Connectivity Solutions M12-M8 double-ended cordsets



M12 Female - M8 Male
Right Angle - Straight
60 VAC/VDC (3wire)
30 VAC/VDC (4wire)
10-30 VDC (LED)
4 A

M12 Female - M8 Male
Straight - Right Angle
60 VAC/VDC (3wire)
30 VAC/VDC (4wire)
10-30 VDC (LED)
4 A

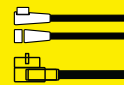
M12 Female - M8 Male
Right Angle - Right Angle
60 VAC/VDC (3wire)
30 VAC/VDC (4wire)
10-30 VDC (LED)
4 A

	①	②
BCC M425-M313-3F-300-	-	-
BCC M425-M313-3F-602-	-	-
BCC M425-M313-3F-603-	-	-
BCC M425-M314-3F-304-	-	-
BCC M425-M314-3F-606-	-	-
BCC M425-M314-3F-650-	-	-
BCC M425-M314-3F-607-	-	-

	①	②
BCC M415-M323-3F-300-	-	-
BCC M415-M323-3F-602-	-	-
BCC M415-M323-3F-603-	-	-
BCC M415-M324-3F-304-	-	-
BCC M415-M324-3F-606-	-	-
BCC M415-M324-3F-607-	-	-

	①	②
BCC M425-M323-3F-300-	-	-
BCC M425-M323-3F-602-	-	-
BCC M425-M323-3F-603-	-	-
BCC M425-M324-3F-304-	-	-
BCC M425-M324-3F-606-	-	-
BCC M425-M324-3F-650-	-	-
BCC M425-M324-3F-607-	-	-

Cables and Accessories



For list of order codes and available lengths, see the index.

Connectivity Solutions

M12 4-wire+PE, 5-wire, 8-wire, 12-wire cordsets



Single-Ended

Type	M12 Female	M12 Female
Configuration	Straight	Right Angle
Voltage Rating	(4p+PE, 5p = 125 V), (8p = 60 V), (12p = 30 V)	(4p+PE, 5p = 125 V), (8p = 60 V), (12p = 30 V)
Amperage	(4p+PE, 5p = 4 A), (8p = 2 A), (12p = 1 A)	(4p+PE, 5p = 4 A), (8p = 2 A), (12p = 1 A)
Conductor Cross-Section	(5p = 0.34 mm ²), (8p, 12p = 0.25 mm ²)	(5p = 0.34 mm ²), (8p, 12p = 0.25 mm ²)
4-wire+PE, non-LED	BCC M415-0000-1A-034-PX0534- ^① ---	BCC M425-0000-1A-034-PX0534- ^① ---
4-wire+PE, PNP-LED, N/O & N/C signals		BCC M425-0000-1A-040-PX0534- ^② ---
5-wire, non-LED	BCC M415-0000-1A-017- ^① -----	BCC M425-0000-1A-017- ^① -----
5-wire, PNP-LED, N/O & N/C signals		BCC M425-0000-1A-039-PX0534- ^② -----
8-wire, non-LED	BCC M418-0000-1A-044-PX0825- ^① ---	BCC M428-0000-1A-044-PX0825- ^① ---
12-wire, non-LED	BCC M41C-0000-1A-049- ^① -----	BCC M42C-0000-1A-049- ^② -----

Jacket Color and Material

Material	Color	Conductor	5-wire	8-wire	12-wire
PVC	Gray	0.34 mm ²	VX8534	VX8825	VX8C25
PUR	Black	0.34 mm ²	PX0534	PX0825	PX0C25

Lengths
020 = 2 meters
050 = 5 meters
100 = 10 meters



Double-Ended

Type	M12 Female - M12 Male
Configuration	Straight - Straight
Voltage Rating	4p+PE & 5p = 125V, 8p=60V, 12p = 30V
Amperage	4p+PE & 5p = 4A, 8p=2A, 12p = 1A
Conductor Cross-Section	4p+PE & 5p = 0.34 mm ² , 8p & 12p = 0.25 mm ² , Yellow = 22 AWG
Cable Jacket Material	Black PUR, Yellow TPE
4-wire+PE, non-LED	BCC M415-M415-3A-313- ^① ----- ^②
4-wire+PE, PNP-N/O & N/C signals	
5-wire, non-LED	BCC M415-M415-3A-312-PX0534- ^① ----- ^②
5-wire, PNP-N/O & N/C signals	
8-wire, non-LED	BCC M418-M418-3A-342-PX0825- ^① ----- ^②
12-wire, non-LED	BCC M41C-M41C-3A-325-PX0C25- ^① ----- ^②

Jacket Color and Material

Material	Color	Conductor	5-wire	8-wire	12-wire
PUR	Black	0.34 mm ²	PX0534	PX0825	PX0C25
TPE	Yellow	22 AWG	EX45T2		

Lengths
003 = 0.3 meters
006 = 0.6 meters
010 = 1.0 meters
020 = 2 meters
050 = 5 meters
100 = 10 meters

For list of order codes and available lengths, see the index.

Connectivity Solutions

M12 shielded cordsets



Single-Ended

Type	M12 Female	M12 Female
Configuration	Straight	Right Angle
Voltage Rating	(3p, 4p = 250 V), (4p+PE, 5p = 125 V), (8p = 60 V)	(3p, 4p = 250 V), (4p+PE, 5p = 125 V), (8p = 60 V)
Amperage	(3p, 4p = 4 A), (5p = 4 A), (8p = 2 A)	(3p, 4p = 4 A), (5p = 4 A), (8p = 2 A)
Conductor Cross-Section	(3p, 4p, 5p = 0.34 mm ²), (8p = 0.25 mm ²)	(3p, 4p, 5p = 0.34 mm ²), (8p = 0.25 mm ²)
3-wire, non-LED, N/O signal, shielded	BCC M415-0000-1A-036- ^① ----- ^②	BCC M425-0000-1A-036- ^① ----- ^②
3-wire, non-LED, N/C signal, shielded	BCC M415-0000-1A-037- ^① ----- ^②	BCC M425-0000-1A-037- ^① ----- ^②
4-wire, non-LED, shielded	BCC M415-0000-1A-014- ^① ----- ^②	BCC M425-0000-1A-014- ^① ----- ^②
4-wire+PE, non-LED, shielded	BCC09K2 (10 meters)	BCC0AZ7 (10 meters)
5-wire, non-LED, shielded	BCC M415-0000-1A-016-PS0525- ^① ----- ^②	BCC M425-0000-1A-016-PS0534- ^① ----- ^②
8-wire, non-LED, shielded	BCC M418-0000-1A-046-PS0825- ^① ----- ^②	BCC M428-0000-1A-046-PS0825- ^① ----- ^②

Jacket Color and Material

Material	Color	Conductor	①			②	
			3-wire	4-wire	5-wire	Lengths	
PVC Shielded	Gray	0.34 mm ²	VS8334	VS8434		020 = 2 meters	
PUR Shielded	Black	0.34 mm ²	PS0334	PS0434	PS0534	050 = 5 meters	
						100 = 10 meters	



Double-Ended

Type	M12 Female - M12 Male	M12 Female - M12 Male
Configuration	Straight - Straight	Right - Straight
Voltage Rating	4p = 250V, 8p = 60V	4p = 250V, 8p = 60V
Amperage	4p = 4A, 8p = 2A	4p = 4A, 8p = 2A
Conductor Cross-Section	4p = 0.34 mm ² , 8p = 0.25 mm ²	4p = 0.34 mm ² , 8p = 0.25 mm ²
4-wire, non-LED, shielded	BCC M415-M414-3A-305-PS0434- ^① ---	BCC M425-M414-3A-305-PS0434- ^① ---
8-wire, non-LED, shielded	BCC0FYC (2 meters)	

Standard Lengths Available:
 010 = 1 meter
 020 = 2 meters
 050 = 5 meters
 100 = 10 meters

For list of order codes and available lengths, see the index.

Connectivity Solutions M12 shielded cordsets

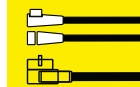


M12 Male	M12 Male
Straight	Right Angle
250 V	250 V
4 A	4 A
(3p, 4p, 5p = 0.34 mm ²)	(3p, 4p = 0.34 mm ²), (8p = 0.25 mm ²)
BCC M413-0000-2A-036- ^① - ^② -	BCC M423-0000-2A-036- ^① - ^② -
BCC M413-0000-2A-037- - -	BCC M423-0000-2A-037- - -
BCC M414-0000-2A-014- - -	BCC M424-0000-2A-014- - -
BCC09K1 (10 meters)	BCC0H68 (10 meters)
BCC0H50 (5 meters)	



M12 Female - M12 Male	M12 Female - M12 Male
Straight - Right	Right - Right
4p = 250V, 8p = 60V	4p = 250V, 8p = 60V
4p = 4A, 8p = 2A	4p = 4A, 8p = 2A
4p = 0.34 mm ² , 8p = 0.25 mm ²	4p = 0.34 mm ² , 8p = 0.25 mm ²
BCC M415-M424-3A-305-PS0434- _ _ _	BCC M425-M424-3A-305-PS0434- _ _ _

Cables and Accessories



For list of order codes and available lengths, see the index.

Connectivity Solutions

M8 and M12 specialty cables

IP69K, ECOLAB, stainless



Single-Ended

Type	IP69K Rated, Stainless, ECOLAB, H ₂ O ₂ Resistant	IP69K Rated, 1.4404 Stainless, ECOLAB
Configuration	Stainless Nut, Grey Overmold & PUR Cable	Stainless Nut, Black Overmold
Voltage Rating	60 V (M8 3-wire), 30 V (M8 4-wire), 250 V (M12 non-LED), 36 V (M12 LED)	60 V (M8 3-wire), 30 V (M8 4-wire), 250 V (M12)
Amperage	4 A	4 A

M8 Versions

3-wire, M8 Female, Straight	BCC06WA (10 meters)	
3-wire, M8 Female, Right Angle	BCC06WE (10 meters)	
3-wire, M8 Female, Right Angle, N/O PNP-LED	BCC097W (3 meters)	BCC S323-0000-10-004-PX0334-__ _
4-wire, M8 Female, Straight	BCC06WC (10 meters)	
4-wire, M8 Female, Right Angle	BCC06WF (10 meters)	

M12 Versions

3-wire, M12 Female, Straight		
3-wire, M12 Female, Right Angle		
3-wire, M12 Female, Right Angle, PNP-LED, N/O	BCC097Z (3 meters)	BCC S425-0000-1A-004-PX0334-__ _
4-wire, M12 Female, Straight	BCC S415-0000-1A-003-PX8434-__ _-C002	BCC S415-0000-1A-003-VX8434-__ _
4-wire, M12 Female, Straight, N/O PNP-LED		
4-wire, M12 Female, Right Angle	BCC S425-0000-1A-003-PX8434-__ _-C002	BCC S425-0000-1A-003-VX8434-__ _
4-wire, M12 Female, Right Angle, N/O PNP-LED	BCC0977 (10 meters)	BCC S425-0000-1A-008-PX0434-__ _
5-wire, M12 Female, Straight	BCC S415-0000-1A-017-PX8534-__ _-C002	
5-wire, M12 Female, Straight, Braided Shield	BCC S415-0000-1A-017-PS8525-__ _-C002	
5-wire, M12 Female, Right Angle	BCC S425-0000-1A-017-PX8534-__ _-C002	
5-wire, M12 Female, Right Angle, Braided Shield	BCC09JH (10 meters)	
8-wire, M12 Female, Straight, Braided Shield	BCC S418-0000-1A-069-PS8825-__ _-C002	

Standard Lengths Available:
 100 = 10 meters
 200 = 20 meters
 250 = 25 meters

Standard Lengths Available:
 LED Non-LED
 030 = 3 meters 100 = 10 meters
 050 = 5 meters 150 = 15 meters
 100 = 10 meters 200 = 20 meters



Double-Ended

Type	1.4404 Stainless, IP69K Rated	1.4404 Stainless, IP69K Rated
Configuration	Stainless Nut, Yellow Overmold & PVC Cable	Stainless Nut, Yellow Overmold & PVC Cable
Voltage Rating	60 V (M8 3-wire), 30 V (M8 4-wire), 250 V (M12 non-LED), 36 V (M12 LED)	60 V (M8 3-wire), 30 V (M8 4-wire), 250 V (M12 non-LED), 36 V (M12 LED)
Amperage	4 A	4 A
4-wire, M12 Female - M12 Male	BCC S415-S414-3A-304-VX44T2-__ _	BCC S425-S414-3A-304-VX44T2-__ _
4-wire, M12 Female - M12 Male, N/O PNP-LED	BCC S415-S414-3A-606-VX44T2-__ _	BCC S425-S414-3A-606-VX44T2-__ _

Standard Lengths Available:
 003 = 0.3 meters 020 = 2 meters
 006 = 0.6 meters 030 = 3 meters
 010 = 1.0 meters 050 = 5 meters
 015 = 1.5 meters

Connectivity Solutions

M8 and M12 specialty cables

Stainless, high temperature



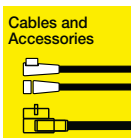
IP69K Rated, 1.4404 Stainless, ECOLAB Stainless Nut, Yellow Overmold & PVC Cable	High Temperature -25°C...120°C
60 V (M8 3-wire), 30 V (M8 4-wire), 250 V (M12 non-LED), 36 V (M12 LED)	125 VAC / 150 VDC
4 A	4 A
BCC S313-0000-10-001-VX43T2-___ BCC S323-0000-10-001-VX43T2-___	BCC0836 (5 meters)
BCC S314-0000-10-003-VX44T2-___ BCC S324-0000-10-003-VX44T2-___	BCC0ECF (5 meters)
	BCC M415-0000-1A-001-PH0334-___ BCC M425-0000-1A-001-PH0334-___
BCC S425-0000-1A-004-VX43T2-___ BCC S415-0000-1A-003-VX44T2-___ BCC S415-0000-1A-008-VX44T2-___ BCC S425-0000-1A-003-VX44T2-___ BCC S425-0000-1A-008-VX44T2-___	BCC M415-0000-1A-003-PH0434-___ BCC M425-0000-1A-003-PH0434-___

Standard Lengths Available:
020 = 2 meters
050 = 5 meters
100 = 10 meters

Standard Lengths Available:
020 = 2 meters
050 = 5 meters
100 = 10 meters



1.4404 Stainless, IP69K Rated Stainless Nut, Yellow Overmold & PVC Cable	1.4404 Stainless, IP69K Rated Stainless Nut, Yellow Overmold & PVC Cable
60 V (M8 3-wire), 30 V (M8 4-wire), 250 V (M12 non-LED), 36 V (M12 LED)	60 V (M8 3-wire), 30 V (M8 4-wire), 250 V (M12 non-LED), 36 V (M12 LED)
4 A	4 A
BCC S415-S424-3A-304-VX44T2-___ BCC S415-S424-3A-606-VX44T2-___	BCC S425-S424-3A-304-VX44T2-___ BCC S425-S424-3A-606-VX44T2-___



Connectivity Solutions
M8 and M12 specialty cables
Global cables, economy line



Single-Ended

Type	Global Cables
Unique Specification	Black Overmold, Yellow PVC Cable
Voltage Rating	60 V (M8 3-wire), 30 V (M8 4-wire), 250 V (M12)
Amperage	4 A
3-wire, M8 Female Straight	BCC M313-0000-10-001-VX43T2-__-C013
3-wire, M8 Female Right Angle	BCC M323-0000-10-001-VX43T2-__-C013
3-wire, M8 Female Right Angle, PNP-LED, N/O	
4-wire, M8 Female Straight	BCC M314-0000-10-003-VX44T2-__-C013
4-wire, M8 Female Right Angle	BCC M324-0000-10-003-VX44T2-__-C013
3-wire, M12 Female Right Angle	BCC M415-0000-1A-003-VX44T2-__-C013
3-wire, M12 Female Right Angle, PNP-LED, N/O	
4-wire, M12 Female Straight, 4-wire	BCC M425-0000-1A-003-VX44T2-__-C013
4-wire+PE, M12 Female Straight	
4-wire+PE, M12 Female Right Angle, PNP-LED, N/O & N/C	

Standard Lengths Available:
 020 = 2 meters
 050 = 5 meters
 100 = 10 meters



Double-Ended

Type	M12 Female - M12 Male
Configuration	Straight - Straight
Voltage Rating	125V
Amperage	4A
Conductor Cross-Section	0.34 mm ²
Cable Jacket Material	Orange High Shore PUR, Weld Resistant
4-wire, non-LED	BCC M415-M414-3A-304-PW3434-__-__
4-wire+PE, N/O & N/C signals	BCC M415-M415-3A-313-PW3534-__-__
4-wire+PE, PNP-LED, N/O & N/C signals	



Standard Lengths Available:
 003 = 0.3 meters 020 = 2 meters
 006 = 0.6 meters 030 = 3 meters
 010 = 1.0 meters 050 = 5 meters
 015 = 1.5 meters

Connectivity Solutions

M8 and M12 specialty cables

Global cables, economy line



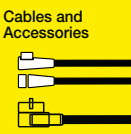
Economy Line	Weld Resistant, High Shore PUR*
non-UL / non-CSA, Black PVC	UL-AWM Style 20549, Orange cable
60 V (M8 3-wire), 30 V (M8 4-wire), 250 V (M12)	250 VAC / VDC (3&4-wire), 60 VDC (5-wire), 30 VDC (LED)
4 A	4 A
BCC M313-0000-10-001-VI0325-__ _	BCC M313-0000-10-001-PW3334-__ _
BCC M323-0000-10-001-VI0325-__ _	BCC M323-0000-10-001-PW3334-__ _
	BCC0E4L (5 meters)
BCC M314-0000-10-003-VI0425-__ _	BCC M314-0000-10-003-PW3434-__ _
BCC M324-0000-10-003-VI0425-__ _	BCC M324-0000-10-003-PW3434-__ _
BCC M415-0000-1A-003-VI0425-__ _	BCC M425-0000-1A-001-PW3334-__ _
	BCC M425-0000-1A-004-PW3334-__ _
BCC M425-0000-1A-003-VI0425-__ _	BCC M415-0000-1A-003-PW3434-__ _
	BCC M415-0000-1A-034-PW3534-__ _
	BCC M425-0000-1A-040-PW3534-__ _

Standard Lengths Available:
 050 = 5 meters
 100 = 10 meters

Standard Lengths Available:
 020 = 2 meters
 050 = 5 meters
 100 = 10 meters



M12 Female - M12 Male
Right Angle - Straight
125V
4A
0.34 mm ²
Orange High Shore PUR, Weld Resistant
BCC M425-M414-3A-304-PW3434-__ _
BCC M425-M415-3A-313-PW3534-__ _
BCC M425-M415-3A-692-PW3534-__ _



Connectivity Solutions
M12 and 7/8" high durability cables
Abrasion and crush resistant



Single-Ended

Type	Stainless steel braid	Flexible conduit
Jacket Temperature	-25...80 °C	-40...105 °C
Operational Temperature Fixed	-50...80 °C	-40...105 °C
Operational Temperature Moving	-25...80 °C	
Voltage Rating	250 V	300 V
Amperage	4 A	4 A
3-wire, M8 Female Straight	BCC W313-0000-10-001-MW8334-__ _	
4-wire, M8 Female Straight	BCC W314-0000-10-003-MW8434-__ _	
4-wire, M12 Female Straight	BCC W415-0000-1A-003-MW8434-__ _	BCC M415-0000-1A-003-MX04T2-__ _
4-wire, M12 Female Right Angle	BCC W425-0000-1A-003-MW8434-__ _	
4-wire, 7/8" Female Straight		BCC A314-0000-10-072-MX04W6-__ _

Standard Lengths Available:
 020 = 2 meters
 050 = 5 meters

Standard Lengths Available:
 010 = 1 meter
 020 = 2 meters
 050 = 5 meters
 100 = 10 meters

For list of order codes and available lengths, see the index.

Connectivity Solutions
M12 and 7/8" high durability cables
Abrasion and crush resistant

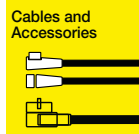


Double-Ended

Type	Stainless Steel Braid	PVC Coated Steel Armor
Jacket Temperature	-25...80 °C	-40...105 °C
Operational Temperature Fixed	-50...80 °C	-40...105 °C
Operational Temperature Moving	-25...80 °C	
Voltage Rating	250 V	300 V
Amperage	4 A	4 A
4-wire, M12 Female Straight - M12 Male Straight	BCC W415-W414-3A-304-MW8434-_-_-_-	BCC M415-M414-3A-304-MX04T2-_-_-_-
4-wire, M12 Female Right Angle - M12 Male Straight	BCC W425-W414-3A-304-MW8434-_-_-_-	
4-wire, 7/8" Female Straight - 7/8" Male Straight	BCC B314-B314-30-304-MW8434-_-_-_-	BCC A314-A314-30-346-MX04W6-_-_-_-
4-wire, 7/8" Female Right Angle - 7/8" Male Straight	BCC B324-B314-30-304-MW8434-_-_-_-	

Standard Lengths Available:
 003 = 0.3 meters
 006 = 0.6 meters
 010 = 1 meter
 020 = 2 meters

Standard Lengths Available:
 010 = 1 meter
 020 = 2 meters
 050 = 5 meter
 100 = 10 meters



For list of order codes and available lengths, see the index.

Connectivity Solutions

M8 and M12 high durability cables

High temperature resistant, non-flammable, non-fraying
UV, ozone, and thermal shock resistant



Single-Ended

Type	Fiberglass Jacket Cable	Thermoplast
Jacket Temperature	-60...400 °C	
Operational Temperature Fixed	-50...80 °C	-50...130 °C
Operational Temperature Moving	-25...80 °C	-40...125 °C
Voltage Rating	250 V	250 V
Amperage	4 A	4 A
4-wire, M12 Female, Straight	BCC W415-0000-1A-003-FW9434-__	BCC W415-0000-1A-003-BW8434-__
4-wire, M12 Female, Right Angle	BCC W425-0000-1A-003-FW9434-__	BCC W425-0000-1A-003-BW8434-__

Standard Lengths Available:

020 = 2 meters

050 = 5 meters



Double-Ended

Type	Fiberglass Jacket Cable	Thermoplast
Jacket Temperature	-60...400 °C	
Operational Temperature Fixed	-50...80 °C	-50...130 °C
Operational Temperature Moving	-25...80 °C	-40...125 °C
Voltage Rating	250 V	250 V
Amperage	4 A	4 A
3-wire, M8 Female Straight - M8 Male Straight	BCC W313-W313-30-300-FW9334-__	BCC W313-W313-30-300-BW9334-__
3-wire, M8 Female Straight - M12 Male Straight	BCC W313-W413-3E-300-FW9334-__	BCC W313-W413-3E-300-BW9334-__
4-wire, M12 Female Straight - M12 Male Straight,	BCC W415-W414-3A-304-FW9434-__	BCC W415-W414-3A-304-BW8434-__
4-wire, M12 Female Right Angle - M12 Male Straight	BCC W425-W414-3A-304-FW9434-__	BCC W425-W414-3A-304-BW8434-__

Standard Lengths Available:

003 = 0.3 meters

006 = 0.6 meters

010 = 1 meter

015 = 1.5 meters

020 = 2 meters

050 = 5 meters

For list of order codes and available lengths, see the index.

Note: More versions available



Connectivity Solutions

M8 and M12 high durability cables

High temperature resistant, non-flammable, non-fraying
UV, ozone, and thermal shock resistant



M12 Splitters

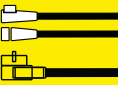
Type	Fiberglass Jacket Cable	Thermoplast
Jacket Temperature	-60...400 °C	
Operational Temperature Fixed	-50...80 °C	-50...130 °C
Operational Temperature Moving	-25...80 °C	-40...125 °C
Voltage Rating	250 V	250 V
Amperage	4 A	4 A
M12 Male Straight - 2 x M12 Female Straight	BCC W414-W415-W415-U2045-__ _	BCC W414-W415-W415-U2044-__ _
M12 Male Straight - 2 x M12 Female Right Angle	BCC W414-W425-W425-U2045-__ _	BCC W414-W425-W425-U2044-__ _

Standard Lengths Available:

003 = 0.3 meters

006 = 0.6 meters

Cables and
Accessories



For list of order codes and available lengths, see the index.

Connectivity Solutions

M8 and M12 high durability cables

Thermal shock and caustic resistant



Single-Ended

Type	Silicone Cable	Molded silicone tube
Jacket Temperature		-60...180 °C
Operational Temperature Fixed	-40...200 °C	-50...80 °C
Operational Temperature Moving	-25...200 °C	-25...80 °C
Voltage Rating	250 V	250 V
Amperage	4 A	4 A
4-wire, M12 Female, Straight	BCC W415-0000-1A-003-SW0434-__ _	BCC W415-0000-1A-003-NW0434-020
4-wire, M12 Female, Right Angle	BCC W425-0000-1A-003-SW0434-__ _	BCC W425-0000-1A-003-NW0434-020

Standard Lengths Available:

- 020 = 2 meters
- 050 = 5 meters
- 100 = 10 meters



Double-Ended

Type	Silicone Cable	Molded silicone tube
Jacket Temperature		-60...180 °C
Operational Temperature Fixed	-40...200 °C	-50...80 °C
Operational Temperature Moving	-25...200 °C	-25...80 °C
Voltage Rating	250 V	250 V
Amperage	4 A	4 A
3-wire, M8 Female Straight - M8 Male Straight	BCC W313-W313-30-300-SW0434-__ _	
4-wire, M8 Female Straight - M8 Male Straight	BCC W314-W314-30-304-SW0434-__ _	
3-wire, M8 Female Straight - M12 Male Straight	BCC W313-W413-3E-300-SW0334-__ _	
4-wire, M8 Female Straight - M12 Male Straight	BCC W314-W414-3E-304-SW0434-__ _	
4-wire, M12 Female Straight - M12 Male Straight	BCC W415-W414-3A-304-SW0434-__ _	BCC W415-W414-3A-304-NW0434-__ _*
4-wire, M12 Female Right Angle - M12 Male Straight	BCC W425-W414-3A-304-SW0434-__ _	BCC W425-W414-3A-304-NW0434-__ _*
4-wire, M12 Fem. Str. PNP LED - M12 Male Straight	BCC W415-W414-3A-650-SW0434-__ _	BCC W415-W414-3A-650-NW0434-__ _*
4-wire, M12 Fem. Rt. Ang. PNP LED - M12 Male Straight	BCC W425-W414-3A-650-SW0434-__ _	BCC W425-W414-3A-650-NW0434-__ _*

Standard Lengths Available:

- 003 = 0.3 meters
- 006 = 0.6 meters
- 010 = 1 meter
- 015 = 1.5 meters
- 020 = 2 meters
- 050 = 5 meters

*Max. 2 meters



M12 Splitters

Type	Silicone Cable
Jacket Temperature	
Operational Temperature Fixed	-40...200 °C
Operational Temperature Moving	-25...200 °C
Voltage Rating	250 V
Amperage	4 A
M12 Male Straight - 2 x M12 Female Straight	BCC W414-W415-W415-U2046-__ _
M12 Male Straight - 2 x M12 Female, Right Angle	BCC W414-W425-W425-U2046-__ _

Standard Lengths Available:

- 003 = 0.3 meters
- 006 = 0.6 meters

Connectivity Solutions

M8 and M12 high durability cables

Thermal shock and caustic resistant



PTFE	Extended silicone Tube
-65...200 °C	-60...260 °C
-65...200 °C	-50...105 °C
-65...200 °C	-40...105 °C
250 V	125 V
4 A	4 A
BCC W415-0000-1A-003-TW0434-_-_-	BCC M415-0000-1A-003-EX44T2-_-_-C008*
BCC W425-0000-1A-003-TW0434-_-_-	BCC M425-0000-1A-003-EX44T2-_-_-C008*

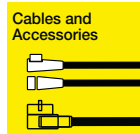
*Max. 5 meters



PTFE	Extended silicone Tube
-65...200 °C	-60...260 °C
-65...200 °C	-50...105 °C
-65...200 °C	-40...105 °C
250 V	125 V
4 A	4 A
BCC W313-W313-30-300-TW0434-_-_-	BCC M314-M314-30-304-EX44T2-_-_-C008
BCC W313-W413-3E-300-TW0334-_-_-	BCC M313-M413-3E-300-EX43T2-_-_-C008
BCC W415-W414-3A-304-TW0434-_-_-	BCC M314-M414-3E-304-EX44T2-_-_-C008
BCC W425-W414-3A-304-TW0434-_-_-	BCC M415-M414-3A-304-EX44T2-030-C008
BCC W415-W414-3A-650-TW0434-_-_-	BCC M425-M414-3A-304-EX44T2-030-C008
BCC W425-W414-3A-650-TW0434-_-_-	



PTFE	Extended silicone Tube
-65...200 °C	-60...260 °C
-65...200 °C	-50...105 °C
-65...200 °C	-40...105 °C
250 V	125 V
4 A	4 A
BCC W414-W415-W415-U2048-_-_-	BCC M414-M415-M415-U2002-_-_-C008
BCC W414-W425-W425-U2048-_-_-	



Connectivity Solutions

High durability cable accessories

WeldRepel® Silicone Wrap

BAM0183	1" wide x 12 ft Clear wrap
BAM0182	2" wide x 36 ft Clear wrap



WeldRepel® Silicone Area Protection

BAM02E1	3 ft x 1 ft
BAM02E2	3 ft x 2 ft
BAM02E3	3 ft x 3 ft
BAM02E4	3 ft x 4 ft
BAM02E5	3 ft x 5 ft
BAM02E6	3 ft x 6 ft
BAM02E7	3 ft x 8 ft
BAM02E8	3 ft x 10 ft
BAM02E9	3 ft x 16 ft
BAM02EA	3 ft x 20 ft



Custom lengths available

WeldRepel® Jacket – Clear tubing

	ID	Roll size	
BAM017E	1/4" diameter	15 m	
BAM017H	3/8" diameter	15 m	Use with M8 (nano) single ended cables
BAM017L	1/2" diameter	15 m	Use with M8 (nano) double ended cables, use with M12 (micro) single ended cables
BAM017N	5/8" diameter	15 m	Use with M12 (micro) double ended cables
BAM017R	3/4" diameter	15 m	
BAM017U	1.5" diameter	7.5 m	
BAM017Z	2" diameter	7.5 m	



Silicone and Fiberglass Jacket

	ID	Roll size
BAM01R1	3/8"	100 feet
BAM01R2	1/2"	100 feet
BAM01UY	3/4"	100 feet

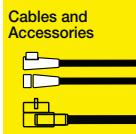


Connectivity Solutions
M8 and M12 specialty cables
High shore, coiled



M8 and M12 Specialty

Type	Short Coil Cable	Long Coil Cable
Unique Specification	0.5m / 2.8m (coiled/stretched)	1.2m / 3.6m (coiled/stretched)
Voltage Rating	250 VAC / VDC	250 VAC / VDC,
Amperage	4 A	4 A
M12 Female Straight, 4-wire	BCC0J1E	BCC0J24
M12 Female Right Angle, 4-wire	BCC0J1C	BCC0J25



Connectivity Solutions

M8 and M12 splitters

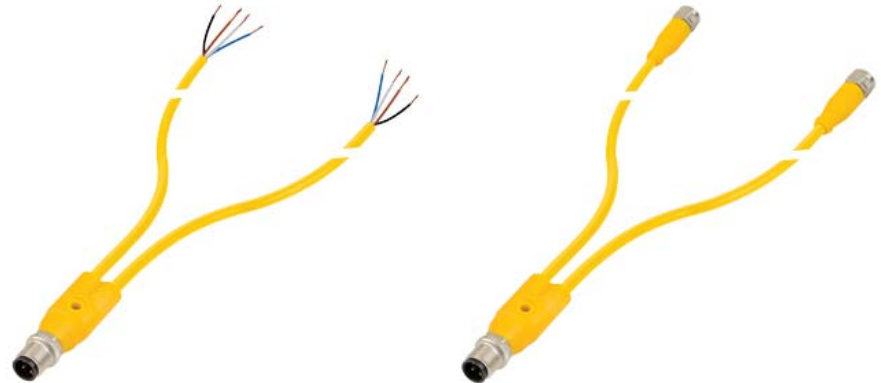


M8 Splitters

Type	M8 Female (x2) - M12 Male	M8 Female (x2) - M12 Male
Configuration	Straight - Straight	Right Angle - Straight
Voltage Rating	60 VAC / 75 VDC	60 VAC / 75 VDC
Amperage	4 A	4 A
Wiring	Jacket Mat.	
3-wire, non-LED	PVC	BCC M414-M313-M313-U2012-___
3-wire, non-LED	PUR (black)	BCC M414-M323-M323-U2012-___
3-wire, OR Logic	PUR (black)	

Standard Lengths Available:

003 = 0.3 m
 006 = 0.6 m
 010 = 1.0 m
 020 = 2 m
 050 = 5 m



M12 Splitters

Type	Flying Leads (x2) - M12 Male	M12 Female (x2) - M12 Male
Configuration	Open - Straight	Straight - Straight
Voltage Rating	250 VAC/ VDC	250 VAC / VDC
Amperage	4 A	4 A
Wiring	Jacket Mat.	
3-wire, non-LED, N/O	PVC	BCC M414-0000-0000-U2009-___
3-wire, non-LED, N/O	TPE	BCC M414-M415-M415-U2010-___
3-wire, PNP-LED, N/O	TPE	BCC M414-M415-M415-U2002-___
3-wire+PE, non-LED, N/O	PVC (black)	BCC M414-M415-M415-U2011-___
3-wire, AND Logic	TPE	BCC01L0 (0.2 Meters)
4-wire+PE, OR Logic	PVC (black)	
4-wire, N/C or N/O, non-LED	PUR (black)	BCC0A0J (0.2 Meters)

Standard Lengths Available:

003 = 0.3 m
 006 = 0.6 m
 010 = 1.0 m
 020 = 2 m
 050 = 5 m

Flying Lead Standard Lengths:

020 = 2 m
 050 = 5 m
 100 = 10 m

For list of order codes and available lengths, see the index.

Connectivity Solutions M8 and M12 splitters



M8 Female (x2) - M8 Male
Straight - Straight
30 VAC / 30 VDC
4 A

M8 Female (x2) - M12 Male
U-style
60 VAC / 60 VDC
4 A

M8 Female (x2) - M8 Male
U-style
30 VAC / 30 VDC
4 A

BCC09JC

BCC0F5C

BCC0AFL (0.3 Meters)

BCC0A07 (0.3 Meters)



M12 Female (x2) - M12 Male
Right Angle - Straight
250 VAC / VDC
4 A

M12 Female (x2) - M12 Male
U-style
250 VAC / VDC
4 A

BCC M414-M425-M425-U2010-_-_-

BCC M414-M425-M425-U2002-_-_-

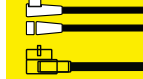
BCC M414-M425-M425-U2011-_-_-

BCC0F57

BCC089P

BCC09MU

Cables and
Accessories









For list of order codes and available lengths, see the index.

Connectivity Solutions

M23 cables



Type	M23 Female		
Configuration	Straight		
Voltage	300 VAC/VDC (12-wire) 150 VAC/VDC (19-wire)		
Amperage	4.0 A (12-wire), 10.0 A(3)/ 1.0 A (16) (19-wire)		
12-wire bridge between pin 9 and 10	2 meters	BCC0FUR	
12-wire bridge between pin 9 and 10	5 meters	BCC0FUT	
12-wire bridge between pin 9 and 10	10 meters	BCC0FUU	
12-wire	 2 meters	BCC0FRC	
12-wire	 5 meters	BCC0FRE	
12-wire	 10 meters	BCC0FRF	
19-wire	 2 meters	BCC0FRT	
19-wire	 5 meters	BCC0FRU	
19-wire	 10 meters	BCC0FRW	



Type	M23 Female (Int) to M23 Male (Ext)		M23 Female (Int) to M23 Male (Int)
Configuration	Straight- Straight		Straight- Straight
Voltage	300 VAC/VDC (12-wire) 150 VAC/VDC (19-wire)		300 VAC/VDC (12-wire) 150 VAC/VDC (19-wire)
Amperage	6.0 A (4)/ 2.0 A (8) (12-wire), 10.0 A(3)/ 1.0 A (16) (19-wire)		6.0 A (4)/ 2.0 A (8) (12-wire), 10.0 A(3)/ 1.0 A (16) (19-wire)
12-Wire	1 meters	BCC0FYF	BCC0FYL
12-Wire	2 meters	BCC0FYK	BCC0FYF
12-Wire	5 meters	BCC0FYH	BCC0FYM
12-Wire	10 meters	BCC0FYJ	BCC0FYN
19-Wire	1 meters	BCC0FZ1	BCC0FZ5
19-Wire	2 meters	BCC0FZ2	BCC0FZ6
19-Wire	5 meters	BCC0FZ3	BCC0FZ7

Connectivity Solutions

M23 cables

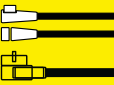


Type	M23 Female		
Configuration	Right		
Voltage	300 VAC/VDC (12-wire) 150 VAC/VDC (19-wire)		
Amperage	4.0 A		
12-wire bridge between pin 9 and 10	2 meters	BCC0FUW	
12-wire bridge between pin 9 and 10	5 meters	BCC0FUY	
12-wire bridge between pin 9 and 10	10 meters	BCC0FUZ	
12-wire	2 meters	BCC0FRH	
12-wire	5 meters	BCC0FRJ	
12-wire	10 meters	BCC0FRK	
19-wire	2 meters	BCC0FRY	
19-wire	5 meters	BCC0FRZ	
19-wire	10 meters	BCC0FT0	



Type	M23 Female (Int) to M23 Male (Ext)		M23 Female (Int) to M23 Male (Int)
Configuration	Right- Straight		Right- Straight
Voltage	300 VAC/VDC (12-wire) 150 VAC/VDC (19-wire)		300 VAC/VDC (12-wire) 150 VAC/VDC (19-wire)
Amperage	6.0 A (4)/ 2.0 A (8) (12-wire), 10.0 A(3)/ 1.0 A (16) (19-wire)		6.0 A (4)/ 2.0 A (8) (12-wire), 10.0 A(3)/ 1.0 A (16) (19-wire)
12-Wire	1 meters	BCC0H0Z	BCC0FZ9
12-Wire	2 meters	BCC0FYR	BCC0FZA
12-Wire	5 meters	BCC0FYT	BCC0FZC
12-Wire	10 meters	BCC0FYU	BCC0FZE
19-Wire	1 meters		BCC0HN1
19-Wire	2 meters		
19-Wire	5 meters		BCC0FZF






Cables and Accessories



Connectivity Solutions
1/2" dual keyway single-ended



1/2" Dual Keyway Single-Ended

Type	1/2" Dual Keyway Female	1/2" Dual Keyway Female
Configuration	Straight	Right Angle
Voltage Rating	250 VAC / VDC	250 VAC / VDC
Amperage	4 A	4 A
3-wire, 18 AWG, PVC	 BCC A213-0000-10-123-VX43W8-___	BCC A223-0000-10-123-VX43W8-___
3-wire, 22 AWG, TPE	BCC A213-0000-1C-123-EX43T2-___	BCC A223-0000-1C-123-EX43T2-___
3-wire, 22 AWG, Stainless Steel Nut	 BCC0H9U (5 meters)	BCC0H9W (5 meters)
4-wire, 18AWG, PVC	 BCC A214-0000-10-124-VX44W8-___	
4-wire, 22 AWG, Stainless Steel Nut	 BCC0H3A (5 meters)	BCC0H3C (5 meters)
6-wire, 22 AWG, Braided Shield	 BCC A216-0000-10-126-VS46T2-__	BCC A226-0000-10-126-VS46T2-__

Standard Lengths Available:
 020 = 2 m
 050 = 5 m
 100 = 10 m

For list of order codes and available lengths, see the index.

Connectivity Solutions
1/2" dual keyway double-ended

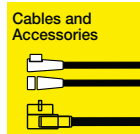


1/2" Dual Keyway Double-Ended

1/2" AC Female - 7/8" Male	1/2" AC Female - 1/2" AC Male	1/2" AC Female - 1/2" AC Male
Straight - Straight	Straight - Straight	Right Angle - Straight
250 VAC / VDC	250 VAC / VDC	250 VAC / VDC
4 A	4 A	4 A
3-wire, 22AWG, TPE	BCC A213-A213-3C-375-EX43T2- _ _ _	BCC A223-A213-3C-375-EX43T2- _ _ _

Standard Lengths Available:

- 020 = 2 m
- 050 = 5 m
- 100 = 10 m



For list of order codes and available lengths, see the index.

Connectivity Solutions

7/8" single-ended mini cordset



7/8" Single-Ended

Type	7/8" Female (Int Threads)	7/8" Female (Int Threads)
Configuration	Straight	Right Angle
Voltage Rating	300 V AC/DC	300 V AC/DC
Amperage	12 A (3-wire)/9 A (4- and 5-wire)	12 A (3-wire)/9 A (4- and 5-wire)
Conductor Cross-Section	16 AWG	16 AWG
3-wire US-Color Code	BCC A313-0000-10-071-VX43W6- ^① ___ ^②	BCC A323-0000-10-071-VX43W6- ^① ___ ^②
4-wire US-Color Code	BCC A314-0000-10-072-VX44W6- ^① ___ ^②	BCC A324-0000-10-072-VX44W6- ^① ___ ^②
4-wire DC-Color Code	BCC A314-0000-10-003- ^① ___ ^②	BCC A324-0000-10-003- ^① ___ ^②
5-wire DC-Color Code	BCC A315-0000-10-063- ^① ___ ^②	BCC A325-0000-10-063- ^① ___ ^②

Jacket Color and Material

Material	Color	Conductor	Lengths	
			4-wire	5-wire
PVC	Yellow	16 AWG	VX44W6	VX45W6
TPE	Yellow	16 AWG	EX44W6	
PUR	Black	1.5mm ²	PX04A5	PX05A5

Lengths	
020	= 2 meters
050	= 5 meters
100	= 10 meters
150	= 15 meters
200	= 20 meters



Bulk Cable

	BCC0AEF	BCC0AEH	BCC0AEJ	BCC0APC
Jacket Material	PVC	PVC	PVC	TPE
Length	100 m	100 m	100 m	100 m
Number of Conductors	3	4	4	4
Conductor Color Code	US AC	US AC	DC	DC
Jacket Color	Yellow	Yellow	Yellow	Yellow
Conductor Gauge	16 AWG	16 AWG	16 AWG	16 AWG
Cordsets Used	7/8"	7/8"	7/8"	7/8"
Temperature Rating	-40...105°C	-40...105°C	-40...105°C	-40...105°C
Cable Diameter (mm)	10.24 ± 0.20 mm	10.67 ± 0.25 mm	10.67 ± 0.25 mm	10.67 ± 0.25 mm

For list of order codes and available lengths, see the index.

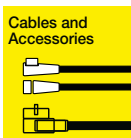
Connectivity Solutions
7/8" single-ended mini cordset



7/8" Male (Ext Threads)	7/8" Male (Ext Threads)
Straight	Right Angle
300 V AC/DC	300 V AC/DC
12 A (3-wire)/9 A (4- and 5-wire)	12 A (3-wire)/9 A (4- and 5-wire)
16 AWG	16 AWG
① ②	① ②
BCC A313-0000-20-071-VX43W6-_-_-_-	BCC A323-0000-20-071-VX43W6-_-_-_-
BCC A314-0000-20-072-VX44W6-_-_-_-	BCC A324-0000-20-072-VX44W6-_-_-_-
BCC A314-0000-20-003-_-_-_-_-_-_-_-_-	BCC A324-0000-20-003-_-_-_-_-_-_-_-_-
BCC A315-0000-20-063-_-_-_-_-_-_-_-_-	BCC A325-0000-20-063-_-_-_-_-_-_-_-_-



BCC0AEK	BCC0EPW (6 pole) BCC0EPU (7 pole) BCC0EPT (8 pole)	BCC0EPR (9 pole) BCC0EPP (10 pole) BCC0EPN (12 pole)	BCC0EPM (19 pole)
PVC	PVC	PVC	PUR
100 m	30 m	30 m	30 m
5	6, 7, 8	9, 10, 12	19
DC	US AC	US AC	---
Yellow	Yellow	Yellow	Black
16 AWG	18 AWG	18 AWG	3x 18 AWG, 16 x 22 AWG
7/8"	1"	1 1/8"	1 1/8"
-40...105°C	-40...105°C	-40...105°C	-40...80°C
12.58 ± 0.25 mm	---	---	10.92 ± 0.13 mm



For list of order codes and available lengths, see the index.

Connectivity Solutions

7/8" double-ended mini cordset



7/8" Double-Ended

Internal Threads to External Threads

Type	7/8" Female (Int) to 7/8" Male (Ext)	7/8" Female (Int) to 7/8" Male (Ext)
Configuration	Straight - Straight	Right Angle - Straight
Voltage Rating	300 V AC/DC	300 V AC/DC
Amperage	12 A (3-wire)/9 A (4- and 5-wire)	12 A (3-wire)/9 A (4- and 5-wire)
Conductor Cross-Section	16 AWG	16 AWG
3-wire US-Color Code	BCC A313-A313-30-345-VX43W6- ^① ___ ^②	BCC A323-A313-30-345-VX43W6- ^① ___ ^②
4-wire US-Color Code	BCC A314-A314-30-346-VX44W6- ^① ___ ^②	BCC A324-A314-30-346-VX44W6- ^① ___ ^②
4-wire DC-Color Code	BCC A314-A314-30-304- ^① ___ ^②	BCC A324-A314-30-304- ^① ___ ^②
5-wire DC-Color Code*	BCC A315-A315-30-335- ^① ___ ^②	BCC A325-A315-30-335- ^① ___ ^②

Jacket Color and Material

Material	Color	Conductor	4-wire ^①	5-wire ^②
PVC	Yellow	16 AWG	VX44W6	VX45W6
TPE	Yellow	16 AWG	EX44W6	
PUR	Black	1.5mm ²	PX04A5	PX05A5

Lengths	
006	= 0.6 meters
020	= 2 meters
050	= 5 meters
100	= 10 meters
150	= 15 meters
200	= 20 meters



7/8" Double-Ended

Internal Threads to Internal Threads

Type	7/8" Female (Int) to 7/8" Male (Int)	7/8" Female (Int) to 7/8" Male (Int)
Configuration	Straight - Straight	Right Angle - Straight
Voltage Rating	300 V AC/DC	300 V AC/DC
Amperage	12 A	12 A
Conductor Cross-Section	16 AWG	16 AWG
3-wire US-Color Code	BCC A313-A313-70-345-VX43W6- ^① ___ ^②	BCC A323-A313-70-345-VX43W6- ^① ___ ^②

Standard Lengths Available:

- 006 = 0.6 meters
- 020 = 2 meters
- 050 = 5 meters
- 100 = 10 meters
- 150 = 15 meters
- 200 = 20 meters

For list of order codes and available lengths, see the index.

Connectivity Solutions

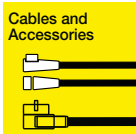
7/8" double-ended mini cordset



7/8" Female (Int) to 7/8" Male (Ext)	7/8" Female (Int) to 7/8" Male (Ext)
Straight - Right Angle	Right Angle - Right Angle
300 V AC/DC	300 V AC/DC
12 A (3-wire)/9 A (4- and 5-wire)	12 A (3-wire)/9 A (4- and 5-wire)
16 AWG	16 AWG
① ②	① ②
BCC A313-A323-30-345-VX43W6-__	BCC A323-A323-30-345-VX43W6-__
BCC A314-A324-30-346-VX44W6-__	BCC A324-A324-30-346-VX44W6-__
BCC A314-A324-30-304-_____	BCC A324-A324-30-304-_____
BCC A315-A325-30-335-_____	BCC A325-A325-30-335-_____



7/8" Female (Int) to 7/8" Male (Int)	7/8" Female (Int) to 7/8" Male (Int)
Straight - Straight	Right Angle - Straight
300 V AC/DC	300 V AC/DC
12 A	12 A
16 AWG	16 AWG
BCC A313-A323-70-345-VX43W6-__	BCC A323-A323-70-345-VX43W6-__



For list of order codes and available lengths, see the index.

Connectivity Solutions
7/8" accessory connectors



7/8" Double-Ended

Internal Threads to External Threads

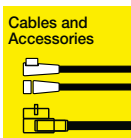
Type	7/8" Tee Black	7/8" Tee Yellow	7/8" 90° Elbow
Configuration	Female - Male Thru, Female Drop	Female - Male Thru, Female Drop	Female - Male
Voltage Rating	300 VAC/VDC	300 VAC/VDC	600 VAC/VDC
Amperage	(4p = 8 A), (5p = 8 A/4 A drop)	8 A	8 A
3-wire	BCC0AA5	BCC0ETK	
4-wire	BCC0AA6	cULus BCC071Y	BCC07Y1
5-wire	BCC0AA7	BCC0ETL	

For list of order codes and available lengths, see the index.

Connectivity Solutions 7/8" accessory connectors



7/8" Bulkhead	7/8" to M12 Converter	M12 to 7/8" Converter
Female - Male	Female - Male	Female - Male
600 VAC/VDC	300 V	300 V
(3p = 13 A), (4p = 10 A), (5p = 8 A)	4 A	4 A
BCC0A7M	BCC0A7E	BCC0A7J
BCC0723	BCC0A7F	BCC0A7K
BCC0A7N	BCC0A7H	BCC0A7L



For list of order codes and available lengths, see the index.

Connectivity Solutions
1" single-ended mini cordset
1" double-ended mini cordset



1" Single-Ended Female

Type	1" Female (Int Threads)	1" Female (Int Threads)
Configuration	Straight	Right Angle
Voltage Rating	300 VAC/VDC	300 VAC/VDC
Amperage	(6p = 5.5 A), (7p = 5 A), (8p = 5A)	(6p = 5.5 A), (7p = 5 A), (8p = 5A)
Conductor Cross-Section	18 AWG	18 AWG
6-wire	BCC A416-0000-10-085-VX46W8-__	BCC A426-0000-10-085-VX46W8-__
7-wire	BCC A417-0000-10-086-VX47W8-__	BCC A427-0000-10-086-VX47W8-__
8-wire	BCC A418-0000-10-087-VX48W8-__	BCC A428-0000-10-087-VX48W8-__

Standard Lengths Available:
 020 = 2 meters
 050 = 5 meters
 100 = 10 meters



1" Single-Ended Male & Double-Ended

Type	1" Male (Int Threads)	1" Female (Int) - 1" Male (Int)
Configuration	Straight	Straight - Straight
Voltage Rating	300 VAC/VDC	300 VAC/VDC
Amperage	(6p = 5.5 A), (7p = 5 A), (8p = 5A)	(6p = 5.5 A), (7p = 5 A), (8p = 5A)
Conductor Cross-Section	18 AWG	18 AWG
6-wire	BCC A416-0000-C0-085-VX46W8-__	BCC A416-A416-70-352-VX46W8-__
7-wire	BCC A417-0000-C0-086-VX47W8-__	BCC A417-A417-70-358-VX47W8-__
8-wire	BCC A418-0000-C0-087-VX48W8-__	BCC A418-A418-70-359-VX48W8-__

Standard Lengths Available:
 020 = 2 meters
 050 = 5 meters
 100 = 10 meters

For list of order codes and available lengths, see the index.

Connectivity Solutions

1 1/8" single-ended mini cordset

1 1/8" double-ended mini cordset



1 1/8" Single-Ended Female

Type	1 1/8" Female (Int Threads)	1 1/8" Female (Int Threads)
Configuration	Straight	Right Angle
Voltage Rating	300 VAC/VDC	300 VAC/VDC
Amperage	(9p, 10p, 12p = 4 A), (19p = 3x8 A, 16 x 3 A)	4 A
Conductor Cross-Section	18 AWG	18 AWG
9-wire	BCC A519-0000-10-088-VX49W8-___	BCC A529-0000-10-088-VX49W8-___
10-wire	BCC A51A-0000-10-089-VX4AW8-___	BCC A52A-0000-10-089-VX4AW8-___
12-wire	BCC A51C-0000-10-090-VX4CW8-___	BCC A52C-0000-10-090-VX4CW8-___
19-wire	BCC A51L-0000-10-091-PX0LW8-___	

Standard Lengths Available:

- 020 = 2 meters
- 050 = 5 meters
- 100 = 10 meters



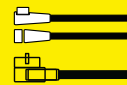
1 1/8" Single-Ended Male & Double-Ended

Type	1 1/8" Male (Int Threads)	1 1/8" Female (Int) - 1 1/8" Male (Int)
Configuration	Straight	Straight - Straight
Voltage Rating	300 VAC/VDC	300 VAC/VDC
Amperage	(9p, 10p, 12p = 4 A), (19p = 3x8 A, 16 x 3 A)	(9p, 10p, 12p = 4 A), (19p = 3x8 A, 16 x 3 A)
Conductor Cross-Section	18 AWG	18 AWG
9-wire	BCC A519-0000-C0-088-VX49W8-___	BCC A519-A519-70-360-VX49W8-___
10-wire	BCC A51A-0000-C0-089-VX4AW8-___	BCC A51A-A51A-70-355-VX4AW8-___
12-wire	BCC A51C-0000-C0-090-VX4CW8-___	BCC A51C-A51C-70-362-VX4CW8-___
19-wire	BCC A51L-0000-C0-091-PX0LW8-___	BCC A51L-A51L-70-363-PX0LW8-___

Standard Lengths Available:

- 020 = 2 meters
- 050 = 5 meters
- 100 = 10 meters

Cables and Accessories



For list of order codes and available lengths, see the index.

Connectivity Solutions

M8 junction blocks



M8 Junction Blocks (MIBs)

Quick Disconnect

Type	M12 Quick Disconnect		M12 Quick Disconnect		M12 Quick Disconnect	M12 Quick Disconnect	
Configuration	4 port		6 port		8 port	10 port	
Voltage Rating	10...30 VDC		10...30 VDC		10...30 VDC	10...30 VDC	
Current Rating / Contact	2.0 A	1.5 A	2.0 A	1.5 A	1.5 A	1.5 A	
Quick Disconnect Connector	M12 8-wire	M12 12-wire	M12 8-wire	M12 12-wire	M12 12-wire	M12 12-wire	
3-wire, female	Non LED	BPI00HA	BPI00HC	BPI00HF	BPI00HH	BPI00HJ	BPI00HK
	NPN-LED	BPI00A6	BPI00A8	BPI00AE	BPI00AH	BPI00AK	BPI00AM
	PNP-LED	BPI00A7	BPI00A9	BPI00AF	BPI00AJ	BPI00AL	BPI00AN
4-wire, female	Non LED	BPI00HE					
	NPN-LED	BPI00AA					
	PNP-LED	BPI00AC					



Suggested Homerun Cables

Type	M12		M12	
Number of Conductors	8		12	
2 meters	Straight	BCC06K1	BCC06UK	
	Right angle	BCC06K4		
5 meters	Straight	BCC06K2	BCC06UL	
	Right angle	BCC06K5	BCC0942	
10 meters	Straight	BCC06K3	BCC06UM	
	Right angle	BCC06K6	BCC0943	

Connectivity Solutions

M8 junction blocks

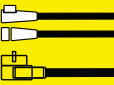


M8 Junction Blocks (MIBs)

Cable Out

Type	Cable Out	Cable Out	Cable Out	Cable Out			
Configuration	4 port	6 port	8 port	10 port			
Voltage Rating	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC			
Current Rating / Block	8 A	8 A	8 A	8 A			
Current Rating / Contact	3 A	3 A	3 A	3 A			
Cable Length	Sensor Connection						
3 meters	3-wire, female	Non LED	BPI00F5	BPI00H2	BPI00FR	BPI00FF	
		NPN-LED	BPI00HL	BPI00HR	BPI00HY	BPI00J2	
		PNP-LED	BPI00C5	BPI00AP	BPI00CL	BPI00E2	
	4-wire, female	Non LED	BPI00F9	BPI00H6	BPI00FY	BPI00FL	
		NPN-LED	BPI00HN	BPI00HU	BPI00J0	BPI00J4	
		PNP-LED	BPI00CC	BPI00EP	BPI00EH	BPI00EZ	
	5 meters	3-wire, female	Non LED	BPI00F6	BPI00H3	BPI00FT	BPI00FH
			NPN-LED	BPI00C9	BPI00AW	BPI00CR	BPI00E6
			PNP-LED	BPI00C6	BPI00AR	BPI00CM	BPI00E3
4-wire, female		Non LED	BPI00FA	BPI00H7	BPI00FZ	BPI00FM	
		NPN-LED	BPI00CJ	BPI00EW	BPI00EM	BPI00F3	
		PNP-LED	BPI00CE	BPI00ER	BPI00EJ	BPI00F0	
10 meters		3-wire, female	Non LED	BPI00F7	BPI00H4	BPI00FU	BPI00FJ
			NPN-LED	BPI00CA	BPI00AY	BPI00CT	BPI00E7
			PNP-LED	BPI00C7	BPI00AT	BPI00CN	BPI00E4
	4-wire, female	Non LED	BPI00FC	BPI00H8	BPI00H0	BPI00FN	
		NPN-LED	BPI00CK	BPI00EY	BPI00EN	BPI00F4	
		PNP-LED	BPI00CF	BPI00ET	BPI00EK	BPI00F1	
	15 meters	3-wire, female	Non LED	BPI00F8	BPI00H5	BPI00FW	BPI00FK
			NPN-LED	BPI00HM	BPI00HT	BPI00HZ	BPI00J3
			PNP-LED	BPI00C8	BPI00AU	BPI00CP	BPI00E5
4-wire, female		Non LED	BPI00FE	BPI00H9	BPI00H1	BPI00FP	
		NPN-LED	BPI00HP	BPI00HW	BPI00J1	BPI00J5	
		PNP-LED	BPI00CH	BPI00EU	BPI00EL	BPI00F2	

Cables and Accessories



Connectivity Solutions

M12 junction blocks



M12 Junction Blocks (MIBs) - Quick Disconnect

Type	M23 Quick Disconnect	M23 Quick Disconnect
Configuration	4 port	8 port
Voltage Rating	10...30 VDC	10...30 VDC
Current Rating / Block	8 A	8 A
Current Rating / Contact	4 A	4 A

Sensor Connection

4-wire, female	Non LED	BPI00JA	BPI00JP
M23, 12-wire	NPN-LED	BPI008W	BPI008R
	PNP-LED	BPI008N	BPI008P
5-wire, female	Non LED	BPI00JJ	BPI00JY
M23, 19-wire	NPN-LED	BPI008Z	BPI008U
	PNP-LED	BPI008Y	BPI008T



Suggested Homerun Cables

Type		M23	M23
Number of Conductors		12	19
2 meters	Straight	BCC0FUR	BCC0FRT
	Right angle	BCC0FUW	BCC0FRY
5 meters	Straight	BCC0FUT	BCC0FRU
	Right angle	BCC0FUY	BCC0FRZ
10 meters	Straight	BCC0FUU	BCC0FRW
	Right angle	BCC0FUZ	BCC0FT0

Connectivity Solutions

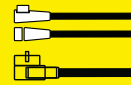
M12 junction blocks



M8 Junction Blocks (MIBs) - Quick Disconnect

Type	Cable Out		Cable Out	
Configuration	4 port		8 port	
Voltage Rating	10...60 VDC		10...60 VDC	
Current Rating / Block	8 A		8 A	
Current Rating / Contact	4 A		4 A	
Cable Length	Sensor Connection			
3 meters	4-wire, female	Non LED	BPI00J6	BPI00JK
		NPN-LED	BPI009M	BPI0094
		PNP-LED	BPI009P	BPI0090
	5-wire, female	Non LED	BPI00JC	BPI00JR
		NPN-LED	BPI00A1	BPI009E
		PNP-LED	BPI009W	BPI0098
5 meters	4-wire, female	Non LED	BPI00J7	BPI00JL
		NPN-LED	BPI009K	BPI0095
		PNP-LED	BPI009R	BPI0091
	5-wire, female	Non LED	BPI00JE	BPI00JT
		NPN-LED	BPI00A2	BPI009F
		PNP-LED	BPI009Y	BPI0099
10 meters	4-wire, female	Non LED	BPI00J8	BPI00JM
		NPN-LED	BPI009L	BPI0096
		PNP-LED	BPI009T	BPI0092
	5-wire, female	Non LED	BPI00JF	BPI00JU
		NPN-LED	BPI00A3	BPI009H
		PNP-LED	BPI009Z	BPI009A
15 meters	4-wire, female	Non LED	BPI00J9	BPI00JN
		NPN-LED	BPI009N	BPI0097
		PNP-LED	BPI009U	BPI0093
	5-wire, female	Non LED	BPI00JH	BPI00JW
		NPN-LED	BPI00A4	BPI009J
		PNP-LED	BPI00A0	BPI009C

Cables and Accessories






Connectivity Solutions

M12 terminal blocks

M12 blocks - M23 homerun cables



M12 Terminal Junction Blocks (MIBs)

Type	Spring Terminals	Spring Terminals
Configuration	4 port	8 port
Voltage Rating	48 VDC	48 VDC
Amperage	3A per Port, 8A per Block	3A per Port, 8A per Block
Cable Diameter	5...13 mm	5...13 mm
3-wire+PE, non-LED	 BPI006L	 BPI006K
4-wire+PE, non-LED	 BPI006H	BPI006P
4-wire+PE, PNP-LED	BPI006M	BPI006R
4-wire+PE, NPN-LED	BPI006N	BPI006T



M12 Terminal Junction Blocks (MIBs)

Type	Screw Terminals	Screw Terminals
Configuration	4 port	8 port
Voltage Rating	18...30 VDC	18...30 VDC
Amperage	2A per Port, 8A per Block	2A per Port, 8A per Block
4-wire+PE, PNP-LED	BPI007K	BPI007H

Connectivity Solutions

M8 blocks - M12 homerun cables
M16 homerun cables
M12 blocks - M23 homerun cables



M8 Blocks - M12 Homerun Cables

Type	M12 Female	M12 Female
Configuration	Straight	Right Angle
Voltage Rating	(8p = 60 V), (12p = 30 V)	(8p = 60 V), (12p = 30 V)
Amperage	(8p = 2 A), (12p = 1 A)	(8p = 2 A), (12p = 1 A)
8-wire	BCC M418-0000-1A-044-PX0825-__ _ _	BCC M428-0000-1A-044-PX0825-__ _ _
12-wire	BCC M41C-0000-1A-049-PX0C25-__ _ _	BCC M42C-0000-1A-049-PX0C25-__ _ _

Standard Lengths Available:
 020 = 2 meters
 050 = 5 meters
 100 = 10 meters

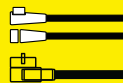


M12 Blocks - M23 Homerun Cables

Type	M23 Female	M23 Female
Configuration	Straight	Right Angle
Voltage Rating	(12p = 250 VAC/VDC), (19p = 125 VAC/VDC)	(12p = 250 VAC/VDC), (19p = 125 VAC/VDC)
Amperage	(12p = 8 A), (19p = 3x8 A)	(12p = 8 A), (19p = 3x8 A)
12-wire	BCC M61C-0000-10-105-PX0CP5-__ _ _	BCC M62C-0000-10-105-PX0CP5-__ _ _
19-wire	BCC M61L-0000-10-022-PX0LP5-__ _ _	BCC M62L-0000-10-022-PX0LP5-__ _ _

Standard Lengths Available:
 020 = 2 meters
 050 = 5 meters
 100 = 10 meters

Cables and Accessories



Connectivity Solutions

M8 and M23 receptacles



M8 Receptacles

Type			M8 Female	M8 Male
Configuration			Straight	Straight
Wire Gauge			24 AWG	24 AWG
Connector Thread Type			Internal	External
3-wire	M8 x 0.5 mounting	0.6 meters	BCC0E0P	BCC0E12
		2 meters	BCC0E11	BCC0E13
4-wire	M8 x 0.5 mounting	0.6 meters	BCC0CTF	BCC0CTJ
		2 meters	BCC0CTH	BCC0CTK



M23 Receptacles

Type			M23 Female	M23 Male
Configuration			Straight	Straight
Wire Gauge			22 AWG	22 AWG
Connector Thread Type			External	External
12-wire	M20 mounting	0.6 meters	BCC0E16	BCC0E14
		2 meters	BCC0E17	BCC0E15
19-wire	M20 mounting	0.6 meters	BCC0E1A	BCC0E18
		2 meters	BCC0E1C	BCC0E19

Connectivity Solutions

M12 A-coded receptacles



M12 A-coded Receptacles

Type				M12 Female	M12 Male	
Configuration				Straight	Straight	
Wire Gauge				22 AWG (8-wire 24AWG)	22 AWG (8-wire 24AWG)	
Connector Thread	Type			Internal	External	
No. Conductors	Mounting	Nut Coating	Length			
3-wire	1/4"-18 NPT	Nickel Brass	0.6 meters	BCC0CW9	BCC0CWF	
			2 meters	BCC0CWA	BCC0CWH	
	1/2"-14 NPT	Aluminum	0.6 meters	BCC0CWC	BCC0CWL	
			2 meters	BCC0CWE	BCC0CWL	
	M16	Nickel Brass	0.6 meters	BCC0E1E	BCC0E1H	
			2 meters	BCC0E1F	BCC0E1J	
4-wire	1/4"-18 NPT	Nickel Brass	0.6 meters	BCC0CWL	BCC0CZ2	
			2 meters	BCC0CWM	BCC0CZ3	
		Stainless Steel	0.6 meters	BCC0CUE	BCC0CUK	
			2 meters	BCC0CUF	BCC0CUL	
	1/2"-14 NPT	Aluminum	0.6 meters	BCC0CZ0	BCC0CZ4	
			2 meters	BCC0CZ1	BCC0CZ5	
		Stainless Steel	0.6 meters	BCC0CUH	BCC0CUM	
			2 meters	BCC0CUJ	BCC0CUN	
	M16	Nickel Brass	0.6 meters	BCC0CWN	BCC0CWR	
			2 meters	BCC0CWP	BCC0CWT	
	4-wire+PE	1/2"-14 NPT	Aluminum	0.6 meters	BCC0CYL	BCC0CYU
				2 meters	BCC0CYM	BCC0CYW
M16		Nickel Brass	0.6 meters	BCC0CWY	BCC0CY1	
			2 meters	BCC0CWZ	BCC0CY2	
5-wire	1/4"-18 NPT	Nickel Brass	0.6 meters	BCC0CZ6	BCC0CYN	
			2 meters	BCC0CZ7	BCC0CYP	
	1/2"-14 NPT	Aluminum	0.6 meters	BCC0CZ8	BCC0CYR	
			2 meters	BCC0CZ9	BCC0CYT	
	M16	Nickel Brass	0.6 meters	BCC0CWU	BCC0CY0	
			2 meters	BCC0CWW	BCC0E0E	
8-wire	1/4"-18 NPT	Nickel Brass	0.6 meters	BCC0CYY	BCC0CYC	
			2 meters	BCC0CYY	BCC0CYE	
	1/2"-14 NPT	Aluminum	0.6 meters	BCC0E1K	BCC0E1M	
			2 meters	BCC0E1L	BCC0CYK	
	M16	Nickel Brass	0.6 meters	BCC0CY3	BCC0CY5	
			2 meters	BCC0CY4	BCC0CY6	



Connectivity Solutions

1/2" dual keyway receptacles



1/2" Dual Keyway Receptacles

Type	1/2" AC Female	1/2" AC Male
Configuration	Straight Dual Keyway	Straight Dual Keyway
Connector Thread Type	Internal	External
Metric Thread - Wire Gauge	22 AWG	22 AWG
NPT Thread - Wire Gauge	22 AWG	22 AWG

No. Conductors	Mounting		
3-wire	M16		BCC0H07
	1/4"-18 NPT	BCC0FJ6	BCC0FJ7
	1/2"-14 NPT		BCC0FJ8
4-wire	1/4"-18 NPT	BCC0FJ9	BCC0FJA
	1/2"-14 NPT		BCC0FJC
5-wire	1/4"-18 NPT	BCC0FJE	BCC0FJF
	1/2"-14 NPT		BCC0FJH
6-wire	1/4"-18 NPT	BCC0FJJ	BCC0FJK
	1/2"-14 NPT		BCC0FJL

Standard Lengths Available
003 = 0.3 meters

Connectivity Solutions

7/8" receptacles

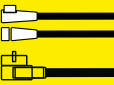


7/8" Receptacles

Type	7/8" Female	7/8" Female	7/8" Male
Configuration	Straight	Straight	Straight
Wire Gauge	16 AWG	16 AWG	16 AWG
Connector Thread Type	Internal	External	External

No. Conductors	Mounting	Color Code	Length			
3-wire	1/2"-14 NPT	AC	0.6 meters	BCC0ER2	BCC0CU2	BCC0CU4
			2 meters	BCC0ER3	BCC0CU3	BCC0CU5
	M20	AC	0.6 meters		BCC0CUP	BCC0CUT
			2 meters		BCC0CUR	BCC0CUU
4-wire	1/2"-14 NPT	AC	0.6 meters	BCC0ER4	BCC0CU6	BCC0CU9
			2 meters	BCC0ER5	BCC0CU7	BCC0CUA
		DC	0.6 meters	BCC0E63		BCC0E64
			2 meters	BCC0720		BCC0722
	M20	AC	0.6 meters		BCC0CUZ	BCC0CW3
			2 meters		BCC0CW0	BCC0CUW
		DC	0.6 meters		BCC0CW1	BCC0CW4
			2 meters		BCC0CW2	BCC0CUY
5-wire	1/2"-14 NPT	AC	0.6 meters		BCC0ERC	BCC0ERF
			2 meters		BCC0ERE	BCC0ERH
		DC	0.6 meters	BCC098M		BCC098P
	M20	DC	2 meters	BCC098N		BCC098R
			0.6 meters		BCC0CW5	BCC0CW7
			2 meters		BCC0CW6	BCC0CW8
6-wire	1/2"-14 NPT	AC	2 meters		BCC0HFR	BCC0HFP

Cables and Accessories



Connectivity Solutions
1" receptacles



1" Receptacles

Type	1" Female	1" Male
Configuration	Straight	Straight
Connector Thread Type	External	External
Cable Color Code	US	US
Wire Gauge	18 AWG	18 AWG
Mounting	1/2"-14 NPT	1/2"-14 NPT

No. Conductors	Lead Length		
6-wire	0.6 m	BCC0A66	BCC0A68
	2.0 m	BCC0A67	BCC0A69
7-wire	0.6 m	BCC0A6A	BCC0A6E
	2.0 m	BCC0A6C	BCC0A6F
8-wire	0.6 m	BCC0A6H	BCC0A6K
	2.0 m	BCC0A6J	BCC0A6L

Connectivity Solutions

1 1/8" receptacles

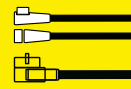


1 1/8" Receptacles

Type	1 1/8" Female	1 1/8" Male
Configuration	Straight	Straight
Connector Thread Type	External	External
Cable Color Code	US	US
Wire Gauge (9-12 wire)	18 AWG	18 AWG
Wire Gauge (19-wire)	3x 18 AWG, 16x 22 AWG	3x 18 AWG, 16x 22 AWG
Mounting	1/2"-14 NPT	1/2"-14 NPT

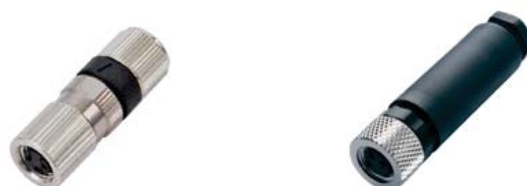
No. Conductors	Lead Length		
9-wire	0.6 m	BCC0A6M	BCC0A6P
	2.0 m	BCC0A6N	BCC0A6R
10-wire	0.6 m	BCC0A6T	BCC0A6W
	2.0 m	BCC0A6U	BCC0A6Y
12-wire	0.6 m	BCC0A6Z	BCC0A71
	2.0 m	BCC0A70	BCC0A72
19-wire	0.6 m	BCC0A73	BCC0A75
	2.0 m	BCC0A74	BCC0A76

Cables and Accessories



Connectivity Solutions

M8 field attachables



M8 Female Field Attachables

Type	M8 Female	M8 Female
Configuration	Straight	Straight
Housing	Plastic/Metal	Plastic
Connection	Piercon Terminals	Screw Terminals
Conductor Maximum	0.14...0.38 mm ² (26...22 AWG)	0.14...0.50 mm ² (26...20 AWG)

No. of Conductors	Cable Ø Range		
3-wire	3...5 mm	BCC09EU	
	3.5...5 mm		BCC06Z1
4-wire	3...5 mm	BCC09EY	
	3.5...5 mm		BCC06Z5



M8 Male Field Attachables

Type	M8 Male	M8 Male
Configuration	Straight	Straight
Housing	Plastic/Metal	Plastic
Connection	Piercon Terminals	Screw Terminals
Conductor Maximum	0.14...0.38 mm ² (26...22 AWG)	0.14...0.50 mm ² (26...20 AWG)

No. of Conductors	Cable Ø Range		
3-wire	3...5 mm	BCC09EW	
	3.5...5 mm		BCC0E7N
4-wire	3...5 mm	BCC09EZ	
	3.5...5 mm		BCC06Z7

Connectivity Solutions

M8 field attachables



M8 Female	M8 Female
Straight	Right Angle
Plastic/Metal	Plastic
Solder Cup	Solder Cup
0.14...0.34 mm ² (26...22 AWG)	0.14...0.34 mm ² (26...22 AWG)

BCC06YW

BCC06YY

Standard Cable Information

Jacket	Wires	Conductors	Diameter
PVC Yellow	3	22 AWG	4.7 ± 0.15 mm
PVC Yellow	4	22 AWG	5.0 ± 0.15 mm
PVC Grey	3	0.34 mm ²	4.5 ± 0.15 mm
PVC Grey	4	0.34 mm ²	4.8 ± 0.15 mm
PUR Yellow	3	22 AWG	4.3 ± 0.20 mm
PUR Yellow	4	22 AWG	4.7 ± 0.20 mm
PUR Black	3	0.34 mm ²	4.3 ± 0.20 mm
PUR Black	4	0.34 mm ²	4.7 ± 0.20 mm
TPE Yellow	3	22 AWG	5.3 ± 0.13 mm
TPE Yellow	4	22 AWG	5.3 ± 0.13 mm



M8 Male	M8 Male
Straight	Right Angle
Plastic/Metal	Plastic
Solder Cup	Solder Cup
0.14...0.34 mm ² (26...22 AWG)	0.14...0.34 mm ² (26...22 AWG)

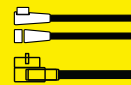
BCC06YZ

BCC06Z0

Standard Cable Information

Jacket	Wires	Conductors	Diameter
PVC Yellow	3	22 AWG	4.7 ± 0.15 mm
PVC Yellow	4	22 AWG	5.0 ± 0.15 mm
PVC Grey	3	0.34 mm ²	4.5 ± 0.15 mm
PVC Grey	4	0.34 mm ²	4.8 ± 0.15 mm
PUR Yellow	3	22 AWG	4.3 ± 0.20 mm
PUR Yellow	4	22 AWG	4.7 ± 0.20 mm
PUR Black	3	0.34 mm ²	4.3 ± 0.20 mm
PUR Black	4	0.34 mm ²	4.7 ± 0.20 mm
TPE Yellow	3	22 AWG	5.3 ± 0.13 mm
TPE Yellow	4	22 AWG	5.3 ± 0.13 mm

Cables and Accessories



Connectivity Solutions

M12 field attachables



M12 Female Field Attachables

Type	M12 Female	M12 Female	M12 Female
Configuration	Straight	Straight	Straight
Housing	Plastic	Plastic	Plastic
Connection	Screw Terminals	Insulation Displacement	Spring Clamp
Conductor Range	0.14...0.75 mm ² (26...18 AWG)	0.14...0.34 mm ² (26...22 AWG)	0.14...0.50 mm ² (26...20 AWG)

No. of Conductors	Allowable Cable Ø			
4-wire	4...6 mm	BCC06Z9	BCC06ZY	
	5...8 mm			
	6...8 mm	BCC06F6	BCC0FJM	BCC06Y6
5-wire	2.1...3 mm or 4...5 mm	BCC09JP		
	4...6 mm	BCC06ZF		
	5...8 mm			
	6...8 mm	BCC06W9		
8-wire	4...6 mm (shielded)			
	6...8 mm (0.14...0.50 mm ²)	BCC0A03		
12-wire	6...8 mm (0.14...0.25 mm ²)			BCC0A05* (solder cup)

*Consult factory for availability.

Standard Cable Information

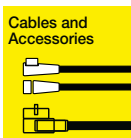
Jacket	Wires	Conductors	Diameter	
PVC Yellow	3	22 AWG	4.7 ± 0.15 mm	BCC0AE7
PVC Yellow	4	22 AWG	5.0 ± 0.15 mm	BCC0AE8
PVC Grey	3	0.34 mm ²	4.5 ± 0.15 mm	BCC0C14
PVC Grey	4	0.34 mm ²	4.8 ± 0.15 mm	BCC0C15
PUR Yellow	3	22 AWG	4.3 ± 0.20 mm	BCC0AE9
PUR Yellow	4	22 AWG	4.7 ± 0.20 mm	BCC0AEA
PUR Black	3	0.34 mm ²	4.3 ± 0.20 mm	BCC0AC7
PUR Black	4	0.34 mm ²	4.7 ± 0.20 mm	BCC0AC8
TPE Yellow	3	22 AWG	5.3 ± 0.13 mm	BCC0AEC
TPE Yellow	4	22 AWG	5.3 ± 0.13 mm	BCC0AEE

Connectivity Solutions
M12 field attachables



M12 Female	M12 Female	M12 Female	M12 Female
Right Angle	Straight	Straight	Right Angle
Plastic	Metal (shielded)	Stainless Steel	Stainless Steel
Screw Terminals	Screw Terminals	Screw Terminals	Screw Terminals
0.14...0.75 mm ² (26...18 AWG)	0.14...0.75 mm ² (26...18 AWG)	0.14...0.75 mm ² (26...18 AWG)	0.14...0.75 mm ² (26...18 AWG)

BCC06ZA	BCC06ZM		
BCC06Y8			
BCC06ZH		BCC097P	BCC097T
	BCC06ZN		
BCC06ZJ		BCC097R	BCC097U
BCC04ME (IDC)	BCC04MC (IDC)		



Connectivity Solutions

M12 field attachables



M12 Male Field Attachables

Type	M12 Male	M12 Male	M12 Male
Configuration	Straight	Straight	Straight
Housing	Plastic	Plastic	Plastic
Connection	Screw Terminals	Insulation Displacement	Spring Clamp
Conductor Maximum	0.14...0.75 mm ² (26...18 AWG)	0.14...0.34 mm ² (26...22 AWG)	0.14...0.50 mm ² (26...20 AWG)

No. of Conductors	Allowable Cable Ø			
4-wire	4...6 mm	BCC06M4	BCC08C0	
	5...8 mm			
	6...8 mm	BCC06F7	BCC0FJN	BCC06Y5
5-wire	2.1...3 mm or 4...5 mm	BCC09JW		
	4...6 mm	BCC06YA		
	5...8 mm			
	6...8 mm	BCC06EY		
8-wire	6...8 mm (0.14...0.50 mm ²)	BCC0A04		
12-wire	6...8 mm (0.14...0.25 mm ²)			BCC0A06* (solder cup)

*Consult factory for availability.

Standard Cable Information

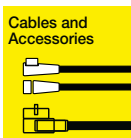
Jacket		Wires	Conductors	Diameter	
PVC	Yellow	3	22 AWG	4.7 ± 0.15 mm	BCC0AE7
PVC	Yellow	4	22 AWG	5.0 ± 0.15 mm	BCC0AE8
PVC	Grey	3	0.34 mm ²	4.5 ± 0.15 mm	BCC0C14
PVC	Grey	4	0.34 mm ²	4.8 ± 0.15 mm	BCC0C15
PUR	Yellow	3	22 AWG	4.3 ± 0.20 mm	BCC0AE9
PUR	Yellow	4	22 AWG	4.7 ± 0.20 mm	BCC0AEA
PUR	Black	3	0.34 mm ²	4.3 ± 0.20 mm	BCC0AC7
PUR	Black	4	0.34 mm ²	4.7 ± 0.20 mm	BCC0AC8
TPE	Yellow	3	22 AWG	5.3 ± 0.13 mm	BCC0AEC
TPE	Yellow	4	22 AWG	5.3 ± 0.13 mm	BCC0AEE

Connectivity Solutions
M12 field attachables



M12 Male	M12 Male	M12 Male	M12 Male
Right Angle	Straight	Straight	Right Angle
Plastic	Metal (shielded)	Stainless Steel	Stainless Steel
Screw Terminals	Screw Terminals	Screw Terminals	Screw Terminals
0.14...0.75 mm ² (26...18 AWG)	0.14...0.75 mm ² (26...18 AWG)	0.14...0.75 mm ² (26...18 AWG)	0.14...0.75 mm ² (26...18 AWG)

BCC06ZC			
	BCC0869		
BCC06ZE			
BCC06ZK		BCC097K	BCC097M
	BCC086A		
BCC06ZL		BCC097L	BCC097N



Connectivity Solutions

1/2" field attachables

7/8" field attachables



1/2" Field Attachables

Type	1/2"	1/2"
Configuration	Straight	Right Angle
Housing	Plastic	Plastic
Connection	Screw Terminals	Screw Terminals
Cable Gland	PG7	PG7

No. of Conductors

3-wire, female	BCC08AU	BCC08AW
3-wire, male	BCC08AY	BCC08AZ



7/8" Field Attachables

Type	7/8" Female	7/8" Male
Configuration	Straight	Straight
Housing	Plastic	Plastic
Connection	Screw Terminals	Screw Terminals
Conductor Maximum	0.14...1.50 mm ² (26...16 AWG)	0.14...1.50 mm ² (26...16 AWG)

No. of Conductors	Allowable Cable Ø		
3-wire	8...10 mm	BCC0AT9	BCC0ATC
	10...12 mm	BCC0ATA	BCC0ATE
4-wire	6...8 mm	BCC0706	BCC0709
	8...10 mm	BCC0707	BCC070A
	10...12 mm	BCC0708	BCC070C
5-wire	6...8 mm	BCC070E	BCC070J
	8...10 mm	BCC070F	BCC070K
	10...12 mm	BCC070H	BCC070L
	12...14 mm	BCC0ATH	BCC0ATF

Standard Cable Information

Jacket	Wires	Color Code	Conductors	Attachable	Temperature Rating	Diameter	
PVC	Yellow	3	US AC	16 AWG	7/8"	-40...105°C	10.24 ± 0.20 mm
PVC	Yellow	4	US AC	16 AWG	7/8"	-40...105°C	10.67 ± 0.25 mm
PVC	Yellow	4	DC	16 AWG	7/8"	-40...105°C	10.67 ± 0.25 mm
PVC	Yellow	5	DC	16 AWG	7/8"	-40...105°C	12.57 ± 0.25 mm
TPE	Yellow	4	DC	16 AWG	7/8"	-40...105°C	10.67 ± 0.25 mm

Connectivity Solutions

M23 field attachables



7/8" Field Attachables

Type	7/8" Female	7/8" Male
Configuration	Right Angle	Right Angle
Housing	Plastic	Plastic
Connection	Screw Terminal	Screw Terminal
Conductor Range	0.14...1.50 mm (26...16 AWG)	0.14...1.50 mm (26...16 AWG)

No. of Conductors	Cable Min. Ø		
3-wire	8...10 mm	BCC0FKF	BCC0FKJ
	10...12 mm	BCC0FKH	BCC0FKK
4-wire	6...8 mm	BCC0FK7	BCC0FKA
	8...10 mm	BCC0FK8	BCC0FKC
	10...12 mm	BCC0FK9	BCC0FKE
5-wire	6...8 mm	BCC0FK1	BCC0FK4
	8...10 mm	BCC0FK2	BCC0FK5
	10...12 mm	BCC0FK3	BCC0FK6

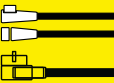


M23 Female Field Attachables

Type	M23 Female	M23 Female
Configuration	Straight	Right Angle
Housing	Metal	Metal
Connection	Solder Connections	Solder Connections
Conductor Range	0.14...1.00 mm ² (26...18 AWG)	0.14...1.00 mm ² (26...18 AWG)

No. of Conductors	Cable Min. Ø		
12-wire	6...9 mm	BCC08JH	BCC08JF
19-wire	6...9 mm	BCC08HJ	BCC08HK

Cables and Accessories



M23 Male Field Attachables

Type	M23 Male (Internal Threads)	M23 Male (External Threads)
Configuration	Straight	Straight
Housing	Metal	Metal
Connection	Solder Connections	Solder Connections
Conductor Range	0.14...1.00 mm ² (26...18 AWG)	0.14...1.00 mm ² (26...18 AWG)

No. of Conductors	Cable Min. Ø		
12-wire	6...9 mm	BCC0H6M	BCC0AY5
19-wire	6...9 mm	BCC0H6N	BCC0H6P

Connectivity Solutions

DIN A style actuator cables

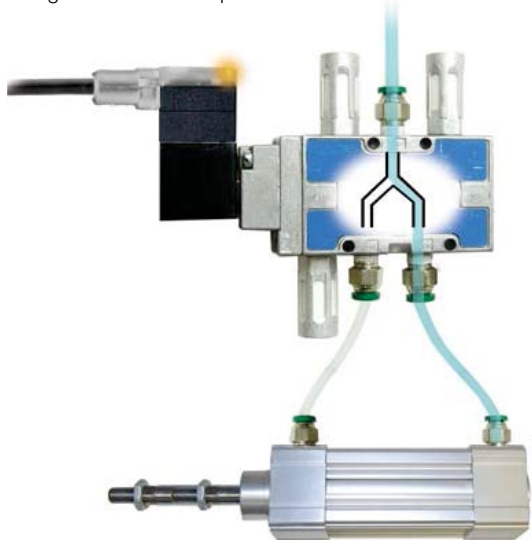
DIN B and industry B style actuator cables

DIN C and industry C style actuator cables

From sensors to cordsets, Balluff offers an extensive line, which includes valve connectors. These valve connectors cover all standard DIN connections per EN175301, while also offering drag chain rated cables, rugged housings, and an option of protective circuits. Balluff can essentially complete any valve connector solution.



While DIN & Industry style connectors are used in many industrial automation applications, the most popular uses are with simple motors and solenoid valves. As with most solenoid valve applications a DIN or Industry style connector is required to switch the valve's position. Whether the application is clamping a part or moving an object, the Balluff valve connector can be used to pass the control signal to the valve. Integrated LEDs allow for easy recognition of solenoid position.



DIN A

Type

Configuration

Straight Wired - Voltage Rating

Suppressor Diode - Voltage Rating

Current Rating

0°	DIN A 18 mm Straight Wired
	DIN A 18 mm - PNP & Suppressor Diode

DIN B and IND B

Type

Configuration

Straight Wired - Voltage Rating

Suppressor Diode - Voltage Rating

Current Rating

0°	DIN B 10mm Straight Wired
	DIN B 10mm - PNP & Suppressor Diode
180°	DIN B 10mm - PNP & Suppressor Diode
0°	IND B 11mm - PNP & Suppressor Diode
	IND B 11mm Straight Wired
180°	IND B 11mm - PNP & Suppressor Diode

DIN C and IND C

Type

Configuration

Straight Wired - Voltage Rating

Suppressor Diode - Voltage Rating

Current Rating

0°	DIN C 8 mm Straight Wired
	DIN C 8 mm - PNP & Suppressor Diode
0°	IND C 9.4 mm - PNP & Suppressor Diode

For face views and wiring diagrams, visit the technical reference section.

Connectivity Solutions

DIN A style actuator cables

DIN B and industry B style actuator cables

DIN C and industry C style actuator cables



DIN A Female
Right Angle
230 VAC/VDC
24 VAC/VDC
4.0 A

DIN A Female - M12 Male
Right Angle - Straight
230 VAC/VDC
24 VAC/VDC
4.0 A

DIN A Female - M12 Male
Right Angle - Right Angle
230 VAC/VDC
24 VAC/VDC
4.0 A

BCC VA04-0000-10-054-
BCC VA04-0000-10-053-

BCC VA04-M413-3E-665-
BCC VA04-M413-3E-664-

BCC VA04-M423-3E-664-



B Style Female
Right Angle
230 VAC/VDC
24 VAC/VDC
4.0 A

B Style Female - M12 Male
Right Angle - Straight
230 VAC/VDC
24 VAC/VDC
4.0 A

B Style Female - M12 Male
Right Angle - Right Angle
230 VAC/VDC
24 VAC/VDC
4.0 A

BCC VB03-0000-10-056-
BCC VB03-0000-10-055-
BCC VB23-0000-10-055-
BCC VB43-0000-10-055-
BCC VB63-0000-10-056-
BCC VB63-0000-10-055-

BCC VB03-M413-3E-666-
BCC VB23-M413-3E-666-
BCC VB43-M413-3E-666-
BCC VB63-M413-3E-667-
BCC VB63-M413-3E-666-

BCC VB03-M423-3E-666-
BCC VB23-M423-3E-666-
BCC VB43-M423-3E-666-
BCC VB63-M423-3E-667-
BCC VB63-M423-3E-666-



C-Style Female
Right Angle
230 VAC/VDC
24 VAC/VDC
4.0 A

C-Style Female - M12 Male
Right Angle - Straight
230 VAC/VDC
24 VAC/VDC
4.0 A

C-Style Female - M12 Male
Right Angle - Right Angle
230 VAC/VDC
24 VAC/VDC
4.0 A

BCC VC04-0000-10-054-
BCC VC04-0000-10-053-
BCC VC44-0000-10-053-

BCC VC04-M413-3E-665-
BCC VC04-M413-3E-664-
BCC VC44-M413-3E-664-

BCC VC04-M423-3E-664-
BCC VC44-M423-3E-664-

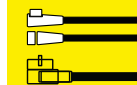
Jacket Color and Material		①	②
Material	Color		
PVC	Grey	VX8350	020 = 2 meters
PUR	Black	PX0350	050 = 5 meters
			100 = 10 meters

②	Single-ended Lengths
003	= 0.3 meters
006	= 0.6 meters
010	= 1 meter
015	= 1.5 meters

②	Double-ended Lengths
003	= 0.3 meters
006	= 0.6 meters
010	= 1 meter
015	= 1.5 meters

For face views and wiring diagrams, visit the technical reference section.

Cables and Accessories



Connectivity Solutions

Accessories

Caps, labels, and adapters



Protection Caps

Size	M8x1	M12x1	M12x1	M12x1	M12x1	M12
Threads	External	External	External	External	External	Internal
Material	Plastic	Plastic	Plastic	CuZn	Stainless steel	NiCuZn
Use	M8 Female Port	M12 Female Port	M12 Female Port	M12 Female Port	M12 Female Port	M12 Male Port
	BAM01C1	BAM01C2	BAM0115	BAM0114	BAM02KM	BAM01YN



Port Covers

Size	M12x1	7/8"-16UN	7/8"-16UN	M23
Threads	Internal	External	Internal	Internal
Material	Anodized Al	CuZn	CuZn	CuZn
Use	M12 Male Port	7/8" Female Port	7/8" Male Port	M23 Male Port
	BAM01LT	BAM012T	BAM012U	BAM012P



Internal Thread Adapters

Use With	Internal Male - Internal Female
Compatibility	BCC A3..., BCC A4..., BCC A5...
7/8"	BAM01LP
1"	BAM01LM
1 1/8"	BAM01LN



Block Labels

Size	17x9
Use With	M12 Plastic Hubs
Compatibility	BPI...M4...
	BAM01JU

Connectivity Solutions

Accessories

M23 assembly wrench and IP67 torque wrench

IP67 Torque Wrenches

By using a calibrated IP67 torque wrench on the hex nut with every cordset, you can ensure the IP67 rating at the sensor or at the MIB, which will protect your sensor signals even in the wettest environments.



In this scenario there is a connection between cordsets, with the final connection to a sensor. This scenario is characteristic of homerun cables, patch cables, and adapter cables. The connection between cordsets can sometimes lie in an unexpected, oily or wet environment at the bottom of a work cell. By using a combination of a new Balluff cordset with hexagonal coupling nut and a properly calibrated torque wrench, the sensor connection is IP67 guaranteed. By ratcheting when the connection is properly sealed, it does not allow over-torque, which can be just as bad as too little torque.



Possible wet/oily environment



Installation Wrench

M8, 0.4 Nm torque rating
 M12, 0.6 Nm torque rating
 7/8", 1.5 Nm torque rating

BAM00ZL
 BAM00ZM
 BAM00ZN

M23 Assembly wrench

M23 connectors are easy to assemble due to their size. After the components are assembled, the top and bottom section must be secured to one another to guarantee the high degree of protection.

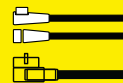


Assembly Wrench

For 12 and 19-pin M23 connectors

BAM01TY

Cables and Accessories



Connectivity Solutions

Control accessories for analog inputs

Balluff signal adapters are crucial for quick, versatile modifications, retrofits and enhancements of a sensor's functionality. Several available models provide quick change options that will convert PNP/NPN outputs, add delay timing and counting functions, or monitor frequency of machine speeds and motion. Applications with very high switching frequency can be slowed down using signal stretching devices or analog inputs can be converted to discrete setpoints without the use of a controller or logic. Sensor controller relay boxes are great for simple applications where a controller is overkill. All of these solutions are suitable as stand-alone solutions in areas lacking external controllers. They are also ideal for applications where a solution must be retrofit without changing the controller.



IP67 Inline - Analog Signal Discrete Setpoint Controller

Rated Operational Voltage	24 VDC	
Rated Operational Current	300mA	
Number of Discrete Outputs	3	
Number of Analog Outputs	1	
Hysteresis	500mV	
Remote Teach	Yes	
Input Type	Wiring	
0...10VDC	PNP, N/O	BAE0070
	NPN, N/O	BAE006Z



Analog Signal Digital Panel Display

Input Signal	0...10 VDC, 4...20 mA	
Supply Voltage	24 VDC	
Resolution	16-bit A/D	
Analog Output	16-bit, 100% adjustable	
Display	6-digit (5-digit analog out)	
Discrete Outputs	Scalable Analog Outputs	
---	---	BAE004R
4x PNP	---	BAE004T
2x PNP	2x	BAE004U
Clear IP65 NEMA 4X Cover		BAM0130

Connectivity Solutions

Control accessories for discrete inputs



IP67 Inline - Signal Conditioning

Rated Operational Voltage	10...30 VDC
Maximum Load Current	400 mA
Timer Maximum Delay	65.535 s
Counter Maximum Count	65535
Frequency Minimum Frequency	0.15 Hz
Frequency Maximum Frequency	1000 Hz
Remote Teach	Yes

Type	Wiring	
Timer	PNP	BAE002M
	NPN	BAE002N
Counter	PNP	BAE002E
Signal Inverter	PNP to NPN	BAE002H
	NPN to PNP	BAE002J
Frequency (under speed)	PNP	BAE002K
	NPN	BAE002L

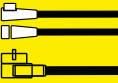


IP20 DIN-rail mount - Signal Stretching Device

Rated Operational Voltage	10...30 VDC
Rated Operational Current	130 mA
Pulse Length Adjustable	2ms...1s
Minimum Input Pulse	1.5ms

Wiring	
PNP/NPN, Complementary	BAE0073

Cables and Accessories



IP20 DIN-rail mount - Sensor Relay Controller

Supply Input Voltage	115 VAC, 60Hz
Sensor Output Voltage	24 VDC
Sensor Output Current Max	100mA DC
Number of Sensor Inputs & Relays	2
Relay Ratings	6A at 120 VAC or 24 VDC
Relay Life	100,000 Operations

Wiring	
PNP/NPN	BAE0023