

# Valve Connectors

## Contents

From sensors to cables, Balluff offers extensive, well engineered system technology that leaves nothing to be desired outside of the switching cabinet, including valve connectors. For maximum efficiency and cost savings.

Balluff valve connectors have an outstanding record in harsh industrial use and adverse conditions. They withstand large temperature differences as well as heavy contamination and their integrated protective circuit effectively prevents voltage peaks. In addition, the drag chain compatible PUR and PVC valve connectors are available only from Balluff.

Choose the EN 175301 compliant valve connectors for extra flexibility

- with or without protective circuit
- with 100% on-time at -25...+80 °C
- various styles in accordance with DIN and Industry standard
- drag chain compatible connections with PUR and PVC cable

|                         |         |          |     |
|-------------------------|---------|----------|-----|
| <b>Valve connectors</b> | Style A | DIN      | 262 |
|                         | Style B | DIN      | 264 |
|                         | Style B | Industry | 266 |
|                         | Style C | DIN      | 268 |
|                         | Style C | Industry | 269 |
|                         |         |          |     |



# Valve connectors

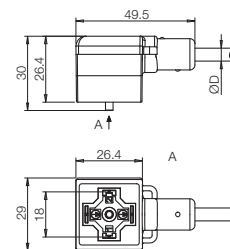
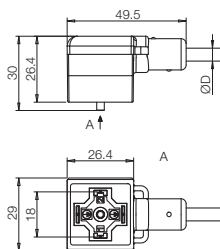
Style A, DIN, 18 mm, 4-pin



|                                       |   |                                   |
|---------------------------------------|---|-----------------------------------|
| Connector diagram and wiring          |   |                                   |
| Cable outlet                          | <b>0°/180°</b>                                  | <b>0°/180°</b>                    |
| Power supply, max. AC $U_B$           | 24 V AC   | 230 V AC                          |
| Power supply, max. DC $U_B$           | 24 V DC   | 230 V DC                          |
| Cable                                 | Molded  | Molded                            |
| Current rating                        | 4.0 A   | 4.0 A                             |
| Protective circuit                    | Suppressor diode                                | No                                |
| No. of wires × cross-section          | 3×0.5mm <sup>2</sup>                            | 3×0.5mm <sup>2</sup>              |
| Degree of protection as per IEC 60529 | IP 67   | IP 67                             |
| Ambient temperature $T_a$             | PUR<br>-25 °C...+80 °C<br>PVC<br>-5 °C...+80 °C | -25 °C...+80 °C<br>-5 °C...+80 °C |
| LED                                   | Yellow  | Without                           |

| Cable material | Color | Length | Ordering code                   |                                 |
|----------------|-------|--------|---------------------------------|---------------------------------|
|                |       |        | Part number                     |                                 |
| PUR            | Black | 2 m    | <b>BCC04W0</b>                  | <b>BCC04W6</b>                  |
|                |       |        | BCC VA04-0000-10-053-PX0350-020 | BCC VA04-0000-10-054-PX0350-020 |
| PUR            | Black | 5 m    | <b>BCC04W1</b>                  | <b>BCC04W7</b>                  |
|                |       |        | BCC VA04-0000-10-053-PX0350-050 | BCC VA04-0000-10-054-PX0350-050 |
| PUR            | Black | 10 m   | <b>BCC04W2</b>                  | <b>BCC04W8</b>                  |
|                |       |        | BCC VA04-0000-10-053-PX0350-100 | BCC VA04-0000-10-054-PX0350-100 |
| PVC            | Gray  | 2 m    | <b>BCC04W3</b>                  | <b>BCC04W9</b>                  |
|                |       |        | BCC VA04-0000-10-053-VX8350-020 | BCC VA04-0000-10-054-VX8350-020 |
| PVC            | Gray  | 5 m    | <b>BCC04W4</b>                  | <b>BCC04WA</b>                  |
|                |       |        | BCC VA04-0000-10-053-VX8350-050 | BCC VA04-0000-10-054-VX8350-050 |
| PVC            | Gray  | 10 m   | <b>BCC04W5</b>                  | <b>BCC04WC</b>                  |
|                |       |        | BCC VA04-0000-10-053-VX8350-100 | BCC VA04-0000-10-054-VX8350-100 |

Other cable materials, colors and lengths on request.



# M12

## Valve Connectors

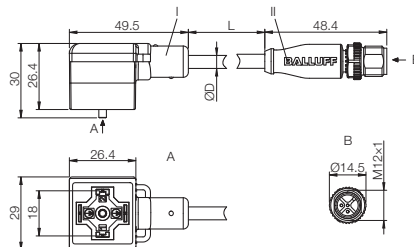
Style A, DIN, 18 mm, 3-pin  
M12 male, straight



|                                       |                      |  |
|---------------------------------------|----------------------|--|
| Connector diagram and wiring          |                      |  |
| Cable outlet                          | <b>0°/180°</b>       |  |
| Power supply, max. AC $U_B$           | 24 V AC              |  |
| Power supply, max. DC $U_B$           | 24 V DC              |  |
| Cable                                 | Molded/molded        |  |
| Current rating                        | 4.0 A                |  |
| Protective circuit                    | Suppressor diode     |  |
| No. of wires × cross-section          | 3×0.5mm <sup>2</sup> |  |
| Degree of protection as per IEC 60529 | IP 67/IP 68          |  |
| Ambient temperature range $T_a$       | -25 °C...+80 °C      |  |
| LED                                   | Yellow               |  |

| Cable material | Color | Length | Ordering code                   |  |
|----------------|-------|--------|---------------------------------|--|
|                |       |        | Part number                     |  |
| PUR            | Black | 0.3 m  | <b>BCC04WF</b>                  |  |
|                |       |        | BCC VA04-M413-3E-664-PX0350-003 |  |
| PUR            | Black | 0.6 m  | <b>BCC04WH</b>                  |  |
|                |       |        | BCC VA04-M413-3E-664-PX0350-006 |  |
| PUR            | Black | 1 m    | <b>BCC0502</b>                  |  |
|                |       |        | BCC VA04-M413-3E-664-PX0350-010 |  |
| PUR            | Black | 1.5 m  | <b>BCC04WJ</b>                  |  |
|                |       |        | BCC VA04-M413-3E-664-PX0350-015 |  |
| PUR            | Black | 2 m    | <b>BCC04WK</b>                  |  |
|                |       |        | BCC VA04-M413-3E-664-PX0350-020 |  |
| PUR            | Black | 3 m    | <b>BCC04WL</b>                  |  |
|                |       |        | BCC VA04-M413-3E-664-PX0350-030 |  |
| PUR            | Black | 5 m    | <b>BCC04WM</b>                  |  |
|                |       |        | BCC VA04-M413-3E-664-PX0350-050 |  |

Other cable materials, colors and lengths on request.



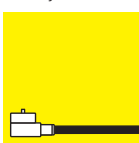
Style A  
DIN

Style B  
DIN

Style B  
Industry

Style C  
DIN

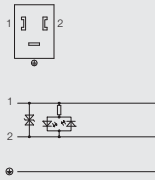
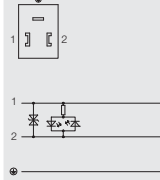
Style C  
Industry



# Valve Connectors

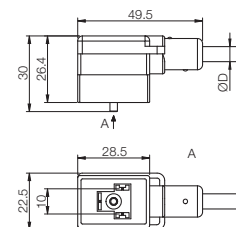
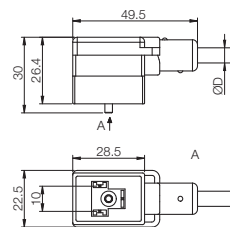
Style B, DIN, 10 mm, 3-pin



|                                       |   |   |
|---------------------------------------|---|---|
| Connector diagram and wiring          |  |  |
| Cable outlet                          | <b>0°</b>   | <b>180°</b>   |
| Power supply, max. AC $U_B$           | 24 V AC   | 24 V AC   |
| Power supply, max. DC $U_B$           | 24 V DC   | 24 V DC   |
| Cable                                 | Molded  | Molded  |
| Current rating                        | 4.0 A   | 4.0 A   |
| Protective circuit                    | Suppressor diode  | Suppressor diode  |
| No. of wires × cross-section          | 3×0.5mm <sup>2</sup>  | 3×0.5mm <sup>2</sup>  |
| Degree of protection as per IEC 60529 | IP 67   | IP 67   |
| Ambient temperature $T_a$             | PUR<br>-25 °C...+80 °C<br>PVC<br>-5 °C...+80 °C                                   | -25 °C...+80 °C<br>-5 °C...+80 °C   |
| LED                                   | Yellow  | Yellow  |

| Cable material | Color | Length | Ordering code                   |                                 |
|----------------|-------|--------|---------------------------------|---------------------------------|
|                |       |        | Part number                     |                                 |
| PUR            | Black | 2 m    | <b>BCC03YC</b>                  | <b>BCC03YH</b>                  |
|                |       |        | BCC VB03-0000-10-055-PX0350-020 | BCC VB23-0000-10-055-PX0350-020 |
| PUR            | Black | 5 m    | <b>BCC03YE</b>                  | <b>BCC03YJ</b>                  |
|                |       |        | BCC VB03-0000-10-055-PX0350-050 | BCC VB23-0000-10-055-PX0350-050 |
| PUR            | Black | 10 m   | <b>BCC03YF</b>                  | <b>BCC03YK</b>                  |
|                |       |        | BCC VB03-0000-10-055-PX0350-100 | BCC VB23-0000-10-055-PX0350-100 |
| PVC            | Gray  | 2 m    | <b>BCC03ZZ</b>                  | <b>BCC0402</b>                  |
|                |       |        | BCC VB03-0000-10-055-VX8350-020 | BCC VB23-0000-10-055-VX8350-020 |
| PVC            | Gray  | 5 m    | <b>BCC0400</b>                  | <b>BCC0403</b>                  |
|                |       |        | BCC VB03-0000-10-055-VX8350-050 | BCC VB23-0000-10-055-VX8350-050 |
| PVC            | Gray  | 10 m   | <b>BCC0401</b>                  | <b>BCC0404</b>                  |
|                |       |        | BCC VB03-0000-10-055-VX8350-100 | BCC VB23-0000-10-055-VX8350-100 |

Other cable materials, colors and lengths on request.



# M12

## Valve Connectors

Style B, DIN, 10 mm, 3-pin  
M12 male, straight



|                                       |                      |                      |
|---------------------------------------|----------------------|----------------------|
| Connector diagram and wiring          |                      |                      |
| Cable outlet                          | <b>0°</b>            | <b>180°</b>          |
| Power supply, max. AC $U_B$           | 24 V AC              | 24 V AC              |
| Power supply, max. DC $U_B$           | 24 V DC              | 24 V DC              |
| Cable                                 | Molded/molded        | Molded/molded        |
| Current rating                        | 4.0 A                | 4.0 A                |
| Protective circuit                    | Suppressor diode     | Suppressor diode     |
| No. of wires × cross-section          | 3×0.5mm <sup>2</sup> | 3×0.5mm <sup>2</sup> |
| Degree of protection as per IEC 60529 | IP 67/IP 68          | IP 67/IP 68          |
| Ambient temperature range $T_a$       | -25 °C...+80 °C      | -25 °C...+80 °C      |
| LED                                   | Yellow               | Yellow               |

| Cable material | Color | Length | Ordering code                   |                                 |
|----------------|-------|--------|---------------------------------|---------------------------------|
|                |       |        | Part number                     |                                 |
| PUR            | Black | 0.3 m  | <b>BCC064E</b>                  | <b>BCC064N</b>                  |
|                |       |        | BCC VB03-M413-3E-666-PX0350-003 | BCC VB23-M413-3E-666-PX0350-003 |
| PUR            | Black | 0.6 m  | <b>BCC064F</b>                  | <b>BCC064P</b>                  |
|                |       |        | BCC VB03-M413-3E-666-PX0350-006 | BCC VB23-M413-3E-666-PX0350-006 |
| PUR            | Black | 1 m    | <b>BCC064H</b>                  | <b>BCC064R</b>                  |
|                |       |        | BCC VB03-M413-3E-666-PX0350-010 | BCC VB23-M413-3E-666-PX0350-010 |
| PUR            | Black | 1.5 m  | <b>BCC064J</b>                  | <b>BCC064T</b>                  |
|                |       |        | BCC VB03-M413-3E-666-PX0350-015 | BCC VB23-M413-3E-666-PX0350-015 |
| PUR            | Black | 2 m    | <b>BCC064K</b>                  | <b>BCC064U</b>                  |
|                |       |        | BCC VB03-M413-3E-666-PX0350-020 | BCC VB23-M413-3E-666-PX0350-020 |
| PUR            | Black | 3 m    | <b>BCC064L</b>                  | <b>BCC064W</b>                  |
|                |       |        | BCC VB03-M413-3E-666-PX0350-030 | BCC VB23-M413-3E-666-PX0350-030 |
| PUR            | Black | 5 m    | <b>BCC064M</b>                  | <b>BCC064Y</b>                  |
|                |       |        | BCC VB03-M413-3E-666-PX0350-050 | BCC VB23-M413-3E-666-PX0350-050 |

Style A  
DIN

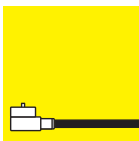
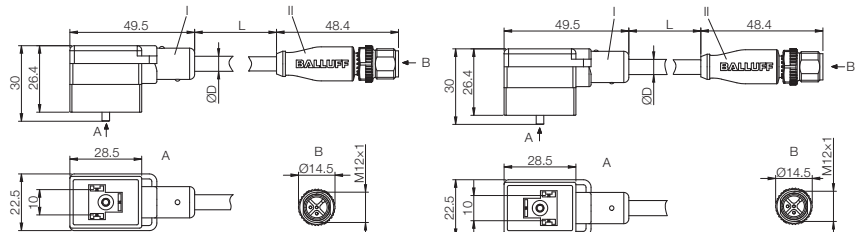
Style B  
DIN

Style B  
Industry

Style C  
DIN

Style C  
Industry

Other cable materials, colors and lengths on request.



# Valve Connectors

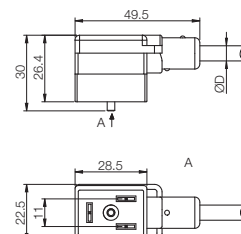
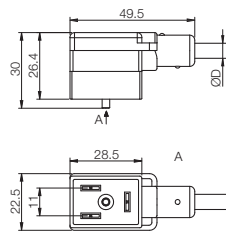
Style B, Industry, 11 mm, 3-pin



|                                       |                      |                      |
|---------------------------------------|----------------------|----------------------|
| Connector diagram and wiring          |                      |                      |
| Cable outlet                          | <b>0°</b>            | <b>180°</b>          |
| Power supply, max. AC $U_B$           | 24 V AC              | 24 V AC              |
| Power supply, max. DC $U_B$           | 24 V DC              | 24 V DC              |
| Cable                                 | Molded               | Molded               |
| Current rating                        | 4.0 A                | 4.0 A                |
| Protective circuit                    | Suppressor diode     | Suppressor diode     |
| No. of wires × cross-section          | 3×0.5mm <sup>2</sup> | 3×0.5mm <sup>2</sup> |
| Degree of protection as per IEC 60529 | IP 67                | IP 67                |
| Ambient temperature $T_a$             | -25 °C...+80 °C      | -25 °C...+80 °C      |
| LED                                   | Yellow               | Yellow               |

| Cable material | Color | Length | Ordering code                                     |
|----------------|-------|--------|---|
| Part number    |       |        |   |
| PUR            | Black | 2 m    | <b>BCC03YL</b><br>BCC VB43-0000-10-055-PX0350-020 |
| PUR            | Black | 5 m    | <b>BCC03YM</b><br>BCC VB43-0000-10-055-PX0350-050 |
| PUR            | Black | 10 m   | <b>BCC03YN</b><br>BCC VB43-0000-10-055-PX0350-100 |
| PVC            | Gray  | 2 m    | <b>BCC0405</b><br>BCC VB43-0000-10-055-VX8350-020 |
| PVC            | Gray  | 5 m    | <b>BCC0406</b><br>BCC VB43-0000-10-055-VX8350-050 |
| PVC            | Gray  | 10 m   | <b>BCC0407</b><br>BCC VB43-0000-10-055-VX8350-100 |
|                |       |        | <b>BCC03YP</b><br>BCC VB63-0000-10-055-PX0350-020 |
|                |       |        | <b>BCC03YR</b><br>BCC VB63-0000-10-055-PX0350-050 |
|                |       |        | <b>BCC03YT</b><br>BCC VB63-0000-10-055-PX0350-100 |
|                |       |        | <b>BCC0408</b><br>BCC VB63-0000-10-055-VX8350-020 |
|                |       |        | <b>BCC0409</b><br>BCC VB63-0000-10-055-VX8350-050 |
|                |       |        | <b>BCC040A</b><br>BCC VB63-0000-10-055-VX8350-100 |

Other cable materials, colors and lengths on request.



# M12

## Valve Connectors

Style B, Industry, 11 mm, 3-pin  
M12 male, straight



| Connector diagram and wiring          |                      |                      |
|---------------------------------------|----------------------|----------------------|
| Cable outlet                          | <b>0°</b>            | <b>180°</b>          |
| Power supply, max. AC $U_B$           | 24 V AC              | 24 V AC              |
| Power supply, max. DC $U_B$           | 24 V DC              | 24 V DC              |
| Cable                                 | Molded/molded        | Molded/molded        |
| Current rating                        | 4.0 A                | 4.0 A                |
| Protective circuit                    | Suppressor diode     | Suppressor diode     |
| No. of wires × cross-section          | 3×0.5mm <sup>2</sup> | 3×0.5mm <sup>2</sup> |
| Degree of protection as per IEC 60529 | IP 67/IP 68          | IP 67/IP 68          |
| Ambient temperature range $T_a$       | -25 °C...+80 °C      | -25 °C...+80 °C      |
| LED                                   | Yellow               | Yellow               |

| Cable material | Color | Length | Ordering code                   |                                 |
|----------------|-------|--------|---------------------------------|---------------------------------|
|                |       |        | Part number                     |                                 |
| PUR            | Black | 0.3 m  | <b>BCC064Z</b>                  | <b>BCC0656</b>                  |
|                |       |        | BCC VB43-M413-3E-666-PX0350-003 | BCC VB63-M413-3E-666-PX0350-003 |
| PUR            | Black | 0.6 m  | <b>BCC0650</b>                  | <b>BCC0657</b>                  |
|                |       |        | BCC VB43-M413-3E-666-PX0350-006 | BCC VB63-M413-3E-666-PX0350-006 |
| PUR            | Black | 1 m    | <b>BCC0651</b>                  | <b>BCC0658</b>                  |
|                |       |        | BCC VB43-M413-3E-666-PX0350-010 | BCC VB63-M413-3E-666-PX0350-010 |
| PUR            | Black | 1.5 m  | <b>BCC0652</b>                  | <b>BCC0659</b>                  |
|                |       |        | BCC VB43-M413-3E-666-PX0350-015 | BCC VB63-M413-3E-666-PX0350-015 |
| PUR            | Black | 2 m    | <b>BCC0653</b>                  | <b>BCC065A</b>                  |
|                |       |        | BCC VB43-M413-3E-666-PX0350-020 | BCC VB63-M413-3E-666-PX0350-020 |
| PUR            | Black | 3 m    | <b>BCC0654</b>                  | <b>BCC065C</b>                  |
|                |       |        | BCC VB43-M413-3E-666-PX0350-030 | BCC VB63-M413-3E-666-PX0350-030 |
| PUR            | Black | 5 m    | <b>BCC0655</b>                  | <b>BCC065E</b>                  |
|                |       |        | BCC VB43-M413-3E-666-PX0350-050 | BCC VB63-M413-3E-666-PX0350-050 |

Style A  
DIN

Style B  
DIN

**Style B**  
Industry

Style C  
DIN

Style C  
Industry

Style C  
Industry

Style C  
Industry

Style C  
Industry

Style C  
Industry

Style C  
Industry

Style C  
Industry

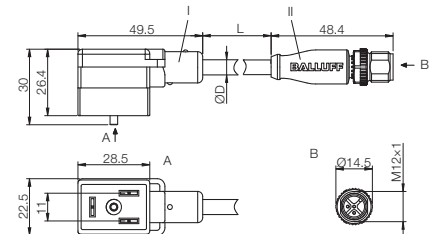
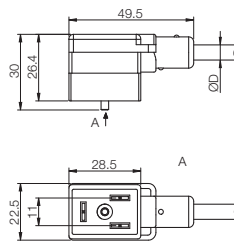
Style C  
Industry

Style C  
Industry

Style C  
Industry

Style C  
Industry

Other cable materials, colors and lengths on request.



# Valve Connectors

Style C, DIN, 8 mm, 3-pin

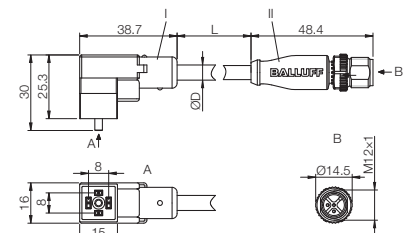
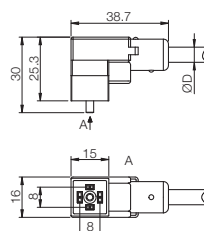
Style C, DIN, 8 mm, 3-pin, male M12, straight



| Connector diagram and wiring          |   |                      |
|---------------------------------------|---|----------------------|
| Cable outlet                          | 0°/180°   | 0°/180°              |
| Power supply, max. AC U <sub>B</sub>  | 24 V AC   | 24 V AC              |
| Power supply, max. DC U <sub>B</sub>  | 24 V DC   | 24 V DC              |
| Cable                                 | Molded  | Molded/molded        |
| Current rating                        | 4.0 A   | 4.0 A                |
| Protective circuit                    | Suppressor diode                                | Suppressor diode     |
| No. of wires × cross-section          | 3×0.5mm <sup>2</sup>                            | 3×0.5mm <sup>2</sup> |
| Degree of protection as per IEC 60529 | IP 67   | IP 67/IP 68          |
| Ambient temperature T <sub>a</sub>    | PUR<br>-25 °C...+80 °C<br>PVC<br>-5 °C...+80 °C | -25 °C...+80 °C      |
| LED                                   | Yellow  | Yellow               |

| Cable material | Color | Length | Ordering code                                     |   |
|----------------|-------|--------|---|---|
|                |       |        | Part number                                       |   |
| PUR            | Black | 0.3 m  |   | <b>BCC04NC</b><br>BCC VC04-M413-3E-664-PX0350-003 |
| PUR            | Black | 0.6 m  |   | <b>BCC04NE</b><br>BCC VC04-M413-3E-664-PX0350-006 |
| PUR            | Black | 1 m    |   | <b>BCC04NF</b><br>BCC VC04-M413-3E-664-PX0350-010 |
| PUR            | Black | 1.5 m  |   | <b>BCC04NH</b><br>BCC VC04-M413-3E-664-PX0350-015 |
| PUR            | Black | 2 m    | <b>BCC04MZ</b><br>BCC VC04-0000-10-053-PX0350-020 | <b>BCC04NJ</b><br>BCC VC04-M413-3E-664-PX0350-020 |
| PUR            | Black | 3 m    |   | <b>BCC04NK</b><br>BCC VC04-M413-3E-664-PX0350-030 |
| PUR            | Black | 5 m    | <b>BCC04N0</b><br>BCC VC04-0000-10-053-PX0350-050 | <b>BCC04NL</b><br>BCC VC04-M413-3E-664-PX0350-050 |
| PUR            | Black | 10 m   | <b>BCC04N1</b><br>BCC VC04-0000-10-053-PX0350-100 |   |
| PVC            | Gray  | 2 m    | <b>BCC04N2</b><br>BCC VC04-0000-10-053-VX8350-020 |   |
| PVC            | Gray  | 5 m    | <b>BCC04N3</b><br>BCC VC04-0000-10-053-VX8350-050 |   |
| PVC            | Gray  | 10 m   | <b>BCC04N4</b><br>BCC VC04-0000-10-053-VX8350-100 |   |

Other cable materials, colors and lengths on request.



# Valve Connectors

Style C, Industry, 9.4 mm, 3-pin

Style C, Industry, 9.4 mm, 3-pin, male M12, straight



|                                       |   |                      |
|---------------------------------------|---|----------------------|
| Connector diagram and wiring          |   |                      |
| Cable outlet                          | <b>0°/180°</b>                                  | <b>0°/180°</b>       |
| Power supply, max. AC $U_B$           | 24 V AC   | 24 V AC              |
| Power supply, max. DC $U_B$           | 24 V DC   | 24 V DC              |
| Cable                                 | Molded  | Molded/molded        |
| Current rating                        | 4.0 A   | 4.0 A                |
| Protective circuit                    | Suppressor diode                                | Suppressor diode     |
| No. of wires × cross-section          | 3×0.5mm <sup>2</sup>                            | 3×0.5mm <sup>2</sup> |
| Degree of protection as per IEC 60529 | IP 67   | IP 67/IP 68          |
| Ambient temperature $T_a$             | PUR<br>-25 °C...+80 °C<br>PVC<br>-5 °C...+80 °C | -25 °C...+80 °C      |
| LED                                   | Yellow  | Yellow               |

| Cable material | Color | Length | Ordering code                                     |   |
|----------------|-------|--------|---|---|
|                |       |        | Part number                                       |   |
| PUR            | Black | 0.3 m  |   | <b>BCC04RY</b><br>BCC VC44-M413-3E-664-PX0350-003 |
| PUR            | Black | 0.6 m  |   | <b>BCC04RZ</b><br>BCC VC44-M413-3E-664-PX0350-006 |
| PUR            | Black | 1 m    |   | <b>BCC04T0</b><br>BCC VC44-M413-3E-664-PX0350-010 |
| PUR            | Black | 1.5 m  |   | <b>BCC04T1</b><br>BCC VC44-M413-3E-664-PX0350-015 |
| PUR            | Black | 2 m    | <b>BCC04RF</b><br>BCC VC44-0000-10-053-PX0350-020 | <b>BCC04T2</b><br>BCC VC44-M413-3E-664-PX0350-020 |
| PUR            | Black | 3 m    |   | <b>BCC04T3</b><br>BCC VC44-M413-3E-664-PX0350-030 |
| PUR            | Black | 5 m    | <b>BCC04RH</b><br>BCC VC44-0000-10-053-PX0350-050 | <b>BCC04T4</b><br>BCC VC44-M413-3E-664-PX0350-050 |
| PUR            | Black | 10 m   | <b>BCC04RJ</b><br>BCC VC44-0000-10-053-PX0350-100 |   |
| PVC            | Gray  | 2 m    | <b>BCC04RK</b><br>BCC VC44-0000-10-053-VX8350-020 |   |
| PVC            | Gray  | 5 m    | <b>BCC04RL</b><br>BCC VC44-0000-10-053-VX8350-050 |   |
| PVC            | Gray  | 10 m   | <b>BCC04RM</b><br>BCC VC44-0000-10-053-VX8350-100 |   |

Style A  
DIN  
Style B  
DIN  
Style B  
Industry  
**Style C  
DIN**  
**Style C  
Industry**

Other cable materials, colors and lengths on request.

