



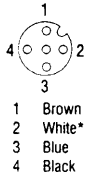
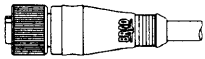
Female Connector

Cable Length (m)

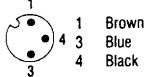
M12 Single I/O Multi-Port

M12 Twin I/O Multi-Port

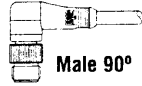
Micro-Change® (M12) Straight



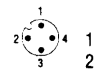
Male Straight



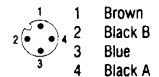
Male 90°



Male Straight

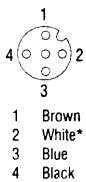
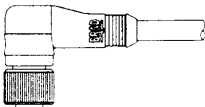


Male 90°



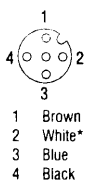
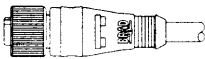
| PVC | 0.6 | 883030E03M006 | 883032E03M006 | 884030E03M006 | 884032E03M006 | 884A30E03M006 | |
|-----|-----|---------------|---------------|---------------|---------------|---------------|--|
| | 1.0 | 883030E03M010 | 883032E03M010 | 884030E03M010 | 884032E03M010 | 884A30E03M010 | |
| | 2.0 | 883030E03M020 | 883032E03M020 | 884030E03M020 | 884032E03M020 | 884A30E03M020 | |
| | 3.0 | 883030E03M030 | 883032E03M030 | 884030E03M030 | 884032E03M030 | 884A30E03M030 | |
| PUR | 0.6 | 883030P03M006 | 883032P03M006 | 884030P03M006 | 884032P03M006 | 884A30P03M006 | |
| | 1.0 | 883030P03M010 | 883032P03M010 | 884030P03M010 | 884032P03M010 | 884A30P03M010 | |
| | 2.0 | 883030P03M020 | 883032P03M020 | 884030P03M020 | 884032P03M020 | 884A30P03M020 | |
| | 3.0 | 883030P03M030 | 883032P03M030 | 884030P03M030 | 884032P03M030 | 884A30P03M030 | |

Micro-Change® (M12) 90°



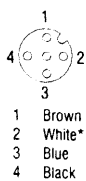
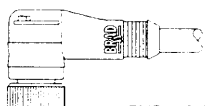
| PVC | 0.6 | 883031E03M006 | 883033E03M006 | 884031E03M006 | 884033E03M006 | 884A31E03M006 | |
|-----|-----|---------------|---------------|---------------|---------------|---------------|--|
| | 1.0 | 883031E03M010 | 883033E03M010 | 884031E03M010 | 884033E03M010 | 884A31E03M010 | |
| | 2.0 | 883031E03M020 | 883033E03M020 | 884031E03M020 | 884033E03M020 | 884A31E03M020 | |
| | 3.0 | 883031E03M030 | 883033E03M030 | 884031E03M030 | 884033E03M030 | 884A31E03M030 | |
| PUR | 0.6 | 883031P03M006 | 883033P03M006 | 884031P03M006 | 884033P03M006 | 884A31P03M006 | |
| | 1.0 | 883031P03M010 | 883033P03M010 | 884031P03M010 | 884033P03M010 | 884A31P03M010 | |
| | 2.0 | 883031P03M020 | 883033P03M020 | 884031P03M020 | 884033P03M020 | 884A31P03M020 | |
| | 3.0 | 883031P03M030 | 883033P03M030 | 884031P03M030 | 884033P03M030 | 884A31P03M030 | |

Micro-Change® (M12) PNP LED



| PVC | 0.6 | 8830P6E03M006 | 8830P8E03M006 | 8840P6E03M006 | 8840P8E03M006 | 884AP6E03M006 | |
|-----|-----|---------------|---------------|---------------|---------------|---------------|--|
| | 1.0 | 8830P6E03M010 | 8830P8E03M010 | 8840P6E03M010 | 8840P8E03M010 | 884AP6E03M010 | |
| | 2.0 | 8830P6E03M020 | 8830P8E03M020 | 8840P6E03M020 | 8840P8E03M020 | 884AP6E03M020 | |
| | 3.0 | 8830P6E03M030 | 8830P8E03M030 | 8840P6E03M030 | 8840P8E03M030 | 884AP6E03M030 | |
| PUR | 0.6 | 8830P6P03M006 | 8830P8P03M006 | 8840P6P03M006 | 8840P8P03M006 | 884AP6P03M006 | |
| | 1.0 | 8830P6P03M010 | 8830P8P03M010 | 8840P6P03M010 | 8840P8P03M010 | 884AP6P03M010 | |
| | 2.0 | 8830P6P03M020 | 8830P8P03M020 | 8840P6P03M020 | 8840P8P03M020 | 884AP6P03M020 | |
| | 3.0 | 8830P6P03M030 | 8830P8P03M030 | 8840P6P03M030 | 8840P8P03M030 | 884AP6P03M030 | |

Micro-Change® (M12) 90° PNP LED



| PVC | 0.6 | 8830P7E03M006 | 8830P9E03M006 | 8840P7E03M006 | 8840P9E03M006 | 884AP7E03M006 | |
|-----|-----|---------------|---------------|---------------|---------------|---------------|--|
| | 1.0 | 8830P7E03M010 | 8830P9E03M010 | 8840P7E03M010 | 8840P9E03M010 | 884AP7E03M010 | |
| | 2.0 | 8830P7E03M020 | 8830P9E03M020 | 8840P7E03M020 | 8840P9E03M020 | 884AP7E03M020 | |
| | 3.0 | 8830P7E03M030 | 8830P9E03M030 | 8840P7E03M030 | 8840P9E03M030 | 884AP7E03M030 | |
| PUR | 0.6 | 8830P7P03M006 | 8830P9P03M006 | 8840P7P03M006 | 8840P9P03M006 | 884AP7P03M006 | |
| | 1.0 | 8830P7P03M010 | 8830P9P03M010 | 8840P7P03M010 | 8840P9P03M010 | 884AP7P03M010 | |
| | 2.0 | 8830P7P03M020 | 8830P9P03M020 | 8840P7P03M020 | 8840P9P03M020 | 884AP7P03M020 | |
| | 3.0 | 8830P7P03M030 | 8830P9P03M030 | 8840P7P03M030 | 8840P9P03M030 | 884AP7P03M030 | |

* White not used on Single I/O and in-line splitter connectors

Multi-Port Splitter Box Matrix

B T Y 8 0 0 P - F B P - 0 5

Nano-Change® Multi-Ports
 BEY - End Cable Entry
 BNY - Top Cable Entry & Connector
Micro-Change® Multi-Ports
 BTY - Top Mount
 BSY - Side Mount

Length
 05 - 5 metres
 10 - 10 metres
 20 - 20 metres

*Balluff/
 Multiswitch
 Prefix all part numbers in this section with BK -.

Number of Ports
 4 - 4 Ports 8 - 8 Ports
 6 - 6 Ports A - 10 Ports

Wiring Configuration
 00/01 - 5 Pole/4 Wire - Single I/O per port
 03/05 - 5 Pole/5 Wire - Twin I/O per port
 04 - 4 Pole/3 Wire - Single I/O per port - no earth

LED Configuration
 P - PNP Format N - NPN Format** 0 - No LEDs**

Termination Options

Pre-wired versions*
 E - PVC Cable
 P - PUR Cable

Connectorised versions
 B - Mini-Change® Connector
 C - M16 or M23 Connector

Receptacle Material
 FB - Standard
 FX - Plastic**
 FS - Stainless Steel**

Connector Matrix

8 0 3 0 0 0 E 0 3 M 0 2 0

Options:

Not all are available on standard delivery terms, please consult our sales office before ordering

* Refer to cable specification and use code indicated in matrix above

**NPN or no LED indication, select from above part number matrixes, minimum order quantity 25 pieces for Connectors and 5 pieces for Multi-Ports

**Coupling materials and connector colour minimum quantities apply to all orders

**Choice of suppression and LED colour for mPm® product, please request separate catalogue

Connector Type

Nano-Change® M8 Snap
 50 - Moulded Connector
 55 - Nano Jumper
 58 - Nano to Micro Jumper

Nano-Change® M8 Coupler
 40 - Moulded Connector
 44 - Nano Jumper
 48 - Nano to Micro Jumper

Micro-Change® M12 Coupler
 80 - Moulded Connector
 88 - Micro Jumper
 84 - Micro to Nano Jumper

mPm® DIN 43650 Jumpers
 D4 - Form B (10mm) to Nano
 E4 - Form A (18mm) to Nano
 F4 - Form B (11mm) to Nano
 G4 - Form C (9.4mm) to Nano
 H4 - Form C (8.0mm) to Nano
 D8 - Form B (10mm) to Micro
 E8 - Form A (18mm) to Micro
 F8 - Form B (11mm) to Micro
 G8 - Form C (9.8mm) to Micro
 H8 - Form C (8.0mm) to Micro

Cable ID No.*

E03 - Yellow PVC 0.34mm²
 P03 - Black PUR 0.34mm²
 S20 - Yellow SJTO type 0.34mm²

Cable Length

M010 - 1.0 metres
 M020 - 2.0 metres
 M030 - 3.0 metres

Coupling Materials**

1 - Stainless Steel

5 - Plastic

Connector Colour**

A - Grey Head Moulding

G - Black Head Moulding

Head Configuration

Moulded Connectors

000 - Female Straight
 001 - Female 90°
 0N0 - Female Straight NPN LED**
 0N1 - Female 90° NPN LED**
 0P0 - Female Straight PNP LED
 0P1 - Female 90° PNP LED
 006 - Male Straight
 007 - Male 90°

Jumpers - Basic Brad® Only

030 - Female Straight to Male Straight
 031 - Female 90° to Male Straight
 032 - Female Straight to Male 90°
 033 - Female 90° to Male 90°
 0P6 - Female Straight PNP LED to Male Straight
 0P7 - Female 90° PNP LED to Male Straight
 0P8 - Female Straight PNP LED to Male 90°
 0P9 - Female 90° PNP LED to Male 90°

Number of Poles

3 - 3 Pole
 4 - 4 Pole

5 - 5 Pole
 8 - 8 Pole

Connector Specification

| Series | 40, 4R, 44, 50, 5R, 55 | N03, N04 | 80, 8R, 88 | 8A | 30 | | LO | K0 |
|------------------------|---------------------------|---------------------|---------------------------------|--------------------------|---------------------------------------|--|-------------------|---------------------------------------|
| Product | Nano-Change® | Nano-Change® | Micro-Change® | Micro-Change® | Mini-Change® | mPm® DIN 43650 | M16 Connector | M23 Connector |
| Connector Type | Moulded & Receptacles | Attachables | Moulded & Receptacles | Attachables | Moulded | Moulded & Attachable | Moulded | Moulded |
| Connector Size | M8 Coupler & Snap | M8 Coupler | M12 Coupler | M12 Coupler | 1 1/8" UNF Coupler | Form A, B & C | M16 Coupler | M23 Coupler |
| Number of Poles | 3 to 5 | 3 & 4 | 3, 4, 5 & 8 | 4 & 5 | 12 & 19 | 2 + earth | 14 | 12 & 19 |
| Contact Material | Female: Gold plated Brass | Gold plated Brass | Gold Plated Brass | Silver plated Brass | Gold plated Brass | Silver plated Brass | Gold plated Brass | Gold plated Brass |
| | Male: Gold plated Brass | Gold plated Brass | Gold plated Brass | Silver plated Brass | Gold plated Brass | n/a | n/a | Gold plated Brass |
| Insert Material | PUR | PA | PA | PA | PVC | PA (+G) | PP0 | PUR |
| O-ring Material | Viton | Viton | Viton | Viton | n/a | Profilled NBR | EPDM - Rubber | NBR |
| Body Material | PVC | PA | PVC | PA | PVC | PP | PUR | PUR |
| Coupling Material | Nickel plated Brass | Nickel plated Brass | Epoxy Coated Zinc | Nickel plated Brass | Epoxy Coated Zinc | n/a | Aluminium | Nickel plated Brass |
| Voltage Rating | Standard: 60 Vac/75 Vdc | 60 Vac/75 Vdc | 3, 4 & 5 pole - 250 Vac/300 Vdc | 4 pole - 250 Vac/300 Vdc | 600 Vac/dc | 250 Vac/dc | 150 Vac/dc | 63 Vac/dc |
| | | | 8 pole - 30 Vac/36 Vdc | 5 pole - 30 Vac/36 Vdc | | | | |
| | With LED: 10 to 30 Vdc | n/a | 10 to 30 Vdc | n/a | n/a | 24 Vac/dc | n/a | n/a |
| Contact Current Rating | 4 Amps | 4 Amps | 4 Amps | 4 Amps | Ø 1.0mm - 4 Amps Ø 2.0mm - 13 Amps | Form A & B - 18 Amps Form C - 10 Amps | 3 Amps | Ø 1.0mm - 6 Amps Ø 1.5mm - 12 Amps |
| Protection Class | IP67 | IP67 | IP68 | IP68 | IP68 | IP65 | IP67 | IP67 |

Environmental Rating - IP68. Is defined as immersion in water at a pressure of 100 pounds per square inch for a duration of one hour, and wash down at a pressure of 1000 pounds per square inch. When used with a mating pair of Brad Harrison® connectors.