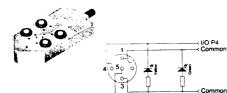




- Frees up skilled workforce for more demanding tasks, whilst reducing the risk of wiring errors and increasing factory throughput
- Quick disconnect solution enables installation or maintenance by semiskilled operators, especially when unscheduled down time occurs through device or cable failure.
- Twin I/O versions increases the density of control devices per unit with LED indication of power and signals for fast fault finding
- Unique choice of either top or side mounted I/O connections for compact or low profile installations, all provided in a robust design sealed waterproof up to IP68

<sup>\*</sup>Balluff/Multiswitch Prefix all part numbers in this section with BK -.



## 5 pole 4 Wire - Single I/O Top-Mount Multi-Splitter Boes

Function	Cable Colour	M23 Connector Pin No	Mini-Change Pin No	Function	Cable M23 ConnectorMini-Change		
					Colour	Pin No	Pin No
+V	Brown	11	10	Earth	Green/Yellow	12	9
0V	Blue	9 & 10	11				
Port 1 P4	White	1	1	Port 5 P4	Pink	5	5
Port 2 P4	Green	2	2	Port 6 P4	Red	6	6
Port 3 P4	Yellow	3	3	Port 7 P4	Black	7	7
Port 4 P4	Grey	4	4	Port 8 P4	Violet	8	8

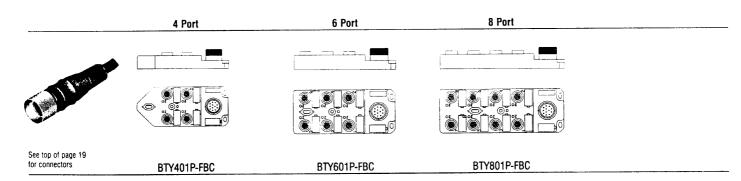
Length (m)

Cable

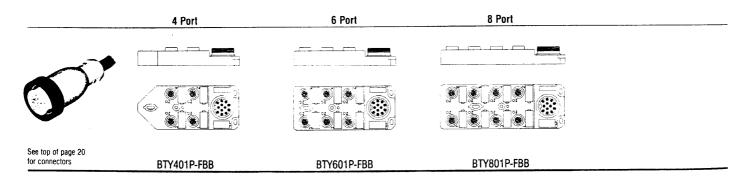
#### **Integral Cable Entry**

		4 Port	6 Port	8 Port	t		
PVC	5.0 10.0 20.0	BTY400P-FBE-05 BTY400P-FBE-10 BTY400P-FBE-20	BTY600P-FBE-05 BTY600P-FBE-10 BTY600P-FBE-20	BTY800P-FBE-05 BTY800P-FBE-10 BTY800P-FBE-20			
PUR	5.0 10.0 20.0	BTY400P-FBP-05 BTY400P-FBP-10 BTY400P-FBP-20	BTY600P-FBP-05 BTY600P-FBP-10 BTY600P-FBP-20	BTY800P-FBP-05 BTY800P-FBP-10 BTY800P-FBP-20			

Integral M23 12 Pole Home Run Connector



### Integral Mini-Change® 12 Pole Home Run Connector



Standard: Power and single status LED per port, identification labels, two sealing caps Options: NPN format LED indication, choice of cable see page 40 for more information

# **Multi-Port Splitter Box Matrix**

\*Balluff/

Multiswitch

numbers in

this section

with BK -.

Prefix all part

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

Nano-Change® Multi-Ports BEY - End Cable Entry

BNY - Top Cable Entry & Connector

Micro-Change® Multi-Ports

BTY - Top Mount BSY - Side Mount

Number of Ports

4 - 4 Ports 6 - 6 Ports 8 - 8 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\*\*

8 0 0 - No LEDs\*\*

3

0 0 0 Length

05 - 5 metres 10 - 10 metres

20 - 20 metres

**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\*

M

FS - Stainless Steel\*\*

### Connector **Matrix**

Not all are available on

standard delivery terms, please consult our sales office before ordering

\* Refer to cable

\*\*NPN or no LED

indication, select from above part number

quantity 25 pieces for

\*\*Coupling materials

and connector colour

minimum quantities

apply to all orders

and LED colour for

request separate

catalogue

for Multi-Ports

matrixes minimum order

Connectors and 5 pieces

\*\*Choice of suppression

mPm® product, please

specification and use

code indicated in matrix

Options:

above

#### **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 0.34mm<sup>2</sup> P03 - Black PUR 0.34mm<sup>2</sup>

S20 - Yellow SJTO type 0.34mm<sup>2</sup>

E 0

3

#### Cable Length

M010 - 1.0 metres M020 - 2.0 metres

0 2 0

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\*\*

ON1 - 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
Ī	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	Profiled 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	Form A & B - 18 Amps	3 Amps	Ø 1.0mm - 6 Amps
						Ø 2.0mm - 13 Amps	Form C - 10 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