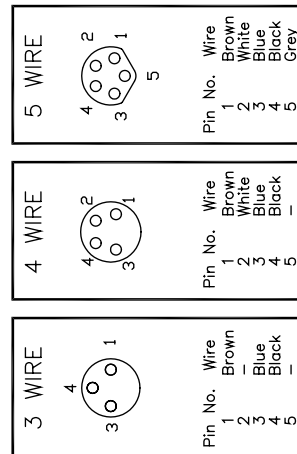
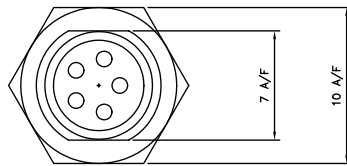
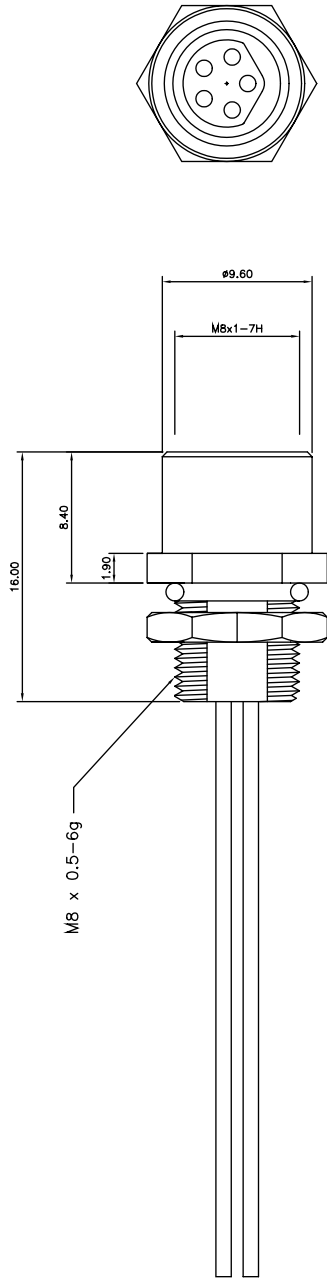


Revision	CN Number	Date	By	App'd

Revision	CN Number	Date	By	App'd

Revision	CN Number	Date	By	App'd
A	First Issue	03.05.98	NW	AB

NANO-CHANGE '4R' SERIES FEMALE RECEPTACLE

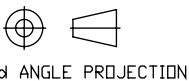


PART No MATRIX

4	R	X	F	3	0	X	X	X	X	X	X	3	
4=Nano Change	R=Receptacle	X=3 Core	F=Female Receptacle	3=30 Centimetres	0=150 Centimetres	X=See table of cable types	X=30 Centimetres	X=150 Centimetres	X=30 Centimetres	X=150 Centimetres	X=30 Centimetres	X=150 Centimetres	3=SHELL MATERIAL 3=Brass; Nickel Plated

Modifications must be carried out using CAD System

A4



FOR EXPLANATION OF DIMENSIONS, TOLERANCES NOTES etc. SEE BS308

**W Woodhead Connectivity Ltd**  
FACTORY 9 RASSAU IND. EST. EBBW VALE GWENT NP23 5SD

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DRAWN	JW	REV.
DATE	03.05.98	A

# MULTI-PORT SPECIFICATION

Series	BEY & BNY	BEY & BNY	BTY	BTY	BSY
Product	Nano-Change - Single I/O	Nano-Change - Twin I/O	Micro-Change Top Mount Single I/O	Micro-Change Top Mount Twin I/O	Micro-Change Side Mount Single I/O
I/O Connectors	M8 Coupler	M8 Coupler	M12 Coupler	M12 Coupler	M12 Coupler
Number of I/O	4, 6, 8 & 10	8, 12, 16 & 20	4, 6 & 8	8, 12 & 16	4, 6 & 8
Contact Material	Gold plated Brass	Gold plated Brass	Gold plated Brass	Gold plated Brass	Gold plated Brass
Insert Material	PUR	PUR	PBT	PBT	PA
O-ring Material	Viton	Viton	Viton	Viton	Viton
Body Material	PBT	PBT	PBT	PBT	PA
Coupling Material	Nickel plated Brass	Nickel plated Brass	Nickel plated Brass	Nickel plated Brass	Epoxy coated Zinc
Voltage Rating with LED	10 to 30 Vdc	10 to 30 Vdc	10 to 30 Vdc	10 to 30 Vdc	10 to 30 Vdc
Current Rating Per I/O	2 Amps	1 Amps	2 Amps	2 Amps	2 Amps
Total Unit - Cable Version	6 Amps	6 Amps	12 Amps	12 Amps	12 Amps
Total Unit - Connector Version	6 Amps	3 Amps	12 Amps	12 Amps	12 Amps
Protection Class	Cable - IP68 M16 Connector - IP67	Cable - IP68 M16 Connector - IP67	Cable - IP68 M23 Connector - IP67 Mini-Change - IP68	Cable - IP68 M23 Connector - IP67 Mini-Change - IP68 Attachable - IP67	Cable - IP68 Mini-Change - IP68

## CABLE SPECIFICATION

ID No	No of Cores	Jacket Colour	Cross Section	Stranding Group	Screen	Nominal Diameter	Nano-Change	Micro-Change	Mini-Change	M23 Connctr.	M16 Connctr.	mPm DIN 43650	Nano Multi Ports	Micro Multi Ports	
<b>PVC - General Purpose - Conveyors, Food Processing, etc - 300 V, -5°C to +70°C, PVC Outer Jacket over PVC Insulation</b>															
E02	3 & 4	Yellow	0.25mm <sup>2</sup>	B	None	4.5mm	✓	✓							
E03	3 & 4	Yellow	0.34mm <sup>2</sup>	C	None	5.0mm	✓	✓							
	5					5.5mm	✓	✓							
E12	3	Black	0.50mm <sup>2</sup>	E	None	5.5mm	✓	✓				✓			
E18	3 & 4	Yellow	0.20mm <sup>2</sup>	C	80% Braid	5.0mm	✓	✓							
E51	4	Grey	0.25mm <sup>2</sup>	B	None	4.5mm	✓	✓							
E52	3 & 4	Grey	0.34mm <sup>2</sup>	C	None	5.0mm	✓	✓							
	5					5.5mm	✓	✓							
<b>PVC for Multi-Ports - General Purpose - Conveyors, Food Processing, etc - 300 V, -5°C to +70°C, PVC Outer Jacket over PVC Insulation</b>															
E80	7	Yellow	4x0.34 & 3x0.75mm <sup>2</sup>	C & E	None	8.4mm			✓	✓				✓	
	9					9.5mm			✓	✓				✓	
	11					9.5mm			✓	✓				✓	
	15					9.8mm			✓	✓				✓	
	19					11.4mm			✓	✓				✓	
<b>CEI PVC - IEC332.3A - Self Extinguishing, Flame Retardant Oil Resistant PVC - 300 V, -5°C to +70°C, CEI PVC Outer Jacket over CEI PVC Insulation</b>															
I02	3 & 4	Grey	0.25mm <sup>2</sup>	B	None	4.5mm	✓	✓							
I03	3 & 4	Grey	0.34mm <sup>2</sup>	C	None	5.0mm	✓	✓							
	5					5.5mm	✓	✓							
I20	3	Grey	0.34mm <sup>2</sup>	C	80% Braid	5.0mm	✓	✓							
	4					6.3mm	✓	✓							
<b>SJTO Type - UL listed/CSA Approved - Self Extinguishing &amp; Flame Retardant - Good weld splatter resistance &amp; rough duty use - 300 V, -40°C to +105°C, UL/CSA PVC Outer Jacket over UL/CSA PVC Insulation</b>															
S20	3 & 4	Yellow	0.34mm <sup>2</sup>	D	50% Braid	6.3mm		✓				✓			
S26	5	Yellow	0.34mm <sup>2</sup>	D	50% Braid	6.5mm		✓				✓			
<b>PUR - General Purpose, Oil resistant for machining applications - 300 V, -5°C to +90°C, PUR Outer Jacket over PVC Insulation</b>															
P03	3 & 4	Black	0.34mm <sup>2</sup>	C	None	5.0mm	✓	✓							
	5					5.5mm	✓	✓							
P08	3 & 4	Yellow	0.25mm <sup>2</sup>	A	None	4.5mm	✓	✓							
P09	3 & 4	Black	0.34mm <sup>2</sup>	A	None	5.0mm	✓	✓							
P12	3	Black	0.50mm <sup>2</sup>	E	None	5.5mm	✓	✓				✓			
P18	4 & 5	Black	0.20mm <sup>2</sup>	C	80% Braid	5.0mm	✓	✓							
<b>PUR for Multi-Ports - General Purpose, Oil resistant for machining applications - 300 V, -5°C to +90°C, PUR Outer Jacket over PVC Insulation</b>															
P80	7	Yellow	4x0.34 & 3x0.75mm <sup>2</sup>	C & E	None	8.4mm			✓	✓				✓	
	9					9.5mm			✓	✓				✓	
	11					9.5mm			✓	✓				✓	
	15					9.8mm			✓	✓				✓	
	19					11.4mm			✓	✓				✓	
P78	6	Black	4x0.34 & 2x0.75mm <sup>2</sup>	C & C	None	8.4mm	✓	✓	✓	✓			✓	✓	
	8					9.5mm	✓	✓	✓	✓			✓	✓	
	10					9.8mm	✓	✓	✓	✓			✓	✓	
	12					9.8mm	✓	✓	✓	✓			✓	✓	
	14					9.8mm	✓	✓	✓	✓			✓	✓	
	18					11.4mm	✓	✓	✓	✓			✓	✓	
P75	22		20x0.25 & 2x0.50mm <sup>2</sup>	C & C		11.4mm	✓	✓	✓	✓			✓	✓	
<b>LSOH PUR - Low Smoke Zero Halogen - Baggage handling, public building use - 300 V, -40°C to +70°C, LSOH PUR Outer Jacket over Polyethylene Insulation</b>															
H03	4	Yellow	0.34mm <sup>2</sup>	C	None	5.0mm	✓	✓							
H69	4	Grey	0.20mm <sup>2</sup>	C	Foil with Drain	4.5mm	✓	✓							
P20	3	Black	0.34mm <sup>2</sup>	C	80% Braid	5.0mm	✓	✓							
	4					5.5mm	✓	✓							
	5					5.8mm	✓	✓							
<b>Irradiated PUR - Machine tool and welding applications - 300 V, -5°C to +105°C, Irradiated PUR Outer Jacket over PVC Insulation</b>															
P82	3 & 4	Orange	0.34mm <sup>2</sup>	E	None	5.0mm	✓	✓							

Stranding and Cross Sectional Area Table					
Stranding Group	Number of Strands				Diameter of Strands
	0.20mm <sup>2</sup>	0.25mm <sup>2</sup>	0.34mm <sup>2</sup>	0.50mm <sup>2</sup>	0.75mm <sup>2</sup>
A		128	174		0.05mm
B		65			0.07mm
C	27	32	42	64	95
D			26		0.13mm
E			19	28	42