



Mil-C-5015 Types

SBMS

Threaded Connector Series



AB Connectors Limited



A Subsidiary of TT electronics plc

AB Connectors

Company Profile

Operating from the principal site in South Wales, U.K., AB Connectors Limited, a subsidiary of TT electronics plc., is one of the recognised market leaders in design, test and manufacture of harsh environment interconnection systems, bespoke harness assemblies and equipment sub-units.

With a satellite assembly facility in North Carolina, USA, and a co-ordinated global sales and distribution network, AB Connectors Ltd. offers an unrivalled service to both engineers and buyers alike.

Through a commitment to a structured new product introduction process, AB Connectors is continuing investment in research and development of new materials and processes, surface treatments and the very latest manufacturing technology and techniques to ensure the products meet the most exacting standards encountered in the modern Military, Mass Transportation and Industrial market places.

Quality system approvals include BS/EN/ISO 9001 along with product approvals to BS9000, IECQ and CECC. As a result of these qualifications, AB Connectors have been awarded several major customer approvals and accreditations.

AB Connectors total commitment to providing customers with high levels of service, cost effectiveness, quality and innovation solutions in interconnection products, make it the ideal first choice supply partner.





SBMS Connector Series Introduction



AB SBMS connectors conform to the environmental requirements of Mil-C-5015 and are manufactured in accordance with the requirements specified by the Military Vehicle Engineering Establishment (M.V.E.E.)

SBMS connectors rationalise engineering and simplify design by reducing overall size and improving sealing characteristics of contemporary M-C-5015 connectors whilst still providing the necessary intermateability and interchangeability features.

Standard SB-MS connectors are pressure sealed and shock/vibration proof. Resilient neoprene monobloc insulators and wire sealing grommets provide positive interfacial and rear sealing capabilities with a continuous operating temperature range of -50°C to $+100^{\circ}\text{C}$.

H.T.M.S. solder type connectors, an extension to the standard SBMS range, are manufactured in accordance with M.V.E.E. specification 695 and have been developed to meet the severe environmental, temperature and fluid contamination conditions generally associated with high performance military engines.

High temperature insulators and grommets withstand continuous operating temperatures of -40°C to $+190^{\circ}\text{C}$ and retain the excellent sealing, shock and vibration characteristics found in the standard SBMS connector.

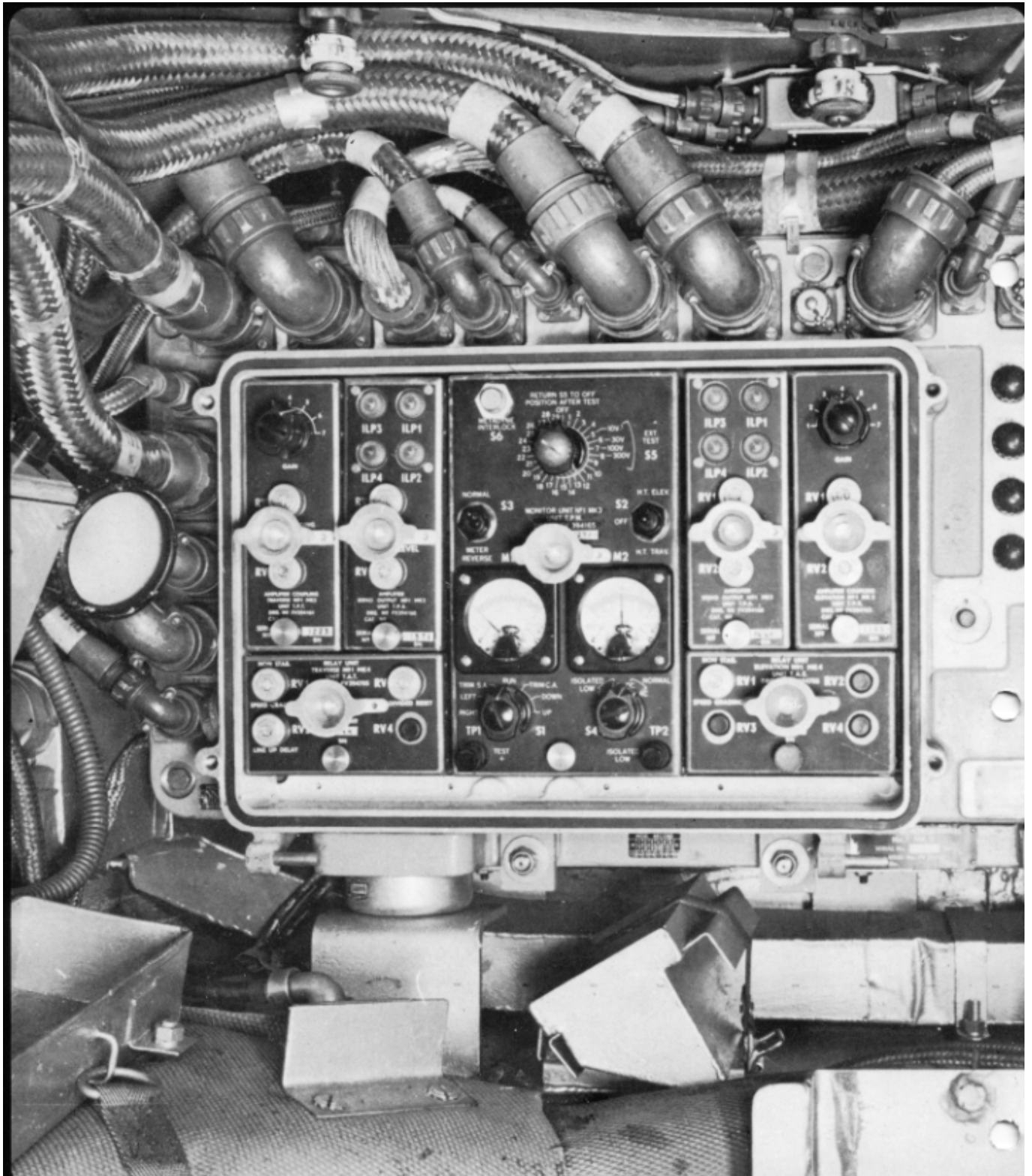
Accessories for SBMS and H.T.M.S. connectors include straight and 90° angle outlets, strain relief cable clamps, grommets, protective caps, panel sealing gaskets and telescopic bushings used in conjunction with the cable clamp.

This publication is issued to provide outline information only and (unless specifically agreed by the company in writing) is not to form part of any order or contract or be regarded as a representation relating to the products or services concerned.

The company reserves the right and may change or vary specification without prior written notice.



SBMS Connector Series





SBMS Connector Series

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Part number make-up

SB-MS 3102 E-20-15 P W GM

<p>Series Prefix SB-MS — Standard 5 MS. H.T.M.S. — High temperature 5 MS.</p> <p>Shell Style 3100 — Wall mounting receptacle. 3101 — Cable connecting receptacle. 3102 — Box mounting receptacle. 3106 — Straight plug. 3108 — 90° angle plug.</p> <p>Class E — Plain grommet nut with grommet. Not shell style 3102. E/A — 90° angle with plain grommet nut and grommets. Only for shell style 3100. E/AC — 90° angle with 5 MS cable clamp and grommets. Only for shell style 3100. E/C — 5 MS cable clamp and grommet. For shell styles 3100, 3101, 3106, 3108.</p>	<p>E/MC — Multicore cable clamp and grommet. For shell styles 3100, 3101, 3106. Not suitable for H.T.M.S. series.</p> <p>Shell size 10SL to 32 — O/D of coupling thread in sixteenths of an inch.</p> <p>Contact arrangements — See pages 4-5</p> <p>Contact type P — Pin. S — Socket.</p> <p>Orientation N, W, X, Y, Z — See pages 4-5</p> <p>Modification Code L.B.E.F. — Less back end fittings. G.M. — Gold .00127 m/m (0.0000 50 in) over Nickel .00381 m/m (0.0001 50 in) AB spec. 301 refers.</p> <p style="font-size: 0.8em;"><i>Please consult factory if additional modifications are required.</i></p>
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SBMS Connector Series Specification

Condensed data for Standard Materials and Finishes

	5 MS type	H.T.M.S. Type
Shell	Aluminium alloy cadmium plated with olive drab passivation.	Aluminium alloy cadmium plated with olive drab passivation.
Insulator	Bonded monobloc neoprene.	Bonded monobloc fluoro-carbon (Viton).
Grommet	Neoprene.	Fluoro-silicone.
Contacts	High quality brass, silver plated (gold optional) over nickel plate. Socket contacts size 16 and 12 fitted with protective 'probe proof' sleeve.	High quality brass, silver plated (gold optional) over nickel plate. Socket contacts size 16 and 12 fitted with protective 'probe proof' sleeve.
Accessory hardware	Aluminium alloy cadmium plated with olive drab passivation.	Aluminium alloy cadmium plated with olive drab passivation.

Mechanical Features

Coupling	Fine thread, captive coupling nut. Front removable for replacement purposes.	Fine thread, captive coupling nut. Front removable for replacement purposes.
Orientation	Insert orientation.	Insert orientation.
Contact type	Non removable, solder bucket.	Non removable, solder bucket.
Pressure sealing	Max leakage of 1 cm ³ /h at pressure of 100kN/m ² .	Max leakage of 1 cm ³ /h at pressure of 100kN/m ² .

Electrical Data

Current ratings	4.5 amps to 100 amps. Max current ratings of contact arrangement are detailed on page 6	4.5 amps to 100 amps. Max current ratings of contact arrangement are detailed on page 6
Voltage ratings	Working 350 to 750V. Proof 800 to 2000V. For service ratings at sea level see Page 6	Working 350 to 750V. Proof 800 to 2000V. For service ratings at sea level see Page 6
Insulation resistance	Initial 5000 M ohms minimum. In excess of 10M ohms after test.	Initial 5000 M ohms minimum. In excess of 10M ohms after test.
Contact resistance	With silver plating — 5 milliohms max, initial. After test, initial plus 5 milliohms (max).	With silver plating — 5 milliohms max, initial. After test, initial plus 5 milliohms (max).
Temperature rating (environmental)	—55°C to +100°C.	—40°C to + 190°C.

Wiring

	AWG Contact Size	AWG Wire Size	Insulation O/D Limits mm/ins.
To obtain satisfactory moisture sealing with our connectors the use of grommets is essential. The following table indicates the insulation outside diameters that are recommended for AWG and M.S. wire sizes.	16	16 to 22	1.63 to 3.30 (0.064) to (0.130)
	12	12 to 14	2.90 to 4.32 (0.114) to (0.170)
	8	8 to 10	4.04 to 6.48 (0.159) to (0.255)
	4	4 to 6	7.11 to 9.40 (0.280) to (0.370)
	0	0 to 2	10.16 to 13.97 (0.400) to (0.550)

Engaging/Separation Force

Due to an improvement in socket contact design, these details are not available at time of publication

- The metric dimensions in this catalogue are derived from the imperial figures given in brackets.
- The Company reserves the right to change the material specifications at any time, without prior notice.

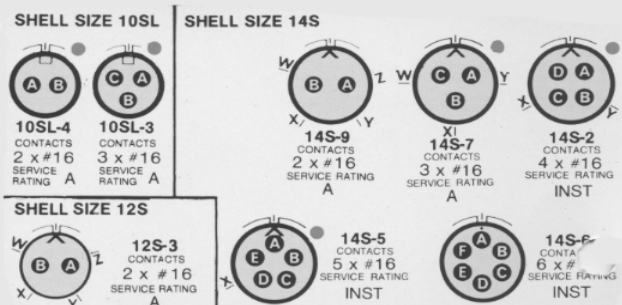
Insert contact arrangement details as required. The shell size and contact arrangement number are shown in combination i.e. 20-29. The numbers following the dash are the contact arrangements which do not necessarily indicate the number of contacts. This information is detailed on pages 6.

Orientation

Alternative insulator positions are available to prevent misalignment of adjacent connectors and are shown on each contact arrangement diagram.

The degrees of orientation available are identified by W.X.Y.Z, which indicate the rotation of the insulator away from position N (normal) shown on the diagram.

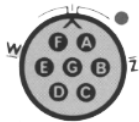
- These contact arrangements are also available in the H.T.M.S. series. For availability of additional contact arrangements please consult factory.





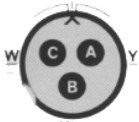
SBMS Connector Series

SHELL SIZE 16S



16S-1
CONTACTS
7 x #16
SERVICE RATING A

SHELL SIZE 16



16-10
CONTACTS
3 x #12
SERVICE RATING A

SHELL SIZE 20



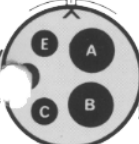
20-15
CONTACTS
7 x #12
SERVICE RATING A



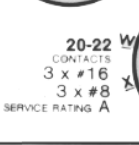
20-18
CONTACTS
6 x #16, 3 x #12
SERVICE RATING A



20-29
CONTACTS
17 x #16
SERVICE RATING A

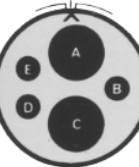


20-14
CONTACTS
3 x #12, 2 x #8
SERVICE RATING A



20-22
CONTACTS
3 x #16
3 x #8
SERVICE RATING A

SHELL SIZE 24



24-12
CONTACTS
3 x #12, 2 x #4
SERVICE RATING A

SHELL SIZE 18

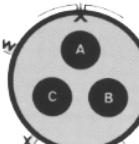


18-11
CONTACTS
5 x #12
SERVICE RATING A



18-1
CONTACTS
10 x #16
SERVICE RATING A & INST†

SHELL SIZE 22



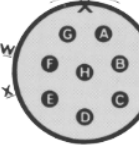
22-2
CONTACTS
3 x #8
SERVICE RATING A



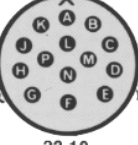
22-22
CONTACTS
4 x #8
SERVICE RATING A



22-23
CONTACTS
8 x #12
SERVICE RATING A & D†



22-18
CONTACTS
8 x #16
SERVICE RATING A & D†



22-19
CONTACTS
14 x #16
SERVICE RATING A

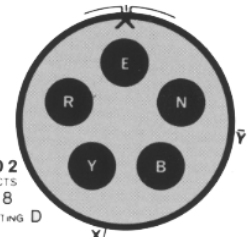


22-14
CONTACTS
19 x #16
SERVICE RATING A

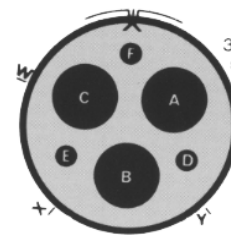


24-28
CONTACTS
24 x #16
SERVICE RATING INST

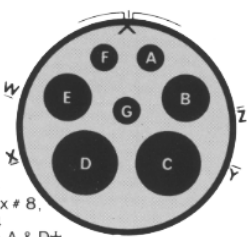
SHELL SIZE 28



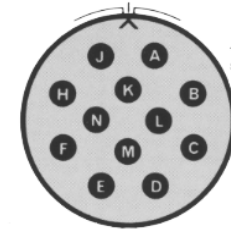
28-PD 2
CONTACTS
5 x #8
SERVICE RATING D



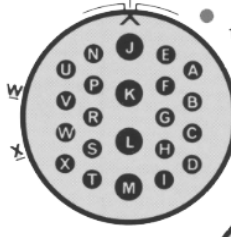
28-22
CONTACTS
3 x #16, 3 x #4
SERVICE RATING D



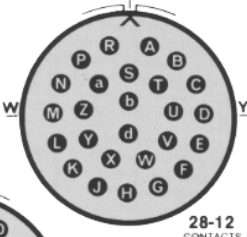
28-10
CONTACTS
3 x #12, 2 x #8,
2 x #4
SERVICE RATING A & D†



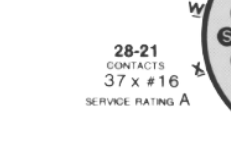
28-51
CONTACTS
12 x #12
SERVICE RATING A



28-11
CONTACTS
18 x #16,
4 x #12
SERVICE RATING A

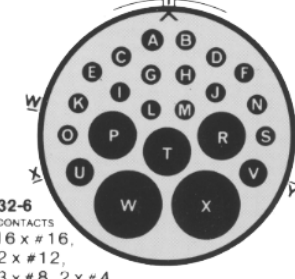


28-12
CONTACTS
26 x #16
SERVICE RATING INST

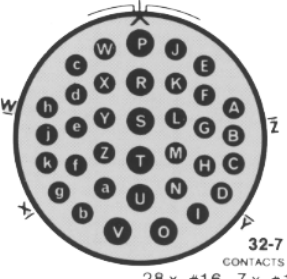


28-21
CONTACTS
37 x #16
SERVICE RATING A

SHELL SIZE 32



32-6
CONTACTS
16 x #16,
2 x #12,
3 x #8, 2 x #4
SERVICE RATING A



32-7
CONTACTS
28 x #16, 7 x #12
SERVICE RATING A & INST



SBMS Connector Series Selection Chart

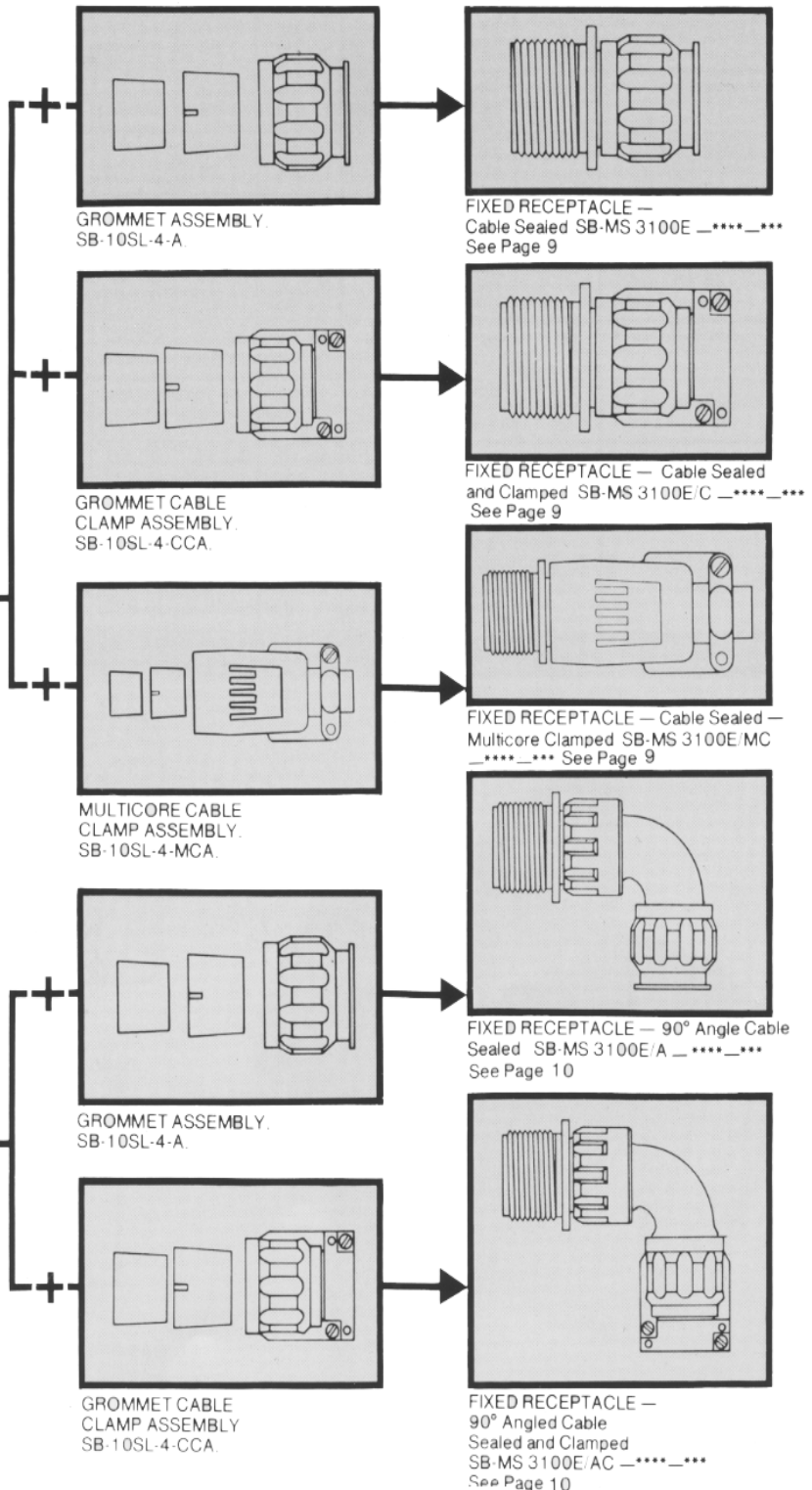
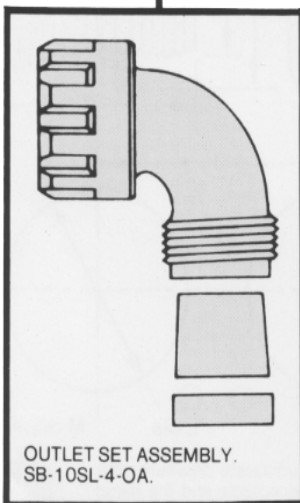
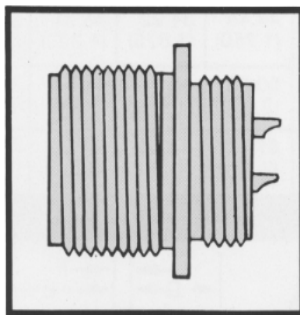
Shell Size	Contact Arrangement	No. of Contact	CONTACT SIZE AND CURRENT RATING (AMPS)				— AT 50°C AMBIENT	INSERT ORIENTATION	SERVICE RATING	Service Rating At Sea Level	VOLTAGE (DC or AC PEAK)	
			16	12	8	4					Working (V)	Proof (V)
10SL	4	2	2 x 18.5 Amps	—	—	—	N	A	Inst.	350	800	
10SL	3	3	3 x 15 Amps	—	—	—	N	A	A	500	1400	
12S	3	2	2 x 18.5 Amps	—	—	—	N,W,X,Y,Z	A	D	750	2000	
14S	9	2	2 x 18.5 Amps	—	—	—	N,W,X,Y,Z	A	+ CONTACT ARRANGEMENT 18-1 Contacts B, F, C and G have service rating A. Balance has Inst. 22-18 Contacts C, D, and E have service rating A. Balance has D. 22-23 Contact H has service rating D. Balance has A. 28-10 Contact G has service rating D. Balance has A. 32-7 Contact A, B, H and J have service rating Inst. Balance has A.			
14S	7	3	3 x 15 Amps	—	—	—	N,W,X,Y	A				
14S	2	4	4 x 14 Amps	—	—	—	N,X,Y	Inst.				
14S	5	5	5 x 13 Amps	—	—	—	N,X	Inst.				
14S	6	6	6 x 11.5 Amps	—	—	—	N	Inst.				
16S	1	7	7 x 11 Amps	—	—	—	N,W,Z	A				
16	10	3	—	3 x 29 Amps	—	—	N,W,X,Y	A				
18	11	5	—	5 x 24 Amps	—	—	N,X,Y	A				
18	1	10	10 x 7.5 Amps	—	—	—	N,W,X,Y,Z	A & Inst.†				
20	14	5	—	3 x 23 Amps	2 x 50.5 Amps	—	N,W,X,Y,Z	A				
20	22	6	3 x 11 Amps	—	3 x 48 Amps	—	N,W,X,Y,Z	A				
20	15	7	—	7 x 21 Amps	—	—	N,W,Z	A				
20	18	9	6 x 11 Amps	3 x 22 Amps	—	—	N,W,X,Y,Z	A				
20	29	17	17 x 7 Amps	—	—	—	N,W,Z	A				
22	2	3	—	—	3 x 56 Amps	—	N,W,X,Y,Z	A				
22	22	4	—	—	4 x 56 Amps	—	N,X,Y	A				
22	18	8	8 x 11 Amps	—	—	—	N,W,X,Y	A & D†				
22	23	8	—	8 x 20 Amps	—	—	N,W,Y	A & D†				
22	19	14	14 x 7 Amps	—	—	—	N,W,X,Y,Z	A				
22	14	19	19 x 5.5 Amps	—	—	—	N,W,Z	A				
24	12	5	—	3 x 11.5 Amps	—	2 x 92 Amps	N,W,X,Y,Z	A				
24	28	24	24 x 5.5 Amps	—	—	—	N,W,X,Y,Z	Inst.				
28	PD2	5	—	—	5 x 56 Amps	—	N,X,Y	D				
28	22	6	3 x 11.5 Amps	—	—	3 x 92 Amps	N,W,X,Y,Z	D				
28	10	7	—	3 x 13 Amps	2 x 29 Amps	2 x 53 Amps	N,W,X,Y,Z	A & D†				
28	51	12	—	12 x 35 Amps	—	—	N	A				
28	11	22	18 x 5 Amps	4 x 10 Amps	—	—	N,W,X,Y,Z	A				
28	12	26	26 x 5 Amps	—	—	—	N,W,X,Y,Z	Inst.				
28	21	37	37 x 5 Amps	—	—	—	N,W,X,Y,Z	A				
32	6	23	16 x 5 Amps	2 x 10 Amps	3 x 23 Amps	2 x 41 Amps	N,W,X,Y,Z	A				
32	7	35	28 x 4.5 Amps	7 x 9 Amps	—	—	N,W,X,Y,Z	A & Inst.†				



SBMS Connector Series Connector Assemblies

The range of SB-MS connectors has been developed to reduce the number of unit assemblies to a minimum. The diagrams on this page clearly indicate that with the addition of accessory sets to the basic, SB-MS 3102 receptacle a comprehensive range of assemblies is obtainable from a relatively small stock of components.

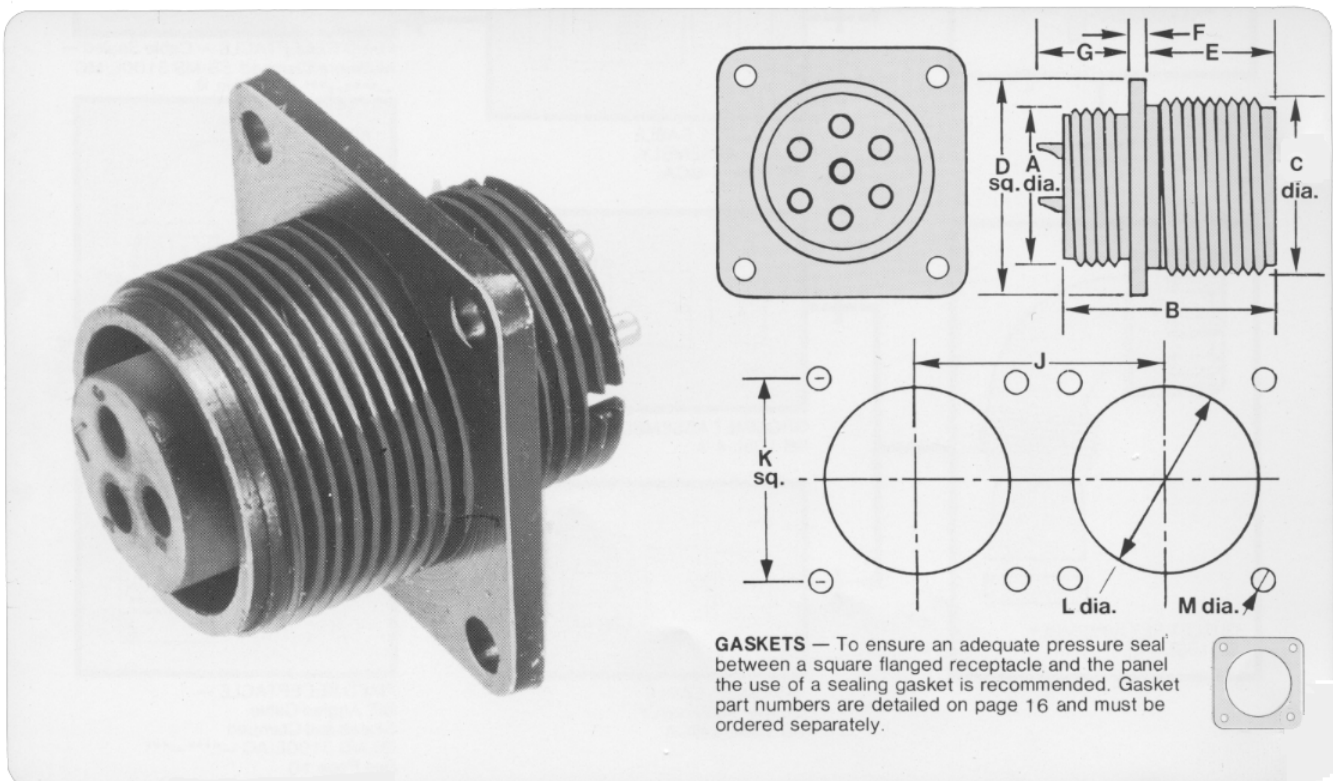
FIXED RECEPTACLE
SB-MS 3102E — CONTACT ARRANGEMENT — PINS OR SOCKETS e.g. SB-MS 3102E-10SL-4P
DIMENSIONS: See page 8





SBMS Connector Series SB-MS 3102E - Fixed Receptacle

PART NUMBER	SHELL SIZE	A DIA.	B	C DIA.	D SQ.	E	F	G	MOUNTING DIMENSIONS			
									J	K SQ.	L DIA.	M DIA.
SB-MS 3102E-10SL—***	10SL	15.87 (0.625)	26.92 (1.060)	15.87 (0.625)	25.40 (1.000)	14.27 (0.562)	1.78 (0.070)	14.22 (0.560)	25.40 (1.000)	18.26 (0.719)	16.26 (0.640)	3.05 (0.120)
SB-MS 3102E-12S —***	12S	15.87 (0.625)	26.92 (1.060)	19.05 (0.750)	27.79 (1.094)	14.27 (0.562)	2.29 (0.090)	14.22 (0.560)	27.80 (1.094)	20.62 (0.812)	16.26 (0.640)	3.05 (0.120)
SB-MS 3102E-14S —***	14S	19.05 (0.750)	26.92 (1.060)	22.23 (0.875)	30.18 (1.188)	14.27 (0.562)	2.29 (0.090)	14.22 (0.560)	30.17 (1.188)	23.01 (0.906)	19.43 (0.765)	3.05 (0.120)
SB-MS 3102E-16S —***	16S	22.22 (0.875)	26.92 (1.060)	25.40 (1.000)	32.53 (1.281)	14.27 (0.562)	2.29 (0.090)	14.22 (0.560)	32.54 (1.281)	24.61 (0.969)	22.60 (0.890)	3.05 (0.120)
SB-MS 3102E-16 —***	16	22.22 (0.875)	34.14 (1.344)	25.40 (1.000)	32.53 (1.281)	20.88 (0.822)	2.92 (0.115)	14.22 (0.560)	32.54 (1.281)	24.61 (0.969)	22.60 (0.890)	3.05 (0.120)
SB-MS 3102E-18 —***	18	25.40 (1.000)	34.14 (1.344)	25.58 (1.125)	34.92 (1.375)	20.88 (0.822)	2.92 (0.115)	14.22 (0.560)	34.92 (1.375)	26.97 (1.062)	25.78 (1.015)	3.05 (0.120)
SB-MS 3102E-20 —***	20	28.57 (1.125)	34.14 (1.344)	31.75 (1.250)	38.10 (1.500)	20.88 (0.822)	2.92 (0.115)	14.22 (0.560)	38.10 (1.500)	29.36 (1.156)	28.96 (1.140)	3.05 (0.120)
SB-MS 3102E-22 —***	22	31.75 (1.250)	34.14 (1.344)	34.92 (1.375)	41.28 (1.625)	20.88 (0.822)	2.92 (0.115)	14.22 (0.560)	41.27 (1.625)	31.80 (1.256)	32.13 (1.265)	3.05 (0.120)
SB-MS 3102E-24 —***	24	34.92 (1.375)	34.14 (1.344)	38.10 (1.500)	44.45 (1.750)	20.88 (0.822)	2.92 (0.115)	14.22 (0.560)	44.45 (1.750)	34.92 (1.375)	35.31 (1.390)	3.73 (0.147)
SB-MS 3102E-28 —***	28	41.27 (1.625)	34.14 (1.344)	44.45 (1.750)	50.80 (2.000)	20.88 (0.822)	2.92 (0.115)	14.22 (0.560)	50.80 (2.000)	39.67 (1.562)	41.66 (1.640)	3.73 (0.147)
SB-MS 3102E-32 —***	32	47.62 (1.875)	34.14 (1.344)	50.80 (2.000)	57.15 (2.250)	20.88 (0.822)	2.92 (0.115)	14.22 (0.560)	57.15 (2.250)	44.45 (1.750)	48.00 (1.890)	3.73 (0.173)



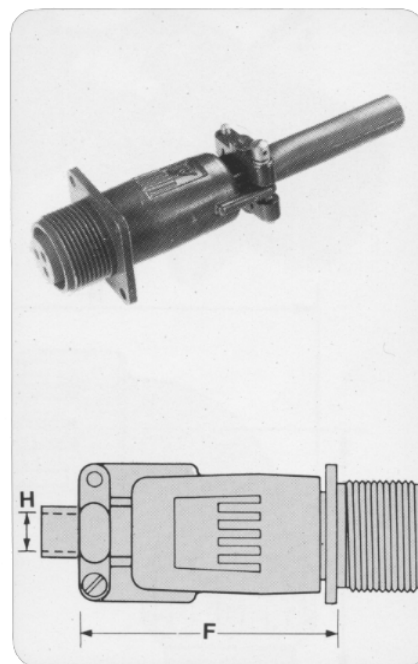
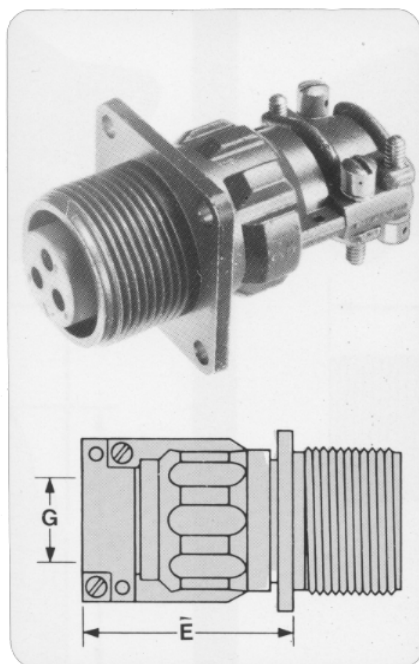
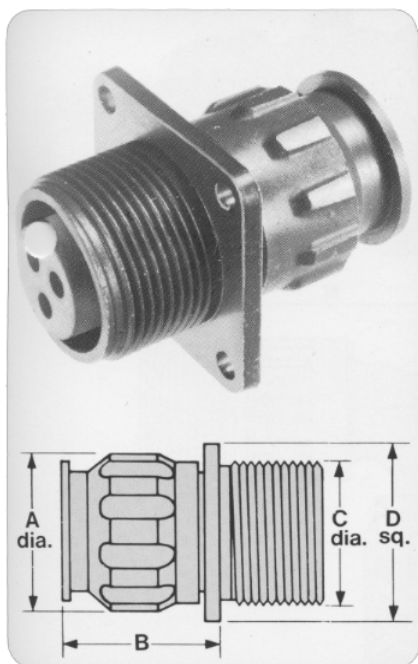


SBMS Connector Series

SB-MS 3100E - Fixed Receptacle - Cable Sealed

SB-MS 3100E/C - Fixed Receptacle - Cable sealed and Clamped

SB-MS 3100E/MC - Fixed Receptacle - Cable Sealed Multicore Clamp



PART NUMBER	SHELL SIZE	A DIA.	B	C DIA.	D SQ.	E	F	G Max. Cable Dia.	H Min. Internal Dia. Bushing
SB-MS 3100E-10SL—***	10SL	20.42 (0.840)	24.13 (0.950)	15.88 (0.625)	25.40 (1.000)	35.23 (1.387)	49.25 (1.939)	7.80 (0.307)	5.41 (0.213)
SB-MS 3100E-12S —***	12S	20.42 (0.840)	24.13 (0.950)	19.05 (0.750)	27.79 (1.094)	35.23 (1.387)	49.25 (1.939)	7.80 (0.307)	5.41 (0.213)
SB-MS 3100E-14S —***	14S	24.51 (0.965)	24.13 (0.950)	22.23 (0.875)	30.18 (1.188)	35.23 (1.387)	49.25 (1.939)	10.97 (0.432)	7.75 (0.305)
SB-MS 3100E-16S —***	16S	28.58 (1.125)	24.13 (0.950)	25.40 (1.000)	32.53 (1.281)	35.23 (1.387)	49.25 (1.939)	14.15 (0.557)	10.92 (0.430)
SB-MS 3100E-16 —***	16	28.58 (1.125)	24.13 (0.950)	25.40 (1.000)	32.53 (1.281)	35.23 (1.387)	49.86 (1.963)	14.15 (0.557)	10.92 (0.430)
SB-MS 3100E-18 —***	18	31.75 (1.250)	29.21 (1.150)	28.58 (1.125)	34.92 (1.375)	48.26 (1.900)	55.47 (2.184)	15.75 (0.620)	14.10 (0.555)
SB-MS 3100E-20 —***	20	34.92 (1.375)	29.21 (1.150)	31.75 (1.250)	38.10 (1.500)	48.26 (1.900)	54.64 (2.151)	20.50 (0.807)	14.10 (0.555)
SB-MS 3100E-22 —***	22	38.10 (1.500)	29.21 (1.150)	34.92 (1.375)	41.28 (1.625)	48.26 (1.900)	54.64 (2.151)	20.50 (0.807)	14.10 (0.555)
SB-MS 3100E-24 —***	24	41.28 (1.625)	29.21 (1.150)	38.10 (1.500)	44.45 (1.750)	48.26 (1.900)	54.64 (2.151)	23.67 (0.932)	18.87 (0.743)
SB-MS 3100E-28 —***	28	47.63 (1.875)	29.21 (1.150)	44.45 (1.750)	50.80 (2.000)	48.26 (1.900)	63.96 (2.518)	25.27 (0.995)	18.87 (0.743)
SB-MS 3100E-32 —***	32	53.98 (2.125)	29.21 (1.150)	50.80 (2.000)	57.15 (2.250)	48.26 (1.900)	63.96 (2.518)	31.62 (1.245)	23.62 (0.930)

** Insert contact arrangement details are required

Maximum cable dia. is applicable to SB-MS 3100E/C only

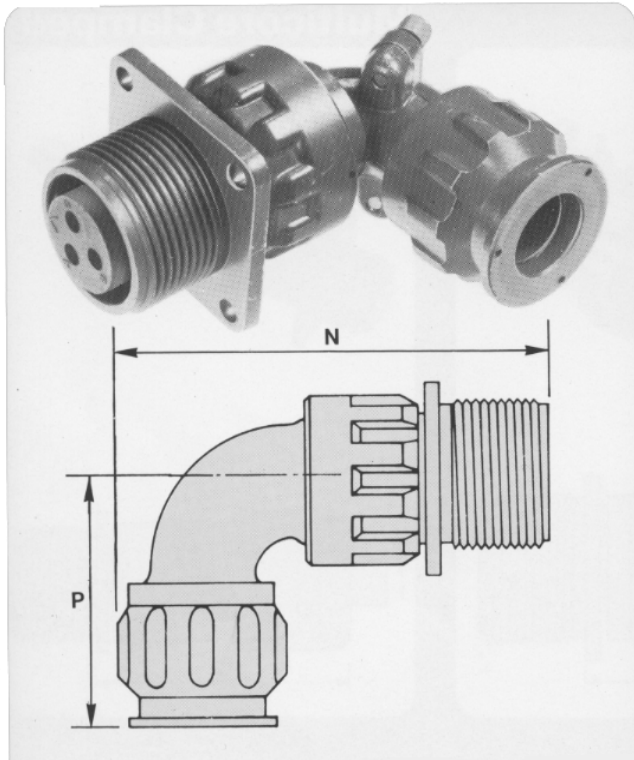
Mounting dimensions are identical to those listed on p8



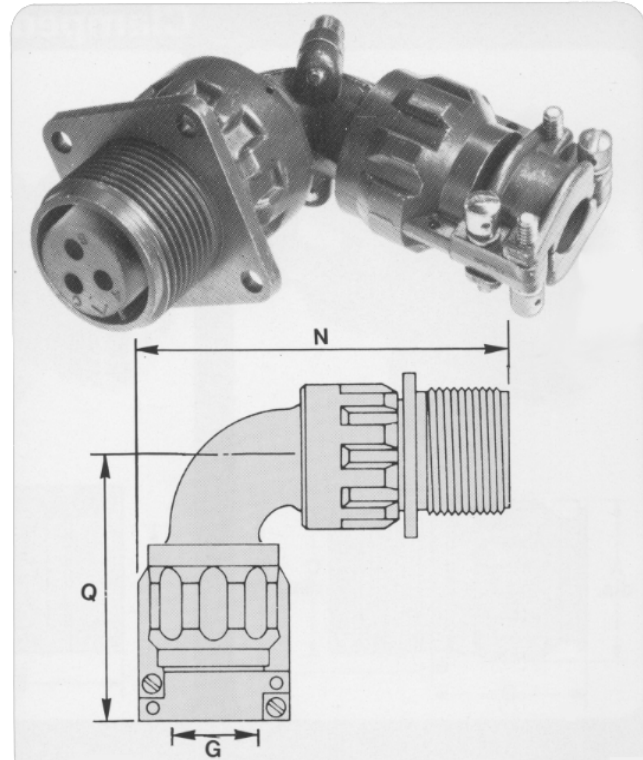
SBMS Connector Series

SB-MS 3100E/A - Fixed Receptacle - 90 Degree Angle Cable Sealed

SB-MS 3100 E/AC - Fixed Receptacle - 90 Degree Angle Cable Sealed and Clamped



PART NUMBER	SHELL SIZE	N	P
SB-MS 3100E/A-10SL—***	10SL	56.67 (2.231)	33.30 (1.311)
SB-MS 3100E/A-12S —***	12S	56.67 (2.231)	33.30 (1.311)
SB-MS 3100E/A-14S —***	14S	59.11 (2.327)	39.27 (1.546)
SB-MS 3100E/A-16S —***	16S	62.41 (2.457)	40.69 (1.602)
SB-MS 3100E/A-16 —***	16	68.22 (2.686)	40.69 (1.602)
SB-MS 3100E/A-18 —***	18	79.93 (3.147)	46.10 (1.815)
SB-MS 3100E/A-20 —***	20	84.61 (3.331)	47.78 (1.881)
SB-MS 3100E/A-22 —***	22	86.18 (3.393)	50.77 (1.999)
SB-MS 3100E/A-24 —***	24	92.23 (3.631)	52.50 (2.067)
SB-MS 3100E/A-28 —***	28	95.02 (3.741)	55.35 (2.179)
SB-MS 3100E/A-32 —***	32	104.34 (4.108)	58.52 (2.304)



PART NUMBER	SHELL SIZE	Q	G Max. Cable Dia.
SB-MS 3100E/AC-10SL—***	10SL	44.40 (1.748)	7.80 (0.307)
SB-MS 3100E/AC-12S —***	12S	44.40 (1.748)	7.80 (0.307)
SB-MS 3100E/AC-14S —***	14S	50.37 (1.983)	10.97 (0.432)
SB-MS 3100E/AC-16S —***	16S	51.82 (2.040)	14.15 (0.557)
SB-MS 3100E/AC-16 —***	16	51.82 (2.040)	14.15 (0.557)
SB-MS 3100E/AC-18 —***	18	65.15 (2.565)	15.75 (0.620)
SB-MS 3100E/AC-20 —***	20	66.83 (2.631)	20.50 (0.807)
SB-MS 3100E/AC-22 —***	22	69.82 (2.749)	20.50 (0.807)
SB-MS 3100E/AC-24 —***	24	71.55 (2.817)	23.67 (0.932)
SB-MS 3100E/AC-28 —***	28	74.40 (2.929)	25.27 (0.994)
SB-MS 3100E/AC-32 —***	32	77.57 (3.054)	31.62 (1.245)



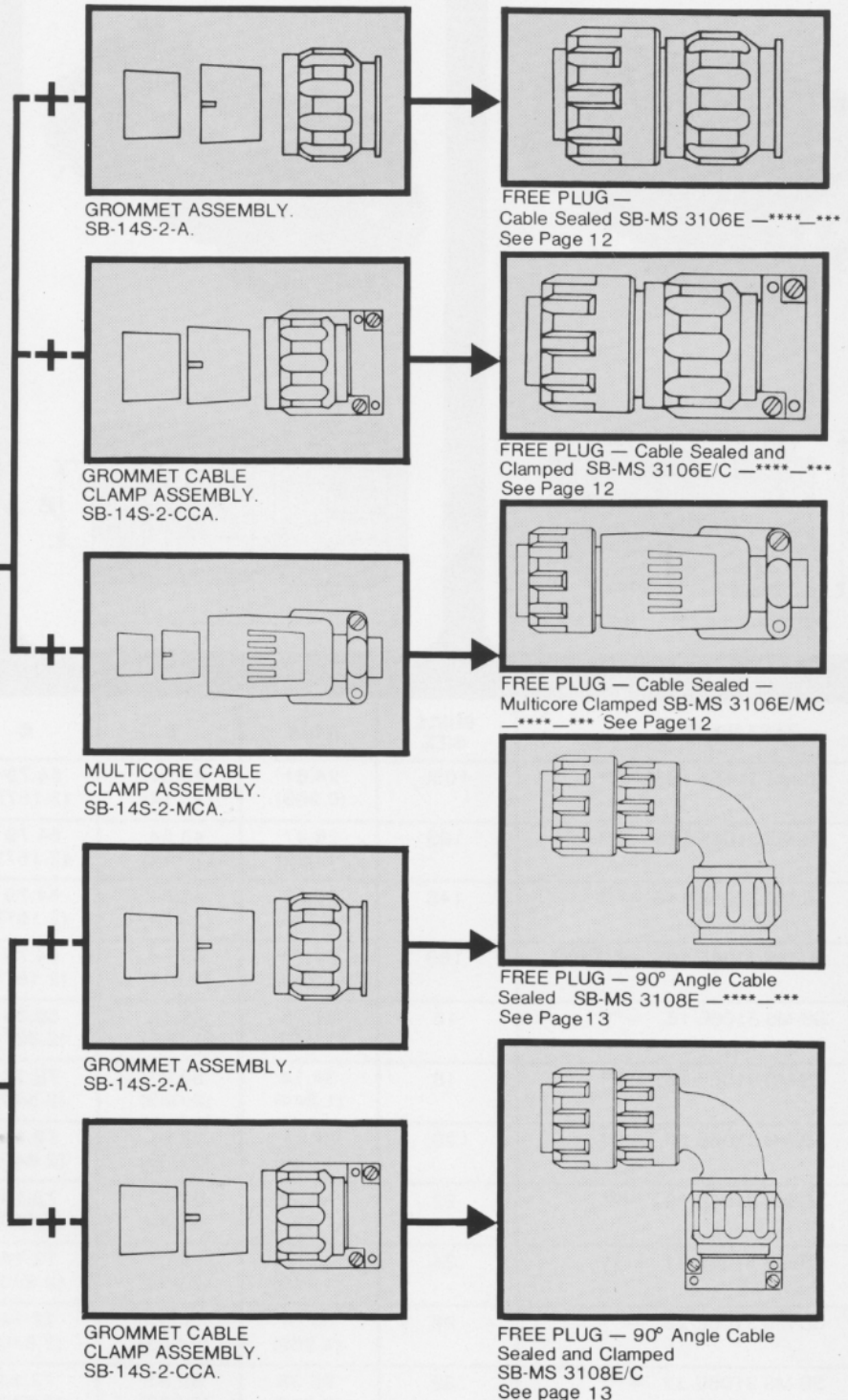
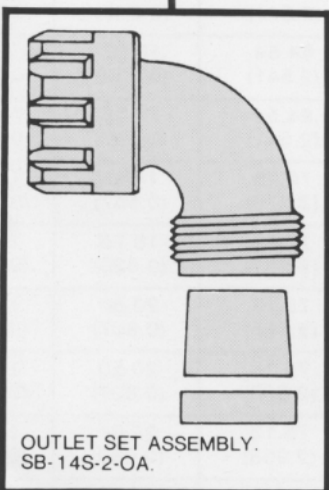
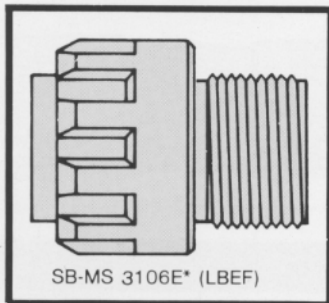
SBMS Connector Series Connector Assemblies

The range of SB-MS connectors has been developed to reduce the number of unit assemblies to a minimum. The diagrams on this page clearly indicate that with the addition of accessory sets to the basic SB-MS 3106 plug a comprehensive range of assemblies is obtainable from a relatively small stock of components.

*The basic SB-MS 3106 plug can be supplied without accessories by the inclusion of LBEF as a suffix in the part number. See page 3 for part number details.

FREE PLUG

SB-MS 3106E — CONTACT ARRANGEMENT — PINS OR SOCKETS e.g. SB-MS 3106E-14S-2P. DIMENSIONS: See page 12



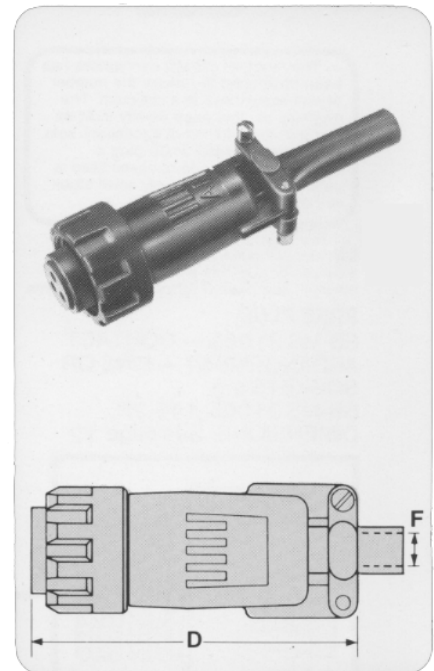
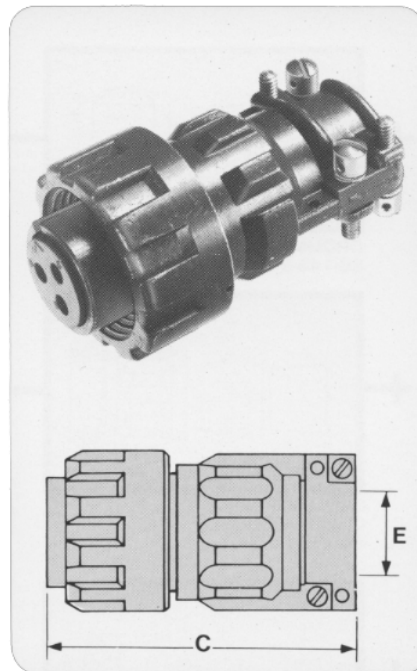
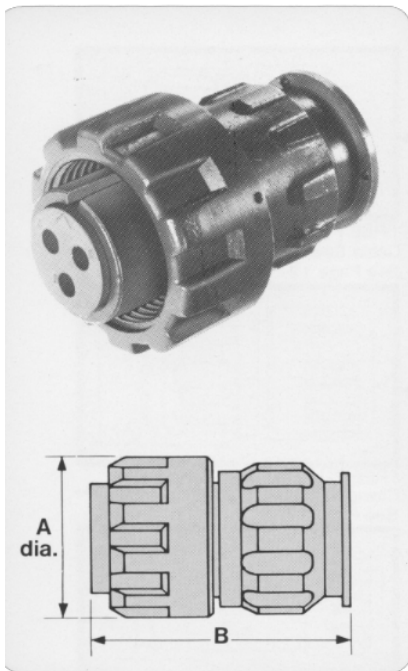


SBMS Connector Series

SB-MS 3106E - Free Plug Cable Sealed

SB-MS 3106E/C - Free Plug Cable Sealed and Clamped

SB-MS 3106E/MC - Free Plug Cable Sealed Multicore Clamped

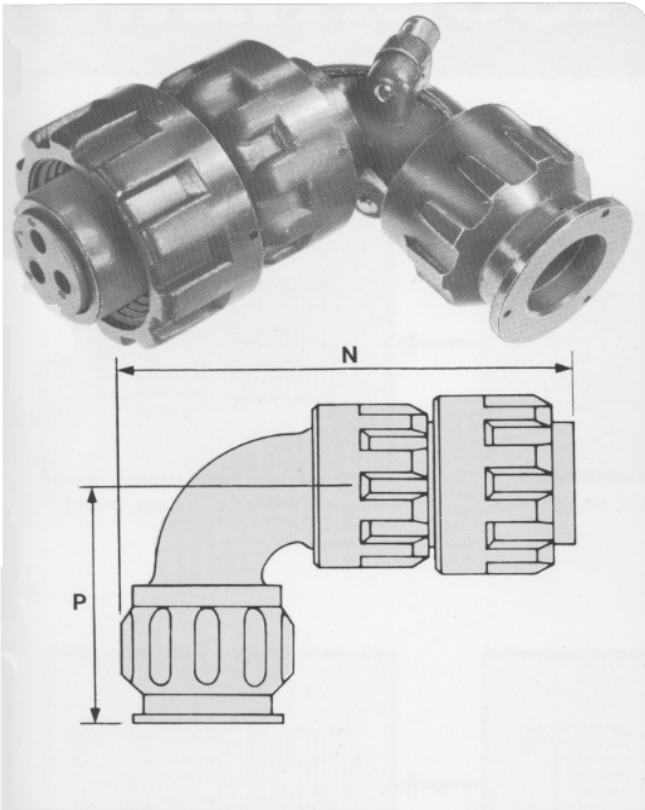


PART NUMBER	SHELL SIZE	A DIA.	B	C	D	E Max. Cable Dia.	F Min. Internal Dia. Bushing
SB-MS 3106E-10SL—***	10SL	24.61 (0.969)	43.54 (1.714)	54.79 (2.157)	64.54 (2.541)	7.80 (0.307)	5.41 (0.21)
SB-MS 3106E-12S —***	12S	26.97 (1.062)	43.54 (1.714)	54.79 (2.157)	64.54 (2.541)	7.80 (0.307)	5.41 (0.213)
SB-MS 3106E-14S —***	14S	29.36 (1.156)	43.54 (1.714)	54.79 (2.157)	64.54 (2.541)	10.97 (0.432)	7.75 (0.305)
SB-MS 3106E-16S —***	16S	31.75 (1.250)	43.54 (1.714)	54.79 (2.157)	64.54 (2.541)	14.15 (0.557)	10.92 (0.430)
SB-MS 3106E-16 —***	16	31.75 (1.250)	48.16 (1.896)	59.36 (2.337)	70.36 (2.770)	14.15 (0.557)	10.92 (0.430)
SB-MS 3106E-18 —***	18	34.14 (1.344)	52.91 (2.083)	72.14 (2.840)	75.97 (2.991)	15.75 (0.620)	14.10 (0.555)
SB-MS 3106E-20 —***	20	37.31 (1.469)	52.91 (2.083)	72.14 (2.840)	75.13 (2.958)	20.50 (0.807)	14.10 (0.555)
SB-MS 3106E-22 —***	22	40.49 (1.594)	52.91 (2.083)	72.14 (2.840)	75.13 (2.958)	20.50 (0.807)	14.10 (0.555)
SB-MS 3106E-24 —***	24	43.66 (1.719)	52.91 (2.083)	72.14 (2.840)	75.13 (2.958)	23.67 (0.932)	18.87 (0.743)
SB-MS 3106E-28 —***	28	50.01 (1.969)	52.91 (2.083)	72.14 (2.840)	84.46 (3.325)	25.27 (0.995)	18.87 (0.742)
SB-MS 3106E-32 —***	32	56.36 (2.219)	52.91 (2.083)	72.14 (2.840)	84.46 (3.325)	31.62 (1.245)	23.62 (0.930)

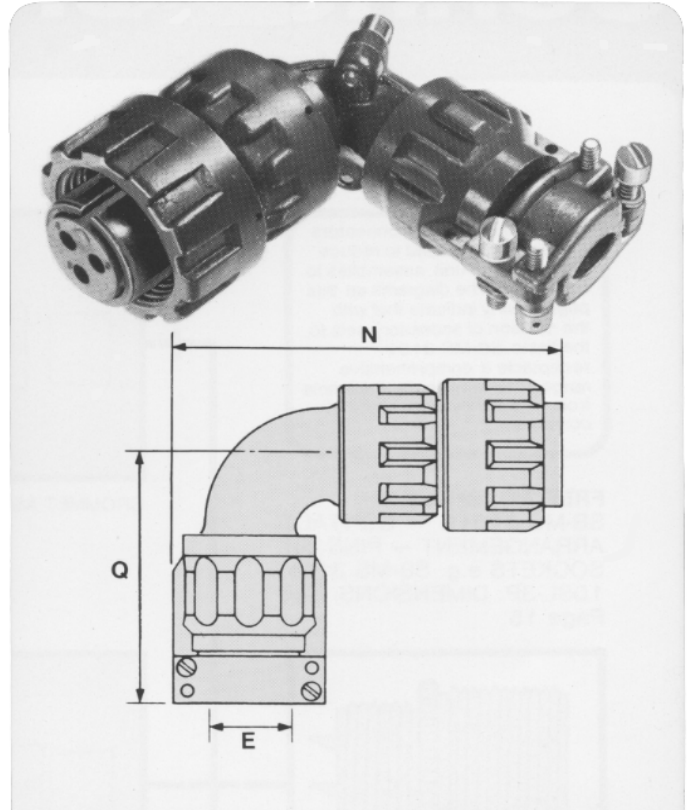


SBMS Connector Series

SB-MS 3108E - Free Plug 90 Degree Angle Cable Sealed



SB-MS 3108E/C - Free Plug 90 Degree Angle - Cable Sealed and Clamped



PART NUMBER	SHELL SIZE	N	P
SB-MS 3108E-10SL—***	10SL	56.67 (2.231)	33.30 (1.311)
SB-MS 3108E-12S —***	12S	56.67 (2.231)	33.30 (1.311)
SB-MS 3108E-14S —***	14S	59.11 (2.327)	39.27 (1.546)
SB-MS 3108E-16S —***	16S	62.41 (2.457)	40.69 (1.602)
SB-MS 3108E-16 —***	16	68.22 (2.686)	40.69 (1.602)
SB-MS 3108E-18 —***	18	79.93 (3.147)	46.10 (1.815)
SB-MS 3108E-20 —***	20	84.61 (3.331)	47.78 (1.881)
SB-MS 3108E-22 —***	22	86.18 (3.393)	50.77 (1.999)
SB-MS 3108E-24 —***	24	92.23 (3.631)	52.50 (2.067)
SB-MS 3108E-28 —***	28	95.02 (3.741)	55.35 (2.179)
SB-MS 3108E-32 —***	32	104.34 (4.108)	58.52 (2.304)

PART NUMBER	SHELL SIZE	Q	E Max. Cable Dia.
SB-MS 3108E/C-10SL—***	10SL	44.40 (1.748)	7.80 (0.307)
SB-MS 3108E/C-12S —***	12S	44.40 (1.748)	7.80 (0.307)
SB-MS 3108E/C-14S —***	14S	50.37 (1.983)	10.97 (0.432)
SB-MS 3108E/C-16S —***	16S	51.82 (2.040)	14.15 (0.557)
SB-MS 3108E/C-16 —***	16	51.82 (2.040)	14.15 (0.557)
SB-MS 3108E/C-18 —***	18	65.15 (2.565)	15.75 (0.620)
SB-MS 3108E/C-20 —***	20	66.83 (2.631)	20.50 (0.807)
SB-MS 3108E/C-22 —***	22	69.82 (2.749)	20.50 (0.807)
SB-MS 3108E/C-24 —***	24	71.55 (2.817)	23.67 (0.932)
SB-MS 3108E/C-28 —***	28	74.40 (2.929)	25.27 (0.995)
SB-MS 3108E/C-32 —***	32	77.57 (3.054)	31.62 (1.245)

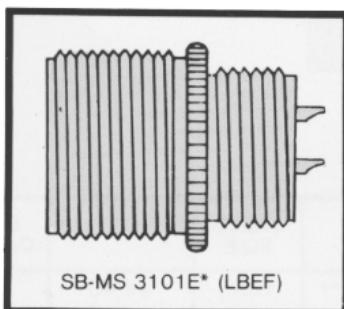
***Insert contact arrangement details as required



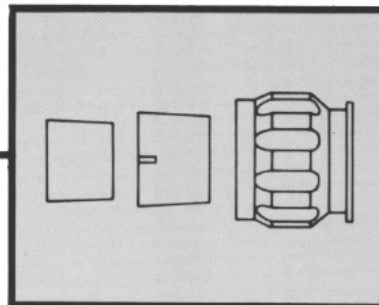
SBMS Connector Series Connector Assemblies

The range of SB-MS connectors has been developed to reduce the number of unit assemblies to a minimum. The diagrams on this page clearly indicate that with the addition of accessory sets to the basic SB-MS 3101 receptacle a comprehensive range of assemblies is obtainable from a relatively small stock of components.

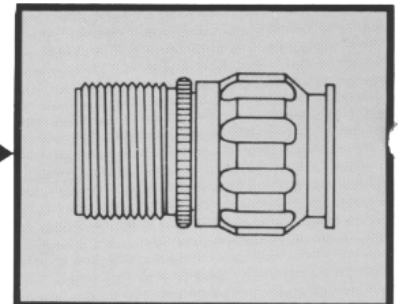
FREE RECEPTACLE
SB-MS 3101E — CONTACT
ARRANGEMENT — PINS OR
SOCKETS e.g. SB-MS 3101E-
10SL-3P. DIMENSIONS: See
Page 15.



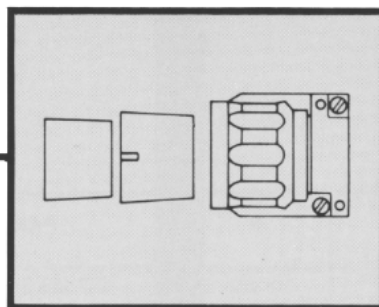
*The basic SB-MS 3101 receptacle can be supplied without accessories by the inclusion of LBEF as a suffix in the part number. See page 3 for part number details.



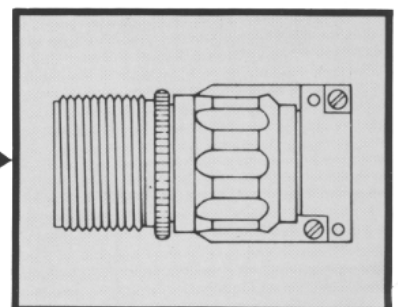
GROMMET ASSEMBLY. SB-10SL-3-A.



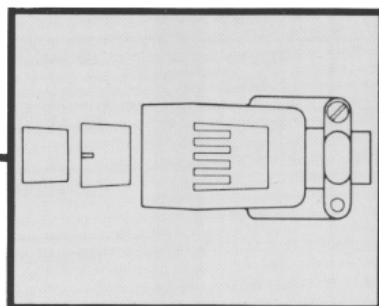
FREE RECEPTACLE — Cable Sealed
SB-MS 3101E —****—***
See Page 15



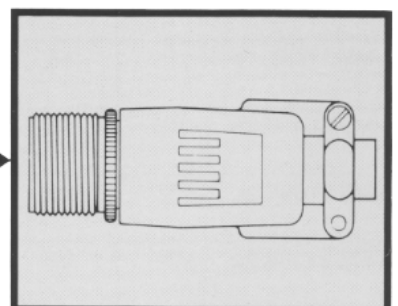
GROMMET CABLE CLAMP
ASSEMBLY. SB-10SL-3-CCA.



FREE RECEPTACLE —
Cable Sealed and Clamped
SB-MS 3101E/C —****—***
See Page 15



MULTICORE CABLE CLAMP
ASSEMBLY. SB-10SL-3-MCA.



FREE RECEPTACLE — Cable Sealed
Multicore Clamped
SB-MS 3101E/MC —****—***
See Page 15

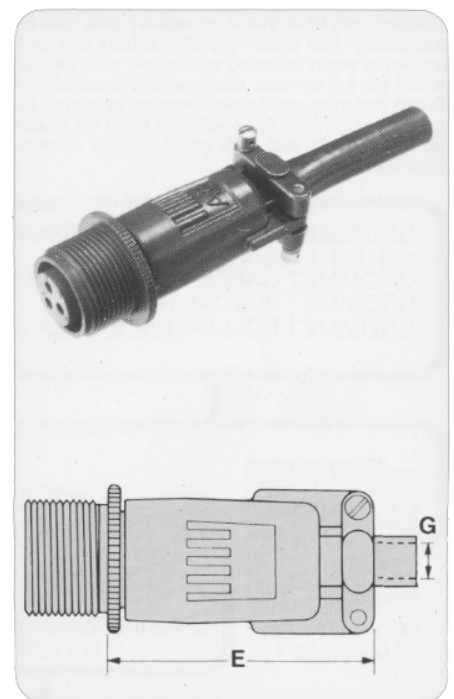
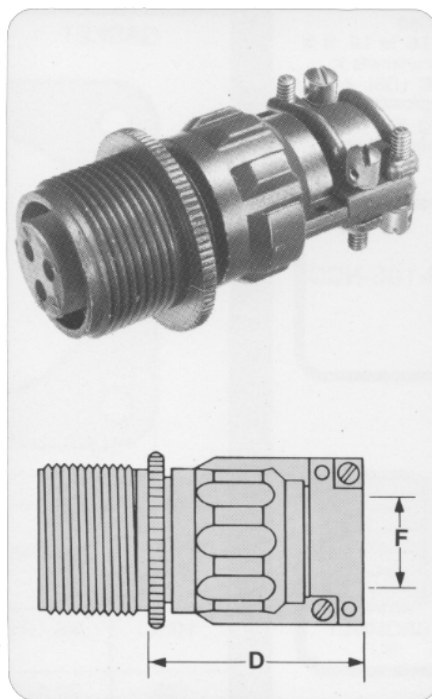
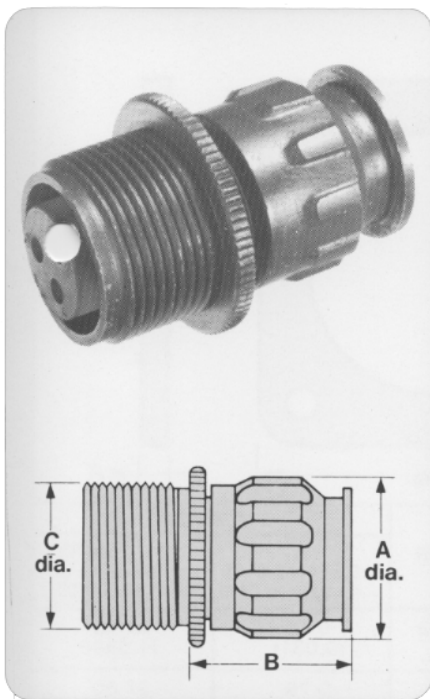


SBMS Connector Series

SB-MS 3101E Free Receptacle Cable Sealed

SB-MS 3101E/C - Free Receptacle Cable Sealed and Clamped

SB-MS 3101E/MC - Free Receptacle Cable Sealed - Multicore Clamped



PART NUMBER	SHELL SIZE	DIMENSIONS					F Max. Cable Dia.	G Min. Internal Dia. Bushing
		A DIA.	B	C, DIA.	D	E		
SB- 3101E-10SL—***	10SL	20.42 (0.840)	24.13 (0.950)	15.88 (0.625)	35.23 (1.387)	49.25 (1.939)	7.80 (0.307)	5.41 (0.213)
SB-MS 3101E-12S —***	12S	20.42 (0.840)	24.13 (0.950)	19.05 (0.750)	35.23 (1.387)	49.25 (1.939)	7.80 (0.307)	5.41 (0.213)
SB-MS 3101E-14S —***	14S	24.51 (0.965)	24.13 (0.950)	22.23 (0.875)	35.23 (1.387)	49.25 (1.939)	10.97 (0.432)	7.75 (0.305)
SB-MS 3101E-16S —***	16S	28.58 (1.125)	24.13 (0.950)	25.40 (1.000)	35.23 (1.387)	49.25 (1.939)	14.15 (0.557)	10.92 (0.430)
SB-MS 3101E-16 —***	16	28.58 (1.125)	24.13 (0.950)	25.40 (1.000)	35.23 (1.387)	49.86 (1.963)	14.15 (0.557)	10.92 (0.430)
SB-MS 3101E-18 —***	18	31.75 (1.250)	29.21 (1.150)	28.58 (1.125)	48.26 (1.900)	55.47 (2.184)	15.75 (0.620)	14.10 (0.555)
SB-MS 3101E-20 —***	20	34.92 (1.375)	29.21 (1.150)	31.75 (1.250)	48.26 (1.900)	54.64 (2.151)	20.50 (0.807)	14.10 (0.555)
SB-MS 3101E-22 —***	22	38.10 (1.500)	29.21 (1.150)	34.92 (1.375)	48.26 (1.900)	54.64 (2.151)	20.50 (0.807)	14.10 (0.555)
SB-MS 3101E-24 —***	24	41.28 (1.625)	29.21 (1.150)	38.10 (1.500)	48.26 (1.900)	54.64 (2.151)	23.67 (0.932)	18.87 (0.743)
SB-MS 3101E-28 —***	28	47.63 (1.875)	29.21 (1.150)	44.45 (1.750)	48.26 (1.900)	63.96 (2.518)	25.27 (0.995)	18.87 (0.743)
SB-MS 3101E-32 —***	32	53.98 (2.125)	29.21 (1.150)	50.80 (2.000)	48.26 (1.900)	63.96 (2.518)	31.62 (1.245)	23.62 (0.930)

***Insert contact arrangement details as required

Maximum cable diameter is applicable to SB-MS 3106E/C only. 15

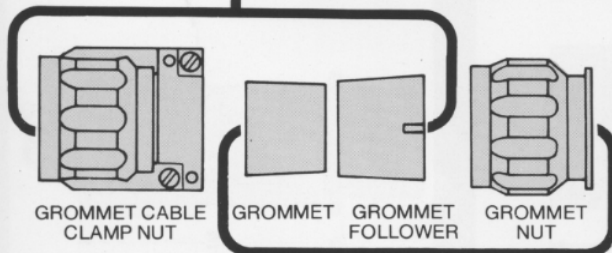


SBMS Connector Series

Accessory Sets

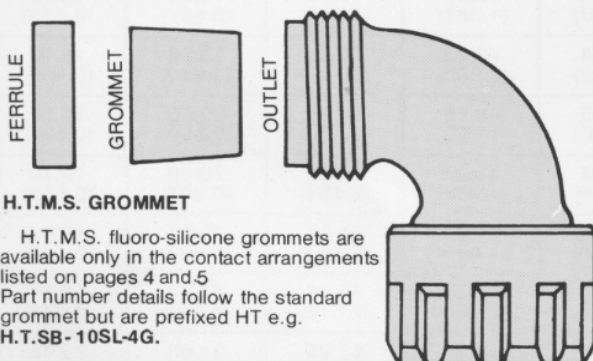
A full range of accessory sets for 5 MS and MS commercial connectors can be supplied as separate items to provide flexibility of connector styles dependent on design requirements. Individual components from these accessory sets can be supplied separately. Full ordering part numbers are on pages 16 to 19. It is essential when ordering accessory sets containing grommets to detail the full contact arrangement description e.g. SB-10SL-4-CCA. When ordering grommet followers, grommet nuts or grommet cable clamp nuts, the shell size must be specified e.g. SB-12S-N etc. Size 10SL and 12S are the ONLY accessory sets that use common components.

GROMMET CABLE CLAMP ASSEMBLY
 e.g. SB-10SL-4-CCA
GROMMET CABLE CLAMP NUT: e.g. SB-10S-NCC
GROMMET: e.g. SB-10SL-4-G
GROMMET FOLLOWER: e.g. SB-10S-F



ASSESSORY SET
 e.g. SB-10SL-4-A
GROMMET: e.g. SB-10SL-4-G
GROMMET FOLLOWER: e.g. SB-10S-F
GROMMET NUT: e.g. SB-10S-N

OUTLET SET ASSEMBLY
 e.g. SB-10SL-4-OA
OUTLET: e.g. SB-10SL-0
GROMMET: e.g. SB-10SL-4-G
FERRULE: e.g. SB-10SL-0F



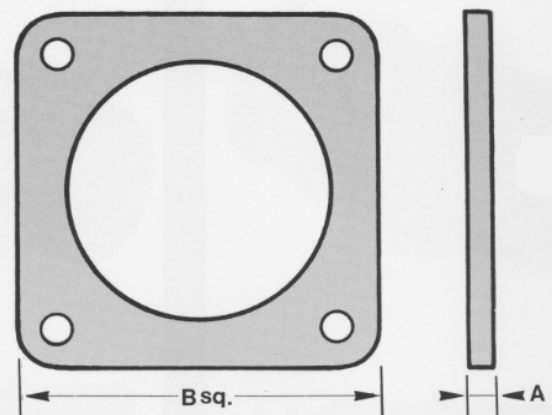
H.T.M.S. GROMMET

H.T.M.S. fluoro-silicone grommets are available only in the contact arrangements listed on pages 4 and 5. Part number details follow the standard grommet but are prefixed HT e.g. **H.T.SB-10SL-4G.**

Spares and Accessories

Dummy receptacles, sealing gaskets, metal protective caps, plastic dust caps, telescopic bushings, grommet bungs (wirehole fillers), coupling nuts and coupling nut circlips are available as replacement spares for damaged connectors or as accessories for applications demanding improved protection or sealing facilities.

GASKET



SHELL SIZE	PART NUMBER	DIMENSIONS	
		'A' +0.254 (+0.010) -0.127 (-0.005)	'B' SQUARE +0.38 (0.015) -0.00 (0.000)
10SL	SB-10SL-RPG	0.79 (0.031)	25.40 (1.000)
12S	SB-12S-RPG	0.79 (0.031)	27.80 (1.094)
14S	SB-14S-RPG	0.79 (0.031)	30.17 (1.188)
16S	SB-16-RPG	0.79 (0.031)	32.54 (1.281)
16	SB-16-RPG	0.79 (0.031)	32.54 (1.281)
18	SB-18-RPG	0.79 (0.031)	34.92 (1.375)
20	SB-20-RPG	0.79 (0.031)	38.10 (1.500)
22	SB-22-RPG	0.79 (0.031)	41.27 (1.625)
24	SB-24-RPG	0.79 (0.031)	44.45 (1.750)
28	SB-28-RPG	0.79 (0.031)	50.80 (2.000)
32	SB-32-RPG	0.79 (0.031)	57.15 (2.250)

GASKETS

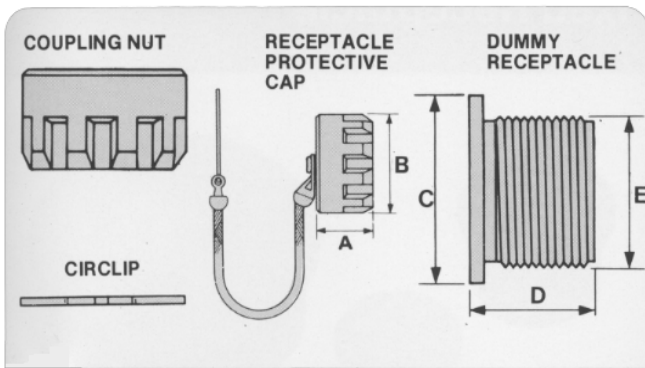
Sealing gaskets manufactured of neoprene are for use with square flanged receptacles for sealing between the shell and mounting panel.

To order high temperature gaskets in fluoro carbon material prefix the part number H.T. e.g. **HT SB-10SL-RPG.**



SBMS Connector Series

Spares and Accessories



SHELL SIZE	COUPLING NUT PART No.	CIRCLIP PART No.	RECEPTACLE PROTECTIVE CAP PART No.	DUMMY RECEPTACLE PART No.
10SL	SB-10SL-CN	SB-10SL-C	SB-10SL-PC	SB-10SL-DR
12S	SB-12S-CN	SB-12S-C	SB-12S-PC	SB-12S-DR
14S	SB-14S-CN	SB-14S-C	SB-14S-PC	SB-14S-DR
16S	SB-16-CN	SB-16-C	SB-16-PC	SB-16-DR
16	SB-16-CN	SB-16-C	SB-16-PC	SB-16-DR
18	SB-18-CN	SB-18-C	SB-18-PC	SB-18-DR
20	SB-20-CN	SB-20-C	SB-20-PC	SB-20-DR
22	SB-22-CN	SB-22-C	SB-22-PC	SB-22-DR
24	SB-24-CN	SB-24-C	SB-24-PC	SB-24-DR
28	SB-28-CN	SB-28-C	SB-28-PC	SB-28-DR
32	SB-32-CN	SB-32-C	SB-32-PC	SB-32-DR

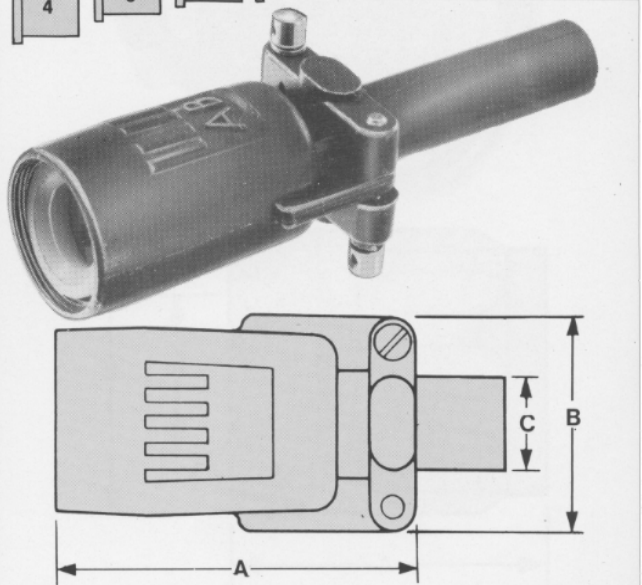
SHELL SIZE	DIMENSIONS				
	A MAX.	B DIA. MAX.	C SQ. MAX.	D MAX.	E
10SL	14.40 (0.567)	27.74 (0.974)	25.53 (1.005)	16.31 (0.642)	0.625x24 UNEF
12S	14.40 (0.567)	27.10 (1.067)	27.91 (1.099)	16.94 (0.667)	0.750x20 UNEF
14S	14.40 (0.567)	29.49 (1.161)	30.30 (1.193)	16.94 (0.667)	0.875x20 UNEF
16S	14.40 (0.567)	31.88 (1.255)	32.66 (1.286)	16.94 (0.667)	1.000x20 UNEF
16	21.54 (0.848)	31.88 (1.255)	32.66 (1.286)	24.18 (0.952)	1.000x20 UNEF
18	21.54 (0.848)	34.26 (1.349)	35.05 (1.380)	24.18 (0.952)	1.125x18 UNEF
20	21.54 (0.848)	37.44 (1.474)	38.23 (1.505)	24.18 (0.952)	1.250x18 UNEF
22	21.54 (0.848)	40.610 (1.599)	41.40 (1.630)	24.18 (0.952)	1.375x18 UNEF
24	21.54 (0.848)	43.79 (1.724)	44.58 (1.755)	24.18 (0.952)	1.500x18 UNEF
28	21.54 (0.848)	50.14 (1.974)	50.93 (2.005)	24.18 (0.952)	1.750x18 NS
32	21.54 (0.848)	56.49 (2.224)	57.23 (2.255)	24.18 (0.952)	2.000x18 NS

***Insert contact arrangement details as required

Multicore Cable Clamp

GROMMET BUNGS
To ensure adequate grommet sealing and prevent the ingress of moisture it is essential that on all unwired contacts, grommet bungs be used in the appropriate grommet sealing cavity.

CONTACT SIZE	GROMMET BUNG PART NO.
4	SB-4-B
8	SB-8-B
12	SB-12-B
16	SB-16-B



A nylon grommet follower and grommet are included in this accessory set.

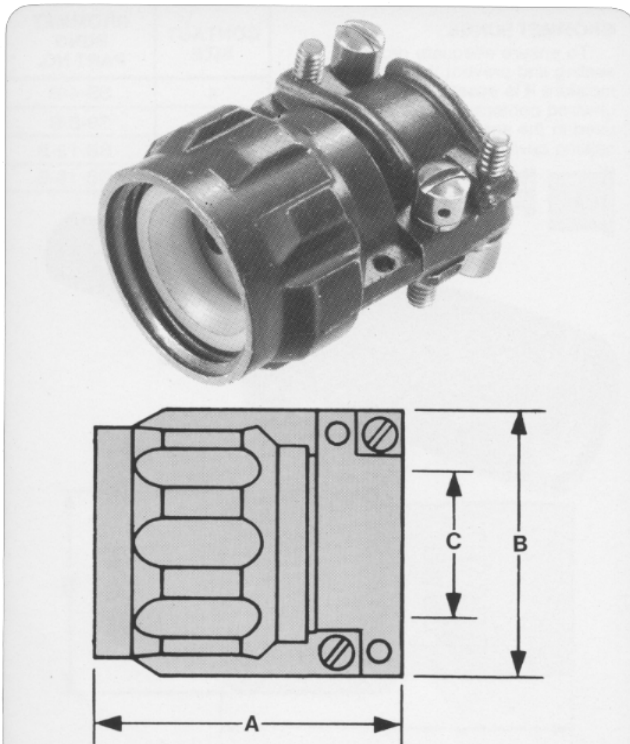
SHELL SIZE	PART NO.	DIMENSIONS		
		A ± 0.13 (0.005)	B ± 0.13 (0.005)	C. Min. Int. Dia. Bushing
10SL	SB-10SI—**—MCA	45.21 (1.780)	21.87 (0.861)	5.41 (0.213)
†12S	SB-12S—**—MCA	45.21 (1.780)	21.87 (0.861)	5.41 (0.213)
‡14S	SB-14S—**—MCA	45.21 (1.780)	25.93 (1.021)	7.75 (0.305)
16S	SB-16S—**—MCA	45.21 (1.780)	28.58 (1.125)	10.92 (0.430)
16	SB-16—**—MCA	45.21 (1.780)	28.58 (1.125)	10.92 (0.430)
18	SB-18—**—MCA	49.99 (1.968)	31.75 (1.250)	14.10 (0.555)
20	SB-20—**—MCA	49.99 (1.968)	36.58 (1.440)	14.10 (0.555)
22	SB-22—**—MCA	49.99 (1.968)	36.58 (1.440)	14.10 (0.555)
†24	SB-24—**—MCA	49.99 (1.968)	41.96 (1.652)	18.87 (0.743)
28	SB-28—**—MCA	59.31 (2.335)	47.63 (1.875)	18.87 (0.743)
32	SB-32—**—MCA	59.31 (2.335)	54.61 (2.150)	23.62 (0.930)

+ Consult factory for availability



SBMS Connector Series

Grommet Cable Clamp

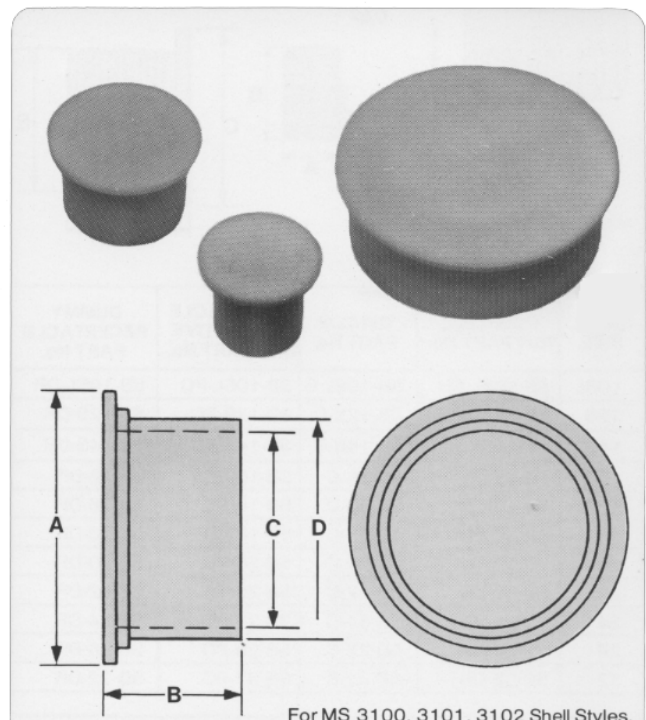


A nylon grommet follower and grommet are included in this accessory set.

SHELL SIZE	PART NO.	DIMENSIONS		
		A ± 0.13 (0.005)	B ± 0.13 (0.005)	C Dia. ± 0.13 (0.005)
10SL	SB-10SL—**—CCA	31.75 (1.250)	21.34 (0.840)	7.92 (0.312)
12S	SB-12S—**—CCA	31.75 (1.250)	21.34 (0.840)	7.92 (0.312)
14S	SB-14S—**—CCA	31.75 (1.250)	24.51 (0.965)	11.10 (0.437)
16S	SB-16S—**—CCA	31.75 (1.250)	28.58 (1.125)	14.27 (0.562)
16	SB-16—**—CCA	31.75 (1.250)	28.58 (1.125)	14.27 (0.562)
18	SB-18—**—CCA	44.45 (1.750)	31.75 (1.250)	15.88 (0.625)
20	SB-20—**—CCA	44.45 (1.750)	34.93 (1.375)	20.62 (0.812)
22	SB-22—**—CCA	44.45 (1.750)	38.10 (1.500)	20.62 (0.812)
24	SB-24—**—CCA	44.45 (1.750)	41.28 (1.625)	23.80 (0.937)
28	SB-28—**—CCA	44.45 (1.750)	47.63 (1.875)	25.40 (1.000)
32	SB-32—**—CCA	44.45 (1.750)	53.98 (2.125)	31.75 (1.250)

18 ***Insert contact arrangement details as required

Plastic Dust Cap - Fixed Receptacle



For MS 3100, 3101, 3102 Shell Styles.

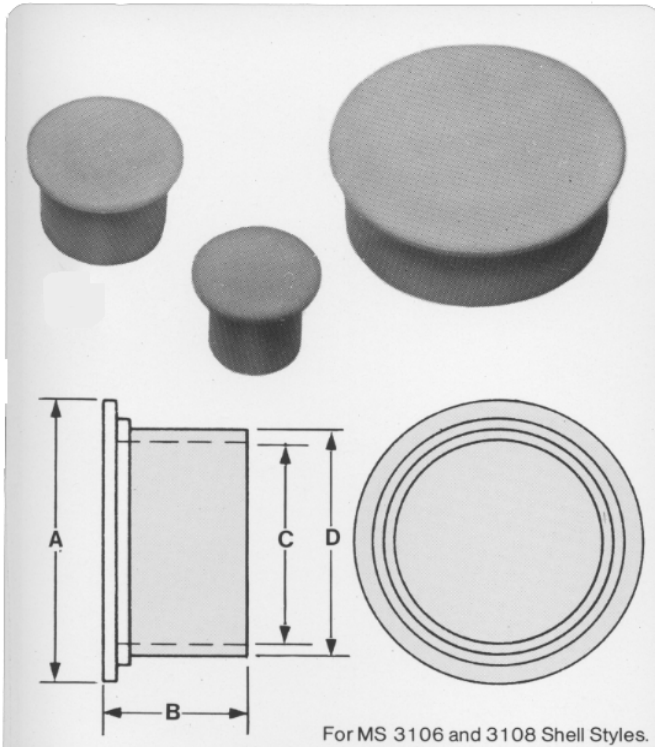
SHELL SIZE	PART NO.	DIMENSIONS			
		A MAX.	B MAX.	C ± 0.127 (±005)	D MAX.
10SL	SB-MSE-172/10SL	23.42 (0.922)	17.14 (0.675)	15.44 (0.608)	17.55 (0.691)
12S	SB-MSE-172/12S	26.59 (1.047)	17.14 (0.675)	18.62 (0.733)	20.73 (0.816)
14S	SB-MSE-172/14S	29.77 (1.172)	17.14 (0.675)	21.79 (0.858)	23.90 (0.941)
16S	SB-MSE-172/16	32.94 (1.297)	17.14 (0.675)	25.00 (0.984)	27.08 (1.066)
16	SB-MSE-172/16	32.94 (1.297)	17.14 (0.675)	25.00 (0.984)	27.08 (1.066)
18	SB-MSE-172/18	36.09 (1.421)	17.14 (0.675)	28.14 (1.108)	30.23 (1.190)
20	SB-MSE-172/20	39.27 (1.596)	17.14 (0.675)	31.32 (1.233)	33.40 (1.315)
22	SB-MSE-172/22	42.44 (1.671)	17.14 (0.675)	34.49 (1.358)	36.58 (1.440)
24	SB-MSE-172/24	45.62 (1.796)	17.14 (0.675)	37.67 (1.483)	39.75 (1.565)
28	SB-MSE-172/28	51.93 (2.045)	17.14 (0.675)	44.02 (1.733)	46.07 (1.813)
32	SB-MSE-172/32	58.29 (2.295)	17.14 (0.675)	50.37 (1.983)	52.42 (2.064)

Plastic dust caps should be ordered as required.



SBMS Connector Series

Plastic Dust Cap - Free Plug



For MS 3106 and 3108 Shell Styles.

SHELL SIZE	PART NO.	DIMENSIONS			
		A MAX.	B MAX.	C ±0.127 (±005)	D MAX.
10SL	SB-MSE-173/10SL	20.93 (0.824)	17.14 (0.675)	13.39 (0.527)	15.29 (0.602)
12S	SB-MSE-173/12S	23.90 (0.941)	17.14 (0.675)	16.36 (0.644)	18.26 (0.719)
14S	SB-MSE-173/14S	27.08 (1.066)	17.14 (0.675)	19.53 (0.769)	21.44 (0.844)
16S	SB-MSE-173/16	30.25 (1.191)	17.14 (0.675)	22.71 (0.894)	24.61 (0.969)
16	SB-MSE-173/16	30.25 (1.191)	17.14 (0.675)	22.71 (0.894)	24.61 (0.969)
18	SB-MSE-173/18	33.30 (1.311)	17.14 (0.675)	25.78 (1.015)	27.68 (1.090)
20	SB-MSE-173/20	36.47 (1.436)	17.14 (0.675)	28.96 (1.140)	30.86 (1.215)
22	SB-MSE-173/22	39.65 (1.561)	17.14 (0.675)	32.13 (1.265)	34.03 (1.340)
24	SB-MSE-173/24	42.82 (1.686)	17.14 (0.675)	35.28 (1.389)	37.19 (1.464)
28	SB-MSE-173/28	48.97 (1.928)	17.14 (0.675)	41.66 (1.640)	43.56 (1.715)
32	SB-MSE-173/32	55.47 (2.184)	17.14 (0.675)	48.00 (1.890)	49.91 (1.965)

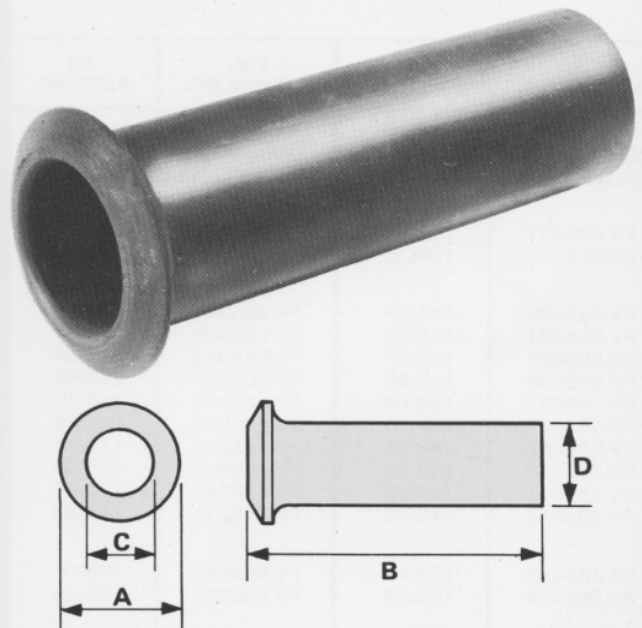
Plastic dust caps should be ordered as required

Telescopic Bushing

The bushing is used together with SB-MS 3100, 3101 and 3106 E/MC shell styles. Taping or wrapping wires is eliminated since the bushing protects wires passing through the cable clamp.

Combinations of bushings may be used to decrease cable entry diameter to improve sealing.

Bushings are not available for H.T.M.S. connectors.



SHELL SIZE	PART NO.	DIMENSIONS			
		A ± 0.178 (0.007)	B ± 0.178 (0.007)	C ± 0.178 (0.007)	D ± 0.178 (0.007)
10SL	SB-MS 554/1	12.83 (0.505)	69.85 (2.750)	5.59 (0.220)	7.62 (0.300)
12S	SB-MS 554/1	12.83 (0.505)	69.85 (2.750)	5.59 (0.220)	7.62 (0.300)
14S	SB-MS 544/2	15.88 (0.625)	66.68 (2.625)	7.92 (0.312)	10.80 (0.425)
16S	SB-MS 544/3	19.05 (0.750)	63.50 (2.500)	11.10 (0.437)	13.97 (0.550)
16	SB-MS 554/3	19.05 (0.750)	63.50 (2.500)	11.10 (0.437)	13.97 (0.550)
18	SB-MS 544/4	22.23 (0.875)	60.33 (2.375)	14.27 (0.562)	15.67 (0.613)
20	SB-MS 554/5	25.40 (1.000)	57.15 (2.250)	15.88 (0.625)	18.75 (0.738)
22	SB-MS 554/6	28.58 (1.125)	57.15 (2.250)	15.88 (0.625)	18.75 (0.738)
†24	SB-MS 554/7	31.75 (1.250)	53.98 (2.125)	19.05 (0.750)	23.50 (0.925)
28	SB-MS 554/8	38.23 (1.505)	53.98 (2.125)	19.05 (0.750)	23.50 (0.925)
32	SB-MS 554/9	44.45 (1.750)	50.80 (2.000)	23.80 (0.937)	31.45 (1.238)

+ Consult factory for availability



SBMS Connector Series

In accordance with the Military Vehicle Engineering Establishment and Ministry of Defence requirements all 5 MS connectors and accessories are coded with Fighting Vehicle (F.V.) service numbers.
To assist in the identification of F.V. numbers against AB part numbers the following cross reference is provided.
A complete FV/AB cross reference list is available on request.

F.V. SERVICE NO.	AB PART NO.	F.V. SERVICE NO.	AB PART NO.
FIXED CONNECTORS	SB-MS 3102E	FREE CONNECTORS	SB-MS 3106E
FV.585001 FV.585002	10SL.3P 10SL.4P	FV.585039 FV.585040	10SL.3S 10SL.4S
FV.585003 FV.585004 FV.585005 FV.585006 FV.585007 FV.585008 FV.585009 FV.585010 FV.585011 FV.585012	14S.2P 14S.2S 14S.5P 14S.5S 14S.7P 14S.7S 14S.9P 14S.9S 14S.4P 14S.4S	FV.585041 FV.585042 FV.585043 FV.585044 FV.585045 FV.585046 FV.585047 FV.585048 FV.585049 FV.585050	14S.2P 14S.2S 14S.5P 14S.5S 14S.7P 14S.7S 14S.9P 14S.9S 14S.4P 14S.4S
FV.585013 FV.585014	16S.1P 16S.1S	FV.585051 FV.585052	16S.1P 16S.1S
FV.585015 FV.585016 FV.585017 FV.585018	18.1P 18.1S 18.11P 18.11S	FV.585053 FV.585054 FV.585055 FV.585056	18.1P 18.1S 18.11P 18.11S
FV.585019 FV.585020 FV.585021 FV.585022 FV.585023 FV.585024 FV.585025 FV.585026	22.14P 22.14S 22.19P 22.19S 22.22P 22.22S 22.18P 22.18S	FV.585057 FV.585058 FV.585059 FV.585060 FV.585061 FV.585062 FV.585063 FV.585064	22.14P 22.14S 22.19P 22.19S 22.22P 22.22S 22.18P 22.18S
FV.585027 FV.585028	24.12P 24.12S	FV.585065 FV.585066	24.12P 24.12S
FV.585029 FV.585030 FV.585031 FV.585032 FV.585033 FV.585034 FV.585035 FV.585036	28.10P 28.10S 28.11P 28.11S 28.21P 28.21S 28.22P 28.22S	FV.585067 FV.585068 FV.585069 FV.585070 FV.585071 FV.585072 FV.585073 FV.585074	28.10P 28.10S 28.11P 28.11S 28.21P 28.21S 28.22P 28.22S
FV.585037 FV.585038	32.6P 32.6S	FV.585075 FV.585076	32.6P 32.6S

Global Presence



The world's demand for electronics is increasing as new technologies, with a higher dependence on complex components, are being adopted by a broader customer base. This growth provides TT electronics an assured future as we focus on efforts to deliver excellence in customer service and quality products to these markets. From our strong UK base, the company has achieved truly global reach. We have established technical and manufacturing facilities in strategic countries maintaining the successful formula of close liaison with our customers in all major overseas markets.

In addition, through strategic relationships with Original Equipment Manufacturers around the world, we are now in the enviable position where we gain double benefit - from growth in their markets and from the increase in the electronic content of end products.

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