



Modular Rectangular Connectors

- Up to 100 signal Ø 1.50mm contacts.
- Modularity mixed signal, power, coaxial contacts.
- Bilevel contact modules (BC, BGD).
- Clip and Cloc contact retaining system.
- Two half part plastic hood.
- Centered jackscrew extractor.
- >500 mating cycles.
- BC & BE only one size of hood.
- BFD & BGD up to five sizes of hood.
- In compliance with NF F61-030, NF F16-101, NF F16-102

Technical Characteristics

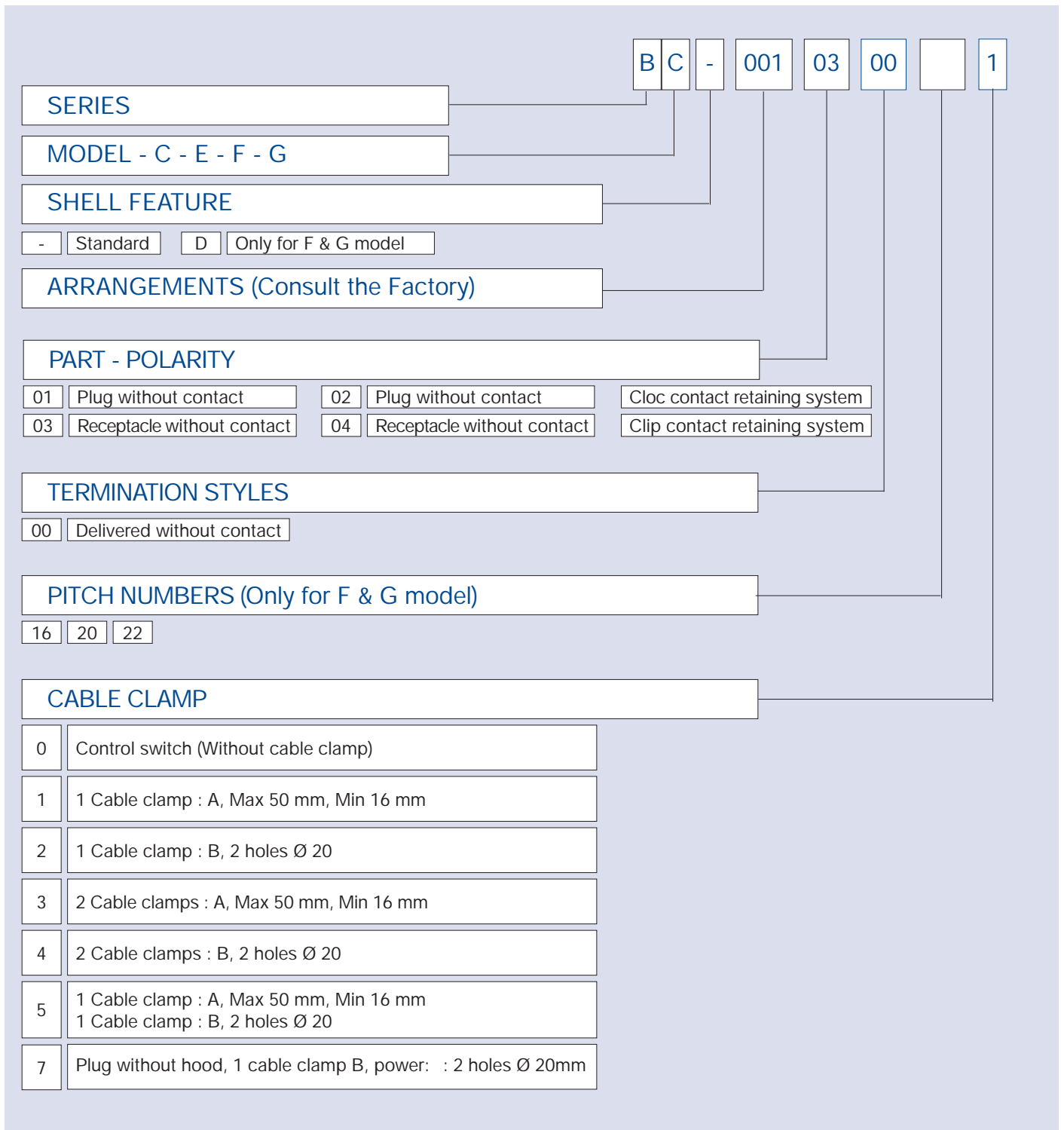
MATERIALS AND PLATINGS		ENVIRONMENTAL	
Shell	Soft Steel (Zn plated)	Temperature range	- 40 °C to 100 °C
Housing	Plug: Thermoplastic	Fire classification	Exigence 3 following NF F 16-102
Insulator	Thermoplastic	Salt spray test	96 hours
Pin & socket body	Brass, Au/Ni	Acid withstanding	Following NF F 61-030 par. 11.4.4
Socket wires	Copper alloy, Au/Ni		

ELECTRICAL CHARACTERISTICS												
BC & BGD						BE & BFD						
Contact Ø	1.50	Ø 2.00	Ø 3.00	Contact Ø	1.50	Ø 2.00	Ø 3.00	Contact Ø	1.50	Ø 2.00	Ø 3.00	
Creepage distance	8 mm	6.80 mm	17 mm	Creepage distance	1.85mm	2.25mm	4.05mm	Creepage distance	1.85mm	2.25mm	4.05mm	
Clearance distance	3.7 mm	5 mm	5.60 mm	Clearance distance	1.25mm	3.40mm	5.40mm	Clearance distance	1.25mm	3.40mm	5.40mm	
Working current	8 A	16 A	25 A	Working current	8A	16A	25A	Working current	8A	16A	25A	
Insulation resistance	§ 5.10 ³ Mv			Insulation resistance	§ 5.10 ³ Mv			Insulation resistance	§ 5.10 ³ Mv			
Contact resistance	# 2.50 mV	# 1.20 mV	# 0.70 mV	Contact resistance	# 2.50mV	# 1.00mV	# 0.80mV	Contact resistance	# 2.50mV	# 1.00mV	# 0.80mV	
Dielectric withstanding voltage	3000 Vrms	4000 Vrms	3900 Vrms	Dielectric withstanding voltage	1500Vrms	2000Vrms	3000Vrms	Dielectric withstanding voltage	1500Vrms	2000Vrms	3000Vrms	
Voltage rating	500 V			Voltage rating	110V	220V	220V	Voltage rating	110V	220V	220V	
Contact holding back in the module	70 N	90 N	110 N	Contact holding back in the module	40N	50N	70N	Contact holding back in the module	40N	50N	70N	
Maxi male contact mass	1.10 g	3.10 g	6.70 g	Maxi male contact mass	1.10g	2.90g	4.90g	Maxi male contact mass	1.10g	2.90g	4.90g	
Maxi female contact mass	0.70 g	2.50 g	5.00 g	Maxi female contact mass	0.70g	1.60g	2.70g	Maxi female contact mass	0.70g	1.60g	2.70g	
IF/SF* per contact pair (average value)	0.45 N	1.80 N	3.00 N	IF/SF* per contact pair (average value)	0.45N	1.80N	3.00N	IF/SF* per contact pair (average value)	0.45N	1.80N	3.00N	

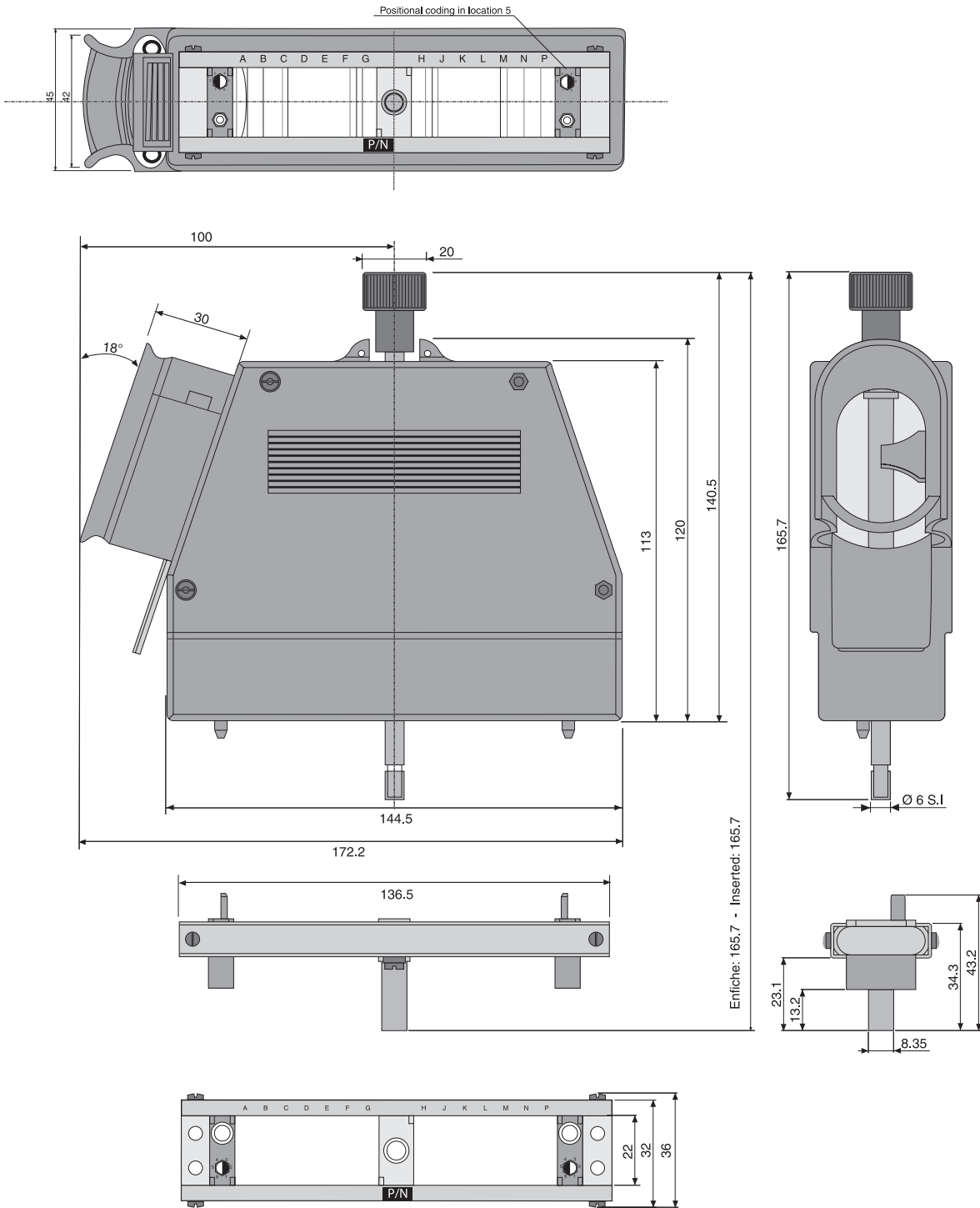
* IF/SF : Insertion and separation force

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Ordering Information

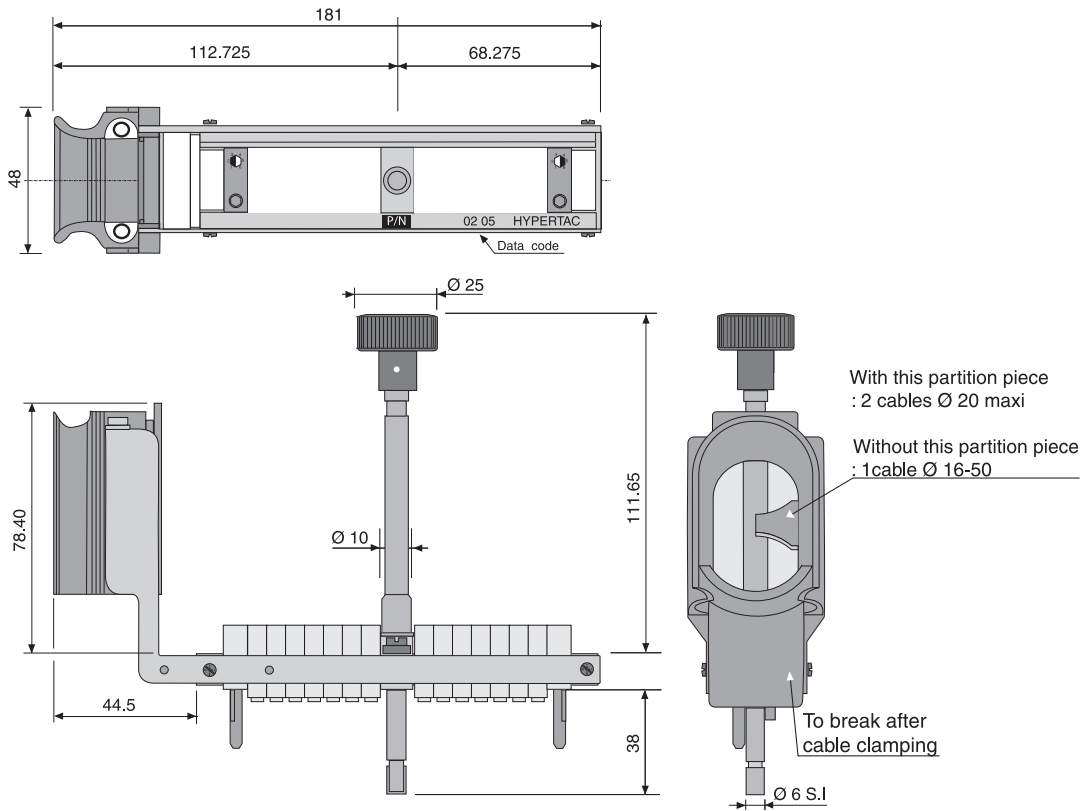


BC & BE - Plug & receptacle dimensions

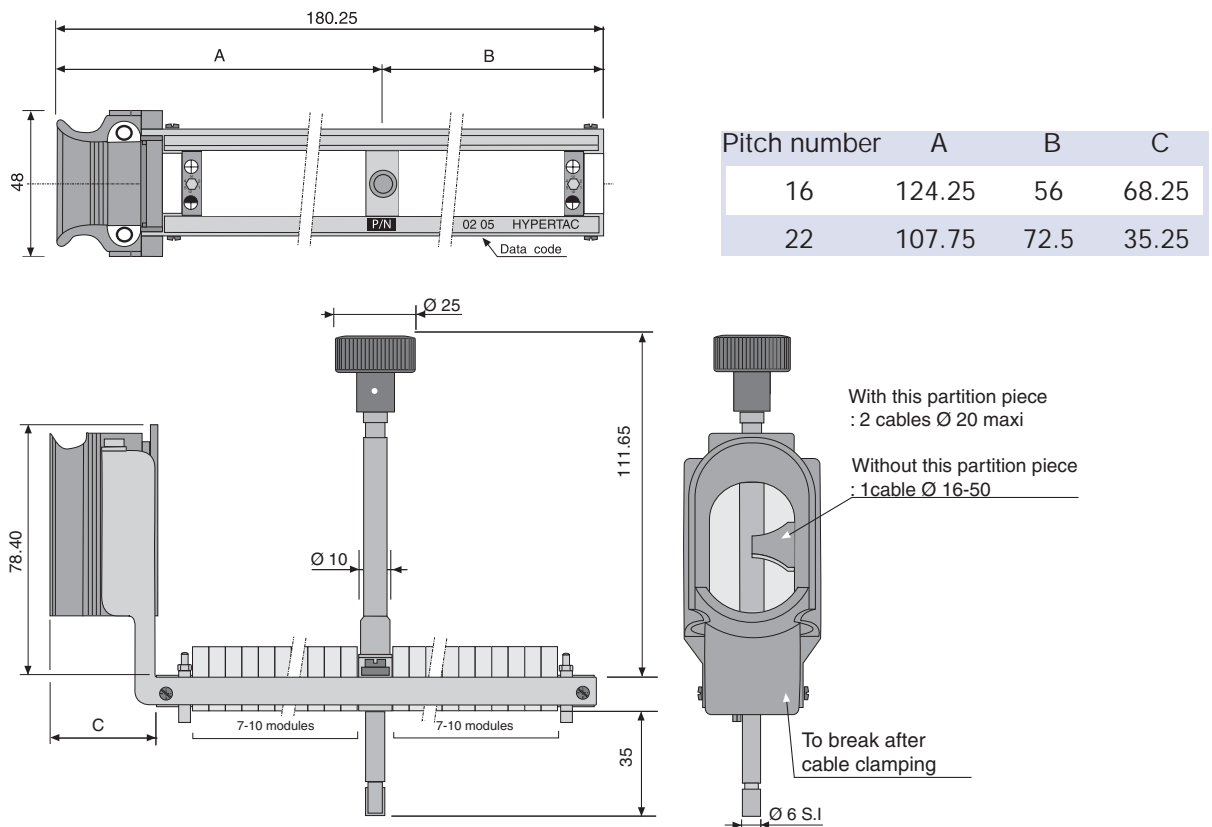


Dimensions are in mm

BC & BE - Plug without hood dimensions

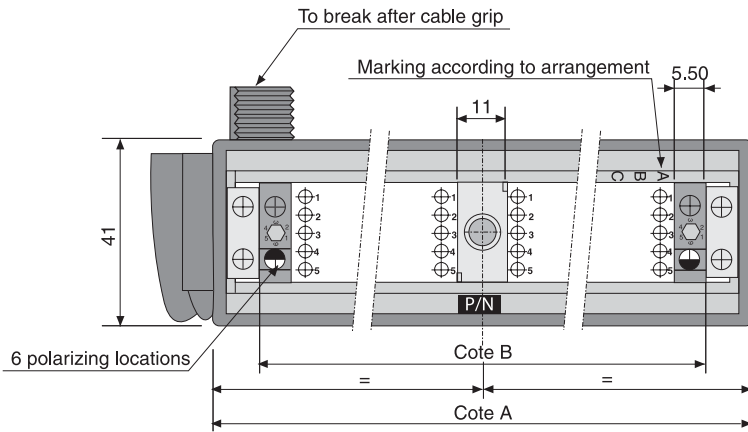


BFD - Plug without hood dimensions

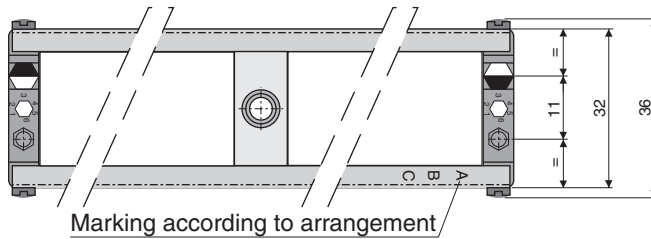
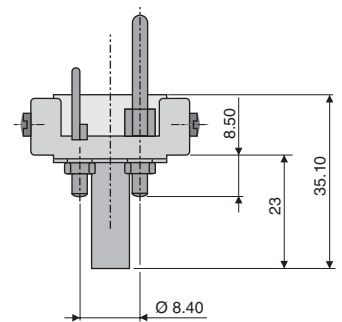
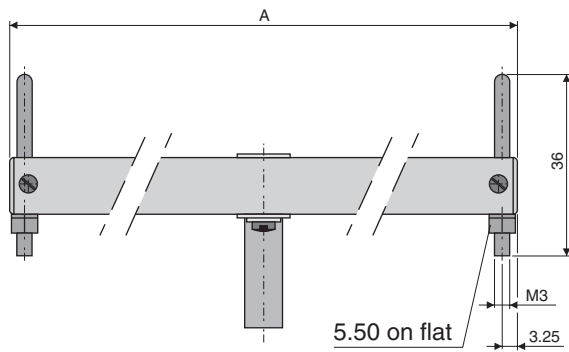
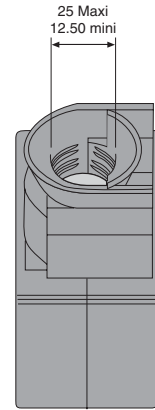
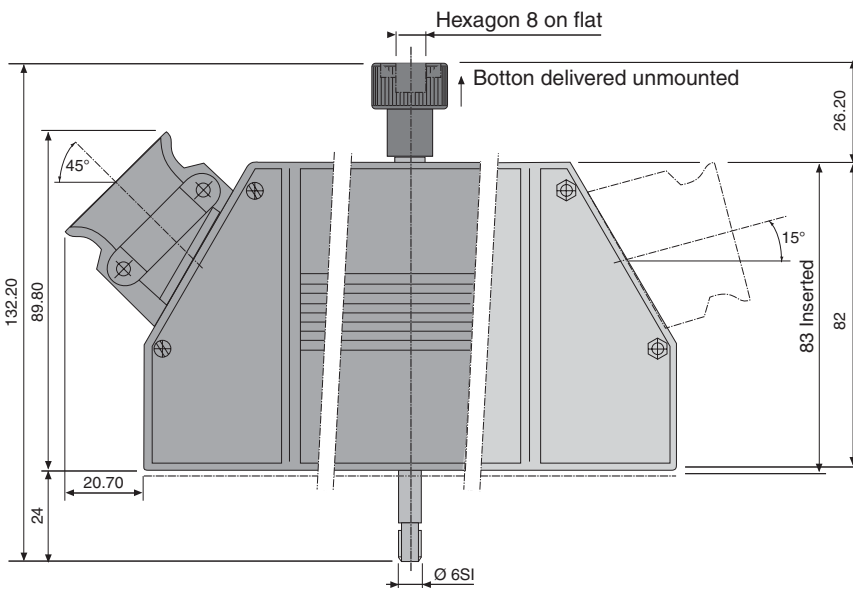


Dimensions are in mm

BF & BFD - Plug and receptacle dimensions



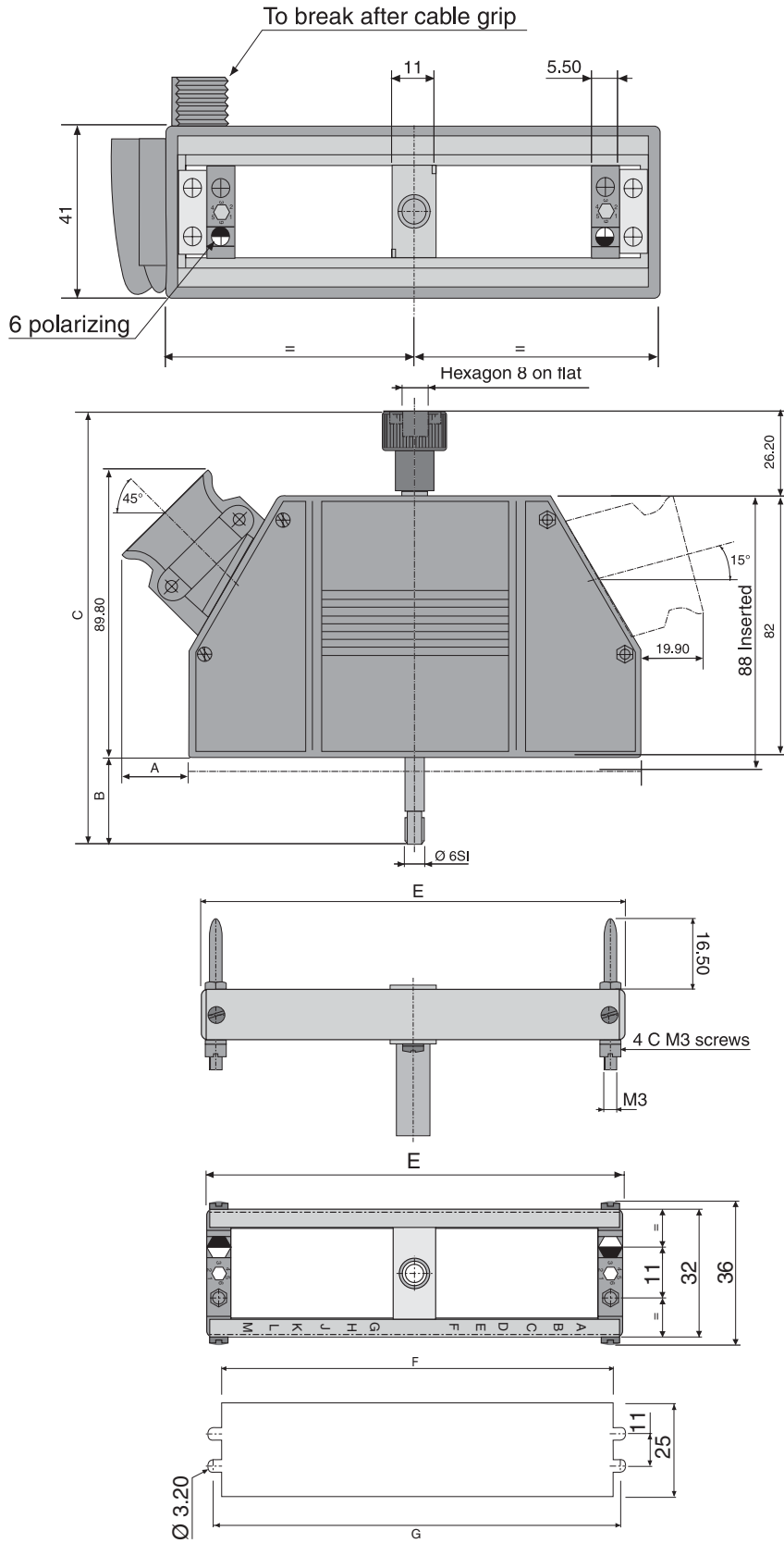
Pitch number	A	B
16	118.40	99
20	140.40	121
22	151.40	132



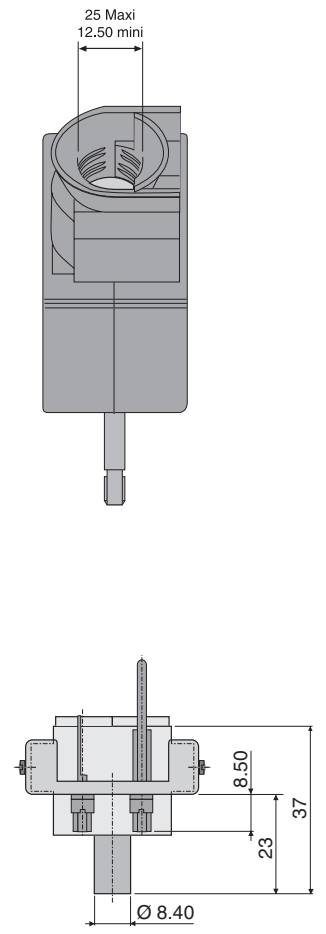
Pitch number	A
16	101
20	123
22	134

Dimensions are in mm

BG & BGD - Plug and receptacle dimensions



Cotes	Pitch nb	
	16	20
A	20.70	20.90
B	27.00	29.00
C	135.20	137.20
D	118.20	140.40
E	101.00	123.00
F	89.50	102.50 mini 111.50 Maxi
G	94.50	116.50



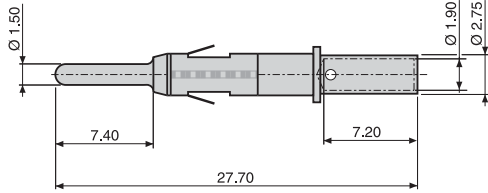
Dimensions are in mm

BG & BGD - Contacts

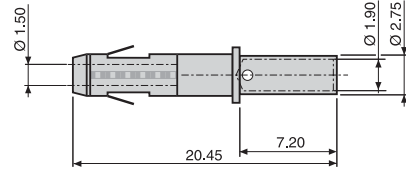
Males

Females

Contacts Ø 1.50 awg 20-18-16-14

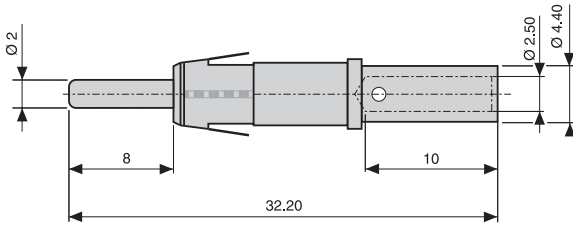


Ref: 0150901-20-ROG

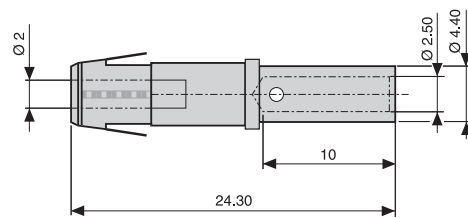


Ref: 0150902-20-RG0

Contacts Ø 2.00 awg 16-15-14-13

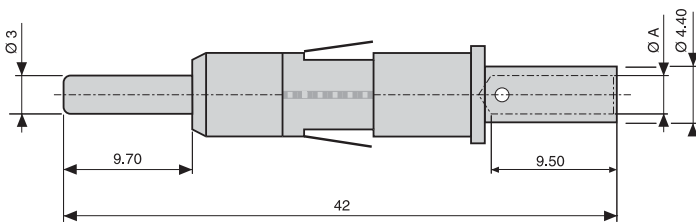


Ref: 0200731-20-ROG



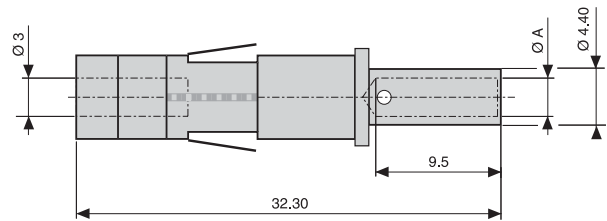
Ref: 0200422-20-RN1

Contacts Ø 3.00*



Ref: 0300341-20-ROG

Ref: 0300391-20-ROG



Ref: 0300172-20-RG1

Ref: 0300232-20-RG1

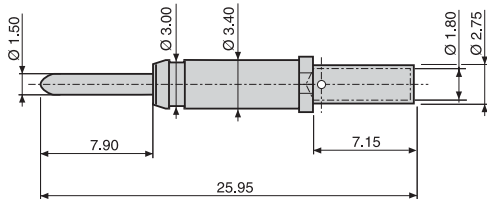
References P/N	Ø A	* AWG
Ø 3.00		
0300341-20-ROG 0300172-20-RG1	2.90	13-11
0300391-20-ROG 0300232-20-RG1	3.40	11-9

BE & BFD - Contacts

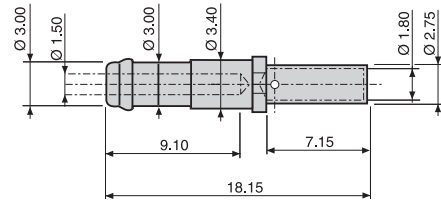
Males

Females

Contacts Ø 1.50 awg 22-20-18-16-14

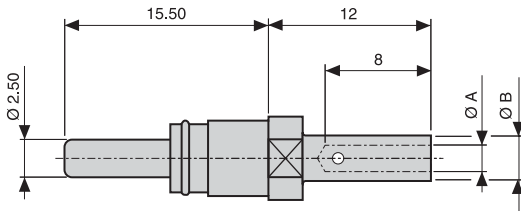


Ref: 0150 761-20-OG

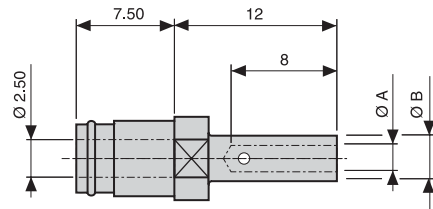


Ref: 0150 682-20-G1

Contacts Ø 2.50*

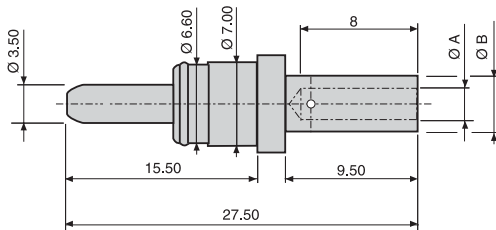


Ref: 0250 181-22-OG
Ref: 0250 201-23-OG

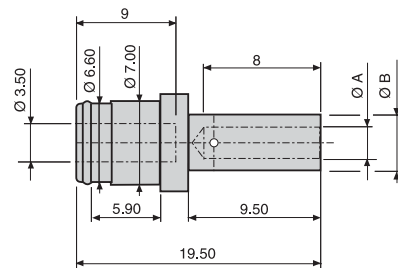


Ref: 0250 172-22-G1
Ref: 0250 202-23-G1

Contacts Ø 3.50*



Ref: 0350 111-24-OG
Ref: 0350 121-25-OG
Ref: 0350 131-26-OG



Ref: 0350 112-24-G1
Ref: 0350 122-25-G1
Ref: 0350 132-26-G1

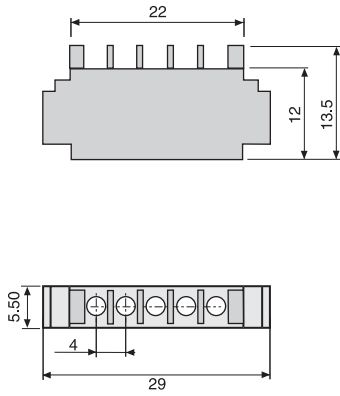
Reference P/N	Ø A	Ø B	* AWG
Ø 2.50			
0250 181-22-OG	1.95	3.10	16-14
0250 172-22-G1			
0250 201-23-OG	1.50	3.10	22-20-18-16
0250 202-23-G1			
Ø 3.50			
0350 111-24-OG	2.10	4.10	14-13
0350 112-24-G1			
0350 121-25-OG	1.95	3.10	16-14
0350 122-25-G1			
0350 131-26-OG	1.50	3.10	22-17
0350 132-26-G1			

Dimensions are in mm

BE & BFD - Modules

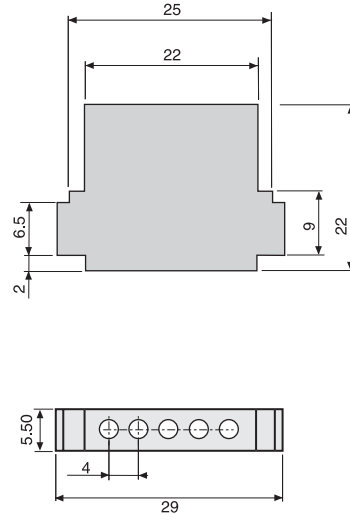
Modules 5 x Ø 1.50

L/RH



Ref: L-- 515 00 00 RHA

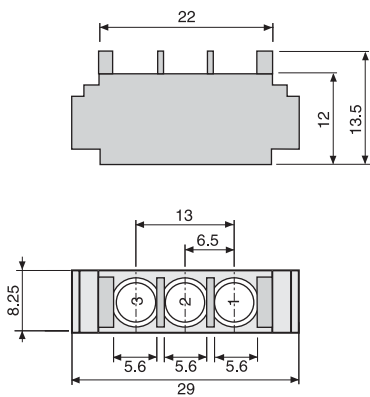
L/ZH



Ref: L -- 515 00 00 ZHA

Modules 3 x Ø 2.50

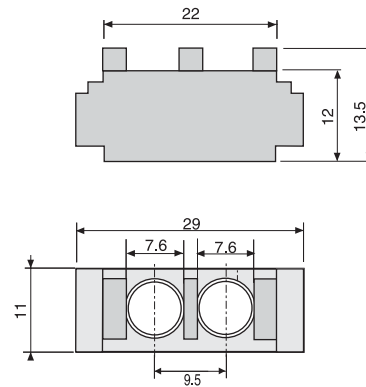
L & SH



Ref: L-- 325 00 00 SH

Modules 2 x Ø 3.50

L & UH



Ref: L-- 235 00 00 UH

BC, BG(D) - Crimping tools

Contact part number	Crimp tool	Gauje AWG	Wire cross section	Positioner	Tool turret	Selector position
0150 901-20-ROG 0150 902-20-ROG1	ASTRO TOOL MS3191/1	24	0.22	SS-015 00 00 002 HYPERTAC	Without	Without
		22	0.34			
		20	0.6			
		18	0.93			
		16	1.34			
		14	1.91			
	ASTRO TOOL TGV 101	24	0.22	Without	ASTRO TOOL TGV 201 red	2
		22	0.34			4
		20	0.6			4
		18	0.93			5
		16	1.34			6
		14	1.91			7
	DANIELS FT8	24	0.22	Without	DANIELS SH 462 red	2
		22	0.34			4
		20	0.6			4
		18	0.93			5
		16	1.34			6
		14	1.91			7
0200 422-20-ROG1 0200 731-20-ROG	ASTRO TOOL TGV 515	17	1		ASTRO TOOL TGV 501	2
		16	1.34			3
		15	1.5			3
		14	1.91			3
		14	2			3
		13	2.5			4
	DANIELS M317	17	1		DANIELS TP 909	2
		16	1.34			3
		15	1.5			3
		14	1.91			3
		14	2			3
		13	2.5			4
0300 17 2-20-ROG1 0300 34 1-20-ROG	ASTRO TOOL TGV 515	13	2.5		ASTRO TOOL TGV 502	
			4			
	DANIELS M317	13	2.5		DANIELS TP 911	4
			4			5
0300 232-20-ROG1 0300 391-20-ROG	ASTRO TOOL TGV 515	4 à to 6	4		ASTRO TOOL TGV 502	4
			5			5
	DANIELS M317	4 à to 6	4		DANIELS TP 911	4
			5			5

Extraction tools

Contact Ø	MALES		FEMALES	
	Part number	Part number	Part number	Extracting tool
1.50	015 090 1-20-ROG	015 090 2-20-ROG1	015 090 2-20-ROG1	SD-015 00 00 005
2	020 073 1-20-ROG	020 042 2-20-ROG1	020 042 2-20-ROG1	SD-020 00 00 001
3	030 034 1-20-ROG	030 017 2-20-ROG1	030 017 2-20-ROG1	SD-030 00 00 002
3	030 039 120-ROG	030 023 2-20-ROG1	030 023 2-20-ROG1	SD-030 00 00 002

BE, BF(D) - Crimping tools

Contact part number	Crimp tool	Gauge AWG	Wire cross section	Positioner	Tool turret	Selector position		
0150 682-20-G1 0150 761-20-OG	ASTRO TOOL TGV 101	24	0,22	SS.0150000002 HYPERTAC	ASTRO TOOL TGV 202 red	2		
		22	0,34			3		
		20	0,6			4		
		18	0,93			5		
		16	1,34			6		
	14	1,91	7					
	DANIELS FT8	24	0,22		DANIELS SH 463 red	2		
		22	0,34			3		
		20	0,6			4		
		18	0,93			5		
		16	1,34			6		
	14	1,91	7					
	ASTRO TOOL MS 3191/1	22	0,34		Without	2		
		20	0,6			3		
		18	0,93			4		
16		1,34	5					
14		1,91	6					
0250 181-22-OG 0250 172-22-G1	ASTRO TOOL TGV 101	16	1,34	Without	ASTRO TOOL TGV 202 blue	6		
		15	1,5			6		
		15	1,82			7		
		14	1,91			7		
		14	2			7		
	DANIELS FT8	16	1,34		DANIELS SH 463 blue	6		
		15	1,5			6		
		15	1,82			7		
		14	1,91			7		
		14	2			7		
0250 201-23-OG 0250 202-23-G1	ASTRO TOOL TGV 101	22	0,34	Without	ASTRO TOOL TGV 202 blue	5		
		20	0,6			6		
		18	0,93			6		
		18	1			6		
		16	1,34			6		
	DANIELS FT8	22	0,34		DANIELS SH 463 blue	5		
		20	0,6			6		
		18	0,93			6		
		18	1			6		
		16	1,34			6		
0350 121-24-OG 0350 122-24-G1	DANIELS M317	14	1,91	Sans Without	DANIELS TP 805	3		
		14	2			3		
		13	2,5			4		
	ASTRO TOOL TGV 515	15	1,5		ASTRO TOOL TGV 503	3		
		14	1,91			3		
		14	2			4		
0350 121-25-OG 0350 122-25-G1	DANIELS M317	16	1,34	Sans Without	DANIELS TP 805	2		
		15	1,5			2		
		14	1,91			3		
		14	2			3		
	ASTRO TOOL TGV 515	16	1,34		ASTRO TOOL TGV 503	2		
		15	1,5			2		
		14	1,91			3		
		14	2			3		
	0350 131-26-OG 0350 132-26-G1	DANIELS M317	22		0,38	Sans Without	DANIELS TP 805	1
			20		0,6			1
18			0,93	2				
18			1	2				
ASTRO TOOL TGV 515		22	0,38	ASTRO TOOL TGV 503	1			
		20	0,6		1			
		18	0,93		2			
		18	1		2			

Insertion and extractions tools

Contact Ø	MALES		FEMALES	
	Part number	Part number	Insertion tool	Extracting tool
1.50	0150 761-20-OG	0150 682-20-G1	S_059 ⁽¹⁾	S__ 072
			SM-0150000002 ⁽²⁾	
			SM-0150000003 ⁽³⁾	
			SM-0150000000 ⁽⁴⁾	
2.50	0250 181-22-OG	0250 172-22-G1	SE-0250000001	S__ 078
	0250 201-23-OG	0250 202-23-G1		
3.50	0350 111-24-OG	0350 112-24-G1	SE-0350000001	S__ 083 ⁽⁵⁾
	0350 121-25-OG	0350 122-25-G1		
	0350 131-26-OG	0350 132-26-G1		

(1) straight tool - (2) unwedge tool - (3) bent tool - (4) 3 tool kit - (5) tool for Ø 1.50, 2.50 et 3.50 contacts

Dimensions are in mm