

DIN 41618 CONNECTORS

◆ SPECIFICATIONS	Pag. 2
◆ WIRE SOLDER	Pag. 3
◆ PCB SOLDER	Pag. 4 - 5
◆ HIGH VOLTAGE PCB SOLDER	Pag. 6
◆ RIGHT ANGLE PCB	Pag. 7
◆ STRAIGHT PCB LAYOUT	Pag. 8
◆ RIGHT ANGLE PCB LAYOUT	Pag. 9

DIN 41622 CONNECTORS

◆ SPECIFICATIONS	Pag. 10
◆ WIRE SOLDER	Pag. 11
◆ PCB SOLDER	Pag. 12
◆ HIGH VOLTAGE PCB SOLDER	Pag. 13
◆ RIGHT ANGLE PCB	Pag. 14
◆ PCB SOLDER	Pag. 15
◆ STRAIGHT PCB LAYOUT	Pag. 16
◆ RIGHT ANGLE PCB LAYOUT	Pag. 17

ACCESSORIES FOR DIN 41618 – 41622 CONNECTORS

◆ PLASTIC HOODS	Pag. 18 – 19
◆ METALLIC HOODS	Pag. 20 – 21
◆ BASINS	Pag. 22
◆ ACCESSORIES FOR HOODS	Pag. 23
◆ PART NUMBER REFERENCE CHART	Pag. 24

CONNETTORI A COLTELLO

Dimensione dei contatti

Tipi: 10 – 16 – 20 – 26 - 39 contatti = 2,5 x 1 mm.

Tipi di contatto

Coltelli maschio: ottone MS 63

Molle femmina: ottone MS 67

Contro molle: in acciaio inox

Superfici di contatto a richiesta

Contatti Ag passivato: 5 μ Ag

Contatti Au duro: 0,3 μ oppure Flash

Materiali isolanti

Policarbonato rinforzato 30% F.V.

Resistenza di contatto

Argento: ≤ 5 m Ω

Oro: ≤ 8 m Ω

Resistenza di isolamento

Tipi di policarbonato $\leq 1 \times 10^6$ M Ω

Rigidità dielettrica

750V – 50 Hz

Tensione di esercizio

Per tutti i tipi secondo VDE 0110 classe A
250 V. valore efficace

Corrente di esercizio

Per tutti i tipi vedi grafico

Capacità di esercizio

Tra i contatti della stessa fila ≤ 2.0 pF

Tra i contatti file adiacenti ≤ 1.6 pF

Tra contatto e massa ≤ 2.7 pF

Temperatura di esercizio

Policarbonato: - 55° C + 125° C

Colori

Policarbonato: nero – grigio - naturale

Forza di inserzione ed estrazione

10 contatti ≤ 33 N

16 contatti ≤ 53 N

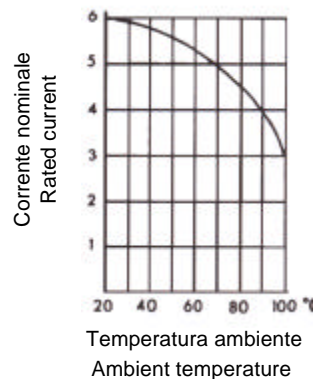
20 contatti ≤ 67 N

26 contatti ≤ 86 N

39 contatti ≤ 130 N

Numero cicli

1.000 cicli



KNIFE CONNECTORS

Contact dimension

10 – 16 – 20 – 26 – 39 poles = 2,5 x 1 mm
(0.0982 x 0,0393 inches)

Contact type

Male contacts Knife: brass MS 63

Female contacts spring: brass MS 67

Counter springs: stainless steel

Contact surface

Contact passivated Ag: 5 μ Ag

Contact hard Au: 0,3 μ or Flash

Insulation materials

Glass-filled polycarbonate 30%

Contact resistance

Silver: ≤ 5 m Ω

Gold: ≤ 8 m Ω

Insulation resistance

Polycarbonate execution $\leq 1 \times 10^6$ M Ω

Dielectric strength

750V – 50 Hz

Operating voltage

For all types as per VDE 0110 Class A

250V. effective voltage

Operating current

For all execution see graphic

Operating capacity

Between contacts in same row ≤ 2.0 pF

Between contacts in adjacent row ≤ 1.6 pF

Between contact and the panel ≤ 2.7 pF

Operating temperature

Polycarbonate execution: - 55° C + 125° C

Colours

Polycarbonate execution: black – grey – natural

Insertion and withdrawal force

10 contacts ≤ 33 N

16 contacts ≤ 53 N

20 contacts ≤ 67 N

26 contacts ≤ 86 N

39 contacts ≤ 130 N

Number of cycles

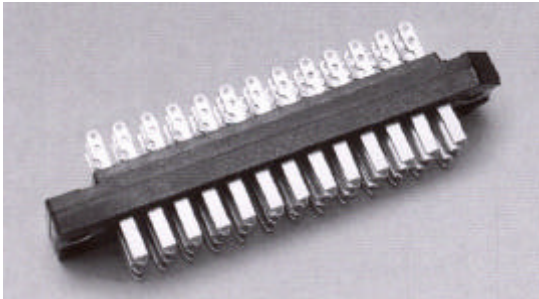
1.000 cycles

DIN 41618 CONNECTORS

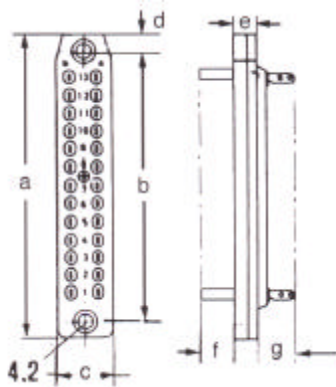
WIRE SOLDER – 2 rows



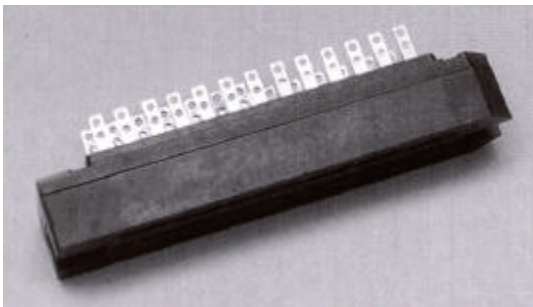
Plug with soldering lugs



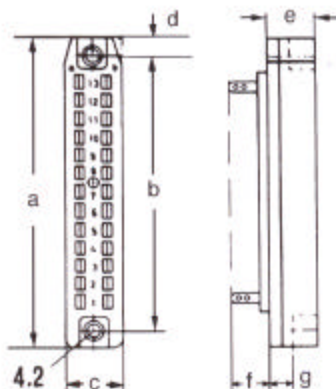
PINS	TOLERANCE $\pm 0,2$							PART NUMBER CONTACT STANDARD AG
	A	B	C	D	E	F	G	
10	47	38	15	4,5	6,5	8,5	10	D.470.101.000
16	59	50	15	4,5	6,5	8,5	10	D.470.103.000
20	71	62	15	4,5	6,5	8,5	10	D.470.104.000
26	83	74	15	4,5	6,5	8,5	10	D.470.106.000
39	83	74	20	4,5	6,5	8,5	10	D.470.108.000



Socket with soldering lugs



PINS	TOLERANCE $\pm 0,2$							PART NUMBER CONTACT STANDARD AG
	A	B	C	D	E	F	G	
10	47	38	15	4,5	12,5	9	6	D.470.301.000
16	59	50	15	4,5	12,5	9	6	D.470.303.000
20	71	62	15	4,5	12,5	9	6	D.470.304.000
26	83	74	15	4,5	12,5	9	6	D.470.306.000
39	83	74	20	4,5	12,5	9	6	D.470.308.000

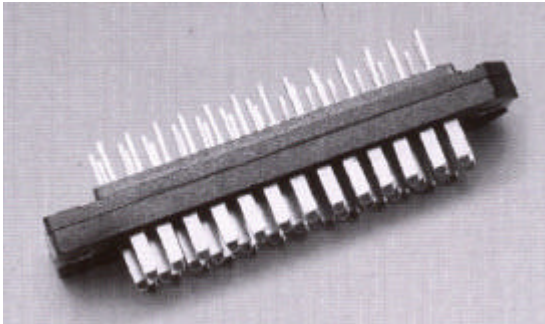


DIN 41618 CONNECTORS

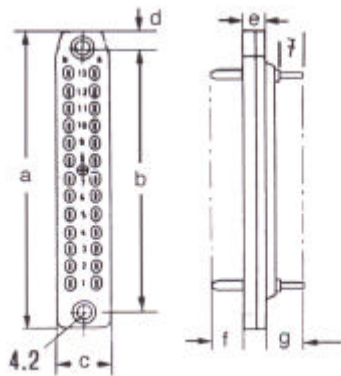
PCB SOLDER – 2 rows



Plug for PCB



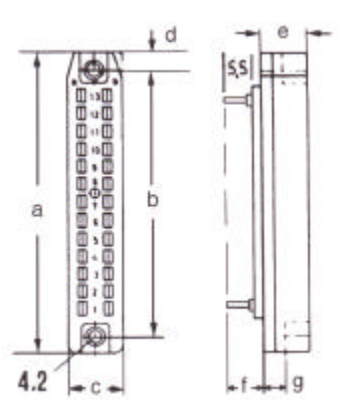
PINS	TOLERANCE $\pm 0,2$							PART NUMBER CONTACT STANDARD AG
	A	B	C	D	E	F	G	
10	47	38	15	4,5	6,5	8,5	7,2	D.470.101.100
16	59	50	15	4,5	6,5	8,5	7,2	D.470.103.100
20	71	62	15	4,5	6,5	8,5	7,2	D.470.104.100
26	83	74	15	4,5	6,5	8,5	7,2	D.470.106.100
39	83	74	15	4,5	6,5	8,5	7,2	D.470.108.100



Socket for PCB



PINS	TOLERANCE $\pm 0,2$							PART NUMBER CONTACT STANDARD AG
	A	B	C	D	E	F	G	
10	47	38	15	4,5	12,5	7	6	D.470.301.100
16	59	50	15	4,5	12,5	7	6	D.470.303.100
20	71	62	15	4,5	12,5	7	6	D.470.304.100
26	83	74	15	4,5	12,5	7	6	D.470.306.100
39	83	74	20	4,5	12,5	7	6	D.470.308.100

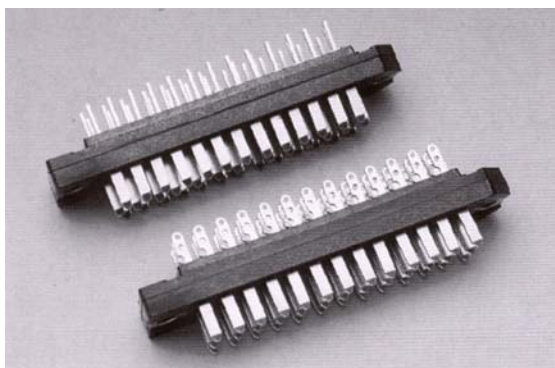


DIN 41618 CONNECTORS

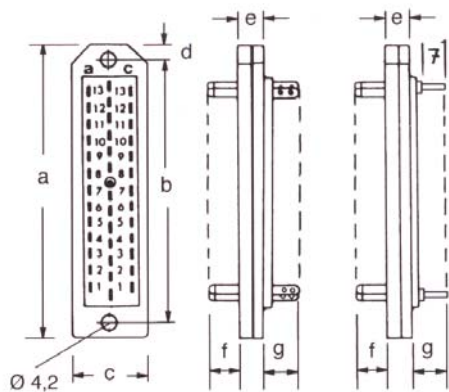
WIRE & PCB SOLDER 3 rows



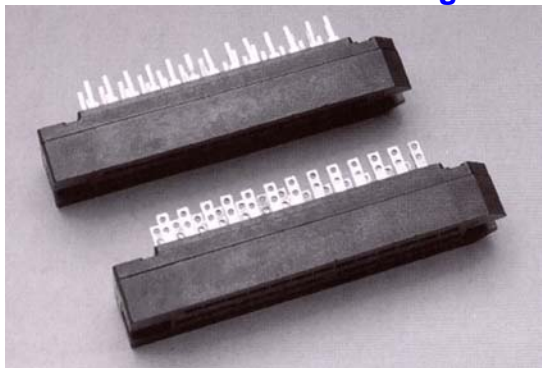
Plug for PCB and soldering circuit



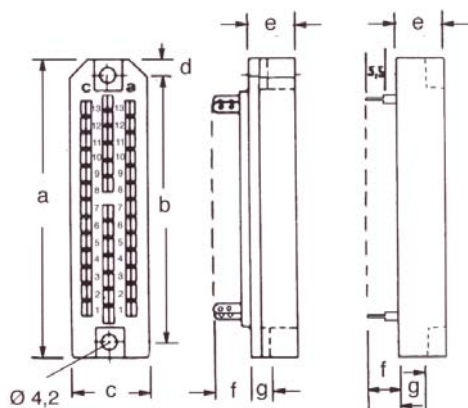
PINS	TOLERANCE $\pm 0,2$							PART NUMBER CONTACT STANDARD AG
	A	B	C	D	E	F	G	
39	83	74	20	4,5	6,5	8,5	10	D.470.108.010 SOLD.
39	83	74	20	4,5	6,5	8,5	10	D.470.108.110 PCB



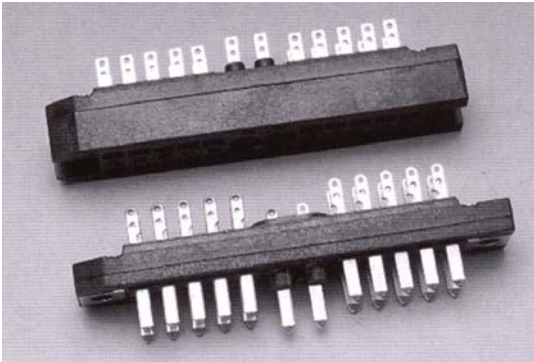
Socket for PCB and soldering circuit



PINS	TOLERANCE $\pm 0,2$							PART NUMBER CONTACT STANDARD AG
	A	B	C	D	E	F	G	
39	83	74	20	4,5	12,5	9	6	D.470.308.010 SOLD.
39	83	74	20	4,5	12,5	9	6	D.470.308.110 PCB



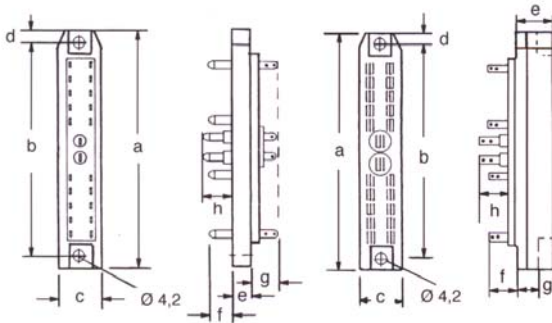
20 + 2 Pins high voltage PCB solder



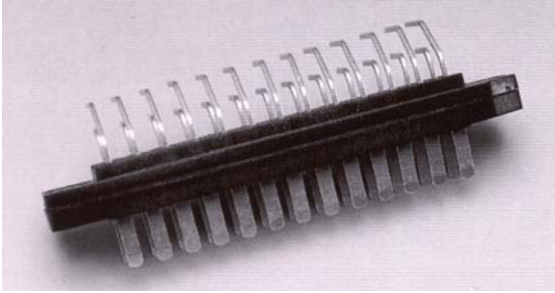
PINS	TOLERANCE $\pm 0,2$								PART NUMBER CONTACT STANDARD AG
	A	B	C	D	E	F	G	H	
22	83	74	15	4,5	6	8,5	10	11,5	D.470.105.200
22	83	74	15	4,5	12,5	9,5	6	12,5	D.470.305.200

Plug

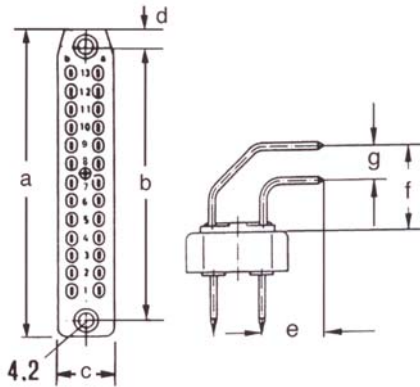
Socket



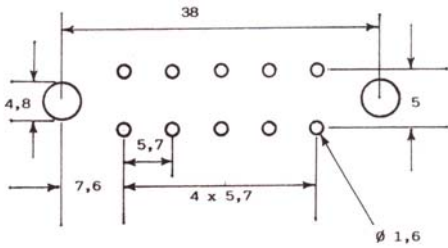
Plug right angle pcb



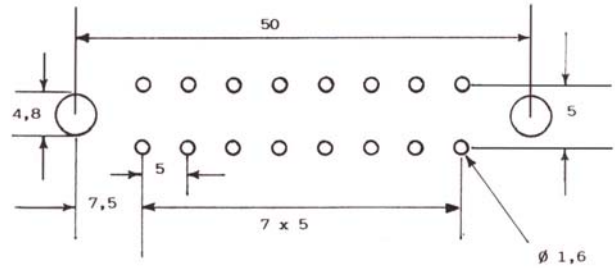
PINS	TOLERANCE $\pm 0,2$							PART NUMBER CONTACT STANDARD AG
	A	B	C	D	E	F	G	
10	47	38	15	4,5	9	12,5	5	D.470.201.100
16	59	50	15	4,5	9	12,5	5	D.470.203.100
20	71	62	15	4,5	9	12,5	5	D.470.204.100
26	83	74	15	4,5	9	12,5	5	D.470.206.100



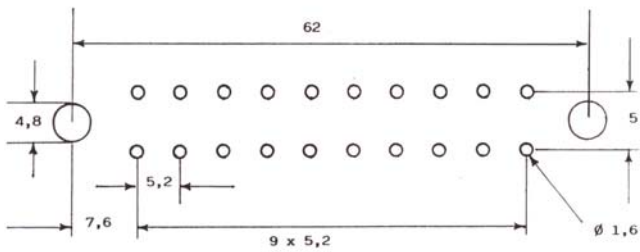
10 pins



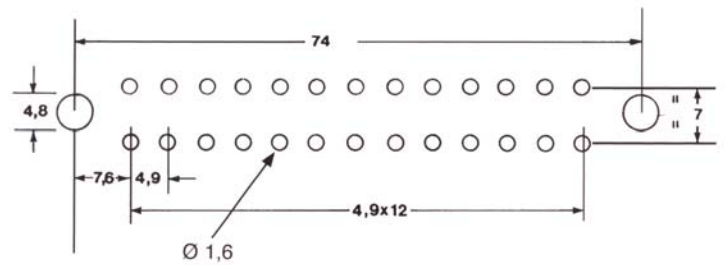
16 pins



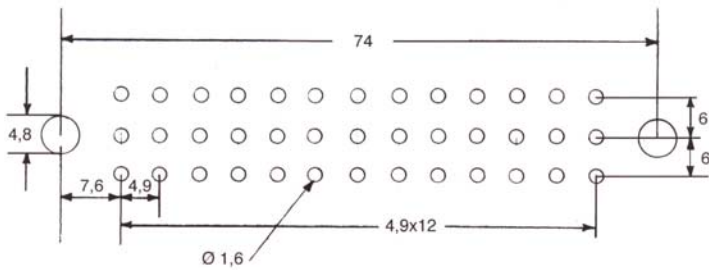
20 pins



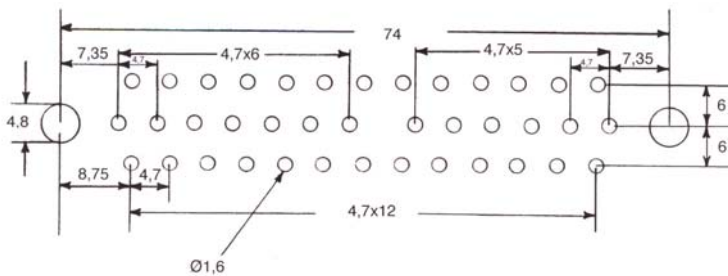
26 pins



39 pins



39 S pins



CONNETTORI A COLTELLO

Dimensione dei contatti

Tipi: 8 – 12 – 16- 20 – 30 – 60 contatti = 3 x 1 mm.

Tipi di contatto

Coltelli maschio: ottone MS 63

Molle femmina: ottone MS 67

Contro molle: in acciaio inox

Superfici di contatto

Contatti Ag passivato: 5 μ Ag

Contatti Au duro: 0,3 μ oppure Flash

Materiali isolanti

Policarbonato rinforzato 30% F.V.

Resistenza contatto

Argento: ≤ 5 m Ω

Oro: ≤ 8 m Ω

Resistenza di isolamento

Tipi di policarbonato $\leq 1 \times 10^6$ M Ω

Rigidità dielettrica

1050V – 50 Hz

Tensione di esercizio

Per tutti i tipi secondo VDE 0110 classe A
350 V. valore efficace

Corrente di esercizio

Per tutti i tipi vedi grafico

Capacità di esercizio

Tra i contatti della stessa fila ≤ 2.0 pF

Tra i contatti file adiacenti ≤ 1.6 pF

Tra contatto e massa ≤ 2.7 pF

Temperatura di esercizio

Policarbonato: - 55° C + 125° C

Colori

Policarbonato: nero – grigio - naturale

Forza di inserzione ed estrazione

8 contatti ≤ 25 N

12 contatti ≤ 40 N

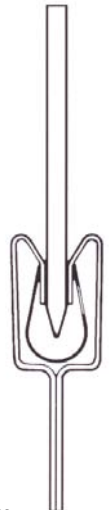
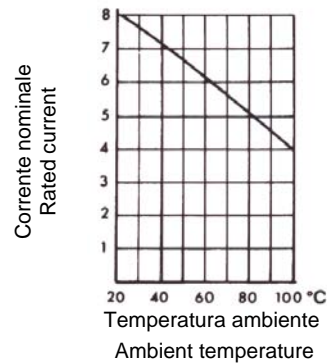
16 contatti ≤ 53 N

20 contatti ≤ 67 N

30 contatti ≤ 100 N

Numero cicli

1.000 cicli



KNIFE CONNECTORS

Contacts dimension

8 – 12 – 16 – 20 – 30 – 60 poles = 3 x 1 mm
(0.1179 x 0.0393 inches)

Contact type

Male contacts Knife: brass MS 63

Female contacts spring: brass MS 67

Counter springs: stainless steel

Contact surface

Contact passivated Ag: 5 μ Ag

Contact hard Au: 0,3 μ or Flash

Insulation materials

Glass-filled polycarbonate 30%

Contact resistance

Silver: ≤ 5 m Ω

Gold: ≤ 8 m Ω

Insulation resistance

Polycarbonate execution $\leq 1 \times 10^6$ M Ω

Dielectric strength

1050V – 50 Hz

Operating voltage

For all types as per VDE 0110 Class A
350V. effective voltage

Operating current

For all execution see graphic

Operating capacity

Between contacts in same row ≤ 2.0 pF

Between contacts in adjacent row ≤ 1.6 pF

Between contact and the panel ≤ 2.7 pF

Operating temperature

Polycarbonate execution: - 55° C + 125° C

Colours

Polycarbonate execution: black – grey - natural

Insertion and withdrawal force

8 contacts ≤ 25 N

12 contacts ≤ 40 N

16 contacts ≤ 53 N

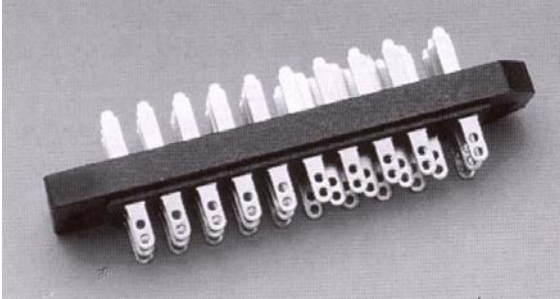
20 contacts ≤ 67 N

30 contacts ≤ 100 N

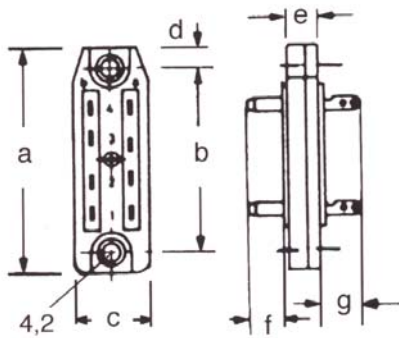
Number of cycles

1.000 cycles

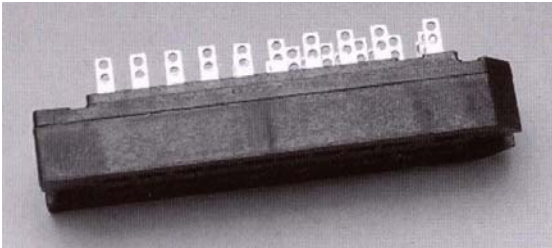
Plug with soldering lugs



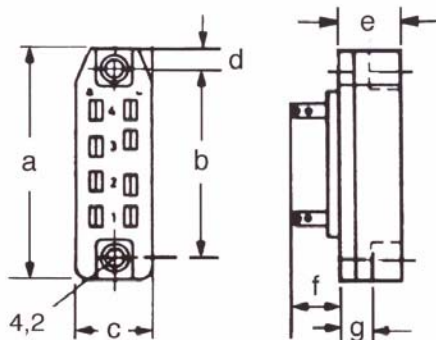
PINS	TOLERANCE $\pm 0,2$							PART NUMBER CONTACT STANDARD AG
	A	B	C	D	E	F	G	
8	47	38	15	4,5	6	8,5	9	D-470.500.000
12	59	50	15	4,5	6	8,5	9	D-470.502.000
16	71	62	15	4,5	6	8,5	9	D-470.503.000
20	83	74	15	4,5	6	8,5	9	D-470.504.000
30	83	74	20	4,5	6	8,5	9	D-470.507.000



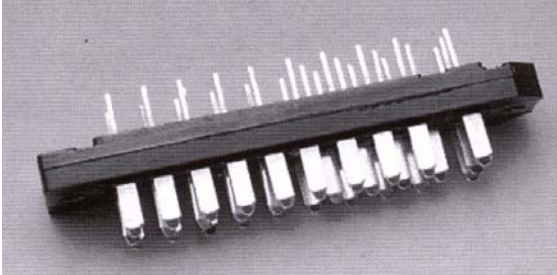
Socket with soldering lugs



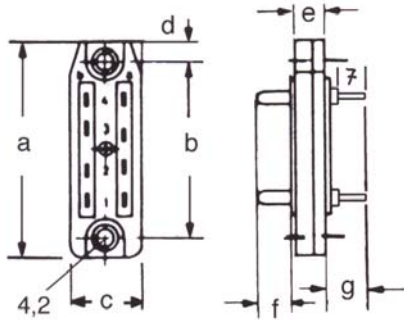
PINS	TOLERANCE $\pm 0,2$							PART NUMBER CONTACT STANDARD AG
	A	B	C	D	E	F	G	
8	47	38	15	4,5	12,5	9	6	D-470.700.000
12	59	50	15	4,5	12,5	9	6	D-470.702.000
16	71	62	15	4,5	12,5	9	6	D-470.703.000
20	83	74	15	4,5	12,5	9	6	D-470.704.000
30	83	74	20	4,5	12,5	9	6	D-470.707.000



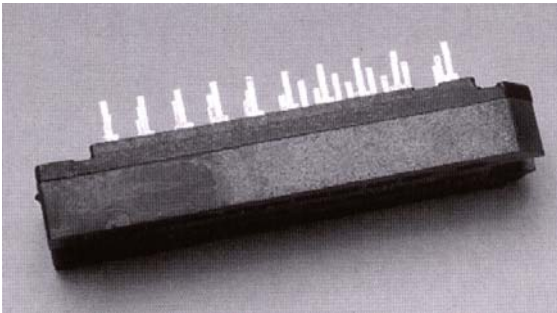
Plug for PCB



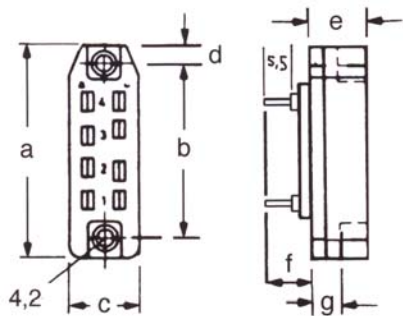
PINS	TOLERANCE $\pm 0,2$							PART NUMBER CONTACT STANDARD AG
	A	B	C	D	E	F	G	
8	47	38	15	4,5	6	9	8,5	D.470.500.100
12	59	50	15	4,5	6	9	8,5	D.470.502.100
16	71	62	15	4,5	6	9	8,5	D.470.503.100
20	83	74	15	4,5	6	9	8,5	D.470.504.100
30	83	74	20	4,5	6	9	8,5	D.470.507.100



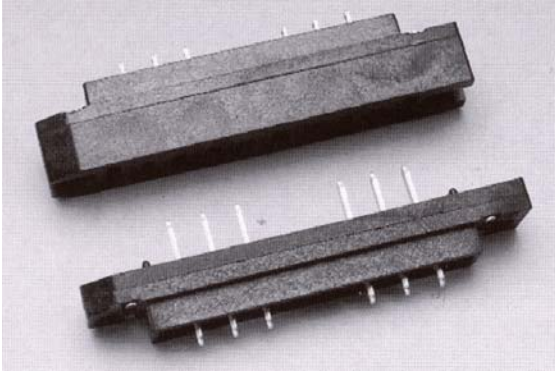
Socket for PCB



PINS	TOLERANCE $\pm 0,2$							PART NUMBER CONTACT STANDARD AG
	A	B	C	D	E	F	G	
8	47	38	15	4,5	12,5	9,5	6	D.470.700.100
12	59	50	15	4,5	12,5	9,5	6	D.470.702.100
16	71	62	15	4,5	12,5	9,5	6	D.470.703.100
20	83	74	15	4,5	12,5	9,5	6	D.470.704.100
30	83	74	20	4,5	12,5	9,5	6	D.470.707.100



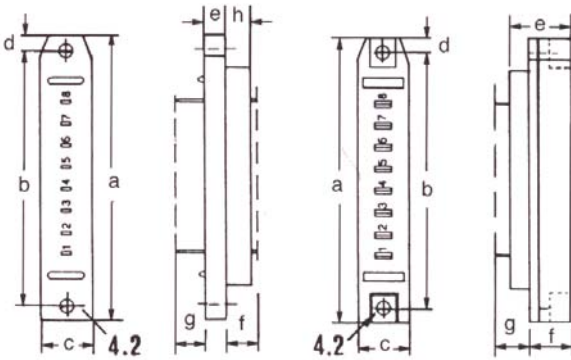
8 Pins high voltage PCB solder



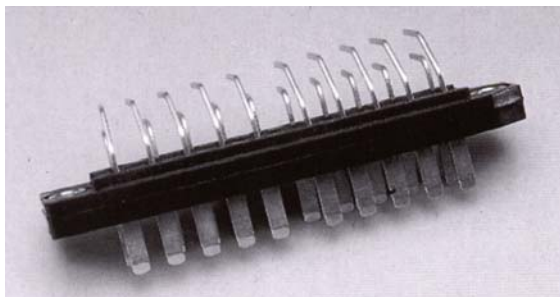
PINS	TOLERANCE $\pm 0,2$								PART NUMBER CONTACT STANDARD AG
	A	B	C	D	E	F	G	H	
8	83	74	15	4,5	6	9	9,5	5,5	D.470.500.200
8	83	74	15	4,5	18	12,5	9,5	-	D.470.700.200

Plug

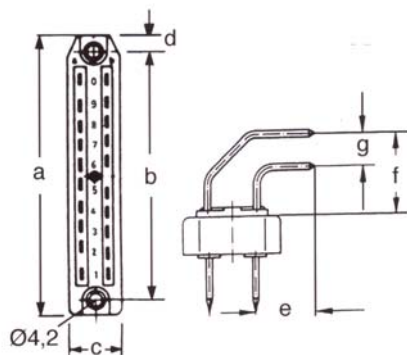
Socket



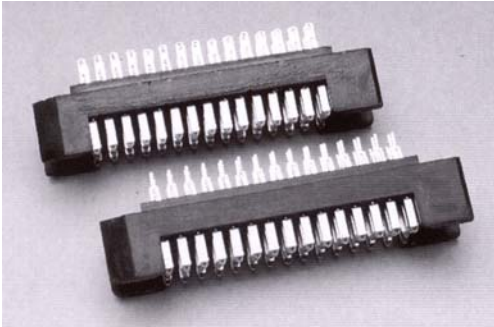
Plug right angle



PINS	TOLERANCE $\pm 0,2$							PART NUMBER CONTACT STANDARD AG
	A	B	C	D	E	F	G	
8	47	38	15	4,5	9	12,5	5	D.470.600.100
12	59	50	15	4,5	9	12,5	5	D.470.602.100
16	71	62	15	4,5	9	12,5	5	D.470.603.100
20	83	74	15	4,5	9	12,5	5	D.470.604.100



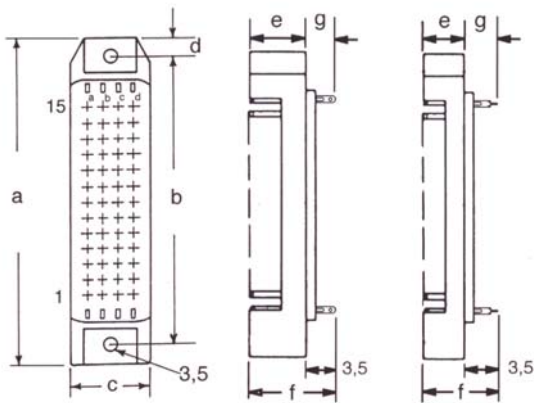
Plug 60 pins



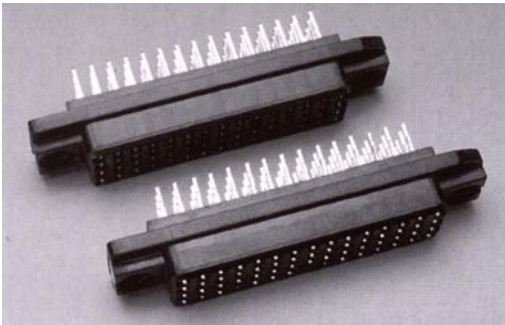
PINS	TOLERANCE $\pm 0,2$							PART NUMBER CONTACT STANDARD AG
	A	B	C	D	E	F	G	
60	83	74	20	4,5	15	24	10	D.470.509.000
60	83	74	20	4,5	15	24	10	D.470.509.100

Soldering

PCB



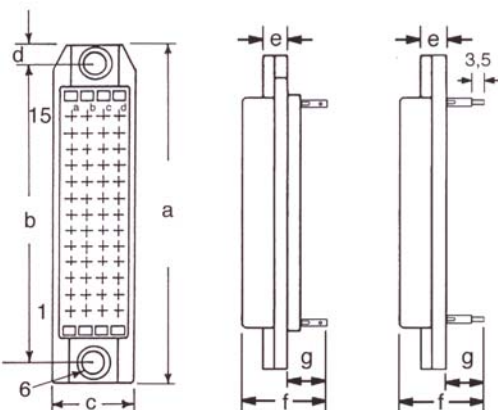
Socket 60 pins



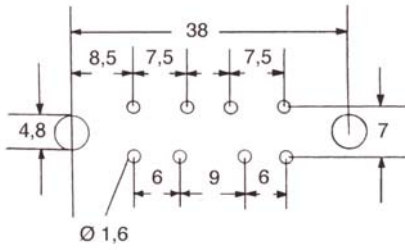
PINS	TOLERANCE $\pm 0,2$							PART NUMBER CONTACT STANDARD AG
	A	B	C	D	E	F	G	
60	83	74	20	4,5	6,5	23	11	D.470.709.000
60	83	74	20	4,5	6,5	23	11	D.470.709.100

Soldering

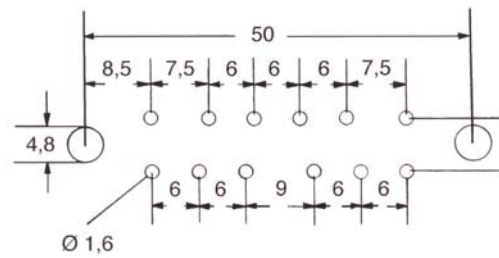
PCB



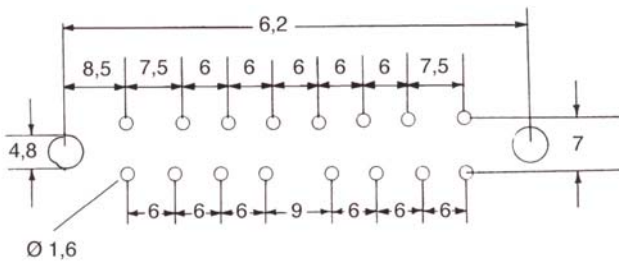
8 pins



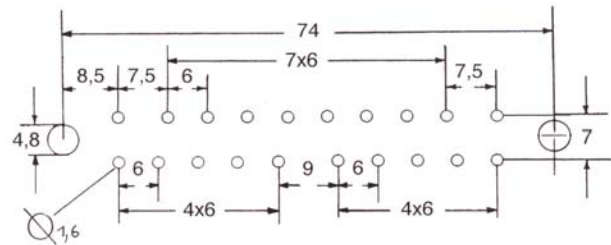
12 pins



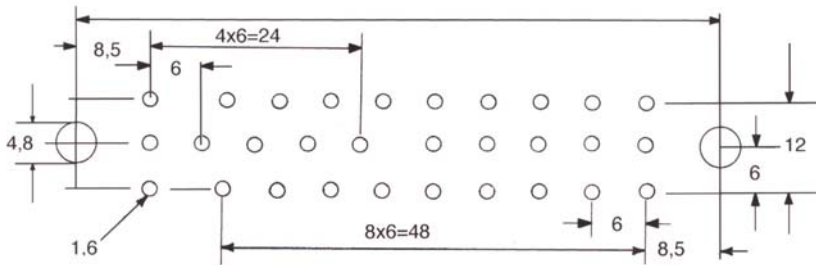
16 pins



20 pins



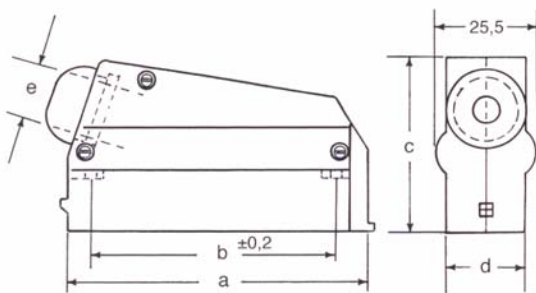
30 pins



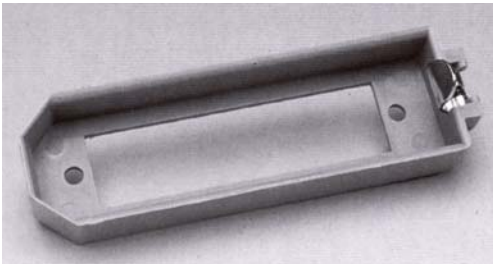
Plastic hood with hook



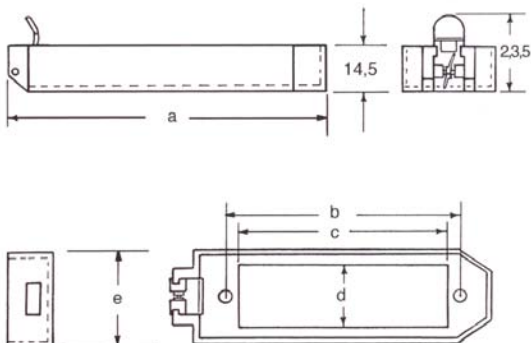
PINS		TOLERANCE $\pm 0,2$					PART NUMBER
DIN 41618	DIN 41622	A	B	C	D	E	CONTACT STANDARD AG
10	8	54	38	45	20	9	D.470.931.700
16	12	66	50	45	20	9	D.470.932.700
20	16	78	62	48	20	12	D.470.933.700
26	20	90	74	48	20	12	D.470.934.700
39	30	90	74	53	25	17	D.470.935.700



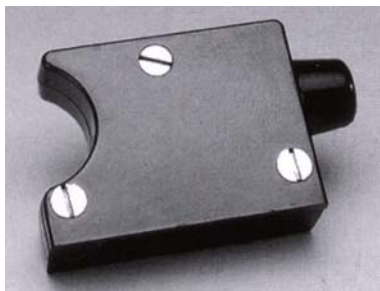
Plastic small basins with hook



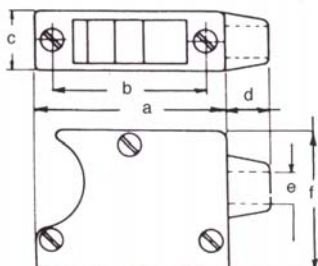
PINS		TOLERANCE $\pm 0,2$					PART NUMBER
DIN 41618	DIN 41622	A	B	C	D	E	CONTACT STANDARD AG
10	8	64	38	30,5	12	25	D.470.931.100
16	12	76	50	42,2	12	25	D.470.932.100
20	16	88	62	54	12	25	D.470.933.100
26	20	100	74	65,5	12	25	D.470.934.100
39	30	100	74	65,5	20	30	D.470.935.100



Plastic hood without hook



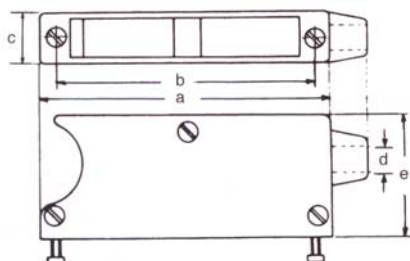
PINS		TOLERANCE $\pm 0,2$						PART NUMBER
DIN 41618	DIN 41622	A	B	C	D	E	F	CONTACT STANDARD AG
10	8	47	38	15	10	8	35	D.470.931.400



Plastic hood without hook



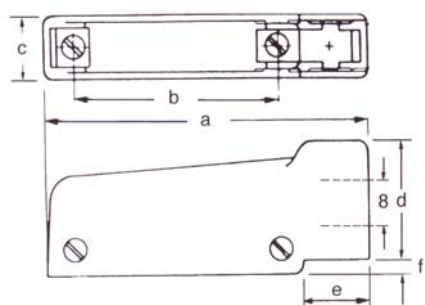
PINS		TOLERANCE $\pm 0,2$					PART NUMBER
DIN 41618	DIN 41622	A	B	C	D	E	CONTACT STANDARD AG
26	20	83,5	74	16	9	35	D.470.934.400
39	30	83,5	74	20	12	36	D.470.935.400



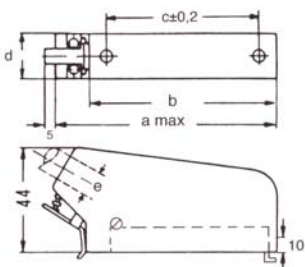
Plastic hood without hook



PINS		TOLERANCE $\pm 0,2$						PART NUMBER
DIN 41618	DIN 41622	A	B	C	D	E	F	CONTACT STANDARD AG
16	12	80	50	16	29	17	3	D.470.932.401
20	16	90	62	16	29	16,5	3	D.470.933.401

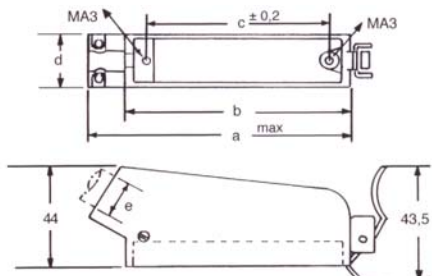


Metal hood with hook



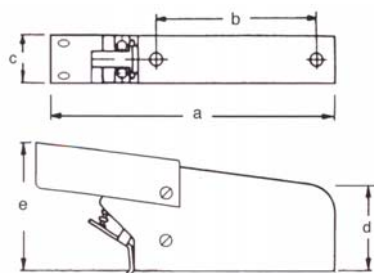
PINS		TOLERANCE $\pm 0,2$					PART NUMBER CONTACT STANDARD AG
DIN 41618	DIN 41622	A	B	C	D	E	
10	8	70	54	38	18,5	10	D.470.931.900
16	12	79,5	66	50	18,5	10	D.470.932.900
20	16	93	79	62	18,5	10	D.470.933.900
26	20	104	90,5	74	18,5	10	D.470.934.900
39	30	104	90,5	74	23	14	D.470.935.900

Metal hood with anterior hook



PINS		TOLERANCE $\pm 0,2$					PART NUMBER CONTACT STANDARD AG
DIN 41618	DIN 41622	A	B	C	D	E	
10	8	70	54	38	18,5	10	D.470.931.901
20	16	93	79	62	18,5	10	D.470.933.901

Metal hood with cable-holder extension

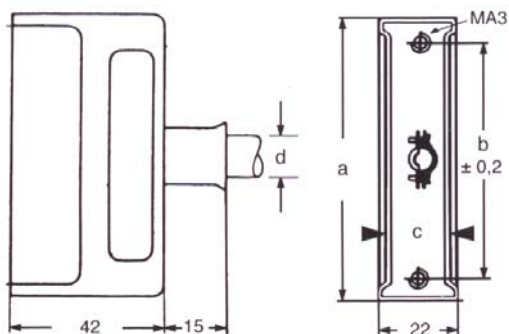


PINS		TOLERANCE $\pm 0,2$					PART NUMBER CONTACT STANDARD AG
DIN 41618	DIN 41622	A	B	C	D	E	
39	30	129,2	74	26	34,5	45	D.470.935.902

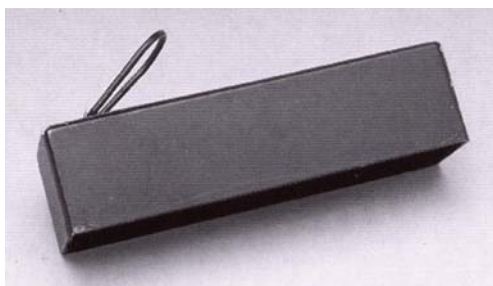
Metal hood without hook



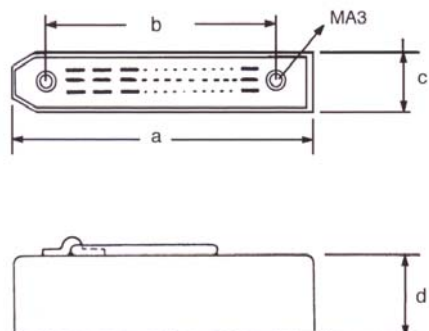
PINS		TOLERANCE $\pm 0,2$				PART NUMBER CONTACT STANDARD AG
DIN 41618	DIN 41622	A	B	C	D	
16	12	62	50	15,5	12	D.470.932.301
20	16	74	62	15,5	12	D.470.933.301
26	20	88	74	18,5	12	D.470.934.301
39	30	88	74	20	15	D.470.935.301



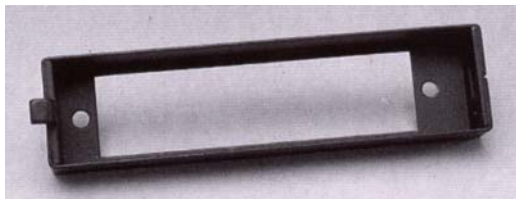
Metal hood with ring



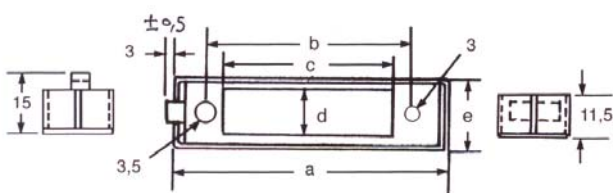
PINS		TOLERANCE $\pm 0,2$				PART NUMBER CONTACT STANDARD AG
DIN 41618	DIN 41622	A	B	C	D	
16	12	63	50	17	23	D.470.932.302
26	20	87	74	17	23	D.470.933.302
39	30	87	74	22	23	D.470.934.302



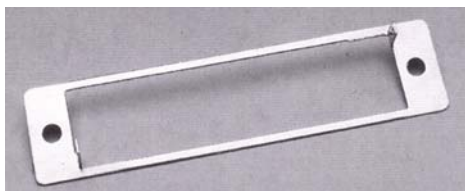
Metal small basins with hook



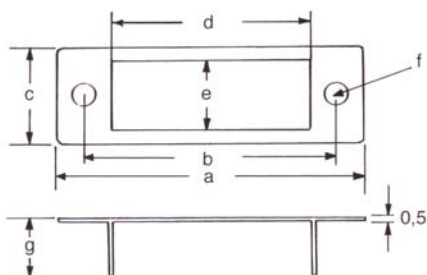
PINS		TOLERANCE $\pm 0,2$					PART NUMBER CONTACT STANDARD AG
DIN 41618	DIN 41622	A	B	C	D	E	
10	8	55	38	31	12	18	D.470.931.300
16	12	68	50	43	12	18	D.470.932.300
20	16	80	62	55	12	18	D.470.933.300
26	20	91,5	74	67	12	18	D.470.934.300
39	30	91,5	74	67	17	23	D.470.935.300



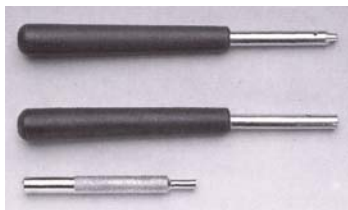
Ground-plate



PINS		TOLERANCE $\pm 0,2$							PART NUMBER CONTACT STANDARD AG
DIN 41618	DIN 41622	A	B	C	D	E	F	G	
10	8	46	38	15	30	11	3,5	8,8	D.470.981.000
16	12	59	50	15	42	11	3,5	8,8	D.470.982.000
20	16	71	62	15	54	11	3,5	8,8	D.470.983.000
26	20	83	74	15	66	11	3,5	8,8	D.470.984.000
39	30	83	74	20	66	16,5	3,5	8,8	D.470.985.000



Hood fixtures



For bush

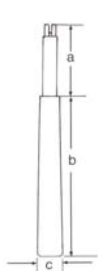
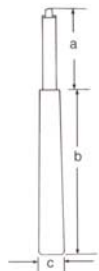
P/N 470.990.001

For pin

P/N 470.990.002

For cable-clamping

P/N 470.990.003



TOLERANCE $\pm 0,2$				PART NUMBER CONTACT STANDARD AG
A	B	C	D	
48	100	15		D.470.990.001
45	100	15		D.470.990.002
80	4,5	11	8	D.470.990.003

Hood attachments

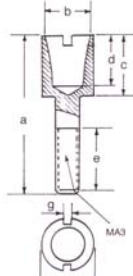
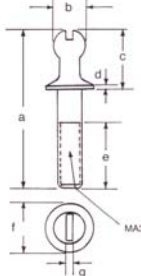


Pin

P/N 470.980.001

Bush

P/N 470.980.002



TOLERANCE $\pm 0,2$							PART NUMBER CONTACT STANDARD AG
A	B	C	D	E	F	G	
19,5	3,8	7,3	0,75	7,5	6	1	D.470.980.001
19,5	5,5	7,5	6,4	7,5	6,5	1	D.470.980.002

Hood attachments

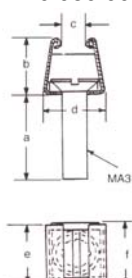
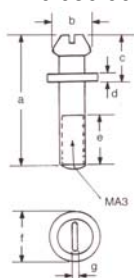


Pin

P/N 470.980.003

Fastener with spring

P/N 470.980.004



TOLERANCE $\pm 0,2$							PART NUMBER CONTACT STANDARD AG
A	B	C	D	E	F	G	
16	4,6	6,5	1	6,5	6	0,8	D.470.980.003
9	6,5	3,5	7,2	7	7,8		D.470.980.004

DIN CONNECTORS

PART NUMBER – PAGE REFERENCE CHART



PART NUMBER	PAGE	PART NUMBER	PAGE	PART NUMBER	PAGE	PART NUMBER	PAGE
D.470.101.000	3	D.470.308.010	5	D.470.704.000	11	D.470.934.100	18
D.470.101.100	4	D.470.308.100	4	D.470.704.100	12	D.470.934.300	22
D.470.103.000	3	D.470.308.110	5	D.470.707.000	11	D.470.934.301	21
D.470.103.100	4	D.470.500.000	11	D.470.707.100	12	D.470.934.302	21
D.470.104.000	3	D.470.500.100	12	D.470.709.000	15	D.470.934.400	19
D.470.104.100	4	D.470.500.200	13	D.470.709.100	15	D.470.934.700	18
D.470.105.200	6	D.470.502.000	11	D.470.931.100	18	D.470.934.900	20
D.470.106.000	3	D.470.502.100	12	D.470.931.300	22	D.470.935.100	18
D.470.106.100	4	D.470.503.000	11	D.470.931.400	19	D.470.935.300	22
D.470.108.000	3	D.470.503.100	12	D.470.931.700	18	D.470.935.301	21
D.470.108.010	5	D.470.504.000	11	D.470.931.900	20	D.470.935.400	19
D.470.108.100	4	D.470.504.100	12	D.470.931.901	20	D.470.935.700	18
D.470.108.110	5	D.470.507.000	11	D.470.932.100	18	D.470.935.900	20
D.470.201.100	7	D.470.507.100	12	D.470.932.300	22	D.470.935.902	20
D.470.203.100	7	D.470.509.000	15	D.470.932.301	21	D.470.980.001	23
D.470.204.100	7	D.470.509.100	15	D.470.932.302	21	D.470.980.002	23
D.470.206.100	7	D.470.600.100	14	D.470.932.401	19	D.470.980.003	23
D.470.301.000	3	D.470.602.100	14	D.470.932.700	18	D.470.980.004	23
D.470.301.100	4	D.470.603.100	14	D.470.932.900	20	D.470.981.000	22
D.470.303.000	3	D.470.604.100	14	D.470.933.100	18	D.470.982.000	22
D.470.303.100	4	D.470.700.000	11	D.470.933.300	22	D.470.983.000	22
D.470.304.000	3	D.470.700.100	12	D.470.933.301	21	D.470.984.000	22
D.470.304.100	4	D.470.700.200	13	D.470.933.302	21	D.470.985.000	22
D.470.305.200	6	D.470.702.000	11	D.470.933.401	19	D.470.990.001	23
D.470.306.000	3	D.470.702.100	12	D.470.933.700	18	D.470.990.002	23
D.470.306.100	4	D.470.703.000	11	D.470.933.900	20	D.470.990.003	23
D.470.308.000	3	D.470.703.100	12	D.470.933.901	20		