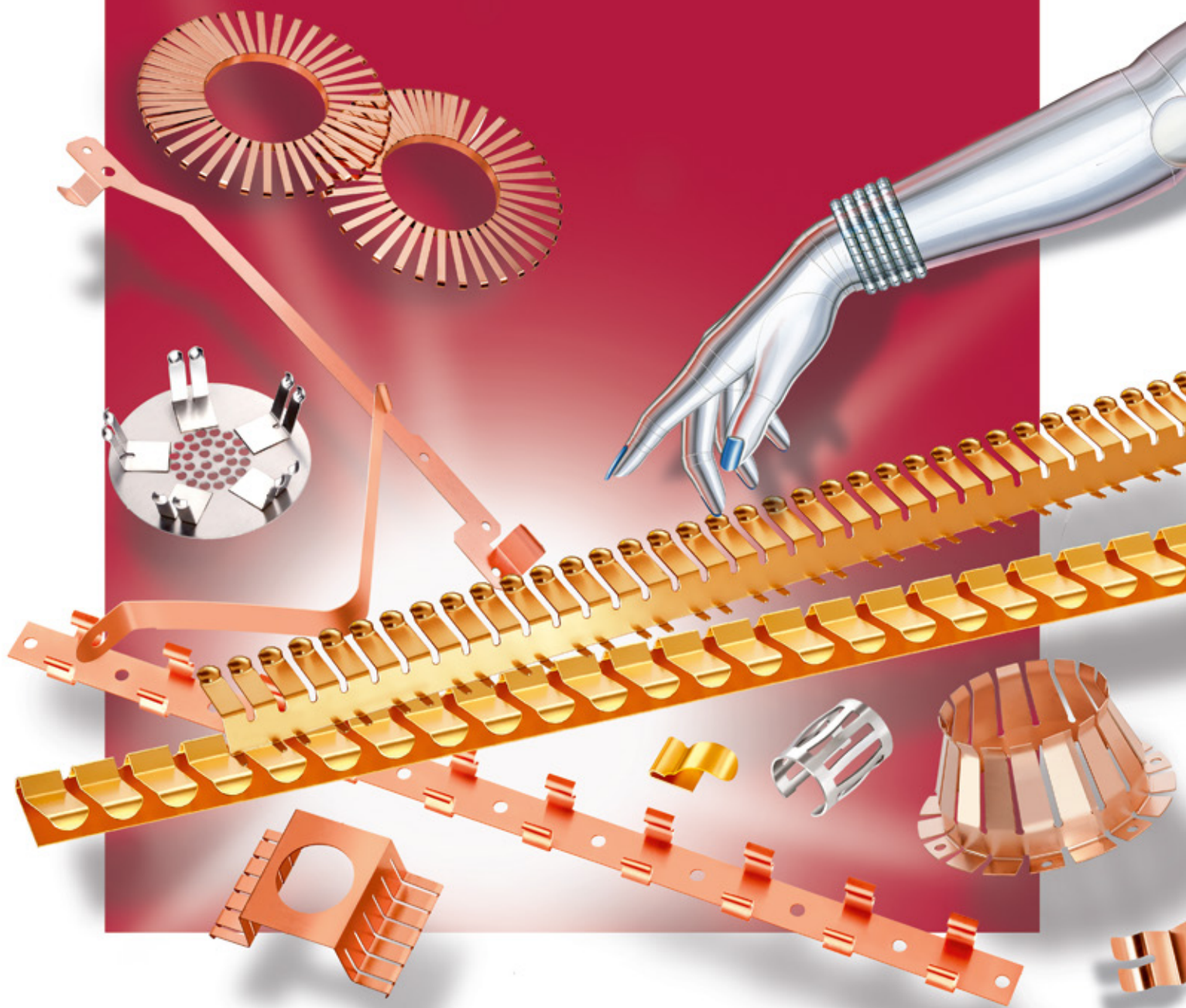
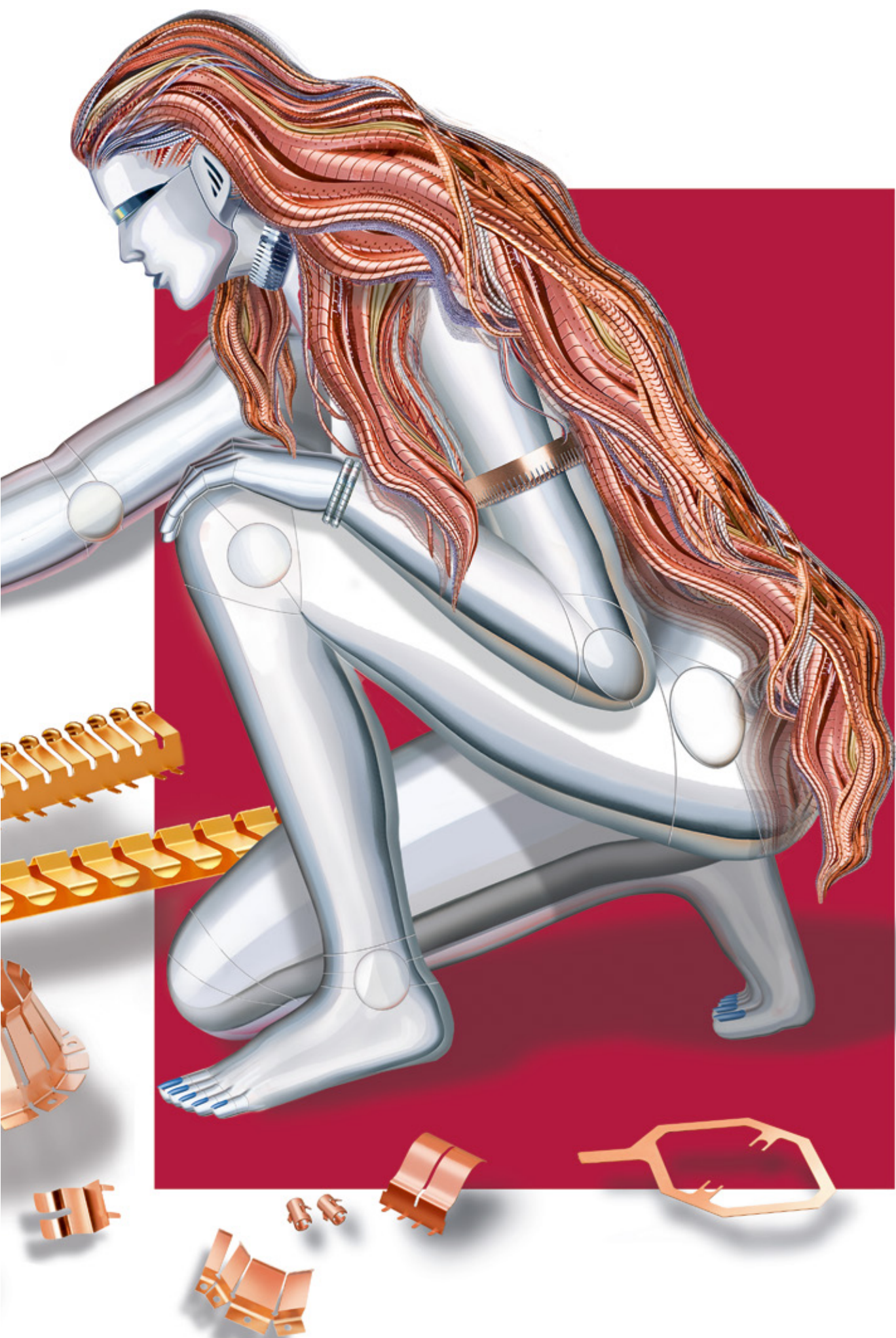


EMC Shielding Solutions and Contact Springs Made in Germany

EMC Shielding Solutions and Contact Springs Made in Germany





Product Codes

1. Contact Strips

By default our contact strips are supplied w/o coating and according to the dimension stated in this catalogue.
Upon request, contact strips can be delivered cut-to-length or custom made to fit your application.
Talk to us!

Ordering example contact springs

E. 8610. 00. 02. TL- 20F

optional letter

indicates various options and layouts

none - CuBe
E - Stainless Steel
R - Ring
M - Brass
U - Unhardened
S - Special

article no.

clip width mm

00 (w/o)
08
10
15
20
30

surface

Coating

02 - **Uncoated**
03 - **Gold Plated**
04 - **Silver Plated**
17 - **Tin Plated**
15 - **Zinc Plated**
19 - **Nickel Plated**
alternative coatings on request

supplement

00 - w/o
WT - with tape
TL - T-lances
DL - D-lances

length

upon request:
- = no. of Fingers
or
• = length mm
Ø = Ring
END = endless
SET

2. All other products

Ordering example other products

40 01. 22 00. 018. 000

category

profile

base material

surface/coating/filler

height / Ø width / inner Ø

category

10 Fabric over Foam
11 Connector Gaskets (Foam)
20 All Metal Gaskets
21 Mesh-Elasto
22 Kombi-Shield
23 Hollow Knitted Gaskets
24 Mesh Tape
25 Elastic Washers
26 Elastic Contacts
30 Low Compression Force
31 Knitted Mesh Soft Gaskets
40 Spiral Shield Gaskets - SF
41 Spiral Shield Gaskets - MF
42 Spiral Shield Gaskets - LF
50 Conductive Elastomers
51 Duo Seal Elastomers
60 Silicone Gaskets - Foam
61 Silicone Gaskets - Tube
62 Silicone Gaskets - Solid
63 Conductive Foils

profile

00 N/A
01 Round
02 Square
03 D-Shape
04 Rectangular
05 With Fin (P-shape)
06 Double Round
07 Hollow Core Round
08 Hollow Core
D-Shape
09 U-Shape
10 O-Ring
11 Kombi Shield 1
11 Kombi Shield 2

base material

00 No insert
20 CuBe
21 Copper
22 Stainless Steel
23 Aluminum
24 Steel
25 Monel
30 Silicone Foam
31 Silicone Tube
32 Solid Silicone
33 EPDM Sponge
34 Neoprene Sponge
35 Urethane Foam
36 Urethane Foam (low density)
37 Silicone TCS
38 Fluorosilicone TCS

surface

20 CuBe
21 Copper
22 Stainless Steel
23 Aluminum
24 Steel
25 Monel
26 CuBe Tin Plated
26 CuBe Gold Plated
28 CuBe, 2-layers
29 CuBe Nickel Plated
30 Tinned Copper
31 CuBe Silver Plated
70 Uncoated, 2-layers
71 Tinned Copper Clad Steel, 2-layers
72 CuBe Tin Plated, 2-layers

coating

02 - Uncoated
03 - Gold
04 - Silver
05 - Copper
06 - Etching
07 - Tin & Copper on Steel
15 - Zinc
17 - Tin
19 - Nickel

filler

40 Silver Fabric
41 Nickel Copper Fabric
42 Nickel Copper + Carbon Fabric
43 Ag/Ni (1A/1)
44 Ag/Cu P (1B/1)
45 Ag/Cu K (1B/2)
46 Ag/Al (1D/1)
47 Ag/Al (1D/2)
48 Ag/Glass (1I/1)
49 Ag/Glass (1I/3)
50 Ag/Glass (1I/4)
51 Ni/Gr (1J/2)
52 Ni/Gr (1J/3)
53 Carbon (1F)
54 Ni/Gr (1J/8)
55 Ag/Cu (2B)
56 Ag/Al (2D)
57 Ni/Gr (2J)
58 Ag/Cu (2A)

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Feuerherdt GmbH is Germany's leading manufacturer of contact springs. Since the establishment over 30 years ago, the company's product range has grown steadily. It comprises around 400 different standard contact springs made of copper beryllium and stainless steel for EMC shielding, grounding and electrical contacting. Furthermore, we specialize in the development of customer-specific special products - from the prototype to series production. In addition to contact springs, we also offer various other EMC shielding products such as conductive elastomer, textile and knitted wire mesh seals, EMC connector gaskets, copper foils with conductive adhesive, shielded windows, board level shieldings and other applications.

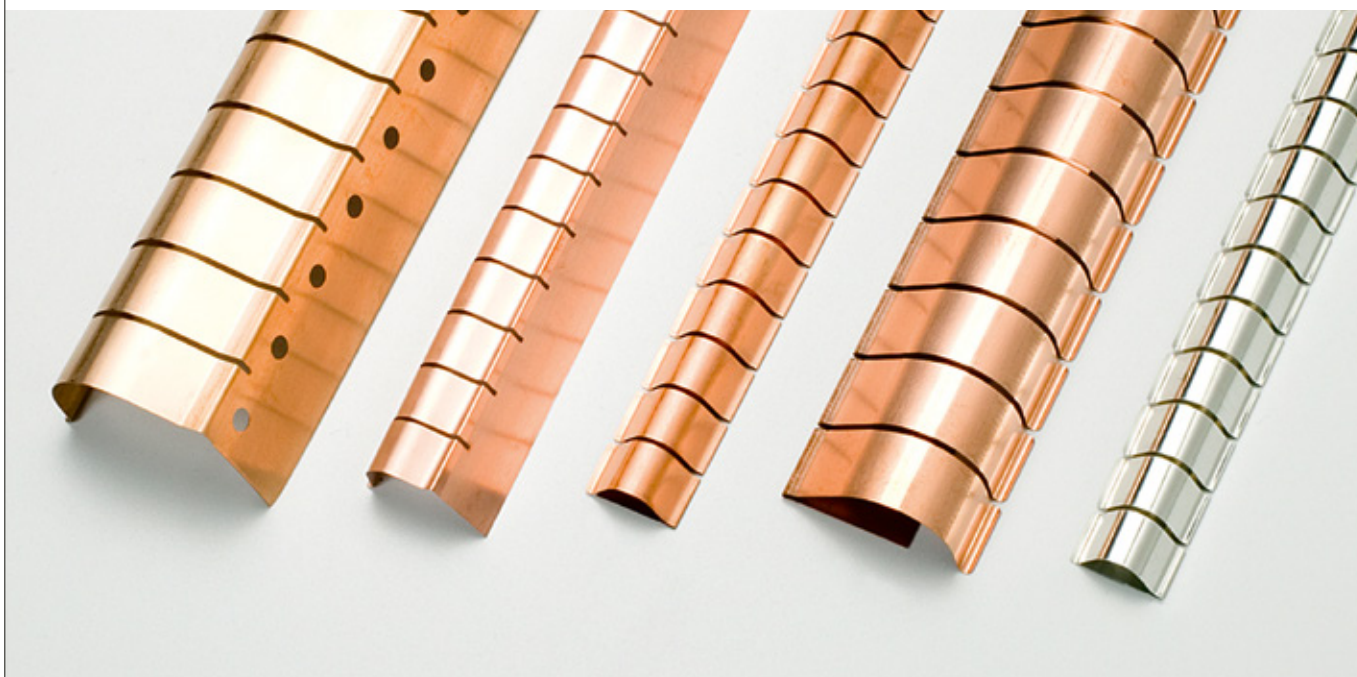
We are committed to the quality label "Made in Germany" and manufacture products of outstanding quality. Since 1996 our distinct quality awareness has been confirmed by our certification according to DIN EN 9001.

Top quality, customer satisfaction and excellent service are the key elements of our corporate philosophy. We achieve these goals through qualified and motivated personnel, efficient production technology and reliable suppliers. Through flexibility, short delivery times and reliability we have earned the trust of our customers. Our constant striving for excellence in meeting our customers' requirements makes us a competent and reliable partner.

Feuerherdt GmbH maintains worldwide business relationships with customers from a wide range of industries: electronics, computer technology, automation, automotive, aerospace, railway technology, mechanical engineering, medical technology, power engineering, measurement and test systems, audio/video technology, telecommunications, research institutes etc.

FEUERHERDT

Contact Strips Made of Copper Beryllium



Application

Due to their outstanding material and electrical characteristics, copper beryllium fingers of different shapes and dimensions are used in the following industries: Broadcasting, telecommunication, industrial control, measuring and instrumentation, aerospace technology, nuclear physics and data processing. Contact fingers and rings made of copper beryllium are used at all radio and microwave frequencies, for instance as contacts to tubes and tuning components as well as for shielding.

Material Properties

The copper beryllium (CuBe2) used for our products is a quality tested quench hardening spring material. It is noteworthy for its yield point, tensile strength and elasticity, good electrical conductivity, high fatigue strength as well as its resistance to abrasion and corrosion. The good thermal conductivity coupled with hardness eliminates sparking. The raw material is non-magnetic and has an excellent temperature performance.

Material

Code designation: CuBe2
Alloy: C17200
Design: Strip material, heat treated after moulding, DIN EN 1654



Physical Characteristics

Specific weight: 8.4 g/cm³
Melting point: 900 °C
Coefficient to expansion: 17x10⁻⁶/°C (20–200°C)
Thermal conductivity: 0.27 cal/cm · s · °C
1.13 W/cm · °C
Vickers hardness: 350–430
Tensile strength: 1200–1450 N/mm²
Bending resistance at 10⁸
Load cycles: 250–290 ±N/mm²
Modulus of elasticity: 135000 N/mm²
Modulus of torsion: 47000 N/mm²
Spring bending limit: 820–950 N/mm²
Electrical conductivity: 12.5–13 m/Ωmm²

Delivery Options

- As strips in standard length, endless, cut to length or formed into a ring
- Standard springs from stock at short notice available
- Finish: bright, silver-plated, gold-plated, tin-plated, nickel-plated or according to customer requirements

Disclaimer

All information in this catalogue has been compiled with care and done to the best of our knowledge. Measured data are in accordance with current MIL- or DIN standards. Because of the different fields of application and test methods it is recommended, however, to take your own measurements. In the end, this is the only way to test the suitability of our products for your special application. For electrical specifications there are no warranty. All length measurements are rounded. Change of technical data, error and misprints reserved.

Edition 20.9

FEUERHERDT

Contact Strips Made of Stainless Steel



The company Feuerherdt GmbH now offers, as first supplier, a regularly stocked assortment of contact strips made of stainless steel (German material no. 1.4310). The material used is stainless strip steel for springs: a material with extraordinary toughness, good spring characteristics, and long service life. The anti-corrosion properties are excellent, with the result that the contact surfaces are always smooth and shiny. The shielding properties are very good, but the attenuation values that can be achieved are less than with CuBe.

Material

Material number: 1.4310

Characteristics: stainless steel, steel tape, cold-rolled
DIN 17224, EN 10258

Mechanical Properties

Tensile strength: 1220 (RM N/mm²)

Yield strength: 987 (RP N/mm²)

Strain: 31.00 (L=80mm)

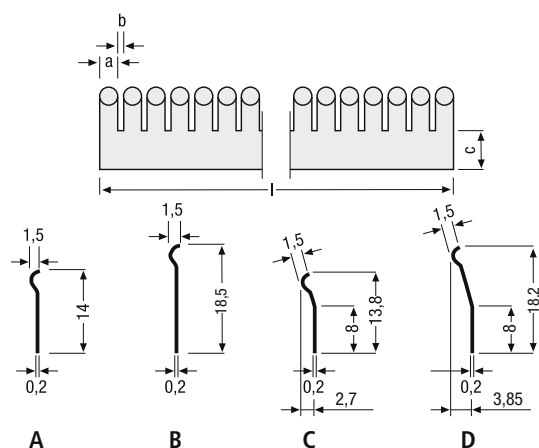
Chemical Composition: (Data given in Percent)

C	0.096	Si	0.63	Mn	0.89	P	0.029
S	0.005	Cr	17.12	Mo	0.22	Ni	7.29
Ti	0.000	Al	0.000	Cu	0.000	V	0.000
W	0.000	Cb/Ta	0.000	Fe	73.6		

Please note that the dimensions of the V2A-springs may vary from the CuBe- springs, due to the different material conditions.
Contact our sales team for further information.

FEUERHERDT

4 Contact Strips



Form

A

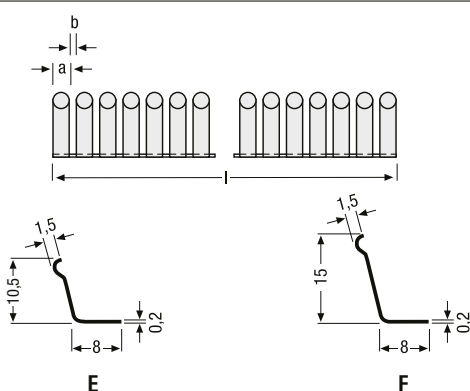
B

C

D

Form	a mm	b mm	c mm	l mm	Part-No.
A	3	1	6.5	499	8101*
B	3	1	6.5	499	8102*
C	3	1	6.5	499	8103*
D	3	1	6.5	499	8104*

*Available in CuBe and stainless steel
Electroplating on request (see cover)



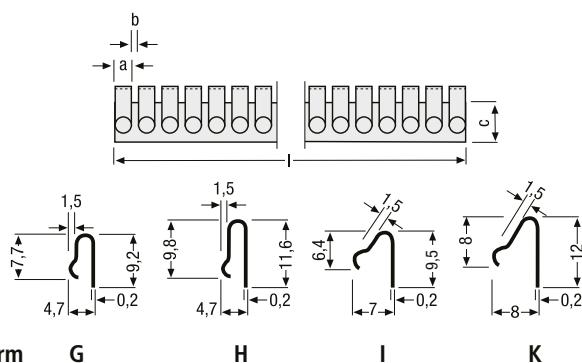
Form

E

F

Form	a mm	b mm	l mm	Part-No.
E	3	1	499	8105*
F	3	1	499	8106*

*Available in CuBe and stainless steel
Electroplating on request (see cover)



Form

G

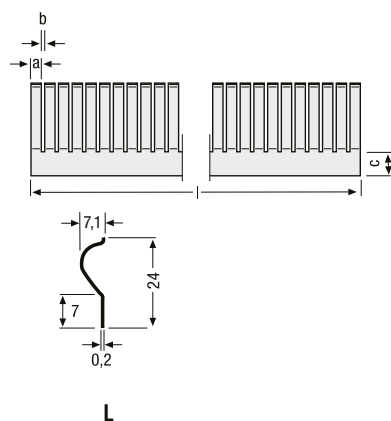
H

I

K

Form	a mm	b mm	c mm	l mm	Part-No.
G	3	1	6.5	499	8107*
H	3	1	6.5	499	8108*
I	3	1	6.5	499	8109*
K	3	1	6.5	499	8110*

*Available in CuBe and stainless steel
Electroplating on request (see cover)



Form

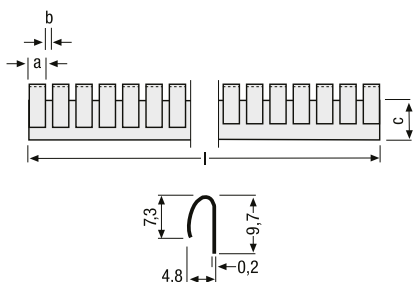
L

Form	a mm	b mm	c mm	l mm	Part-No.
L	3	1	6.5	499	8111*

*Available in CuBe and stainless steel
Electroplating on request (see cover)

FEUERHERDT

Contact Strips

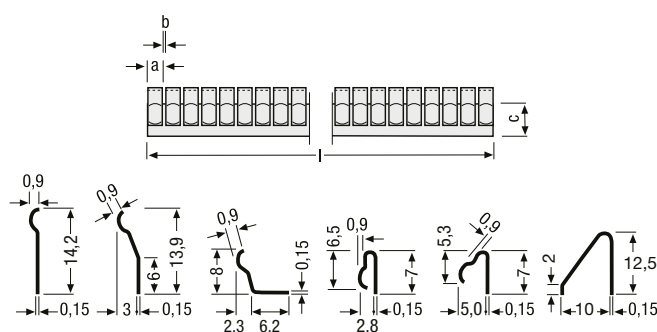


Form

M

Form	a mm	b mm	c mm	l mm	Part-No.
M	3	1	6.5	499	8112*

* Available in CuBe and stainless steel
Electroplating on request (see cover)



Form N

N1

O

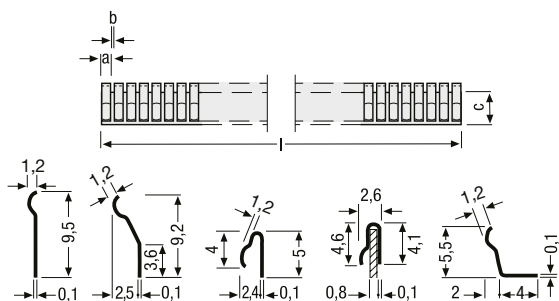
P

Q

Q1

Form	a mm	b mm	c mm	l mm	Part-No.
N	1.5	0.5	5.5	500	8113*
N1	1.5	0.5	5.5	500	8125*
O	1.5	0.5	5.5	500	8114*
P	1.5	0.5	5.5	500	8115*
Q	1.5	0.5	5.5	500	8116*
Q1	3.0	1	10.8	499	8126*

* Available in CuBe and stainless steel
Electroplating on request (see cover)



Form

R

R1

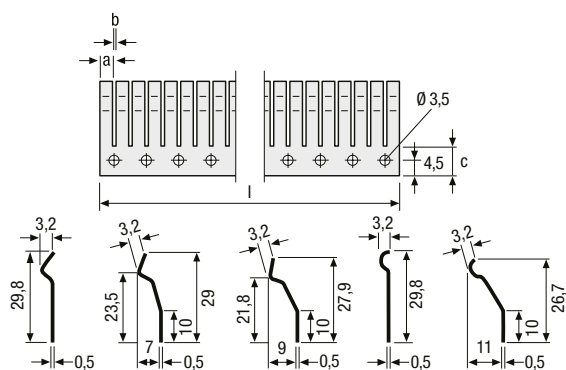
S

S1

T

Form	a mm	b mm	c mm	l mm	Part-No.
R	1	0.5	3.2	499	8117*
R1	1	0.5	3.2	499	8127*
S	1	0.5	3.2	499	8118*
S1	1	0.5	3.2	499	8128*
T	1	0.5	3.2	499	8119*

* Available in CuBe and stainless steel
Electroplating on request (see cover)



Form

U

U1

U2

U10

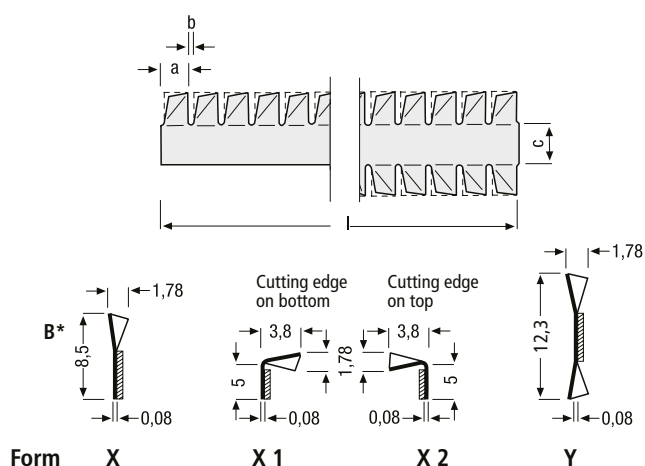
U11

Form	a mm	b mm	c mm	l mm	Part-No.
U	3.0	1.0	9	503	8120*
U1	3.0	1.0	9	503	8121*
U2	3.0	1.0	9	503	8122*
U10	3.0	1.0	9	503	8123*
U11	3.0	1.0	9	503	8124*

* Available in CuBe and stainless steel
Electroplating on request (see cover)

FEUERHERDT

Twisted Contact Strips



Form X

X 1

X 2

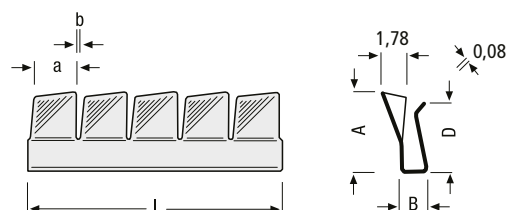
Y

Form	a	b	c	l mm	Part-No.
X	3.8	0.4	4.8	407	8501**
	3.8	0.4	4.8	608	8502**
	3.8	0.4	4.8	499	8503**
	3.8	0.4	4.8	endless	8504**
X 1	3.8	0.4	4.8	499	8505**
X 2	3.8	0.4	4.8	499	8506**
Y	3.8	0.4	4.8	407	8511**
	3.8	0.4	4.8	608	8512**
	3.8	0.4	4.8	499	8513**
	3.8	0.4	4.8	endless	8514**

* Other dimensions available

** Available in CuBe and stainless steel

Electroplating on request (see cover)



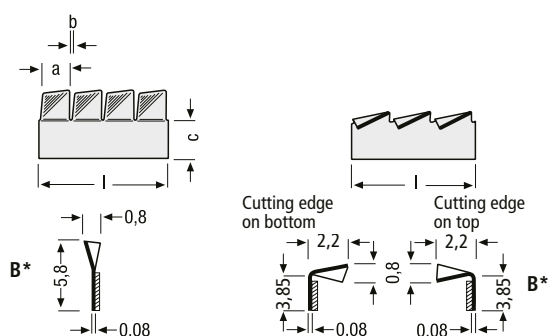
Form X 3, X 4

Form	a	b	A	B	D	l mm	Part-No.
X 3	3.8	0.4	4.8	1.0	4.1	407	8601*
	3.8	0.4	4.8	1.5	3.6	407	8602*
	3.8	0.4	4.8	2.0	3.2	407	8603*
X 4	3.8	0.4	6.4	1.0	5.8	407	8604*
	3.8	0.4	6.4	1.5	5.3	407	8605*
	3.8	0.4	6.4	2.0	5.1	407	8606*

* Available in CuBe and stainless steel

Electroplating on request (see cover)

Mini-Twisted Contact Strips



Form

X M

X 1 M

X 2 M

Form	a	b	c	l mm	Part-No.
X M	2.0	0.4	3.1	500	8610**
	2.0	0.4	3.1	610	8611**
	2.0	0.4	3.1	endless	8613**
X 1 M	2.0	0.4	3.1	610	8614**
X 2 M	2.0	0.4	3.1	610	8615**

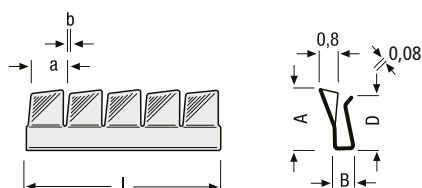
* Other dimensions available

** Available in CuBe and stainless steel

Electroplating on request (see cover)

FEUERHERDT

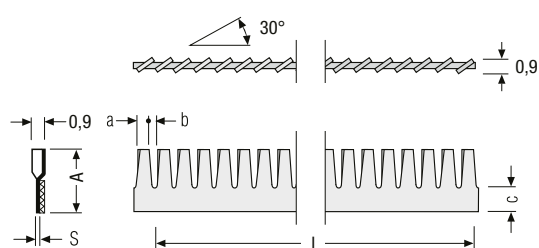
Mini-Twisted Contact Strips



Form X 5 bis X 10

Form	a	b	A	B	D	l mm	Part-No.
X 5	2.0	0.4	3.8	1.0	3.7	405	8616*
X 6	2.0	0.4	3.8	1.5	3.5	405	8617*
X 7	2.0	0.4	4.7	1.0	4.5	405	8618*
X 8	2.0	0.4	4.3	1.5	4.4	405	8619*
X 9	2.0	0.4	5.9	1.0	4.7	405	8620*
X 10	2.0	0.4	5.9	1.5	4.3	405	8621*

* Available in CuBe and stainless steel
Electroplating on request (see cover)

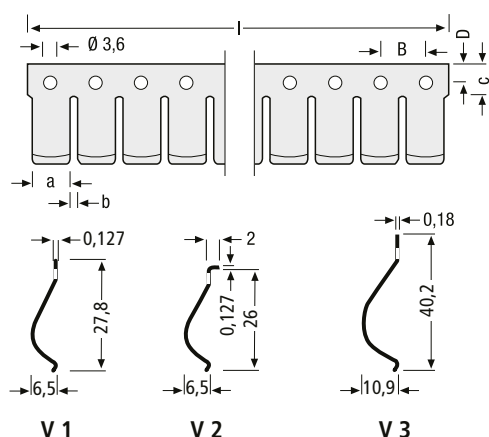


Form Z

Form	a	b	C	A	S	l mm	Part-No.
Z	1.65	0.76	4.1	9.1	0.127	406	9070*
Z	1.65	0.76	4.1	9.1	0.127	endless	9071*

* Available in CuBe and stainless steel
Electroplating on request (see cover)

RFI/EMI-Shielding



Form

V 1

V 2

V 3

Form	a	b	c	B	D	l mm	Part-No.
V1	8.5	1	6.45	9.5	4	502	8801*
	8.5	1	6.45	9.5	4	endless	8802*
V2	8.5	1	4.9	9.5	2.3	502	8803*
V3	11.7	1	8	12.7	4.8	507	8804
	11.7	1	8	12.7	4.8	endless	8805

* Available in CuBe and stainless steel
Electroplating on request (see cover)

Electrical Properties

Excellent shielding values 110 dB at 100 MHz

Application

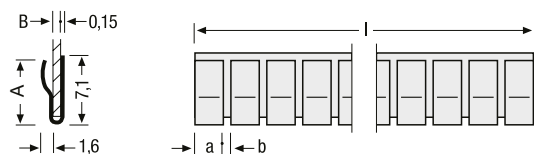
Shielding of doors and other movable parts in shielded rooms, cabins and cabinets

Mounting

By way of rivets, screws or soldering

FEUERHERDT

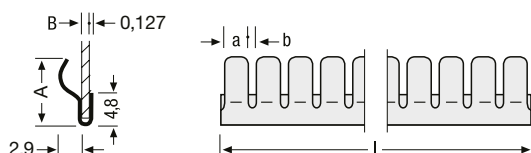
8 Clip-On Gaskets

**Form CL 1**

Also available endless

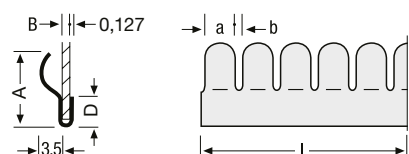
Form	a mm	b mm	A mm	B mm	l mm	Part-No.
CL1	5.6	0.8	6.7	0.8	409	8901.08*
CL1-1	5.6	0.8	6.6	1.0	409	8901.10*
CL1-2	5.6	0.8	6.2	1.5	409	8901.15*
CL1-3	5.6	0.8	5.8	2.0	409	8901.20*
CL1-12	5.6	0.8	6.45	1.2	409	8901.12*

*Available in CuBe and stainless steel
Electroplating on request (see cover)
CL1-1, CL1-2 and CL1-3 also available with D + T lances

**Form CL 2**

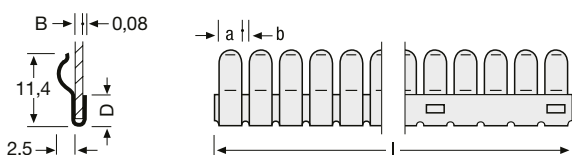
Form	a mm	b mm	A mm	B mm	l mm	Part-No.
CL2	3.6	1.2	8.2	0.8	407	8902.08*
CL2-1	3.6	1.2	8.0	1.0	407	8902.10*
CL2-2	3.6	1.2	7.8	1.5	407	8902.15*

*Available in CuBe and stainless steel
Electroplating on request (see cover)

**Form CL 3**

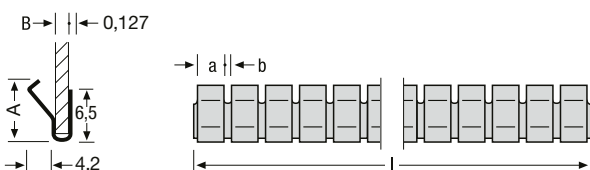
Form	a mm	b mm	A mm	B mm	D mm	l mm	Part-No.
CL3	3.6	1.2	11.4	0.8	5.2	407	8903.08*
CL3-1	3.6	1.2	10.8	1.0	4.8	407	8903.10*
CL3-2	3.6	1.2	11.2	1.5	4.5	407	8903.15*
CL3-3	3.6	1.2	10.5	3.0	4.4	407	8903.30*

*Available in CuBe and stainless steel
Electroplating on request (see cover)

**Form CL 4**

Form	a mm	b mm	B mm	D mm	l mm	Part-No.
CL4	3.6	1.2	1.5	4.9	407	8904.15*
CL4-1	3.6	1.2	2.0	4.8	407	8904.20*

*Available in CuBe and stainless steel
Electroplating on request (see cover)

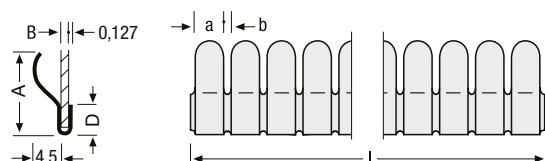
**Form CL 5**

Form	a mm	b mm	A mm	B mm	l mm	Part-No.
CL5	3.6	1.2	8.2	0.8	407	8905.08*
CL5-1	3.6	1.2	8.2	1.0	407	8905.10*
CL5-2	3.6	1.2	8.2	1.5	407	8905.15*
CL5-3	3.6	1.2	8.0	2.0	407	8905.20*

*Available in CuBe and stainless steel
Electroplating on request (see cover)

FEUERHERDT

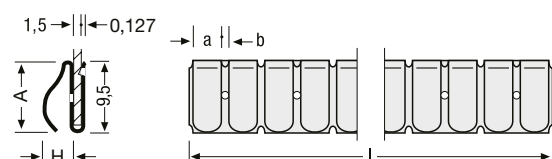
Clip-On Gaskets



Form CL 6

Form	a mm	b mm	A mm	B mm	D mm	I mm	Part-No.
CL 6	3.6	1.2	13.7	0.8	5.7	503	8906.08*
CL 6-1	3.6	1.2	13.7	1.0	5.4	503	8906.10*
CL 6-2	3.6	1.2	13.7	1.5	4.8	503	8906.15*
CL 6-3	3.6	1.2	13.7	2.0	4.6	503	8906.20*

*Available in CuBe and stainless steel
Electroplating on request (see cover)

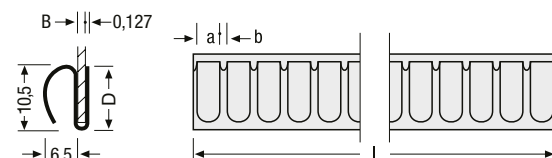


Form CL 7

Also available with D and T lances

Form	a mm	b mm	A mm	H mm	I mm	Part-No.
CL 7	5.31	1.04	9.5	5.2	406	8907.15*
CL 7-1	5.31	1.04	8.0	6.9	406	8927.15*
CL 7-2	5.31	1.04	7.5	7.9	406	8928.15*

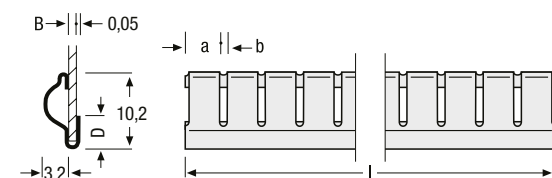
*Available in CuBe and stainless steel
Electroplating on request (see cover)



Form CL 8

Form	a mm	b mm	B mm	D mm	I mm	Part-No.
CL 8	3.2	1.55	2.0	8.2	402	8908.20*
CL 8-1	7.95	1.55	2.0	8.1	407	8929.20*
CL 8-2	3.2	1.55	3.0	7.4	407	8908.30*

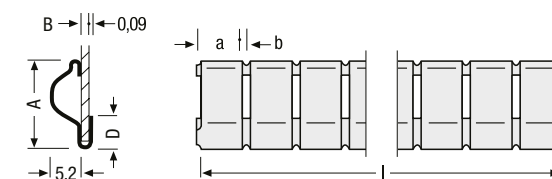
*Available in CuBe and stainless steel
Electroplating on request (see cover)



Form CL 9

Form	a mm	b mm	B mm	D mm	I mm	Part-No.
CL 9	5.7	0.6	0.8	5.7	409	8909.08*
CL 9-1	5.7	0.6	1.0	5.5	409	8909.10*
CL 9-2	5.7	0.6	1.5	5.2	409	8909.15*
CL 9-3	5.7	0.6	2.0	5.2	409	8909.20*

*Available in CuBe and stainless steel
Electroplating on request (see cover)



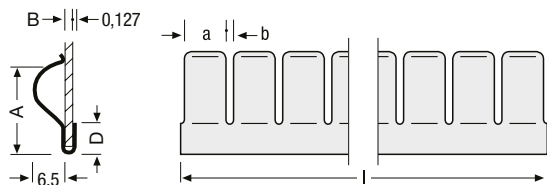
Form CL 10

Form	a mm	b mm	A mm	B mm	D mm	I mm	Part-No.
CL 10	8.7	0.8	16.2	1.5	5.6	455	8910.15*
CL 10-1	8.7	0.8	15.7	3.0	4.8	455	8910.30*

*Available in CuBe and stainless steel
Electroplating on request (see cover)

FEUERHERDT

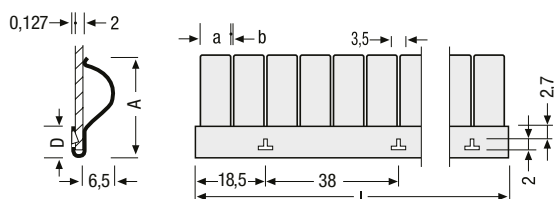
Clip-On Gaskets



Form CL 11

Form	a mm	b mm	A mm	B mm	D mm	I mm	Part-No.
CL 11	8.5	1.0	26.8	2.0	7.8	493	8911.20*
CL 11-1	8.5	1.0	26.5	3.0	7.2	493	8911.30*

*Available in CuBe and stainless steel
Electroplating on request (see cover)

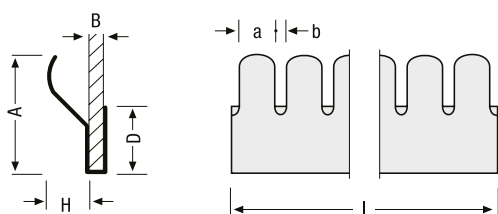


Form CL 12

Clamping leg with T lances

Form	a mm	b mm	A mm	D mm	I mm	Part-No.
CL 12	8.5	1.0	26.8	7.8	493	8912.20*

*Available in CuBe and stainless steel
Electroplating on request (see cover)



Form CL 13 – CL 18

Material thickness: 0.10 mm

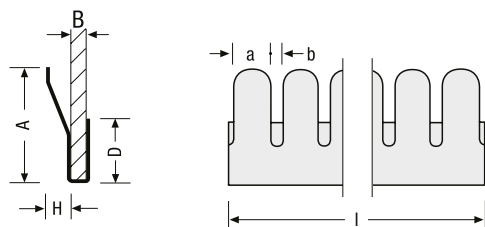
Form	a mm	b mm	A mm	B mm	D mm	H mm	I mm	Part-No.
CL 13	3.6	1.2	15.4	1.0	7.4	5.3	406	8630.10**
CL 14	3.6	1.2	15.4	1.5	6.9	5.3	406	8631.15**
CL 15	3.6	1.2	15.4	2.0	7.1	5.3	406	8632.20**
CL 16*	3.6	1.2	8.6	1.0	6.3	2.5	402	8633.10**
CL 17*	3.6	1.2	8.6	1.5	5.8	2.5	402	8634.15**
CL 18*	3.6	1.2	8.6	2.0	5.4	2.5	402	8635.20**

* With T lances

** Available in CuBe and stainless steel
Electroplating on request (see cover)

FEUERHERDT

Clip-On Gaskets

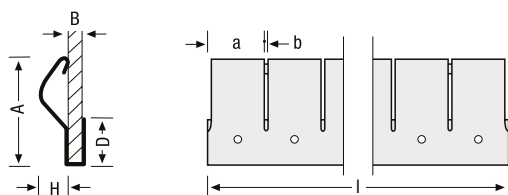


Form CL 19 – CL 21

Material thickness: 0.10 mm

Form	a mm	b mm	A mm	B mm	D mm	H mm	I mm	Part-No.
CL 19	3.6	1.2	11.4	1.0	6.8	2.5	407	8636.10*
CL 20	3.6	1.2	11.4	1.5	6.3	2.5	407	8637.15*
CL 21	3.6	1.2	11.4	2.0	5.9	2.5	407	8638.20*

*Available in CuBe and stainless steel
Electroplating on request (see cover)

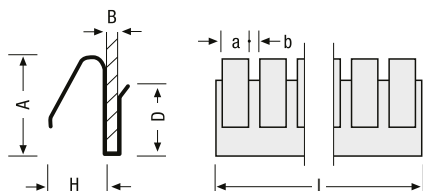


Form CL 22 – CL 28

Material thickness: 0.70 mm

Form	a mm	b mm	A mm	B mm	D mm	H mm	I mm	Part-No.
CL 22	5.84	0.51	11.7	1.0	6.1	3.0	458	8639.10
CL 23	5.84	0.51	11.7	1.5	5.6	3.0	458	8640.15
CL 24	5.84	0.51	11.7	2.0	5.1	3.0	458	8641.20
CL 25	9.02	0.51	19.3	1.0	7.4	6.4	457	8642.10
CL 26	9.02	0.51	19.3	1.5	6.9	6.4	457	8643.15
CL 27	9.02	0.51	19.3	2.0	6.4	6.4	457	8644.20
CL 28	9.02	0.51	19.3	3.0	5.3	6.4	457	8645.30

Available with lances
Electroplating on request (see cover)



Form CL 32 – CL 37

Material thickness:

CL 32 – CL 35 : 0.15 mm

CL 36 – CL 37 : 0.08 mm

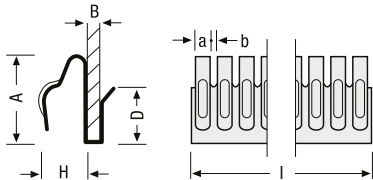
Form	a mm	b mm	A mm	B mm	D mm	H mm	I mm	Part-No.
CL 32 *	3.2	1.55	12.2	1.0	8.25	7.2	402	8649.10**
CL 33 *	3.2	1.55	12.2	1.5	8.0	7.2	402	8650.15**
CL 34 *	3.2	1.55	12.2	2.0	7.25	7.2	402	8651.20**
CL 35 *	3.2	1.55	12.2	3.0	6.55	7.2	402	8652.30**
CL 36	2.8	0.4	4.6	1.0	3.8	2.3	307	8653.10**
CL 37	2.8	0.4	4.6	1.5	3.4	2.3	307	8654.15**

* Also available with D- lances
** Available in CuBe and stainless steel
Electroplating on request (see cover)

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Clip-On Gaskets

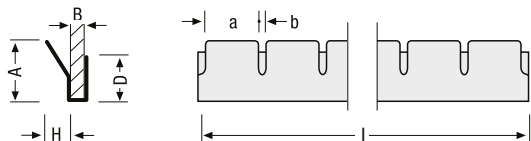


Form CL 38 – CL 46

Material thickness:
CL 38 – CL 41 : 0.15 mm
CL 42 – CL 44 : 0.127 mm
CL 45 – CL 46 : 0.08 mm

Form	a mm	b mm	A mm	B mm	D mm	H mm	I mm	Part-No.
CL 38	1.5	0.5	9.2	1.0	6.4	5.1	408	8655.10*
CL 39	1.5	0.5	9.2	1.5	5.9	5.1	408	8656.15*
CL 40	1.5	0.5	9.2	2.0	5.4	5.1	408	8657.20*
CL 41	1.5	0.5	9.2	3.0	4.6	5.1	408	8658.30*
CL 42	1.27	0.64	9.1	1.0	6.9	4.1	408	8659.10*
CL 43	1.27	0.64	9.1	1.5	6.1	4.1	408	8660.15*
CL 44	1.27	0.64	9.1	2.0	5.6	4.1	408	8661.20*
CL 45	1.0	0.5	6.1	1.0	4.7	2.8	406	8662.10*
CL 46	1.0	0.5	6.1	1.5	4.4	2.8	406	8663.15*

*Available in CuBe and stainless steel
Electroplating on request (see cover)



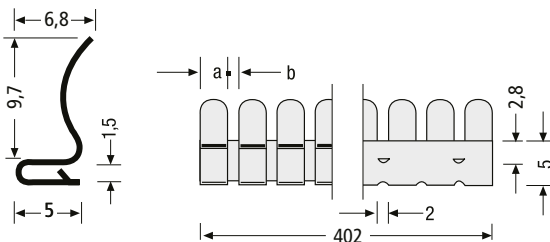
Form CL 47 – CL 49

Material thickness: 0.08 mm

Form	a mm	b mm	A mm	B mm	D mm	H mm	I mm	Part-No.
CL 47	3.8	0.4	4.8	0.8	3.0	1.3	306	8664.08*
CL 48	3.8	0.4	4.8	1.0	2.8	1.3	306	8665.10*
CL 49	3.8	0.4	4.8	1.5	2.3	1.3	306	8666.15*

*Available in CuBe and stainless steel
Electroplating on request (see cover)

Contact Fingers (clip-on)



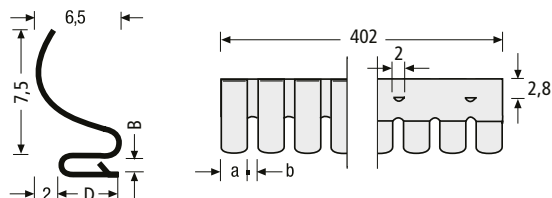
Form CL 53

Material thickness: 0.127 mm

Form	a mm	b mm	Part-No.
CL 53	3.6	1.2	8953.15*

D-lances standard, without lances optional
*Available in CuBe and stainless steel
Electroplating on request (see cover)

Contact Fingers (clip-on)

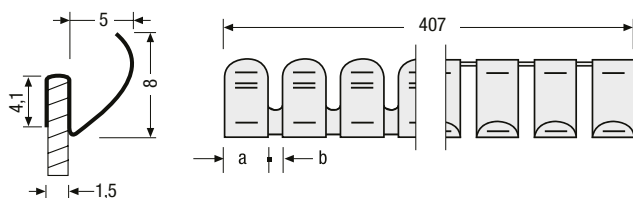


Form CL 54

Material thickness: 0.127 mm

Form	a mm	b mm	B mm	D mm	Order-No.
CL 54	3.6	1.2	0.8	5.2	8954.08*
CL 54-1	3.6	1.2	1.0	5.1	8954.10*
CL 54-2	3.6	1.2	1.5	5.1	8954.15*
CL 54-3	3.6	1.2	2.0	5.2	8954.20*
CL 54-4	3.6	1.2	3.0	5.1	8954.30*

* Available in CuBe and stainless steel
Electroplating on request (see cover)

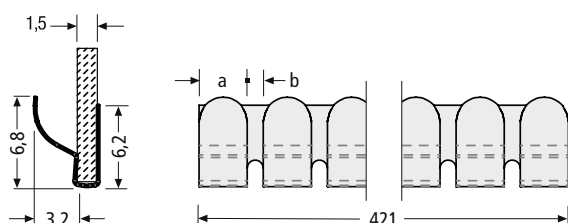


Form CL 55

Material thickness: 0.127 mm

Form	a mm	b mm	Part-No.
CL 55	3.6	1.2	8955.15*

* Available in CuBe and stainless steel
Electroplating on request (see cover)

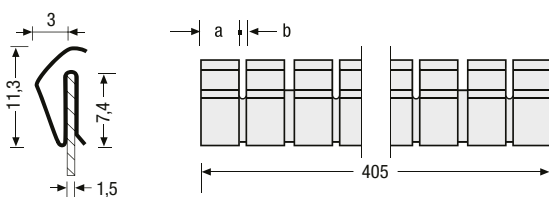


Form CL 56

Material thickness: 0.127 mm

Form	a mm	b mm	Part-No.
CL 56	3.6	1.2	8956.15*

* Available in CuBe and stainless steel
Electroplating on request (see cover)



Form CL 57

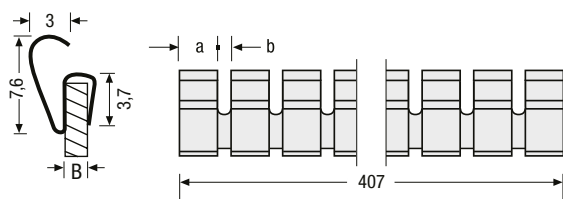
Material thickness: 0.08 mm

Form	a mm	b mm	Part-No.
CL 57	5.31	1.04	8669.15*

D-lances standard, without lances optional
* Available in CuBe and stainless steel
Electroplating on request (see cover)

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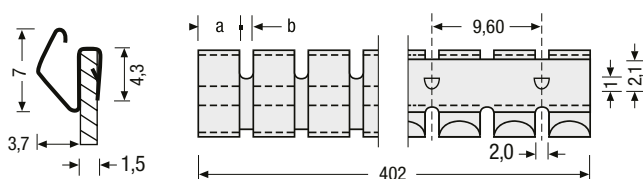
Contact Fingers (clip-on)

**Form CL 58**

Material thickness: 0.127 mm

Form	a mm	b mm	B mm	Part-No.
CL 58	3.6	1.2	1.5	8918.15*
CL 58-1	3.6	1.2	2.0	8918.20*

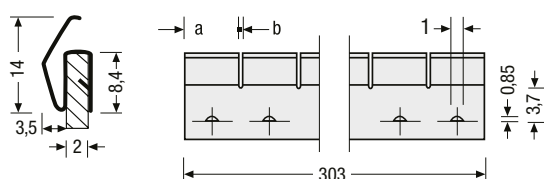
*Available in CuBe and stainless steel
Electroplating on request (see cover)

**Form CL 59**

Material thickness: 0.127 mm

Form	a mm	b mm	Part-No.
CL 59	3.6	1.2	8917.15*

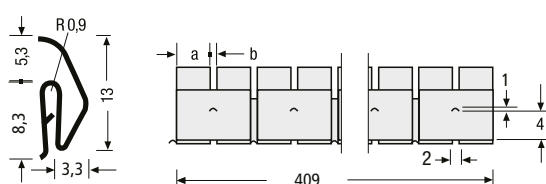
D-lances standard, without lances optional
*Available in CuBe and stainless steel
Electroplating on request (see cover)

**Form CL 60**

Material thickness: 0.10 mm

Form	a mm	b mm	Part-No.
CL 60	9	0.8	8913.20*

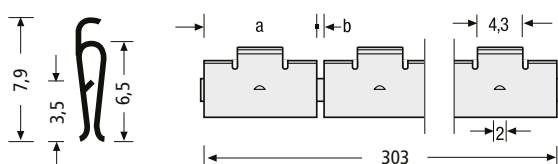
*Available in CuBe and stainless steel
Electroplating on request (see cover)

**Form CL 61**

Material thickness: 0.127 mm

Form	a mm	b mm	B** mm	Part-No.
CL 61	5.6	0.8	1.5	8914.15*

*Available in CuBe and stainless steel
**Clip width in mounted condition
Electroplating on request (see cover)

**Form CL 62**

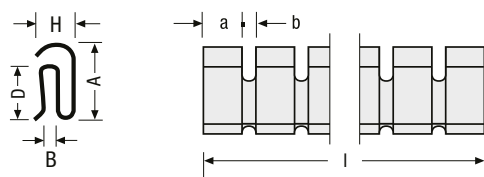
Material thickness: 0.08 mm

Form	a mm	b mm	B** mm	Part-No.
CL 62	12.68	1.14	1.8	8915.18*

*Available in CuBe and stainless steel
**Clip width in mounted condition
Electroplating on request (see cover)

FEUERHERDT

Contact Fingers (clip-on)



Form CL 63

Material thickness:

CL63 - CL63-1 : 0.08 mm

CL63-2 - CL63-3 : 0.127 mm

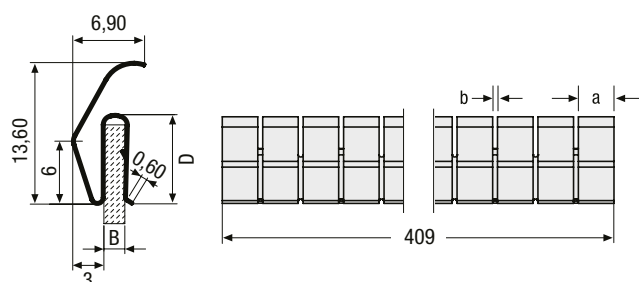
Form	a mm	b mm	H mm	A mm	B** mm	D mm	I mm	Part-No.
CL 63	3.0	1.0	2.8	6.1	1.5	3.85	407	8916.15*
CL 63-1	3.0	1.0	2.8	6.0	2.0	3.5	407	8916.20*
CL 63-2	4.0	1.0	7.2	11.9	1.5	7.5	409	8919.15*/***
CL 63-3	4.0	1.0	7.2	20.0	1.75	7.5	409	8919.18*/***

*Available in CuBe and stainless steel

**Clip width in mounted condition

***Optionally available with lances

Electroplating on request (see cover)



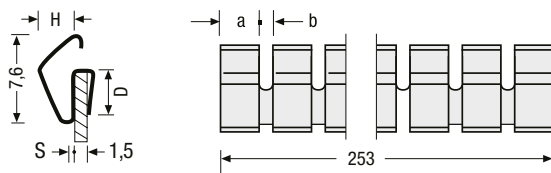
Form CL 64

Material thickness: 0.127 mm

Form	a mm	b mm	B mm	D mm	Part-No.
CL 64	5.6	0.8	2	8.6	8924.20*

*Available in CuBe and stainless steel

Electroplating on request (see cover)

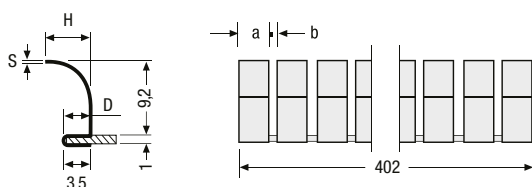


Form CL 65 – CL 66

Form	a mm	b mm	H mm	D mm	S mm	Part-No.
CL 65	3.0	0.8	2.8	3.6	0.09	8922.15*
CL 66	3.6	1.2	2.85	3.7	0.127	8923.15*

*Available in CuBe and stainless steel

Electroplating on request (see cover)



Form CL 67

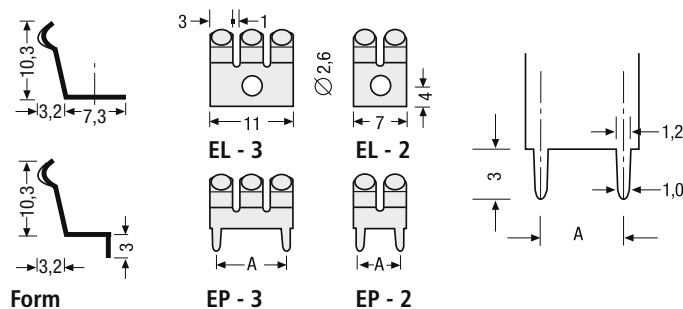
Form	a mm	b mm	H mm	D mm	S mm	Part-No.
CL 67	3.6	1.2	5.7	3.5	0.127	8952.10*

*Available in CuBe and stainless steel

Electroplating on request (see cover)

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Contact Fingers with Hole/Pins

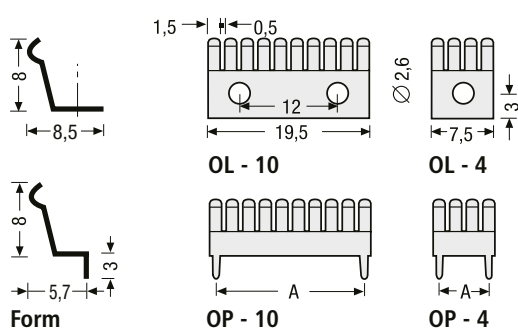


Form	Number of Fingers	A mm	Part-No.
EL - 3	3	-	8920*
EL - 2	2	-	8921*
EP - 3	3	10	8925*
EP - 2	2	5	8926*

Material thickness: 0.2 mm

*Available in CuBe and stainless steel

Electroplating on request (see cover)

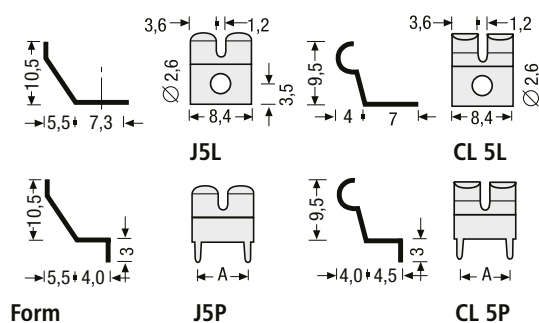


Form	Number of Fingers	A mm	Part-No.
OL	10	-	8930*
	4	-	8931*
OP	10	17.5	8935*
	4	5	8936*

Material thickness: 0.15 mm

*Available in CuBe and stainless steel

Electroplating on request (see cover)

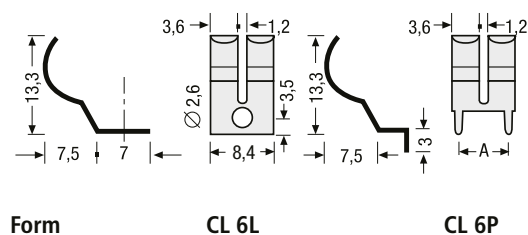


Form	Number of Fingers	A mm	Part-No.
J 5 L	2	-	8940*
J 5 P	2	5	8941*
CL 5 L	2	-	8945*
CL 5 P	2	5	8946*

Material thickness: 0.127 mm

*Available in CuBe and stainless steel

Electroplating on request (see cover)



Form	Number of Fingers	A mm	Part-No.
CL 6 L	2	-	8950*
CL 6 P	2	5	8955*

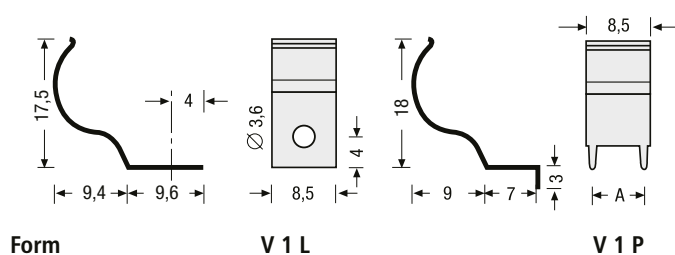
Material thickness: 0.127 mm

*Available in CuBe and stainless steel

Electroplating on request (see cover)

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Contact Fingers with Hole/Pins



Form

V 1 L

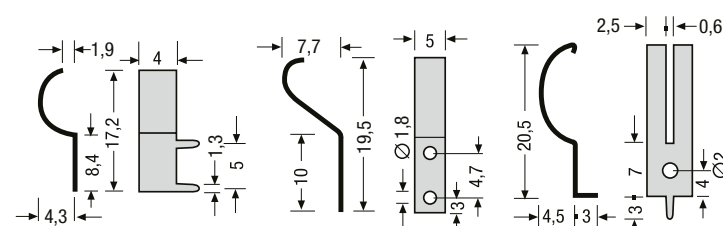
V 1 P

Form	Number of Fingers	A mm	Part-No.
V 1 L	1	-	8960*
V 1 P	1	5	8965*

Material thickness: 0.127 mm

*Available in CuBe and stainless steel

Electroplating on request (see cover)



Form

L P P

L P L

L P L P

(L P L curve left or right possible)

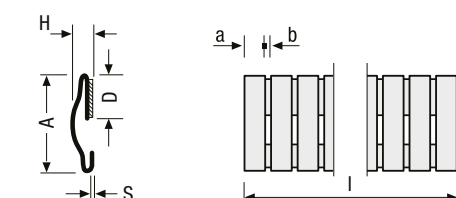
Form	Number of Fingers	A mm	Part-No.
L P P links	1	-	8970*
L P P rechte	1	-	8971*
L P L	1	-	8980*
L P L P	2	-	8990*

Material thickness: 0.15 mm

*Available in CuBe and stainless steel

Electroplating on request (see cover)

Low Profile Gaskets

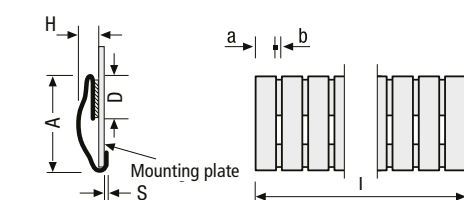


Form NP 2-3

Form	a mm	b mm	D mm	H mm	A mm	S mm	I mm	Part-No.
NP 2	2.54	0.64	6.0	2.0	11.4	0.05	406	2001
NP 3	2.54	0.64	8.2	3.0	15.2	0.05	406	2002

With adhesive tape

Low Profile Gaskets, Hook-On Type



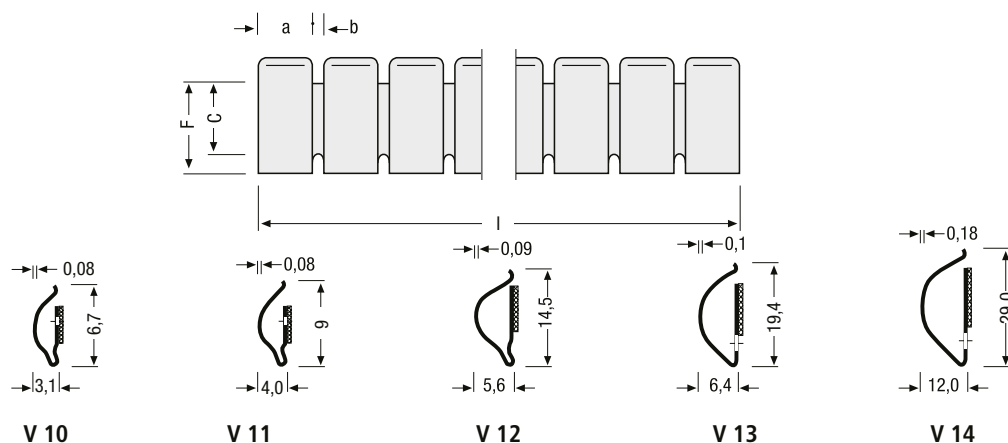
Form NPH 1-2

Form	a mm	b mm	D mm	H mm	A mm	S mm	I mm	Part-No.
NPH 1	2.54	0.64	6.0	1.5	11.4	0.05	406	2003
NPH 2	2.54	0.64	8.2	2.3	15.2	0.05	406	2004

With adhesive tape

FEUERHERDT

Curved Fingers



Form

V 10

V 11

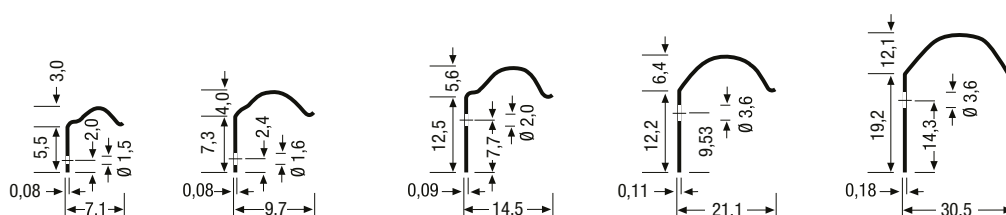
V 12

V 13

V 14

Form	a mm	b mm	c mm	F mm	l mm	Part-No. mm
V 10	4.32	0.46	3.85	5.5	406	9001*
					endless	9002*
V 11	5.8	0.56	3.85	7.5	406	9003*
					endless	9004*
V 12	8.71	0.81	10.00	12.60	608	9005*
					endless	9006*
V 13	8.51	1.02	10.00	12.00	609	9007*
V 14	11.68	1.02	17.00	19.9	304	9009*

*CuBe as standard. Also available in stainless steel on request
Electroplating on request (see cover)
With adhesive tape



Form

V 15-1

V 15

V 16

V 17

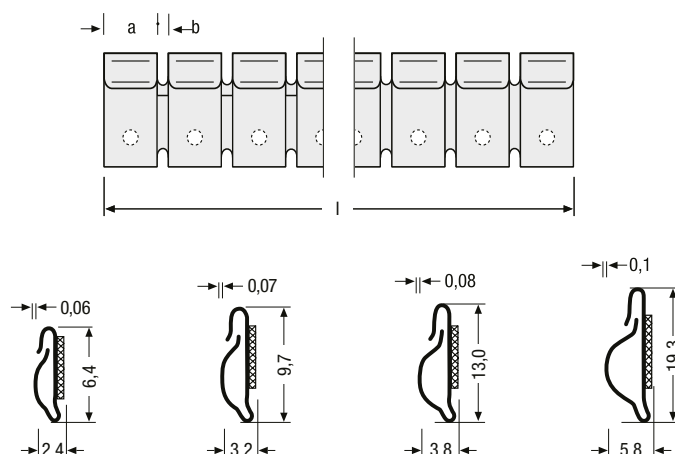
V 18

Form	a mm	b mm	l mm	Part-No.
V 15-1	4.32	0.46	406	9019*
V 15	5.79	0.56	406	9020*
V 16	8.72	0.81	609	9021*
V 17	8.51	1.02	305	9022*
V 18	11.68	1.02	304	9023*

*CuBe as standard. Also available in stainless steel on request
Electroplating on request (see cover)
With adhesive tape

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Slippy Fingers



Form

V 19

V 20

V 21

V 22

Form	a mm	b mm	ø mm	l mm	Part-No.
V 19	4.3	0.46	1.5	409	9030*
V 20	4.32	0.46	1.5	406	9032*
V 21	5.79	0.56	1.57	406	9034*
V 22	8.71	0.81	2	610	9036*

* Only available in CuBe
Electroplating on request (see cover)
With adhesive tape

Description

Curved fingers and slippy fingers are versatile shields that can be used to very effectively shield enclosures, cabinets and panels against interference radiation. The space requirement is minimal and the assembly is extremely simple, as the underside of the spring is equipped with adhesive tape.

Extensive soldering, riveting or bolting is therefore not necessary.

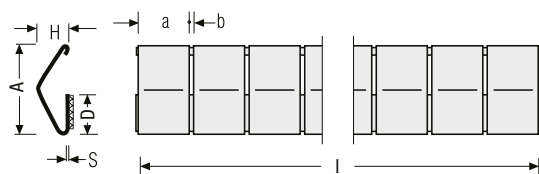
The measured attenuation values are excellent. Magnetic field: at 14 KHz more than 46 dB.

Plane waves: at 10 GHz approx. 108 dB.

Slippy fingers are a further development of the curved fingers, whereby the free part of the finger is retained within a flap and is therefore protected against damage. As compression increases, the fingers will slide further into the flap.

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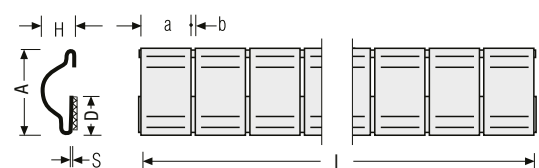
Grounding and Shield Strips



Form W1 - W5

Form	a mm	b mm	A mm	D mm	H mm	S mm	I mm	Part-No.
W1	4.3	0.5	8.0	5.0	2.8	0.05	408	9040*
W2	5.7	0.6	9.4	5.3	3.3	0.05	409	9041*
W3	8.7	0.8	15.2	7.2	5.7	0.08	607	9042*
W4	8.7	0.8	19.8	11.2	8.1	0.10	455	9043*
W5	11.7	1.0	27.9	19.8	10.4	0.10	456	9044*

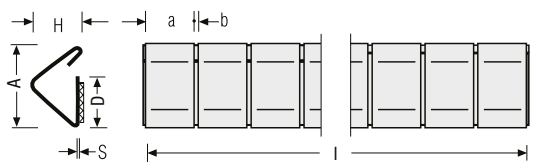
*Available in CuBe and stainless steel
Electroplating on request (see cover)
With adhesive tape



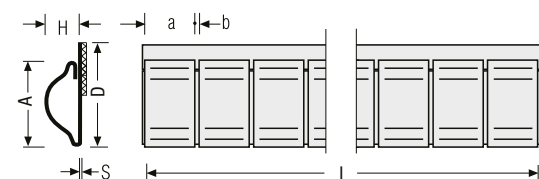
Form W6 - W9

Form	a mm	b mm	A mm	D mm	H mm	S mm	I mm	Part-No.
W6	3.5	0.45	8.1	5.4	2.5	0.09	406	9045
W7	5.7	0.6	9.4	5.25	3.3	0.09	406	9046
W8	3.9	0.8	15.2	7.4	5.6	0.09	457	9047
W9	8.7	0.8	15.2	7.4	5.6	0.09	457	9048
W10	5.7	0.6	8.4	5.45	5.15	0.05	409	9049*

*Available in CuBe and stainless steel
Electroplating on request (see cover)
With adhesive tape



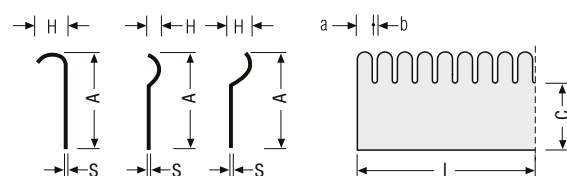
Form W10



Form W12

Form	a mm	b mm	A mm	D mm	H mm	S mm	I mm	Part-No.
W12	8.71	0.81	15.2	19.8	5.6	0.09	456	9051

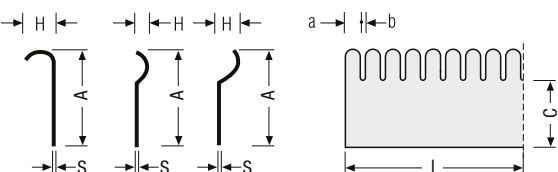
Only available in CuBe.
Electroplating on request (see cover)
With adhesive tape



Form J1 J2 J3

Form	a mm	b mm	A mm	C mm	H mm	S mm	I mm	Part-No.
J1	3.6	1.2	19.6	16.0	5.8	0.127	407	9060*
J2	3.6	1.2	22.6	16.0	2.3	0.127	407	9061*
J3	3.6	1.2	22.6	16.0	3.0	0.127	407	9062*

*Available in CuBe and stainless steel
Electroplating on request (see cover)



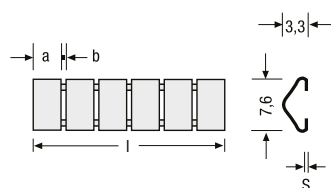
Form J4 J5 J6

Form	a mm	b mm	A mm	C mm	H mm	S mm	I mm	Part-No.
J4	3.6	1.2	21.6	15.0	2.2	0.127	407	9063*
J5	3.6	1.2	23.4	16.0	2.3	0.127	407	9064*
J6	3.6	1.2	23.4	16.0	2.3	0.127	407	9065*

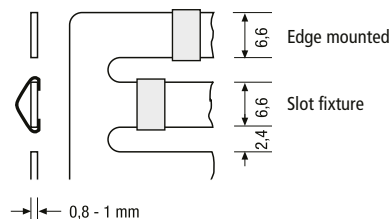
*Available in CuBe and stainless steel
Electroplating on request (see cover)

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Slot-Mount Shields in Strips or as Single Contacts

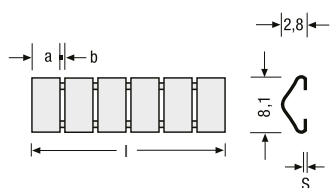


Form GK 1 - GK 2

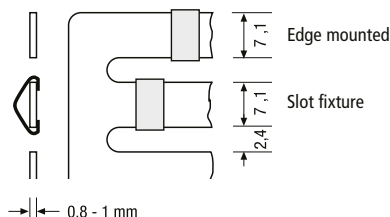


Form	a mm	b mm	S mm	l mm	Part-No.
GK 1	4.3	0.5	0.05	407	9701*
GK 2	4.3	0.5	0.09	403	9702*

*Available in CuBe and stainless steel
Electroplating on request (see cover)

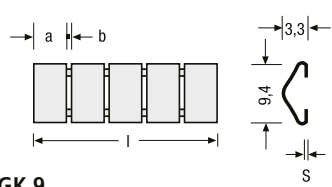


Form GK 5 - GK 6

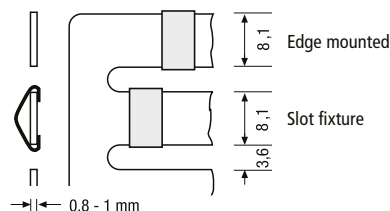


Form	a mm	b mm	S mm	l mm	Part-No.
GK 5	4.3	0.5	0.05	403	9705*
GK 6	4.3	0.5	0.09	407	9706*

*Available in CuBe and stainless steel
Electroplating on request (see cover)

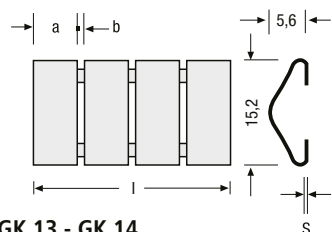


Form GK 9

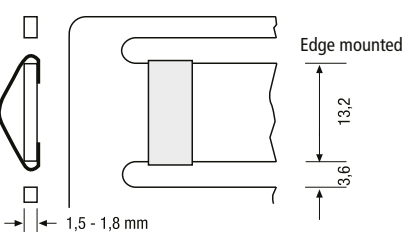


Form	a mm	b mm	S mm	l mm	Part-No.
GK 9	5.7	0.6	0.05	403	9709*

*Available in CuBe and stainless steel
Electroplating on request (see cover)

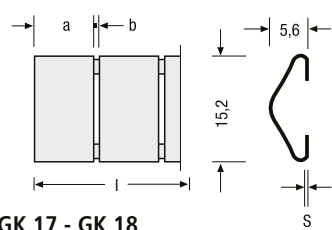


Form GK 13 - GK 14

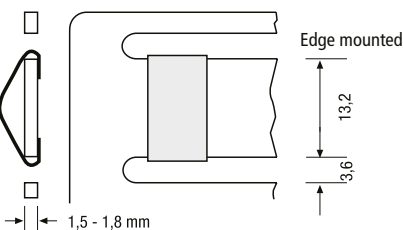


Form	a mm	b mm	S mm	l mm	Part-No.
GK 13	6.4	0.8	0.08	457	9713*
GK 14	6.4	0.8	0.127	457	9714*

*Available in CuBe and stainless steel
Electroplating on request (see cover)

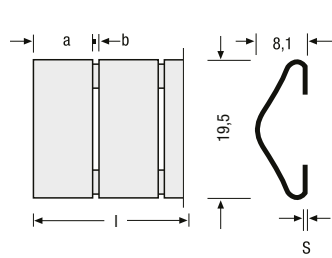


Form GK 17 - GK 18

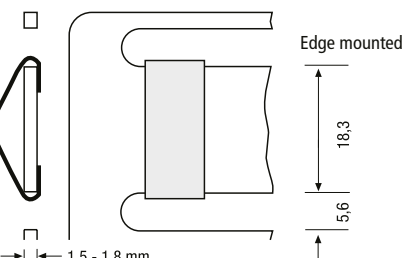


Form	a mm	b mm	S mm	l mm	Part-No.
GK 17	8.7	0.8	0.05	398	9717*
GK 18	8.7	0.8	0.08	398	9718*

*Available in CuBe and stainless steel
Electroplating on request (see cover)



Form GK 21 - GK 22



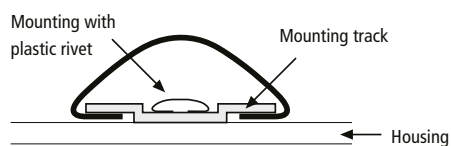
Form	a mm	b mm	S mm	l mm	Part-No.
GK 21	8.7	0.8	0.08	398	9721*
GK 22	8.7	0.8	0.10	398	9722*

*Available in CuBe and stainless steel
Electroplating on request (see cover)

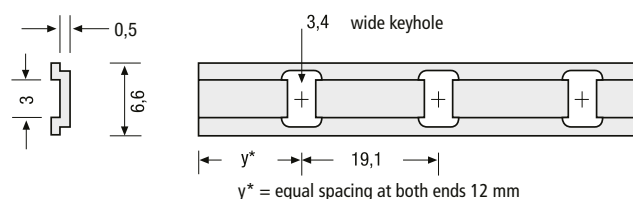
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Mounting Tracks

Mounting on riveted track

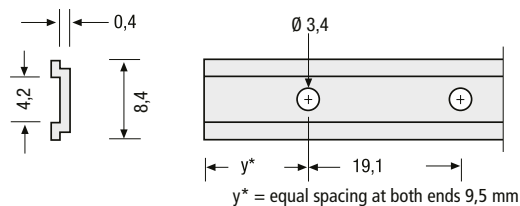


The slot-mount shields can be mounted directly on the housing panel or alternatively on a mounting track with T-end-pieces.



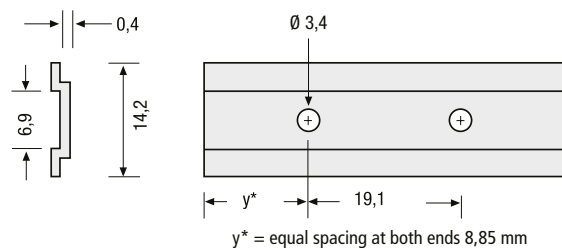
Mounting track	l mm	Part-No.
MS 2 for GK 1 - 6	406	E9730*

Material: stainless steel



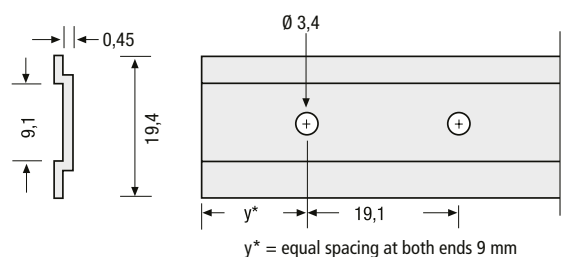
Mounting track	l mm	Part-No.
MS 3 for GK 9	401	9735*

Material: brass, bright finish



Mounting track	l mm	Part-No.
MS 4 for GK 13 - 18	457	9740*

Material: brass, bright finish

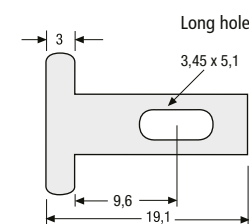


Mounting track	l mm	Part-No.
MS 5 for GK 21 - 22	400	9745*

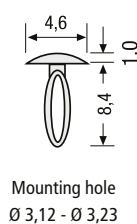
Material: brass, bright finish
Also available in stainless steel on request

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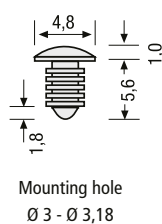
Mounting Tracks



TE 1 - 3



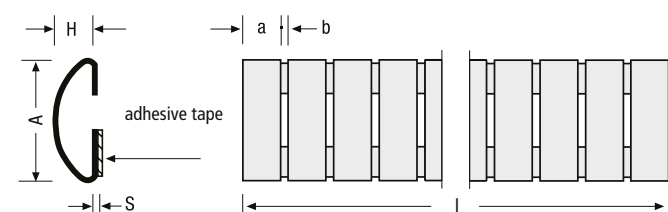
NE 1



NE 2

T-end-piece	Part-No.
TE 1 for GK 9	9750
TE 2 for GK 13 - 18	9751
TE 3 for GK 21 - 22	9752
Plastic rivet	
NE 1 for Sheet thickness 0.5 - 1.5 mm	9754
NE 2 for Sheet thickness 0.5 - 1.5 mm	9755

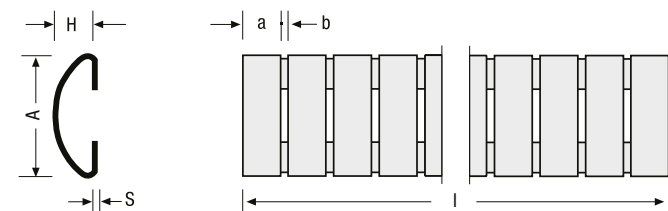
Half-Round Springs and Mounting Tracks



Form HR 1 - 3

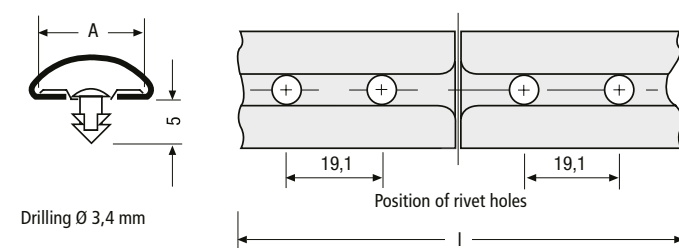
Form	a mm	b mm	A mm	H mm	S mm	I mm	Part-No.
HR 1	4.3	0.5	9.1	2.8	0.08	383	9760*
HR 2	5.8	0.6	11.4	3.6	0.08	383	9761*
HR 3	8.7	0.8	15.8	5.5	0.10	379	9762*

*Available in CuBe and stainless steel
Electroplating on request (see cover)



Form	a mm	b mm	A mm	H mm	S mm	I mm	Rivet Number	Part-No.
HR 6	4.3	0.5	9.1	2.8	0.08	383	10	9763*
HR 7	5.8	0.6	11.7	3.6	0.08	383	10	9764*
HR 8	8.7	0.8	15.8	5.5	0.10	379	10	9765*

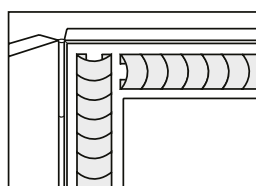
For mounting tracks
*Available in CuBe and stainless steel
Electroplating on request (see cover)



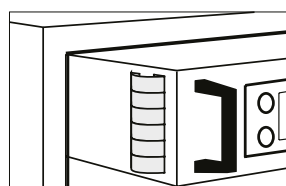
Mounting tracks

Form	A mm	I mm	Part-No.
MS 6	8.6	383	9766*
MS 7	11.4	383	9767*
MS 8	15.2	381	9768*

Material: brass, bright finish



HR 1 - HR 3



HR 6 - HR 8

Mounting examples

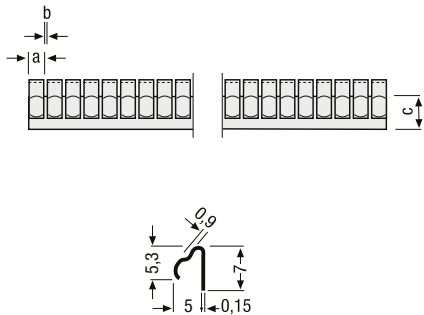
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24

Contact Rings



Manufacturing of customized rings is possible, suitable spring geometry provided. Rings from contact springs are available either closed (spot-welded) or open.

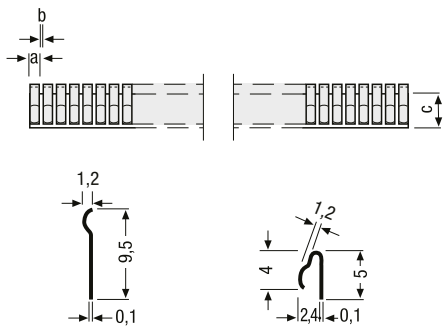


Form

Q

Base strips for rings

Form	a mm	b mm	c mm	Part-No.
Q	1.5	0.5	5.5	R.8116*



Form

R

S

Form	a mm	b mm	c mm	Part-No.
R	1.0	0.5	3.2	R.8117*
S	1.0	0.5	3.2	R.8118*

Further variations on request.

Custom-Made Contact Springs



...from Europe's No. 1 Specialist

Countless professional and sustainable shielding solutions can be realized with the standard EMC shielding strips offered in this catalogue. And if you are looking for a part that does not fit into any of the categories mentioned or if you require a genuine special solution for your application, you have come to the right place as well because this is one of Feuerherdt's core competences. We meet your requirements - no matter whether if they refer to single contacts, unconventional shapes, research projects, completely new product developments, a small series or millions of parts. On request, we also offer cut-to-length contact strips.

Know-how that has grown for over 30 years makes Feuerherdt the number one address when it comes to genuinely customer-specific EMC shielding solutions. We handle the construction and manufacturing, based on your design or a description of your application, for the best solution of your project. On request, we can carry out bending tests for complicated geometric specifications, create the necessary drawings and manufacture sample parts / prototypes.

Shared knowledge and experience makes you and us an unbeatable team.

Talk to us - our competent and friendly staff will be happy to support you.

+49(0)30 – 710 96 45 50 | emc@feuerherdt.de



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Spiral Shield Gaskets

Spiral shields are made from hardened beryllium copper or stainless steel and are characterized by excellent fatigue strength and elasticity.

If the beryllium copper spiral is additionally tin-plated, it also offers excellent corrosion protection in contact with aluminium in a saline environment.

Stainless steel shields are used when the emphasis is on corrosion protection and not on conductive properties.

Compression force

The spiral shields are available with three different elasticity/tension forces (as listed below).

The optimal compression of the shield is 25 % of the spiral diameter.

Mounting

The spirals are mounted in a standard O-ring groove.

The groove should be at least 35% wider than the gasket diameter.

The groove depth should be 75% of the groove diameter.

Material-Mix: see table				Recommended mounting dimensions mm		
Diameter	Standard Force*	Moderate Force	Low Force	L	G	W
0.9	4007.XXYY.009	4107.XXYY.009**/**	--	0.59	1.17	0.84
1.2	4007.XXYY.012	4107.XXYY.012**	--	0.89	1.60	1.14
1.6	4007.XXYY.016	4107.XXYY.016	4207.XXYY.016	1.17	2.39	1.52
1.8	4007.XXYY.018	4107.XXYY.018	4207.XXYY.018	1.35	2.39	1.70
2	4007.XXYY.020	4107.XXYY.020	4207.XXYY.020	1.50	2.77	1.91
2.4	4007.XXYY.024	4107.XXYY.024	4207.XXYY.024	1.78	3.18	2.29
2.6	4007.XXYY.026	4107.XXYY.026	4207.XXYY.026	1.96	3.58	2.52
2.8	4007.XXYY.028	4107.XXYY.028	4207.XXYY.028	2.08	3.96	2.67
3.2	4007.XXYY.032	4107.XXYY.032	4207.XXYY.032	2.39	4.34	3.07
3.5	4007.XXYY.035	4107.XXYY.035	4207.XXYY.035	2.64	4.75	3.40
3.6	4007.XXYY.036	4107.XXYY.036	4207.XXYY.036	2.67	4.75	3.46
4.4	4007.XXYY.044	4107.XXYY.044	4207.XXYY.044	3.25	5.95	4.19
4.8	4007.XXYY.048	4107.XXYY.048	4207.XXYY.048	3.56	6.35	4.60
6.4	4007.XXYY.064	4107.XXYY.064	4207.XXYY.064	4.70	8.71	6.10
7.9	4007.XXYY.079	4107.XXYY.079	4207.XXYY.079	5.94	10.72	7.62
9.5	4007.XXYY.095	4107.XXYY.095	4207.XXYY.095	7.11	11.70	9.25
12.7	--	4107.XXYY.127	4207.XXYY.127	9.53	16.66	12.32

XX: Inlay. YY: Spring material, see material table (M)

Moderate and low force spirals are supplied with silicone inlay as standard.

All Standard Force spirals are only available without silicone inlay.

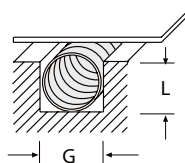
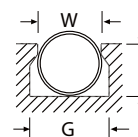
** These sizes cannot be supplied with silicone inlay

*** These sizes cannot be supplied in stainless steel



Inlay (XX)	Spring Material (YY)
00 - Without inlay	20 - CuBe
32 - Silicone inlay	22 - Stainless Steel
	26 - CuBe Tin-plated

Additional surfaces on request



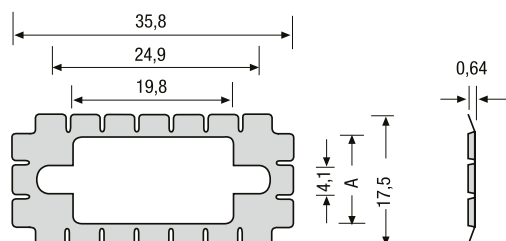
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D-Connector Shields with Contact Fingers

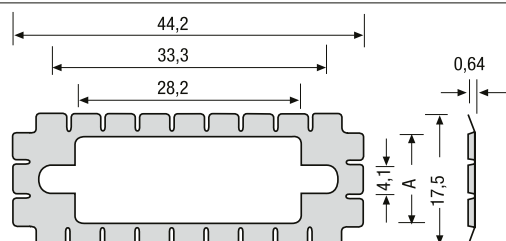
See also our silicone-based
"D"-connector shields, p. 41



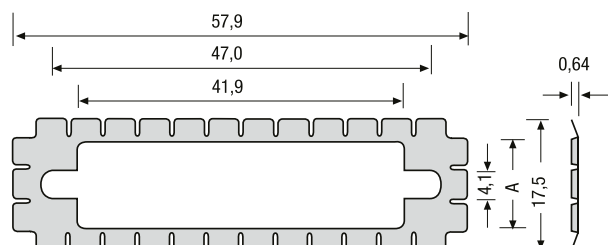
Gasket for grounding and shielding of
D-Sub connectors with 9, 15, 25, 37 and 50 pins.
With 20° angled contact fingers.
Material: beryllium copper or stainless steel
Surface finishing available on request.



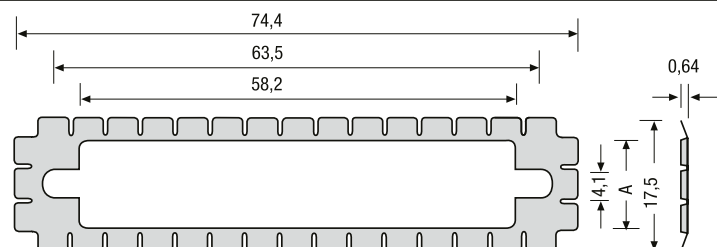
A		Part-No.	
Pins	mm	Stainless Steel	CuBe
9	11.2	9506	9526
	8.9	9507	9527



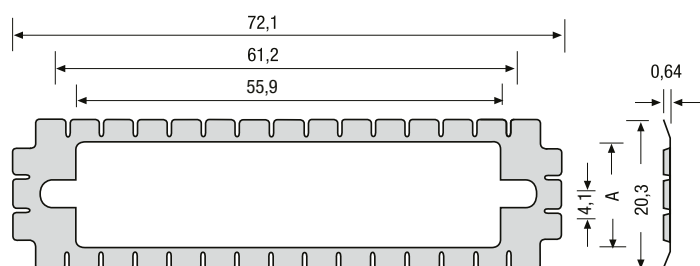
A		Part-No.	
Pins	mm	Stainless Steel	CuBe
15	11.2	9508	9528
	8.9	9509	9529



A		Part-No.	
Pins	mm	Stainless Steel	CuBe
25	11.2	9510	9530
	8.9	9511	9531



A		Part-No.	
Pins	mm	Stainless Steel	CuBe
37	11.2	9512	9532
	8.9	9513	9533



A		Part-No.	
Pins	mm	Stainless Steel	CuBe
50	14.0	9514	9534
	11.4	9515	9535

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Conductive Elastomers



Electrically conductive elastomers cover an important area in the field of EMC shielding when an additional environmental shielding is required.

They consist of an elastomeric binder (silicone or fluoro-silicone), which is supplied with different fillers depending on the desired shielding performance and contacted materials (prevention of corrosion).

We are happy to advise you on the selection!

Electrically conductive elastomers are produced in sheets, as moulded or extruded sections and can also be printed onto surfaces.

Depending on the application and the required profile, o-rings can be supplied as moulded parts or vulcanized from extruded profiles.

Extruded round profiles can be produced with very small diameters and are therefore well suited for narrow-walled housings.

Galvanic compatibility

Housing material

● Good

■ Satisfactory

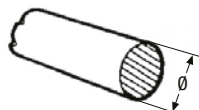
X Not recommended

Material code	Filler type	Aluminium alloys	Magnesium alloys	Stainless Steel	Copper alloys	Cadmium plating	Tin plating	Nickel plating	Chromium plating	Silver plating	Galvanised Steel	Titanium
A	Silver/Nickel	X	X	●	●	X	■	●	●	●	X	●
B	Silver/Copper	X	X	●	●	X	X	■	●	●	X	●
D	Silver/Aluminium	■	■	●	●	■	■	■	●	●	■	●
K	Inert Aluminium (Al Compatible)	●	■	●	●	■	●	●	●	●	■	●
I	Silver/Glass	X	X	●	●	X	■	●	●	●	X	●
G	Silver	X	X	●	●	X	■	●	●	●	X	●
J	Silver/Graphite	■	■	●	●	■	●	●	●	●	■	●
E	Silver/Nickel	■	■	●	●	■	●	●	●	●	■	●

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Conductive Elastomers

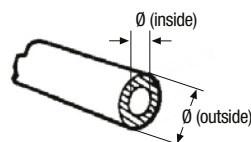
O Profile



Part-No.	Ø nominal
5001.XXYY.010	1.02
5001.XXYY.014	1.35
5001.XXYY.016	1.57
5001.XXYY.018	1.78
5001.XXYY.020	2.03
5001.XXYY.024	2.36
5001.XXYY.026	2.62
5001.XXYY.028	2.84
5001.XXYY.030	3.02
5001.XXYY.032	3.18
5001.XXYY.033	3.30
5001.XXYY.035	3.53
5001.XXYY.038	3.81
5001.XXYY.041	4.06
5001.XXYY.048	4.78
5001.XXYY.055	5.49
5001.XXYY.064	6.35

XX: Basic material, YY: Filler,
see material table  page 30

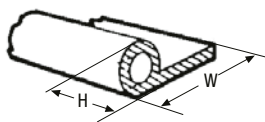
Hollow O Profile



Part-No.	Ø inside	Ø nominal
5007.XXYY.008.024	0.80	2.40
5007.XXYY.011.032	1.14	3.18
5007.XXYY.013.040	1.27	3.96
5007.XXYY.032.064	3.18	6.35
5007.XXYY.049.079	4.88	7.92
5007.XXYY.064.095	6.35	9.53

XX: Basic material, YY: Filler, see material table  page 30

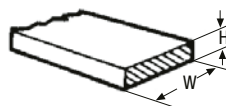
Profile with Fin (P Profile)



Part-No.	Height	Width
5005.XXYY.051.127	5.08	12.70
5005.XXYY.051.216	5.08	21.59
5005.XXYY.064.127	6.35	12.70
5005.XXYY.064.159	6.35	15.88
5005.XXYY.064.222	6.35	22.22
5005.XXYY.079.222	7.92	22.22
5005.XXYY.091.198	9.14	19.81

XX: Basic material, YY: Filler, see material table  page 30

Rectangular Profile



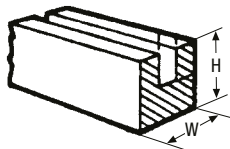
Part-No.	Height	Width
5004.XXYY.011.016	1.07	1.60
5004.XXYY.016.024	1.57	2.41
5004.XXYY.019.031	1.91	3.05
5004.XXYY.016.032	1.57	3.18
5004.XXYY.016.040	1.57	3.96
5004.XXYY.016.064	1.57	6.35
5004.XXYY.019.127	1.91	12.70
5004.XXYY.032.127	3.18	12.70
5004.XXYY.048.127	4.78	12.70
5004.XXYY.016.191	1.57	19.05
5004.XXYY.016.224	1.57	22.35

XX: Basic material, YY: Filler, see material table  page 30

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Conductive Elastomers

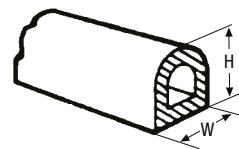
U Profile



Part-No.	Height	Width
5009.XXYY.025.025	2.54	2.54
5009.XXYY.028.032	2.79	3.20
5009.XXYY.057.032	5.72	3.20
5009.XXYY.040.040	3.94	3.96
5009.XXYY.040.045	3.96	4.45
5009.XXYY.059.083	5.94	8.31

XX: Basic material, YY: Filler, see material table (M)

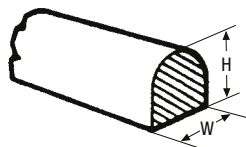
Hollow D Profile



Part-No.	Height	Width
5008.XXYY.040.040	3.96	3.96
5008.XXYY.047.048	4.72	4.75
5008.XXYY.079.079	7.92	7.92
5008.XXYY.079.079	7.92	7.92
5008.XXYY.082.124	8.23	12.37
5008.XXYY.064.064	6.35	6.35

XX: Basic material, YY: Filler, see material table (M)

Solid D Profile



Part-No.	Height	Width
5003.XXYY016.014	1.63	1.40
5003.XXYY.017.016	1.73	1.57
5003.XXYY.020.024	1.98	2.39
5003.XXYY.023.020	2.26	1.98
5003.XXYY.025.016	2.54	1.57
5003.XXYY.028.038	2.79	3.81
5003.XXYY.040.030	3.96	3.00
5003.XXYY.045.045	4.45	4.52
5003.XXYY.040.040	3.96	3.96

XX: Basic material, YY: Filler, see material table (M)



Basic material (XX)	Filler (YY)
37 - Silicone	43 Ag/Ni (1A/1)
38 - Fluorosilicone	44 Ag/Cu 1 (1B/1)
	45 Ag/Cu 2 (1B/2)
	46 Ag/Al 1 (1D/1)
	47 Ag/Al 2 (1D/2)
	48 Ag/Glass 1 (1I/1)
	49 Ag/Glass 3 (1I/3)
	50 Ag/Glass 4 (1I/4)
	51 Ni/Gr 2 (1J/2)
	52 Ni/Gr 3 (1J/3)
	53 Carbon (1F)
	54** Ni/Gr (1J/8)
	55* Ag/Cu (2B)
	56* Ag/Al (2D)
	57* Ni/Gr (2J)
	58* Ag/Cu (2A))

Material specification, see page 31

*Only in combination with fluorosilicone

** Flame retardant according to UL94-V0

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Conductive Elastomers

General Description

EcE Material Reference (Type)	1A/1	1B/1	1B/2	1D/1	1I/1	1I/3	1I/4
Elastomer Type (Sil - Silicone, F/Sil - Fluorosilicone)	Sil	Sil	Sil	Sil	Sil	Sil	Sil
Filler Material (Silver on Aluminium, Nickel, Copper, Glass & Nickel Graphite)	Ag/Ni	Ag/Cu	Ag/Cu	Ag/Al	Ag/Glass	Ag/Glass	Ag/Glass
Colour	Tan	Tan	Tan	Tan	Tan	Tan	Tan

Electrical Properties	Tol	Test Method							
Volume Resistivity (ohm · cm) (as supplied)	Max.		0.047	0.005	0.008	0.008	0.050	0.005	0.050 - 0.100
Shielding Effectiveness (dB)		MIL-G-83528 MIL 285	70	70	70	70	50	55	55
200 KHz (H-Field)			105	115	115	110	65	95	95
100 MHz (E-Field)			105	115	115	105	70	95	90
500 MHz (E-Field)			100	115	115	100	70	95	90
2 GHz (Plane Wave)			100	115	115	100	65	95	90
10 GHz (Plane Wave)									

Physical Properties

Specific Gravity (g/cm³)	±5%	ASTM D-792	4.32	3.32	3.02	2.11	1.85	1.80	1.75
Hardness (Shore A)	± 5	ASTM D-2240	65	75	61	70	65	65	60
Tensile Strength (MPa)	Min.	ASTM D-412	1.25	1.25	1.00	0.90	0.55	0.35	0.90
Elongation (%)	Min.	ASTM D-412	100	100	100	100	60	75	80
Compression Set (%)	Max.	ASTM D-395	30	30	30	30	30	30	30
Upper Operating Temperature (°C)	—		160	125	125	160	160	160	160
Lower Operating Temperature (°C)	—	ASTM D-1329	-50	-50	-50	-50	-50	-50	-50

General Description

EcE Material Reference (Type)	1J/2	1J/3	1J/8	1D/2	2A	2B	2D	2J
			not in- flammable					
Elastomer Type (Sil - Silicone, F/Sil - Fluorosilicone)	Sil	Sil	Sil	Sil	F/Sil	F/Sil	F/Sil	F/Sil
(Silver on Aluminium, Nickel, Copper, Glass & Nickel Graphite)	Ni/Gr	Ni/Gr	Ag/Al	Ag/Ni	Ag/Cu	Ag/Al	Ni/Gr	
Colour	Gray	Gray	Gray	Tan	Tan	Tan	Lt Grn	Dk Grn

Electrical Properties	Tol	Test Method								
Volume Resistivity (ohm · cm) (as supplied)	Max.		0.050	0.100- 0.500	0.050 0.100	0.008	0.005	0.005	0.010	0.050
Shielding Effectiveness (dB)										
200 KHz (H-Field)		MIL-G-83528	70	70	70	70	75	75	70	70
100 MHz (E-Field)		MIL 285	95	95	95	100	110	110	110	100
500 MHz (E-Field)			90	90	90	100	110	120	105	100
2 GHz (Plane Wave)			90	90	90	100	105	120	100	100
10 GHz (Plane Wave)			90	90	90	100	100	120	100	100

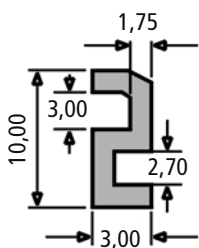
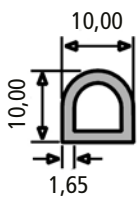
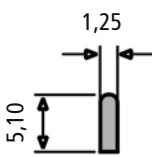
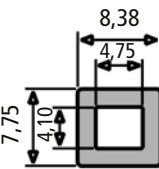
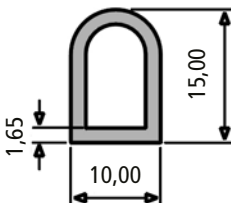
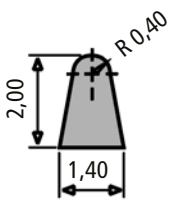
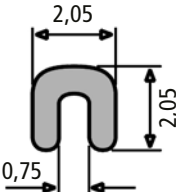
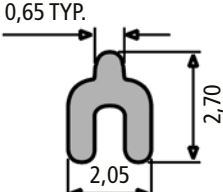
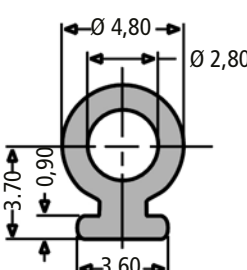
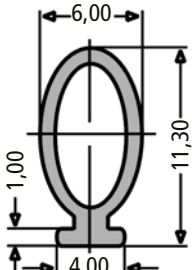
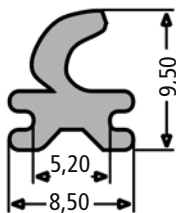
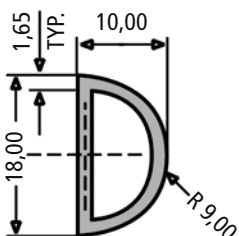
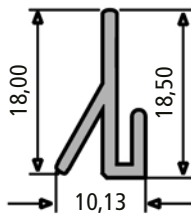
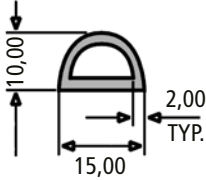
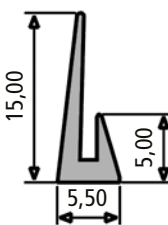
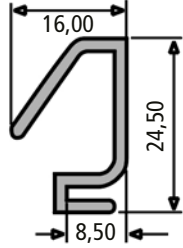
Physical Properties

Specific Gravity (g/cm³)	±5%	ASTM D-792	2.45	1.99	2.30	2.00	4.60	5.00	2.70	3.25
Hardness (Shore A)	± 5	ASTM D-2240	80	60	75	65	80	75	70	80
Tensile Strength (MPa)	Min.	ASTM D-412	2.00	1.00	1.40	0.90	1.25	1.25	0.55	0.75
Elongation (%)	Min.	ASTM D-412	150	100	125	175	100	100	100	100
Compression Set (%)	Max.	ASTM D-395	30	30	30	30	30	30	30	30
Upper Operating Temperature (°C)	—		160	160	160	160	160	125	160	160
Lower Operating Temperature (°C)	—	ASTM D-1329	-50	-50	-50	-50	-50	-55	-55	-55

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Special Extruded Profiles

Examples of non-standard profiles

<p>ES-XX-101</p> 	<p>ES-XX-118</p> 	<p>ES-XX-159</p> 	<p>ES-XX-152</p> 
<p>ES-XX-172</p> 	<p>ES-XX-181</p> 	<p>ES-XX-177</p> 	<p>ES-XX-190</p> 
<p>ES-XX-218</p> 	<p>ES-XX-229</p> 	<p>ES-XX-238</p> 	<p>ES-XX-246</p> 
<p>ES-XX-265</p> 	<p>ES-XX-268</p> 	<p>ES-XX-272</p> 	<p>ES-XX-275</p> 

All dimensions in mm

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Special Extruded Profiles

Examples of non-standard profiles

<p>ES-XX-285</p>	<p>ES-XX-383</p>	<p>ES-XX-353</p>	<p>ES-XX-380</p>
<p>ES-XX-390</p>	<p>ES-XX-395</p>	<p>ES-XX-420</p>	<p>ES-XX-446</p>
<p>ES-XX-480</p>	<p>ES-XX-495</p>	<p>ES-XX-497</p>	<p>ES-XX-514</p>
<p>ES-XX-518</p>	<p>ES-XX-524</p>	<p>ES-XX-571</p>	<p>ES-XX-597</p>

All dimensions in mm

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Special Extruded Profiles

Examples of non-standard carbon-loaded profiles

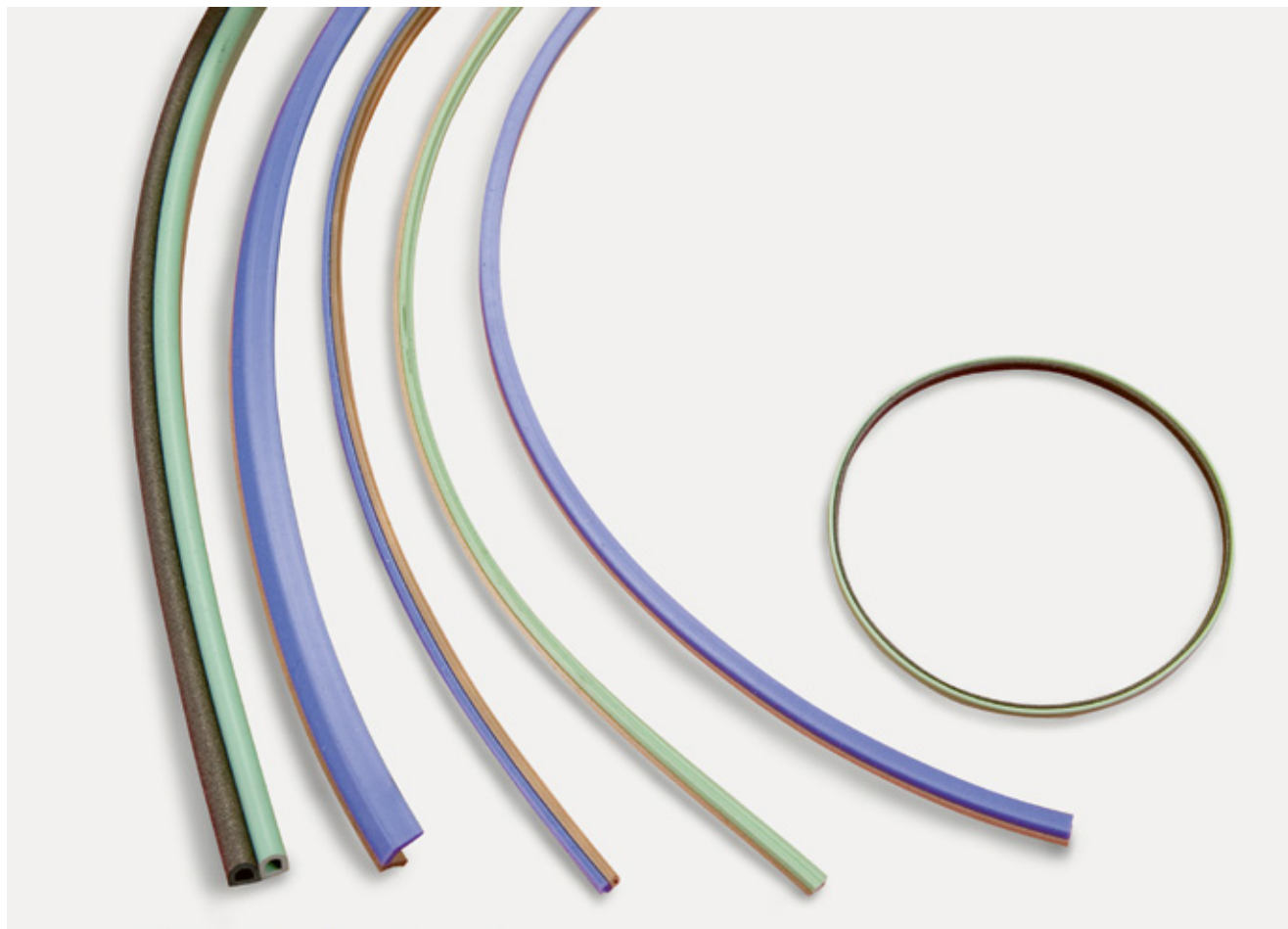
<p>ES-XX-298</p>	<p>ES-XX-332</p>	<p>ES-XX-353</p>	<p>ES-XX-428</p>
<p>ES-XX-435</p>	<p>ES-XX-486</p>	<p>ES-XX-488</p>	<p>ES-XX-489</p>
<p>ES-XX-540</p>	<p>SK340</p>	<p>SK431</p>	<p>SK413</p>

Based on carbon-loaded silicone, a range of clip-on, rivet mounted and P.S.A. backed extrusions can be supplied as extruded lengths or mitre jointed to suit cabinets.

Shielding is a minimum of 30-65dB from 200KHz-10GHz and environmental sealing performance of IP65 and beyond.

FEUERHERDT

Special Applications „Duo Seal“



In critical environments, our Duo seal gasket will fulfill the task of the EMC and environmental shielding. This seal is comprised of two materials with a vulcanised seamed joint. The material for the environmental seal is non-conductive silicone or fluorosilicone and protects the internal EMC gasket from external contamination and moisture, thus preventing galvanic corrosion.

The conductive part of the seal can be filled with different materials such as silver/aluminium, nickel/graphite etc.

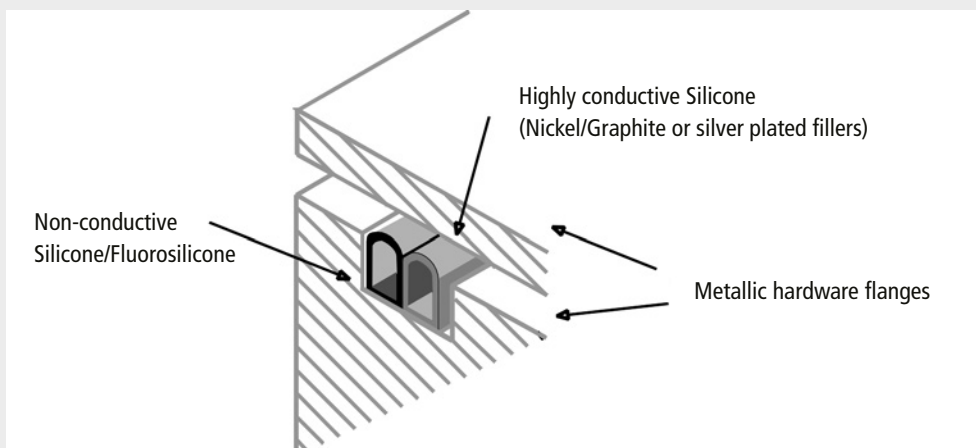
Summary of features:

- Compact use of a single rectangular groove.
- Low compression force.
- Custom-made gaskets to suit your hardware.
- Self retaining capability.
- Available in a comprehensive range of materials.
- Environmental sealing up to 5 psi or IP67 is possible.

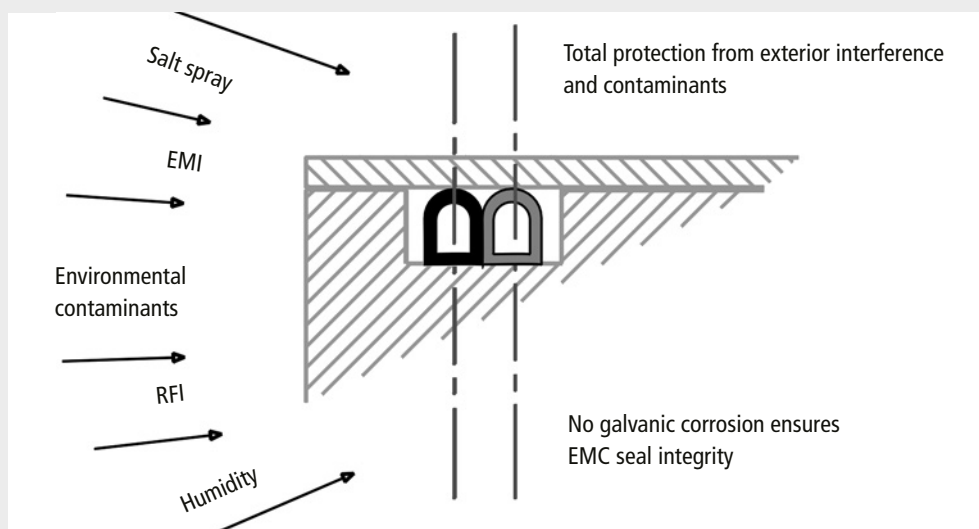
Duo Seal gaskets can be supplied endless on rolls, cut-to-length or vulcanised as o-rings. Our team will be pleased to help you selecting the optimum profile for your application.

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Special Applications „Duo Seal“

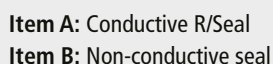


„Duo Seal“ - the ultimate protection



FEUERHERDT

Duo Seal must be optimized for the respective groove.



Maximum sectional area = 5.13 mm per section
Items A and B are co-vulcanised
Duo Seal Profile ES-XX-176

- Max. compression: 20% v
- Min. compression: 7.2% v
- Groove tolerance: ± 0.10 mm v
- Duo seal tolerance: ± 0.15 mm v
- Max. seal sectional area: 10.26 mm² v
- Groove max./min. height: 3.2 mm/3.0 mm v
- Min. groove sectional area: 10.50 mm² v

Feuerherdt GmbH | Motzener Strasse 26 b | D-12277 Berlin | Phone: +49(0)30-710 96 45-50 | Fax: +49(0)30-710 96 45-99
www.feuerherdt.de | emc@feuerherdt.de

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Special „Duo Seal“ Extruded Profiles

Some of the non-standard profiles that have been developed to suit specific customer applications for high spec RFI / IP applications.
Made from co-extruded conductive and non-conductive elastomer profiles.

<div>ES-XX-176</div>	<div>ES-XX-204</div>	<div>ES-XX-233</div>
<div>ES-XX-281</div>	<div>ES-XX-662</div>	<div>ES-XX-667</div>
<div>ES-XX-743</div>	<div>ES-XX-753</div>	<div>ES-XX-970</div>

Non-conductive (environmental)

Conductive (EMC)

Silicone Gaskets with Electrically Conductive Coating

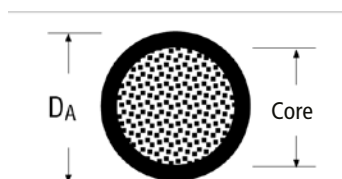
These very soft gaskets offer good shielding properties.

The core is either silicone foam, silicone tube or solid silicone.

The electrically conductive coating is made of silvered copper particles.

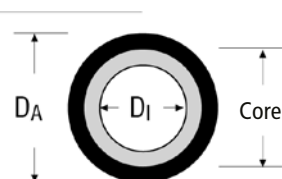
Technical Data of the Coating:

Volume resistance:	0.008 ohm-cm
Coating thickness:	0.15 mm + 0.05
Density DIN 53479:	3.6 g/cm ³
Elongation limit:	125%
Temperature stability:	125° C



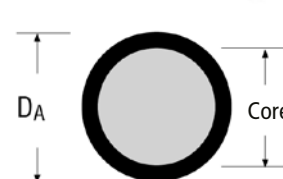
**Core: silicone foam
non-conductive**

Density	0.43 g/cm ³
Shore-A hardness	Härte 15° ±5
Elongation limit	140%
Permanent set	<40%
Temperature stability	200° C



**Core: silicone tube
non-conductive**

Density	1.14 g/cm ³
Shore-A hardness	60°
Elongation limit	150%
Permanent set	<35%
Temperature stability	200° C



**Core: solid silicone
non-conductive**

Density	1.08 g/cm ³
Shore-A hardness	Härte 60° ±7
Elongation limit	180%
Permanent set	<35%
Temperature stability	200° C

Foam	
Part-No.	Ø A
6001.3044.015	1.50
6001.3044.018	1.80
6001.3044.020	2.00
6001.3044.023	2.30
6001.3044.025	2.50
6001.3044.028	2.80
6001.3044.030	3.00
6001.3044.033	3.30
6001.3044.035	3.50
6001.3044.038	3.80
6001.3044.040	4.00
6001.3044.043	4.30
6001.3044.045	4.50
6001.3044.048	4.80
6001.3044.050	5.00
6001.3044.053	5.30
6001.3044.055	5.50
6001.3044.060	6.00

Tube		
Part-No.	Ø I	Ø A
6107.3144.005.012	0.50	1.20
6107.3144.005.013	0.50	1.30
6107.3144.005.014	0.50	1.40
6107.3144.005.015	0.50	1.50
6107.3144.005.016	0.50	1.60
6107.3144.010.017	1.00	1.70
6107.3144.005.018	0.50	1.80
6107.3144.010.018	1.00	1.80
6107.3144.010.020	1.00	2.00
6107.3144.010.021	1.00	2.10
6107.3144.010.022	1.00	2.20
6107.3144.010.023	1.00	2.30
6107.3144.015.023	1.50	2.30
6107.3144.010.024	1.00	2.40
6107.3144.010.025	1.00	2.50
6107.3144.015.025	1.50	2.50
6107.3144.010.026	1.00	2.60
6107.3144.015.026	1.50	2.60
6107.3144.010.027	1.00	2.70
6107.3144.015.027	1.50	2.70
6107.3144.010.028	1.00	2.80
6107.3144.010.030	1.00	3.00
6107.3144.015.030	1.50	3.00

Tube		
Part-No.	Ø I	Ø A
6107.3144.020.030	2.00	3.00
6107.3144.015.031	1.50	3.10
6107.3144.015.032	1.50	3.20
6107.3144.010.033	1.00	3.30
6107.3144.015.033	1.50	3.30
6107.3144.015.035	1.50	3.50
6107.3144.015.036	1.50	3.60
6107.3144.010.037	1.00	3.70
6107.3144.010.038	1.00	3.80
6107.3144.015.038	1.50	3.80
6107.3144.020.040	2.00	4.00
6107.3144.015.041	1.50	4.10
6107.3144.020.042	2.00	4.20
6107.3144.020.043	2.00	4.30
6107.3144.020.045	2.00	4.50
6107.3144.020.047	2.00	4.70
6107.3144.020.049	2.00	4.90
6107.3144.020.050	2.00	5.00
6107.3144.020.055	2.00	5.50
6107.3144.020.057	2.00	5.70
6107.3144.030.060	3.00	6.00
6107.3144.020.061	2.00	6.10
6107.3144.020.063	2.00	6.30

Solid	
Part-No.	Ø A
6201.3244.012	1.20
6201.3244.015	1.50
6201.3244.018	1.80
6201.3244.020	2.00
6201.3244.023	2.30
6201.3244.025	2.50
6201.3244.028	2.80
6201.3244.030	3.00
6201.3244.033	3.30
6201.3244.035	3.50
6201.3244.038	3.80
6201.3244.040	4.00
6201.3244.043	4.30
6201.3244.045	4.50
6201.3244.048	4.80
6201.3244.055	5.50

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Electrically Conductive Adhesives

It is a 1-component silicone based adhesive that cures at room temperature. It is used in the field of high-frequency shielding for elastic and electrically conductive bonding of HF seals, metal plates and foils.

Technical data:

Elastomer Binder		Silicone
Conductive pigment	silver-plated copper particles	Ag/Cu
Density DIN 53479	g/cm ³	2.4
Shore A Hardness DIN 53505	±6	62
Volume resistance VDE 0303	Ohm•cm	0.08
Temperature range	°C	-55/+125
Elongation at break DIN 53504-S1	%	> 35
Colour		beige
Shielding dB:		
H-field 10 KHz		67
E-field 1 MHz		130
P-field 1 GHz		110
Conductive bonding of:		
Metal with Metall		good
Metal with HF gasket		good
HF gasket with HF gasket		good
Adhesion on aluminium	N/cm	>18
Removable with white spirit		no
Viscosity on delivery	21°C	Viscous
Solvent Toluene	%	5
Catalyst	21°C	Humidity
Curing at room temperature	21°C	yes
Skin formation at 0.2 mm thickness approx.	Minutes	1 to 4
Curing at 0.2 mm thickness approx.	Minutes	5 to 20
Curing depending on layer thickness and exhaust-air surface	Minutes	3 to 180
Odourless curing		no
Resistance to	UV, Ozon	yes
Storage time: plastic cartridges	Month	0.5
Storage time: Aluminium cartridges	Month	3

Part-No.	Size
1.26.0005	5 cm ³ - Cartridge (10g)
1.26.0010	10 cm ³ - Cartridge (25g)
1.26.0030	30 cm ³ - Cartridge (50g)
1.26.0055	55 cm ³ - Cartridge (100g)
1.26.0310	310 cm ³ - Aluminium cartridge (800g)
1.26.1000	1000 cm ³ - Aluminium cartridge (2200g)

Flexible filling quantities are possible on request.
Please note the packaging dependent storage time of 2-12 weeks.

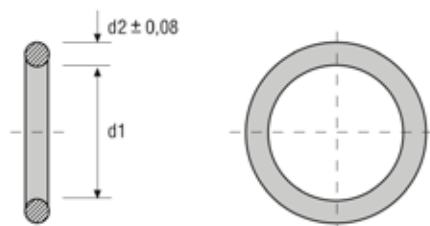


FEUERHERDT

Standard Connector Gaskets

„O“ Ring Gaskets of Conductive Silicone for MIL Shells

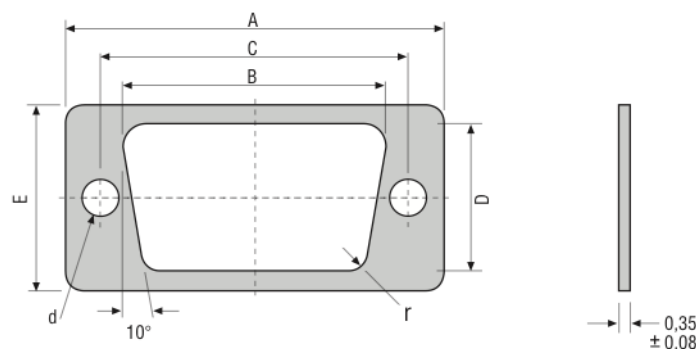
Standard „O“ ring gaskets for MIL shells are produced by compression moulding. Alternatively, we offer production from extruded profiles vulcanized to an O-ring. Other dimensions are also possible with this process.



Shell size	MIL C 38999 MIL C 26482	MIL C 81511	d1	Tolerance on d1%	d 2
	Order code	Order code	mm	mm	mm
6	001	–	14.00	0.13	1.78
8	002	–	17.16	0.13	1.78
8	–	003	18.77	0.13	1.78
9	004	–	20.35	0.15	1.78
10	–	005	21.95	0.15	1.78
11+12	006	–	25.12	0.15	1.78
13+14	007	007	28.30	0.15	1.78
15+16	008	008	31.47	0.15	1.78
17+18	009	009	34.65	0.15	1.78
19+20	10	–	37.77	0.15	2.62
21+22	011	–	40.95	0.25	2.62
23+24	012	–	44.12	0.25	2.62

Miniature Sub- O“ Shell Gaskets of Conductive Silicone

Production by screen printing. Therefore inexpensive, because no die-cutting waste. Also, very low material thicknesses of only 0.35 mm possible.

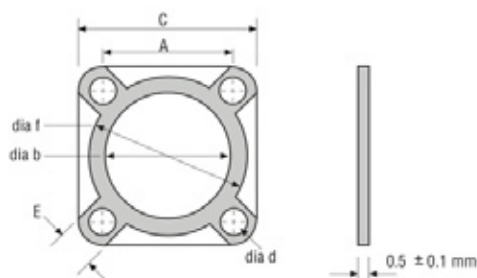


Shell size	No. of contacts	Order code	A ±0.38mm	B ±0.38mm	C ±0.08mm	D ±0.18mm	E ±0.38mm	d ±0.12mm	r
1	9	001	30.81	20.45	25.00	11.34	14.91	3.12	3.56
2	15	002	39.14	28.57	33.30	11.34	14.91	3.12	3.56
3	25	003	53.03	42.29	47.05	11.34	14.91	3.12	3.56
4	37	004	69.32	58.80	63.48	11.34	14.91	3.12	3.56
5	50	005	66.93	56.64	61.14	14.34	17.83	3.12	3.56

FEUERHERDT

Standard Connector Gaskets

Mil Spec Back Shell Connector Gaskets



MIL-C-38999

Shell size	Order code	A mm ±0.20	Ø b mm ±0.20	C mm ±0.25	Ø d mm ±0.15	E mm ±0.20	Ø f mm ±0.20
8	001	15.09	16.25	21.34	3.43	7.00	20.75
9+10	002	18.26	19.30	24.51	3.43	7.00	23.80
11+12	003	20.62	22.48	26.92	3.58	7.50	26.98
13+14	004	23.01	25.78	29.29	3.43	7.00	30.28
15+16	005	24.61	29.05	31.95	3.96	7.50	33.55
18	006	26.97	32.25	34.32	3.96	7.50	36.75
19+20	007	29.36	35.18	38.10	3.58	7.50	39.68
21+22	008	31.75	38.35	41.28	3.58	7.50	42.85
23+24	009	34.93	41.53	44.45	4.37	8.00	46.03
25	010	38.10	44.70	47.63	4.37	8.00	49.20

MIL-C-5015/26482

8	011	15.09	12.95	22.23	3.96	7.50	17.45
10	012	18.26	16.08	25.40	3.96	7.50	20.58
12	013	20.65	19.30	27.79	3.58	7.00	23.80
14	014	23.01	22.48	30.18	3.96	7.50	26.98
16	015	24.61	25.65	32.54	3.96	7.50	30.15
18	016	26.97	29.08	34.93	3.96	7.50	33.58
20	017	29.36	32.00	38.10	4.37	8.00	36.50
22	018	31.75	35.18	41.28	4.37	8.00	39.68
24	019	34.93	38.35	44.45	5.16	9.00	42.85

MIL-C-5015

28	020	39.67	44.70	50.80	5.16	9.00	49.20
32	021	44.45	51.05	57.15	5.56	9.50	55.55
36	022	49.23	57.40	63.50	5.56	9.50	61.90
40	023	55.58	63.75	69.85	5.56	9.50	68.25
44	024	60.33	70.89	76.20	5.56	9.50	75.39
48	025	66.68	77.24	82.55	5.56	9.50	81.74

MIL-C-81511

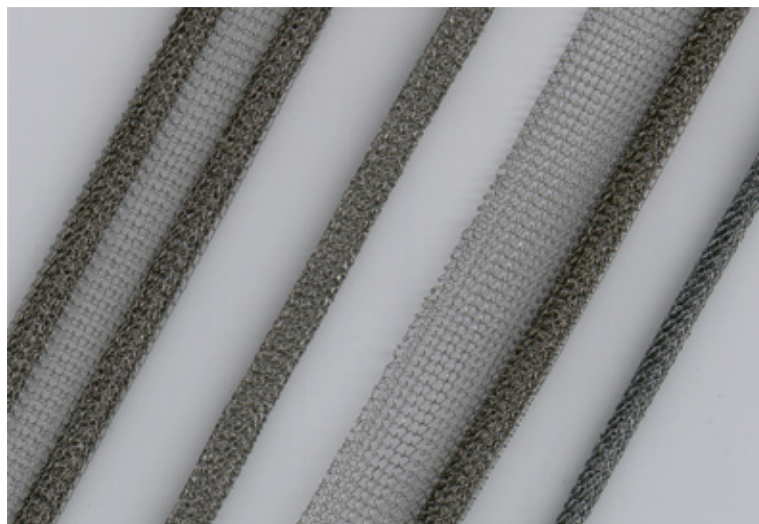
8	026	15.09	14.68	20.62	3.18	7.00	19.18
10	027	18.26	17.52	23.80	3.18	7.00	20.02
14	028	23.01	24.08	28.58	3.18	7.00	28.58
16	029	24.61	27.25	31.75	3.18	7.00	31.75
18	030	26.97	30.45	34.11	3.18	7.00	34.95
20	031	29.36	33.57	37.26	3.18	7.00	38.07
22	032	31.75	36.75	39.67	3.18	7.00	41.25
24	033	34.93	39.95	43.26	3.86	7.00	44.45

Non-MIL-Standard Connector Gaskets

17	034	26.97	29.00	34.93	3.58	7.50	33.50
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FEUERHERDT

All Metal Gaskets (Knitted Wire Mesh)



Available Materials

- Monel
- Tinned, copper-plated steel wire
- Stainless Steel
- Copper Beryllium
- Tin-plated copper
- Aluminium

Delivery Form

- Endless on spools
- Optionally with adhesive tape

Mechanical tolerances:

1.5 - 5 mm	+0.4 -0.0 mm
10 - 5 mm	+0.6 -0.0 mm
>10 mm	+0.8 -0.0 mm

Description

All metal gaskets are available in four designs: round, rectangular, round/double-round with fastening strip.

They are pressed together between two contact surfaces (e.g. also in a groove), offer good shielding performance and have no temperature limits.

Round

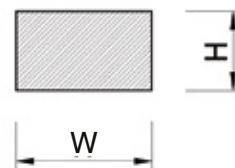


Part-No.	Ø
2001.XXYY.016	1.60
2001.XXYY.024	2.40
2001.XXYY.032	3.20
2001.XXYY.048	4.80
2001.XXYY.064	6.40
2001.XXYY.080	8.00
2001.XXYY.095	9.50
2001.XXYY.111	11.10
2001.XXYY.127	12.70
2001.XXYY.159	15.90
2001.XXYY.191	19.10

XX: Basic material,

YY: Plating, see material table (M) page 44

Rectangular



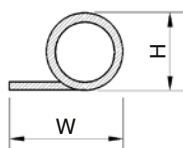
Part-No.	Height	Width
2004.XXYY.024.024	2.40	2.40
2004.XXYY.024.048	2.40	4.80
2004.XXYY.024.064	2.40	6.40
2004.XXYY.032.032	3.20	3.20
2004.XXYY.032.064	3.20	6.40
2004.XXYY.032.080	3.20	8.00
2004.XXYY.048.048	4.80	4.80
2004.XXYY.048.080	4.80	8.00
2004.XXYY.048.127	4.80	12.70
2004.XXYY.064.064	6.40	6.40
2004.XXYY.064.127	6.40	12.70
2004.XXYY.080.127	8.00	12.70
2004.XXYY.095.127	9.50	12.70

XX: Basic material,

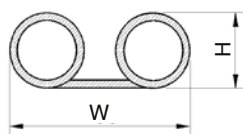
YY: Plating, see material table (M) page 44

FEUERHERDT

All Metal Gaskets (Knitted Wire Mesh)



Round with Mounting Fin



Double Round with Mounting Fin

Part-No.	Height	Width
2005.XXYY.016.127	1.60	12.70
2005.XXYY.024.159	2.40	15.90
2005.XXYY.032.095	3.20	9.50
2005.XXYY.032.127	3.20	12.70
2005.XXYY.040.127	4.00	12.70
2005.XXYY.040.195	4.00	19.50
2005.XXYY.048.127	4.80	12.70
2005.XXYY.048.191	4.80	19.10
2005.XXYY.064.159	6.40	15.90
2005.XXYY.064.191	6.40	19.10
2005.XXYY.080.159	8.00	15.90
2005.XXYY.095.195	9.50	19.50
2005.XXYY.127.254	12.70	25.40

XXYY: Basic material and finish, see material table (M)

Part-No.	Height	Width
2006.XXYY.032.095	3.20	9.50
2006.XXYY.032.127	3.20	12.70
2006.XXYY.032.159	3.20	15.90
2006.XXYY.032.191	3.20	19.10
2006.XXYY.040.254	4.00	25.40
2006.XXYY.048.191	4.80	19.10
2006.XXYY.048.222	4.80	22.20
2006.XXYY.048.254	4.80	25.40
2006.XXYY.064.191	6.40	19.10
2006.XXYY.064.254	6.40	25.40
2006.XXYY.080.222	8.00	22.20
2006.XXYY.095.254	9.50	25.40
2006.XXYY.095.320	9.50	32.00

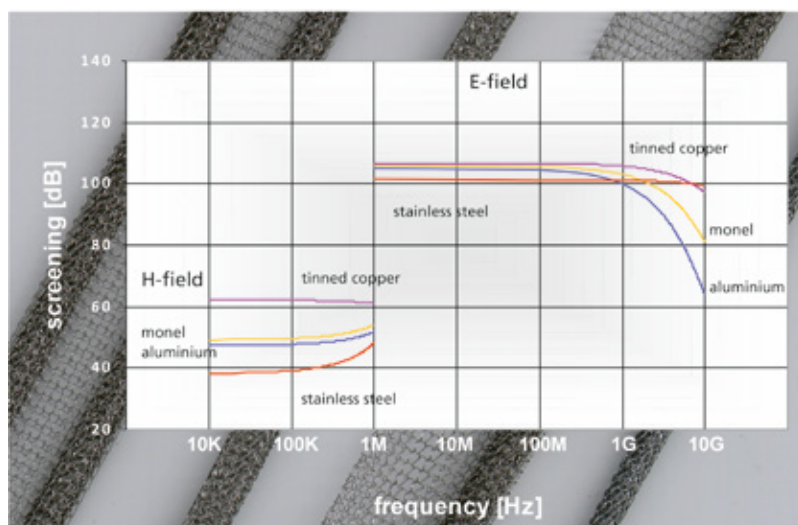
XXYY: Basic material and finish, see material table (M)



Basic material and finish (XXYY)

2502 - Monel
2407 - Tinned copper-clad steel wire
2202 - Stainless Steel
2002 - Beryllium copper
2130 - Tinned copper
2302 - Aluminium

On request available in 2-layer or 2-threaded version.



Comparison of Shielding Performances

This graph compares general performances in E-field and H-field screening of four gaskets made of different materials (monel, stainless steel, tinned copper and aluminium). Tests are performed on type T.064 cross section and in accordance with MIL STD 285.

FEUERHERDT

All Metal Gaskets (Knitted Wire Mesh)

Monel

Material no. (DIN) 2.4360
Wire Diameter 0.11 mm

Shielding Effectiveness		
Electrical		
Frequency (Hz)	Mode	Screening (dB)
1 M	E	124.5
10 M	E	110
110 M	P	105.5
400 M	P	101
1 G	P	86
10 G	P	82.5
Magnetic		
10 K	H	48.5
100 K	H	50.5
1 M	H	54

Tinned, copper-plated steel wire

ASTM-B-520
Wire Diameter 0.11 mm

Shielding Effectiveness		
Electrical		
Frequency (Hz)	Mode	Screening (dB)
1 M	E	125.5
10 M	E	110
110 M	P	114.5
400 M	P	99
1 G	P	85.5
10 G	P	99.5
Magnetic		
10 K	H	62
100 K	H	62.5
1 M	H	61

Stainless Steel

AISI 304, Material Nr. (DIN) 1.4301
Wire Diameter 0.11 mm

Shielding Effectiveness		
Electrical		
Frequency (Hz)	Mode	Screening (dB)
1 M	E	119.5
10 M	E	104
110 M	P	103.5
400 M	P	97
1 G	P	84
10 G	P	101.5
Magnetic		
10 K	H	36
100 K	H	42
1 M	H	48

Aluminium

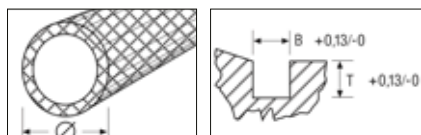
Alloy 5056, AMS-4182
Wire Diameter 0.13 mm

Shielding Effectiveness		
Electrical		
Frequency (Hz)	Mode	Screening (dB)
1 M	E	125
10 M	E	111.5
110 M	P	105
400 M	P	98
1 G	P	81.5
10 G	P	65
Magnetic		
10 K	H	45
100 K	H	50.5
1 M	H	51.5

Mesh Gasket - Hollow Gaskets

Hollow-knitted gaskets offer maximum elasticity with constant point-to-point contact using extremely low compression forces. They are available in four versions: Round hollow knit, round hollow knit with fin and double round and D profile.

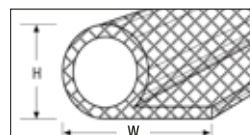
Hollow Core Round



Part-No.	Ø
2307.XXYY.016	1.60
2307.XXYY.024	2.40
2307.XXYY.032	3.20
2307.XXYY.048	4.80
2307.XXYY.064	6.40
2307.XXYY.080	8.00
2307.XXYY.095	9.50
2307.XXYY.111	11.10
2307.XXYY.127	12.70

XXYY: Basic material and finish, see material table (M)

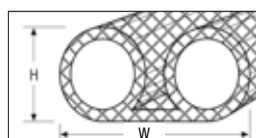
Hollow Core Round with Single Fin



Part-No.	Height	Width
2305.XXYY.016.095	1.60	9.50
2305.XXYY.024.127	2.40	12.70
2305.XXYY.032.127	3.20	12.70
2305.XXYY.032.159	3.20	15.90
2305.XXYY.048.159	4.80	15.90
2305.XXYY.064.191	6.40	19.10
2305.XXYY.064.254	6.40	25.40
2305.XXYY.080.254	8.00	25.40
2305.XXYY.095.320	9.50	32.00

XXYY: Basic material and finish, see material table (M)

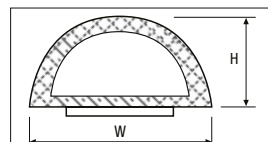
Hollow Core Double Round



Part-No.	Height	Width
2306.XXYY.024.127	2.40	12.70
2306.XXYY.032.127	3.20	12.70
2306.XXYY.032.159	3.20	15.90
2306.XXYY.048.159	4.80	15.90
2306.XXYY.048.191	4.80	19.10
2306.XXYY.064.191	6.40	19.10
2306.XXYY.064.254	6.40	25.40
2306.XXYY.080.254	8.00	25.40
2306.XXYY.095.032	9.50	32.00

XXYY: Basic material and finish, see material table (M)

D-Profile



Part-No.	Height	Width
2303.XXYY.032.051	3.20	5.10

XXYY: Basic material and finish, see material table (M)



Basic material and finish (XXYY)

2002 - CuBe
 2030 - CuBe, tin-plated
 2407 - Tinned, copper-plated steel wire
 2202 - Stainless Steel

On request available in 2-layer or 2-threaded version.

FEUERHERDT

Mesh Gasket - Hollow Gaskets

Properties

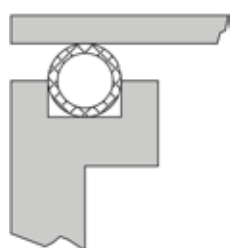
- Compression force ca. 80% less than conventional knitted wire shielding with elastomer core.
- Nearly 100% recovery of the original diameter after almost 75% compression.
- Good shielding performance.
- Up to 75% lighter than conventional wire knit.
- Very long working life.
- No moisture absorption.

Delivery Form

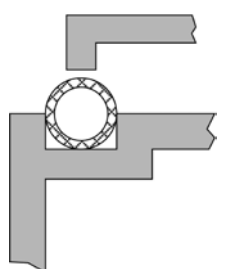
- Endless on spools



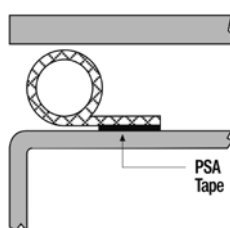
Mounting Examples



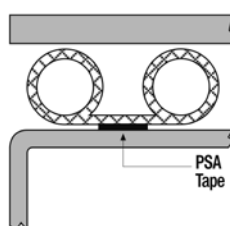
Round gasket in a groove and flat lid.



Round gasket in a groove and contacting with a "Knife-edge".



Round gasket with fin and double-sided adhesive tape. Can also be mounted using a clamping strip.



Double round gasket with double-sided adhesive tape. Fastening also possible with screws or clamping strip.

Compression Recovery

An essential feature of hollow knit is its elasticity. It recovers its initial diameter up to 90% and more after repeated compression cycles and squeezing up to 75%.

Outside Ø	Deflection % of external dia	Recovery in % after compression cycles		
		100 Cycles	250 Cycles	500 Cycles
1.6 mm	25	100	98	98
	50	98	98	94
	75	98	98	94
2.4 mm	25	100	100	100
	50	98	98	96
	75	92	90	88
3.2 mm	25	96	96	96
	50	96	96	96
	75	96	95	95
4.8 mm	25	98	98	98
	50	98	98	98
	75	89	88	88
6.4 mm	25	100	100	100
	50	100	98	98
	75	97	96	96
8.0 mm	25	100	100	100
	50	100	100	99
	75	100	100	98
9.5 mm	25	98	98	98
	50	98	98	97
	75	95	95	95
11.1 mm	25	100	100	100
	50	100	99	99
	75	100	100	98
12.7 mm	25	100	100	100
	50	98	98	97
	75	98	98	97

FEUERHERDT

Mesh-Elasto (Wire Mesh over Elastomere Core Gaskets)

A mesh-elasto gasket is a combination of EMC and environmental shielding. An elastic core (silicone foam or tube /neoprene foam) are knitted over with single or multiple layers of wire. The elastomer core allows for a speedy recovery of the gasket and provides protection against dust and moisture. The knitted mesh ensures EMI shielding.

Materials

wire mesh: copper-beryllium, tinned copper-plated steel wire, stainless steel, monel, aluminium

Elastomer core: neoprene foam, silicone foam, silicone tube. EPDM foam, LF urethane foam

Delivery Form

Mesh elasto gaskets are available endless on rolls or closed to rings according to customer specification.

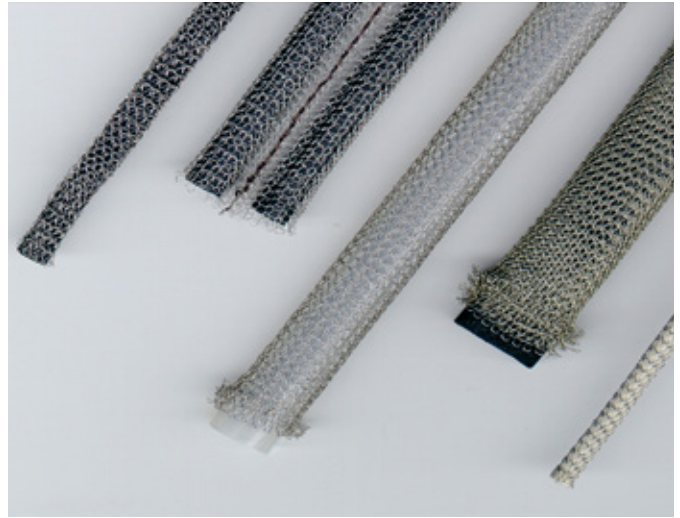
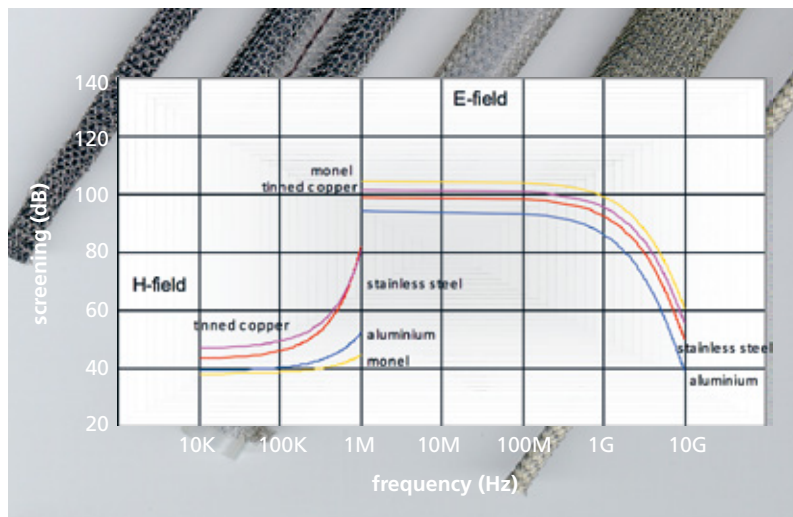
Round or double knitted fabrics are also supplied as P or double P section for mounting purposes.

The following mechanical tolerances apply:

1.5 - 5 mm: +0.3 bis -0.3 mm

5.5 - 12 mm: +0.6 bis -0.6 mm

>12 mm: +0.9 bis -0.9 mm

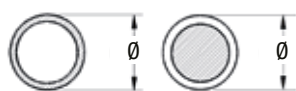


Comparison of Shielding Performances

This graph compares the general performance in E and H-field screening of four gaskets made of different materials (monel, stainless steel, tinned copper and aluminium). The tests were performed on the round MESH Elasto with Ø 6.4 mm and according to MIL STD 285.

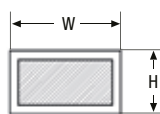
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Mesh-Elasto (Wire Mesh over Elastomere Core Gaskets)


Round

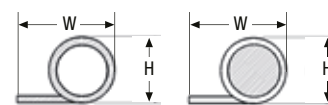
Part-No.	Ø
2101.XXYY.016	1.60
2101.XXYY.024	2.40
2101.XXYY.032	3.20
2101.XXYY.048	4.80
2101.XXYY.064	6.40
2101.XXYY.080	8.00
2101.XXYY.095	9.50
2101.XXYY.111	11.10
2101.XXYY.127	12.70
2101.XXYY.159	15.90
2101.XXYY.191	19.10

XX: Basic material,
YY: Plating, see material table (M)


Rectangular

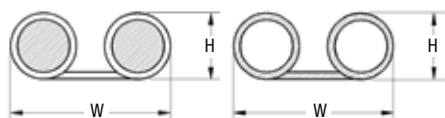
Part-No.	Height	Width
2104.XXYY.024.024	2.40	2.40
2104.XXYY.024.048	2.40	4.80
2104.XXYY.024.064	2.40	6.40
2104.XXYY.032.032	3.20	3.20
2104.XXYY.032.064	3.20	6.40
2104.XXYY.032.080	3.20	8.00
2104.XXYY.048.048	4.80	4.80
2104.XXYY.048.080	4.80	8.00
2104.XXYY.048.127	4.80	12.70
2104.XXYY.064.064	6.40	6.40
2104.XXYY.064.127	6.40	12.70
2104.XXYY.080.127	8.00	12.70
2104.XXYY.095.127	9.50	12.70

XX: Basic material, YY: Plating, see material table (M)


Round with Mounting Bar

Art.Nr.	Height	Width
2105.XXYY.032.095	3.20	9.50
2105.XXYY.032.127	3.20	12.70
2105.XXYY.032.159	3.20	15.90
2105.XXYY.032.191	3.20	19.10
2105.XXYY.048.127	4.80	12.70
2105.XXYY.048.159	4.80	15.90
2105.XXYY.048.191	4.80	19.10
2105.XXYY.048.222	4.80	22.20
2105.XXYY.080.159	8.00	15.90
2105.XXYY.080.191	8.00	19.10
2105.XXYY.080.222	8.00	22.20
2105.XXYY.080.254	8.00	25.40
2105.XXYY.095.320	9.50	32.00

XX: Basic material, YY: Plating, see material table (M)


Double Round

Part-No.	Height	Width
2106.XXYY.032.095	3.20	9.50
2106.XXYY.032.127	3.20	12.70
2106.XXYY.032.159	3.20	15.90
2106.XXYY.032.191	3.20	19.10
2106.XXYY.048.159	4.80	15.90
2106.XXYY.048.191	4.80	19.10
2106.XXYY.048.222	4.80	22.20
2106.XXYY.048.254	4.80	25.40
2106.XXYY.064.191	6.40	19.10
2106.XXYY.064.254	6.40	25.40
2106.XXYY.080.222	8.00	22.20
2106.XXYY.095.254	9.50	25.40
2106.XXYY.095.254	9.50	32.00

XX: Basic material, YY: Plating, see material table (M)



Basic material (XX)	Finish (YY)
34 - Neoprene foam	25 - Monel
33 - EPDM foam	07 - Tin-plated, copper-plated steel wire
30 - Silicone foam	22 - Stainless Steel
31 - Silicone tube	20 - CuBe
36 - Urethane foam (low density)	30 - Tin-plated copper
	23 - Aluminium

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Mesh-Elasto (Wire Mesh over Elastomere Core Gaskets)

Monel

Material no. (DIN) 2.4360
Wire Diameter 0.11 mm

Shielding Effectiveness		
Electrical		
Frequency (Hz)	Mode	Screening (dB)
1 M	E	124.5
10 M	E	107
110 M	P	105.5
400 M	P	98
1 G	P	82
10 G	P	62
Magnetic		
10 K	H	37
100 K	H	40
1 M	H	44.5

Tinned, copper-plated steel wire

ASTM-B-520
Wire Diameter 0.11 mm

Shielding Effectiveness		
Electrical		
Frequency (Hz)	Mode	Screening (dB)
1 M	E	125.5
10 M	E	109
110 M	P	110
400 M	P	99.5
1 G	P	63
10 G	P	58
Magnetic		
10 K	H	38
100 K	H	62.5
1 M	H	79

Stainless Steel

AISI 304, Material no. (DIN) 1.4301
Wire Diameter 0.11 mm

Shielding Effectiveness		
Electrical		
Frequency (Hz)	Mode	Screening (dB)
1 M	E	125.5
10 M	E	107
110 M	P	105.5
400 M	P	91.5
1 G	P	64
10 G	P	52
Magnetic		
10 K	H	35
100 K	H	58.5
1 M	H	80.5

Aluminium

Alloy 5056, AMS-4182
Wire Diameter 0.13 mm

Shielding Effectiveness		
Electrical		
Frequency (Hz)	Mode	Screening (dB)
1 M	E	118
10 M	E	100.5
110 M	P	97
400 M	P	86
1 G	P	63.5
10 G	P	40.5
Magnetic		
10 K	H	37.5
100 K	H	42.5
1 M	H	52

Kombi-Shield

Kombi-Shield is a combination of knitted wire mesh bonded to an elastomer (foam or solid). It is available with or without adhesive tape. Standard is a full-metal gasket with an attached strip of elastomer foam.

Instead of a full metal gasket, a mesh elasto gasket can also be joined to the elastomer section. Due to its elastic core, this is softer and more flexible.

The combination of a mesh / Mesh-elasto gasket with an elastomer strip provides both good environmental and EMC shielding.

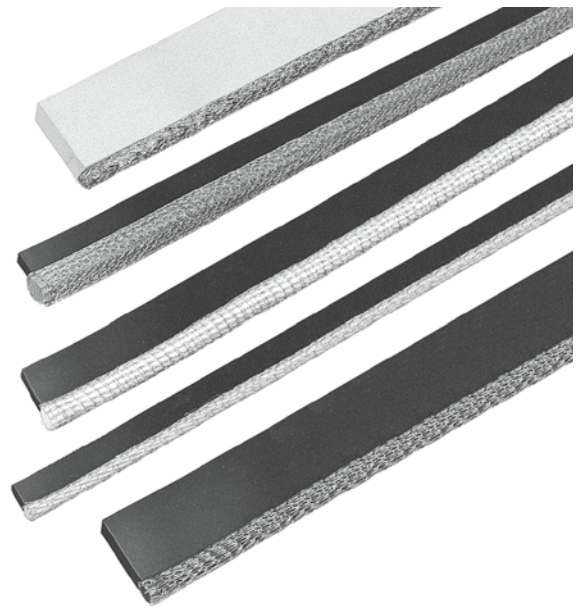
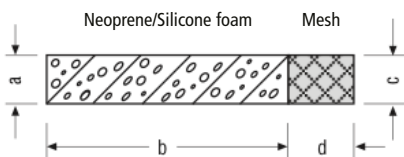
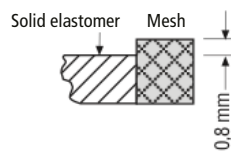
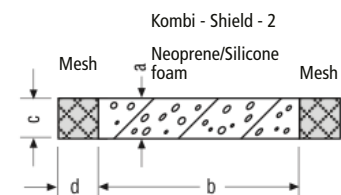
Delivery Form

Sold by the meter, formed into a ring or rectangular frame

Materials

Elastomer: Neoprene, EPDM or silicone

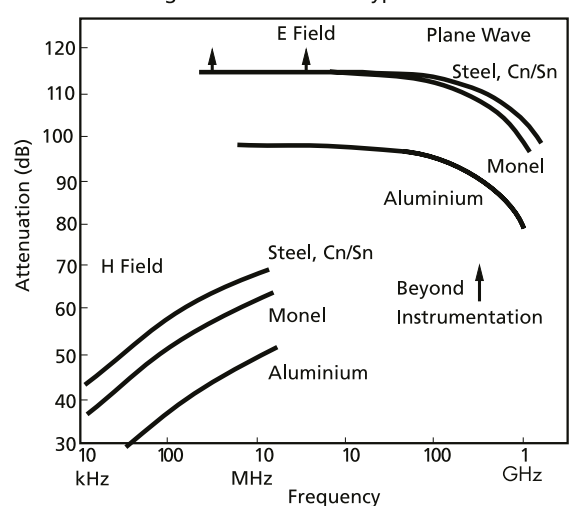
Knitted wire mesh: Monel, tin-plated copper-plated steel wire, CuBe, tin-plated copper, aluminium



Tolerances

Dimensions	Solid elastomer	Foam elastomer	
		Silicone	Neoprene
a bis 3.18	± 0.38	+ 0.81– 0.41	+ 0.81– 0.41
a 3.18 –12.7	± 0.38	± 0.79	± 1.60
a 12.7 and above	± 0.38	± 1.60	± 2.39
b to 25.4	± 0.78	± 0.78	± 0.78
c	1.57– 4.78	+ 0.38	
and		– 0.00	
d	4.78 – 9.53	± 0.78	
		– 0.00	

Shielding effectiveness of a typical Kombi-Shield

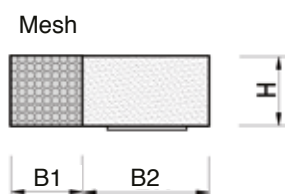


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Kombi-Shield

Kombi-Shield Standard Profiles

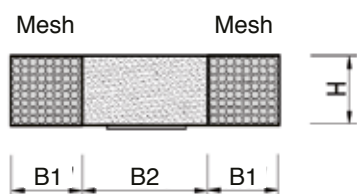
Single



Part-No.	Height	B1 (Mesh)	B2 (Elastomer)
2211.XXYY.024.320.064	2.40	3.20	6.40
2211.XXYY.024.320.095	2.40	3.20	9.50
2211.XXYY.032.320.127	3.20	3.20	12.70
2211.XXYY.032.032.159	3.20	3.20	15.90
2211.XXYY.032.064.127	3.20	6.40	12.70
2211.XXYY.048.048.127	4.80	4.80	12.70
2211.XXYY.048.064.159	4.80	6.40	15.90
2211.XXYY.048.064.191	4.80	6.40	19.10
2211.XXYY.048.095.127	4.80	9.50	12.70
2211.XXYY.064.064.159	6.40	6.40	15.90
2211.XXYY.064.095.191	6.40	9.50	19.10
2211.XXYY.095.064.127	9.50	6.40	12.70
2211.XXYY.095.064.191	9.50	6.40	19.10

XX: Elastomer-material, YY: Mesh-material, see material table (M)

Double



Part-No.	Height	B1 (Mesh)	B2 (Elastomer)
2212.XXYY.032.032.064	3.20	3.20	6.40
2212.XXYY.032.032.095	3.20	3.20	9.50
2212.XXYY.032.032.127	3.20	3.20	12.70
2212.XXYY.032.064.095	3.20	6.40	9.50
2212.XXYY.032.064.127	3.20	6.40	12.70
2212.XXYY.048.032.064	4.80	3.20	6.40
2212.XXYY.048.032.127	4.80	3.20	12.70
2212.XXYY.064.064.127	6.40	6.40	12.70

XX: Elastomer-material, YY: Mesh-material, see material table (M)

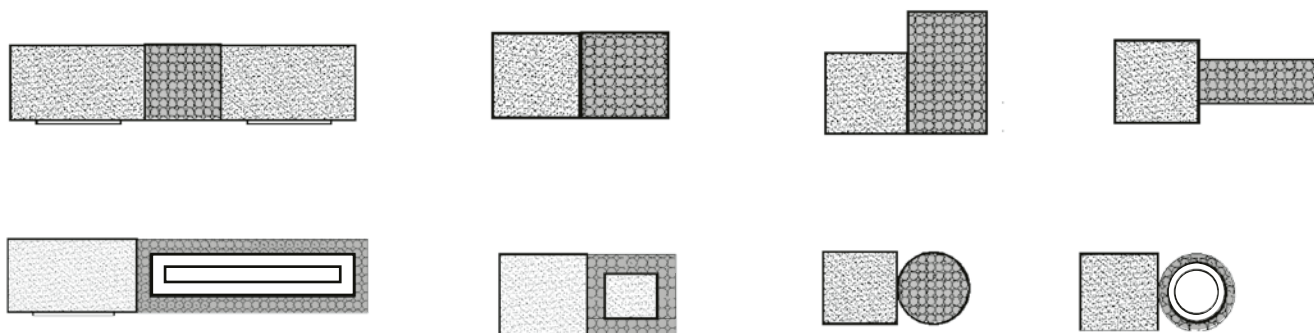


Elastomer-material (XX)	Mesh-material (YY)
34 - Neoprene foam	25 - Monel
33 - EPDM foam	07 - Tin-plated, copper-plated steel wire
	22 - Stainless Steel
	20 - CuBe
	26 - Tin-plated CuBe
	23 - Aluminium

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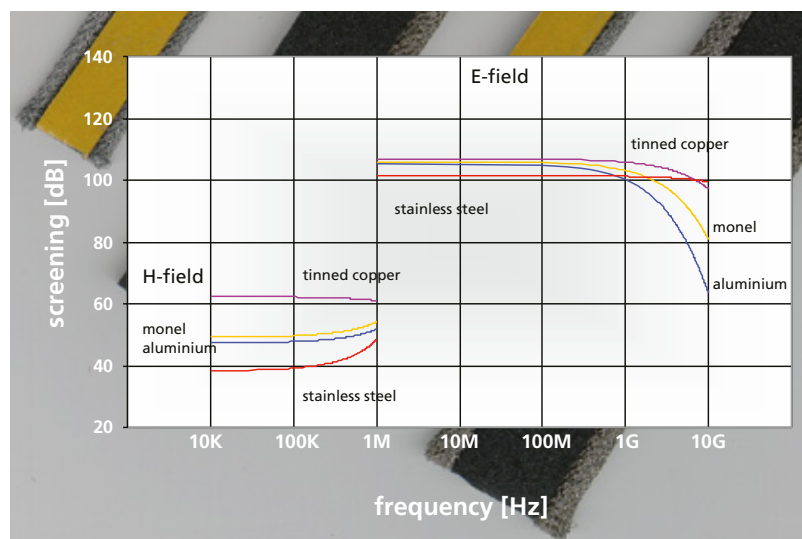
Kombi-Shield

Examples of Non-Standard Profiles



 **Elastomer**
 **Knitted Wire Mesh**
 **Elastomer with Knitted Wire Mesh**

Other sizes, configurations or ready-to-install seals (according to your drawing) available on request.



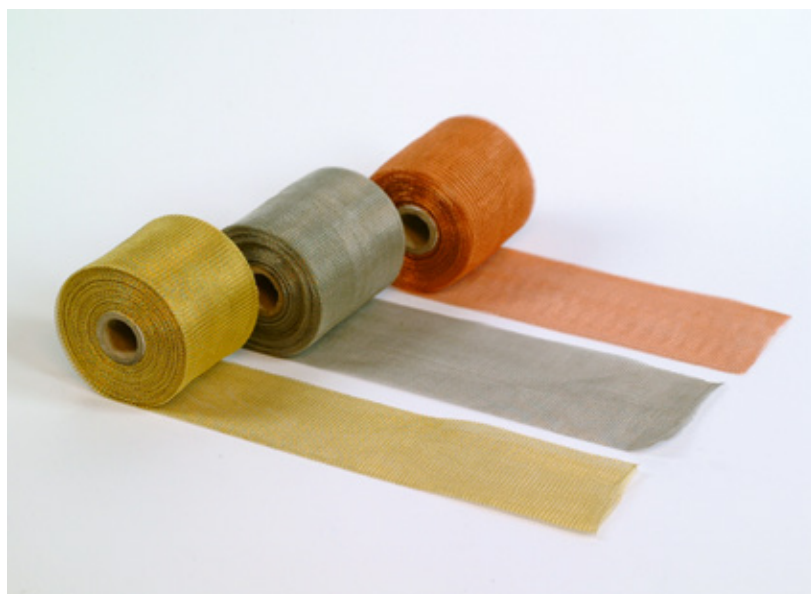
Comparison of Shielding Performances

This graph compares the general E-field and H-field screening performance of four combi-seals with identical dimensions made of different wire materials (monel, stainless steel, tin-plated copper and aluminium).

Tests performed according to **MIL STD 285**.

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Mesh-Tapes



- Specially designed for shielding and grounding of electrical and electronical cable assemblies
- Flexible structure to adapt to irregular surfaces and contours during the wrapping process (50% overlap recommended)
- Tin-plated version for better solderability
- Protection against electrostatic discharge (ESD)

Materials available

- Tin-plated, copper-plated steel wire (standard)
- Tin-plated copper
- Stainless Steel
- Monel
- Aluminium

Part-No. B	B mm
2400.00YY.127	12.70
2400.00YY.191	19.10
2400.00YY.254	25.40
2400.00YY.508	50.80
2400.00YY.762	76.20
2400.00YY.1016	101.60
2400.00YY.1524	152.40

YY: Plating, see material table 

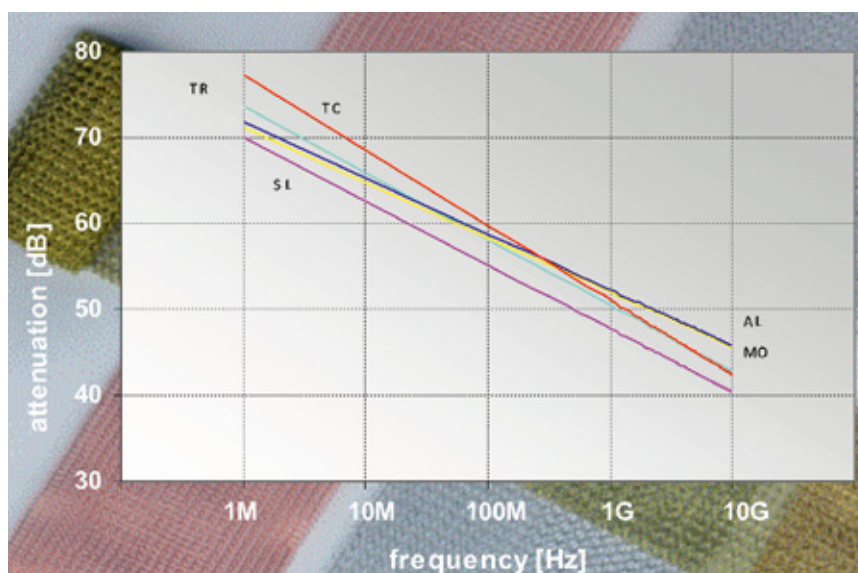


Finish (YY)

- 25 - Monel
- 30 - Tin-plated copper
- 22 - Stainless Steel
- 07 - Tinned copper clad steel
- 23 - Aluminium

E-field attenuation

NOTE: These values are only guidelines and refer to an overlap of 50%, resulting in 4 effective mesh layers.



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Low Compression-Force Gaskets

Description

Low compression-force gaskets are characterized by the fact that at low closure forces an excellent shielding and a tightness against dust and water can be achieved.

Features

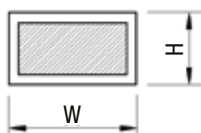
- A knitted fabric of silver-plated nylon yarn is combined with a core of neoprene.
- optimum conductivity of each individual fibre
- smooth, soft surface
- self-sealing ends (Ripstop)
- Shielding up to 100 dB in a frequency range of 1 Mhz - 1 GHz

Delivery Form

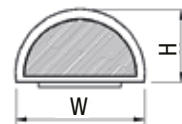
- Endless on reel or custom-tailored
- Adhesive tape as standard
- Version without tape only on request



Round



Rectangular



D-Profile

Round	
Part-No.	Ø
3001.3440.016	1.60
3001.3440.024	2.40
3001.3440.032	3.20
3001.3440.048	4.80
3001.3440.064	6.40
3001.3440.080	8.00
3001.3440.095	9.50
3001.3440.111	11.10
3001.3440.127	12.70
3001.3440.159	15.90
3001.3440.191	19.10

Rectangular		
Part-No.	H	W
3004.3440.024.024	2.40	2.40
3004.3440.024.048	2.40	4.80
3004.3440.024.064	2.40	6.40
3004.3440.032.032	3.20	3.20
3004.3440.032.064	3.20	6.40
3004.3440.032.080	3.20	8.00
3004.3440.048.048	4.80	4.80
3004.3440.048.080	4.80	8.00
3004.3440.048.127	4.80	12.70
3004.3440.064.064	6.40	6.40
3004.3440.064.127	6.40	12.70
3004.3440.080.127	8.00	12.70
3004.3440.095.127	9.50	12.70

D-Profile		
Part-No.	H	W
3003.3440.048.076	4.80	7.60
3003.3440.064.095	6.40	9.50
3003.3440.064.127	6.40	12.70
3003.3440.095.127	9.50	12.70

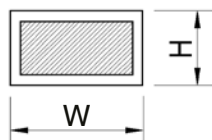
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Knitted Mesh Soft Gaskets



Description

Knitted Mesh Soft gaskets are designed specifically for shielding applications where a low compression resistance gasket is required. One layer of fine Monel wire mesh knitted over a low density urethane foam gives an excellent combination of EMI shielding performance and mechanical characteristics.



Rectangular		
Part-No.	H	W
3104.3625.032.048	3.20	4.80
3104.3625.032.064	3.20	6.40
3104.3625.032.095	3.20	9.50
3104.3625.032.127	3.20	12.70
3104.3625.048.048	4.80	4.80
3104.3625.048.064	4.80	6.40
3104.3625.048.095	4.80	9.50
3104.3625.064.064	6.40	6.40
3104.3625.064.095	6.40	9.50
3104.3625.064.127	6.40	12.70
3104.3625.095.095	9.50	9.50
3104.3625.095.127	9.50	12.70
3104.3625.127.127	12.70	12.70

Properties

- high elasticity and low clamping forces
- dust and water repellent
- good shielding performance
- available endless on spools or cut to length according to your requirements
- flame retardant according to UL94-HF1

Available Materials

- low sealing foam (LF)
- Monel wire Ø 0.09 mm (MO)
- also available with adhesive tape on customer request

Mechanical tolerances:

Up to 6.4 mm	+0.8 -0.8 mm
>6.4 mm	+1.2 -1.2 mm

Monel

Material Nr. (DIN) 2.4360
Wire diameter 0.09 mm

Shielding performance		
Electrical		
Frequency (Hz)	Mode	Screening (dB)
1 M	E	120
10 M	E	108
100 M	E	102
400 M	E	98
1 G	P	90

Tests performed according to MIL STD 285
Seal pressure 25%

Other sizes, configurations or ready-to-install gaskets (according to your drawing) available on request

FEUERHERDT

Fabric over Foam Gaskets



- Conductive fabric wrapped over foam or sponge core: easy to apply and to install
- Suitable for use on metal enclosures or metallized plastics (low compression force)
- Over 100db average shielding efficiency in the range 100mhz-10ghz
- Rip-stop fabrics that allow self-terminating cut ends on gaskets
- Available on reels, cut-to-length or preformed ready to install gasket
- Pressure sensitive adhesive (standard)
- Range of cores:
Urethane foam
Neoprene foam
EPDM
- Range of fabric materials:
Nickel copper + carbon
Nickel copper

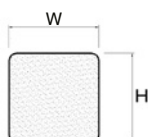
Description

Fabric over foam gaskets are made of a resilient foam core, bonded over with conductive fabric. More than 70 different profiles offer unlimited selection for any application. Some profiles contain rigid inserts. Metallized conductive fabric bonded to resilient core (available in urethane foam, neoprene sponge) offers a good shielding efficiency and works as a seal to block air, light and dust. All profiles are available with UL94-V0 specifications.

Mechanical tolerances:

1.5 - 5 mm	+0.5 -0.5 mm
>5 mm	+0.8 -0.8 mm

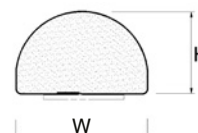
Square



Part-No.	Height	Width
1002.XXYY.030.030	3.00	3.00
1002.XXYY.050.050	5.00	5.00
1002.XXYY.060.060	6.00	6.00
1002.XXYY.064.064	6.40	6.40
1002.XXYY.095.095	9.50	9.50
1002.XXYY.100.100	10.00	10.00
1002.XXYY.127.127	12.70	12.70
1002.XXYY.150.150	15.00	15.00
1002.XXYY.170.170	17.00	17.00
1002.XXYY.200.200	20.00	20.00

XX: Basic material, YY: Plating, see material table  page 58

D-Shape

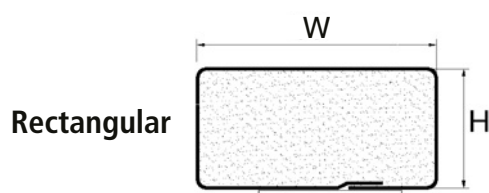


Part-No.	Height	Width
1003.XXYY.015.038	1.50	3.80
1003.XXYY.023.023	2.30	2.30
1003.XXYY.025.064	2.50	6.40
1003.XXYY.030.038	3.00	3.80
1003.XXYY.030.090	3.00	9.00
1003.XXYY.036.064	3.60	6.40
1003.XXYY.036.095	3.60	9.50
1003.XXYY.048.076	4.80	7.60
1003.XXYY.064.095	6.40	9.50
1003.XXYY.095.127	9.50	12.70

XX: Basic material, YY: Plating, see material table  page 58

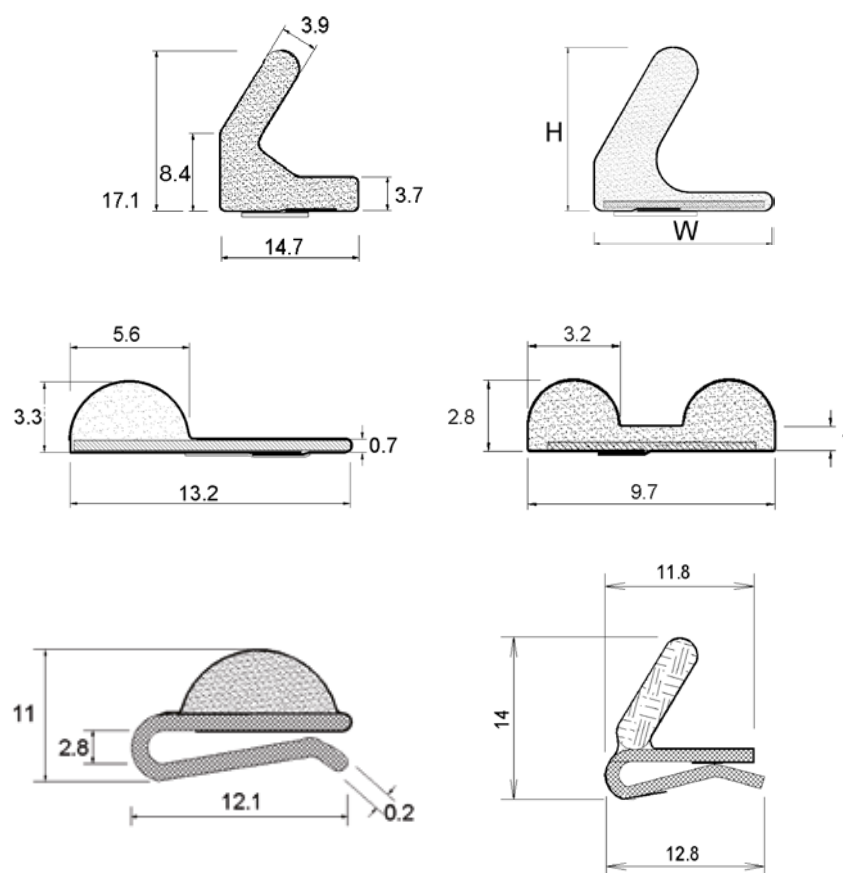
FEUERHERDT

Fabric over Foam Gaskets



M	Base material (XX)	Textile cover (YY)
	35 - Urethane foam (standard)	41 - Nickel copper
	36 - Low density urethane foam	42 - Nickel copper + carbon
	34 - Neoprene foam	
	33 - EPDM foam	

Special Profiles



Other sizes, configurations or ready-to-install gaskets (according to your drawing) available on request.

Rectangular		
Part-No.	H	W
1004.XXYY.005.050	0.50	5.00
1004.XXYY.005.070	0.50	7.00
1004.XXYY.005.100	0.50	10.00
1004.XXYY.010.030	1.00	3.00
1004.XXYY.010.040	1.00	4.00
1004.XXYY.010.050	1.00	5.00
1004.XXYY.010.070	1.00	7.00
1004.XXYY.010.100	1.00	10.00
1004.XXYY.010.170	1.00	17.00
1004.XXYY.015.622	1.50	62.20
1004.XXYY.020.030	2.00	3.00
1004.XXYY.020.040	2.00	4.00
1004.XXYY.020.050	2.00	5.00
1004.XXYY.020.070	2.00	7.00
1004.XXYY.020.100	2.00	10.00
1004.XXYY.020.127	2.00	12.70
1004.XXYY.020.170	2.00	17.00
1004.XXYY.020.210	2.00	21.00
1004.XXYY.020.300	2.00	30.00
1004.XXYY.020.413	2.00	41.30
1004.XXYY.030.040	3.00	4.00
1004.XXYY.030.090	3.00	9.00
1004.XXYY.032.048	3.20	4.80
1004.XXYY.032.064	3.20	6.40
1004.XXYY.032.095	3.20	9.50
1004.XXYY.032.127	3.20	12.70
1004.XXYY.040.200	4.00	20.00
1004.XXYY.050.080	5.00	8.00
1004.XXYY.050.100	5.00	10.00
1004.XXYY.050.413	5.00	41.30
1004.XXYY.060.080	6.00	8.00
1004.XXYY.064.095	6.40	9.50
1004.XXYY.064.127	6.40	12.70
1004.XXYY.075.150	7.50	15.00
1004.XXYY.080.127	8.00	12.70
1004.XXYY.095.127	9.50	12.70
1004.XXYY.100.254	10.00	25.40
1004.XXYY.115.105	11.50	10.50
1004.XXYY.159.254	15.90	25.40
1004.XXYY.170.100	17.00	10.00

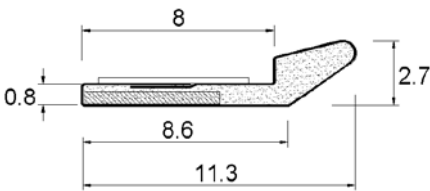
XX: Basic material, YY: Textile cover, see material table M

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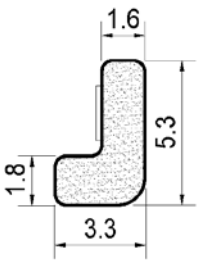
Fabric over Foam Gaskets

Special Profiles

Knife-Edge-Profile



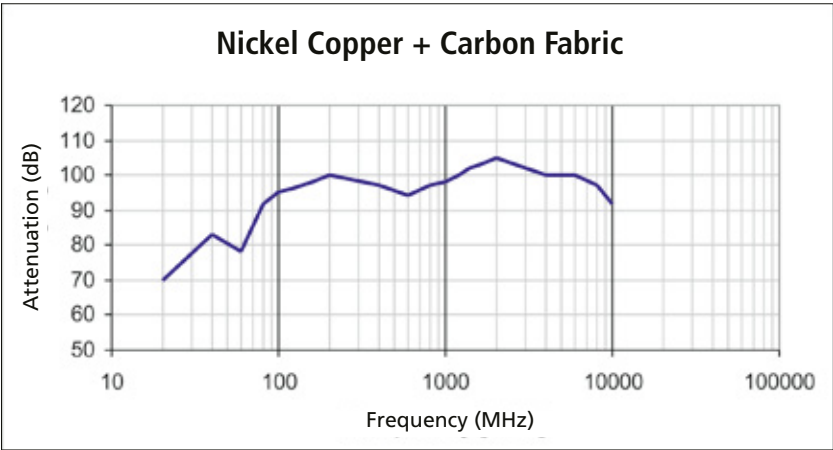
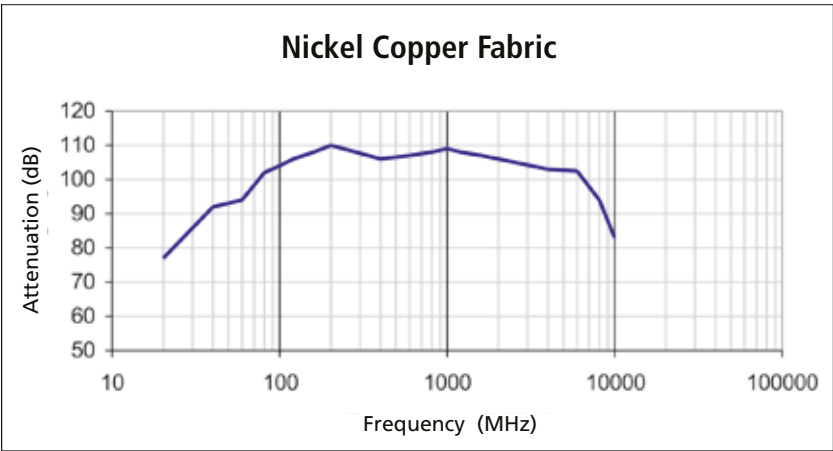
J-Profile



Other sizes, configurations or ready-to-install gaskets (according to your drawing) available on request.

Shielding Performance according to MIL-G-83528

Tested with 10.5 x 10.5 standard profiles. Gasket compressed 50%.



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Elastic Washers and Contacts



Properties

- High conductivity (electrical and thermal) with vibration and shock dampening properties
- Low impedance (typically less than 0.02 ohm) even with low closure force
- Typical interlocking loop structure provides the spring effect
- Material density of the fine wire mesh defines the required spring force
- Customized shapes available

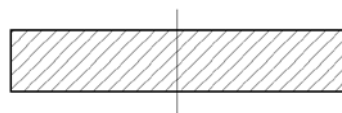
Available Materials

- Monel
- Copper Beryllium
- Tin-plated, copper-plated steel wire
- Stainless Steel
- Aluminium

Washers



Contact washers



Wire finish

Part-No.	Ø inside	Ø outside	Height
2501.00YY.024.060.024	2.40	6.00	2.40
2501.00YY.032.075.032	3.20	7.50	3.20
2501.00YY.040.075.048	4.00	7.50	4.80
2501.00YY.081.113.064	8.10	11.30	6.40
2501.00YY.050.127.032	5.00	12.70	3.20
2501.00YY.080.127.064	8.00	12.70	6.40
2501.00YY.090.135.048	9.00	13.50	4.80
2501.00YY.090.159.024	9.00	15.90	2.40
2501.00YY.127.191.032	12.70	19.10	3.20
2501.00YY.159.214.048	15.90	21.40	4.80
2501.00YY.127.254.032	12.70	25.40	3.20
2501.00YY.159.032.048	15.90	32.00	4.80
2501.00YY.127.032.064	12.70	32.00	6.40

Contact washers

Part-No.	Ø	Height
2601.00YY.024.032	2.40	3.20
2601.00YY.032.032	3.20	3.20
2601.00YY.032.064	3.20	6.40
2601.00YY.032.095	3.20	9.50
2601.00YY.064.032	6.40	3.20
2601.00YY.064.064	6.40	6.40
2601.00YY.064.095	6.40	9.50
2601.00YY.064.127	6.40	12.70
2601.00YY.127.048	12.70	4.80
2601.00YY.127.064	12.70	6.40
2601.00YY.127.095	12.70	9.50
2601.00YY.127.127	12.70	12.70
2601.00YY.127.159	12.70	15.90

YY: Wire finish, see material table (M)

YY: Wire finish, see material table (M)



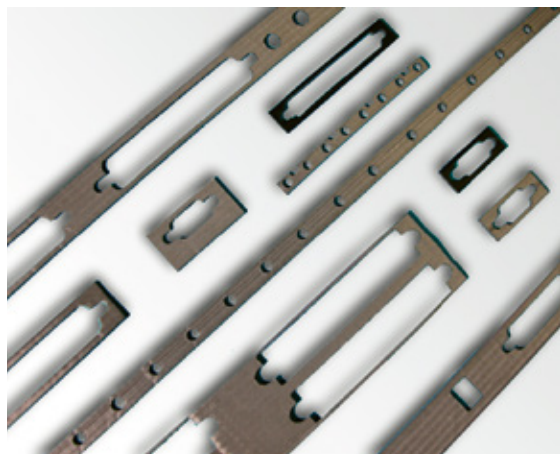
Finish (YY)

- 07 - Tin-plated, copper-plated steel wire
- 20 - CuBe
- 22 - Stainless Steel
- 23 - Aluminium
- 25 - Monel

Individual sizes, configurations or materials available on request.

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Punched Gaskets (Fabric over Foam)



Properties

- Flexible design according to customer drawing
- Over 100 dB average shielding efficiency in the Range of 100 MHz-10 GHz
- Rip-Stop fabric for self terminating tips
- Delivery optionally with or without double-sided adhesive tape

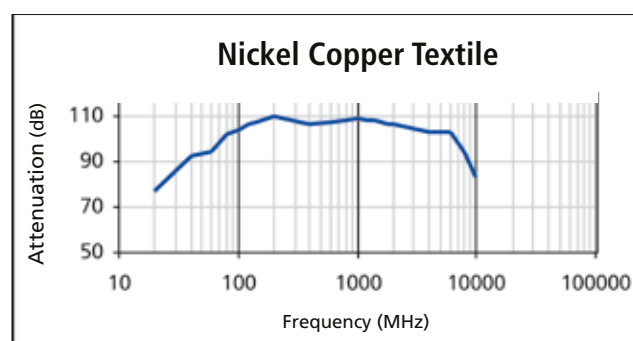
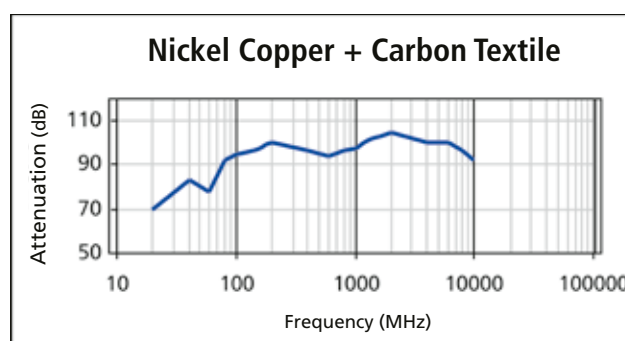
Available Materials

- Selection of cores:
 - Urethane foam
 - Neoprene foam
- Selection of fabric materials:
 - Nickel Copper + Carbon
 - Nickel Copper

Description

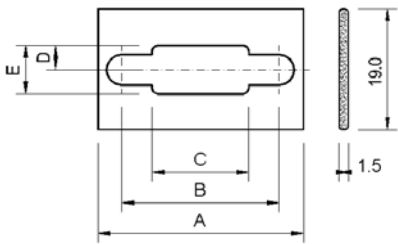
Punched connector gaskets are made of a foam core with conductive nylon fabric (Ni/Cu or Ni/Cu + Carbon) and provide both good EMC shielding and a seal against air, light and dust. Due to the low compression force, the seals are ideally suited for metal or metallized plastic housings.

Shielding Performance of Fabric over Foam Gaskets according to MIL-G-83528



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Connector Gaskets (Fabric over Foam)



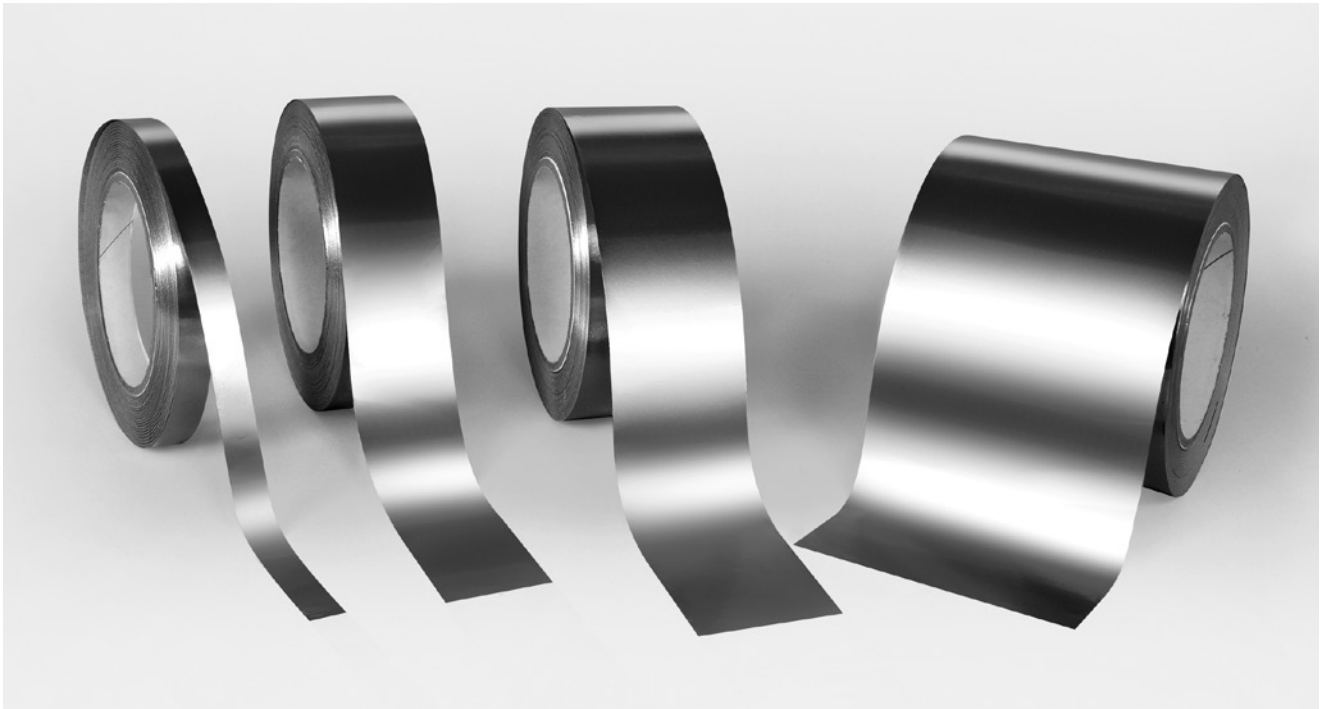
Part-No.	Pins	A	B	C	D	E	Application
1100.XXYY.009.335	9	33.5	25.0	16.5	4.0	7.9	Comport, Mouse, Serial
1100.XXYY.011.417	11	41.7	33.3	24.7	3.9	7.9	Game, Multimedia, Serial, VGA
1100.XXYY.015.417	15	41.7	33.3	24.7	3.9	7.9	Game, Multimedia, Serial, VGA
1100.XXYY.025.560	25	56.0	47.4	38.1	3.9	7.9	Parallel, Printer, Scanner, Serial
1100.XXYY.037.726	37	72.6	64.4	55.9	3.9	7.9	Serial Port
1100.XXYY.050.699	50	69.9	61.1	52.4	5.4	10.7	Serial Port

XX: Basic material, YY: Textile cover, see material table 

Other sizes, configurations or ready-to-install gaskets (according to your drawing) available on request.

	Base material (XX)	Textile cover (YY)
	35 - Urethane foam (standard)	41 - Nickel copper
	34 - Neoprene foam	42 - Nickel copper + carbon

Conductive Foils



Conductive foils are suitable for a wide range of applications in shielding technology.

They are inexpensive and easy to use.

They are usually supplied with a conductive adhesive tape.

Typical applications include the lining of small enclosures, sealing of housing joints and welds, establishing electrical contact on surfaces which cannot be welded, shielding cables as well as the short-term use during EMC tests to locate leaks.

Material

Copper or Aluminium

Delivery Form

As endless tape on spools or punched to customer specifications.

Technical Data

Electrical resistance:	Copper	0,020Ω/cm ²	(Aluminium 1 Ω/cm ²)
Thickness (foil + adhesive):	Copper	75µm	(Aluminium 130 µm)
Shielding attenuation:	Copper	50 dB	

Copper foil

Part-No.	Width
6300.2100.127	12.70
6300.2100.254	25.40
6300.2100.381	38.10
6300.2100.508	50.80
6300.2100.762	76.20
6300.2100.1020	102.00
6300.2100.2030	203.00

Aluminiumfoil

Part-No.	Width
6300.2300.127	12.70
6300.2300.254	25.40
6300.2300.381	38.10
6300.2300.508	50.80
6300.2300.762	76.20
6300.2300.1020	102.00
6300.2300.2030	203.00

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Board Level Shieldings



Material:
Tin-plated steel 0.6mm
Pin: 2.5 x 1mm

Closed enclosure with solder pins for PCB mounting

L mm	W mm	H mm	Part-No.
25	25	15	9501
30	25	18	9502
40	28	20	9503
40	32	18	9504
60	40	20	9505
70	50	25	9506



Material:
Tin-plated steel 0.9mm
Pin: 2.3 x 1mm

Enclosure frame with solder pins for PCB mounting.
Separate lid with contact fingers

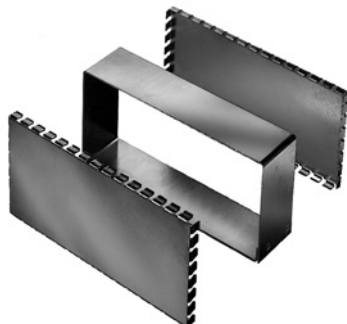
L mm	W mm	H mm	Part-No.
20	20	10	9510
30	30	15	9511
50	25	15	9512
50	50	15	9513
75	50	25	9514
75	75	25	9515
100	50	25	9516
125	75	25	9517



Material:
Tin-plated steel 0.9mm

Enclosure with separate lid

L mm	W mm	H mm	Part-No.
50	50	15	9520
75	50	25	9521
100	50	35	9522
160	100	50	9523



Material:
Tin-plated steel 0.9mm

Enclosure frame with two separate lids

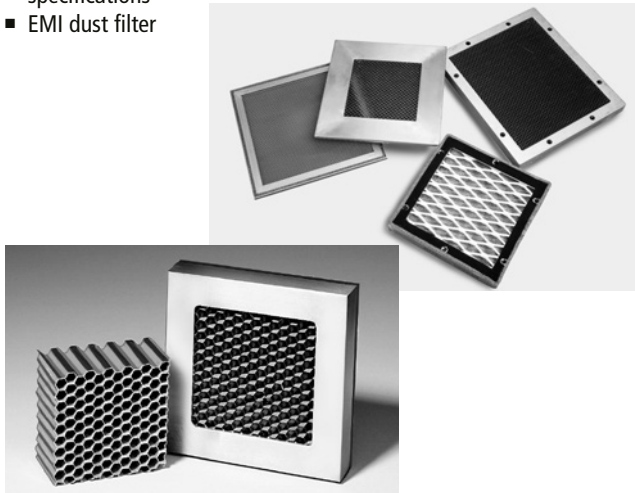
L mm	W mm	H mm	Part-No.
50	50	15	9530
75	50	15	9531
100	50	25	9532
160	100	35	9533
220	100	50	9534

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Other EMC Solutions on Request

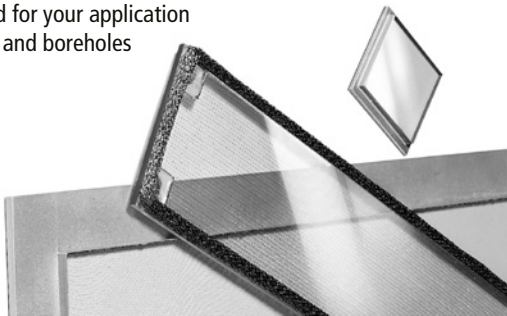
Honeycomb Vents from Steel or Aluminium

- Made of steel or aluminium
- With and without frame
- Especially for your application, dimensions, air flow and shielding specifications
- EMI dust filter



Shielded Windows for Displays and Shielded Rooms

- Made of glass or polycarbonate
- Shielding material Mesh
- Silver-coated bus bar for good contact
- Assembled for your application
- incl. steps and boreholes



Special Enclosures

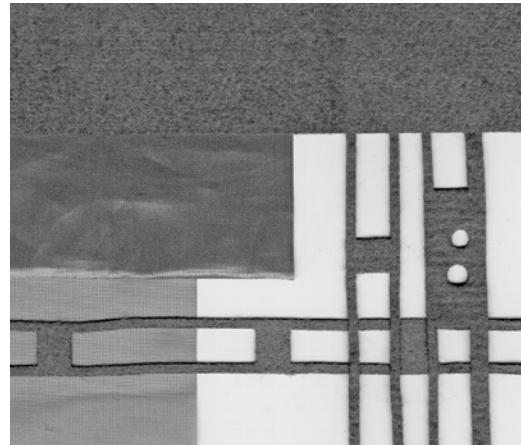
- E.g. printed circuit board housings in customer-specific design upon your request

Conductive Paints

- A selection of conductive paints for spraying or painting with different fillers

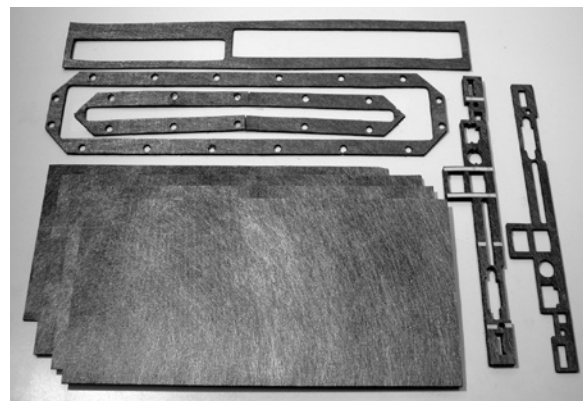
Conductive Fabrics & Textiles

- Metal-coated materials and electrochemically impregnated non-woven textiles
- Good flexibility to avoid surface irregularities to compensate
- Rip-stop characteristics
- Die-cut gaskets according to drawing



Conductive Foam

- Combines the conductivity of metal gaskets with low compression properties of fabric-over-foam gaskets
- A mesh surface offers excellent abrasion resistance with up to 1 million cycles
- Die-cut gaskets according to drawing



Form-in-place Gaskets from Silicone with Ag/Cu Filler

- On foil or directly on your product
- Individual profile design, suitable for complicated geometries
- Cost-effective right from prototype production

Other EMC solutions on request. Our sales team will be happy to help you make the right choice!

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RoHS and REACH

All components manufactured or sold by Feuerherdt GmbH comply with the current directive of the European Parliament and Council on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS directive).

The materials we use do not contain any substances from the current candidate list (SVHC list [http:// echa.europa.eu/en/candidate-list-table](http://echa.europa.eu/en/candidate-list-table)) in a concentration of more than 0.1 mass % and comply with the current REACH regulation.

The declarations of conformity can be found at www.feuerherdt.de.

Quality Management

To ensure our quality standards, compliance with and documentation of specific requirements from standards, guidelines and customer specifications is of utmost importance.

For this reason, we strive for first-class quality with the aim of ensuring fault-free production. That is why we act quality-oriented right from the start, because the pursuit of first-class quality should apply along the entire value chain.

Our pronounced quality awareness has been certified by ISO 9001 since 1996. For this purpose, we have implemented a functioning quality management system with committed employees, which reflects our internal quality policy throughout the entire value creation process.

As an environmentally conscious company, we see ourselves as having a responsibility towards nature in order to protect and conserve it. Therefore, it is a high priority for us not only to manufacture environmentally friendly products, but also to do so in an environmentally friendly way.

Remarks

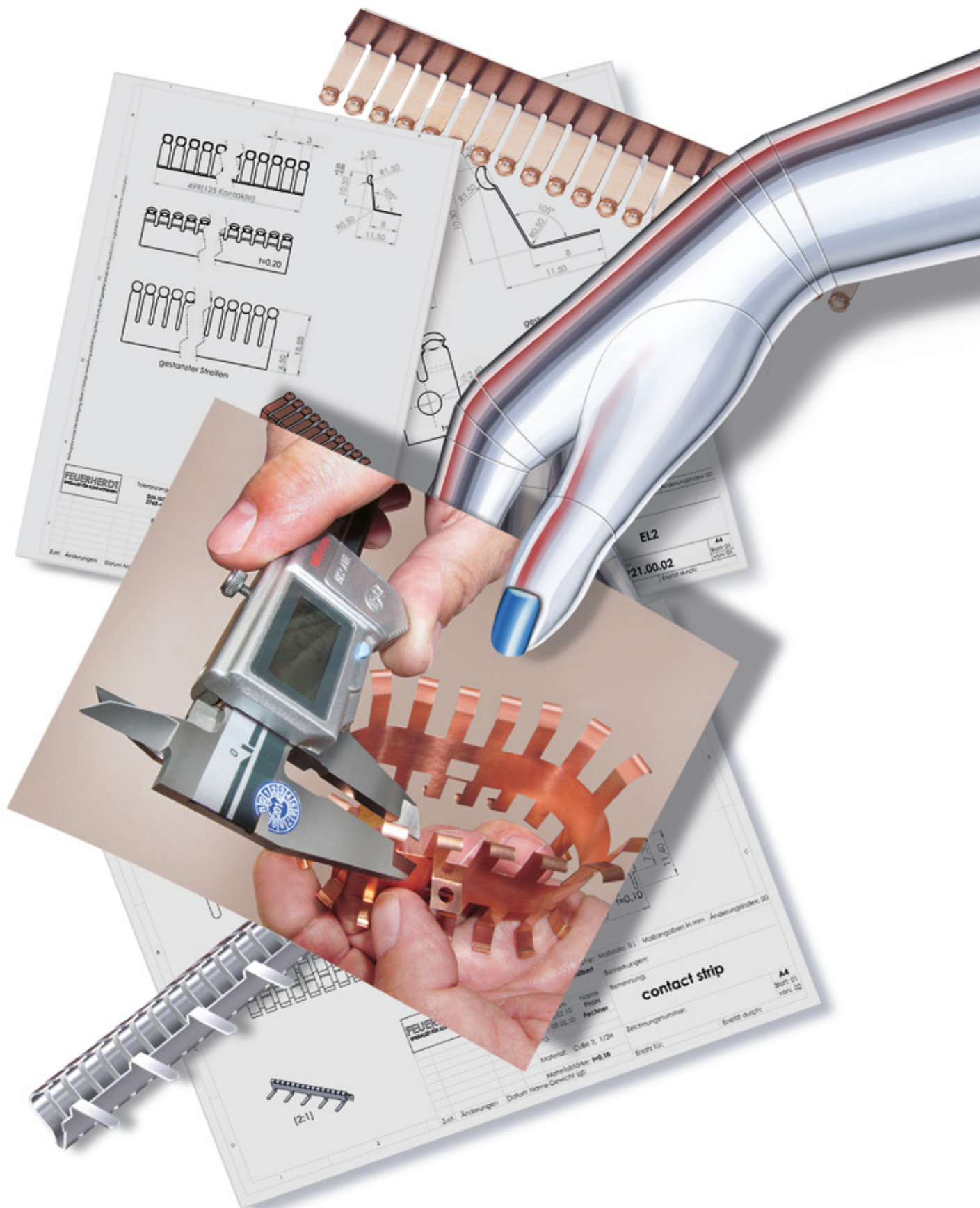
All information in this catalogue is given with due care and to the best of our knowledge. Measurement data are prepared according to current MIL or DIN standards. However, due to the various fields of application and test procedures, we cannot guarantee the correctness and completeness of the information provided. It is recommended that you perform your own measurements. This is the only way to ultimately prove the suitability of our products for a specific application. We do not carry out EMC measurements ourselves, but we can help you with the execution.

All dimensions in this catalogue are rounded accordingly and given in millimetres. Please refer to our technical drawings for detailed specifications and tolerances.

Subject to change of technical data, errors and misprints reserved.

Our general terms and conditions apply.

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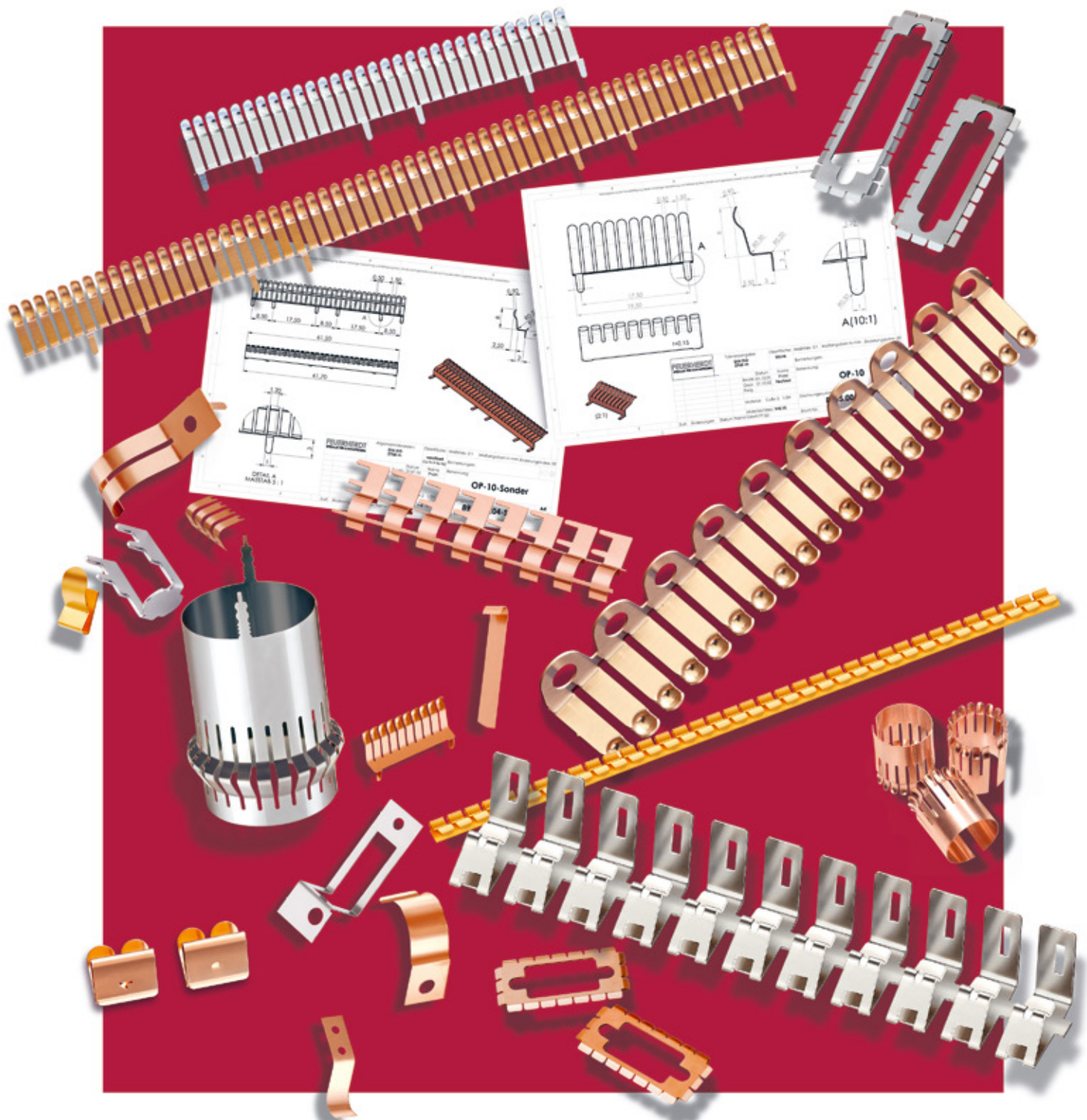


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German engineering at its best - our commitment for over 30 years

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EMC Shielding Products

Feuerherdt GmbH • Motzener Strasse 26 b • D-12277 Berlin

Phone +49(0)30/710 96 45-50 • Fax +49(0)30/710 96 45 99

E-Mail: emc@feuerherdt.de • Internet: www.feuerherdt.de