Welded crimp rings

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Clamping and crimp rings for air spring systems of different materials with smooth and profiled cross sections

TECHNICIAL SPECIFICATION OF WELDED CRIMP RINGS

Performance	· pressure butt welded · weld coining · extension of welding area max. 0.4 mm in width and in thickness of material
Materials	· C4C ref. EN 10263-2 · tensile 370 MPa ± 40MPA · Quality DC according EN 10139 and other materials on request.
Tolerances of material before forming	· width of material ± 0.15 mm · thickness of material ± 0.05 mm · radius at rough-rolled edge: 0.5 x thickness + 0.5
Dimension performance of crimp rings	· ovality (long axis – short axis) max. 1.6 mm (caliper / gage inspection) · inner circumference ± 1mm (measurements with Novomter) · flatness: inner diameter < 100 mm ø max. 0,5 mm inner diameter > 100 mm ø max. 0,7 mm,
Marking of crimp rings	· data code stamp inside or outside up to 14 digits
Galvanic coatings	· guaranteed corrosion resistances at unworked condition · surface resistance in build-in condition to be tested at customer

ATTENTION! At a galvanic coating, a hydrogen embrittlement of material can not be excluded.

Galvanic surface treatment	Surface resistance after salt spraytest DIN 50021 SS
Zinc thick-film passivated	400 h
Zn Fe transparent (Cr VI-free)	480 h
Zn Ni transparent (Cr VI-free)	720 h

Material- and ring dimensions (mm)	Smallest ring inner diameter (mm)
8 x 3	80
10 x 2	70
10 x 2,5	80
10 x 3	80
10 x 3,5	90
12,5 x 2	80
12,5 x 3	85
15 x 2	80
15 x 3	100
15 x 4	115
15 x 5	130
20 x 5	160

other dimension on request

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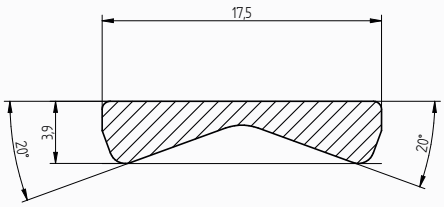
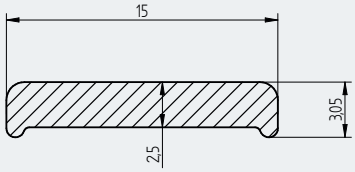
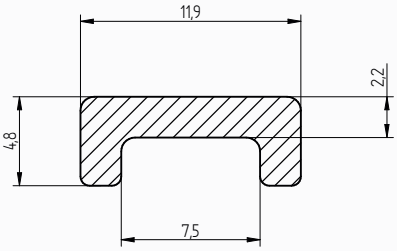
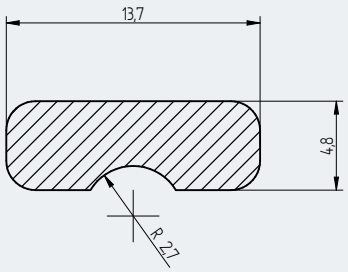
Profiled crimp rings

Wire dimensions (mm)	Material	Drawing
17,5 x 3,9 (17,5 ± 0,15) (3,9 ± 0,10) smallest ring inner diameter 120 mm	C4C / DIN EN 10263-2	
15 x 2,5 x 3,05 (15 ± 0,15) (3,05 ± 0,10) smallest ring inner diameter 82 mm	C4C / DIN EN 10263-2 (Rm max. 315 MPa)	
11,9 x 4,8 (11,9 ± 0,15) (4,80 ± 0,15) smallest ring inner diameter 125 mm	C4C / DIN EN 10263-2	
13,7 x 4,8 (13,7 ± 0,15) (4,80 ± 0,15) smallest ring inner diameter 135 mm	C4C / DIN EN 10263-2	

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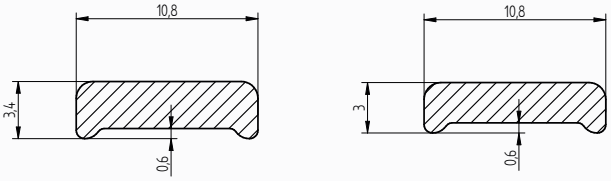
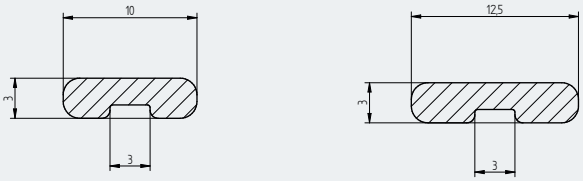
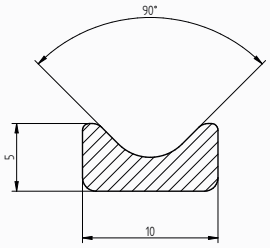
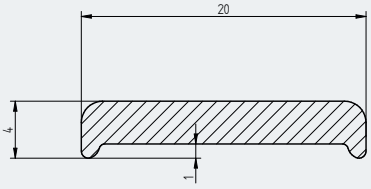
Profiled crimp rings

Wire dimensions (mm)	Material	Drawing
10,8 x 3,4 / 3,0 (10,8 ± 0,2) (3,40 / 3,0 ± 0,1) smallest ring inner diameter 100 mm	DC 01 / annealed DIN EN 10139 (Re 150 – 255 N/mm²/ Rm 250 – 315 N/mm²)	
10,0 / 12,5 x 3,0 (10,0 / 12,5 ± 0,15) (3,0 ± 0,05) smallest ring inner diameter 90 mm	C4C / DIN EN 10263-2	
10,0 x 5,0 (10,0 ± 0,15) (5,00 ± 0,15) smallest ring inner diameter 110 mm	C4C / DIN EN 10263-2	
20,0 x 4,0 (20,0 ± 0,2) (4,0 ± 0,1) smallest ring inner diameter N.N. mm	DC01 / DIN EN 10139 Rm 400-500 N/mm²	

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