



## Tubular cable lugs, Cu, F-series



- ▶ For fine and superfine stranded round conductors, e.g. to DIN EN 60228 Cl. 5 and 6
- ▶ Pipe dimension adjusted for fine and superfine stranded conductors
- ▶ Special wide opening for the easy entry of fine conductors

### Characteristics

- Annealed material optimises material and crimping properties
- To DIN EN 61373 class 1B vibration-tested
- Simple and safe connection due to flat contact surfaces and internal chamfer
- Reliable assignment owed to item designation on the cable lug

### Material

- Copper (EN13600)

### Surface

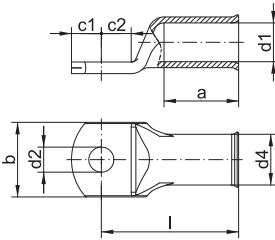
- Tin-plated to protect against corrosion

### Technical instructions

- Tool: see page 42

### Additional information

- Also available as featured article with inspection hole, part number appendix „MS“
- 10 - 240 mm<sup>2</sup> UL-tested



Nominal cross section mm <sup>2</sup>	Size of bolt dia.	Part No.	Dimension mm								Weight/ 100 pcs. ~ kg	Packing unit/pcs
			d1	a	b	d2	d4	c1	c2	l		
10	M5	<b>702F5</b>	5.5	14	12	5.3	8.0	6.25	7.5	27	0.72	100
	M6	<b>702F6</b>	5.5	14	12	6.5	8.0	6.25	7.5	27	0.71	100
	M8	<b>702F8</b>	5.5	14	16	8.5	8.0	8.50	9.5	29	0.77	100
	M10	<b>702F10</b>	5.5	14	16	10.5	8.0	10.50	11.5	31	0.82	100
	M12	<b>702F12</b>	5.5	14	19	13.0	8.0	12.00	13.0	32	0.82	100
16	M5	<b>703F5</b>	6.6	15	13	5.3	9.5	6.25	7.5	30	1.10	100
	M6	<b>703F6</b>	6.6	15	13	6.5	9.5	6.25	7.5	30	1.07	100
	M8	<b>703F8</b>	6.6	15	16	8.5	9.5	10.00	10.0	32	1.21	100
	M10	<b>703F10</b>	6.6	15	17	10.5	9.5	12.00	12.0	34	1.28	100
	M12	<b>703F12</b>	6.6	15	19	13.0	9.5	13.00	13.0	35	1.28	100
25	M5	<b>704F5</b>	7.9	17	15	5.3	11.0	7.50	7.5	32	1.52	25
	M6	<b>704F6</b>	7.9	17	15	6.5	11.0	7.50	7.5	32	1.50	100
	M8	<b>704F8</b>	7.9	17	17	8.5	11.0	10.00	10.0	34	1.61	100
	M10	<b>704F10</b>	7.9	17	17	10.5	11.0	12.00	12.0	37	1.71	100
	M12	<b>704F12</b>	7.9	17	19	13.0	11.0	13.00	13.0	38	1.74	25
35	M6	<b>705F6</b>	9.2	19	17	6.5	12.5	7.50	7.5	35	1.91	100
	M8	<b>705F8</b>	9.2	19	18	8.5	12.5	10.00	10.0	37	2.08	100
	M10	<b>705F10</b>	9.2	19	18	10.5	12.5	12.00	12.0	40	2.24	100
	M12	<b>705F12</b>	9.2	19	19	13.0	12.5	13.00	13.0	41	2.22	25
	M14	<b>705F14</b>	9.2	19	21	15.0	12.5	14.50	14.5	43	2.41	25
50	M6	<b>706F6</b>	11.0	21	21	6.5	15.0	10.00	10.0	41	3.54	25
	M8	<b>706F8</b>	11.0	21	21	8.5	15.0	10.00	10.0	41	3.44	50
	M10	<b>706F10</b>	11.0	21	21	10.5	15.0	12.00	12.0	43	3.64	50
	M12	<b>706F12</b>	11.0	21	21	13.0	15.0	13.00	13.0	46	3.73	50
	M14	<b>706F14</b>	11.0	21	23	15.0	15.0	14.50	14.5	48	3.89	25
	M16	<b>706F16</b>	11.0	21	28	17.0	15.0	16.00	16.0	50	4.02	25

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### Tubular cable lugs, Cu, F-series

Nominal cross section mm <sup>2</sup>	Size of bolt dia.	Part No.	Dimension mm								Weight/ 100 pcs. ~ kg	Packing unit/pcs
			d1	a	b	d2	d4	c1	c2	l		
70	M8	<b>707F8</b>	13.0	25	25	8.5	17.0	10.00	10.0	46	4.46	50
	M10	<b>707F10</b>	13.0	25	25	10.5	17.0	12.00	12.0	48	4.62	50
	M12	<b>707F12</b>	13.0	25	25	13.0	17.0	13.00	13.0	50	4.71	50
	M14	<b>707F14</b>	13.0	25	25	15.0	17.0	14.50	14.5	52	4.87	25
	M16	<b>707F16</b>	13.0	25	25	17.0	17.0	16.00	16.0	54	5.85	25
95	M8	<b>708F8</b>	14.5	26	28	8.5	19.0	12.00	12.0	52	6.35	25
	M10	<b>708F10</b>	14.5	26	28	10.5	19.0	12.00	12.0	52	6.23	50
	M12	<b>708F12</b>	14.5	26	28	13.0	19.0	13.00	13.0	53	6.31	50
	M14	<b>708F14</b>	14.5	26	28	15.0	19.0	14.50	14.5	55	6.46	25
	M16	<b>708F16</b>	14.5	26	28	17.0	19.0	16.00	16.0	56	6.56	50
120	M10	<b>709F10</b>	16.2	30	30	10.5	21.0	14.00	14.0	57	8.31	50
	M12	<b>709F12</b>	16.2	30	30	13.0	21.0	15.00	15.0	58	8.39	50
	M14	<b>709F14</b>	16.2	30	30	15.0	21.0	15.00	15.0	58	8.06	25
	M16	<b>709F16</b>	16.2	30	30	17.0	21.0	16.00	16.0	59	8.17	50
	M20	<b>709F20</b>	16.2	30	36	21.0	21.0	22.00	22.0	66	9.56	25
150	M10	<b>710F10</b>	18.0	32	34	10.5	23.0	15.00	16.0	64	10.91	10
	M12	<b>710F12</b>	18.0	32	34	13.0	23.0	16.00	17.0	65	10.89	25
	M14	<b>710F14</b>	18.0	32	34	15.0	23.0	18.00	19.0	67	11.42	10
	M16	<b>710F16</b>	18.0	32	34	17.0	23.0	19.00	20.0	68	11.30	10
	M20	<b>710F20</b>	18.0	32	40	21.0	23.0	21.00	22.0	70	11.36	10
185	M12	<b>711F12</b>	20.6	35	39	13.0	26.0	21.50	19.0	72	15.40	10
	M14	<b>711F14</b>	20.6	35	39	15.0	26.0	21.50	19.0	72	15.20	10
	M16	<b>711F16</b>	20.6	35	39	17.0	26.0	21.50	19.0	72	15.00	25
	M20	<b>711F20</b>	20.6	35	39	21.0	26.0	21.50	19.0	72	14.20	10
240	M10	<b>712F10</b>	23.1	44	41	10.5	28.0	16.00	17.0	80	16.50	10
	M12	<b>712F12</b>	23.1	44	41	13.0	28.0	16.00	17.0	80	16.30	10
	M14	<b>712F14</b>	23.1	44	41	15.0	28.0	19.00	20.0	83	16.80	10
	M16	<b>712F16</b>	23.1	44	41	17.0	28.0	19.00	20.0	83	16.71	25
	M20	<b>712F20</b>	23.1	44	41	21.0	28.0	21.00	22.0	85	17.12	10
300	M12	<b>713F12</b>	26.1	44	47	13.0	32.0	19.00	22.0	96	25.60	5
	M14	<b>713F14</b>	26.1	44	47	15.0	32.0	19.00	22.0	96	26.56	5
	M16	<b>713F16</b>	26.1	44	47	17.0	32.0	19.00	22.0	96	25.60	5
	M20	<b>713F20</b>	26.1	44	47	21.0	32.0	22.00	22.0	96	26.24	5



## Angled tubular cable lugs, Cu, 90° angled, F-series



- ▶ For fine and superfine stranded round conductors, e.g. to DIN EN 60228 Cl. 5 and 6
- ▶ Tube dimension adjusted for fine and superfine stranded conductors
- ▶ Special wide opening for the easy entry of fine conductors
- ▶ Flat contact surface by special angle pressing technology

### Characteristics

- Annealed material optimises material and crimping properties
- Tube dimensions suitable for fine stranded conductors
- Flat contact surface and internal chamfer for simple cable insertion

### Material

- Copper (EN13600)

### Surface

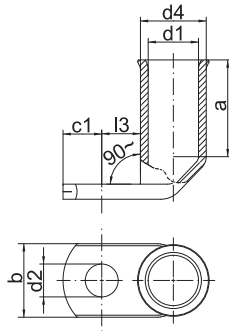
- Tin-plated to protect against corrosion

### Technical instructions

- Tool: see page 42

### Additional information

- Also available as featured article 45° angled, part number appendix „45“
- Also available as featured article with inspection hole, part number appendix „MS“
- 90° angled version: 10 - 240 mm<sup>2</sup> UL-tested



Nominal cross section mm <sup>2</sup>	Size of bolt dia.	Part No.	Dimension mm							Weight/ 100 pcs. ~ kg	Packing unit/pcs
			d1	a	b	d2	d4	c1	l3		
10	M5	<b>742F5</b>	5.5	14	12	5.3	8.0	6.25	7.5	0.80	50
	M6	<b>742F6</b>	5.5	14	12	6.5	8.0	6.25	7.5	0.78	50
	M8	<b>742F8</b>	5.5	14	16	8.5	8.0	9.00	9.5	0.84	50
	M10	<b>742F10</b>	5.5	14	16	10.5	8.0	10.50	12.0	0.88	50
	M12	<b>742F12</b>	5.5	14	19	13.0	8.0	12.00	13.0	0.90	50
16	M5	<b>743F5</b>	6.6	15	13	5.3	9.5	6.25	7.5	1.12	50
	M6	<b>743F6</b>	6.6	15	13	6.5	9.5	6.25	7.5	1.12	50
	M8	<b>743F8</b>	6.6	15	16	8.5	9.5	10.00	10.0	1.30	50
	M10	<b>743F10</b>	6.6	15	17	10.5	9.5	12.00	12.0	1.38	50
	M12	<b>743F12</b>	6.6	15	19	13.0	9.5	13.00	13.0	1.34	50
25	M5	<b>744F5</b>	7.9	17	15	5.3	11.0	7.50	7.5	1.52	25
	M6	<b>744F6</b>	7.9	17	15	6.5	11.0	7.50	7.5	1.54	25
	M8	<b>744F8</b>	7.9	17	17	8.5	11.0	10.00	10.0	1.80	25
	M10	<b>744F10</b>	7.9	17	17	10.5	11.0	12.00	12.0	1.79	25
	M12	<b>744F12</b>	7.9	17	19	13.0	11.0	13.00	13.0	1.76	25
35	M6	<b>745F6</b>	9.2	19	17	6.5	12.5	7.50	7.5	2.02	25
	M8	<b>745F8</b>	9.2	19	18	8.5	12.5	10.00	10.0	2.18	25
	M10	<b>745F10</b>	9.2	19	18	10.5	12.5	12.00	12.0	2.30	25
	M12	<b>745F12</b>	9.2	19	19	13.0	12.5	13.00	13.0	2.26	25
	M14	<b>745F14</b>	9.2	19	21	15.0	12.5	14.50	14.5	2.65	25
50	M6	<b>746F6</b>	11.0	21	21	6.5	15.0	10.00	10.0	3.75	25
	M8	<b>746F8</b>	11.0	21	21	8.5	15.0	10.00	10.0	3.57	25
	M10	<b>746F10</b>	11.0	21	21	10.5	15.0	12.00	12.0	3.83	25
	M12	<b>746F12</b>	11.0	21	21	13.0	15.0	13.00	13.0	3.74	25
	M14	<b>746F14</b>	11.0	21	23	15.0	15.0	14.50	14.5	4.20	25
	M16	<b>746F16</b>	11.0	21	28	17.0	15.0	16.00	16.0	4.35	25

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**Angled tubular cable lugs, Cu, 90° angled, F-series**

Nominal cross section mm <sup>2</sup>	Size of bolt dia.	Part No.	Dimension mm						Weight/ 100 pcs. ~ kg	Packing unit/pcs	
			d1	a	b	d2	d4	c1			l3
70	M8	<b>747F8</b>	13.0	25	25	8.5	17.0	10.00	10.0	4.83	25
	M10	<b>747F10</b>	13.0	25	25	11.0	17.0	12.00	12.0	5.18	25
	M12	<b>747F12</b>	13.0	25	25	13.0	17.0	13.00	13.0	5.16	25
	M14	<b>747F14</b>	13.0	25	25	15.0	17.0	14.50	14.5	5.38	25
	M16	<b>747F16</b>	13.0	25	25	17.0	17.0	16.00	16.0	6.50	25
95	M8	<b>748F8</b>	14.5	26	28	8.5	19.0	12.00	12.0	6.66	25
	M10	<b>748F10</b>	14.5	26	28	11.0	19.0	12.00	12.0	6.04	25
	M12	<b>748F12</b>	14.5	26	28	13.0	19.0	13.00	13.0	6.58	25
	M14	<b>748F14</b>	14.5	26	28	15.0	19.0	14.50	14.5	7.24	25
	M16	<b>748F16</b>	14.5	26	28	17.0	19.0	16.00	16.0	7.34	25
120	M10	<b>749F10</b>	16.2	30	30	11.0	21.0	14.00	14.0	8.76	10
	M12	<b>749F12</b>	16.2	30	30	13.0	21.0	15.00	15.0	8.76	10
	M14	<b>749F14</b>	16.2	30	30	15.0	21.0	15.00	15.0	9.15	10
	M16	<b>749F16</b>	16.2	30	30	17.0	21.0	16.00	16.0	8.54	10
	M20	<b>749F20</b>	16.2	30	36	21.0	21.0	22.00	22.0	9.60	10
150	M10	<b>750F10</b>	18.0	32	34	11.0	23.0	15.00	16.0	11.54	10
	M12	<b>750F12</b>	18.0	32	34	13.0	23.0	16.00	18.0	11.58	10
	M14	<b>750F14</b>	18.0	32	34	15.0	23.0	18.00	19.0	11.90	10
	M16	<b>750F16</b>	18.0	32	34	17.0	23.0	19.00	20.0	11.80	10
	M20	<b>750F20</b>	18.0	32	40	21.0	23.0	21.00	22.0	12.00	10
185	M12	<b>751F12</b>	20.6	35	39	13.0	26.0	21.50	19.0	16.36	10
	M14	<b>751F14</b>	20.6	35	39	15.0	26.0	21.50	19.0	16.20	10
	M16	<b>751F16</b>	20.6	35	39	17.0	26.0	21.50	19.0	15.36	10
	M20	<b>751F20</b>	20.6	35	39	21.0	26.0	21.50	19.0	15.80	10
240	M16	<b>752F16</b>	23.1	44	41	17.0	28.0	19.00	20.0	17.80	5