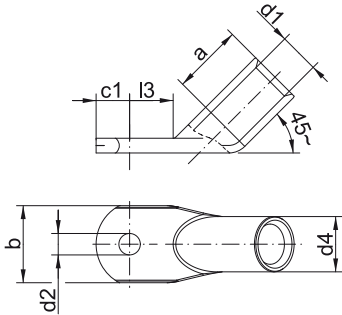


## Angled tubular cable lugs, Cu, 45° angled, standard type



- ▶ For multi-stranded, round conductors e.g. to DIN EN 60228
- ▶ For pre-rounded multi-stranded sector shaped conductors
- ▶ Flat contact surface by special angle pressing technology
- ▶ In combination with EKM 60 ID suitable for fine-stranded conductors

### Characteristics

- Annealed material optimises material and crimping properties
- Simple cable entry due to internal chamfer
- Item identification on cable lug

### Material

- Copper (EN13600)

### Surface

- Tin-plated to protect against corrosion

### Technical instructions

- Tool: see page 38
- Sleeves for compacted conductors and sleeves for 3-core and 4-core cables, see chapter „Sleeves for compacted conductors and sector shaped conductors - Cu“

### Additional information

- Possible as a special version with inspection hole on request. Part Number appendix „MS“

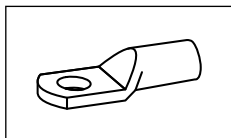
Nominal cross section mm <sup>2</sup>	Size of bolt dia.	Part No.	Dimension mm							Weight/ 100 pcs. ~ kg	Packing unit/pcs
			d1	a	b	d2	d4	c1	l3		
6	M5	<b>41R545</b>	3.5	9	10	5.5	6.5	7.5	9	0.60	50
	M6	<b>41R645</b>	3.5	9	12	6.4	6.5	7.5	10	0.58	50
	M8	<b>41R845</b>	3.5	9	14	8.4	6.5	10.0	13	0.68	50
	M10	<b>41R1045</b>	3.5	9	17	10.5	6.5	12.0	15	0.70	50
	M12	<b>41R1245</b>	3.5	9	19	13.0	6.5	13.0	17	0.70	50
10	M5	<b>42R545</b>	4.5	10	12	5.5	7.0	6.5	10	0.57	50
	M6	<b>42R645</b>	4.5	10	12	6.4	7.0	6.5	10	0.57	50
	M8	<b>42R845</b>	4.5	10	15	8.4	7.0	10.0	13	0.63	50
	M10	<b>42R1045</b>	4.5	10	17	10.5	7.0	12.0	15	0.68	50
	M12	<b>42R1245</b>	4.5	10	19	13.0	7.0	13.0	18	0.68	50
16	M5	<b>43R545</b>	5.5	13	12	5.5	8.5	7.5	10	1.01	50
	M6	<b>43R645</b>	5.5	13	12	6.4	8.5	7.5	11	1.06	50
	M8	<b>43R845</b>	5.5	13	15	8.4	8.5	10.0	13	1.15	50
	M10	<b>43R1045</b>	5.5	13	17	10.5	8.5	12.0	15	1.09	50
	M12	<b>43R1245</b>	5.5	13	19	13.0	8.5	13.0	18	1.15	50
25	M5	<b>44R545</b>	7.0	15	14	5.5	10.0	7.5	11	1.40	25
	M6	<b>44R645</b>	7.0	15	14	6.4	10.0	7.5	11	1.32	25
	M8	<b>44R845</b>	7.0	15	16	8.4	10.0	10.0	13	1.44	25
	M10	<b>44R1045</b>	7.0	15	18	10.5	10.0	12.0	15	1.49	25
	M12	<b>44R1245</b>	7.0	15	19	13.0	10.0	13.0	18	1.44	25
35	M14	<b>44R1445</b>	7.0	15	21	15.0	10.0	14.5	20	1.55	25
	M6	<b>45R645</b>	8.5	17	17	6.4	12.0	7.5	11	2.05	25
	M8	<b>45R845</b>	8.5	17	17	8.4	12.0	10.0	13	2.20	25
	M10	<b>45R1045</b>	8.5	17	19	10.5	12.0	12.0	15	2.28	25
	M12	<b>45R1245</b>	8.5	17	21	13.0	12.0	13.0	18	2.38	25
	M16	<b>45R1645</b>	8.5	17	26	17.0	12.0	16.0	22	2.40	25

See next page



### Angled tubular cable lugs, Cu, 45° angled, standard type

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		
50	M6	<b>46R645</b>	10.0	19	20	6.4	14.0	10.0	13	3.43	25
	M8	<b>46R845</b>	10.0	19	20	8.4	14.0	10.0	13	3.28	25
	M10	<b>46R1045</b>	10.0	19	20	10.5	14.0	12.0	16	3.47	25
	M12	<b>46R1245</b>	10.0	19	23	13.0	14.0	13.0	18	3.42	25
	M16	<b>46R1645</b>	10.0	19	28	17.0	14.0	16.0	22	3.76	25
70	M6	<b>47R645</b>	12.0	21	23	6.4	16.5	10.0	13	5.06	25
	M8	<b>47R845</b>	12.0	21	23	8.4	16.5	10.0	14	5.06	25
	M10	<b>47R1045</b>	12.0	21	23	10.5	16.5	12.0	16	5.25	25
	M12	<b>47R1245</b>	12.0	21	23	13.0	16.5	13.0	18	5.30	25
	M14	<b>47R1445</b>	12.0	21	23	15.0	16.5	14.5	20	5.60	25
	M16	<b>47R1645</b>	12.0	21	28	17.0	16.5	16.0	22	5.61	25
95	M20	<b>47R2045</b>	12.0	21	30	21.0	16.5	19.0	24	5.60	25
	M8	<b>48R845</b>	13.5	25	26	8.4	18.0	12.0	14	6.19	25
	M10	<b>48R1045</b>	13.5	25	26	10.5	18.0	12.0	17	5.70	25
	M12	<b>48R1245</b>	13.5	25	26	13.0	18.0	13.0	18	6.67	25
	M16	<b>48R1645</b>	13.5	25	28	17.0	18.0	16.0	22	6.78	25
120	M20	<b>48R2045</b>	13.5	25	36	21.0	18.0	22.0	24	6.80	25
	M8	<b>49R845</b>	15.0	26	28	8.4	19.5	14.0	16	7.92	10
	M10	<b>49R1045</b>	15.0	26	28	10.5	19.5	14.0	17	7.99	10
	M12	<b>49R1245</b>	15.0	26	28	13.0	19.5	14.0	18	7.96	10
	M14	<b>49R1445</b>	15.0	26	28	15.0	19.5	15.0	20	7.94	10
150	M16	<b>49R1645</b>	15.0	26	30	17.0	19.5	16.0	22	8.26	10
	M8	<b>50R845</b>	16.5	30	31	8.4	21.0	14.0	16	9.00	10
	M10	<b>50R1045</b>	16.5	30	31	10.5	21.0	14.0	17	9.15	10
	M12	<b>50R1245</b>	16.5	30	31	13.0	21.0	15.0	18	8.75	10
	M14	<b>50R1445</b>	16.5	30	31	15.0	21.0	15.0	20	9.20	10
185	M16	<b>50R1645</b>	16.5	30	31	17.0	21.0	16.0	22	9.22	10
	M10	<b>51R1045</b>	19.0	30	35	10.5	24.0	18.0	22	13.30	10
	M12	<b>51R1245</b>	19.0	30	35	13.0	24.0	18.0	22	13.32	10
	M14	<b>51R1445</b>	19.0	30	35	15.0	24.0	18.0	22	13.40	10
	M16	<b>51R1645</b>	19.0	30	35	17.0	24.0	18.0	22	12.80	10
240	M20	<b>51R2045</b>	19.0	30	39	21.0	24.0	22.0	24	13.10	10
	M10	<b>52R1045</b>	21.0	35	39	10.5	26.0	21.5	22	16.28	10
	M12	<b>52R1245</b>	21.0	35	39	13.0	26.0	21.5	22	16.80	10
	M16	<b>52R1645</b>	21.0	35	39	17.0	26.0	21.5	22	16.10	10
300	M20	<b>52R2045</b>	21.0	35	39	21.0	26.0	21.5	24	16.10	10
	M12	<b>53R1245</b>	23.5	44	43	13.0	29.5	24.0	24	24.08	5
	M14	<b>53R1445</b>	23.5	44	43	15.0	29.5	24.0	24	24.20	5
	M16	<b>53R1645</b>	23.5	44	43	17.0	29.5	24.0	24	23.23	5
400	M12	<b>54R1245</b>	27.0	44	49	13.0	34.0	24.0	24	34.00	5
	M14	<b>54R1445</b>	27.0	44	49	15.0	34.0	24.0	24	33.40	5
	M16	<b>54R1645</b>	27.0	44	49	17.0	34.0	24.0	24	34.28	5

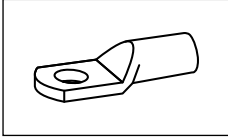


### Tool application chart

**Tubular cable lugs, butt connectors, parallel connectors and T-connectors „standard type“ and tubular cable lugs for switchgear connections made from Cu**  
Part 1 of 2




























Tool type	Crimping range corresponds to nominal cross-section mm <sup>2</sup>	Crimping Tool		Catalogue page		Crimp profile
		Part No.	Crimping head / adapter	Crimping Tool	Crimping die	
Mechanical crimping tools	0,75 - 16	K2		224		
	1 - 4	K511		233		
	6 - 50	K5		226		
		K05		229		
	6 + 10	K512		233		
	10 - 25	K04		228		
	6 - 120	K06		231		
	16 - 95	K95		225		
		TK95		225		
	25 - 150	K09		232		
	50 - 120	K6		226		
	35 - 95	K8		228		
	120 - 240	K7		227		
	185 - 400	K07		227		
Mechanical, electrical, pneumatic crimping tools with interchangeable dies / heads	0.75 - 10	K50		235	312	
		EK50ML		244	312	
	6 - 150	K354		236	314	
	6 - 240	K18		239	323	
	6 - 300	K22		240	327	
Hand hydraulic crimping tools	6 - 185	HK6018		280	323	
		HK60UNV	+UA18	465	323	
	6 - 300	HK6022		282	327	
		HK60UNV	+UA22	465	327	
	10 - 240	HK60VP		284		
	16 - 300	HK60VPFT		285		
	16 - 400	HK12030		286	333	
		HK12042		288	333	
HK120U			290	333		
Battery powered crimping tools	0.75 - 10	EK1550ML		248	312	
	6 - 120	EK30IDML		247		
	6 - 150	EK354ML		250	314	
		EK354		256	314	
	6 - 240	EK5018		260	323	
		EK60UNV	+UA18	468	323	
		EKM60UNV	+UA18	467	323	
	6 - 240	EK505		258	319	

See next page



## Tool application chart

**Tubular cable lugs, butt connectors, parallel connectors and T-connectors „standard type“ and tubular cable lugs for switchgear connections made from Cu**  
Part 2 of 2

Tool type	Crimping range corresponds to nominal cross-section mm <sup>2</sup>	Crimping Tool		Catalogue page		Crimp profile
		Part No.	Crimping head / adapter	Crimping Tool	Crimping die	
Battery powered crimping tools	6 - 300	EK6022		264	327	
		EKM6022		262	327	
		EK60UNV	+UA22	468	327	
		EKM60UNV	+UA22	467	327	
	10 - 240	EK60VP		266		
		EKM60ID		268		
	16 - 300	EK60VPFT		267		
	16 - 400	EK12032		270	333	
		EK12042		272	333	
		EK120U		274	333	
		EK135FT	+UA12T	276	333	
		EK120UNV	+UA15T	469	333	
	70 - 185	EK120ID		269		
	400 - 630	EK135FT		276	338	
Hydraulic crimping systems	6 - 240	THK18		294	323	
	6 - 300	THK22		296	327	
	10 - 400	THK120		300	333	
	16 - 400	HK252	+25A13	308	333 + 339	
Hydraulic crimping heads	6 - 240	PK18		294	323	
		PK60UNV	+UA18	466	323	
	6 - 300	PK22		296	327	
		PK60UNV	+UA22	466	327	
	10 - 240	PK60VP		298		
		PK60ID		299		
	16 - 300	PK60VPFT		298		
	16 - 400	PK12042		300	333	
		PK120U		302	333	
	16 - 400	PK252	+25A13	304	333 + 339	