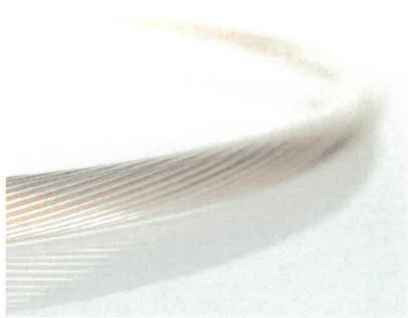


CABLE BEADS



Cable beads for High-Performance

Technical specification round cable beads of steel wire*

constructions	cross section	minimum	surface coating	constructions	cross section	minimum	surface coating
[mm]	diameter [mm]	theoretical breaking load [kN]		[mm]	diameter [mm]	theoretical breaking load [kN]	
1x1.2+ (6) x 0.96	3.12	7.87	bronze	1x6+ (11) x 2.0	10.00		brass
1x1.5+ (7) x 0.96	3.42	9.82	bronze	1x1.6+ (6+12+18) x 1.4	10.00	112.31	bronze or brass
1x1.4+ (6) x 1.3	4.00	14.91	bronze	1x3+ (8+14) x 1.8	10.20	106.86	brass
1x1.5+ (6) x 1.3	4.10	15.08	bronze	1x6+ (11) x 2.2	10.40	83.00	bronze or brass
1x1.6+ (6) x 1.3	4.20		bronze	1x3+ (7+14) x 2	11.00	124.77	brass
1x1.5+ (6) x 1.4	4.30	17.28	bronze or brass	1x3+ (7+13) x 2.2	11.80	142.87	bronze or brass
1x1.6+ (6) x 1.4	4.40	17.51	bronze or brass	1x1.6+ (6+12+18+23) x 1.3	12.00	159.47	bronze
1x2.5+ (10) x 0.96	4.42	15.41	bronze	1x3+ (9+15+21) x 1.5	12.00	153.45	bronze or brass
1x1.8+ (7) x 1.4	4.60	21.51	bronze or brass	1x5+ (11+17) x 1.8	12.20	138.98	brass
1x2.0+ (7) x 1.4	4.80		bronze or brass	1x4+ (9+15) x 2.2	12.80	172.34	bronze or brass
1x2.2+ (8) x 1.3	4.80	22.24	bronze	1x5+ (10+16) x 2	13.00	157.70	brass
1x2.2+ (8) x 1.4	5.00	25.32	bronze or brass	1x2.5+ (7+13+19) x 1.8	13.30	188.72	brass
1x1.2+ (6+12) x 0.96	5.04	24.55	bronze	1x3+ (8+14+20) x 1.8	13.80	204.66	brass
1x2.5+ (7)x 1.8	5,1		brass	1x5+ (10+16) x 2.2	13.80	189.45	bronze or brass
1x3+ (10) x 1.3	5.60	28.65	bronze	1x4+(12+18+24+30) x 1.3	14.40		bronze
1x3+ (9) x 1.5	6.00	31.31	bronze or brass	1x5+ (13+19+25) x 1.5	14.00	196.95	bronze or brass
1x2.5+ (7) x 1.8	6.10	32.24	bronze or brass	1x6+ (11+17) x 2.2	14.80	207.10	bronze or brass
1x3+ (8) x 1.8	6.60	38.40	bronze or brass	1x3+ (7+13+20) x 2	15.00	239.34	brass
1x1.5+ (6+12) x 1.3	6.70	47.72	bronze	1x5+ (11+17+23) x 1.8	15.80	251.45	brass
1x1.6+ (6+12) x 1.3	6.80	47.95	bronze	1x5+ (10+16+22) x 2	17.00	290.36	brass
1x1.8+ (7+13) x 1.3	7.00	54.23	bronze	1x3+ (9+15+21+27) x 1.5	17.15	245.06	bronze or brass
1x3+ (7) x 2	7.00	40.35	brass	1x6+ (11+17+23) x 2	18.00	311.50	brass
1x1.6+ (6+12) x 1.4	7.20	58.59	bronze or brass	1x5+ (10+16+22) x 2.2	18.20	350.05	bronze or brass
1x1.8+ (7+13) x 1.4	7.40	62.59	bronze or brass	1x6+ (11+17+23) x 2.2	19.20	375.00	bronze or brass
1x3+ (7) x 2.2	7.40	47.97	bronze or brass	1x5+ (11+17+23+29) x 1.8	19.40	393.26	brass
1x2+ (7+13) x 1.4	7.60	62.81	bronze or brass	1x5+ (10+16+22+28) x 2	21.00	459.20	brass
1x2.2+ (8+14) x 1.4	7.80	69.56	bronze or brass	1x6+ (11+17+23+30) x 2	22.00	492.40	brass
1x1.6+(6)x1.4+(10)x1.8	8.00	64.64	brass	1x5+ (10+16+22+28) x 2.2	22.60	554.45	bronze or brass
1x5+ (13) x 1,50	8.00		bronze or brass	1x5+ (11+17+23+29+35) x 1.8	23.00	564.41	brass
1x4+ (9) x 2	8.00	52.68	brass	1x5+ (13+19+25+31+37+41) x 1.5	23.00	570.17	bronze or brass
1x4+ (8) x 2.2	8.40	55.54	bronze or brass	1x6+ (11+17+23+29) x 2.2	23.60	586.70	bronze or brass
1x5+ (11) x 1.8	8.60	55.85	brass	1x6+ (11+17+23+29+35) x 2	26.00	697.42	brass
1x5+ (10) x 2	9.00	61.22	brass	1x5+ (10+16+22+28+33) x 2.2	27.00	795.35	bronze or brass
1x3+ (9+15) x 1.5	9.00	82.20	bronze or brass	1x6+ (11+17+23+29+35) x 2.2	28.00	842.20	bronze or brass
1x5+ (10) x 2.2	9.40	72.65	bronze or brass	1x6+ (11+17+23+29+35+40) x 2.2	32.40	1134.20	bronze or brass
1x6+ (13) x 1.8	9,6	68,68	brass	1x6+ (11+17+23+29+34+39+45) x 2.2	36.80	1448.10	bronze or brass
1x2.5+ (7+13) x 1.8	9.70	95.81	brass	1x5+ (10+16+22+28+34+40+46+53) x 2	37.00	1502.39	brass
				1x6+ (11+17+23+29+35+40+46+52) x 2.2	41.20	1849.60	bronze or brass

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*The author accepts no responsibility for the timeliness, accuracy, completeness or quality of the information provided.

*other wire sizes, and surface coating on request



Cable beads for High-Performance

technical data

- butt welded cable cores with helically wound layer wire around core ring.
Ends of layers joined with brass sleeve.
- inner bead diameter: on request
- tolerance: ± 0.5 mm for each inner diameter
- flatness: max. 2.5 mm
- concentricity: for ring diameter < 300mm: max 8 mm; for > 301mm: max 20mm
- surface of spring steel layer wire, standard coating in bronze or brass

Fields of application

- passenger car tyres
- motorcycle tyres
- agricultural tyres
- air spring systems
- motorsports tyres
- truck tyres
- aircraft tyres
- other technical applications, valves, pipes, geers

Advices

inner diameter from 66 to 2.000 mm

standard cross sections from 3 to 45 mm, > 45mm on request

constructions as in page 2 (others on request)

Advantage of round cable bead compared to standard hexagonal beads

Lightweight – round cable bead is lighter than standard hex beads, lower rolling resistance

Higher strength – lighter than hex bead with same tensile strength

cable Bead with high strength values – less deformation after vulcanization compared to standard hex beads

Uneven stress of hexagonal bead / no stress with round cable beads

Stress of bead in tire – hexagonal bead has larger deformation ratio and stress value than round cable bead

improvement in production process of tires in bead area compared to hexagonal bead

Better results of performance, of the tires by testing compared to hex beads

LET'S BEAD IT