BzII DIN 48201 Messenger Wire

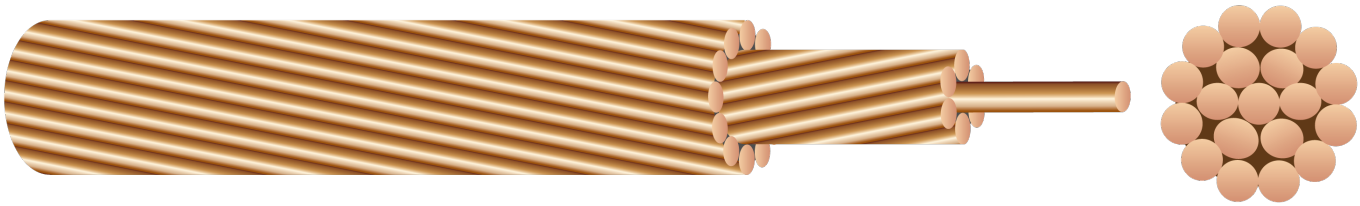


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

Bronze BzII (CuMg) stranded conductor per DIN 48201 part 2

APPLICATIONS AND FEATURES:

For use in High Speed Rail systems of domestic and international standard application, primarily as electro-mechanical current carrying cable and wire for overhead contact systems (OCS). Southwire's messenger wire is designed for long service life with the ability to maintain rugged strength through sustained performance.

- Stranded Wrought Copper Alloy BzII (CuMg)
- Domestically manufactured to international standards
- Flexible to Wind and Vibration
- Durable and Reliable Support
- High Tensile Strength and Breaking Load
- RoHS/Proposition 65 Compliant

SPECIFICATIONS:

- DIN 48201 part 2 Bronze Stranded Conductors

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Table 1 – Weights and Measurements

Stock Code	Nominal Cross Section (mm²)	Calculated Cross Section (mm²)	Number of Wires	Diameter per Wire (mm)	Calculated Conductor Diameter (mm)	Weight (kg/km)	Breaking Load (kN)	Continuous Current Carrying Capacity (A)
TBA	10	10.02	7	1.35	4.1	90	5.88	75
TBA	16	15.89	7	1.70	5.1	143	9.33	100
457418	25	24.25	7	2.10	6.3	218	14.24	130
TBA	35	34.36	7	2.50	7.5	310	20.17	160
TBA	50	49.48	7	3.00	9.0	446	28.58	200
TBA	50	48.35	19	1.80	9.0	437	28.39	200
649155	70	65.81	19	2.10	10.5	596	38.64	245
726691	95	93.27	19	2.50	12.5	845	54.76	305
457419	120	116.99	19	2.80	14.0	1060	67.57	350
TBA	150	147.11	37	2.25	15.8	1337	86.37	410
TBA	185	181.62	37	2.50	17.5	1649	106.63	465
TBA	240	242.54	61	2.25	20.3	2209	142.40	560
TBA	300	299.43	61	2.50	22.5	2725	175.80	635
TBA	400	400.14	61	2.89	26.0	3640	231.12	765
TBA	500	499.83	61	3.23	29.1	4545	288.70	880

Remark: The outer layer has to be right handed (Z- rotation)
Reference values for continuous current- carrying capacity are valid up to 60 Hz at the given wind velocity of 0,6 m/s and sun impact (for Germany) for a starting ambient temperature of 35°C and a final temperature of the conductor of 70° C. For special environmental conditions (calm) the values have to be reduced by about 30%.
Other designs: for example international standards or customer specifications - on request

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