

Low-Alloyed Phosphor Bronze (Copper-Tin) BD01 | BD03 | BD06



Material Designation			
Sundwiger	BD01	BD03	BD06
DIN-EN Symbol	CuSn0,15	(CuSn0,3)	CuSn0,6
DIN-EN	CW117C	CW129C	-
UNS	C14410 C14415	C18835	C50100

Reference to Standards	
DIN	EN 12166

Typical Applications
• Conductor wire • Harness wire • Flat wire • Special screws • Pressed parts • Rivets

About the Alloy
Wire of low-alloyed phosphor bronze has a good electrical conductivity and a better softening behaviour than copper.
Wire made of this alloy is therefore used for conductive wire in electrical and electronic components and harness wire in vehicles.

Mechanical Properties*				
Sundwiger		BD01	BD03	BD06
Tensile strength in N/mm ²	soft	260 - 320	270 - 330	280 - 340
	hard	340 - 400	350 - 420	380 - 450
	spring-hard	350 - 420	380 - 450	400 - 470
	extra spring-hard	380 - 450	400 - 470	420 - 490
	Super spring-hard	450 - 570	470 - 620	490 - 640
Elongation A100 in %, soft		> 30		
* Reference values				

Physical Properties*			
Sundwiger	BD01	BD03	BD06
Electrical conductivity in % IACS, soft	≥80	≥68	≥63
Electrical conductivity in MS/m, soft	≥46,4	≥39,4	≥36,5
Density in g/cm ³	8,9	8,9	8,9
* Reference values			

Available Dimensions		
Rolled, modified square wire	5,1 mm	max. 2000 kg
	7,4 mm	
	1,2 - 6,2 mm in coils	max. 200 kg
	1,8 - 6,2 mm on stands	max. 1500 kg
	0,5 - 3 mm on reels	max. 1000 kg
	1,5 - 3 mm on acropaks	max. 400 kg
Round wire	On request: in drums	max. 400 kg

Your Contact Person	
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