

TABLE 2
STANDARD SIZES AND TOLERANCES OF SOLID AND TUBULAR BARE WIRES^a

Nominal Diameter		Solid Wire Tolerance				Tubular Cored Wire Tolerance	
in. ^b	mm	GMAW/GTAW ^c		SAW/EGW/ESW		in.	mm
		in.	mm	in.	mm		
0.020	0.5	±0.001	+0.01/−0.03	—	—	—	—
...	0.6						
0.025	...						
0.030	...						
...	0.8						
0.035	0.9						
...	1.0	±0.002	+0.01/−0.04	—	±0.04	±0.002	+0.02/−0.05
0.045	...						
$\frac{3}{64}$	1.2						
0.052	...						
...	1.4						
$\frac{3}{16}$	1.6						
0.068	...	±0.003	+0.01/−0.07	±0.002	±0.04	±0.003	+0.02/−0.06
0.072	1.8						
$\frac{5}{64}$	2.0						
$\frac{3}{32}$	2.4, 2.5						
$\frac{7}{64}$	2.8						
...	3.0						
$\frac{1}{8}$	3.2	—	—	±0.004	±0.06	±0.004	+0.02/−0.07
$\frac{5}{32}$	4.0						
$\frac{3}{16}$	4.8 ^d						
...	5.0						
$\frac{7}{32}$	5.6 ^d						
...	6.0						
$\frac{1}{4}$	6.4 ^d	—	—	±0.004	±0.06	±0.004	+0.02/−0.08
$\frac{5}{16}$	8.0						

NOTES:

- a. Dimensions, tolerances, and package forms other than those shown shall be as agreed upon between purchaser and supplier.
- b. To establish the nominal diameter for the tolerances, the fractions shall be converted to their decimal equivalents.
- c. Bare straight lengths shall be 36 in. +0, −½ in. [900 mm +15, −0 mm].
- d. These metric sizes are not shown in ISO 544.

Table 2 — Dimensions and tolerances for wires, rods, and covered electrodes

Dimensions in millimetres

Nominal diameter	Solid wires and solid wire electrodes ^a		Tubular cored wires and tubular cored electrodes ^a	Solid and tubular cored rods ^a			Covered electrodes ^{ab}			
	Welding process									
	G, W, L, EB Diameter tolerance	S, ES, EG Diameter tolerance	T, S, EG Diameter tolerance	W, O, P			E			
			Diameter tolerance	Diameter tolerance	Length	Length tolerance	Diameter of core wire	Diameter tolerance	Length	Length tolerance
0,5	+0,01	—	—	—	—	—	—	—	—	—
0,6	-0,03									
0,8	+0,01 -0,04									
0,9										
1,0										
1,2										
1,4										
1,6										
1,8										
2,0										
2,4	±0,04	+0,02 -0,05	±0,1	500 ≤ l < 1 000	±5	1,6	±0,06	200 up to 350	±6	
2,5		2,0								
2,8	+0,01 -0,07	±0,06	+0,02 -0,06	—	—	—	—	—	—	
3,0			±0,10							
3,2										3,2
4,0	—	±0,06	+0,02 -0,07	—	—	—	—	—	—	
5,0			±0,10							
6,0										4,0
8,0	—	±0,06	+0,02 -0,08	—	—	—	—	—	—	
							8,0	±0,1	275 ≤ l < 450 ^c	±6

^a Other dimensions may be agreed. For intermediate dimensions, tolerances given in this table shall be used.

^b Dimensions for the core wire.

^c For special cases (e.g. gravity welding), length, l < 1 000 mm.