

## TIG welding rod and wire

**Features:**                   ▪ Good impact value at low temperatures  
                                       ▪ Most widely used in Japan

**Classification:**       AWS A5.18 ER70S-G

**Shielding Gas:**       Ar

**Identification color:** 1st Yellow

**Polarity:**               DCEN

## Packaging data

φ mm	Spool		Tube		
	kg		kg	Length mm	g/piece
0.8	10	-	-	-	-
1.0	10	-	-	-	-
1.2	10	20	5	1,000	9
1.6	10	-	5	1,000	16
2.0	-	-	5	1,000	25
2.4	-	-	5	1,000	35
3.2	-	-	5	1,000	63
<b>Volume mm</b>	240W, 110H, 230L	280W, 110H, 270L	40W, 35H, 1015L		

## Composition (wire mass%)

	Typical	Guaranty <sup>a</sup>
<b>C</b>	0.10	0.02~0.12
<b>Si</b>	0.74	0.40~0.95
<b>Mn</b>	1.40	1.00~1.50
<b>P</b>	0.011	0.025
<b>S</b>	0.012	0.025
<b>Cu</b>	0.24	0.50
<b>Al</b>	<0.01	0.15
<b>Ti</b>	<0.01	0.15
<b>Zr</b>	<0.01	0.12

Note: <sup>a</sup> Single values are maximum.

## All-weld mechanical properties

	Typical		Guaranty
<b>0.2%YS (MPa)</b>	480	380	400min.
<b>TS (MPa)</b>	580	500	483min.
<b>El on 4d (%)</b>	33	36	22min.
<b>IV -29°C (J)</b>	180	230	27min.
<b>PWHT (°Cxh)</b>	AW	625x8	AW

## Approvals

<b>ABS</b>	3**, 3Y**
<b>LR</b>	3Ym (H15)
<b>DNV</b>	III YM
<b>BV</b>	SA3YM
<b>NK</b>	KSW53G (I)
<b>CCS</b>	3, 3YSM