

**Technical data sheet**

011121MBA

Cored welding wire

**TUBE S 308L-G****CLASSIFICATION**

ASME IIC SFA 5.22 / AWS A 5.22:	EC308L
ASME IIC SFA 5.9 / AWS A 5.9:	EC308L
EN ISO 17633-A:	T 19 9 L M M12 1
EN ISO 17633-B:	TS308L-M M12 1
Equivalent Material number :	1.4316
ASME IX Qualification	QW432 F-N° 6 QW442 A-N° 8

**DESCRIPTION**

- Metal cored stainless steel wire for gas shielded arc welding
- 19% chromium - 9% nickel - low carbon deposit
- Enhanced productivity, improved weldability, better wetting properties compared to solid wires
- Excellent weld metal quality and X-ray soundness

**APPLICATIONS**

TUBE S 308L-G is suitable for welding stainless steels with an alloy content between 16 to 21% Cr and 8 to 13% Ni, stabilised or not.

**Examples:**

AISI	UNS	Material number	EN Symbol
302	S30200	1.4300	X12 CrNi 18 8
304	S30400	1.4301	X5 CrNi 18-10
304L	S30403	1.4306	X2 CrNi 19-11
304LN	S30453	1.4311	X2 CrNiN 18-10
305	J92701	1.4312	GX10 CrNi 18-8
308	S30800	1.4303	X4 CrNi 18-12
321	S32100	1.4541	X6 CrNiTi 18-10
347	S34700	1.4550	X6 CrNiNb 18-10

**TYPICAL ALL-WELD METAL ANALYSIS**

C	Mn	Si	Cr	Ni	S	P
0.02	1.40	0.55	20.5	10.5	0.008	0.015

Typical ferrite level: 10 FN

**MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES**

Rm [MPa]	Rp0.2% [MPa]	As [%]	CVN [J]
520	320	35	-196°C : 27

**TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES**

Rm [MPa]	Rp0.2% [MPa]	As [%]	CVN [J]
600	430	40	-196°C : 35

**SHIELDING GAS**

EN ISO 14175:	M12	Ar + 0.5 % < CO <sub>2</sub> ≤ 2.5 with or without helium
	Z	Ar + CO <sub>2</sub> ≤ 0.5 % or O <sub>2</sub> ≤ 0.5 % with or without helium
	I1	Ar
	M13	Ar + 0.5 % < O <sub>2</sub> ≤ 3.0 with or without helium

**OPERATING CONDITIONS**

Current type	Gas flow rate	Stick out	Recovery
DC+ / pulsed	10 - 20 l/min.	12 - 25 mm	98 %

**WELDING POSITIONS**

TUBE S 308L-G is primarily used in the flat and horizontal positions. However, welds in other positions are also possible using the short-circuiting or pulsed arc modes of transfer.

**PACKAGING**

Diameter	1.2 mm		1.6 mm
	EN ISO 544 – ASME IIC SFA-5.2 M		
Spool type	S200	BS300	BS300
Weight	5 kg	15 kg	15 kg

Other packaging and other diameters: please consult us

Welding products and techniques evolve constantly. All descriptions, illustrations and properties given in this data sheet are subject to change without notice and can only be considered as suitable for general guidance. This document is intended to help the user make the correct choice of product. It is his responsibility to assess its suitability for his intended application.