



### Standards

CSA W48, Class B-G 49A 2 C1 S3 (B-G 49A 2 C G3) (ER49S-3).  
CAN/CSA-ISO 14341, AWS A5.18/ASME SFA 5.18, Class ER70S-3

### Description & Applications

It is a lightly copper-coated carbon steel solid wire electrode for Gas Metal Arc Welding (GMAW). It may be used in single or multi-pass welding in all GMAW transfer modes: short circuit, spray or pulsed spray transfer mode. Commonly used to weld low and medium carbon steels, as well as some low alloy steels.

- Typical applications include automotive, piping and structural steel market segments. Also used where a weld deposit with little or no silicate islands is required.

### The BLUESHIELD™ Advantage

- Offers a smooth stable arc transfer and excellent bead profile.
- Weld metal toughness or Charpy impacts down to -20°C (-4°F).
- Low hydrogen weld deposit.
- High deposit rate and efficiency.

### Typical Welding Parameters

- All position weld capabilities when using either short circuit or pulsed spray transfer.
- Direct current electrode positive (DCEP) is recommended.
- A range of 80-200 A and 16-22 V for all position.
- A range of 175-450 A and 24-32 V for flat and horizontal fillets.



DIAMETER		ELECTRICAL EXTENSION mm (in)	
mm	in	SHORT CIRCUIT	SPRAY
0.9	0.035	6-9 (1/4-3/8)	16-25 (5/8-1)
1.0	0.040	6-9 (1/4-3/8)	16-25 (5/8-1)
1.14	0.045	6-9 (1/4-3/8)	16-25 (5/8-1)
1.32	0.052	6-9 (1/4-3/8)	16-25 (5/8-1)
1.6	0.062	6-9 (1/4-3/8)	16-25 (5/8-1)

### Recommended Shielding Gases

CWB certification 100% Co2 according to CSA W48.

BLUESHIELD™ 6, BLUESHIELD™ 7, BLUESHIELD™ 8, ARCAL™ M23 (BLUESHIELD™ 23) gas mixtures for MIG welding.

### Typical Wire Chemistry

C	Mn	Si	P	S	Ni	Cr	Mo	V	Cu
0.08	1.15	0.55	0.007	0.010	0.01	0.03	<0.02	<0.02	0.05



### Typical Mechanical Properties\*

	AS WELDED CO <sub>2</sub>
TENSILE STRENGTH MPa (ksi)	515 (74.7)
YIELD STRENGTH MPa (ksi)	415 (60.2)
ELONGATION (%)	32
IMPACT (Charpy V-notch) @ -20°C (-4°F)	117 J (86.6 ft-lb)

\* Actual welding positions and procedures can impact results.

### Packaging

DIAMETER		SMALL PACKAGING			ITEM NUMBER
mm	in	kg	lb		
0.9	0.035	20	44	Spool	A0418505
1.0	0.040				A0418506
1.14	0.045				A0418509

DIAMETER		LARGE PACKAGING			ITEM NUMBER
mm	in	kg	lb		
0.9	0.035	450	990	Reel	A0418503
1.14	0.045				A0418504
0.9	0.035	750	1653.4	Reel	A0418493**
1.0	0.040				A0418508**
1.14	0.045				A0418510**
1.32	0.052				A0927541**
1.6	0.062				A0418496**
0.9	0.035	907.2	2000	Reel	A0418494
1.14	0.045				A0418511
1.32	0.052				A0418495**
1.6	0.062				A0418497**
0.9	0.035	250	551	Drum	A0418540
1.0	0.040				A0418537**
1.14	0.045				A0418538**
1.32	0.052				A0418539**
0.9	0.035	350	772	Recyclable Drum	A1071604**
1.0	0.040				A0931549**
1.14	0.045				A0971505**

\*\* Available on request.