



# exocor™

## CARBON STEEL BARE WIRE DATA SHEET executive 70S-6 CFP

### DESCRIPTION

Executive 70S-6 CFP is a copper free solid carbon steel wire, intended for both single and multi-pass welding. It is especially suited for sheet metal applications, where smooth weld beads are desired, and structural and plate steels that have moderate amounts of rust or mill scale.

The high levels of manganese and silicon provide strong deoxidizing, excellent wetting action, and a highly fluid weld puddle. The special surface coating of Executive 70S-6 CFP results in better feedability and arc stability, as well as reduced spatter and improved bead appearance.

Each heat of Executive 70S-6 CF is certified to the current ASME standard and unique within the industry AS WELDED mechanical properties are provided as standard practice.

### TYPICAL CHEMICAL VALUES

C	Cr	Ni	Mo	Mn	Si	P	V	S	Cu
0.06	0.05	0.03	0.01	1.5	0.85	0.01	0.01	0.01	0.07

### TYPICAL WELDING PARAMETERS

DIAMETER, POLARITY, GAS	WIRE FEED SPEED M/MIN (IN/MIN)	VOLTAGE (VOLTS)	APPROX. CURRENT (AMPS)	SHIELDING GAS
<b>.035" (0.9 mm), DC+</b>				
Short Circuit Transfer	2.5 (100)	18	80	100% CO <sub>2</sub> (Short circuit) Ar/CO <sub>2</sub> Blends Ar/O <sub>2</sub> Blends Tri-mixes
	3.8 (150)	19	120	
	6.4 (250)	22	175	
Spray Transfer	9.5 (375)	23	195	Ar/O <sub>2</sub> Blends Tri-mixes
	12.7 (500)	29	230	
	15.2 (600)	30	275	
<b>.045" (1.1 mm), DC+</b>				
Short Circuit Transfer	3.2 (125)	19	145	100 CO <sub>2</sub> (Short circuit) Ar/CO <sub>2</sub> Blends Ar/O <sub>2</sub> Blends Tri-mixes
	3.8 (150)	20	165	
	5.1 (200)	21	200	
Spray Transfer	8.9 (350)	27	285	Ar/O <sub>2</sub> Blends Tri-mixes
	12.1 (475)	30	335	
	12.7 (500)	30	340	

### TYPICAL MECHANICAL PROPERTIES AS WELDED

Tensile Strength:	83,000 PSI	570 MPA
Yield Strength:	77,000 PSI	530 MPA
Elongation:	27%	
Charpy V-Notch:	90 J (66 ft-lb) @ -29°C (-20°F)	
	80 J (59 ft-lb) @ -50°C (-58°F) *with 100% CO <sub>2</sub>	
	120 J (88 ft-lb) @ -29°C (-20°F)	
	106 J (78 ft-lb) @ -50°C (-58°F) *with 92/8 Ar/CO <sub>2</sub>	

### CLASSIFICATION

Wire chemistry has been optimized for best performance and conforms to **AWS/SFA 5.18, Class ER70S-6**. It is certified for GMAW by the CWB to classification B-G 49A 3 C1 G6 (ER49S-6) of CSA Standard W48.