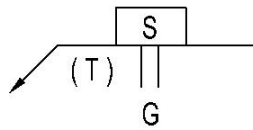
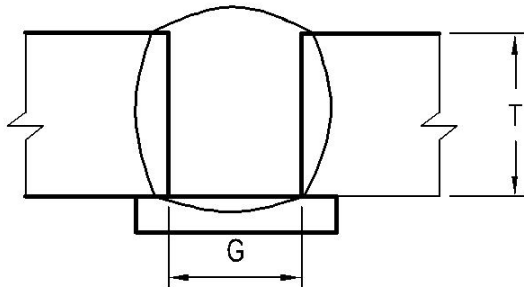


Prepared By: WeldCanada.com, Inc.		<b>PREQUALIFIED WELDING PROCEDURE DATA SHEET</b>		WPDS No.	DEMO
				Ref. WPS	MCAW-CS
Company Name: <i>www.WeldCanada.com</i> Address: <i>info@WeldCanada.com, Toll Free: 1 (877) WPS-WELD</i>				Ref. Standards	CSA W47.1/ W59
Process	MCAW	Process Mode	Semi-Automatic	Position	Flat
Base Materials	Steel Groups 1, 2 & 3 of Table 11.1/12.1 of CSA W59-03 (Excluding weathering steels)				
Wire Class. (CSA W48)	E491C-6M, E491C-6M-H4, E491C-6M-H8				
AWS Classification	A5.18, E70C-6M, E70C-6M H4, E70C-6M H8				
Shielding Gas (Flux for SAW)	Ar+ 5 to 15% CO2 (Or) Ar+ 20 to 25% CO2			Flow Rate	40-50 CFH
				Nozzle Dia.	5/8 in
Weld Type	Complete Joint Penetration Groove Weld			Current/ Polarity	DCEP
Electrical Stick Out ESO (in)	1-1/8 to 1-1/4	Preheat/ Interpass Temp., Min			Up to 20 mm (3/4); 0 C (32 F); Table 5.3-CSA W59 for more

Joint Configuration/ Joint Details:

F1-1



$$G_{min} = T$$

$$T \leq 10 \text{ mm } (\frac{3}{8} \text{ in})$$

B-L1a-FC

Welding Parameters:

Thickness (T) mm (in)	Weld Size ETT (E)	Side	Weld Layers	Pass Numbers	Filler Dia. mm (in)	Current Amps	Volts V	Wire Feed Speed (IPM)	Travel Speed (IPM)
T ≤ 10 mm (3/8)	T	1	Root, Fill, Cap	As Required, see notes	2.0 mm (5/64)	290-320	25-27	125-150	10 to 18
						350-380	27-29	160-180	

Notes or Code Guidance:

- Transfer Mode: Spray
- Preferred shielding gases listed first.
- If using Ar+20-25% CO2, voltages may be increased by approximately 1 to 1-1/2 volts.
- Number of passes varies based on joint configuration, position, wire size, travel speed, and weld technique.
- First pass should be large enough to minimize the possibility of cracking.
- Maximum thickness of weld layers, except root and surface layers, shall not exceed 6 mm (1/4).
- The end of contact tube recommended to be recessed in the cup nozzle at least 6 mm (1/4).
- Any combination of shielding gas with wire needs to be CWB Certified.

Welding Supervisor or Welding Engineer

CWB Acceptance



Caution Note: Use of prequalified joint is not intended as a substitute for engineering judgment in the suitability of application to a welded assembly or connection.