# **CSF-309L(P)**

For 22%Cr-12%Ni Stainless steel

AWS A5.22. E309LT0(1)-1/-4

#### **Applications**

CSF-309L(P) is suitable for welding of 22%Cr-12%Ni steel and heat resistant steel and dissimilar joint such as a stainless steel to carbon steel of low alloy steel. Under layer welding on claded side groove claded stainless steel or carbon steel where stainless steel weld metal is overlayed.

#### Characteristics

- (1) CSF-309L(P) is flux cored wire and designed for Fillet & H-F(All-position) welding with CO<sub>2</sub> gas Shielding.
- (2) It provides the excellent usability with stable arc, less spattering, good bead appearance, better slag removal, and less quantity of welding fume comparable to solid wire.
- (3) Is containing Ferrite of a reasonable quantity and crack-resistance, integranular corrosion resistance, mechanical properties of weld metal is superior.
- (4) Shield gas is 100%CO2 or Ar+CO2 gas.

### Notes on usage

- (1) The optimum flow of CO<sub>2</sub> for Shielding is 20~25 l/min.
- (2) Protect the weld with a screen to prevent blowholes caused by wind where the wind velocity is 2m/sec and more.
- (3) Keep the distance between tip & base metal at ½~1 inch.

#### Typical chemical composition of weld metal (%)

(Shielding gas:100%CO<sub>2</sub>)

	С	Mn	Si	Р	S	Cr	Ni	FN
CSF-308L	0.03	1.51	0.56	0.015	0.015	23.6	12.8	22
CSF-308LP	0.03	1.33	0.64	0.019	0.006	23.6	13.0	21

#### Typical mechanical properties of weld metal

(Shielding gas:100%CO<sub>2</sub>)

	YP	TS	EL	IV (ft-lbf)	
	(ksi)	(ksi)	%	32°F	
CSF-309L	61.1	83.5	39.0	36	
CSF-309LP 61.5		84.2	38.0	37	

## Size & recommended current range (DC+)

Dia. mm (in)	Current(A)	Voltage(V)	Welding Speed(inch/min.)
1.2(0.045)	150~300	24~33	7.87~23.62
1.6(0.062)	200~400	24~33	7.87~23.62

<sup>·</sup> Approval: CSF-309L: ABS, BV, DNV, KR, LR, NK / CSF-309LP: ABS, BV, DNV, LR