

Standards

TS EN ISO 14171-A	: S2 Si
EN ISO 14171-A	: S2 Si
AWS A5.17	: EM 12 K

Chemical Composition of Welding Wire % (Typical)

C	Si	Mn	Cu
0.10	0.25	1.0	<0.30 ¹

¹copper-plated

Mechanical Properties

Submerged Arc Flux	AWS A5.17	Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation ((Lo=5do) (%))	Impact Strength ISO-V(J)		
					-20°C	-30°C	-40°C
ELIFLUX BFB	F7A2-EM12K	430	530	28	80	70	---
	F7P2-EM12K						
ELIFLUX BFF	F7A4-EM12K	450	540	23	---	---	65
	F7P4-EM12K						
ELIFLUX BAB-S	F7A4-EM12K	440	550	28	100	---	65
ELIFLUX BBR-AG	F7A0-EM12K	420	510	29	50	---	---

Chemical Composition of Weld Metal - % (Typical)

Submerged Arc Flux	C	Si	Mn
ELIFLUX BFB	0.05	0.40	1.70
ELIFLUX BFF	0.06	0.30	1.10
ELIFLUX BAB-S	0.07	0.45	1.60
ELIFLUX BBR-AG	0.07	0.40	1.30

Typical Base Material Grades

- Structural Steels: S355JR
- Pipe Steels: L360
- Boiler Steels: P295GH, P 355 GH
- Ship-Construction Steels: A, B, D, E

Features and Applications

- Applicability in submerged arc welding of steel materials with medium or high levels of tensile strength
- Usability in manufacture processes of pressure vessels, boilers, pipes, ship and other steel construction purposes
- Decreased affinity to Oxygen due to high content of Silicon
- Increased electric conductivity, and increased resistance to corrosion due to copper coating

Operating Data

Product Code	Diameter (mm) / (inch)		Weight (Kg)	Package Type
	mm	inch		
3010400071	2.0	5/64	25	K 435 *BIG PACK * Packaging alternatives according to the order; 30 - 350 - 550 - 1000 Kg
3010400072	2.4	3/32	25	
3010400073	3.2	1/8	25	
3010400074	4.0	5/32	25	
3010400075	5.0	3/16	25	

Approvals: S2Si: TSE, CE, SEPRO, DB • S2Si x ELIFLUX BFF: BV, ABS, CE
 S2Si x ELIFLUX BFB: ABS, LR, BV, CE