

FILARC 27P

This low hydrogen electrode is specially designed for downhill welding circumferential joints in pipes. The low hydrogen weld metal provides high notch toughness and excellent ductility to reduce the risk of cracking. The electrode is used particularly for pipelines, compressor stations, hot tapping and associated work using pipe steels in API 5LX52 to X70 grades in the oil and gas distribution industries, also process piping etc. Productivity is overall 25-30% faster than cellulosic electrodes and 40-50% faster than conventional low hydrogen electrodes for welding vertically up. Welding advice: Keep short arc using beaded or weaved runs. 2.5 mm size can also be welded uphill for increased heat input. DC- is preferred.

Specifications			
Classifications	SFA/AWS A5.5 : E8018-G (nearest) EN ISO 2560-A : E 46 4 B 41 H5		
Approvals	ABS: 3Y BV: 3Y H10 CE: EN 13479 DB: 10.105.03 DNV-GL: 3 YH10 LR: 4Y40 H10 VdTÜV: 02591 Seproz: UNA 272581		

Approvals are based on factory location. Please contact ESAB for more information.

Welding Current DC+(-)	
Alloy Type	Carbon Manganese
Coating Type	Basic covering

Typical Tensile Properties					
Condition Yield Strength Tensile Strength Elongation					
ISO					
As Welded	560 MPa	610 MPa	29 %		

Typical Charpy V-Notch Properties			
Condition	Testing Temperature	Impact Value	
ISO			
As Welded	-40 °C	90 J	
As Welded	-50 °C	70 J	

Typical Weld Metal Analysis %			
С	Mn	Si	
0.08	1.2	0.5	

Deposition Data					
Diameter	Current	Voltage	Efficiency (%)	Fusion time per electrode at 90% I max	Deposition Rate
2.5 x 350.0 mm	80-100 A	25 V	67 %	53 sec	1.0 kg/h
3.2 x 350.0 mm	110-150 A	26 V	68 %	53 sec	1.6 kg/h
4.0 x 350.0 mm	180-220 A	28 V	74 %	50 sec	2.8 kg/h