

# Cor-A-Rosta® P309L

## TOP FEATURES

- All positional flux cored wire for welding austenitic stainless to mild steel.
- Excellent weldability and self releasing slag
- High resistance to embrittlement

## TYPICAL APPLICATIONS

- Steel construction
- Shipbuilding

## CLASSIFICATION

AWS A5.22 E309LT1-1/-4  
 EN ISO 17633-A T 23 12 L P C/M 2

## CURRENT TYPE

DC+

## WELDING POSITIONS

All except vertical down

## SHIELDING GASES (ACC. EN ISO 14175)

M21 Mixed gas Ar+ (>15-25%) CO<sub>2</sub>  
 C1 Active gas 100% CO<sub>2</sub>  
 Gas flow 15-25l/min

## APPROVALS

| ABS | LR | DNV | TÜV |
|-----|----|-----|-----|
| +   | +  | +   | +   |

## CHEMICAL COMPOSITION (WEIGHT %), TYPICAL, ALL WELD METAL

| Shielding gas | C    | Mn  | Si  | Cr | Ni   | FN (acc.WRC 1992) |
|---------------|------|-----|-----|----|------|-------------------|
| M21/C1        | 0.04 | 1.3 | 0.6 | 24 | 12.5 | 15                |

## MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

|                     | Shielding gas | Condition* | Yield strength (MPa) | Tensile strength (MPa) | Elongation (%) | Impact ISO-V (J) |        |
|---------------------|---------------|------------|----------------------|------------------------|----------------|------------------|--------|
|                     |               |            |                      |                        |                | +20°C            | -110°C |
| Required: AWS A5.22 |               |            | not specified        | min. 520               | min. 30        |                  |        |
| EN ISO 17633-A      |               |            | min. 320             | min. 510               | min. 20        |                  |        |
| Typical values      | M21/C1        | AW         | 445                  | 560                    | 36             | 45               | 40     |

\* AW = As welded

## PACKAGING AND AVAILABLE SIZES

| Wire diameter (mm) | Packaging    | Weight (kg) | Item number |
|--------------------|--------------|-------------|-------------|
| 1.2                | SPOOL (S200) | 5.0         | 585285      |
|                    | SPOOL (S300) | 15.0        | 585223      |

### TEST RESULTS

Test results for mechanical properties, deposit or electrode composition and diffusible hydrogen levels were obtained from a weld produced and tested according to prescribed standards, and should not be assumed to be the expected results in a particular application or weldment. Actual results will vary depending on many factors, including, but not limited to, weld procedure, plate chemistry and temperature, weldment design and fabrication methods. Users are cautioned to confirm by qualification testing, or other appropriate means, the suitability of any welding consumable and procedure before use in the intended application

Safety Data Sheets (SDS) are available here:



Subject to Change – The information is accurate to the best of our knowledge at the time of printing.  
Please refer to [www.lincolnelectric.eu](http://www.lincolnelectric.eu) for any updated information.