

Cor-A-Rosta[®] P309L

CLASSIFICATION

| | | | | | |
|-------------|-------------------|---------|---|--------|--------|
| AWS A5.22 | E309LT1-1/-4 | A-Nr | 8 | Mat-Nr | 1.4332 |
| ISO 17633-A | T 23 12 L P C/M 2 | F-Nr | 6 | | |
| | | 9606 FM | 5 | | |

GENERAL DESCRIPTION

Gas shielded flux cored high CrNi alloyed wire electrode for positional welding
 For welding stainless to mild steel and buffer layers in clad steel
 Excellent weldability and self releasing slag
 High resistance to embrittlement

WELDING POSITIONS (ISO/ASME)



CURRENT TYPE / SHIELDING GAS (ISO 14175)

DC +
 M21 : Mixed gas Ar+ (>15-25%) CO₂
 C1 : Active gas 100% CO₂
 Flow rate : 15-25 l/min

APPROVALS

| Shielding gas | ABS | DNV | LRS | TÜV |
|---------------|-----|-----|-----|-----|
| M21 | + | + | + | + |
| C1 | + | + | + | |

CHEMICAL COMPOSITION (W%), 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 (N/mm ²) | Tensile strength (N/mm ²) | Elongation (%) | Impact ISO-V(J) | |
|------------------------------------|---------------|-----------|-------------------------------------|---------------------------------------|----------------|-----------------|-------|
| | | | | | | +20°C | -20°C |
| Required: AWS A5.22 ISO 17633-A | | | not required | min. 520 | min. 30 | | |
| Typical values | M21/C1 | AW | min. 320 445 | min. 510 560 | min. 25 36 | 45 | 40 |

PACKAGING AND AVAILABLE SIZES

| | |
|-------------------------|-----|
| Diameter (mm) | 1.2 |
| 5 kg plastic spool S200 | X |
| 15 kg spool S300 | X |

Cor-A-Rosta[®] P309L : rev. C-EN27-19/05/16

All information in this data sheet is accurate to the best of our knowledge at the time of printing. Please refer to www.lincolnelectric.eu for any updated information.
 Fumes: Safety Data Sheets (SDS) are available on our website.

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EXAMPLES OF MATERIALS TO BE WELDED

| Steel grades | EN 10088-1/-2 | Mat. Nr | ASTM/ACI A240/A312/A351 | UNS |
|---------------------------------------|---------------|---------|----------------------------|--------|
| Corrosion resistant cladsteels | | | | |
| | X2CrNiN18-10 | 1.4311 | (TP)304LN | S30453 |
| | X2CrNi19-11 | 1.4306 | (TP)304L | S30403 |
| | | | CF-3 | J92500 |
| | X4CrNi18-10 | 1.4301 | (TP)304 | S30400 |

Dissimilar metals (mild and low alloy steel to CrNi or CrNiMo stainless steel)

WELDING PARAMETERS, OPTIMUM FILL PASSES

| Diameter (mm) | Welding positions | | |
|------------------|-------------------|----------|----------|
| | PA/1G | PB/2F | PC/G |
| 1.2 | 100-250A | 100-250A | 100-200A |

FCAW

REMARKS/APPLICATION ADVICE

For downhand welding, use Cor-A-Rosta 309L