| **Standard:**<br>**AWS A5.10**<br>**ER5183** | Chemical Composition % | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Si | Fe | Cu | Mn | Zn | Mg | Ti | AL | Other Each | Other Total |
| Grade ER5183 | ⩽ 0.4 | ⩽ 0.4 | ⩽ 0.1 | 0.5 – 1.0 | ⩽ 0.25 | 4.3 – 5.2 | ⩽ 0.15 | Rest | ⩽ 0.05 | ⩽ 0.15 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Type | Spool (MIG) | | | Tube (TIG) | | |
| Specification (MM) | 0.8、0.9、1.0、1.2、1.6、2.0 | | | 1.6、2.0、2.4、3.2、4.0、5.0 | | |
| Package | S100/0.5kg S200/2kg<br>S270,S300/6kg-7kg S360/20kg | | | 5kg/box 10kg/box length :1000MM | | |
| Mechanical Properties | Fusion Temperature ℃ | Electrical IACS | Heat W/m.k | Tensile Mpa | Yield Mpa | Elongation % |
| | 575 – 640 | 29% | 2.66 | 275 – 300 | 130 – 160 | 15 – 25 |

| | | | | |
|---|---|---|---|---|
| | Diameter（MM） | 1.2 | 1.6 | 2.0 |
| MIG Welding | Welding Current - A | 180 – 300 | 200 – 400 | 240 – 450 |
| | Welding Voltage- V | 18 – 28 | 20 – 24 | 22 – 34 |
| TIG Welding | Diameter（MM） | 1.6 – 2.4 | 2.4 – 4.0 | 4.0 – 5.0 |
| | Welding Current - A | 150 – 250 | 200 – 320 | 220 – 400 |

| | |
|---|---|
| Performance characteristics | An aluminum alloy welding wire containing nearly 5% magnesium.<br><br>Magnesium content in welding is required, Welding base materials 5083 and 5654 with higher magnesium content and higher tensile strength (if tensile strength is required 276MPa or higher)<br><br>It has excellent resistance to seawater corrosion and low temperature, and the weld is white after anodizing, which can provide good color matching for welded joints. |
| Application | It is used for welding aluminum alloy in ship structure, offshore platform, cryogenic container, railway locomotive and automobile industry. |
| Notice | 1、The product can be kept for two years under the condition of factory packing and sealed, and the packing can be removed for three months under the usual atmospheric environment.<br><br>2、Products should be stored in a ventilated, dry and place.<br><br>3、After the wire is removed from the package, it is recommended that appropriate dust proof cover be applied over the wire. |