

# Material: UNS Z35841

## Standard Specification for Zinc-Aluminum ZA-12 Alloy Casting

**Group:** Non-Ferrous Zinc Alloy

**Sub Group:** UNS Zinc-Aluminum ZA-27 Alloy Casting

**Application:** Intended for Valve, Pump, General Engineering, Automotive and Other Industries Grade

**Belongs to the Industry:** Casting

| Chemical Composition |      |                 | Heat Treatment          |               |
|----------------------|------|-----------------|-------------------------|---------------|
| Aluminium            | Al % | 25.000 - 28.000 | As-Cast or Aging        |               |
| Cadmium              | Cd % | 0.006 max.      |                         |               |
| Copper               | Cu % | 2.000 - 2.500   |                         |               |
| Iron                 | Fe % | 0.075 max.      |                         |               |
| Magnesium            | Mg % | 0.010 - 0.020   |                         |               |
| Lead                 | Pb % | 0.006 max.      |                         |               |
| Tin                  | Sn % | 0.003 max.      |                         |               |
| Zinc                 | Zn % | Balance         |                         |               |
| -                    | -    | -               | Mechanical Properties   |               |
| -                    | -    | -               | Tensile Strength in Mpa | 310 - 441     |
| -                    | -    | -               | Yield Strength in Mpa   | 257 - 376     |
| -                    | -    | -               | Elongation in %         | 1 - 11        |
| -                    | -    | -               | Reduction of Area in %  | -             |
| -                    | -    | -               | Hardness in HB          | 94 - 119      |
| -                    | -    | -               | Impact in Joule         | 12.8 - 58 @RT |

| Cross Reference Table |          |               |                              |
|-----------------------|----------|---------------|------------------------------|
| Material              | Standard | Country       | Grade Belong to the Industry |
| ZA-27                 | ANSI/AA  | USA           | Casting                      |
| B86 ZA27              | ASTM     | USA           | Casting                      |
| B240 ZA27             | ASTM     | USA           | Ingot and Casting            |
| ZP2720                | ISO      | International | Casting                      |
| ZP27                  | ISO      | International | Casting                      |
| -                     | -        | -             | -                            |
| -                     | -        | -             | -                            |

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