

## 5P18L/EN



High Performance Mechanical  
Classic Casting

18kt

### GENERAL INFORMATION

Carats: 18kt, suitable also for 14kt (see specific tech data sheet) and 8, 9, 10kt (see specific tech data sheet)  
Colour: intense red colour coordinates: L\*=84.1 a\*=11.0 b\*=18.0  
Advised use: universal (both mechanical works and casting)

MECHANICAL WORKS	stamping	■	chains	■	tube	■	spring	■
CASTING	closed systems	■	open systems	■	pre-set stones		■	

Density: 14,56 g/cm<sup>3</sup>  
Hardness (as cast): 160 HV  
Hardness (after cold work 70%): 280 HV  
Hardness (after annealing): 170 HV  
Hardness (after age hardening): 304 HV

### DIRECTIONS FOR SUGGESTED USE

Melting temperature: 910 °C

Casting temperature:

100 °C over its Liquidus temperature to cast into ingot-mould and continuous casting

100 °C over its Liquidus temperature to cast with centrifugal machines and vacuum machines with controlled atmosphere

140 °C over its Liquidus temperature to cast in outdoor cylinders with vacuum

Ingot-mould temperature: 150 °C

Cylinders temperature: from 550 °C to 650 °C depending on the machine and objects dimensions

Cooling of ingots: quick in lukewarm water (about 40 °C)

Cooling casted objects: in water after 10 minutes

Annealing: 670 °C for 20 minutes followed by a quick cooling in hot water (40°C min.)

Age hardening: *Step 1: solubilization*  
680 °C for 30 minutes. Cooling quickly in warm water (about 40 °C).  
*Step 2: hardening*  
300 °C for 2 hours. Cooling at room temperature.

### HINTS

❖ Recommended Pandora Alloys 18kt 5N red solders: TR5NJ (soft), MR5NJ (medium), FR5NJ (hard)

The above directions are only indicative. Strong variations to the above data are possible, depending on personal experience. Please, do not hesitate to contact us for further information.

Tech Chart and Safety Data Sheet available on our website [www.pandoralloys.com](http://www.pandoralloys.com)