



## TAPER PLUG VALVES

Materials of construction  
and colour code

### CAST IRON

ASTM A 126 Class B (High strength grey iron).

Tensile Strength: min. 31000 PSI (214 N/mm<sup>2</sup>).

Cast Iron material is very economical and suitable for most common service conditions such as air, water, gas and oil at medium pressures and temperatures. It possesses good resistance to corrosion in most organic solutions, alkalies and many acids of higher concentrations at normal temperatures. Plugs are anti-friction treated with P.T.F.E.

### DUCTILE IRON (Cast Iron with spheroidal Graphite).

ASTM A 536 Gr. 60-40-18.

Tensile Strength: min. 60000 PSI (414 N/mm<sup>2</sup>).

This material is especially used where cast iron does not fulfil the requirements and where cast steel is too expensive. Plugs are anti-friction treated with P.T.F.E.

### CARBON STEEL

ASTM A 216 Grade WCB.

Tensile Strength: min. 70000 PSI (485 N/mm<sup>2</sup>).

The valves of cast steel are made in accordance with the specification of the mentioned ASTM standard.

To counteract seizing steel plugs have a thin coat 20 µm of electroless nickel, and then anti-friction treated with P.T.F.E.

Carbon steel is suited for valves in cold or hot water services without corrosive impurities. It is also suitable for oil, gas, air and, other line fluids where valves are required of high strength, toughness and stability against vibration, blows and fire, except for extremely high or low temperatures which require steel alloys.

Our valves are also available to NACE Standard MR-01-75. Hardness level of Rc 22 or lower.

### LEAD-BRONZE 80/10/10

CuPb10Sn10. ISO 1338 - ASTM B30 937.

Tensile Strength: min. 12500 PSI (180 N/mm<sup>2</sup>).

Brinell Hardness: 65

Chemical Properties: Resistant to actions of ordinary services.

Physical Properties: Good pressure tightness and resistant to wear.

Other alloys, fx. 90/10 or 88/10/2,0 are delivered on inquiry.

### STAINLESS ACID-RESISTING STEEL

Rust and acid resisting.

Chromium	Nickel	Molybdenum
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Cr 18% to 21%	9 to 12%	2 to 3%
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ASTM A 351 Grade CF8M or AISI 316.

Tensile Strength: min. 70000 PSI (485 N/mm<sup>2</sup>).

To counteract seizing plugs in stainless steel have a thin coat 20 µm of electroless nickel, and then anti-friction treated with P.T.F.E.

### AUSTENITIC - FERRITIC STEEL. (Duplex stainless steel)

ASTM A 890 4A,

Chromium	Nickel	Molybdenum	Nitrogen
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Cr 22%	Ni 5%	Mo 2,5%	N 0.1%
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Tensile strength: min. 620 N/mm<sup>2</sup>.

The materials A 890 4A are austenitic-ferritic acid-resistant steel with very high mechanical properties. Moreover they are extremely, resistant to corrosion.

The materials A 890 4A are very resistant to stress - (SCC) and pitting corrosion in environments containing chloride. The resistance to stress corrosion (SCC) caused by hydrogen sulphide in environments containing chloride is also excellent.

The materials A 890 A4 meet the demands usually requiring high alloyed nickel qualities. As the content of chromium and nickel is fairly low these materials will prove an economically good alternative to for more expensive high alloyed qualities.

To counteract seizing plugs in stainless steel have a thin coat 20 µm of electroless nickel, and then anti-friction treated with P.T.F.E.

**SPECIAL QUALITIES AND ALLOYS:** Tests which exceed the requirements of the respective standards can be carried out on the above mentioned materials if required.

Special alloys are manufactured on request.

### COLOUR CODE

To facilitate identification the valves are normally painted as follows:

Cast Iron : Green	Steel : Blue	Stainless Steel : Silver grey
Ductile : Dark grey	Bronze : Unpainted	Duplex : Light grey