



HIGH PERFORMANCE BALL VALVES FOR EXTREME SERVICES

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Kulventiler för extremt höga temperaturer

Valvole a sfera per temperature estreme

Válvulas de esfera para temperaturas extremas

ΣΦΑΙΡΙΚΟΙ ΚΡΟΥΝΟΙ ΓΙΑ ΣΥΝΘΗΚΕΣ ΥΨΗΛΩΝ ΘΕΡΜΟΚΡΑ.

Palloventtiilit erittäin korkeille lämpötiloille

耐高溫球閥

Your local Agent



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a company of



Ball valves for extreme temperature

Kogelkranen voor extreme temperaturen

Kugelhähne für extremen Temperatureinsatz

Kogelkranen voor extreme temperaturen

Vannes à boisseaux sphériques pour températures élevées



UNI EN ISO 9001:2008



Category III
Directive 97/23/CE "PED"



II 2 GD c T6 X
Directive 94/9/CE "ATEX"



P40

design ANSI B16.34



SAT crio

design ANSI B16.34/API 6D/ISO 14313
ISO 17292/ASME VIII Div.1



3W

design ANSI B16.34/API 608
ISO 17292/ASME VIII Div.1



“Y” - “L” or “T” configuration

AP

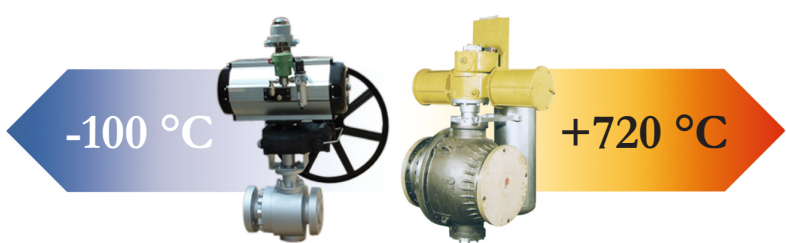
design ANSI B16.34/API 608/BS5351
ISO 17292/ASME VIII Div.1



AP10N - AP10HP - AP20P - AP60 - AP64 - AP68 - AP606 - AP609 - AP615 - AP50 - AP54 - APT2

SAT

design ANSI B16.34/API 608/API 6D
ISO 14313/ISO 17292/ASME VIII Div.1



Special Designs



INTRODUCTION

Since 1977 Penta is involved in the design and production of

- Metal seated ball valves for high temperature services
- Metal seated ball valves for abrasive services (with solids)
- Spring Loaded PTFE seated cryogenic ball valves
- Ball valves with special designs arrangements

During its activity the Company has developed proprietary technologies for

- Self lubricated metallic seat material PENTAFITE
- Special expanded graphite gaskets to meet very high pressures and temperatures
- Long lasting designs

More than twenty years of worldwide experience on critical services is now available in a wide range of valve sizes and pressure classes.

All our production is 100% pressure tested to meet NO VISIBLE leakage both in seat hydrotesting and low pressure gas seat testing.

Since 1995 Penta has been part of the ALFA VALVOLE group, one of leading Italian manufacturers of soft seated ball valves.

Safety and reliability together with full satisfaction of customer's expectations are the main criteria on which design and manufacture of Penta valves is based.

PENTAFITE UNIQUE TECHNOLOGY

This advanced exclusive seat material shows together:

- **Metallic properties**, specially for which compressive strength refers
- **Low friction factors**, to reduce valve torque
- **Self lubricating properties**, to eliminate galling experienced with other solid metals
- **High elasticity**, to eliminate lapping of seat to a specific side of the ball and to allow quick and easy interchangeability
- **High corrosion resistance**

a company of



Floating ball			
	1/2"	3/4"	1"
900			PN160
1500			PN250

PEEK/DEVILON/PENTAFITE
Tungsten Carbide/Chrome Carbide
Stellite seats
(peek is limited to 240°C)

Trunnion Mounted ball							
	1"	1 1/2"	2"	3"	4"	6"	8"
150							PN10-16
300							PN25-40
600							PN100
900							PN160
1500							PN250

Spring Loaded Reinf. PTFE seats/PENTAFITE metal seats (limited to -100° C)

Floating ball							
	1/2"	3/4"	1"	1 1/2"	2"	3"	4"
150							PN10-16
300							PN25-40
600							PN100
900							PN160
1500							PN250

Spring Loaded Reinf. PTFE seats/PENTAFITE metal seats (limited to -100° C)

Trunnion Mounted ball							
	1/2"	3/4"	1"	1 1/2"	2"	3"	4"
150							PN10-16
300							PN25-40
600							PN100

PEEK/PENTAFITE/Tungsten Carbide/Chrome Carbide/Stellite seats

Trunnion Mounted ball							
	1/2"	3/4"	1"	1 1/2"	2"	3"	4"
150							PN10-16
300							PN25-40
600							PN100
900							PN160
1500							PN250

PEEK/PENTAFITE/Tungsten Carbide/Chrome Carbide/Stellite seats (peek is limited to 240°C)

Floating ball							
	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"
150							PN10-16
300							PN25-40
600							PN100
800							
900							PN160
1500							PN250

PEEK/PENTAFITE/Tungsten Carbide/Chrome Carbide/Stellite seats (peek is limited to 240°C)

Floating Ball							
	1/2"	3/4"	1"	1 1/2"	2"	3"	4"
150							PN10-16
300							PN25-40
600							PN100
900							PN160
1500							PN250
2500							PN420

PENTAFITE/Tungsten Carbide/Chrome Carbide/Stellite seats

Trunnion Mounted Ball											
	2"	2 1/2"	3"	4"	6"	8"	10"	12"	14"	16"	18"
150											PN10-16
300											PN25-40
600											PN100
900											PN160
1500											PN250
2500											PN420

PENTAFITE/Tungsten Carbide/Chrome Carbide/Stellite seats

design ANSI B16.34/API 608/API 6D/ISO 14313/ISO 17292/API 6A/ASME VIII Div.1

Size range 1/2" to 24" – Pressare range Class 150 to 1500 / API 6A 2000 / 3000 / 5000

Metal seats c/with scraping rings (SAT3 model)
Subsea Ball Valves
Double Block and Bleed Systems
Non-Transflow 3 way
Change-over units