



PUMPS TYPE A-P10

Pumps type A-P10 (OH2) are single stage horizontal processing pumps centerline mounted, typical construction designed and manufactured in accordance with the latest edition of Norm API610 (ISO 13709) and ATEX directive. These pumps are widely used in refineries, petrochemical and chemical plants. They are designed for continuous work, for pumping various liquids with a wide range of physico-chemical parameters.



Construction



Centrifugal, single stage, horizontal, suitable for harsh working conditions processing pumps A-P10 (OH2).

Centerline mounted, spiral pump casing is vertically split, suction flange lies in pump's axis, discharge flange is directed upwards.

Pump's construction allows to obtain different configurations in terms of the type of seal. Externally ribbed bearing housing with a capacious oil sump accommodate bearings with high load capacity, supported by a shaft with considerable rigidity

Parameters



Efficiency: $Q =$ up to 1400 m³/h

Height of lifting: $H =$ up to 295 m

Project pressure: $p =$ up to 51 bar for $t = 20$ °C

Temperature: $t =$ from -70 °C to 250 °C (standard construction)

$t =$ from -70 °C to 400 °C (construction with cooling)

Discharge flanges: $D_n =$ from 40 mm to 300 mm

Standards



API 610 / ISO 13709 (latest editions)

ATEX Directive 2014/34/UE

ANSI / ASME (#150; #300) or DIN / EN (PN40) - connection flanges

API682 (last edition) - mechanical seal



API 610 / ISO 13709
latest editions



ANSI / ASME (#150; #300)
or DIN / EN (PN40)
connection flanges



API682 (latest editions)
mechanical seal



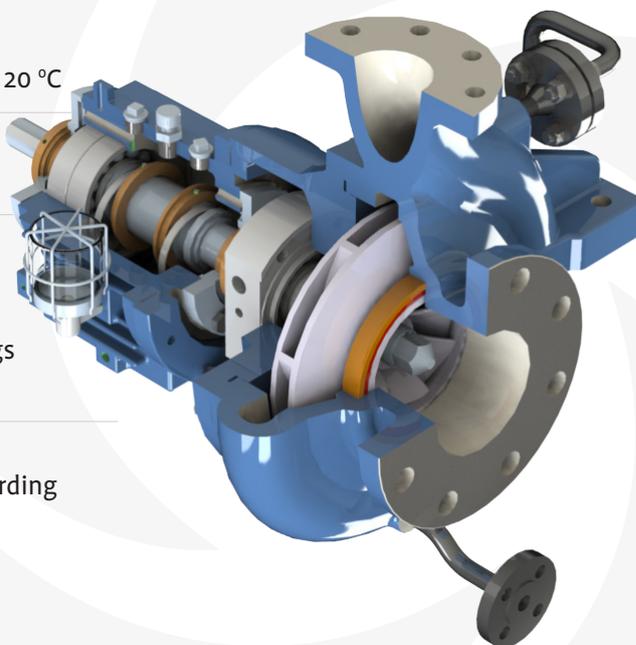
ATEX Directive
2014/34/UE

**Ribbed bearing housing,
capacious oil sumps**
Temperature increase up to 20 °C

Bearings durability
up to 200000h

Rigid shafts
Shaft deflection no more
than 0.05mm, optimal and
long-lasting work of bearings
and mechanical seals

Large gland chambers
Compatible with seals according
to API682 latest edition



API 610 / ISO 13709
Full compliance with the latest edition
of Norms

Casing supported in axis
Maximum stability of work in high
temperatures

**Spiral collective channels
(singular, double)**
Radial force minimization

Radial top outlets
Self-venting, symmetrical load system

Working slots
Protected with replaceable high
hardness sealing rings

Materials of construction (Compliant with API 610 – Table H.1)

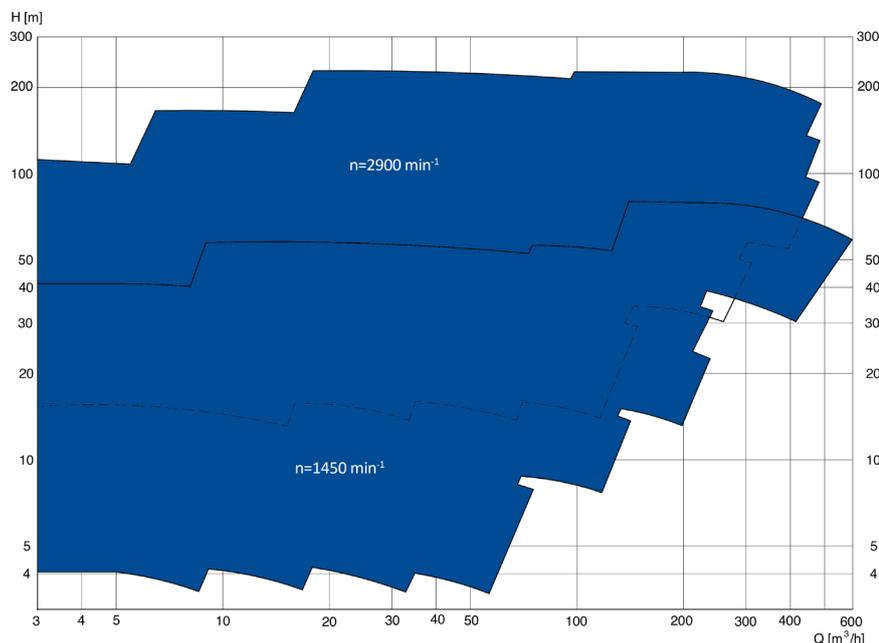
Part name	Klasa materiałowa API						
	S-1	S-5	S-6	S-8	C-6	A-8	D-1 / D-2
Pump casing / cover	CS	CS	CS	CS	12% CR	316L AUS	Duplex / Super Duplex
Impeller	CI	CS	12% Cr	316 AUS	12% CR	316L AUS	Duplex / Super Duplex
Sealing ring	CI	12% CR+H	12% CR+H	316 AUS+HF	12% CR+H	316L AUS+HF	Duplex / Super Duplex + H
Shaft	CS	AISI 4140	12% CR	316L AUS	12% CR	Duplex	Duplex / Super Duplex
Bearing housing	CS	CS	CS	CS	CS	CS	CS

CS-Cast iron/carbon steel; AISI4140-alloy steel; 12%CR-cast iron/chrome steel; 316AUS-Cast iron/austenitic steel >2% Mo; S.Duplex – Super Duplex; +H –hardened; +HF- hard faces.



Possibility of making other alloys, including materials compliant with NACE.

Range of operation



Application



REFINING, PRODUCTION
AND DISTRIBUTION OF
PETROLEUM



PETROCHEMICAL
AND CHEMICAL
INDUSTRY



SERVICES FOR GAS
INDUSTRY



HOT
WATER



HOT OIL
INSTALLATIONS



HYDROCARBON
PROCESSING



GENERAL
INDUSTRY

Grupa Powen-Wafapomp
ul. Wolności 318, 41-800 Zabrze
tel. +48 32 777 57 77
e-mail: zabrze@powen.com.pl
web: www.powen.com.pl