



INSTRUCTIONS 1126 e

Section

Effective

Replaces

February 2006

AK pump HT mechanical seal

INSTALLATION

OPERATION

MAINTENANCE

**BLACKMER
ZI PLAINE DES ISLES
F- 89000 AUXERRE**

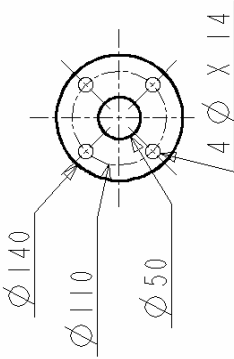
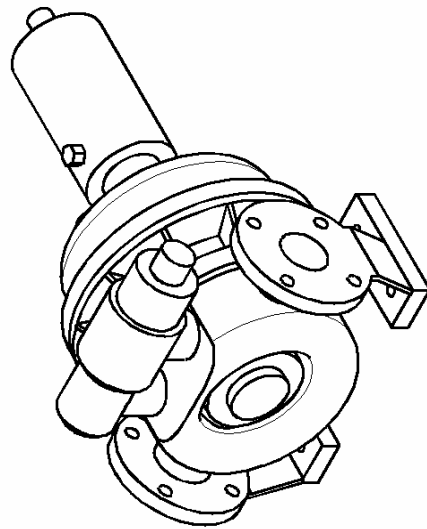
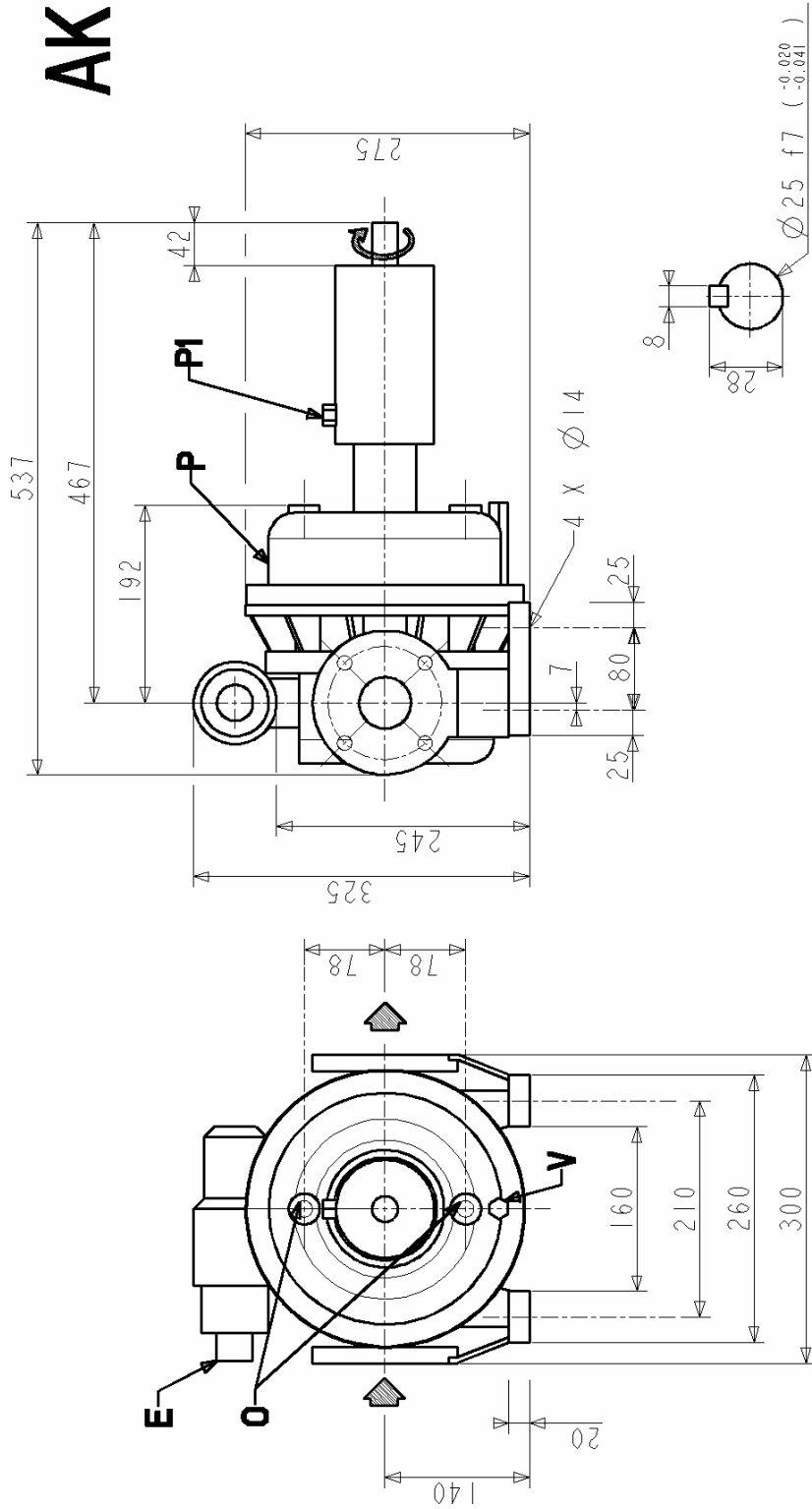
Tel. : 00 800 890 890 89

Fax : +33 3.86.49.87.17

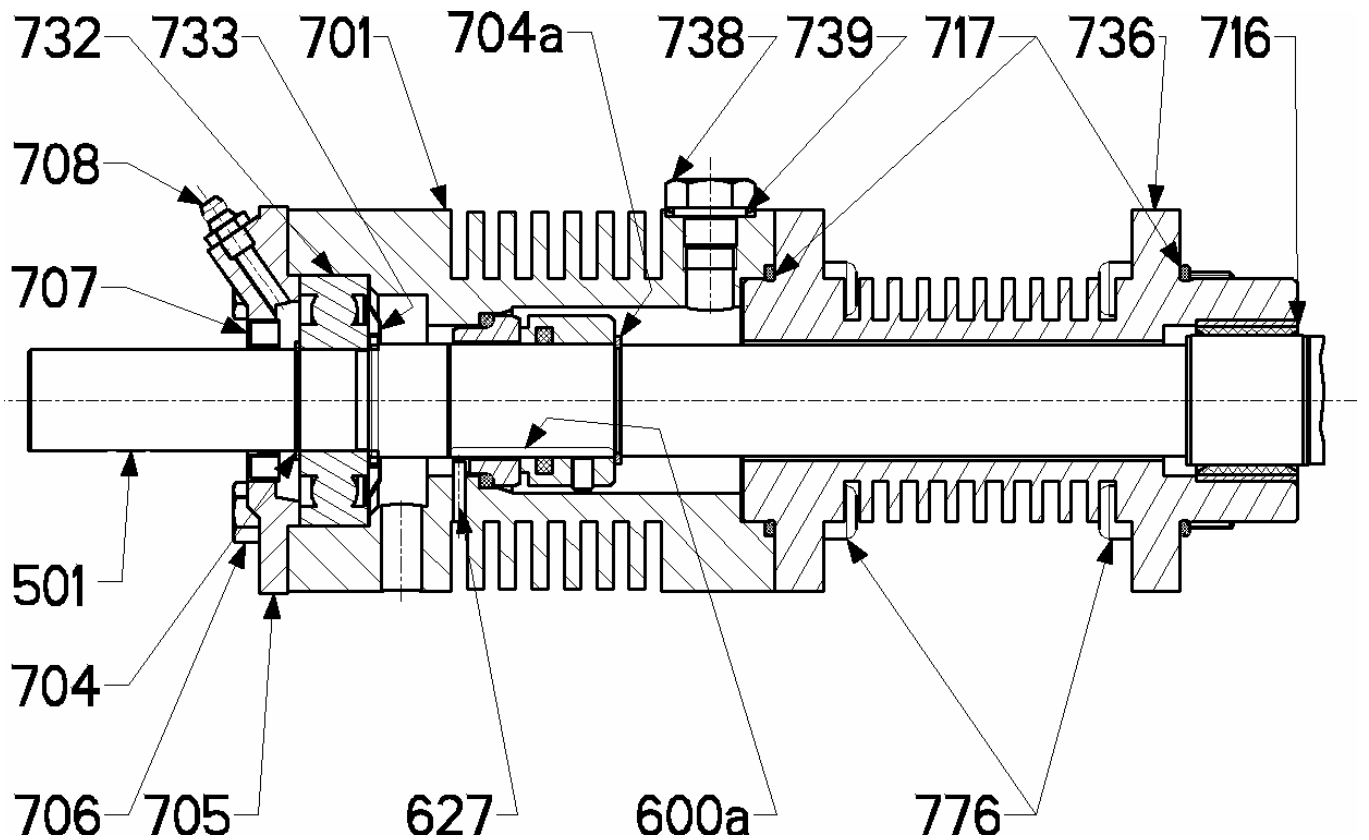
e-mail : contact@blackmer-mouvex.com

Your distributor :

AK HT



- O CYL GAS CASING / 1/2 (VARIANT)
- Casing inlet / outlet
- FLUID: IN AT BOTTOM / OUT AT TOP
- VAPOUR: IN AT TOP / OUT AT BOTTOM
- Max. temperature: 250°C / Max. pressure 6 bar
- P Pump plate
- PI Gland packing bleed valve
- V Pump drain



Operation

The shaft **501** drives the revolving part of the mechanical seal as it rotates.

The fixed part is fastened to the mechanical seal holder **701** by the stop **627**.

The unit is sealed by the mechanical seal **600a**:

- on the shaft by the rotary-part seal,
- by the mating surface between the rotary part and the fixed part,
- in the bore of the mechanical seal holder **701** by the fixed-part seal.

Sealing is therefore dependent on the surface condition of the mating faces and seals.

Before starting up the pump, it is essential to bleed air from the mechanical seal holder **701** via the plug **738** (the air is replaced by the product being pumped or a compatible product).

REMOVAL

Before removal, make sure the pump has been drained and take the necessary precautions to prevent it from starting up.

It must not be possible to start it up, even by accident. The pump must be at ambient temperature. If the pump has a casing, the casing must be drained.

After opening the pump :

- Remove the screws **776** on the pump side.
- Take out the mechanical seal holder **701** and bearing shell **736** assembly with the shaft **501** by tapping with a mallet on the end of the shaft **501** opposite the drive end.
- Remove the screws **706**, the cover **705** and the retaining rings **704** and **704a**.
- Remove the screws **776** from the drive end.
- Use an extractor to take out the assembly of the mechanical seal holder **701**, bearing **732**, protection **733** and fixed part of the mechanical seal **600a**.
- Remove the screws from the revolving part of the mechanical seal **600a** and separate it from the shaft **501**.
- Remove the fixed part of the mechanical seal **600a** from the mechanical seal holder **701**.

REFITTING

- The seals **717**, **739**, screws **776** and **706**, retaining rings **704** and **704a**, the lip seal **707**, protection **733**, and mechanical seal and plug **738** must be changed whenever removed.
- Thoroughly clean the part of the shaft in contact with the mechanical seal (surface must be free from scratches).
- Refit all the parts onto the shaft **501** in the opposite order to removal.
- Make sure the notch in the fixed part of the mechanical seal **600a** engages in the pin **627**.
- When refitting the mechanical seal holder **701**, check the leak drain hole faces downwards.
- Make sure the lip seal **707** is not cut when refitting the cover **705**.

TOOLS REQUIRED

- Mallet
- Extractor
- Retaining ring pliers
- 13 mm flat spanner
- 6/4 hexagon socket wrench

Torque value: M8 = 23 Nm

REPLACEMENT PARTS

◆ Assemblies and parts available

ITEM	REF. No.	DESCRIPTION
◆700	1	HT ball bearing
◆738a	1	Bearing shell assembly
716	1	Piston ring
736	1	HT bearing shell
701	1	Mechanical seal holder
◆600	1	Complete mechanical seal
717	2	Seal
739	1	Metallic seal
738	1	Plug
733	1	Protection
704	1	Retaining ring
704a	1	Retaining ring
707	1	Lip seal
706	4	Screw
600a	1	Mechanical seal
776	8	Screw
732	1	Bearing
705	1	Cover
708	1	Grease nipple
627	1	Pin

When ordering replacement parts, indicate :

- The pump TYPE and SERIAL NUMBER (stamped on the pump plate)
- INSTRUCTIONS 1126

The ITEM REFERENCES and DESCRIPTIONS of the parts required. Please note that only those parts (complete assemblies or components) preceded by the symbol ◆ can be supplied.