

# Armak Geared Piston Air Motor

## Type AGP01BE

**KRISCH  
DIENST**

Fluidtechnik

### New Technology Air Motors

- non vibrating operation even at high speeds
- contact free rotating pistons, resulting in long lifetime with reduced maintenance
- motor efficiency increases over time
- completely enclosed motor casing prevents internal corrosion. Without an internal oil sump
- compact design with total freedom of installation
- usable speed range from 150 rpm - high start torque
- metric flange D080 for mounting of standard IEC gear boxes. SAE flange upon request
- motor shaft AGP01BE with key and keyway
- perfect control with Armak lever / remote control valves. including emergency stop or brake to machinery directive
- ATEX II cat. 2 GDcT5 and ATEX I M2 can be supplied, valid under ATEX operating parameters

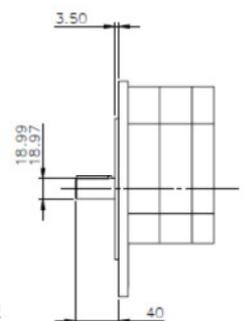
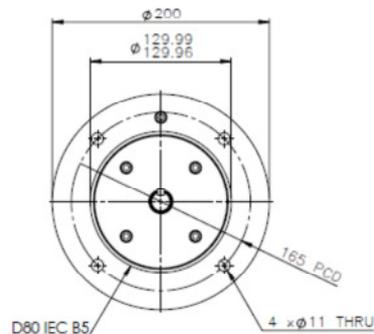
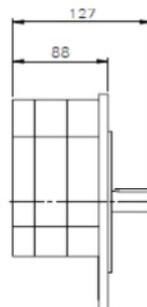
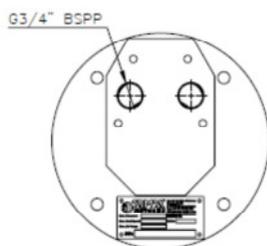
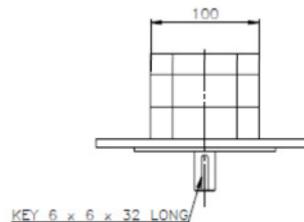
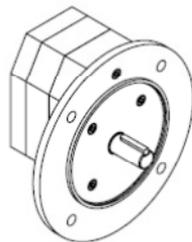


The torque is developed by one power piston and is transferred to the output shaft with a second also contact free rotating piston by a synchronising gear train.

This frictionless operation results in a long

**maintenance free operation** without downtime.

The **totally closed motor housing** without breather holes permits applications in wet or dirty surroundings without corrosion inside the motor



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### Technical Data for Motor AGP01BE at 6bar

valid for motor AGP01BE without accessories like silencer, FRL, valves etc

Motor	AGP01BE		AGP01BE		
Max. Power at 6 bar	kW	1,8	Air lubrication short run	drop/min	8 – 10
Speed at max. power and 6 bar	rpm	2.700	Air lubrication continuous run	drop/min	3 – 4
Torque at max power and 6 bar	Nm	6.6	Operating temperature range	° C	-20 - +80
Starting torque at 6 bar	Nm	6.3	max. inlet air temperature	° C	+70
max. continuous speed	rpm	3.000	Mass	kg	9
suggested min. speed	rpm	150	Radial force middle of shaft	N	2.000
Air line connection	G 3/4"		Axial force on shaft	N	20

Motor Versions	Part Number
Motor basic design	AGP01BE
Motor with lever control valve LCV - biased CW	AGP01BJ
Motor with lever control valve LCV - biased ACW	AGP01BK
Motor with lever control valve LCV - no bias	AGP01BL
Motor with remote control valve RCV - no bias	AGP01BR
Motor with remote control valve RCV - biased CW	AGP01BV
Motor with remote control valve RCV - biased ACW	AGP01BW

Accessories	part number
Remote control	on request
Brake	on request
Gear box	on request
Silencer	on request
Service kit	on request
Filter / regulator / lubricator	on request

**ATEX II Kat. 2 GDc T5** and **ATEX I M2** can be supplied but only if operating under approved ATEX operating conditions.

#### Valves:

In winch operation a lowering load can be braked to a full stop using Armak Valves. A parking brake can be used instead of a dynamic brake which requires frequent service.

#### Note:

All data are valid only with sufficient air supply and when using correctly sized fittings and valves with net. cross section suitable for the air volume required. Pressure loss by lubricator, silencer, valves and piping must be considered.

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From the operating point consider the starting torque (example winches) or consider the operating torque (example pump drive).

In case of system failure (blocked shaft) the max. starting torque must be considered to prevent the motor from damaging gears or other components.

When using gears consider the gearbox efficiency: helical / epicyclic gears up to 97% per stage, worm gears sometimes below 50%, all depending on gear box design.

### Additional Armak Motors:

Armak Rotary Piston Air Motor AGP04, AGP06, AGP07, AGP10, AGP16

Armak Rotary Piston Air Motor AGP110, AGP210, AGP310, AGP410, AGP510

### Final Comment

In order to assure long and trouble free operation above data and additional data from the service manual must be adhered to.

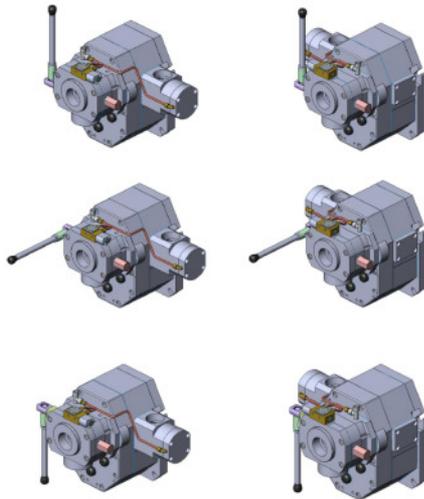
**Performance Data for AGP01BE** valid for 6 bar pressure difference across the motor will follow after more test runs and measurements

### Armak Motor AGP01J, AGP01K or AGP01L with Lever Control Valve

To prevent operator errors, the valve installation must fit the actual application.

On all motors AGP01, AGP04, AGP06, AGP07, AGP10 or AGP16 the control lever can point upwards, forward or down.

Such lever adjustment can be done even during the final installation of the motor



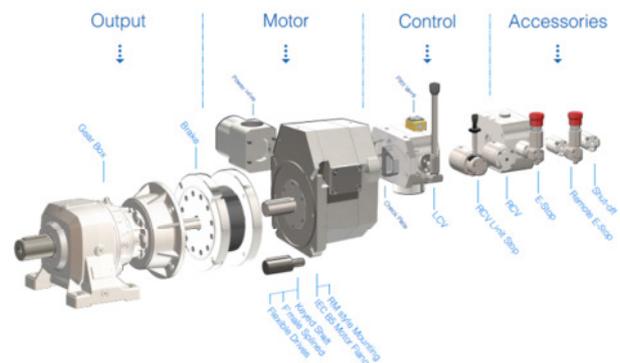
To achieve bias in valves as required for example in winch applications, CP check plates are installed in the valves. Depending on the application and on the users equipment, the air flow cross section in these check plates must be adjusted.

Armak Lever Control or Remote Control Valves can completely if briefly stop the lowering under load on a winch. Brakes therefore will be static brakes with long life.

Production Facility Hull, England



### ARMAX Geared Piston Motors GP



We reserve the right for improvements without prior notice

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