Rotary wing drives, Series RAK

2705010300

- Torque 0,15 ... 147 Nm
- Angle of rotation 90 ... 180°
- Rotary wing drive
- Cushioning: elastic
- Optionally with adjustable angle of rotation and hydraulic shock absorber

AVENTICS Series RAK Rotary wing drives

The AVENTICS Series RAK is an efficient and easy way to generate torque from compressed air, in a very compact size. They are ideal for the compact applications in a wide range of industries such as, packaging, process, electronics etc.

Technical data

Industry	Industrial
Type	Archive product: Do not use in new constructions!
Compressed air connection	M5
Rotary compact module version	Rotary wing drive, double-acting
axis geometry	single
Frame size	RAK - 1S
Type	Single vane
Axis diameter	4 mm
Theoretical torque at	6 bar
Min. swivel times	0.06 s
Maximum operating frequency	180
Interior volume	1.4 cm³
Max. permissible axial bearing load	3 N
Radial shaft load	30 N
Theoretical torque	0.15 Nm
Permissible kinetic energy	0.0006 J
Repetitive precision	4 °
Max. angle of rotation	180 °
Min. working pressure	2 bar

Max. working pressure	7 bar
Min. ambient temperature	-5 °C
Max. ambient temperature	80 °C
Min. medium temperature	-5 °C
Max. medium temperature	60 °C
Medium	Compressed air
Min. oil content of compressed air	0 mg/m³
Max. oil content of compressed air	1 mg/m³
Max. particle size	5 µm
Weight	0.036 kg

Material

Housing material	Aluminum
Surface housing	anodized
Seal material	Acrylonitrile butadiene rubber
Material axis	Steel, chrome-plated
Part No.	2705010300

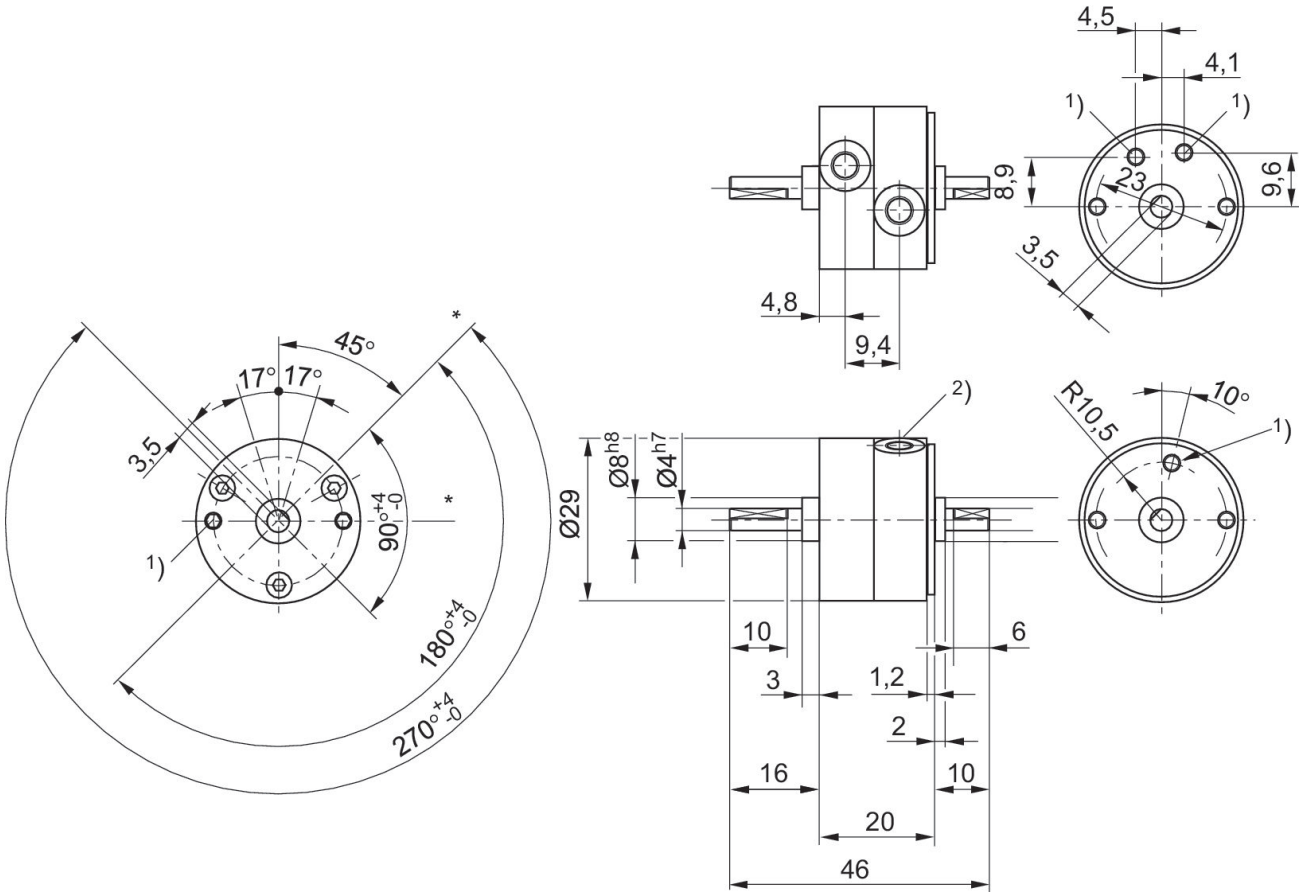
Technical information

The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the “Technical information” document (available in https://www.emerson.com/en-us/support).

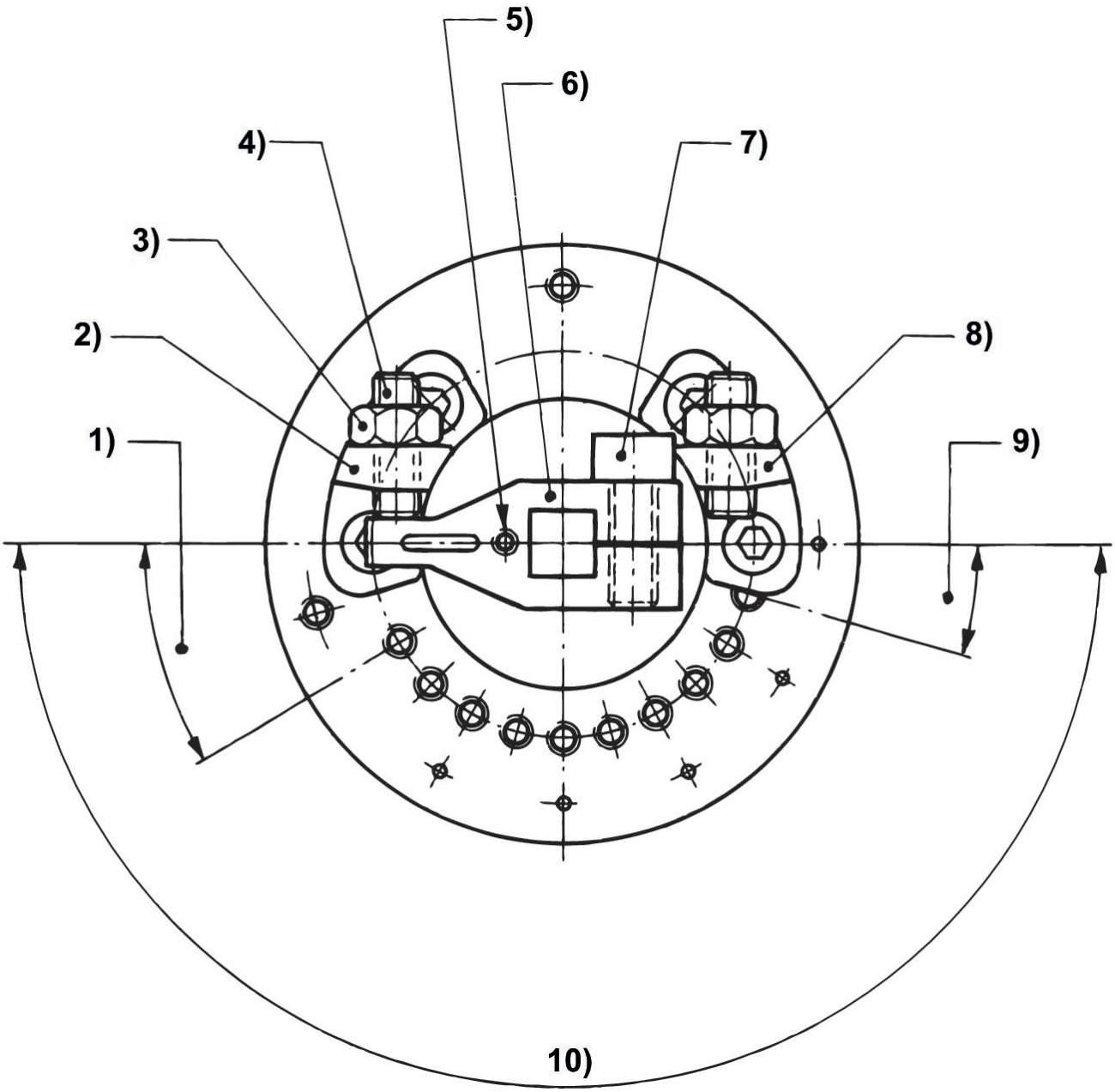
Dimensions



* Oscillating reference point
1) M3
2) 2 x M5

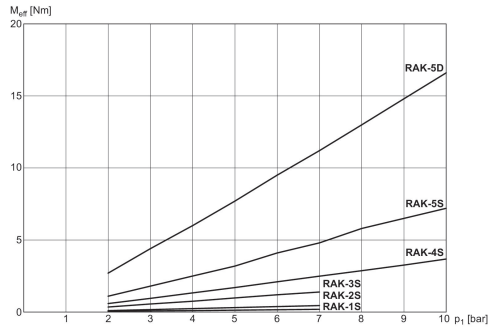
Adjustable stop

Mounted on 2S, 3S, 4S, 5S and 5D at delivery



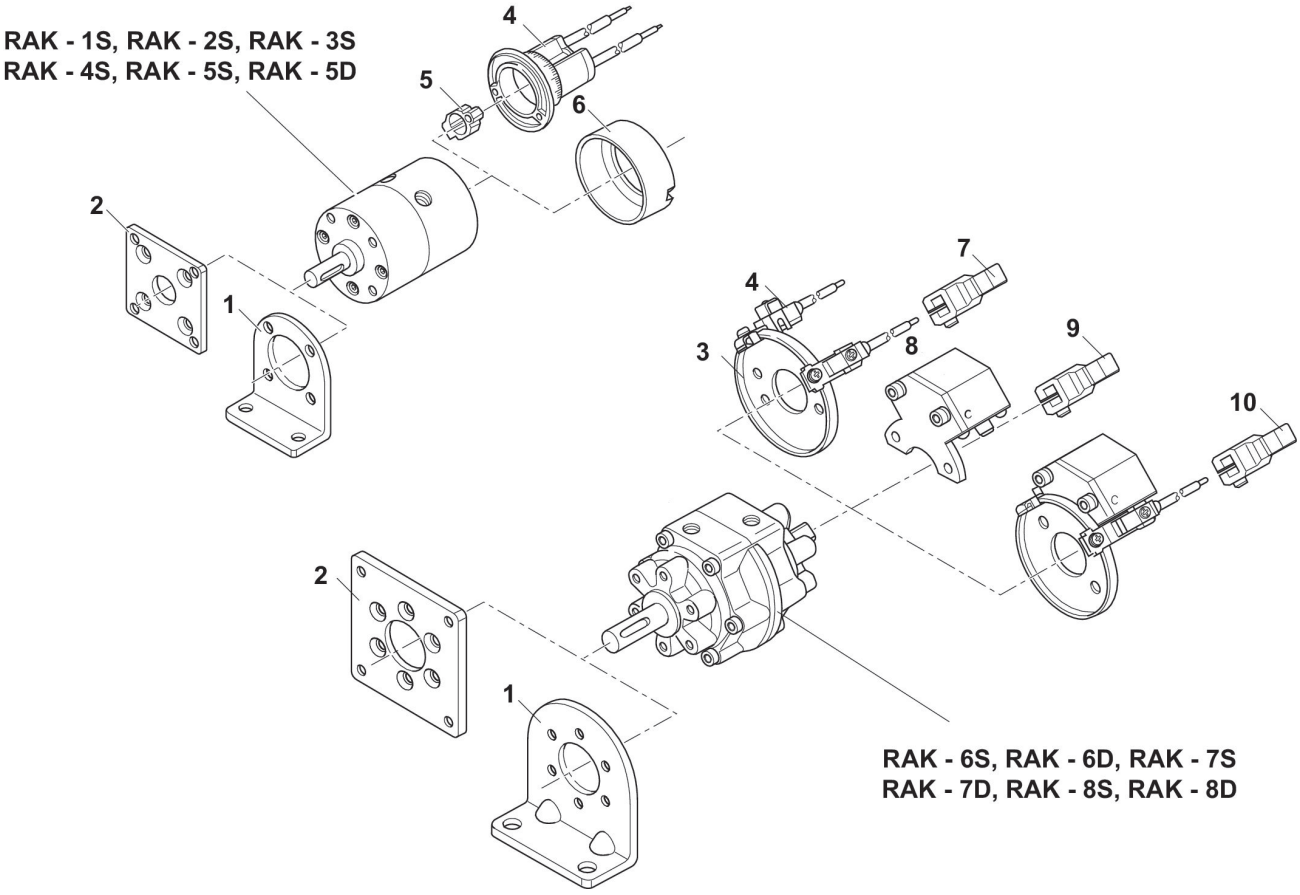
1) Minimum angle setting 30°. 2) Reference point stopper. 3) Locknut. 4) Fine adjust screw. 5) Mounting hole for magnet. 6) Swivel arm. 7) Swivel arm fixation screw. 8) Angle setting stopper. 9) Stopper mounting pitch 15°. 10) Oscillating angle.

Effective torque



M_{eff}: effective torque

Overview drawing



1) foot mounting 2) flange mounting 3) mounting plate for sensor 4) sensor unit 5) Magnet 6) Protective cover 7) swivel arm with magnet 8) hydraulic shock absorber 9) swivel arm without magnet 10) swivel arm with magnet
NOTE: This overview drawing is only for orientation to indicate where the various accessory parts can be fastened to the cylinder. The illustration has been simplified for this purpose. It is thus not possible to derive the dimensions from this overview.