

Field of Application

The pneumatic rotary drive can be used for rotary fittings in the beverages and foodstuffs industry, the pharmaceuticals industry and the bio-technology sector, as well as the chemical industry.

The rotary drive is used for the following **KIESELMANN** products:

butterfly valve:	DN 25 - 100
leakage-butterfly valve:	DN 50 - 80
straight way ball valve:	DN 25 - 80
three-way ball valve:	DN 25 - 65



ATTENTION

In order to avoid danger, we explicitly advise the user to use the fittings in accordance to the authorized technical data.



ATTENTION

Danger of injury by spring tension!
The drive is maintenance-free. Do not open it.

Function

If compressed air is connected to the LA -port of the rotary drive (1), its axis will turn 90°. When bleeding it will reset by spring force.



NOTE

- In order to avoid air leakages, only use an elbow-type screw-in connexion respectively a straight screw-in connexion with sealing by an o-ring to the end face.

Installation Instructions

You can mount the rotary drive in any position, however, you should check if the manufacturer of the valve used gave particular mounting specifications.



NOTE

You may have to restrict the pressure of the outlet air to avoid line shocks.

Position control and position indication

Standard equipment of the rotary drive(1) includes a transparent repeater mechanism (2) and a mechanical proximity indication (3).

Proximity switches

The transparent repeater mechanism (2) is suitable for commercially available inductive proximity switches with thread M12x1. Use proximity switches with non-flush mounting and a nominal operating distance of 4.0 mm.

KIESELMANN have various variants of proximity switches available.

Assembly

Before mounting proximity switches first remove the red plastic caps (7) from the repeater mechanism (2). Then manually screw the proximity switches into the threadholes of the repeater mechanism until they arrive at the stop. No adjustment will be required. Screw the locknut against the repeater mechanism (2) applying little force.

For valve maintenance you may screw the repeater mechanism (2) off the drive unit together with the proximity switches.

Special features valve control

Optionally, modular valve control systems can be installed to the actuator for reading and actuating valve positions. The standard version is a closed system with twofold limit position messaging (standard), with SPS, Interbus or ASI bus switch-on electronics, and integrated 3/2-way solenoid valves. For tough operating conditions we recommend employing a high-grade steel cover.

Technical Data

Model:	Pneum. multiturn actuator 90°C enclosed type kind of actuation: air / spring
Valve size:	90/100
Temperature:	+4°C - +60°C
Torque:	see Fig.1
Pneum.- connection:	G 1/8"
Air consumption / bar:	0,50 l. / actuation
Control air pressure:	5,5 - 8,0 bar
Quality of control air:	ISO 8573-1 : 2001 quality class 3

Material:	Stainless steel: 1.4301 AISI304
Surfaces:	RA 1,5 - 2,5µm E-polished
Seals:	NBR

Torque characteristic

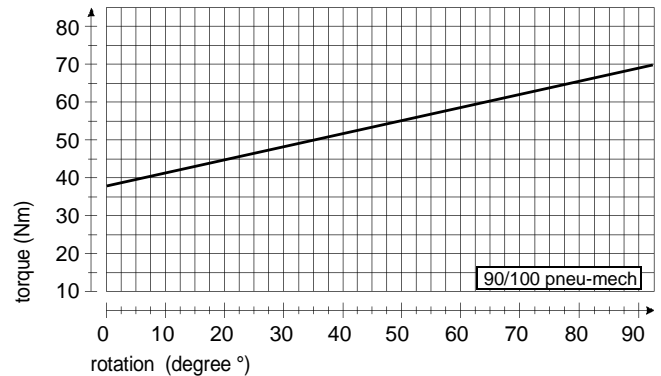
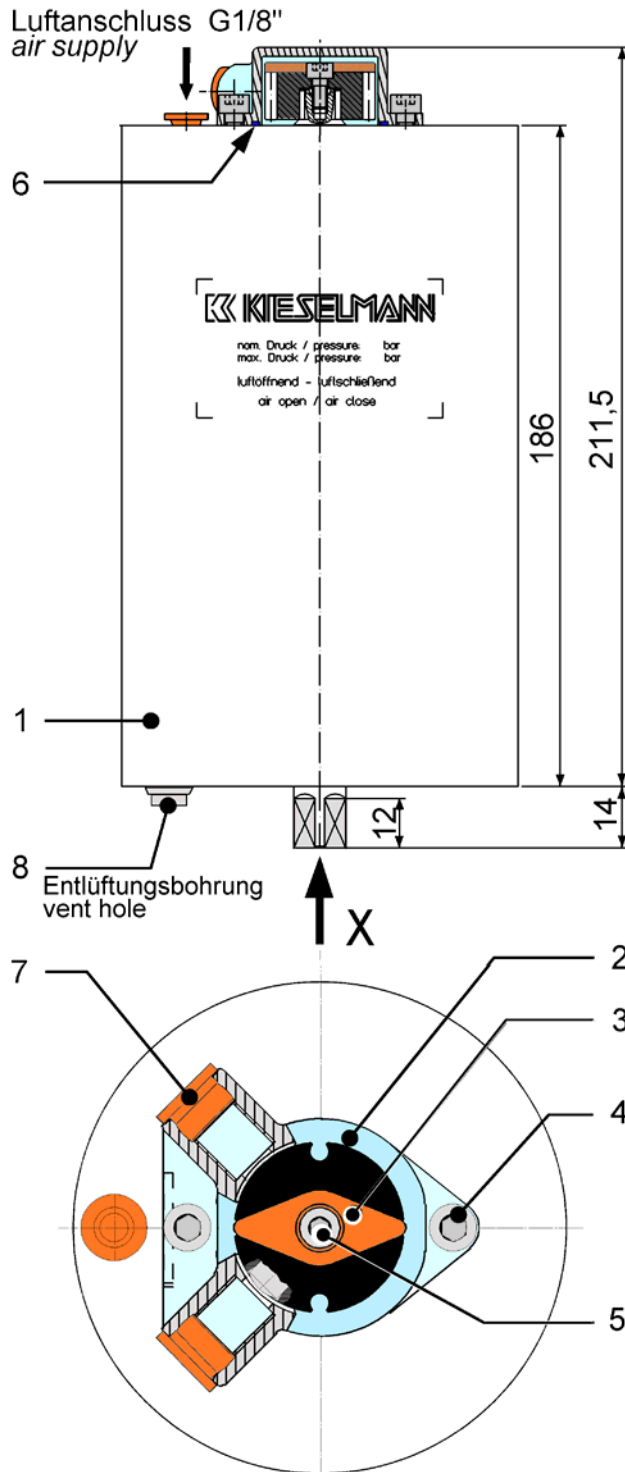


fig. 1

EC Manufacturer's Declaration

We do hereby certify that the concept and the design of the components described in this documentation, as they are supplied by ourselves, have been designed for installation into machinery or systems, and that these components may not be placed into service until it has been determined that the machinery or the system into which they are to be installed correspond with "2006/42 EC". This declaration is null and void if modifications are made to the components without our approval.



☐ Spare parts list

Item	Designation	Material
1	Multiturn actuator Art.-No.: 4200 100 000-022	1.4301 AISI 304
2	Repeater mechanism Art.-No.: 4100 100 021-094	MABS
3	Position indication Art.-No.: 4100 100 022-097	PBT sw
4	Head cap screw DIN 912 M6x10 (2x) Art.-No.: 8095 006 010-020	1.4301 AISI 304
5	Head cap screw DIN 912 M5x10 Art.-No.: 8095 005 010-020	1.4301 AISI 304
6	O-Ring Ø40 X 1.5 Art.-No.: 2304 040 015-055	NBR SW 70° SH.
7	Cap GPN 300/F091 (2x) Art.-No.: 4301 080 020-095	PE red
8	Screw plug R1/8" bore size Ø2,0 Art.-No.: 8230 002 001-061	PP

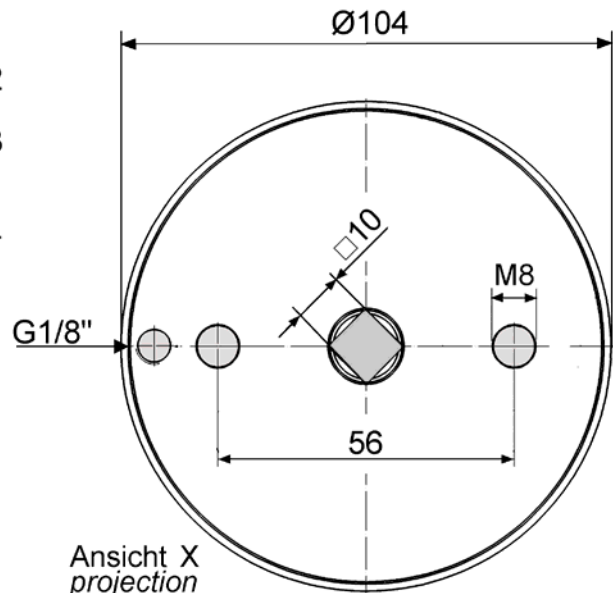


fig. 2