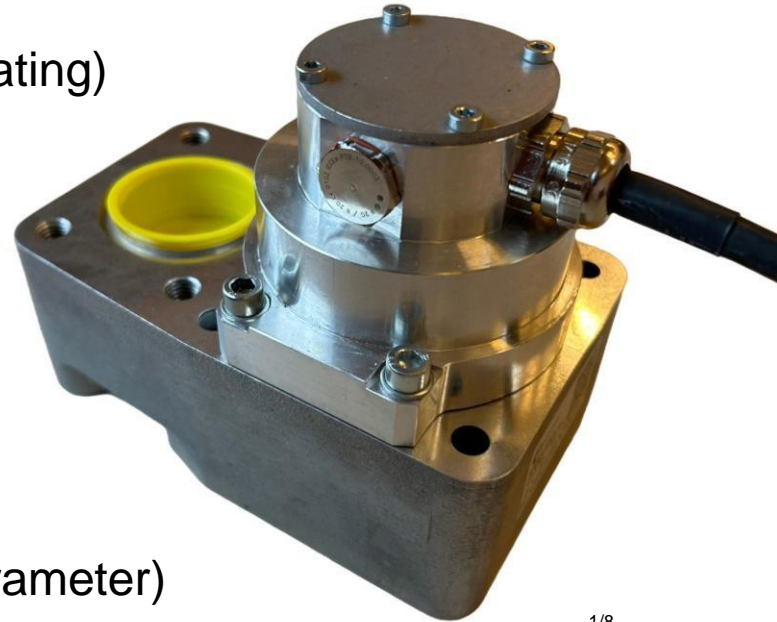




Megasol 400

- ✓ Longer lifetime (solenoid/anchor; coating)
- ✓ Optimized hub for better dynamic
- ✓ Higher residual air gaps
- ✓ Higher max. dp over valve
- ✓ Shorter open/closing time (same parameter)



High magnetic force

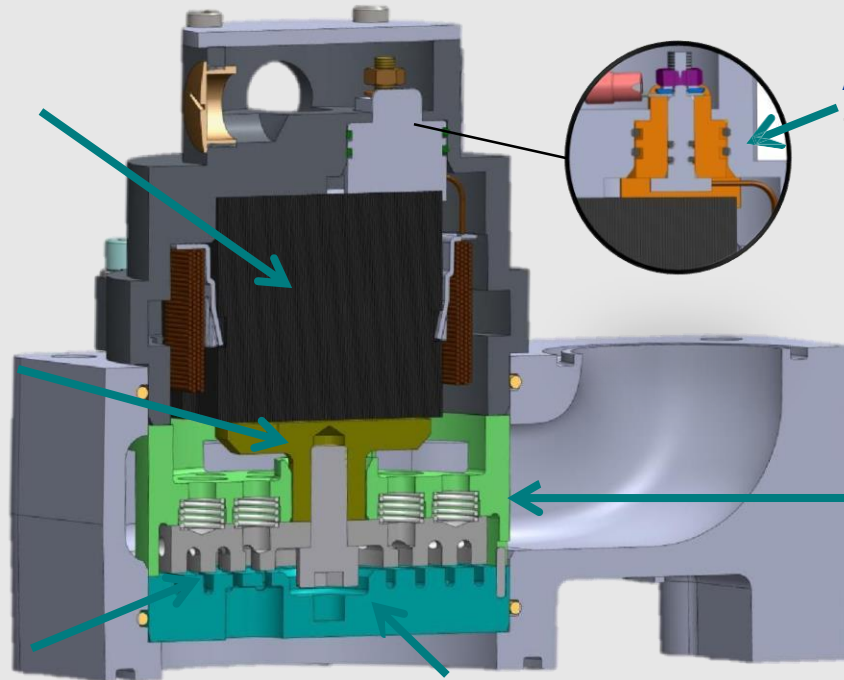
→ high differential pressure

Special anchor material

→ precise and fast metering

Small metering hub design

→ fast acting
→ short opening/closing times



ATEX conform design

→ Zone 1 (II 2G Ex mb IIC T4 Gb)

High precision parts manufacturing

→ all made in house
→ dimensional accuracy $\pm 2\mu\text{m}$
→ low leakage
→ low flow variance

Optimized material pairing and coating

→ high durability over lifetime

- Precise metering of gas quantity
- Fast opening and excellent dynamic behaviour
- Very low internal leakage
- Long service life
- Suitable for new engines as well as retrofits
- Suitable for hydrogen applications
- Bolt-on compatible to market standard

Pending:

- ATEX Zone 1 (II 2G Ex mb IIC T4 Gb)



Specifications

Flow rate (Z-Value)

Supply voltage

Internal Leakage

($\Delta p = 1 \text{ bar}$, 20°C , closed valve)

Time to fully open
after signal on ($\Delta p = 1 \text{ bar}$)

Time to fully close
after signal off ($\Delta p = 1 \text{ bar}$)

Max. pressure gas supply

Max. pressure air supply

Max. backfire pressure

Max. differential pressure

Max. Temperature gas supply

Operating temperature

Diameter Gas inlet

Filtration required

MEGASOL 400

105

24V & 110V

< 0.25% of steady state
flow rate

< 5ms

< 2ms

4 bar(a)

3 bar(a)

0.5 bar

< 2.0 bar

80°C

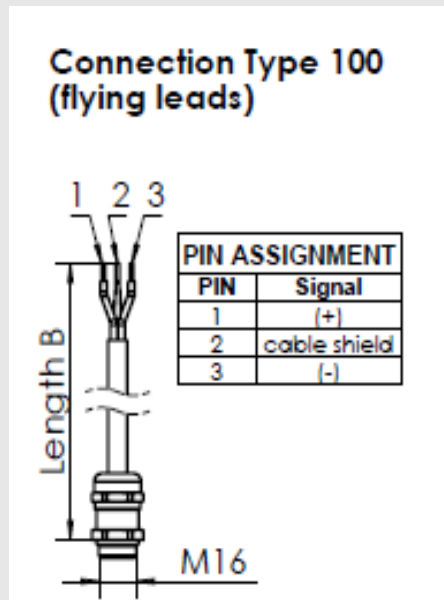
-20°C up to 105°C

44 mm

5μ



- Connector configuration: flying leads
- Cable length: 3,7 meters



Actual EOL-tests:

- inductivity (coil incl. cable)
- resistance (coil incl. cable)
- int. leakage (@ dp = 1,0bar)
- ext. leakage (@ dp = 7,0bar)
- static. mass flow (@ dp = 1,0bar)

Foreseen for new EOL- testbench with test-report:

- static. mass flow (@ dp = 0,1bar)
 - reference valve correlation to dp = 1,0bar
- dynamic mass flow (@ dp = 1,0bar)
- dynamic: opening/closing time (@ dp = 1,0bar)



Megasol advantages (to comparable competitor valves):

- solenoid system:
 - higher max. dp over valve
 - shorter open/closing time (same parameter)

- mechanical system:
 - optimized hub for better dynamic
 - higher residual air gaps
 - longer lifetime (solenoid/anchor; coating)





Questions?

Our 4TaKT Sales team is ready to assist you

Or click [here](#) to send a request for a free quote