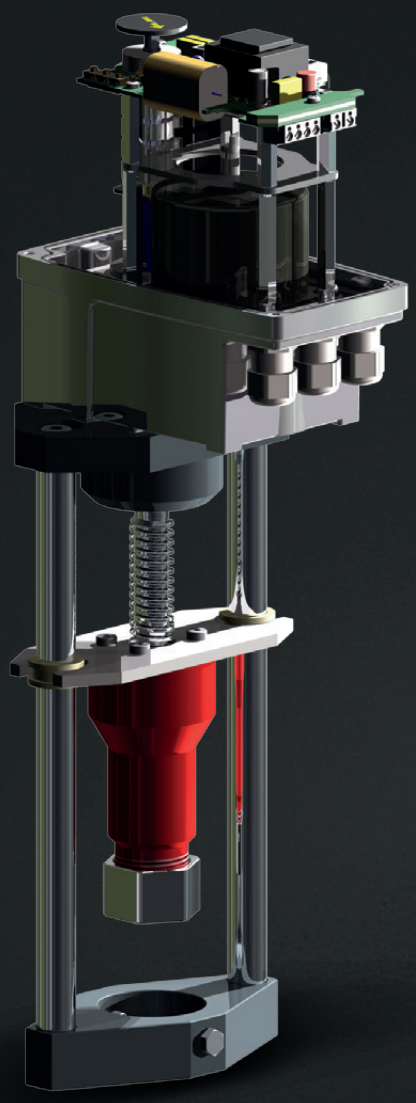
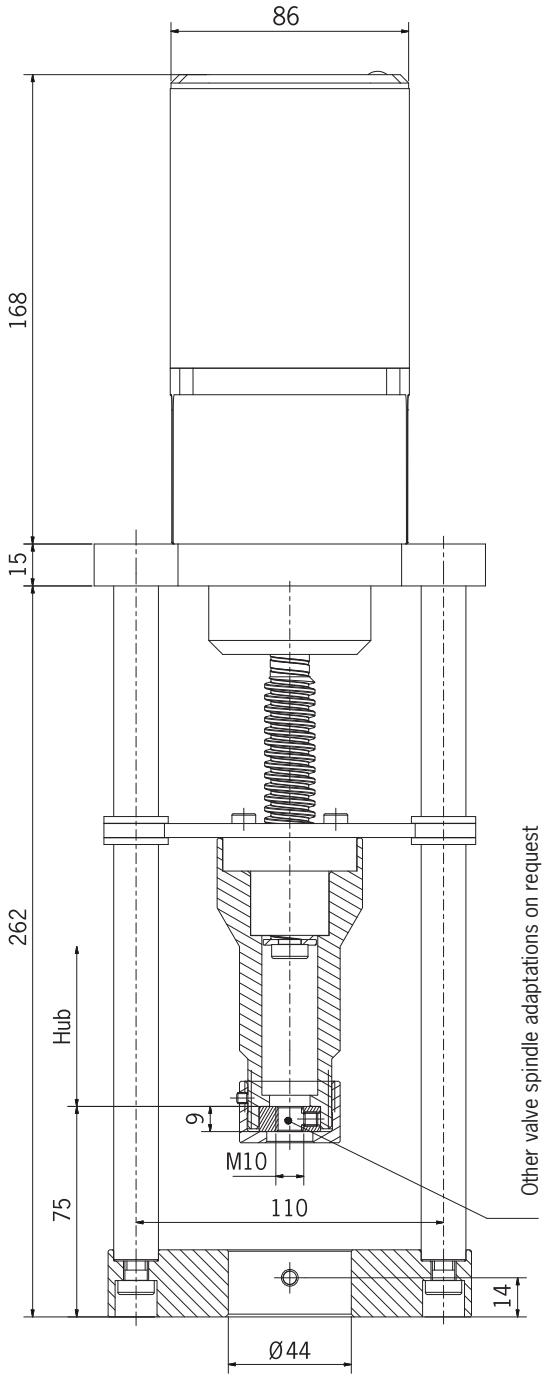
# VENTARIS N+
## The combination of Nano+ and Ventaris



**Nano+ actuator head**

> Synchronous motor (24 VAC, 115 VAC, 230 VAC), alternatively 24 VDC motor
> Metal body/cover
> Robust industrial design
> Expandable functions through numerous options
> Failsafe option – moves to a safe position in case of a power outage
> Adjustment via fixable aluminium control cams

# TECHNICAL DATA
## Ventaris N+




Other diameters on request

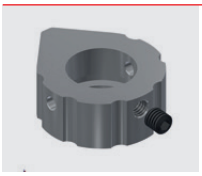
**TECHNICAL DATA NANO +**

| | |
|---|---|
| **Protection type** | IP 65 |
| **Ambient temperature** | –15 °C...+60 °C (optionally –40 °C...+80 °C) |
| **Case** | Powder-coated die-cast aluminium |
| **Gear unit** | Metal |
| **Cover** | Aluminium |
| **Hand wheel** | Outer (optional) |
| **Position indicator** | Mechanical |
| **Supply voltage** | 230 VAC; optionally 115 VAC, 24 VAC, 24 VDC |
| **Additional switches** | 2 or 4, optional |
| **Potentiometer** | Optional |
| **Duty cycle** | 100 % |
| **Connection** | 3 cable entries M16x1.5 |
| **Path shut-off** | Aluminium control cam, micro-switch |
| **Maintenance** | Maintenance-free |
| **Actuation** | 3-point step (optional positioner) |

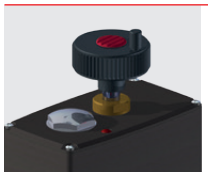
| | TYPE VENTARIS N | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Actuating force** (N) | 1000 | 1000 | 1000 | 1000 | 1000 | 2000 | 2000 | 2000 | 2000 | 2000 | 3000 | 3000 |
| **Actuating time** (mm/s) | 0.1 | 0.3 | 0.5 | 0.8 | 1.3 | 0.1 | 0.3 | 0.5 | 0.8 | 1.3 | 0.1 | 0.3 |
| **Actuating force** (N) | 3000 | 3000 | 3000 | 4000 | 4000 | 4000 | 4000 | 4000 | 5000 | 5000 | 5000 | 6000 |
| **Actuating time** (mm/s) | 0.5 | 0.8 | 1.3 | 0.1 | 0.3 | 0.5 | 0.8 | 1.3 | 0.1 | 0.3 | 0.5 | 0.7 |

Other actuating times on request

# VENTARIS N+
## Options

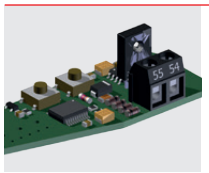


**Cam profiles**
> 330°/180°
> With set screw for securing position

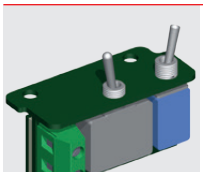


**Hand wheel**
> Automatic disconnect
> Not co-rotating

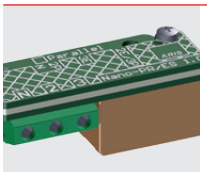
**Mechanical position indicator**
> Freely adjustable



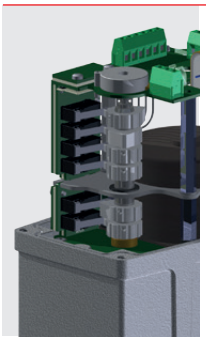
**Power output** (additional PCB)
> Position feedback 4–20 mA



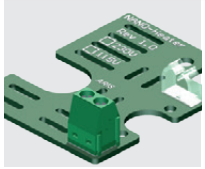
**Service switch** (standard with DC)
> Manual/automatic operation (switch)
> Left hand/right hand rotation (button)
> Integrated in actuator



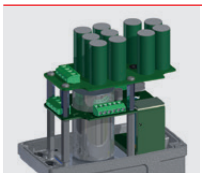
**Parallel relay/ single-wire control** (AC)
> Alternating current relay
> Completely wired
> Operating voltage = motor voltage
> Parallel connection of multiple actuators



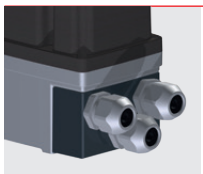
**Two or four additional auxiliary path switches**
> Adjustment via control cams that can be adjusted without tools
> Different control cam forms enable different functions of the auxiliary path switches
> High switching reliability due to spacer between the PCB and the control cam shaft



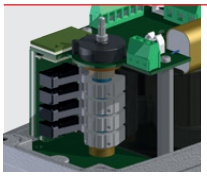
**Heating**
> For heating the interior of the actuator to prevent condensation of water



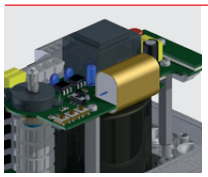
**Fail-safe**
> Energy storage
> Moves to pre-defined position in case of power outage
> Charge time <3 minutes
> Integrated in the actuator
> Moves at control speed or high speed
> 24 VDC



**Cable entry adapter**
> For cable gland 3xM20 (instead of 3xM16)
> Cable entry from front
> Anodised aluminium



**Potentiometer**
Standard
> 1 kΩ/10 kΩ
> Position feedback



**PMR Nano (AC)**
> Power supply:
230 V ±10%, 50/60 Hz
Special voltages/frequencies on request

> Reference input:
0 (4) to 20 mA (DC), optionally 0 (2) to 10 V
Load 250 Ω, overload protection 25 mA
Reverse voltage protection up to –25 mA
Resolution 10 bit

> Actual output:
Fixed limits: 0 or 4–20 mA
(Optionally 0 or 2–10 V)
Current sink, max. load 500 Ω
Resolution 10 bit