

NAV SERIES ELECTRIC GLOBE VALVE ACTUATOR

VALVE & VALVE ACTUATOR



NAV SERIES

NAV series electric valve actuator is mainly use with Globe Valve in the HVAC system to regulate the flow of water and steam in response to the demand of a controller.

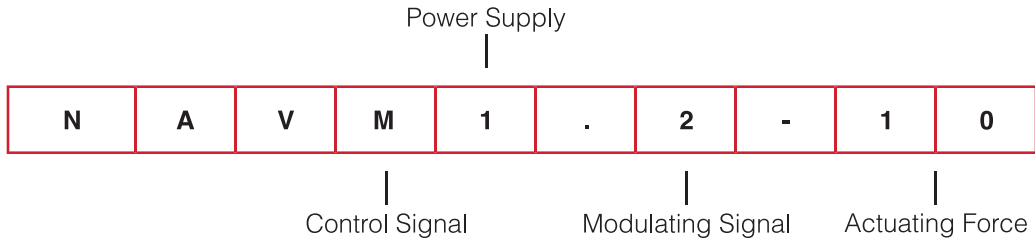
PRODUCT FEATURE

- Complete range from 1000N to 3000N
- 3 Point floating or Modulating (0-10VDC or 4-20mA Control Signal Selectable)
- Low leakage factor of up to 0.05%
- High close-off pressure actuator satisfies demanding requirements of high-rise buildings and high pressure pumping systems

TECHNICAL SPECIFICATION

| | |
|-----------------------|----------------------------------------------------------|
| ACTUATING FORCE | 1000N/1800N & 3000N |
| POWER SUPPLY | AC 24 V |
| FREQUENCY | 50 / 60 Hz |
| POWER CONSUMPTION | 2.4 W |
| PROTECTION CLASS | II |
| CONTROL SIGNAL | See TABLE 1: VALVE CODE NUMBER DESIGNATION |
| LIFE CYCLE | 60,000 cycle |
| IP PROTECTION | IP 42 (1000N), IP54 (1800N/3000N) |
| AMBIENT TEMPERATURE | -20°...50° as per IEC721-3-3 |
| AMBIENT HUMIDITY | 5...95% rH (non Condensing) |
| INVENTORY TEMPERATURE | +70°C as per IEC 721-3-2 |
| STROKE LENGTH | Max 20 mm (1000N), Max 42mm (1800N/3000N) |
| WEIGHT | See TABLE 2: MAXIMUM CLOSE-OFF PRESSURE (KPA) AND WEIGHT |
| CERTIFICATION | CE and ISO 9000 (EN...requirements) |

TABLE 1: VALVE CODE NUMBER DESIGNATION



| VALVE ACTUATOR NAV | NAV = Valve Actuator |
|-----------------------------------------------------------------|--------------------------------------------------------|
| CONTROL SIGNAL | A = 3 Point Control M = Modulating Control |
| POWER SUPPLY | 1 = AC 24 |
| MODULATING SIGNAL (APPLICABLE FOR MODULATING SIGNAL) | 2 = 0(2)-10 Vdc (Factory Default Setting) / 0(4)-20 mA |
| ACTUATING FORCE | 10 = 1000N 18 = 1800N 30 = 3000N |

To Order

Specify the code number from the Actuator Code Selection Guide.

Repair Parts

Available repair parts for NAV Series Actuator include replacement actuators. No other field repairs should be attempted.

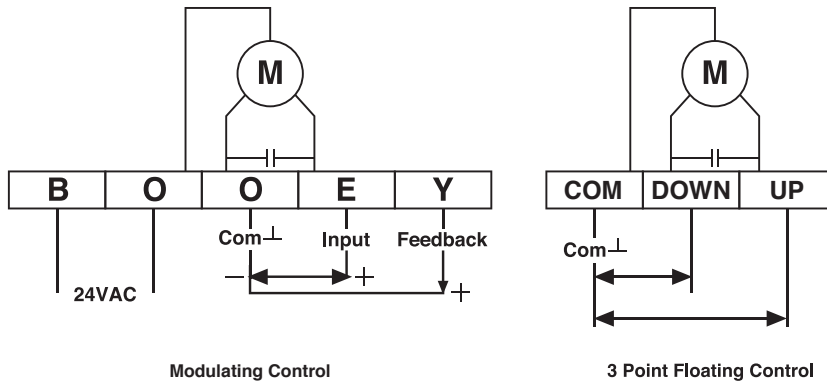
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VALVE AND VALVE ACTUATOR

| TABLE 2: MAXIMUM CLOSE-OFF PRESSURE (KPA) AND WEIGHT | | | | | | | |
|------------------------------------------------------|-----------|------|------|-------|-------|------|--------|
| MAXIMUM SHUTOFF PRESSURE (KPA) | | | | | | | WEIGHT |
| MODEL | FORCE (N) | DN20 | DN25 | DN32 | DN40 | DN50 | KG |
| NAV... -- 10 | 500 | 1000 | 680 | 550 | 400 | 270 | 1.2 |
| MAXIMUM SHUTOFF PRESSURE (KPA) | | | | | | | WEIGHT |
| MODEL | FORCE (N) | DN65 | DN80 | DN100 | DN125 | DN50 | KG |
| NAV... -- 18 | 1800 | 340 | 150 | 90 | - | - | 4.8 |
| NAV... -- 30 | 3000 | - | - | 270 | 150 | 90 | 5.0 |

FIGURE 3: ACTUATOR WIRING DIAGRAM

NAV...10 (1000N)



NAV...18 and NAV...30 (1800N and 3000N)

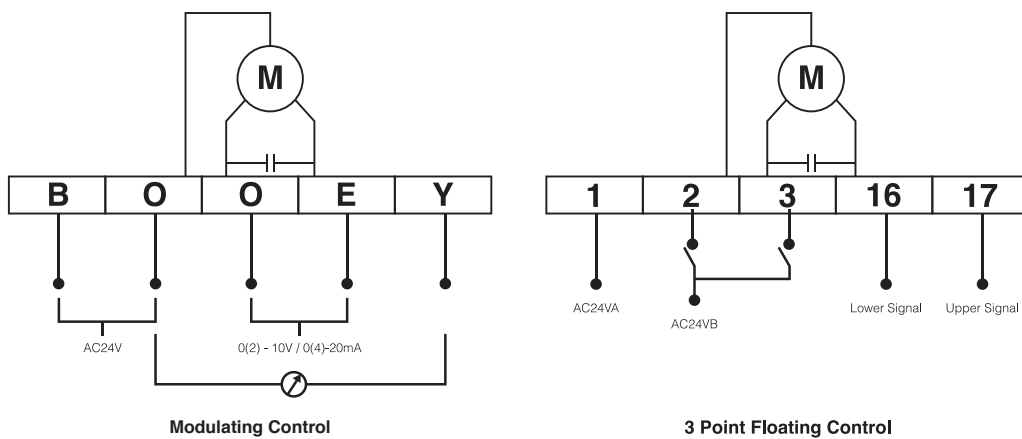
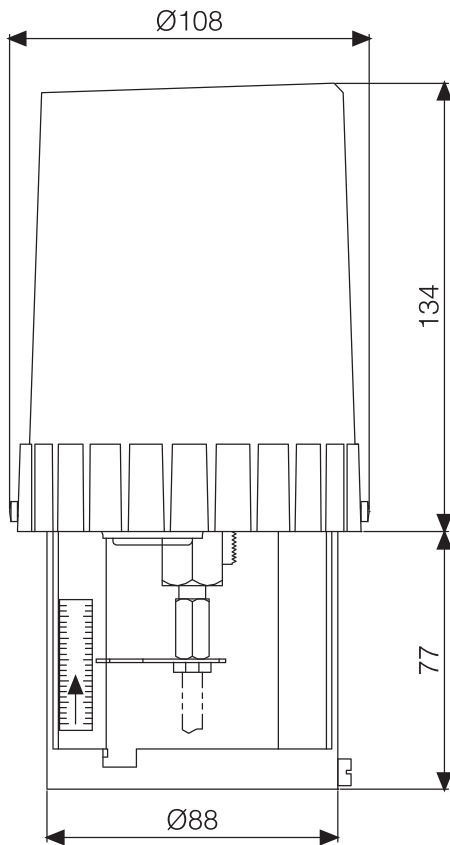
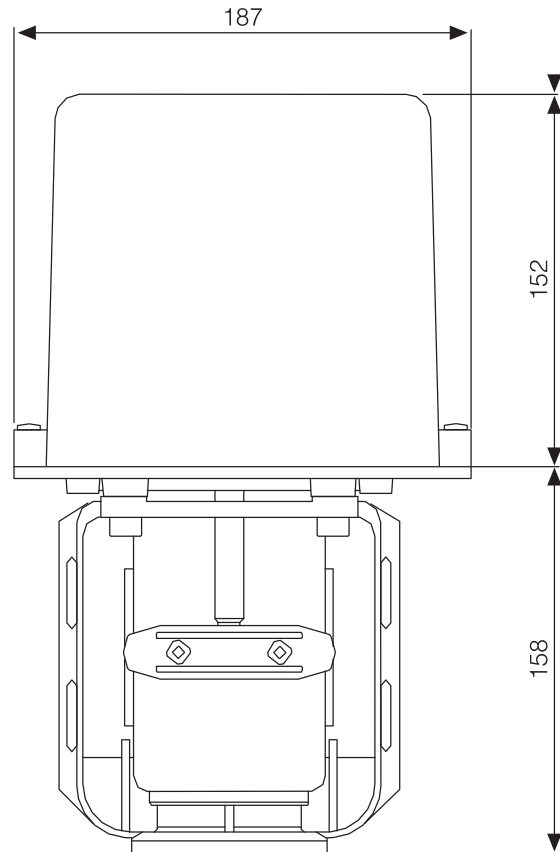


TABLE 3: DIMENSION OF ACTUATOR (mm)



NAV... 10 Series (1000N)



**NAV... 18 Series (1800N)
NAV... 30 Series (3000N)**

APPLICATION OVERVIEW

The NAV series Electric Valve Actuator features a complete range from 1000N to 3000N actuating force. They are use with the globe valve to regulate the flow of water or Steam. The Actuator can be ordered with NENUTEC Valve NVCS or NVCF series valves and NTC controller for a complete HVAC solution.