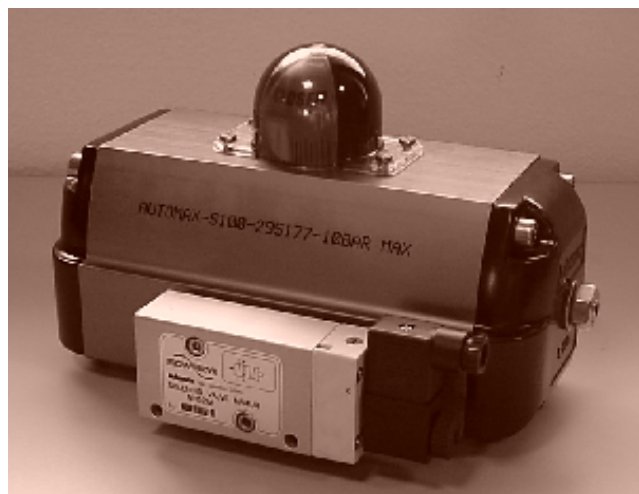


Automax Namur design 5/2 and 3/2 Solenoid valves

NH series solenoid valve is suitable to operate pneumatic actuators. It can be directly mounted on the supply side of the actuator without using other accessories pipes and plates.

This solenoid valves can be used as a 5 way for double acting actuators or as 3 way for spring return actuators. It can be easily modified from 5 to 3 way by using the APS1 recycle and purge plate mounted between the solenoid valve and the actuator.

This plate is expressly designed to convert from 5 to 3 way and to prevent corrosive atmospheres from being pulled into the spring chamber; which increases the life of the actuator. The air passage cross section in the solenoid valve is sufficient for rapid operation. For slower operation (opening and closing independently) FC-DA or FC-SR modules may be sandwich mounted between the actuator and solenoid valve. Please find detailed information in the specific bulletins.



NH series solenoid valve: Main features

- Designed according to Namur VDI / VDE 3845 to be directly mounted on the actuator body
- 5 or 3 way with 1/4" BSP/F supply and purge connections
- Available with single and dual coil versions.
- Body and spool of aluminium alloy
- Seals of buna-N
- Encapsulated coil (Insulation class F according to VDE0580 std.) with sealed electrical connector (according to DIN 43650 form B std.)
- Solenoid coils are suitable to work on continuous service
- Manual override screw.

Installation Instructions:

The Automax NH52 and NH32 solenoid valves is installed very easily to any Supernova actuator. They are designed according to Namur VDI/VDE 3845 std.

Before starting operation check if the actuator is double acting or spring return.

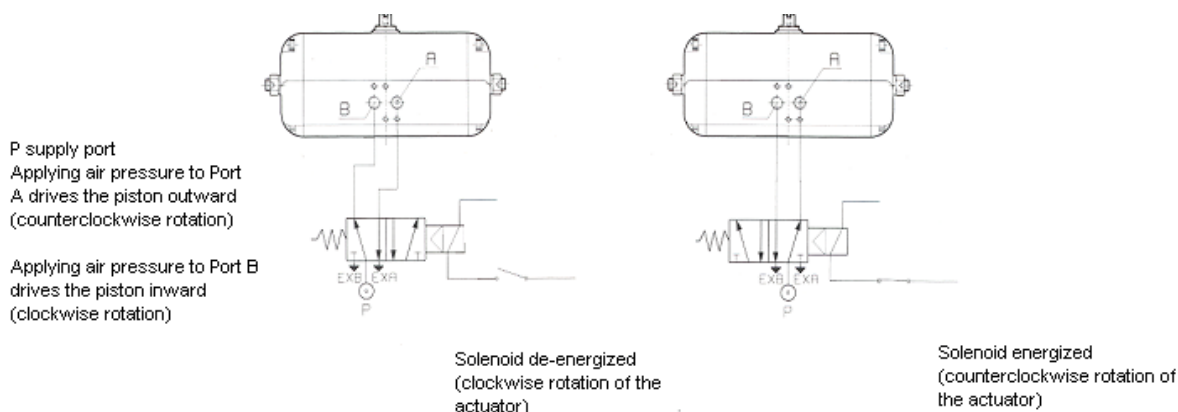
In case of double acting an NH52 5 way solenoid valve has to be used; if the actuator is a spring return an NH32 (composed by N52+ APS1 module) has to be used.

- 1) Place the O-rings into the O-rings bores on the face of the valve. Each O-ring should be completely seated into the bore.
- 2) Place the actuator with the two ports facing you, and the pinion pointing up. Orient the Automax solenoid valve with the O-rings toward the actuator and the operator toward the right (the small O-ring is for use with the optional APS1 module).
- 3) The valve is then mounted to the actuator with the two screws (M4) provided.
- 4) Connect the air supply to the supply port and wire solenoid per local and national electrical codes. The assembly is now ready for operation.

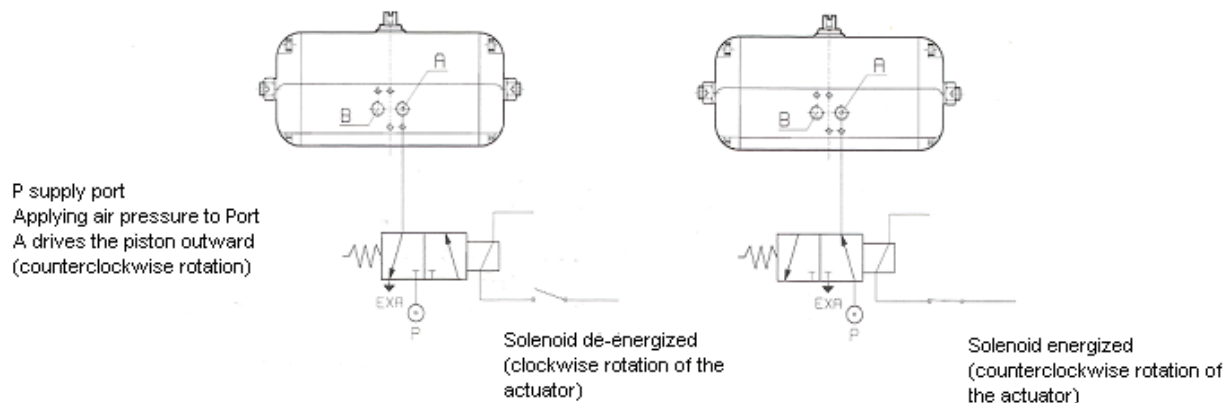
Operation

Diagram

Double acting actuator with 5 way solenoid valve (fig.1)



Spring return actuator with 3 way solenoid valve (fig.2)



Temperature (enviromental):

Temperature (supply media):

Air pressure supply:

Supply media:

from -10° C to +60° C (consult factory for different applications)

from -10° C to +70° C (consult factory for different applications)

2 bar p_{min} to 8 bar p_{max}

lubricated or dry air (Oil used in air line should be compatible with seal used in the systems); do not use lubricated air in conjunction with AUTOMAX positioners

Air flow: 1300 l/min



Namur solenoid valve NH series AUTOMAX *by Hoerbiger*

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Electrical Characteristics

Automax code ref.	Voltage	Protection	Explosion proof	Coil insulation	Absorbed power	Electrical connection
NH52M NH52SS NH32M	24-48-110-220Vac 50-60Hz, 24-48-110Vdc	IP65	-	Class F	2,5 W DC 6,6 VA AC (start) 3,9 VA AC (holding)	Pg9 with cable gland
NH52XBM NH52XBSS NH32XBM	24-48-110-220Vac 50-60Hz, 24-48-110Vdc	IP67	EExd IIC T5 (Cenelec)	Class F	16 VA (holding) 19 W DC	1/2" npt/f

Bill of material

Description	Material
Body	Aluminium
Spool	Aluminium
Seat	Buna -N

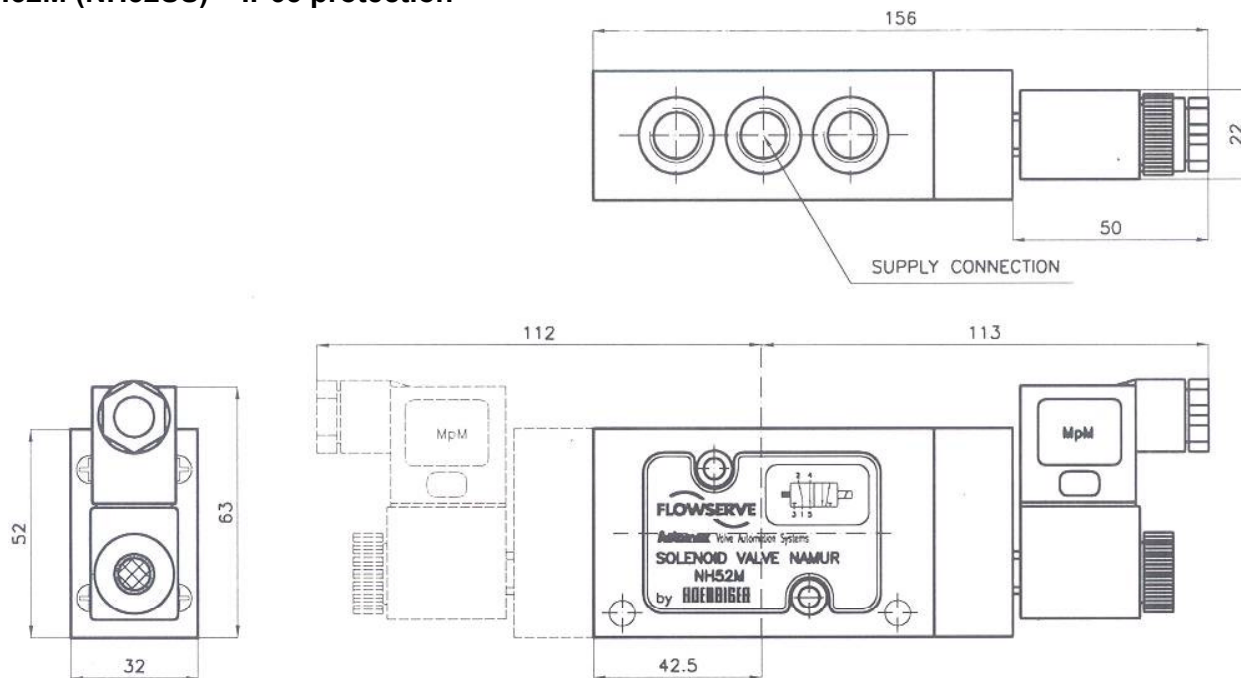
Namur module accessories

(to be mounted between actuator and solenoid valve):

- **APS1** The Automax APS1 module works with the N52H solenoid valve and diverts exhaust air from the piston into the spring chamber. This prevents corrosive atmospheres from being pulled into the spring chamber
- **FC** The "FC" Series Flow Control modules provide compact flow controls for precise adjustment of SuperNova actuator speeds. The Flow Control Modules may be sandwich mounted with other Automax accessories or may be used with Automax PNF adaptor. In case of order specify **FC-DA** for double acting actuator or **FC-SR** for spring return actuator.
- **APS2** The Automax APS2 module works with remote/line mounted solenoid valve and diverts exhaust air from the piston into the spring chamber. This prevents corrosive atmospheres from being pulled into the spring chamber. It can be used also as a quick exhaust device.
- **PNF** The Automax LV1 module can be used to adapt Namur accessories with 1/4" BSP/F connections.
- **LV1** The LV1 Lockout and Vent Valve module provides two primary functions. The LV1 may be used with a manual override to shut off supply air and vent actuator ports. The LV1 may be sandwich mounted with other Automax Namur accessories or may be used with the PNF module.

Overall dimensions

- NH52M (NH52SS) – IP65 protection



- NH52XBM (NH52XBSS) – Explosion proof

