


Feature:

- Retrofit assembly available for the majority of the manufacturers of valves (with option –XX-Y) (see Retrofit option).
- Variable running time.
- Manuel override.
- Maintenance free.
- Fail safe by *Enerdrive System*¹ (on models 060 & 080).
- Auxiliary switches. (on models 020 & 080).

Old Number

AQT1000A	AT000
AQT1021A	AT020
AQT1060A	AT060
AQT1080A	AT080
	AT000-30
	AT020-30
	AT060-30
	AT080-30

Technical Data	AT000 AQT 1000A	AT020 AQT 1021A	AT060 AQT 1060A	AT080 AQT 1080A	AT000-30	AT020-30	AT060-30	AT080-30
Auxiliary switches	No	Yes(2)	No	Yes(2)	No	Yes(2)	No	Yes(2)
Feedback	No	No	No	No	No	No	No	No
Fail safe - Enerdrive	No		Yes		No		Yes	
Power consumption	6 VA		20VA Peak, 6VA		6 VA		20VA Peak, 6VA	
Control signal	3 wire / 2 position, 3 wire / 3 point floating		2 wire / 2 position, 4 wire / 3 point floating		3 wire / 2 position, 3 wire / 3 point floating		2 wire / 2 position, 4 wire / 3 point floating	
Running time to ½ inch	60 sec force dependant				30 sec force dependant			
Force	100 lb. [450 N] at rated voltage							
Power supply	22 to 26 VAC or 28 to 32 VDC							
Electrical connection	18 AWG [0.8 mm ²] minimum							
Inlet bushing	2 inlet bushing of 5/8 in [15.9 mm] & 7/8 in [22.2 mm]							
Maximum stroke	1 in [25.4 mm]							
Direction	Reversible, normally open or normally close (factory set with normally close direction)							
Ambient temperature	0°F to +122°F [-18°C to +50°C]							
Storage temperature	-22°F to +122°F [-30°C to +50°C]							
Relative Humidity	5 to 95 % non condensing.							
Weight	2 lbs. [0.9 kg]							

Warning: Do not use automatic screw driver on manual override

Dimensions

Dimension	Inches	Metric (mm)
A	5.93	150.6
B	4.80	121.9
C	3.60	91.4

Caution

We strongly recommend that all neptronic® products be wired to a separate transformer and that transformer shall service only neptronic® products. This precaution will prevent interference with, and/or possible damage to incompatible equipment.
When multiple actuators are wired on a single transformer, polarity must be observed. Long wiring runs create voltage drop which may affect the actuator performance.

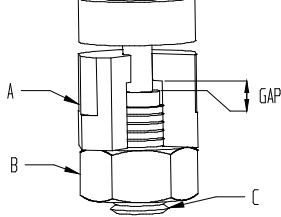
¹ Enerdrive Fail-Safe System: US Patent #5,278,454 | European Patent #0647366



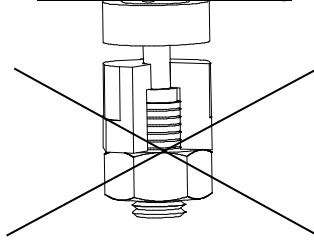
Mechanical installation

Mounting of the actuator on valve

Correct mounting



Non Correct mounting



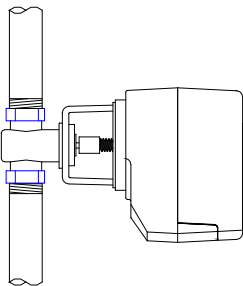
1. Screw completely the valve shaft (C) unto the coupling of the actuator (A).
2. Unscrew the coupling (A) for 1/2 of turn in order to leave a functional play.
3. Screw the counter nut (B).

Warning:

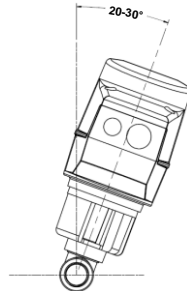
Do not over tight coupling of the actuator on the shaft of the valve.

Mounting of the actuated valve on system

Vertical mounting



Horizontal mounting

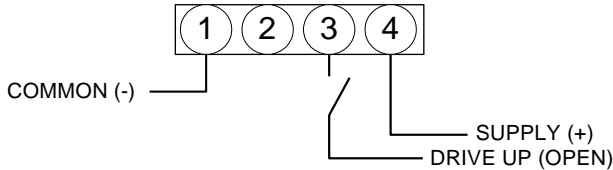


1. Pay attention to system particularity; be sure that the expansions, contractions of the system and its medium as well as operating pressures are within the tolerances.
2. When plumbing, the motorized valve should be situated in an easily accessible place and sufficient space should be allowed for the removal of the actuator.
3. To prevent moisture from collecting in the motor casing, install the motorized valve such that the **actuator is superior to the valve**, at 20-30° / at vertical. Avoid mounting the valve so that the valve stem is below horizontal.

Wiring Diagrams

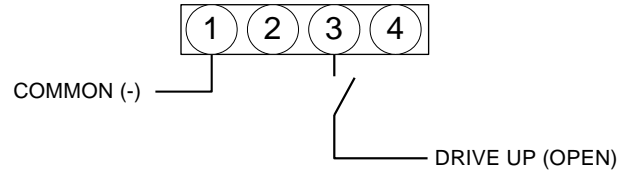
**Models AT000 & 020
 AT000-30 & 020-30**

3 wire / 2 position (ON-OFF)

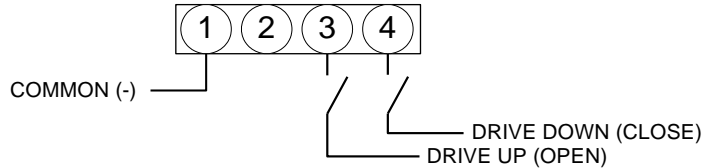


**Models AT060 & 080
 AT060-30 & 080-30**

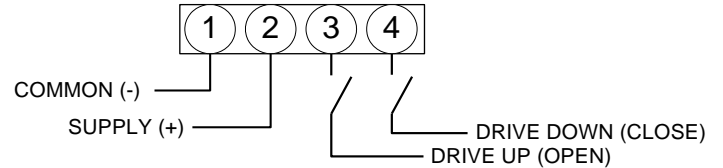
2 wire / 2 position (ON-OFF)



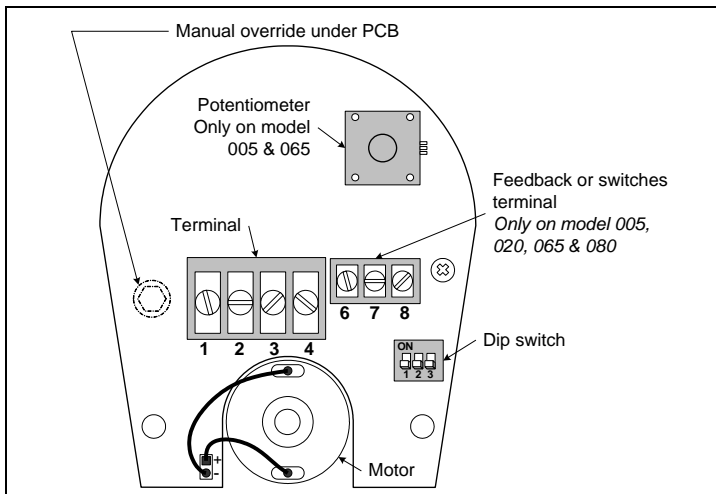
3 wire / 3 point floating



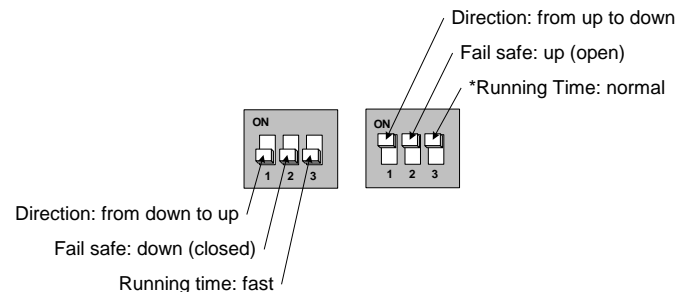
4 wire / 3 point floating



PC Board

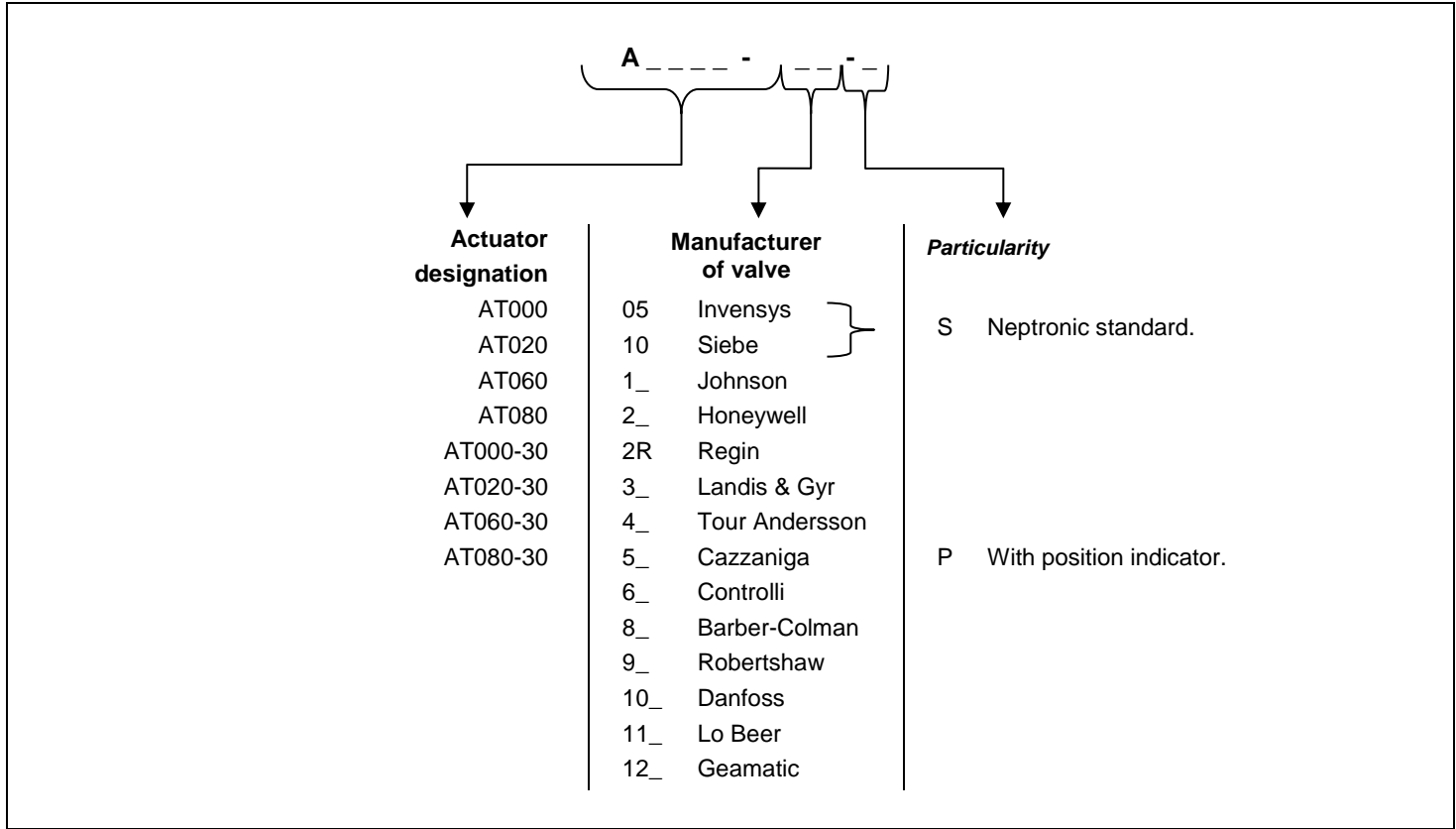


Dip switch settings



*On AT model:
 When switch #3 is "ON", the running time will be 60 sec.

Retrofit option





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