

**Work with**

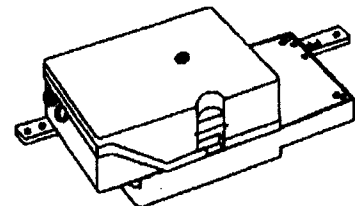
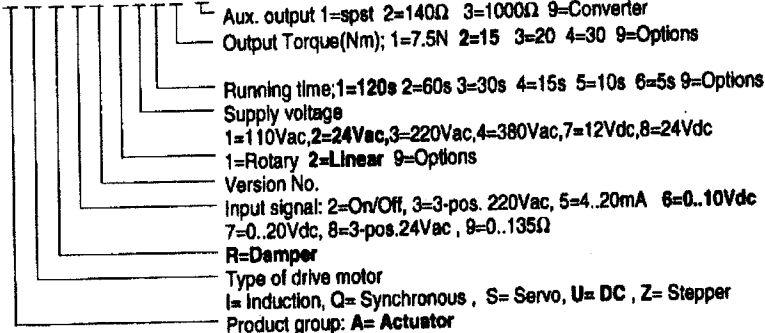
- \* ATI
- \* Barber coleman
- \* Honeywell
- \* Johnson
- \* Landis & Gyr
- \* Satchwell
- \* Sauter
- \* Staefa
- \* T/A
- \* TEG
- \* Others

## Electric Linear Actuators

DC motor drives, Modulating  
with electronic safety system

## AUR65.2.

**AUR65.2212**



### Description

Electrical actuator, 0...10Vdc control, stroke is 60mm, DC motor drive without spring return.

### Application

In heating, ventilating, air conditioning and other industrial installations for control of air dampers, fire dampers and other ventilating openings located not in the living spaces.

The application allows a bit of noise from the units. Signals from other controllers are also acceptable.

### Ordering Specification

When ordering, please give full designation and type reference of unit;

Ex: AUR65.22120 Electrical Damper Actuator Proportional, 0...10Vdc Linear type, 120s, 24Vac, 400N for aux unit

### Technical Data

Supply voltage	24V ac/dc ± 20%
Frequency	50Hz / 60Hz
Power source	DC motor
Power consumption	3VA...
Running time	125- 200s at 50/60Hz
Model of control	Proportional(std)
Travel / linear	62mm(std)
Noise level	>45[dB]
Nominal Force(f)	300-500Nf(std)
Control signal(Y)	0...10Vdc
Voltage	0.1mA max.
Current	
Control signal(R)	0...1000Ω (0...100%)
Resistance	Optional
Control output(U)	0...10Vdc(std)
Voltage	0.5mA max.
Current	
Weight	1.Kg
Permissible amb.temp. Operation	-15...+50°C
Transport & storage	-30...+65°C
Permissible amb.humid.	class D to DIN 40040
Protection standard of housing	IP54 to DIN 40050
Max. medium temp.	+150 °C
Cable entry glands	PG11

**Accessories;**

position indication unit	
-potentiometer	-0...140
-potentiometer	-0...1000

- position alarm switch
- snap action switch
- Estimated life time
- Drive motor
- Gear train

10(3)A 24...250Vac

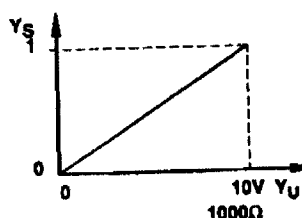
App.: 400,000 cls  
App.: 1,000,000 cls

### Summary of types

Type Nr.	Output Torque	Running time 50/ 60Hz	Space for Aux.units			
			0	1	2	3
AUR65.22120	200N	125s - 200s	0	SW	140Ω	1000Ω
AUR65.22140	400N	125s - 200s	0	SW	140Ω	1000Ω
AUR65.22160	600N	125s - 200s	0	SW	140Ω	1000Ω
AUR65.22180	800N	125s - 200s	0	SW	140Ω	1000Ω
AUR65.22220	200N	40s 90s	0	SW	140Ω	1000Ω
AUR65.22240	400N	40s 90s	0	SW	140Ω	1000Ω
AUR65.22260	600N	40s 90s	0	SW	140Ω	1000Ω
AUR65.22320	200N	20s 50s	0	SW	140Ω	1000Ω
AUR65.22340	400N	20s 50s	0	SW	140Ω	1000Ω
AUR65.22420	200N	10s 30s	0	SW	140Ω	1000Ω

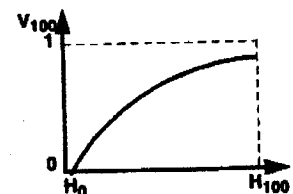
### Function

The actuator is controlled by a standard signal of 0...10Vdc received from conventional electronic controller or DDC unit. It provides electronic position control which, in conjunction with ATI or any compatible venturi type air dampers or air valves, gives an equal percentage valve characteristic.



Correlation between control signal and correcting variable

Y<sub>S</sub> = Correcting variable  
Y<sub>U</sub> = control signal 0...10Vdc  
Y<sub>R</sub> = correcting signal 0...10Vdc



Correlation between valve stroke and volumetric flow

V<sub>100</sub> = volumetric flow  
H = valve stroke

**Auxiliary units**

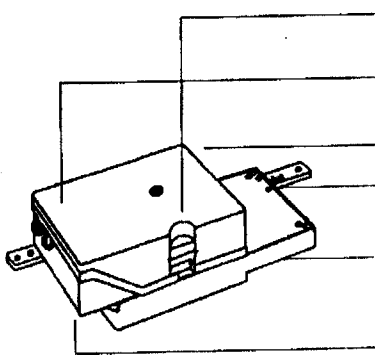
Control output U with a 0...10Vdc control signal allows control of the following units:

- Indication units
- On / Off switching units

## Design Features

Actuator are supplied as separate units. Assembling them requires neither special tools nor adjustments.

- Maintenance free electrical actuator with DC motor
- A switch on PCB can reverse the rotation of the actuator.
- Blocking proof gear train with self-lubrication sintered bearings
- Quick mounting bracket make easy installation.
- Gear train is made of aluminum die-cast and specially coated for corrosion proof.
- Important gears are made of sintered metal or special tool steel and heat treatment.



1. Push button
2. Cable entries
3. Control box
4. Clamping device
5. Gear train
6. Quick mounting bracket slot

## Application Advice

For further information on the complete regulating unit consist of actuator and valve also refer to the Data Sheet of the various type of valves, 4300... 4499.

Observe the permissible temperatures. For details refer to <Application > and <Technical Data>

Data Sheet 34001 contains basic system data on POLYTEK. All hints and explanations given in this sheet must be observed.

All units connected to terminals Y and U, together with the AUR..., must be connected to the same G0. The factory fitted link across terminals R and M may be removed only if a unit is connected between these terminals.

## Mounting and Installation Advice

Mounting positions:

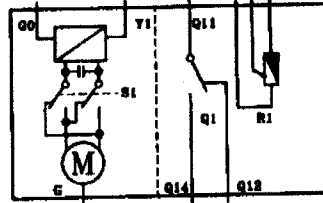
The actuator's mounting instructions are supplied in the box of the unit.

## Commissioning Advice

When commissioning the installation, check the wiring and make a functional test.

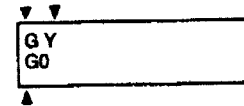
## Wiring Diagram

Internal Diagram



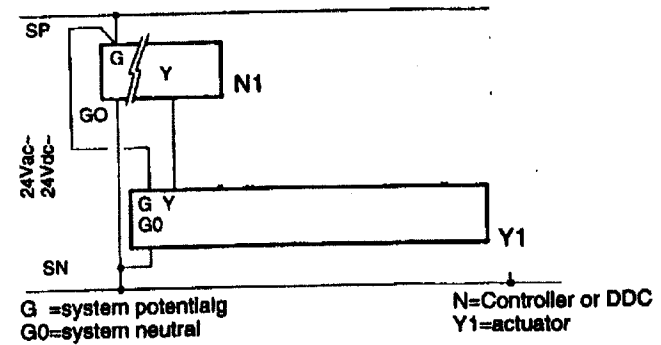
- G, G0 = Operating voltage 24Vac  
 G = system potential (SP)  
 G0 = system neutral (SN)  
 Y = control signal 0...10Vdc  
 S1 = Change-over switch  
 Q1 = Switch unit  
 R1 = Potentiometer  
 M = motor

## Connecting terminals

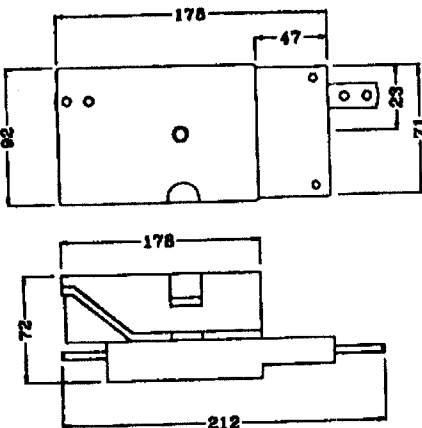


## Wiring diagram

The wiring diagram shows all possible connections. How many and which of these are used depends on the system involved.



## Dimensions



Dimensions in mm

We reserve the right to make changes and improvements in our products which may affect the accuracy of the information contained in this leaflet.