

Table-1: Two-Position Actuators

| Part Number | Control Signal | Spring Return Action (Valve Normal Position) | VA / Voltage             | Leads                                     | Stroke Timing <sup>g</sup> | Spring Return Timing <sup>g</sup> | End Switch |
|-------------|----------------|--|--------------------------|---|----------------------------|-----------------------------------|------------|
| M210A00     | Two-Position   | Normally Open                                | 3.5/1.8 at 24 Vac/24 Vdc | Removeable Terminal Block <sup>b</sup>    | 50 sec                     | 35 sec.                           |            |
| M210A01     |                |  |                          | 10 ft. (3.05 m) Plenum Cable <sup>c</sup> |                            |                                   | SPST       |
| M210A11     |                |  |                          |   |                            |                                   |            |
| M210A02     |                |  |                          | 18 in. (45 cm) Appliance Wire             |                            |                                   | SPST       |
| M210A12     |                |  |                          |   |                            |                                   |            |
| M210M02     |                |  |                          | 18 in. (45 cm) Appliance Wire             |                            |                                   | SPST       |
| M220A00     |                | Normally Closed                              | 3.5/1.8 at 24 Vac/24 Vdc | Removeable Terminal Block <sup>b</sup>    | 50 sec                     | 35 sec.                           |            |
| M220A01     |                |  |                          | 10 ft. (3.05 m) Plenum Cable <sup>c</sup> |                            |                                   | SPST       |
| M220A11     |                |  |                          |   |                            |                                   |            |
| M220A02     |                |  |                          | 18 in. (45 cm) Appliance Wire             |                            |                                   | SPST       |
| M220A12     |                |  |                          |   |                            |                                   |            |
| M220M02     |                |  |                          | 18 in. (45 cm) Appliance Wire             |                            |                                   | SPST       |
| M220M12     |                |  |                          |   |                            |                                   |            |

Table-2 Floating Actuators

| Part Number | Control Signal | Spring Return Action (Valve Normal Position) | VA @ 24 Vac 50/60 Hz | Leads                                     | Stroke Time, sec. 50/60 Hz | Time-out Delay, sec. 50/60 Hz |
|-------------|----------------|--|----------------------|---|----------------------------|-------------------------------|
| M332A00     | Floating       | None   | 2.3/2.4              | Terminal Block <sup>b</sup>               | 159/135                    | 181 Sec                       |
| M332A01     |                |  |                      | 10 ft. (3.05 m) Plenum Cable <sup>c</sup> |                            |                               |
| M312A00     |                | Normally Open                                | 3.2/3.3 <sup>d</sup> | Terminal Block <sup>b</sup>               |                            |                               |
| M312A01     |                |  |                      | 10 ft. (3.05 m) Plenum Cable <sup>c</sup> |                            |                               |
| M322A00     |                | Normally Closed                              | 3.2/3.3 <sup>d</sup> | Terminal Block <sup>b</sup>               |                            |                               |
| M322A01     |                |  |                      | 10 ft. (3.05 m) Plenum Cable <sup>c</sup> |                            |                               |

Table-3 Proportional Actuators

| Part Number | Control Signal   | Spring Return Action (Valve Normal Position) | VA @ 24 Vac 50/60 Hz | Leads                                     | Stroke Time, sec. 50/60 Hz | Time-out Delay, sec. 50/60 Hz |
|-------------|--|--|----------------------|---|----------------------------|-------------------------------|
| M333A00     | Proportional <sup>a</sup><br>(Vdc : 0...5, 0...10, 2...10, 5...10, 4...20 mA dc <sup>e</sup> ) | None   | 2.7/2.8              | Terminal Block <sup>b</sup>               | 159/135                    | 200/166                       |
| M333A01     |  |  |                      | 10 ft. (3.05 m) Plenum Cable <sup>c</sup> |                            |                               |
| M313A00     |  | Normally Open                                | 2.7/2.8 <sup>d</sup> | Terminal Block <sup>b</sup>               |                            |                               |
| M313A01     |  |  |                      | 10 ft. (3.05 m) Plenum Cable <sup>c</sup> |                            |                               |
| M323A00     |  | Normally Closed                              | 2.7/2.8 <sup>d</sup> | Terminal Block <sup>b</sup>               |                            |                               |
| M323A01     |  |  |                      | 10 ft. (3.05 m) Plenum Cable <sup>c</sup> |                            |                               |

- a. Default configured for 0...10 Vdc input signal, direct acting control.
- b. All terminal block and appliance wire units accept a 1/2" conduit connector fitting (.875" diameter).
- c. All plenum cable units include an integral 3/8" conduit connector fitting.
- d. Size transformer for 10 VA per actuator.
- e. For 4...20 mA control, a separate isolated transformer must be used with each valve.
- g. Nominal.

8. VBB/VBS and VB-2000 Series  
Ball Valve Assemblies