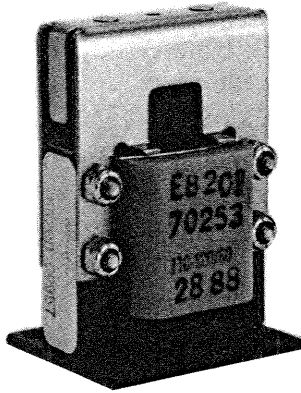


- 
- Unless specifically designed for such service **SOLENOIDS SHOULD NOT BE** submerged in or splashed with oils, coolants or other liquids.
  - **SOLENOIDS MUST NOT BE** used in locations where temperature or atmospheric conditions are beyond those for which they have been specifically designed.
  - Check line voltage. Solenoids should not be subjected to voltages and currents other than those printed or stamped on coil or solenoid. Use a coil designed for a specific power supply.
  - Solenoids should not be used in applications where the coil will be subjected to voltage spikes.
  - Use solenoids rated for the intended application. Solenoids should not be cycled at a rate which will prevent cooling of the coil. A continuous current in-rush may occur which can burn out the coil.
  - Mounting for solenoids should be designed to avoid blocking solenoid plunger in open positions resulting in a high in-rush current which may burn out coil. Use the shortest possible stroke to reduce impact force and wear. Mount solenoid on a heat sink if possible.
  - Do not use solenoids in an overloaded or underloaded condition and do not apply side loads to the plunger. The load force line should be in a straight line with the plunger.

The user should refer to NFPA 70B, RECOMMENDED PRACTICE FOR ELECTRICAL EQUIPMENT MAINTENANCE, published by the National Fire Protection Association, for additional information.

## Pull and Push Type Solenoids



The EB200 series industrial solenoids are available in standard base and side mountings and have stainless steel saddle type retainers. They are available in stacking widths of 1/2, 3/4, 1 and 1-1/4 inches. Available with side or bottom mountings and in 50 Hz and DC models. Standard versions available for 115, 230, 460V, 60 Hz.

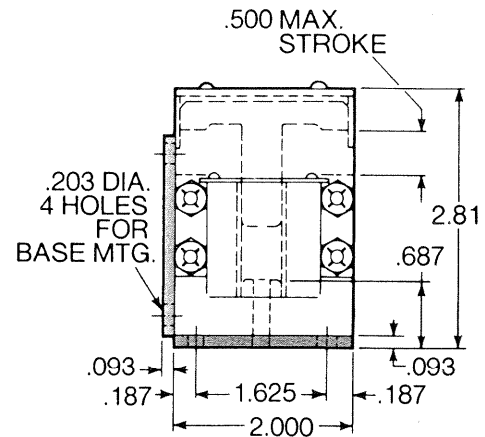
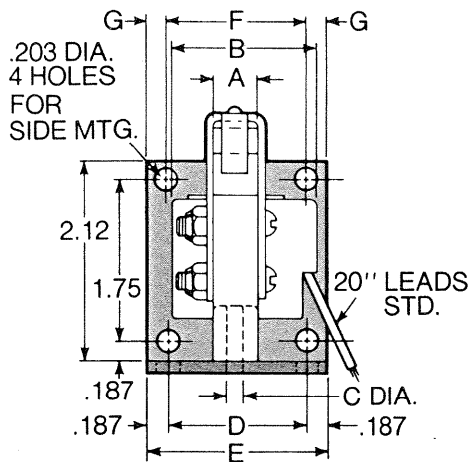
### Features include:

- 1/2 inch stroke
- 115, 230, and 460 V, 60 Hz models
- 2 to 10 pound pull or push force
- Standard side and base mounting
- 1-1/2" long stainless steel round loose push pin available at additional charge
- Captive pin is also available at additional cost. (Pin has head or shoulder which serves to hold it in place in the solenoid.)

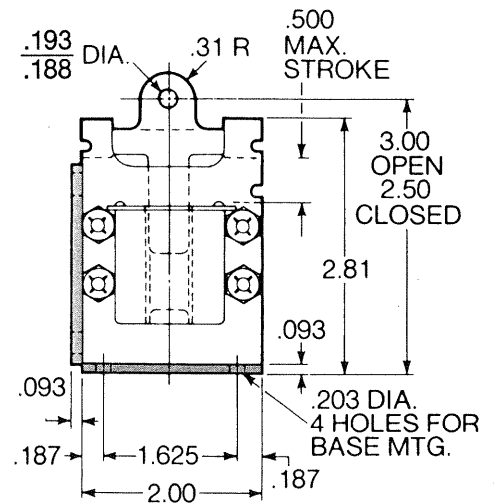
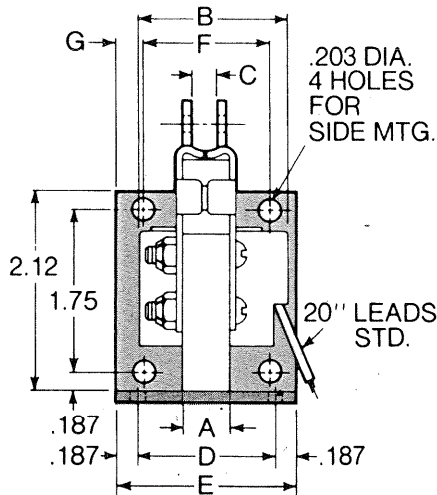
| Stacking Size | Part Number  | Type              | Mounting          | V & C      | (Inches) Stroke | (Lbs.) Force   | Description or Special Features  |
|---------------|--------------|-------------------|-------------------|------------|-----------------|--|--|
| .50           | EB200-00067  | Pull              | Standard Base     | 110/120/60 | .50             | 2  | Same as EB200-00067 except special coil                                      |
|               | EB200-00219  | Pull              | Standard Base     | 110/120/60 | .50             | 1.5  |  |
|               | EB200-00141  | Pull              | Standard Side     | 110/120/60 | .50             | 2  | Same as EB200-00141 except D.C. coil and force                               |
|               | EB200-00140  | Pull              | Standard Side     | 110/DC     | .50             | .55  |  |
|               | EB200-00264  | Pull              | Standard Side     | 110/120/60 | .50             | 2  | Same as EB200-00141 except special ret. stops cut off                        |
|               | EB200-00653  | Pull              | Non-Standard Side | 115/50     | .62             | 1.5  | Special core, special plunger, special retainer, special coil, spring return |
|               | EB200-00675  | Pull              | Non-Standard Side | 110/120/60 | .62             | 2.0  | Same as EB200-00653 except force, special coil                               |
| EB200-09543   | Push         | Non-Standard      | 110/120/60        | .125       | 5.25            | Special core, special plunger, special coil, special pin |  |
| EB200-09857   | Push         | Standard Base     | 110/120/60        | .50        | 2.0             |  |  |
| .75           | EB200-10034  | Pull              | Standard Base     | 110/120/60 | .50             | 6.   | Same as EB200-10034 except voltage   |
|               | EB200-10093  | Pull              | Standard Base     | 220/240/60 | .50             | 6.   |  |
|               | EB200-10215  | Pull              | Standard Side     | 110/120/60 | .50             | 6.   | Special plunger with .205 link hole  |
|               | EB200-10700  | Pull              | Standard Side     | 115/50/60  | .50             | 6.   |  |
|               | EB200-10343  | Pull              | Non-Standard Side | 110/120/60 | .50             | 6.   | Special core, special coil, coil information on both sides                   |
|               | EB200-10216  | Pull              | Standard Side     | 220/240/60 | .50             | 6.   | Same as EB200-10215 except voltage   |
|               | EB200-19704  | Push              | Standard Side     | 110/120/60 | .50             | 6.   | Special plunger, special saddle stop   |
| EB200-19894   | Push         | Standard Side     | 48 VDC            | .50        | 1.75            |  |  |
| 1.00          | EB200-20067  | Pull              | Standard Base     | 110/120/60 | .50             | 7.5  | Special mounting, special plunger, special retainer                          |
|               | EB200-20114  | Pull              | Standard Side     | 110/120/60 | .50             | 7.5  |  |
|               | EB200-20464  | Pull              | Non-Standard Side | 110/120/60 | .50             | 7.5  |  |
|               | EB200-29865  | Push              | Standard Base     | 110/120/60 | .50             | 7.5  |  |
| 1.25          | EB200-30025  | Pull              | Standard Base     | 220/240/60 | .50             | 10.  | Same as EB200-30046 except voltage   |
|               | EB200-30046  | Pull              | Standard Base     | 110/120/60 | .50             | 10.  | Same as EB200-30046 except voltage   |
|               | EB200-30123  | Pull              | Standard Base     | 440/480/60 | .50             | 10.  |  |
|               | EB200-30195  | Pull              | Standard Side     | 110/120/60 | .50             | 10.  | Same as EB200-30195 except voltage 110/50/60                                 |
|               | EB200-30843  | Pull              | Standard Side     | 110/50/60  | .50             | 10.  |  |
|               | EB200-39896  | Push              | Standard Base     | 110/120/60 | .50             | 10.  |  |
|               | EB200-39116  | Push              | Non-Standard Base | 115/50/60  | .375            | 7.0  | Special mounting, special coil, 36" leads                                    |
|               | EB200-39117  | Push              | Non-Standard Base | 115/50/60  | .50             | 7.0  |  |
|               | EB200-39143  | Push              | Non-Standard Base | 115/60     | .50             | 10.  | Special mounting, special coil   |
|               | EB200-39115* | Push              | Standard Base     | 110/50/60  | .50             | 10.  | Special spring return  |
|               | EB200-39904* | Push              | Standard Base     | 220/50/60  | .50             | 10.  | Same as EB200-39115 except voltage   |
|               | EB200-39193  | Push              | Non-Standard Side | 440/60     | .50             | 10.  | Special coil, special lead wire  |
|               | EB200-39363  | Push              | Non-Standard Side | 110/60     | .50             | 15.0   | Same as EB200-39383 except coil is reversed                                  |
|               | EB200-39383  | Push              | Non-Standard Side | 110/60     | .50             | 15.0   | Captive pin 13/16" in closed position, special coil                          |
|               | EB200-39386  | Push              | Non-Standard Side | 125/60     | .50             | 15.0   | Same as EB200-39383 except voltage   |
| EB200-39366   | Push         | Non-Standard Side | 125/60            | .50        | 15.0            | Same as EB200-39363 except voltage                       |  |

# EB200 Series

## EB200 Push Type, Base and Side Mount



## EB200 Pull Type, Base and Side Mount



## Mounting Information and Dimensions

### Push Type, Base and Side Mount

Code: ■ Base Base Mounting

| Stacking Size A | B   | C    | D     | E    | F | G |
|-----------------|---|------|-------|------|---|---|
| .50             | 1.56  | .172 | 1.250 | 1.62 | — | — |
| .75             | Not available as standard unit. See special solenoid catalog. |      |       |      |   |   |
| 1.00            | 2.12  | .205 | 1.750 | 2.12 | — | — |
| 1.25            | 2.38  | .199 | 2.125 | 2.50 | — | — |

Code: ■ Side Side Mounting

|      |   |      |   |   |       |      |
|------|---|------|---|---|-------|------|
| .50  | 1.56  | .172 | — | — | 1.500 | .250 |
| .75  | 1.88  | .172 | — | — | 1.500 | .250 |
| 1.00 | Not available as standard unit. See special solenoid catalog. |      |   |   |       |      |
| 1.25 | Not available as standard unit. See special solenoid catalog. |      |   |   |       |      |

### Pull Type, Base and Side Mount

Code: ■ Base Base Mounting

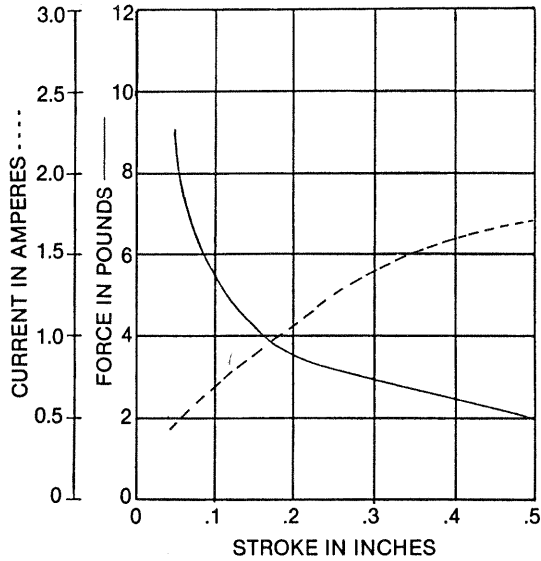
| Stacking Size A | B    | C   | D     | E    | F | G |
|-----------------|------|-----|-------|------|---|---|
| .50             | 1.56 | .25 | 1.250 | 1.62 | — | — |
| .75             | 1.88 | .25 | 1.500 | 1.88 | — | — |
| 1.00            | 2.12 | .38 | 1.750 | 2.12 | — | — |
| 1.25            | 2.38 | .50 | 2.125 | 2.50 | — | — |

Code: ■ Side Side Mounting

|      |      |     |   |   |       |      |
|------|------|-----|---|---|-------|------|
| .50  | 1.56 | .25 | — | — | 1.500 | .250 |
| .75  | 1.88 | .25 | — | — | 1.500 | .250 |
| 1.00 | 2.12 | .38 | — | — | 2.125 | .187 |
| 1.25 | 2.38 | .50 | — | — | 2.125 | .187 |

## Typical Force and Current Curves

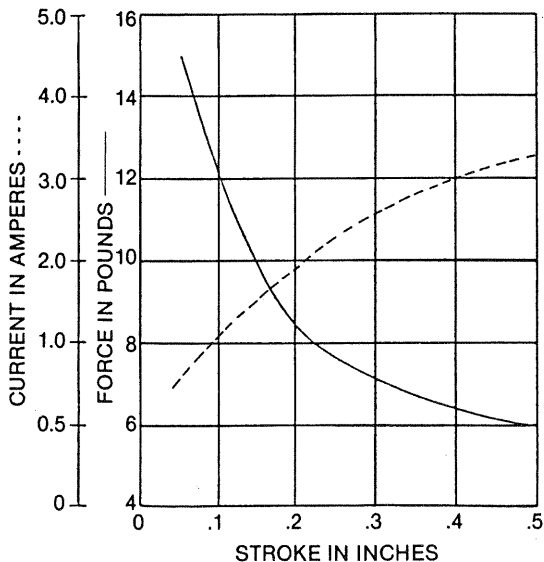
.50 Stacking Size Curves Shown for 115 volt, 60 Hz



| STROKE (inches) | PULL TYPE  |               | PUSH TYPE  |               |
|-----------------|------------|---------------|------------|---------------|
|                 | FORCE lbs. | CURRENT amps. | FORCE lbs. | CURRENT amps. |
| .1              | 5.5        | .7            | 5.5        | .7            |
| .2              | 3.5        | 1.1           | 3.5        | 1.1           |
| .3              | 3.0        | 1.4           | 3.0        | 1.4           |
| .4              | 2.5        | 1.6           | 2.5        | 1.6           |
| .5              | 2.0        | 1.7           | 2.0        | 1.7           |

REFERENCE PART NUMBERS FOR .50 STACKING SIZE  
EB200-09857, EB200-00067, EB200-00141

.75 Stacking Size Curves Shown for 115 volt, 60 Hz



| STROKE (inches) | PULL TYPE  |               | PUSH TYPE  |               |
|-----------------|------------|---------------|------------|---------------|
|                 | FORCE lbs. | CURRENT amps. | FORCE lbs. | CURRENT amps. |
| .1              | 12.1       | 1.1           | 12.1       | 1.1           |
| .2              | 8.5        | 1.9           | 8.5        | 1.9           |
| .3              | 7.0        | 2.6           | 7.0        | 2.6           |
| .4              | 6.5        | 3.0           | 6.5        | 3.0           |
| .5              | 6.0        | 3.3           | 6.0        | 3.3           |

REFERENCE PART NUMBERS FOR .75 STACKING SIZE  
EB200-19704, EB200-10034