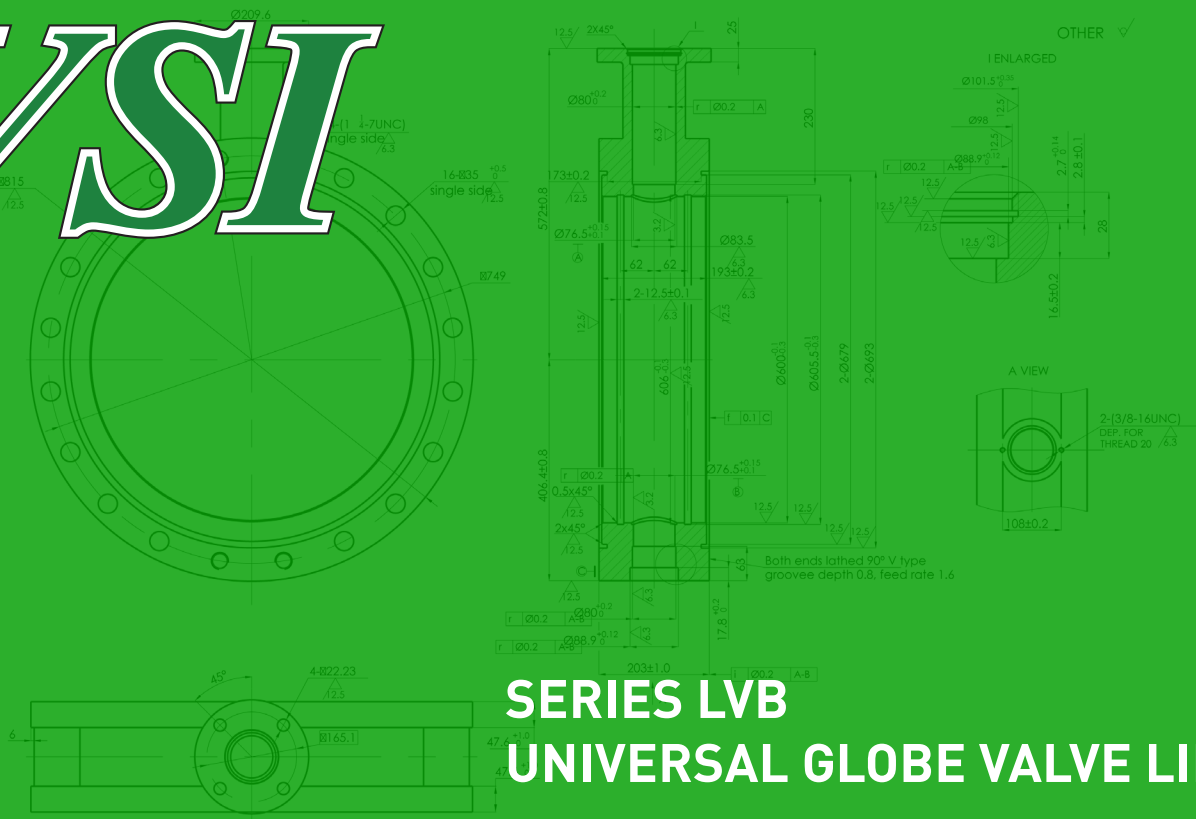


VSI

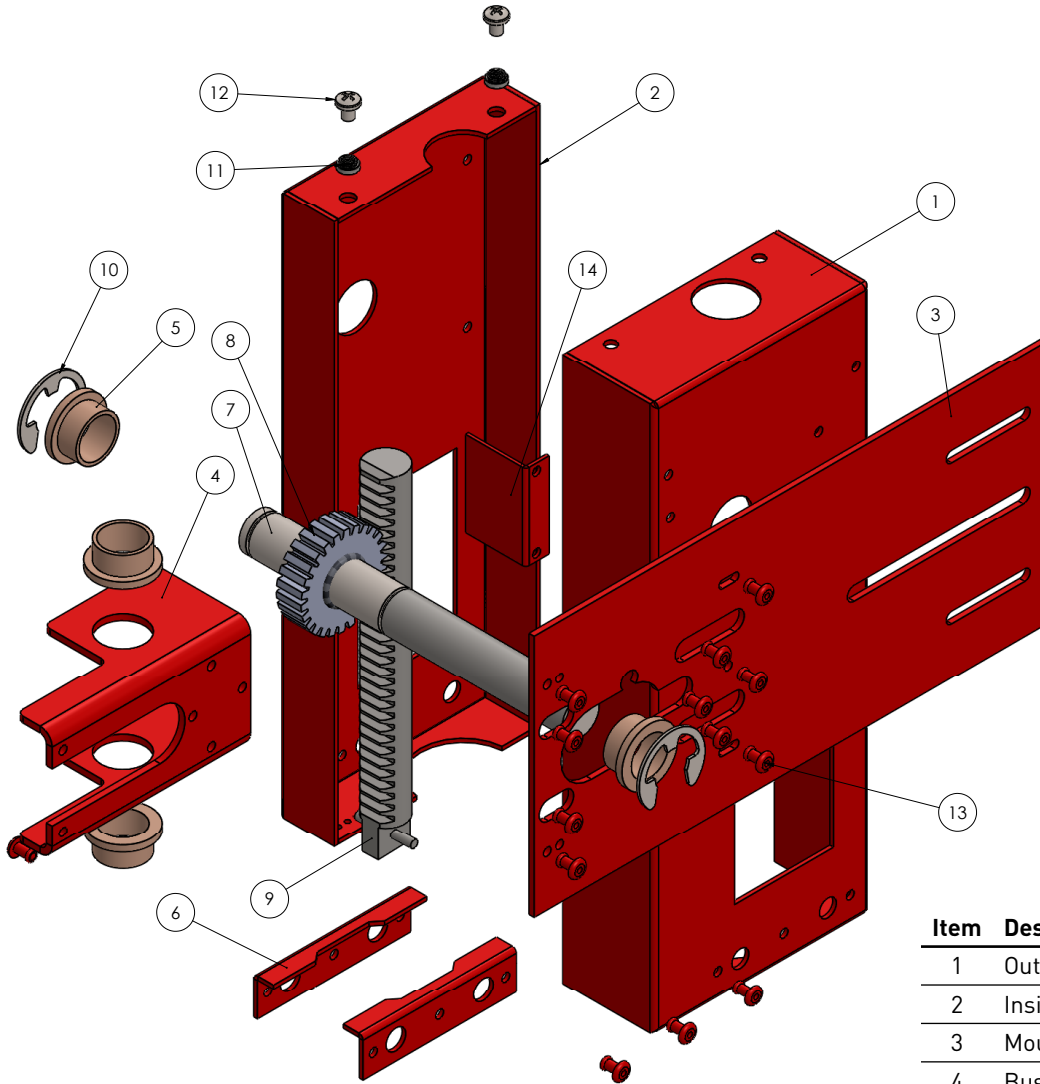


SERIES LVB UNIVERSAL GLOBE VALVE LINKAGE



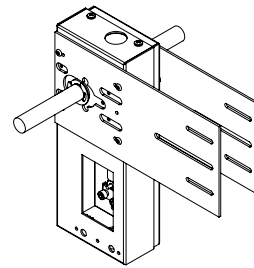
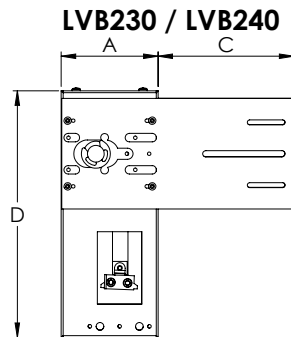
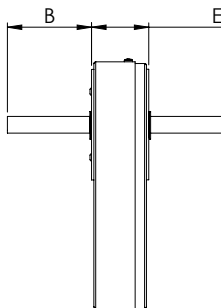
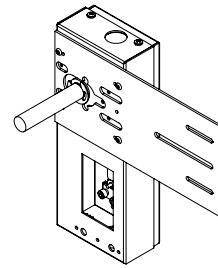
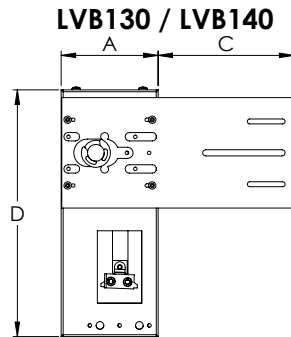
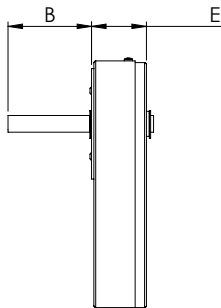
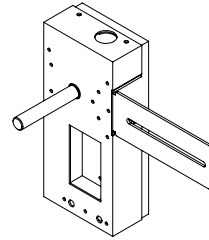
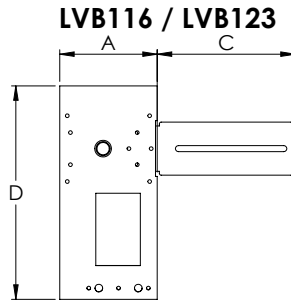
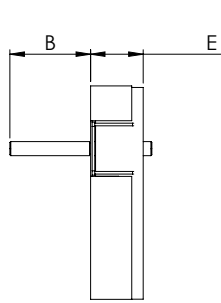
- LVB series linkages are available for 1/2" through 6" globe valves made by most manufacturers like Johnson Controls, Honeywell, Siemens (Landis), and Barber-Colman (Siebe).
- Flexible actuator orientation allows for various applications.
- Dual actuators can be mounted on the double plate units (LVB 230/240) for higher close-off applications.
- Custom-made collars and caps will fit perfectly for your valves. (See retrofit form)

Materials of Construction



| Item | Description | Material |
|------|-----------------|-----------------|
| 1 | Outside | Steel |
| 2 | Inside Cover | Steel |
| 3 | Mounting Plate | Steel |
| 4 | Bushing Bracket | Steel |
| 5 | Bushing | Bronze |
| 6 | 1/2 Clamp | Steel |
| 7 | Drive Shaft | Stainless Steel |
| 8 | Drive Gear | Steel |
| 9 | Rack Gear | Steel |
| 10 | E-Clip | Spring Steel |
| 11 | Press Nut | Stainless Steel |
| 12 | Pan Screw | Stainless Steel |
| 13 | Rivets | Steel |
| 14 | Angle Support | Steel |

Dimensions



| Linkage | A | B | C | D | E | SHAFT |
|------------|-------|-----|------|-----|-------|-------|
| LVB116 | 4.375 | 3.5 | 6.25 | 9.5 | 2.5 | Ø16mm |
| LVB123 | 4.375 | 3.5 | 6.25 | 9.5 | 2.5 | Ø16mm |
| LVB130/230 | 4.375 | 4 | 6 | 11 | 2.375 | Ø19mm |
| LVB140/240 | 4.375 | 4 | 6 | 11 | 2.375 | Ø19mm |

Output Force Calculations

| Linkage | Linear Travel (mm/90°) | Linear Travel (in/90°) | Metric Multiplier (1/m) | Imperial Multiplier (1/in) |
|------------|---------------------------|---------------------------|----------------------------|-------------------------------|
| LVB116 | 16 | 0.63 | 78.54 | 1.995 |
| LVB123 | 23 | 0.91 | 55.70 | 1.415 |
| LVB130/230 | 30 | 1.18 | 40.47 | 1.028 |
| LVB140/240 | 40 | 1.57 | 30.64 | 0.778 |

Notes: Output Force = Multiplier x Input Torque



Actuator Close-Off Chart

| Actuator Torque | Valve Size | Close-Off Pressure in PSI | | | |
|-----------------|------------|---------------------------|-------------|-------------|-------------|
| | | 16mm Stroke | 23mm Stroke | 30mm Stroke | 40mm Stroke |
| 35in-lb | 1/2" | >250 | 215 | 190 | - |
| | 3/4" | 130 | 100 | 90 | - |
| | 1" | 80 | 60 | 50 | - |
| | 1-1/4" | 50 | 40 | 30 | - |
| 44in-lb | 1/2" | >250 | >250 | 230 | - |
| | 3/4" | 165 | 130 | 110 | - |
| | 1" | 100 | 80 | 70 | - |
| | 1-1/4" | 65 | 50 | 45 | - |
| 53in-lb | 1/2" | >250 | >250 | >250 | - |
| | 3/4" | 200 | 155 | 135 | - |
| | 1" | 115 | 90 | 80 | - |
| | 1-1/4" | 75 | 60 | 50 | - |
| | 1-1/2" | 55 | 40 | 35 | - |
| | 2" | 30 | 25 | 20 | - |
| 62in-lb | 1/2" | >250 | >250 | >250 | - |
| | 3/4" | 225 | 175 | 145 | - |
| | 1" | 130 | 100 | 80 | - |
| | 1-1/4" | 80 | 60 | 50 | - |
| | 1-1/2" | 55 | 45 | 35 | - |
| | 2" | 30 | 25 | 20 | - |
| 70in-lb | 1/2" | >250 | >250 | >250 | - |
| | 3/4" | >250 | 205 | 180 | - |
| | 1" | 155 | 120 | 105 | - |
| | 1-1/4" | 100 | 80 | 70 | - |
| | 1-1/2" | 70 | 55 | 50 | - |
| | 2" | 40 | 30 | 25 | - |
| 75in-lb | 1/2" | >250 | >250 | >250 | - |
| | 3/4" | >250 | 215 | 180 | - |
| | 1" | 165 | 120 | 100 | - |
| | 1-1/4" | 105 | 80 | 65 | - |
| | 1-1/2" | 70 | 55 | 45 | - |
| | 2" | 40 | 30 | 25 | - |
| 88in-lb | 1/2" | >250 | >250 | >250 | - |
| | 3/4" | >250 | >250 | 210 | - |
| | 1" | 190 | 140 | 120 | - |
| | 1-1/4" | 120 | 90 | 75 | - |
| | 1-1/2" | 85 | 65 | 50 | - |
| | 2" | 45 | 35 | 30 | - |

| Actuator Torque | Valve Size | Close-Off Pressure in PSI | | | |
|-----------------|------------|---------------------------|-------------|-------------|-------------|
| | | 16mm Stroke | 23mm Stroke | 30mm Stroke | 40mm Stroke |
| 132in-lb | 1/2" | >250 | >250 | - | - |
| | 3/4" | >250 | >250 | - | - |
| | 1" | >250 | 215 | 165 | 125 |
| | 1-1/4" | 180 | 135 | 110 | 85 |
| | 1-1/2" | 125 | 95 | 75 | 60 |
| | 2" | 70 | 50 | 45 | 35 |
| 140in-lb | 2-1/2" | - | 40 | 30 | 20 |
| | 1/2" | >250 | >250 | >250 | >250 |
| | 3/4" | >250 | >250 | >250 | 230 |
| | 1" | >250 | 240 | 175 | 135 |
| | 1-1/4" | 200 | 160 | 115 | 90 |
| | 1-1/2" | 140 | 110 | 80 | 60 |
| 177in-lb | 2" | 80 | 65 | 45 | 35 |
| | 2-1/2" | - | 40 | 30 | 25 |
| | 3" | - | 30 | 20 | 15 |
| | 1" | - | >250 | 225 | 170 |
| | 1-1/4" | - | 200 | 145 | 110 |
| | 1-1/2" | - | 140 | 105 | 80 |
| 210in-lb | 2" | - | 80 | 60 | 45 |
| | 2-1/2" | - | 55 | 40 | 30 |
| | 3" | - | 35 | 25 | 20 |
| | 1" | - | >250 | - | - |
| | 1-1/4" | - | 240 | - | - |
| | 1-1/2" | - | 170 | - | - |
| 310in-lb | 2" | - | 95 | - | - |
| | 2-1/2" | - | 62 | 45 | 35 |
| | 3" | - | 44 | 30 | 25 |
| | 2" | - | 140 | 105 | 80 |
| | 2-1/2" | - | 90 | 65 | 50 |
| | 3" | - | 65 | 45 | 35 |
| 360in-lb | 4" | - | 35 | 25 | 20 |
| | 5" | - | 25 | 15 | 15 |
| | 6" | - | 15 | 10 | 10 |
| | 2" | - | 180 | 150 | 105 |
| | 2-1/2" | - | 120 | 95 | 75 |
| | 3" | - | 85 | 60 | 30 |
| 360in-lb | 4" | - | 60 | 45 | 25 |
| | 5" | - | 35 | 20 | 20 |
| | 6" | - | 20 | 15 | 15 |

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Dual Actuator Close-Off Chart

| Actuators Torque | Valve Size | Close-Off Pressure in PSI | |
|---------------------|---------------|---------------------------|----------------|
| | | 30mm Stroke | 40mm Stroke |
| 280in-lb | 2" | 95 | 70 |
| | 2-1/2" | 60 | 45 |
| | 3" | 40 | 30 |
| | 4" | 20 | 15 |
| | 5" | 15 | 10 |
| | 6" | 9 | 8 |
| 420in-lb | 2" | - | - |
| | 2-1/2" | 85 | 65 |
| | 3" | 60 | 45 |
| | 4" | 35 | 30 |
| | 5" | 20 | 15 |
| | 6" | 15 | 10 |
| 560in-lb | 2-1/2" | 115 | 85 |
| | 3" | 75 | 60 |
| | 4" | 45 | 35 |
| | 5" | 25 | 20 |
| | 6" | 20 | 15 |
| 620in-lb | 2-1/2" | >125 | 95 |
| | 3" | 95 | 60 |
| | 4" | 55 | 40 |
| | 5" | 35 | 25 |
| | 6" | 25 | 20 |
| 720in-lb | 2-1/2" | >125 | >125 |
| | 3" | 105 | 75 |
| | 4" | 65 | 40 |
| | 5" | 45 | 35 |
| | 6" | 30 | 25 |

Note: The listed close-off pressures are estimated numbers for all commercial manufacturers



Globe Valve Linkage Selection Chart

Manufacturer's Valve and Linkage Model Numbers

| Valve Models | | Valve Size | | | | | | | | | | | |
|------------------------------|---|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|---------------------|---------------------|---------------------|--------------------|-----------------|-----------------|
| Manufacturer | Model# | 1/2" | 3/4" | 1" | 1-1/4" | 1-1/2" | 2" | 2-1/2" | 3" | 4" | 5" | 6" | |
| Johnson Control | V90AD-1C thru 7C V90DD-1C thru 7C | LVB116 JU5T1 | LVB116 JU5T1 | LVB123 JU5T1 | - | LVB123 JU5T1 | - | - | - | - | - | - | |
| | V90CA-1 thru 8 | LVB123 JU5T1 | LVB123 JU5T1 | LVB123 JU5T1 | LVB123 JU5T1 | LVB123 JU5T1 | LVB123 JU5T1 | LVB123 JU2T3 | LVB130/230 JU2T3 | - | - | - | |
| | VG 7000/2000 Series | LVB116 JU1T1 | LVB116 JU1T1 | LVB116 JU3T1 | LVB116 JU3T1 | LVB123 JU3T1 | LVB123 JU3T1 | LVB123 JU4T3 | LVB123 JU4T3 | LVB130/230 JU4T3 | LVB230 JU4T3/T5 | LVB240 JU4T5 | LVB240 JU4T5 |
| | VTM Series VB-3752 | LVB116 JU5T1 | LVB116 JU5T1 | LVB116 JU5T1 | LVB123 JU5T1 | LVB123 JU5T1 | LVB123 JU5T1 | LVB123 JU2T3 | LVB123 JU2T3 | LVB130/230 JU2T3 | LVB230 JU2T3 | LVB240 JU6T5 | LVB240 JU4T5 |
| | VB-3754-1 thru 8 VB-3970 | LVB116 JU5T1 | LVB116 JU5T1 | LVB123 JU5T1 | LVB123 JU5T1 | LVB123 JU5T1 | LVB123 JU5T1 | LVB123 JU2T3 | LVB123 JU2T3 | LVB130/230 JU2T3 | LVB230 JU2T3 | LVB240 JU6T5 | LVB240 JU6T5 |
| | VB-3974-1 thru 7 VB-4324-1 thru 7 VB-4322 | LVB116 JU5T1 | LVB116 JU5T1 | LVB123 JU5T1 | LVB123 JU5T1 | LVB123 JU5T1 | LVB123 JU5T1 | LVB123 JU2T3 | LVB123 JU2T3 | LVB130/230 JU2T3 | LVB230 JU2T3 | LVB240 JU6T5 | LVB240 JU6T5 |
| | V-5462 | - | - | - | - | - | - | - | LVB123 JU6T3 | LVB130/230 JU6T3 | LVB230 JU6T5 | LVB240 JU6T5 | LVB240 JU6T5 |
| Honeywell | V5011 V5013 | LVB123 HU1T1 | LVB123 HU1T1 | LVB123 HU1T1 | LVB123 HU1T1 | LVB123 HU1T1 | LVB123 HU1T1 | LVB123 HU1T1 | LVB123 HU1T1 | LVB240 HU2T4 | LVB240 HU2T4 | LVB240 HU2T4 | |
| Siemens Landis Powers | 590 (3-way) | - | - | - | - | LVB116 GU2T1 | LVB116 GU2T1 | LVB123 GU3T3 | LVB123 GU3T3 | LVB230 GU3T3 | LVB240 GU3T3 | LVB240 GU3T3 | |
| | 591 (2-way) | - | - | - | - | LVB130 GU2T1 | LVB130 GU2T1 | LVB123 GU3T3 | LVB123 GU3T3 | LVB230 GU3T3 | LVB240 GU3T3 | LVB240 GU3T3 | |
| | 658 | LVB116 GU1T1 | LVB116 GU1T1 | LVB116 GU1T1 | LVB116 GU1T1 | - | - | - | - | - | - | - | |
| | 599 | LVB123 ** | LVB123 ** | LVB123 ** | LVB123 ** | LVB123 ** | LVB123 ** | LVB123 ** | LVB123 ** | LVB240 ** | LVB240 ** | LVB240 ** | |
| Siebe Barber Colman Invensys | VB-111-0-X-1 thru 9 | LVB116 BU1T1 | LVB116 BU1T1 | LVB116 BU1T1 | LVB116 BU1T1 | - | - | - | - | - | - | - | |
| | VB-921X-0-X-1 thru 13 | LVB116 BU1T1 | LVB116 BU1T1 | LVB116 BU1T1 | LVB116 BU1T1 | LVB130 BU2T1 | LVB130 BU2T1 | LVB130/230 BU3T5 | LVB140/240 BU3T5 | - | - | - | |
| | VB-922X-9-X-1 thru 13 | LVB116 BU1T1 | LVB116 BU1T1 | LVB116 BU1T1 | LVB116 BU1T1 | LVB130 BU2T1 | LVB130 BU2T1 | LVB130/230 BU3T5 | LVB130/230 BU3T5 | - | - | - | |
| | VB-925X-0-X-1 thru 13 | LVB116 BU1T1 | LVB116 BU1T1 | LVB116 BU1T1 | LVB116 BU1T1 | LVB130 BU2T1 | LVB130 BU2T1 | LVB130/230 BU3T5 | LVB130/230 BU3T5 | - | - | - | |
| | VB-926X-0-X-1 thru 13 | LVB116 BU1T1 | LVB116 BU1T1 | LVB116 BU1T1 | LVB116 BU1T1 | LVB130 BU2T1 | LVB130 BU2T1 | LVB130/230 BU3T5 | LVB130/230 BU3T5 | - | - | - | |
| | VB-927X-0-X-1 thru 11 VB-928X-0-X-1 thru 11 | LVB116 BU1T1 | LVB116 BU1T1 | LVB116 BU1T1 | LVB116 BU1T1 | LVB130 BU2T1 | LVB130 BU2T1 | - | - | - | - | - | |
| | VB-931X-0-X-1 thru 14 | LVB116 BU1T1 | LVB116 BU1T1 | LVB116 BU1T1 | LVB116 BU1T1 | LVB130 BU2T1 | LVB130 BU2T1 | LVB130/230 BU3T5 | LVB130/230 BU3T5 | LVB240 BU3T5 | - | - | |
| | VB-932X-0-X-1 thru 11 | LVB116 BU1T1 | LVB116 BU1T1 | LVB116 BU1T1 | LVB116 BU1T1 | LVB130 BU2T1 | LVB130 BU2T1 | LVB123 WU1T3 | LVB123 WU1T3 | LVB230 WU1T3 | LVB230 WU1T3 | LVB240 WU1T3 | |
| VB-7213 VB-7313 | LVB116 BU1T1 | LVB116 BU1T1 | LVB116 BU1T1 | LVB116 BU1T1 | LVB116 BU1T1 | LVB116 BU1T1 | - | - | - | - | - | | |

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Notes: if linkage information is not found on this chart, please contact our customer service to see if the linkage is available to be customized.

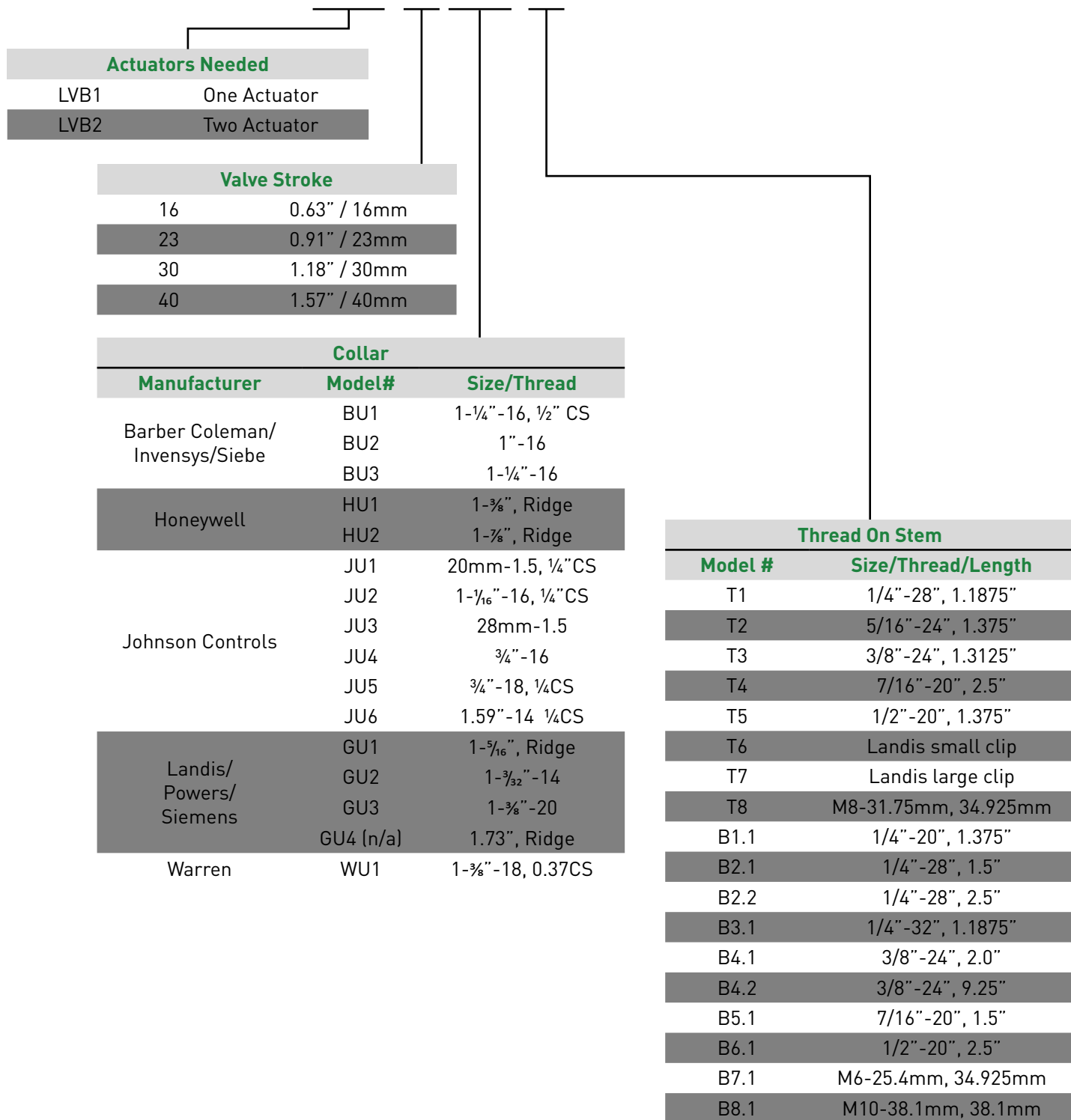
Johnson Controls VG7000 Series are available from 1/2" to 2", VG2000 Series are available from 2 1/2"-6".

** Siemens 599 Series globe valves come with collars and caps built into the valve.



Part Number Matrix

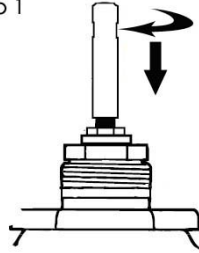
Series Numbers: **LVB1 16 HU1 T1**





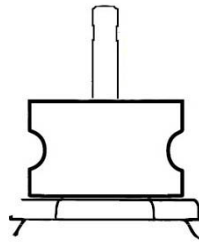
Linkage Installation

Step 1



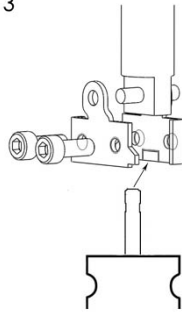
Remove any existing linkages then screw the cap onto the valve stem.

Step 2



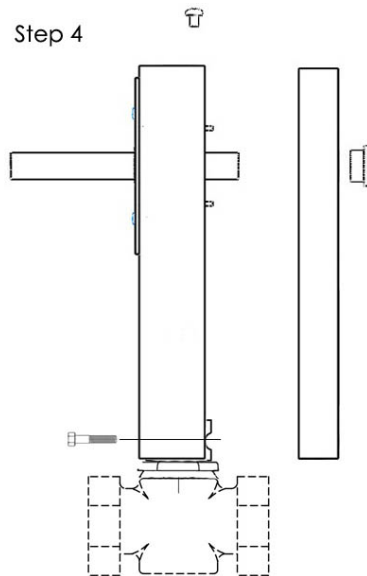
Screw the collar onto the valve neck and tighten.

Step 3



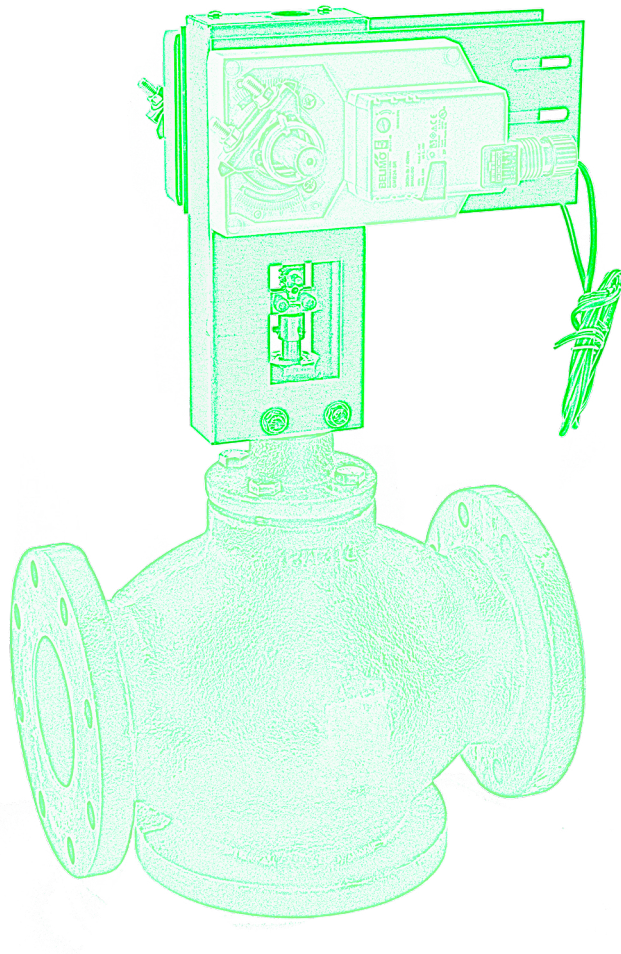
Attach the stem cap to the mounting clips and tighten the screws.

Step 4



Use two bolts to secure the valve into the inside





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VSI

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