



BVA300 Series Pneumatic Actuators for use with Spirax Sarco Ball Valves

Description

The BVA300 series are pneumatic rotary actuators which automate Spirax Sarco ball valves in a wide range of industrial applications. BVA300 actuators are provided with bi-directional travel stops that allow a rotation of 90°±5°. Linkage is made with the new BVL_X kits with extended stem (not available for M10MVi and M10MSi models. For more details, see page 7).

Pneumatic actuated ball valve range:

| | | Page |
|---------------------------------|--|------|
| | M10Vi; M10Si; M10Ti; M10ECFi4; M10Hi; M10HTi | 5 |
| Three-piece ball valves: | M10HPi; M10Pi | 6 |
| | M10MVi; M10MSi | 7 |
| | M70i; M80i | 8 |
| Actuators combined with: | Two-piece ball valves: M31V ISO; M31S ISO; M33V ISO; M33S ISO; M33F ISO; M33T ISO | 9 |
| | M33H ISO; M33HT ISO | 10 |
| | M21Hi; M21HTi; M40Hi; M40HTi | 11 |
| One-piece ball valves: | M45i | 12 |
| | M21Ti; M21Vi; M21Si; M21Fi; M40Ti; M40Vi; M40Si; M40Fi | 13 |
| | M21ViJ; M21SiJ; M40ViJ; M40SiJ | 14 |

BVA300 pneumatic actuator range:

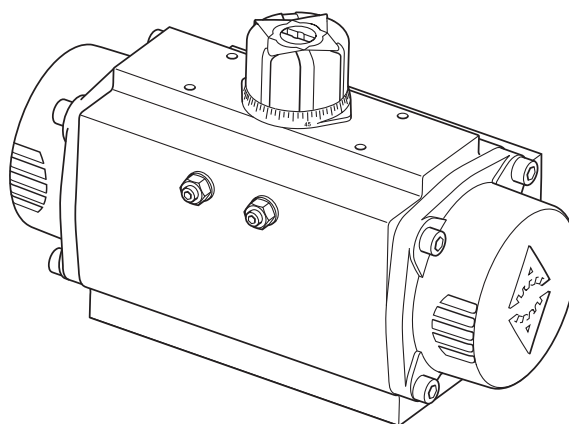
For optimum actuator performance use the selection tables on pages 5 to 14.

Double acting: 310D, 315D, 320D, 325D, 330D, 335D, 340D, 345D, 350D, 355D, 357D, 360D, 365D.

Single acting (spring return): 310S, 315S, 320S, 325S, 330S, 335S, 340S, 345S, 350S, 355S, 357S, 360S, 365S.

Technical data

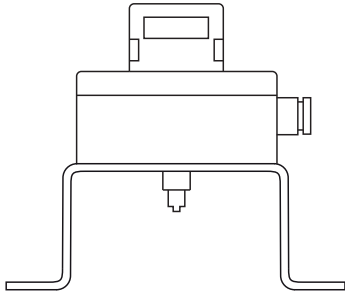
| | |
|---|--|
| Maximum pressure | 8 bar g |
| Minimal pressure | 3 bar g |
| Operating temperature range | -30 °C to 100 °C |
| Note: Other operating temperature ranges available on request. | |
| Operating media | Compressed air (clean and dry) Non corrosive gas Light hydraulic oil (must be compatible with 'O' rings) |
| Rotation 90 ±5° | Anticlockwise with port 'A' pressurised |
| Air pressure for standard selection tables | 3,4,5 and 6 bar g |



Optional extras:

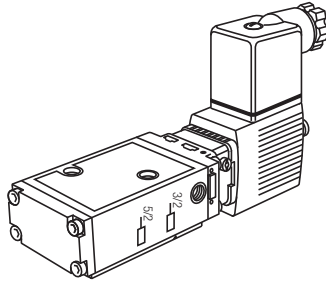
Limit switch box:

For more details, see TI-P372-26



Solenoid valve: a range of Namur electrical valves with an encapsulation rating to IP65 is available for use with BVA actuators. These can be used to drive actuators with compressed air or non-corrosive gas.

Note: Explosion proof solenoid valves are available on request.

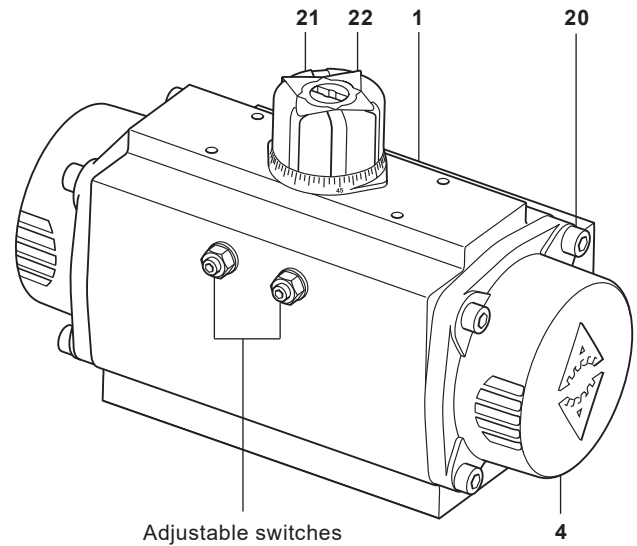


| Solenoid | Coil voltage |
|--------------------|--------------|
| | 220 Vac |
| 3/2 NAMUR for BVAS | 110 Vac |
| | 24 Vac/dc |
| 5/2 NAMUR for BVAD | 220 Vac |
| | 110 Vac |
| | 24 Vac/dc |

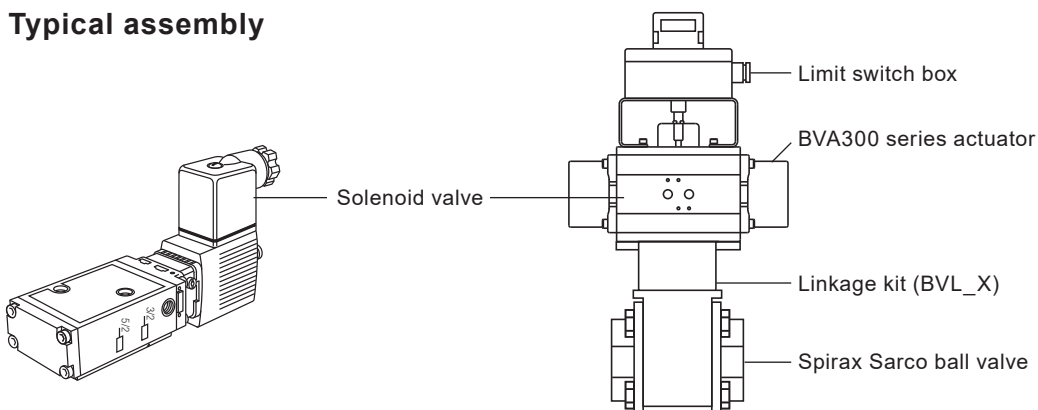
Materials

| No | Part | Material |
|----|--------------------|----------------------------|
| 1 | Body | Aluminium hard anodized |
| 3 | Pinion* | Nickel plated carbon steel |
| 4 | End caps | Aluminium epoxy coated |
| 20 | Bolt | Stainless steel |
| 21 | Indicator cap | Polyamide |
| 22 | Coloured indicator | Polyamide |

*shown clearly in the spares drawing on page 4



Typical assembly

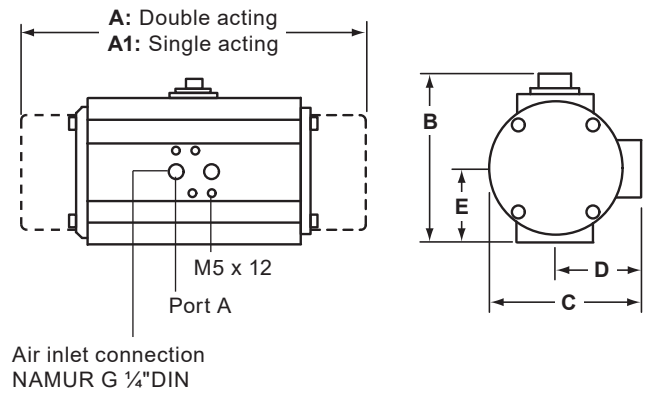


BVL_X linkage kit components and materials

| | |
|--------------------------|---|
| Frame | Stainless steel AISI 304/Carbon steel CF8M and Stainless steel WCB (only for M10MVi and M10MSi) |
| Stem adapter | |
| Frame-to-actuator screws | Stainless steel |
| Washers | Stainless steel |
| Frame-to-valve screws | Stainless steel |
| Stem nut | Stainless steel |

Dimensions/weights (approximate) in mm and kg

| Type | A1 | A | B | C | D | E | Weights | |
|---------------|-----|-----|-----|-----|-----|-----|---------|--------|
| | | | | | | | Single | Double |
| BVA310 | 163 | 145 | 96 | 76 | 48 | 34 | 1.6 | 1.4 |
| BVA315 | 195 | 158 | 115 | 91 | 56 | 45 | 2.3 | 2.1 |
| BVA320 | 217 | 177 | 137 | 111 | 66 | 55 | 3.7 | 3.0 |
| BVA325 | 258 | 196 | 147 | 122 | 71 | 60 | 4.8 | 3.8 |
| BVA330 | 299 | 225 | 165 | 136 | 78 | 70 | 7.3 | 5.6 |
| BVA335 | 349 | 273 | 182 | 153 | 86 | 80 | 10.8 | 8.5 |
| BVA340 | 397 | 304 | 199 | 173 | 96 | 85 | 15.4 | 11.2 |
| BVA345 | 473 | 372 | 221 | 192 | 106 | 98 | 22.2 | 16.9 |
| BVA350 | 560 | 439 | 249 | 213 | 116 | 114 | 34.3 | 25.8 |
| BVA355 | 601 | 461 | 280 | 243 | 131 | 130 | 46.0 | 32.5 |
| BVA357 | 698 | 504 | 313 | 276 | 148 | 147 | 66.0 | 49.1 |
| BVA360 | 738 | 518 | 383 | 356 | 178 | 177 | 99.9 | 69.6 |
| BVA365 | 940 | 630 | 434 | 415 | 213 | 201 | 183.0 | 129.4 |



How to order

Note: You will need to refer to the selection tables (pages 5 to 14) before placing an order.

How to order example:

- 1 - Spirax Sarco BVA320S/8 actuator
- 1 - 3/2 NAMUR solenoid 24 Vac
- 1 - 303X linkage kit
- 1 - LSB72 limit switch box

Note: Actuated ball valves may be supplied completely assembled to suit the application.

Spare parts The spare parts available are detailed below. No other parts are supplied as spares.

Available spares

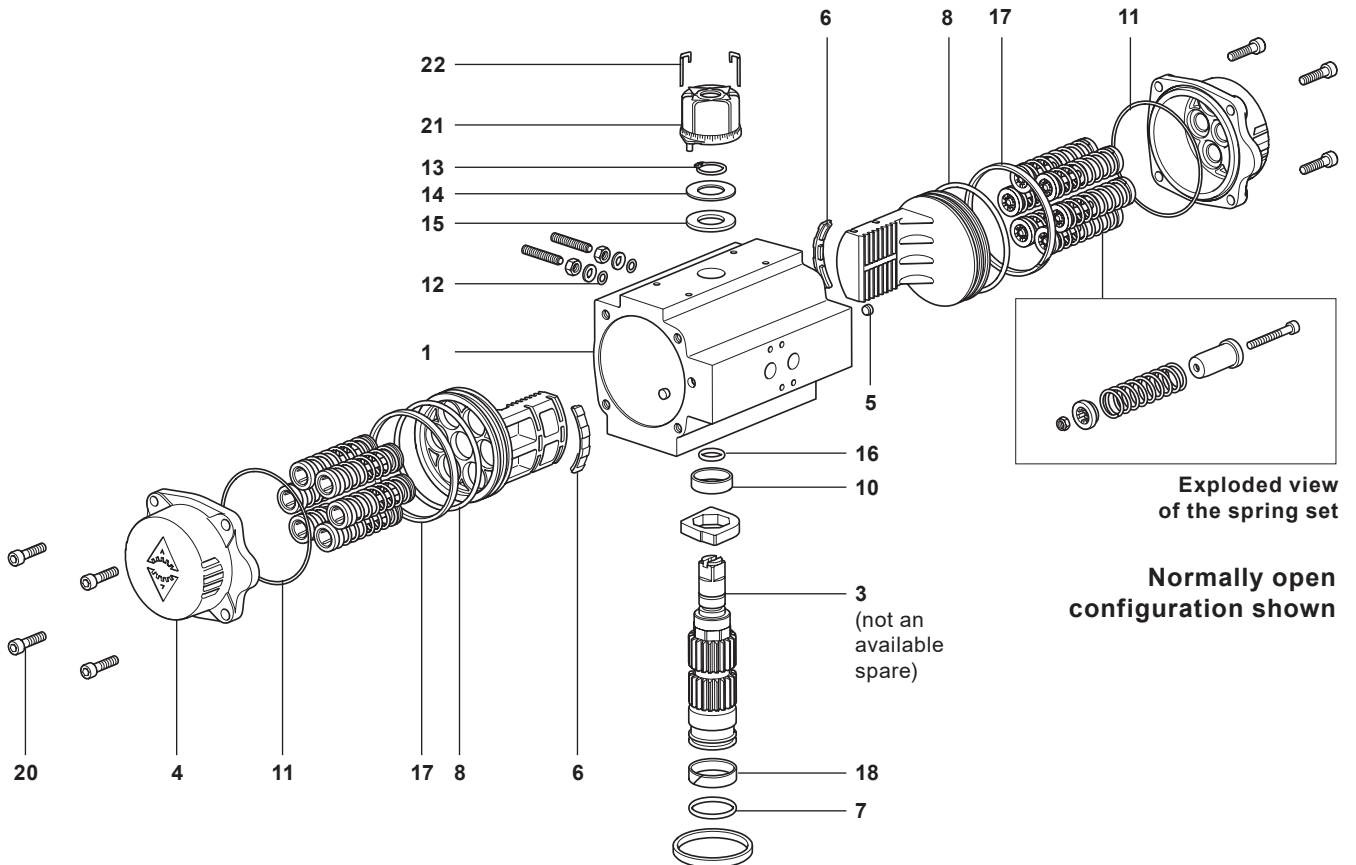
| | | |
|-------------------------------|---|------------------|
| | 'O' rings set (available either in NBR, Viton or Silicon) | 7, 8, 11, 12, 16 |
| BVA300 series maintenance kit | Pinion washers | 13, 14, 15 |
| | Others | 5, 6, 10, 17, 18 |

How to order spares

Always order spares by using the description given in the column headed 'Available spares' and state the nomenclature of the pneumatic actuator that they are intended for.

Note: all the spares mentioned above are sold together in one spare part kit.

Example: 1 - BVA300 series maintenance kit with 'O' rings in NBR for a Spirax Sarco BVA320S/08 pneumatic actuator.



Spring quantity selection

According to the available air pressure, the BVA has different spring configurations. For more details, see the Installation and Maintenance Instructions IM-P372-24.

| BVA | Springs | | | | | |
|-----------|---------|-----|-----|------|------|------|
| | S/4 | S/6 | S/8 | S/10 | S/12 | S/14 |
| 310 | • | • | • | | | |
| 315 - 365 | | | • | • | • | • |

Example: BVA325S/10 has 10 springs.

Selection tables

Pages 5 to 14 contain all necessary information to select the correct actuator for relevant Spirax Sarco ball valves. For valves not appearing in these tables please contact Spirax Sarco for advice.

Pneumatic actuator selection tables for three-piece ball valves

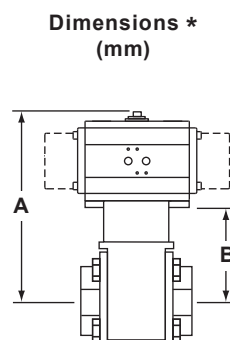
M10Vi; M10Si; M10Ti and M10ECFi4 ball valves

| DN | Double acting | | Single acting | |
|--|---------------|------|---------------|------|
| | BVA | BVL | BVA | BVL |
| Actuator operating pressure 3 bar g | | | | |
| 1/4" RB - 3/8" RB | 310D | 300X | 310S/4 | 300X |
| 1/2" RB - 3/8" FB | 310D | 300X | 310S/4 | 300X |
| 3/4" RB - 1/2" FB | 310D | 300X | 315S/8 | 300X |
| 1" RB - 3/4" FB | 315D | 302X | 320S/8 | 303X |
| 1 1/4" RB - 1" FB | 320D | 311X | 325S/8 | 311X |
| 1 1/2" RB - 1 1/4" FB | 330D | 305X | 340S/8 | 316X |
| 2" RB - 1 1/2" FB | 330D | 306X | 340S/8 | 307X |
| 2 1/2" RB - 2" FB | 335D | 309X | 340S/8 | 309X |
| Actuator operating pressure 4 bar g | | | | |
| 1/4" RB - 3/8" RB | 310D | 300X | 310S/6 | 300X |
| 1/2" RB - 3/8" FB | 310D | 300X | 310S/6 | 300X |
| 3/4" RB - 1/2" FB | 310D | 300X | 315S/10 | 300X |
| 1" RB - 3/4" FB | 315D | 302X | 320S/10 | 303X |
| 1 1/4" RB - 1" FB | 315D | 310X | 320S/10 | 311X |
| 1 1/2" RB - 1 1/4" FB | 325D | 305X | 335S/10 | 316X |
| 2" RB - 1 1/2" FB | 325D | 306X | 335S/10 | 307X |
| 2 1/2" RB - 2" FB | 330D | 308X | 340S/10 | 309X |
| Actuator operating pressure 5 bar g | | | | |
| 1/4" RB - 3/8" RB | 310D | 300X | 310S/6 | 300X |
| 1/2" RB - 3/8" FB | 310D | 300X | 310S/6 | 300X |
| 3/4" RB - 1/2" FB | 310D | 300X | 310S/6 | 300X |
| 1" RB - 3/4" FB | 315D | 302X | 320S/12 | 303X |
| 1 1/4" RB - 1" FB | 315D | 310X | 320S/12 | 311X |
| 1 1/2" RB - 1 1/4" FB | 320D | 305X | 330S/12 | 305X |
| 2" RB - 1 1/2" FB | 325D | 306X | 335S/12 | 307X |
| 2 1/2" RB - 2" FB | 325D | 308X | 335S/12 | 309X |
| Actuator operating pressure 6 bar g | | | | |
| 1/4" RB - 3/8" RB | 310D | 300X | 310S/8 | 300X |
| 1/2" RB - 3/8" FB | 310D | 300X | 310S/8 | 300X |
| 3/4" RB - 1/2" FB | 310D | 300X | 310S/8 | 300X |
| 1" RB - 3/4" FB | 310D | 302X | 315S/14 | 302X |
| 1 1/4" RB - 1" FB | 315D | 310X | 320S/14 | 311X |
| 1 1/2" RB - 1 1/4" FB | 320D | 305X | 330S/14 | 305X |
| 2" RB - 1 1/2" FB | 320D | 306X | 330S/14 | 306X |
| 2 1/2" RB - 2" FB | 325D | 308X | 335S/14 | 309X |

M10Hi and M10HTi ball valves

| DN | Double acting | | Single acting | |
|--|---------------|------|---------------|------|
| | BVA | BVL | BVA | BVL |
| Actuator operating pressure 3 bar g | | | | |
| 1/4" RB - 3/8" RB | 315D | 490X | 320S/8 | 491X |
| 1/2" RB - 3/8" FB | 315D | 490X | 320S/8 | 491X |
| 3/4" RB - 1/2" FB | 315D | 490X | 325S/8 | 491X |
| 1" RB - 3/4" FB | 320D | 493X | 330S/8 | 493X |
| 1 1/4" RB - 1" FB | 325D | 494X | 340S/8 | 495X |
| 1 1/2" RB - 1 1/4" FB | 330D | 496X | 340S/8 | 497X |
| 2" RB - 1 1/2" FB | 330D | 498X | 340S/8 | 499X |
| 2 1/2" RB - 2" FB | 335D | 502X | 345S/8 | 503X |
| Actuator operating pressure 4 bar g | | | | |
| 1/4" RB - 3/8" RB | 310D | 490X | 320S/10 | 491X |
| 1/2" RB - 3/8" FB | 310D | 490X | 320S/10 | 491X |
| 3/4" RB - 1/2" FB | 315D | 490X | 320S/10 | 491X |
| 1" RB - 3/4" FB | 320D | 493X | 325S/10 | 493X |
| 1 1/4" RB - 1" FB | 325D | 494X | 335S/10 | 495X |
| 1 1/2" RB - 1 1/4" FB | 325D | 496X | 335S/10 | 497X |
| 2" RB - 1 1/2" FB | 330D | 498X | 340S/10 | 499X |
| 2 1/2" RB - 2" FB | 335D | 502X | 340S/10 | 502X |
| Actuator operating pressure 5 bar g | | | | |
| 1/4" RB - 3/8" RB | 310D | 490X | 315S/12 | 490X |
| 1/2" RB - 3/8" FB | 310D | 490X | 315S/12 | 490X |
| 3/4" RB - 1/2" FB | 315D | 490X | 320S/12 | 491X |
| 1" RB - 3/4" FB | 315D | 492X | 325S/12 | 493X |
| 1 1/4" RB - 1" FB | 320D | 494X | 330S/12 | 494X |
| 1 1/2" RB - 1 1/4" FB | 325D | 496X | 335S/12 | 497X |
| 2" RB - 1 1/2" FB | 325D | 498X | 335S/12 | 499X |
| 2 1/2" RB - 2" FB | 330D | 505X | 335S/12 | 502X |
| Actuator operating pressure 6 bar g | | | | |
| 1/4" RB - 3/8" RB | 310D | 490X | 315S/14 | 490X |
| 1/2" RB - 3/8" FB | 310D | 490X | 315S/14 | 490X |
| 3/4" RB - 1/2" FB | 310D | 490X | 320S/14 | 491X |
| 1" RB - 3/4" FB | 315D | 492X | 320S/14 | 493X |
| 1 1/4" RB - 1" FB | 320D | 494X | 330S/14 | 494X |
| 1 1/2" RB - 1 1/4" FB | 320D | 496X | 330S/14 | 496X |
| 2" RB - 1 1/2" FB | 325D | 498X | 335S/14 | 499X |
| 2 1/2" RB - 2" FB | 325D | 505X | 335S/14 | 502X |

| DN | A | B |
|--------|-----|-----|
| 1/4" | 218 | 122 |
| 3/8" | 218 | 122 |
| 1/2" | 218 | 122 |
| 3/4" | 239 | 124 |
| 1" | 266 | 129 |
| 1 1/4" | 281 | 134 |
| 1 1/2" | 336 | 137 |
| 2" | 342 | 143 |
| 2 1/2" | 356 | 157 |



| DN | A | B |
|--------|-----|-----|
| 1/4" | 259 | 122 |
| 3/8" | 259 | 122 |
| 1/2" | 259 | 122 |
| 3/4" | 271 | 124 |
| 1" | 294 | 129 |
| 1 1/4" | 347 | 134 |
| 1 1/2" | 336 | 137 |
| 2" | 342 | 143 |
| 2 1/2" | 378 | 157 |

* Note: The dimensions A and B represent the maximum size (mm) for the biggest recommended actuator according to each valve.

Selection tables

Pages 5 to 14 contain all necessary information to select the correct actuator for relevant Spirax Sarco ball valves. For valves not appearing in these tables please contact Spirax Sarco for advice.

Pneumatic actuator selection tables for three-piece ball valves

M10HPi ball valves

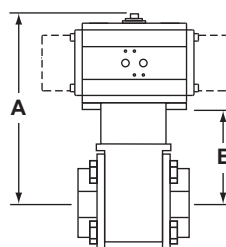
| DN | Double acting | | Single acting | |
|--|---------------|------|---------------|------|
| | BVA | BVL | BVA | BVL |
| Actuator operating pressure 3 bar g | | | | |
| 1/4" RB - 3/8" RB | 315D | 490X | 320S/8 | 491X |
| 1/2" RB - 3/8" FB | 315D | 490X | 320S/8 | 491X |
| 3/4" RB - 1/2" FB | 315D | 490X | 325S/8 | 491X |
| 1" RB - 3/4" FB | 320D | 493X | 330S/8 | 493X |
| 1 1/4" RB - 1" FB | 325D | 494X | 340S/8 | 495X |
| 1 1/2" RB - 1 1/4" FB | 330D | 496X | 340S/8 | 497X |
| 2" RB - 1 1/2" FB | 335D | 499X | 345S/8 | 500X |
| Actuator operating pressure 4 bar g | | | | |
| 1/4" RB - 3/8" RB | 310D | 490X | 320S/10 | 491X |
| 1/2" RB - 3/8" FB | 310D | 490X | 320S/10 | 491X |
| 3/4" RB - 1/2" FB | 315D | 490X | 320S/10 | 491X |
| 1" RB - 3/4" FB | 320D | 493X | 325S/10 | 493X |
| 1 1/4" RB - 1" FB | 325D | 494X | 335S/10 | 495X |
| 1 1/2" RB - 1 1/4" FB | 325D | 496X | 335S/10 | 497X |
| 2" RB - 1 1/2" FB | 335D | 499X | 340S/10 | 499X |
| Actuator operating pressure 5 bar g | | | | |
| 1/4" RB - 3/8" RB | 310D | 490X | 315S/12 | 490X |
| 1/2" RB - 3/8" FB | 310D | 490X | 315S/12 | 490X |
| 3/4" RB - 1/2" FB | 315D | 490X | 320S/12 | 491X |
| 1" RB - 3/4" FB | 315D | 492X | 325S/12 | 493X |
| 1 1/4" RB - 1" FB | 320D | 494X | 330S/12 | 494X |
| 1 1/2" RB - 1 1/4" FB | 325D | 496X | 335S/12 | 497X |
| 2" RB - 1 1/2" FB | 330D | 498X | 340S/12 | 499X |
| Actuator operating pressure 6 bar g | | | | |
| 1/4" RB - 3/8" RB | 310D | 490X | 315S/14 | 490X |
| 1/2" RB - 3/8" FB | 310D | 490X | 315S/14 | 490X |
| 3/4" RB - 1/2" FB | 310D | 490X | 320S/14 | 491X |
| 1" RB - 3/4" FB | 315D | 492X | 320S/14 | 493X |
| 1 1/4" RB - 1" FB | 320D | 494X | 330S/14 | 494X |
| 1 1/2" RB - 1 1/4" FB | 320D | 496X | 330S/14 | 496X |
| 2" RB - 1 1/2" FB | 330D | 498X | 340S/14 | 499X |

| DN | A | B |
|--------|-----|-----|
| 1/4" | 259 | 122 |
| 3/8" | 259 | 122 |
| 1/2" | 259 | 122 |
| 3/4" | 271 | 124 |
| 1" | 294 | 129 |
| 1 1/4" | 347 | 134 |
| 1 1/2" | 336 | 137 |
| 2" | 381 | 143 |

M10Pi ball valves

| DN | Double acting | | Single acting | |
|--|---------------|------|---------------|------|
| | BVA | BVL | BVA | BVL |
| Actuator operating pressure 3 bar g | | | | |
| 1/4" RB - 3/8" RB | 310D | 490X | 310S/4 | 490X |
| 1/2" RB - 3/8" FB | 310D | 490X | 310S/4 | 490X |
| 3/4" RB - 1/2" FB | 310D | 490X | 315S/8 | 490X |
| 1" RB - 3/4" FB | 315D | 492X | 320S/8 | 493X |
| 1 1/4" RB - 1" FB | 320D | 494X | 325S/8 | 494X |
| 1 1/2" RB - 1 1/4" FB | 330D | 496X | 340S/8 | 497X |
| 2" RB - 1 1/2" FB | 330D | 498X | 340S/8 | 499X |
| 2 1/2" RB - 2" FB | 330D | 505X | 340S/8 | 502X |
| Actuator operating pressure 4 bar g | | | | |
| 1/4" RB - 3/8" RB | 310D | 490X | 310S/6 | 490X |
| 1/2" RB - 3/8" FB | 310D | 490X | 310S/6 | 490X |
| 3/4" RB - 1/2" FB | 310D | 490X | 315S/10 | 490X |
| 1" RB - 3/4" FB | 315D | 492X | 320S/10 | 493X |
| 1 1/4" RB - 1" FB | 315D | 504X | 320S/10 | 494X |
| 1 1/2" RB - 1 1/4" FB | 325D | 496X | 335S/10 | 497X |
| 2" RB - 1 1/2" FB | 325D | 498X | 335S/10 | 499X |
| 2 1/2" RB - 2" FB | 330D | 505X | 340S/10 | 502X |
| Actuator operating pressure 5 bar g | | | | |
| 1/4" RB - 3/8" RB | 310D | 490X | 310S/6 | 490X |
| 1/2" RB - 3/8" FB | 310D | 490X | 310S/6 | 490X |
| 3/4" RB - 1/2" FB | 310D | 490X | 310S/6 | 490X |
| 1" RB - 3/4" FB | 315D | 492X | 320S/12 | 493X |
| 1 1/4" RB - 1" FB | 315D | 504X | 320S/12 | 494X |
| 1 1/2" RB - 1 1/4" FB | 320D | 496X | 330S/12 | 496X |
| 2" RB - 1 1/2" FB | 325D | 498X | 335S/12 | 499X |
| 2 1/2" RB - 2" FB | 325D | 505X | 335S/12 | 502X |
| Actuator operating pressure 6 bar g | | | | |
| 1/4" RB - 3/8" RB | 310D | 490X | 310S/8 | 490X |
| 1/2" RB - 3/8" FB | 310D | 490X | 310S/8 | 490X |
| 3/4" RB - 1/2" FB | 310D | 490X | 310S/8 | 490X |
| 1" RB - 3/4" FB | 310D | 492X | 315S/14 | 492X |
| 1 1/4" RB - 1" FB | 315D | 504X | 320S/14 | 494X |
| 1 1/2" RB - 1 1/4" FB | 320D | 496X | 330S/14 | 496X |
| 2" RB - 1 1/2" FB | 320D | 498X | 330S/14 | 498X |
| 2 1/2" RB - 2" FB | 325D | 505X | 335S/14 | 502X |

Dimensions *
(mm)



| DN | A | B |
|--------|-----|-----|
| 1/4" | 218 | 122 |
| 3/8" | 218 | 122 |
| 1/2" | 218 | 122 |
| 3/4" | 239 | 124 |
| 1" | 266 | 129 |
| 1 1/4" | 281 | 134 |
| 1 1/2" | 336 | 137 |
| 2" | 342 | 143 |
| 2 1/2" | 356 | 157 |

* Note: The dimensions A and B represent the maximum size (mm) for the biggest recommended actuator according to each valve.

Selection tables

Pages 5 to 14 contain all necessary information to select the correct actuator for relevant Spirax Sarco ball valves. For valves not appearing in these tables please contact Spirax Sarco for advice.

Pneumatic actuator selection tables for three-piece ball valves

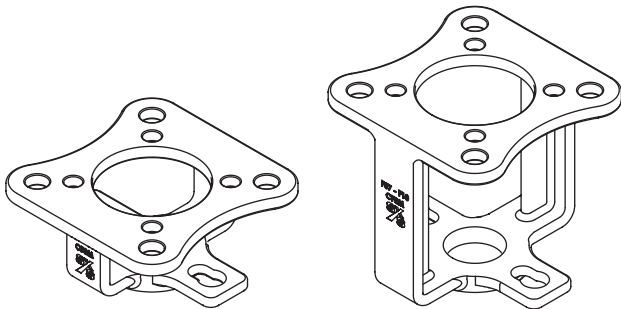
M10MVi and M10MSi ball valves

| DN | Double acting | | Single acting | |
|--|---------------|-----|---------------|-----|
| | BVA | BVL | BVA | BVL |
| Actuator operating pressure 3 bar g | | | | |
| 1/4" RB - 3/8" RB | 310D | 560 | 310S/4 | 560 |
| 1/2" RB - 3/8" FB | 310D | 560 | 310S/4 | 560 |
| 3/4" RB - 1/2" FB | 310D | 560 | 315S/8 | 560 |
| 1" RB - 3/4" FB | 315D | 562 | 320S/8 | 563 |
| 1 1/4" RB - 1" FB | 320D | 564 | 325S/8 | 564 |
| 1 1/2" RB - 1 1/4" FB | 330D | 564 | 340S/8 | 565 |
| 2" RB - 1 1/2" FB | 330D | 566 | 340S/8 | 567 |
| Actuator operating pressure 4 bar g | | | | |
| 1/4" RB - 3/8" RB | 310D | 560 | 310S/6 | 560 |
| 1/2" RB - 3/8" FB | 310D | 560 | 310S/6 | 560 |
| 3/4" RB - 1/2" FB | 310D | 560 | 315S/10 | 560 |
| 1" RB - 3/4" FB | 315D | 562 | 320S/10 | 563 |
| 1 1/4" RB - 1" FB | 320D | 564 | 320S/10 | 564 |
| 1 1/2" RB - 1 1/4" FB | 325D | 564 | 335S/10 | 565 |
| 2" RB - 1 1/2" FB | 325D | 566 | 335S/10 | 567 |

| DN | Double acting | | Single acting | |
|--|---------------|-----|---------------|-----|
| | BVA | BVL | BVA | BVL |
| Actuator operating pressure 5 bar g | | | | |
| 1/4" RB - 3/8" RB | 310D | 560 | 310S/6 | 560 |
| 1/2" RB - 3/8" FB | 310D | 560 | 310S/6 | 560 |
| 3/4" RB - 1/2" FB | 310D | 560 | 310S/6 | 560 |
| 1" RB - 3/4" FB | 315D | 562 | 320S/12 | 563 |
| 1 1/4" RB - 1" FB | 320D | 564 | 320S/12 | 564 |
| 1 1/2" RB - 1 1/4" FB | 320D | 564 | 330S/12 | 564 |
| 2" RB - 1 1/2" FB | 325D | 566 | 335S/12 | 567 |
| Actuator operating pressure 6 bar g | | | | |
| 1/4" RB - 3/8" RB | 310D | 560 | 310S/8 | 560 |
| 1/2" RB - 3/8" FB | 310D | 560 | 310S/8 | 560 |
| 3/4" RB - 1/2" FB | 310D | 560 | 310S/8 | 560 |
| 1" RB - 3/4" FB | 310D | 562 | 315S/14 | 562 |
| 1 1/4" RB - 1" FB | 320D | 564 | 320S/14 | 564 |
| 1 1/2" RB - 1 1/4" FB | 320D | 564 | 330S/14 | 564 |
| 2" RB - 1 1/2" FB | 320D | 566 | 330S/14 | 566 |

Automation

Spirax Sarco offers two height options, on the one hand low bracket (40 mm) for applications below 100 °C (212 °F). For higher temperature applications the use of high temperature bracket of about 90 mm height is recommended.



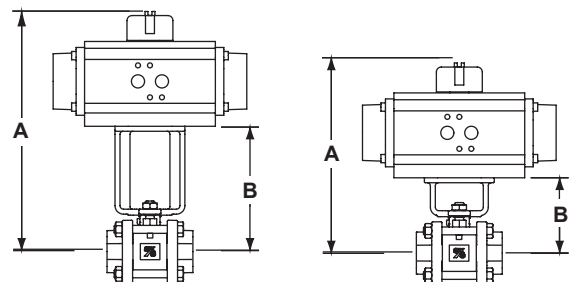
Kit BVA for M10M selection guide:

| | | |
|----------------|------------------------------|---|
| Bracket height | Blank = Short bracket (40mm) | X |
| | X = Tall bracket (90mm) | |
| Kit material | Blank Stainless steel | C |
| | C Carbon steel | |

Example: 1 off Spirax Sarco Kit BVL 560 - CX.

Dimensions (mm)

| DN | A | B | C | D |
|--------|-------|-------|-------|------|
| 1/4" | 214 | 118 | 164 | 68 |
| 3/8" | 214 | 118 | 164 | 68 |
| 1/2" | 214 | 118 | 164 | 68 |
| 3/4" | 235 | 120 | 185 | 70 |
| 1" | 265.5 | 125.5 | 212.5 | 75.5 |
| 1 1/4" | 278 | 131 | 228 | 81 |
| 1 1/2" | 333.5 | 134.5 | 283.5 | 84.5 |
| 2" | 341 | 142 | 291 | 92 |



* Note: The dimensions A and B represent the maximum size (mm) for the biggest recommended actuator according to each valve.

Selection tables

Pages 5 to 14 contain all necessary information to select the correct actuator for relevant Spirax Sarco ball valves. For valves not appearing in these tables please contact Spirax Sarco for advice.

Pneumatic actuator selection tables for three-piece ball valves

M70i ball valves

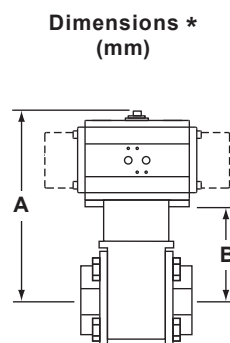
| DN | Double acting | | Single acting | |
|--|---------------|------|---------------|------|
| | BVA | BVL | BVA | BVL |
| Actuator operating pressure 3 bar g | | | | |
| ½" | 315D | 300X | 320S/8 | 301X |
| ¾" | 315D | 300X | 325S/8 | 301X |
| 1" | 320D | 303X | 325S/8 | 303X |
| 1½" | 330D | 306X | 340S/8 | 307X |
| 2" | 335D | 309X | 345S/8 | 318X |
| Actuator operating pressure 4 bar g | | | | |
| ½" | 315D | 300X | 320S/10 | 301X |
| ¾" | 315D | 300X | 320S/10 | 301X |
| 1" | 315D | 302X | 325S/10 | 303X |
| 1½" | 330D | 306X | 340S/10 | 307X |
| 2" | 335D | 309X | 340S/10 | 309X |
| Actuator operating pressure 5 bar g | | | | |
| ½" | 310D | 300X | 320S/12 | 301X |
| ¾" | 315D | 300X | 320S/12 | 301X |
| 1" | 315D | 302X | 320S/12 | 303X |
| 1½" | 325D | 306X | 335S/12 | 307X |
| 2" | 330D | 308X | 340S/12 | 309X |
| Actuator operating pressure 6 bar g | | | | |
| ½" | 310D | 300X | 315S/14 | 300X |
| ¾" | 310D | 300X | 320S/14 | 301X |
| 1" | 315D | 302X | 320S/14 | 303X |
| 1½" | 325D | 306X | 335S/14 | 307X |
| 2" | 330D | 308X | 335S/14 | 309X |

M80i ball valves

| DN | Double acting | | Single acting | |
|--|---------------|------|---------------|------|
| | BVA | BVL | BVA | BVL |
| Actuator operating pressure 3 bar g | | | | |
| 2½" | 335D | 481X | 345S/8 | 482X |
| 3" | 340D | 481X | 345S/8 | 482X |
| 4" | 340D | 484X | 350S/8 | 486X |
| Actuator operating pressure 4 bar g | | | | |
| 2½" | 335D | 481X | 340S/10 | 481X |
| 3" | 335D | 481X | 345S/10 | 482X |
| 4" | 335D | 484X | 345S/10 | 485X |
| Actuator operating pressure 5 bar g | | | | |
| 2½" | 330D | 480X | 340S/12 | 481X |
| 3" | 335D | 481X | 340S/12 | 481X |
| 4" | 335D | 484X | 345S/12 | 485X |
| Actuator operating pressure 6 bar g | | | | |
| 2½" | 330D | 480X | 340S/14 | 481X |
| 3" | 330D | 480X | 340S/14 | 481X |
| 4" | 335D | 484X | 340S/14 | 484X |

| DN | A | B |
|-----|-----|-----|
| 2½" | 407 | 186 |
| 3" | 434 | 213 |
| 4" | 499 | 250 |

| DN | A | B |
|-----|-----|-----|
| ½" | 259 | 122 |
| ¾" | 271 | 124 |
| 1" | 276 | 129 |
| 1½" | 342 | 143 |
| 2" | 378 | 157 |



* **Note:** The dimensions **A** and **B** represent the maximum size (mm) for the biggest recommended actuator according to each valve.

Selection tables

Pages 5 to 14 contain all necessary information to select the correct actuator for relevant Spirax Sarco ball valves. For valves not appearing in these tables please contact Spirax Sarco for advice.

Pneumatic actuator selection tables for two-piece ball valves

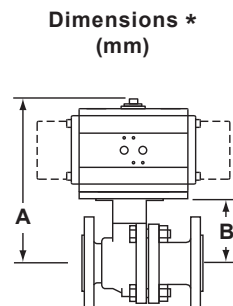
M31V ISO and M31S ISO ball valves

| DN | Double acting | | Single acting | |
|--|---------------|------|---------------|------|
| | BVA | BVL | BVA | BVL |
| Actuator operating pressure 3 bar g | | | | |
| 2" | 325D | 400X | 335S/8 | 401X |
| 2½" | 330D | 402X | 340S/8 | 403X |
| 3" | 330D | 402X | 345S/8 | 404X |
| 4" | 345D | 406X | 355S/8 | 407X |
| 6" | 355D | 409X | 365S/8 | 414X |
| 8" | 360D | 413X | - | - |
| Actuator operating pressure 4 bar g | | | | |
| 2" | 320D | 400X | 330S/10 | 400X |
| 2½" | 325D | 402X | 335S/10 | 403X |
| 3" | 330D | 402X | 340S/10 | 403X |
| 4" | 340D | 405X | 350S/10 | 407X |
| 6" | 355D | 409X | 360S/10 | 410X |
| 8" | 355D | 412X | 360S/12 | 413X |
| Actuator operating pressure 5 bar g | | | | |
| 2" | 320D | 400X | 330S/12 | 400X |
| 2½" | 320D | 402X | 330S/12 | 402X |
| 3" | 325D | 402X | 335S/12 | 403X |
| 4" | 335D | 405X | 350S/12 | 407X |
| 6" | 350D | 409X | 360S/12 | 410X |
| 8" | 355D | 412X | 360S/12 | 413X |
| Actuator operating pressure 6 bar g | | | | |
| 2" | 320D | 400X | 330S/14 | 400X |
| 2½" | 320D | 402X | 330S/14 | 402X |
| 3" | 325D | 402X | 335S/14 | 403X |
| 4" | 335D | 405X | 345S/14 | 406X |
| 6" | 350D | 409X | 360S/14 | 410X |
| 8" | 350D | 412X | 360S/14 | 413X |

M33V ISO, M33S ISO, M33F and M33T ISO ball valves

| DN | Double acting | | Single acting | |
|--|---------------|------|---------------|------|
| | BVA | BVL | BVA | BVL |
| Actuator operating pressure 3 bar g | | | | |
| 2" | 330D | 510X | 340S/8 | 511X |
| 2½" | 335D | 513X | 345S/8 | 514X |
| 3" | 340D | 513X | 350S/8 | 526X |
| 4" | 350D | 517X | 360S/8 | 527X |
| 6" | 360D | 520X | 365S/8 | 521X |
| 8" | 365D | 525X | - | - |
| Actuator operating pressure 4 bar g | | | | |
| 2" | 330D | 510X | 335S/10 | 511X |
| 2½" | 335D | 513X | 340S/10 | 513X |
| 3" | 335D | 513X | 345S/10 | 514X |
| 4" | 345D | 516X | 355S/10 | 517X |
| 6" | 355D | 519X | 360S/10 | 520X |
| 8" | 360D | 524X | 365S/10 | 525X |
| Actuator operating pressure 5 bar g | | | | |
| 2" | 325D | 510X | 335S/12 | 511X |
| 2½" | 330D | 512X | 340S/12 | 513X |
| 3" | 335D | 513X | 340S/12 | 513X |
| 4" | 345D | 516X | 355S/12 | 517X |
| 6" | 350D | 519X | 360S/12 | 520X |
| 8" | 360D | 524X | 365S/12 | 525X |
| Actuator operating pressure 6 bar g | | | | |
| 2" | 325D | 510X | 335S/14 | 511X |
| 2½" | 330D | 512X | 335S/14 | 513X |
| 3" | 335D | 513X | 340S/14 | 513X |
| 4" | 345D | 516X | 350S/14 | 517X |
| 6" | 350D | 519X | 360S/14 | 520X |
| 8" | 360D | 524X | 365S/14 | 525X |

| DN | A | B |
|-----|-----|-----|
| 2" | 340 | 158 |
| 2½" | 371 | 172 |
| 3" | 400 | 179 |
| 4" | 488 | 208 |
| 6" | 747 | 313 |
| 8" | 731 | 348 |



| DN | A | B |
|-----|-----|-----|
| 2" | 356 | 157 |
| 2½" | 390 | 169 |
| 3" | 426 | 177 |
| 4" | 647 | 264 |
| 6" | 750 | 316 |
| 8" | 785 | 351 |

* Note: The dimensions A and B represent the maximum size (mm) for the biggest recommended actuator according to each valve.

Selection tables

Pages 5 to 14 contain all necessary information to select the correct actuator for relevant Spirax Sarco ball valves. For valves not appearing in these tables please contact Spirax Sarco for advice.

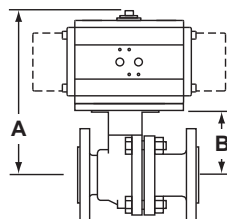
Pneumatic actuator selection tables for two-piece ball valves

M33H ISO and M33HT ISO ball valves

| DN | Double acting | | Single acting | |
|--|---------------|------|---------------|------|
| | BVA | BVL | BVA | BVL |
| Actuator operating pressure 3 bar g | | | | |
| 2" | 335D | 511X | 345S/8 | 528X |
| 2½" | 335D | 513X | 345S/8 | 514X |
| 3" | 340D | 513X | 350S/8 | 526X |
| 4" | 350D | 517X | 360S/8 | 527X |
| 6" | 360D | 520X | 365S/8 | 521X |
| 8" | 365D | 525X | - | - |
| Actuator operating pressure 4 bar g | | | | |
| 2" | 330D | 510X | 340S/10 | 511X |
| 2½" | 335D | 513X | 340S/10 | 513X |
| 3" | 335D | 513X | 345S/10 | 514X |
| 4" | 345D | 516X | 355S/10 | 517X |
| 6" | 357D | 520X | 360S/10 | 520X |
| 8" | 360D | 524X | 365S/10 | 525X |
| Actuator operating pressure 5 bar g | | | | |
| 2" | 330D | 510X | 340S/12 | 511X |
| 2½" | 330D | 512X | 340S/12 | 513X |
| 3" | 335D | 513X | 345S/12 | 514X |
| 4" | 345D | 516X | 355S/12 | 517X |
| 6" | 355D | 519X | 360S/12 | 520X |
| 8" | 360D | 524X | 365S/12 | 525X |
| Actuator operating pressure 6 bar g | | | | |
| 2" | 325D | 510X | 335S/14 | 511X |
| 2½" | 325D | 512X | 340S/14 | 513X |
| 3" | 335D | 513X | 340S/14 | 513X |
| 4" | 345D | 516X | 350S/14 | 517X |
| 6" | 350D | 519X | 360S/14 | 520X |
| 8" | 360D | 524X | 365S/14 | 525X |

| DN | A | B |
|-----|-----|-----|
| 2" | 395 | 174 |
| 2½" | 390 | 169 |
| 3" | 426 | 177 |
| 4" | 647 | 264 |
| 6" | 750 | 316 |
| 8" | 785 | 351 |

Dimensions *
(mm)



* Note: The dimensions **A** and **B** represent the maximum size (mm) for the biggest recommended actuator according to each valve.

Selection tables

Pages 5 to 14 contain all necessary information to select the correct actuator for relevant Spirax Sarco ball valves. For valves not appearing in these tables please contact Spirax Sarco for advice.

Pneumatic actuator selection tables for one-piece ball valves

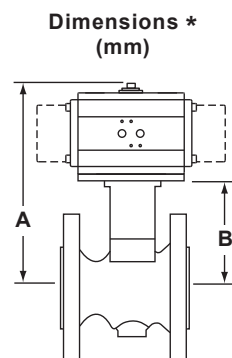
M21Hi and M21HTi ball valves

M40Hi and M40HTi ball valves

| DN | Double acting | | Single acting | |
|--|---------------|------|---------------|------|
| | BVA | BVL | BVA | BVL |
| Actuator operating pressure 3 bar g | | | | |
| ½" ** | 315D | 300X | 325S/8 | 301X |
| ¾" ** | 315D | 300X | 325S/8 | 301X |
| 1" | 320D | 303X | 325S/8 | 303X |
| 1¼" | 320D | 494X | 330S/8 | 494X |
| 1½" | 325D | 306X | 340S/8 | 307X |
| 2" | 330D | 306X | 340S/8 | 307X |
| 2½" | 335D | 511X | 345S/8 | 528X |
| 3" | 335D | 513X | 345S/8 | 514X |
| 4" | 340D | 513X | 350S/8 | 526X |
| 6" | 350D | 517X | 360S/8 | 527X |
| Actuator operating pressure 4 bar g | | | | |
| ½" ** | 315D | 300X | 320S/10 | 301X |
| ¾" ** | 315D | 300X | 320S/10 | 301X |
| 1" | 315D | 302X | 325S/10 | 303X |
| 1¼" | 320D | 494X | 325S/10 | 494X |
| 1½" | 325D | 306X | 335S/10 | 307X |
| 2" | 325D | 306X | 335S/10 | 307X |
| 2½" | 335D | 511X | 345S/10 | 528X |
| 3" | 335D | 513X | 345S/10 | 514X |
| 4" | 340D | 513X | 350S/10 | 526X |
| 6" | 350D | 517X | 357S/10 | 527X |

| DN | Double acting | | Single acting | |
|--|---------------|------|---------------|------|
| | BVA | BVL | BVA | BVL |
| Actuator operating pressure 5 bar g | | | | |
| ½" ** | 315D | 300X | 320S/12 | 301X |
| ¾" ** | 315D | 300X | 320S/12 | 301X |
| 1" | 315D | 302X | 320S/12 | 303X |
| 1¼" | 315D | 504X | 325S/12 | 494X |
| 1½" | 320D | 306X | 330S/12 | 306X |
| 2" | 325D | 306X | 335S/12 | 307X |
| 2½" | 330D | 510X | 340S/12 | 511X |
| 3" | 330D | 512X | 345S/12 | 514X |
| 4" | 335D | 513X | 345S/12 | 514X |
| 6" | 345D | 516X | 357S/12 | 527X |
| Actuator operating pressure 6 bar g | | | | |
| ½" ** | 310D | 300X | 320S/14 | 301X |
| ¾" ** | 310D | 300X | 320S/14 | 301X |
| 1" | 315D | 302X | 320S/14 | 303X |
| 1¼" | 315D | 504X | 325S/14 | 494X |
| 1½" | 320D | 306X | 330S/14 | 306X |
| 2" | 320D | 306X | 330S/14 | 306X |
| 2½" | 330D | 510X | 340S/14 | 511X |
| 3" | 330D | 512X | 340S/14 | 513X |
| 4" | 335D | 513X | 345S/14 | 514X |
| 6" | 345D | 516X | 355S/14 | 517X |

| DN | A | B |
|-------|-----|-----|
| ½" ** | 271 | 124 |
| ¾" ** | 271 | 124 |
| 1" | 276 | 129 |
| 1¼" | 299 | 134 |
| 1½" | 337 | 138 |
| 2" | 342 | 143 |
| 2½" | 395 | 174 |
| 3" | 383 | 162 |
| 4" | 426 | 177 |
| 6" | 647 | 264 |



* **Note:** The dimensions A and B represent the maximum size (mm) for the biggest recommended actuator according to each valve.

** **Note:** ½" and ¾" just for M21i

Selection tables

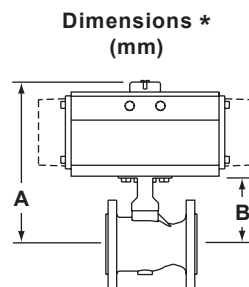
Pages 5 to 14 contain all necessary information to select the correct actuator for relevant Spirax Sarco ball valves. For valves not appearing in these tables please contact Spirax Sarco for advice.

Pneumatic actuator selection tables for one-piece ball valves

M45i ball valves

| DN | Double acting | | Single acting | |
|--|---------------|------|---------------|------|
| | BVA | BVL | BVA | BVL |
| Actuator operating pressure 3 bar g | | | | |
| 1" | 320D | 303X | 325S/8 | 303X |
| 1¼" | 320D | 494X | 330S/8 | 494X |
| 1½" | 325D | 306X | 340S/8 | 307X |
| 2" | 330D | 306X | 340S/8 | 307X |
| 2½" | 335D | 511X | 345S/8 | 528X |
| 3" | 340D | 513X | 345S/8 | 514X |
| 4" | 345D | 514X | 355S/8 | 526X |
| 6" | 345D | 516X | 360S/8 | 527X |
| Actuator operating pressure 4 bar g | | | | |
| 1" | 315D | 302X | 325S/10 | 303X |
| 1¼" | 320D | 494X | 330S/10 | 494X |
| 1½" | 325D | 306X | 330S/10 | 306X |
| 2" | 325D | 306X | 335S/10 | 307X |
| 2½" | 330D | 510X | 340S/10 | 511X |
| 3" | 335D | 513X | 345S/10 | 514X |
| 4" | 340D | 513X | 350S/10 | 526X |
| 6" | 345D | 516X | 355S/10 | 517X |
| Actuator operating pressure 5 bar g | | | | |
| 1" | 315D | 302X | 320S/12 | 303X |
| 1¼" | 320D | 494X | 325S/12 | 494X |
| 1½" | 320D | 306X | 330S/12 | 306X |
| 2" | 325D | 306X | 335S/12 | 307X |
| 2½" | 330D | 510X | 340S/12 | 511X |
| 3" | 335D | 513X | 340S/12 | 513X |
| 4" | 335D | 513X | 345S/12 | 514X |
| 6" | 340D | 515X | 355S/12 | 517X |
| Actuator operating pressure 6 bar g | | | | |
| 1" | 315D | 302X | 320S/14 | 303X |
| 1¼" | 315D | 504X | 325S/14 | 494X |
| 1½" | 320D | 306X | 330S/14 | 306X |
| 2" | 320D | 306X | 330S/14 | 306X |
| 2½" | 325D | 510X | 335S/14 | 511X |
| 3" | 330D | 512X | 340S/14 | 513X |
| 4" | 335D | 513X | 345S/14 | 514X |
| 6" | 340D | 515X | 350S/14 | 517X |

| DN | A | B |
|-----|-----|-----|
| 1" | 276 | 129 |
| 1¼" | 299 | 134 |
| 1½" | 337 | 138 |
| 2" | 342 | 143 |
| 2½" | 378 | 157 |
| 3" | 383 | 162 |
| 4" | 457 | 177 |
| 6" | 650 | 264 |



* **Note:** The dimensions **A** and **B** represent the maximum size (mm) for the biggest recommended actuator according to each valve.

Selection tables

Pages 5 to 14 contain all necessary information to select the correct actuator for relevant Spirax Sarco ball valves. For valves not appearing in these tables please contact Spirax Sarco for advice.

Pneumatic actuator selection tables for one-piece ball valves

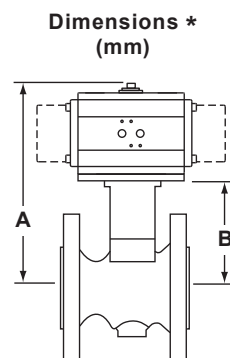
M21Ti, M21Vi, M21Si and M21Fi ball valves

M40Ti, M40Vi, M40Si and M40Fi ball valves

| DN | Double acting | | Single acting | |
|--|---------------|------|---------------|------|
| | BVA | BVL | BVA | BVL |
| Actuator operating pressure 3 bar g | | | | |
| ½" ** | 310D | 300X | 320S/8 | 301X |
| ¾"*** | 310D | 300X | 320S/8 | 301X |
| 1" | 315D | 302X | 320S/8 | 303X |
| 1¼" | 320D | 494X | 325S/8 | 494X |
| 1½" | 320D | 306X | 330S/8 | 306X |
| 2" | 320D | 306X | 330S/8 | 306X |
| 2½" | 330D | 510X | 340S/8 | 511X |
| 3" | 335D | 513X | 345S/8 | 514X |
| 4" | 340D | 513X | 350S/8 | 526X |
| 6" | 340D | 515X | 350S/8 | 517X |
| 8" *** | 360D | 520X | 365S/8 | 521X |
| Actuator operating pressure 4 bar g | | | | |
| ½" ** | 310D | 300X | 315S/10 | 300X |
| ¾"*** | 310D | 300X | 315S/10 | 300X |
| 1" | 315D | 302X | 320S/10 | 303X |
| 1¼" | 315D | 504X | 320S/10 | 494X |
| 1½" | 320D | 306X | 325S/10 | 306X |
| 2" | 320D | 306X | 330S/10 | 306X |
| 2½" | 325D | 510X | 335S/10 | 511X |
| 3" | 335D | 513X | 340S/10 | 513X |
| 4" | 335D | 513X | 345S/10 | 514X |
| 6" | 335D | 515X | 345S/10 | 516X |
| 8" *** | 355D | 519X | 360S/10 | 520X |

| DN | Double acting | | Single acting | |
|--|---------------|------|---------------|-------|
| | BVA | BVL | BVA | BVL |
| Actuator operating pressure 5 bar g | | | | |
| ½" ** | 310D | 300X | 315S/12 | 300X |
| ¾"*** | 310D | 300X | 315S/12 | 300X |
| 1" | 315D | 302X | 320S/12 | 303X |
| 1¼" | 315D | 504X | 320S/12 | 494X |
| 1½" | 315D | 506X | 325S/12 | 306X |
| 2" | 320D | 306X | 325S/12 | 306X |
| 2½" | 325D | 510X | 335S/12 | 511X |
| 3" | 330D | 512X | 340S/12 | 513X |
| 4" | 335D | 513X | 340S/12 | 513X |
| 6" | 335D | 515X | 345S/12 | 516X |
| 8" *** | 350D | 519X | 360S/12 | 520X |
| Actuator operating pressure 6 bar g | | | | |
| ½" ** | 310D | 300X | 315S/14 | 300X |
| ¾"*** | 310D | 300X | 315S/14 | 300X |
| 1" | 310D | 302X | 315S/14 | 302X |
| 1¼" | 315D | 504X | 320S/14 | 494X |
| 1½" | 315D | 506X | 325S/14 | 306X |
| 2" | 315D | 506X | 325S/14 | 306X |
| 2½" | 320D | 510X | 330S/14 | 510X |
| 3" | 330D | 512X | 335S/14 | 513X |
| 4" | 330D | 512X | 340S/14 | 513X |
| 6" | 335D | 515X | 345S/14 | 516X |
| 8" *** | 350D | 519X | 360S/14 | 520 X |

| DN | A | B |
|-----|-----|-----|
| ½" | 271 | 124 |
| ¾" | 271 | 124 |
| 1" | 276 | 129 |
| 1¼" | 299 | 134 |
| 1½" | 337 | 138 |
| 2" | 342 | 143 |
| 2½" | 356 | 157 |
| 3" | 383 | 162 |
| 4" | 398 | 177 |
| 6" | 513 | 264 |
| 8" | 750 | 316 |



* **Note:** The dimensions A and B represent the maximum size (mm) for the biggest recommended actuator according to each valve.

** **Note:** ½" and ¾" just for M21i

*** **Note:** 8" just for M40i

Selection tables

Pages 5 to 14 contain all necessary information to select the correct actuator for relevant Spirax Sarco ball valves. For valves not appearing in these tables please contact Spirax Sarco for advice.

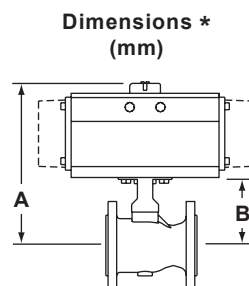
Pneumatic actuator selection tables for one-piece ball valves

M21ViJ and M21SiJ ball valves

M40ViJ and M40SiJ ball valves

| DN | Double acting | | Single acting | |
|--|---------------|------|---------------|------|
| | BVA | BVL | BVA | BVL |
| Actuator operating pressure 3 bar g | | | | |
| 1½" | 320D | 306X | 330S/8 | 306X |
| 2" | 325D | 306X | 330S/8 | 306X |
| 2½" | 330D | 510X | 340S/8 | 511X |
| 3" | 335D | 513X | 345S/8 | 514X |
| 4" | 340D | 513X | 350S/8 | 526X |
| Actuator operating pressure 4 bar g | | | | |
| 1½" | 320D | 306X | 325S/10 | 306X |
| 2" | 320D | 306X | 330S/10 | 306X |
| 2½" | 330D | 510X | 335S/10 | 511X |
| 3" | 335D | 513X | 345S/10 | 514X |
| 4" | 340D | 513X | 345S/10 | 514X |
| Actuator operating pressure 5 bar g | | | | |
| 1½" | 320D | 306X | 325S/12 | 306X |
| 2" | 320D | 306X | 325S/12 | 306X |
| 2½" | 325D | 510X | 335S/12 | 511X |
| 3" | 335D | 513X | 340S/12 | 513X |
| 4" | 335D | 513X | 345S/12 | 514X |
| Actuator operating pressure 6 bar g | | | | |
| 1½" | 320D | 306X | 325S/14 | 306X |
| 2" | 320D | 306X | 325S/14 | 306X |
| 2½" | 325D | 510X | 335S/14 | 511X |
| 3" | 330D | 512X | 340S/14 | 513X |
| 4" | 335D | 513X | 340S/14 | 513X |

| DN | A | B |
|-----|-----|-----|
| 1½" | 303 | 138 |
| 2" | 308 | 143 |
| 2½" | 373 | 174 |
| 3" | 383 | 162 |
| 4" | 426 | 177 |



* **Note:** The dimensions **A** and **B** represent the maximum size (mm) for the biggest recommended actuator according to each valve.