

Features

- Scotch Yoke quarter turn (90°) rotation
- Double acting and spring return models
- Easily adjustable with external adjustment mechanism
- Direct valve mounting per ISO5211
- Visual valve position indicator
- Extruded aluminum body with 35 micron hard anodizing
- IP66 & IP68 weatherproof actuator
- Spring return models use pre-compressed spring cartridges
- Female double square output drive
- Namur mounting pad for direct mount solenoid valves
- Standard VDI/VDE 3845 mounting for top mount accessories
- Type IP66 & IP68– weather proof enclosure

Applications

Valworx scotch yoke actuators are typically used to operate quarter turn ball valves, butterfly valves and plug valves. They can also be applied virtually anywhere a 90 degree rotation is required such as dampers. Quick and easy to install with standard ISO5211/DIN 3337 mounting dimensions and a double square female output drive. The operating temperature range of the actuator is -4 to 167°F (-20 to 75°C).

Operation

Double acting actuators require air pressure to open and air pressure to close. Spring return actuators require air pressure to open and utilize springs to close for failsafe operation. Typically 4-way pilot valves are used to control a double acting actuator and 3-way pilot valves for spring return models. Pilot air should be filtered, dry or lubricated. Output drive rotates counter-clockwise to open when viewed from top of actuator.

Construction

| | |
|--------------------------------------|--|
| Body | ASTM 6063 extruded aluminium, 35 micron anodizing |
| End Covers | ASTM B179 die-cast aluminium, 5 micron anodized, 40 micron polyester coating |
| Drive Shaft | Nickel plated steel alloy |
| Crank | Steel alloy |
| Seals | NBR |
| Springs (spring return model) | Pre-compressed cartridges, 60-80 micron polyester coating |
| Pistons | Anodized aluminium alloy |
| Pilot Air Connection | 1/4" NPT plus standard Namur solenoid mounting pad |
| Fasteners | 304 stainless steel |



Description

Valworx heavy duty scotch yoke actuator features hard anodized aluminum enclosure, type IP66 & IP68. Actuators are available in double acting and spring return models. They meet international ISO 5211 standards for easy valve mounting and replacement. Position confirmation switches can be easily mounted to the actuator with the standard VDI/VDE-3845 top mounting pad. Rotation adjustment +5°-10° in the 90° position.

Approvals

- CE Declaration of conformity
- EN ISO 12100:2010
- EN ISO 4414:2010
- ISO5211/ DIN3337 valve mounting
- Namur VDI/VDE 3845 accessory mounting
- SIL3– EN 17955:2024 & IEC 61508-1/-2:2010

Options

- Direct mount solenoid valves
- Monitor/Position confirmation limit switches

Construction Features

Heavy duty rugged scotch yoke design

Anodized aluminum alloy covers with 40 micron polyester powder coating

Spring return models use multiple pre-compressed spring cartridges with polyester coating

Stainless steel fasteners

Visual valve position indicator

Standard Namur top mounting for optional switches

Extruded aluminum body with 35 micron hard anodizing

NPT pilot air ports and additional Namur VDI/VDE-3845 solenoid mounting pad

International standard ISO5211 valve mounting pad



Pressure-Temperature

Pilot Air Pressure: 43-120 PSI (3-8 Bar)

Pilot Air Pressure-Recommended: 58-87 PSI (4-6 Bar)

Pilot Air Pressure- Maximum: 120 PSI (8 Bar)

Pilot Media: Filtered, dry or lubricated compressed air

Temperature Rating: -4 to 167°F (-20 to 75°C)



Typical Applications



Specifications (English Units)

| Stock Number | Size | Nominal Torque @ 72 PSI * (inch lbs) | Rotation | Maximum Pressure (PSI) | Cycle Time /90° (seconds) | | Ports (NPT) | Air Volume per Cycle (standard cubic inches)** | Valve Mounting ISO5211 | Output Drive (mm) |
|---|-------|--------------------------------------|----------|------------------------|---------------------------|-------|-------------|--|------------------------|-------------------|
| | | | | | Open | Close | | | | |
| PNEUMATIC ACTUATORS: SPRING RETURN | | | | | | | | | | |
| 532150 | SR50 | 141 | 90° | 120 | 0.3 | 0.5 | 1/4 | 73.2 | F03/F05/07 | 11 |
| 532165 | SR65 | 389 | 90° | 120 | 0.4 | 0.6 | 1/4 | 109.8 | F05/F07 | 14 |
| 532180 | SR80 | 673 | 90° | 120 | 0.6 | 0.9 | 1/4 | 256.3 | F07 | 17 |
| 532190 | SR100 | 1009 | 90° | 120 | 0.7 | 1.2 | 1/4 | 512.6 | F07/F10 | 22 |
| 532196 | SR125 | 3053 | 90° | 120 | 1.0 | 2.3 | 1/4 | 1067.9 | F07/F10 | 22 |
| 532197 | SR140 | 4460 | 90° | 120 | 1.3 | 3.1 | 1/4 | 1665.9 | F10/F12 | 27 |
| PNEUMATIC ACTUATORS: DOUBLE ACTING | | | | | | | | | | |
| 532050 | DA50 | 354 | 90° | 120 | 0.3 | 0.3 | 1/4 | 146.5 | F03/F05/F07 | 11 |
| 532065 | DA65 | 752 | 90° | 120 | 0.4 | 0.4 | 1/4 | 219.7 | F05/F07 | 14 |
| 532080 | DA80 | 1469 | 90° | 120 | 0.6 | 0.6 | 1/4 | 402.8 | F07 | 17 |
| 532090 | DA100 | 2690 | 90° | 120 | 0.8 | 0.8 | 1/4 | 842.1 | F07/F10 | 22 |
| 532096 | DA125 | 5593 | 90° | 120 | 1.2 | 1.3 | 1/4 | 1720.9 | F07/F10 | 22 |
| 532097 | DA140 | 8576 | 90° | 120 | 1.6 | 1.6 | 1/4 | 2709.5 | F10/F12 | 27 |

*Reference torque charts for detailed specifications

**Standard cubic inches at 72 PSI supply pressure. Cycle = open + close

Specifications (Metric Units)

| Stock Number | Size | Nominal Torque @ 5 Bar * (NM) | Rotation | Maximum Pressure (PSI) | Cycle Time /90° (seconds) | | Ports (NPT) | Air Volume per Cycle (standard liters)** | Valve Mounting ISO5211 | Output Drive (mm) |
|---|-------|-------------------------------|----------|------------------------|---------------------------|-------|-------------|--|------------------------|-------------------|
| | | | | | Open | Close | | | | |
| PNEUMATIC ACTUATORS: SPRING RETURN | | | | | | | | | | |
| 532150 | SR50 | 16 | 90° | 8 | 0.3 | 0.5 | 1/4 | 1.2 | F03/F05/07 | 11 |
| 532165 | SR65 | 44 | 90° | 8 | 0.4 | 0.6 | 1/4 | 1.8 | F05/F07 | 14 |
| 532180 | SR80 | 76 | 90° | 8 | 0.6 | 0.9 | 1/4 | 4.2 | F07 | 17 |
| 532190 | SR100 | 114 | 90° | 8 | 0.7 | 1.2 | 1/4 | 8.4 | F07/F10 | 22 |
| 532196 | SR125 | 345 | 90° | 8 | 1.0 | 2.3 | 1/4 | 17.5 | F07/F10 | 22 |
| 532197 | SR140 | 504 | 90° | 8 | 1.3 | 3.1 | 1/4 | 27.3 | F10/F12 | 27 |
| PNEUMATIC ACTUATORS: DOUBLE ACTING | | | | | | | | | | |
| 532050 | DA50 | 40 | 90° | 8 | 0.3 | 0.3 | 1/4 | 2.4 | F03/F05/F07 | 11 |
| 532065 | DA65 | 85 | 90° | 8 | 0.4 | 0.4 | 1/4 | 3.6 | F05/F07 | 14 |
| 532080 | DA80 | 166 | 90° | 8 | 0.6 | 0.6 | 1/4 | 6.6 | F07 | 17 |
| 532090 | DA100 | 304 | 90° | 8 | 0.8 | 0.8 | 1/4 | 13.8 | F07/F10 | 22 |
| 532096 | DA125 | 632 | 90° | 8 | 1.2 | 1.3 | 1/4 | 28.2 | F07/F10 | 22 |
| 532097 | DA140 | 969 | 90° | 8 | 1.6 | 1.6 | 1/4 | 44.4 | F10/F12 | 27 |

*Reference torque charts for detailed specifications

**Standard liters at 5 Bar supply pressure. Cycle= open + close

Double Acting Torque Charts

Double Acting (DA) Torque Ratings (inch lbs) English Units

| STOCK NUMBER | SIZE | AIR SUPPLY (PSI) | | | | | | | |
|--------------|-------|------------------|------|-------|------|-------|-------|-------|-------|
| | | 72 | | 87 | | 100 | | 116 | |
| | | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° |
| 532050 | DA50 | 354 | 345 | 424 | 415 | 477 | 469 | 539 | 539 |
| 532065 | DA65 | 752 | 761 | 885 | 911 | 1017 | 1062 | 1150 | 1212 |
| 532080 | DA80 | 1469 | 1469 | 1770 | 1770 | 2017 | 2062 | 2310 | 2354 |
| 532090 | DA100 | 2690 | 2814 | 3239 | 3407 | 3699 | 3956 | 4159 | 4496 |
| 532096 | DA125 | 4708 | 5717 | 6602 | 6850 | 7567 | 7903 | 8496 | 8868 |
| 532097 | DA140 | 8576 | 7779 | 10258 | 9240 | 11859 | 10682 | 13205 | 12107 |

Double Acting (DA) Torque Ratings (Nm) Metric Units

| STOCK NUMBER | SIZE | AIR SUPPLY (BAR) | | | | | | | |
|--------------|-------|------------------|-----|------|------|------|------|------|------|
| | | 5 | | 6 | | 7 | | 8 | |
| | | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° |
| 532050 | DA50 | 40 | 39 | 48 | 47 | 54 | 53 | 61 | 61 |
| 532065 | DA65 | 85 | 86 | 100 | 103 | 115 | 120 | 130 | 137 |
| 532080 | DA80 | 166 | 166 | 200 | 200 | 228 | 233 | 261 | 266 |
| 532090 | DA100 | 304 | 318 | 366 | 385 | 418 | 447 | 470 | 508 |
| 532096 | DA125 | 532 | 646 | 746 | 774 | 855 | 893 | 960 | 1002 |
| 532097 | DA140 | 969 | 879 | 1159 | 1040 | 1340 | 1207 | 1492 | 1368 |

Double Acting Actuator Weights

| | DA Actuator Weights | | | | | |
|------|---------------------|-----|-----|------|------|------|
| Size | 50 | 65 | 80 | 90 | 125 | 140 |
| Lbs. | 3.1 | 5.1 | 8.6 | 14.7 | 24.9 | 36.6 |
| Kg. | 1.4 | 2.3 | 3.9 | 6.7 | 11.3 | 16.4 |

Spring Return Torque Charts

Spring Return (SR) Torque Ratings (inch lbs) English Units

| STOCK NUMBER | SIZE | AIR SUPPLY (PSI) | | | | | | | | SPRINGS TORQUE | |
|--|-------|------------------|------|-------|------|---|------|-------|-------|----------------|------|
| | | 72 | | 87 | | 100 | | 116 | | | |
| | | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | 90° | 0° |
| 532150 | SR50 | 386 | 235 | 483 | 400 | 593 | 566 | 689 | 689 | 351 | 235 |
| 532165 | SR65 | 841 | 598 | 1062 | 937 | 1267 | 1267 | 1475 | 1595 | 685 | 634 |
| 532180 | SR80 | 1653 | 1240 | 2136 | 1861 | 2618 | 2480 | 3031 | 3169 | 1240 | 1102 |
| 532190 | SR100 | 2894 | 1929 | 3858 | 3031 | 1031 | 4685 | 1277 | 5649 | 2205 | 1653 |
| 530196 | SR125 | 5030 | 3101 | 6821 | 5581 | 2258 | 8543 | 10334 | 10334 | 6476 | 5925 |
| 530197 | SR140 | 7303 | 3652 | 10058 | 6752 | 12814 | 9783 | 15570 | 12814 | 8956 | 8337 |
| 0° = closed position, extended springs | | | | | | 90° = open position, compressed springs | | | | | |

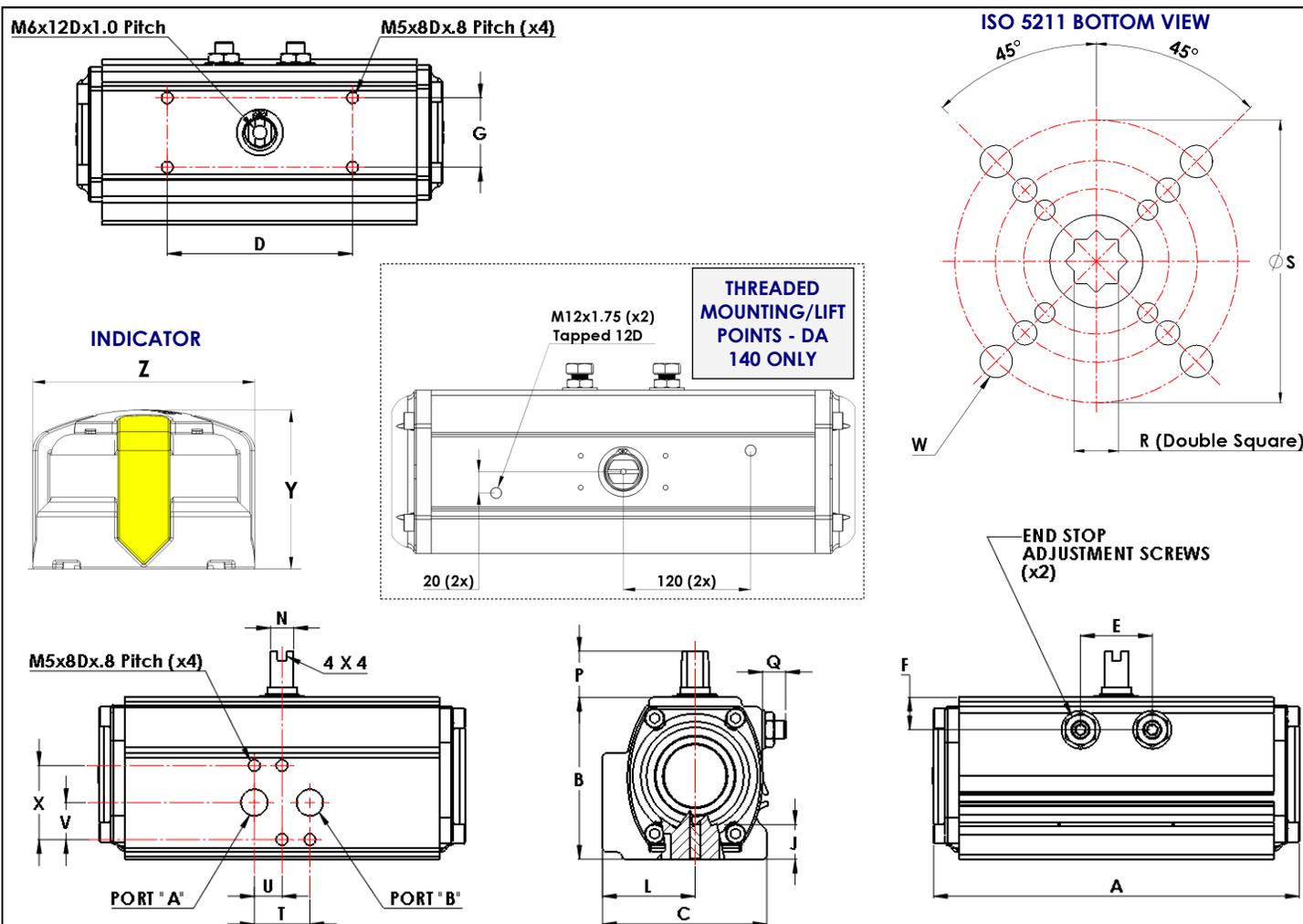
Spring Return (SR) Torque Ratings (Nm) Metric Units

| STOCK NUMBER | SIZE | AIR SUPPLY (BAR) | | | | | | | | SPRINGS TORQUE | |
|--|-------|------------------|-----|-----|-----|---|-----|------|-----|----------------|-----|
| | | 5 | | 6 | | 7 | | 8 | | | |
| | | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | 90° | 0° |
| 532150 | SR50 | 27 | 16 | 33 | 28 | 41 | 39 | 48 | 48 | 24 | 16 |
| 532165 | SR65 | 58 | 41 | 73 | 65 | 87 | 87 | 102 | 110 | 47 | 44 |
| 532180 | SR80 | 114 | 86 | 147 | 128 | 181 | 171 | 209 | 219 | 86 | 76 |
| 532190 | SR100 | 200 | 133 | 266 | 209 | 323 | 285 | 390 | 361 | 152 | 114 |
| 532196 | SR125 | 347 | 214 | 470 | 385 | 589 | 561 | 713 | 713 | 447 | 409 |
| 532197 | SR140 | 504 | 252 | 694 | 466 | 884 | 675 | 1074 | 884 | 618 | 575 |
| 0° = closed position, extended springs | | | | | | 90° = open position, compressed springs | | | | | |

Spring Return Actuator Weights

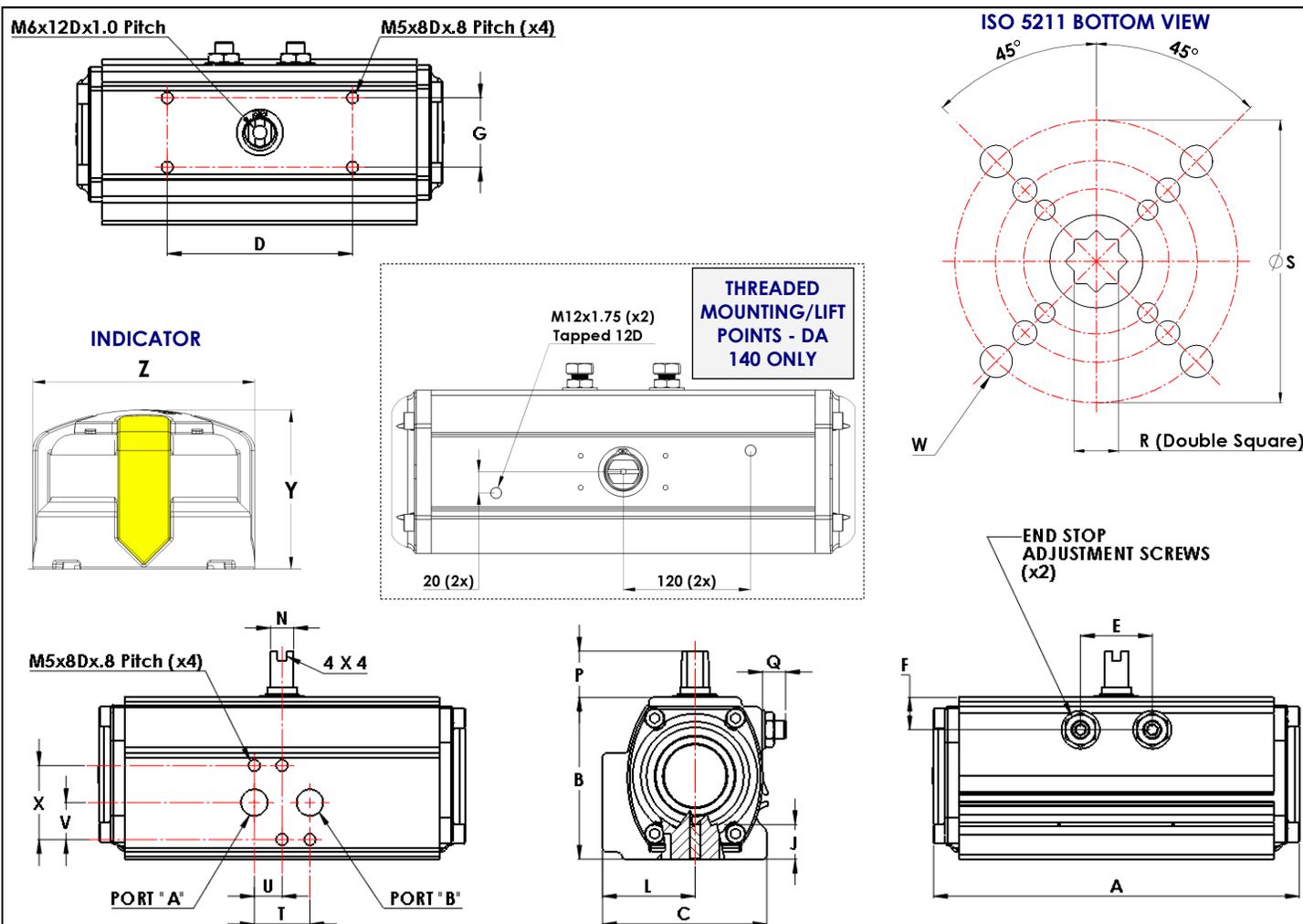
| | SR Actuator Weights | | | | | |
|------|---------------------|-----|------|------|------|------|
| Size | 50 | 65 | 80 | 90 | 125 | 140 |
| Lbs. | 3.5 | 6.6 | 11.7 | 20.9 | 38.8 | 52.7 |
| Kg. | 1.6 | 3.0 | 5.3 | 9.5 | 17.6 | 23.9 |

Double Acting (DA) Dimensions Sizes 50-140 (inches)



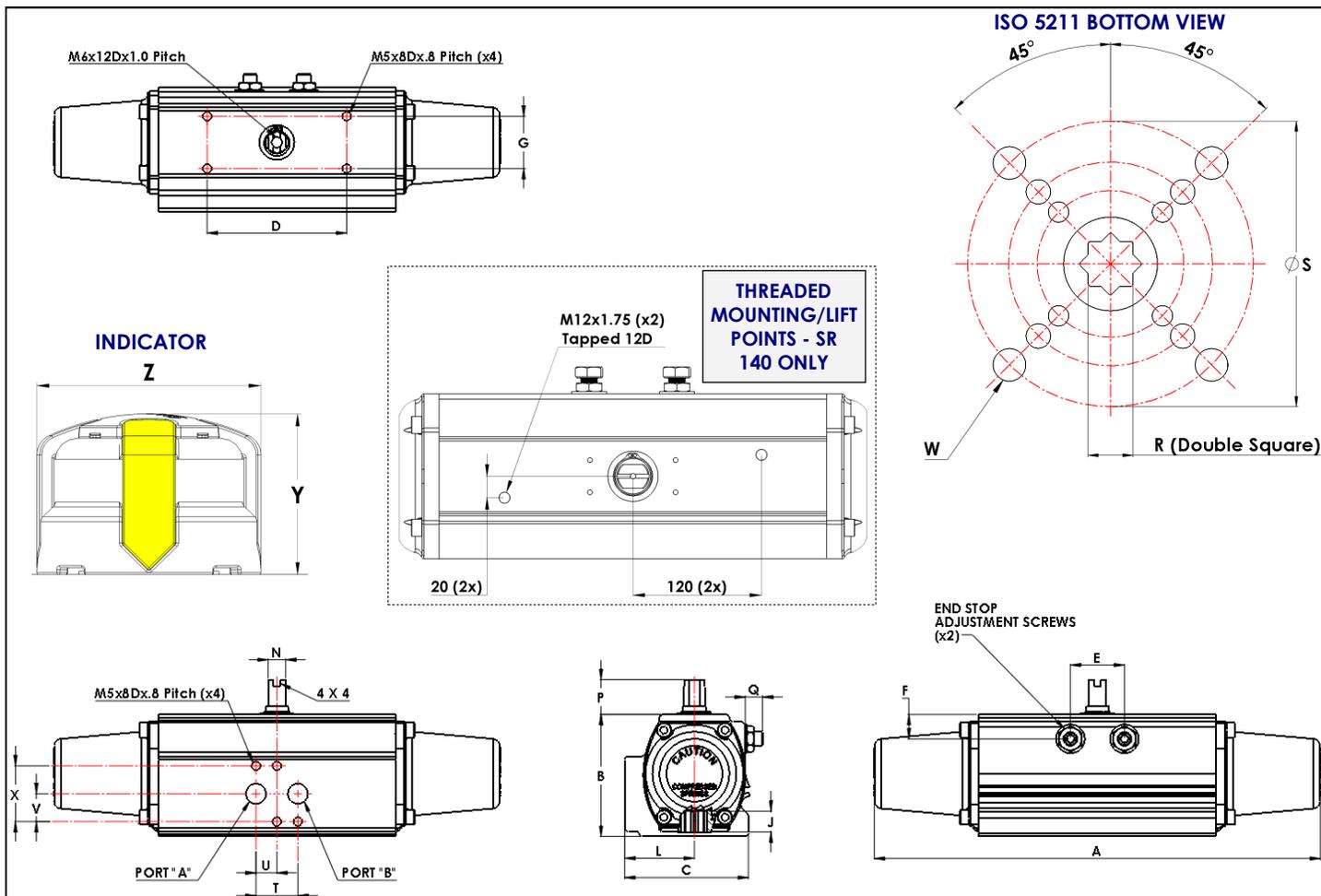
| Size | A | B | C | D | E | F | G | J | L | N | O | P | Q | R | T | U | V | X | Y | Z | Ports (NPT) | F ISO 5211 | S | W |
|-------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------------|------------|----------|----------|
| DA50 | 6.3 | 2.7 | 2.9 | 3.1 | 1.2 | 0.3 | 1.1 | 0.6 | 1.5 | 0.3 | 0.5 | 0.7 | 0.3 | 0.4 | 0.9 | 0.4 | 0.6 | 1.2 | 0.9 | 1.2 | 1/4 | F03 | 36 | M5 X 11 |
| | | | | | | | | | | | | | | | | | | | | | F05 | 50 | M6 X 13 | |
| | | | | | | | | | | | | | | | | | | | | | F07 | 70 | M8 X 15 | |
| DA65 | 7.9 | 3.4 | 3.5 | 3.1 | 1.6 | 0.3 | 1.1 | 0.7 | 1.8 | 0.4 | 0.6 | 0.7 | 0.4 | 0.5 | 0.9 | 0.4 | 0.6 | 1.2 | 0.9 | 1.5 | 1/4 | F05 | 50 | M6 X 14 |
| | | | | | | | | | | | | | | | | | | | | | F07 | 70 | M8 X 14 | |
| DA80 | 9.9 | 4.1 | 3.9 | 3.1 | 2.0 | 0.5 | 1.1 | 0.7 | 1.9 | 0.4 | 0.7 | 0.7 | 0.4 | 0.6 | 0.9 | 0.4 | 0.6 | 1.2 | 0.9 | 1.5 | 1/4 | F07 | 70 | M8 X 18 |
| DA100 | 12.2 | 5.0 | 5.0 | 3.1 | 2.2 | 0.5 | 1.1 | 1.0 | 2.4 | 0.7 | 1.1 | 0.7 | 0.6 | 0.8 | 0.9 | 0.4 | 0.6 | 1.2 | 0.9 | 1.7 | 1/4 | F07 | 70 | M8 X 17 |
| DA125 | 15.3 | 6.0 | 5.9 | 3.1 | 2.7 | 0.7 | 1.1 | 1.0 | 2.8 | 0.7 | 1.1 | 0.7 | 1.1 | 0.8 | 0.9 | 0.4 | 0.6 | 1.2 | 0.9 | 1.7 | 1/4 | F10 | 102 | M10 X 22 |
| | | | | | | | | | | | | | | | | | | | | | F07 | 70 | M8 X 17 | |
| DA140 | 16.9 | 6.7 | 6.4 | 3.1 | 3.2 | 0.9 | 1.1 | 1.1 | 3.0 | 0.9 | 1.3 | 0.7 | 1.1 | 0.8 | 0.9 | 0.4 | 0.6 | 1.2 | 0.9 | 2.1 | 1/4 | F12 | 125 | M12 X 26 |
| | | | | | | | | | | | | | | | | | | | | | F10 | 102 | M10 X 22 | |

Double Acting (DA) Dimensions Sizes 50-140 (mm)



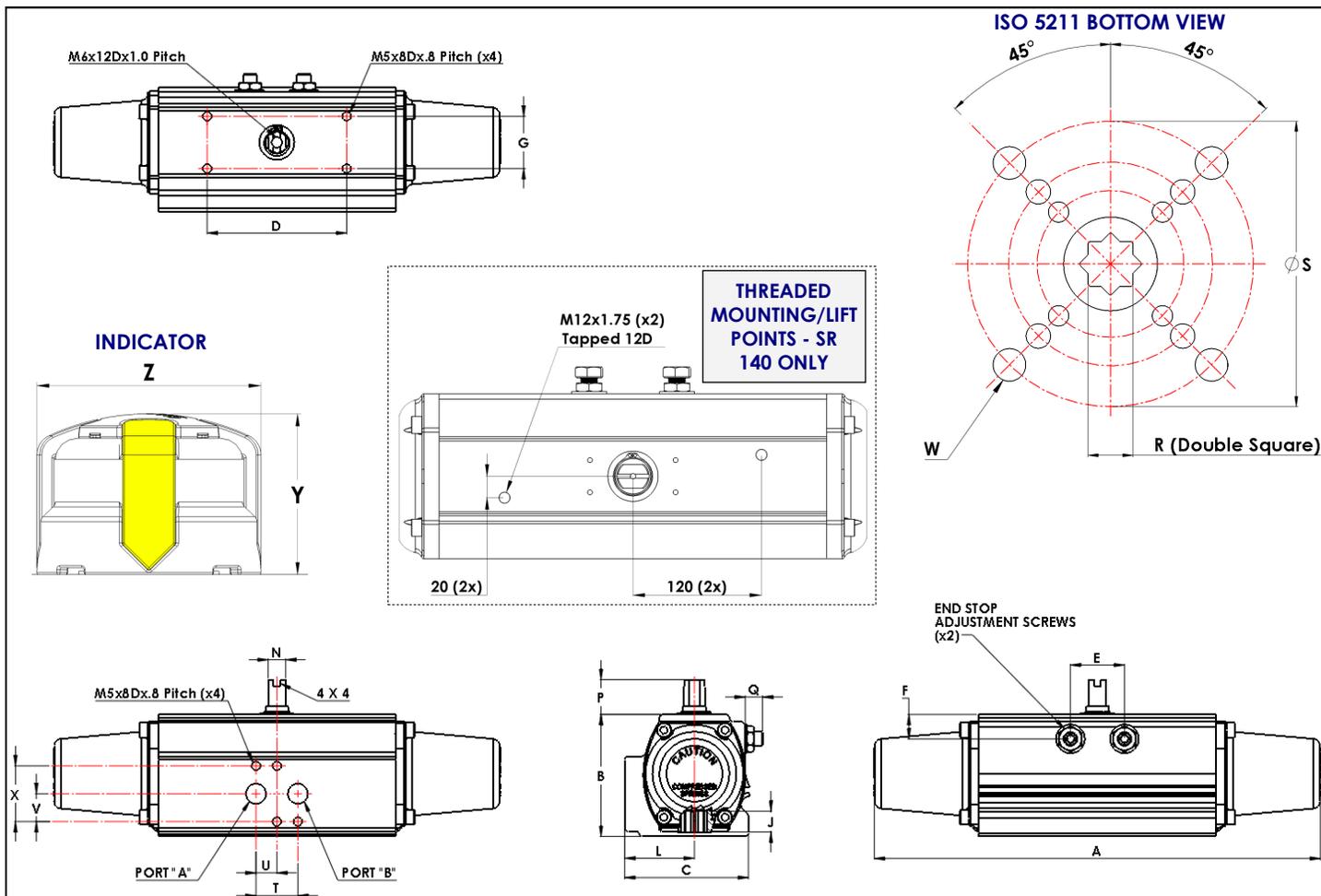
| Size | A | B | C | D | E | F | G | J | L | N | O | P | Q | R | T | U | V | X | Y | Z | Ports (NPT) | F ISO 5211 | S | W |
|-------|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-------------|------------|----------|----------|
| DA50 | 162 | 70 | 75 | 80 | 32 | 10 | 30 | 17 | 40 | 9 | 13 | 20 | 9 | 11 | 24 | 12 | 16 | 32 | 24 | 32 | 1/4 | F03 | 36 | M5 X 11 |
| | | | | | | | | | | | | | | | | | | | | | F05 | 50 | M6 X 13 | |
| | | | | | | | | | | | | | | | | | | | | | F07 | 70 | M8 X 15 | |
| DA65 | 202 | 87 | 89 | 80 | 42 | 10 | 30 | 19 | 46 | 12 | 16 | 20 | 11 | 14 | 24 | 12 | 16 | 32 | 24 | 40 | 1/4 | F05 | 50 | M6 X 14 |
| | | | | | | | | | | | | | | | | | | | | | F07 | 70 | M8 X 14 | |
| DA80 | 253 | 106 | 101 | 80 | 51 | 13 | 30 | 20 | 50 | 12 | 20 | 20 | 12 | 17 | 24 | 12 | 16 | 32 | 24 | 40 | 1/4 | F07 | 70 | M8 X 18 |
| DA100 | 311 | 128 | 129 | 80 | 56 | 14 | 30 | 26 | 62 | 18 | 28 | 20 | 17 | 22 | 24 | 12 | 16 | 32 | 24 | 45 | 1/4 | F07 | 70 | M8 X 17 |
| DA125 | 390 | 154 | 151 | 80 | 70 | 20 | 30 | 26 | 72 | 19 | 28 | 20 | 28 | 22 | 24 | 12 | 16 | 32 | 24 | 45 | 1/4 | F10 | 102 | M10 X 22 |
| | | | | | | | | | | | | | | | | | | | | | F07 | 70 | M8 X 17 | |
| DA140 | 431 | 172 | 164 | 80 | 82 | 24 | 30 | 30 | 77 | 24 | 35 | 20 | 30 | 22 | 24 | 12 | 16 | 32 | 24 | 55 | 1/4 | F10 | 102 | M10 X 22 |
| | | | | | | | | | | | | | | | | | | | | | F12 | 125 | M12 X 26 | |

Spring Return (SR) Dimensions Sizes 50-140 (inches)



| Size | A | B | C | D | E | F | G | J | L | N | O | P | Q | R | T | U | V | X | Y | Z | Ports (NPT) | F ISO 5211 | S | W |
|-------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------------|------------|-----|----------|
| SR50 | 10.1 | 2.7 | 2.9 | 3.1 | 1.2 | 0.3 | 1.1 | 0.6 | 1.5 | 0.3 | 0.5 | 0.7 | 0.3 | 0.4 | 0.9 | 0.4 | 0.6 | 1.2 | 0.9 | 1.2 | 1/4 | F03 | 36 | M5 X 11 |
| | | | | | | | | | | | | | | | | | | | | | | F05 | 50 | M6 X 13 |
| | | | | | | | | | | | | | | | | | | | | | | F07 | 70 | M8 X 15 |
| SR65 | 12.3 | 3.4 | 3.5 | 3.1 | 1.6 | 0.3 | 1.1 | 0.7 | 1.8 | 0.4 | 0.6 | 0.7 | 0.4 | 0.5 | 0.9 | 0.4 | 0.6 | 1.2 | 0.9 | 1.5 | 1/4 | F05 | 50 | M6 X 14 |
| | | | | | | | | | | | | | | | | | | | | | | F07 | 70 | M8 X 14 |
| SR80 | 16.5 | 4.1 | 3.9 | 3.1 | 2.0 | 0.5 | 1.1 | 0.7 | 1.9 | 0.4 | 0.7 | 0.7 | 0.4 | 0.6 | 0.9 | 0.4 | 0.6 | 1.2 | 0.9 | 1.5 | 1/4 | F07 | 70 | M8 X 18 |
| SR100 | 19.6 | 5.0 | 5.0 | 3.1 | 2.2 | 0.5 | 1.1 | 1.0 | 2.4 | 0.7 | 1.1 | 0.7 | 0.6 | 0.8 | 0.9 | 0.4 | 0.6 | 1.2 | 0.9 | 1.7 | 1/4 | F07 | 70 | M8 X 17 |
| SR125 | 23.8 | 6.0 | 5.9 | 3.1 | 2.7 | 0.7 | 1.1 | 1.0 | 2.8 | 0.7 | 1.1 | 0.7 | 1.1 | 0.8 | 0.9 | 0.4 | 0.6 | 1.2 | 0.9 | 1.7 | 1/4 | F10 | 102 | M10 X 22 |
| | | | | | | | | | | | | | | | | | | | | | | F07 | 70 | M8 X 17 |
| SR140 | 26.8 | 6.7 | 6.4 | 3.1 | 3.2 | 0.9 | 1.1 | 1.1 | 3.0 | 0.9 | 1.3 | 0.7 | 1.1 | 0.8 | 0.9 | 0.4 | 0.6 | 1.2 | 0.9 | 2.1 | 1/4 | F10 | 102 | M10 X 22 |
| | | | | | | | | | | | | | | | | | | | | | | F12 | 125 | M12 X 26 |

Spring Return (SR) Dimensions Sizes 50-140 (mm)



| Size | A | B | C | D | E | F | G | J | L | N | O | P | Q | R | T | U | V | X | Y | Z | Ports (NPT) | F ISO 5211 | S | W |
|-------|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-------------|------------|----------|----------|
| SR50 | 257 | 70 | 75 | 80 | 32 | 10 | 30 | 17 | 40 | 9 | 13 | 20 | 9 | 11 | 24 | 12 | 16 | 32 | 24 | 32 | 1/4 | F03 | 36 | M5 X 11 |
| | | | | | | | | | | | | | | | | | | | | | F05 | 50 | M6 X 13 | |
| | | | | | | | | | | | | | | | | | | | | | F07 | 70 | M8 X 15 | |
| SR65 | 314 | 87 | 89 | 80 | 42 | 10 | 30 | 19 | 46 | 12 | 16 | 20 | 11 | 14 | 24 | 12 | 16 | 32 | 24 | 40 | 1/4 | F05 | 50 | M6 X 14 |
| | | | | | | | | | | | | | | | | | | | | | F07 | 70 | M8 X 14 | |
| SR80 | 421 | 106 | 101 | 80 | 51 | 13 | 30 | 20 | 50 | 12 | 20 | 20 | 12 | 17 | 24 | 12 | 16 | 32 | 24 | 40 | 1/4 | F07 | 70 | M8 X 18 |
| SR100 | 500 | 128 | 129 | 80 | 56 | 14 | 30 | 26 | 62 | 18 | 28 | 20 | 17 | 22 | 24 | 12 | 16 | 32 | 24 | 45 | 1/4 | F07 | 70 | M8 X 17 |
| | | | | | | | | | | | | | | | | | | | | | F10 | 102 | M10 X 22 | |
| SR125 | 606 | 154 | 151 | 80 | 70 | 20 | 30 | 26 | 72 | 19 | 28 | 20 | 28 | 22 | 24 | 12 | 16 | 32 | 24 | 45 | 1/4 | F07 | 70 | M8 X 17 |
| | | | | | | | | | | | | | | | | | | | | | F10 | 102 | M10 X 22 | |
| SR140 | 682 | 172 | 164 | 80 | 82 | 24 | 30 | 30 | 77 | 24 | 35 | 20 | 30 | 22 | 24 | 12 | 16 | 32 | 24 | 55 | 1/4 | F10 | 102 | M10 X 22 |
| | | | | | | | | | | | | | | | | | | | | | F12 | 125 | M12 X 26 | |