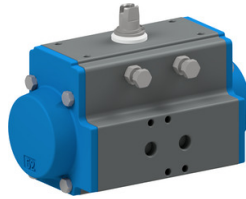


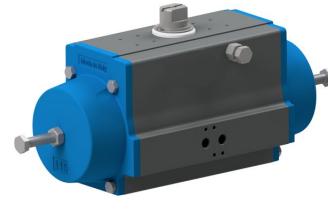
## Pneumatic rotary actuator according to ISO 5211 Series PAD, PAS



PAD032



PAD/PAS052...330


PAD052...160-R  
PAD052...160-180

|                               |                                                                                                                                                                                                                                                     |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Design type                   | Piston actuator with 2 opposed pistons, elastic sealing, actuator in all details in accordance with ISO 5211 or NAMUR recommendations, End positions adjustable on both sides $\pm 5^\circ$ , Piston diameter 32...330mm                            |
| Function                      | Piston diameter 32mm: available in double-acting Version 0...90°<br>Piston diameter 52...330mm: available in double-acting 0...90° or rather 0...180° or single-acting Version 0...90°                                                              |
| Actuation                     | pneumatic                                                                                                                                                                                                                                           |
| Connection                    | Piston diameter 32mm: Female thread to ISO7/1<br>Piston diameter 52...330mm: Female thread to ISO7/1, NAMUR valve direct flange-mountable                                                                                                           |
| Materials<br>Standard version | Aluminium hard anodized, Steel pinion nickel-plated, Piston guide POM, Seals NBR                                                                                                                                                                    |
| Medium temperature            | -20...+80°C                                                                                                                                                                                                                                         |
| Ambient temperature           | -20...+80°C                                                                                                                                                                                                                                         |
| Operating pressure range      | 1...8bar                                                                                                                                                                                                                                            |
| Control medium                | filtered and lubricated or non-lubricated compressed air                                                                                                                                                                                            |
| End-position cushioning       | none, the actuator is not able to absorb mass                                                                                                                                                                                                       |
| Mounting type                 | above flange pattern after ISO 5211, F03...F25                                                                                                                                                                                                      |
| Mounting position             | any                                                                                                                                                                                                                                                 |
| Approvals                     | ATEX II 2G Ex h IIC T6...T3 Gb / II 2D Ex h IIIC T85°C...T200°C Db, SIL3 (32-270)                                                                                                                                                                   |
| Special version               | Pinion in stainless steel, PTFE-coated actuator, Nickel-plated actuator, Medium temperatures and Ambient temperatures from -40...+80°C, or rather -20...+150°C                                                                                      |
| Accessories                   | Piston diameter 32mm: Adjustment of the switching speed<br>Piston diameter 53...330mm: assembled manual, pneumatic or electric control valve, electrical end position feedback, Positioner in I/P or P/P Version, Adjustment of the switching speed |
| Ordering note                 | Please also specify control pressure and operating temperature when ordering.                                                                                                                                                                       |

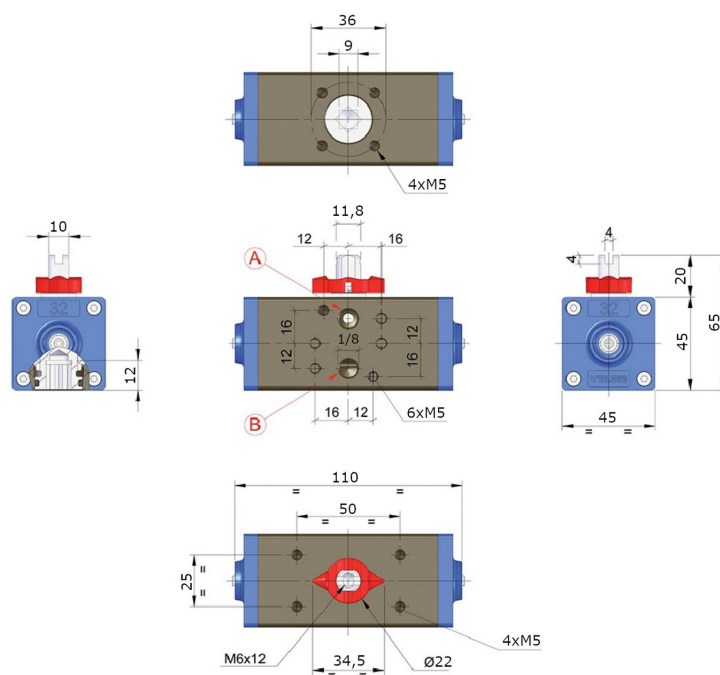


## Type code

|                         |                                                                     | PA S 100 5 - 180 HS |  |  |  |
|-------------------------|---------------------------------------------------------------------|---------------------|--|--|--|
| <b>Type</b>             | Double-acting                                                       | D                   |  |  |  |
|                         | Single-acting                                                       | S                   |  |  |  |
| <b>Piston diameter</b>  | 32mm                                                                | 032                 |  |  |  |
|                         | 52mm                                                                | 052                 |  |  |  |
|                         | 63mm                                                                | 063                 |  |  |  |
|                         | 75mm                                                                | 075                 |  |  |  |
|                         | 85mm                                                                | 085                 |  |  |  |
|                         | 100mm                                                               | 100                 |  |  |  |
|                         | 115mm                                                               | 115                 |  |  |  |
|                         | 125mm                                                               | 125                 |  |  |  |
|                         | 140mm                                                               | 140                 |  |  |  |
|                         | 160mm                                                               | 160                 |  |  |  |
|                         | 180mm                                                               | 180                 |  |  |  |
|                         | 200mm                                                               | 200                 |  |  |  |
|                         | 230mm                                                               | 230                 |  |  |  |
|                         | 270mm                                                               | 270                 |  |  |  |
|                         | 330mm                                                               | 330                 |  |  |  |
| <b>Spring set</b>       | none spring set (Leave blank)                                       |                     |  |  |  |
|                         | Spring set 01                                                       | 1                   |  |  |  |
|                         | Spring set 02                                                       | 2                   |  |  |  |
|                         | Spring set 03                                                       | 3                   |  |  |  |
|                         | Spring set 04                                                       | 4                   |  |  |  |
|                         | Spring set 05                                                       | 5                   |  |  |  |
|                         | Spring set 06                                                       | 6                   |  |  |  |
|                         | Spring set 07                                                       | 7                   |  |  |  |
|                         | Spring set 08                                                       | 8                   |  |  |  |
| <b>Special versions</b> | Rotation angle 180°                                                 | 180                 |  |  |  |
|                         | Medium temperature/Ambient temperature -20...150°C - Seals FKM      | H                   |  |  |  |
|                         | Medium temperature/Ambient temperature -40...+80°C - Seals Silicone | L                   |  |  |  |
|                         | Actuator nickel-plated                                              | N                   |  |  |  |
|                         | Actuator PTFE coated                                                | P                   |  |  |  |
|                         | Rotation angle adjustable                                           | R                   |  |  |  |
|                         | Pinion in stainless steel 1.4305                                    | S                   |  |  |  |
|                         | US-Version NPT / UNF                                                | U                   |  |  |  |



## Dimensions PAD032



A Counterclockwise direction of rotation

B Direction of rotation clockwise

## Dimensions PAD052...PAD230 and PAS052...PAS230

Version 9

150761 / Generated 2026/39 EN

MADE IN EUROPE

+43 512 52076

austria@stasto.eu

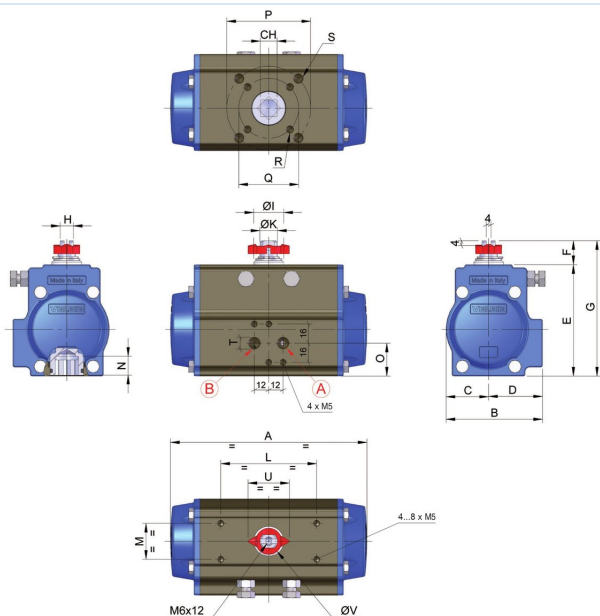
© STASTO Automation KG

[www.stasto.com](http://www.stasto.com)

Open series online

Page 3 / 8





A Counterclockwise direction of rotation

B Direction of rotation clockwise

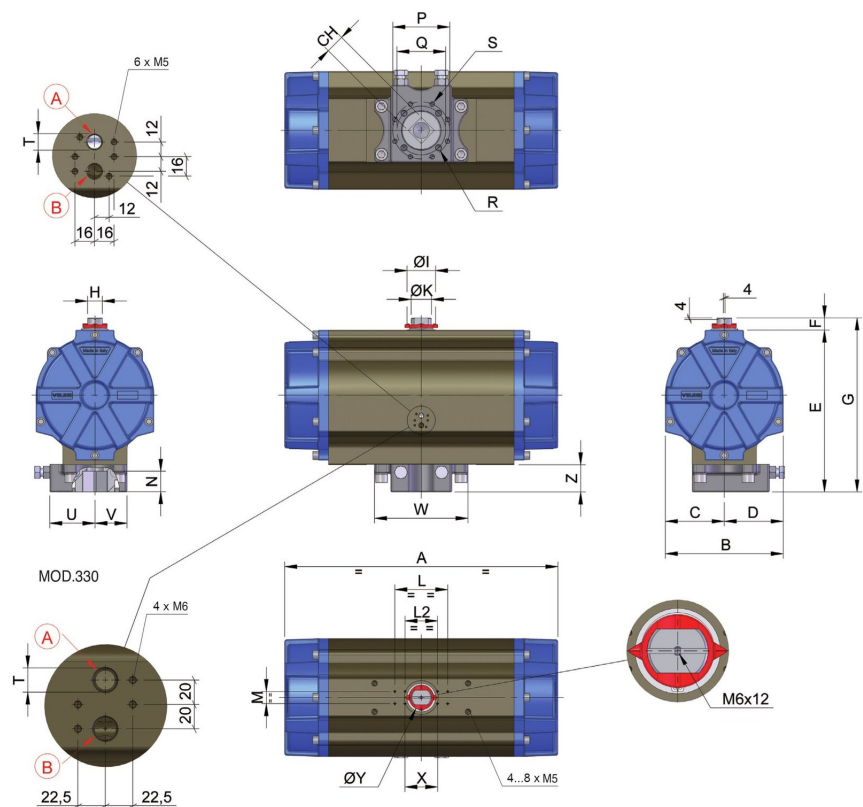
| CH  | A     | B     | C    | D     | E     | F  | G     | H  | ØI | J  | ØK | L      | M  | N    | Type single-acting | Type double-acting |
|-----|-------|-------|------|-------|-------|----|-------|----|----|----|----|--------|----|------|--------------------|--------------------|
| 11  | 141   | 71    | 30   | 41    | 81,5  | 20 | 101,5 | 9  | 21 | 8  | 12 | 80     | 30 | 12   | PAS052             | PAD052             |
| 14  | 164   | 80,5  | 35,5 | 45    | 93    | 20 | 113   | 11 | 25 | 8  | 15 | 80     | 30 | 16   | PAS063             | PAD063             |
| 17  | 210   | 94,5  | 42   | 52,5  | 111   | 20 | 131   | 13 | 29 | 8  | 19 | 80     | 30 | 19   | PAS075             | PAD075             |
| 17  | 240,5 | 106   | 47,5 | 58,5  | 125   | 20 | 145   | 15 | 35 | 8  | 22 | 80     | 30 | 19   | PAS085             | PAD085             |
| 17  | 275   | 123   | 55   | 68    | 138   | 20 | 158   | 15 | 35 | 8  | 22 | 80     | 30 | 20,5 | PAS100             | PAD100             |
| 22  | 333   | 137   | 64   | 73    | 162,5 | 30 | 192,5 | 22 | 49 | 14 | 32 | 80/130 | 30 | 24   | PAS115             | PAD115             |
| 22  | 372   | 148   | 68   | 80    | 174,5 | 30 | 204,5 | 22 | 49 | 14 | 32 | 80/130 | 30 | 24   | PAS125             | PAD125             |
| 27  | 435   | 164   | 76,5 | 87    | 197   | 30 | 227   | 24 | 49 | 16 | 35 | 80/130 | 30 | 29   | PAS140             | PAD140             |
| 27  | 500   | 186   | 87   | 99    | 221   | 30 | 251   | 30 | 57 | 16 | 40 | 80/130 | 30 | 32   | PAS160             | PAD160             |
| 36  | 493   | 213   | 98   | 115   | 253   | 30 | 283   | 36 | 62 | 16 | 45 | 80/130 | 30 | 43   | PAS180             | PAD180             |
| 36  | 578,5 | 217   | 108  | 109   | 275   | 30 | 308   | 36 | 67 | 16 | 50 | 80/130 | 30 | 37   | PAS200             | PAD200             |
| 46* | 690   | 248,5 | 124  | 124,5 | 325   | 30 | 355   | 36 | 67 | 16 | 50 | 80/130 | 30 | 50   | PAS230             | PAD230             |

\*Square diagonal - no star

| O    | P   | Q   | R      | S      | T<br>ISO 7/1 | Weight<br>[approx. kg] |      | Flange<br>ISO 5211 | Type single-acting | Type double-acting |
|------|-----|-----|--------|--------|--------------|------------------------|------|--------------------|--------------------|--------------------|
|      |     |     |        |        |              | PAD                    | PAS  |                    |                    |                    |
| 26,5 | 50  | 36  | M5x7,5 | M6x9   | G1/8"        | 1,2                    | 1,3  | F03/F05            | PAS052             | PAD052             |
| 27,5 | 70  | 50  | M6x8   | M8x12  | G1/8"        | 1,7                    | 2,0  | F05/F07            | PAS063             | PAD063             |
| 35   | 70  | 50  | M6x8   | M8x12  | G1/8"        | 2,8                    | 3,4  | F05/F07            | PAS075             | PAD075             |
| 42   | 70  | 50  | M6x8   | M8x12  | G1/8"        | 3,9                    | 4,8  | F05/F07            | PAS085             | PAD085             |
| 50   | 102 | 70  | M8x8   | M10x14 | G1/4"        | 5,5                    | 7,0  | F07/F10            | PAS100             | PAD100             |
| 50   | 102 | 70  | M8x12  | M10x15 | G1/4"        | 8,9                    | 11,5 | F07/F10            | PAS115             | PAD115             |
| 61   | 102 | 70  | M8x12  | M10x15 | G1/4"        | 10,8                   | 14,1 | F07/F10            | PAS125             | PAD125             |
| 71   | 125 | 102 | M10x15 | M12x18 | G1/4"        | 16,3                   | 21,8 | F10/F12            | PAS140             | PAD140             |
| 80   | 125 | 102 | M10x14 | M12x17 | G1/4"        | 21,8                   | 29,6 | F10/F12            | PAS160             | PAD160             |
| 99   | 140 | 102 | M10x15 | M16x25 | G1/4"        | 29,0                   | 39,9 | F10/F14            | PAS180             | PAD180             |
| 78   | 140 | -   | -      | M16x24 | G1/4"        | 37,0                   | 55,0 | F14                | PAS200             | PAD200             |
| 92   | 165 | -   | -      | M20x29 | G1/4"        | 58,5                   | 71,0 | F16                | PAS230             | PAD230             |



Dimensions PAD270, PAD330, PAS270 and PAS330

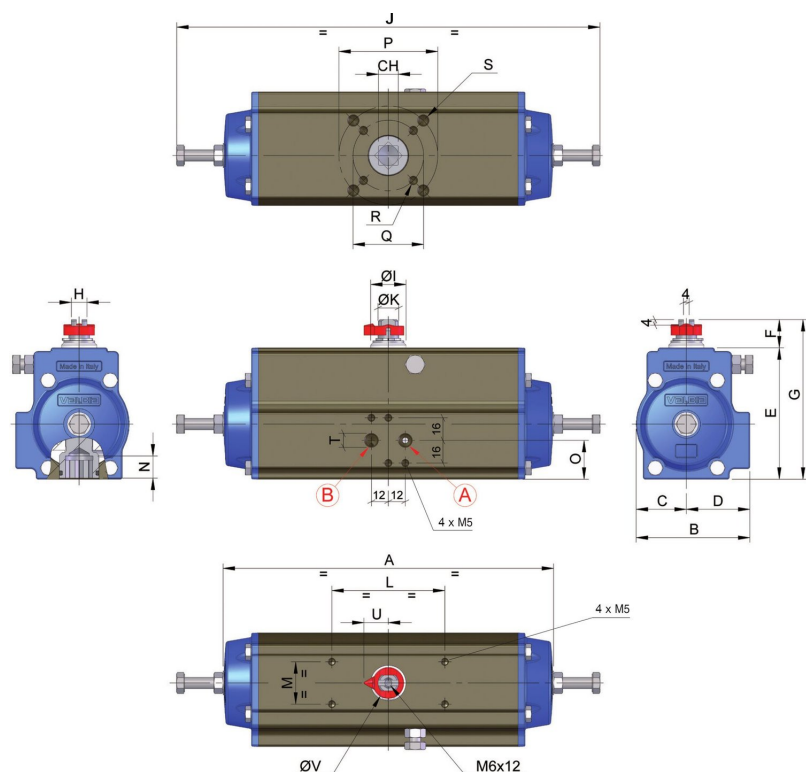


A Counterclockwise direction of rotation      B Direction of rotation clockwise

| CH | A   | B   | C   | D   | E   | F  | G   | H  | ØI  | J  | ØK | L   | L2 | M  | N  | Type<br>single-acting | Type<br>double-acting |
|----|-----|-----|-----|-----|-----|----|-----|----|-----|----|----|-----|----|----|----|-----------------------|-----------------------|
| 46 | 672 | 290 | 145 | 145 | 399 | 30 | 429 | 36 | 70  | 20 | 50 | 130 | 80 | 30 | 50 | PAS270                | PAD270                |
| 55 | 881 | 402 | 201 | 201 | 505 | 50 | 555 | 36 | 109 | 20 | 50 | 130 | -  | 30 | 62 | PAS330                | PAD330                |

| P   | Q   | R      | S      | T<br>ISO 7/1 | U   | V   | W   | X    | ØY | Z  | Weight<br>[approx. kg] |     | Flange<br>ISO 5211 | Type<br>single-acting | Type<br>double-acting |
|-----|-----|--------|--------|--------------|-----|-----|-----|------|----|----|------------------------|-----|--------------------|-----------------------|-----------------------|
|     |     |        |        |              |     |     |     |      |    |    | PAD                    | PAS |                    |                       |                       |
| -   | 165 | M20x30 | -      | G1/4"        | 111 | 79  | 230 | 80,5 | 60 | 68 | 83                     | 100 | F16                | PAS270                | PAD270                |
| 254 | 165 | M20x30 | M16x26 | G1/2"        | 135 | 135 | 356 | 80,5 | 60 | 95 | 168                    | 209 | F16/F25            | PAS330                | PAD330                |

Dimensions PAD052...PAD160 - Rotation angle 180°



A Counterclockwise direction of rotation

B Direction of rotation clockwise

| CH | A   | B    | C    | D    | E     | F  | G     | H  | ØI | approx. J | ØK | L      | M  | N    | Type double-acting |
|----|-----|------|------|------|-------|----|-------|----|----|-----------|----|--------|----|------|--------------------|
| 11 | 197 | 71   | 30   | 41   | 81,5  | 20 | 101,5 | 10 | 21 | 281       | 12 | 80     | 30 | 12   | PAD052-180         |
| 14 | 233 | 80,5 | 35,5 | 45   | 93    | 20 | 113   | 11 | 25 | 314       | 15 | 80     | 30 | 16   | PAD063-180         |
| 17 | 298 | 94,5 | 42   | 52,5 | 111   | 20 | 131   | 13 | 29 | 379       | 19 | 80     | 30 | 19   | PAD075-180         |
| 17 | 341 | 106  | 47,5 | 58,5 | 125   | 20 | 145   | 15 | 35 | 500       | 22 | 80     | 30 | 19   | PAD085-180         |
| 17 | 388 | 123  | 55   | 68   | 137,8 | 20 | 157,8 | 15 | 35 | 534       | 22 | 80     | 30 | 20,5 | PAD100-180         |
| 22 | 477 | 137  | 64   | 73   | 162,4 | 30 | 192,4 | 22 | 49 | 608       | 32 | 80/130 | 30 | 24   | PAD115-180         |
| 22 | 537 | 148  | 68   | 80   | 174,4 | 30 | 204,4 | 22 | 49 | 744       | 32 | 80/130 | 30 | 24   | PAD125-180         |
| 27 | 610 | 164  | 76,5 | 87,5 | 197   | 30 | 227   | 24 | 49 | 787       | 35 | 80/130 | 30 | 29   | PAD140-180         |
| 27 | 644 | 186  | 87   | 99   | 221   | 30 | 251   | 30 | 57 | 767       | 40 | 80/130 | 30 | 32   | PAD160-180         |

| O    | P   | Q   | R      | S      | T ISO 7/1 | Weight [approx. kg] | Flange ISO 5211 | Type double-acting |
|------|-----|-----|--------|--------|-----------|---------------------|-----------------|--------------------|
| 26,5 | 50  | 36  | M5x7,5 | M6x9   | 1/8"      | 1,7                 | F03/F05         | PAD052-180         |
| 27,5 | 70  | 50  | M6x8   | M8x12  | 1/8"      | 2,5                 | F05/F07         | PAD063-180         |
| 35   | 70  | 50  | M6x8   | M8x12  | 1/8"      | 4,2                 | F05/F07         | PAD075-180         |
| 42   | 70  | 50  | M6x8   | M8x12  | 1/8"      | 6                   | F05/F07         | PAD085-180         |
| 50   | 102 | 70  | M6x8   | M10x14 | 1/4"      | 8,6                 | F07/F10         | PAD100-180         |
| 50   | 102 | 70  | M8x12  | M10x15 | 1/4"      | 13,7                | F07/F10         | PAD115-180         |
| 61   | 102 | 70  | M8x12  | M10x14 | 1/4"      | 17,5                | F07/F10         | PAD125-180         |
| 71   | 125 | 102 | M10x15 | M12x18 | 1/4"      | 25                  | F10/F12         | PAD140-180         |
| 80   | 125 | 102 | M10x14 | M12x17 | 1/4"      | 31,2                | F10/F12         | PAD160-180         |

#### Torques for double-acting rotary actuators at various control pressures

Version 9

150761 / Generated 2026/39 EN

MADE IN EUROPE

+43 512 52076

austria@stasto.eu

© STASTO Automation KG

www.stasto.com

Open series online

Page 6 / 8



| Type   | Torque in newton metres [Nm] |       |       |       |         |       |       |       |
|--------|------------------------------|-------|-------|-------|---------|-------|-------|-------|
|        | 2,5 bar                      | 3 bar | 4 bar | 5 bar | 5,5 bar | 6 bar | 7 bar | 8 bar |
| PAD032 | 3,5                          | 4,2   | 6     | 7,5   | 8       | 9     | 10    | 11,5  |
| PAD052 | 9                            | 11    | 14,5  | 18,5  | 20      | 22    | 26    | 30    |
| PAD063 | 15,5                         | 19    | 26    | 33    | 36      | 39,5  | 46,5  | 53,5  |
| PAD075 | 29                           | 35    | 47,5  | 60    | 66      | 72    | 84,5  | 97    |
| PAD085 | 41,5                         | 50,5  | 68,5  | 87    | 96      | 105   | 123   | 141   |
| PAD100 | 66                           | 80    | 108   | 136   | 150     | 164,5 | 193   | 221   |
| PAD115 | 109                          | 132   | 179   | 226   | 249     | 272   | 319   | 366   |
| PAD125 | 143,5                        | 174   | 235   | 297   | 327     | 358   | 419   | 481   |
| PAD140 | 205                          | 246   | 328   | 410   | 451     | 493   | 575   | 657   |
| PAD160 | 287                          | 344   | 458   | 573   | 630     | 688   | 802   | 917   |
| PAD180 | 395                          | 474   | 632   | 789   | 868     | 947   | 1105  | 1263  |
| PAD200 | 532                          | 638   | 851   | 1063  | 1170    | 1276  | 1489  | 1701  |
| PAD230 | 879                          | 1055  | 1406  | 1758  | 1934    | 2109  | 2461  | 2812  |
| PAD270 | 1292                         | 1550  | 2067  | 2584  | 2842    | 3101  | 3617  | 4134  |
| PAD330 | 229                          | 2759  | 3679  | 4599  | 5059    | 5519  | 6438  | 7358  |

#### Torques for single-acting rotary actuators at various control pressures

| Type   | Torque in newton metres [Nm] |            |       |            |         |            |       |            |       |            |
|--------|------------------------------|------------|-------|------------|---------|------------|-------|------------|-------|------------|
|        | 3 bar                        | Spring set | 4 bar | Spring set | 5,5 bar | Spring set | 6 bar | Spring set | 7 bar | Spring set |
| PAS052 | 3,5                          | 01         | 4,8   | 03         | 6,2     | 05         | 8,1   | 05         | 8,1   | 05         |
| PAS063 | 5                            | 01         | 7,9   | 03         | 10,6    | 05         | 12,5  | 05         | 12,5  | 05         |
| PAS075 | 10,1                         | 01         | 13,8  | 03         | 17,5    | 05         | 23,2  | 05         | 23,2  | 05         |
| PAS085 | 16,1                         | 01         | 21,3  | 03         | 28,7    | 05         | 36,3  | 05         | 36,3  | 05         |
| PAS100 | 24,2                         | 01         | 33,3  | 03         | 42,3    | 05         | 55,2  | 05         | 55,2  | 05         |
| PAS115 | 41                           | 01         | 54,7  | 03         | 71,1    | 05         | 90,4  | 05         | 90,4  | 05         |
| PAS125 | 51,9                         | 01         | 63,9  | 03         | 88,1    | 05         | 118,8 | 05         | 119,2 | 05         |
| PAS140 | 77                           | 01         | 86    | 03         | 114     | 05         | 155   | 05         | 164   | 05         |
| PAS160 | 119                          | 02         | 148   | 04         | 202     | 05         | 239   | 06         | 268   | 06         |
| PAS180 | 160                          | 02         | 196   | 04         | 262     | 05         | 333   | 06         | 364   | 06         |
| PAS200 | 237                          | 02         | 295   | 04         | 406     | 05         | 458   | 06         | 507   | 06         |
| PAS230 | 348                          | 01         | 466   | 02         | 661     | 05         | 694   | 06         | 777   | 06         |
| PAS270 | 588                          | 02         | 785   | 04         | 1076    | 07         | 1177  | 08         | 1214  | 08         |
| PAS330 | 1010                         | 02         | 1347  | 04         | 1853    | 07         | 2021  | 08         | 2121  | 08         |

The type designation must be supplemented with the spring set No. (see Order code). The specified torques are minimum torques. The closing and opening torque are different.

#### Air consumption in NI/stroke

| Type                              | Piston diameter [mm] |      |      |      |      |      |      |      |      |      |      |       |       |      |      |
|-----------------------------------|----------------------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|------|
|                                   | 32                   | 52   | 63   | 75   | 85   | 100  | 115  | 125  | 140  | 160  | 180  | 200   | 230   | 270  | 330  |
| Counterclockwise rotation PAD/PAS | 0,04                 | 0,10 | 0,19 | 0,36 | 0,51 | 0,79 | 1,29 | 1,63 | 2,26 | 3,61 | 4,63 | 5,70  | 10,68 | 15,0 | 25,5 |
| Clockwise rotation PAD            | 0,03                 | 0,13 | 0,23 | 0,44 | 0,64 | 1,00 | 1,71 | 2,21 | 3,16 | 5,02 | 6,60 | 10,55 | 15,05 | 17,8 | 44,2 |
| Counterclockwise rotation PAD-180 | -                    | 0,17 | 0,33 | 0,60 | 0,90 | 1,37 | 2,13 | 2,90 | 4,90 | 5,40 | -    | -     | -     | -    | -    |
| Clockwise rotation PAD-180        | -                    | 0,16 | 0,29 | 0,56 | 0,83 | 1,32 | 2,25 | 3,00 | 3,90 | 6,32 | -    | -     | -     | -    | -    |

To determine the air consumption, the air consumption must be multiplied by the absolute pressure and the number of strokes per minute.



## Actuation time approx. [s]

| Type                                                                      | Piston diameter [mm] |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------------------------------------------------------------------|----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                                                                           | 32                   | 52   | 63   | 75   | 85   | 100  | 115  | 125  | 140  | 160  | 180  | 200  | 230  | 270  | 330  |
| Counterclockwise rotation PAD                                             | 0,03                 | 0,07 | 0,11 | 0,18 | 0,36 | 0,38 | 0,60 | 0,80 | 1,13 | 1,43 | 1,99 | 3,08 | 4,15 | 6,16 | 5,50 |
| Clockwise rotation PAD                                                    | 0,03                 | 0,05 | 0,10 | 0,15 | 0,25 | 0,34 | 0,54 | 0,70 | 0,94 | 1,25 | 1,80 | 2,41 | 3,80 | 5,47 | 5,50 |
| Counterclockwise rotation PAS                                             | -                    | 0,07 | 0,13 | 0,32 | 0,32 | 0,54 | 0,92 | 1,20 | 1,64 | 2,27 | 3,08 | 3,58 | 6,20 | 8,97 | 6,40 |
| Clockwise rotation PAS                                                    | -                    | 0,07 | 0,13 | 0,22 | 0,30 | 0,48 | 0,75 | 0,94 | 1,25 | 1,60 | 2,38 | 2,80 | 5,40 | 6,62 | 7,40 |
| Counterclockwise rotation PAD-180                                         | -                    | 0,08 | 0,14 | 0,34 | 0,42 | 0,64 | 1,11 | 1,87 | 2,95 | 3,03 | -    | -    | -    | -    | -    |
| Clockwise rotation PAD-180                                                | -                    | 0,08 | 0,12 | 0,25 | 0,39 | 0,62 | 1,08 | 1,13 | 2,03 | 2,29 | -    | -    | -    | -    | -    |
| Actuation time at 6 bar control pressure and without mounted pilot valve. |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |

Illustrations non-binding

Design, dimensional and material changes reserved

[Armatures](#) / [Ball valves - automatically operated](#) / [Spare parts](#) / [Pneumatic actuator Series PAD](#)

Version 9

150761 / Generated 2026/39 EN

MADE IN EUROPE

+43 512 52076

austria@stasto.eu

© STASTO Automation KG

[www.stasto.com](http://www.stasto.com)

Open series online

Page 8 / 8

