

# Guide cylinders, Series GPC-BV

- Ø 10-100 mm
- double-acting
- Plain bearing
- Cushioning elastic
- with magnetic piston



|  |                 |
|--|-----------------|
| Working pressure min./max.             | See table below |
| Ambient temperature min./max.          | -10 ... 70 °C   |
| Medium                                 | Compressed air  |
| Max. particle size                     | 50 µm           |
| Oil content of compressed air          | 0 ... 5 mg/m³   |
| Pressure for determining piston forces | 6.3 bar         |
| Weight                                 | See table below |

## Technical data

| Piston Ø  | 10 mm      | 12 mm      | 16 mm      | 20 mm      | 25 mm      | 32 mm      | 40 mm      |
|-----------|------------|------------|------------|------------|------------|------------|------------|
| Stroke 10 | R402000294 | 0822060000 | 0822061000 | 0822062000 | 0822063000 | -          | -          |
| 20        | R402000296 | 0822060001 | 0822061001 | 0822062001 | 0822063001 | -          | -          |
| 25        | R402000297 | 0822060007 | 0822061007 | 0822062007 | 0822063007 | 0822064000 | 0822065000 |
| 30        | R402000298 | 0822060002 | 0822061002 | 0822062002 | 0822063002 | -          | -          |
| 40        | R402000300 | 0822060003 | 0822061003 | 0822062003 | 0822063003 | -          | -          |
| 50        | R402000302 | 0822060004 | 0822061004 | 0822062004 | 0822063004 | 0822064001 | 0822065001 |
| 75        | R402000307 | 0822060005 | 0822061005 | 0822062005 | 0822063005 | 0822064002 | 0822065002 |
| 100       | R402000312 | 0822060006 | 0822061006 | 0822062006 | 0822063006 | 0822064003 | 0822065003 |
| 125       | -          | 0822060024 | 0822061024 | 0822062024 | 0822063024 | 0822064004 | 0822065004 |
| 150       | -          | 0822060029 | 0822061029 | 0822062029 | 0822063029 | -          | -          |
| 160       | -          | -          | -          | -          | 0822063031 | 0822064005 | 0822065005 |
| 200       | -          | -          | -          | -          | 0822063039 | 0822064006 | 0822065006 |

| Piston Ø  | 50 mm      | 63 mm      | 80 mm      | 100 mm     |
|-----------|------------|------------|------------|------------|
| Stroke 10 | -          | -          | -          | -          |
| 20        | -          | -          | -          | -          |
| 25        | 0822066000 | 0822067000 | R402000914 | R402000928 |
| 30        | -          | -          | -          | -          |

| Piston Ø | 50 mm      | 63 mm      | 80 mm      | 100 mm     |
|----------|------------|------------|------------|------------|
| 40       | -          | -          | -          | -          |
| 50       | 0822066001 | 0822067001 | R402000915 | R402000929 |
| 75       | 0822066002 | 0822067002 | R402000916 | R402000930 |
| 100      | 0822066003 | 0822067003 | R402000917 | R402000931 |
| 125      | 0822066004 | 0822067004 | R402000918 | R402000932 |
| 150      | -          | -          | -          | -          |
| 160      | 0822066005 | 0822067005 | R402000919 | R402000933 |
| 200      | 0822066006 | 0822067006 | R402000920 | R402000934 |

## Technical data

| Piston Ø                   | 10 mm       | 12 mm       | 16 mm       | 20 mm       |
|----------------------------|-------------|-------------|-------------|-------------|
| Port                       | M5          | M5          | M5          | M5          |
| Working pressure min./max. | 2 ... 8 bar | 2 ... 8 bar | 2 ... 8 bar | 2 ... 8 bar |
| Retracting piston force    | 42 N        | 53 N        | 95 N        | 148 N       |
| Extracting piston force    | 49 N        | 71 N        | 127 N       | 198 N       |
| Speed max.                 | 0.5 m/s     | 0.5 m/s     | 0.5 m/s     | 0.5 m/s     |
| Impact energy              | 0.04 J      | 0.1 J       | 0.11 J      | 0.15 J      |

| Piston Ø                   | 25 mm         | 32 mm         | 40 mm       | 50 mm       |
|----------------------------|---------------|---------------|-------------|-------------|
| Port                       | G 1/8         | G 1/8         | G 1/8       | G 1/4       |
| Working pressure min./max. | 1.5 ... 8 bar | 1.3 ... 8 bar | 1 ... 8 bar | 1 ... 8 bar |
| Retracting piston force    | 260 N         | 435 N         | 720 N       | 1110 N      |
| Extracting piston force    | 309 N         | 507 N         | 792 N       | 1237 N      |
| Speed max.                 | 0.8 m/s       | 0.6 m/s       | 0.6 m/s     | 0.6 m/s     |
| Impact energy              | 0.35 J        | 0.4 J         | 0.52 J      | 0.64 J      |

| Piston Ø                   | 63 mm       | 80 mm       | 100 mm      |
|----------------------------|-------------|-------------|-------------|
| Port                       | G 1/4       | G 1/4       | G 3/8       |
| Working pressure min./max. | 1 ... 8 bar | 1 ... 8 bar | 1 ... 8 bar |
| Retracting piston force    | 1837 N      | 2969 N      | 4639 N      |
| Extracting piston force    | 1964 N      | 3167 N      | 4948 N      |
| Speed max.                 | 0.6 m/s     | 0.4 m/s     | 0.4 m/s     |
| Impact energy              | 0.75 J      | 0.75 J      | 1 J         |

## Technical information

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

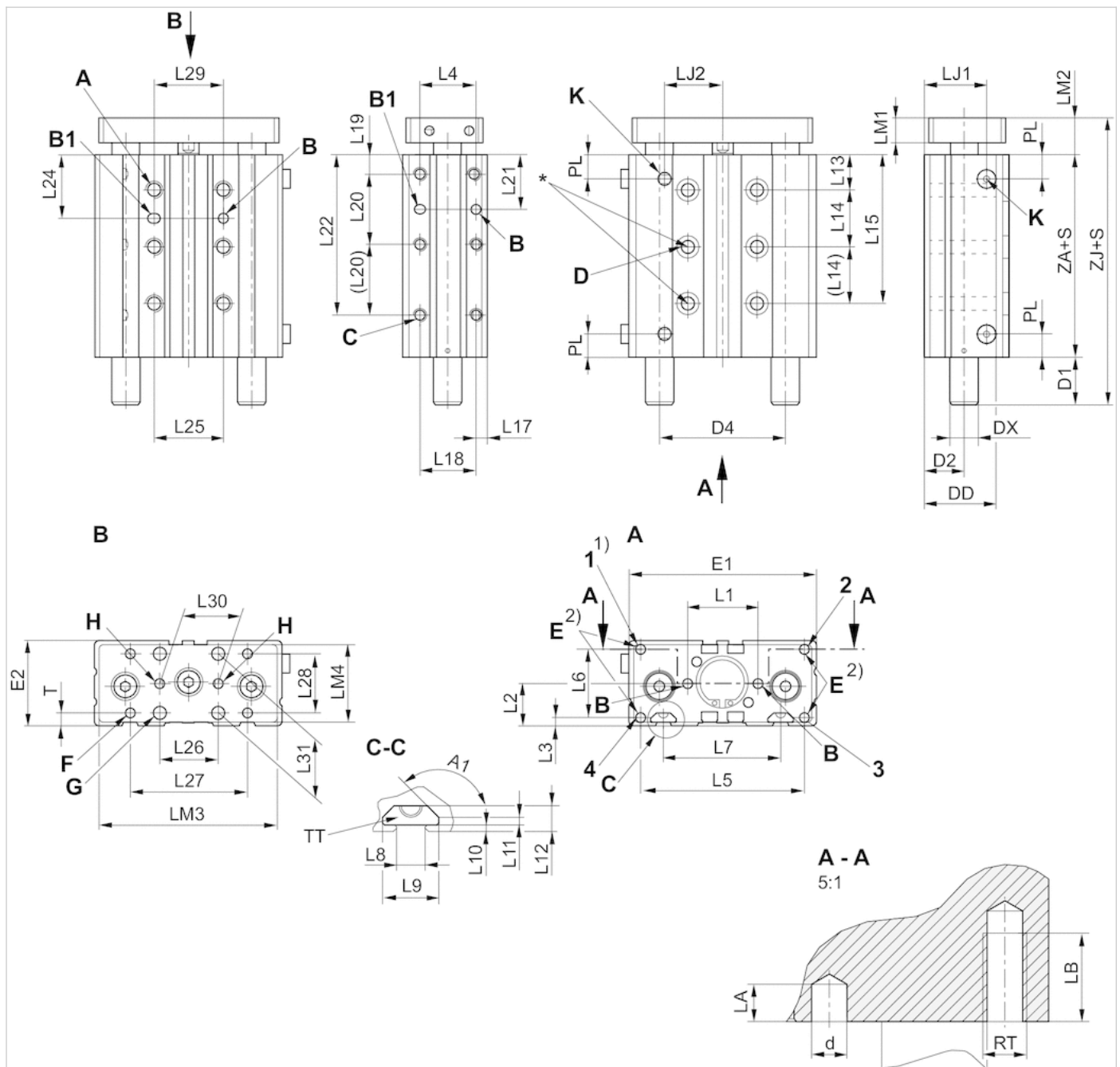
Note: Only the Ø10 variants fits to sensor series ST4. The sensor series ST6 and SN3 can be used for all other Ø variants.

Technical information

| Material    |                    |
|-------------|--------------------|
| Housing     | Aluminum, anodized |
| Seal        | Polyurethane       |
| Front plate | Steel, galvanized  |
| Guide rod   | Stainless steel    |
| Bearing     | Sintered bronze    |
| Piston rod  | Stainless steel    |

## Dimensions

### Dimensions, Ø 10 ... 20



\* Suitable for screws according to ISO 4762

1) Only Ø 20 threaded hole

2) M4 mounting hole for GPC-E accessories

1, 2, 3, 4: threaded holes

S = stroke

Note: Only the Ø10 variants fits to sensor series ST4. The sensor series ST6 and SN3 can be used for all other Ø variants.

## Dimensions

| Piston Ø | A<br>RTxLB | A1   | B<br>ØdxLA | B1<br>ØdxDxLA | C<br>RTxLB | D<br>Ø |
|----------|------------|------|------------|---------------|------------|--------|
| 10 mm    | M4x6       | –    | 4H7x4      | 4H7x5x4       | M4x6       | 3.2    |
| 12 mm    | M5x8       | –    | 4H7x4      | 4H7x5x4       | M5x8       | 4.2    |
| 16 mm    | M5x8       | 135° | 4H7x4      | 4H7x5x4       | M5x8       | 4.2    |
| 20 mm    | M6x10      | 135° | 4H7x4      | 4H7x5x4       | M6x10      | 5.2    |

| Piston Ø | D1<br>S=10-30 | D1<br>S=40-100 | D1<br>S>100 | D2   | D4 | DD   | DX |
|----------|---------------|----------------|-------------|------|----|------|----|
| 10 mm    | 13.5          | 13.5           | 13.5        | 7    | –  | 17.4 | 8  |
| 12 mm    | 0             | 17.6           | 32.6        | 14.5 | 40 | 20   | 10 |
| 16 mm    | 0             | 20             | 35          | 15.8 | 47 | 28.5 | 12 |
| 20 mm    | 0             | 20             | 35          | 16.5 | 54 | 30.5 | 12 |

| Piston Ø | E<br>RTxLB | E1 | E2   | F<br>Ø 1) | G<br>Ø 2) | H<br>Ø 2) | K  | L1       |
|----------|------------|----|------|-----------|-----------|-----------|----|----------|
| 10 mm    | M4x8       | 50 | 21   | M4        | –         | –         | M5 | 20 ±0,04 |
| 12 mm    | M5x8       | 58 | 30.5 | M4        | 4.5       | 4H9       | M5 | 23 ±0,04 |
| 16 mm    | M5x8       | 68 | 33   | M4        | 5.5       | 4H9       | M5 | 28 ±0,04 |
| 20 mm    | M5x10      | 80 | 36   | M5        | 5.5       | 4H9       | M5 | 30 ±0,04 |

| Piston Ø | L2   | L3  | L4 | L5 | L6 | L7 | L8   | L9 | L10 | L11 |
|----------|------|-----|----|----|----|----|------|----|-----|-----|
| 10 mm    | 10.5 | 3   | –  | 20 | 15 | –  | –    | –  | –   | –   |
| 12 mm    | 15   | 4   | 22 | 50 | 22 | –  | –    | –  | –   | –   |
| 16 mm    | 16.5 | 4   | 25 | 61 | 25 | 43 | 6.15 | 12 | 1.5 | 1.5 |
| 20 mm    | 18   | 3.5 | 24 | 70 | 29 | 50 | 6.15 | 12 | 1.5 | 1.5 |

| Piston Ø | L12 | L13  | L14<br>S=10 | L14<br>S=20 | L14<br>S>20 | L15<br>S=40 | L15<br>S>40 |
|----------|-----|------|-------------|-------------|-------------|-------------|-------------|
| 10 mm    | –   | 15   | –           | 20          | 20          | 55          | 55          |
| 12 mm    | –   | 14.5 | –           | 18          | 22          | –           | 58.5        |
| 16 mm    | 5.5 | 14   | 18          | 25          | 25          | –           | 64          |
| 20 mm    | 5.5 | 15   | 16          | 24          | 24          | –           | 63          |

| Piston Ø | L17 | L18 | L19 | L20<br>S=10 | L20<br>S>10 | L21<br>S=10 | L21<br>S>10 |
|----------|-----|-----|-----|-------------|-------------|-------------|-------------|
| 10 mm    | 15  | –   | 8   | 20          | 20          | 13          | 13          |
| 12 mm    | 4   | 22  | 8   | 20          | 20          | 18          | 18          |
| 16 mm    | 4   | 25  | 8   | 18          | 25          | 20.5        | 20.5        |
| 20 mm    | 4.5 | 24  | 8   | 20          | 30          | 18          | 23          |

| Piston Ø | L22<br>S≤40 | L22<br>S>40 | L24<br>S=10 | L24<br>S>10 | L25 | L26 | L27 |
|----------|-------------|-------------|-------------|-------------|-----|-----|-----|
| 10 mm    | 48          | 48          | 25          | 25          | 20  | –   | 20  |
| 12 mm    | –           | 48          | 25.5        | 25.5        | 20  | –   | 40  |
| 16 mm    | –           | 58          | 26.5        | 26.5        | 25  | 20  | 40  |
| 20 mm    | –           | 68          | 23          | 27          | 30  | 25  | 50  |

| Piston Ø | L28 | L29 | L30 | L31 | LJ1  | LJ2 | LM1 | LM2  | LM3 |
|----------|-----|-----|-----|-----|------|-----|-----|------|-----|
| 10 mm    | 10  | 20  | –   | –   | 15.5 | 15  | 5   | 13.5 | 48  |

| Piston Ø | L28 | L29 | L30      | L31 | LJ1  | LJ2  | LM1 | LM2  | LM3 |
|----------|-----|-----|----------|-----|------|------|-----|------|-----|
| 12 mm    | 20  | 20  | –        | –   | 24.8 | 17.5 | 8   | 12.7 | 55  |
| 16 mm    | 20  | 25  | 20 ±0,04 | 22  | 27   | 21   | 8   | 13.5 | 65  |
| 20 mm    | 25  | 30  | 25 ±0,04 | 25  | 26.5 | 25   | 10  | 15.5 | 77  |

| Piston Ø | LM4 | PL  | T   | TT | ZA   | ZJ<br>S=10-30 | ZJ<br>S=40-100 |
|----------|-----|-----|-----|----|------|---------------|----------------|
| 10 mm    | 19  | 8   | 5.5 | –  | 36   | 63            | 63             |
| 12 mm    | 27  | 8.5 | 5   | –  | 34.4 | 47.1          | 64.7           |
| 16 mm    | 30  | 8.8 | 6.5 | N6 | 36   | 49.5          | 69.5           |
| 20 mm    | 33  | 10  | 5.5 | N6 | 36   | 51.5          | 71.5           |

S = stroke

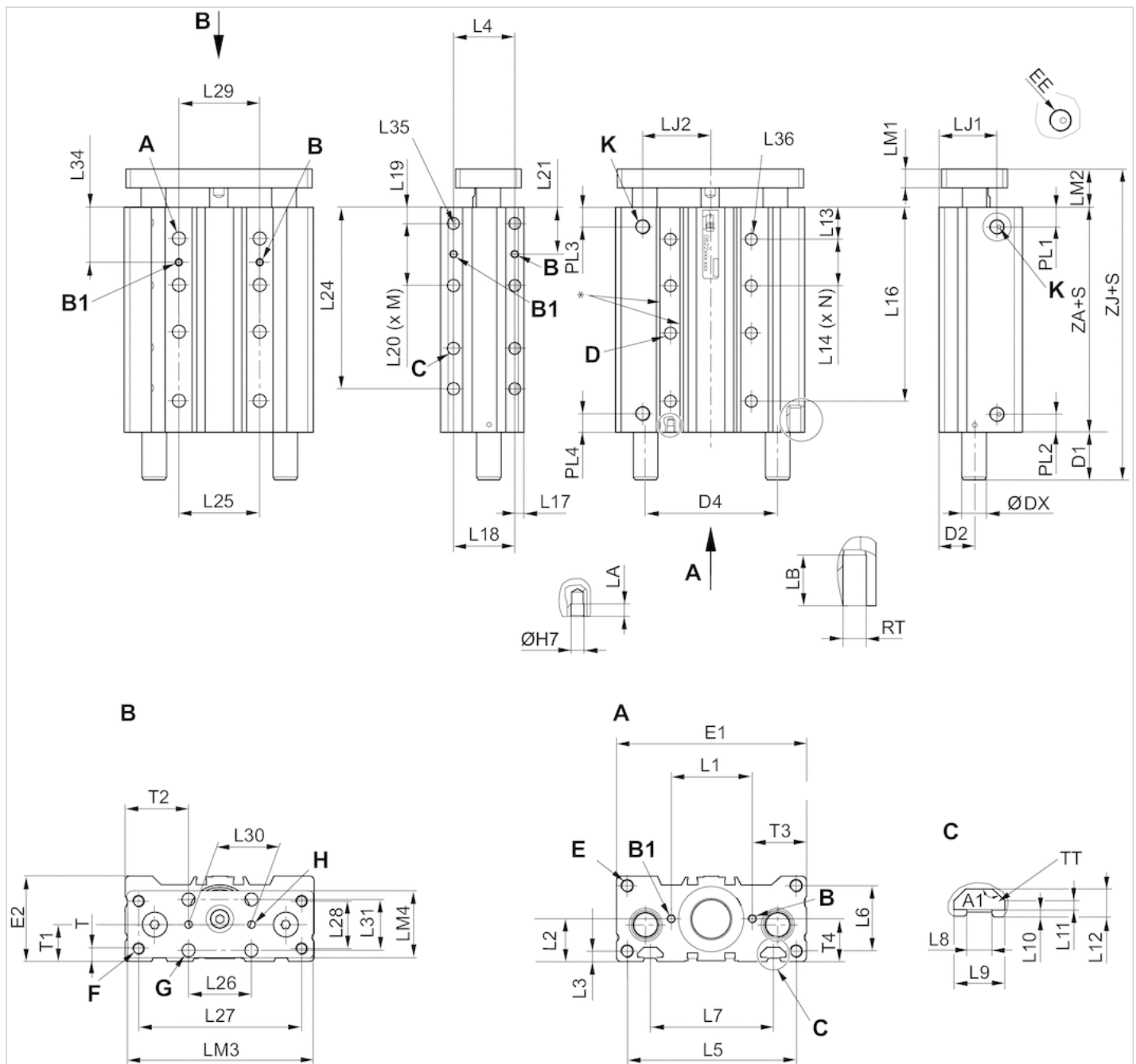
To determine the cylinder length (ZA) for intermediate strokes (i.e. stroke 10 with dia. 40), the next available standard stroke size must be used

- 1) Through hole with thread
- 2) through-hole

Two holes C-C 10 mm.

## Dimensions

Dimensions, Ø 25 ... 100



\* Suitable for screws according to ISO 4762

S = stroke

Note: Only the Ø10 variants fits to sensor series ST4. The sensor series ST6 and SN3 can be used for all other Ø variants.

## Dimensions

| Piston Ø | A RTxLB | A1   | B ØdxLA | B1 ØdxD | C RTxLB | D Ø 1) | D2   | D4   | DX | E RTxLB | E1  | E2   |
|----------|---------|------|---------|---------|---------|--------|------|------|----|---------|-----|------|
| 25 mm    | M6x10   | 135° | 4x4     | 4x5     | M6x10   | 5.5    | 18   | 59   | 16 | M6x12   | 95  | 43   |
| 32 mm    | M8x14   | 135° | 4x4     | 4x5     | M8x14   | 7.4    | 23   | 75.6 | 20 | M6x12   | 114 | 48.5 |
| 40 mm    | M8x14   | 135° | 4x4     | 4x5     | M8x14   | 7.4    | 23   | 86   | 20 | M8x16   | 124 | 54.5 |
| 50 mm    | M10x20  | 135° | 5x5     | 5x6     | M10x20  | 9.3    | 27.5 | 104  | 25 | M8x16   | 148 | 64   |
| 63 mm    | M10x20  | 135° | 5x5     | 5x6     | M10x20  | 9.3    | 35   | 124  | 25 | M10x20  | 162 | 78.5 |
| 80 mm    | M12x24  | 135° | 6x6     | 6x7     | M12x25  | 11.2   | 39.5 | 152  | 32 | M12x25  | 202 | 91.5 |
| 100 mm   | M12x24  | 135° | 6x6     | 6x7     | M12x25  | 11.2   | 39.5 | 174  | 32 | M12x25  | 226 | 111  |

| Piston Ø | F Ø 1) | G Ø 2) | H Ø 2) | K EE  | L1        | L2   | L3  | L4       | L5  | L6   | L7  | L8   | L9   |
|----------|--------|--------|--------|-------|-----------|------|-----|----------|-----|------|-----|------|------|
| 25 mm    | M6     | 6.5    | 4H8    | G 1/8 | 35 ±0,1   | 20.5 | 4.5 | 25 ±0,1  | 85  | 34   | 52  | 6.15 | 12   |
| 32 mm    | M8     | 6.5    | 4H8    | G 1/8 | 44 ±0,1   | 24   | 5   | 33 ±0,1  | 105 | 26   | 70  | 8.2  | 16.7 |
| 40 mm    | M8     | 8.5    | 4H8    | G 1/8 | 53 ±0,15  | 27   | 6   | 40 ±0,15 | 110 | 42   | 80  | 8.2  | 16.7 |
| 50 mm    | M8     | 8.5    | 4H8    | G 1/4 | 66 ±0,15  | 32   | 8   | 48 ±0,15 | 133 | 34.5 | 93  | 8.2  | 16.7 |
| 63 mm    | M10    | 10.5   | 5H8    | G 1/4 | 84 ±0,15  | 39   | 8   | 60 ±0,15 | 147 | 62   | 112 | 10.2 | 20.3 |
| 80 mm    | M12    | 10.5   | 5H8    | G 1/4 | 100 ±0,15 | 46   | 9   | 60 ±0,15 | 182 | 54.5 | 132 | 10.2 | 20.3 |
| 100 mm   | M12    | 12.5   | 6H8    | G 3/8 | 120 ±0,15 | 55.5 | 9   | 60 ±0,15 | 206 | 76   | 155 | 10.2 | 20.3 |

| Piston Ø | L10 | L11 | L12 | L13  | L15 | L17 | L18 | L19 | L22 | L25 | L26 | L27 | L28 | L29       | L30     | L31  | LJ1  |
|----------|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------|---------|------|------|
| 25 mm    | 1.5 | 1.5 | 5.5 | 16.5 | 25  | 5.5 | 25  | 8   | 32  | 32  | 30  | 81  | 23  | 32 ±0,1   | 30 ±0,2 | 24   | 29.6 |
| 32 mm    | 2.2 | 2.8 | 9   | 20.5 | 33  | 6.5 | 33  | 10  | 42  | 42  | 32  | 97  | 30  | 42 ±0,1   | 32 ±0,2 | 25   | 40   |
| 40 mm    | 2.2 | 2.8 | 9   | 20   | 40  | 6   | 40  | 10  | 53  | 53  | 42  | 107 | 30  | 53 ±0,15  | 42 ±0,2 | 32.5 | 37.8 |
| 50 mm    | 2.2 | 2.8 | 9   | 23   | 48  | 7.5 | 48  | 12  | 63  | 63  | 53  | 134 | 40  | 63 ±0,15  | 53 ±0,2 | 40   | 54.5 |
| 63 mm    | 6   | 6   | 16  | 24   | 60  | 11  | 60  | 12  | 80  | 80  | 63  | 140 | 48  | 80 ±0,15  | 63 ±0,2 | 48   | 57   |
| 80 mm    | 6   | 6   | 16  | 33.5 | 60  | 12  | 60  | 13  | 96  | 96  | 80  | 176 | 52  | 96 ±0,15  | 80 ±0,2 | 60   | 77.5 |
| 100 mm   | 6   | 6   | 16  | 32.5 | 60  | 12  | 60  | 13  | 119 | 119 | 96  | 204 | 64  | 119 ±0,15 | 96 ±0,2 | 60   | 68.5 |

| Piston Ø | LJ2  | LM1 | LM2  | LM3 | LM4 | PL1  | PL2  | PL3  | PL4  | T    | T1         | T2        | T3        |
|----------|------|-----|------|-----|-----|------|------|------|------|------|------------|-----------|-----------|
| 25 mm    | 32   | 10  | 15.5 | 93  | 33  | 11   | 11   | 11   | 11   | 6.5  | 18 ±0,4    | 32,5 ±0,4 | 30 ±0,05  |
| 32 mm    | 40.5 | 12  | 18.5 | 112 | 43  | 13.5 | 13.5 | 13.5 | 13.5 | 8    | 23 ±0,4    | 41 ±0,4   | 35 ±0,05  |
| 40 mm    | 44   | 12  | 19.5 | 122 | 43  | 12   | 12   | 12   | 12   | 8    | 23 ±0,4    | 41 ±0,4   | 35,5 ±0,1 |
| 50 mm    | 50.5 | 15  | 23.5 | 146 | 52  | 13   | 13   | 13   | 13   | 7.5  | 27,5 ±0,4  | 47,5 ±0,4 | 41 ±0,1   |
| 63 mm    | 59   | 15  | 24   | 160 | 67  | 13.7 | 13.7 | 13.7 | 13.7 | 11   | 35 ±0,4    | 49,5 ±0,5 | 39 ±0,1   |
| 80 mm    | 74.5 | 20  | 30   | 200 | 76  | 23   | 23   | 23   | 23   | 13.5 | 39,5 ±0,45 | 61 ±0,5   | 51 ±0,2   |
| 100 mm   | 86.5 | 20  | 31   | 224 | 84  | 21.5 | 21.5 | 21.5 | 21.5 | 18.5 | 50,5 ±0,45 | 65 ±0,5   | 53 ±0,2   |

| Piston Ø | T4         | TT  | ZA    |
|----------|------------|-----|-------|
| 25 mm    | 20,5 ±0,05 | N6  | 42 3) |
| 32 mm    | 24 ±0,05   | N8  | 46.5  |
| 40 mm    | 27 ±0,1    | N8  | 44    |
| 50 mm    | 32 ±0,1    | N8  | 46    |
| 63 mm    | 39 ±0,1    | N10 | 51    |
| 80 mm    | 46 ±0,2    | N10 | 77    |
| 100 mm   | 55,5 ±0,2  | N10 | 77    |

S = stroke

To determine the cylinder length (ZA) for intermediate strokes (i.e. stroke 10 with dia. 40), the next available standard stroke size must be used

1) Through hole with thread



2) through-hole

3) For stroke 10/150, ZA = 52, for stroke 25, ZA = 47

Two holes C-C 10 mm.

## Dimensions

| Piston Ø | S=10<br>D1 | S=20<br>D1 | S=25<br>D1 | S=30<br>D1 | S=40<br>D1 | S=50<br>D1 |
|----------|------------|------------|------------|------------|------------|------------|
| 25 mm    | 0          | 0          | 0          | 0          | 0          | 0          |
| 32 mm    | -          | -          | 17         | 17         | 17         | 17         |
| 40 mm    | -          | -          | 19         | 19         | 19         | 19         |
| 50 mm    | -          | -          | 25         | 25         | 25         | 25         |
| 63 mm    | -          | -          | 19         | 19         | 19         | 19         |
| 80 mm    | -          | -          | 10.5       | 10.5       | 10.5       | 10.5       |
| 100 mm   | -          | -          | 9.5        | 9.5        | 9.5        | 9.5        |

| Piston Ø | S=75<br>D1 | S=100<br>D1 | S=125<br>D1 | S=150<br>D1 | S=160<br>D1 | S=200<br>D1 |
|----------|------------|-------------|-------------|-------------|-------------|-------------|
| 25 mm    | 11         | 11          | 27          | 27          | 27          | 27          |
| 32 mm    | 17         | 17          | 35          | 35          | 35          | 35          |
| 40 mm    | 19         | 19          | 37          | 37          | 37          | 37          |
| 50 mm    | 25         | 25          | 55          | 55          | 55          | 55          |
| 63 mm    | 19         | 19          | 49          | 49          | 49          | 49          |
| 80 mm    | 10.5       | 10.5        | 38.5        | 38.5        | 38.5        | 38.5        |
| 100 mm   | 9.5        | 9.5         | 37.5        | 37.5        | 37.5        | 37.5        |

| Piston Ø | S=10<br>L14 | S=20<br>L14 | S=25<br>L14 | S=30<br>L14 | S=40<br>L14 | S=50<br>L14 |
|----------|-------------|-------------|-------------|-------------|-------------|-------------|
| 25 mm    | 19          | 25          | 25          | 25          | 25          | 25          |
| 32 mm    | 30          | 30          | 30          | 33          | 33          | 33          |
| 40 mm    | 30          | 30          | 30          | 40          | 40          | 40          |
| 50 mm    | 25          | 25          | 25          | 48          | 48          | 48          |
| 63 mm    | 28          | 28          | 28          | 28          | 28          | 28          |
| 80 mm    | 35          | 35          | 35          | 60          | 60          | 60          |
| 100 mm   | 37          | 37          | 37          | 60          | 60          | 60          |

| Piston Ø | S=75<br>L14 | S=100<br>L14 | S=125<br>L14 | S=160<br>L14 | S=200<br>L14 |
|----------|-------------|--------------|--------------|--------------|--------------|
| 25 mm    | 25          | 25           | 25           | 25           | 25           |
| 32 mm    | 33          | 33           | 33           | 33           | 33           |
| 40 mm    | 40          | 40           | 40           | 40           | 40           |
| 50 mm    | 48          | 48           | 48           | 48           | 48           |
| 63 mm    | 60          | 60           | 60           | 60           | 60           |
| 80 mm    | 60          | 60           | 60           | 60           | 60           |
| 100 mm   | 60          | 60           | 60           | 60           | 60           |

S = stroke

## Dimensions

| Piston Ø | S=10<br>N | S=20<br>N | S=25<br>N | S=30<br>N | S=40<br>N | S=50<br>N | S=75<br>N |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 25 mm    | 1         | 1         | 1         | 1         | 1         | 2         | 3         |
| 32 mm    | -         | -         | 1         | 1         | 1         | 1         | 2         |
| 40 mm    | -         | -         | 1         | 1         | 1         | 1         | 2         |
| 50 mm    | -         | -         | 1         | 1         | 1         | 1         | 1         |
| 63 mm    | -         | -         | 1         | 1         | 1         | 1         | 1         |
| 80 mm    | -         | -         | 1         | 1         | 1         | 1         | 1         |
| 100 mm   | -         | -         | 1         | 1         | 1         | 1         | 1         |

| Piston Ø | S=100<br>N | S=125<br>N | S=160<br>N | S=200<br>N | S=40<br>L16 | S=50<br>L16 |
|----------|------------|------------|------------|------------|-------------|-------------|
| 25 mm    | 3          | 3          | 3          | 3          | 65.5        | -           |
| 32 mm    | 3          | 3          | 3          | 3          | -           | 76          |
| 40 mm    | 2          | 3          | 3          | 3          | -           | -           |
| 50 mm    | 2          | 2          | 3          | 3          | -           | -           |
| 63 mm    | 1          | 2          | 2          | 3          | -           | -           |
| 80 mm    | 1          | 2          | 2          | 3          | -           | -           |
| 100 mm   | 1          | 2          | 2          | 3          | -           | -           |

| Piston Ø | S=100<br>L16 | S=125<br>L16 | S=160<br>L16 | S=200<br>L16 |
|----------|--------------|--------------|--------------|--------------|
| 25 mm    | 125.5        | 150.5        | 185.5        | 225.5        |
| 32 mm    | -            | 151          | 186          | 226          |
| 40 mm    | -            | -            | 184          | 224          |
| 50 mm    | -            | 148          | -            | 223          |
| 63 mm    | 127          | -            | 187          | -            |
| 80 mm    | 143.5        | -            | 203.5        | -            |
| 100 mm   | 144.5        | -            | 204.5        | -            |

S = stroke

## Dimensions

| Piston Ø | S=20<br>L20 | S=25<br>L20 | S=30<br>L20 | S=40<br>L20 | S=50<br>L20 | S=75<br>L20 |
|----------|-------------|-------------|-------------|-------------|-------------|-------------|
| 25 mm    | 22          | 32          | 32          | 32          | 32          | 32          |
| 32 mm    | 35          | 35          | 42          | 42          | 42          | 42          |
| 40 mm    | 30          | 30          | 53          | 53          | 53          | 53          |
| 50 mm    | 30          | 30          | 30          | 30          | 30          | 63          |
| 63 mm    | 30          | 30          | 30          | 30          | 30          | 80          |
| 80 mm    | 47          | 47          | 47          | 47          | 47          | 96          |
| 100 mm   | 49          | 49          | 49          | 49          | 49          | 49          |

| Piston Ø | S=100<br>L20 | S=125<br>L20 | S=160<br>L20 | S=200<br>L20 | S=20<br>L21 | S=25<br>L21 |
|----------|--------------|--------------|--------------|--------------|-------------|-------------|
| 25 mm    | 32           | 32           | 32           | 32           | 19          | 24          |
| 32 mm    | 42           | 42           | 42           | 42           | 27.5        | 27.5        |
| 40 mm    | 53           | 53           | 53           | 53           | 25          | 25          |
| 50 mm    | 63           | 63           | 63           | 63           | 27          | 27          |

| Piston Ø | S=100<br>L20 | S=125<br>L20 | S=160<br>L20 | S=200<br>L20 | S=20<br>L21 | S=25<br>L21 |
|----------|--------------|--------------|--------------|--------------|-------------|-------------|
| 63 mm    | 80           | 80           | 80           | 80           | 27          | 27          |
| 80 mm    | 96           | 96           | 96           | 96           | 36.5        | 36.5        |
| 100 mm   | 119          | 119          | 119          | 119          | 37.5        | 37.5        |

| Piston Ø | S=30<br>L21 | S=40<br>L21 | S=50<br>L21 | S=75<br>L21 | S=100<br>L21 | S=125<br>L21 |
|----------|-------------|-------------|-------------|-------------|--------------|--------------|
| 25 mm    | 24          | 24          | 24          | 24          | 24           | 24           |
| 32 mm    | 31          | 31          | 31          | 31          | 31           | 31           |
| 40 mm    | 36.5        | 36.5        | 36.5        | 36.5        | 36.5         | 36.5         |
| 50 mm    | 27          | 27          | 27          | 43.5        | 43.5         | 43.5         |
| 63 mm    | 27          | 27          | 27          | 52          | 52           | 52           |
| 80 mm    | 36.5        | 36.5        | 36.5        | 61          | 61           | 61           |
| 100 mm   | 37.5        | 37.5        | 37.5        | 37.5        | 72.5         | 72.5         |

| Piston Ø | S=160<br>L21 | S=200<br>L21 |
|----------|--------------|--------------|
| 25 mm    | 24           | 24           |
| 32 mm    | 31           | 31           |
| 40 mm    | 36.5         | 36.5         |
| 50 mm    | 43.5         | 43.5         |
| 63 mm    | 52           | 52           |
| 80 mm    | 61           | 61           |
| 100 mm   | 72.5         | 72.5         |

S = stroke

## Dimensions

| Piston Ø | S10<br>M | S20<br>M | S25<br>M | S30<br>M | S40<br>M | S50<br>M | S75<br>M |
|----------|----------|----------|----------|----------|----------|----------|----------|
| 25 mm    | 1        | 1        | 1        | 1        | 1        | 1        | 2        |
| 32 mm    | -        | -        | 1        | 1        | 1        | 1        | 2        |
| 40 mm    | -        | -        | 1        | 1        | 1        | 1        | 1        |
| 50 mm    | -        | -        | 1        | 1        | 1        | 1        | 1        |
| 63 mm    | -        | -        | 1        | 1        | 1        | 1        | 1        |
| 80 mm    | -        | -        | 1        | 1        | 1        | 1        | 1        |
| 100 mm   | -        | -        | 1        | 1        | 1        | 1        | 1        |

| Piston Ø | S100<br>M | S125<br>M | S160<br>M | S200<br>M | S40<br>L24 | S50<br>L24 | S75<br>L24 |
|----------|-----------|-----------|-----------|-----------|------------|------------|------------|
| 25 mm    | 3         | 3         | 3         | 3         | 60         | 70         | 95         |
| 32 mm    | 2         | 3         | 3         | 3         | -          | -          | -          |
| 40 mm    | 2         | 2         | 3         | 3         | -          | -          | 91         |
| 50 mm    | 1         | 2         | 2         | 3         | -          | -          | -          |
| 63 mm    | 1         | 1         | 2         | 2         | -          | -          | -          |
| 80 mm    | 1         | 1         | 1         | 2         | -          | -          | -          |
| 100 mm   | 1         | 1         | 1         | 1         | -          | -          | -          |

| Piston Ø | S100<br>L24 | S125<br>L24 | S160<br>L24 | S200<br>L24 |
|----------|-------------|-------------|-------------|-------------|
| 25 mm    | -           | 145         | 180         | 220         |
| 32 mm    | 122.5       | -           | 182.5       | 222.5       |

| Piston Ø | S100<br>L24 | S125<br>L24 | S160<br>L24 | S200<br>L24 |
|----------|-------------|-------------|-------------|-------------|
| 40 mm    | -           | -           | -           | 216         |
| 50 mm    | 116         | -           | 176         | -           |
| 63 mm    | -           | 142         | -           | 217         |
| 80 mm    | -           | 160         | 195         | -           |
| 100 mm   | -           | -           | 195         | 235         |

S = stroke

## Dimensions

| Piston Ø | S10<br>L34 | S20<br>L34 | S25<br>L34 | S30<br>L34 | S40<br>L34 | S50<br>L34 |
|----------|------------|------------|------------|------------|------------|------------|
| 25 mm    | 26         | 29         | 29         | 29         | 29         | 29         |
| 32 mm    | 35.5       | 35.5       | 35.5       | 37         | 37         | 37         |
| 40 mm    | 35         | 35         | 35         | 40         | 40         | 40         |
| 50 mm    | 35.5       | 35.5       | 35.5       | 47         | 47         | 47         |
| 63 mm    | 38         | 38         | 38         | 38         | 38         | 38         |
| 80 mm    | 51         | 51         | 51         | 51         | 51         | 63.5       |
| 100 mm   | 51         | 51         | 51         | 51         | 51         | 62.5       |

| Piston Ø | S75<br>L34 | S100<br>L34 | S125<br>L34 | S160<br>L34 | S200<br>L34 | S10<br>L35 |
|----------|------------|-------------|-------------|-------------|-------------|------------|
| 25 mm    | 29         | 29          | 29          | 29          | 29          | 4          |
| 32 mm    | 37         | 37          | 37          | 37          | 37          | 4          |
| 40 mm    | 40         | 40          | 40          | 40          | 40          | 4          |
| 50 mm    | 47         | 47          | 47          | 47          | 47          | 4          |
| 63 mm    | 54         | 54          | 54          | 54          | 54          | 4          |
| 80 mm    | 63.5       | 63.5        | 63.5        | 63.5        | 63.5        | 4          |
| 100 mm   | 62.5       | 62.5        | 62.5        | 62.5        | 62.5        | 4          |

| Piston Ø | S20<br>L35 | S25<br>L35 | S30<br>L35 | S40<br>L35 | S50<br>L35 | S75<br>L35 |
|----------|------------|------------|------------|------------|------------|------------|
| 25 mm    | 4          | 4          | 4          | 6          | 6          | 8          |
| 32 mm    | 4          | 4          | 4          | 4          | 4          | 6          |
| 40 mm    | 4          | 4          | 4          | 4          | 4          | 6          |
| 50 mm    | 4          | 4          | 4          | 4          | 4          | 4          |
| 63 mm    | 4          | 4          | 4          | 4          | 4          | 4          |
| 80 mm    | 4          | 4          | 4          | 4          | 4          | 4          |
| 100 mm   | 4          | 4          | 4          | 4          | 4          | 4          |

| Piston Ø | S100<br>L35 | S125<br>L35 | S160<br>L35 | S200<br>L35 |
|----------|-------------|-------------|-------------|-------------|
| 25 mm    | 8           | 10          | 10          | 10          |
| 32 mm    | 8           | 8           | 10          | 10          |
| 40 mm    | 6           | 6           | 8           | 10          |
| 50 mm    | 6           | 6           | 8           | 8           |
| 63 mm    | 4           | 6           | 6           | 8           |
| 80 mm    | 4           | 6           | 6           | 6           |
| 100 mm   | 4           | 4           | 6           | 6           |

S = stroke

## Dimensions

| Piston Ø | S10<br>L36 | S20<br>L36 | S25<br>L36 | S30<br>L36 | S40<br>L36 | S50<br>L36 |
|----------|------------|------------|------------|------------|------------|------------|
| 25 mm    | 4          | 4          | 4          | 4          | 6          | 6          |
| 32 mm    | 4          | 4          | 4          | 4          | 4          | 6          |
| 40 mm    | 4          | 4          | 4          | 4          | 4          | 4          |
| 50 mm    | 4          | 4          | 4          | 4          | 4          | 4          |
| 63 mm    | 4          | 4          | 4          | 4          | 4          | 4          |
| 80 mm    | 4          | 4          | 4          | 4          | 4          | 4          |
| 100 mm   | 4          | 4          | 4          | 4          | 4          | 4          |

| S75<br>L36 | S100<br>L36 | S125<br>L36 | S160<br>L36 | S200<br>L36 | S10<br>ZJ | S20<br>ZJ |
|------------|-------------|-------------|-------------|-------------|-----------|-----------|
| 8          | 10          | 10          | 10          | 10          | 57.5      | 57.5      |
| 6          | 8           | 10          | 10          | 10          | -         | -         |
| 6          | 6           | 8           | 10          | 10          | -         | -         |
| 4          | 6           | 8           | 8           | 10          | -         | -         |
| 4          | 6           | 6           | 8           | 10          | -         | -         |
| 4          | 6           | 6           | 8           | 8           | -         | -         |
| 4          | 6           | 6           | 8           | 8           | -         | -         |

| S25<br>ZJ | S30<br>ZJ | S40<br>ZJ | S50<br>ZJ | S75<br>ZJ | S100<br>ZJ | S125<br>ZJ | S160<br>ZJ |
|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|
| 57.5      | 57.5      | 57.5      | 57.5      | 68.5      | 68.5       | 84.5       | 84.5       |
| 82        | -         | -         | 82        | 82        | 82         | 100        | 100        |
| 82.6      | -         | -         | 82.6      | 82.6      | 82.6       | 124.5      | 124.5      |
| 94.5      | -         | -         | 94.5      | 94.5      | 94.5       | 124.6      | 124.6      |
| 94.6      | -         | -         | 94.6      | 94.6      | 94.6       | 145.5      | 145.5      |
| 117.5     | -         | -         | 117.5     | 117.5     | 117.5      | 145.5      | 145.5      |
| 117.5     | -         | -         | 117.5     | 117.5     | 117.5      | 145.5      | 145.5      |

| S200<br>ZJ |
|------------|
| 84.5       |
| 100        |
| 124.5      |
| 124.6      |
| 145.5      |
| 145.5      |
| 145.5      |

S = stroke

## Weight [kg]

| Piston Ø | S     | Weight kg |
|----------|-------|-----------|
| 10 mm    | 10 mm | 0.19 kg   |
| 10 mm    | 20 mm | 0.22 kg   |
| 10 mm    | 25 mm | 0.23 kg   |
| 10 mm    | 30 mm | 0.24 kg   |
| 10 mm    | 40 mm | 0.27 kg   |

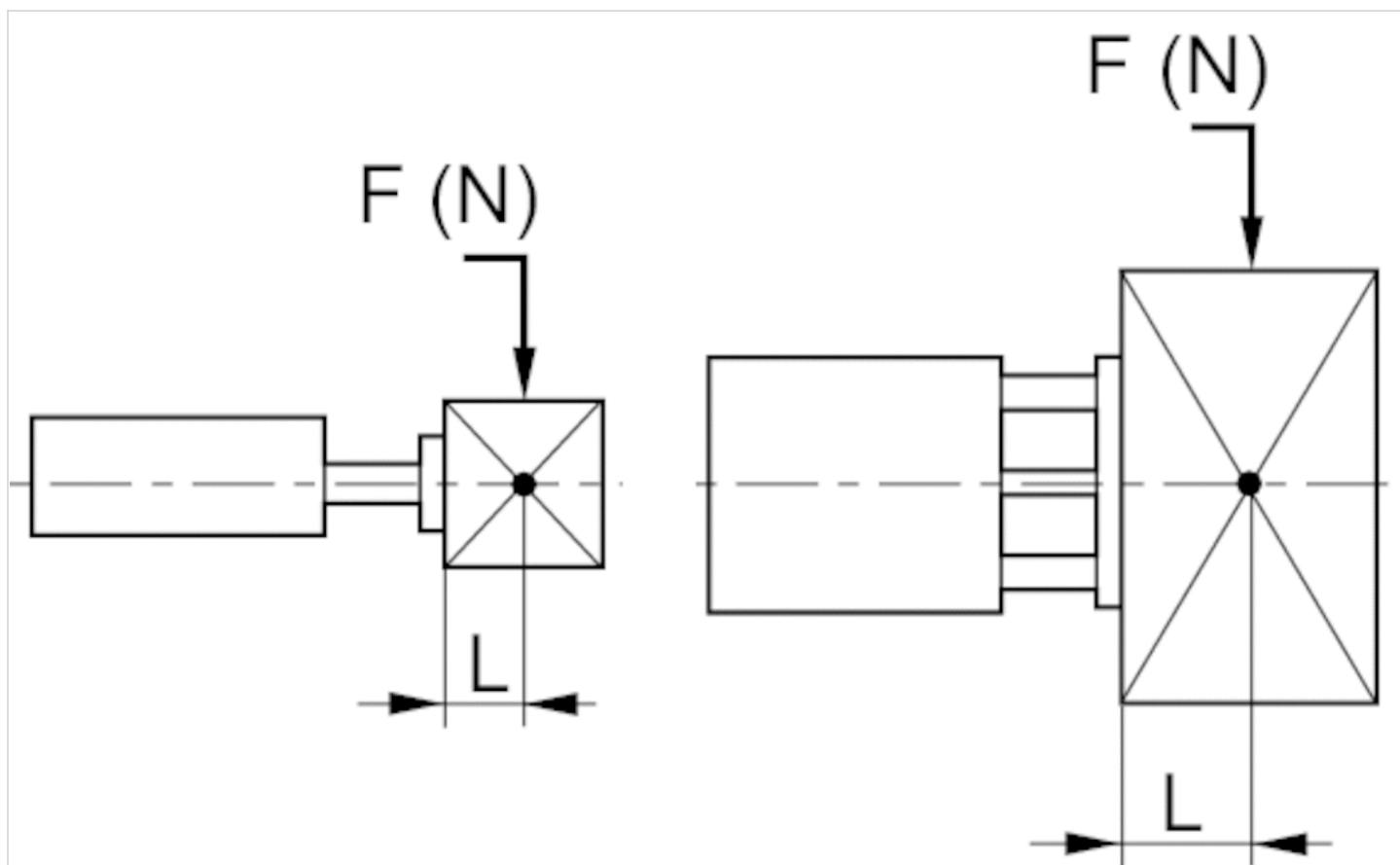
| Piston Ø | S      | Weight kg |
|----------|--------|-----------|
| 10 mm    | 50 mm  | 0.29 kg   |
| 10 mm    | 75 mm  | 0.36 kg   |
| 10 mm    | 100 mm | 0.42 kg   |
| 12 mm    | 10 mm  | 0.3 kg    |
| 12 mm    | 20 mm  | 0.34 kg   |
| 12 mm    | 25 mm  | 0.37 kg   |
| 12 mm    | 30 mm  | 0.39 kg   |
| 12 mm    | 40 mm  | 0.45 kg   |
| 12 mm    | 50 mm  | 0.49 kg   |
| 12 mm    | 75 mm  | 0.61 kg   |
| 12 mm    | 100 mm | 0.73 kg   |
| 12 mm    | 125 mm | 0.85 kg   |
| 12 mm    | 150 mm | 0.97 kg   |
| 16 mm    | 10 mm  | 0.38 kg   |
| 16 mm    | 20 mm  | 0.44 kg   |
| 16 mm    | 25 mm  | 0.46 kg   |
| 16 mm    | 30 mm  | 0.49 kg   |
| 16 mm    | 40 mm  | 0.57 kg   |
| 16 mm    | 50 mm  | 0.63 kg   |
| 16 mm    | 75 mm  | 0.77 kg   |
| 16 mm    | 100 mm | 0.91 kg   |
| 16 mm    | 125 mm | 1.06 kg   |
| 16 mm    | 150 mm | 1.2 kg    |
| 20 mm    | 10 mm  | 0.5 kg    |
| 20 mm    | 20 mm  | 0.57 kg   |
| 20 mm    | 25 mm  | 0.6 kg    |
| 20 mm    | 30 mm  | 0.64 kg   |
| 20 mm    | 40 mm  | 0.73 kg   |
| 20 mm    | 50 mm  | 0.8 kg    |
| 20 mm    | 75 mm  | 0.98 kg   |
| 20 mm    | 100 mm | 1.16 kg   |
| 20 mm    | 125 mm | 1.35 kg   |
| 20 mm    | 150 mm | 1.52 kg   |
| 25 mm    | 10 mm  | 0.82 kg   |
| 25 mm    | 20 mm  | 0.92 kg   |
| 25 mm    | 25 mm  | -         |
| 25 mm    | 30 mm  | 1.05 kg   |
| 25 mm    | 40 mm  | 1.14 kg   |
| 25 mm    | 50 mm  | 1.25 kg   |
| 25 mm    | 75 mm  | 1.56 kg   |
| 25 mm    | 100 mm | 1.83 kg   |
| 25 mm    | 125 mm | 2.15 kg   |
| 25 mm    | 150 mm | -         |
| 25 mm    | 160 mm | 2.53 kg   |
| 25 mm    | 200 mm | 2.97 kg   |
| 32 mm    | 25 mm  | 1.56 kg   |
| 32 mm    | 50 mm  | 1.93 kg   |
| 32 mm    | 75 mm  | 2.26 kg   |
| 32 mm    | 100 mm | 2.62 kg   |

| Piston Ø | S      | Weight kg |
|----------|--------|-----------|
| 32 mm    | 125 mm | 3.06 kg   |
| 32 mm    | 160 mm | 3.57 kg   |
| 32 mm    | 200 mm | 4.17 kg   |
| 40 mm    | 25 mm  | 1.8 kg    |
| 40 mm    | 50 mm  | 2.2 kg    |
| 40 mm    | 75 mm  | 2.6 kg    |
| 40 mm    | 100 mm | 3.08 kg   |
| 40 mm    | 125 mm | 3.6 kg    |
| 40 mm    | 160 mm | 4.1 kg    |
| 40 mm    | 200 mm | 4.8 kg    |
| 50 mm    | 25 mm  | 3 kg      |
| 50 mm    | 50 mm  | 3.6 kg    |
| 50 mm    | 75 mm  | 4.2 kg    |
| 50 mm    | 100 mm | 4.8 kg    |
| 50 mm    | 125 mm | 5.6 kg    |
| 50 mm    | 160 mm | 6.4 kg    |
| 50 mm    | 200 mm | 7.3 kg    |
| 63 mm    | 25 mm  | 3.8 kg    |
| 63 mm    | 50 mm  | 4.5 kg    |
| 63 mm    | 75 mm  | 5.2 kg    |
| 63 mm    | 100 mm | 5.9 kg    |
| 63 mm    | 125 mm | 6.86 kg   |
| 63 mm    | 160 mm | 7.78 kg   |
| 63 mm    | 200 mm | 8.9 kg    |
| 80 mm    | 25 mm  | 7.3 kg    |
| 80 mm    | 50 mm  | 8.3 kg    |
| 80 mm    | 75 mm  | 9.3 kg    |
| 80 mm    | 100 mm | 10.3 kg   |
| 80 mm    | 125 mm | 11.6 kg   |
| 80 mm    | 160 mm | 12.9 kg   |
| 80 mm    | 200 mm | 14.5 kg   |
| 100 mm   | 25 mm  | 8.8 kg    |
| 100 mm   | 50 mm  | 10 kg     |
| 100 mm   | 75 mm  | 11.1 kg   |
| 100 mm   | 100 mm | 12.2 kg   |
| 100 mm   | 125 mm | 13.7 kg   |
| 100 mm   | 160 mm | 15.2 kg   |
| 100 mm   | 200 mm | 17 kg     |

S = stroke

## Dimensions

Permissible static side load  $F$  [N] at distance  $L$



## Dimensions

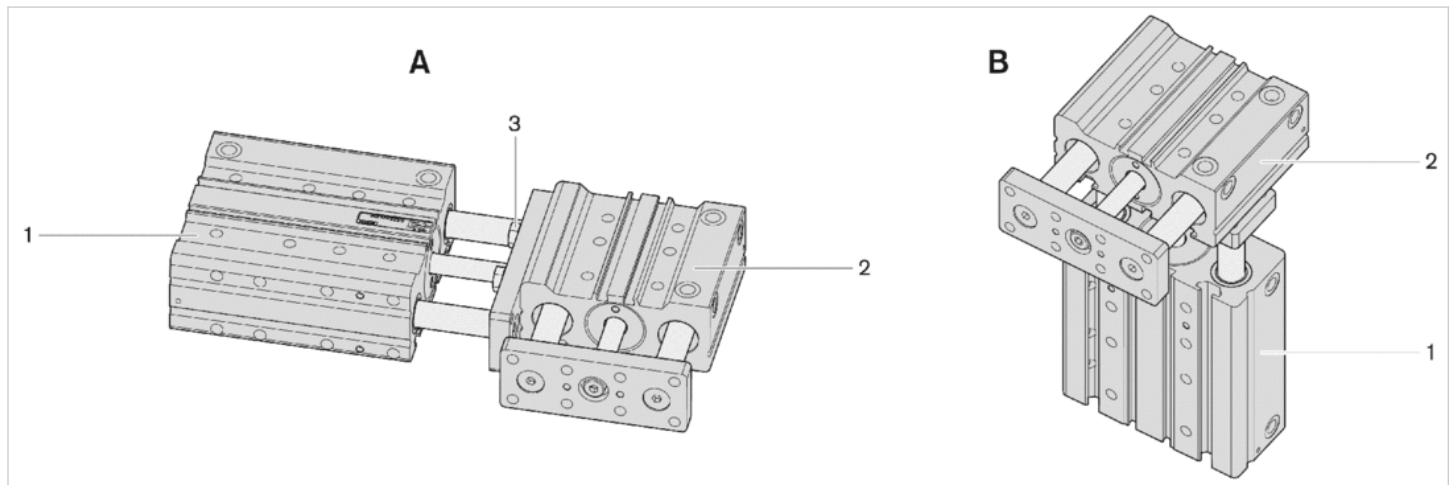
| Piston Ø | L  | S=10 | S=20 | S=25 | S=30 | S=40 | S=50 | S=75 | S=100 | S=125 | S=150 | S=160 | S=200 |
|----------|----|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|
| 10 mm    | 25 | 12   | 11   | 11   | 10   | 10   | 9    | 8    | 7     | –     | –     | –     | –     |
| 12 mm    | 25 | 28   | 24   | 23   | 21   | 31   | 28   | 22   | 19    | 16    | 13    | –     | –     |
| 16 mm    | 50 | 63   | 56   | 53   | 51   | 73   | 67   | 55   | 49    | 42    | 35    | –     | –     |
| 20 mm    | 50 | 63   | 56   | 53   | 51   | 73   | 67   | 55   | 49    | 42    | 35    | –     | –     |
| 25 mm    | 50 | 53.2 | 48.4 | –    | 44.4 | 41   | 38.1 | 59   | 51.9  | 65.4  | –     | 57.3  | 50.1  |
| 32 mm    | 50 | –    | –    | 139  | –    | –    | 118  | 103  | 90.8  | 116   | –     | 102   | 90.2  |
| 40 mm    | 50 | –    | –    | 138  | –    | –    | 118  | 102  | 90.4  | 116   | –     | 102   | 89.9  |
| 50 mm    | 50 | –    | –    | 218  | –    | –    | 187  | 164  | 146   | 215   | –     | 191   | 169   |
| 63 mm    | 50 | –    | –    | 217  | –    | –    | 186  | 163  | 145   | 214   | –     | 190   | 169   |
| 80 mm    | 50 | –    | –    | 392  | –    | –    | 342  | 304  | 273   | 356   | –     | 318   | 284   |
| 100 mm   | 50 | –    | –    | 390  | –    | –    | 341  | 302  | 272   | 354   | –     | 318   | 284   |

S = stroke



## Dimensions

### GPC combinations



- 1) Cylinder 1
- 2) Cylinder 2
- 3) Screw

### Minimum strokes for cylinder 1 when using 2 assembled guide cylinders

| Piston Ø | S  |
|----------|----|
| 32 mm    | 25 |
| 40 mm    | 25 |
| 50 mm    | 30 |
| 63 mm    | 30 |
| 80 mm    | 35 |
| 100 mm   | 40 |

S = stroke

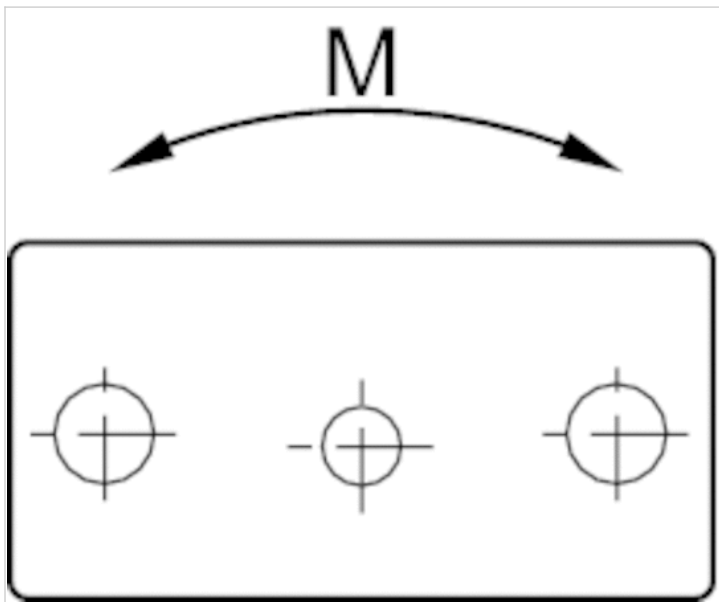
### Minimum strokes for cylinder 2 when using 2 assembled guide cylinders

| Piston Ø | Ø 2 | A  | B  | 3      |
|----------|-----|----|----|--------|
| 10 mm    | 12  | —  | —  | M4x12  |
| 12 mm    | 16  | —  | —  | M5x15  |
| 16 mm    | 20  | —  | —  | M5x18  |
| 20 mm    | 25  | —  | —  | M6x20  |
| 25 mm    | 32  | 25 | 15 | M6x20  |
| 32 mm    | 40  | 30 | 30 | M8x25  |
| 40 mm    | 50  | 30 | 30 | M8x30  |
| 50 mm    | 63  | 55 | 30 | M10x30 |
| 63 mm    | 80  | 55 | 55 | M10x35 |
| 80 mm    | 100 | 55 | 30 | M12x40 |

A = min.stroke: assembly A↔B = min.stroke: assembly B↔3 = screw

## Dimensions

### Permissible static moment $M$ [Nm]



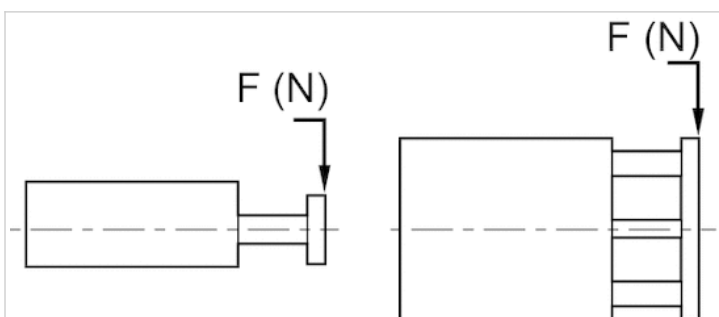
## Dimensions

| Piston Ø | S=10 | S=20 | S=25 | S=30 | S=40 | S=50 | S=75 | S=100 | S=125 | S=160 | S=200 |
|----------|------|------|------|------|------|------|------|-------|-------|-------|-------|
| 10 mm    | 1.75 | 1.5  | 1.4  | 1.3  | 1.2  | 1.1  | 0.85 | 0.75  | –     | –     | –     |
| 12 mm    | 0.56 | 0.48 | 0.46 | 0.42 | 0.62 | 0.56 | 0.44 | 0.38  | 0.32  | 0.26  | –     |
| 16 mm    | 1.48 | 1.32 | 1.25 | 1.2  | 1.72 | 1.57 | 1.29 | 1.15  | 0.99  | 0.82  | –     |
| 20 mm    | 1.7  | 1.51 | 1.43 | 1.38 | 1.97 | 1.81 | 1.49 | 1.32  | 1.13  | 0.95  | –     |
| 25 mm    | 3.11 | 2.6  | –    | 2.23 | 1.96 | 1.74 | 2.41 | 2.02  | 2.42  | 2.05  | 1.75  |
| 32 mm    | –    | –    | 8.17 | –    | –    | 6.4  | 5.26 | 4.47  | 5.45  | 4.67  | 4.01  |
| 40 mm    | –    | –    | 9.19 | –    | –    | 7.22 | 5.95 | 5.05  | 6.17  | 5.29  | 4.55  |
| 50 mm    | –    | –    | 17   | –    | –    | 13.6 | 11.4 | 9.73  | 13.6  | 11.8  | 10.3  |
| 63 mm    | –    | –    | 20.1 | –    | –    | 16.1 | 13.4 | 11.5  | 16.1  | 14    | 12.2  |
| 80 mm    | –    | –    | 42.1 | –    | –    | 34.9 | 29.8 | 26    | 32.4  | 28.5  | 24.9  |
| 100 mm   | –    | –    | 47.8 | –    | –    | 39.7 | 33.9 | 29.6  | 37    | 32.5  | 28.5  |

S = stroke

## Dimensions

### Permissible static side force $F$ [N]



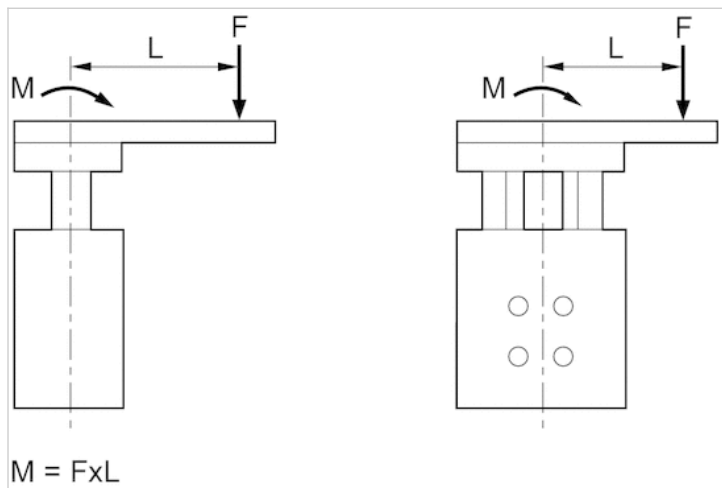
## Dimensions

| Piston Ø | S=10 | S=20 | S=25 | S=30 | S=40 | S=50 | S=75 | S=100 | S=125 | S=150 | S=160 | S=200 |
|----------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|
| 25 mm    | 106  | 88   | –    | 76   | 66   | 59   | 82   | 69    | 82    | –     | 70    | 59    |
| 32 mm    | –    | –    | 216  | –    | –    | 169  | 139  | 118   | 144   | –     | 124   | 106   |
| 40 mm    | –    | –    | 214  | –    | –    | 168  | 138  | 118   | 144   | –     | 123   | 106   |
| 50 mm    | –    | –    | 327  | –    | –    | 262  | 218  | 187   | 261   | –     | 227   | 197   |
| 63 mm    | –    | –    | 324  | –    | –    | 260  | 217  | 186   | 260   | –     | 226   | 196   |
| 80 mm    | –    | –    | 554  | –    | –    | 459  | 392  | 342   | 427   | –     | 374   | 328   |
| 100 mm   | –    | –    | 549  | –    | –    | 456  | 390  | 341   | 425   | –     | 373   | 327   |

S = stroke

## Dimensions

Permissible static moment M [Nm]



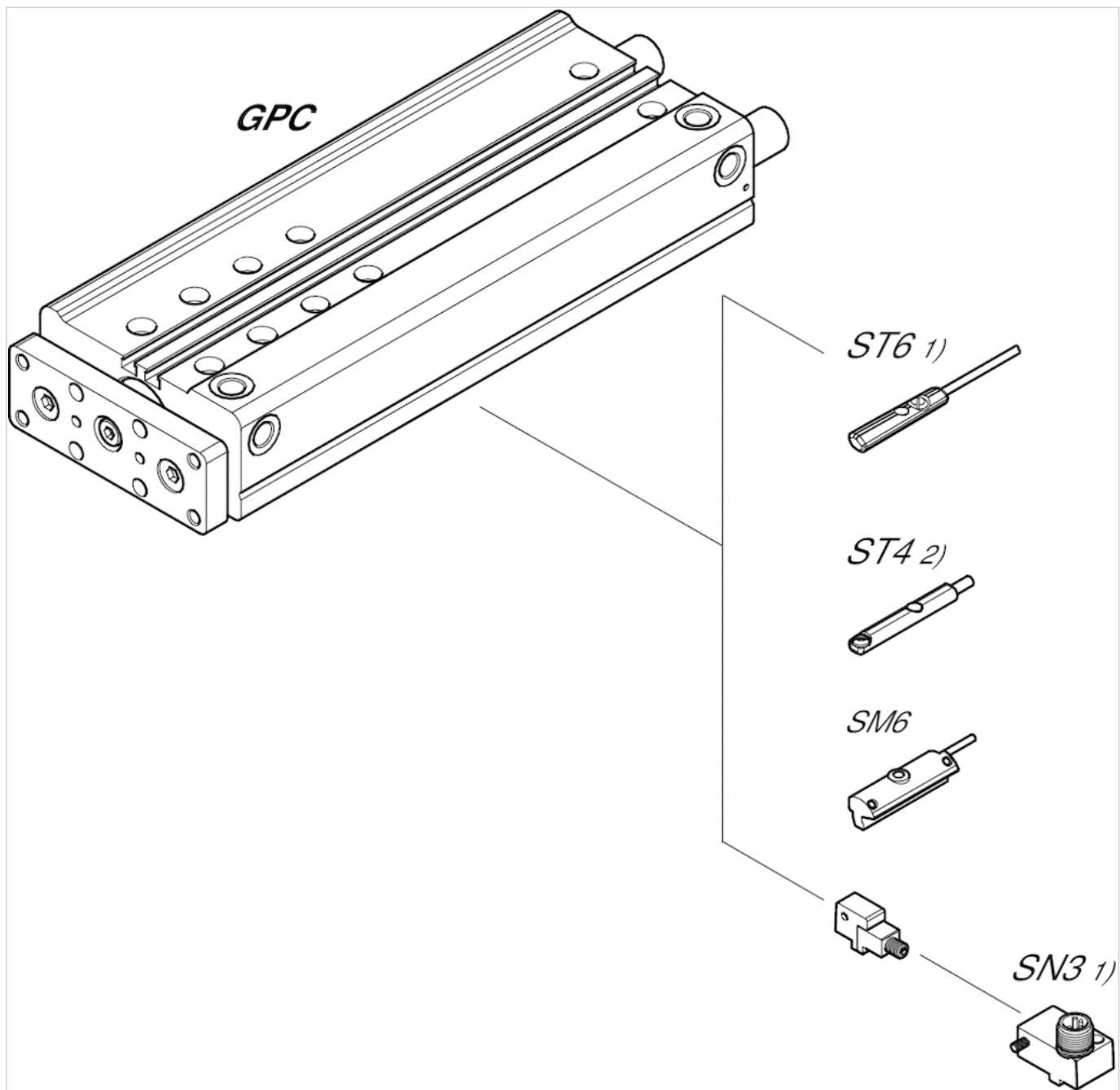
## Dimensions

| Piston Ø | S 5–30 | S >30 | S 35–50 | S 55–100 | S >100 |
|----------|--------|-------|---------|----------|--------|
| 10 mm    | 1,5    | 1,5   | –       | –        | –      |
| 12 mm    | 2      | 3.5   | –       | –        | –      |
| 16 mm    | 4.5    | 14    | –       | –        | –      |
| 20 mm    | 4.5    | 14    | –       | –        | –      |
| 25 mm    | 4.6    | –     | 4.9     | 9.4      | 14.5   |
| 32 mm    | 15.2   | –     | 16.5    | 17.2     | 26.4   |
| 40 mm    | 15.3   | –     | 15.3    | 17.2     | 26.4   |
| 50 mm    | 26     | –     | 26      | 28.9     | 51.6   |
| 63 mm    | 26     | –     | 26      | 28.9     | 51.6   |
| 80 mm    | 52.1   | –     | 52.1    | 57.9     | 90.3   |
| 100 mm   | 52.3   | –     | 52.3    | 57.9     | 90.4   |

S = stroke

## Accessories overview

## Overview drawing



1)  $\leq \text{Ø}12 \text{ mm}$  (GPC-BV, GPC-E, GPC-TL)

2) Only for  $\text{Ø}10 \text{ mm}$  (GPC-BV) and all  $\text{Ø}$  (GPC-ST)

## NOTE:

This overview drawing is only for orientation to indicate where the various accessory parts can be fastened to the cylinder. The illustration has been simplified for this purpose. It is thus not possible to derive the dimensions from this overview.