

| Standard executions | | |
|--------------------------------|--------|------|
| Version | Symbol | Type |
| With self-lubricating bushings | | GEDB |
| With spherical bearings | | GEDS |



On request, they can be supplied according to 2014/34/EU - ATEX

| Options | | Suffix |
|-----------------------------|----------------|--------|
| Seals FKM | -20°C ÷ +150°C | V |
| Special versions on request | | / S |

The options can be combined (when this is possible).

Series of compact guided cylinders magnetic as standard. A one piece body is provided with grooves allowing the mounting of the magnetic reed switch without further brackets; this makes the magnetic sensor not protrude outside the body itself. The bottom plates are provided with elastic cushionings.

For the magnetic reed switches type ASC see from page 1.110.1.

How to order: 32 / 50 GEDBV

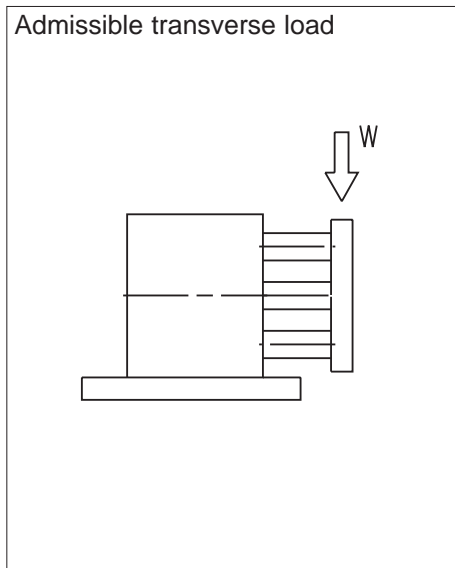
| | | | | |
|------|---|--------|------|--------|
| 32 | / | 50 | GEDB | V |
| Bore | / | Stroke | Type | Option |

| Technical data | |
|-------------------|--|
| Fluid | Compressed filtered air with or without lubrication. Lubrication, if started, must be continued. |
| Pressure | 1,5 ÷ 9 bar |
| Temperature range | -10°C ÷ +70°C (standard) -20°C ÷ +150°C (V) |
| Materials | Bottom plates: Anodised aluminium Body: Anodised aluminium Plate: Anodised aluminium Guiding rods: GEDB: Chrome-plated and ground steel GEDS: Chrome steel hardened and chrome-plated Rod: Chrome-plated steel C 45 Seals: Nitrile rubber (NBR) - Piston: Brass Guiding bushings: GEDB: Sintered bronze GEDS: Spherical bearings |

| Bore (mm) | Standard strokes (mm) | Max stroke (mm) |
|-----------|--|-----------------|
| 10 | 25, 50, 75, 100 | 100 |
| 16 | 25, 50, 75, 100, 125, 150, 175, 200 | 200 |
| 20 | | |
| 25 | 30, 50, 75, 100, 125, 150, 175, 200, 250 | 250 |
| 32 | | |
| 40 | 30, 50, 75, 100, 125, 150 | 150 |
| 50 | | |
| 63 | | |

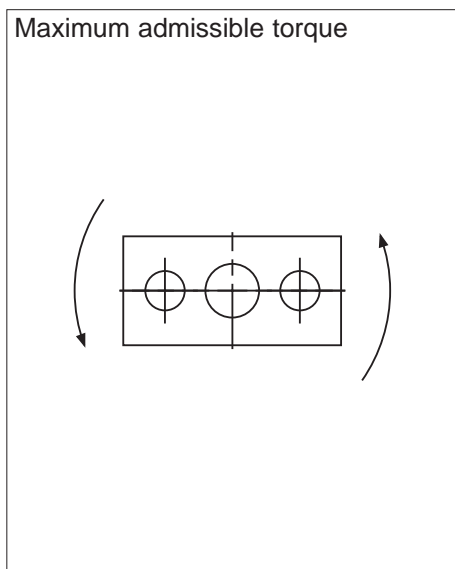
See page 1.1.3 to calculate the cylinder force.

Should you require intermediate strokes, the overall dimensions of the cylinder body will be those of the cylinder with the following standard stroke (in fact the intermediate stroke is obtained applying a distancer).



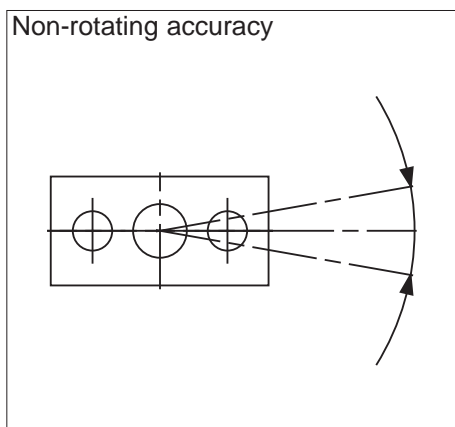
| Bore mm | Type | Stroke mm | | | | | | |
|---------|------|-----------|-----|-----|----|-----|-----|-----|
| | | 25 | 30 | 50 | 75 | 100 | 125 | 150 |
| Ø 10 | GEDB | 8 | 6 | 4 | 8 | 6 | 4 | 3 |
| | GEDS | 1,5 | 1,2 | 1 | 4 | 3,5 | 3 | 2,5 |
| Ø 16 | GEDB | 8 | 6 | 4 | 8 | 6 | 4 | 3 |
| | GEDS | 1,5 | 1,2 | 1 | 4 | 3,5 | 3 | 2,5 |
| Ø 20 | GEDB | 14 | 12 | 10 | 12 | 10 | 8 | 5 |
| | GEDS | 2,5 | 2,1 | 2 | 8 | 6 | 4 | 3 |
| Ø 25 | GEDB | 20 | 18 | 16 | 20 | 18 | 15 | 12 |
| | GEDS | 7 | 6 | 5 | 20 | 16 | 13 | 10 |
| Ø 32 | GEDB | 27 | 24 | 22 | 24 | 22 | 20 | 18 |
| | GEDS | 9 | 8 | 7 | 25 | 22 | 27 | 18 |
| Ø 40 | GEDB | 27 | 24 | 22 | 24 | 22 | 20 | 18 |
| | GEDS | 9 | 8 | 9 | 25 | 22 | 20 | 18 |
| Ø 50 | GEDB | 45 | 42 | 40 | 45 | 40 | 35 | 30 |
| | GEDS | 12 | 11 | 9,5 | 40 | 32 | 28 | 25 |
| Ø 63 | GEDB | 45 | 42 | 40 | 45 | 40 | 35 | 30 |
| | GEDS | 12 | 11 | 9,5 | 40 | 32 | 28 | 25 |

Note: Cylinders from 75 mm stroke are supplied with double guiding bushings.

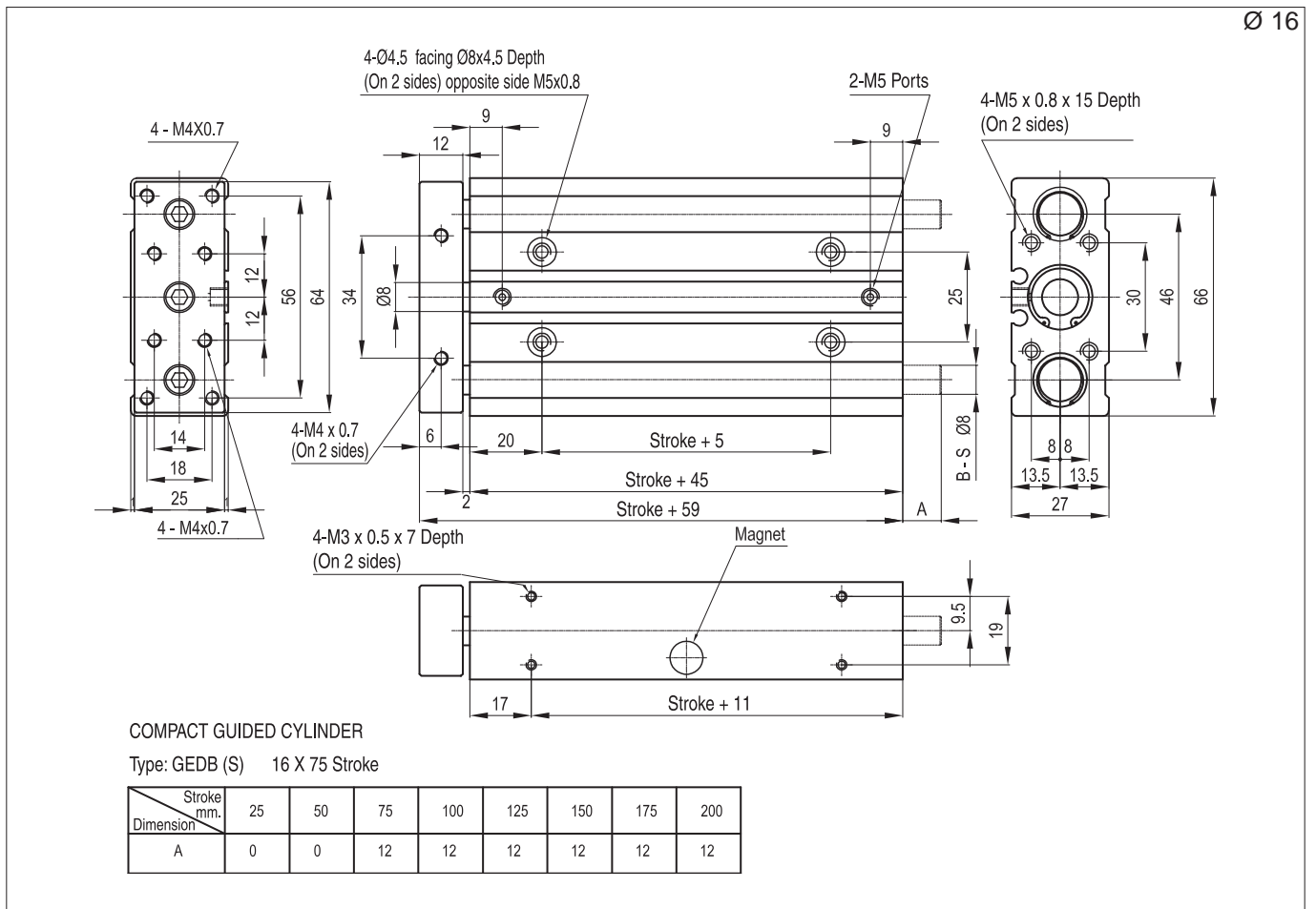
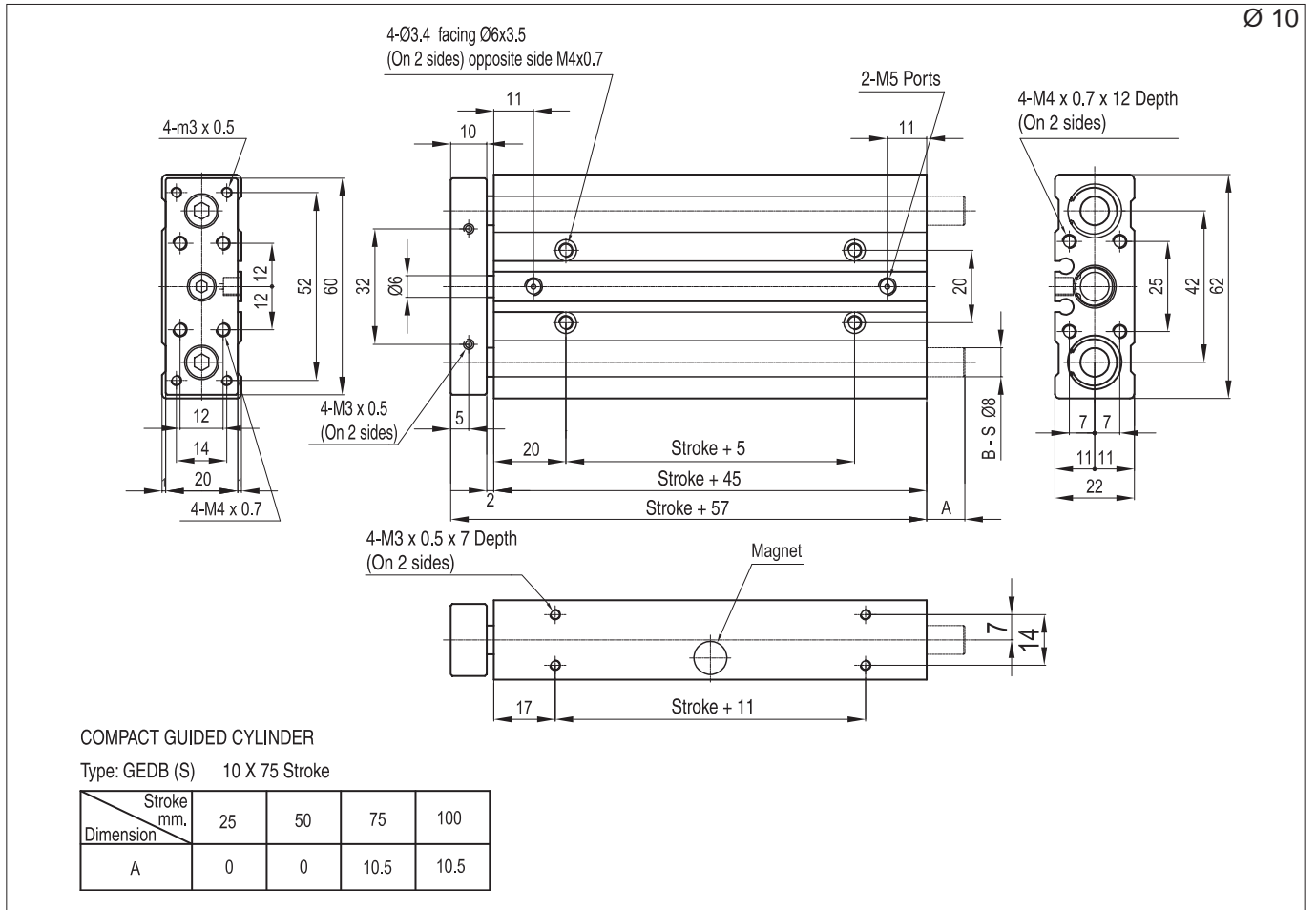


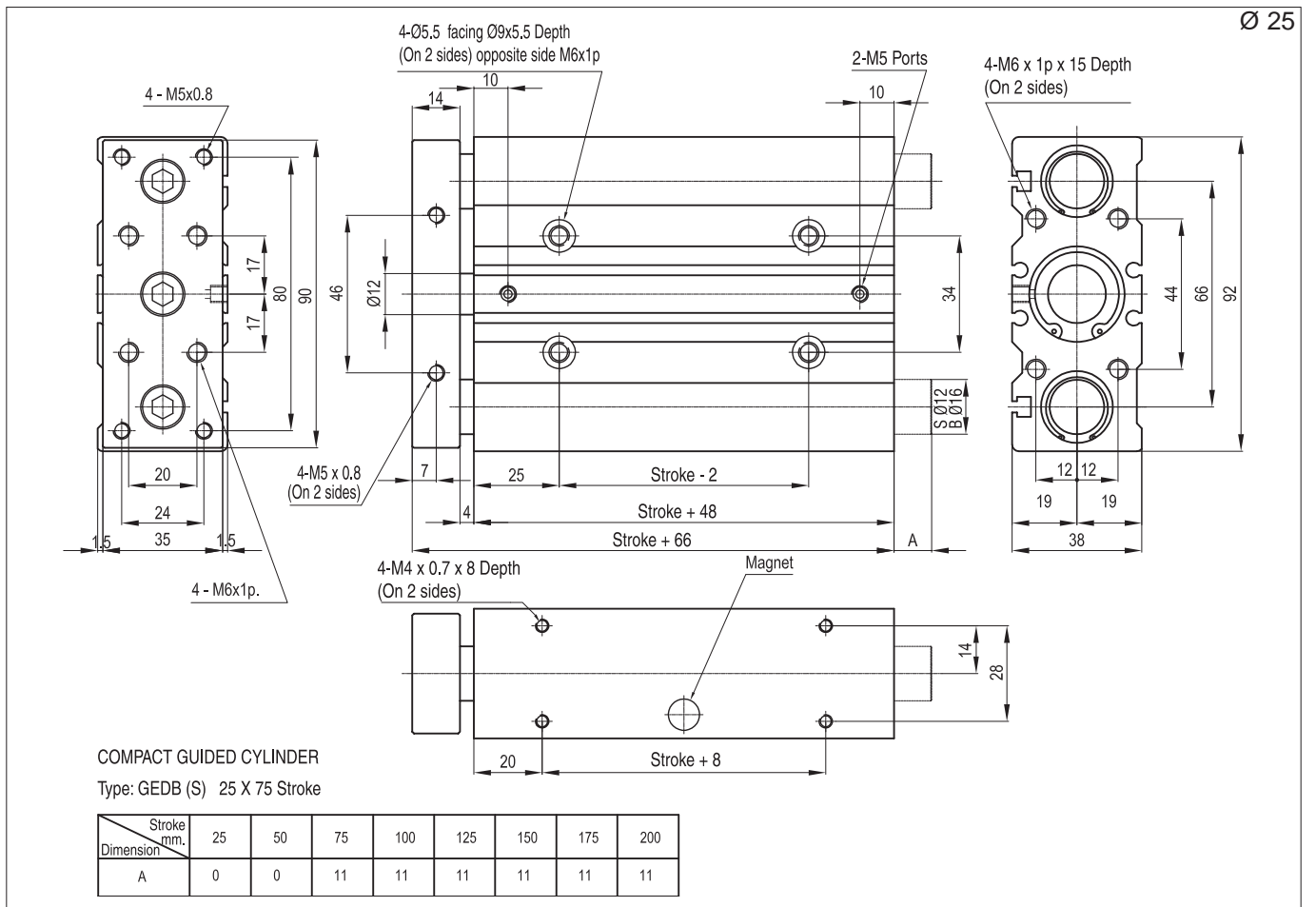
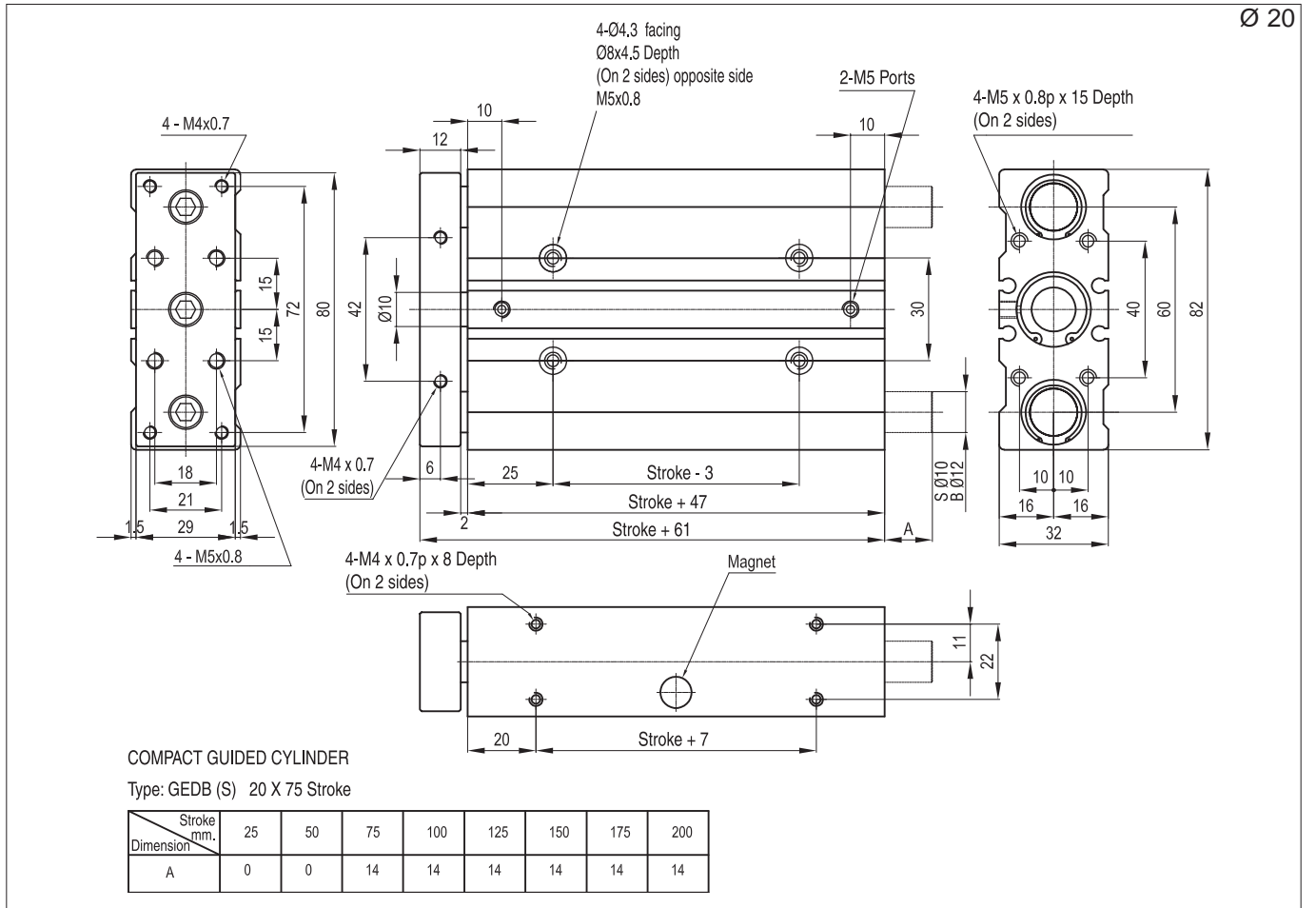
| Bore mm | Type | Stroke mm | | | | | | |
|---------|------|-----------|-----|-----|-----|-----|-----|-----|
| | | 25 | 30 | 50 | 75 | 100 | 125 | 150 |
| Ø 10 | GEDB | 25 | 20 | 15 | 25 | 20 | 15 | 10 |
| | GEDS | 3 | 2,5 | 2 | 4 | 3 | 2 | 1,5 |
| Ø 16 | GEDB | 25 | 20 | 15 | 25 | 20 | 15 | 10 |
| | GEDS | 3 | 2,5 | 2 | 4 | 3 | 2 | 1,5 |
| Ø 20 | GEDB | 40 | 35 | 30 | 40 | 35 | 30 | 25 |
| | GEDS | 4 | 3 | 2 | 15 | 12 | 10 | 8 |
| Ø 25 | GEDB | 65 | 55 | 50 | 65 | 55 | 50 | 40 |
| | GEDS | 2 | 10 | 8 | 30 | 25 | 20 | 16 |
| Ø 32 | GEDB | 90 | 80 | 70 | 90 | 75 | 60 | 45 |
| | GEDS | 18 | 16 | 14 | 50 | 45 | 40 | 35 |
| Ø 40 | GEDB | 90 | 80 | 70 | 90 | 75 | 60 | 45 |
| | GEDS | 18 | 16 | 14 | 50 | 45 | 40 | 35 |
| Ø 50 | GEDB | 150 | 130 | 110 | 150 | 120 | 100 | 80 |
| | GEDS | 35 | 30 | 25 | 100 | 85 | 70 | 55 |
| Ø 63 | GEDB | 150 | 130 | 110 | 150 | 120 | 100 | 80 |
| | GEDS | 35 | 30 | 25 | 120 | 85 | 70 | 55 |

Note: Cylinders from 75 mm stroke are supplied with double guiding bushings.



| Bore mm | Non-rotating accuracy ν |
|--------------|-----------------------------|
| Ø 10 Ø 16 | $\pm 0,18$ |
| Ø 20 Ø 25 | $\pm 0,17$ |
| Ø 32 Ø 40 | $\pm 0,16$ |
| Ø 50 Ø 63 | $\pm 0,15$ |





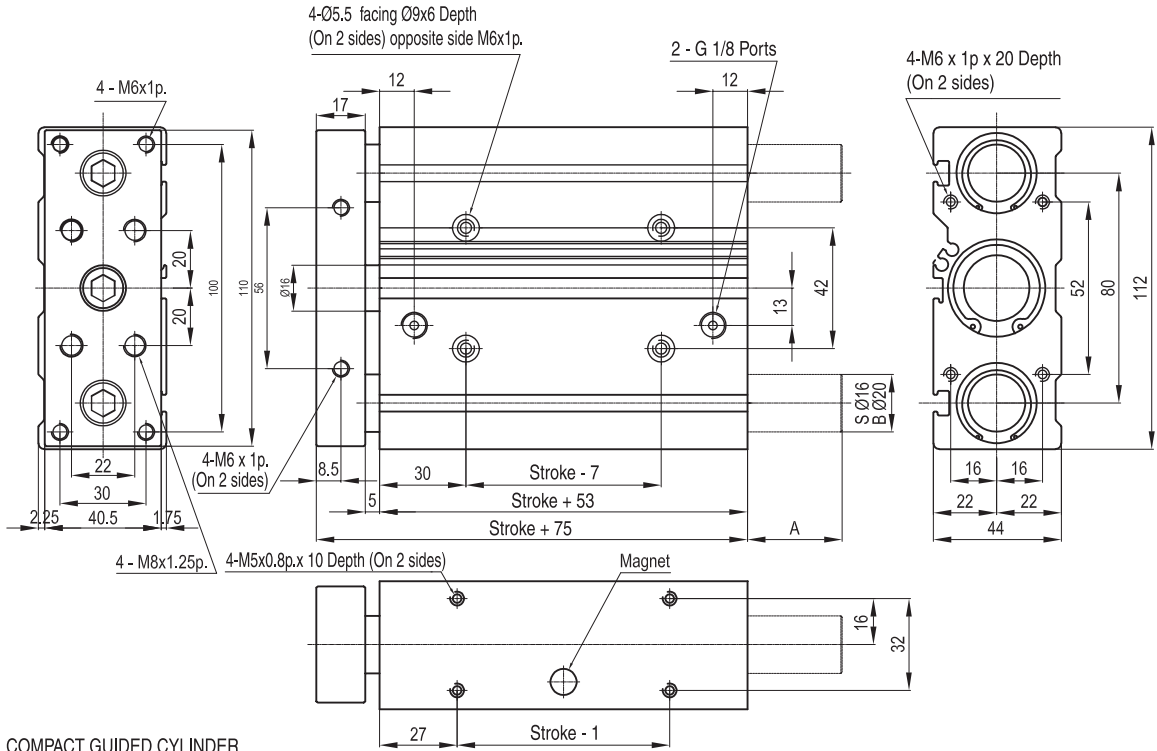
Compact Guided Cylinders

Bores from 10 to 63 mm

Ø 32 - Ø 40



Ø 32

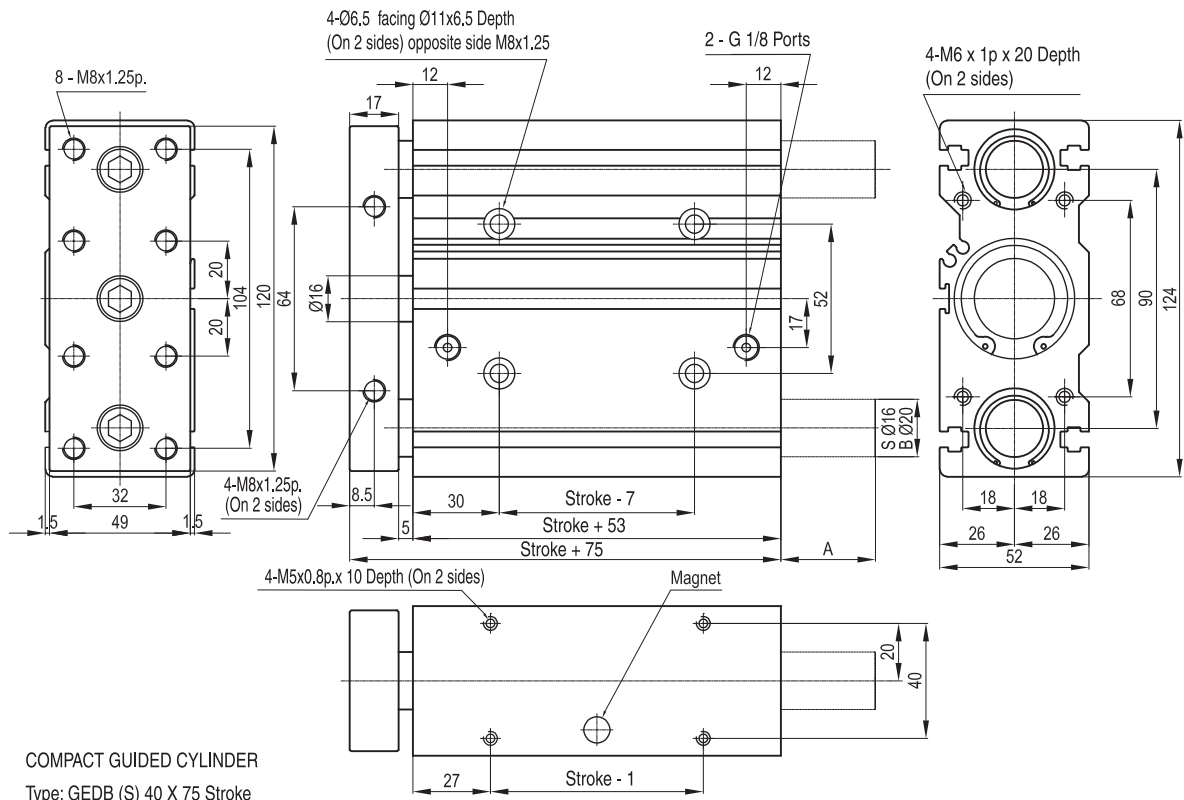


COMPACT GUIDED CYLINDER

Type: GEDB (S) 32 X 75 Stroke

| Stroke Dimension mm. | 30 | 50 | 75 | 100 | 125 | 150 | 175 | 200 | 250 |
|----------------------------|----|----|----|-----|-----|-----|-----|-----|-----|
| A | 0 | 0 | 33 | 33 | 33 | 33 | 33 | 33 | 33 |

Ø 40



COMPACT GUIDED CYLINDER

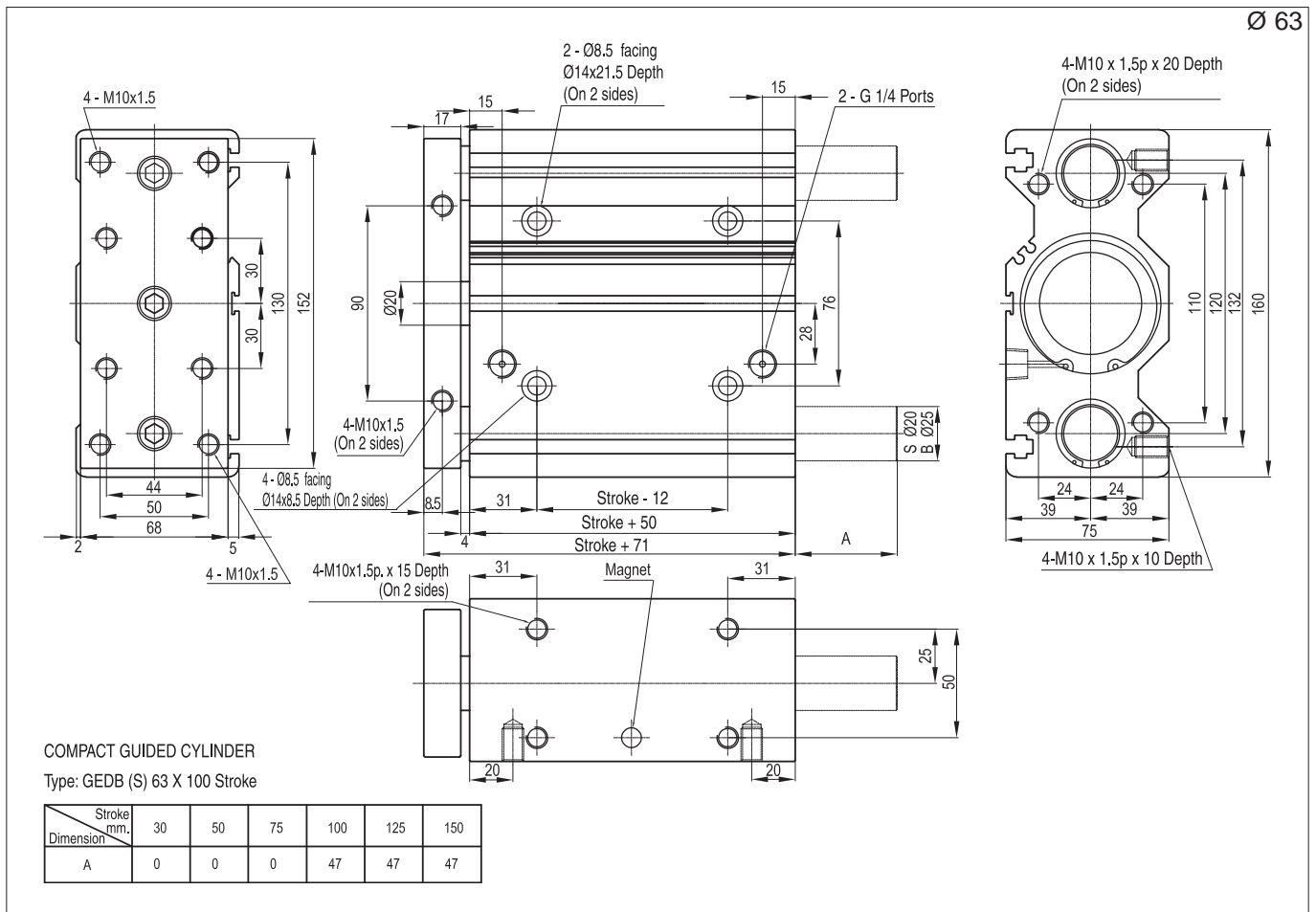
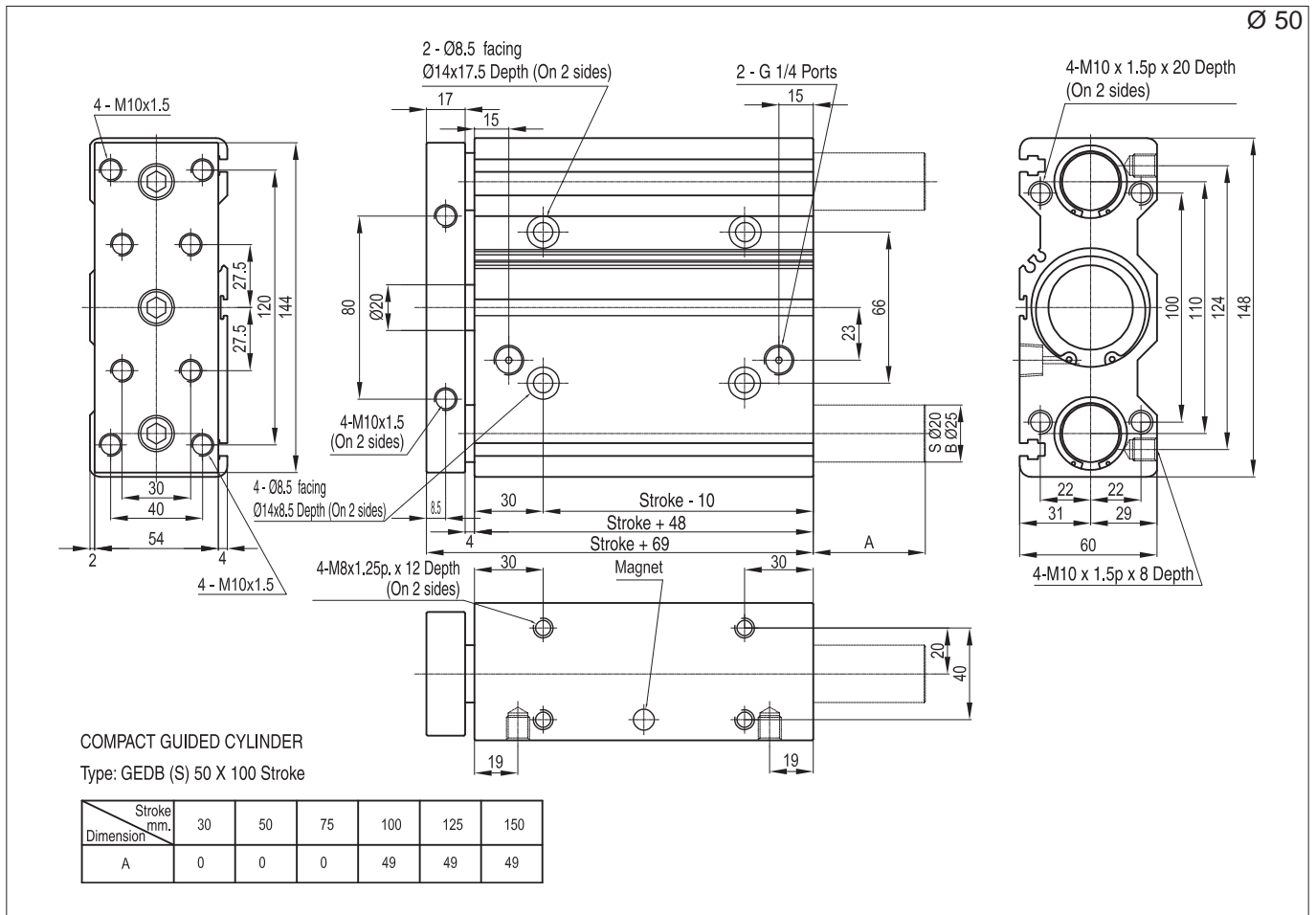
Type: GEDB (S) 40 X 75 Stroke

| Stroke Dimension mm. | 30 | 50 | 75 | 100 | 125 | 150 | 135 | 200 | 250 |
|----------------------------|----|----|----|-----|-----|-----|-----|-----|-----|
| A | 0 | 0 | 33 | 33 | 33 | 33 | 33 | 33 | 33 |

Compact Guided Cylinders

Bores from 10 to 63 mm

Ø 50 - Ø 63



| Standard executions | | |
|---|--------|------|
| Version | Symbol | Type |
| Double acting, magnetic self lubricating bushings | | GPB |
| Double acting, magnetic spherical bushings | | GPS |



Series of guiding and stopper cylinders, magnetic as standard. This cylinder are made of uni-body aluminium alloy with high anti-rotation, torsion and side load features. Piston with magnet is standard and the body, a one piece, is provided with grooves allowing the mounting of the magnetic reed switch without further brackets; this makes the magnetic sensor not protrude outside the body itself. The bottom plates are provided with elastic cushionings.

For the magnetic reed switches type ASC see from page 1.110.2.

| Options | Suffix |
|--------------------|--------|
| Special on request | / S |

How to order: 20/30 GPB

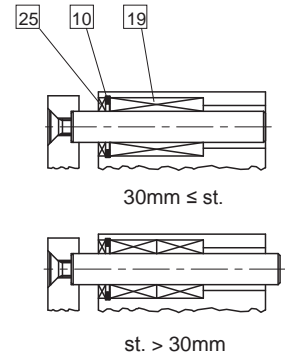
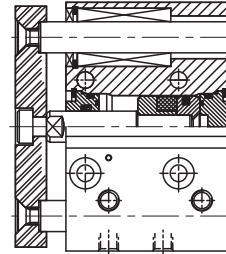
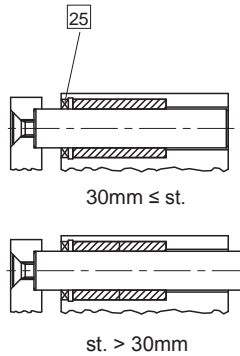
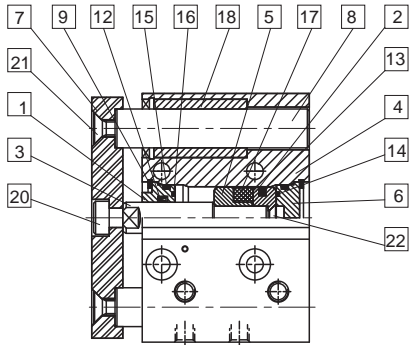
| | | | | |
|------|---|--------|------|--------|
| 20 | / | 30 | GPB | |
| Bore | / | Stroke | Type | Option |

| Technical data | | | | | | | | |
|-------------------|--|------|------|------|------|------|------|------|
| Fluid | Compressed filtered air with or without lubrication. Lubrication, if started, must be continued. | | | | | | | |
| Bore | Ø 12 | Ø 16 | Ø 20 | Ø 20 | Ø 32 | Ø 40 | Ø 50 | Ø 63 |
| Pressure range | 2 ÷ 7 bar | | | | | | | |
| Temperature range | - 10 °C ÷ + 60°C | | | | | | | |

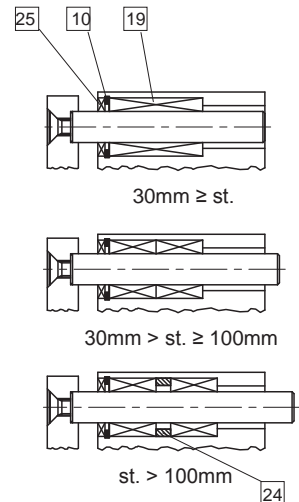
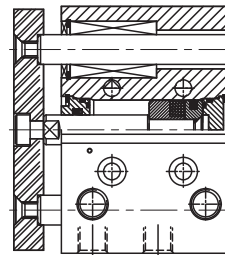
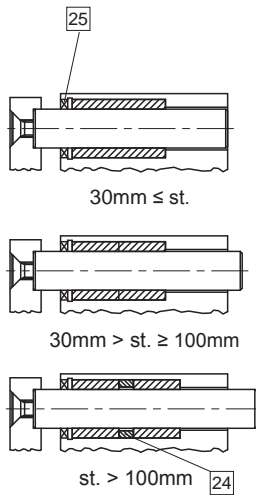
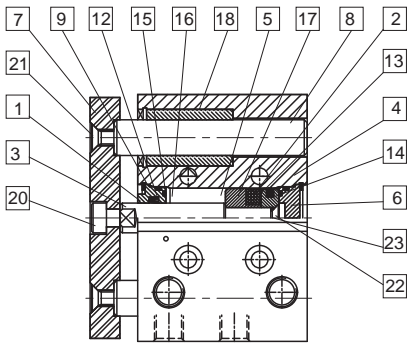
| Bore (mm) | Standard stroke GPB | Standard stroke GPS |
|-----------|--|--|
| 12 | 10, 20, 30, 40, 50, 75, 100 | 10, 20, 30, 40, 50, 75, 100 |
| 16 | 10, 20, 30, 40, 50, 75, 100 | 10, 20, 30, 40, 50, 75, 100 |
| 20 | 20, 30, 40, 50, 75, 100, 125, 150, 175 | 20, 30, 40, 50, 75, 100, 125, 150, 175 |
| 25 | 20, 30, 40, 50, 75, 100, 125, 150, 175 | 20, 30, 40, 50, 75, 100, 125, 150, 175 |
| 32 | 25, 50, 75, 100, 125, 150 | 25, 50, 75, 100, 125, 150 |
| 40 | 25, 50, 75, 100, 125, 150 | 25, 50, 75, 100, 125, 150 |
| 50 | 25, 50, 75, 100, 125, 150 | 25, 50, 75, 100, 125, 150 |
| 63 | 25, 50, 75, 100, 125, 150 | 25, 50, 75, 100, 125, 150 |

Type: **GPB - GPS**
(Bores $\varnothing 12 \div \varnothing 25$)

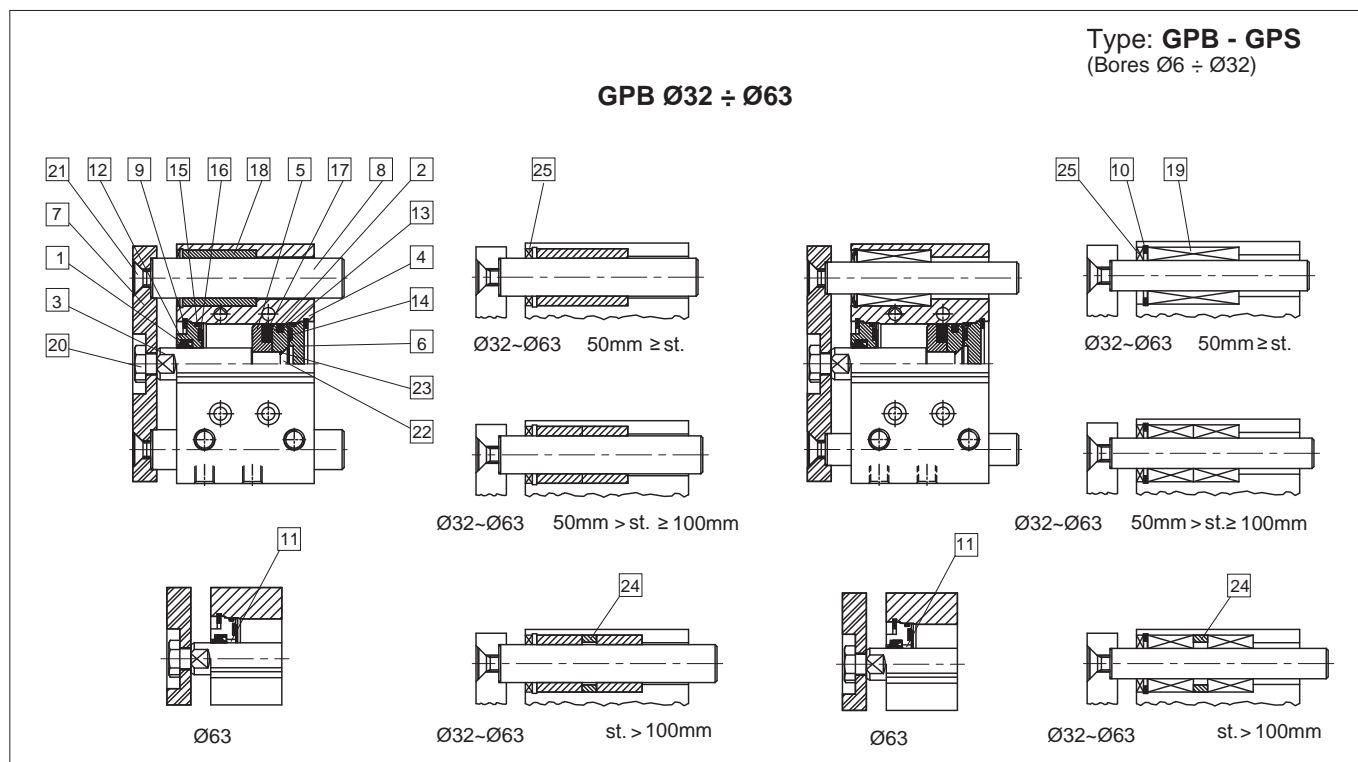
GPB $\varnothing 12 \div \varnothing 16$



GPB $\varnothing 20 \div \varnothing 25$



| Materials | | | |
|-----------|-----------------|---|--|
| 1 | Rod cover | Brass ($\varnothing 12$) - Hard anodised aluminium alloy ($\varnothing 16 \div \varnothing 25$) | 14 Rubber lining Nitrile rubber NBR |
| 2 | Piston | Hard anodised aluminium alloy | 15 Cylinder gasket Nitrile rubber NBR |
| 3 | Piston rod | Stainless steel ($\varnothing 12$) - Carbon steel ($\varnothing 16 \div \varnothing 32$) | 16 Rubber lining Nitrile rubber NBR |
| 4 | Cylinder tube | Hard anodised aluminium alloy | 17 Magnet Magnetic material |
| 5 | Magnet holder | Hard anodised aluminium alloy | 18 Oilless bearing Oil-impregnated sintered alloy |
| 6 | Head cover | Hard anodised aluminium alloy | 19 Linear bearing Special steel |
| 7 | Guide plate | Carbon steel nickel plating | 20 Hexagon socket head screw Carbon steel nickel plating |
| 8 | Guide stem | Carbon steel (GPB) - Special steel (GPS) | 21 Screw Carbon steel nickel plating |
| 9 | Retaining ring | Carbon steel nickel plating | 22 Screw Carbon steel nickel plating |
| 10 | Retaining ring | Carbon steel nickel plating | 23 O-ring Nitrile rubber NBR |
| 11 | Oilless bearing | Oil-impregnated sintered alloy | 24 Stroke pad Hard anodised aluminium alloy |
| 12 | Rod packing | Nitrile rubber NBR | 25 Dust cover Aluminium alloy ($\varnothing 12 \div \varnothing 16$) |
| 13 | Piston packing | Nitrile rubber NBR | Carbon steel - NBR ($\varnothing 20 \div \varnothing 25$) |



| Materials | | | | | |
|-----------|-----------------|--|----|---------------------------|--------------------------------|
| 1 | Rod cover | Brass ($\varnothing 12$) - Hard anodised aluminium alloy ($\varnothing 16 - \varnothing 25$) | 14 | Rubber lining | Nitrile rubber NBR |
| 2 | Piston | Hard anodised aluminium alloy | 15 | Cylinder gasket | Nitrile rubber NBR |
| 3 | Piston rod | Stainless steel ($\varnothing 12$) - Carbon steel ($\varnothing 16 - \varnothing 32$) | 16 | Rubber lining | Nitrile rubber NBR |
| 4 | Cylinder tube | Hard anodised aluminium alloy | 17 | Magnet | Magnetic material |
| 5 | Magnet holder | Hard anodised aluminium alloy | 18 | Oilless bearing | Oil-impregnated sintered alloy |
| 6 | Head cover | Hard anodised aluminium alloy | 19 | Linear bearing | Special steel |
| 7 | Guide plate | Carbon steel nickel plating | 20 | Hexagon socket head screw | Carbon steel nickel plating |
| 8 | Guide stem | Carbon steel (GPB) - Special steel (GPS) | 21 | Screw | Carbon steel nickel plating |
| 9 | Retaining ring | Carbon steel nickel plating | 22 | Screw | Carbon steel nickel plating |
| 10 | Retaining ring | Carbon steel nickel plating | 23 | O-ring | Nitrile rubber NBR |
| 11 | Oilless bearing | Oil-impregnated sintered alloy | 24 | Stroke pad | Hard anodised aluminium alloy |
| 12 | Rod packing | Nitrile rubber NBR | 25 | Dust cover | Carbon steel - NBR |
| 13 | Piston packing | Nitrile rubber NBR | | | |

Guiding and stopper cylinders

Bores from 12 to 63 mm

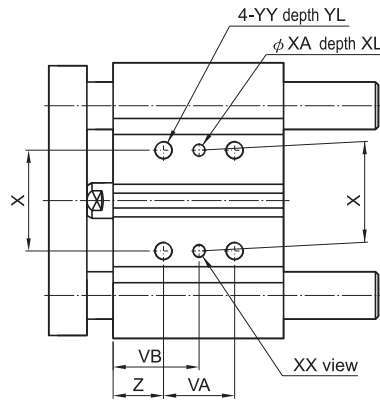
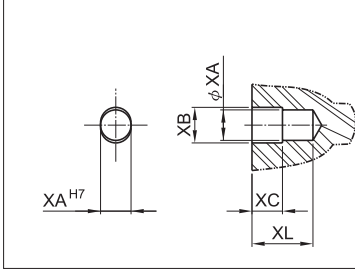
Standard dimensions



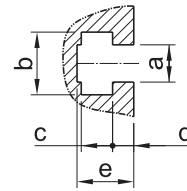
Type: **GPB - GPS**

(Bores $\varnothing 12 \div \varnothing 25$)

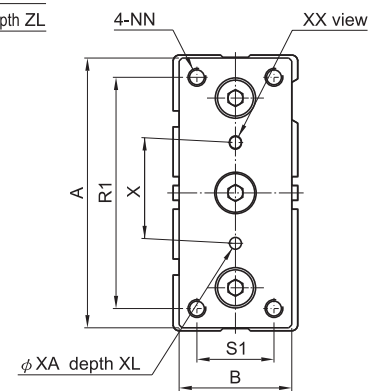
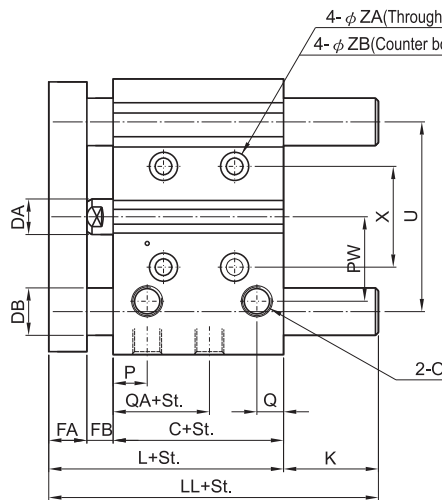
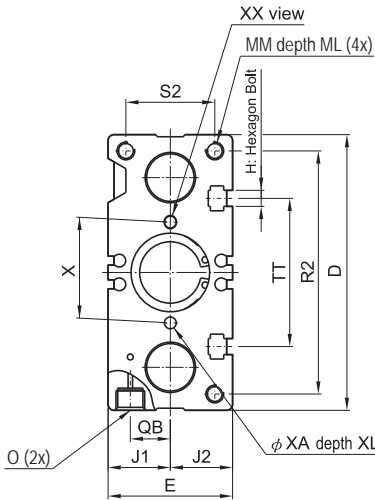
XX View



Groove dimensions



| Bore | a | b | c | d | e |
|------------------|-----|-----|-----|-----|-----|
| $\varnothing 12$ | 4,4 | 7,4 | 3,7 | 2 | 6,2 |
| $\varnothing 16$ | 4,4 | 7,4 | 3,7 | 2,5 | 6,7 |
| $\varnothing 20$ | 5,4 | 8,4 | 4,5 | 2,3 | 7,3 |
| $\varnothing 25$ | 5,4 | 8,4 | 4,5 | 3 | 8,2 |



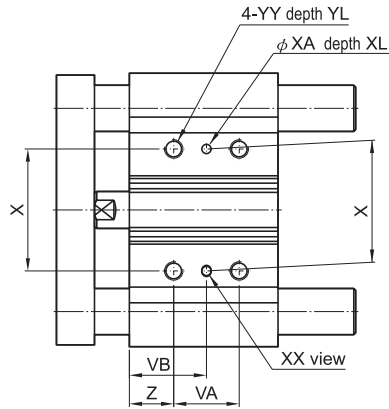
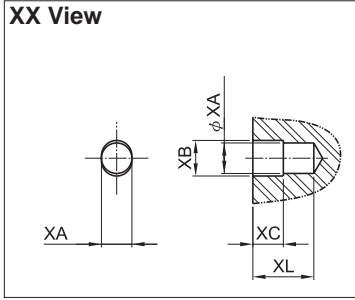
| \varnothing mm | Stroke | A | B | C | D | DA | DB | | E | FA | FB | H | J1 | J2 | L | MM | ML | NN | O | P | Q |
|------------------|--------|----|----|------|----|----|-----|-----|----|----|----|----|----|----|------|----|----|----|------|------|-----|
| | | | | | | | GPB | GPS | | | | | | | | | | | | | |
| 12 | 10-100 | 56 | 22 | 29 | 58 | 6 | 8 | 6 | 26 | 8 | 5 | M4 | 13 | 13 | 42 | M4 | 10 | M4 | M5 | 11 | 7.5 |
| | | 62 | 25 | 33 | 64 | 8 | 10 | 8 | 30 | 8 | 5 | M4 | 15 | 15 | 46 | M5 | 12 | M5 | M5 | 11 | 8 |
| 20 | 20-175 | 81 | 30 | 37 | 83 | 10 | 12 | 10 | 36 | 10 | 6 | M5 | 18 | 18 | 53 | M5 | 13 | M5 | 1/8" | 11.5 | 9 |
| | | 91 | 38 | 37.5 | 93 | 12 | 16 | 12 | 42 | 10 | 6 | M5 | 21 | 21 | 53.5 | M6 | 15 | M6 | 1/8" | 11.5 | 9 |

| \varnothing mm | Stroke | QA | QB | PW | TT | U | VA | | | VB | | | S1 | S2 | R1 | R2 | X ± 0.02 | XA H7 | XB | VC |
|------------------|--------|------|------|------|----|----|---------------|---------------------|-----------|---------------|---------------------|-----------|----|----|----|----|--------------|-------|-----|----|
| | | | | | | | st. ≤ 30 | 30 < st. ≤ 100 | st. > 100 | st. ≤ 30 | 30 < st. ≤ 100 | st. > 100 | | | | | | | | |
| 12 | 10-100 | 12 | 7.5 | 18 | 37 | 41 | 20 | 40 | - | 15 | 25 | - | 14 | 18 | 48 | 50 | 23 | 3 | 3.5 | 3 |
| | | 14 | 10 | 19 | 38 | 46 | 24 | 44 | - | 17 | 27 | - | 16 | 22 | 54 | 56 | 24 | 3 | 3.5 | 3 |
| 20 | 20-175 | 12.5 | 11.5 | 25 | 44 | 54 | 24 | 44 | 120 | 29 | 39 | 77 | 18 | 24 | 70 | 72 | 28 | 3 | 3.5 | 3 |
| | | 12.5 | 13.5 | 28.5 | 50 | 64 | 24 | 44 | 120 | 29 | 39 | 77 | 28 | 30 | 78 | 82 | 34 | 4 | 4.5 | 3 |

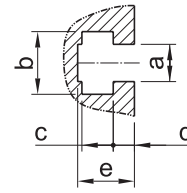
| \varnothing mm | Stroke | XL | YY | YL | Z | ZA | ZB | ZL | GPB | | | | GPS | | | | | | | |
|------------------|--------|----|----|----|----|-----|-----|-----|---------------|----------|---------------|----------|---------------|---------------------|-----------|---------------|---------------------|-----------|--|--|
| | | | | | | | | | K | | LL | | K | | | LL | | | | |
| | | | | | | | | | st. ≤ 50 | st. > 50 | st. ≤ 50 | st. > 50 | st. ≤ 30 | 30 < st. ≤ 100 | st. > 100 | st. ≤ 30 | 30 < st. ≤ 100 | st. > 100 | | |
| 12 | 10-100 | 6 | M5 | 10 | 5 | 4.3 | 8 | 4.5 | 0 | 15 | 42 | 57 | 0 | 15 | - | 42 | 57 | - | | |
| | | 6 | M5 | 10 | 5 | 4.3 | 8 | 4.5 | 0 | 22 | 46 | 68 | 0 | 22 | - | 46 | 68 | - | | |
| 20 | 20-175 | 6 | M6 | 12 | 17 | 5.6 | 9.5 | 5 | 0 | 28 | 53 | 81 | 0 | 28 | 52 | 53 | 81 | 105 | | |
| | | 6 | M6 | 12 | 17 | 5.6 | 9.5 | 5.5 | 0 | 29 | 53.5 | 82.5 | 0 | 31 | 50 | 53.5 | 84.5 | 103.5 | | |

Type: **GPB - GPS**
(Bores $\varnothing 32 \div \varnothing 63$)

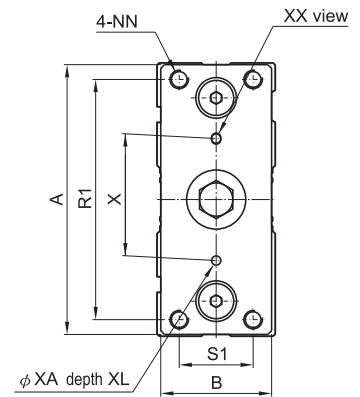
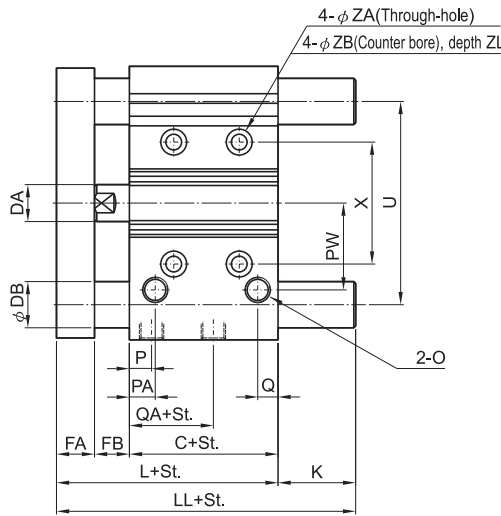
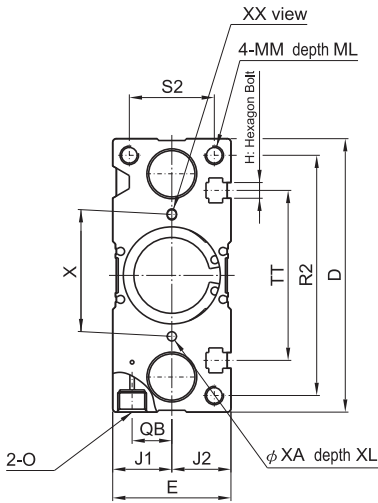
XX View



Groove dimensions



| Bore | a | b | c | d | e |
|------------------|-----|------|------|-----|------|
| $\varnothing 32$ | 6.5 | 10.5 | 5.35 | 3.5 | 9.5 |
| $\varnothing 40$ | 6.5 | 10.5 | 5.35 | 4 | 11 |
| $\varnothing 50$ | 8.5 | 13.5 | 7.5 | 4.5 | 13.5 |
| $\varnothing 63$ | 11 | 17.8 | 10 | 7 | 18.5 |



| \varnothing mm | Stroke | A | B | C | D | DA | DB | | E | FA | FB | H | J1 | J2 | L | MM | ML | NN | O | P | Q |
|------------------|---------------------------|-----|----|------|-----|----|-----|-----|----|----|----|-----|----|----|------|-----|----|-----|------|------|----|
| | | | | | | | GPB | GPS | | | | | | | | | | | | | |
| 32 | 25, 50, 75, 100, 125, 150 | 110 | 44 | 37.5 | 112 | 16 | 20 | 16 | 48 | 12 | 10 | M6 | 24 | 24 | 59.5 | M8 | 20 | M8 | 1/8" | 11.5 | 10 |
| 40 | | 118 | 44 | 44 | 120 | 16 | 20 | 16 | 54 | 12 | 10 | M6 | 27 | 27 | 66 | M8 | 20 | M8 | 1/8" | 14 | 11 |
| 50 | | 146 | 60 | 44 | 148 | 20 | 25 | 20 | 64 | 16 | 12 | M8 | 32 | 32 | 72 | M10 | 22 | M10 | 1/4" | 12 | 11 |
| 63 | | 158 | 70 | 49 | 162 | 20 | 25 | 20 | 78 | 16 | 12 | M10 | 39 | 39 | 77 | M10 | 22 | M10 | 1/4" | 16.5 | 13 |

| \varnothing mm | Stroke | QA | QB | PA | PW | TT | U | VA | | | VB | | | S1 | S2 | R1 | R2 | X ± 0.02 | XA H7 | XB |
|------------------|---------------------------|----|------|------|----|-----|-----|----|--------|-----------|----|--------|-----------|----|----|-----|-----|--------------|-------|-----|
| | | | | | | | | 25 | 50-100 | st. > 100 | 25 | 50-100 | st. > 100 | | | | | | | |
| 32 | 25, 50, 75, 100, 125, 150 | 5 | 16.5 | 11.5 | 34 | 63 | 78 | 24 | 48 | 124 | 33 | 45 | 83 | 30 | 34 | 96 | 98 | 42 | 4 | 4.5 |
| 40 | | 11 | 18 | 14 | 38 | 72 | 86 | 24 | 48 | 124 | 34 | 46 | 84 | 30 | 40 | 104 | 106 | 50 | 4 | 4.5 |
| 50 | | 9 | 21.5 | 14 | 47 | 92 | 110 | 24 | 48 | 124 | 36 | 48 | 86 | 40 | 46 | 130 | 130 | 66 | 5 | 6 |
| 63 | | 14 | 28 | 16.5 | 55 | 110 | 124 | 28 | 52 | 128 | 38 | 50 | 88 | 50 | 58 | 130 | 142 | 80 | 5 | 6 |

| \varnothing mm | Stroke | XC | XL | YY | YL | Z | ZA | ZB | ZL | GPB | | | | GPS | | | | | |
|------------------|---------------------------|----|----|-----|----|----|-----|----|-----|--------|----------|--------|----------|--------|---------|-----------|--------|---------|-----------|
| | | | | | | | | | | K | | LL | | K | | LL | | | |
| | | | | | | | | | | 25, 50 | st. > 50 | 25, 50 | st. > 50 | 25, 50 | 75, 100 | st. > 100 | 25, 50 | 75, 100 | st. > 100 |
| 32 | 25, 50, 75, 100, 125, 150 | 3 | 6 | M8 | 16 | 21 | 6.5 | 11 | 7.5 | 8 | 45 | 67.5 | 104.5 | 8 | 45 | 65 | 67.5 | 104.5 | 124.5 |
| 40 | | 3 | 6 | M8 | 16 | 22 | 6.5 | 11 | 7.5 | 1.5 | 38.5 | 67.5 | 104.5 | 1.5 | 38.5 | 58.5 | 67.5 | 104.5 | 124.5 |
| 50 | | 4 | 8 | M10 | 20 | 24 | 8.5 | 14 | 9 | 6.5 | 48.5 | 78.5 | 120.5 | 6.5 | 48.5 | 68.5 | 78.5 | 120.5 | 140.5 |
| 63 | | 4 | 8 | M10 | 20 | 24 | 8.5 | 14 | 9 | 1.5 | 43.5 | 78.5 | 120.5 | 1.5 | 43.5 | 63.5 | 78.5 | 120.5 | 140.5 |