

Construction characteristics

| | |
|----------------|--|
| Body | extruded shape anodized aluminium alloy 6060 |
| Bushings | sintered bronze |
| Wiper | oil resitant NBR rubber |
| Rods | chromed C43 steel |
| Plate | plated zinc steel |
| Mounting block | plated zinc steel |

Technical characteristics

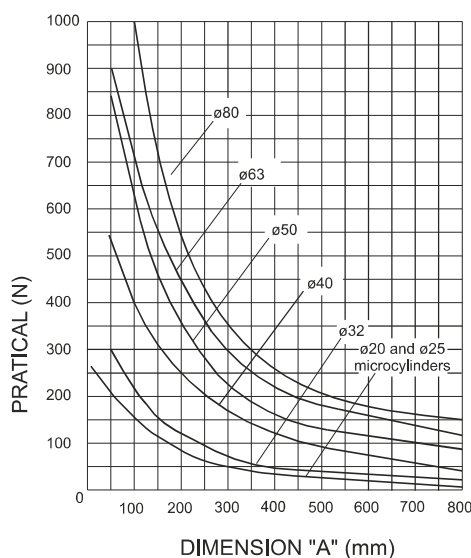
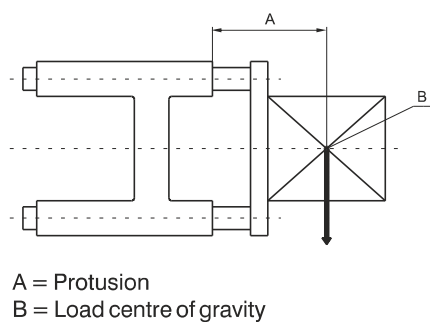
Max. suggested strokes for 1200 series:

| | | |
|-----------|-----|-----|
| Diameter | 20 | 25 |
| Stroke mm | 200 | 250 |

Max. suggested strokes for 1320 series:

| | | | | | |
|-----------|-----|-----|-----|-----|-----|
| Diameter | 32 | 40 | 50 | 63 | 80 |
| Stroke mm | 300 | 350 | 450 | 500 | 550 |

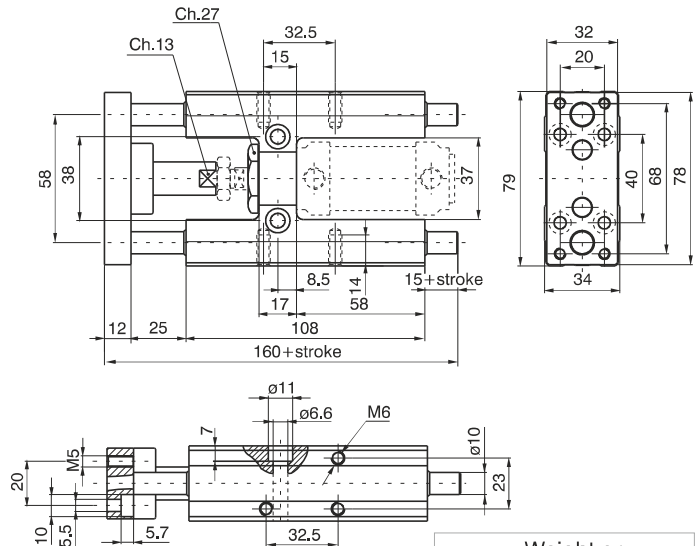
Loading diagram based on dimension "A"



Use and maintenance

Follow the indication of the above diagram as far as loads are concerned. A large quantity of grease is placed between the two wipers during assembly, therefore the linear control units should not require special maintenance.

Dimensions for microcylinders ISO 6432



Ordering code

1260.Ø.stroke.GLB
(Microcylinders ISO 6432 must be ordered separately)

Standard strokes

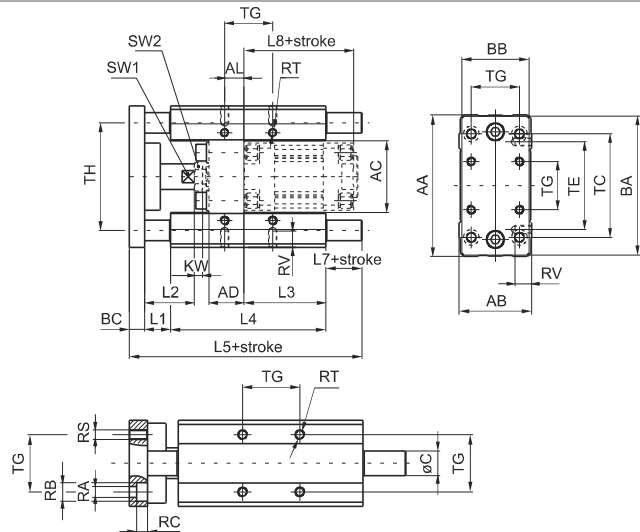
- Ø 20 100 - 150 - 200 mm
- Ø 25 100 - 150 - 200 - 250 mm

Weight gr.

| | |
|------------|-------------|
| stroke 100 | every 50 mm |
| 970 | 60 |

Sensors and sensor clamps: Use standard sensors and clamps.

Dimensions for microcylinders ISO 15552



Ordering code

1320.Ø.stroke.GLB
(Cylinders must be ordered separately)

| | | | | | | |
|--------|-------------|------|------|------|------|-------|
| | Bore | Ø32 | Ø40 | Ø50 | Ø63 | Ø80 |
| Weight | stroke 100 | 1720 | 2900 | 4700 | 6000 | 11300 |
| gr. | every 50 mm | 91 | 159 | 159 | 250 | 380 |

| Bore | AA | AB | AC | AD | AL | BA | BB | BC | C | KW | L1 | L2 | L3 | L4 | L5 |
|------|-----|-----|------|----|------|-----|-----|----|----|----|----|----|-----|-----|-----|
| 32 | 97 | 49 | 50 | 24 | 4.3 | 93 | 45 | 12 | 12 | 6 | 25 | 39 | 76 | 125 | 187 |
| 40 | 115 | 58 | 57.5 | 28 | 11 | 112 | 55 | 12 | 16 | 7 | 25 | 44 | 81 | 140 | 207 |
| 50 | 137 | 70 | 69.5 | 34 | 18.8 | 134 | 65 | 15 | 20 | 8 | 25 | 48 | 79 | 150 | 225 |
| 63 | 152 | 85 | 84.5 | 34 | 15.3 | 149 | 80 | 15 | 20 | 8 | 25 | 48 | 111 | 182 | 242 |
| 80 | 189 | 105 | 106 | 34 | 21 | 180 | 100 | 20 | 25 | 9 | 25 | 53 | 128 | 215 | 302 |

| Bore | L7 | L8 | RA | RB | RC | RS | RT | RV | SW1 | SW2 | TC | TE | TG | TH |
|------|----|-----|-----|----|-----|-----|-----|----|-----|-----|-----|-----|------|-----|
| 32 | 25 | 94 | 6.6 | 11 | 6.5 | M6 | M6 | 12 | 15 | 17 | 78 | 61 | 32.5 | 74 |
| 40 | 30 | 105 | 6.6 | 11 | 6.5 | M6 | M6 | 14 | 15 | 19 | 84 | 69 | 38 | 87 |
| 50 | 35 | 106 | 9 | 15 | 9 | M8 | M8 | 16 | 22 | 24 | 100 | 85 | 46.5 | 104 |
| 63 | 20 | 121 | 9 | 15 | 9 | M8 | M8 | 16 | 22 | 24 | 105 | 100 | 56.5 | 119 |
| 80 | 42 | 128 | 11 | 18 | 11 | M10 | M10 | 20 | 27 | 24 | 130 | 130 | 72 | 148 |

Standard strokes

- Ø 32 100 - 150 - 200 - 250 - 300 mm
- Ø 40 100 - 150 - 200 - 250 - 300 - 350 mm
- Ø 50 100 - 150 - 200 - 250 - 300 - 350 - 400 - 450 mm
- Ø 63 100 - 150 - 200 - 250 - 300 - 350 - 400 - 450 - 500 mm
- Ø 80 100 - 150 - 200 - 250 - 300 - 350 - 400 - 450 - 500 - 550 mm

Sensor clamps and brackets for 1319-1320 series
Use standard sensors and brackets on the rear and following special brackets on front of cylinders for use sensors codes 1500_ , RS_ , HS_ which have the following ordering codes:

- 1320.AGL** sensor bracket for cylinders Ø32 and Ø40
- 1320.BGL** sensor bracket for cylinders Ø50 and Ø63
- 1320.CGL** sensor bracket for cylinders Ø80

General

The piston rod lock devices are clamping units mounted on the microcylinders front head. They allow the piston rod to lock in any position.

Piston rod clamping is mechanically obtained by springs actuated purpose-made jaws. This method allows to lock the cylinder in the desired position, should the air pressure drop.

The piston rod lock device is not a safety device.

Construction characteristics

| | |
|------------------|--------------------------|
| Mounting bracket | anodised aluminium |
| Body | anodised aluminium |
| Clamping jaws | hardened alloy copper |
| Piston | acetal resin |
| Seal | NBR Oil resistant rubber |
| Springs | springs steel |

Technical characteristics

| | | | | | | | |
|---|--|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|------------------------------------|------------------------------------|
| Fluid | filtered and lubricated air | | | | | | |
| Working pressure | 3 bar - 6 bar | | | | | | |
| Working temperature | -5°C - +70°C | | | | | | |
| Functioning | mechanical double jaws | | | | | | |
| Locking | axial, two-direction (normally locked) | | | | | | |
| Unlocking | pneumatic | | | | | | |
| Clamping force with static load (microcylinders) | $\frac{\text{Ø12}}{180\text{N}}$ | $\frac{\text{Ø16}}{180\text{N}}$ | $\frac{\text{Ø20}}{350\text{N}}$ | $\frac{\text{Ø25}}{350\text{N}}$ | $\frac{\text{Ø32}}{600\text{N}}$ | | |
| Clamping force with static load (cylinders) | $\frac{\text{Ø32}}{600\text{N}}$ | $\frac{\text{Ø40}}{1000\text{N}}$ | $\frac{\text{Ø50}}{1400\text{N}}$ | $\frac{\text{Ø63}}{2000\text{N}}$ | $\frac{\text{Ø80}}{5000\text{N}}$ | $\frac{\text{Ø100}}{5000\text{N}}$ | $\frac{\text{Ø125}}{7000\text{N}}$ |

"Attention: Dry air must be used for application below 0°C"

Use and maintenance

Operate within the specified technical characteristics.

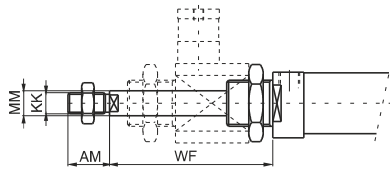
The piston rod lock does not require maintenance if properly utilised.

The working inlet port has to be pressurised for assembling the piston rod lock device on cylinder. Alternatively adjust the jaws with screw located on connection.

Spare parts are not available.

Microcylinders for piston rod lock

Threaded end covers version

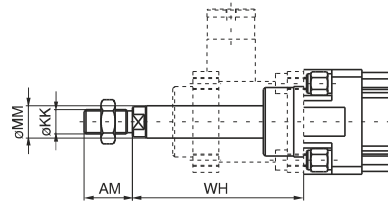


Ordering code

12_ _Ø.stroke.B

Order piston rod lock separately. Do not use with stainless steel or hexagonal piston rod.

Cylinders for piston rod lock

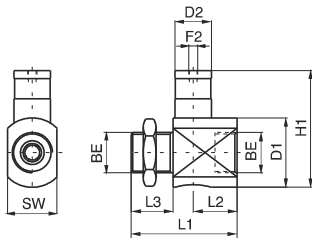


Ordering code

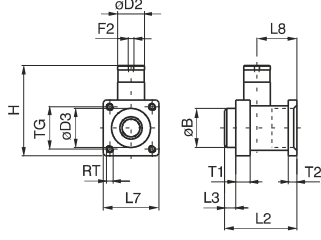
13 --Ø.stroke.--B

Order piston rod lock separately. Do not use with stainless steel piston rod.

Piston rod lock complete



Do not use as safety device



Ordering code

1260.Ø.51BS

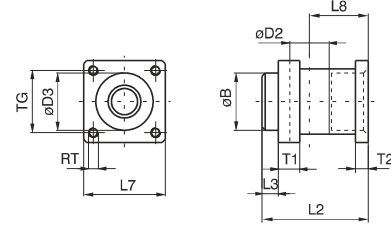
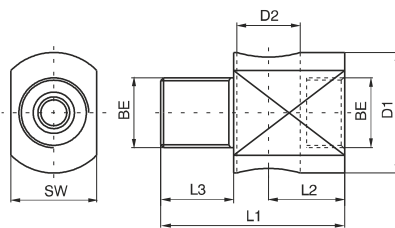
| | | | | | |
|------------|----|----|-----|-----|-----|
| Ø | 12 | 16 | 20 | 25 | 32 |
| Weight gr. | 82 | 82 | 140 | 140 | 188 |

Ordering code

1320.Ø.51BS

| | | | | | | | |
|------------|-----|-----|-----|-----|------|------|------|
| Ø | 32 | 40 | 50 | 63 | 80 | 100 | 125 |
| Weight gr. | 191 | 276 | 535 | 852 | 1772 | 2412 | 5250 |

Piston rod lock bracket



Ordering code

1260.Ø.51S

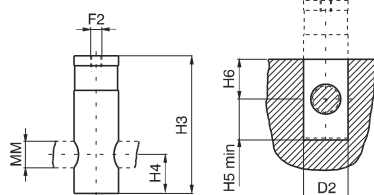
| | | | | | |
|------------|----|----|----|----|-----|
| Ø | 12 | 16 | 20 | 25 | 32 |
| Weight gr. | 60 | 60 | 85 | 85 | 133 |

Ordering code

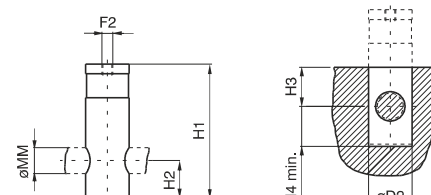
1320.Ø.51S

| | | | | | | | |
|------------|-----|-----|-----|-----|------|------|------|
| Ø | 32 | 40 | 50 | 63 | 80 | 100 | 125 |
| Weight gr. | 142 | 171 | 360 | 486 | 1060 | 1700 | 3500 |

Piston rod lock and housing



Do not use as safety device



Ordering code

1260.Ø.51B (Ø12-Ø25)

| | | | | | |
|------------|----|----|----|----|----|
| Ø | 12 | 16 | 20 | 25 | 32 |
| Weight gr. | 22 | 22 | 55 | 55 | 55 |

1320.32.51B (Ø32)

Ordering code

1320.Ø.51B

| | | | | | | | |
|------------|----|-----|-----|-----|-----|-----|------|
| Ø | 32 | 40 | 50 | 63 | 80 | 100 | 125 |
| Weight gr. | 49 | 105 | 175 | 366 | 712 | 712 | 1750 |

Table of dimensions (series 1200)

| Bore | AM | BE | D1 | D2 | F2 | H1 | H3 | H4 | H5 | H6 | KK | L1 | L2 | L3 | MM | SW | WF |
|------|----|---------|------|----|----|----|----|------|------|----|----------|----|----|----|----|----|------|
| 12 | 16 | M16x1.5 | 20 | 16 | M5 | 35 | 35 | 10 | 11 | 10 | M6x1 | 42 | 21 | 12 | 6 | 20 | 55 |
| 16 | 16 | M16x1.5 | 20 | 16 | M5 | 35 | 35 | 10 | 11 | 10 | M6x1 | 42 | 21 | 12 | 6 | 20 | 55 |
| 20 | 20 | M22x1.5 | 38 | 20 | M5 | 64 | 62 | 17.5 | 19 | 18 | M8x1.25 | 58 | 24 | 23 | 8 | 27 | 73 |
| 25 | 22 | M22x1.5 | 38 | 20 | M5 | 64 | 62 | 17.5 | 19 | 18 | M10x1.25 | 58 | 24 | 23 | 10 | 27 | 77 |
| 32 | 20 | M30x1.5 | 39.5 | 20 | M5 | 64 | 62 | 17.5 | 18.5 | 18 | M10x1.25 | 60 | 26 | 22 | 12 | 35 | 76.5 |

Table of dimensions (series 1300)

| Bore | AM | B | D2 | D3 | F2 | H | H1 | H2 | H3 | H4 | KK | L2 | L3 | L7 | L8 | MM | RT | T1 | T2 | TG | WH |
|------|----|----|----|------|--------|-----|-----|------|----|------|----------|-----|----|-----|------|----|-----|----|----|------|-----|
| 32 | 22 | 30 | 20 | 30.5 | M5 | 67 | 62 | 17.5 | 18 | 18.5 | M10x1.25 | 58 | 10 | 45 | 31.5 | 12 | M6 | 13 | 8 | 32.5 | 74 |
| 40 | 24 | 35 | 24 | 35 | G 1/8" | 86 | 83 | 22 | 22 | 23 | M12x1.25 | 65 | 10 | 50 | 36 | 16 | M6 | 13 | 8 | 38 | 85 |
| 50 | 32 | 40 | 30 | 40 | G 1/8" | 105 | 100 | 25 | 25 | 26 | M16x1.5 | 82 | 12 | 60 | 45.5 | 20 | M8 | 16 | 15 | 46.5 | 107 |
| 63 | 32 | 45 | 38 | 45 | G 1/8" | 121 | 116 | 30 | 30 | 31 | M16x1.5 | 82 | 12 | 70 | 49.5 | 20 | M8 | 16 | 15 | 56.5 | 107 |
| 80 | 40 | 45 | 48 | 45 | G 1/8" | 164 | 155 | 36 | 36 | 37 | M20x1.5 | 110 | 20 | 90 | 61 | 25 | M10 | 20 | 18 | 72 | 126 |
| 100 | 40 | 55 | 48 | 55 | G 1/8" | 172 | 155 | 36 | 36 | 37 | M20x1.5 | 115 | 23 | 105 | 65 | 25 | M10 | 20 | 18 | 89 | 143 |
| 125 | 54 | 60 | 65 | 60 | G 1/8" | 210 | 195 | 56 | 55 | 56 | M27x2 | 167 | 45 | 140 | 86.5 | 32 | M12 | 30 | 22 | 110 | 187 |