

Twinrod Cylinders

GSB

Oilless Bearing Type

GSU

Linear Bearing Type






- Piston with magnet is standard accessory in the GS series cylinders.
- This cylinder is of two-axle mode with double thrust force and smooth and precise operation.

Specification

| Bore sizes of cylinder (mm) | φ 6 | φ 10 | φ 16 | φ 20 | φ 25 | φ 32 |
|-------------------------------------|--|------|--------|------|--------|------|
| Type of operation | Double acting | | | | | |
| Power fluid | Filtered air with or without lubrication | | | | | |
| Min. pressure (MPa) | 0.15 | 0.1 | | 0.05 | | |
| Max. pressure (MPa) | 0.7 | | | | | |
| Proof pressure | 1.05 | | | | | |
| The range of temperature (°C) | -10~60 | | | | | |
| The range of speed (mm/sec) | 30~300 | | 30~500 | | | |
| Port size | M5/10.8 | | | | PT 1/8 | |
| The range of adjustable stroke (mm) | 0 ~ -5 | | | | | |

How to order

GSB / **25** / **100** - **LN32H** × **2**

| Type | Bore | Stroke | Sensor switch | Quantity |
|---|--|---|---|-------------------|
|  GSB  GSU | 6—φ 6mm 10—φ 10mm 16—φ 16mm 20—φ 20mm 25—φ 25mm 32—φ 32mm | 10-10mm 15-15mm 20-20mm 25-25mm 30-30mm 35-35mm 40-40mm 45-45mm 50-50mm 60-60mm 70-70mm 75-75mm 80-80mm 90-90mm 100-100mm 125-125mm 150-150mm |  LN32H | 1: 1pc 2: 2pcs |

Note:
 1.Can choose NPN or PNP type (3-Wire type, 24VDC).
 2.Can choose plug-in cable.

Standard stroke

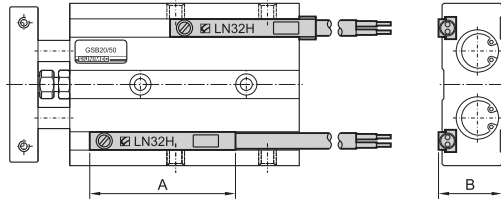
| Type | Bore | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 60 | 70 | 75 | 80 | 90 | 100 | 125 | 150 |
|------|------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|
| GSB | φ 6 | ● | - | ● | - | ● | - | ● | - | ● | - | - | - | - | - | - | - | - |
| | φ 10 | ● | ● | ● | ● | ● | ● | ● | ● | ● | - | - | - | - | - | - | - | - |
| | φ 16 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| GSU | φ 20 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | φ 25 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | φ 32 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | φ 32 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |

Installation of sensor switches

- GSB TYPE
- GSU TYPE

Dimensional Table

| Bore | Sensor switch | A | B |
|------|---------------|----|------|
| 6 | LN32H | 29 | 16.5 |
| 10 | LN32H | 29 | 18 |
| 16 | LN32H | 29 | 20.5 |
| 20 | LN32H | 29 | 25.5 |
| 25 | LN32H | 29 | 30.5 |
| 32 | LN32H | 29 | 38.5 |



How to order the seal kit

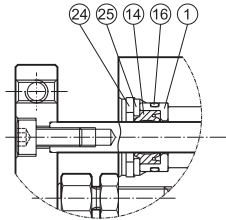
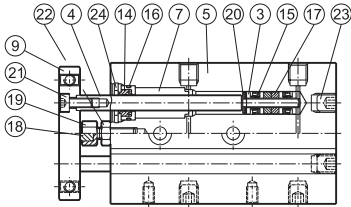
GSSK

| Bore | Seal kit |
|------|-------------------------------|
| 6 | GSSK6 - Includin No.14,15,16 |
| 10 | GSSK10 - Includin No.14,15,16 |
| 16 | GSSK16 - Includin No.14,15,16 |

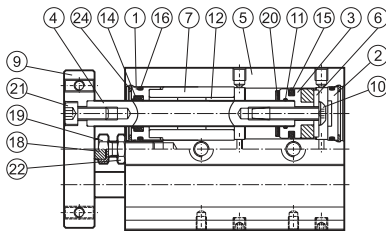
GSSK

| Bore | Seal kit |
|------|-------------------------------|
| 20 | GSSK20 - Includin No.14,15,16 |
| 25 | GSSK25 - Includin No.14,15,16 |
| 32 | GSSK32 - Includin No.14,15,16 |

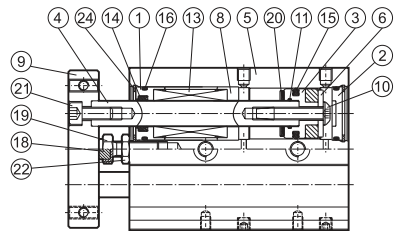
● GSB TYPE Bore φ 6



● GSB TYPE Bore φ 10~φ 32



● GSU TYPE Bore φ 10~φ 32



Parts List

| No. | Part name | Quantity | No. | Part name | Quantity | No. | Part name | Quantity |
|-----|----------------|----------|-----|-----------------|----------|-----|---------------------------|----------|
| 1 | Rod cover | 2 | 10 | bolt | 2 | 19 | Adjusting screw | 1 |
| 2 | Head cover | 2 | 11 | O-ring | 2 | 20 | Rubber lining | 2 |
| 3 | Piston | 2 | 12 | Oiless bearing | 4 | 21 | Hexagon socket head screw | 2 |
| 4 | Piston rod | 2 | 13 | linear bearing | 2 | 22 | Lock nut | 1 |
| 5 | Cylinder tube | 1 | 14 | Rod packing | 2 | 23 | Set screw | 2 |
| 6 | Magnet holder | 2 | 15 | Piston packing | 2 | 24 | Snap ring | 4 |
| 7 | Bearing holder | 2 | 16 | Cylinder gasket | 4 | 25 | Steel pad | 2 |
| 8 | Bearing holder | 2 | 17 | Magnet | 2 | | | |
| 9 | Guide plate | 1 | 18 | Rubber pillar | 1 | | | |

DA

DP

DS

DQ

DB

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ST

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GS

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GT

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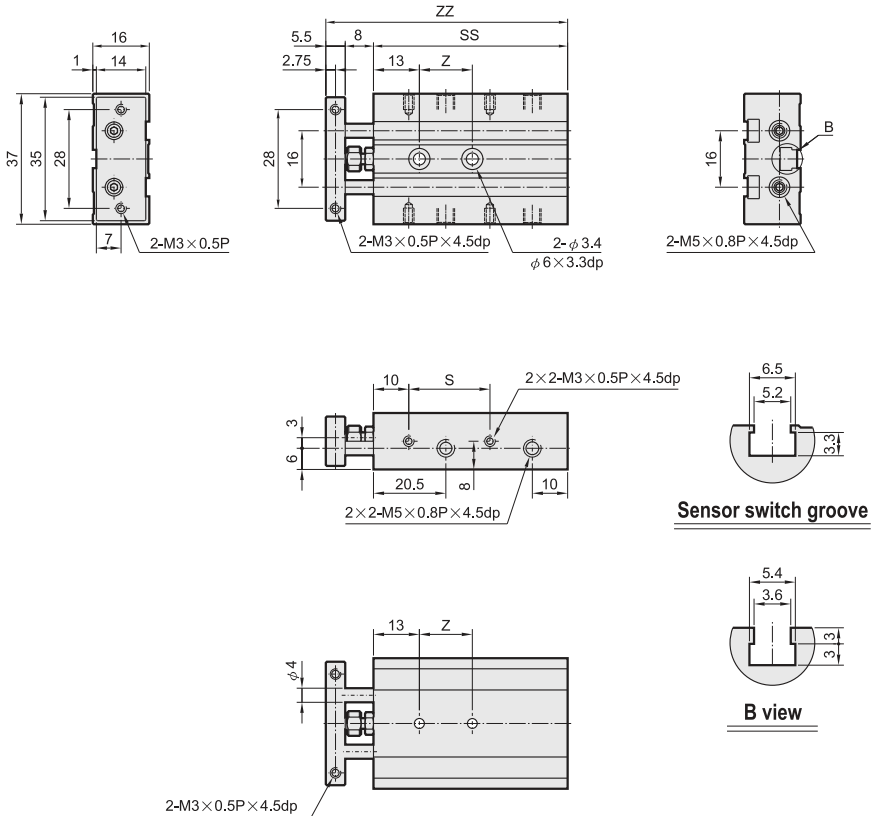
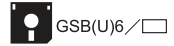
CT

CH

Dimensional features

● GSB TYPE

Bore φ 6



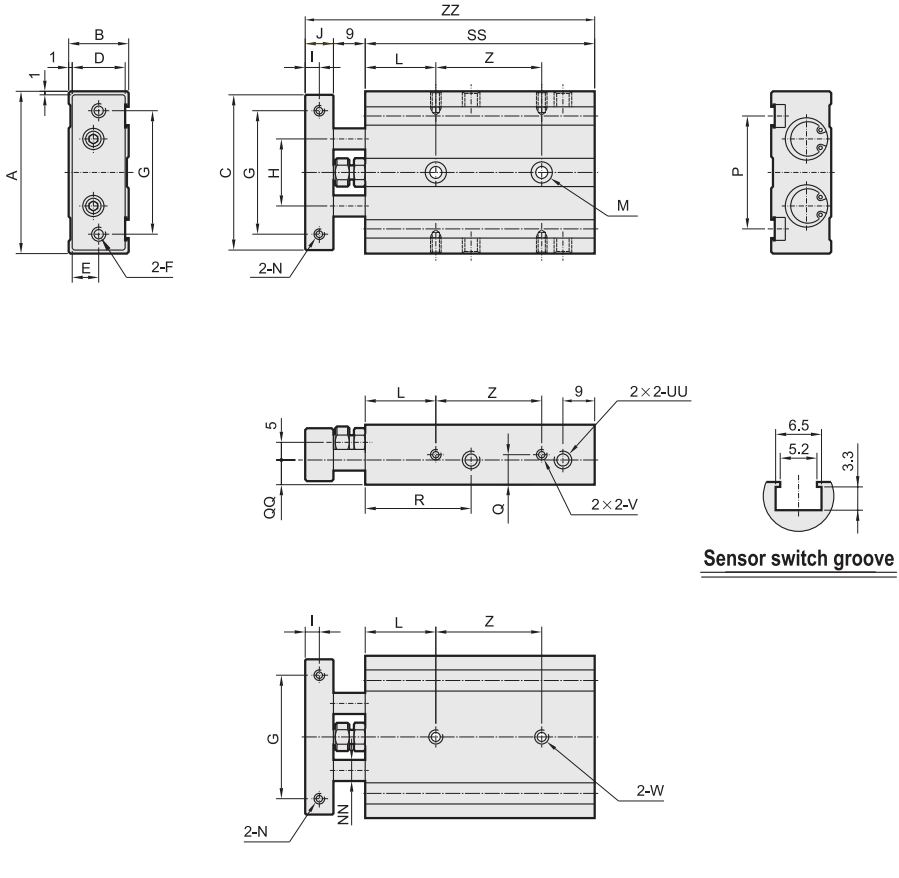
Dimensional Table

| Stroke | S | Z | SS | ZZ |
|--------|----|----|----|-------|
| 10 | 23 | 15 | 55 | 68.5 |
| 20 | 33 | 20 | 65 | 78.5 |
| 30 | 43 | 25 | 75 | 88.5 |
| 40 | 53 | 30 | 85 | 98.5 |
| 50 | 63 | 35 | 95 | 108.5 |

Dimensional features

● GSB, GSU TYPE

Bore φ 10, φ 16



Dimensional Table

| Bore | A | B | C | D | E | F | G | H | I | J | L | M | N | NN | P | Q | QQ | R | W | V |
|------|----|----|----|----|-----|---------|----|----|---|----|----|--------------------|-------------|-----|----|-----|----|----|-------------|---------------|
| φ 10 | 46 | 17 | 44 | 15 | 7.5 | M4×0.7P | 35 | 19 | 4 | 8 | 20 | 2-φ 3.4, φ 6×3.3dp | M3×0.5P×5dp | φ 6 | 32 | 8.5 | 7 | 30 | M4×0.7P×8dp | M3×0.5P×4.5dp |
| φ 16 | 58 | 20 | 56 | 18 | 9 | M5×0.8P | 45 | 24 | 5 | 10 | 30 | 2-φ 4.3, φ 8×4.4dp | M4×0.7P×6dp | φ 8 | 47 | 10 | 10 | 36 | M5×0.8P×9dp | M4×0.7P×5dp |

| Bore | UU | St.=10 | | St.=15 | | St.=20 | | St.=25 | | St.=30 | | St.=35 | | St.=40 | | St.=45 | | St.=50 | | | | | | | | | | |
|------|---------------|--------|----|--------|----|--------|----|--------|----|--------|----|--------|-----|--------|----|--------|----|--------|-----|-----|----|-----|-----|----|-----|-----|----|-----|
| | | SS | Z | ZZ | SS | Z | ZZ | SS | Z | ZZ | SS | Z | ZZ | SS | Z | ZZ | SS | Z | ZZ | SS | Z | ZZ | | | | | | |
| φ 10 | M5×0.8P×4.5dp | 65 | 30 | 82 | 70 | 30 | 87 | 75 | 30 | 92 | 80 | 30 | 97 | 85 | 40 | 102 | 90 | 40 | 107 | 95 | 40 | 112 | 100 | 40 | 117 | 105 | 40 | 122 |
| φ 16 | M5×0.8P×5.5dp | 70 | 25 | 89 | 75 | 25 | 94 | 80 | 25 | 99 | 85 | 25 | 104 | 90 | 35 | 109 | 95 | 35 | 114 | 100 | 35 | 119 | 105 | 35 | 124 | 110 | 35 | 129 |

| Bore | St.=60 | | St.=70 | | St.=75 | | St.=80 | | St.=90 | | St.=100 | | St.=125 | | St.=150 | | | | | | | | | |
|------|--------|----|--------|-----|--------|-----|--------|----|--------|-----|---------|-----|---------|----|---------|-----|----|-----|-----|----|-----|-----|----|-----|
| | SS | Z | ZZ | SS | Z | ZZ | SS | Z | ZZ | SS | Z | ZZ | SS | Z | ZZ | | | | | | | | | |
| φ 10 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | | | | | | | |
| φ 16 | 120 | 45 | 139 | 130 | 45 | 149 | 135 | 45 | 154 | 140 | 45 | 159 | 150 | 55 | 169 | 160 | 55 | 179 | 185 | 80 | 204 | 210 | 80 | 229 |

DA

DP

DS

DQ

DB

DN

BN

ST

NT

DU

Sensor switch groove

DJ

TA

GP

GS

GM

GT

RT

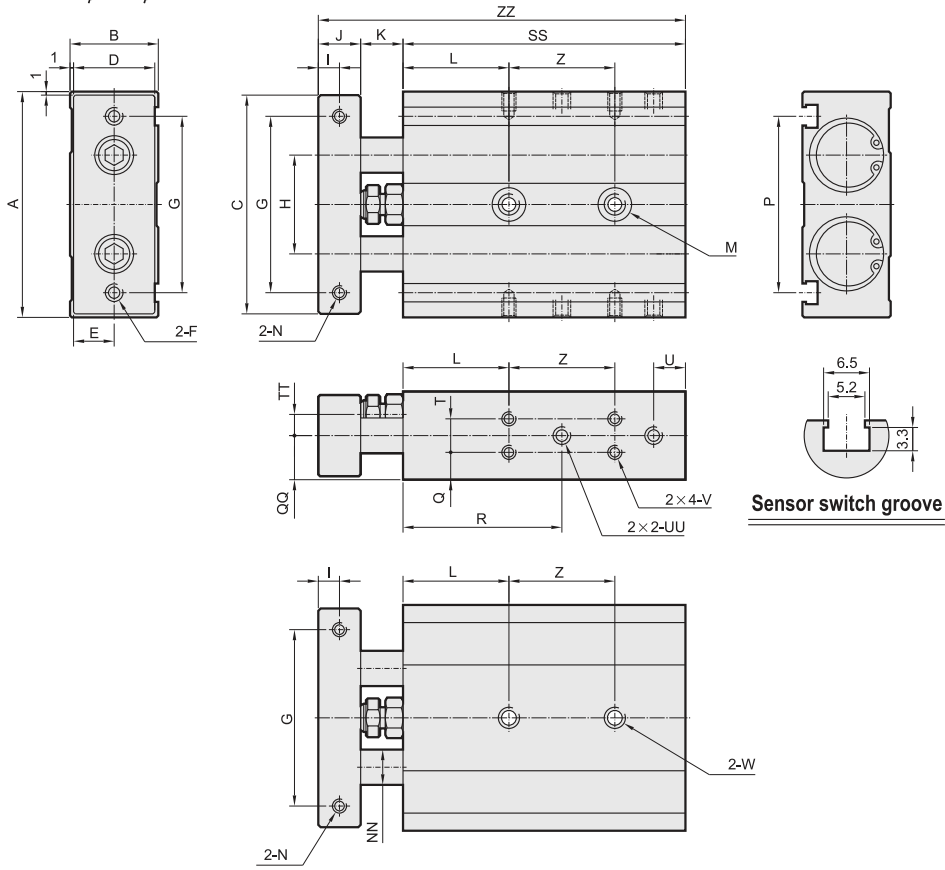
CT

CH

Dimensional features

● GSB, GSU TYPE

Bore φ20 ~ φ32



Dimensional Table

| Bore | A | B | C | D | E | F | G | H | I | J | K | L | M | N | NN | P | Q | QQ | R | T | TT | U |
|------|----|----|----|----|------|---------|----|----|---|----|----|----|----------------------|---------------|-----|----|------|------|------|-----|----|----|
| φ20 | 64 | 25 | 62 | 23 | 11.5 | M5×0.8P | 50 | 28 | 6 | 12 | 12 | 30 | 2-φ5.5, 2-φ9.5×5.4dp | M4×0.7P×7.5dp | φ10 | 50 | 7.75 | 12.5 | 45 | 9.5 | 6 | 9 |
| φ25 | 80 | 30 | 78 | 28 | 14 | M6×1.0P | 60 | 35 | 6 | 12 | 12 | 30 | 2-φ6.8, 2-φ11×6.3dp | M5×0.8P×7.5dp | φ12 | 60 | 8.5 | 15 | 44.5 | 13 | 9 | 10 |
| φ32 | 98 | 38 | 96 | 36 | 18 | M6×1.0P | 75 | 44 | 8 | 16 | 14 | 30 | 2-φ6.8, 2-φ11×6.3dp | M5×0.8P×10dp | φ16 | 74 | 9 | 19 | 52.5 | 20 | 11 | 12 |

| Bore | UU | V | W | St.=10 | | St.=15 | | St.=20 | | St.=25 | | St.=30 | | St.=35 | | St.=40 | | | | | | | | |
|------|---------------|---------------|---------------|--------|----|--------|----|--------|-----|--------|----|--------|-----|--------|-----|--------|----|-----|-----|----|-----|-----|----|-----|
| | | | | SS | Z | SS | Z | SS | Z | SS | Z | SS | Z | SS | Z | SS | Z | | | | | | | |
| φ20 | M5×0.8P×4.5dp | M4×0.7P×5.5dp | M6×1.0P×10dp | 80 | 30 | 104 | 85 | 30 | 109 | 90 | 30 | 114 | 95 | 30 | 119 | 100 | 40 | 124 | 105 | 40 | 129 | 110 | 40 | 134 |
| φ25 | PT 1/8 | M5×0.8P×7.5dp | M8×1.25P×16dp | 82 | 30 | 106 | 87 | 30 | 111 | 92 | 30 | 116 | 97 | 30 | 121 | 102 | 40 | 126 | 107 | 40 | 131 | 112 | 40 | 136 |
| φ32 | PT 1/8 | M5×0.8P×7.5dp | M8×1.25P×16dp | 92 | 40 | 122 | 97 | 40 | 127 | 102 | 40 | 132 | 107 | 40 | 137 | 112 | 50 | 142 | 117 | 50 | 147 | 122 | 50 | 152 |

| Bore | St.=45 | | St.=50 | | St.=60 | | St.=70 | | St.=75 | | St.=80 | | St.=90 | | St.=100 | | St.=125 | | St.=150 | | | | | | | | | | | |
|------|--------|----|--------|-----|--------|-----|--------|----|--------|-----|--------|-----|--------|----|---------|-----|---------|-----|---------|----|-----|-----|----|-----|-----|----|-----|-----|----|-----|
| | SS | Z | SS | Z | SS | Z | SS | Z | SS | Z | SS | Z | SS | Z | SS | Z | SS | Z | SS | Z | | | | | | | | | | |
| φ20 | 115 | 40 | 139 | 120 | 40 | 144 | 130 | 60 | 154 | 140 | 60 | 164 | 145 | 60 | 169 | 150 | 60 | 174 | 160 | 60 | 184 | 170 | 60 | 194 | 195 | 85 | 219 | 220 | 85 | 244 |
| φ25 | 117 | 40 | 141 | 122 | 40 | 146 | 132 | 60 | 156 | 142 | 60 | 166 | 147 | 60 | 171 | 152 | 60 | 176 | 162 | 60 | 186 | 172 | 60 | 196 | 197 | 85 | 221 | 222 | 85 | 246 |
| φ32 | 127 | 50 | 157 | 132 | 50 | 162 | 142 | 70 | 172 | 152 | 70 | 182 | 157 | 70 | 187 | 162 | 70 | 192 | 172 | 70 | 202 | 182 | 70 | 212 | 207 | 95 | 237 | 232 | 95 | 262 |