

MA6432 Series Stainless Steel Mini Cylinder (ISO6432)



MA6432-10 x 50



MA6432-25 x 50

Ordering Code

MA6432 **S** **25** **50** **20** **×** **50**

Series Code
 MA: Double Action Type
 MSA: Single-Extension Type
 MAD: Drawing-in Type
 MACD: Double-shaft Double Action
 MAC: Double-shaft and adjustable stroke type
 MACW: With Cushion Type

Back Cover Type
 Blank-Fishtail Type
 CR: Rounded Type
 U: Horizontal Type
 S: Double-shaft Double Action
 D: Damping Type
 A: Adjustable stroke type

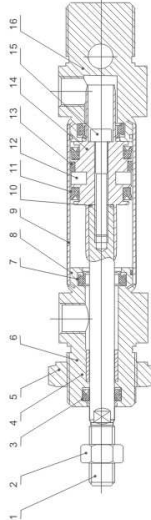
Stroke
 8mm-25mm

Adjustable Stroke Type
 0-100mm

Magnet Code
 Blank: Without Magnet
 S: With Magnet

Fixed Type
 Blank: Normal type
 LF: Front and back fixed type
 SDB: Front cover fixed type
 SDBB: Back cover fixed type
 U: Back cover fixed type

Internal structure



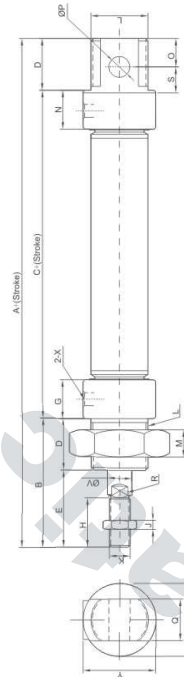
| NO | Designation | NO | Designation |
|----|------------------|----|-------------------|
| 1 | Piston Rod | 9 | Barrel |
| 2 | Piston Rod Nut | 10 | Piston rod O-ring |
| 3 | Front Cover Seal | 11 | Piston O-ring |
| 4 | Bearing | 12 | Magnet(Optional) |
| 5 | Hexagon Screw | 13 | Wear Ring |
| 6 | Front Cover | 14 | Piston |
| 7 | Cushion Ring | 15 | Hex Socket Screw |
| 8 | O-ring | 16 | Back Cover |

Specification

| Cylinder diameter | 8 | 10 | 12 | 16 | 20 | 25 |
|---------------------------------|--|-----|-----|-----|-----|----|
| Fluid | Air | | | | | |
| Motion pattern | Double Action or single Action | | | | | |
| Ensured Pressure Resistance | 15.3kgf/cm ² (1.5Mpa) | | | | | |
| Max.pressure | 10.2kgf/cm ² (1.0Mpa) | | | | | |
| Min.pressure | 0.5kgf/cm ² (0.05Mpa) | | | | | |
| Environment and fluid temp | -10~+80°C (Internal Magnetic install by Tech strap: Type Max:60°C) | | | | | |
| Piston velocity | Rubber Buffer(Standard), Air Buffer(Optional) | | | | | |
| Buffering | 50~750mm/s | | | | | |
| Kinetic energy Tolerance(kg/cm) | 0.2 | 0.3 | 0.4 | 0.9 | 2.7 | 4 |
| Port Size | M5×0.8 | | | | | |
| Stroke | Standard stroke | | | | | |
| Bore(mm) | Max.Stroke(mm) | | | | | |
| 8 | 10,25,40,50,80,100,125,160,200 | | | | | |
| 10 | 10,25,40,50,80,100,125,160,200 | | | | | |
| 12 | 10,25,40,50,80,100,125,160,200 | | | | | |
| 16 | 10,25,40,50,80,100,125,160,200 | | | | | |
| 20 | 25,40,50,80,100,125,150,160,175,200,250,300 | | | | | |
| 25 | 25,40,50,80,100,125,150,160,175,200,250,300 | | | | | |

MA6432 Series Stainless Steel Mini Cylinder (ISO 6432)

Overall Dimensions



Dimension Sheet

| Bore/Symbol | A | B | C | D | E | G | H | M | J | O | K | N | P | S | R | U | V | Q | Y | L | X |
|-------------|-----|----|----|----|----|------|----|---|-----|----|----------|------|---|----|---|----|----|----|----|----------|-------|
| 8 | 86 | 28 | 46 | 12 | 16 | 9 | 12 | 7 | 3 | 10 | M4×0.7 | 9 | 4 | 6 | - | 15 | 4 | 8 | 15 | M12×1.25 | M5 |
| 10 | 86 | 27 | 47 | 12 | 15 | 9 | 12 | 7 | 3 | 10 | M4×0.7 | 9 | 4 | 6 | - | 15 | 4 | 8 | 15 | M12×1.25 | M5 |
| 12 | 105 | 37 | 51 | 17 | 20 | 9 | 16 | 6 | 4.5 | 14 | M6×1 | 10.5 | 6 | 9 | 5 | 20 | 6 | 12 | 20 | M16×1.5 | M5 |
| 16 | 111 | 38 | 56 | 17 | 21 | 12.5 | 16 | 6 | 4.5 | 13 | M6×1 | 10.5 | 6 | 9 | 5 | 20 | 6 | 12 | 20 | M16×1.5 | M5 |
| 20 | 128 | 45 | 63 | 20 | 25 | 15 | 20 | 8 | 6 | 11 | M8×1.25 | 15 | 8 | 12 | 6 | 27 | 8 | 16 | 27 | M22×1.5 | G1/8" |
| 25 | 137 | 50 | 65 | 22 | 28 | 15 | 22 | 8 | 6 | 11 | M10×1.25 | 15 | 8 | 12 | 8 | 27 | 10 | 16 | 27 | M22×1.5 | G1/8" |

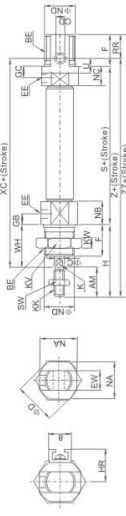
MA6432-N Series Stainless Steel Mini Cylinder (ISO 6432)



MA6432-N25 x 150

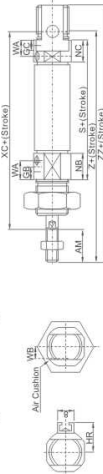
Overall Dimensions

Non Magnet Inside Magnet Rubber Buffer



Install by Orbit

Non Magnet Inside Magnet Rubber Buffer



Install by Tech Strap

Dimension Sheet

| Bore | AM | BE | φC | φCD | φD | EE | EW | F |
|------|----|----------|----|-----|------|--------|----|----|
| φ8 | 12 | M12×1.25 | 4 | 4 | 17 | M5×0.8 | 8 | 12 |
| φ10 | 12 | M16×1.25 | 4 | 4 | 17 | M5×0.8 | 8 | 12 |
| φ12 | 16 | M16×1.5 | 6 | 6 | 20 | M5×0.8 | 12 | 17 |
| φ16 | 16 | M16×1.5 | 6 | 6 | 20 | M5×0.8 | 12 | 17 |
| φ20 | 20 | M22×1.5 | 8 | 8 | 28 | G1/8" | 16 | 20 |
| φ25 | 22 | M22×1.5 | 10 | 8 | 33.5 | G1/8" | 16 | 22 |

| Bore | GB | GC | WA | WB | H | HR | K | KK | KV | KW | NB | NC | NA | ND | RR | S | SW | U | IWH | XC | Z | ZZ |
|------|--------|--------|------|-----|----|------|---|----------|----|----|------------|------------|----|----|----|--------|----|----|-----|--------|--------|----------|
| φ8 | 7 | 5 | - | - | 28 | 10 | - | M4×0.7 | 19 | 6 | 11.5 | 9.5 | 15 | 12 | 10 | 46 | 7 | 6 | 16 | 64 | 76 | 86 |
| φ10 | 7(5.5) | 7(6.5) | 10.5 | 4.5 | 28 | 10.5 | - | M4×0.7 | 19 | 6 | 11.5(13.5) | 9.5(13.5) | 15 | 12 | 10 | 46(53) | 7 | 6 | 16 | 64(71) | 76(83) | 86(93) |
| φ12 | 8(5.5) | 8(6.5) | 9.5 | 5.5 | 38 | 14 | 5 | M6×0.4 | 24 | 8 | 12.5(12.5) | 10.5(12.5) | 18 | 16 | 14 | 50(54) | 10 | 9 | 22 | 75(79) | 91(95) | 105(109) |
| φ16 | 8(5.5) | 8(6.5) | 9.5 | 5.5 | 38 | 14 | 5 | M6×0.8 | 24 | 8 | 12.5 | 10.5(12.5) | 18 | 16 | 13 | 56 | 10 | 9 | 22 | 82 | 98 | 111 |
| φ20 | 8 | 8 | 17 | 8.5 | 44 | 17 | 6 | M8×1.25 | 32 | 11 | 15 | 15 | 24 | 22 | 11 | 62 | 13 | 12 | 24 | 95 | 95 | 126 |
| φ25 | 8 | 8 | 20 | 10 | 50 | 20 | 8 | M10×1.25 | 32 | 11 | 15 | 15 | 30 | 22 | 11 | 65 | 17 | 12 | 28 | 104 | 126 | 137 |

Our company can also provide SMC Type ISO6432 standard stainless steel mini cylinder, if you need this, pls add -N after normal ordering code.

MA6432 Series Stainless Steel Mini Cylinder (ISO 6432 Big Bore)



MA6432 50 x 50-S



MA6432 63 x 50-S

Ordering Code MA6432 50 × 50 S

Ordering Code MA6432 63 × 50 S

Series Code
 MA: Double Action Type
 MSA: Single-Extrusion Type
 MTA: Single Drawing-in Type
 MAD: Double-shaft Double Action Type
 MAC: Double-shaft Double Action Damping Type
 MAC: With Cushion Type

Back Cover Type
 Blank/Fishtail type
 CM: Rounded type
 U: Horizontal type

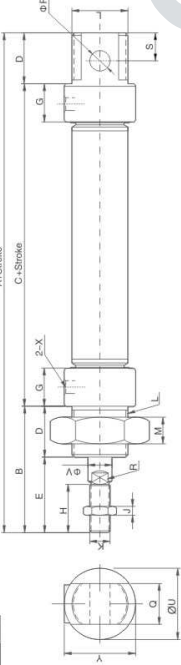
Cylinder Bore
 32mm-63mm

Stroke
 Adjustable Stroke Type
 0-100mm

Magnet Code
 Blank/Without Magnet
 S: With Magnet

Fixed Type
 Blank/Normal type
 LB: Front and back fixed type
 FA: Front cover fixed type
 SDB: Back cover swinging type

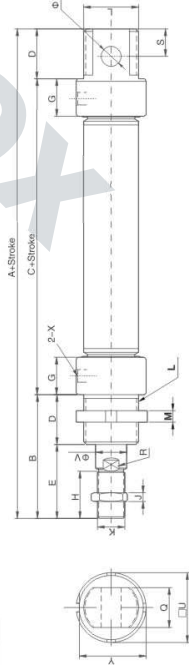
Overall Dimensions



Dimension Sheet

| Bore/Symbol | A | B | C | D | E | G | H | M | J | K | P | S | R | U | V | O | Y | K | X |
|-------------|-----|----|----|----|----|------|----|---|---|----------|----|----|----|------|----|----|------|-------|------|
| 32 | 160 | 57 | 76 | 27 | 30 | 16 | 22 | 8 | 6 | M10×1.25 | 10 | 12 | 10 | 35 | 12 | 16 | 35 | M24×2 | G1/8 |
| 40 | 162 | 57 | 76 | 27 | 32 | 16.7 | 24 | 8 | 7 | M12×1.25 | 12 | 12 | 14 | 41.6 | 16 | 16 | 41.6 | M30×2 | G1/8 |

Overall Dimensions



Dimension Sheet

| Bore/Symbol | A | B | C | D | E | G | H | M | J | K | P | S | R | U | V | O | Y | K | X |
|-------------|-----|----|----|----|----|----|----|---|---|---------|----|----|----|----|----|----|----|---------|------|
| 50 | 200 | 73 | 94 | 33 | 40 | 22 | 32 | 8 | 8 | M16×1.5 | 16 | 15 | 17 | 57 | 20 | 21 | 55 | M45×1.5 | G1/4 |
| 63 | 203 | 73 | 97 | 33 | 40 | 22 | 32 | 8 | 8 | M16×1.5 | 16 | 15 | 17 | 70 | 20 | 21 | 68 | M45×1.5 | G1/4 |

MA Series Stainless Steel Mini Cylinder



MA 25 x 50



MAJ 25 x 50-25

Ordering Code MA 20 × 50 S

Ordering Code MAJ 25 × 50- 25 S

Type
 MA: Double Action Type
 MSA: Single-Extrusion Type
 MTA: Single Drawing-in Type
 MAD: Double-shaft Double Action Type
 MAC: Double-shaft Double Action Damping Type
 MAC: With Cushion Type

Back Cover Type
 Blank/Fishtail type
 CM: Rounded type
 U: Horizontal type

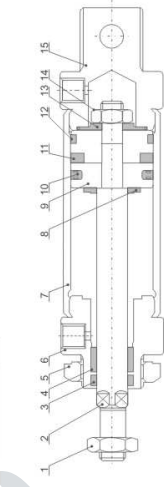
Cylinder Bore
 16mm-40mm

Stroke
 Adjustable Stroke Type
 0-100mm

Magnet Code
 Blank/Without Magnet
 S: With Magnet

Fixed Type
 Blank/Normal type
 LB: Front and back fixed type
 FA: Front cover fixed type
 SDB: Back cover swinging type
 U: Back cover fixed type

Internal structure



Specification

| NO | Designation | NO | Designation |
|----|-----------------------|----|--------------------|
| 1 | Piston Rod Nut | 2 | Piston Rod |
| 3 | Front Cover Seal Ring | 4 | Oiled Bearing |
| 5 | Front Cover Nut | 6 | Front Cover |
| 7 | Stainless steel tube | 8 | Anti-crash cushion |
| 9 | Piston | 10 | Piston O-Ring |
| 11 | Magnet(Optional) | 12 | Wear ring |
| 13 | Back cushion | 14 | Hex socket screw |
| 15 | Back Cover | | |

| Bore(mm) | 16 | 20 | 25 | 32 | 40 |
|-----------------------------|---|---------|----------|--------|----|
| Motion pattern | Double Action or Single Action | | | | |
| Working Medium | Air | | | | |
| Fixed Type | Normal Type | LB Type | SDB Type | U Type | |
| Operating Pressure Range | 0.1-0.9MPa | | | | |
| Ensured Pressure Resistance | 1.35MPa | | | | |
| Operating Temperature Range | -5-70°C | | | | |
| Operating Speed Range | 50-800mm/s | | | | |
| Buffer Type | Standard Type Anti-crash cushion Adjustable cushion | | | | |
| Damping Type | G1/8" | | | | |
| Port Size | M5×0.8 G1/8" G1/8" G1/8" G1/8" G1/8" | | | | |

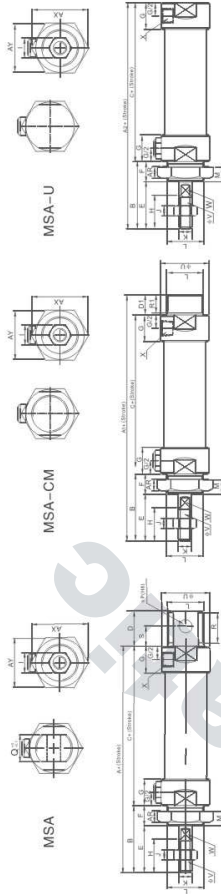
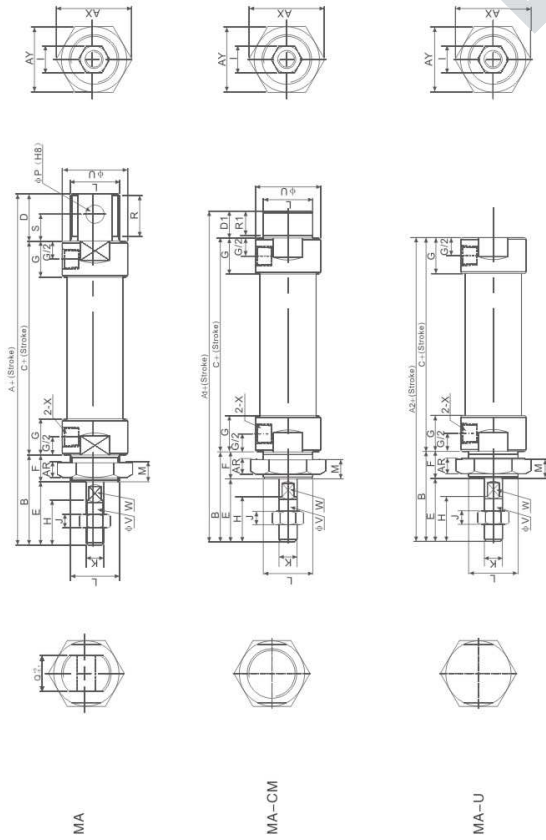
Our Company can also make flat for cylinder covers inlet and outlet position. If you require this, it should be specified.

Stroke

| Bore(mm) | 16 | 20 | 25 | 32 | 40 |
|--------------------|-----|-----|-----|-----|-----|
| Standard Stroke | 125 | 160 | 175 | 200 | 250 |
| Max.Stroke | 300 | 500 | 500 | 500 | 650 |
| Permissible Stroke | 500 | 650 | 650 | 650 | 650 |

MA Series Stainless Steel Mini Cylinder

Overall Dimensions



Dimension Sheet

| Symbol | A | A1 | A2 | B | C | D | D1 | E | F | G | H | I | J |
|------------------------|----------|---------|------|--------|------|--------|----|----|------|----|----|-------|----|
| Bore/Stroke | 0-50 | 51-100 | 0-50 | 51-100 | 0-50 | 51-100 | | | | | | | |
| 16 | 114 | 139 | 128 | 153 | 98 | 123 | 38 | 60 | 85 | 16 | 22 | 16 | 10 |
| 20 | 137 | 162 | 134 | 159 | 116 | 141 | 40 | 76 | 101 | 21 | 12 | 28 | 12 |
| 25 | 141 | 166 | 134 | 159 | 120 | 145 | 44 | 76 | 101 | 21 | 14 | 30 | 14 |
| 32 | 147 | 172 | 136 | 161 | 120 | 145 | 44 | 76 | 101 | 27 | 14 | 30 | 14 |
| 40 | 149 | 174 | 122 | 144 | 122 | 147 | 46 | 76 | 101 | 27 | 14 | 32 | 14 |
| Inside Diameter/Symbol | K | L | M | P | Q | R | S | U | V | W | X | AR | AX |
| 16 | M6×1 | M16×1.5 | 14 | 6 | 12 | 14 | 14 | 9 | 21 | 6 | 5 | M5 | 6 |
| 20 | M8×1.25 | M22×1.5 | 10 | 8 | 16 | 19 | 10 | 12 | 27 | 8 | 6 | G1/8" | 7 |
| 25 | M10×1.25 | M22×1.5 | 12 | 8 | 16 | 19 | 12 | 12 | 30 | 10 | 8 | G1/8" | 7 |
| 32 | M10×1.25 | M24×2.0 | 12 | 10 | 16 | 25 | 12 | 15 | 35 | 12 | 10 | G1/8" | 8 |
| 40 | M12×1.25 | M30×2.0 | 12 | 12 | 20 | 25 | 12 | 15 | 41.6 | 16 | 14 | G1/8" | 9 |

Dimension Sheet

| Bore/Stroke | A | A1 | A2 | B | C | D | D1 | E | F | G | H | I | J | K |
|------------------------|---------|-----|-----|----|----|----|----|------|----|------|-------|----|----|----------|
| 16 | 114 | 144 | 98 | 38 | 60 | 16 | 16 | 22 | 16 | 10 | 16 | 10 | 5 | M6×1 |
| 20 | 137 | 128 | 116 | 40 | 76 | 21 | 12 | 28 | 12 | 16 | 20 | 12 | 6 | M8×1.25 |
| 25 | 141 | 134 | 120 | 44 | 76 | 21 | 14 | 30 | 14 | 16 | 22 | 17 | 6 | M10×1.25 |
| 32 | 147 | 134 | 120 | 44 | 76 | 27 | 14 | 30 | 14 | 16 | 22 | 17 | 6 | M10×1.25 |
| 40 | 149 | 136 | 122 | 46 | 76 | 27 | 14 | 32 | 14 | 16.7 | 24 | 17 | 7 | M12×1.25 |
| Inside Diameter/Symbol | L | M | P | Q | R | S | U | V | W | X | AR | AX | AY | |
| 16 | M16×1.5 | 14 | 6 | 12 | 14 | 14 | 9 | 21 | 6 | 5 | M5 | 6 | 24 | 27.5 |
| 20 | M22×1.5 | 10 | 8 | 16 | 19 | 10 | 12 | 27 | 8 | 6 | G1/8" | 7 | 33 | 29 |
| 25 | M22×1.5 | 12 | 8 | 16 | 19 | 12 | 12 | 30 | 10 | 8 | G1/8" | 7 | 33 | 29 |
| 32 | M24×2.0 | 12 | 10 | 16 | 25 | 12 | 15 | 35 | 12 | 10 | G1/8" | 8 | 37 | 32 |
| 40 | M30×2.0 | 12 | 12 | 20 | 25 | 12 | 15 | 41.6 | 16 | 14 | G1/8" | 9 | 47 | 41 |

MAL6432 Series Aluminum alloy mini cylinder (ISO 6432)

Specification

| | |
|-----------------------------|--------------------------------|
| Motion Pattern | Double Action or Single Action |
| Operating Pressure Range | 0.1~0.9MPa |
| Ensured Pressure Resistance | 1.35MPa |
| Operating Temperature Range | -5~70 °C |
| Operating Speed Range | 30~800mm/s |

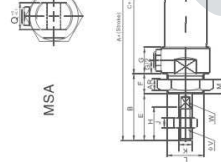
Product Instruction

Our company can also provide MAL series ISO6432 standard aluminum alloy mini cylinder, if you need this, please change ordering code MAL into MAL6432.



MAL6432 20 x 75

Overall Dimensions



Dimension Sheet

| Symbol | A | A1 | A2 | B | C | D | D1 | E | F | G | H | I | J |
|------------------------|----------|---------|------|--------|------|--------|----|----|------|----|----|-------|----|
| Bore/Stroke | 0-50 | 51-100 | 0-50 | 51-100 | 0-50 | 51-100 | | | | | | | |
| 16 | 114 | 139 | 128 | 153 | 98 | 123 | 38 | 60 | 85 | 16 | 22 | 16 | 10 |
| 20 | 137 | 162 | 134 | 159 | 116 | 141 | 40 | 76 | 101 | 21 | 12 | 28 | 12 |
| 25 | 141 | 166 | 134 | 159 | 120 | 145 | 44 | 76 | 101 | 21 | 14 | 30 | 14 |
| 32 | 147 | 172 | 136 | 161 | 120 | 145 | 44 | 76 | 101 | 27 | 14 | 30 | 14 |
| 40 | 149 | 174 | 122 | 144 | 122 | 147 | 46 | 76 | 101 | 27 | 14 | 32 | 14 |
| Inside Diameter/Symbol | K | L | M | P | Q | R | S | U | V | W | X | AR | AX |
| 16 | M6×1 | M16×1.5 | 14 | 6 | 12 | 14 | 14 | 9 | 21 | 6 | 5 | M5 | 6 |
| 20 | M8×1.25 | M22×1.5 | 10 | 8 | 16 | 19 | 10 | 12 | 27 | 8 | 6 | G1/8" | 7 |
| 25 | M10×1.25 | M22×1.5 | 12 | 8 | 16 | 19 | 12 | 12 | 30 | 10 | 8 | G1/8" | 7 |
| 32 | M10×1.25 | M24×2.0 | 12 | 10 | 16 | 25 | 12 | 15 | 35 | 12 | 10 | G1/8" | 8 |
| 40 | M12×1.25 | M30×2.0 | 12 | 12 | 20 | 25 | 12 | 15 | 41.6 | 16 | 14 | G1/8" | 9 |

Overall Dimensions



Dimension Sheet

| Inside Diameter/Symbol | A | A1 | B | C | E | F | G | H | I | J | K |
|------------------------|---------|-----|------|----|----|-------|------|----|----|----|----------|
| 16 | 156 | 135 | 38 | 60 | 22 | 16 | 10 | 16 | 10 | 5 | M6×1 |
| 20 | 156 | 153 | 40 | 76 | 28 | 12 | 16 | 20 | 12 | 6 | M8×1.25 |
| 25 | 164 | 161 | 44 | 76 | 30 | 14 | 16 | 22 | 17 | 6 | M10×1.25 |
| 32 | 164 | 161 | 44 | 76 | 30 | 14 | 16 | 22 | 17 | 6 | M10×1.25 |
| 40 | 168 | 164 | 46 | 76 | 32 | 14 | 16.7 | 24 | 17 | 7 | M12×1.25 |
| Inside Diameter/Symbol | L | M | U | V | W | X | AR | AX | AY | T | |
| 16 | M16×1.5 | 14 | 21 | 6 | 5 | M5 | 6 | 25 | 22 | 16 | |
| 20 | M22×1.5 | 10 | 29 | 9 | 6 | G1/8" | 7 | 33 | 29 | 19 | |
| 25 | M22×1.5 | 12 | 34 | 10 | 8 | G1/8" | 7 | 33 | 29 | 21 | |
| 32 | M24×1.5 | 12 | 39.5 | 12 | 10 | G1/8" | 8 | 37 | 32 | 21 | |
| 40 | M30×2.0 | 12 | 41.6 | 16 | 12 | G1/8" | 9 | 47 | 41 | 21 | |