



RoHS Compliant



No.E-9659C

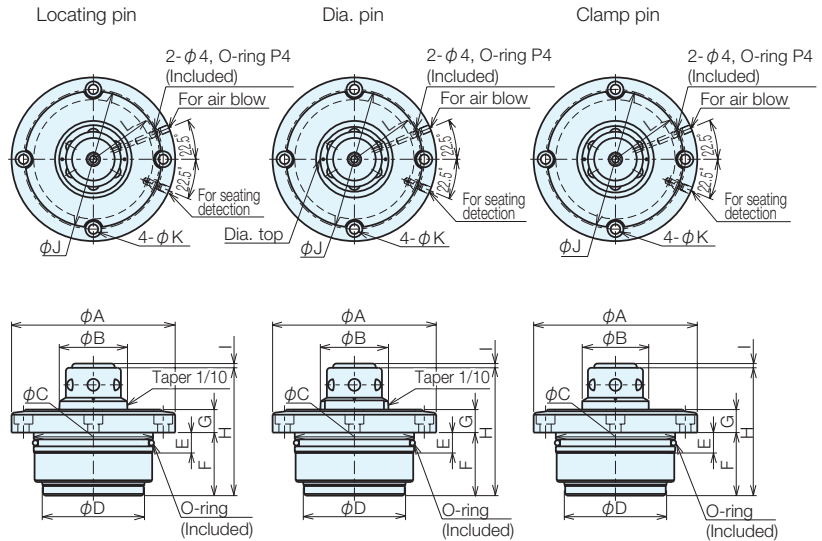
Q-Lock Elements/Pins (Hydraulic Type Single Action)

Material Main body: SCM420 Piston: SCM440
Steel balls: SUJ2

Heat Treatment Main body: HRC55 heat treatment
Piston: HRC55 heat treatment
Steel balls: HRC62 heat treatment

Clamping by spring.

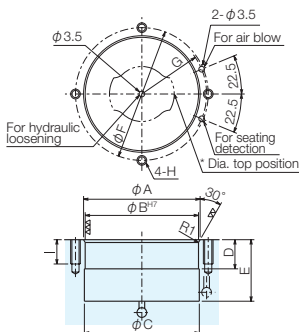
Types and External Dimensions



Pin (Hydraulic Type Single Action) Specifications

| Type | Order No. | No. | A | B | C ^{h 5} | D | E | F | G ± 0.003 | H | I | J | K | L | Weight (kg) |
|--------------|-----------|----------|-----|----|------------------|------|----|----|-----------|-------|-----|-----|-----|----|-------------|
| Locating pin | 971075 | QLSM03RP | 66 | 32 | 45 | 37.5 | 10 | 30 | 12 | 65 | 1.8 | 54 | 5.5 | 27 | 0.7 |
| | 968836 | QLSM07RP | 96 | 40 | 70 | 60 | 12 | 37 | 13.5 | 75 | 1.8 | 82 | 6.6 | 41 | 2.1 |
| | 968837 | QLSM10RP | 118 | 48 | 90 | 75 | 15 | 43 | 17 | 88.5 | 2.6 | 102 | 6.6 | 51 | 4.0 |
| Dia. Pin | 968838 | QLSM16RP | 132 | 55 | 100 | 85 | 15 | 58 | 18 | 109.5 | 3.3 | 114 | 9 | 57 | 5.8 |
| | 971076 | QLSM03DP | 66 | 32 | 45 | 37.5 | 10 | 30 | 12 | 65 | 1.8 | 54 | 5.5 | 27 | 0.7 |
| | 968839 | QLSM07DP | 96 | 40 | 70 | 60 | 12 | 37 | 13.5 | 75 | 1.8 | 82 | 6.6 | 41 | 2.1 |
| Clamp pin | 968840 | QLSM10DP | 118 | 48 | 90 | 75 | 15 | 43 | 17 | 88.5 | 2.6 | 102 | 6.6 | 51 | 4.0 |
| | 968841 | QLSM16DP | 132 | 55 | 100 | 85 | 15 | 58 | 18 | 109.5 | 3.3 | 114 | 9 | 57 | 5.8 |
| | 971077 | QLSM03CP | 66 | 30 | 45 | 37.5 | 10 | 30 | 12 | 65 | 1.8 | 54 | 5.5 | 27 | 0.7 |
| Clamp pin | 968842 | QLSM07CP | 96 | 39 | 70 | 60 | 12 | 37 | 13.5 | 75 | 1.8 | 82 | 6.6 | 41 | 2.1 |
| | 968843 | QLSM10CP | 118 | 47 | 90 | 75 | 15 | 43 | 17 | 88.5 | 2.6 | 102 | 6.6 | 51 | 4.0 |
| | 968844 | QLSM16CP | 132 | 54 | 100 | 85 | 15 | 58 | 18 | 109.5 | 3.3 | 114 | 9 | 57 | 5.8 |

Mounting Dimensions



| No. | A | B ^{H7} | C | D | E | F | G | H | I |
|--------|-----|-----------------|------|----|----|-----|----|----|----|
| QLSM03 | 46 | 45 | 44.5 | 12 | 32 | 54 | 27 | M5 | 13 |
| QLSM07 | 72 | 70 | 71 | 18 | 39 | 82 | 41 | M6 | 15 |
| QLSM10 | 92 | 90 | 91 | 20 | 45 | 102 | 51 | M6 | 15 |
| QLSM16 | 102 | 100 | 101 | 20 | 60 | 114 | 57 | M8 | 20 |

* The relationship between the dia. pin top position and the tap hole is as shown in the diagram. Machine the tap holes and port holes according to the direction of the dia. pin.

Jig Set-up Systems (Q-lock)

Base Elements

Clamp Units

Clamping Parts

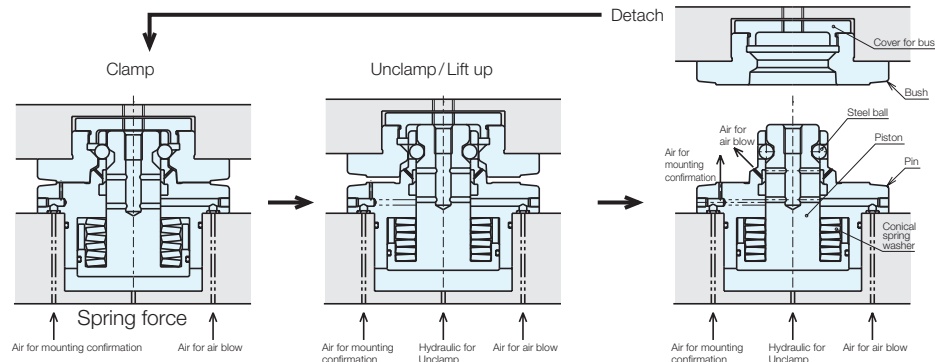
Mechanical Parts

Machine Vises

Surface Plates and Measurement Instruments

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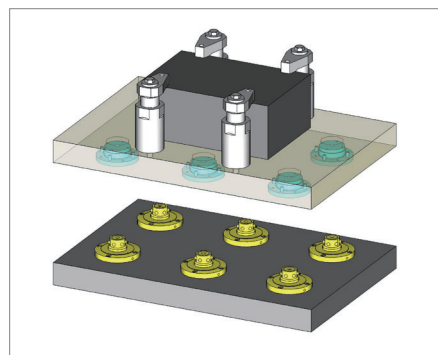
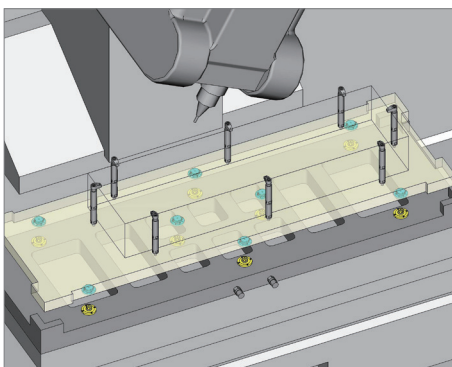
■ Section Drawing



■ Technical Data

| Type | | Hydraulic Type Single Action | | | |
|---|--------------|------------------------------|--------|--------|--------|
| Drive Method | Clamping | Spring | | | |
| | Unclamp | Hydraulics | | | |
| No. | | QLSM03 | QLSM07 | QLSM10 | QLSM16 |
| Clamping Force (kN) (at 5 MPa) | | 3 | 7 | 10 | 16 |
| Cylinder Volume (cm ³) | Clamp Side | - | - | - | - |
| | Unclamp Side | 2 | 7 | 14 | 15 |
| Clamp Stroke (mm) | | 1.8 | 2.3 | 3.1 | 2.6 |
| Liftup Amount (mm) (at 5 MPa) | | 1.3 | 1.8 | 2.6 | 2.1 |
| Liftup Force (kN/piece) (at 5 MPa) | | 1.7 | 5 | 9 | 10 |
| Minimum Operating Pressure When Unclamped (MPa) | | 3.6 | | | |
| Guaranteed Withstand Pressure (MPa) | | 10 | | | |
| Recommended Air Blow Pressure (MPa) | | 0.5 | | | |
| Ambient Operating Temperature (°C) | | 0 - 65 | | | |
| Normal Usage Pressure (MPa) | | 5 | | | |

Usage Examples



Jig Set-up Systems (Q-lock)

Base Elements

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