

Operation guide



| TYPE | PL-S micro | | PL-S | | | PLF | | | PL-G | | | PS-SV | | PS-ZD | |
|---|---|-----|------|-----|------|---|-----|-----|--|-----|-----|--|-----|---|-----|
| Grinding and inspection vice | | | | | | | | | | | | | | | |
| Features | <ul style="list-style-type: none"> - Draw-down effect - Simple clamping and releasing with allen key - Clamping jaw adjustable in steps; engages automatically - No spindle | | | | | <ul style="list-style-type: none"> - Draw-down effect - Made of alloyed tool steel, hardened and finely ground - Horizontal and vertical ground prism - No spindle which could, become dirty during erosion | | | <ul style="list-style-type: none"> - Clamping and releasing with threaded spindle - Made of alloyed tool steel, hardened and finely ground | | | <ul style="list-style-type: none"> - Made of alloyed tool steel, hardened and finely ground - Bearing and location pins hardened and ground with a precision of 0.001 mm - The clamping device can be positively locked in any angular position | | <ul style="list-style-type: none"> - Positive locking in any desired angular position by locking screws - Made of alloyed tool steel, hardened and finely ground - Can be rotated 360° | |
| Clamping system | mechanical, manually operated | | | | | mechanical, manually operated | | | mechanical, manually operated | | | mechanical, manually operated | | mechanical, manually operated | |
| Force amplification | | | | | | | | | | | | | | | |
| Set-up options | Base | | | | | Base | | | Base | | | Base | | Base | |
| Machining centers with high working accuracy | | | | | | | | | | | | | | | |
| Universal milling machines with high working accuracy | | | | | | | | | | | | | | | |
| Universal milling machines standard version | | | | | | | | | | | | | | | |
| Jig boring machines | | | | | | | | | | | | | | | |
| 5-axis machining | | | | | | | | | | | | | | | |
| Grinding machines | ✓✓ | | | | | ✓✓ | | | | | | ✓✓ | | ✓✓ | |
| Series production | | | | | | | | | | | | | | | |
| For limited space | | | | | | | | | | | | | | | |
| Jaw width mm | 34 | 45 | 70 | 90 | 120 | 50 | 73 | 100 | 60 | 73 | 88 | 70 | 90 | 70 | 120 |
| Clamping range (max.) | 25 | 50 | 80 | 120 | 150 | 65 | 100 | 125 | 55 | 100 | 125 | 80 | 120 | 80 | 150 |
| Length (opened) mm | 75 | 110 | 160 | 210 | 280 | 140 | 190 | 245 | 110 | 210 | 250 | 160 | 210 | 180 | 270 |
| Width mm | 34 | 45 | 70 | 90 | 120 | 50 | 73 | 100 | 60 | 73 | 88 | 70 | 90 | 110 | 160 |
| Height mm | 35 | 45 | 62 | 80 | 90 | 50 | 67 | 90 | 50 | 67 | 88 | 93 | 113 | 137 | 210 |
| Clamping force (max.) kN | 2 | 2 | 2,5 | 3 | 4 | 1,6 | 2 | 5 | 2 | 4 | 4 | 6 | 7 | - | - |
| Weight kg | 0,35 | 1 | 3 | 5,8 | 13,5 | 1,4 | 4,1 | 7,3 | 1,6 | 4 | 7,6 | 5,3 | 11 | 11,1 | 43 |
| Page | 4126 | | | | | 4127 | | | 4127 | | | 4128 | | 4128 | |

Operation guide

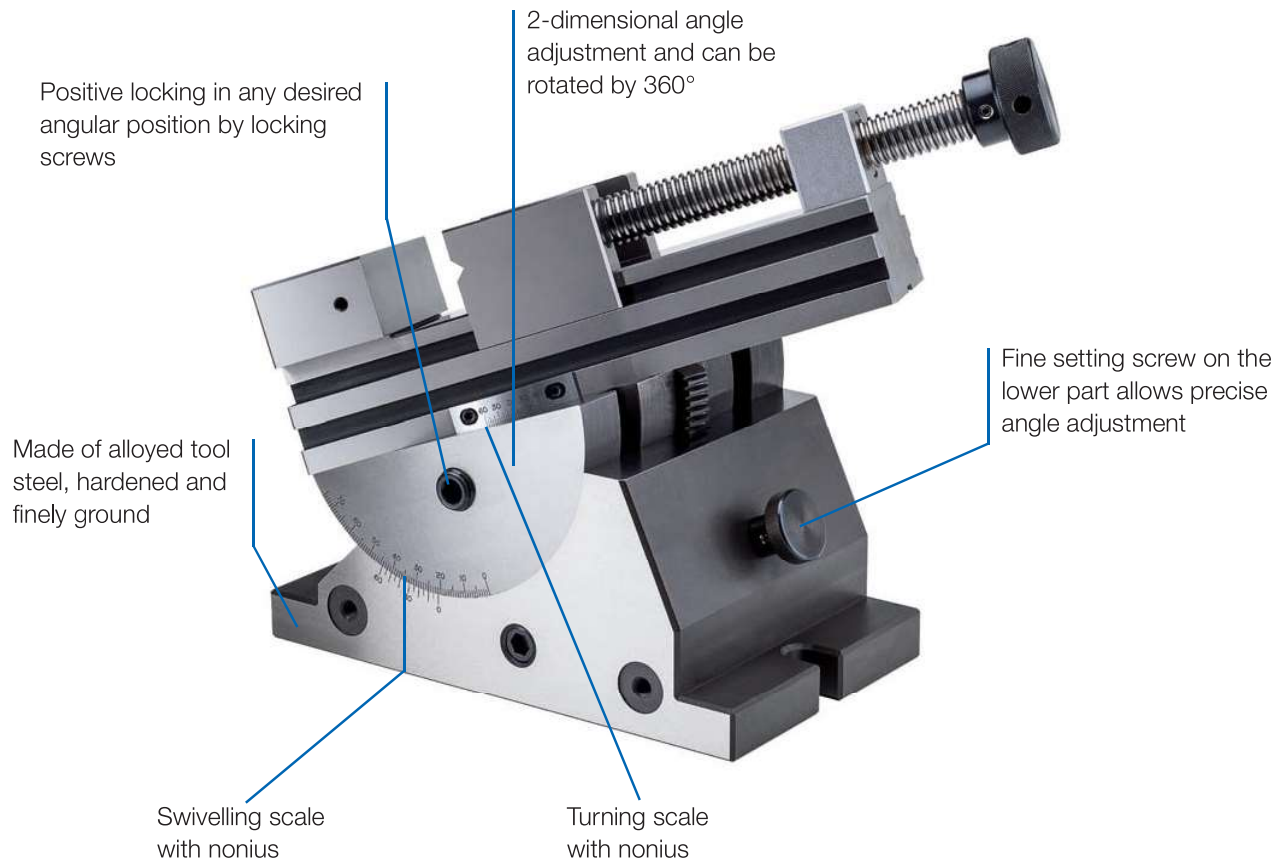
* Constant clamping force for each clamping process and high repeatability in combination with a torque wrench

GRINDING AND INSPECTION VICES

RÖHM grinding and inspection vices are primarily used in grinding, milling and engraving machines, at jig boring machines, for measurement and inspection work and for manufacturing processes which require the highest standards of clamping precision.

ADVANTAGES AT A GLANCE

- ⊕ Special vices for measuring, testing and engraving
- ⊕ Easy to use and universally applicable
- ⊕ Made of alloyed tool steel, hardened and finely ground



Grinding and inspection vices

APPLICATION

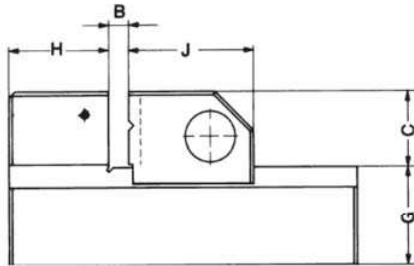
Mainly in tool construction on grinding, milling and engraving machines, on jig boring machines, for measuring and control work and for production operations requiring high clamping precision.

CUSTOMER BENEFITS

- ⊕ Easy clamping and unclamping with allen key
- ⊕ Clamping jaw adjustable in stages, snaps in automatically

TECHNICAL FEATURES

- With draw-down effect
- Made of alloyed tool steel, hardened and very finely ground
- Horizontally and vertically ground prism
- No spindle which could cause contamination during electric discharge machining, for example



A29
PL-S micro, with quick adjustment

| Item no. | Size | Squareness ¹⁾ / 100 mm | Parallelism ²⁾ / 100 mm | Jaw width mm | B mm | Total height mm | C mm | Length body mm | G mm | H mm | J mm | Work locator | Weight kg |
|----------|------|-----------------------------------|------------------------------------|--------------|------|-----------------|------|----------------|------|------|------|--------------|-----------|
| 1179514 | 1 | 0,005 | 0,002 | 34 | 25 | 35 | 15 | 75 | 20 | 20 | 25 | M5x17 | 0,35 |
| 1179515 | 2 | 0,005 | 0,002 | 45 | 50 | 45 | 20 | 110 | 25 | 25 | 35 | M5x17 | 1 |

- 1) Base to stationary jaw clamping surface
2) Base to upper guide edge

APPLICATION

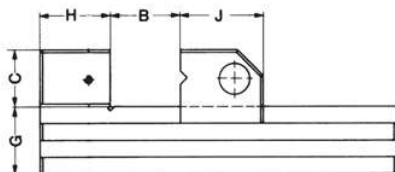
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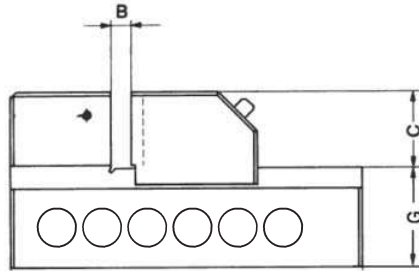
A29
PL-S, with quick adjustment

| Item no. | Size | Squareness ¹⁾ / 100 mm | Parallelism ²⁾ / 100 mm | Jaw width mm | B mm | Total height mm | C mm | Length body mm | G mm | H mm | J mm | Work locator | Weight kg |
|----------|------|-----------------------------------|------------------------------------|--------------|------|-----------------|------|----------------|------|------|------|--------------|-----------|
| 1179516 | 1 | 0,005 | 0,002 | 70 | 80 | 62 | 30 | 160 | 32 | 33 | 45 | M6 | 3 |
| 1179517 | 2 | 0,005 | 0,002 | 90 | 120 | 80 | 40 | 210 | 40 | 40 | 50 | M5 | 5,8 |
| 1179518 | 3 | 0,005 | 0,002 | 120 | 150 | 90 | 40 | 280 | 50 | 60 | 70 | M5 | 13,5 |

- 1) Base to stationary jaw clamping surface
2) Base to upper guide edge

Grinding and inspection vices

Grinding and inspection vices



APPLICATION

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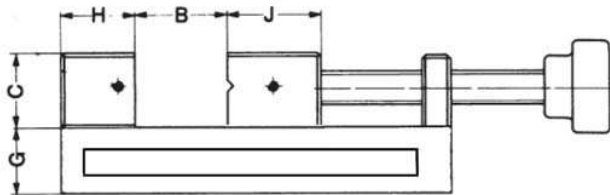
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PLF, with quick adjustment in gauge accuracy

| Item no. | Size | Squareness ¹⁾ / 100 mm | Parallelism ²⁾ / 100 mm | Jaw width mm | B mm | Total height mm | C mm | G mm | Length body mm | Weight kg |
|----------|------|-----------------------------------|------------------------------------|--------------|------|-----------------|------|------|----------------|-----------|
| 1111185 | 0 | 0,005 | 0,005 | 50 | 65 | 50 | 25 | 25 | 140 | 1,4 |
| 1111186 | 1 | 0,005 | 0,005 | 73 | 100 | 67 | 35 | 32 | 190 | 4,1 |
| 1111187 | 2 | 0,005 | 0,005 | 100 | 125 | 90 | 45 | 45 | 245 | 7,3 |

- 1) Base to stationary jaw clamping surface
2) Base to upper guide edge

Grinding and inspection vices



APPLICATION

Mainly in tool construction on grinding, milling and engraving machines, on jig boring machines, for measuring and control work and for production operations requiring high clamping precision.

TYPE

- ⊕ Clamping and unclamping with threaded spindle

TECHNICAL FEATURES

- Horizontally and vertically ground prism
- Made of alloyed tool steel, hardened and very finely ground

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PL-G

| Item no. | Size | Squareness ¹⁾ / 100 mm | Parallelism ²⁾ / 100 mm | Jaw width mm | B mm | Total height mm | C mm | Length body mm | G mm | H mm | J mm | Weight kg |
|----------|------|-----------------------------------|------------------------------------|--------------|------|-----------------|------|----------------|------|------|------|-----------|
| 1111182 | 0 | 0,005 | 0,002 | 60 | 55 | 55 | 25 | 110 | 25 | 25 | 33 | 1,6 |
| 1111183 | 1 | 0,005 | 0,002 | 73 | 100 | 74 | 35 | 210 | 32 | 33 | 45 | 4 |
| 1111184 | 2 | 0,005 | 0,002 | 88 | 125 | 88 | 40 | 250 | 48 | 40 | 50 | 7,6 |

- 1) Base to stationary jaw clamping surface
2) Base to upper guide edge

Grinding and inspection vices

APPLICATION

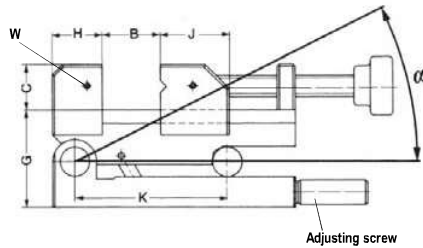
Mainly in tool construction on grinding, milling and engraving machines, on jig boring machines, for measuring and control work and for production operations requiring high clamping precision.

CUSTOMER BENEFITS

- ③ The clamping device can be positively locked in any angular position

TECHNICAL FEATURES

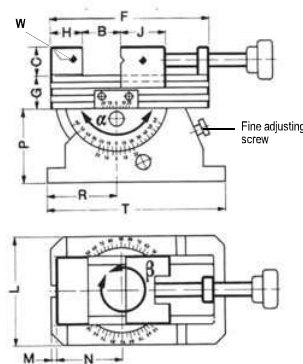
- Made of alloyed tool steel, hardened and very finely ground
- Bearing and support pins hardened and ground to a precision of 0.001 mm



A29
PS-SV, front swivelling axis

| Item no. | Size | Squareness / 100 mm | Parallelism / 100 mm | Angular accuracy | Jaw width mm | B mm | Total height mm | C mm | Length body mm | G mm | H mm | J mm | K mm | α | W | Weight kg |
|----------|------|---------------------|----------------------|------------------|--------------|------|-----------------|------|----------------|------|------|------|------|----------|---------|-----------|
| 370778 | 1 | 0,005 | 0,002 | bei 45° ± 15° | 70 | 80 | 93 | 30 | 160 | 63 | 33 | 45 | 100 | 0° - 46° | 2xM5x15 | 5,3 |
| 370779 | 2 | 0,005 | 0,002 | bei 45° ± 15° | 90 | 120 | 113 | 40 | 210 | 73 | 40 | 50 | 150 | 0° - 46° | 2xM5x15 | 11 |

Grinding and inspection vices



APPLICATION

Mainly in tool construction on grinding, milling and engraving machines, on jig boring machines, for measuring and control work and for production operations requiring high clamping precision.

CUSTOMER BENEFITS

- ③ 2-dimensional angle adjustment via vernia, for size 1 with 3'-vernia, for size 2 with 5'-vernia
- ③ 360° turnable

TECHNICAL FEATURES

- Fine adjustment screw on bottom section makes exact angular adjustment possible
- Size 2 for heavy machining
- Positive locking in any desired angular position using fixing screws
- Made of alloyed tool steel, hardened and very finely ground

A29
PS-ZD 2-dimensional

| Item no. | Size | Squareness / 100 mm | Parallelism / 100 mm | Jaw width mm | B mm | Total height mm | C mm | Length body mm | G mm | H mm | J mm | L mm | M mm | N mm | P mm | R mm | T mm | β | α | W | Weight kg |
|----------|------|---------------------|----------------------|--------------|------|-----------------|------|----------------|------|------|------|------|------|------|------|------|------|---------|-----------|---------|-----------|
| 370782 | 1 | 0,005 | 0,002 | 70 | 80 | 137 | 30 | 160 | 32 | 33 | 45 | 110 | 5 | 65 | 75 | 70 | 180 | 360° | 0° - 120° | 2xM5x15 | 11,1 |
| 370783▲ | 2 | 0,005 | 0,002 | 120 | 150 | 210 | 40 | 270 | 50 | 55 | 70 | 160 | 10 | 105 | 120 | 105 | 270 | 360° | 0° - 70° | 2xM6x20 | 43 |