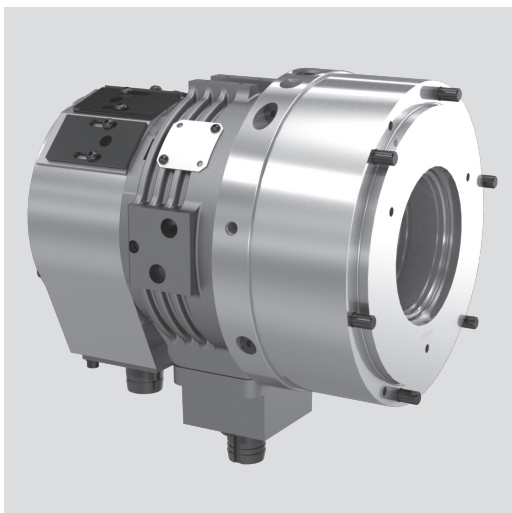


VNK-T2

Open center
rotating hydraulic cylinder

- Up to 45 bar
- Through hole Ø 37.5 - 127.5 mm
- Short design / low mass
- Stroke control via proximity switch or LPS 4.0



Application/customer benefits

- Actuation of open center jaw and collet power chucks
- Machining of bars and tubes

Technical features

- Pressure range 8–45 bar
- Short design / low mass / low power consumption
- Horizontal installation only
- Safety valves and excess pressure relief valve
- Mounting from the rear side with bolts
- A 10 µm filter in pressure line is requested
- Use oil HM32 ISO 3448

VNK-T2

standard version

- Mounting for bar guides standard
- Bar guides not included

VNK-T2-PXP

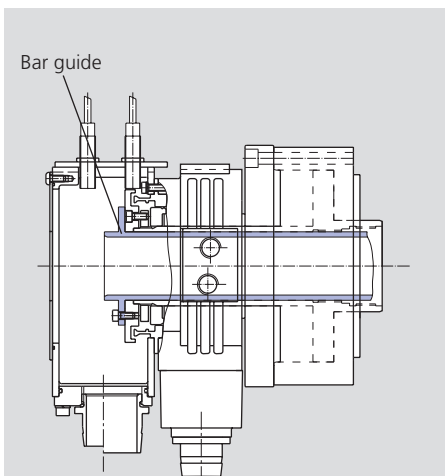
for linear positioning system

- Mounting for bar guides standard
- Bar guides not included
- Minikit PXP must be ordered separately
- Sensor PXP Ø 30mm not included

VNK-T2-LPS 4.0

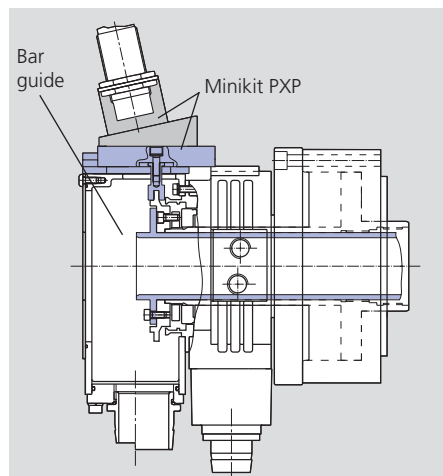
for linear positioning system LPS-X

- Bar guides not included
- Minikit LPS-X must be ordered separately
- Sensor LPS-X not included (see page 313)



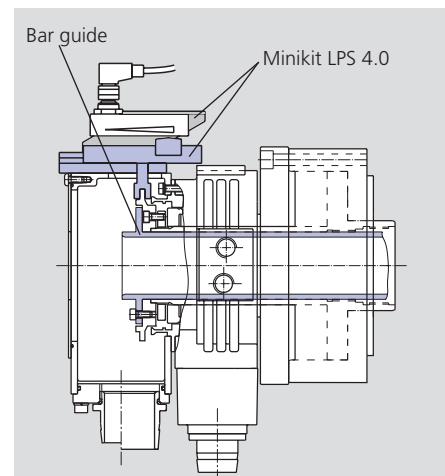
Ordering example VNK-T2 150-67

- Cylinder Id. No. 33092216



Ordering example VNK-T2 150-67-PXP

- Cylinder Id. No. 77091916
- Minikit PXP Id. No. 60367941***



Ordering example VNK-T2 150-67-LPS 4.0

- Cylinder Id. No. 77091916
- Minikit LPS 4.0 Id. No. 46593***

Technical data

| SMW-AUTOBLOK Type VNK-T2 | | 70-37 | 102-46 | 130-52 | 150-67 | 170-77 | 176-82 | 200-86 | 225-95 | 250-110 | 320-127 |
|-----------------------------|----------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| VNK-T2 Standard version | | 33092211 | 33092213 | 33092215 | 33092216 | 33092218 | 33092217 | 33092219 | 33092220 | 33092222 | 33092225 |
| VNK-T2 prepared for PXP/LPS | | 77091911 | 77091913 | 77091915 | 77091916 | 77091918 | 77092017 | 77091919 | 77091920 | 77091922 | 77091925 |
| Minikit PXP | | 60367941 | 60367941 | 60367941 | 60367941 | 60367941 | 60367941 | 60367941 | 60367941 | 60367941 | 60367941 |
| Minikit LPS 4.0 | | 046593 | 046593 | 046593 | 046593 | 046593 | 046593 | 046593 | 046593 | 046593 | 046593 |
| Piston area | cm ² | 70 | 103 | 131 | 152 | 170 | 176 | 197 | 226 | 247 | 325 |
| Through hole | mm | 37.5 | 46.5 | 52.5 | 67.5 | 77 | 82 | 86 | 95 | 110 | 127.5 |
| Max. pressure | bar | 45 | 45 | 45 | 45 | 45 | 45 | 45 | 45 | 45 | 45 |
| Draw pull at 45 bar | kN | 32 | 47 | 59 | 68 | 76 | 79 | 89 | 102 | 110 | 144 |
| Oil leakage* | dm ³ /min | 2.5 | 3 | 3.5 | 4 | 4.5 | 4.5 | 5 | 7 | 9 | 12 |
| Max. speed | r.p.m. | 8000 | 7000 | 6300 | 5500 | 5000 | 5000 | 4500 | 4000 | 3600 | 3200 |
| Weight | kg | 8 | 12 | 15 | 20 | 23 | 25 | 27 | 30 | 49 | 61 |
| Moment of inertia | kg·m ² | 0.013 | 0.028 | 0.04 | 0.07 | 0.09 | 0.12 | 0.13 | 0.17 | 0.28 | 0.54 |
| Power absorption** | kW | 0.85 | 1 | 1.2 | 1.5 | 1.8 | 1.8 | 1.9 | 1.9 | 2.2 | 2.5 |

* Total at 30 bar / 50 °C.

** At max. speed / oil HM32 ISO 3448.

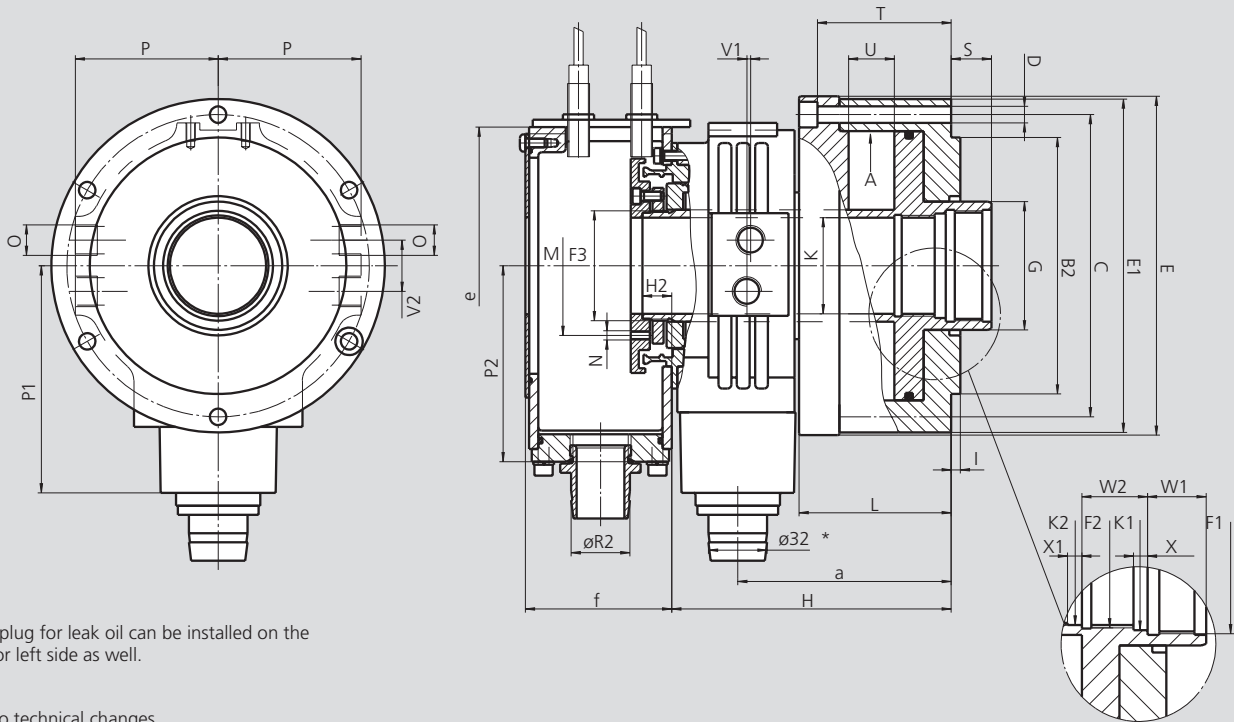
*** Sensor non included in minikit.

Important: On higher pressure the leakage increases proportionally. On higher oil temperature the leakage increases over proportionally (the use of an oil cooler is recommended). When designing/checking the hydraulic unit please ask for our data sheets.

VNK-T2

Open center
rotating hydraulic cylinder

- Up to 45 bar
- Through hole \varnothing 37.5 - 127.5 mm
- Short design / low mass
- Stroke control via proximity switch or LPS 4.0



* Drain plug for leak oil can be installed on the right or left side as well.

Subject to technical changes.
For more detailed information please ask our customer service.

| SMW-AUTOBLOK Type VNK-T2 | | 70-37 | 102-46 | 130-52 | 150-67 | 170-77 | 176-82 | 200-86 | 225-95 | 250-110 | 320-127 |
|--------------------------|-------|---------------------|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| A | mm | 107 | 130 | 147 | 163 | 175 | 180 | 190 | 205 | 220 | 250 |
| B2 h7 | mm | 110 | 130 | 140 | 160 | 160 | 168 | 180 | 210 | 210 | 250 |
| C | mm | 125 | 147 | 165 | 180 | 195 | 205 | 210 | 227 | 240 | 270 |
| D | mm | 6 x \varnothing 9 | 6 x \varnothing 9 | 6 x \varnothing 9 | 6 x \varnothing 11 | 6 x \varnothing 11 | 6 x \varnothing 11 | 6 x \varnothing 11 | 6 x \varnothing 11 | 6 x \varnothing 11 | 6 x \varnothing 13 |
| E | mm | 145 | 165 | 185 | 202 | 217 | 228 | 234 | 249 | 266 | 295 |
| E1 | mm | 140 | 162 | 182 | 197 | 214 | 222 | 228 | 245 | 266 | 290 |
| F1 | mm | M44 x 1.5 | M55 x 2.0 | M60 x 1.5 | M75 x 2.0 | M85 x 2.0 | M90 x 2.0 | M95 x 2.0 | M105 x 2.0 | M120 x 2.0 | M135 x 2.0 |
| F2 | mm | M42 x 1.5 | M50 x 1.5 | M55 x 2.0 | M72 x 1.5 | M80 x 2.0 | M85 x 2.0 | M90 x 2.0 | M100 x 2.0 | M115 x 2.0 | - |
| F3 | mm | M42 x 1.5 | M52 x 1.5 | M60 x 1.5 | M74 x 1.5 | M84 x 1.5 | M89 x 1.5 | M94 x 2.0 | M104 x 2.0 | M120 x 2.0 | M138 x 2.0 |
| G | mm | 50 | 61 | 70 | 85 | 95 | 100 | 105 | 115 | 130 | 145 |
| H | mm | 151 | 152 | 152 | 178 | 178 | 182.5 | 203 | 208 | 245 | 265 |
| H2 | mm | 16 | 16 | 16 | 21 | 21 | 24.5 | 21 | 21 | 26 | 36.5 |
| I | mm | 5 | 5 | 5 | 8 | 8 | 8 | 8 | 8 | 8 | 5 |
| Through hole | K | mm | 37.5 | 46.5 | 52.5 | 67.5 | 77 | 82 | 86.5 | 95.5 | 127.5 |
| | K1 H8 | mm | 42.5 | 52.5 | 57 | 72.5 | 82 | 87 | 92 | 102.5 | 132 |
| | K2 H8 | mm | 40 | 47 | 52.5 | 69 | 77 | 82 | 87 | 97 | - |
| | L | mm | 83 | 83 | 83 | 95 | 95 | 97 | 107 | 116 | 134 |
| | M | mm | \varnothing 53 | \varnothing 68 | \varnothing 70 | \varnothing 91 | \varnothing 91 | \varnothing 101 | \varnothing 116 | \varnothing 120 | - |
| | N | mm | M6 (2x) | M6 (2x) | M6 (2x) | M6 (4x) | M6 (2x) | M6 (2x) | M6 (2x) | M6 (2x) | - |
| Oil connections | O | inch | G 3/8" | G 3/8" | G 3/8" | G 3/8" | G 3/8" | G 3/8" | G 3/8" | G 3/8" | G 3/8" |
| | P | mm | 67 | 76 | 78 | 89 | 94 | 94 | 104 | 112 | 128 |
| | P1 | mm | 111 | 122 | 128 | 138 | 143 | 143 | 153 | 165 | 198 |
| | P2 | mm | 100 | 100 | 107 | 127 | 127 | 127 | 127 | 162 | 162 |
| Standard | R2* | mm | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 |
| Max. | S | mm | 24 | 22 | 22 | 25 | 25 | 25 | 31 | 31 | 44 |
| | T | mm | 67 | 73 | 73 | 83 | 83 | 85 | 95 | 95 | 119 |
| Piston stroke | U | mm | 26 | 25 | 25 | 29 | 29 | 29 | 34 | 34 | 40 |
| | V1 | mm | 9 | 9 | 9 | 10 | 10 | 10 | 11 | 11 | 15 |
| | V2 | mm | 28 | 28 | 28 | 36 | 36 | 36 | 36 | 36 | 36 |
| | W1 | mm | 20 | 25 | 25 | 25 | 25 | 25 | 32 | 32 | 32 |
| | W2 | mm | 22 | 25 | 28 | 28 | 28 | 28 | 30 | 30 | - |
| | X | mm | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | X1 | mm | 5 | 20 | 10.5 | 6 | 10 | 10 | 10 | 6 | - |
| | a | mm | 114.5 | 117 | 117 | 134 | 134 | 136.5 | 146 | 180 | 198 |
| | e | mm | 128 | 128 | 144 | 184 | 184 | 184 | 184 | 230 | 230 |
| Standard | f | mm | 65 | 65 | 80 | 90 | 90 | 90 | 90 | 100 | 100 |

* R₂ also \varnothing 40 or \varnothing 60 (optional).

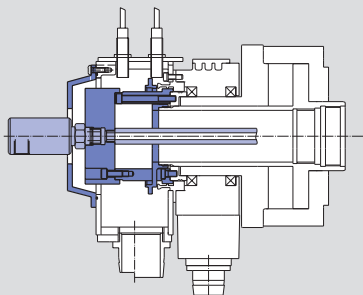
VNK-T2

Open center
rotating hydraulic cylinder

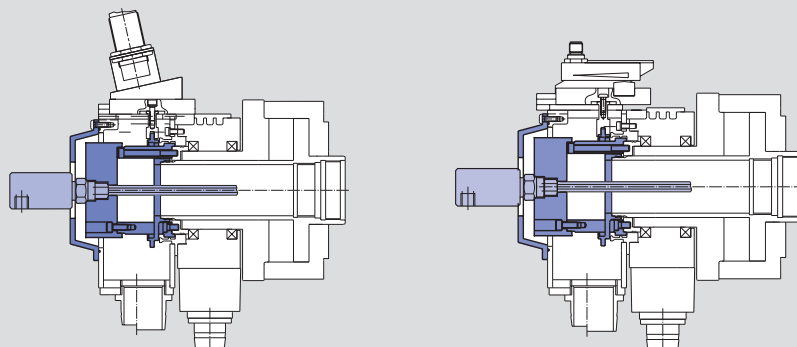
Kits for VNK-T2 cylinders (optional)

- Kit CP3 for rotary union
- Kit adjusting workstop

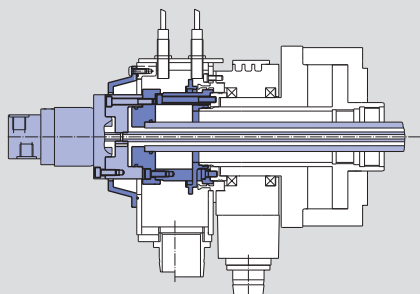
Kit CP3 for VNK-T2 standard 1 medium rotary union



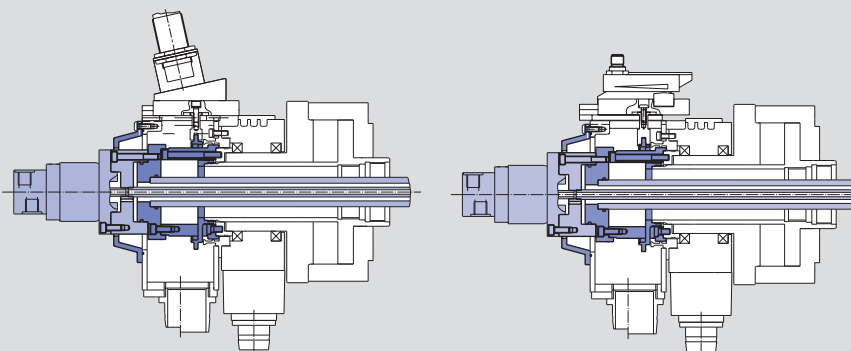
Kit CP3 for VNK-T2-PXP / VNK-T2-LPS-4.0 1 medium rotary union



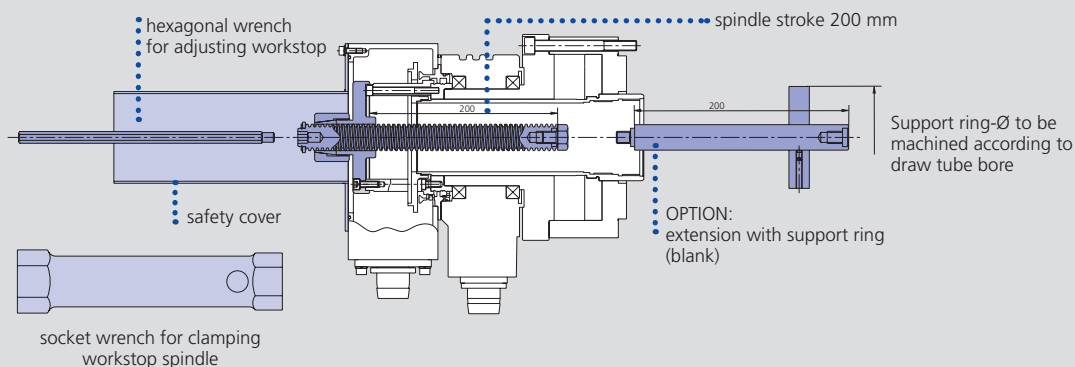
Kit CP3 for VNK-T2 standard 2 media rotary union



Kit CP3 for VNK-T2-PXP / VNK-T2-LPS-4.0 2 media rotary union



Kit adjustable workstop (only for cylinders with Kit CP3 mounted)



| SMW-AUTOBLOK Type VNK-T2 | 70-37 | 102-46 | 130-52 | 150-67 | 170-77 | 176-82 | 200-86 | 225-95 | 250-110 | 320-127 |
|----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|
| Id. No. adjusting workstop | 044540 | 044542 | 044544 | 044546 | 044548 | 046682 | 044550 | 044552 | 044554 | 044556 |

Important:

The basis to mount the axial workstop is a VNK-T2 cylinder **with the CP-3 standard unit** mounted. The spindle of the work stop can have a through hole for media as an option.