

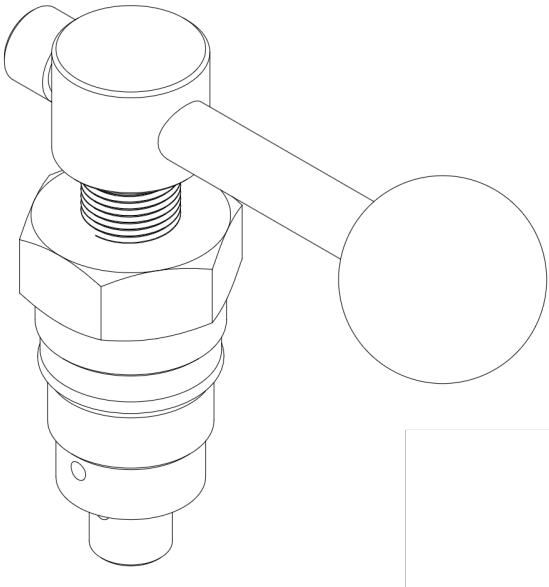
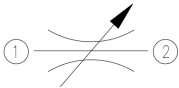
NEEDLE VALVE - 700BAR (NVK)



Poppet-Seat Type | Cartridge | 700 bar

Specification/ Technical Data

Max. Operating Pressure	700 bar
Max Flow at ΔP 15bar	10 LPM
Flow Direction	1 to 2
Design	Poppet Seat Type
Mounting	Screw-in Cartridge
Flow Adjustment	Hand Lever
Body Material	Carbon Steel
Media	Mineral Oil
Oil Temperature Range	+10 to 60°C
Oil Viscosity	ISO VG 46-100
Oil Cleanliness (ISO 4406)	20/18 /15
Orientation	Any
Weight (approx.)	0.3 Kg



Needle valve cartridge NVK is a compact, screw-in type valve designed for precisely controlling fluid flow in systems operating under extreme pressure conditions up to 700 bar. The valve construction ensures durability and leak-free operation even at high pressures. The fine control feature makes it ideal for controlling oil flow and thereby adjusting cylinder speed. These valves may also be used for manually decomposing or relieving hydraulic pressure in high-pressure systems like jacks, tensioning, crimping, etc. after completion of operation.

NVK valve is a poppet-in-seat type of valve, where the poppet lifts to allow oil flow through it. The adjustment increases or decreases the allowable area for oil flow, thereby throttling the flow through the valve. Flow adjustment is possible in direction 1 to 2, and when the valve is fully closed, the poppet blocks the oil path, making the valve zero leak. In direction 2 to 1, throttling is not possible, and the valve will be shut completely, making it zero leak.

The flow adjustment is through a standard lever supplied with the valve, and flow may be adjusted even at high pressures.

Ordering Information

Basic Code	Needle Valve	NV
Type	Cartridge	K
Pr. Rating	700 bar	700
Adjustment	Hand Lever	-
Version		1x

Model	Rated Flow	Max Pressure
NVK 700	10 LPM	700 bar

Rated flow considering ΔP 15bar
Tested with Mineral Oil ISO VG46 at 50deg C

Technical drawing of a mechanical assembly, showing a side view and a detail view of the cavity.

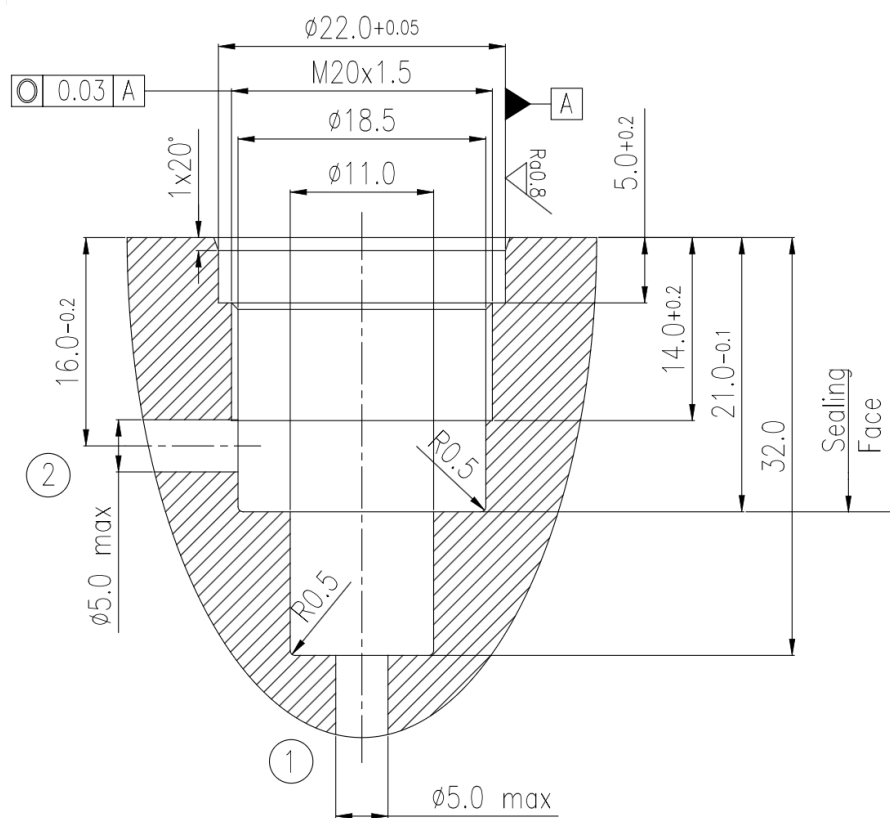
Side View Dimensions:

- Overall height: 100.0 max
- Height of the upper section: 22.5
- Height of the lower section: 10.0
- Internal diameters: $\phi 10.0$, $\phi 18.0$, $\phi 22.0$
- Thread specification: M20x1.5
- Feature 1: A circular feature with a crosshair symbol.
- Feature 2: A circular feature with a crosshair symbol.

Cavity Details:

- Surface texture: 0.03 A
- Internal diameter: $\phi 22.0 + 0.05$
- Thread specification: M20x1.5
- Internal diameter: $\phi 18.5$
- Internal diameter: $\phi 11.0$
- Angle: $1 \times 20^\circ$
- Dimension: 16.0 - 0.2
- Feature 2: A circular feature with a crosshair symbol.

Cavity Details



Spare List

SealKit	SSVNVK1x
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