

## Насос НШ 10У-3 А



### Описание

### Описание и назначение

Насос НШ 10У-3 А конструктивно представляет собой шестилопастную насосную единицу, предназначенную для работы в гидравлических системах, где номинальное давление достигает 16 МПа (160 кгс/см<sup>2</sup>). Этот насос НШ 10У-3 А представляет собой универсальный вариант с четырехзвездчатой связью с приводным валом, обеспечивающей точную передачу крутящего момента. Оборудование подходит для промышленных машин, строительных инструментов, и производственных установок, обеспечивая непрерывный поток минерального масла без прерываний.

Существуют два варианта вращения: правый (по часовой стрелке) и левый (против часовой стрелки) при наблюдении со стороны подачи. Эта гибкость позволяет интегрировать насос НШ 10У-3А в различные гидравлические схемы без необходимости перепроектирования кинематических схем. Совместимость с аналогичными сериями U и UK полная, что упрощает модернизацию существующего оборудования.

### Mass, gabert sizes and Код ТН ВЭД

Агрегатная масса составляет 2 кг, при этом компактные размеры составляют 145 мм в ширину, 115 мм в высоту, и 95 мм в глубину. Универсальные размеры облегчают установку в ограниченных пространствах. Код ТН ВЭД: 8413 50 000 0 — шестилопастные насосы.

Спросите любого механика: Почему наш **Насос НШ 10У-3 А** никогда не изнашивается рано? Потому что его частота вращения составляет 2400 об/мин, а давление в системе остается стабильным на уровне 16 МПа!

Working volume, cm <sup>3</sup>	10
Nominal rotation frequency, rpm	2400
Nominal flow rate, l/min	21
Nominal pressure, MPa	16
Maximum peak	21

pressure,	
MPa	
Required	8.6
drive power,	
kW	
Mass, kg	2
Resource,	12
thousand	
hours	
Manufacture	ГИДРАВЛИК
r	A, Russia

## Advantages and usage specifics

The **Насос НШ 10У-3 А** demonstrates multiple benefits for operational teams: reduced downtime due to high reliability, extended service life exceeding 12 thousand hours, convenient mounting thanks to compact sizes, stable pressure handling up to 21 MPa briefly, compatibility with typical hydraulic mediums like IG-32, IG-50 oils.

Universal design ensures interchangeability with older master types, providing 20% budget saving over replacing whole assembly. The 4-star connection yields accurate alignment with drive shaft, minimizing backlash and power losses.

## Operating principle

Functionality of **Насос НШ 10У-3А** bases on coupling of two six-blade rotors inside a hermetic chamber. When driving rotor spins, it creates rarefaction at inlet, drawing working liquid. In coupling zone, oil is expelled into pressure-leading pipe under rated pressure. Profile of blades in UNIVERSAL series is optimized to lower pulsation of flow and noise during work. Four-star execution (denoted 'A') guarantees elevated accuracy when joining with propulsor.

Continuous performance rests on correct oil viscosity, clean filters, and observance of permissible temperature range from -20 °C to +65 °C. With regular maintenance intervals, service resource surpasses 5000 hours. Housing made from high-strength alloy SCh20 and blades from steel 40X provide stability even when dealing with contaminated liquid.

## Temperature regimes and resource life

Allowed working temperature span covers -20 °C to +65 °C. Under cyclic or continuous loading scenarios, respecting oil grade (IG-32 or IG-50) and scheduled filter replacement every 500 hours, the functional duration of **Насос НШ 10У-3А** goes beyond 5000 hours. Factors influencing resource include oil quality, servicing frequency, filtration cleanliness, and pressure compliance. For example, usage with low-temperature oil IG-22 expands lower limit to -30 °C, but oil must be pre-warmed to +15 °C beforehand.

## Applications: equipment and machinery

**Насос НШ 10У-3А** actively serves in: tract machines MTZ-82 and K-744; frontal pistriches PK-1.5; drive caches DU-39; hydraulic presses; communal machines (synchronizers, isolators); stations for timber processing. Due to compactness and universality, this pump ideally matches modernizing older hydraulic systems, replacing analogues Master and NSh32M with 20% budget

economy.

## Constructed designation decoded

Breaking down marking НШ 10U-3 A:

- НШ** — pump six-blade;
- 10** — working volume 10 cm<sup>3</sup>;
- U** — universal constructive execution;
- 3** — nominal pressure 16 MPa;
- A** — four-star execution on shaft.

## Mounting dimensions

Shown image details exact outer dimensions and connecting measures for installing the **Hasoc НШ 10U-3A**. Note bore diameter 18 mm and depth of star connection 25 mm — critical parameters for compatibility with existing drive.

## Common mistakes when choosing

- Selecting by flow rate without accounting for pressure and oil viscosity.
- Ignoring permissible temperature range and medium type (oil, aqueous).
- Mismatch of connection type (4-star, 6-star) causing alignment issues.
- Overlooking resource factor, leading to premature replacements.
- Neglecting interchangeability with already-mounted pumps.

## Examples of orders

Company «Agro-Service» (Novosibirsk) purchased 45 pcs of **Nacoc НШ 10U-3A** for repair of tractor K-701. Warehouse «Stanckomporn» (Kazan) incorporated 70 aggregates into line of hydraulic presses. For client from Rostva-na-Doun, 20 pcs were supplied as technical support for communal machines before winter season.

## FAQ

How to pick appropriate modification based on pressure, throughput, and connectivity? – Check nominal pressure 16 MPa, flow capacity 21 l/min, and connection type 'A' for four-star; ensure temperature regime matches your environment.

What are supply timelines for Russia and SNG, stock availability? – Delivery to Russian cities (Moscow, Sankt-Peter, Ekateriburg, Novosibirsk, Kazan, Rostva-na-Doun etc) occurs within 7-10 working days; SNG countries (Kazistan, Belarus, Armian) within 10 days. Stock is kept at supplier warehouse, guaranteeing prompt dispatch.

Which conditions for operation (freezing, open area, dusty rooms, oil quality)? – Permitted temperature range -20°C to +65°C; oil must be IG-32 or IG-50 grade; dusty environments require more frequent filter changes.

Compatibility with existing equipment and possibility of selecting analogue? – Fully interchangeable with series НШ10U-3, НШ10UK-3, and MASTER НШ. Technical team at

ГИДРАВЛИКА can consult on best alternative fitting current installation.

## About brand and supplier

Choosing the **Насос НШ 10У-3А** from brand ГИДРАВЛИК ensures product that underwent 100 factory quality checks. Supplier ГИДРАВЛИКА guarantees prompt delivery across whole Russia — from Moscow and Питер to Ekateriburg, Novosibirsk, Kazan and Rostva-na-Doun. Geographical expansion: supply to SNG countries within 10 working days. Official manufacturer provides technical support and spare parts throughout entire exploitation term.

For ordering, please use the order form on our site or contact through [Контакты](#) page. Engineers will assist in fitting adaptation and analogue selection as needed.