

# NIROSTAR ATEX

05/2024

## THE WORLD'S FIRST FLEXIBLE IMPELLER PUMP FOR USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES



The **NIROSTAR ATEX** is the first flexible impeller pump in the world with ATEX approval. The pump unit and electronic controls are mounted together on a sturdy trolley with large solid rubber tires (electrically conductive). The trolley includes a height-adjustable telescopic handle to ensure easy mobility in and around the worksite. Due to the compact design of the NIROSTAR ATEX, it is transportable in most passenger cars.

The **NIROSTAR ATEX** brings all the advantages of a high quality flexible impeller pump including dry self-priming, suitability for abrasive and corrosive liquids, and pulsation-free flow.

This flexible impeller pump meets the strict requirements of Category 2G of Directive 2014/34/EU. It is designed to convey flammable liquids per Gas Group IIB and Temperature class T2. The unit can be used in areas where an explosive atmosphere of gas and vapor per Gas Group IIB and Temperature Class T2 can occur.



## WHAT IS ATEX?

ATEX is an abbreviation for „ATmosphere EXplosible“. At the same time, ATEX is the abbreviated name of the European Directive 2014/34/EU concerning the placing on the market of explosion-proof electrical and mechanical equipment, components and protective systems. It came into effect on 1 July 2003, and all new equipment and protective systems have been subject to it since.

## APPROVAL FOR USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES

The ATEX-NIROSTAR series has a type examination by a notified body in accordance with Annex III of Directive 2014/34/EU, including the essential health and safety requirements in accordance with Annex II of Directive 2014/34/EU as a category 2 non-electrical device.

Type Examination Certificate No.: **BVS 18 ATEX H 004 X**

Equipment label and clarification:

**EX II2/2G<sup>1</sup> EX<sup>2</sup> IIB<sup>3</sup> T2<sup>4</sup> GB/GB<sup>5</sup> +5°C ≤ TA ≤ +40°C**

1. Equipment Group II – Surface Industries, Equipment Category 2 Gas / Vapor G, Suitable for Zone 1 and 2
2. Type of protection for non-electrical equipment in potentially explosive atmospheres. Explosion protection in accordance to ISO 80079-36/37 Standards. Type of protection “Constructional Safety“- Marked with EX
3. Gas Group IIB
4. Temperature Class T2 (Gas) Maximum Surface Temperature 300°C
5. Explosion Protection Level Gb (High Level of Protection) Gas

Labeling according to RL 2014/34/EU and ISO 80079 Part 36

## IMPELLER MATERIALS

The ZUWA Flexible Impeller Pumps are equipped standard with NBR (Perbunan®, Buna-N®). Five different elastomer type impellers can be equipped for ATEX applications!

IMPELLER MATERIAL	SUITABLE FOR	CHARACTERISTICS
<b>NBR</b> Acrylonitrile-Butadiene-rubber (Perbunan®, Buna-N®):	water, antifreeze, heat transfer fluid, vegetable oil and grease	high impact elasticity and good mechanical strength good for applications involving high pressures up to max. 5 bar
<b>EPDM</b> Ethylene-Propylene-Diene-rubber (Keltan®, Buna EP®)	high temperatures, acids and bases	high elasticity and very good mechanical stability
<b>FKM or FPM</b> Fluor-rubber (Viton®, Fluorel®)	oil, diesel, fuel oil, palm oil, soy bean oil and oil emulsive wood	preservatives very good chemical resistance, less mechanical resistance
<b>CR</b> Chloroprene-rubber (Neoprene®, Bayprene®)	preferably used for applications in the food industry	flame retardant, tearproof, durable

	NIROSTAR 2000-A	NIROSTAR 2000-B
Capacity	max. 30 l/min	max. 60 l/min
Pressure	max. 5 bar	max. 5 bar
Inlet / Outlet Connections	¾"	1"
Speed	max. 2.800 rpm	max. 2.800 rpm
Protection Class	IP 66	IP 66
Fluid Temperature	max. 60°C	max. 60°C
Suction Capability	max. 7 meters (dry max. 3 meters)	max. 7 meters (dry max. 3 meters)
Sound Level	74 dB (A)	74 dB (A)
Article Number	13118126921	13218126931