

TECHFLOW

pump solution



NEPTUNE

DRUM PUMPS



www.techflow.pl

Manual hand pumps

Are always a useful and cost effective alternative to conventional electric or air operated drum pumps when only small quantities of media have to be removed out of canisters or drums or if the customer would use the drum pump only occasionally or rarely.

Electric or air operated drum and container pumps

Drum and container pumps consist of a high-performance, internally or externally ventilated universal motor, which is also available in an explosion-proof version and a pump tube that is suitable for the application.

The pump tubes of drum pumps are available in PP, PVDF, ALUMINIUM, SS 316.

POLIPROPYLENE (PP)

Are suitable for neutral, aggressive and hardly combustible liquids.

They are used specifically for pumping aggressive chemicals such as acids, alkalies or detergents.

Drive shaft: Stainless steel 316 or hastelloy 2,4610.

Media temperature: max. 50 °C.

POLYVINYLIDENFLUORIDE (PVDF)

Are especially suitable for highly aggressive liquids such as concentrated acids and bases.

Drive shaft: Hastelloy 2,4610

Media temperature: max. 90 °C.

ALUMINIUM (Alu)

Are suitable for neutral and hardly combustible liquids.

With these pump tubes particularly mineral oil products up to a maximum viscosity of 1,000 mPas will be transferred.

Drive shaft: Stainless steel 316

Media temperature: max. 90 °C.

STAINLESS STEEL 316 Ti

Are used for all neutral, slightly aggressive liquids such as diluted acids, alkalies or detergents and thin fluid food.

Drive shaft: stainless steel 316.

Media temperature: max. 90 °C.



ALU



PP



PVDF



SS



N-180



N-280



N-AIR 1



N-460

PUMP TUBES MADE OF POLYPROPYLENE

STANDARD TUBE LENGTHS

700 mm | 1000 mm | 1200 mm



PP pump tubes

Drive shaft made of stainless steel AISI 316 or hastelloy 2,4610.
Hose connection 1" included.
Maximum medium temperature 50 °C.

POLYPROPYLENE WITH STAINLESS STEEL DRIVE SHAFT AISI 316

Pump tube diameter	Pump tube length	Version	Code
Ø 41 mm	700 mm	Rotor	26410070
Ø 41 mm	1000 mm	Rotor	26410100
Ø 41 mm	1200 mm	Rotor	26410120

POLYPROPYLENE WITH HASTELLOY DRIVE SHAFT 2,4610

Pump tube diameter	Pump tube length	Version	Code
Ø 41 mm	700 mm	Rotor	21410070
Ø 41 mm	1000 mm	Rotor	21410100
Ø 41 mm	1200 mm	Rotor	21410120

AXIAL ROTOR

Standard in all pump tubes

Pump tubes with rotor are used when high capacities and low heads are required.

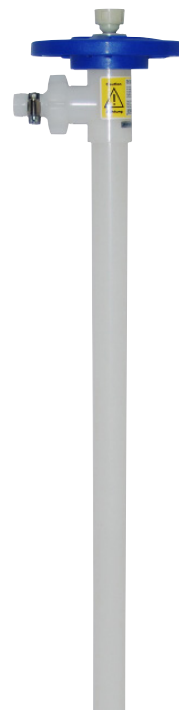


SPECIAL LENGTHS ARE AVAILABLE ON REQUEST

PUMP TUBES MADE OF PVDF

STANDARD TUBE LENGTHS

700 mm | 1000 mm | 1200 mm



PVDF pump tubes

Drive shaft made of hastelloy 2,4610.
Hose connection 1" included.
Maximum medium temperature 90 °C.

PVDF WITH HASTELLOY DRIVE SHAFT 2,4610

Pump tube diameter	Pump tube length	Version	Code
Ø 41 mm	700 mm	Rotor	23410070
Ø 41 mm	1000 mm	Rotor	23410100
Ø 41 mm	1200 mm	Rotor	23410120

AXIAL ROTOR

Standard in all pump tubes

Pump tubes with rotor are used when high capacities and low heads are required.



SPECIAL LENGTHS ARE AVAILABLE ON REQUEST

PUMP TUBES MADE OF ALUMINIUM

STANDARD TUBE LENGTHS

700 mm | 1000 mm | 1200 mm



Aluminium pump tubes

Drive shaft made of stainless steel AISI 316.

Hose connection 1" included.

Maximum medium temperature 90 °C.

ALUMINIUM WITH STAINLESS STEEL DRIVE SHAFT AISI 316

Pump tube diameter	Pump tube length	Version	Code
Ø 41 mm	700 mm	Rotor	24410070
Ø 41 mm	1000 mm	Rotor	24410100
Ø 41 mm	1200 mm	Rotor	24410120

AXIAL ROTOR

Standard in all pump tubes

Pump tubes with rotor are used when high capacities and low heads are required.



SPECIAL LENGTHS ARE AVAILABLE ON REQUEST

PUMP TUBES MADE OF STAINLESS STEEL 316

STANDARD TUBE LENGTHS

700 mm | 1000 mm | 1200 mm



Stainless steel = SS pump tubes with Ex approval, outside Ex-areas max. 90 °C

Drive shaft made of stainless steel 316.

Hose connection 1" included.

 EC type examination certificate number ZELM 09 ATEX 0424X - Ex II 1/2 G c II B T4

Maximum medium temperature 90 °C.

STAINLESS STEEL AISI 316 TUBE & SHAFT

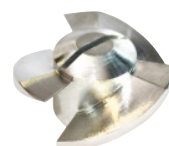
ATEX APPROVAL-ZELM 09 ATEX 0424 X EX III/2 G C II BT4

Pump tube diameter	Pump tube length	Version	Code
Ø 41 mm	700 mm	Rotor	22410070
Ø 41 mm	1000 mm	Rotor	22410100
Ø 41 mm	1200 mm	Rotor	22410120

AXIAL ROTOR

Standard in all pump tubes

Pump tubes with rotor are used when high capacities and low heads are required.



SPECIAL LENGTHS ARE AVAILABLE ON REQUEST

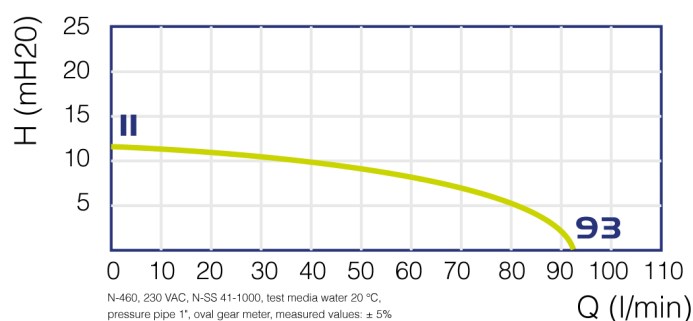
N-180 & N-280

N-180

230 Volt, 50/60 Hz, 640 Watt, IP 24

230 Volt, 50/60 Hz, 640 Watt, IP 24, double insulation protection class II, over load protection switch with integrated low voltage release. 5 m cable with plug. Speed control as option.

PERFORMANCE CURVE N-180



OPERATING DATA

Flow rate	up to 93 l/min
Head	up to 11 m
Viscosity	up to 600 mPas
Density	up to 1,5

N-180

Version

Voltage

Code



with LVR

230 V 1~,50/60 Hz, 640 W

1180 2301

with LVR + SC

230 V 1~,50/60 Hz, 640 W

1180 2303

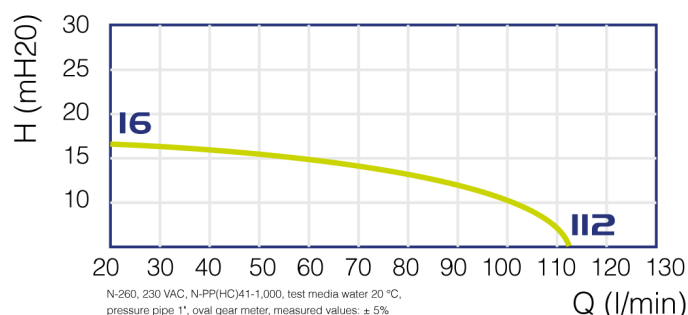
LVR: Low voltage release SC: Speed control

N-280

230 Volt, 50/60 Hz, 825 Watt, IP 24,

230 Volt, 50/60 Hz, 825 Watt, IP 24, double insulation protection class II, over load protection switch with integrated low voltage release. 5 m cable with plug. Speed control as option.

PERFORMANCE CURVE N-280



OPERATING DATA

Flow rate	up to 112 l/min
Head	up to 16 m
Viscosity	up to 1,000 mPas
Density	up to 1,9

N-280

Version

Voltage

Code



with LVR

230 V 1~,50/60 Hz, 825 W

1280 2301

with LVR + SC

230 V 1~,50/60 Hz, 825 W

1280 2303

LVR: Low voltage release SC: Speed control

N-AIR 1 & N-460

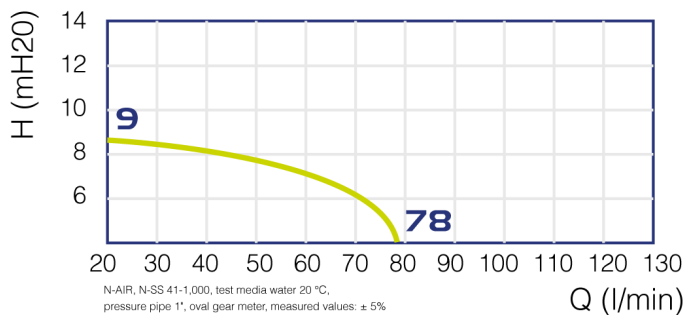
N-AIR 1

300 Watt at max 6 bar operating pressure, IBEX U05 ATEX B007 X



300 Watt at max 6 bar operating pressure, with silencer and a brass ball valve for control compressed air. This regulates speed of the motor and varies pumping capacity.

PERFORMANCE CURVE N-AIR 1



OPERATING DATA

Flow rate	up to 78 l/min
Head	up to 9 m
Viscosity	up to 400 mPas
Density	up to 1,3



IBEX U05 ATEX B007 X

N-AIR 1

Voltage

Code



300 Watt at max. 6 bar
operating pressure
Air consumption under load 13 l/sec.

3001 0300

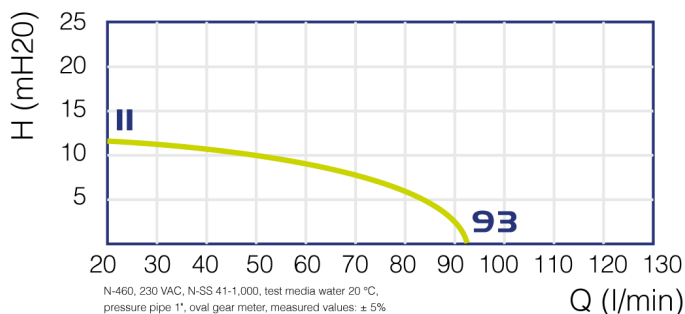
N-460

230 Volt, 50/60 Hz, 640 Watt, IP 55, II 2G Ex db IIC T6 Gb



230 Volt, 50/60 Hz, 640 Watt, protection class II 2G Ex db IIC T6 Gb, IP 55, with integrated low voltage release, 5 m cable without plug. Optional with Ex-plug.

PERFORMANCE CURVE N-280



OPERATING DATA

Flow rate	up to 93 l/min
Head	up to 11m
Viscosity	up to 600 mPas
Density	up to 1,5



II 2G Ex db IIC T6 Gb

N-460

Version

Voltage

Code



with LVR

230 V 1~, 50/60 Hz, 640 W

1460 2301

LVR: Low voltage release

MANUAL PUMPS

Code



N-04

Pump material: Polypropylene
Shaft: Polypropylene
Seals: depending on the media
Flow rate: ca. 0,3 l/stroke*
Hose connection: 3/4"
The telescopic suction tube is adjustable from 500 to 950 mm and has a diameter of max. 34 mm.

APPLICATION

For acids (yellow), mineral oil products (blue), alkaline solutions (red) and thin liquid food (blue/white).

N-04 YELLOW	FKM	6004 0000
N-04 RED	EPDM	6004 0001
N-04 BLUE	NBR	6004 0002
N-04 BLUE/WHITE	PTE	6004 0003



N-08

Pump material: PVDF
Seals: PTFE
Flow rate: 0.3 l/rotation*
Suction tube length: 3 x 35 cm
Pump complete with discharge arc and drum adapter G 2".
Regular PTFE lubrication required.

APPLICATION

Hand-crank rotary pump for chemicals.
The pump is suitable for thin fluid, highly aggressive media such as acids and alkalies.

6008 0000



N-13

Material: pump housing made of cast iron
Seals: NBR
Flow rate: 0,25 l/rotation*
Pump tube diameter: 53 mm
Suction tube length: 1000 mm; therefore suitable for smaller containers and 200 liter drums
Pump complete with discharge arc and drum adapter G 2".

APPLICATION

Metal hand crank rotary pump.
The pump is suitable for diesel, heating oil, oils (up to SAE 90) and all other self-lubricating, non-aggressive and non-flammable media.

6013 0000



N-16

Execution for fire brigade with flexible suction hose instead of a rigid tube.
Suction hose DN 19 x 4; 1,5 m
Discharge hose DN 19 x 4; 1,5 m
Flow rate: app. 0,25 l/stroke*
In pump housing integrated drum adapters with M 64x4 and G 2" enable an easy fixing in drum.

APPLICATION

Fire brigade hand pump
ATEX compliant, single-acting hand pump that can be used for following media of hazard classes A I-III:
Diesel, heating oil, fuel, petroleum, anti freezing liquid for cooler (undiluted), thin fluid mineral oils and rapeseed methyl ester.

6016 0000

ACCESSORIES

Code

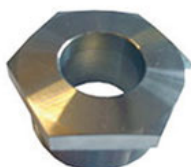


Barrel adapter made of polypropylene

(PP and PVDF pump tube) for fixing the barrel pump in the bung hole of a drum, diameter of pump tube 41 mm, G 2"

Ø 41

9001



Barrel adapter made of stainless steel

For secure fixing of drum pump in bung hole of a drum, diameter of pump tube 41 mm, G 2"

Ø 41

9002



Emission proof drum adapter

For pump tube diameter 41 mm
FKM-seals prevent emission of harmful gases and vapours out of the drum. A vacuum in drum is equalized by a valve.

made of polypropylene

made of brass

made of stainless steel 316.

9024

9025

9026



Bouding ground set

Set consisting of 4 cables with connection clamps.

These ground wires with connection clamps are absolute necessary when pumping flammables or for use in hazardous areas.

This set can be used as an electric conductive connection between the drum pump and the container for earthing and balancing out the energy resources.

9003



Strainer

For protection the barrel pump when abrasive particles are present.

Polypropylene. Size of slots 1,5 x 12 mm, tube-Ø 40, 41 or 42 mm

Stainless steel 316. Size of slots 1,5 x 20 mm, tube-Ø 41 mm

PP

9011

SS

9012

PVDF

9230

ACCESSORIES

Code



Nozzle made of polypropylene

Housing and internal parts in polypropylene
Valve seat and seals made of FKM or EPDM
Rotatable hose connection
Flow rate: 80 l/min
Viscosity: 800 mPas
Operating pressure: 3 bar
Weight: 210 g

FKM	1"	9103
EPDM	1"	9106



Nozzle made of PVDF

Housing and internal parts in PVDF
Valve seat and seals made of FKM
Rotatable hose connection
Flow rate: 80 l/min
Viscosity: 800 mPas
Operating pressure: 3 bar
Weight: 210 g

FKM	1"	9109
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Nozzle made of stainless steel 316

Housing and internal parts in SS 316
Valve seat and seals made of PTFE
Hose connection 1"
Flow rate: 80 l/min
Viscosity: 900 mPas
Operating pressure: 4 bar
Medium temperature: max. 80 °C
Weight: 1 kg

	1"	9013
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Nozzle made of aluminium

Housing and internal parts in ALU
Valve seat and seals made of NBR
Hose connection 1"
Flow rate: 60 l/min*
Hose connection ALU

	1"	9032
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Electronic flow meter FM I20

Turbine gear meter
are suitable for low viscous, water-like media and are
available in PP, PVDF and stainless steel.

PP	9020
PVDF	9021
SS	9008



pump solution



AUTHORIZED PARTNER:



biuro@techflow.pl
www.techflow.pl
Tel: 666-633-083

