

Roots blowers KUBÍČEK

Units containing ROOTs blowers from KUBÍČEK VHS are devices in which external compression of the gaseous medium takes place by means of two three-tooth rotors (rotary pistons). These are mounted longitudinally in parallel axes in the blower housing and rotate in the opposite direction. The movement of the rotary pistons causes the medium to be sucked on the suction side of the device, transported to the discharge point and compressed. The system is equipped with a synchronizing gear with ground bevel gearing, which ensures the accuracy and smoothness of rotation of the rotors. At the same time, it defines the clearance for non-contact rolling of the rotors, which thus does not need to be lubricated and therefore the medium cannot be contaminated with oil. We currently produce 22sizes of ROOTs blowers

Working pressure $\Delta P = 0-100 \text{ kPa}$

Q = 15–20 000 m³/hour

Electric motor power $P_1 = 0,25-560 \text{ kW}$ Connection dimensions DN = 50–500





Vacuum blower units

ROOTs blowers in vacuum mode are manufactured in two standard single-stage versions. Basic, for vacuum up to -40 kPa, rel and with pre-inlet cooling to achieve a vacuum of -80 kPa rel. They are also available as special multistage units capable of reaching a working vacuum of -99.8 kPa. Rel.



Gas blower units

Based on the standard series of ROOTs blowers, we design and manufacture custom units that are designed for extraction, compression and transport of flammable, explosive and aggressive gases. They meet the requirements of EU Directive No. 94/9 / EC – the so-called ATEX.Available in various material designs or surface finishes of the workspace.As one of the few, we also supply all-stainless steel design.



Mobile applications

KUBÍČEK blowers designed for operation on special trucks and trailers. The experience gained through long-term cooperation with truck bodybuilders is reflected in the further design and development of these customer-designed units.

Working pressure - relatively	Volume flow
$\begin{array}{l} \Delta P = 0{-}40 \text{ kPa} \\ \text{in basic design} \\ \Delta P = {-}40 \text{ a} \breve{z} {-}80 \text{ kPa} \\ \text{with pre-inlet cooling} \\ \Delta P = \text{up to } {-}99{,}8 \text{ kPa} \\ \text{multi-stage design} \end{array}$	Q = 15–20 000 m³/hour
Electric motor power P ₁ = 0,25–560 kW	Connection dimensions DN = 50–500

Working pressure	Vo	lume flow
$\Delta P = 0 \text{ až } 100 \text{ kF}$ overpressure $\Delta P = 0 \text{ až } -40 \text{ kF}$ vacuum $\Delta P = -40 \text{ až } -80 \text{ k}$ vacuum with cooler	a rel.	= 15–20 000 m³/hour
Electric motor power $P_1 = 0,25-560 \text{ k}$		nnection dimensions N = 50–500

Working pressure	Volume flow
$\Delta P = 0-100 \text{ kPa rel.}$ overpressure $\Delta P = 0 \text{ až } -80 \text{ kPa rel.}$ floor	Q = 40–20 000 m³/hour
Engine power	Connection dimensions
P ₁ = 0,75–560 kW	DN = 80-500



Blowers in agriculture

KUBÍČEK blowers designed for various agricultural operations. Significant representatives in this segment include, for example, special vacuum pumps for milking lines or intensification of fish farming equipment.



Bare shaft blower units

KUBÍČEK ROOTs blowers are devices in which external compression of a gaseous medium takes place by means of two three-tooth rotors (rotary pistons). The system is equipped with a synchronizing gear with ground bevel gearing, which ensures the accuracy and smoothness of rotation of the rotors. At the same time, it defines the clearance for non-contact rolling of the rotors, which thus does not need to be lubricated and therefore the medium cannot be contaminated with oil.



FB Deflagration flame arresters

The deflagration flame arrester type FB series is intended for the protection of technological equipment used for storage, distribution, extraction, transport, compression and further processing of flammable and explosive gases and mixtures of the relevant explosion group. The use of a arrester is limited by the maximum operating pressure and operating temperature range for which the arrester has been tested. The arresters are certified according to ČSN EN ISO 16852 for a maximum pressure of 120 kPa (abs.) And a temperature range of -20 to + 60 ° C.

Working pressure	Volume flow
$\Delta P = 0-100 \text{ kPa rel.}$ overpressure $\Delta P = 0 \text{ až } -80 \text{ kPa rel.}$ floor	Q = 15–20 000 m³/hou
Engine power $P_1 = 0,25-560 \text{ kW}$	Connection dimensions DN = 50–500

Work pressure
∆P = 0–100 kPa rel.
overpressure
$\Lambda P = 0$ až -80 kPa re

-80 kPa rel. Con

Q = 15–20 000 m³/hour Connecting dimensions of flanges

of flanges DN50–500 / PN16

Volume flow

max. 120 kPa (abs.)	ČSN
Temperature range	
-20 to+ 60 °C	

Aeration membranes

The company KUBÍČEK VHS has been supplying a

quality aeration PU membrane, marked FB-102N,

25 years. Based on the wishes of our customers,

we now also offer other material designs, EPDM

of its own production, to the market for more than

Work pressure

Certified ČSN EN ISO 16852

AW Heat echangers

Heat exchangers are designed for direct heat exchange between the air / gas and liquid. They are installed on input or output of devices (blower units). The exchanger consists of housing and two fronts for input and output of air / gas. The housing of exchanger and the inner pipes are made of stainless or carbon steel. Inputs and outputs of liquid / water are placed on the exchanger housing. Counterflow connection is used for higher performance.

On the gas side	On the liquid side
0,6 MPa max. pressure	0,6 MPa max. pressure
300 °C max. temperature	110 °C max. temperature
up to 13 200 m³/h max. flow	up to 12,5 m³/h max. flow
Temperature range -20 to 300 °C	



Pipe silencers

Pipe silencers can be used in cases where higher demands are placed on the soundproofing of the environment. They are suitable for use in low / medium-pressure pipelines with air speeds up to 20 m/s. By using a silencer, it is possible to suppress unpleasant sound resonances, ie change the frequency and level of noise emitted by the pipeline to the surroundings. Silencers made of stainless steel are installed directly in the pipeline, as close as possible to the noise source.

Connection dimensions

DN 50 - 500

Connection variants Stainless steel - flanges - flexibble connection - welded

Casing material

Use of oxygen under standard conditions per

or silicone.

Pressure loss (∆p) 4 – 6 kPa

(Ea) up to 8,5 %/m

Recommended flow (QL) 2,5 – 5 m³/m.h



KUBÍČEK VHS, s.r.o. is a Czech company, founded in 1991, based in Velk∉ Losiny, Czech Republic.

We are the largest Czech manufacturer and supplier of blowers for a wide range of applications. We guarantee our partners absolute professionalism in all aspects of our products and services. Blowers of our own design are developed and manufactured in Velké Losiny.

From the first contact with the client to the delivery and installation of the equipment as well as the following service, all KUBÍČEK employees are guided by the company's main principles: To address customer requirements individually, quickly, correctly and above standard. Today our products work reliably all around the world.

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