

# MIDGETBOX

AIR-OPERATED DOUBLE DIAPHRAGM PUMPS



- Product designed and constructed in Italy
- PATENTED stall-prevention pneumatic circuit
- Operates with non-lubricated air
- SELF-PRIMING
- Dry operation
- ATEX certification for ZONE 1 - ZONE 2
- Adjustable operating speed
- Extremely versatile
- Suitable for pumping fluids in demanding applications
- Suitable for continuous use

## CUBIC PUMPS CODES ENCODING

ex. ICU15P-NTTPV -

Internal distributor, Cubic 15, PP casing, NBR air side diaphragm, PTFE product side diaphragm, PTFE balls, PP ball seats, Viton® o-ring.

I	CU15	P	N	T	T	P	V	-	-
INTERNAL DISTRIBUTOR	PUMP MODEL	DAMPER PUMP	AIR-SIDE DIAPHRAGM	PRODUCT-SIDE DIAPHRAGM	BALLS	BALL SEATS	O-RING*	SPLIT MANIFOLD	CONDUCT VERSION
I	<b>MID</b> - Midgetbox (available only in PP/PP+CF) <b>CU15</b> - Cubic 15	<b>P</b> - Polypropylene <b>EC</b> - ECTFE (Halar) <b>PC</b> - PP+CF	<b>N</b> - NBR	<b>T</b> - PTFE	<b>G</b> - Pyrex® <sup>1)</sup> <b>A</b> - AISI 316 <b>T</b> - PTFE	<b>R</b> - PPS-V <b>K</b> - PEEK <sup>1)</sup> <b>P</b> - PP <b>EC</b> - ECTFE <b>A</b> - AISI 316 <b>I</b> - PE-UHMW	<b>D</b> - EPDM <b>V</b> - Viton® <b>N</b> - NBR <b>T</b> - PTFE	<b>X</b> Split manifold <b>Y</b> NPT thread <b>J</b> Spacer on shaft	<b>C*</b>

1) Only for MIDGETBOX

\*C version CONDUCT for standard ATEX ZONE 1Ex II 2/2GD c IIB T135°C

# MIDGETBOX

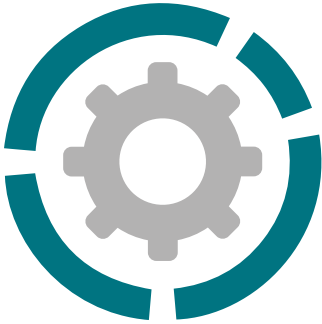
AIR-OPERATED DOUBLE DIAPHRAGM PUMPS



## Specifications and types



STANDARD: II 3G Ex h IIB T4 Gc - II 3D Ex h IIIB T135°C Dc X  
 CONDUCT: II 2G Ex h IIb T4 Gb - II 2D Ex h IIIB T135°C Db X



Suction / delivery connections	G 1/4" f(*)
Air fitting	G 1/8" f
Max flow rate*	6 l/min
Max supply air pressure	8 bar
Max head*	80 m
Max negative suction head - dry-running**	3 m
Max negative suction head - pump primed	9,5 m
Max diameter of suspended solids	0 mm
Noise level	60 dB
Volume per stroke	3.2 cc

(\*) NPT fittings on request

\*\* The value depends on the pump configuration.



PP

Midgetbox



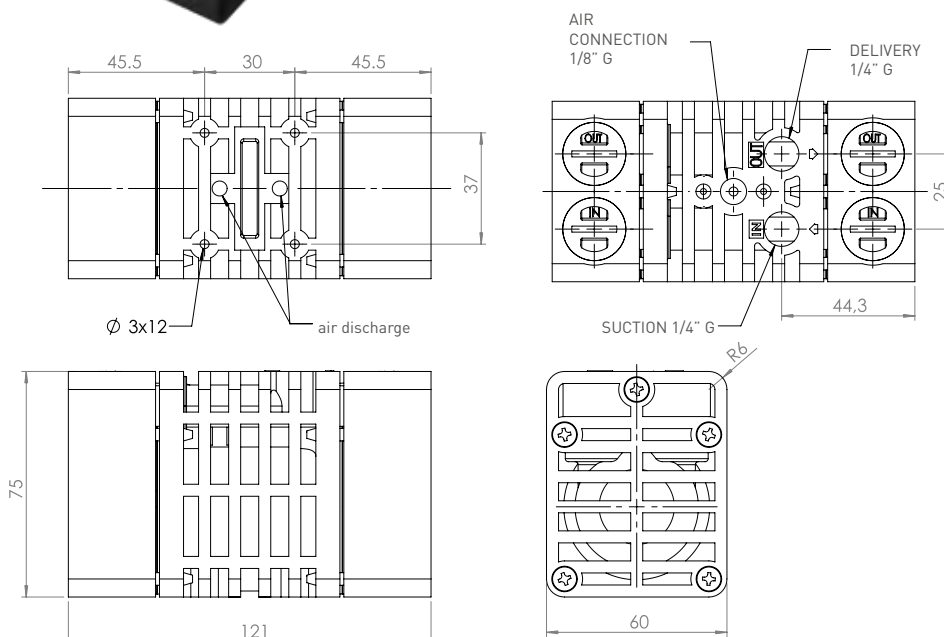
### Maximum Dimensions

Height	75 mm
Width	121 mm
Depth	60 mm



### Construction materials (casing and manifolds) and net weight

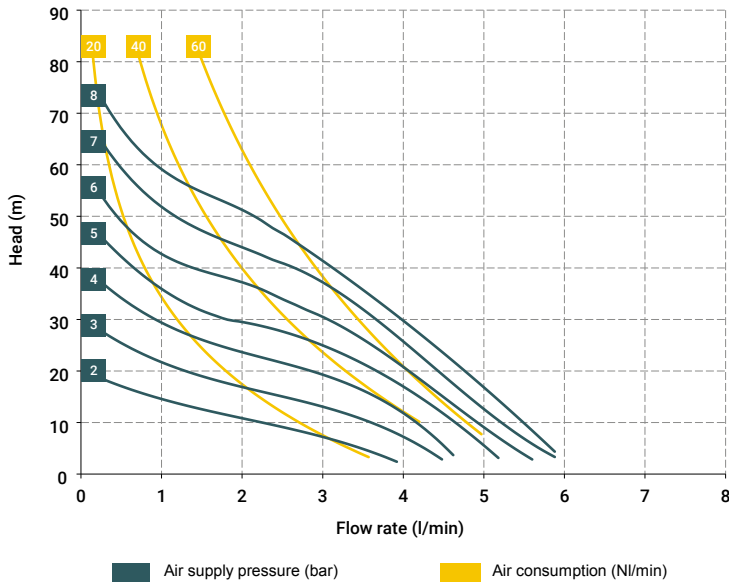
<b>Polypropylene</b> (with glass additive)	0.52 kg
	Temp. 3°C min. 65°C max
<b>Conductive polypropylene</b> (with carbon additive)	0.52 kg
	Temp. 3°C min. 65°C max



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STANDARD: II 3G Ex h IIB T4 Gc - II 3D Ex h IIIB T135°C Dc X  
 CONDUCT: II 2G Ex h IIb T4 Gb - II 2D Ex h IIIB T135°C Db X



\*The curves and the performances refer to pumps with immersed suction and open delivery outlet, with water at 20°C and vary based on the composition materials.

#### MAIN APPLICATION SECTORS



GRAPHIC INDUSTRY



WATER AND SLUDGE TREATMENT



CHEMICAL INDUSTRY



GALVANIC AND ELECTRONIC INDUSTRY

#### T10 distributor material (pneumatic circuit):

- POM

#### Central material:

- Polypropylene (with glass additive)
- Conductive polypropylene (with carbon additive)

#### Valves materials:

- PPS
- PEEK

#### Diaphragm materials:

- PTFE
- NBR

#### Caps materials:

- Polypropylene (with glass additive)
- Conductive polypropylene (with carbon additive)

#### Balls materials:

- AISI 316
- PYREX

#### O-ring materials:

- PTFE

#### Package:

**cardboard box - cm 14 x 19 x 14 - weight 0.17 kg**  
 (the weight refers to the package only, without the pump)

#### Accessories:

- Equaflux 51

(For the dampener materials refer to the relative technical sheet)

- Air regulation kit W1000-8-G

Any chromatic variations in our polypropylene and PVDF products are due to the special mixtures of the raw materials used. The use of high quantities of, respectively, glass and carbon additives, results in a unique aesthetic that does not affect the quality of the product in any way. Quite the opposite, it highlights its highly technological nature, to the benefit of its performance.

#### SELF-PRIMING USE



#### UNDER HEAD USE



#### DRUM TRANSFER



#### IMMERSED

