#### AIR-OPERATED DOUBLE DIAPHRAGM PUMPS





Suction / delivery connections	G 1" or DN 25(*)
Air fitting	G 3/8" f
Max flow rate*	160 l/min
Max supply air pressure	8 bar
Max head*	80 m
Max negative suction head - dry-running**	4 m
Max negative suction head - pump primed	9,5 m
Max diameter of suspended solids	4 mm
Noise level	75 dB
Volume per stroke	222 cc

(\*) NPT fittings on request

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



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

IECEx certification

Adjustable operating speed

Extremely versatile

Suitable for pumping liquids with high viscosity and demanding applications

Possibility of pumping fluids containing suspended solids

Possibility of suspended installation

Manifolds can be supplied with stainless steel reinforcement rings for pumps in PP – PP+CF – PVDF

Suitable for continuous use

#### 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 - I M2 Ex h I Mb X  $CONDUCT: II\ 2G\ Exh\ IIIb\ T4\ Gb-II\ 2D\ Exh\ IIIB\ T135^{\circ}C\ Db\ X-Exh\ IIB\ T4\ Gb-Exh\ IIIB\ T135^{\circ}C\ Db$ 







Maximum Dimensions	
Height	325 mm
Width	329 mm
Depth	202 mm



Construction materials (casing and manifolds) and net weight				
Polypropylene (with glass additive)	7.6 Kg			
	Max 3°C min.			
	65°C max			
Conductive polypropylene (with carbon additive)	7.6 Kg			
	Max 3°C min.			
	65°C max			



#### Construction materials (casing and manifolds) available on request

P0Mc

**UHMWPE** 





Maximum Dimensions	
Height	325 mm
Width	329 mm
Depth	202 mm



Construction materials (casing ar	nd manifolds) and net weight
PVDF	9.6 Kg
	May 200 main

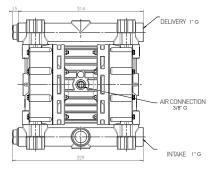
Max 3°C min. 95°C max

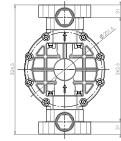


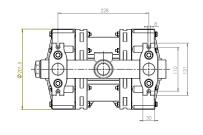
#### Construction materials (casing and manifolds) available on request

P0Mc

**UHMWPE** 







#### AIR-OPERATED DOUBLE DIAPHRAGM PUMPS



## Specifications and types



 $STANDARD: II 3G Ex h IIB T4 Gc - II 3D Ex h IIIB T135 ^C Dc X - I M2 Ex h I Mb X CONDUCT: II 2G Exh IIb T4 Gb - II 2D Exh IIIB T135 ^C Db X - Exh IIB T4 Gb - Exh IIIB T135 ^C Db X - Exh IIB T4 Gb - Exh IIIB T135 ^C Db X - Exh IIB T4 Gb - Exh IIIB T135 ^C Db X - Exh IIB T4 Gb - Exh IIIB T135 ^C Db X - Exh IIIB T4 Gb - Exh IIIB T135 ^C Db X - Exh IIIB T4 Gb - Exh IIIB T135 ^C Db X - Exh IIIB T4 Gb - Exh IIIB T135 ^C Db X - Exh IIIB T4 Gb - Exh IIIB T135 ^C Db X - Exh IIIB T4 Gb - Exh IIIB T135 ^C Db X - Exh IIIB T4 Gb - Exh IIIB T135 ^C Db X - Exh IIIB T4 Gb - Exh IIIB T135 ^C Db X - Exh IIIB T4 Gb - Exh IIIB T135 ^C Db X - Exh IIIB T4 Gb - Exh IIIB T135 ^C Db X - Exh IIIB T4 Gb - Exh IIIB T135 ^C Db X - Exh IIIB T4 Gb - Exh IIIB T135 ^C Db X - Exh IIIB T4 Gb - Exh IIIB T135 ^C Db X - Exh IIIB T4 Gb - Exh IIIB T135 ^C Db X - Exh IIIB T4 Gb - Exh IIIB - Exh$ 



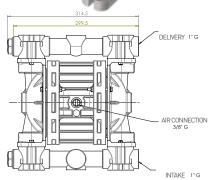


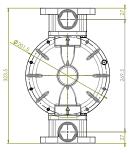


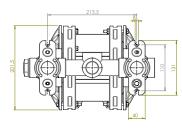
Maximum Dimensions	
Height	324 mm
Width	315 mm
Depth	202 mm



Construction materials (casing and manifolds) and net weight				
ALU	8.5 Kg			
	Max 3°C min.			
	95°C max			









# DELIVERY 1"G

# Electropolished AISI 316

Boxer 100



Maximum Dimensions	
Height	327 mm
Width	308 mm
Depth	202 mm

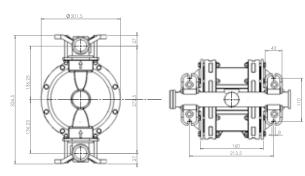


Construction materials (casing and manifolds) and net weight				
Electropolished AISI 316	11.7 Kg			
	Max 3°C min.			
	95°C max			



#### Construction materials (casing and manifolds) available on request

DUPLEX/W.DUPLEX

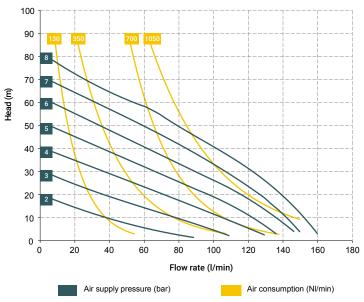


#### AIR-OPERATED DOUBLE DIAPHRAGM PUMPS



## Specifications and types

STANDARD: II 3G Ex h IIB T4 Gc - II 3D Ex h IIIB T135°C Dc X - I M2 Ex h I Mb X CONDUCT: II 2G Exh IIb T4 Gb-II 2D Exh IIIB T135°C Db X-Exh IIB T4 Gb-Exh IIIB T135°C Db



\*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.

#### **Accessories**

• Equaflux 200

[For the dampener materials refer to the relative technical sheet] 
• Truck model 01

Foot valve: VALVFN0000100APP (POLYPROPYLENE) VALVFN0000100AFV (PVDF)

- Air regulation kit W3000-10-GBatch controller
- Cycle counter Reinforcement rings

Flange kit (DIN flange - ANSI available on request): KITFLANG-B100P (POLYPROPYLENE) KITFLANG-B100F (PVDF) KITFLANG-B100A (AISI 316) KITFLANG-B100AL (ALUMINIUM)

#### T20 distributor material (pneumatic circuit):

POM

#### Central material:

- Polypropylene (with glass additive)
- Conductive polypropylene (with carbon additive)
- Aluminium
- Aisi 316
- DUPLEX/S.DUPLEX

#### Diaphragm materials:

- PTFE
- HYTREL
- SANTOPRENE
- NBR
- EPDM

#### Caps materials:

- Polypropylene (with glass additive)
- Conductive polypropylene (with carbon additive)
- PVDF
- Aluminium
- Natural ECTFE
- AISI 316

#### **Balls materials:**

- PTFE
- AISI 316
- EPDM
- NBR

#### O-ring materials:

- EPDM
- NBR
- VITON®
- PTFE

#### Package:

cardboard box - cm 27 x 39 x 41 - weight 1.4 Kg

(the weight refers to the package only, without the pump)

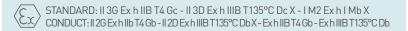
Any chromatic variations in our polypropylene and PVDF products are due to the special mixtures of the raw materials used. The use of high quantities of, respectively, glass and carbon additives, results in a unique aesthetic that does not affect the quality of the product in any way. Quite the opposite,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

### MAIN APPLICATION SECTORS (B)WATER AND SLUDGE TREATMENT PRODUCTION AND STORAGE 6 CERAMIC, STONE, MARBLE GLASS AND MINING INDUSTRY GRAPHIC INDUSTRY PAINT INDUSTRY PACKING, GLUE, GOLD PROCESSING INDUSTRY PAPER AND PAPER MILLS MECHANICAL AND METAL-TEXTILE AND LEATHER GALVANIC AND ELECTRONIC INDUSTRY

#### AIR-OPERATED DOUBLE DIAPHRAGM PUMPS



## Specifications and types



## **BOXER PUMPS CODES ENCODING**

ex. IB50-P-HTTPV--

Internal distributor, Boxer 50, PP casing, Hytrel® air side diaphragm, PTFE product side diaphragm, PTFE balls, PP ball seats, Viton® o-ring.

ĺ	IB50-	Р	Н	T	Т	P	V	-	-
INTERNAL DISTRIBUTOR	PUMP MODEL	DAMPER PUMP	AIR-SIDE DIAPHRAGM	PRODUCT-SIDE DIAPHRAGM	BALLS	BALL SEATS	0-RING	SPLIT MANIFOLD	CONDUCT VERSION
	B7         Boxer 7           B15         Boxer 15           MICR         Microboxer           MIN         Miniboxer           B50         Boxer 50           B81         Boxer 81           B90         Boxer 90           B100         Boxer 100           B150         Boxer 251           B251         Boxer 251           B252         Boxer 502           B502         Boxer 522           B503         Boxer 503	P - Polypropylene FC - PVDF+CF PC - PP+CF AL - Aluminium A - AISI 316	N - NBR D - EPDM H - Hytrel M - Santoprene	T - PTFE	T - PTFE A - AISI 316 D - EPDM N - NBR	P - Polypropylene F - PVDF A - AISI 316 I - PE-UHMW R - PPS-V L - Aluminium	D - EPDM V - Viton® N - NBR T - PTFE S - Silicone	X* 3* Y* J* W*	C* Z*

<sup>\*</sup>X = split manifold

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

Z = version for standard IECEx

(both only on request)



<sup>\*3 = 3°</sup> central hole on manifold

<sup>\*</sup>Y = "NPT" thread

<sup>\*</sup>J = spacer on shaft

<sup>\*</sup>W = clamp manifold (all only on request)