

## 1" 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

CE



- **Robust Design**
- 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

<sup>(\*)</sup> NPT fittings on request \*\* The value depends on the pump configuration



## 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 DbX - Exh IIB T4 Gb - Exh IIIB T135°C Db

PP Boxer 100



## **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

Boxer 100

325 mm 329 mm 202 mm

**UHMWPE** 



## **PVDF**





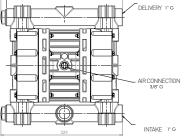
## Construction materials (casing and manifolds) and net weight

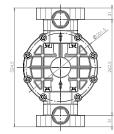
PVDF	9.6 Kg
	Max 3°C min.
	95°C max

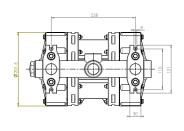


Construction materials (casing and manifolds) available on request

**UHMWPE** 







X-Cel House, Chrysalis Way, Langley Bridge, Eastwood, Nottinghamshire NG16 3RY Tel: +44 (0) 1773 302 660 | Email: sales@northridgepumps.com | Website: www.northridgepumps.com



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 Ex h IIb T4 Gb - II 2D Ex h IIB T135°C Db X - Ex h IIB T4 Gb - Ex h IIIB T135°C Db





## Boxer 100



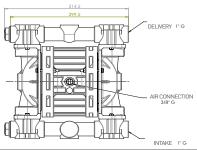
## **Maximum Dimensions**

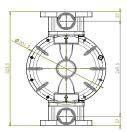
Height	324 mm
Width	315 mm
Depth	202 mm

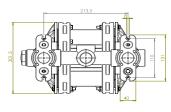


Construction materials (casing and manifolds) and net weight

ALU	8.5 Kg
	Max 3°C min.
	95°C may









# DELIVERY 1'G AIR CONNECTION 3/8'G

# **Electropolished AISI 316**

## Boxer 100



## **Maximum Dimensions**

Height	327 mm
Width	308 mm
Depth	202 mm

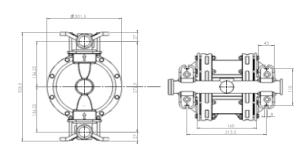


Construction materials (casing and manifolds) and net weight

Electropolished AISI 316	11.7 Kg
	Max 3°C min.
	95°C may



Construction materials (casing and manifolds) available on request  ${\tt DUPLEX/W.DUPLEX}$ 



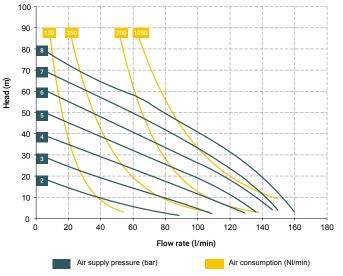


## AIR-OPERATED DOUBLE DIAPHRAGM PUMPS

# 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 n
   Truck model 01 materials refer to the relative technical sheet)

VALVFN0000100APP (POLYPROPYLENE) VALVFN0000100AFV (PVDF)

- Air regulation kit W3000-10-G
  Batch 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

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.



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# Specifications and types



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## **BOXER PUMPS CODES CODING**

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.

I	IB50-	Р	Н	T	T	Р	٧	-	-
INTERNAL DISTRIBUTOR	PUMP MODEL	DAMPER PUMP	AIR-SIDE DIAPHRAGM	PRODUCT-SIDE DIAPHRAGM	BALLS	BALL SEATS	0-RING	SPLIT MANIFOLD	CONDUCT VERSION
I	B7         Boxer 7           B15         Boxer 15           MICR         Microboxer           MIN         Miniboxer           B50         Boxer 50           B81         Boxer 81           B90         Boxer 90           B100         Boxer 100           B150         Boxer 150           B251         Boxer 251           B252         Boxer 502           B502         Boxer 502           B523         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

\*W = clamp manifold (all only on request)

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