BTS TECH https://btstech.pl +48 22 390 63 48 sklep@btstech.pl

### **AIR-OPERATED DOUBLE DIAPHRAGM PUMPS**



3" f BSPP (*)
3/4" f BSPP
800 l/min
8 bar
80 m
4 m
9,5 m
10 mm
80 dB
1825 сс

č.



(\*) NPT fittings only on request

 The curves and performances refer to pumps with immersed suction and open delivery outlet with water at 20 °C and vary according to the composition materials.
 \* Value depends on pump configuration.

CE

- Product designed and constructed in Italy
- PATENTED stall-prevention pneumatic circuit
- Operates with NON-lubricated air
- SELF-PRIMING
- Supports dry running
- ATEX certification for ZONE 1 ZONE 2
- IECEx certification
- Adjustable operating speed
  - Versatile
- Suitable for pumping fluids with high viscosity and for demanding applications
- Usable with fluids containing suspended solids
- Option of suspended installation
- Manifolds available with stainless steel reinforcement rings for PP PP + CF PVDF pumps
- Suitable for continuous use

### AIR-OPERATED DOUBLE DIAPHRAGM PUMPS

## Specifications and types



Boxer 503

Boxer 503

 $\langle E_X \rangle$ 

PP

ATEX Zona 1 (CONDUCT): II2GExhIIBT4Gb – II2DExhIIIBT135°CDbX ATEX Zona 2 (STANDARD): II3GExhIIBT4Gc – II3DExhIIIBT135°CDcX – IM2ExhIMbX\* IECEx: ExhIIBT4Gb – ExhIIBT135°CDb

\* The string relating to mining applications is not applicable to aluminium BOXER range pumps

	Maximum Dimensions			
	Height	726 mm		
	Width	585 mm		
	Depth	404 mm		
$\uparrow \uparrow$	Construction materials (body and manifolds) and net weight			
$\hat{\mathbf{M}}$	Polypropylene (with glass filler)	50 Kg		
		Temp. 3°C min.		
		65°C max		
	Conductive polypropylene (with carbon filler)	50 Kg		
		Temp. 3°C min.		
		65°C max		



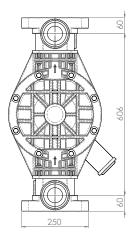
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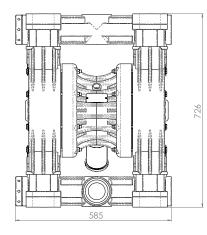


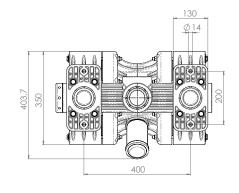
Height	726 mm
Width	585 mm
Depth	404 mm



	, ,
<b>PVDF</b> (with carbon filler)	67 Kg
	Temp. 3°C min
	95°C max







### AIR-OPERATED DOUBLE DIAPHRAGM PUMPS



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ATEX Zona 1 (CONDUCT): II2GExhIIBT4Gb – II2DExhIIIBT135°CDbX ATEX Zona 2 (STANDARD): II3GExhIIBT4Gc – II3DExhIIIBT135°CDcX – IM2ExhIMbX\* IECEx: ExhIIBT4Gb – ExhIIBT135°CDb

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Maximum Dimensions

Construction materials (bod

Height

Width Depth

ALU

AISI 316

Height

Width

Depth

AISI 316

ALU



y and manifolds) and net weight	
404 mm	
580 mm	



Boxer 503

Temp. 3°C min. 95°C max

826 mm

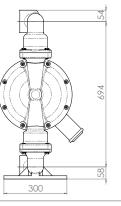
546 mm

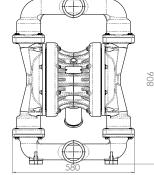
404 mm

71 Kg

Boxer 503

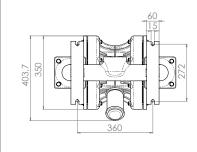
806 mm





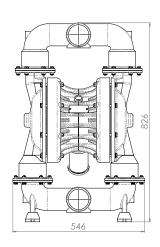
Maximum Dimensions

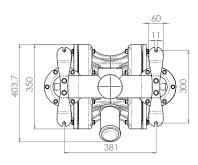
Construction materials (body and manifolds) and net weight





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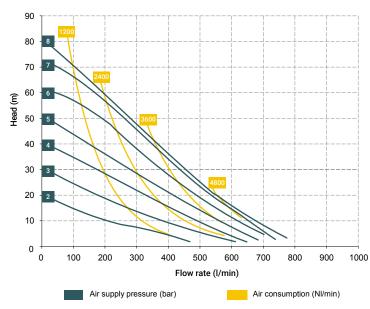




### AIR-OPERATED DOUBLE DIAPHRAGM PUMPS



### Specifications and types



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

- Accessories: Equaflux 303
- For damage for the second second
- Foot valve
- Air regulation W8000-20-G Stroke counter
- Reinforcement rings
  Flange kit (DIN flanges ANSI on request)

ATEX Zona 1 (CONDUCT): II2GExhIIBT4Gb - II2DExhIIIBT135°CDbX  $\langle E_{\rm X} \rangle$ ATEX Zona 2 (STANDARD): II3GExhIIBT4Gc – II3DExhIIIBT135°CDcX – IM2ExhIMbX\* IECEx: ExhIIBT4Gb - ExhIIBT135°CDb

<sup>\*</sup> The string relating to mining applications is not applicable to aluminium BOXER range pumps

#### Distributor material T40 (compressed air circuit) • POM

#### **Core material:**

- Polypropylene (with glass filler)
- Conductive polypropylene (with carbon filler)
- Aluminium

#### **Diaphragm materials:**

- PTFE
- HYTREL
- SANTOPRENE
- NBR
- EPDM
- Cap materials:
- Polypropylene (with glass filler)
- Conductive polypropylene (with carbon filler)
- PVDF
- AISI 316
- Aluminium

#### **Ball materials:**

- PTFE
- AISI 316 L • EPDM
- NBR

**O-ring materials:** 

- EPDM
- NBR
- VITON<sup>®</sup>
- PTFE

#### Packaging:

wooden crate - 83 x 70 x 52 cm - weight 25 Kg (PP, PP+CF, PP+PVDF)

(the weight refers only to the packaging without the pump inside) wooden crate - 93 x 68 x 51 cm - weight 25 Kg (ALU) (the weight refers only to the packaging without the pump inside) wooden crate - 94 x 63 x 51 cm - weight 24 Kg (AISI316) (the weight refers only to the packaging without the pump inside)

Any colour variations in our polypropylene and PVDF products are due to the special blends of the raw materials used. The use of high levels of glass and long-fiber carbon filler result in a unique colour that does not in any way affect the quality of the product; on the contrary, it points to the high level of content used to ensure outstanding performance



BOXER 503 (INOX): A3 - M3

BOXER 503 (ALU):

A3 - M3

Standard fittings:

- Suction: A3 Delivery:
- M3



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## Specifications and types

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## **BOXER PUMPS CODES ENCODING**

ex. IB503-P-HTTPV--

Internal distributor, Boxer 503, body PP, air-side diaph. Hytrel®, product-side diaph. PTFE, AISI 316 L balls, PP ball seats, EPDM O-Ring.

IB503-	Р	Н	Т	т	Р	V	-	-
PUMP MODEL	PUMP BODY	AIR-SIDE DIAPHRAGM	FLUID-SIDE DIAPHRAGM	BALLS	BALL SEATS	0-RING	MANIFOLD	VERSION
IB07 - Boxer 07 IB15 - Boxer 15 IMICR - Microboxer IB35 - Boxer 35 IB50 - Boxer 50 IMIN - Miniboxer IB81 - Boxer 81 IB90 - Boxer 90 IB100 - Boxer 100 IB150 - Boxer 150 IB251 - Boxer 251 IB252 - Boxer 252 IB522 - Boxer 522 IB502 - Boxer 502 IB503 - Boxer 503	P - PP PC - PP+CF FC - PVDF+CF A - AISI 316 (L) AL - ALU	N - NBR D - EPDM H - Hytrel® M - Santoprene®	T - PTFE	T - PTFE A - AISI 316 L D - EPDM N - NBR	P - Polypropylene F - PVDF A - AISI 316 L I - PE-UHMW R - PPS L - Aluminium	D - EPDM V - Viton® N - NBR T - PTFE	X* 3* Y* W* K*	C* Z*

Example table, for the table with the complete codes please contact the Debem sales department.

\*X = split manifold \*3 = 3rd hole on the manifold \*Y = manifold with NPT fitting

C = CONDUCT version for ATEX ZONE 1 Z = Version for IECEx Standard

\*W = clamp manifold

\*K = manifold with reinforcement rings (all on request only)



UNDER HEAD USE



MAIN APPLICATION SECTORS



















