

BOXER 522 / BOXER 502



<https://btstech.pl>
+48 22 390 63 48
sklep@btstech.pl

AIR-OPERATED DOUBLE DIAPHRAGM PUMPS



Suction / delivery connections	2" f BSPP (*)
Air fitting	1/2" f BSPP
Max flow rate*	600 l/min
Max supply air pressure	8 bar
Max head*	80 m
Max negative suction head - dry running**	5 m
Max negative suction head - pump primed	9,5 m
Max diameter suspended solids	8 mm
Noise level	80 dB
Volume per stroke	1825 cc



(*) 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

BOXER 522 / BOXER 502

AIR-OPERATED DOUBLE DIAPHRAGM PUMPS



Specifications and types



ATEX Zona 1 (CONDUCT): II2GExhII BT4Gb – II2DExhII BT135°C DbX
ATEX Zona 2 (STANDARD): II3GExhII BT4Gc – II3DExhII BT135°C DbX – IM2ExhI MbX*
IECEX: ExhII BT4Gb – ExhII BT135°C Db

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



PP

Boxer 522



Maximum Dimensions

Height	650 mm
Width	590 mm
Depth	404 mm



Construction materials (body and manifolds) and net weight

Polypropylene (with glass filler)	38 Kg
	Temp. 3°C min. 65°C max
Conductive polypropylene (with carbon filler)	34,5 Kg
	Temp. 3°C min. 65°C max



PVDF

Boxer 522



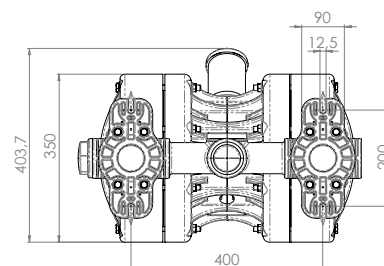
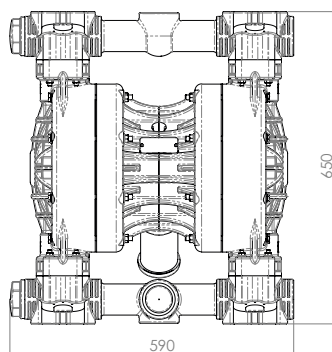
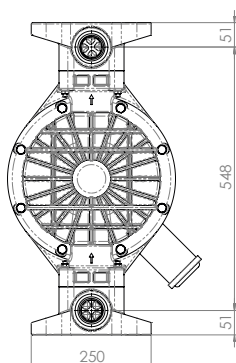
Maximum Dimensions

Height	650 mm
Width	590 mm
Depth	404 mm



Construction materials (body and manifolds) and net weight

PVDF (with carbon filler)	45 Kg
	Temp. 3°C min. 95°C max



BOXER 522 / BOXER 502

AIR-OPERATED DOUBLE DIAPHRAGM PUMPS



Specifications and types



ATEX Zona 1 (CONDUCT): II2GExhII BT4Gb – II2DExhII BT135°CDBx

ATEX Zona 2 (STANDARD): II3GExhII BT4Gc – II3DExhII BT135°CDBx – IM2ExhIMbX*

IECEX: ExhII BT4Gb – ExhII BT135°CDB

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



BOXER 502

ALU



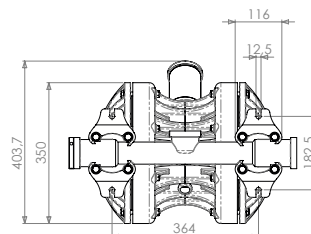
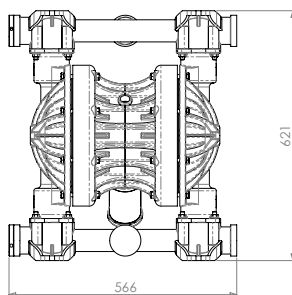
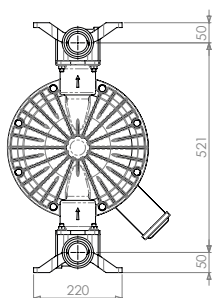
Maximum Dimensions

Height	621 mm
Width	566 mm
Depth	404 mm



Construction materials (body and manifolds) and net weight

ALU	37 Kg
	Temp. 3°C min.
	95°C max



BOXER 502

AISI 316



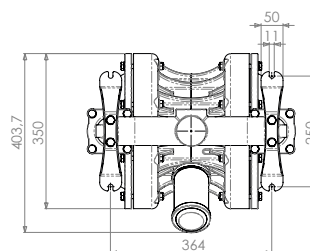
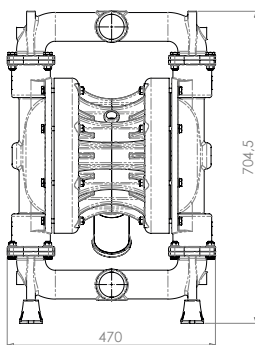
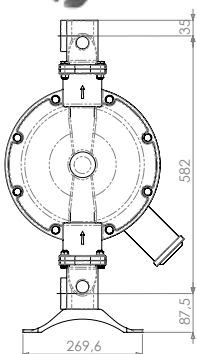
Maximum Dimensions

Height	705 mm
Width	470 mm
Depth	404 mm



Construction materials (body and manifolds) and net weight

AISI 316	54 Kg
	Temp. 3°C min.
	95°C max



BOXER 522 / BOXER 502

AIR-OPERATED DOUBLE DIAPHRAGM PUMPS

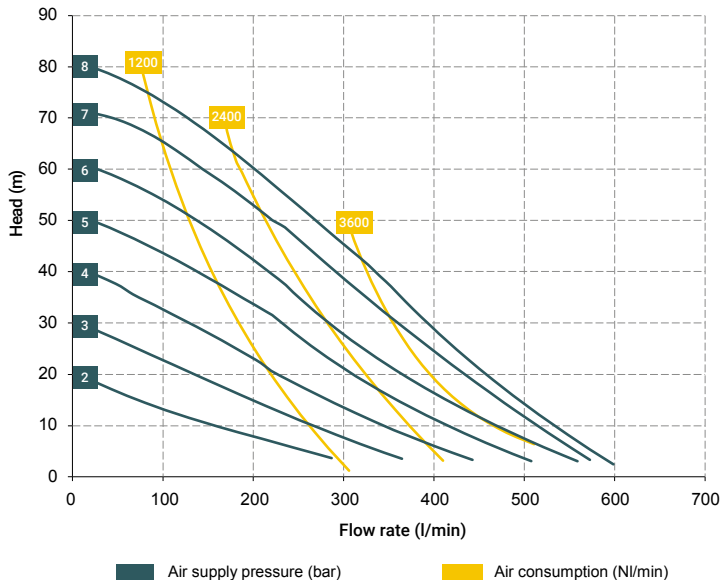


Specifications and types



ATEX Zona 1 (CONDUCT): II2GExhIIIBT4Gb – II2DExhIIIBT135°CDBX
ATEX Zona 2 (STANDARD): II3GExhIIIBT4Gc – II3DExhIIIBT135°CDBX – IM2ExhIMbX*
IECEX: ExhIIIBT4Gb – ExhIIIBT135°CDB

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



* 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:

- Equaflex 302
- (For damper materials, please refer to the technical data sheet)
- Basket filter in Polypropylene or PVDF with G 2" f/f fittings
- Foot valve
- Air regulation W8000-20-G
- Stroke counter
- Reinforcement rings
- Flange kit (DIN flanges - ANSI on request)

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 L
- Aluminium

Ball materials:

- PTFE
- AISI 316 L
- EPDM
- NBR

O-ring materials:

- EPDM
- NBR
- VITON®
- PTFE

Packaging:

wooden crate - 74 x 70 x 53 cm - weight 22 Kg (PP, PP+CF, PVDF, ALU)

(the weight refers only to the packaging without the pump inside)

wooden crate - 79 x 55 x 52 cm - weight 25 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 502 (ALU):

A1 - A2 - A3

M1 - M2 - M3

Standard fittings:

- Suction: A1
- Delivery: M1



BOXER 522 (PP):

A1 - A2 - A3 - A4 - A5 - A6

M1 - M2 - M3 - M4 - M5 - M6

BOXER 522 (PVDF):

A1 - A2 - A3 - A4 - A5 - A6

M1 - M2 - M3 - M4 - M5 - M6

Standard fittings:

- Suction: A1
- Delivery: M1



BOXER 502 (INOX):

A3 - M3

Standard fittings:

- Suction: A3
- Delivery: M3



BOXER 522 / BOXER 502

AIR-OPERATED DOUBLE DIAPHRAGM PUMPS



Specifications and types



ATEX Zona 1 (CONDUCT): II2GExhIIIBT4Gb – II2DExhIIIBT135°CDbX
ATEX Zona 2 (STANDARD): II3GExhIIIBT4Gc – II3DExhIIIBT135°CDeX – IM2ExhIMbX*
IECEx: ExhIIIBT4Gb – ExhIIIBT135°CDb

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

BOXER PUMPS CODES ENCODING

ex. IB522-P-HTTPV--

Internal distributor, Boxer 522, body PP, air-side diaph. Hytrel®, product-side diaph. PTFE, AISI 316 L balls, PP ball seats, EPDM O-Ring.

IB522-	P	H	T	T	P	V	-	-
PUMP MODEL	PUMP BODY	AIR-SIDE DIAPHRAGM	FLUID-SIDE DIAPHRAGM	BALLS	BALL SEATS	O-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

*W = clamp manifold

*K = manifold with reinforcement rings

(all on request only)

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

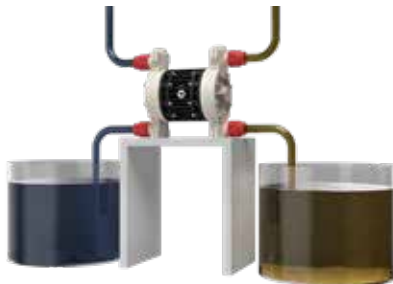
SELF-PRIMING USE



UNDER HEAD USE



SPLIT SUCTION and DELIVERY



MAIN APPLICATION SECTORS



MAIN APPLICATION SECTORS

● BOXER 522
● BOXER 502



PRODUCTION AND STORAGE OF BIODIESEL



PAINT INDUSTRY



CHEMICAL INDUSTRY



OIL & GAS



WATER AND SLUDGE TREATMENT



CERAMIC, STONE, MARBLE GLASS AND MINING INDUSTRY



TEXTILE AND LEATHER INDUSTRY



PACKING, GLUE, PAPER AND PAPER MILLS



MECHANICAL AND METALLURGICAL INDUSTRY



GALVANIC AND ELECTRONIC INDUSTRY