AIR-OPERATED DOUBLE DIAPHRAGM PUMPS





- 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
- Suitable for continuous use

AIR-OPERATED DOUBLE DIAPHRAGM PUMPS



Specifications and types



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



Suction / delivery connections	1/4" f BSPP(*)
Air fitting	1/8" f BSPP
Max flow rate*	9 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 suspended solids	0,5 mm
Noise level	65 dB
Volume per stroke	3.2 cc



PP	Boxer 7
	DUXEI /



Maximum Dimensions	
Height	120 mm
Width	137 mm
Depth	69 mm



Construction materials (body and manifolds) and net weight				
Polypropylene (with glass filler)	0,7 Kg			
	Temp. 3	°C min.		
		65°C max		
Conductive polypropylene (with carbo	n filler)	0,7 Kg		
		Temp. 3°C min.		
		65°C max		



PV	DF	Boxer 7			
\Diamond	Maximum Dimensions				
	Height	120 mm			
	Width	137 mm			
	Depth	70 mm			
*	Construction materials (body and manifolds) and net weight				
∞	PVDF (with carbon filler)	0,7 Kg			
		Temp. 3°C min.			

95°C max

^(*) 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.

AIR-OPERATED DOUBLE DIAPHRAGM PUMPS

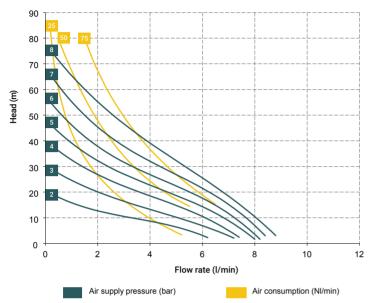


Specifications and types



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 $^{^*}$ 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.

T10 distributor material (compressed air circuit):

• POM

Core material:

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

Diaphragm materials:

- PTFE
- NBR

Cap materials:

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

Ball materials:

- PTFE
- AISI 316 L
- EPDM

O-ring materials:

- EPDM
- NBR
- VITON®
- PTFE

Packaging:

cardboard box - 14 x 19 x 14 cm - weight 0.17 kg

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

BOXER 07 (PP):

A1 - A2 - A4 - M1 - M2- M4

BOXER 07 (PVDF):

A1 - A2 - A4 - M1 - M2- M4

Standard fittings:

- Suction:
 - Α1
- Delivery:

M1



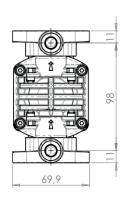
Accessories:

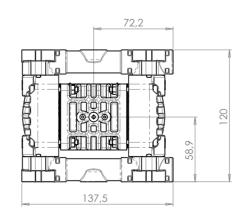
• Equaflux 51

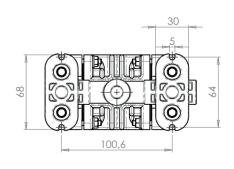
(For damper materials, please refer to the technical data sheet)

• Air regulation kit W1000-8-G

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.







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Specifications and types



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

BOXER PUMPS CODES ENCODING

Internal distributor, Boxer 07, body PP, air-side diaph. Hytrel®, product-side diaph. PTFE, AISI 316 L balls, PP ball seats, EPDM 0-Ring.

IB07-	Р	Н	T	T	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 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

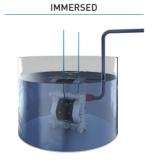
(all on request only)

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





SPLIT SUCTION



SPLIT SUCTION





MAIN APPLICATION SECTORS











CERAMIC, STONE, MARBLE, GLASS AND MINING INDUSTRY







DRUM TRANSFER