

## Specifications and types



Zone 2 – Zone 22  
Zone 1 – Zone 21  
Zone 1 – Zone 21  
Zone M2  
IECEX

II 3G Ex h IIB T4 Gc e II 3D Ex h IIIB T135°C Dc X  
II 2G Ex h IIB T4 Gb e II 2D Ex h IIIB T135°C Db X  
II 2G Ex h IIC T4 Gb  
I M2 Ex h I Mb X \*  
Ex h IIB T4 Gb e Ex h IIIB T135°C Db

\*\* The IIC Group gas application string is applicable on Boxer series pumps in Conduct version with conductive TFM membranes.  
\* The mining application string does not apply to aluminium pumps in the Boxer range

Suction / delivery connections Boxer 15	3/8" f BSPP (*)
Suction / delivery connections FDA Boxer 15	3/4" Clamp BS 4825'
Air fitting	3/8" f BSPP
Max. flow rate*	17 l/min
Max. supply air pressure	8 bar
Max. head*	80 m
Max negative suction head - dry-running**	3 m
Max negative suction head - with pump primed	9,5 m
Max. diameter suspended solids	0,5 mm
Noise	65 dB

(\*) NPT connections on request

\* Curves and performance refer to pumps with submerged suction and free delivery port, with water at 20°C and vary depending on material composition.

\*\* Value depends on pump configuration.



### PLASTIC MATERIAL PP (GF/CF) - PVDF

### Boxer 15



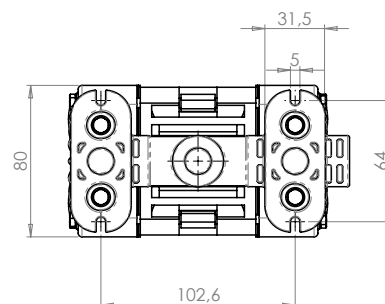
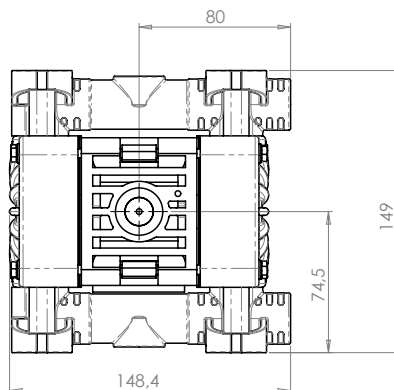
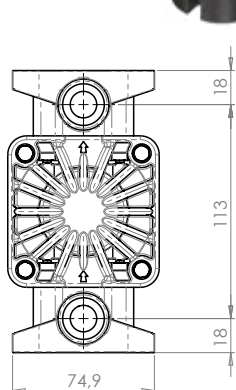
#### Maximum dimensions

Height	149 mm
Width	148 mm
Depth	80 mm



#### Construction mat. (casing and manifolds) and net weight

<b>POLYPROPYLENE (with glass filler)</b>	1,1 Kg Temp. 3°C min. 65°C max
<b>CONDUCTIVE POLYPROPYLENE (with carbon filler)</b>	1,1 Kg Temp. 3°C min. 65°C max
<b>PVDF (with carbon filler)</b>	1,4 Kg Temp. 3°C min. 95°C max



# Boxer 15

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### METAL MATERIAL - ALU

### Boxer 15



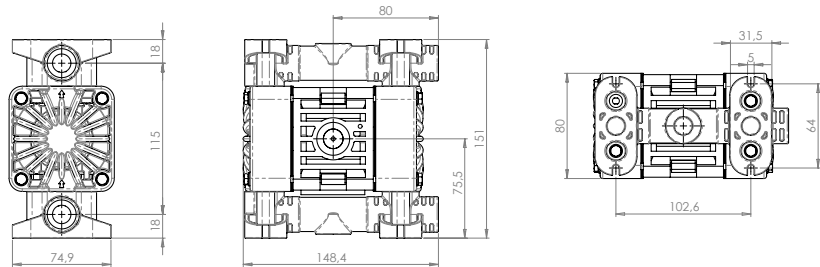
#### Maximum dimensions

Height	151 mm
Width	148 mm
Depth	80 mm



#### Construction mat. (casing and manifolds) and net weight

ALU	1,9 Kg
	Temp. 3°C min.
	95°C max



### METAL MATERIAL - AISI 316 L

### Boxer 15



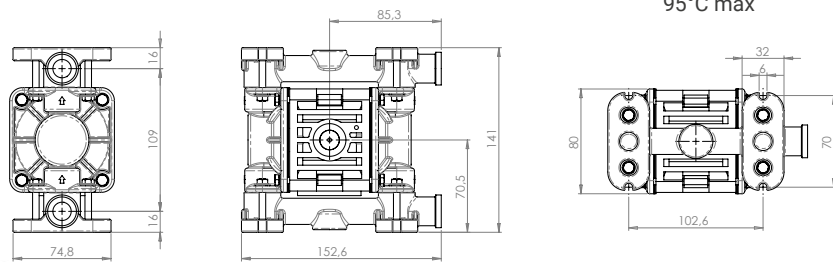
#### Maximum dimensions

Height	141 mm
Width	153 mm
Depth	80 mm



#### Construction mat. (casing and manifolds) and net weight

AISI 316 L	2,4 Kg
	Temp. 3°C min.
	95°C max



## FDA BOXER 15



### METAL MATERIAL - AISI 316 L

### FDA Boxer 15



#### Maximum dimensions

Height	162 mm
Width	160 mm
Depth	80 mm



#### Construction mat. (casing and manifolds) and net weight

AISI 316 L	2,4 Kg
	Temp. 3°C min.
	95°C max

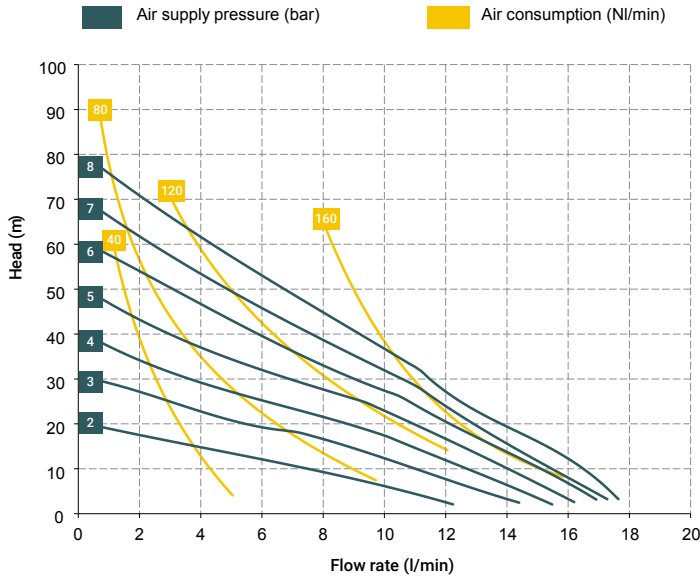
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\* The curves and performances refer to pumps with immersed suction and open delivery outlet with water at 20 °C and vary according to the composition materials.

### BOXER 15 (PP):

A1 - A2 - A4 - A5 - A6 - M1 - M2- M4 - M5 - M6

### BOXER 15 (PVDF):

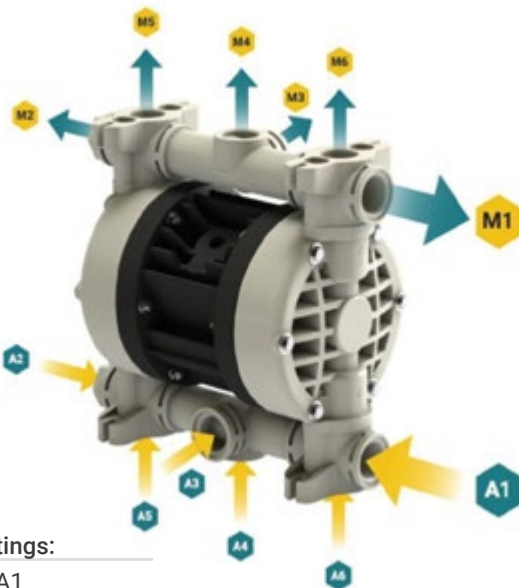
A1 - A2 - A4 - A5 - A6 - M1 - M2- M4 - M5 - M6

### BOXER 15 (INOX):

A1 - A2 - A4 - A5 - A6 - M1 - M2- M4 - M5 - M6

### BOXER 15 (ALU):

A1 - A2 - A4 - A5 - A6 - M1 - M2- M4 - M5 - M6



### Standard fittings:

- Suction: A1
- Delivery: M1

### T15 distributor material (compressed air circuit)

- POM

### Core material

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

### Diaphragm materials

- PTFE
- NBR

### Cap materials

- Polypropylene (with glass filler)
- Conductive polypropylene (with carbon filler)
- PVDF
- PPS
- Natural ECTFE
- AISI 316 L

### Ball materials

- PTFE
- AISI 316 L
- EPDM

### O-ring materials

- EPDM
- NBR
- VITON®
- PTFE

### Packaging

Cardboard box - 14 x 20 x 20 cm - weight 0.4 kg  
(the weight refers only to the packaging without the pump inside)

### Accessories

- Equaflex 51 (For damper materials, please refer to the technical data sheet)
- Foot valve
- Air regulation kit
- Batch controller
- Stroke counter
- Reinforcement rings
- Flange kit (DIN flanges - ANSI on request)

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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## BOXER PUMPS CODES ENCODING

ex. IB15-P-HTTPV-  
 Internal distributor, Boxer 15, body PP, air-side diaph. Hytrel®, product-side diaph. PTFE, AISI 316 L balls, PP ball seats, EPDM O-Ring.

IB07-	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



Under head



Drum Transfer



Split Suction and Delivery



Split Suction