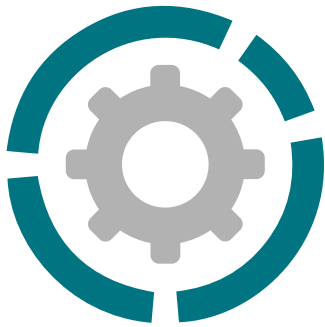


BOXER 81 / BOXER 90

AIR-OPERATED DOUBLE DIAPHRAGM PUMPS



Suction / delivery connections	G 1" or DN 25(*)
Air fitting	G 3/8" f
Max flow rate*	110 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	70 dB
Volume per stroke	100 cc

(*) NPT fittings on request

** The value depends on the pump configuration.



- Product designed and constructed in Italy
- 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

BOXER 81 / BOXER 90

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 IIIB T135°C Db X - Ex h IIB T4 Gb - Ex h IIIB T135°C Db



PP

Boxer 81



Maximum Dimensions

Height	274 mm
Width	308 mm
Depth	170 mm



Construction materials (casing and manifolds) and net weight

Polypropylene (with glass additive)	5 Kg
	Max 3°C min.
	65°C max

Conductive polypropylene (with carbon additive)	5 Kg
	Max 3°C min.
	65°C max



Construction materials (casing and manifolds) available on request

POMc

UHMWPE



PVDF

Boxer 81



Maximum Dimensions

Height	274 mm
Width	308 mm
Depth	170 mm



Construction materials (casing and manifolds) and net weight

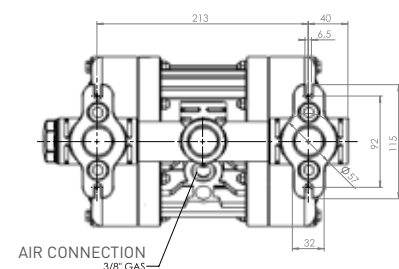
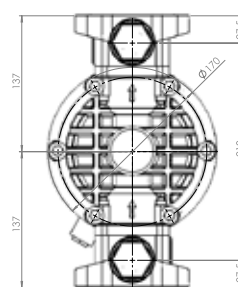
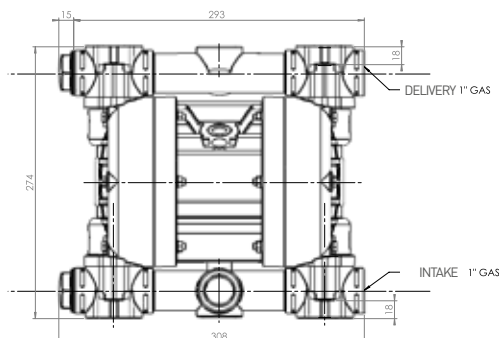
PVDF	6 Kg
	Max 3°C min.
	95°C max



Construction materials (casing and manifolds) available on request

POMc

UHMWPE



BOXER 81 / BOXER 90

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 IIIB T135°C Db X - Ex h IIB T4 Gb - Ex h IIIB T135°C Db



Electropolished AISI 316

Boxer 81



Maximum Dimensions

Height	275 mm
Width	305 mm
Depth	170 mm



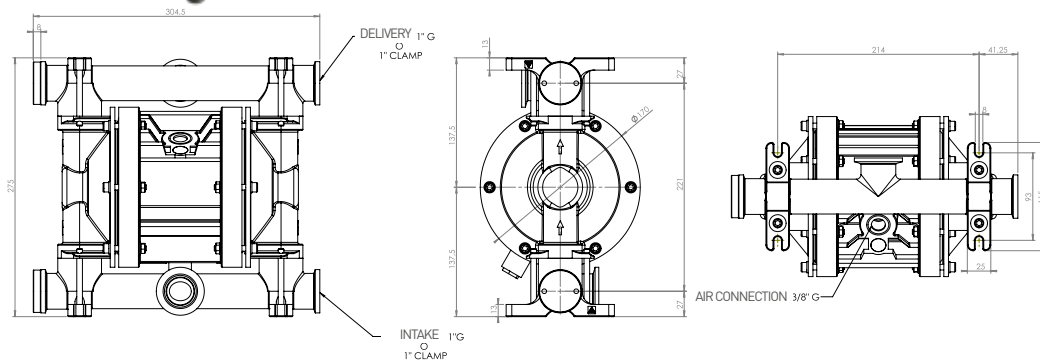
Construction materials (casing and manifolds) and net weight

Electropolished AISI 316	10.6 Kg
	Max 3°C min.
	95°C max



Construction materials (casing and manifolds) available on request

POMc
UHMWPE



BOXER 90

ALU



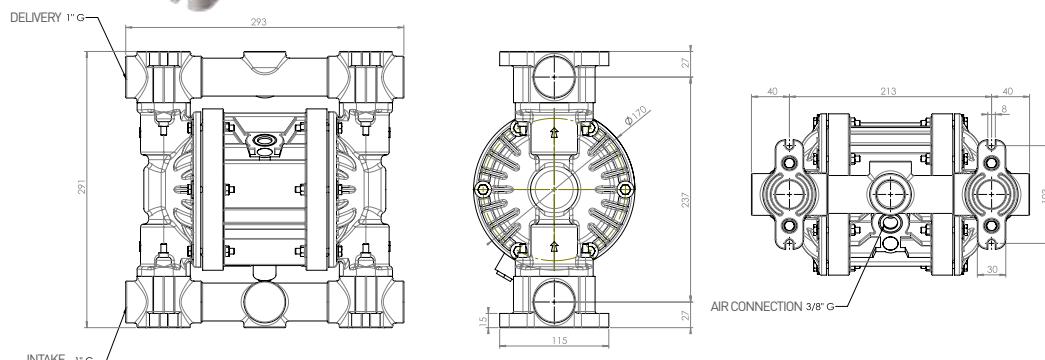
Maximum Dimensions

Height	291 mm
Width	293 mm
Depth	170 mm



Construction materials (casing and manifolds) and net weight

ALU	7 Kg
	Max 3°C min.
	95°C max



BOXER 81 / BOXER 90

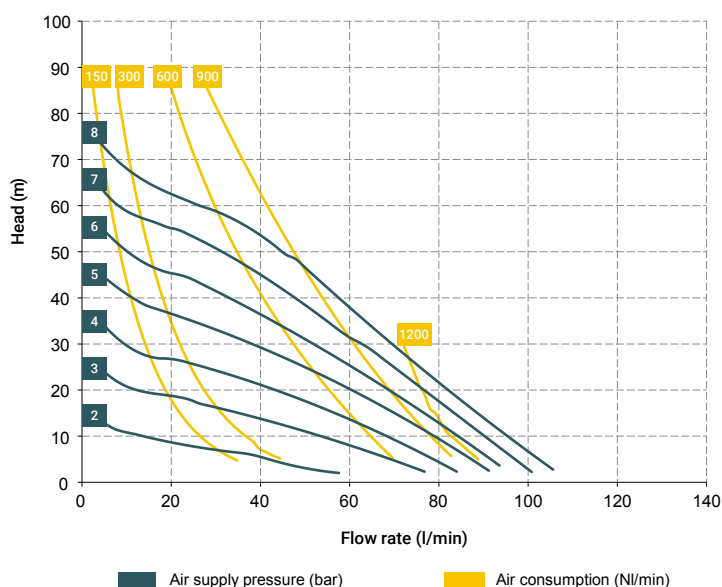
AIR-OPERATED DOUBLE DIAPHRAGM PUMPS



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 IIIB T135°C Db X - Ex h IIB T4 Gb - Ex h 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 100
- (For the dampener materials refer to the relative technical sheet)
- Truck model 01

Foot valve:

- 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-B081P (POLYPROPYLENE)
- KITFLANG-B081F (PVDF)
- KITFLANG-B080A (AISI 316)
- KITFLANG-B081AL (ALUMINIUM)

T20 distributor material (pneumatic circuit):

- POM

Central material:

- Polypropylene (with glass additive)
- Conductive polypropylene (with carbon additive)
- Aisi 316
- Aluminum
- DUPLEX/S.DUPLEX

Diaphragm materials:

- PTFE
- HYTREL
- SANTOPRENE
- NBR
- EPDM

Caps materials:

- Polypropylene (with glass additive)
- Conductive polypropylene (with carbon additive)
- PVDF
- PPS
- AISI 316

Balls materials:

- PTFE
- AISI 316
- EPDM
- NBR

O-ring materials:

- EPDM
- NBR
- VITON®
- PTFE

Package:

cardboard box – cm 24 x 39 x 37 – weight 1.2 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.

MAIN APPLICATION SECTORS



AUTOMOTIVE



PRODUCTION AND STORAGE OF BIO DIESEL



WATER AND SLUDGE TREATMENT



CHEMICAL INDUSTRY



OIL & GAS



GRAPHIC INDUSTRY



CERAMIC, STONE, MARBLE GLASS AND MINING INDUSTRY



PAINT INDUSTRY



GOLD PROCESSING INDUSTRY



PACKING, GLUE, PAPER AND PAPER MILLS



TEXTILE AND LEATHER INDUSTRY



MECHANICAL AND METALLURGIC INDUSTRY



GALVANIC AND ELECTRONIC INDUSTRY

BOXER 81 / BOXER 90

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 IIIB T135°C Db X - Ex h IIB T4 Gb - Ex h IIIB T135°C Db

BOXER PUMPS CODES ENCODING

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-	P	H	T	T	P	V	-	-
INTERNAL DISTRIBUTOR	PUMP MODEL	DAMPER PUMP	AIR-SIDE DIAPHRAGM	PRODUCT-SIDE DIAPHRAGM	BALLS	BALL SEATS	O-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 252 B502 Boxer 502 B522 Boxer 522 B503 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*

*X = split manifold

*3 = 3° central hole on manifold

*Y = "NPT" thread

*J = spacer on shaft

*W = clamp manifold

(all only on request)

C = version CONDUCT for standard ATEX ZONE 1 Ex II 2/2GD c IIB T135°C

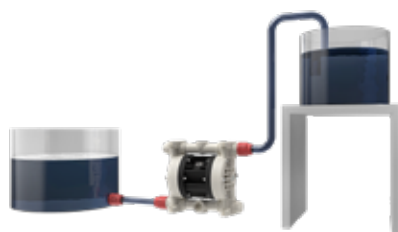
Z = version for standard IECEx

(both only on request)

SELF-PRIMING USE



UNDER HEAD USE



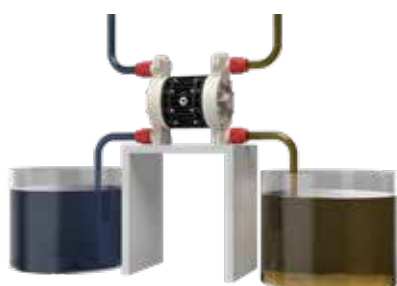
IMMERSED



DRUM TRANSFER



SPLIT SUCTION and DELIVERY



SPLIT SUCTION

