

# DIAPHRAGM PUMPS

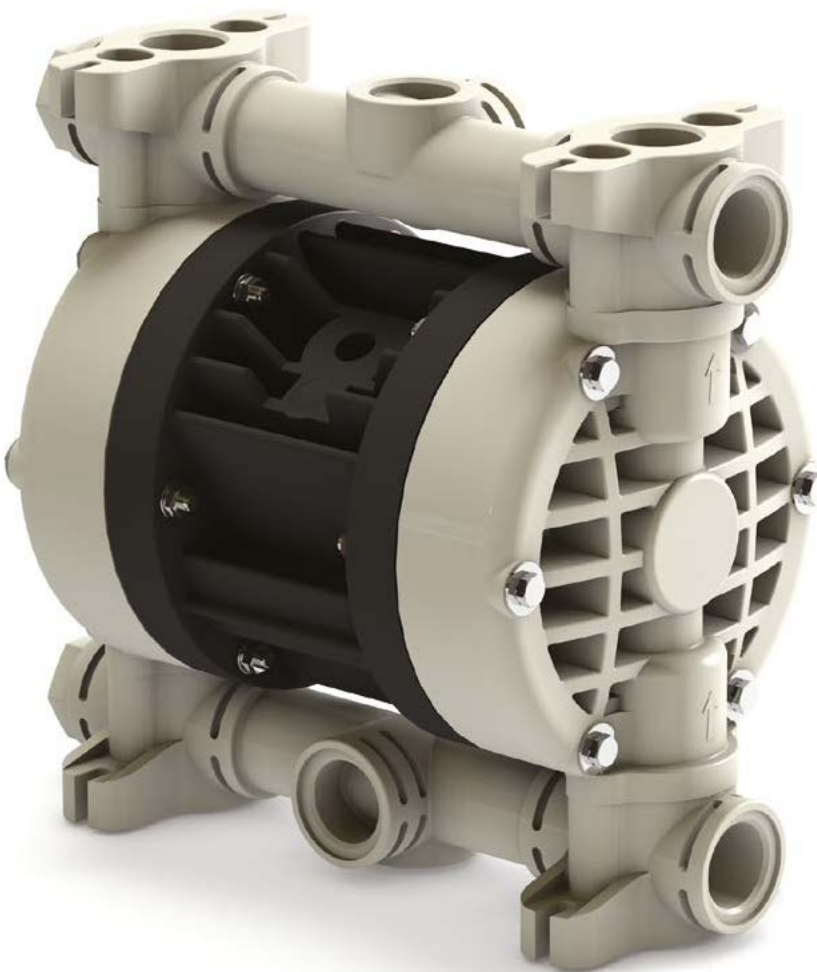
# BOXER 81




MADE IN ITALY



- **Product of Italian origin**
- **Patented** stall protection pneumatic circuit
- Works with **non**-lubricated air
- **Self priming**
- Idles without damage
- Possibility of adjusting the pumping speed
- Versatility of use
- Broad choice of materials that are compatible with the fluid to be pumped
- Particularly suitable for heavy duty applications
- Atex zone 1 (*on request*) - Atex zone 2 standard
- Customisable suction/delivery fitting position (*on request*)
- Available with reinforcement rings (*on request*)
- Available with NPT fittings (*on request, only for stainless steel pumps*)
- Available with clamp / din connections (*on request, only for stainless steel pumps*)
- Diaphragms with "long life" profile
- Diaphragms in various materials
- Suitable for pumping high viscosity fluids
- High performance
- High power and sturdiness
- Continuous operation: YES
- Warranty: 1 year - according to our general conditions of sale
- Spare parts: to identify the spare parts check the exploded views provided at the end of the operation and maintenance manual



 **STANDARD:** II 3/3 GD c IIB T135°C (zone 2)  
**CONDUCT:** II 2/2 GD c IIB T135°C (zone 1)

**Intake/delivery connections** G 1" f o DN 25 (\*) - flow rate 100 l/min

**Construction materials** PP - PP+CF - PVDF - Alu - AISI316

(\*) NPT connections on request

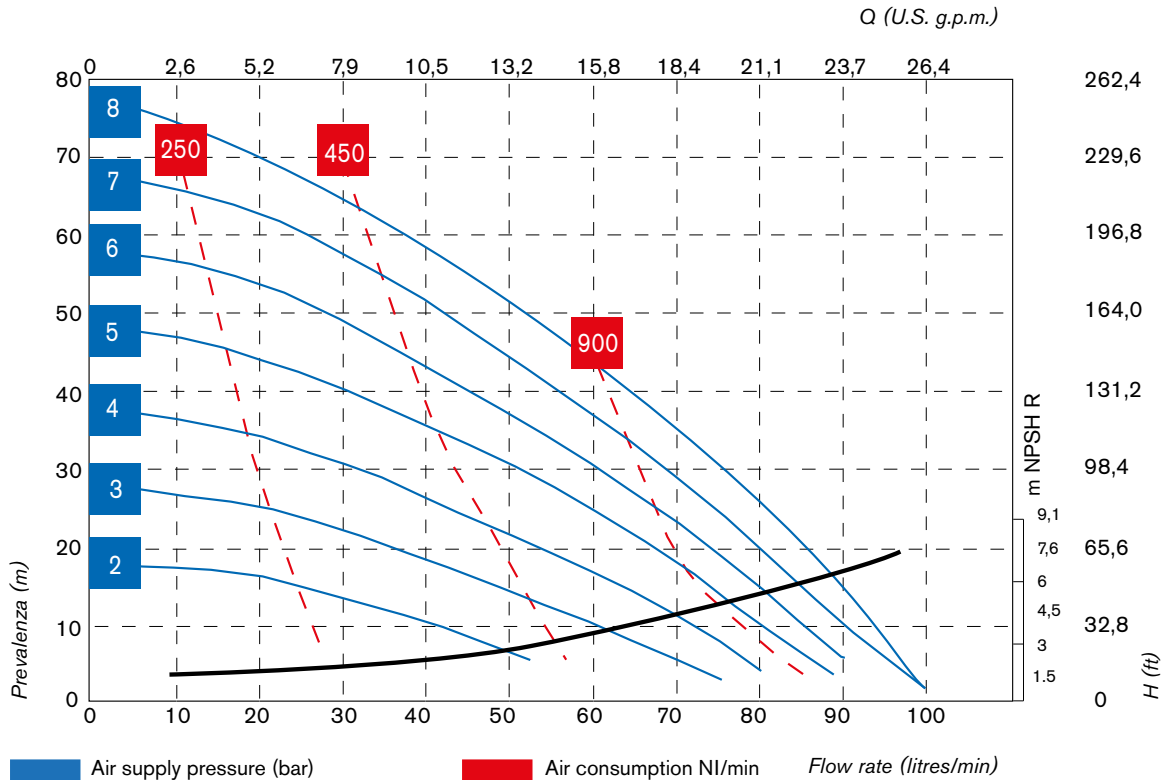


# DIAPHRAGM PUMPS

## BOXER 81



**Ex** STANDARD: II 3/3 GD c IIB T135°C (zone 2)  
 CONDUCT: II 2/2 GD c IIB T135°C (zone 1)



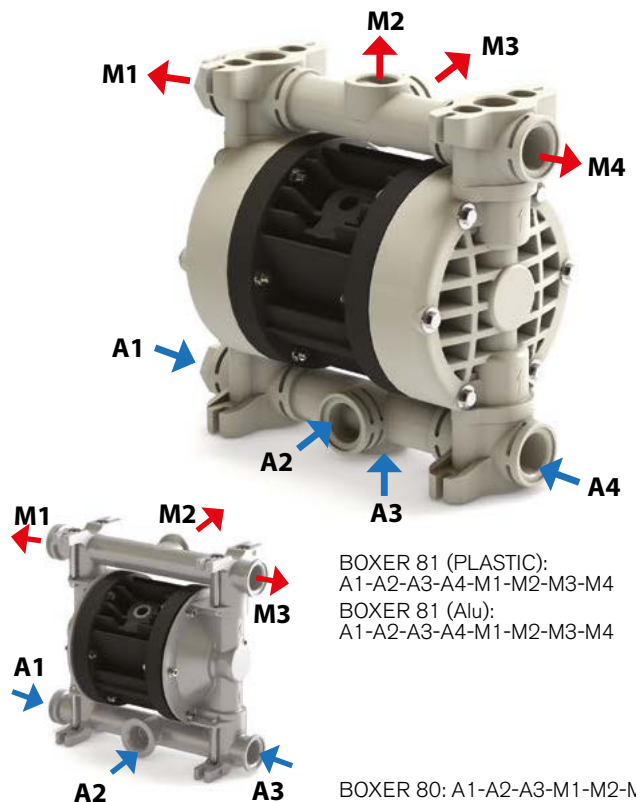
\* The curves and performance values refer to pumps with submerged suction and a free delivery outlet with water at 20°C, and vary according to the construction material. \*\* Attention: the average values of the various configurations of materials by ball and ball seats. \*\*\* The value depends on the configuration of the pump.

Guaranteed head/flow rate according to ISO 9906

|  |                    |  |  |
|--|--------------------|--|--|
| <b>Intake/delivery connections</b>     | G 1" f o DN 25 (*) |  |  |
| <b>Air connection</b>                  | G 3/8" f           |  |  |
| <b>Max. flow rate*</b>                 | 100 l/min          |  |  |
| <b>Max. air supply pressure</b>        | 8 bar              |  |  |
| <b>Max. head*</b>                      | 80 m               |  |  |
| <b>Max. self-priming capacity**</b>    | 4 m                |  |  |
| <b>Max. stored neg. suction</b>        | 9,5                |  |  |
| <b>Max. diameter of passing solids</b> | 4 mm               |  |  |
| <b>Noise***</b>                        | 70 dB              |  |  |
| <b>Displacement per cycle</b>          | 100 cc             |  |  |
| <b>Max. viscosity</b>                  | 25.000 cps         |  |  |

(\*) NPT connections on request

|  |       |        |                |           |
|--|-------|--------|----------------|-----------|
| <b>Construction materials and net weight</b> | PP    | 5 Kg   | Temp. 3°C min. | 65°C max. |
|  | PP+CF | 5 Kg   | Temp. 3°C min. | 65°C max. |
|  | PVDF  | 6,5 Kg | Temp. 3°C min. | 95°C max. |
|  | Alu   | 6,5 Kg | Temp. 3°C min. | 95°C max. |



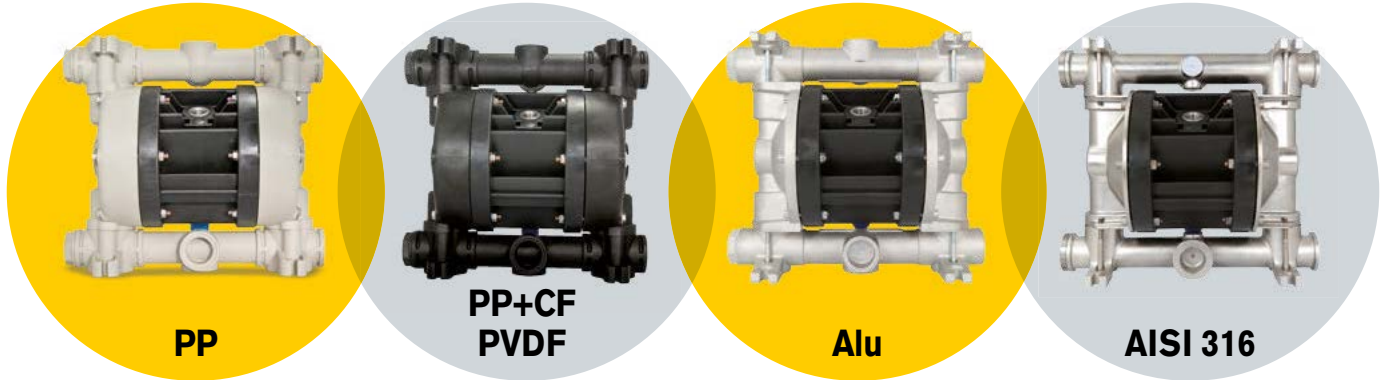
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# BOXER 81

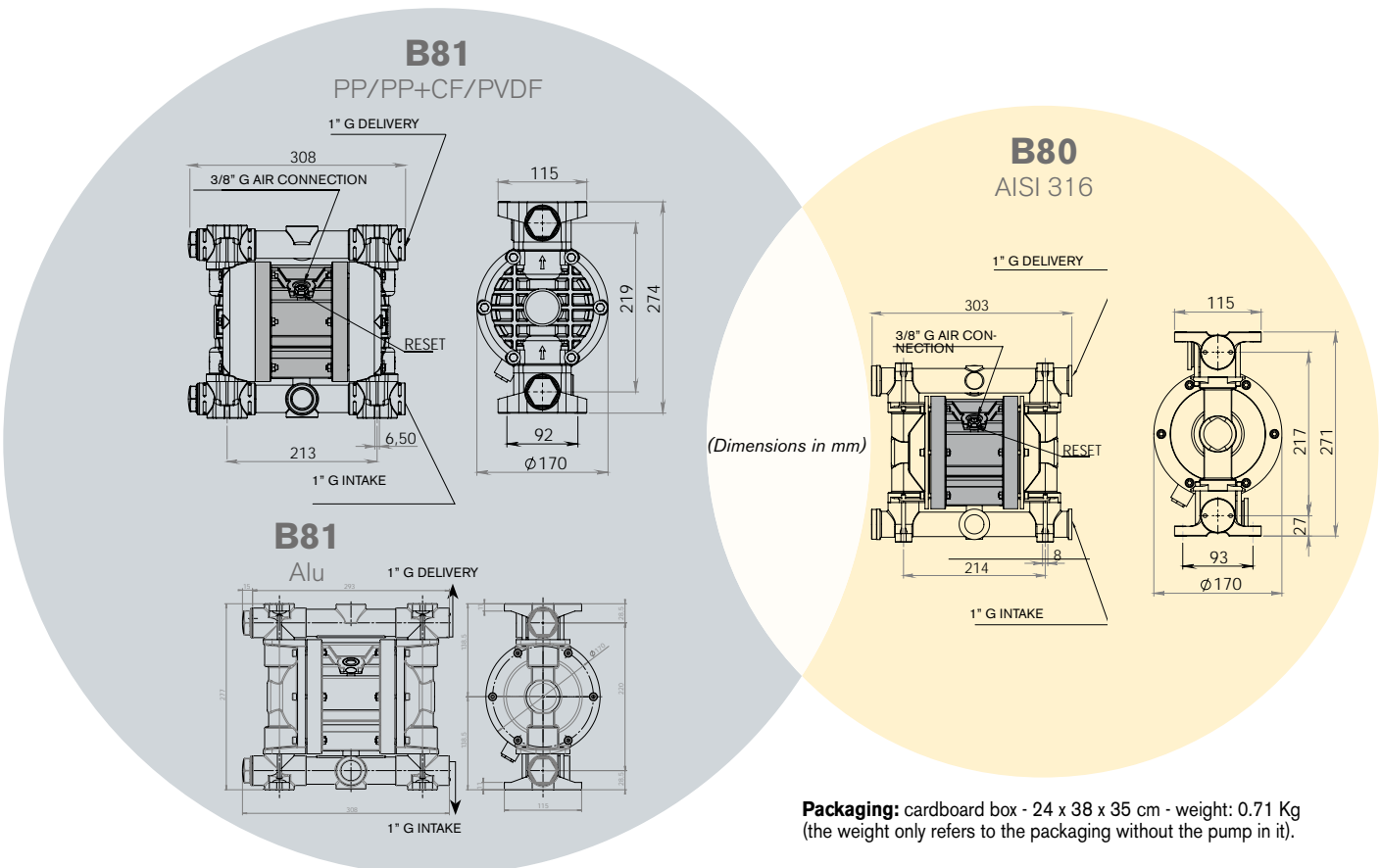
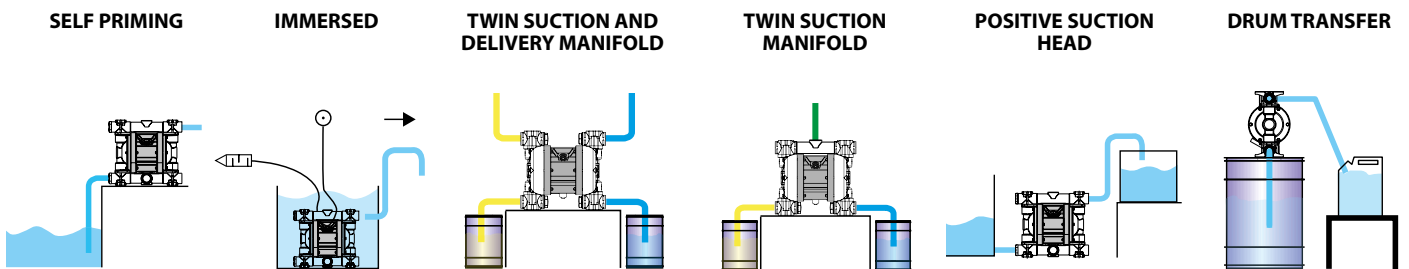


**Ex** STANDARD: II 3/3 GD c IIB T135°C (zone 2)  
 CONDUCT: II 2/2 GD c IIB T135°C (zone 1)

## AVAILABLE MATERIALS



## INSTALLATION



# DIAPHRAGM PUMPS

# BOXER 81



**Ex** STANDARD: II 3/3 GD c IIB T135°C (zone 2)  
 CONDUCT: II 2/2 GD c IIB T135°C (zone 1)

## BOXER COMPOSITION CODE

ex. **IB81 - P - HT - T - P - V**

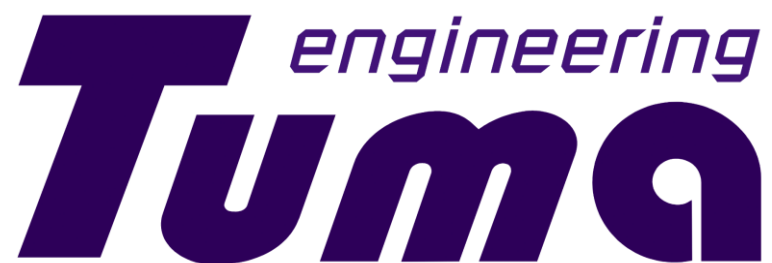
Internal Exchanger, Boxer 81, body PP, air side diaphragm Hytrel, fluid side diaphragm PTFE, balls PTFE, ball seats PP, O-Ring in Viton.

| I                  | B81 -          | P -  | H   | T                    | T   | P   | V  | -             | -               |
|--------------------|----------------|--|---|----------------------|---|---|--|---------------|-----------------|
| INTERNAL EXCHANGER | PUMP MODEL     | PUMP BODY  | AIR SIDE DIAPHRAGM                                  | FLUID SIDE DIAPHRAGM | BALLS   | BALL SEATS  | O-RING                                       | TWIN MANIFOLD | CONDUCT VERSION |
| I                  | B81 - Boxer 81 | P - PP<br>PC - PP + CF<br>FC - PVDF + CF<br>AL - Alu<br>A - AISI 316 | H - Hytrel<br>M - Santoprene<br>D - EPDM<br>N - NBR | T - PTFE*            | T - PTFE<br>A - AISI 316<br>D - EPDM<br>N - NBR | P - Polypropylene<br>F - PVDF<br>A - AISI 316<br>L - Alu<br>I - HMWHDPE | T - PTFE<br>D - EPDM<br>V - Viton<br>N - NBR | X             | C               |

\*) Cover diaphragms (only on Hytrel and Santoprene diaphragms) cannot be fitted individually.

## PRODUCT APPLICATION





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