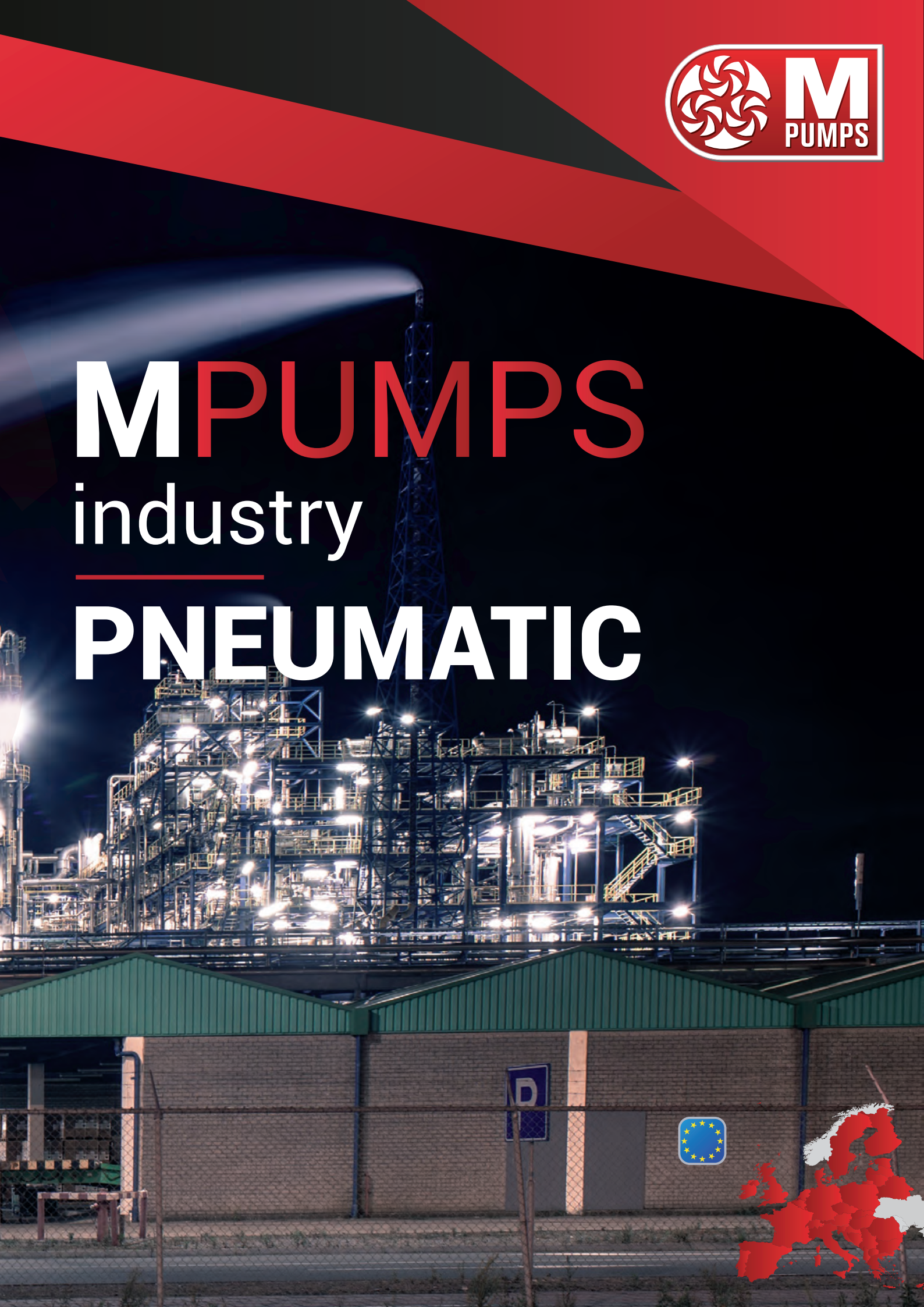
MPUMPS
industry
PNEUMATIC



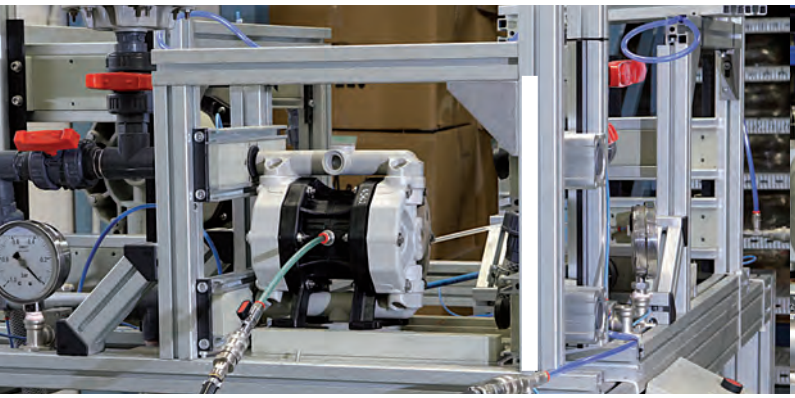
M PUMPS INDUSTRY provides to its customers a full range of quality centrifugal, magnetic drive pumps and pneumatic pumps to satisfy the requirements of the industry processing, chemical processing, pharmaceutical and other industries.

M PUMPS PROCESS pumps are designed and manufactured entirely in our premises with a stringent quality control before delivered to customers. The extreme attention to cost containment allowed to search for appropriate solutions for pumping and to develop a patented system (Hybrid rear containment shell) that reaches the highest levels in this field.

M PUMPS PROCESS produces a unique and important product in the market.

All our products are carefully tested to meet the harshest working conditions of the chemical, textile, food, ecologic, graphic, tanning, ceramics, electronic, galvanic, oil production, petrochemical and paints industries.

M PUMPS INDUSTRY is now able to offer the highest quality products at competitive prices, increasing day by day the trust of new clients.



CERTIFICATES

CE CONFORMITY MARKING

ATEX

ISO 9001:2008

GOST-R RUSSIA

FDA COMPLIANT

EC 1935/2004 CONFORMITY

EAC CONFORMITY MARKING

PRODUCTS

Air operated double diaphragm pumps have long been recognized as the most flexible pumps of the industry for handling difficult liquids at relatively low pressures and flows. The range of applications is virtually limitless. MPUMPS AODD pumps come in many sizes and choices of materials of construction. Almost every type of liquid from highly corrosive acids through high viscosity paints and adhesives, to food and drink products can be pumped.

Boa

Air operated double diaphragm pumps Realized in:
PP, PVDF, ALUMINIUM, SS AISI 316, POMc
Flow-rate from 8 lt/min to 1.000 lt/min
Connection from ¼" to 3".

Boa Food

Air operated double diaphragms pumps
Realized in:
SS AISI 316 electro-polished and PP food grade (P7)
Flow-rate from 8lt/min to 1.000 lt/min
Tri-Clamp Connection.

Boa Atex

Air operated double diaphragms pumps, ATEX certified for zone 1. Realized in:
PP+CF, PVDF+CF, ALUMINIUM,
SS AISI 316, POMc+CF
Flow-rate from 8lt/min to 1.000 lt/min
Connection from ¼" to 3".

Boa Accurate

Double diaphragm pumps with remote control
Realized in:
PP, PVDF, ALUMINIUM, SS AISI 316, POMc
Flow-rate from 8 lt/min to 700 lt/min
Connection from ¼" to 2".

Boa Drum

Air operated double diaphragms pumps with special Features to empty drums and tanks
Realized in:
PP, PVDF, ALUMINIUM, SS AISI 316, POMc
Flow-rate from 8 lt/min to 160 lt/min
Connection from ¼" to 1".

Boa Twin

Air operated double diaphragms pumps with special Features with double inlet/outlet
Realized in:
PP, PVDF, ALUMINIUM, SS AISI 316, POMc
Flow-rate from 8 lt/min to 700 lt/min
Connection from ¼" to 2".

Damper

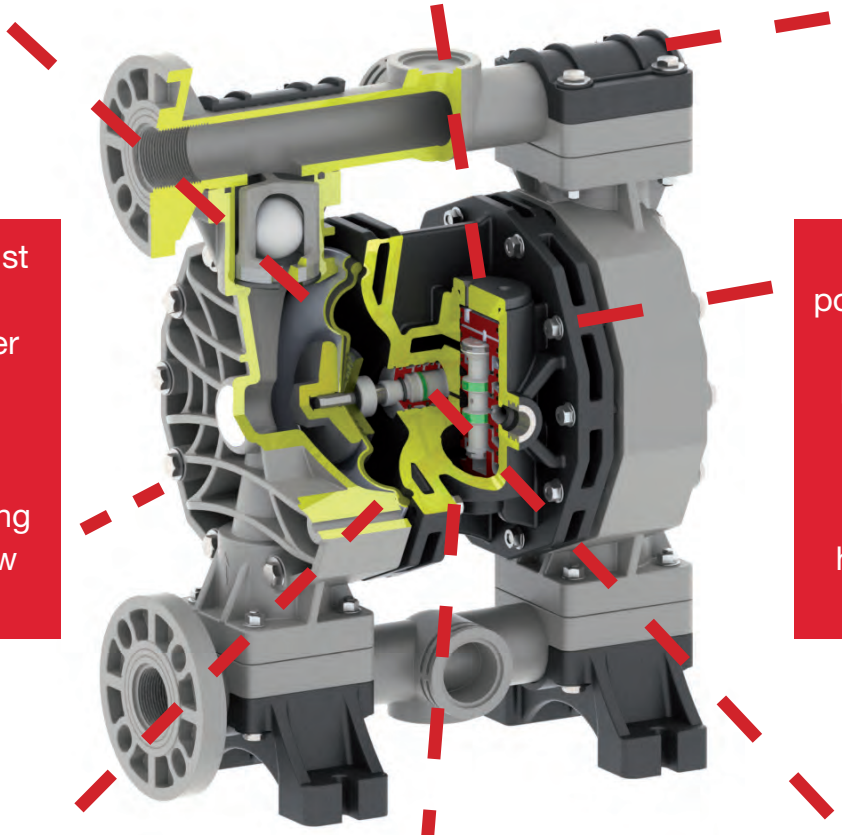
Pneumatic, automatic pulsation dampeners. Realized in:
PP, PVDF, ALUMINIUM, SS AISI 316, POMc
Applicable to all size of pumps.
Available also in ATEX or FOOD version.

TECHNICAL FEATURES

Un-balanced pilot spool, precisely controls positioning of the main power spool to eliminate stalling and increase efficiency

Long-lasting diaphragm construction ensures a consistent performance and a longer operating life

All bolted design for an effective sealing to extended leak-proof service



Special exhaust chamber with double silencer to expand diffusion passages, reduce the icing and assure low noise level

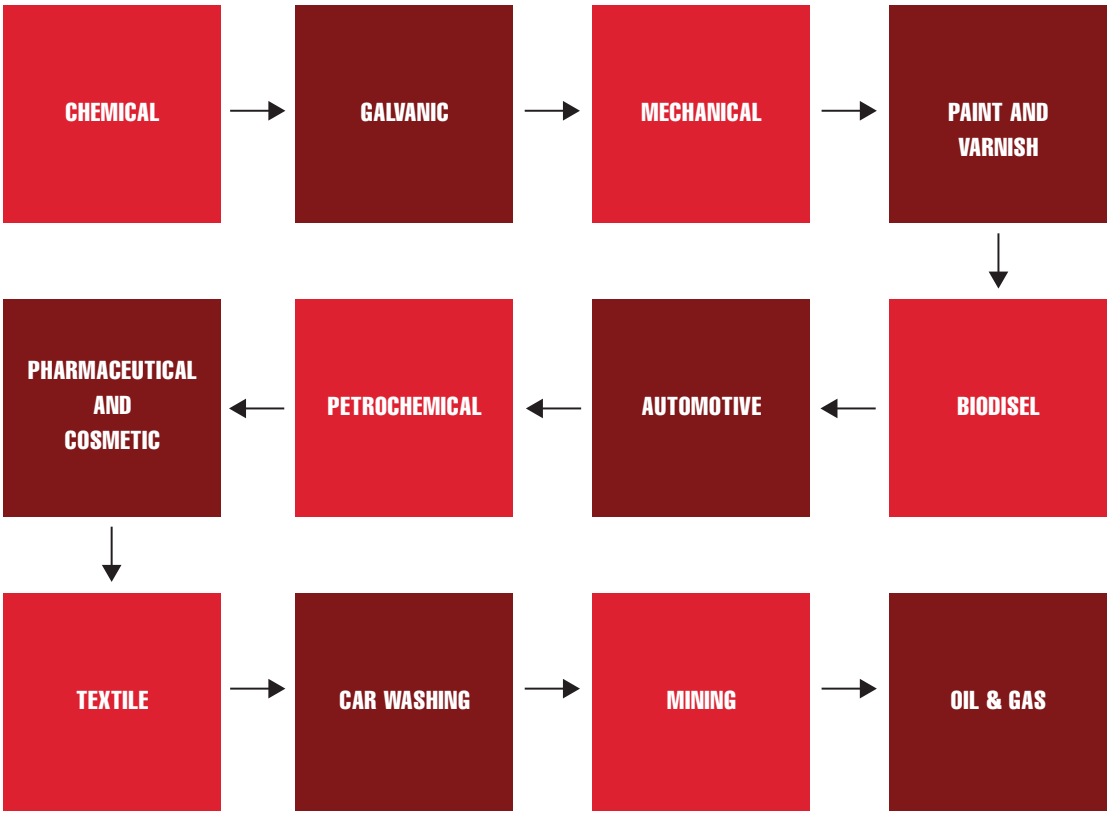
Solid polypropylene air chambers and plastic air valve for maximum chemical resistance in highly corrosive environments

Special pinch clamping, design to minimize wear e increase life of the diaphragm, and provides a uniform seal to avoid leak

Acetalic shuttle ensures long valve life, auto-lubricated material

Pneumatic exchanger is easily externally accessible for a quick inspection

M PUMPS products can be installed in many application in different industries.



Installation

Pump installed below head (positive suction)

(when it is necessary to empty completely the container)

Self priming pump installed above head (negative suction)

(pump initially work with dry column without problem)

Pump installed above drum or tank

(with special featuring pump)

Pump installed on hopper for high viscosity liquid

(hopper's height helps the pump to treat the fluid. Air pressure has to be high, Suction tube has to be bigger than pump size)

Submerged pump

(it is necessary to check the chemical compatibility)

Suspended

special version with fixing feet also in the upper part, for ceiling fixing

Pump installed on a mobile unit

(with a trolley or cart when pump must be often moved)

CODES

Q	0160	P-	HT	T	P	V	1	-	AB
MODEL OF PUMP	SIZE	CASING MATERIAL	DIAPHRAGMS	BALLS MATERIAL	BALL SEATS MATERIAL	GASKET MATERIAL	CONNECTIONS	ATEX ZONE CERTIFICATION	PORTS CONNECTION

Pump selection

To select the right **MPUMPS** for your application, the following factors should be considered to achieve economy of operation, long pump life, and minimal maintenance costs:

- The nature of the medium to be pumped, its viscosity, and the solids content
- Pumping capacity in relation to the desired output
- Suction and pressure conditions

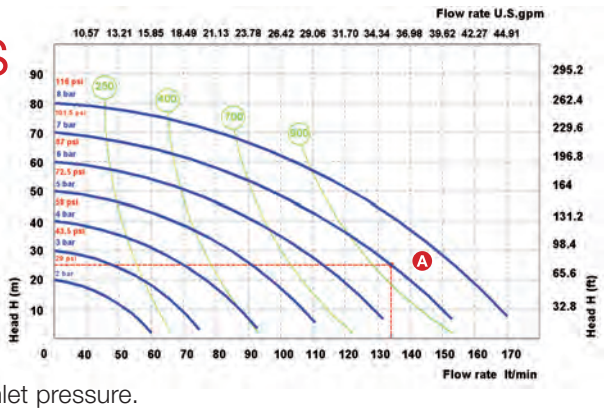
Considering these parameters, an optimal pump size is selected when the intersection of the intended installation “pressure vs. flow rate” is near the middle section of the curves.

Using Performance Curves

To determine compressed air requirements and proper size for a **MPUMPS** AODD pump, two elements of information are required:

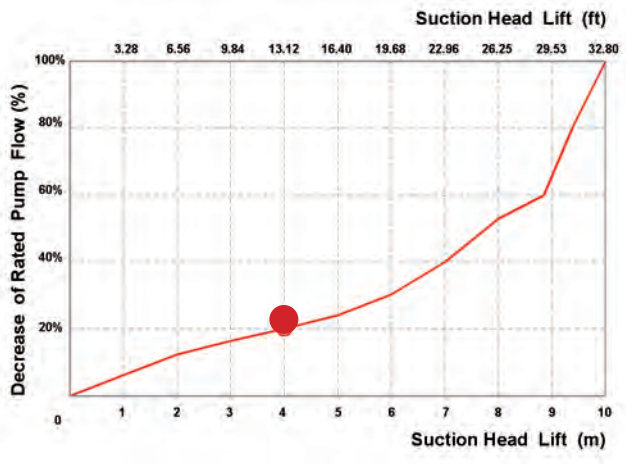
1 Required Flow Rate
2 Total Delivery Head

As an example, consider a P160 pump performance curve, pumping about 135 l/min at 25m.
Point A on the performance curve is where the desired Flow Rate and Total Delivery Head points intersect. This point determines compressed air requirements for the particular pump.



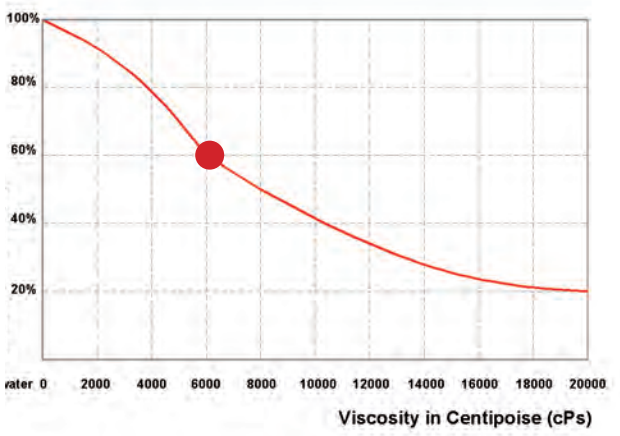
At performance point A, the pump will require approximately 7 bar air inlet pressure.
To arrive at this figure, follow the solid blue curve to the left to read the air pressure rating in BAR.
By looking at the nearest green curve, it is determined the pump will require approximately 900 nl/min (Normal Liter per minute) of air consumption.

Specified Suction Lift



With a suction lift of 4 m, pump rate decreases by approximately 20%. Valid for pumps 3/4” and larger; data varies with pump configuration.

Viscous Liquids Performance Data



During the conveyance of a fluid with a viscosity of 6000cPs, the pump rate decreases to 60% of its rated value (100% = water). Valid for 3/4” pumps & larger.

PUMP CASING

Materials

Polypropylene — P

Polypropylene: Wide chemical compatibility. General purpose.

Polypropylene+CF — PC

Conductive Polypropylene: Wide chemical compatibility. General purpose. Groundable.

PVDF+CF — KC

Conductive PVDF: Strong chemical resistance to acids. High temperature resistance. Groundable.

POMc — O

Acetal: Wide range of solvent and hydrocarbons resistance. Good level of abrasion resistance.

POMc+CF — OC

Conductive Acetal: Wide range of solvent and hydrocarbons. Good level of abrasion resistance. Groundable.

Aluminium — A

Aluminium: Wide range of solvent and hydrocarbons. Good level of abrasion resistance.

SS - AISI 316 — S

Stainless Steel AISI 316: High level of corrosion and abrasion resistance.

SS – AISI 316 Electropolished — S

SS – AISI 316 Electropolished: High level of corrosion and abrasion resistance. Food Version.

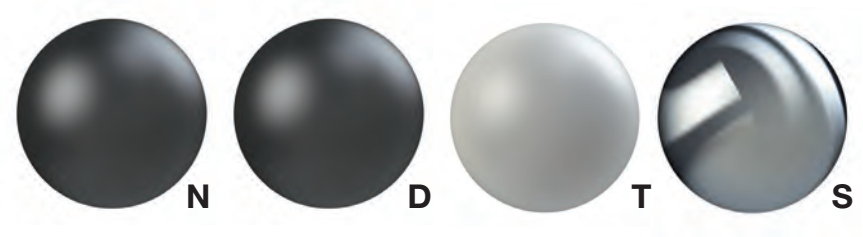
MATERIALS

Diaphragm

NBR: Good for petroleum-based fluids, water, oils, hydrocarbons and MILD chemicals.
EPDM: OK with caustic solutions, dilute acids, ketones and alcohols. Good abrasion resistance.
PTFE: Widest chemical compatibility, extreme corrosion resistance, non-adhesive, high heat resistance.
HYTREL: Good low temperature properties. Good abrasion resistance.
SANTOPRENE: solutions and dilute acids.

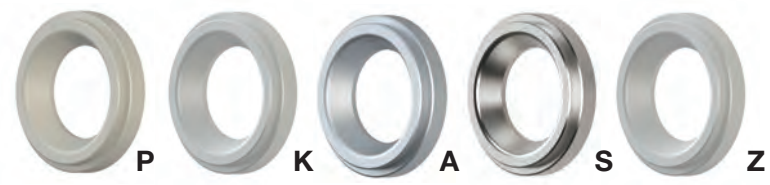
Ball Check

NBR: Good for petroleum-based fluids, water, oils, hydrocarbons and MILD chemicals.
EPDM: OK with caustic solutions, dilute acids, ketones and alcohols. Good abrasion resistance.
PTFE: Widest chemical compatibility, extreme corrosion resistance, non-adhesive, high heat resistance.
SS: High level of corrosion and abrasion resistance. Good for viscous fluids.



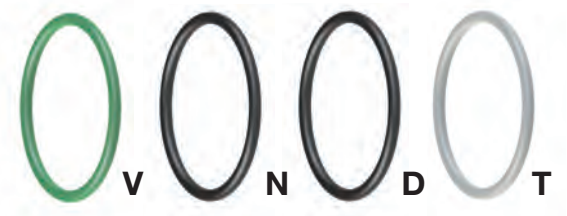
Seat

POLYPROPYLENE: Wide chemical compatibility. General purpose.
PVDF: Strong chemical resistance to acids. High temperature resistance.
ALUMINUM: Wide range of solvent and hydrocarbons. Good level of abrasion resistance.
SS: High level of corrosion and abrasion resistance.
PE: with high molecular weight: High level of abrasion resistance



Orings

VITON: High heat resistance. Good resistance to aggressive chemicals and hydrocarbons.
NBR: Good for petroleum-based fluids, water, oils, hydrocarbons and MILD chemicals
EPDM: OK with caustic solutions, dilute acids, ketones and alcohols. Good abrasion resistance.
PTFE: Widest chemical compatibility, extreme corrosion resistance, non-adhesive, high heat resistance.



BOA

M PUMPS

Air operated double diaphragms pumps
Realized in:
PP, PVDF, ALUMINIUM, SS AISI 316, POMc
Flow-rate from 8lt/min to 1.000 lt/min
Connection from ¼" to 3".
ATEX certification for zone 2
EX II 3/3 GD c IIB T135°C

BOAQ8

Composition

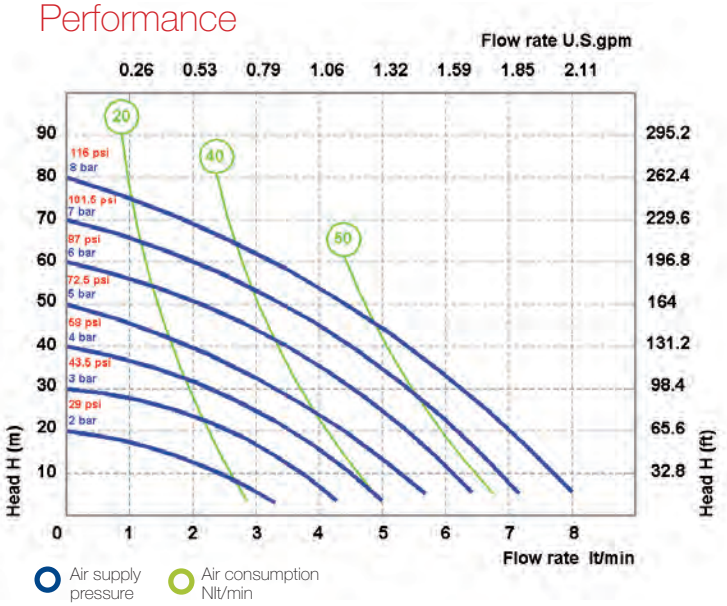
MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
BOAQ8	**P** = PP **KC** = PVDF+CF **O** = POMc	**NT** = NBR+PTFE	**T** = PTFE **S** = SS	**P** = PP **K** = PVDF **O** = POMc	**D** = EPDM **V** = VITON **N** = NBR **T** = PTFE	**1** = BSP **5** = NPT	**-** = zone 2	**AB** = STANDARD

Technical data

Fluid connections:	1/4" BSP
Air connection:	4 mm
Max flow-rate:	8 lt/min
Max air pressure:	8 bar
Max delivery head:	80 m
Max Suction Lift Dry:	3 m
Max Suction Lift Wet:	9,8 m
Max Solid passing:	2,5 mm
Noise level:	62 dB
Max Viscosity:	6.000 cps

EX II 3/3 GD c IIB T 135°C

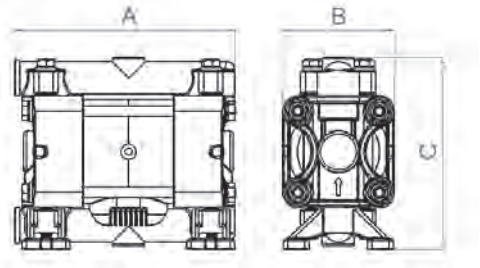
Performance

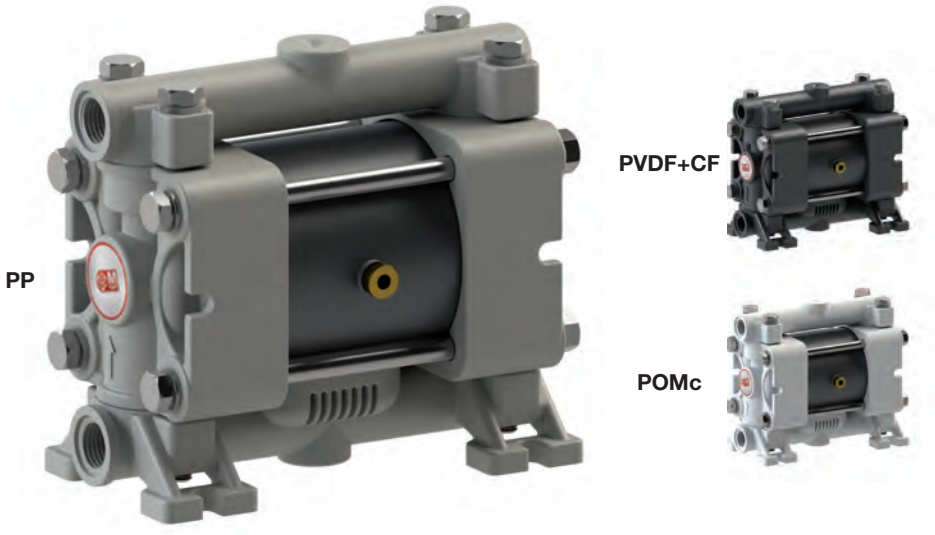


The curves and performance values refer to pumps with submerged suction and a free delivery outlet with water at 20°C, and vary according to the construction material.

Dimensions

	PP	PVDF	POMc
A (mm)	129	129	129
B (mm)	68	68	68
C (mm)	112	112	112
Weight kg	0,7	0,9	0,9
MAX Temperature	65°C	95°C	80°C
MIN Temperature	-4°C	-20°C	-5°C





PP

PVDF+CF

POMc

BOAQ20

Composition

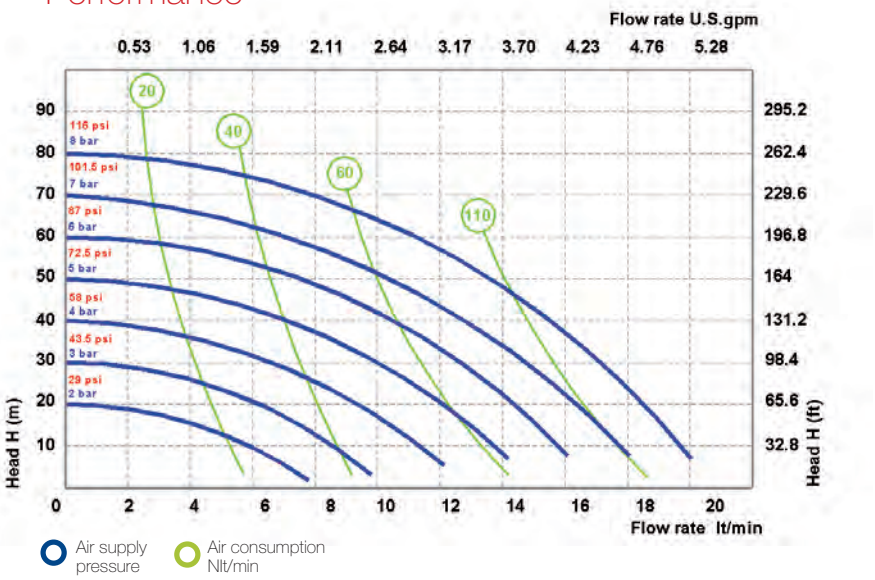
MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
BOAQ20	**P** = PP **KC** = PVDF+CF **O** = POMc **S** = SS	**HT** = HYTREL+PTFE **MT** = SANTOPRENE+PTFE **H** = HYTREL **M** = SANTOPRENE	**T** = PTFE **S** = SS **D** = EPDM **N** = NBR	**P** = PP **K** = PVDF **O** = POMc **S** = SS **Z** = PE-UHMWE	**D** = EPDM **V** = VITON **N** = NBR **T** = PTFE	**1** = BSP **2** = FLANGED **5** = NPT	**-** = zone 2	**AB** = STANDARD

Technical data

Fluid connections:	3/8” BSP
Air connection:	6 mm
Max flow-rate:	20 lt/min
Max air pressure:	8 bar
Max delivery head:	80 m
Max Suction Lift Dry:	6 m
Max Suction Lift Wet:	9,8 m
Max Solid passing:	3 mm
Noise level:	65 dB
Max viscosity:	12.000 cps

EX II 3/3 GD c IIB T 135°C

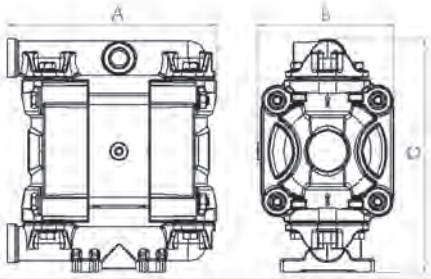
Performance



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.

Dimensions

	PP	PVDF	POMc	AISI 316
A (mm)	146	146	146	148
B (mm)	96	96	96	92
C (mm)	164	164	164	153
Weight kg	1,1	1,4	1,1	2,1
MAX Temperature	65°C	95°C	80°C	95°C
MIN Temperature	-4°C	-20°C	-5°C	-20°C



PP

PVDF+CF

POMc

AISI 316

BOAQ35

Composition

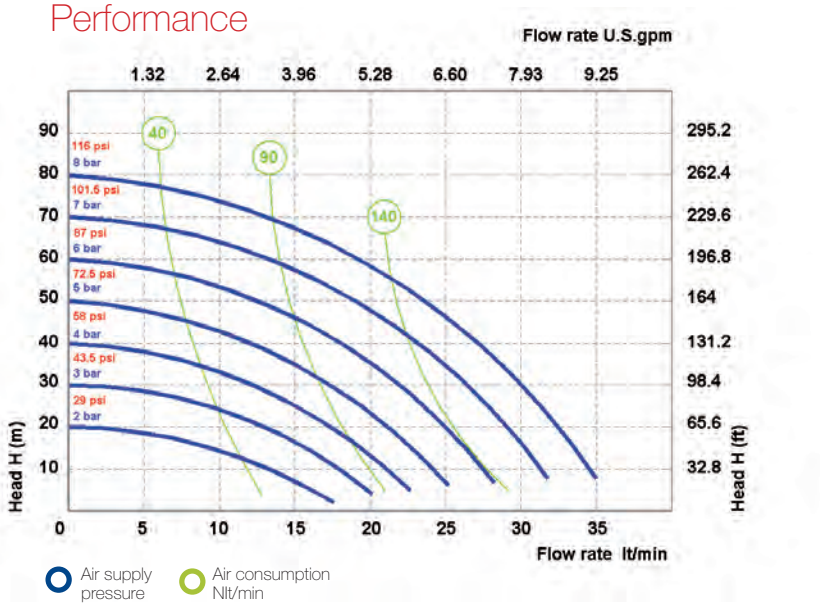
MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
BOAQ35	**P** = PP **KC** = PVDF+CF **O** = POMc **S** = SS	**HT** = HYTREL+PTFE **MT** = SANTOPRENE+PTFE **H** = HYTREL **M** = SANTOPRENE	**T** = PTFE **S** = SS **D** = EPDM **N** = NBR	**P** = PP **K** = PVDF **O** = POMc **S** = SS **Z** = PE-UHMWE	**D** = EPDM **V** = VITON **N** = NBR **T** = PTFE	**1** = BSP **2** = FLANGED **5** = NPT	**-** = zone 2	**AB** = STANDARD

Technical data

Fluid connections:	1/2" BSP
Air connection:	6 mm
Max flow-rate:	35 lt/min
Max air pressure:	8 bar
Max delivery head:	80 m
Max Suction Lift Dry:	5 m
Max Suction Lift Wet:	9,8 m
Max Solid passing:	3,5 mm
Noise level:	65 dB
Max Viscosity:	15.000 cps

EX II 3/3 GD c IIB T 135°C

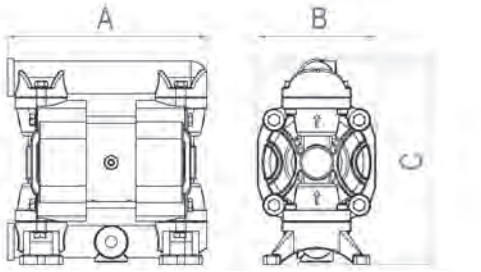
Performance



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.

Dimensions

	PP	PVDF	POMc	AISI
A (mm)	177	177	177	182
B (mm)	105	105	105	104
C (mm)	183	183	183	190
Weight kg	1,4	1,7	1,4	2,4
MAX Temperature	65°C	95°C	80°C	95°C
MIN Temperature	-4°C	-20°C	-5°C	-20°C



PP

PVDF+CF

POMc

AISI 316

BOAQ55

Composition

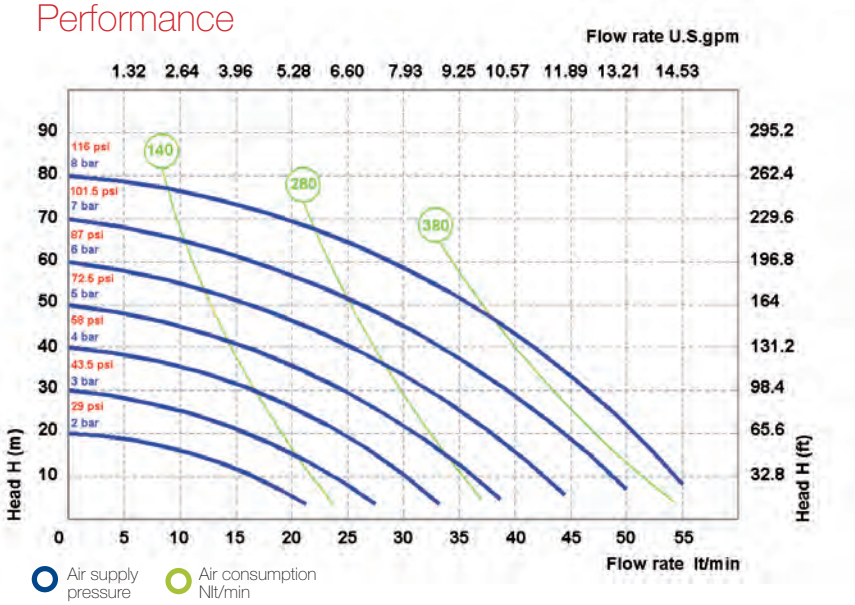
MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
BOAQ55	**P** = PP **KC** = PVDF+CF **A** = ALU **S** = SS	**HT** = HYTREL+PTFE **MT** = SANTOPRENE+PTFE **H** = HYTREL **M** = SANTOPRENE **D** = EPDM **N** = NBR	**T** = PTFE **S** = SS **D** = EPDM **N** = NBR	**P** = PP **K** = PVDF **A** = ALU **S** = SS **Z** = PE-UHMWE	**D** = EPDM **V** = VITON **N** = NBR **T** = PTFE	**1** = BSP **2** = FLANGED **5** = NPT	**-** = zone 2	**AB** = STANDARD

Technical data

Fluid connections:	1/2” BSP
Air connection:	1/4” BSP
Max flow-rate:	55 lt/min
Max air pressure:	8 bar
Max delivery head:	80 m
Max Suction Lift Dry:	6 m
Max Suction Lift Wet:	9,8 m
Max Solid passing:	3,5 mm
Noise level:	68 dB
Max Viscosity:	20.000 cps

EX II 3/3 GD c IIB T 135°C

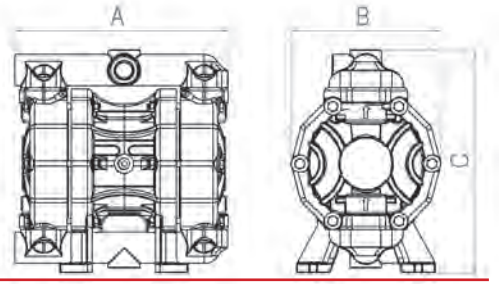
Performance

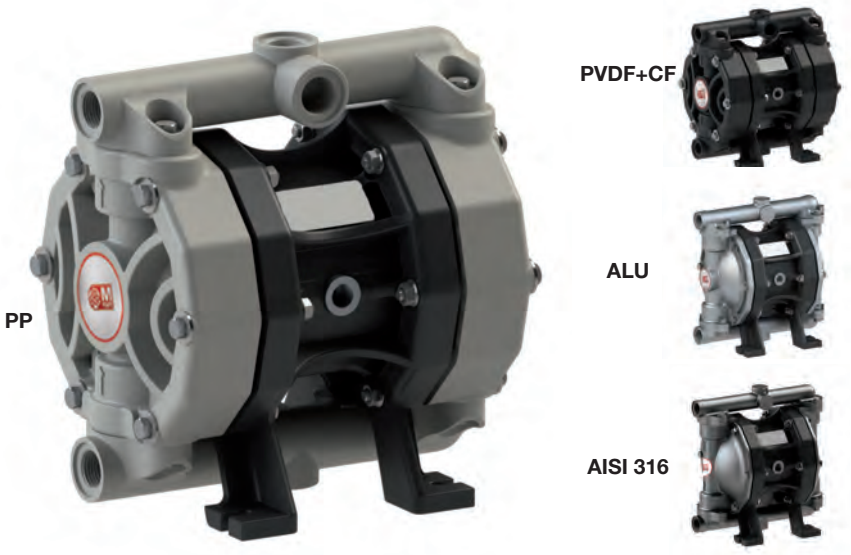


The curves and performance values refer to pumps with submerged suction and a free delivery outlet with water at 20°C, and vary according to the construction material.

Dimensions

	PP	PVDF	ALU	AISI
A (mm)	222	222	225	225
B (mm)	156	156	156	156
C (mm)	233	233	230	230
Weight kg	4	4,5	5	6
MAX Temperature	65°C	95°C	90°C	95°C
MIN Temperature	-4°C	-20°C	-20°C	-20°C





BOAQ70

Composition

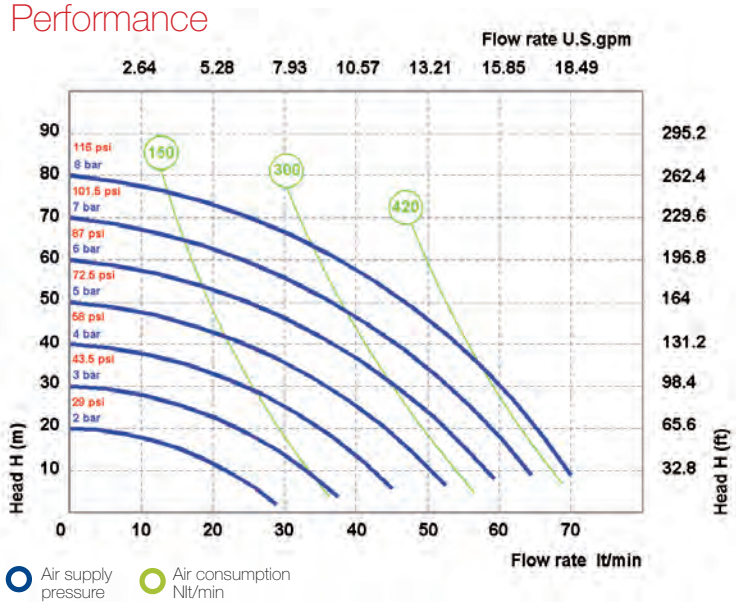
MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
BOAQ70	**P** = PP **KC** = PVDF+CF **A** = ALU **S** = SS	**HT** = HYTREL+PTFE **MT** = SANTOPRENE+PTFE **H** = HYTREL **M** = SANTOPRENE **D** = EPDM **N** = NBR	**T** = PTFE **S** = SS **D** = EPDM **N** = NBR	**P** = PP **K** = PVDF **A** = ALU **S** = SS **Z** = PE-UHMWE	**D** = EPDM **V** = VITON **N** = NBR **T** = PTFE	**1** = BSP **2** = FLANGED **5** = NPT	**-** = zone 2	**AB** = STANDARD

Technical data

Fluid connections:	1/2” BSP
Air connection:	3/8” BSP
Max flow-rate:	70 lt/min
Max air pressure:	8 bar
Max delivery head:	80 m
Max Suction Lift Dry:	6 m
Max Suction Lift Wet:	9,8 m
Max Solid passing:	3,5 mm
Noise level:	72 dB
Max Viscosity:	25.000 cps

EX II 3/3 GD c IIB T 135°C

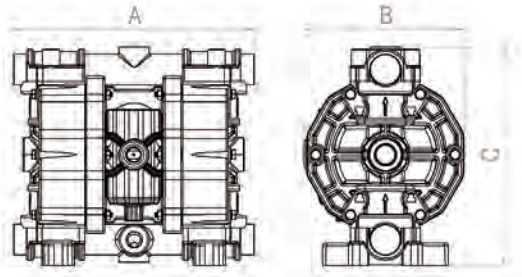
Performance

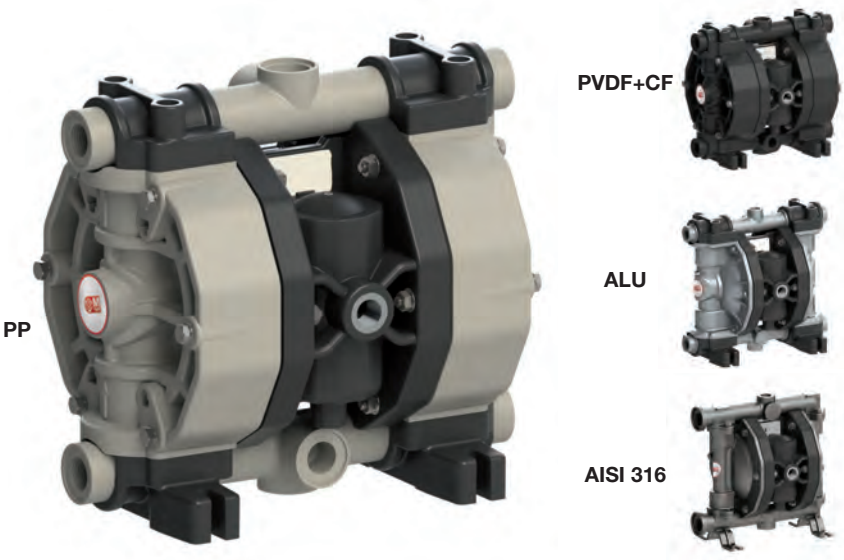


The curves and performance values refer to pumps with submerged suction and a free delivery outlet with water at 20°C, and vary according to the construction material.

Dimensions

	PP	PVDF	ALU	AISI
A (mm)	265	265	265	250
B (mm)	175	175	175	175
C (mm)	245	245	245	250
Weight kg	6,5	7	7	9
MAX Temperature	65°C	95°C	90°C	95°C
MIN Temperature	-4°C	-20°C	-20°C	-20°C





BOAQ110

Composition

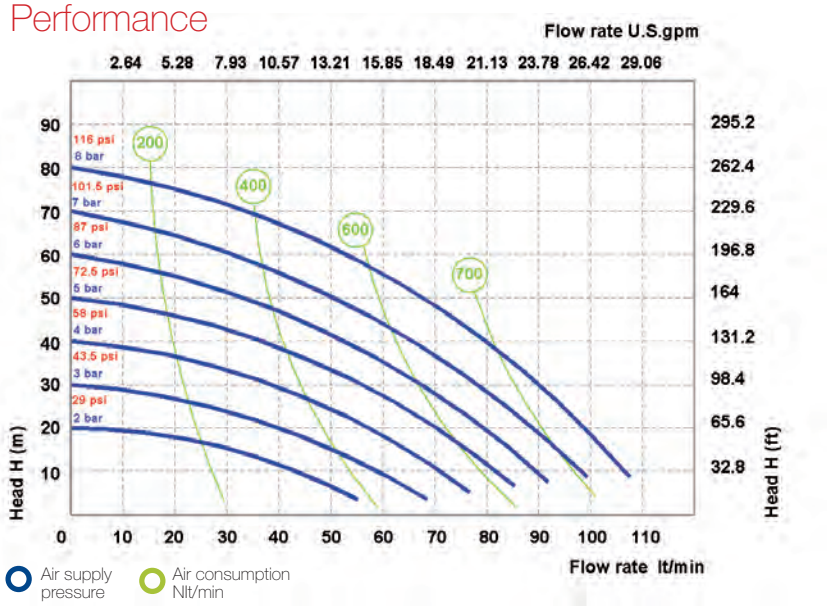
MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
BOAQ110	**P** = PP **KC** = PVDF+CF **A** = ALU **S** = SS	**HT** = HYTREL+PTFE **MT** = SANTOPRENE+PTFE **H** = HYTREL **M** = SANTOPRENE **D** = EPDM **N** = NBR	**T** = PTFE **S** = SS **D** = EPDM **N** = NBR	**P** = PP **K** = PVDF **A** = ALU **S** = SS **Z** = PE-UHMWE	**D** = EPDM **V** = VITON **N** = NBR **T** = PTFE	**1** = BSP **2** = FLANGED **5** = NPT	**-** = zone 2	**AB** = STANDARD

Technical data

Fluid connections:	3/4” BSP
Air connection:	3/8” BSP
Max flow-rate:	110 lt/min
Max air pressure:	8 bar
Max delivery head:	80 m
Max Suction Lift Dry:	6 m
Max Suction Lift Wet:	9,8 m
Max Solid passing:	3,5 mm
Noise level:	72 dB
Max Viscosity:	25.000 cps

EX II 3/3 GD c IIB T 135°C

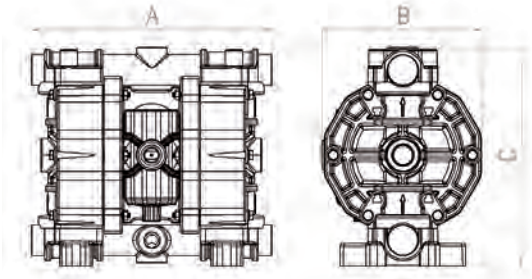
Performance

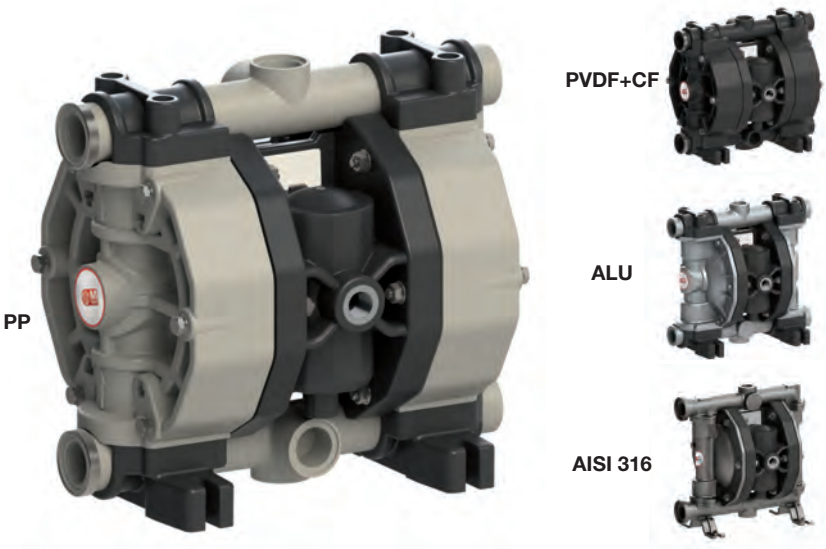


The curves and performance values refer to pumps with submerged suction and a free delivery outlet with water at 20°C, and vary according to the construction material.

Dimensions

	PP	PVDF	ALU	AISI
A (mm)	265	265	265	250
B (mm)	175	175	175	175
C (mm)	245	245	245	250
Weight kg	6,5	7	7	9
MAX Temperature	65°C	95°C	90°C	95°C
MIN Temperature	-4°C	-20°C	-20°C	-20°C





BOAQ170

Composition

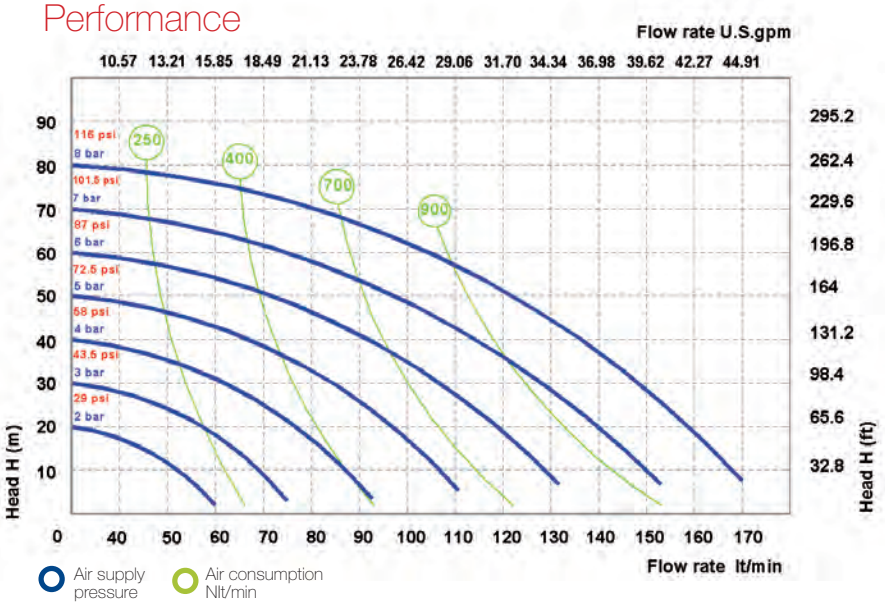
MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
BOA1Q70	**P** = PP **KC** = PVDF+CF **A** = ALU **S** = SS	**HT** = HYTREL+PTFE **MT** = SANTOPRENE+PTFE **H** = HYTREL **M** = SANTOPRENE **D** = EPDM **N** = NBR	**T** = PTFE **S** = SS **D** = EPDM **N** = NBR	**P** = PP **K** = PVDF **A** = ALU **S** = SS **Z** = PE-UHMWE	**D** = EPDM **V** = VITON **N** = NBR **T** = PTFE	**1** = BSP **2** = FLANGED **5** = NPT	**-** = zone 2	**AB** = STANDARD

Technical data

Fluid connections:	1” BSP
Air connection:	1/2” BSP
Max flow-rate:	170 lt/min
Max air pressure:	8 bar
Max delivery head:	80 m
Max Suction Lift Dry:	6 m
Max Suction Lift Wet:	9,8 m
Max Solid passing:	7,5 mm
Noise level:	75 dB
Max Viscosity:	35.000 cps

EX II 3/3 GD c IIB T 135°C

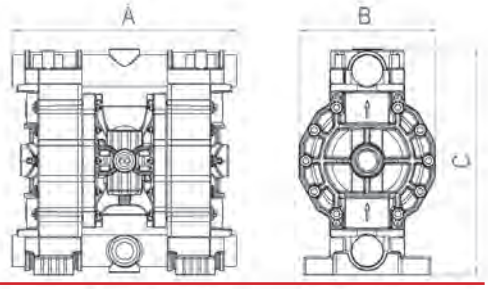
Performance



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.

Dimensions

	PP	PVDF	ALU	AISI
A (mm)	370	370	370	360
B (mm)	222	222	222	222
C (mm)	370	370	364	346
Weight kg	15	16	16	20
MAX Temperature	65°C	95°C	90°C	95°C
MIN Temperature	-4°C	-20°C	-20°C	-20°C



PP

PVDF+CF

ALU

AISI 316

BOAQ250

Composition

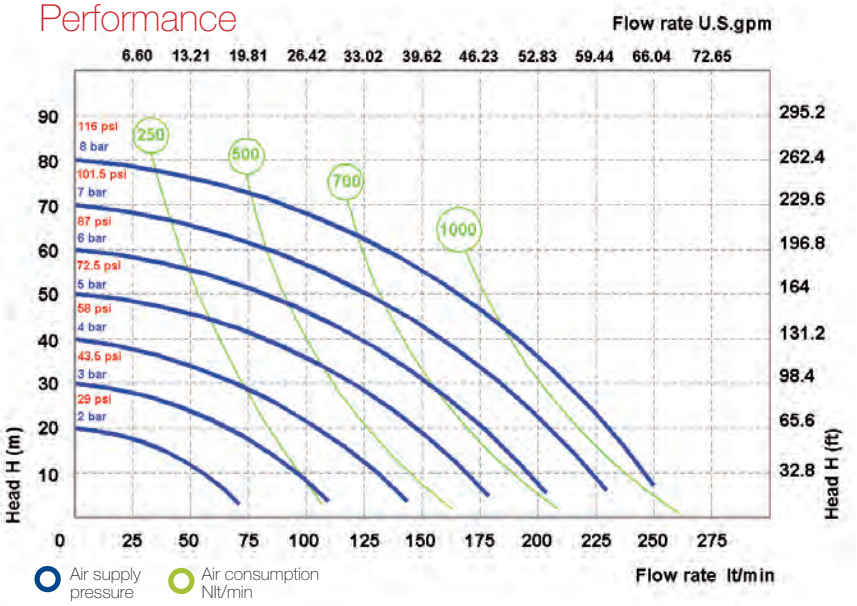
MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
BOAQ250	**P** = PP **KC** = PVDF+CF **A** = ALU **S** = SS	**HT** = HYTREL+PTFE **MT** = SANTOPRENE+PTFE **H** = HYTREL **M** = SANTOPRENE **D** = EPDM **N** = NBR	**T** = PTFE **S** = SS **D** = EPDM **N** = NBR	**P** = PP **K** = PVDF **A** = ALU **S** = SS **Z** = PE-UHMWE	**D** = EPDM **V** = VITON **N** = NBR **T** = PTFE	**1** = BSP **2** = FLANGED **5** = NPT	**-** = zone 2	**AB** = STANDARD

Technical data

Fluid connections:	1” 1/4 BSP
Air connection:	1/2” BSP
Max flow-rate:	250 lt/min
Max air pressure:	8 bar
Max delivery head:	80 m
Max Suction Lift Dry:	6 m
Max Suction Lift Wet:	9,8 m
Max Solid passing:	7,5 mm
Noise level:	75 dB
Max Viscosity:	35.000 cps

EX II 3/3 GD c IIB T 135°C

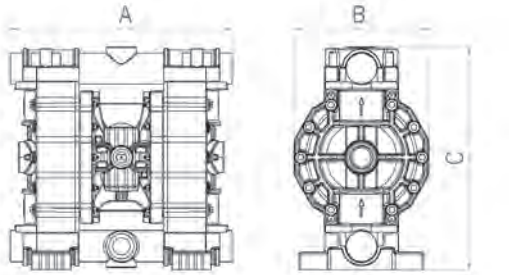
Performance



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.

Dimensions

	PP	PVDF	ALU	AISI
A (mm)	370	370	370	360
B (mm)	222	222	222	222
C (mm)	370	370	364	346
Weight kg	15	16	16	20
MAX Temperature	65°C	95°C	90°C	95°C
MIN Temperature	-4°C	-20°C	-20°C	-20°C



PP

PVDF+CF

ALU

AISI 316

BOAQ350

Composition

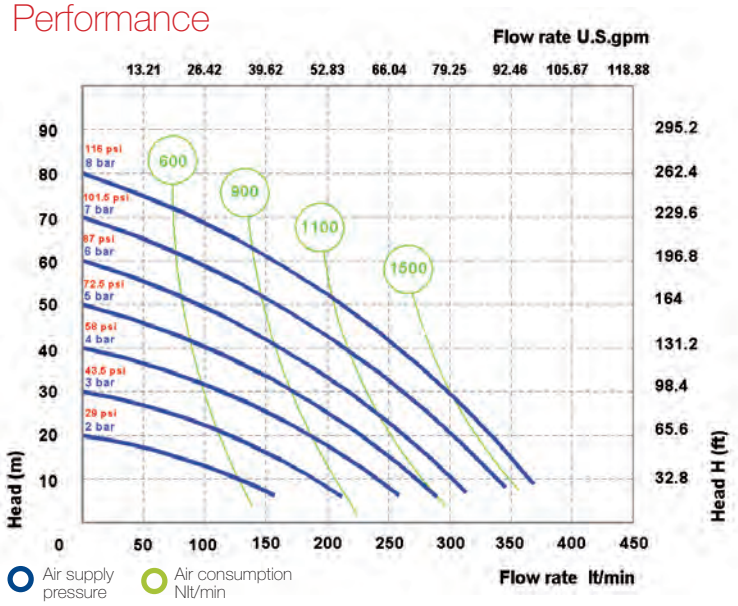
MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
BOAQ350	**P** = PP **KC** = PVDF+CF **A** = ALU **S** = SS	**HT** = HYTREL+PTFE **MT** = SANTOPRENE+PTFE **H** = HYTREL **M** = SANTOPRENE **D** = EPDM **N** = NBR	**T** = PTFE **S** = SS **D** = EPDM **N** = NBR	**P** = PP **K** = PVDF **A** = ALU **S** = SS **Z** = PE-UHMWE	**D** = EPDM **V** = VITON **N** = NBR **T** = PTFE	**1** = BSP **2** = FLANGED **5** = NPT	**-** = zone 2	**AB** = STANDARD **EF** = STANDARD AISI 316

Technical data

Fluid connections:	1" 1/2 BSP **DN 40**
Air connection:	3/4" BSP
Max flow-rate:	380 lt/min
Max air pressure:	8 bar
Max delivery head:	80 m
Max Suction Lift Dry:	5 m
Max Suction Lift Wet:	9,8 m
Max Solid passing:	8 mm
Noise level:	78 dB
Max Viscosity:	40.000 cps

EX II 3/3 GD c IIB T 135°C

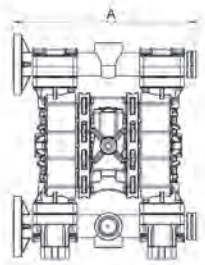
Performance

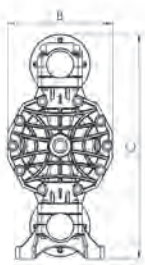


The curves and performance values refer to pumps with submerged suction and a free delivery outlet with water at 20°C, and vary according to the construction material.

Dimensions

	PP	PVDF	ALU	AISI
A (mm)	454	454	443	361
B (mm)	260	260	260	260
C (mm)	562	562	562	502
Weight kg	18	22	22	40
MAX Temperature	65°C	95°C	90°C	95°C
MIN Temperature	-4°C	-20°C	-20°C	-20°C





PP

PVDF+CF

ALU

AISI 316

BOAQ550

Composition

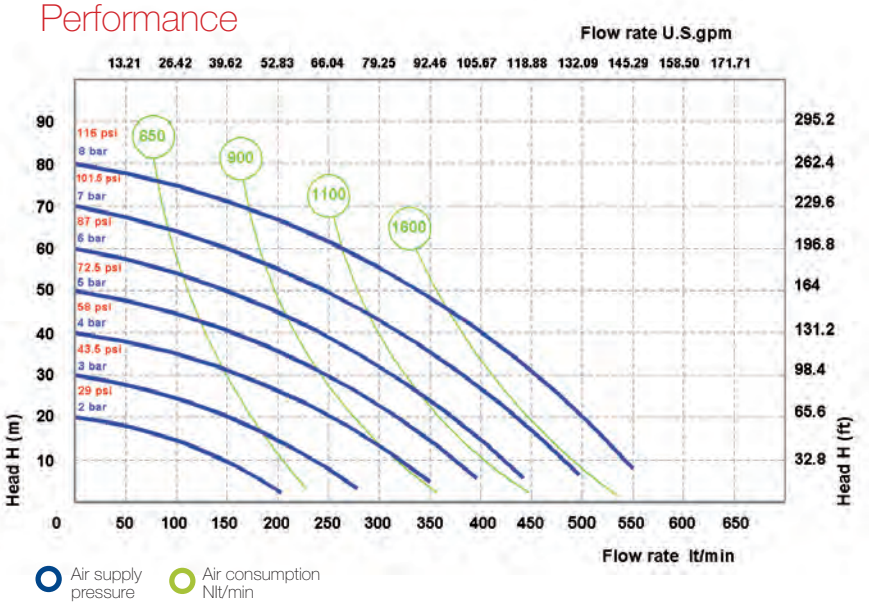
MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
BOAQ550	**P** = PP **KC** = PVDF+CF **A** = ALU **S** = SS	**HT** = HYTREL+PTFE **MT** = SANTOPRENE+PTFE **H** = HYTREL **M** = SANTOPRENE **D** = EPDM **N** = NBR	**T** = PTFE **S** = SS **D** = EPDM **N** = NBR	**P** = PP **K** = PVDF **A** = ALU **S** = SS **Z** = PE-UHMWE	**D** = EPDM **V** = VITON **N** = NBR **T** = PTFE	**1** = BSP **2** = FLANGED **5** = NPT	**-** = zone 2	**AB** = STANDARD **EF** = STANDARD AISI 316

Technical data

Fluid connections:	1" 1/2 BSP **DN 40**
Air connection:	3/4" BSP
Max flow-rate:	550 lt/min
Max air pressure:	8 bar
Max delivery head:	80 m
Max Suction Lift Dry:	5 m
Max Suction Lift Wet:	9,8 m
Max Solid passing:	8,5 mm
Noise level:	78 dB
Max Viscosity:	50.000 cps

EX II 3/3 GD c IIB T 135°C

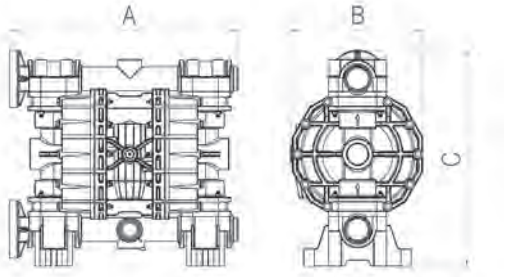
Performance

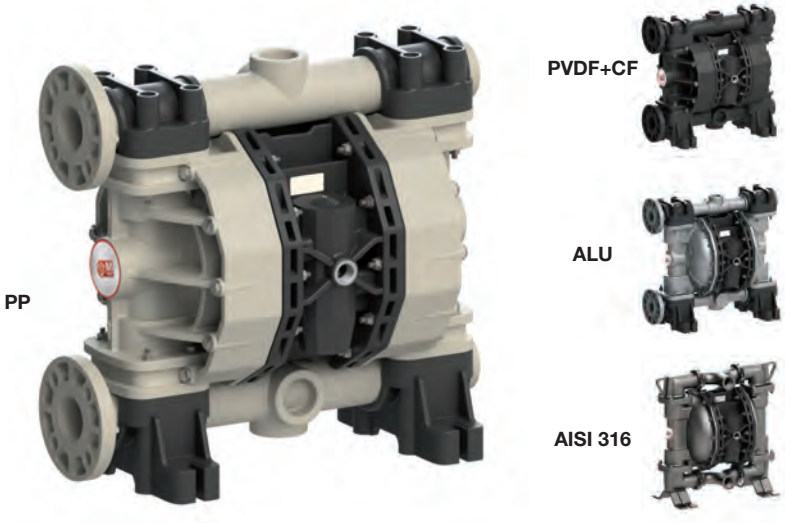


The curves and performance values refer to pumps with submerged suction and a free delivery outlet with water at 20°C, and vary according to the construction material.

Dimensions

	PP	PVDF	ALU	AISI
A (mm)	595	595	595	582
B (mm)	345	345	345	345
C (mm)	565	565	560	570
Weight kg	31	36	36	60
MAX Temperature	65°C	95°C	90°C	95°C
MIN Temperature	-4°C	-20°C	-20°C	-20°C





BOAQ700

Composition

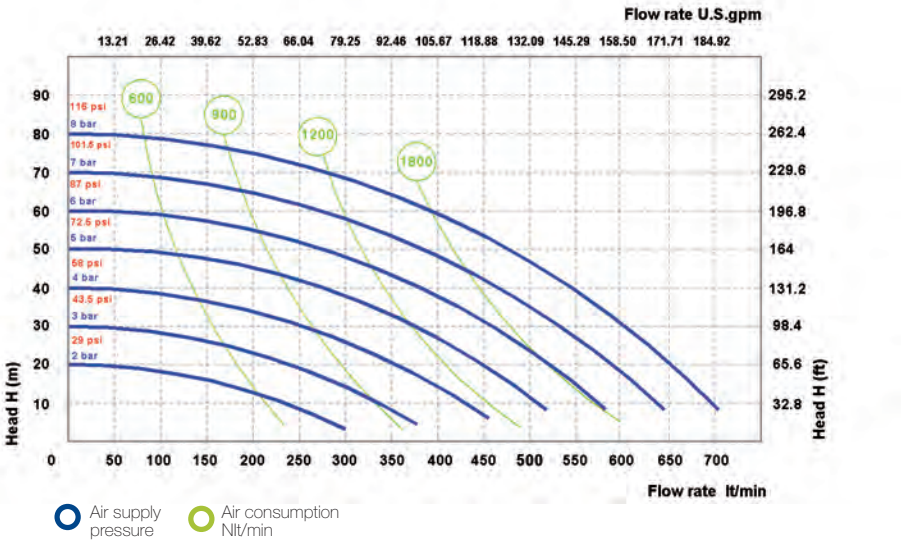
MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
BOAQ700	**P** = PP **KC** = PVDF+CF **A** = ALU **S** = SS	**HT** = HYTREL+PTFE **MT** = SANTOPRENE+PTFE **H** = HYTREL **M** = SANTOPRENE **D** = EPDM **N** = NBR	**T** = PTFE **S** = SS **D** = EPDM **N** = NBR	**P** = PP **K** = PVDF **A** = ALU **S** = SS **Z** = PE-UHMWE	**D** = EPDM **V** = VITON **N** = NBR **T** = PTFE	**1** = BSP **2** = FLANGED **5** = NPT	**-** = zone 2	**AB** = STANDARD **EF** = STANDARD AISI 316

Technical data

Fluid connections:	2” BSP **DN 50**
Air connection:	3/4” BSP
Max flow-rate:	700 lt/min
Max air pressure:	8 bar
Max delivery head:	80 m
Max Suction Lift Dry:	5 m
Max Suction Lift Wet:	9,8 m
Max Solid passing:	8,5 mm
Noise level:	78 dB
Max Viscosity:	50.000 cps

EX II 3/3 GD c IIB T 135°C

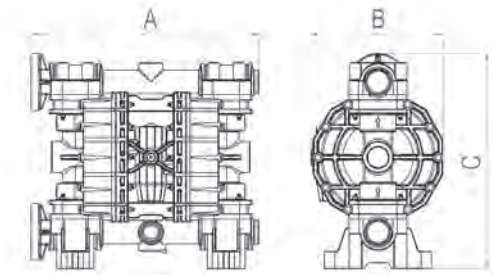
Performance



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.

Dimensions

	PP	PVDF	ALU	AISI
A (mm)	595	595	595	487
B (mm)	345	345	345	345
C (mm)	565	565	560	599
Weight kg	31	36	36	46
MAX Temperature	65°C	95°C	90°C	95°C
MIN Temperature	-4°C	-20°C	-20°C	-20°C



PP

PVDF+CF

ALU

AISI 316

BOAQ1000

Composition

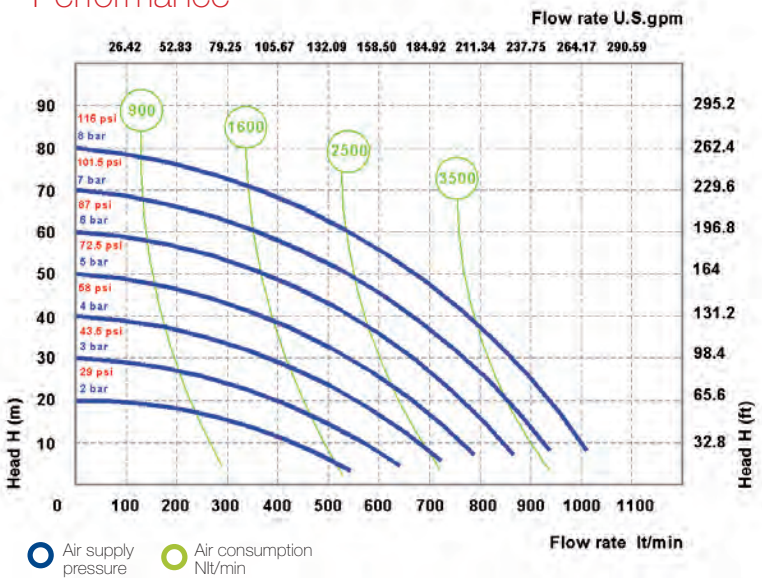
MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
Q1000	**P** = PP **K** = PVDF **A** = ALU **S** = SS	**MT** = SANTOPRENE+PTFE **H** = HYTREL **M** = SANTOPRENE	**T** = PTFE **S** = SS **D** = EPDM **N** = NBR	**P** = PP **K** = PVDF **A** = ALU **S** = SS	**D** = EPDM **V** = VITON **N** = NBR **T** = PTFE	**1** = BSP **2** = FLANGED	**-** = zone 2	**AB** = STANDARD

Technical data

Fluid connections:	3" BSP **DN 80**
Air connection:	3/4" BSP
Max flow-rate:	1050 lt/min
Max air pressure:	8 bar
Max delivery head:	80 m
Max Suction Lift Dry:	5 m
Max Suction Lift Wet:	9,8 m
Max Solid passing:	10 mm
Noise level:	78 dB
Max Viscosity:	55.000 cps

EX II 3/3 GD c IIB T 135°C

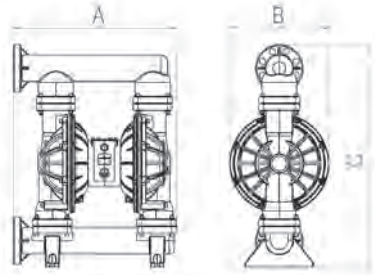
Performance



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.

Dimensions

	PP	PVDF	ALU	AISI
A (mm)	685	685	570	570
B (mm)	417	417	420	420
C (mm)	933	933	838	838
Weight kg	50	55	55	120
MAX Temperature	65°C	95°C	90°C	95°C
MIN Temperature	-4°C	-20°C	-20°C	-20°C



PP

PVDF

ALU

AISI 316

BOA

FOOD

FDA compliant

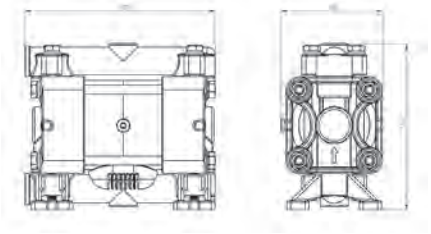
M PUMPS

Air operated double diaphragms pumps
Realized in:
SS AISI 316 electro-polished and PP food grade
(P7)
Flow-rate from 8lt/min to 1.000 lt/min
Tri-Clamp Connection.
ATEX certification
Atex zone 2 - EX II 3/3 GD c IIB T 135°C

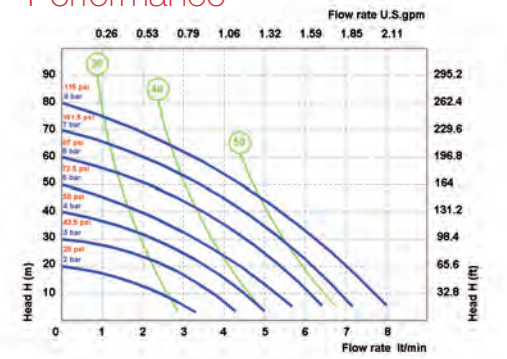
BOAFood QF8

FDA compliant

PP FOOD GRADE



Performance



Air supply pressure

Air consumption Nlt/min

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.

Technical data

Fluid connections:	1/4" BSP
Air connection:	4 mm
Max flow-rate:	8 lt/min
Max air pressure:	8 bar
Max viscosity:	6.000 cps

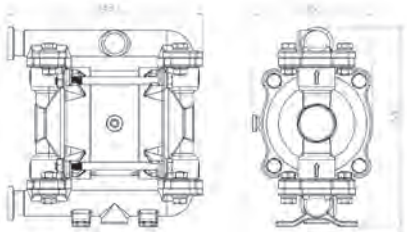
Composition

MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
QF8	**P** = PP FOOD GRADE	**NT** = NBR+PTFE	**T** = PTFE **S** = SS	**P** = PP	**T** = PTFE	**1** = BSP **5** = NPT	**-** = zone 2	**AB** = STANDARD

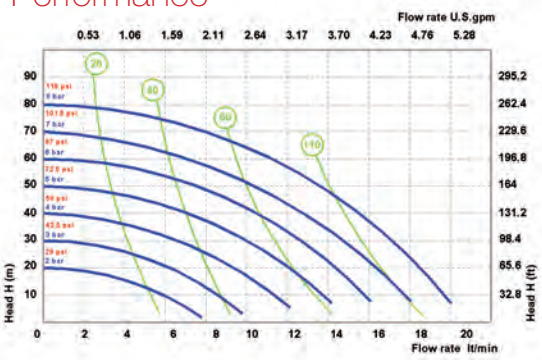
BOAFood QF20

FDA compliant

AISI 316 ELECTRO-POLISHED



Performance



Air supply pressure

Air consumption Nlt/min

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.

Technical data

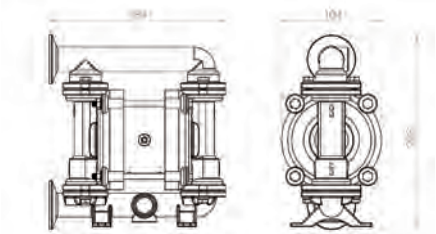
Fluid connections:	Tri-Clamp 1/2"
Air connection:	6 mm
Max flow-rate:	20 lt/min
Max air pressure:	8 bar
Max viscosity:	12.000 cps

Composition

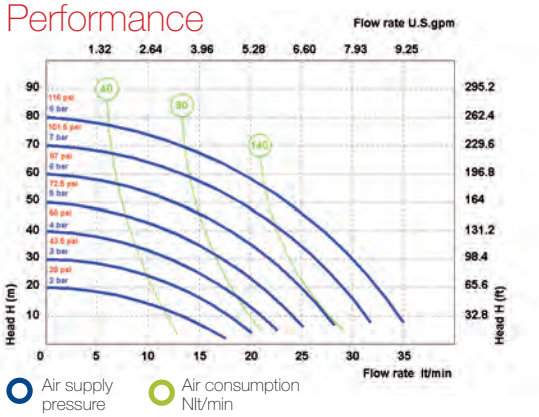
MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
QF20	**S** = SS POLISHED	**HT** = HYTREL+PTFE	**T** = PTFE **S** = SS	**P** = PP	**T** = PTFE	**3** = TRI-CLAMP **1** = BSP	**-** = zone 2 **X** = zone 1	**AB** = STANDARD

BOAFood QF35

FDA compliant



Performance



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.

Technical data

Fluid connections:	Tri-Clamp 1”
Air connection:	6 mm
Max flow-rate:	35 lt/min
Max air pressure:	8 bar
Max viscosity:	15.000 cps

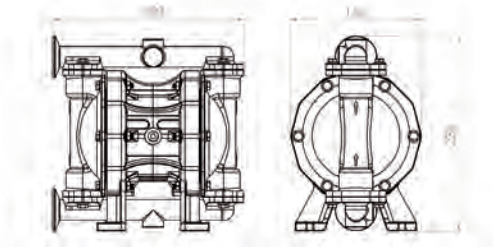
Composition

MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
QF35	**S** = SS POLISHED	**HT** = HYTREL+PTFE	**T** = PTFE **S** = SS	**S** = SS	**T** = PTFE	**3** = TRI-CLAMP **1** = BSP	**-** = zone 2 **X** = zone 1	**AB** = STANDARD

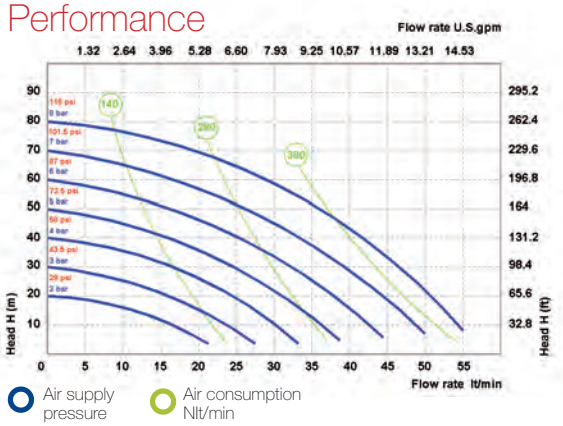
BOAFood QF55

FDA compliant

AISI 316 ELECTRO-POLISHED



Performance



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.

Technical data

Fluid connections:	Tri-Clamp 1”
Air connection:	1/4” BSP
Max flow-rate:	55 lt/min
Max air pressure:	8 bar
Max viscosity:	20.000 cps

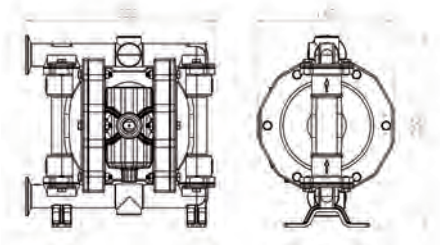
Composition

MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
QF55	**S** = SS POLISHED	**HT** = HYTREL+PTFE	**T** = PTFE **S** = SS	**S** = SS	**T** = PTFE	**3** = TRI-CLAMP **1** = BSP	**-** = zone 2 **X** = zone 1	**AB** = STANDARD

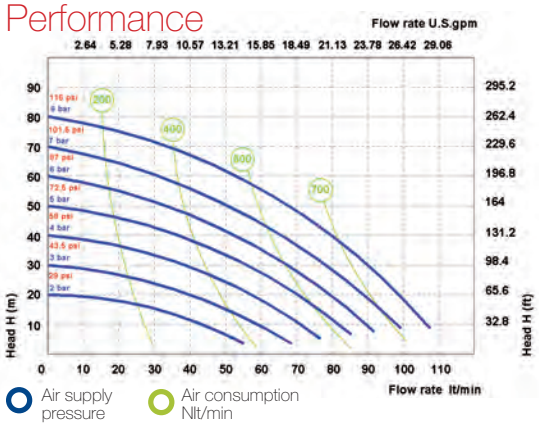
BOAFood QF110

FDA compliant

AISI 316 ELECTRO-POLISHED



Performance



Air supply pressure

Air consumption Nlt/min

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.

Technical data

Fluid connections:	Tri-Clamp 1”
Air connection:	3/8” BSP
Max flow-rate:	110 lt/min
Max air pressure:	8 bar
Max viscosity:	25.000 cps

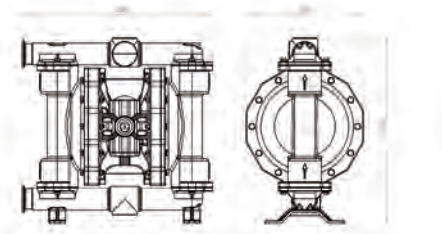
Composition

MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
QF110	**S** = SS POLISHED	**HT** = HYTREL+PTFE	**T** = PTFE **S** = SS	**S** = SS	**T** = PTFE	**3** = TRI-CLAMP **1** = BSP	**-** = zone 2 **X** = zone 1	**AB** = STANDARD

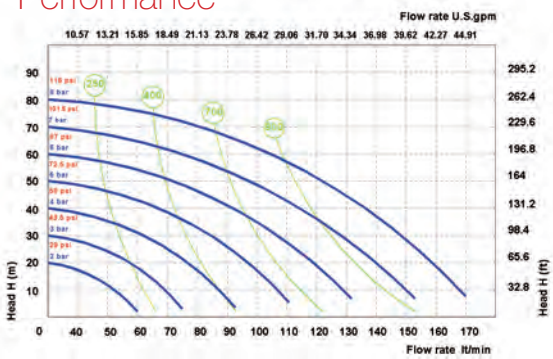
BOAFood QF170

FDA compliant

AISI 316 ELECTRO-POLISHED



Performance



Air supply pressure

Air consumption Nlt/min

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.

Technical data

Fluid connections:	Tri-Clamp 1”1/2
Air connection:	1/2” BSP
Max flow-rate:	170 lt/min
Max air pressure:	8 bar
Max viscosity:	35.000 cps

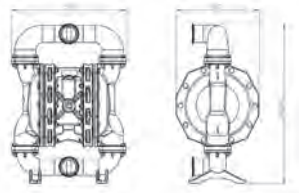
Composition

MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
QF170	**S** = SS POLISHED	**HT** = HYTREL+PTFE	**T** = PTFE **S** = SS	**S** = SS	**T** = PTFE	**3** = TRI-CLAMP **1** = BSP	**-** = zone 2 **X** = zone 1	**AB** = STANDARD

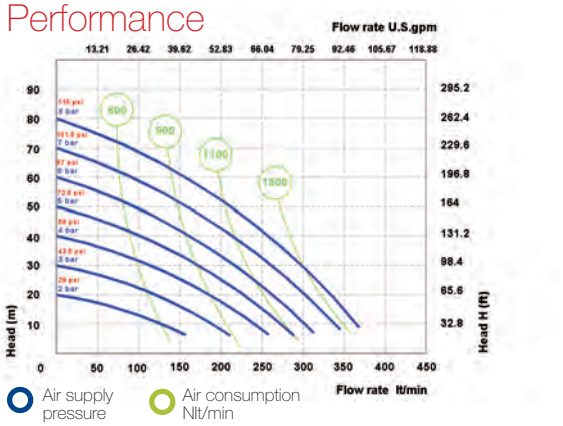
BOAFood QF350

FDA compliant

AISI 316 ELECTRO-POLISHED



Performance



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.

Technical data

Fluid connections:	Tri-Clamp 2”
Air connection:	3/4” BSP
Max flow-rate:	380 lt/min
Max air pressure:	8 bar
Max viscosity:	40.000 cps

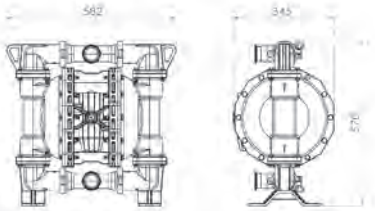
Composition

MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
QF350	**S** = SS POLISHED	**HT** = HYTREL+PTFE	**T** = PTFE **S** = SS	**S** = SS	**T** = PTFE	**3** = TRI-CLAMP **1** = BSP	**-** = zone 2 **X** = zone 1	**EF** = STANDARD

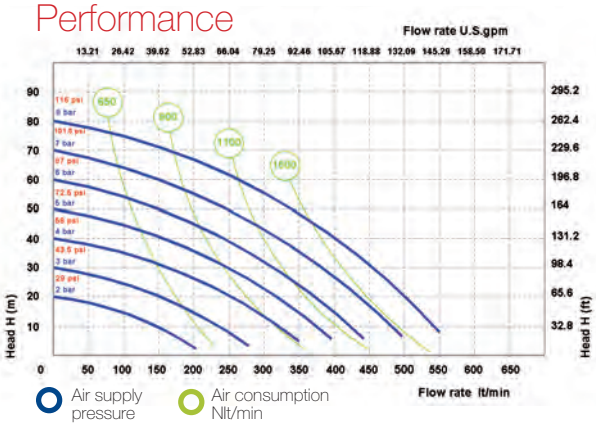
BOAFood QF550

FDA compliant

AISI 316 ELECTRO-POLISHED



Performance



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.

Technical data

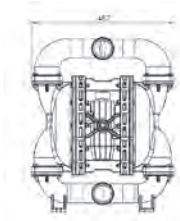
Fluid connections:	Tri-Clamp 2”
Air connection:	3/4” BSP
Max flow-rate:	550 lt/min
Max air pressure:	8 bar
Max viscosity:	50.000 cps

Composition

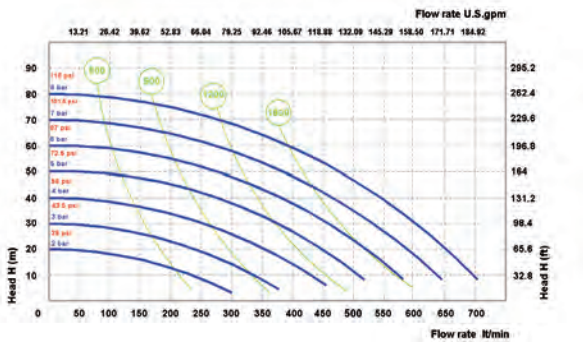
MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
QF550	**S** = SS POLISHED	**HT** = HYTREL+PTFE	**T** = PTFE **S** = SS	**S** = SS	**T** = PTFE	**3** = TRI-CLAMP **1** = BSP	**-** = zone 2 **X** = zone 1	**EF** = STANDARD

BOAFood QF700

AISI 316 ELECTRO-POLISHED



Performance



Air supply pressure

Air consumption Nlt/min

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.

Technical data

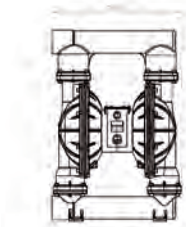
Fluid connections:	Tri-Clamp 2”1/2
Air connection:	3/4” BSP
Max flow-rate:	700 lt/min
Max air pressure:	8 bar
Max viscosity:	50.000 cps

Composition

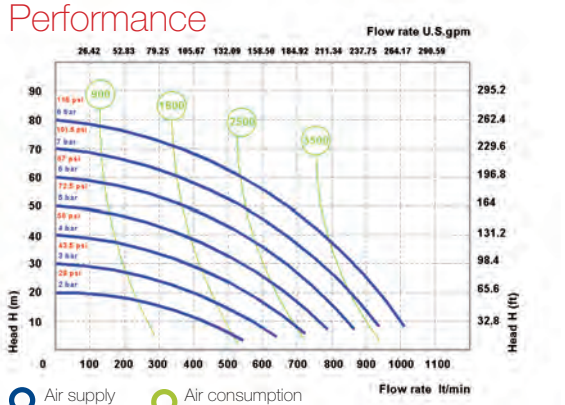
MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
QF700	**S** = SS POLISHED	**HT** = HYTREL+PTFE	**T** = PTFE **S** = SS	**S** = SS	**T** = PTFE	**3** = TRI-CLAMP **1** = BSP	**-** = zone 2 **X** = zone 1	**EF** = STANDARD

BOAFood QF1000

AISI 316 ELECTRO-POLISHED



Performance



Air supply pressure

Air consumption Nlt/min

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.

Technical data

Fluid connections:	3” BSP
Air connection:	3/4” BSP
Max flow-rate:	1050 lt/min
Max air pressure:	8 bar
Max viscosity:	55.000 cps

Composition

MODEL	CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
QF1000	**S** = SS POLISHED	**HT** = HYTREL+PTFE	**T** = PTFE **S** = SS	**S** = SS	**T** = PTFE	**3** = TRI-CLAMP **1** = BSP	**-** = zone 2 **X** = zone 1	**AB** = STANDARD

BOA

SPECIAL PUMPS

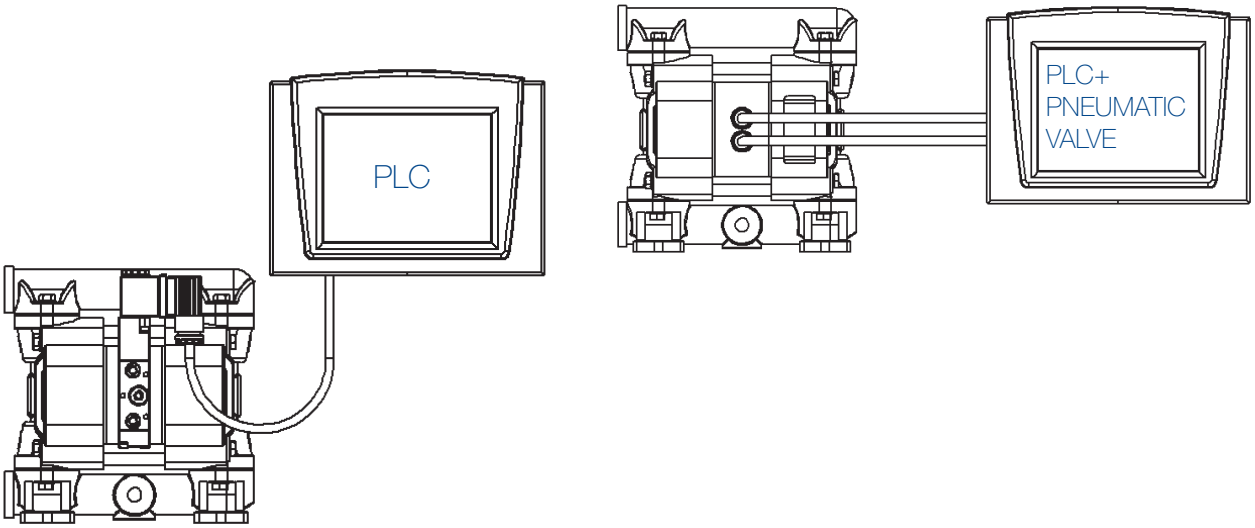
M PUMPS

Air operated double diaphragms pumps
with special features:
BOA ACCURATE remote control
BOA DRUM to empty drums and tanks
BOA TWIN with double inlet/outlet

BOAControl
Special Pumps

BOAControl are Pumps gives you the external pump control necessary for exacting applications such as batching. Featuring a direct electrical interface that utilizes electrical impulses to stroke the pump instead of differential pressure, the BOA ACCURATE provides a variable stroke rate that you can easily control as needed.

Note: PLC and computer system not included.



PUMPS

BC7 / BC18 / BC30
BC50 / BC65 / BC100
BC160 / BC250

MAIN APPLICATIONS

- **Chemical industry**
- **Flexographic industry**
- **Painting industry**
- **Wastewater technology**
- **Printing industry**

BOADrum
Special Pumps

BOA Drum are designed for emptying drums and containers, and provide an economical and wear resistant alternative to other pumping systems. In order to handle a wide range of fluids, DP pumps are available in all materials. The pump can be quickly and easily mounted on the drum with its feet. The drum will be completely emptied with a suction pipe.

PUMPS

BD18 / BD30 / BD50
BD65 / BD100 / BD160

MAIN APPLICATIONS

- **Chemical industry**
- **Waste disposal technology**
- **Automotive industry**
- **Food industry**

BOATwin
Special Pumps

PUMPS

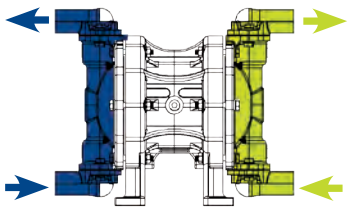
BT18 / BT30 / BT50
BT65 / BT100 / BT160
BT250 / BT400

MAIN APPLICATIONS

- **Painting industry**
- **Wastewater technology**
- **Printing industry**
- **Paper processing**
- **Flexographic industry**

Technical data

BOA TWIN are mainly used in the textile and paper processing industry. These dual action pumps are able to transfer two different media independently and simultaneously.
This is accomplished by using separate connections on the suction and discharge ports, keeping two pumped media isolated from each other, preventing unwanted mixing.



BOA

DAMPER

Pneumatic, automatic pulsation dampeners
Realized in:
PP, PVDF, ALUMINIUM, SS AISI 316, POMc
Applicable to all size
of pumps.
Available also in ATEX
or FOOD version.

BOADamper

The active pulsation dampener is the most efficient way to remove pressure variations on the discharge of the pump. **MPUMPS** pulsation dampener works actively with compressed air and a diaphragm, automatically setting the correct pressure to minimize the pulsations. Pulsation dampeners require minimum maintenance and are, subject to the requirements of the application, available in the same housing and diaphragm materials as the pump.

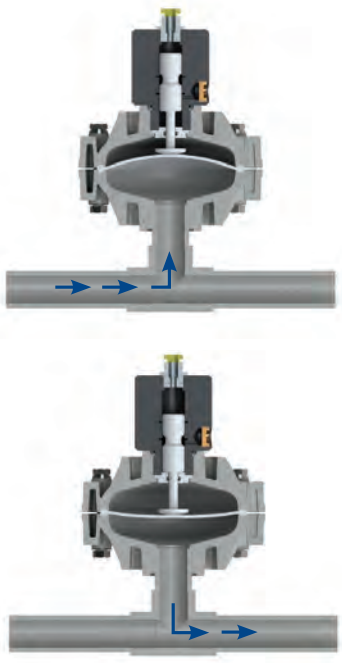
How it works

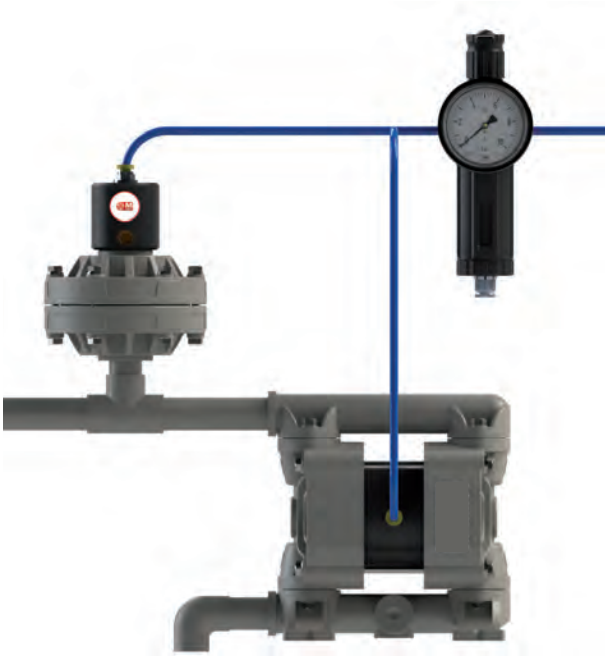
The pulsating flow of the discharge forces the diaphragm upwards where it is cushioned by the air in the chamber.
The flexing of the diaphragm absorbs the pulsation giving a smooth flow.

Application

- Metering/ Injection/Dosing
- Equalizes discharge pressure spikes, increasing accuracy
- Filter Press/Inline Filters
- Increases filter efficiency and life by providing a smooth flow
- Spraying
- Smooth, consistent spray pattern.
- Filling
- Eliminates inconsistent filling and splashing.
- Transfer
- Eliminates harmful water hammer, preventing pipe and valve damage.

Significant Pulsation Reduction with an average 70% - 80% pulsation reduction in high back pressure applications.





BOADamper
D20

APPLY TO:
7 - 18 - 30

Dimensions

	PP	PVDF	POMc	AISI
A (mm)	119	119	119	119
B (mm)	143	143	143	143
Weight kg	0,6	0,7	0,65	1,9
MAX Temperature	65°C	95°C	80°C	95°C
MIN Temperature	-4°C	-20°C	-5°C	-20°C

Technical data

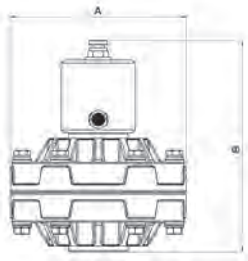
Fluid connections: 3/4”
Air connection: 6 mm
Max air pressure: 8 bar

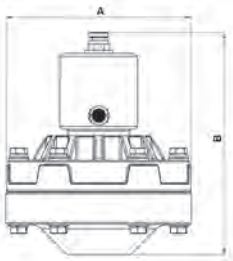
PP

PVDF+CF

POMc

AISI





BOADamper
D25

APPLY TO:
50 - 65 -100

Dimensions

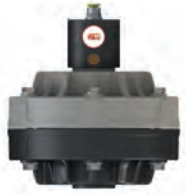
	PP	PVDF	POMc	AISI
A (mm)	181	181	181	181
B (mm)	195	195	195	182
Weight kg	1,6	2	1,9	6,5
MAX Temperature	65°C	95°C	80°C	95°C
MIN Temperature	-4°C	-20°C	-5°C	-20°C

Technical data

Fluid connections: 1”
Air connection: 8 mm
Max air pressure: 8 bar

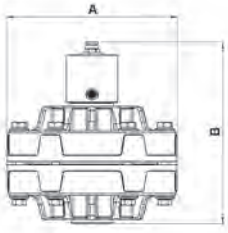
PP

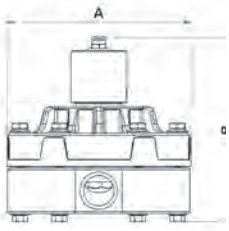
PVDF+CF



POMc

AISI





BOADamper
D40

APPLY TO:
160 - 250
400

Dimensions

	PP	PVDF	POMc	AISI
A (mm)	233	233	233	233
B (mm)	270	270	270	275
Weight kg	3,8	4	3,9	5,9
MAX Temperature	65°C	95°C	80°C	95°C
MIN Temperature	-4°C	-20°C	-5°C	-20°C

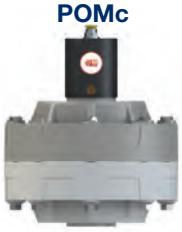
Technical data

Fluid connections: 1”1/2
Air connection: 10 mm
Max air pressure: 8 bar

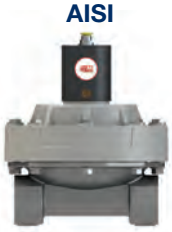
PP

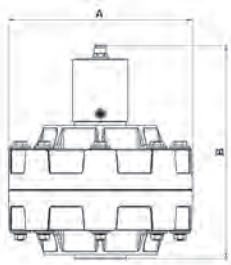
PVDF+CF

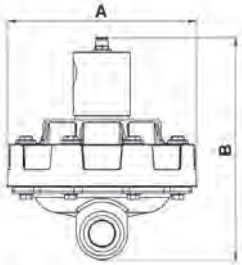
POMc



AISI







BOADamper
D40

APPLY TO:
500 - 700
1000

Dimensions

	PP	PVDF	ALU	AISI
A (mm)	404	404	404	350
B (mm)	420	420	420	418
Weight kg	13,7	17	14,3	21,6
MAX Temperature	65°C	95°C	90°C	95°C
MIN Temperature	-4°C	-20°C	-20°C	-20°C

Technical data

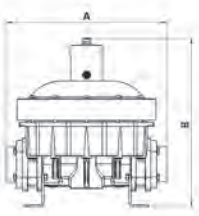
Fluid connections: 2”
Air connection: 12 mm
Max air pressure: 8 bar

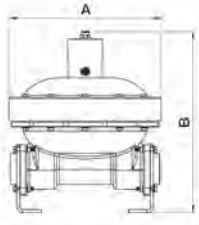
PP

PVDF+CF

ALU

AISI





ACCESSORIES

VALVES, FITTINGS AND CONNECTIONS IN PP, PVC, INOX

REINFORCED PVC HOSE
With metal reinforcement for suction/discharge, also food-grade.

FLANGE CONNECTION KIT
Adapt a pump from BSP type connection to flanges with this kit.

AIR REGULATION KIT
Adjust and set air pressure and air flow-rate with a filter regulator, pressure gauge and air valve unit.

SWITCH VALVES
Remotely start and stop with a solenoid or pneumatic valve for the pump's air.

STROKE COUNTER
Count the number of strokes, connected to a control. It allows various type of monitoring.

DIAPHRAGM FAILURE DETECTION FLUI-GUARD
The Electronic Leak Detector provide a signal via warning lights, an audible alarm, and the pump can be shut down.

PNEUMATIC OR ELECTRONIC BATCH CONTROL
Pneumatic and electronic batcher can control any FLUIMAC AODD pump allowing you to set the cycles amount.

BASKET STRAINER FILTERS IN PP
Installed on the suction of the pumps, protects them from suspended solids and impurity.

INOX TROLLEY
It makes transportable pumps

ANTI VIBRATION FEET KIT
Reduces physical vibration from AODD pump operation.

PP, PVDF, ALU, SS NOOZLE
Dispenser to delivery control and batching.

M PUMPS INDUSTRY d.o.o.

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