

AIR OPERATED DOUBLE DIAPHRAGM PUMPS

Series MARCH MASTER AIR



...ADVANCED
SOLUTIONS...

AIR OPERATED DOUBLE DIAPHRAGM PUMPS

Series MARCH MASTER AIR

PUMP DESCRIPTION

| MMA | - | 1040S | - | SS | - | SS | - | PT | - | PT | - | B |
|------------------|-------------------|-----------------------|----------------------|----------------------|---------------------|-----------------|---|----|---|----|---|---|
| Series | Pump Size | Materials Fluid Cover | Materials Valve Seat | Materials Valve Ball | Materials Diaphragm | Connections | | | | | | |
| MARCH MASTER AIR | 515 - 1/2" - 3/4" | Polypropylene (PP) | Polypropylene (PP) | PTFE (PT) | PTFE (PT) | BSP (f) | | | | | | |
| | 716 - 1/2" - 3/4" | PVDF (KY) | PVDF (KY) | Hytrel (HY) | Hytrel (HY) | NPT (f) | | | | | | |
| | 1040 - 1" | Aluminium (AL) | Aluminium (AL) | Santoprene (SP) | Santoprene (SP) | Flange DIN/ANSI | | | | | | |
| | 1590 - 1 1/2" | AISI304 (SS) | AISI304 (SS) | Viton (FK) | Viton (FK) | | | | | | | |
| | 2150 - 2" | AISI316 (LL) | AISI316 (LL) | | | | | | | | | |
| 3300 - 3" | | | | | | | | | | | | |

MATERIALS AND TEMPERATURES

| Pump material | Limit |
|---------------|---|
| Viton | 121,1 °C |
| PTFE | 104,4 °C |
| Santoprene | 82,2 °C |
| TPE Hytrel | 65,5 °C |
| Polypropylene | 4,4°C ... 65,5°C |
| PVDF | 4,4°C ... 93,3°C |
| Aluminium | depending on used Elastomeres but max. 93,3°C |
| AISI304 | |
| AISI316 | |



MATERIAL FEATURES

Aluminum material for air motor and fluid cover

- Medium corrosion and abrasion resistance
- Not suitable for halogenated hydrocarbons

PVDF material for fluid cover and valve seats

- High chemical resistance to acids and bases
- Good abrasion resistance
- High temperature resistance

Polypropylene material for fluid cover and valve seats

- Broad chemical compatibility
- general purpose pump
- Cost-effective alternative

Stainless steel material for fluid cover, valve seats and valve balls

- High corrosion and abrasion resistance
- Passivated for the use of water-based paints

TPE Hytrel material for valve balls and diaphragm

- Good abrasion resistance
- Often used as a substitute for Buna-N

Santoprene® material for valve balls and diaphragm

- Good abrasion resistance and chemical resistance
- Not suitable for solvents and hydrocarbons
- Can replace EPDM or EPR
- Food safe

PTFE material for valve balls and diaphragm

- Excellent for solvents
- Low abrasion resistance
- High chemical compatibility with materials
- Food safe

Viton material for valve balls and diaphragm

- High degree of corrosion resistance in acids
- Resistant to unleaded fuels
- Food safe

DESIGN

- Oscillating positive displacement pump
- Pulsating
- Air motor
- Compressed air operations
- Self-priming, dry and wet
- Dry running safe
- Solid
- 3-way air control valve without dead center
- ATEX version available

APPLICATIONS

Water treatment industry

- Surface skimmer
- ion exchange
- Treatment with chemicals
- Polymer feed
- clarifier
- drainage

Paint and varnish production

- bulk storage
- Mix
- Filter and fill

Barrel or bulk discharge or transfer

Circulation and delivery systems

liquid drain

On-demand wholesale paced

chemical feed

AIR OPERATED DOUBLE DIAPHRAGM PUMPS

Series MARCH MASTER AIR

Type: MMA 515 (1/2" und 3/4")



PERFORMANCE DATA

| | |
|---|---------------------------|
| Capacity flow: | 0 - 57 l/min |
| Discharge pressure, max.: | 8,4 bar |
| Suction height, max. dry / wet: | 4 m / 7,6 m |
| Air consumption, max.: | 0,672 m ³ /min |
| Solid size, max.: | 2,5 mm |
| Air pressure, max.: | 8,5 bar |
| Recommended cycles for increased durability: | 25 n/min (225 l/h) |
| Viscosity, max.: | 5000 cP |

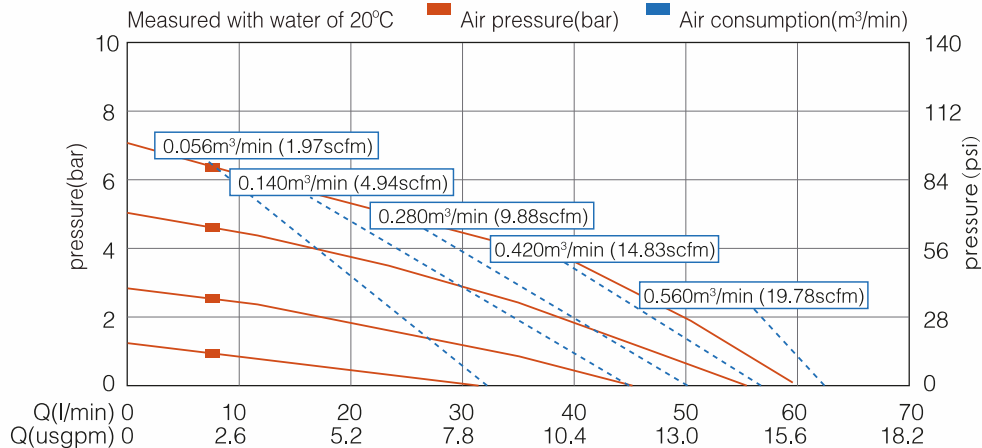
NOZZLES

| | |
|---------------------------|-------------------|
| Suction,- Discharge side: | 1/2" and 3/4" BSP |
| Air Inlet: | 1/4" NPT (f) |
| Air Outlet: | 3/8" NPT (f) |

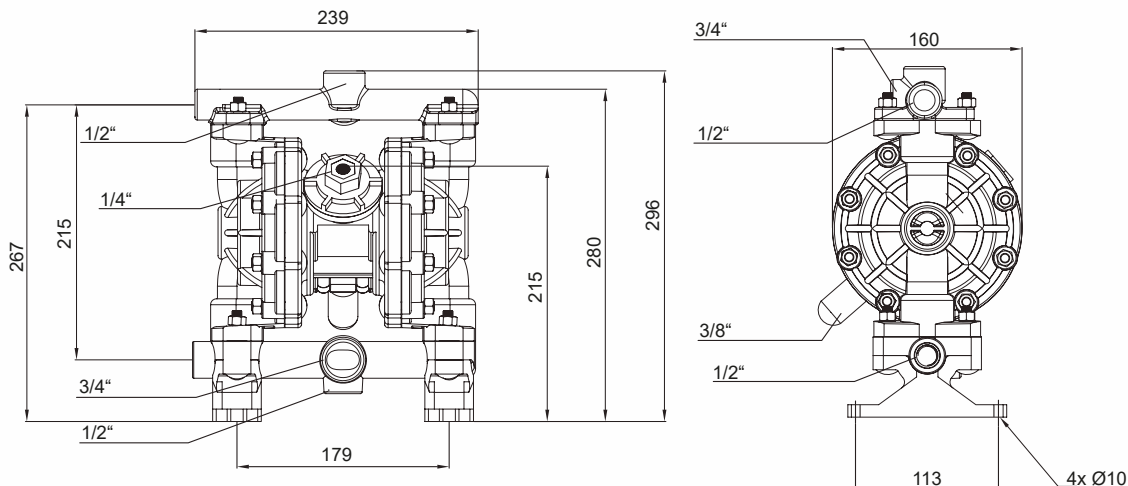
MATERIALS

| | |
|--------------------------|---|
| Housings / Valve-Seats: | Polypropylene (PP) PVDF (KY) PTFE (PT) Hytel (HY) Santoprene (SP) Viton (FK) |
| Valve-Balls / Diaphragm: | |

PERFORMANCE CURVES



DIMENSIONS



AIR OPERATED DOUBLE DIAPHRAGM PUMPS

Series MARCH MASTER AIR

Type: MMA 716A (1/2" and 3/4")



PERFORMANCE DATA

| | |
|---|---------------------------|
| Capacity flow: | 0 - 57 l/min |
| Discharge pressure, max.: | 8,4 bar |
| Suction height, max.: | |
| dry / wet: | 4 m / 7,6 m |
| Air consumption, max.: | 0,672 m ³ /min |
| Solid size, max.: | 2,5 mm |
| Air pressure, max.: | 8,5 bar |
| Recommended cycles for increased durability: | 25 n/min (225 l/h) |
| Viscosity, max.: | 5000 cP |

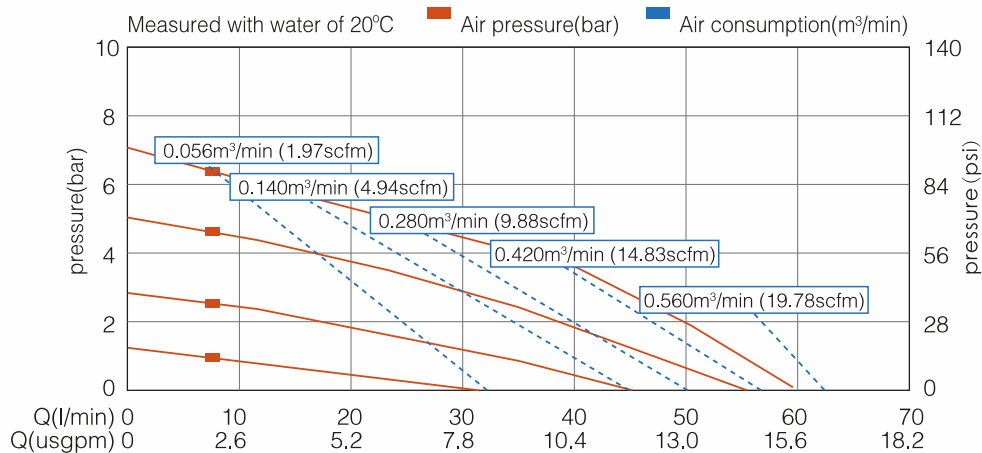
NOZZLES

| | |
|---------------------------|-------------------|
| Suction,- Discharge side: | 1/2" and 3/4" BSP |
| Air Inlet: | 1/4" NPT (f) |
| Air Outlet: | 3/8" NPT (f) |

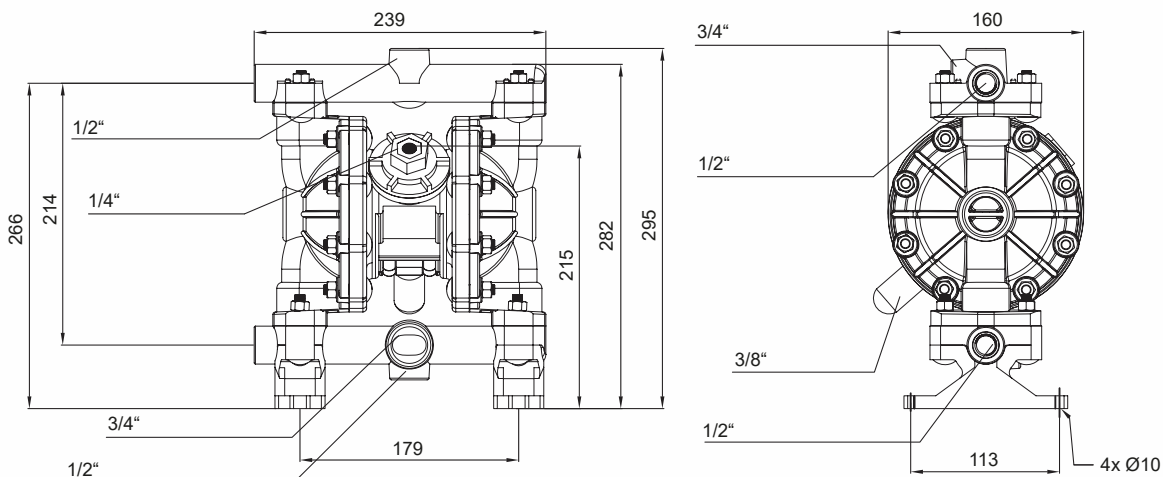
MATERIALS

| | |
|--------------------------|-----------------|
| Housings / Valve-Seats: | Aluminium (AL) |
| Valve-Balls / Diaphragm: | PTFE (PT) |
| | Hytrell (HY) |
| | Santoprene (SP) |
| | Viton (FK) |

PERFORMANCE CURVES



DIMENSIONS



AIR OPERATED DOUBLE DIAPHRAGM PUMPS

Series MARCH MASTER AIR

Type: MMA 716S (1/2" and 3/4")



PERFORMANCE DATA

| | |
|---|---------------------------|
| Capacity flow: | 0 - 57 l/min |
| Discharge pressure, max.: | 8,4 bar |
| Suction height, max.: | |
| dry / wet: | 4 m / 7,6 m |
| Air consumption, max.: | 0,672 m ³ /min |
| Solid size, max.: | 2,5 mm |
| Air pressure, max.: | 8,5 bar |
| Recommended cycles for increased durability: | 25 n/min (225 l/h) |
| Viscosity, max.: | 5000 cP |

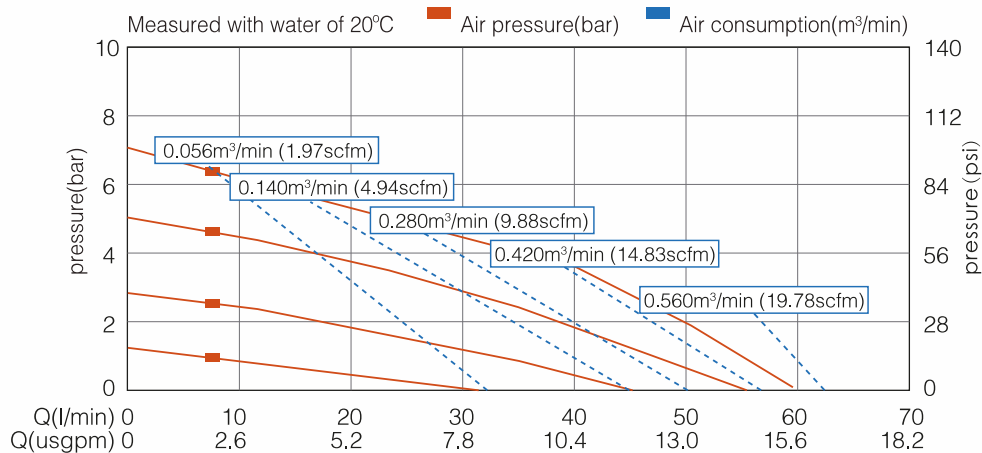
NOZZLES

| | |
|---------------------------|-------------------|
| Suction,- Discharge side: | 1/2" and 3/4" BSP |
| Air Inlet: | 1/4" NPT (f) |
| Air Outlet: | 3/8" NPT (f) |

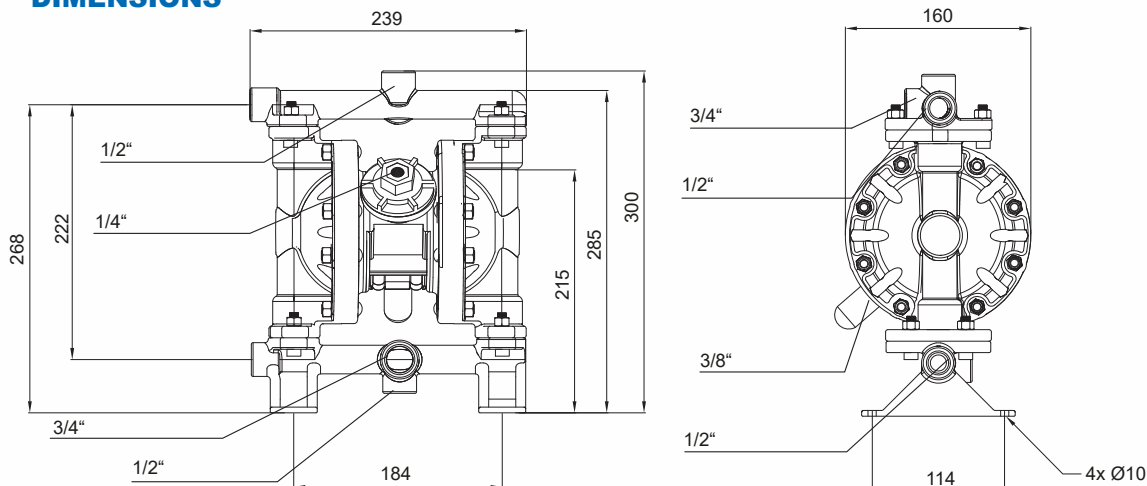
MATERIALS

| | |
|--------------------------|---|
| Housings / Valve-Seats: | AISI304 (SS) AISI316 (LL) |
| Valve-Balls / Diaphragm: | PTFE (PT) Hytrel (HY) Santoprene (SP) Viton (FK) |

PERFORMANCE CURVES



DIMENSIONS



AIR OPERATED DOUBLE DIAPHRAGM PUMPS

Series MARCH MASTER AIR

Type: MMA 1040P (1")



PERFORMANCE DATA

| | |
|--|-------------------------|
| Capacity flow: | 0 - 157 l/min |
| Discharge pressure, max.: | 8,4 bar |
| Suction height, max.: | |
| dry / wet: | 4 m / 8 m |
| Air consumption, max.: | 1,7 m ³ /min |
| Solid size, max.: | 4 mm |
| Air pressure, max.: | 8,4 bar |
| Recommended cycles for increased durability: | 40 n/min (1536 l/h) |
| Viscosity, max.: | 10000 cP |

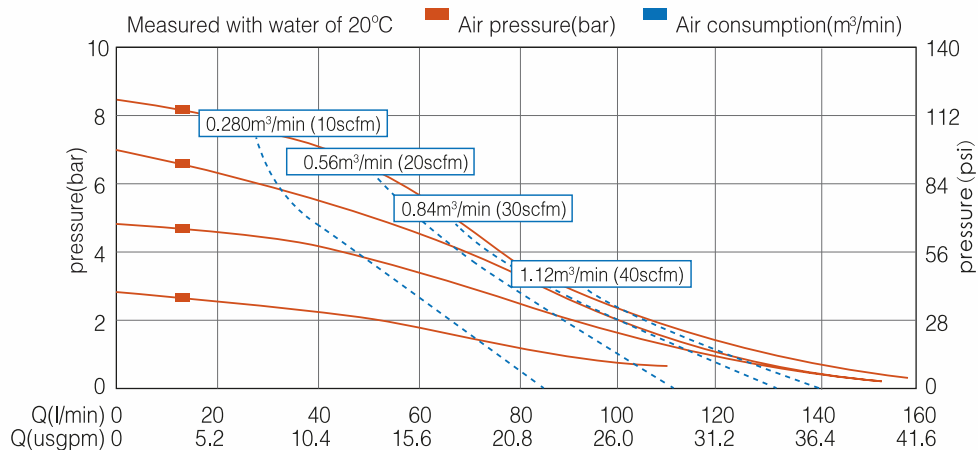
NOZZLES

| | |
|---------------------------|--------------------|
| Suction,- Discharge side: | 1" Flange DIN/ANSI |
| Air Inlet: | 1/2" NPT (f) |
| Air Outlet: | 3/8" NPT (f) |

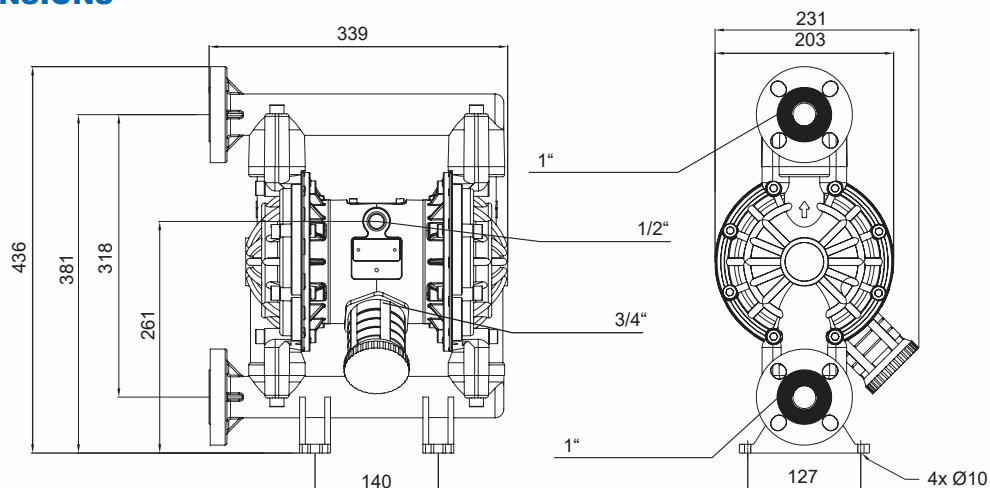
MATERIALS

| | |
|--------------------------|---|
| Housings / Valve-Seats: | Polypropylene (PP) PVDF (KY) |
| Valve-Balls / Diaphragm: | PTFE (PT) Hytrel (HY) Santoprene (SP) Viton (FK) |

PERFORMANCE CURVE



DIMENSIONS



AIR OPERATED DOUBLE DIAPHRAGM PUMPS

Series MARCH MASTER AIR

Type: MMA 1040A (1")



PERFORMANCE DATA

| | |
|--|-------------------------|
| Capacity flow: | 0 - 157 l/min |
| Discharge pressure, max.: | 8,4 bar |
| Suction height, max.: | |
| dry / wet: | 4 m / 8 m |
| Air consumption, max.: | 1,7 m ³ /min |
| Solid size, max.: | 4 mm |
| Air pressure, max.: | 8,4 bar |
| Recommended cycles for increased durability: | 40 n/min (1536 l/h) |
| Viscosity, max.: | 10000 cP |

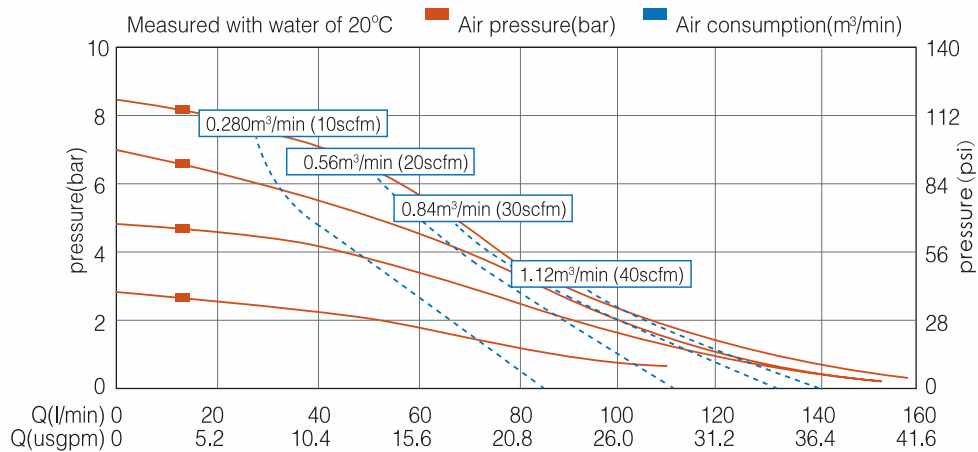
NOZZLES

| | |
|---------------------------|--------------|
| Suction,- Discharge side: | 1" BSP |
| Air Inlet: | 1/2" NPT (f) |
| Air Outlet: | 3/8" NPT (f) |

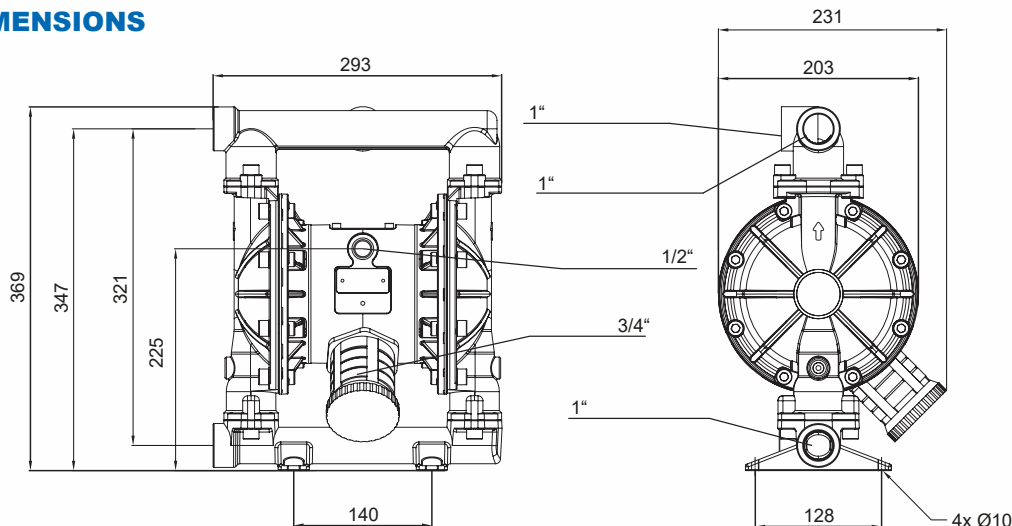
MATERIALS

| | |
|--------------------------|-----------------|
| Housings / Valve-Seats: | Aluminium (AL) |
| Valve-Balls / Diaphragm: | PTFE (PT) |
| | Hytreil (HY) |
| | Santoprene (SP) |
| | Viton (FK) |

PERFORMANCE CURVE



DIMENSIONS



AIR OPERATED DOUBLE DIAPHRAGM PUMPS

Serie MARCH MASTER AIR

Type: MMA 1040S (1")



PERFORMANCE DATA

| | |
|---|-------------------------|
| Capacity flow: | 0 - 157 l/min |
| Discharge pressure, max.: | 8,4 bar |
| Suction height, max. dry / wet: | 4 m / 8 m |
| Air consumption, max.: | 1,7 m ³ /min |
| Solid size, max.: | 4 mm |
| Air pressure, max.: | 8,4 bar |
| Recommended cycles for increased durability: | 40 n/min (1536 l/h) |
| Viscosity, max.: | 10000 cP |

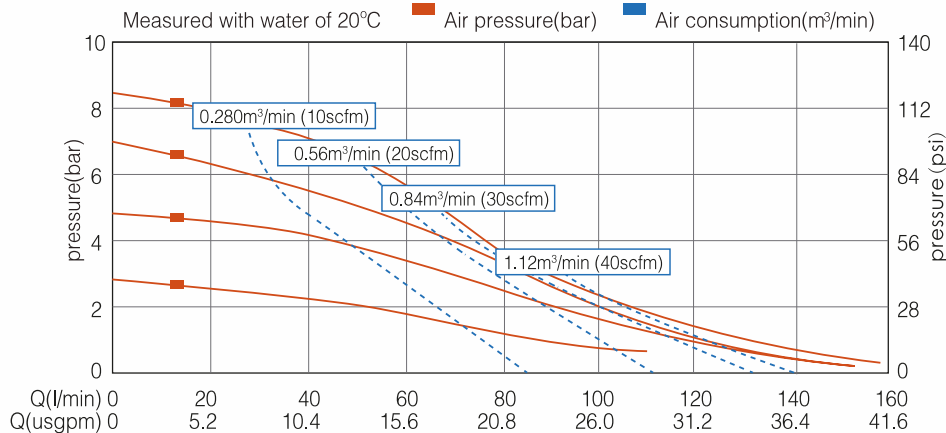
NOZZLES

| | |
|---------------------------|--------------|
| Suction,- Discharge side: | 1" BSP |
| Air Inlet: | 1/2" NPT (f) |
| Air Outlet: | 3/8" NPT (f) |

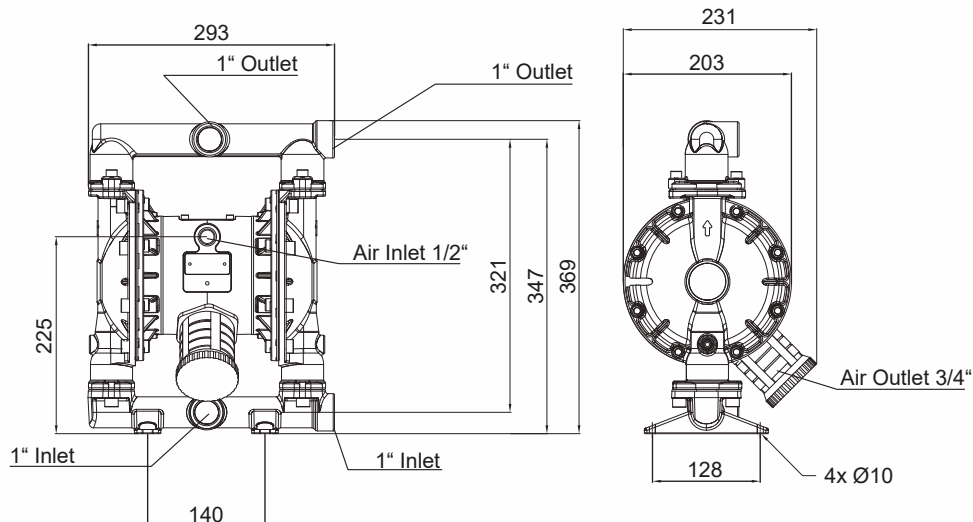
MATERIALS

| | |
|--------------------------|---|
| Housings / Valve-Seats: | AISI304 (SS) AISI316 (LL) |
| Valve-Balls / Diaphragm: | PTFE (PT) Hytrel (HY) Santoprene (SP) Viton (FK) |

PERFORMANCE CURVE



DIMENSIONS



AIR OPERATED DOUBLE DIAPHRAGM PUMPS

Series MARCH MASTER AIR

Type: MMA 1590P (1 1/2")



PERFORMANCE DATA

| | |
|--|-------------------------|
| Capacity flow: | 0 - 358 l/min |
| Discharge pressure, max.: | 8,4 bar |
| Suction height, max.: | |
| dry / wet: | 5 m / 8 m |
| Air consumption, max.: | 3,5 m ³ /min |
| Solid size, max.: | 5 mm |
| Air pressure, max.: | 8,4 bar |
| Recommended cycles for increased durability: | 25 n/min (2940 l/h) |
| Viscosity, max.: | 15000 cP |

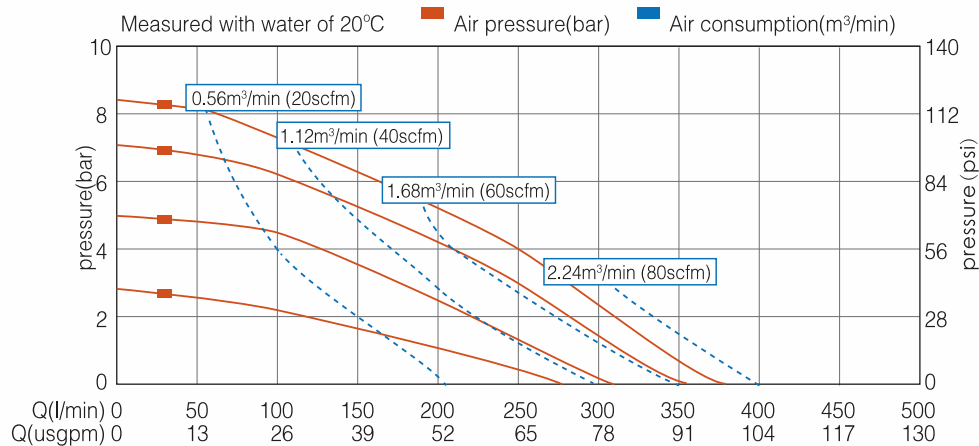
NOZZLES

| | |
|---------------------------|------------------------|
| Suction,- Discharge side: | 1 1/2" Flange DIN/ANSI |
| Air Inlet: | 1/2" NPT (f) |
| Air Outlet: | 3/4" NPT (f) |

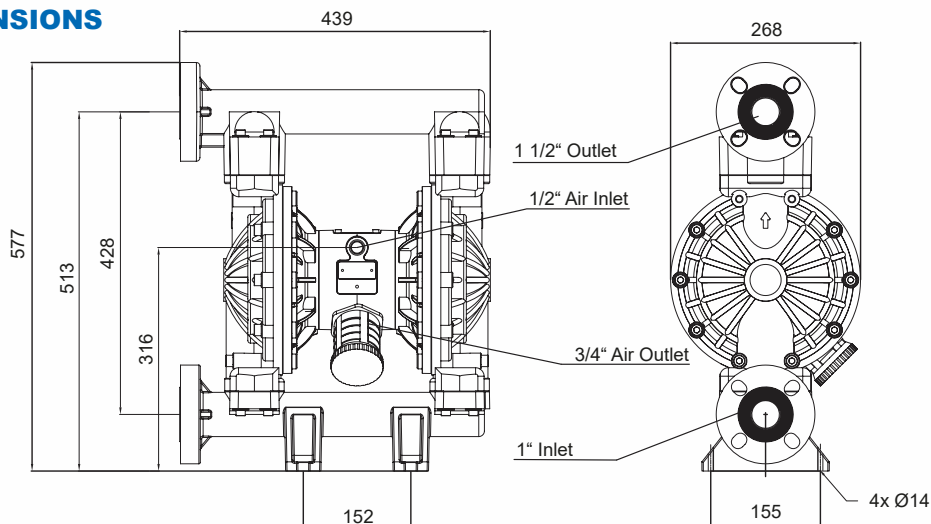
MATERIALS

| | |
|--------------------------|---|
| Housings / Valve-Seats: | Polypropylene (PP) PVDF (KY) |
| Valve-Balls / Diaphragm: | PTFE (PT) Hytrel (HY) Santoprene (SP) Viton (FK) |

PERFORMANCE CURVES



DIMENSIONS



AIR OPERATED DOUBLE DIAPHRAGM PUMPS

Series MARCH MASTER AIR

Type: MMA 1590A (1 1/2")



PERFORMANCE DATA

| | |
|---|-------------------------|
| Capacity flow: | 0 - 358 l/min |
| Discharge pressure, max.: | 8,4 bar |
| Suction height, max.: | |
| dry / wet: | 5 m / 8 m |
| Air consumption, max.: | 3,5 m ³ /min |
| Solid size, max.: | 5 mm |
| Air pressure, max.: | 8,4 bar |
| Recommended cycles for increased durability: | 25 n/min (2940 l/h) |
| Viscosity, max.: | 15000 cP |

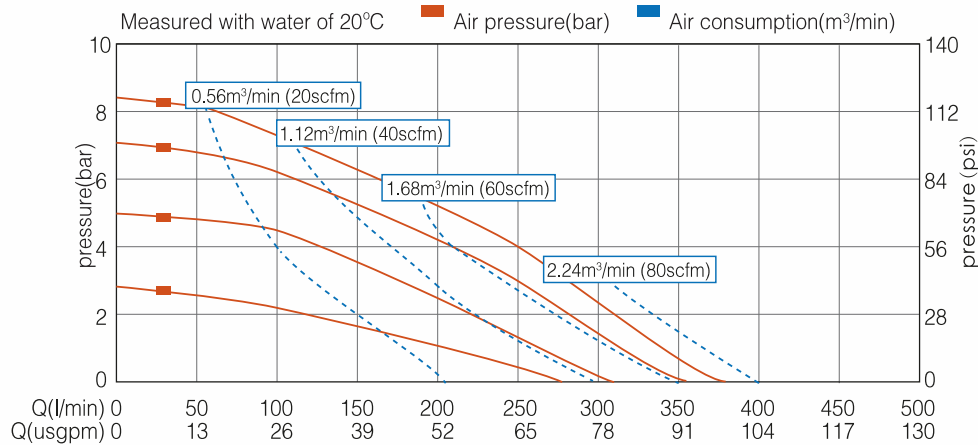
NOZZLES

| | |
|---------------------------|--------------|
| Suction,- Discharge side: | 1 1/2" BSP |
| Air Inlet: | 1/2" NPT (f) |
| Air Outlet: | 3/4" NPT (f) |

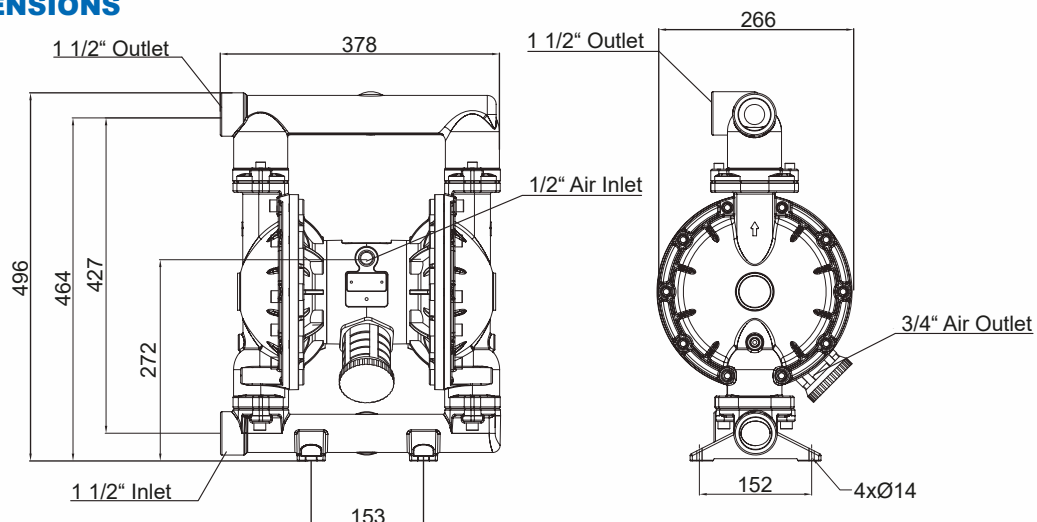
MATERIALS

| | |
|--------------------------|-----------------|
| Housings / Valve-Seats: | Aluminium (AL) |
| Valve-Balls / Diaphragm: | PTFE (PT) |
| | Hytrell (HY) |
| | Santoprene (SP) |
| | Viton (FK) |

PERFORMANCE CURVE



DIMENSIONS



AIR OPERATED DOUBLE DIAPHRAGM PUMPS

Series MARCH MASTER AIR

Type: MMA 1590S (1 1/2")



PERFORMANCE DATA

| | |
|---|-------------------------|
| Capacity flow: | 0 - 358 l/min |
| Discharge pressure, max.: | 8,4 bar |
| Suction height, max.: | |
| dry / wet: | 5 m / 8 m |
| Air consumption, max.: | 3,5 m ³ /min |
| Solid size, max.: | 5 mm |
| Air pressure, max.: | 8,4 bar |
| Recommended cycles for increased durability: | 25 n/min (2940 l/h) |
| Viscosity, max.: | 15000 cP |

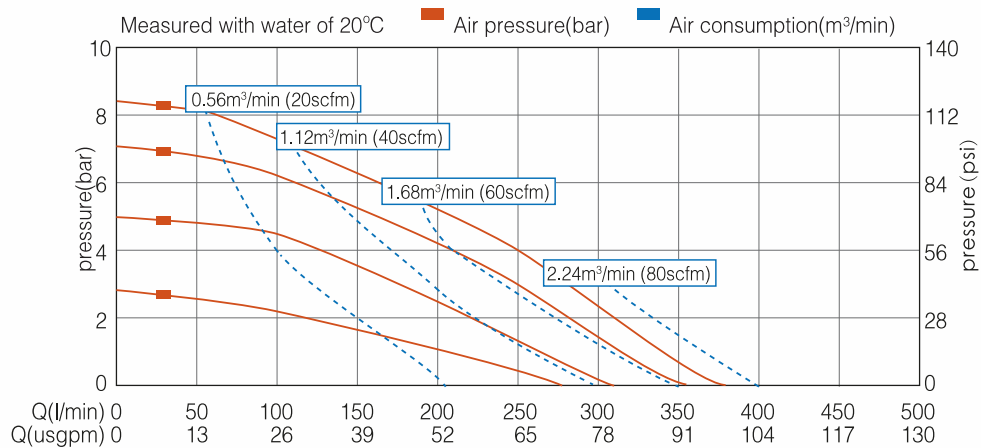
NOZZLES

| | |
|---------------------------|--------------|
| Suction,- Discharge side: | 1 1/2" BSP |
| Air Inlet: | 1/2" NPT(f) |
| Air Outlet: | 3/4" NPT (f) |

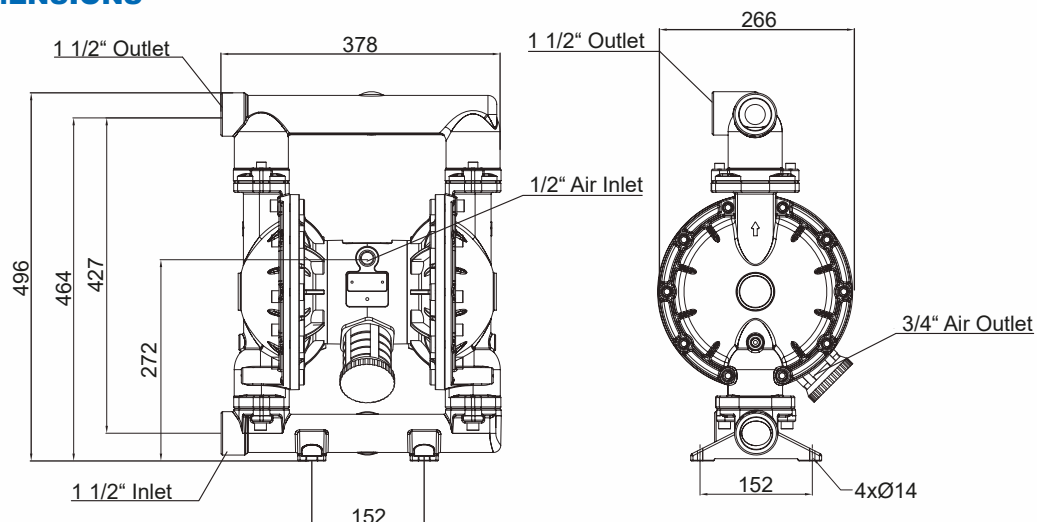
MATERIALS

| | |
|--------------------------|---|
| Housings / Valve-Seats: | AISI304 (SS) AISI316 (LL) |
| Valve-Balls / Diaphragm: | PTFE (PT) Hytrel (HY) Santoprene (SP) Viton (FK) |

PERFORMANCE CURVES



DIMENSIONS



AIR OPERATED DOUBLE DIAPHRAGM PUMPS

Series MARCH MASTER AIR

Type: MMA 2150P (2")



PERFORMANCE DATA

| | |
|--|-------------------------|
| Capacity flow: | 0 - 587 l/min |
| Discharge pressure, max.: | 8,4 bar |
| Suction height, max.: | |
| dry / wet: | 5 m / 8 m |
| Air consumption, max.: | 4,9 m ³ /min |
| Solid size, max.: | 6 mm |
| Air pressure, max.: | 8,4 bar |
| Recommended cycles for increased durability: | 25 n/min (5850 l/h) |
| Viscosity, max.: | 20000 cP |

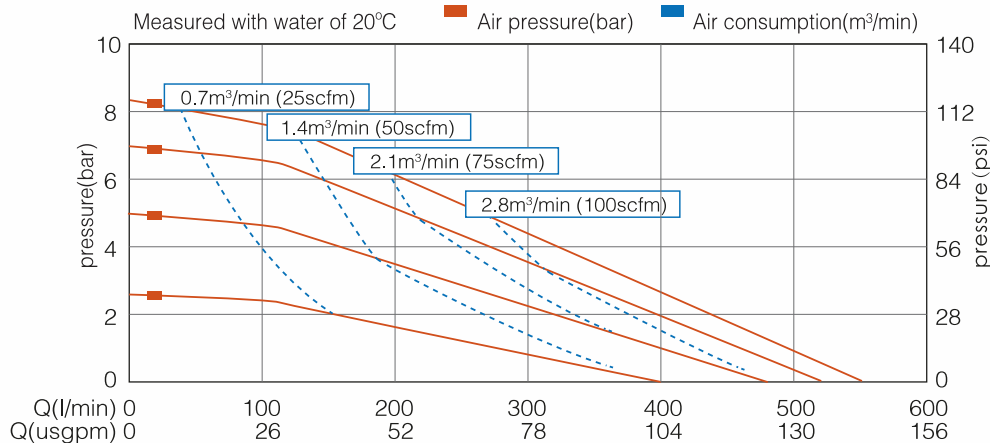
NOZZLES

| | |
|---------------------------|---------------------|
| Suction,- Discharge side: | 2" Flanged DIN/ANSI |
| Air Inlet: | 1/2" NPT(f) |
| Air Outlet: | 3/4" NPT (f) |

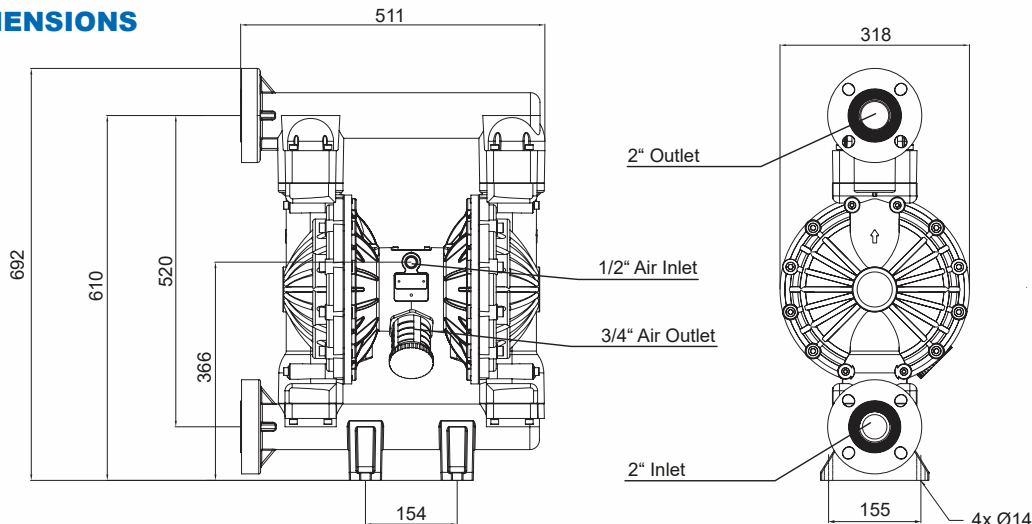
MATERIALS

| | |
|--------------------------|---|
| Housings / Valve-Seats: | Polypropylene (PP) PVDF (KY) |
| Valve-Balls / Diaphragm: | PTFE (PT) Hytrel (HY) Santoprene (SP) Viton (FK) |

PERFORMANCE CURVES



DIMENSIONS



AIR OPERATED DOUBLE DIAPHRAGM PUMPS

Series MARCH MASTER AIR

Type: MMA 2150A (2")



PERFORMANCE DATA

| | |
|---|-------------------------|
| Capacity flow: | 0 - 587 l/min |
| Discharge pressure, max.: | 8,4 bar |
| Suction height, max.: | |
| dry / wet: | 5 m / 8 m |
| Air consumption, max.: | 4,9 m ³ /min |
| Solid size, max.: | 6 mm |
| Air pressure, max.: | 8,4 bar |
| Recommended cycles for increased durability: | 25 n/min (5850 l/h) |
| Viscosity, max.: | 20000 cP |

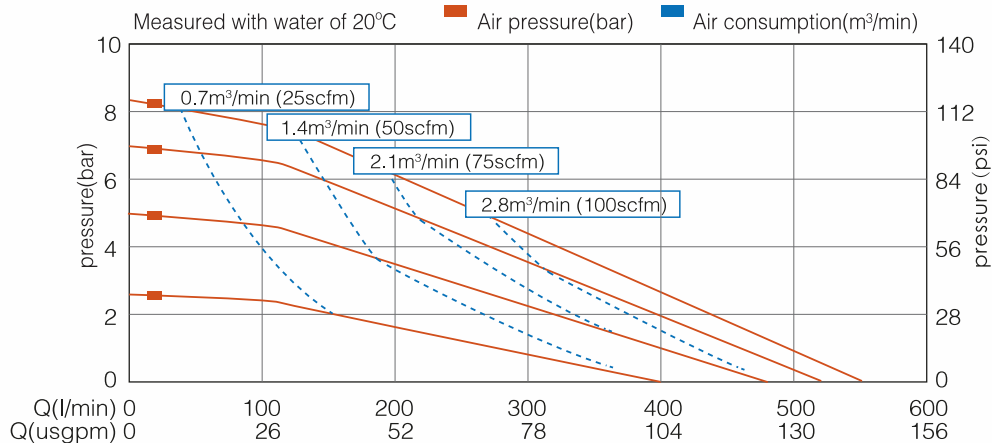
NOZZLES

| | |
|---------------------------|--------------|
| Suction,- Discharge side: | 2" BSP |
| Air Inlet: | 1/2" NPT(f) |
| Air Outlet: | 3/4" NPT (f) |

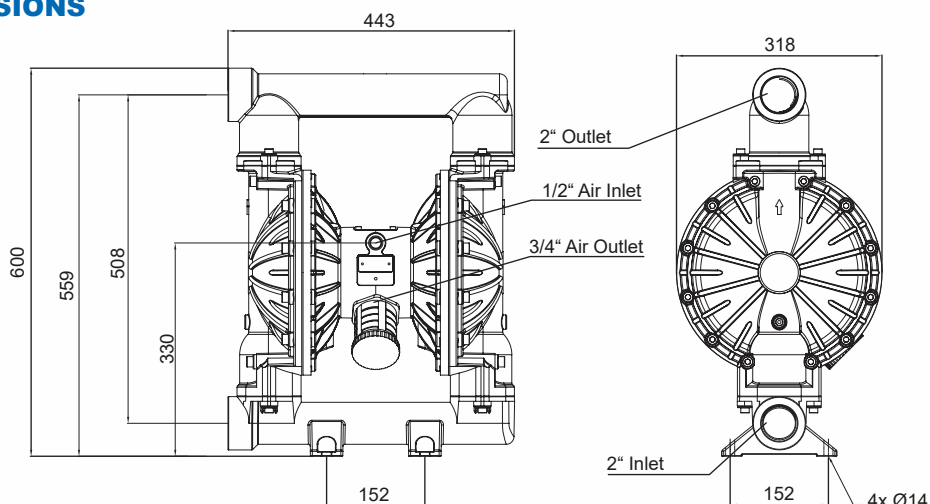
MATERIALS

| | |
|--------------------------|-----------------|
| Housings / Valve-Seats: | Aluminium (AL) |
| Valve-Balls / Diaphragm: | PTFE (PT) |
| | Hytrek (HY) |
| | Santoprene (SP) |
| | Viton (FK) |

PERFORMANCE CURVES



DIMENSIONS



AIR OPERATED DOUBLE DIAPHRAGM PUMPS

Series MARCH MASTER AIR

Type: MMA 2150S (2")



PERFORMANCE DATA

| | |
|---|-------------------------|
| Capacity flow: | 0 - 587 l/min |
| Discharge pressure, max.: | 8,4 bar |
| Suction height, max. dry / wet: | 5 m / 8 m |
| Air consumption, max.: | 4,9 m ³ /min |
| Solid size, max.: | 6 mm |
| Air pressure, max.: | 8,4 bar |
| Recommended cycles for increased durability: | 25 n/min (5850 l/h) |
| Viscosity, max.: | 20000 cP |

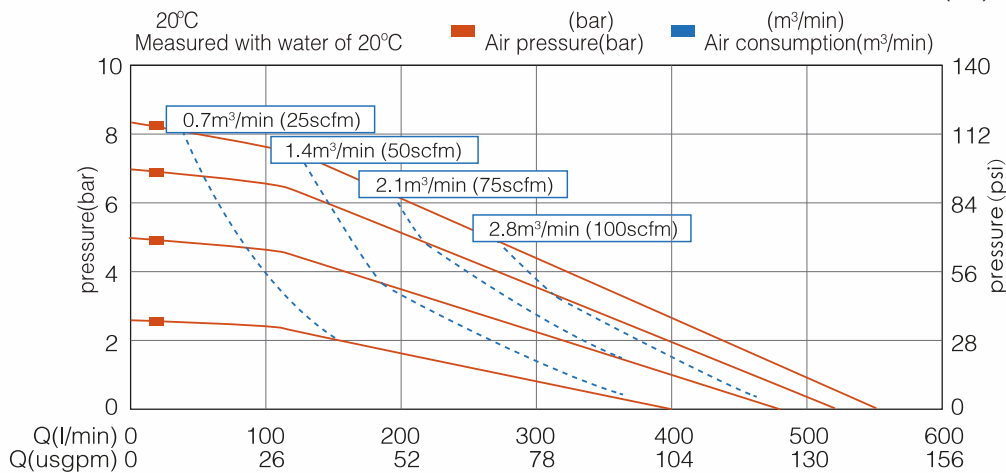
NOZZLES

| | |
|---------------------------|--------------|
| Suction,- Discharge side: | 2" BSP |
| Air Inlet: | 1/2" NPT (f) |
| Air Outlet: | 3/4" NPT (f) |

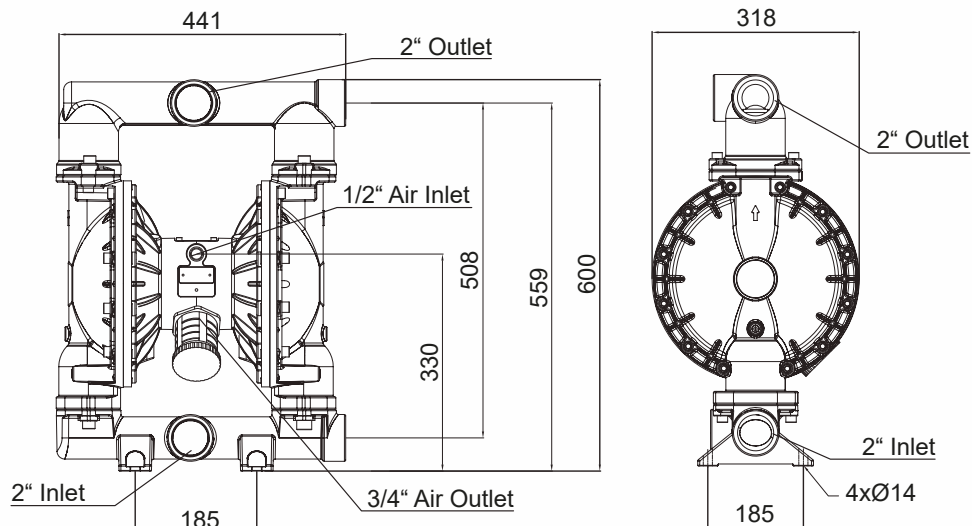
MATERIALS

| | |
|--------------------------|---|
| Housings / Valve-Seats: | AISI304 (SS) AISI316 (LL) |
| Valve-Balls / Diaphragm: | PTFE (PT) Hytrel (HY) Santoprene (SP) Viton (FK) |

KENNLINIEN



ABMESSUNGEN



AIR OPERATED DOUBLE DIAPHRAGM PUMPS

Series MARCH MASTER AIR

Type: MMA 3300P (3")



PERFORMANCE DATA

| | |
|--|-------------------------|
| Capacity flow: | 0 - 1060 l/min |
| Discharge pressure, max.: | 8,4 bar |
| Suction height, max.: | |
| dry / wet: | 5 m / 8 m |
| Air consumption, max.: | 9,1 m ³ /min |
| Solid size, max.: | 9,4 mm |
| Air pressure, max.: | 8,4 bar |
| Recommended cycles for increased durability: | 20 n/min (5850 l/h) |
| Viscosity, max.: | 25000 cP |

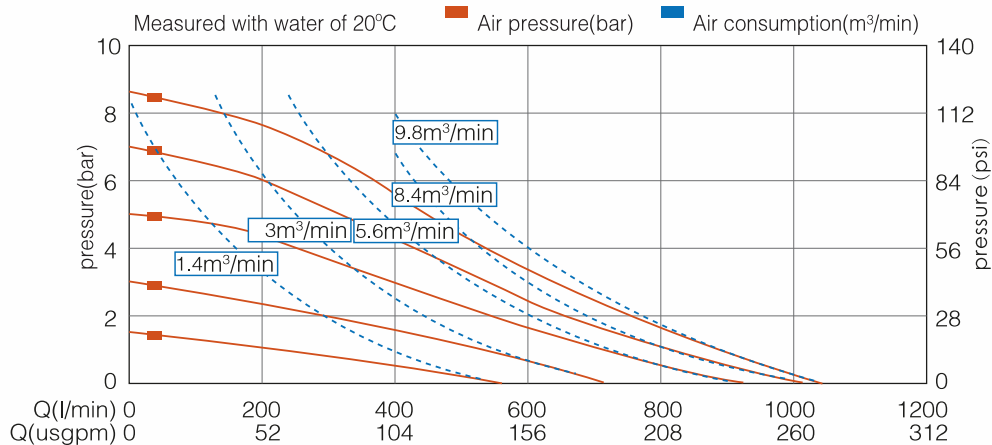
NOZZLES

| | |
|---------------------------|--------------------|
| Suction,- Discharge side: | 3" Flange DIN/ANSI |
| Air Inlet: | 3/4" NPT (f) |
| Air Outlet: | 1" NPT (f) |

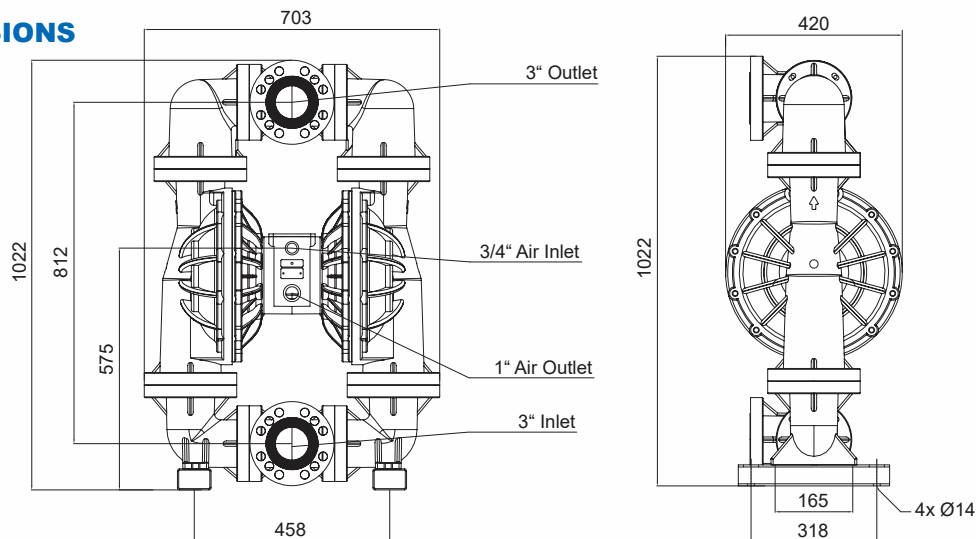
MATERIALS

| | |
|--------------------------|---|
| Housings / Valve-Seats: | Polypropylene (PP) PVDF (KY) |
| Valve-Balls / Diaphragm: | PTFE (PT) Hytrek (HY) Santoprene (SP) Viton (FK) |

PERFORMANCE CURVE



DIMENSIONS



AIR OPERATED DOUBLE DIAPHRAGM PUMPS

Series MARCH MASTER AIR

Type: MMA 3300A (3")



PERFORMANCE DATA

| | |
|--|-------------------------|
| Capacity flow: | 0 - 1060 l/min |
| Discharge pressure, max.: | 8,4 bar |
| Suction height, max. dry / wet: | 5 m / 8 m |
| Air consumption, max.: | 9,1 m ³ /min |
| Solid size, max.: | 9,4 mm |
| Air pressure, max.: | 8,4 bar |
| Recommended cycles for increased durability: | 20 n/min (13200 l/h) |
| Viscosity, max.: | 25000 cP |

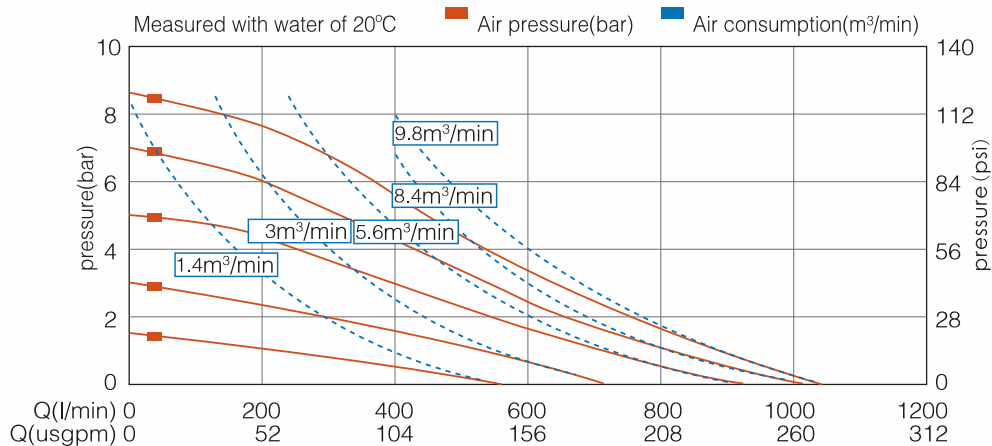
NOZZLES

| | |
|---------------------------|---------------------|
| Suction,- Discharge side: | 3" Flanged DIN/ANSI |
| Air Inlet: | 3/4" NPT(f) |
| Air Outlet: | 1" NPT (f) |

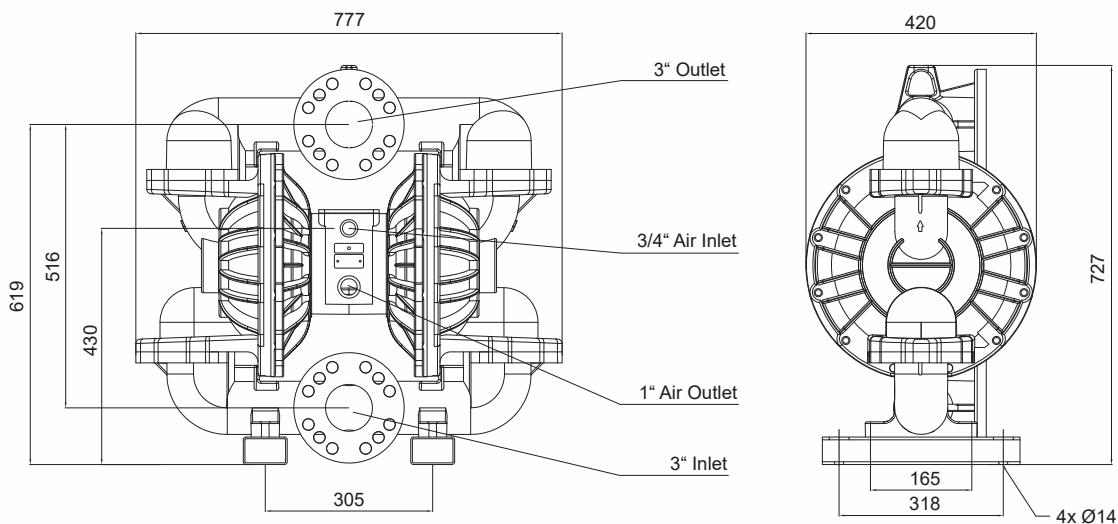
MATERIALS

| | |
|--------------------------|-----------------|
| Housings / Valve-Seats: | Aluminium (AL) |
| Valve-Balls / Diaphragm: | PTFE (PT) |
| | Hytrell (HY) |
| | Santoprene (SP) |
| | Viton (FK) |

PERFORMANCE CURVES



DIMENSIONS



AIR OPERATED DOUBLE DIAPHRAGM PUMPS

Series MARCH MASTER AIR

Type: MMA 3300S (3")



PERFORMANCE DATA

| | |
|--|-------------------------|
| Capacity flow: | 0 - 1060 l/min |
| Discharge pressure, max.: | 8,4 bar |
| Suction height, max. dry / wet: | 5 m / 8 m |
| Air consumption, max.: | 9,1 m ³ /min |
| Solid size, max.: | 9,4 mm |
| Air pressure, max.: | 8,4 bar |
| Recommended cycles for increased durability: | 20 n/min (13200 l/h) |
| Viscosity, max.: | 25000 cP |

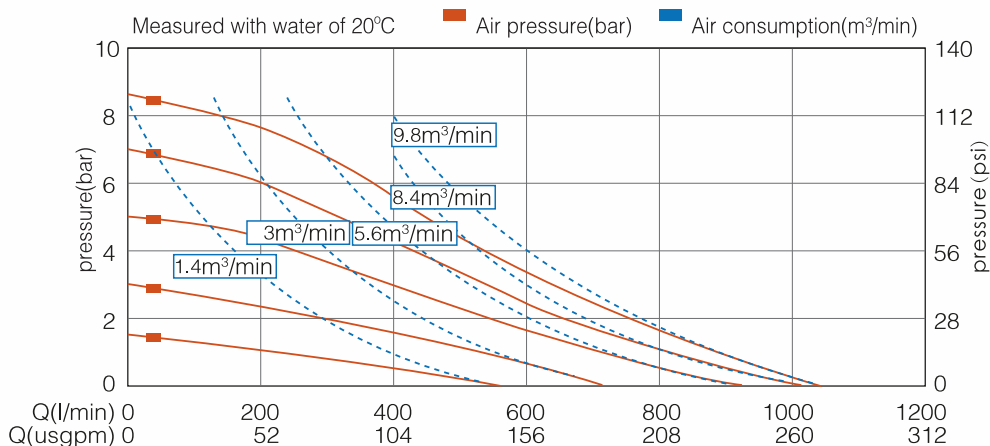
NOZZLES

| | |
|---------------------------|-------------|
| Suction,- Discharge side: | 3" BSP |
| Air Inlet: | 3/4" NPT(f) |
| Air Outlet: | 1" NPT (f) |

MATERIALS

| | |
|--------------------------|--|
| Housings / Valve-Seats: | AISI304 (SS) AISI316 (LL) |
| Valve-Balls / Diaphragm: | PTFE (PT) Hytel (HY) Santoprene (SP) Viton (FK) |

PERFORMANCE CURVE



DIMENSIONS

