

HPX

Air-Operated Double Diaphragm Pumps

Center-ported air-operated double diaphragm pumps from 1/4" to 3" in polypropylene, PVDF, aluminium and stainless steel. Self-priming, dry-run safe and deadhead-safe – with manufacturer performance curves, installation dimensions and full material options for every size.



CAT

Product Catalog
Edition 2.0
July 2026
supersedes Edition
1.1

HydraPumps

Power in every drop.

info@hydrapumps.com

HPX 25 PP – PP / TF / TF

series · 1 size · 2 body – 3 seat / 4 ball / 5 diaphragm

1 Pump size	
06	1/4"
15	1/2"
20	3/4"
25	1"
40	1.5"
50	2"
80	3"

2 Pump body	
PP	Polypropylene
KV	PVDF
AL	Aluminium
AC	Cast iron (nodular)
SS	SS304
LL	SS316

3 Valve seat	
PP	Polypropylene
KV	PVDF
ST	Santoprene
AL	Aluminium
SS	SS304
LL	SS316

4 Valve ball	
TF	PTFE (Teflon)
ST	Santoprene
BN	Buna-N
SS	SS304
LL	SS316

5 Diaphragm	
TF	PTFE (Teflon)
ST	Santoprene
VT	FKM (Viton®)
BN	Buna-N
PU	Polyurethane

Reading the example. HPX 25 PP - PP/TF/TF = 1" pump, polypropylene body, polypropylene seats, PTFE balls, PTFE diaphragms. Segments always read in flow-path order: body → seat → ball → diaphragm.

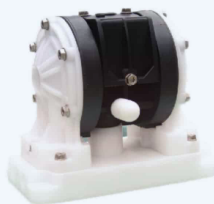
Generation letter. Every nameplate carries a build-generation letter (this catalog: Generation B). Always quote the model code AND the generation letter when ordering spares – wet-end kits are generation-specific and do not interchange across generations.

Codes on pre-2026 (Generation-A) nameplates read the wetted segments in the former order body / diaphragm / ball / seat – see Edition 1.1. Side-ported variants are the HPXS series (separate catalog). Not every combination is stocked – configured to order.

Wetted material	Minimum	Maximum
FKM / Viton® (VT)	-40 °C (-40 °F)	176 °C (350 °F)
PTFE diaphragm (TF)	+4 °C (+40 °F)	176 °C (350 °F)
Santoprene (ST)	-40 °C (-40 °F)	148 °C (300 °F)
Buna-N (BN)	-40 °C (-40 °F)	121 °C (250 °F)
Polyurethane (PU)	-40 °C (-40 °F)	93 °C (200 °F)
Polypropylene body (PP)	+4 °C (+40 °F)	65 °C (150 °F)
PVDF body (KV)	+4 °C (+40 °F)	93 °C (200 °F)

Temperature limits are based on mechanical stress only; certain chemicals significantly reduce the safe operating temperature. The most restrictive wetted component governs the pump. Metal fluid sections (AL / SS / cast iron): consult factory for the application's temperature envelope.

Generation-B platform values per the manufacturer's current engineering data (April 2024). These supersede the Edition 1.1 table – several limits are stricter than previously published.



HPX06

Plastic Pump – center-ported · Generation B

1/4"

19 L/min

7 bar

1.5 mm solids

Technical parameters

Suction / discharge connection 1/4"

Maximum free flow 19 L/min (5 US gpm)

Maximum working / air pressure 7 bar (102 psi)

Air pressure range 1.8 – 7 bar

Maximum air consumption 0.25 m³/min

Maximum solids handling 1.5 mm

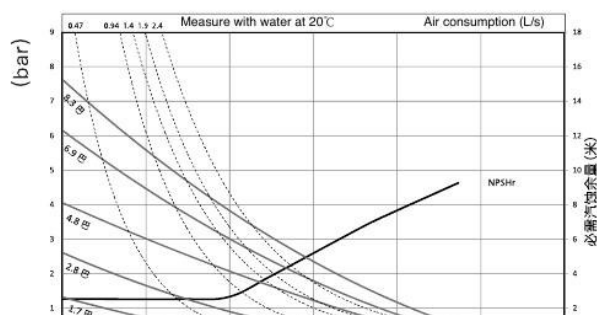
Air inlet · air exhaust 1/4" · 1/4"

Body materials PP · KV (PVDF)

Envelope (W × D × H) Certified GA drawing on request

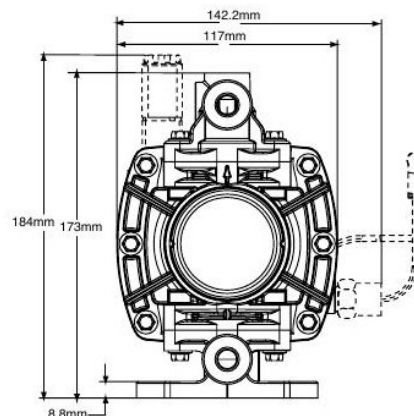
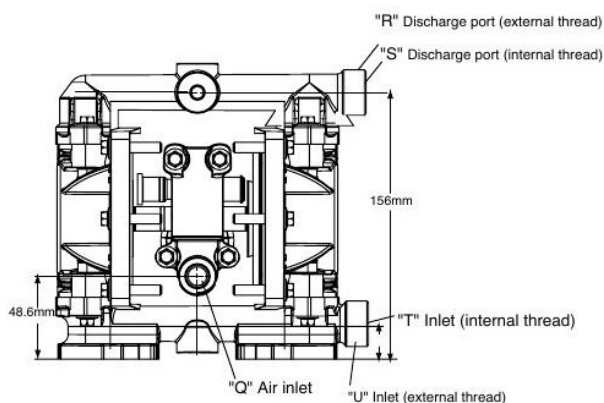
Weight On request

Performance Curves



Manufacturer performance curves, measured with water at 20 °C.
Boxed values = air consumption at the marked duty points.

Installation Dimension Drawing



Installation dimensions (mm) – center-port configuration. Certified GA drawings are issued with the order documentation.



HPX15/20

Plastic Pump – center-ported · Generation B

1/2" · 3/4"

57 L/min

7 bar

2.5 mm solids

Technical parameters

Suction / discharge connection 1/2" · 3/4"

Maximum free flow 57 L/min (15 US gpm)

Maximum working / air pressure 7 bar (102 psi)

Air pressure range 1.8 – 7 bar

Maximum air consumption 0.67 m³/min

Maximum solids handling 2.5 mm

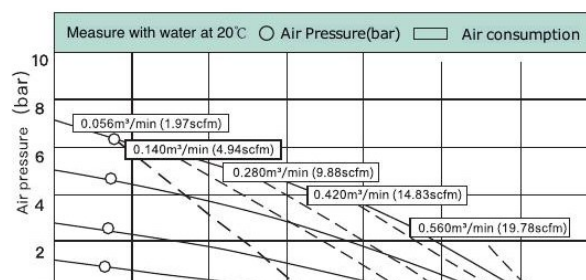
Air inlet · air exhaust 1/4" · 3/8"

Body materials PP · KV (PVDF)

Envelope (W × D × H) Certified GA drawing on request

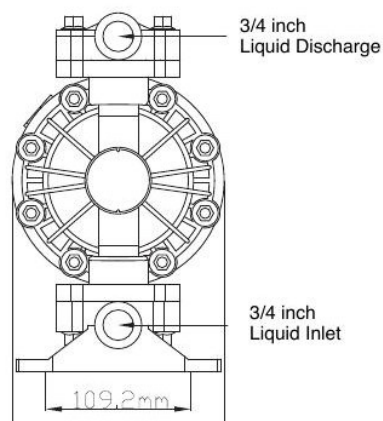
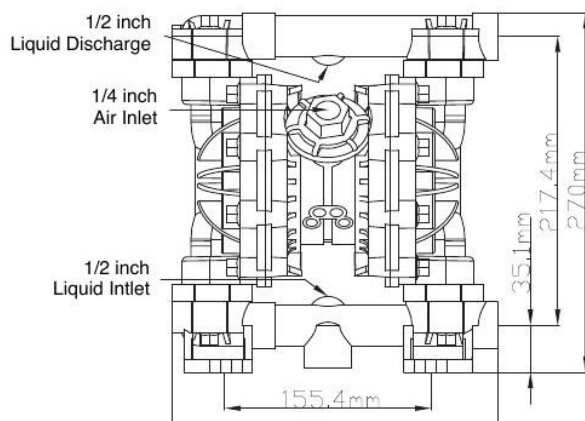
Weight On request

Performance Curves



Manufacturer performance curves, measured with water at 20 °C. Boxed values = air consumption at the marked duty points.

Installation Dimension Drawing



Installation dimensions (mm) – center-port configuration. Certified GA drawings are issued with the order documentation.



HPX15/20

Aluminium Pump – center-ported · Generation B

1/2" · 3/4"

57 L/min

7 bar

2.5 mm solids

Technical parameters

Suction / discharge connection 1/2" · 3/4"

Maximum free flow 57 L/min (15 US gpm)

Maximum working / air pressure 7 bar (102 psi)

Air pressure range 1.8 – 7 bar

Maximum air consumption 0.67 m³/min

Maximum solids handling 2.5 mm

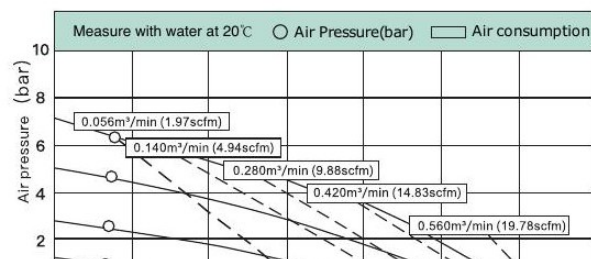
Air inlet · air exhaust 1/4" · 3/8"

Body materials AL (cast iron AC to order)

Envelope (W × D × H) 220 W x 158.8 D x 275 H

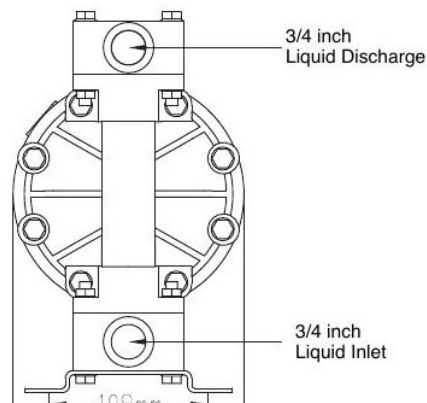
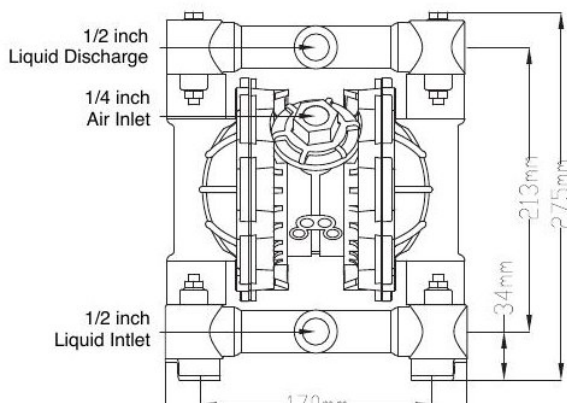
Weight On request

Performance Curves

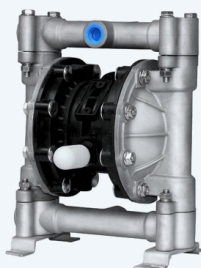


Manufacturer performance curves, measured with water at 20 °C. Boxed values = air consumption at the marked duty points.

Installation Dimension Drawing



Installation dimensions (mm) – center-port configuration. Certified GA drawings are issued with the order documentation.



HPX15/20

Stainless Steel Pump – center-ported · Generation B

1/2" · 3/4"

57 L/min

7 bar

2.5 mm solids

Technical parameters

Suction / discharge connection 1/2" · 3/4"

Maximum free flow 57 L/min (15 US gpm)

Maximum working / air pressure 7 bar (102 psi)

Air pressure range 1.8 – 7 bar

Maximum air consumption 0.67 m³/min

Maximum solids handling 2.5 mm

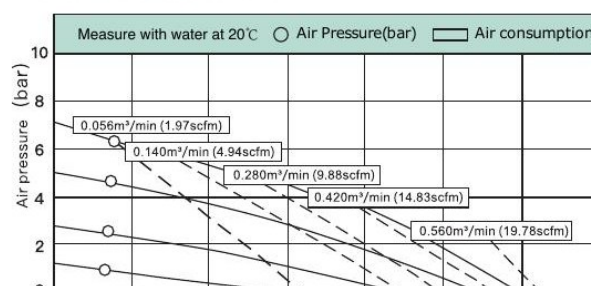
Air inlet · air exhaust 1/4" · 3/8"

Body materials SS (304) · LL (316)

Envelope (W × D × H) Overall approx 220 W x 158.8 D x 275 H mm

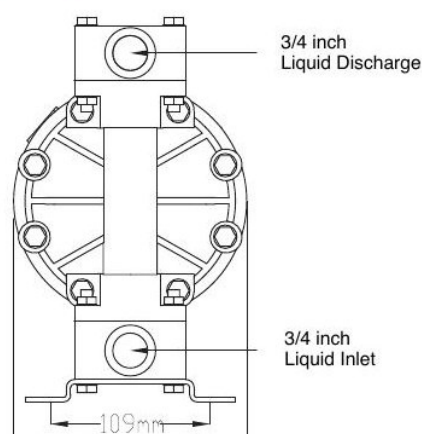
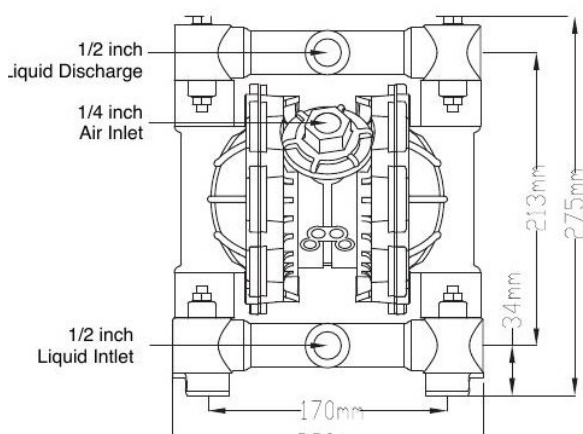
Weight On request

Performance Curves



Manufacturer performance curves, measured with water at 20 °C. Boxed values = air consumption at the marked duty points.

Installation Dimension Drawing



Installation dimensions (mm) – center-port configuration. Certified GA drawings are issued with the order documentation.



HPX25

Plastic Pump – center-ported · Generation B

1"

150 L/min

8.4 bar

3.2 mm solids

Technical parameters

Suction / discharge connection 1"

Maximum free flow 150 L/min (40 US gpm)

Maximum working / air pressure 8.4 bar (122 psi)

Air pressure range 1.4 – 8.4 bar

Maximum air consumption 1.5 m³/min

Maximum solids handling 3.2 mm

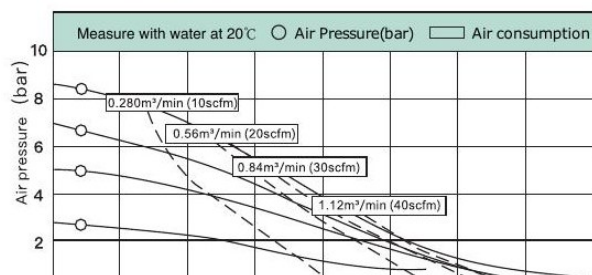
Air inlet · air exhaust 1/2" · 3/4"

Body materials PP · KV (PVDF)

Envelope (W × D × H) Certified GA drawing on request

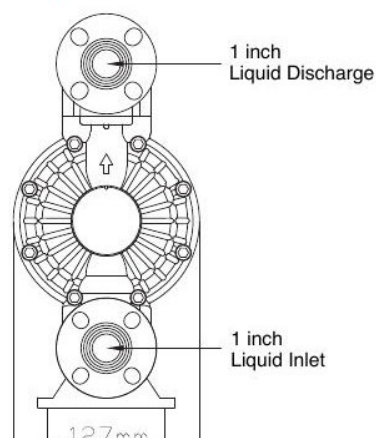
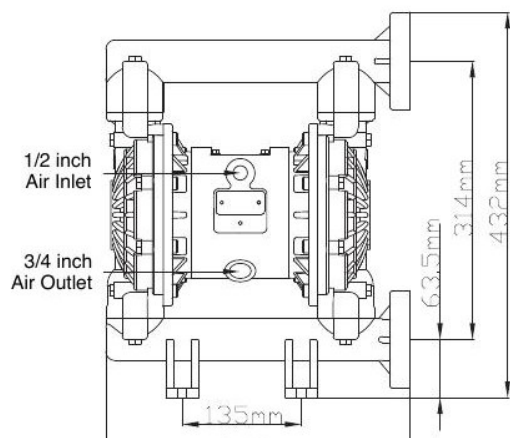
Weight On request

Performance Curves



Manufacturer performance curves, measured with water at 20 °C. Boxed values = air consumption at the marked duty points.

Installation Dimension Drawing



Installation dimensions (mm) – center-port configuration. Certified GA drawings are issued with the order documentation.



HPX25

Aluminium Pump – center-ported · Generation B

1"

150 L/min

8.4 bar

3.2 mm solids

Technical parameters

Suction / discharge connection 1"

Maximum free flow 150 L/min (40 US gpm)

Maximum working / air pressure 8.4 bar (122 psi)

Air pressure range 1.4 – 8.4 bar

Maximum air consumption 1.5 m³/min

Maximum solids handling 3.2 mm

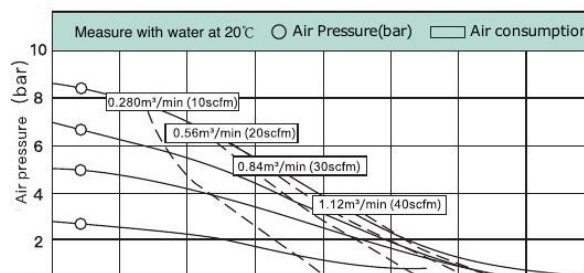
Air inlet · air exhaust 1/2" · 3/4"

Body materials AL (cast iron AC to order)

Envelope (W × D × H) 305 W x 200 D x 319.5 H

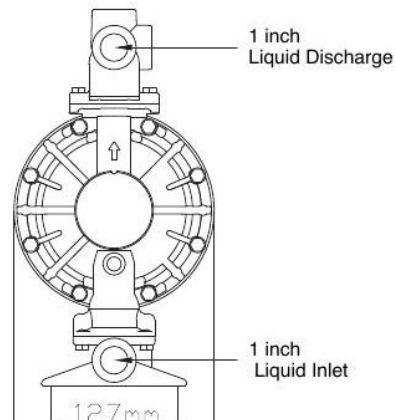
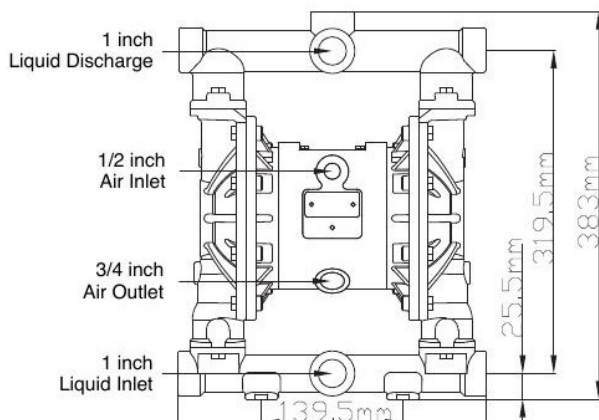
Weight On request

Performance Curves



Manufacturer performance curves, measured with water at 20 °C. Boxed values = air consumption at the marked duty points.

Installation Dimension Drawing



Installation dimensions (mm) – center-port configuration. Certified GA drawings are issued with the order documentation.



HPX25

Stainless Steel Pump – center-ported · Generation B

1"

150 L/min

8.4 bar

3.2 mm solids

Technical parameters

Suction / discharge connection 1"

Maximum free flow 150 L/min (40 US gpm)

Maximum working / air pressure 8.4 bar (122 psi)

Air pressure range 1.4 – 8.4 bar

Maximum air consumption 1.5 m³/min

Maximum solids handling 3.2 mm

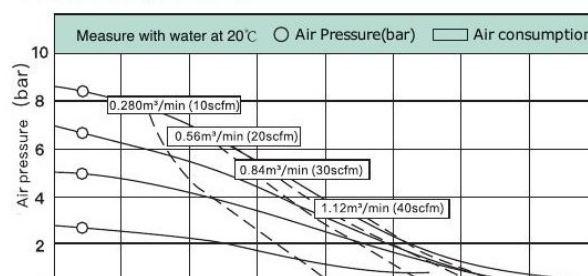
Air inlet · air exhaust 1/2" · 3/4"

Body materials SS (304) · LL (316)

Envelope (W × D × H) Overall approx 282 W x 200 D x 375 H mm

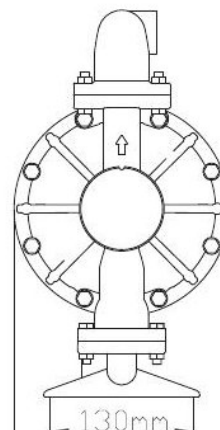
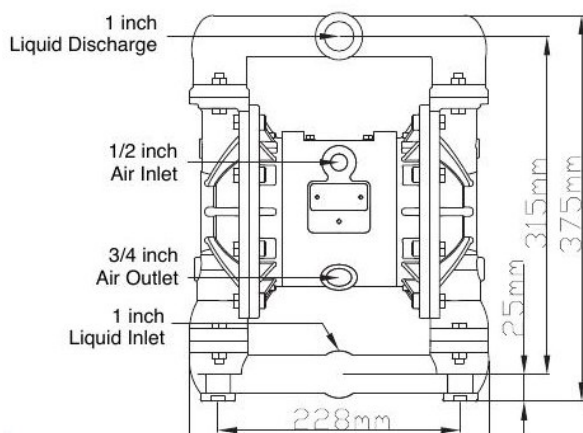
Weight On request

Performance Curves



Manufacturer performance curves, measured with water at 20 °C.
Boxed values = air consumption at the marked duty points.

Installation Dimension Drawing



Installation dimensions (mm) – center-port configuration. Certified GA drawings are issued with the order documentation.



HPX40

Plastic Pump – center-ported · Generation B

1.5"

378 L/min

8.4 bar

4.8 mm solids

Technical parameters

Suction / discharge connection 1.5"

Maximum free flow 378 L/min (100 US gpm)

Maximum working / air pressure 8.4 bar (122 psi)

Air pressure range 1.4 – 8.4 bar

Maximum air consumption 3.0 m³/min

Maximum solids handling 4.8 mm

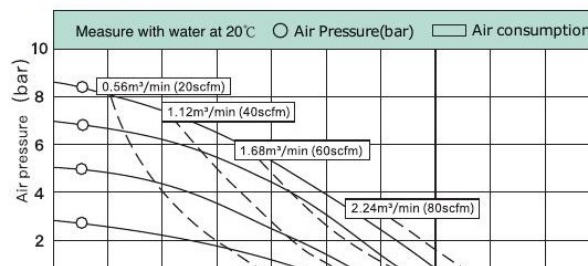
Air inlet · air exhaust 1/2" · 3/4"

Body materials PP · KV (PVDF)

Envelope (W × D × H) Certified GA drawing on request

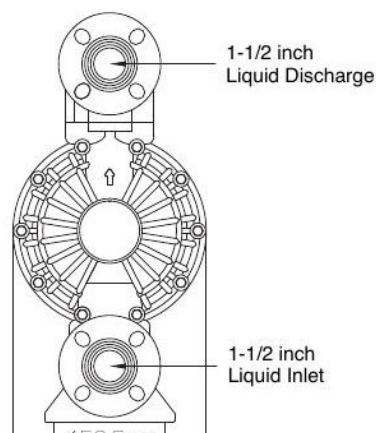
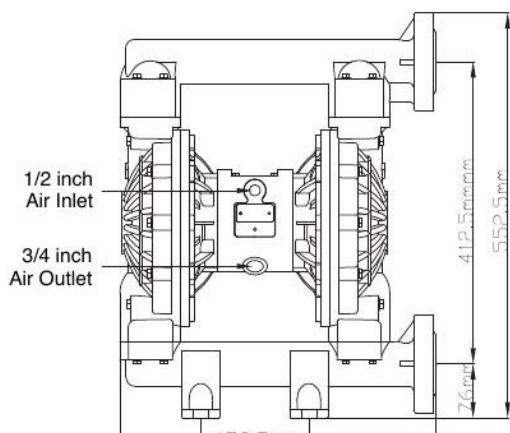
Weight On request

Performance Curves



Manufacturer performance curves, measured with water at 20 °C.
Boxed values = air consumption at the marked duty points.

Installation Dimension Drawing



Installation dimensions (mm) – center-port configuration. Certified GA drawings are issued with the order documentation.



HPX40

Aluminium Pump – center-ported · Generation B

1.5"

378 L/min

8.4 bar

4.8 mm solids

Technical parameters

Suction / discharge connection 1.5"

Maximum free flow 378 L/min (100 US gpm)

Maximum working / air pressure 8.4 bar (122 psi)

Air pressure range 1.4 – 8.4 bar

Maximum air consumption 3.0 m³/min

Maximum solids handling 4.8 mm

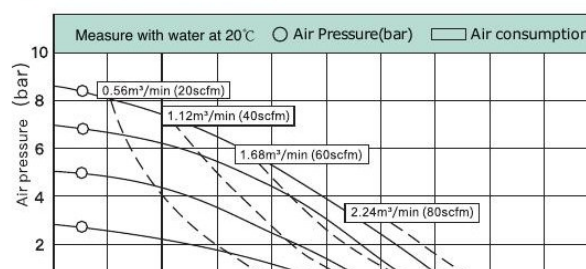
Air inlet · air exhaust 1/2" · 3/4"

Body materials AL (cast iron AC to order)

Envelope (W × D × H) 379.5 W x 265.5 D x 497 H

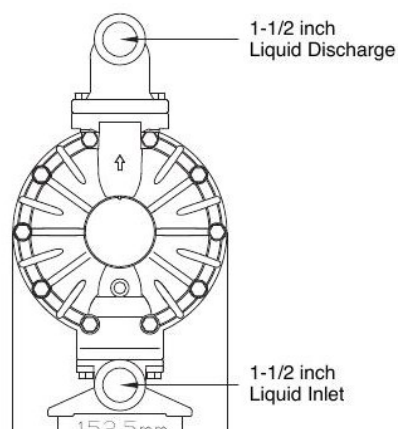
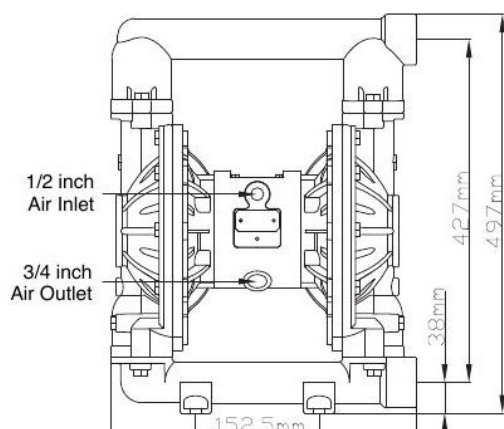
Weight On request

Performance Curves



Manufacturer performance curves, measured with water at 20 °C. Boxed values = air consumption at the marked duty points.

Installation Dimension Drawing



Installation dimensions (mm) – center-port configuration. Certified GA drawings are issued with the order documentation.



HPX40

Stainless Steel Pump – center-ported · Generation B

1.5"

378 L/min

8.4 bar

4.8 mm solids

Technical parameters

Suction / discharge connection 1.5"

Maximum free flow 378 L/min (100 US gpm)

Maximum working / air pressure 8.4 bar (122 psi)

Air pressure range 1.4 – 8.4 bar

Maximum air consumption 3.0 m³/min

Maximum solids handling 4.8 mm

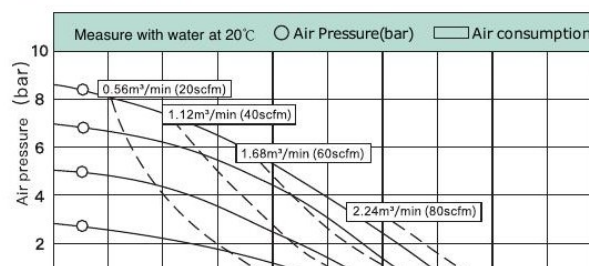
Air inlet · air exhaust 1/2" · 3/4"

Body materials SS (304) · LL (316)

Envelope (W × D × H) Overall approx 363 W x 265.5 D x 501 H mm

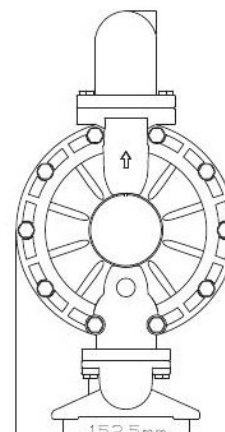
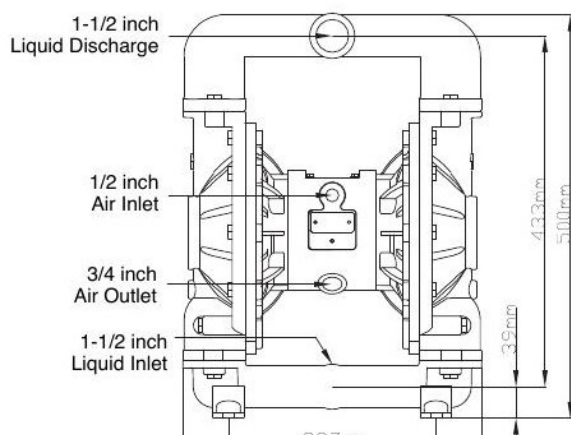
Weight On request

Performance Curves



Manufacturer performance curves, measured with water at 20 °C. Boxed values = air consumption at the marked duty points.

Installation Dimension Drawing



Installation dimensions (mm) – center-port configuration. Certified GA drawings are issued with the order documentation.



HPX50

Plastic Pump – center-ported · Generation B

2"

568 L/min

8.4 bar

6.3 mm solids

Technical parameters

Suction / discharge connection 2"

Maximum free flow 568 L/min (150 US gpm)

Maximum working / air pressure 8.4 bar (122 psi)

Air pressure range 1.4 – 8.4 bar

Maximum air consumption 4.2 m³/min

Maximum solids handling 6.3 mm

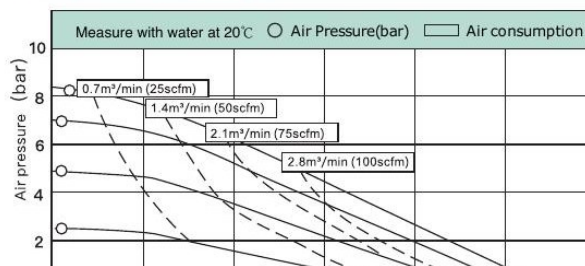
Air inlet · air exhaust 1/2" · 3/4"

Body materials PP · KV (PVDF)

Envelope (W × D × H) Certified GA drawing on request

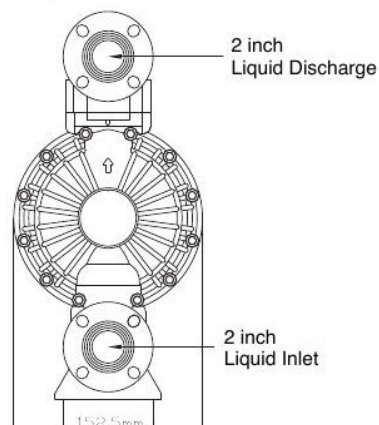
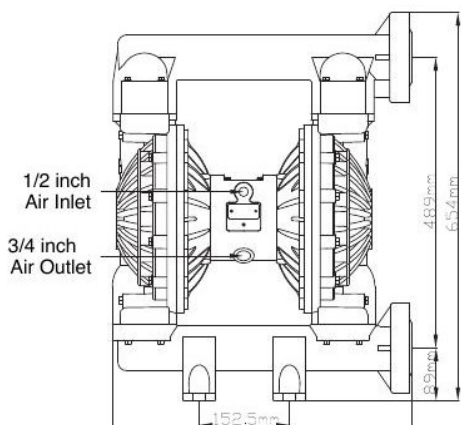
Weight On request

Performance Curves



Manufacturer performance curves, measured with water at 20 °C.
Boxed values = air consumption at the marked duty points.

Installation Dimension Drawing



Installation dimensions (mm) – center-port configuration. Certified GA drawings are issued with the order documentation.



HPX50

Aluminium Pump – center-ported · Generation B

2"

568 L/min

8.4 bar

6.3 mm solids

Technical parameters

Suction / discharge connection 2"

Maximum free flow 568 L/min (150 US gpm)

Maximum working / air pressure 8.4 bar (122 psi)

Air pressure range 1.4 – 8.4 bar

Maximum air consumption 4.2 m³/min

Maximum solids handling 6.3 mm

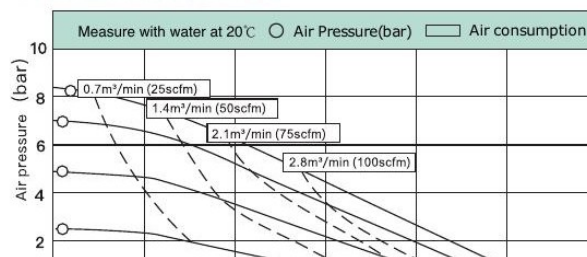
Air inlet · air exhaust 1/2" · 3/4"

Body materials AL (cast iron AC to order)

Envelope (W × D × H) ~443.2 W x ~313 D x ~597.7 H

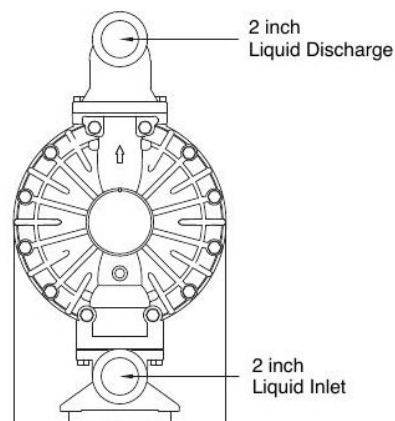
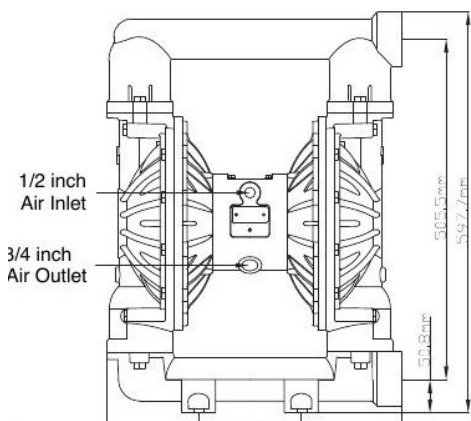
Weight On request

Performance Curves



Manufacturer performance curves, measured with water at 20 °C.
Boxed values = air consumption at the marked duty points.

Installation Dimension Drawing



Installation dimensions (mm) – center-port configuration. Certified GA drawings are issued with the order documentation.



HPX50

Stainless Steel Pump – center-ported · Generation B

2"

568 L/min

8.4 bar

6.3 mm solids

Technical parameters

Suction / discharge connection 2"

Maximum free flow 568 L/min (150 US gpm)

Maximum working / air pressure 8.4 bar (122 psi)

Air pressure range 1.4 – 8.4 bar

Maximum air consumption 4.2 m³/min

Maximum solids handling 6.3 mm

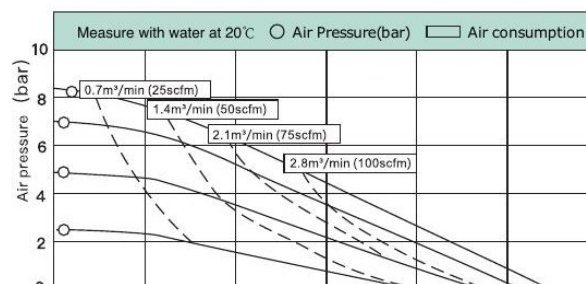
Air inlet · air exhaust 1/2" · 3/4"

Body materials SS (304) · LL (316)

Envelope (W × D × H) Overall approx 430 W x 317.5 D x 604 H mm

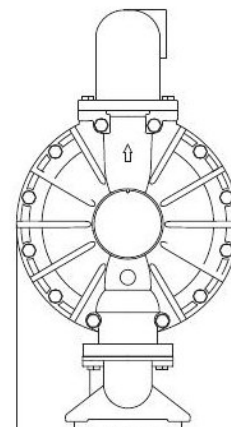
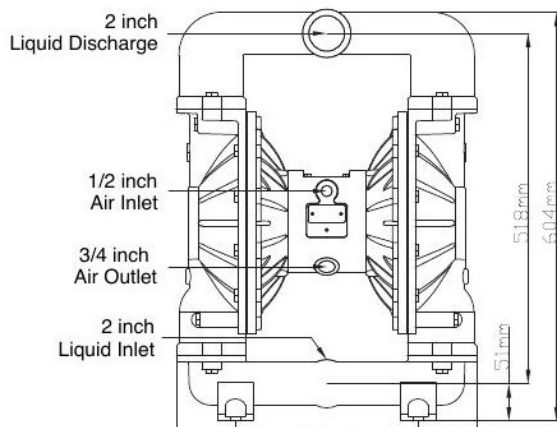
Weight On request

Performance Curves

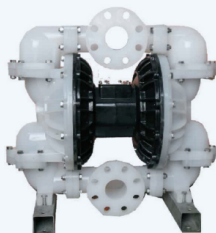


Manufacturer performance curves, measured with water at 20 °C. Boxed values = air consumption at the marked duty points.

Installation Dimension Drawing



Installation dimensions (mm) – center-port configuration. Certified GA drawings are issued with the order documentation.



HPX80

Plastic Pump – center-ported · Generation B

3" (DN80 flanged)

1022 L/min

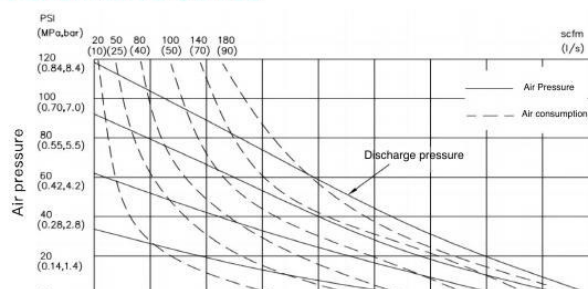
8.4 bar

9.4 mm solids

Technical parameters

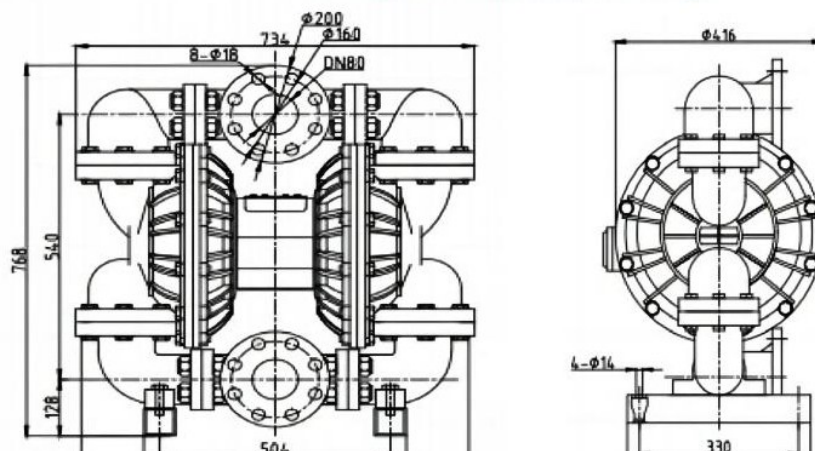
Suction / discharge connection	3" (DN80 flanged)
Maximum free flow	1022 L/min (270 US gpm)
Maximum working / air pressure	8.4 bar (122 psi)
Air pressure range	1.4 – 8.4 bar
Maximum air consumption	7.8 m ³ /min
Maximum solids handling	9.4 mm
Air inlet · air exhaust	3/4" · 1"
Body materials	PP · KV (PVDF)
Envelope (W × D × H)	770 W x 380 D x 768 H
Weight	On request

Performance Curves

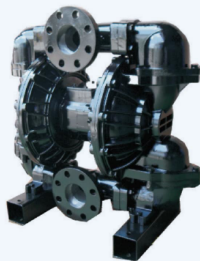


Manufacturer performance curves, measured with water at 20 °C. Boxed values = air consumption at the marked duty points.

Installation Dimension Drawing



Installation dimensions (mm) – center-port configuration. Certified GA drawings are issued with the order documentation.



HPX80

Aluminium Pump – center-ported · Generation B

3" (DN80 flanged)

1022 L/min

8.4 bar

9.4 mm solids

Technical parameters

Suction / discharge connection 3" (DN80 flanged)

Maximum free flow 1022 L/min (270 US gpm)

Maximum working / air pressure 8.4 bar (122 psi)

Air pressure range 1.4 – 8.4 bar

Maximum air consumption 7.8 m³/min

Maximum solids handling 9.4 mm

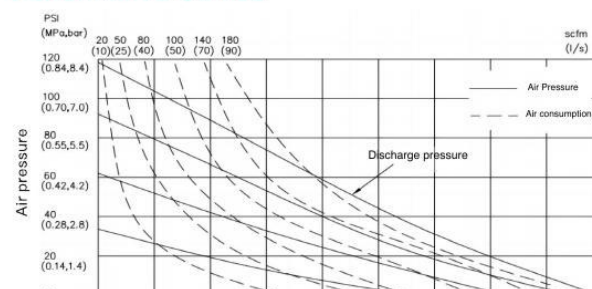
Air inlet · air exhaust 3/4" · 1"

Body materials AL (cast iron AC to order)

Envelope (W × D × H) Overall approx 595 W x 380 D x 840 H mm

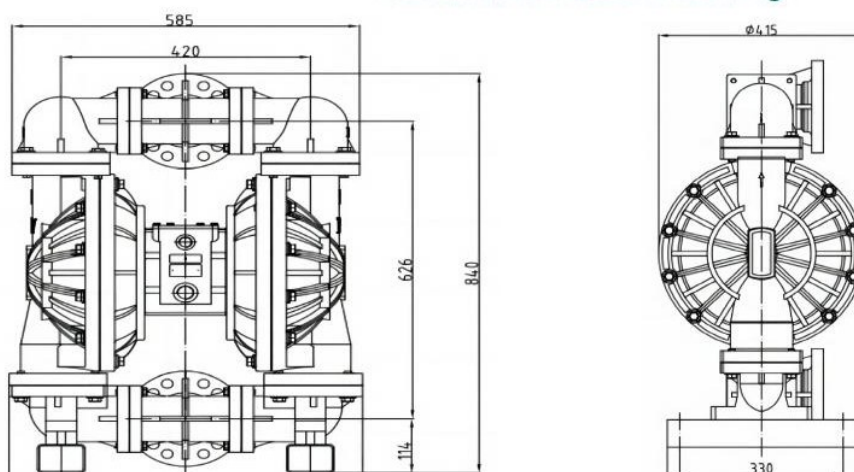
Weight On request

Performance Curves



Manufacturer performance curves, measured with water at 20 °C. Boxed values = air consumption at the marked duty points.

Installation Dimension Drawing



Installation dimensions (mm) – center-port configuration. Certified GA drawings are issued with the order documentation.



HPX80

Stainless Steel Pump – center-ported · Generation B

3" (DN80 flanged)

1022 L/min

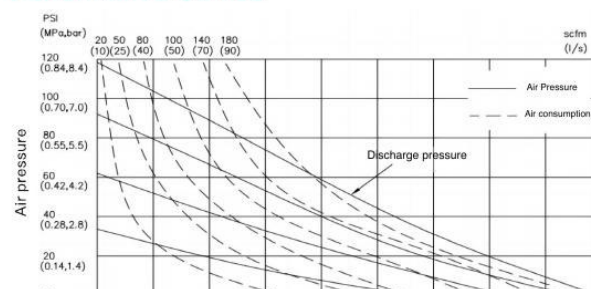
8.4 bar

9.4 mm solids

Technical parameters

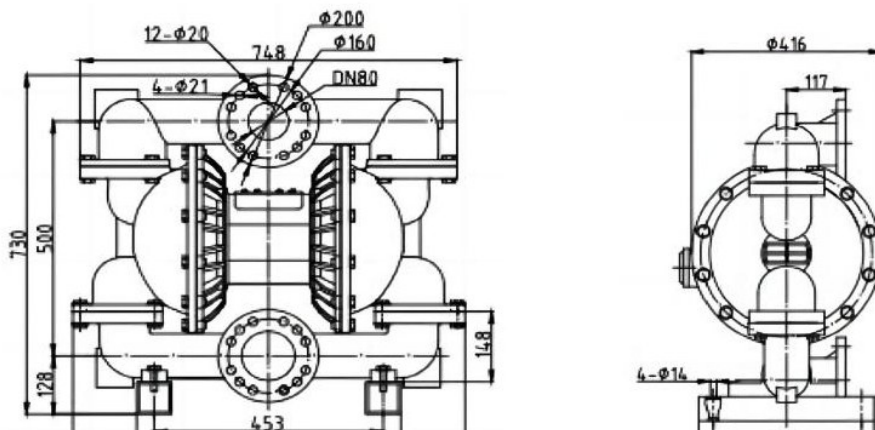
Suction / discharge connection	3" (DN80 flanged)
Maximum free flow	1022 L/min (270 US gpm)
Maximum working / air pressure	8.4 bar (122 psi)
Air pressure range	1.4 – 8.4 bar
Maximum air consumption	7.8 m ³ /min
Maximum solids handling	9.4 mm
Air inlet · air exhaust	3/4" · 1"
Body materials	SS (304) · LL (316)
Envelope (W × D × H)	778 W x 380 D x 730 H
Weight	On request

Performance Curves



Manufacturer performance curves, measured with water at 20 °C. Boxed values = air consumption at the marked duty points.

Installation Dimension Drawing



Installation dimensions (mm) – center-port configuration. Certified GA drawings are issued with the order documentation.

HOW TO ORDER

Specify the full model code – size, body, then seat / ball / diaphragm (flow-path order) – together with the duty point: fluid, viscosity, solids content, temperature, suction condition, and the required flow and discharge head. Example: HPX 50 AL - ST/TF/TF, water-based slurry, flooded suction, 300 L/min at 40 m.

Spares. Wet-end service kits (diaphragms, balls, seats, seals) and air-valve kits are available for every size. Kits are generation-specific: quote the model code and the nameplate generation letter with every spares order.

Side-ported duties. For straight-through in-line installation, see the HPXS Side Port Series catalog – same platform, side suction and discharge, configured to order.



Power in every drop.