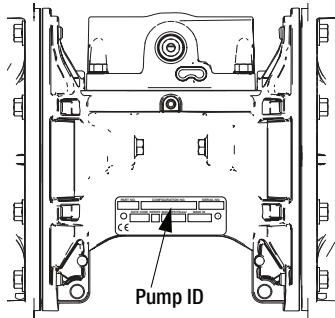


Husky 1590 Plastic Pumps Air-Operated Double Diaphragm

Husky 1590 Selector Tool

To order a Husky 1590, use the online selector tool at www.graco.com/pumpselectors or contact your distributor.



NOTE: Check the identification plate (ID) for the Configuration Number of your pump. Use the following matrix to define the components of your pump.



Example of Product Selector Tool on www.graco.com/pumpselectors.

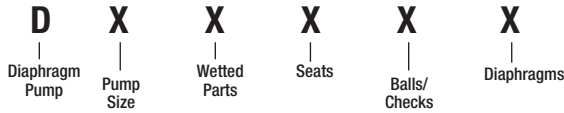
Pump Configuration Options

Pump (1.5 inch ports, 90 gpm)	Center Section and Air Valve Material		Air Valve/Monitoring	Fluid Covers and Manifolds	
P Polypropylene 1590	Aluminum	A01A	Standard w/Buna-N Seals	F2	PVDF, end flange
		A01D	Remote w/ Buna-N Seals		
F PVDF 1590	Stainless Steel	S01A	Standard	P2	Polypropylene, end flange
		S01D	Remote		

Check Valve Seats		Check Valve Balls		Diaphragm		Manifold O-Rings	
BN	Buna-N	AC	Acetal	BN	Buna-N	—	None
FK	Fluoroelastomer	BN	Buna-N	FK	Fluoroelastomer	PT	PTFE
GE	Geolast	FK	Fluoroelastomer	GE	Geolast		
PP	Polypropylene	GE	Geolast	PT	PTFE/EPDM Two-Piece		
PV	PVDF	PT	PTFE	PO	PTFE Overmolded		
SA	17-4 Stainless Steel	SD	440C Stainless Steel	SP	Santoprene		
SP	Santoprene	SP	Santoprene	TP	TPE		
SS	316 Stainless Steel	TP	TPE				
TP	TPE						

Husky 1590 Plastic Pumps

Ordering Information



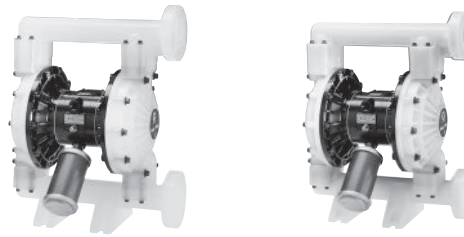
PUMP SIZE (AIR MOTOR TYPE AND MATERIAL)	WETTED PARTS	SEATS	BALLS	DIAPHRAGM
B = 1-1/2" (38.1 mm) Standard: aluminum center section	2 = Poly (flange)	3 = Stainless Steel	1 = PTFE	1 = PTFE
C = 1-1/2" (38.1 mm) Remote: aluminum center section	5 = PVDF (flange)	4 = Hardened SST	2 = Acetal	5 = TPE
T = 1-1/2" (38.1 mm) Standard: stainless steel center section		5 = TPE	4 = Hardened SST	6 = Santoprene
U = 1-1/2" (38.1 mm) Remote: stainless steel center section		6 = Santoprene	5 = TPE	7 = Buna N
		7 = Buna N	6 = Santoprene	8 = Fluoroelastomer
		8 = Fluoroelastomer	7 = Buna N	G = Geolast
		9 = Polypropylene	8 = Fluoroelastomer	
		A = PVDF	G = Geolast	
		G = Geolast		

Popular Models

Material	Part Number (ANSI-Flange)		Part Number (BSP Ported)		Materials for Seats	Materials for Balls	Materials for Diaphragms	Fluid Kit	Air Kit	Air Control**
	Standard Air Valve	Remote* Air Valve	Standard Air Valve	Remote* Air Valve						
Standard Pumps with Aluminum Center Section										
Polypropylene	DB2311				Stainless Steel	PTFE	PTFE	DOC311	236273	246947
	DB2377	DC2377			Stainless Steel	Buna-N	Buna-N	DOC377	236273	246947
	DB2777	DC2777			Buna	Buna-N	Buna-N	DOC777	236273	246947
	DB2888	DC2888			Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	DOC888	236273	246947
	DB2911	DC2911			Polypropylene	PTFE	PTFE	DOC911	236273	246947
	DB2955				Polypropylene	TPE	TPE	DOC955	236273	246947
	DB2966				Polypropylene	Santoprene	Santoprene	DOC966	236273	246947
	DB2977				Polypropylene	Buna-N	Buna-N	DOC977	236273	246947
	DB2988				Polypropylene	Fluoroelastomer	Fluoroelastomer	DOC988	236273	246947
	DB29GG	DC29GG			Polypropylene	Geolast	Geolast	DOC9GG	236273	246947
PVDF	DB5311				Stainless Steel	PTFE	PTFE	DOC311	236273	246947
	DB5666				Santoprene	Santoprene	Santoprene	DOC666	236273	246947
	DB5811	DC5911			Fluoroelastomer	PTFE	PTFE	DOC811	236273	246947
	DB5888	DC5888			Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	DOC888	236273	246947
	DB5A11	DC5A11			PVDF	PTFE	PTFE	DOCA11	236273	246947
	DB5A88				PVDF	Fluoroelastomer	Fluoroelastomer	DOCA88	236273	246947

*Requires CycleFlo or external valve control

** Air control includes air regulator and filter with gauge



Technical Specifications

Husky 1590 Plastic Pumps	Polypropylene	PVDF
Maximum fluid working pressure	120 psi (8.4 bar, 0.84 MPa)	120 psi (8.4 bar, 0.84 MPa)
Maximum free flow delivery*	100 gpm (378.5 lpm)	100 gpm (378.5 lpm)
Maximum pump speed	200 cpm	200 cpm
Displacement per cycle**	0.5 gallon (1.96 liter)	0.5 gallon (1.96 liter)
Maximum suction lift (DB2366)	20 ft (6.1 m) dry	20 ft (6.1 m) dry
Maximum size pumpable solids	0.19 in (4.8 mm)	0.19 in (4.8 mm)
Maximum operating temperature***	150°F (65.5°C)	150°F (65.5°C)
Maximum diaphragm operating temperature***		
PTFE	220°F (104.4°C)	220°F (104.4°C)
Santoprene	180°F (82.2°C)	180°F (82.2°C)
Buna-N	180°F (82.2°C)	180°F (82.2°C)
TPE	150°F (65.5°C)	150°F (65.5°C)
Fluoroelastomer	250°F (121.1°C)	250°F (121.1°C)
Geolast	150°F (65.5°C)	150°F (65.5°C)
Typical sound level at 70 psi (4.9 bar, 0.49 MPa) air @ 125 cpm	77 dBa	77 dBa
Maximum air consumption	125 scfm (3.5 m3/min.)	125 scfm (3.5 m3/min.)
Air pressure operating range	20 to 120 psi (1.4 to 8.4 bar, 0.14 to 0.84 MPa)	20 to 120 psi (1.4 to 8.4 bar, 0.14 to 0.84 MPa)
Air inlet size	1/2 npt(f)	1/2 npt(f)
Fluid inlet & outlet size****	1-1/2 in (38.1 mm) ANSI-flange	1-1/2 in (38.1 mm) ANSI-flange
Weight	35 lb (16 kg)	49 lb (22 kg)
Weight with stainless steel center section	48.3 lb (21.9 kg)	62.3 lb (28.2 kg)
Instruction manual	308549	308549

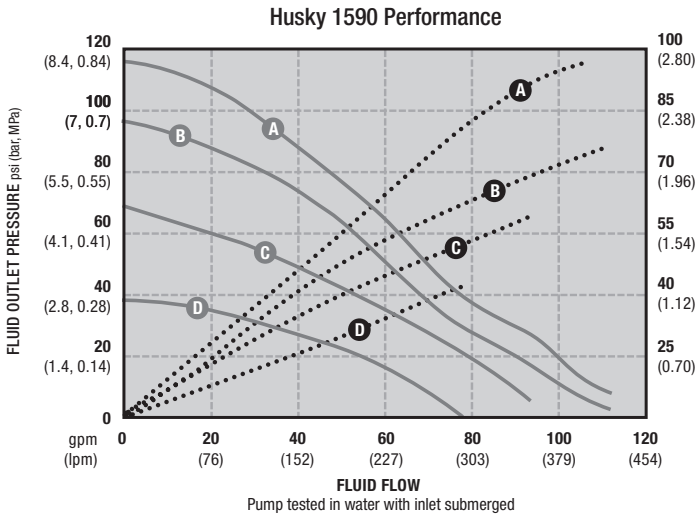
* Flow rates are with muffler and do not vary based on diaphragm material

** Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type

*** Actual pump performance may be affected by prolonged usage at temperature

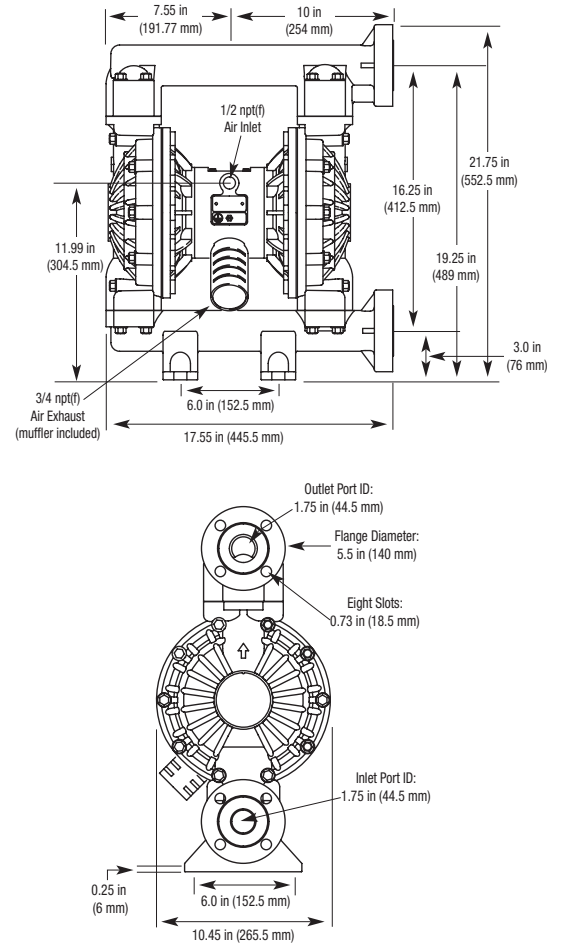
Husky 1590 Plastic Pumps

Performance Charts



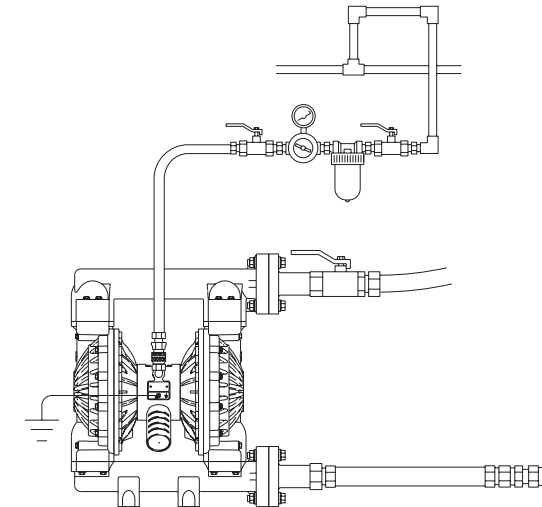
AIR PRESSURE	LEGEND
(A) = at 120 psi (8.4 bar, 0.84 MPa)	Air Consumption •••••
(B) = at 100 psi (7 bar, 0.7 MPa)	Fluid Pressure ———
(C) = at 70 psi (4.8 bar, 0.48 MPa)	
(D) = at 40 psi (2.8 bar, 0.28 MPa)	

Dimensions



Typical System Drawings

Husky 1590 Above Ground Gravity Feed

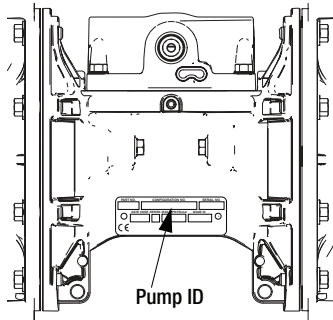


Husky 1590 Metal Pumps

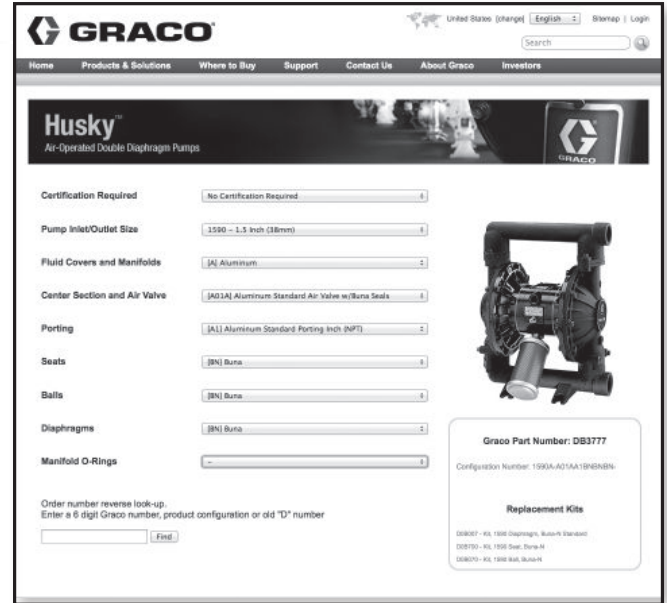
Air-Operated Double Diaphragm

Husky 1590 Selector Tool

To order a Husky 1590, use the online selector tool at www.graco.com/pumpselectors or contact your distributor.



NOTE: Check the identification plate (ID) for the Configuration Number of your pump. Use the following matrix to define the components of your pump.



Example of Product Selector Tool on www.graco.com/pumpselectors.

Pump Configuration Options

Pump (1.5 inch ports, 90 gpm)	Center Section and Air Valve Material	Air Valve/Monitoring	Fluid Covers and Manifolds
A ★ Aluminum 1590	Aluminum	A01A Standard	A1 Aluminum, standard ports, NPT A2 Aluminum, standard ports, BSPT S1 Stainless steel, standard ports, NPT S2 Stainless steel, standard ports, BSPT
		A01D Remote	
		A01E Standard	
S ‡ Stainless Steel 1590	Stainless Steel	S01A Standard	
		S01D Remote	

★, ‡, or ✕: See ATEX Certifications below.

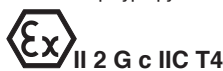
Check Valve Seats		Check Valve Balls		Diaphragm		Manifold O-Rings	
BN	Buna-N	AC	Acetal	BN	Buna-N	—	None
FK	Fluoroelastomer	BN	Buna-N	FK	Fluoroelastomer	PT	PTFE
GE	Geolast	FK	Fluoroelastomer	GE	Geolast		
PP	Polypropylene	GE	Geolast	PT	PTFE/EPDM Two-Piece		
PV	PVDF	PT	PTFE	SP	Santoprene		
SA	17-4 Stainless Steel	SD	440C Stainless Steel	TP	TPE		
SP	Santoprene	SP	Santoprene				
SS	316 Stainless Steel	TP	TPE				
TP	TPE						

ATEX Certifications

★ All Aluminum 1590 pumps are certified:



‡ Stainless Steel pumps with aluminum or conductive polypropylene centers are certified:

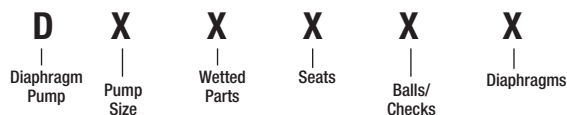


✕ DataTrak and Pulse Count are certified:

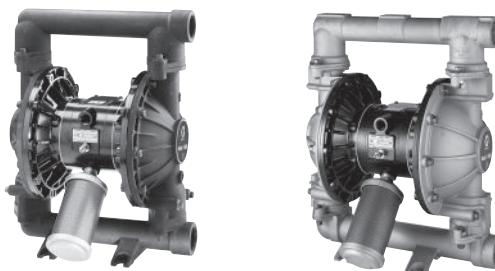


Husky 1590 Metal Pumps

Ordering Information



PUMP SIZE (AIR MOTOR TYPE AND MATERIAL)	WETTED PARTS	SEATS	BALLS	DIAPHRAGM
B = 1-1/2" (38.1 mm) Standard: aluminum center section	3 = Aluminum (npt)	3 = Stainless Steel	1 = PTFE	1 = PTFE
C = 1-1/2" (38.1 mm) Remote: aluminum center section	4 = Stainless Steel (npt)	4 = Hardened SST	2 = Acetal	5 = TPE
T = 1-1/2" (38.1 mm) Standard: stainless steel center section	C = Aluminum (bspt)	5 = TPE	4 = Hardened SST	6 = Santoprene
U = 1-1/2" (38.1 mm) Remote: stainless steel center section	D = Stainless Steel (bspt)	6 = Santoprene	5 = TPE	7 = Buna-N
		7 = Buna-N	6 = Santoprene	8 = Fluoroelastomer
		8 = Fluoroelastomer	7 = Buna-N	G = Geolast
		9 = Polypropylene	8 = Fluoroelastomer	
		A = PVDF	G = Geolast	
		G = Geolast		



Technical Specifications

Husky 1590 Metal Pumps	Aluminum	Stainless Steel
Maximum fluid working pressure	120 psi (8.4 bar, 0.84 MPa)	120 psi (8.4 bar, 0.84 MPa)
Maximum free flow delivery*	100 gpm (378.5 lpm)	100 gpm (378.5 lpm)
Maximum pump speed	200 cpm	200 cpm
Displacement per cycle**	0.5 gallon (1.96 liter)	0.5 gallon (1.96 liter)
Maximum suction lift (DB2366)	20 ft (6.1 m) dry	20 ft (6.1 m) dry
Maximum size pumpable solids	0.19 in (4.8 mm)	0.19 in (4.8 mm)
Maximum operating temperature***	150°F (65.5°C)	150°F (65.5°C)
Maximum diaphragm operating temperature***		
PTFE	220°F (104.4°C)	220°F (104.4°C)
Santoprene	180°F (82.2°C)	180°F (82.2°C)
Buna-N	180°F (82.2°C)	180°F (82.2°C)
TPE	150°F (65.5°C)	150°F (65.5°C)
Fluoroelastomer	250°F (121.1°C)	250°F (121.1°C)
Geolast	150°F (65.5°C)	150°F (65.5°C)
Typical sound level at 70 psi (4.9 bar, 0.49 MPa) air @ 125 cpm	77 dBA	77 dBA
Maximum air consumption	125 scfm (3.5 m3/min.)	125 scfm (3.5 m3/min.)
Air pressure operating range	20 to 120 psi (1.4 to 8.4 bar, 0.14 to 0.84 MPa)	20 to 120 psi (1.4 to 8.4 bar, 0.14 to 0.84 MPa)
Air inlet size	1/2 npt(f)	1/2 npt(f)
Fluid inlet & outlet size****	1-1/2 npt(f) or bspt(f)	1-1/2 npt(f) or bspt(f)
Weight	33.5 lb (15.2 kg)	86 lb (40 kg)
Weight with stainless steel center section	n/a	98.8 lb (44.8 kg)
Instruction manual	308441	308441

*Flow rates are with muffler and do not vary based on diaphragm material

**Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type

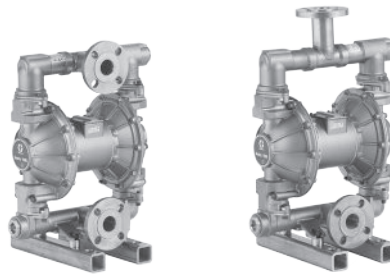
*** Actual pump performance may be affected by prolonged usage at temperature

Popular Models

Material	Part Number (NPT Ported)		Part Number (BSP Ported)		Seat Material	Ball Material	Diaphragm Material	Fluid Kit	Air Kit	Air Control**	
	Standard Air Valve	Remote* Air Valve	Standard Air Valve	Remote* Air Valve							
Standard Pumps with Aluminum Center Section											
Aluminum	DB3311	DC3311	DBC311	DCC311	Stainless Steel	PTFE	PTFE	DOB311	236273	246947	
	DB3341		DBC341		Hardened SST	Stainless Steel	PTFE	DOB331	236273	246947	
	DB3366	DC3366	DBC366	DCC366	Stainless Steel	Santoprene	Santoprene	DOB366	236273	246947	
	DB3377	DC3377	DBC377	DCC377	Stainless Steel	Buna-N	Buna-N	DOB377	236273	246947	
	DB3525	DC3525	DBC525	DCC525	TPE	Acetal	TPE	DOB525	236273	246947	
	DB3555		DBC555		TPE	TPE	TPE	DOB555	236273	246947	
	DB3666	DC3666	DBC666	DCC666	Santoprene	Santoprene	Santoprene	DOB666	236273	246947	
	DB3777	DC3777	DBC777	DCC777	Buna-N	Buna-N	Buna-N	DOB777	236273	246947	
	DB3888	DC3888	DBC888	DCC888	Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	DOB888	236273	246947	
	DB3GGG	DC3GGG	DBCGGG	DCCGGG	Geolast	Geolast	Geolast	DOBGGG	236273	246947	
	DB3911		DBC911		Polypropylene	PTFE	PTFE	DOB911	236273	246947	
	DB3977		DBC977		Polypropylene	Buna-N	Buna-N	DOB977	236273	246947	
	Stainless Steel	DB4311	DC4311	DBD311	DCD311	Stainless Steel	PTFE	PTFE	DOB311	236273	246947
		DB4341		DBD341		Stainless Steel	Hardened SST	PTFE	DOB341	236273	246947
DB4377		DC4377	DBD377	DCD377	Stainless Steel	Buna-N	Buna-N	DOB377	236273	246947	
DB4525			DBD525		TPE	Acetal	TPE	DOB525	236273	246947	
DB4666		DC4666	DBD666	DCD666	Santoprene	Santoprene	Santoprene	DOB666	236273	246947	
DB4777		DC4777	DBD777	DCD777	Buna-N	Buna-N	Buna-N	DOB777	236273	246947	
DB4888		DC4888	DBD888	DCD888	Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	DOB888	236273	246947	
DB4GGG		DC4GGG	DBDGGG	DCDGGG	Geolast	Geolast	Geolast	DOBGGG	236273	246947	
DB4911			DBD911		Polypropylene	PTFE	PTFE	DOB911	236273	246947	
Corrosion Resistant Pumps with Stainless Steel Center Section											
Stainless Steel	DT4311	DU4311	DTD311	DUD311	Stainless Steel	PTFE	PTFE	DOB311	255061	246947	
	DT4377	DU4377	DTD377	DUD377	Stainless Steel	Buna-N	Buna-N	DOB377	255061	246947	
	DT4388	DU4388	DTD388	DUD388	Stainless Steel	Fluoroelastomer	Fluoroelastomer	DOB388	255061	246947	
	DT4666	DU4666	DTD666	DUD666	Santoprene	Santoprene	Santoprene	DOB666	255061	246947	
	DT4888	DU4888	DTD888	DUD888	Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	DOB888	255061	246947	
	DT4911	DU4911	DTD911	DUD911	Polypropylene	PTFE	PTFE	DOB911	255061	246947	

*Requires CycleFlo or external valve control

** Air control includes air regulator and filter with gauge



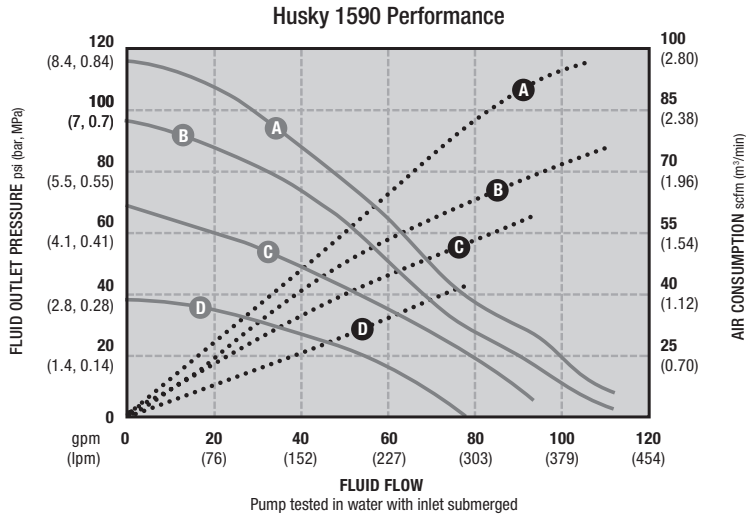
Stainless Steel Flange Models*

Part Number	Outlet Orientation	Seat Material	Ball Material	Diaphragm Material	Air Valve	Seat Kit	Ball Kit	Diaphragm Kit
25C654	Horizontal	Stainless Steel	PTFE	Overmolded PTFE	236273	DOB300	DOB010	253627
25C656	Vertical	Stainless Steel	PTFE	Overmolded PTFE	236273	DOB300	DOB010	253627
DBR311	Horizontal	Stainless Steel	PTFE	PTFE	236273	DOB300	DOB010	DOB001
DBP311	Vertical	Stainless Steel	PTFE	PTFE	236273	DOB300	DOB010	DOB001
DBR366	Horizontal	Stainless Steel	Santoprene	Santoprene	236273	DOB300	DOB060	DOB006
DBP366	Vertical	Stainless Steel	Santoprene	Santoprene	236273	DOB300	DOB060	DOB006

*All stainless steel flange models have a fixed center inlet.

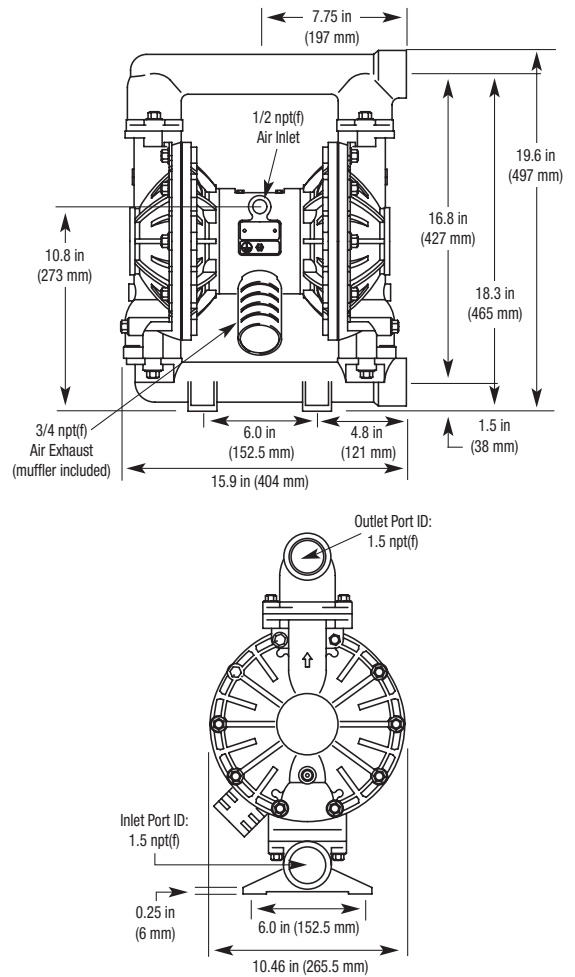
Husky 1590 Metal Pumps

Performance Charts



AIR PRESSURE	LEGEND
(A) = at 120 psi (8.4 bar, 0.84 MPa)	Air Consumption - -
(B) = at 100 psi (7 bar, 0.7 MPa)	Fluid Pressure - - - - -
(C) = at 70 psi (4.8 bar, 0.48 MPa)	
(D) = at 40 psi (2.8 bar, 0.28 MPa)	

Dimensions



Refer to manual 308441 for additional dimensions

Typical System Drawings

Husky 1590 Above Ground Gravity Feed

