

SDP 50 ALX

MAX DISCHARGE
0-592 litres/minute

SIZE, MATERIAL
2", Aluminium

WEIGHT
29 Kgs



AIR OPERATED DIAPHRAGM PUMP

These aluminium constructed pumps are commonly combined with Neoprene, Nitrile, Santoprene, Hytrel, Viton or PTFE Elastomers. With these elastomers they are ideal for pumping of water and water-based fluids, non-aggressive fluids, oily fluids and fluids having low acidic or alkali concentrations

Aluminium Pumps offer a relatively low-cost solution to many pumping applications. For this purpose, the main industries that choose Aluminium pumps are Paints, Marine, Mining, Ceramic and Wastewater/Pollution management.



Diaphragm Options 'X'

Neoprene
Nitrile
Santoprene
Hytrel
Viton
PTFE



Approvals and Certifications

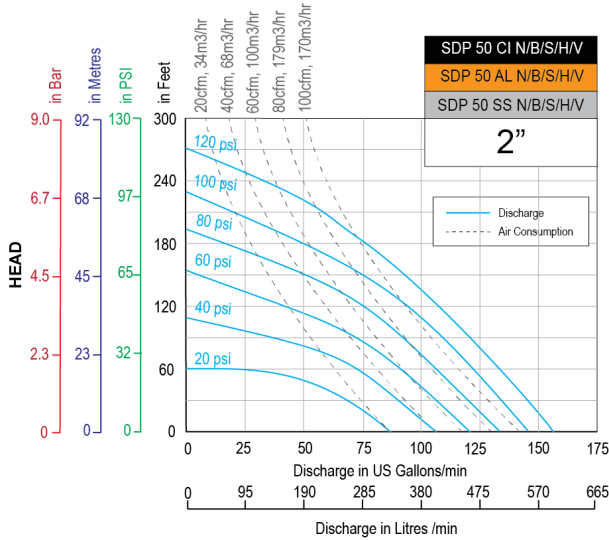
All Teryair pumps are CE marked and manufactured under an ISO 9001:2015 Quality system by SGS. All Teryair aluminium, Ductile iron, and Stainless Steel pumps are explosion-proof Certified (ATEX).



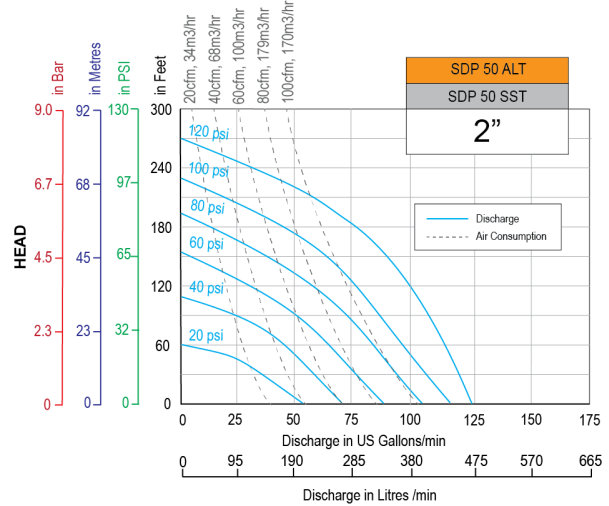
Versatility

This pump handles Viscous fluids, Slurries, Solid laden fluids, Shear Sensitive fluids very well.
No Priming needed
No Foaming of fluid pumped
No Stall damages
Portable
Submerged operation capable

Performance Graphs SDP 50 ALN/ALB/ALS/ALH/ALV



Performance Graphs SDP 50 ALT

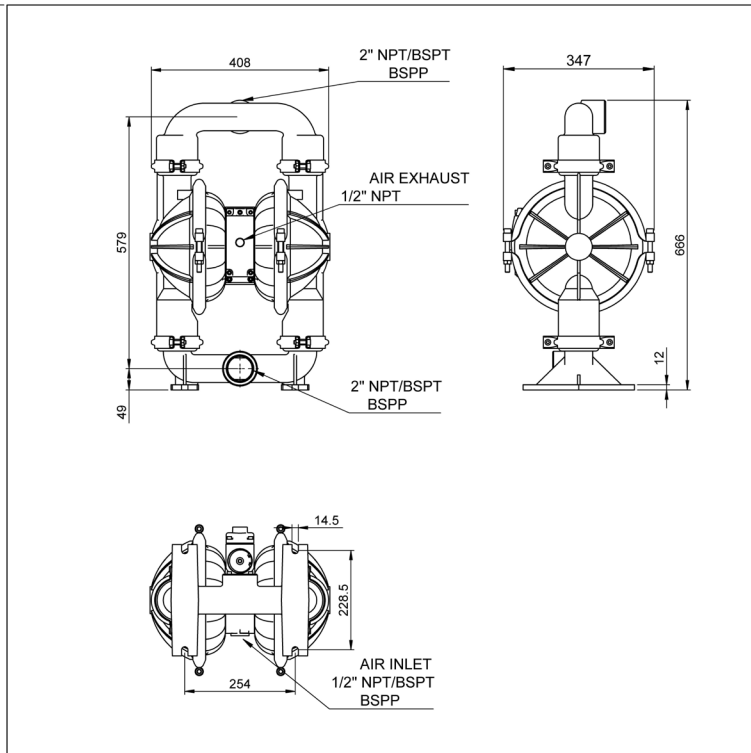


- Performance as measured pumping water at 20degC.
- **Disclaimer:** Actual pump performance may vary depending on number of bends, suction needed and friction in length of discharge piping.
- For guidance on how to select a suitable pump, visit Terryair AODD pump Selection guide.

Technical Data SDP 50ALX

	SDP 50AL with Neoprene / Nitrile / Santoprene / Hytelr / Viton fitments	SDP 50AL with PTFE Fitments
Maximum Discharge	592 Litres/min (156 US gallons/min)	471 Litres/min (125 US gallons/min)
Suction Head Dry	6.7 meters, 22 feet	4.6 meters, 15 feet
Suction Head Wet	8.5 meters, 28 feet	9.5 meters, 31 feet
Pump Weight	29 Kgs, 64 lbs	29 Kgs, 64 lbs
Max Solid Passage	6.4 mm (1/4")	6.4 mm (1/4")
Air Distribution System	SDP MaxFlo, MOC aluminium, acetal and CFT seals	SDP MaxFlo, MOC aluminium, acetal and CFT seals
Balls / Seals	Santoprene or Hytelr or Nitrile or Neoprene or Viton	PTFE
Air Inlet	1/2" NPT/BSPT/BSPP	1/2" NPT/BSPT/BSPP
Fluid Inlet, Fluid Outlet	2" NPT/BSPT/BSPP	2" NPT/BSPT/BSPP

Dimensions SDP 50 ALX



Pump Nomenclature







XX	XX	XX	X	X	X	
Air Valve Type	Pump Size	Material of Construction	Material of Diaphragm	Bolted or Clamped	Threading on Inlet and Outlet	
DP - Classic	06 - 1/4"	AL - Aluminium	B - Nitrile N - Neoprene S - Santoprene T - PTFE V - Viton H - Hytrel	B - Bolted C - Clamped	R- NPT	
	12 - 1/2"					
ADP - Advanced	15 - 1/2"	SS - Stainless Steel 316L			G - BSPT	
SDP - MaxFlo	25 - 1"					
	40 - 1 - 1/2"	PP - Polypropylene				P - BSPP
	50 - 2 "					
	75- 3"	CI - Ductile Iron	F - Flanged			
100 - 4"						

Air Valve Replacement Kits for SDP 50 ALX / SSX Pumps

Air Valve Replacement Kit consists of a complete operational air valve assembly complete. Consisting of Air Valve Body, End Plates, Spool and all seals, o rings and gaskets.

Replacement KIT Ordering No	Suitable for
203 97 01	NPT Fitted ALX or SSX Pumps With Any Diaphragm Variant
	BSPT Fitted ALX or SSX Pumps With Any Diaphragm Variant
	BSPP Fitted ALX or SSX Pumps With Any Diaphragm Variant

Diaphragm specifications

Neoprene		An excellent general-purpose diaphragm for use in non-aggressive applications such as water-based slurries, well water or sea water. Exhibits excellent flex life and low cost. Temperature range -18°C to +93°C (0°F to +200°F)
Nitile		Excellent for applications involving petroleum / oil-based fluids such as leaded gasolines, fuel oils, non-synthetic hydraulic oils, kerosene, turpentine and motor oils. Temperature range -12°C to +82°C (+10°F to +180°F)
Santoprene		Good abrasion resistance. Low cost. Can handle mild acids and alkalis well. Excellent low cost alternative to ptfе. Excellent suction capabilities Excellent general purpose diaphragm. Temperature range -40°C to +107°C (-40F to +225°F)
Hytrel		Good abrasion resistance. Low cost. . Excellent suction capabilities Good general purpose diaphragm. Temperature range -29°C to +104°C (-20°F to +220°F)
Viton		Excellent for use in applications requiring extremely hot temperatures. May also be used with aggressive fluids such as aromatic or chlorinated hydrocarbons and highly aggressive acids. Especially where high suction lift is important. Temperature range -40°C to +175°C (-40°F to +350°F)
PTFE		Excellent choice when pumping highly aggressive fluids such as aromatic or chlorinated hydrocarbons, acids, caustics, ketones and acetates. Temperature range +4°C to +104°C (+40°F to +220°F)

note: not all diaphragms may be available with this pump, see page 1 for diaphragm options for this pump.

Repair Kits for SDP 50 ALX / SSX and CIX Pumps

Repair Kits consist of everything you need to quickly restore the pump. Repair Kits contain one set of Diaphragms, one set of balls, one set of seats or seats+Orings, secondary shaft complete with seals, air valve spool complete with fitted seals, all gaskets, end caps with fitted rings and other wear parts needed to rebuild the pump. Repair kits are threading independant.

Repair KIT Ordering No	Suitable for
203 97 10N	SDP 50 ALN / SSN / CIN
203 97 10B	SDP 50 ALB / SSB / CIB
203 97 10S	SDP 50 ALS / SSS / CIS
203 97 10H	SDP 50 ALH / SSH / CIH
203 97 10V	SDP 50 ALV / SSV / CIV
203 97 10T	SDP 50 ALT / SST / CIT

SUMMARY FOR THE ATEX RATING FOR TERYAIR AODD MODELS

Pump Size	Series	Wetted Materials	Center Section	Diphargm Materials	ATEX Rating
06 (1/4")	SDP	Aluminium	Aluminium	Neoprene	II 2 GD Ex h IIC T6 Gb Ex h IIIC T85°C Db (IP65)
				Buna-N	
				Viton-FKM	II 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65)
				Sentoprene	
				Hytrel	II 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65)
				PTFE	
		Stainless Steel	Stainless Steel	Neoprene	II 2 GD Ex h IIC T6 Gb Ex h IIIC T85°C Db I M2 Ex h I Mb (IP65)
				Buna-N	
				Viton-FKM	II 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65) I M2 Ex h I Mb (IP65)
				Sentoprene	
				Hytrel	II 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65) I M2 Ex h I Mb (IP65)
				PTFE	
12 (1/2")	DP/SDP	Aluminium	Aluminium	Neoprene	II 2 GD Ex h IIC T6 Gb Ex h IIIC T85°C Db (IP65)
				Buna-N	
				Viton-FKM	II 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65)
				Sentoprene	
				Hytrel	II 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65)
				PTFE	
	SDP	Stainless Steel	Stainless Steel	Neoprene	II 2 GD Ex h IIC T6 Gb Ex h IIIC T85°C Db I M2 Ex h I Mb (IP65)
				Buna-N	
				Viton-FKM	II 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65) I M2 Ex h I Mb (IP65)
				Sentoprene	
				Hytrel	II 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65) I M2 Ex h I Mb (IP65)
				PTFE	
25 (1")	DP / SDP	Aluminium / Stainless Steel	Aluminium	Neoprene	II 2 GD Ex h IIC T6 Gb Ex h IIIC T85°C Db (IP65)
				Buna-N	
				Viton-FKM	II 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65)
				Sentoprene	
				Hytrel	II 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65)
				PTFE	

SUMMARY FOR THE ATEX RATING FOR TERYAIR AODD MODELS

Pump Size	Series	Wetted Materials	Center Section	Diphragm Materials	ATEX Rating
40 (1-1/2")	DP / SDP	Aluminium / Stain- less Steel	Aluminium	Neoprene	II 2 GD Ex h IIC T6 Gb Ex h IIIC T85°C Db (IP65)
				Buna-N	
				Viton-FKM	II 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65)
				Sentoprene	II 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65)
				Hytrel	
				PTFE	
50 (2")	DP / SDP	Aluminium / Stain- less Steel	Aluminium	Neoprene	II 2 GD Ex h IIC T6 Gb Ex h IIIC T85°C Db (IP65)
				Buna-N	
				Viton-FKM	II 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65)
				Sentoprene	II 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65)
				Hytrel	
				PTFE	
	SDP	Cast Iron	Cast Iron	Neoprene	II 2 GD Ex h IIC T6 Gb Ex h IIIC T85°C Db I M2 Ex h I Mb (IP65)
				Buna-N	
				Viton-FKM	"II 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65) I M2 Ex h I Mb (IP65) "
				Sentoprene	II 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65) I M2 Ex h I Mb (IP65)
Hytrel					
PTFE					
75 (3")	DP / SDP	Aluminium	Aluminium	Neoprene	II 2 GD Ex h IIC T6 Gb Ex h IIIC T85°C Db (IP65)
				Buna-N	
				Viton-FKM	II 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65)
				Sentoprene	II 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65)
				Hytrel	
				PTFE	
	SDP	Cast Iron	Cast Iron	Neoprene	II 2 GD Ex h IIC T6 Gb Ex h IIIC T85°C Db I M2 Ex h I Mb (IP65)
				Buna-N	
				Viton-FKM	II 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65) I M2 Ex h I Mb (IP65)
				Sentoprene	II 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65) I M2 Ex h I Mb (IP65)
				Hytrel	
				PTFE	