

# VALUE FOR MONEY

# SDP 50 SSX

### MAX DISCHARGE 0-592 litres/minute

size, material 2", Stainless Steel 316L

WEIGHT 48 Kgs

# AIR OPERATED DIAPHRAGM PUMP

Stainless Steel constructed pumps are used in applications which demand high pumping performance, combinations of hot and corrosive fluids, both acidic and alkali. They are the ultimate choice for durable long life performance. These pumps are usually combined with highly capable and corrosion resistant diaphragms, mainly PTFE and often Viton and Santoprene.

With these elastomers they are ideal for pumping of fluids like benzyl diacetone, phosphoric acid, ferric sulfate, isopropyl chloride, transformer oils and many other similar fluids. Excellent choice when pumping highly aggressive fluids such as aromatic or chlorinated hydrocarbons, acids, caustics, ketone and acetates.

These pumps find wide applications across industries, some popular industries are Chemicals, Pharma, Food/Beverage and Electronic manufacturing.



# 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 aluminum, Ductile iron, and Stainless Steel pumps are explosionproof Certified (ATEX).

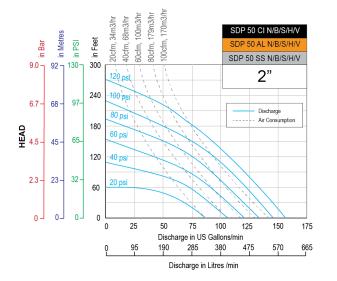


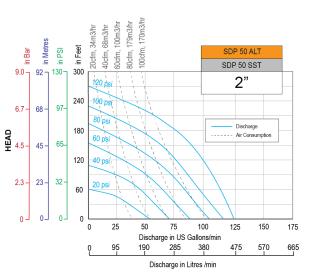
# Versatility

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 SSN/SSB/SSS/SSH/SSV





- 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 Teryair AODD pump Selection guide.

# **Technical Data SDP 50SSX**

	SDP 50SS with Neoprene / Nitrile / San- toprene / Hytrel / Viton fitments	SDP 50SS 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	48 Kgs, 105 lbs	48 Kgs, 105 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 Hytrel or Nitrile or Neo- prene 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	

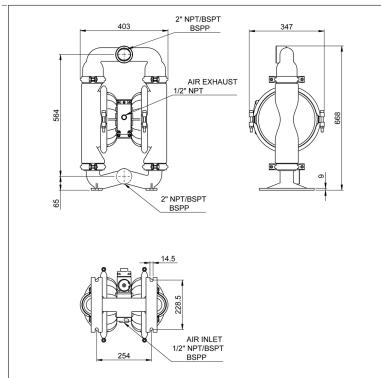
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#### Performance Graphs SDP 50 SST



# VALUE FOR MONEY

# **Dimensions SDP 50 SSX**



# **Pump Nomenclature**

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

# Air Valve Replacement Kits for SDP 50 SSX / ALX 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 slur- ries, 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-ba- sed fluids such as leaded gasolines, fuel oils, non-syn- thetic 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 ptfe. Excellent suction capabilites Excellent general purpose diaphragm. Temperature range -40°C to +107°C (-40F to +225°F)
Hytrel	$\bigcirc$	Good abrasion resistance. Low cost Excellent suc- tion capabilites 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 SSX / ALX / 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
202 97 10N	SDP 50 SSN / ALN / CIN
202 97 10B	SDP 50 SSB / ALB / CIB
202 97 105	SDP 50 SSS / ALS / CIS
202 97 10H	SDP 50 SSH / ALH / CIH
202 97 10V	SDP 50 SSV / ALV / CIV
202 97 10T	SDP 50 SST / ALT / CIT



### SUMMERY FOR THE ATEX RATING FOR TERYAIR AODD MODELS

Pump Size	Series	Wetted Materials	Center Section	Dipharagm Materials	ATEX Rating
		Aluminium	Aluminium	Neoprene	ll 2 GD Ex h IIC T6 Gb
				Buna-N	Ex h IIIC T85ºC Db (IP65)
				Viton-FKM	ll 2 GD Ex h IIC T3 Gb Ex h IIIC T200ºC Db (IP65)
				Sentoprene	ll 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65)
				Hytrel	
				PTFE	
06 (1/4")	SDP		Stainless Steel	Neoprene	ll 2 GD Ex h IIC T6 Gb Ex h IIIC T85°C Db <b>I M2 Ex h I Mb (IP65)</b>
(1/4)				Buna-N	
		Stainless Steel		Viton-FKM	ll 2 GD Ex h IIC T3 Gb Ex h IIIC T200ºC Db (IP65) I M2 Ex h I Mb (IP65)
				Sentoprene	ll 2 GD Ex h IIC T5 Gb
				Hytrel	Ex h IIIC T100ºC Db (IP65)
				PTFE	I M2 Ex h I Mb (IP65)
	DP/SDP	Aluminium	Aluminium	Neoprene	ll 2 GD Ex h IIC T6 Gb
				Buna-N	Ex h IIIC T85°C Db (IP65)
				Viton-FKM	ll 2 GD Ex h IIC T3 Gb Ex h IIIC T200⁰C Db (IP65)
				Sentoprene	
				Hytrel	ll 2 GD Ex h IIC T5 Gb Ex h IIIC T100⁰C Db (IP65)
				PTFE	LX II IIIC 1100 C D0 (II 05)
12 (1/2")		Stainless Steel	Stainless Steel	Neoprene	ll 2 GD Ex h IIC T6 Gb Ex h IIIC T85°C Db I M2 Ex h I Mb (IP65) Il 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65) I M2 Ex h I Mb (IP65) Il 2 GD Ex h IIC T5 Gb
(1/2)	SDP			Buna-N	
				Viton-FKM	
				Sentoprene	
				Hytrel	Ex h IIIC T100°C Db (IP65)
				PTFE	I M2 Ex h I Mb (IP65)
25 (1")	DP / SDP	Aluminium / Stain- less Steel	Aluminium	Neoprene	ll 2 GD Ex h IIC T6 Gb
				Buna-N	Ex h IIIC T85°C Db (IP65)
				Viton-FKM	ll 2 GD Ex h IIC T3 Gb Ex h IIIC T200ºC Db (IP65)
				Sentoprene	
				Hytrel	ll 2 GD Ex h IIC T5 Gb Ex h IIIC T100⁰C Db (IP65)
				PTFE	LA II III C I 100 C D0 (1F03)



### SUMMERY FOR THE ATEX RATING FOR TERYAIR AODD MODELS

Pump Size	Series	Wetted Materials	Center Section	Dipharagm Materials	ATEX Rating
40			Aluminium	Neoprene	ll 2 GD Ex h IIC T6 Gb
				Buna-N	Ex h IIIC T85°C Db (IP65)
	DP /	Aluminium / Stain-		Viton-FKM	ll 2 GD Ex h IIC T3 Gb Ex h IIIC T200⁰C Db (IP65)
(1-1/2")	SDP	less Steel		Sentoprene	
				Hytrel	ll 2 GD Ex h IIC T5 Gb Ex h IIIC T100⁰C Db (IP65)
				PTFE	
				Neoprene	ll 2 GD Ex h IIC T6 Gb
				Buna-N	Ex h IIIC T85ºC Db (IP65)
	DP / SDP	Aluminium / Stain- less Steel	Aluminium	Viton-FKM	ll 2 GD Ex h IIC T3 Gb Ex h IIIC T200⁰C Db (IP65)
	SDP	less steel		Sentoprene	
				Hytrel	ll 2 GD Ex h IIC T5 Gb Ex h IIIC T100⁰C Db (IP65)
				PTFE	EX II IIIC I 100 C D0 (1P65)
50 (2")	SDP	Cast Iron	Cast Iron	Neoprene	ll 2 GD Ex h IIC T6 Gb
				Buna-N	Ex h IIIC T85ºC Db I M2 Ex h I Mb (IP65)
				Viton-FKM	"ll 2 GD Ex h IIC T3 Gb Ex h IIIC T200ºC Db (IP65) <b>I M2 Ex h I Mb (IP65)</b> "
				Sentoprene	ll 2 GD Ex h IIC T5 Gb Ex h IIIC T100⁰C Db (IP65) I M2 Ex h I Mb (IP65)
				Hytrel	
				PTFE	
	DP / SDP	Aluminium	Aluminium	Neoprene	ll 2 GD Ex h IIC T6 Gb Ex h IIIC T85⁰C Db (IP65)
				Buna-N	
				Viton-FKM	ll 2 GD Ex h IIC T3 Gb Ex h IIIC T200⁰C Db (IP65)
				Sentoprene	
				Hytrel	ll 2 GD Ex h IIC T5 Gb Ex h IIIC T100⁰C Db (IP65)
				PTFE	EX II IIIC 1100 C D0 (II 05)
75 (3")	SDP	Cast Iron	Cast Iron	Neoprene	ll 2 GD Ex h IIC T6 Gb
				Buna-N	Ex h IIIC T85ºC Db I M2 Ex h I Mb (IP65)
				Viton-FKM	ll 2 GD Ex h IIC T3 Gb Ex h IIIC T200⁰C Db (IP65) I <b>M2 Ex h I Mb (IP65)</b>
				Sentoprene	ll 2 GD Ex h IIC T5 Gb
				Hytrel	Ex h IIIC T100ºC Db (IP65)
				PTFE	I M2 Ex h I Mb (IP65)