



SDP 12 SSX

MAX DISCHARGE

0-55 litres/minute

SIZE, MATERIAL

1/2", Stainless Steel 316L

WEIGHT

10 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'

Nitrile

Neoprene

Santoprene

Hytrel PTFE Viton



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).

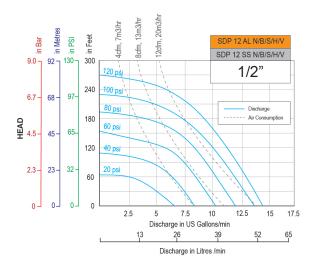


Versatility

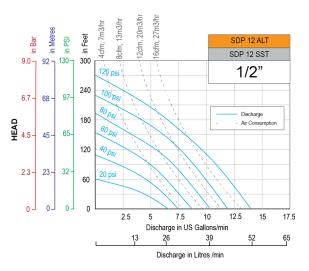
This pump handles Viscous fluids, Slurries, Solid laden fluids, Shear Sensitive fluids very well. No Priming needed No Foaming of fluid pumped No Stall damages Portable Submerged operation capable



Performance Graphs SDP 12 SSN/SSB/SSS/SSH/SSV



Performance Graphs SDP 12 SST



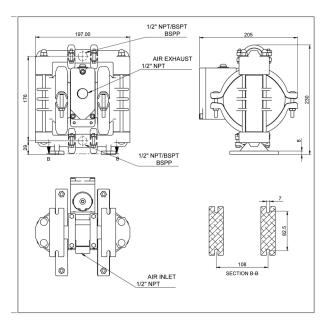
- Performance as measured pumping water at 20degC.
- Disclaimer: Actual pump performance may vary depending on number of bends, suction needed and friction in length of discharge piping.
- For guidance on how to select a suitable pump, visit Teryair AODD pump Selection guide.

Technical Data SDP 12SSX

	SDP 12SS with Nitrile / Neoprene / Santoprene / Hytrel / Viton fitments	SDP 12SS with PTFE fitments
Maximum Discharge	55 Litres/min (15 US gallons/min)	51 literes/min (14 US gallons/ min)
Suction Head Dry	5.5 meters, 18 feet	4 meters, 13 feet
Suction Head Wet	9.5 meters, 31 feet	9.5 meters, 31 feet
Pump Weight	10 Kgs, 22 lbs	10 Kgs, 22 lbs
Max Solid Passage	1.6 mm (1/16")	1.6 mm (1/16")
Air Distribution System	SDP MaxFlo, MOC aluminium, acetal and CFT seals	SDP MaxFlo, MOC aluminium, acetal and CFT seals
Balls / Seals	Nitrile or Neoprene or Santoprene or Hytrel or Viton	PTFE
Air Inlet	1/2" NPT	1/2" NPT
Fluid Inlet, Fluid Outlet	1/2" NPT/BSPT/BSPP	1/2" NPT/BSPT/BSPP



Dimensions SDP 12SSX



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
	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	B - Bolted	G - BSPT
SDP - MaxFlo	40 - 1 - 1/2"	PP - Polypropylene	S - Santoprene T - PTFE V - Viton H - Hytrel	C - Clamped	P - BSPP
ODI - WAXI IO	50 - 2 "				
	75- 3"	CI - Ductile Iron			F - Flanged
	100 - 4"				

Air Valve Replacement Kits for SDP 12 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.

Repair KIT Ordering No	Suitable for
167 97 04	NPT Fitted SSX Pumps With Any Diaphragm Variant
	BSPT Fitted SSX Pumps With Any Diaphragm Variant
	BSPP Fitted SSX Pumps With Any Diaphragm Variant



Diaphragm specifications

Diapinagin spec	
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 ptfe. Excellent suction capabilites Excellent general purpose diaphragm. Temperature range -40°C to +107°C (-40F to +225°F)
Hytrel	Good abrasion resistance. Low cost Excellent suction 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 12 SSX / ALX 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
164 97 01N	SDP 12 SSN / ALN
164 97 01B	SDP 12 SSB / ALB
164 97 015	SDP 12 SSS / ALS
164 97 01H	SDP 12 SSH / ALH
164 97 01V	SDP 12 SSV / ALV
164 97 01T	SDP 12 SST / ALT



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 Ex h IIIC T85°C Db (IP65)	
			Buna-N		
			Viton-FKM	ll 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65)	
			Sentoprene	Ha op n I wome of	
			Hytrel	ll 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65)	
				PTFE	Zara into 1100 G pt (if ot)
06 (1/4")	SDP			Neoprene	ll 2 GD Ex h IIC T6 Gb
(1/4)				Buna-N	Ex h IIIC T85°C Db I M2 Ex h I Mb (IP65)
	Stainless Steel	Stainless Steel	Viton-FKM	ll 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65) I M2 Ex h I Mb (IP65)	
				Sentoprene	ll 2 GD Ex h IIC T5 Gb
				Hytrel	Ex h IIIC T100°C Db (IP65)
				PTFE	I M2 Ex h I Mb (IP65)
				Neoprene	ll 2 GD Ex h IIC T6 Gb
				Buna-N	Ex h IIIC T85°C Db (IP65)
DP/SDP	Aluminium	Aluminium	Viton-FKM	ll 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65)	
				Sentoprene	He op n I ware si
				Hytrel	ll 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65)
				PTFE	
12 (1/2")				Neoprene	ll 2 GD Ex h IIC T6 Gb
(1/2)				Buna-N	Ex h IIIC T85°C Db I M2 Ex h I Mb (I P65)
SDP	Stainless Steel	Stainless Steel	Viton-FKM	Il 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65) I M2 Ex h I Mb (IP65)	
				Sentoprene	ll 2 GD Ex h IIC T5 Gb
				Hytrel	Ex h IIIC T100°C Db (IP65)
				PTFE	I M2 Ex h I Mb (IP65)
				Neoprene	ll 2 GD Ex h IIC T6 Gb
25 (1") DP /		Aluminium	Buna-N	Ex h IIIC T85°C Db (IP65)	
			Viton-FKM	ll 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65)	
	SDP	SDP less Steel		Sentoprene	lla op n i vorte c'
				Hytrel	ll 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65)
			PTFE	2x 11 1110 1100 C 120 (11 03)	



SUMMERY FOR THE ATEX RATING FOR TERYAIR AODD MODELS

Pump Size	Series	Wetted Materials	Center Section	Dipharagm Materials	ATEX Rating
40 DP / (1-1/2") SDP				Neoprene	ll 2 GD Ex h IIC T6 Gb
				Buna-N	Ex h IIIC T85°C Db (IP65)
	Aluminium / Stain-	Aluminium	Viton-FKM	ll 2 GD Ex h IIC T3 Gb Ex h IIIC T200⁰C Db (IP65)	
	SDP	less Steel		Sentoprene	ll 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65)
				Hytrel	
				PTFE	
				Neoprene	ll 2 GD Ex h IIC T6 Gb
				Buna-N	Ex h IIIC T85°C Db (IP65)
	DP / SDP		Aluminium	Viton-FKM	ll 2 GD Ex h IIC T3 Gb Ex h IIIC T200⁰C Db (IP65)
	SDP	less Steel		Sentoprene	W - 00 0 1 120 0 0 0
				Hytrel	ll 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65)
				PTFE	EX II IIIC 1 100 C D0 (1765)
50 (2")				Neoprene	ll 2 GD Ex h IIC T6 Gb
		DP Cast Iron	Cast Iron	Buna-N	Ex h IIIC T85°C Db I M2 Ex h I Mb (IP65)
SDP	SDP			Viton-FKM	"ll 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65) I M2 Ex h I Mb (IP65)"
				Sentoprene	ll 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65) I M2 Ex h I Mb (IP65)
				Hytrel	
				PTFE	
		DP / SDP Aluminium SDP Cast Iron	Aluminium	Neoprene	ll 2 GD Ex h IIC T6 Gb Ex h IIIC T85°C Db (IP65)
				Buna-N	
				Viton-FKM	ll 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65)
	SDP			Sentoprene	
				Hytrel	ll 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65)
				PTFE	EX II IIIC 1100 C D0 (1P65)
75 (3")				Neoprene	ll 2 GD Ex h IIC T6 Gb
			Cast Iron	Buna-N	Ex h IIIC T85°C Db I M2 Ex h I Mb (IP65)
	SDP			Viton-FKM	ll 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65) I M2 Ex h I Mb (IP65)
				Sentoprene	ll 2 GD Ex h IIC T5 Gb
				Hytrel	Ex h IIIC T100°C Db (IP65)
				PTFE	I M2 Ex h I Mb (IP65)