





MAX DISCHARGE 0-51 litres/minute

size, material **1/2", Aluminium** 

weight **4.4 Kgs** 



# AIR OPERATED DIAPHRAGM PUMP

These aluminum constructed pumps are commonly combined with Neoprene, Nitrile 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

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



## Diaphragm Options 'X'

Neoprene Nitrile 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).

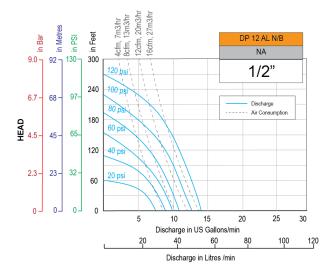


# Versatility

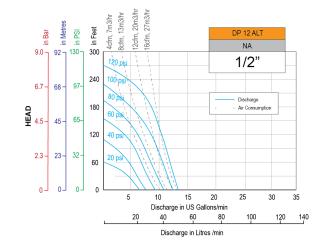
This pump handles Viscous fluids, Slurries, Solid laden fluids, Shear Sensitive fluids very well. No Priming needed No Foaming of fluid pumped No Stall damages Portable Submerged operation capable



#### Performance Graphs DP 12 ALN/ALB



#### Performance Graphs DP 12 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 Teryair AODD pump Selection guide.

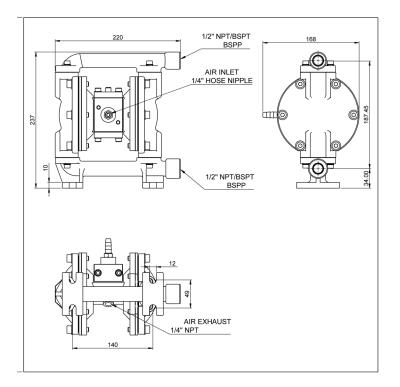
# **Technical Data DP 12ALX**

	DP 12AL with Neoprene / Nitrile fit- ments	DP 12AL with PTFE Fitments
Maximum Discharge	51 Litres/min (14 US gallons/min)	50 liters/min (13 US gallons/min)
Suction Head Dry	1.5 meters, 6 feet	2.7 meters, 9 feet
Suction Head Wet	9.5 metres, 31 feet	9 meters, 30 feet
Pump Weight	4.4 Kgs, 9.7 lbs	4.4 Kgs, 9.7 lbs
Max Solid Passage	1.6 mm (1/16")	1.6 mm (1/16")
Air Distribution System	Classic-Rugged Bronze Valve Body with Hard Anodized Spool	Classic-Rugged Bronze Valve Body with Hard Anodized Spool
Balls / Seals	Neoprene or Nitrile	PTFE
Air Inlet	1/4" Hose Nipple (barb)	1/4" Hose Nipple (barb)
Fluid Inlet, Fluid Outlet	1/2" NPT/BSPT/BSPP	1/2" NPT/BSPT/BSPP





# **Dimensions DP 12ALX**



## **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 N - Neoprene S - Santoprene T - PTFE V - Viton H - Hytrel	B - Bolted C - Clamped	R- NPT
ADP - Advanced	25 - 1"	SS - Stainless Steel 316L			G - BSPT
SDP - MaxFlo	40 - 1 - 1/2"	PP - Polypropylene Cl - Ductile Iron			P - BSPP
	50 - 2 "				
	75- 3"				F - Flanged
	100 - 4"				

## Air Valve Replacement Kits for DP 12 ALX Pumps

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

Replacement KIT Ordering No	Suitable for
	NPT Fitted ALX Pumps With Any Diaphragm Variant
171 97 41	BSPT Fitted ALX Pumps With Any Diaphragm Variant
	BSPP Fitted ALX Pumps With Any Diaphragm Variant



# **Diaphragm specifications**

Neoprene	6	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-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 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 DP 12 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, air valve spool complete, all gaskets, end caps with fitted rings. Repair kits are threading independant.

Repair KIT Ordering No	Suitable for
171 97 52	DP 12 ALN
171 97 52B	DP 12 ALB
171 97 52T	DP 12 ALT



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

Pump Size	Series	Wetted Materials	Center Section	Dipharagm Materials	ATEX Rating
	Aluminium		Neoprene	ll 2 GD Ex h IIC T6 Gb	
			Buna-N	Ex h IIIC T85ºC Db (IP65)	
		Aluminium	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	
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 T200⁰C Db (IP65) <b>I M2 Ex h I Mb (IP65)</b>
				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)
		Aluminium		Neoprene	ll 2 GD Ex h IIC T6 Gb
			Aluminium	Buna-N	Ex h IIIC T85ºC Db (IP65)
	DP/SDP			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	
12 (1/2")		Stainless Steel	Stainless Steel	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 (IP65)
	SDP			Viton-FKM	ll 2 GD Ex h IIC T3 Gb Ex h IIIC T200⁰C Db (IP65) <b>I M2 Ex h I Mb (IP65)</b>
				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)
			Aluminium	Neoprene	ll 2 GD Ex h IIC T6 Gb
				Buna-N	Ex h IIIC T85°C Db (IP65)
25 (1")	DP /			Viton-FKM	ll 2 GD Ex h IIC T3 Gb Ex h IIIC T200⁰C Db (IP65)
	SDP			Sentoprene	
				Hytrel	ll 2 GD Ex h IIC T5 Gb Ex h IIIC T100⁰C Db (IP65)
				PTFE	Exit incertico (CDD (in 03)



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

Pump Size	Series	Wetted Materials	Center Section	Dipharagm Materials	ATEX Rating
				Neoprene	ll 2 GD Ex h IIC T6 Gb
			Aluminium	Buna-N	Ex h IIIC T85°C Db (IP65)
	DP / SDP			Viton-FKM	ll 2 GD Ex h IIC T3 Gb Ex h IIIC T200ºC Db (IP65)
(1-1/2")	SDP			Sentoprene	ll 2 GD Ex h IIC T5 Gb Ex h IIIC T100ºC Db (IP65)
				Hytrel	
				PTFE	
				Neoprene	ll 2 GD Ex h IIC T6 Gb Ex h IIIC T85ºC Db (IP65)
				Buna-N	
	DP /	Aluminium / Stain-	Aluminium	Viton-FKM	ll 2 GD Ex h IIC T3 Gb Ex h IIIC T200ºC Db (IP65)
	SDP	less Steel		Sentoprene	
				Hytrel	ll 2 GD Ex h IIC T5 Gb Ex h IIIC T100⁰C Db (IP65)
				PTFE	EX N IIIC I 100°C DD (1P65)
50 (2")			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)
SD	SDP	Cast Iron		Viton-FKM	"ll 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C 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	
		Δluminium	Aluminium	Neoprene	ll 2 GD Ex h IIC T6 Gb
				Buna-N	Ex h IIIC T85ºC Db (IP65)
	DP /			Viton-FKM	ll 2 GD Ex h IIC T3 Gb Ex h IIIC T200⁰C Db (IP65)
	SDP			Sentoprene	ll 2 GD Ex h IIC T5 Gb Ex h IIIC T100⁰C Db (IP65)
				Hytrel	
				PTFE	
75 (3")				Neoprene	ll 2 GD Ex h IIC T6 Gb
		Cast Iron	Cast Iron	Buna-N	Ex h IIIC T85ºC 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 T100ºC Db (IP65)
				PTFE	I M2 Ex h I Mb (IP65)