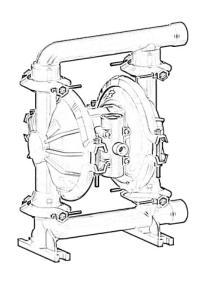
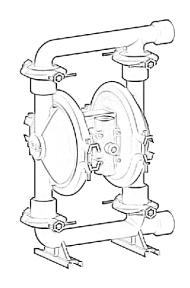




### Operation and Maintenance Guide



DP 25 AL N/B/S/H/V/T



DP 25 SSN/B/S/H/V/T

DP 25 Aluminum and Stainless Steel Construction, All variants

Models	Descriptions
DP 25 AL N/B/S/H/V/T	Aluminum with Neoprene, Buna N, Santoprene, Hytrel, Viton and PTFE fitments
DP 25 SS N/B/S/H/V/T	Stainless Steel with Neoprene, Buna N, Santoprene, Hytrel, Viton and PTFE fitments

Read this manual carefully before installing, operating or servicing this equipment. It's the responsibility of the employer to ensure this manual is read by the operator. Please preserve this manual.

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#### **Pump Nomenclature**

XX	XX	XX	X	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 3161	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	o olalipou	
	75- 3"	CI - Ductile Iron			F - Flanged
	100 - 4"				

# Operating and Safety Instructions



Static sparks can cause explosion resulting in severe injury or death.

Ground the pump and the pump connections like hoses and containers into which or from the fluid is being transferred. Connect the grounding wire to any bolt on the pump.

Check continuity of electrical path to ground at regular intervals.

Consult local building and electrical codes for grounding requirements where needed.

Use hoses containing a grounding wire.

# Warning: Pump Exhaust

In case of a diaphragm failure, fluid being pumped may spray out from the exhaust of the pump. This may cause severe injury depending on the fluid being pumped.

If the fluid is hazardous, pipe away the exhaust to a safe remote location using a generous diameter pipe preferably with a grounding arrangement, and refit the muffler at the end of this arrangement.

Always wear safety glasses while in the vicin-

ity of an operating pump.

# Warning: Overpressure/Hazardous Pressure

Do not exceed the max supply air pressure of 125 PSI.

Make sure all connected hoses and pipelines are rated to operate safely with the pressures generated by pump of 125 PSI.

Do not open or handle pump or hoses while pressurized.

Disconnect air supply line and relieve pressure from the system by carefully opening discharge and supply lines.

# Warning: Hazardous Materials

Do not move a pump that contains hazardous fluids trapped inside it. Please observe prescribed handling and safety codes. Drain the pump safely, by turning it upside down and collecting the fluid safely, before moving the pump.

# 

Please check compatibility of fluids intended to be handled with the materials of construction of the pump. Severe reactions and explosions may occur if materials are incompatible. Caution: Chemical compatibility



Please check that the fluid being pumped is compatible with the wetted parts of the pump. Refer Cole Parmer compatibility (http://www.coleparmer.in/Chemical-Resistance) guide for details. Note that chemical compatibility may change with temperature; take this into account while selecting pump material.



### ! Caution: Structural support

Please refer figure 1 and ensure that the piping system is independently supported and does not load the pump. The pumps are not designed to take the continuous and often pulsating load of a piping system. Important to use a flexible connection between rigid piping and pump casings.



#### Caution: Running dry, disconnection of hoses when not in use

Although these pumps can be run dry for long periods, it is advisable to avoid this as it causes unnecessary wear of wearing parts.



#### Caution: Operator understanding

Please ensure that all operators have read this manual and have the required understanding of safe working practices and are equipped with safety equipment when working on/around the pump.



#### Caution: Using genuine caution teryair fittings & spares

Use genuine teryair parts to ensure correct pump operation and maximize life.



#### Warning **Conditions for Certification**

- 1. Control of Environmental humidity to minimize the generation of the static electricity.
- 2. Protection from direct airflow causing a charge transfer.
- 3. Touch with an insulating object to avoid electrostatic charge hazard.
- 4. Clean the surface with damp cloth only to avoid electrostatic charge hazard.

### **Operating Instructions**

The Tervair Stroke diaphragm pump generates a alternate stroking of the diaphragms against the fluid in the liquid chambers of the Pump. This reciprocatory action is responsible for the fluid being pumped.

It is possible to control the output of the pump by controlling the supply air pressure.

It is also possible to control the output of the pump by throttling action on the fluid flowing in the outlet piping by means of a valve. if such a valve is shut completely the pressure in the discharge piping increases to a point when the pressure at pump discharge equals it and the pump comes to a stop. This causes no damage to the pump and the pump consumes no more energy. Upon opening of the valve, the pump starts reciprocating once again and resumes fluid delivery.







# Caution: Temperature limitations and diaphragm options

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 +177°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)

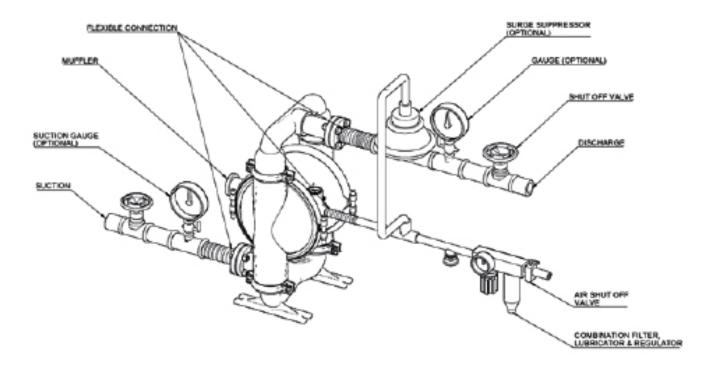
## **Suggested Lubricants**

Brand	Above 27 Deg C (	From 5 Deg C to 27 Deg C	Below 5 Deg C
Shell	Toona R 72	Toona R 41	Toona R 27
Mobil	Almo 529	Almo 527	Almo 525
Esso		Arox EP 65	Arox EP 45
Caltex	Rando Oil 150	Rando Oil 100	Rando Oil 46
Texaco	Regal Oil F	Regal Oil PE	Regal Oil B
Daltron	Silkolene 881	Silkolene 548	Silkolene 773
Burmah Castrol	RD Oil 3	RD Oil Light	Megna SPX
BP	RD 220 HP60C	RD150 HP20C	RD80 HP10C
Duckham	Garnet 7	Garnet 6	Zero Flo 5
Sternol	Merlin 87	Merlin 71	Merlin 54
Petrofina	Purifoc 53	Purifoc 46	Purifoc 32
Chevron	Vistac Oil 18X	Vistac Oil 19X	Vistac Oil 9X





#### Suggested site selection and installation recommendations



#### **Location selection**

Pump location must be easily accessible with reasonable space around for maintenance operations.

Pump dimensional data for each variant is available in section showing exploded views

#### Air supply

Compressed air at 90 PSI ( Stroke pumps can take a max of 125PSI), free from moisture and having an oil mist is essential. Use of a filter (50 microns), a lubricator and a regulator is highly recommended and should be installed as close as possible to the pump inlet.

Ensure correct grade of oil is used in thelubricator bowl. Too thick oil may slow down the valve shifting mechanism and affect pump performance. See suggested lubricants on page no 5.

#### **Piping**

see section on safety if used in hazardous area) See Figure 1.

Suction side 1 inch or larger, non-collapsible Delivery side 1 inch or larger.

A minimum number of bends and fittings to be used. A flexible connection between suction, delivery and air supply piping is highly recommended such that piping stresses and loads do not transfer to pump housing. Select piping materials such that chemical compatibility is

maintained with the fluid being pumped.

#### **Suction**

Ensure that the suction head after installation is well within the pumps suction capabilities

#### **Muffler**

Use of supplied muffler is recommended to bring pump operation sounds down to comfortable levels, in case of hazardous fluids handling, please read section of safety regarding piping away of exhaust see

Warning: Pump Exhaust) earlier in this manual.





# **Troubleshooting**

Serial No	Description	Causes	Remedial Action
1	Pump stops and will not start	Insufficient Air Pressure	Check air pressure is as recommended at the pump air inlet
		Air Filter Blocked	Check if debris has clogged the inlet filter on the FRL unit/pump inlet air valve (some models have air filter on the air inlet valve) and ensure clear passage of air
		Internal damage or excessive wear on components	roceed to dismantle the pump, examine component for wear, replace any worn components, re assemble carefully as instructed in this manual and re start the pump.
2	Pumps runs slowly, poor delivery	Cavitation	Check if cavitation is occurring in the suction side, if so reduce suction vacuum by slowing down the pump.
		Worn Balls and Seats	Check proper sealing action of balls against seals, these components need to be replaced as a set if they are worn.
		Insufficient or wrong lubricant in the air supply.	Ensure that the lubricant is as per the recommended chart, a thicker lubricant often makes the air valve work sluggishly
		Internal damage or excessive wear on components	Proceed to dismantle the pump, examine component for wear, replace any worn components, re assemble carefully as instructed in this manual and re start the pump.
3	Pump air valve frerzes	Excessive moisture in supply air line.	Ensure that the dew point of the supplied air is low enough. Install a air dryer or moisture separator on the supply line
4	Air bubbles in pump discharge or product sprays out	Broken Diaphragm	
	of exhaust vent	Improper seal between inner pistons, outer pistons and shaft.	Proceed to dismantle the pump, examine component for wear, replace any
		Air leakage into product from balls / seats area	worn components, re assembly carefully as instructed in this manual and re start the pump
		Air sucked into suction pipeline due to insufficiently tight joints on suction pipeline.	



#### **Maintenance**

Regular inspection and maintenance schedules will greatly enhance the life of the pump and will ensure a trouble free and safe working environment with little chance of breakdowns. Follow the instructions clearly in "Disassembly and Reassembly" of the pump and in the troubleshooting section.

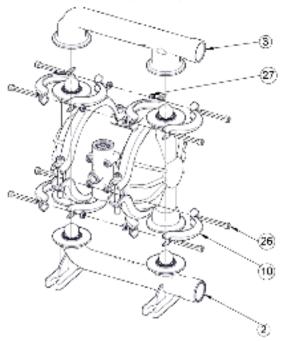
Use genuine Teryair spares and if possible mention the serial number of the pump when ordering spares.

Always replace elastomers as a set, eg diaphragms, balls and seats.

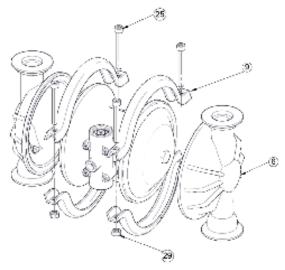
#### **Diassembly and Re-assembly**

#### 1. Replacement of Diaphragm

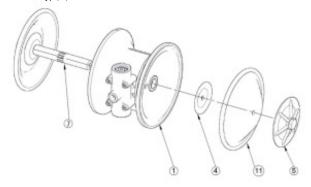
a) Unscrew both bolt (26) & nut (27) as shown in the exploded view and proceed to remove the small clamp (10). Repeat for the other three small clamps. Remove the outlet (3) & inlet (2) respectively. Examine the balls, seals (and seats) for wear.



b. Now unscrew hex socket head bolt (25) & nut (29) of any one side and proceed to remove the big clamp (9). Now remove the outer chamber (6). Now repeat the same procedure to remove the second outer chamber (6)



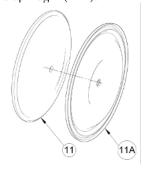
c. Now with the help of two spanner hold one of the across flat of one outer flange (5) and rotate the second outer flange (5) to disassemble it from the shaft assembly. Remove the diaphragm (11), & inner flange (4). Now pull out the shaft assembly out of the shaft housing (1).



\*For ALT/SST series hold one of the across flat of hex. Bolt (23) and rotate the second bolt (23) to disassemble it from the shaft assembly. Remove the washer (23A) and outer flange (5), backup diaphragm (11), PTFE diaphragm (11A) & inner flange (5). Now pull out the half shaft assembly out of the shaft housing (1).



- Now hold the shaft (7) in a vice with proper d. packing. Care must be taken not to damage the shaft outer surface. Now remove the outer flange (5) with spanner.
- \*For ALT/SST series remove the bolt (23) and remove the outer flange (5), Backup diaphragm (11) & PTFE diaphragm
- e. Now replace the diaphragms (11). Ensure that diaphragm orientation is correct, i.e. For ALB/ALN/ALV thesticker side of the diaphragm (11) to be located in the outer chamber (6). Now assemble the outer flange (5) in reverse manner and remove the half shaft assembly from vice.
- \* For ALT & SST model the convex side of outer ring PTFE diaphragm (11A) to be located in outer chamber (6). For the backup diaphragm (11) the larger side of outer ring to be located in shaft housing (1) & small side in the concave groove of PTFE diaphragm (11A).



- \* For ALS/ ALH model AIR SIDE marking to be located towards the shaft housing (1).
- Lubricate the edge of the shaft with specified lubricant. Slowly insert the shaft with rotating motion. Care should be taken not to damage the rubber rings (8).
- Once the half shaft open portion comes out of the bush, follow the procedure in reverse manner as described in part (a) & (b) and assemble the pump.

#### 2) Replacement of Shaft O rings

- For removing the rubber rings from bush, first follow the step a, b & c from the diaphragm replacement.
- Now remove the seals with the help of needle Nose pliers. Care should be taken not to damage the inner face of bush.
- Once all the old seals are have been removed, the c. inside of the bushing should be cleaned to ensure no debris is left that may damage to new seals (Pressurized air is preferable).
- These following tools can be used to aid in the installation of new seals:

Needle Nose pliers Phillips Screwdriver Electrical Tape

Wrap electrical tape around each leg of the needle e.

- nose pliers (heat shrink may also be used). This is done to prevent damaging the inside portion of the new seals.
- With a new seal in hand, place the two legs of the nose pliers inside the seal ring. Open the pliers as wide as the seal diameter will allow, then two fingers pull down on the top portion of the seal to form kidney bean shape.
- Lightly clamp the pliers together to hold the seal into the kidney shape. Be sure to pull the seal into as tight of a kidney shape as possible, this will allow the seal to travel down the bushing bore easier.
- With the seal clamped in the pliers, insert the seal into the bushing bore and position the bottom of the seal into the correct groove. Once the bottom of the seal is seated in the groove, release the clamp pressure on the pliers. This will allow the seal to partially snap back to its original shape.
- After the pliers are removed, you will notice a slight bump in the seal shape. Before the seal can be properly resized, the bump in the seal should be removed as much as possible. This can be done with either the Phillips screw driver or your finger, apply light pressure to the peak of the bump. This pressure will cause the bump to be almost completely eliminated.
- Lubricate the edge of the shaft with specified lubrij. cant.
- k. Slowly insert the shaft with rotating motion. This will complete the resizing of the seals.
- Perform these steps for the remaining seals.

#### 3) Replacement of Ball seat & Ball

- Follow the step (a) of diaphragm replacement. Replace the ball (12) & seat (13) with new one.
- \* For ALT, SST, ALS & ALH series change the valve seat (13) & oring (13A) with new one.

#### Replacement of air valve and 4) o-ring of end cap

- Unscrew nut (27) from the shaft housing (1). Remove the air valve assembly along with the bolt (24). Now remove the circlips (20) from both ends. Now with the help of bolt (24) pull the end cap (17) & (18) from both ends. Now slide out the air valve (16). Change the oring (19) of both end caps.
- While assembly first put the end cap with pin (18) in air valve body (14). Make sure the notch of end cap (18) matches with the drill hole of body. Push the end cap with oring (19) gently. Now fit the circlip (20). Now slide the air valve from other side ensuring the drill portion located in the pin of end cap (18). Now push the end cap (17) with oring (19) from the other end.
- You can also change the gasket for air valve body (14) & blocking pad (22). Now assemble the air valve assembly in reverse manner. While assembly make sure to put the spring washer (28) along with the nut (27).

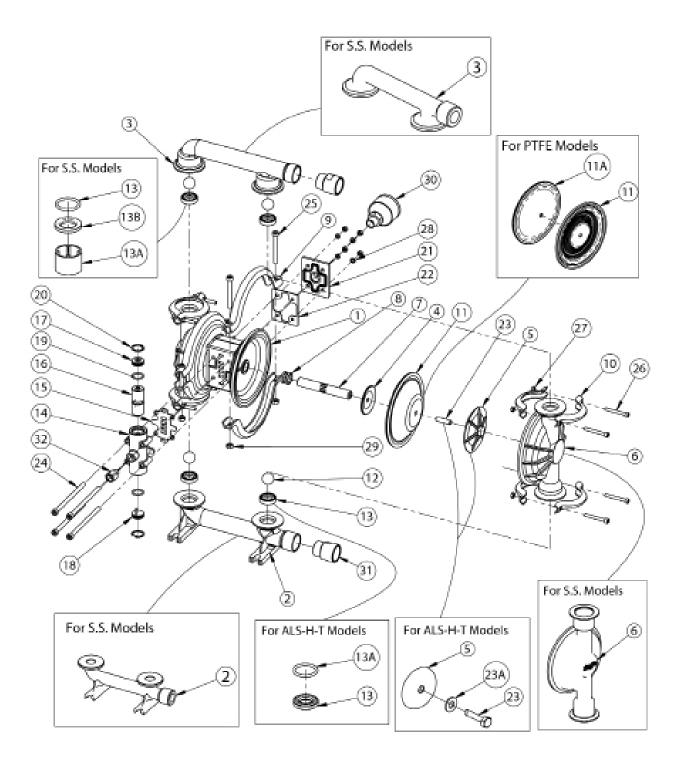




## **Bill of Materials for DP 25 ALN Pumps**

ILLU. NO.	PART NO	DESCRIPTION	DP25ALN-CR	DP25ALN-CG	DP25ALN-CP
1	1601041	SHAFT HOUSING	1	1	1
2	1601002	INLET BASE	1	-	-
2*	1601008	INLET BASE	-	1	-
2**	1601011	INLET BASE	-	-	1
3	1601003	OUTLET	1	-	-
3*	1601009	OUTLET	-	1	-
3**	1601012	OUTLET	-	-	1
4	1603012	INNER FLANGE	2	2	2
5	1601005	OUTER FLANGE	2	2	2
6	1601004	OUTER CHAMBER SIDE	2	2	2
7	1602110	SHAFT	1	1	1
8	1604021	RUBBER RINGS	4	4	4
9	1603013	BIG CLAMP	4	4	4
10	1603014	SMALL CLAMP	8	8	8
11	1604020	DIAPHRAGM (NEOPRENE)	2	2	2
12	1604015	BALL (NEOPRENE)	4	4	4
13	1604016	SEAL (NEOPRENE)	4	4	4
14	1630401	AIR VALVE BODY	1		
14*	1630402	AIR VALVE BODY	-	1	-
14**	1630405	AIR VALVE BODY	-	-	1
15	160 40 36	GASKET	1	1	1
16	1632001	AIR VALVE	1	-	-
17	160 08 03	VALVE END CAP	1	1	1
18	160 08 02	VALVE END CAP WITH PIN	1	1	1
19	163 40 01	O RING	2	2	2
20	1609025S	INT CIRCLIP	2	2	2
21	160 10 42	BLOCKING PAD	1	1	1
22	160 40 35	GASKET	1	1	1
23	160 21 09	STUD	2	2	2
24	160 90 51	ALLEN BOLT	4	4	4
25	160 90 32	ALLEN BOLT	4	4	4
26	150 40 28	ALLEN BOLT	8	8	8
27	150 40 25	HEX NUT	12	12	12
28	500 90 48	SPRING WASHER	4	4	4
29	022 40 21	HEX NUT	4	4	4
30	805 98 01	SILENCER	1	1	1

## **Exploded View for DP 25 Pump**







# **Bill of Materials for DP 25 ALB Pumps**

ILLU. NO.	PART NO	DESCRIPTION	DP25ALB-CR	DP25ALB-CG	DP25ALB-CP
1	160 10 41	SHAFT HOUSING	1	1	1
2	160 10 02	INLET BASE	1	-	-
2*	160 10 08	INLET BASE	-	1	-
2**	160 10 11	INLET BASE	-	-	1
3	160 10 03	OUTLET	1	-	-
3*	160 10 09	OUTLET	-	1	-
3**	160 10 12	OUTLET	-	-	1
4	160 30 12	INNER FLANGE	2	2	2
5	160 10 05	OUTER FLANGE	2	2	2
6	160 10 04	OUTER CHAMBER SIDE	2	2	2
7	160 21 10	SHAFT	1	1	1
8	160 40 21	RUBBER RINGS	4	4	4
9	160 30 13	BIG CLAMP	4	4	4
10	160 30 14	SMALL CLAMP	8	8	8
11	160 40 20B	DIAPHRAGM (BUNA N)	2	2	2
12	160 40 15B	BALL (BUNA N)	4	4	4
13	160 40 16B	SEAL (BUNA N)	4	4	4
14	163 04 01	AIR VALVE BODY	1	-	-
14*	163 04 02	AIR VALVE BODY	-	1	-
14**	163 04 05	AIR VALVE BODY	-	-	1
15	160 40 36	GASKET	1	1	1
16	163 20 01	AIR VALVE	1	1	1
17	160 08 03	VALVE END CAP	1	1	1
18	160 08 02	VALVE END CAP WITH PIN	1	1	1
19	163 40 01	O RING	2	2	2
20	1609025S	INT CIRCLIP	2	2	2
21	160 10 42	BLOCKING PAD	1	1	1
22	160 40 35	GASKET	1	1	1
23	160 21 09	STUD	2	2	2
24	160 90 51	ALLEN BOLT	4	4	4
25	160 90 32	ALLEN BOLT	4	4	4
26	150 40 28	ALLEN BOLT	8	8	8
27	150 40 25	HEX NUT	12	12	12
28	500 90 48	SPRING WASHER	4	4	4
29	022 40 21	HEX NUT	4	4	4
30	805 98 01	SILENCER	1	1	1

## **Bill of Materials for DP 25 ALS Pumps**

ILLU. NO.	PART NO	DESCRIPTION	DP25ALS-CR	DP25ALS-CG	DP25ALS-CP
1	160 10 41	SHAFT HOUSING	1	1	1
2	160 10 49	INLET BASE	1	-	-
2*	160 10 10	INLET BASE	-	1	-
2**	160 10 13	INLET BASE	-	-	1
3	160 10 03	OUTLET	1	-	-
3*	160 10 09	OUTLET	-	1	-
3**	160 10 12	OUTLET	-	-	1
4	160 30 12	INNER FLANGE	2	2	2
5	160 10 05	OUTER FLANGE	2	2	2
6	160 10 48	OUTER CHAMBER SIDE	2	2	2
7	160 21 10	SHAFT	1	1	1
8	160 40 21	RUBBER RINGS	4	4	4
9	160 30 13	BIG CLAMP	4	4	4
10	160 30 14	SMALL CLAMP	8	8	8
11	163 41 01	DIAPHRAGM (SANTOPRENE)	2	2	2
12	163 41 02	BALL (SANTOPRENE)	4	4	4
13	160 20 51A	SEAL (SANTOPRENE)	4	4	4
13A	160 36 50T	O RING (PTFE)	4	4	4
14	163 04 01	AIR VALVE BODY	1	-	-
14*	163 04 02	AIR VALVE BODY	-	1	-
14**	163 04 05	AIR VALVE BODY	-	-	1
15	160 40 36	GASKET	1	1	1
16	163 20 01	AIR VALVE	1	1	1
17	160 08 03	VALVE END CAP	1	1	1
18	160 08 02	VALVE END CAP WITH PIN	1	1	1
19	163 40 01	O RING	2	2	2
20	1609025S	INT CIRCLIP	2	2	2
21	160 10 42	BLOCKING PAD	1	1	1
22	160 40 35	GASKET	1	1	1
23	160 21 09	STUD	2	2	2
24	160 90 51	ALLEN BOLT	4	4	4
25	160 90 32	ALLEN BOLT	4	4	4
26	150 40 28	ALLEN BOLT	8	8	8
27	150 40 25	HEX NUT	12	12	12
28	500 90 48	SPRING WASHER	4	4	4
29	022 40 21	HEX NUT	4	4	4
30	805 98 01	SILENCER	1	1	1



## **Bill of Materials for DP 25 ALH Pumps**

ILLU. NO.	PART NO	DESCRIPTION	DP25ALH-CR	DP25ALH-CG	DP25ALH-CP
1	160 10 41	SHAFT HOUSING	1	1	1
2	160 10 49	INLET BASE	1	-	-
2*	160 10 10	INLET BASE	-	1	-
2**	160 10 13	INLET BASE	-	-	1
3	160 10 03	OUTLET	1	-	-
3*	160 10 09	OUTLET	-	1	-
3**	160 10 12	OUTLET	-	-	1
4	160 30 12	INNER FLANGE	2	2	2
5	160 10 05	OUTER FLANGE	2	2	2
6	160 10 48	OUTER CHAMBER SIDE	2	2	2
7	160 21 10	SHAFT	1	1	1
8	160 40 21	RUBBER RINGS	4	4	4
9	160 30 13	BIG CLAMP	4	4	4
10	160 30 14	SMALL CLAMP	8	8	8
11	163 41 01	DIAPHRAGM (HYTREL)	2	2	2
12	163 41 02	BALL (HYTREL)	4	4	4
13	160 20 51A	SEAL (HYTREL)	4	4	4
13A	160 36 50T	O RING (PTFE)	4	4	4
14	163 04 01	AIR VALVE BODY	1	-	-
14*	163 04 02	AIR VALVE BODY	-	1	-
14**	163 04 05	AIR VALVE BODY	-	-	1
15	160 40 36	GASKET	1	1	1
16	163 20 01	AIR VALVE	1	1	1
17	160 08 03	VALVE END CAP	1	1	1
18	160 08 02	VALVE END CAP WITH PIN	1	1	1
19	163 40 01	O RING	2	2	2
20	1609025S	INT CIRCLIP	2	2	2
21	160 10 42	BLOCKING PAD	1	1	1
22	160 40 35	GASKET	1	1	1
23	160 21 09	STUD	2	2	2
24	160 90 51	ALLEN BOLT	4	4	4
25	160 90 32	ALLEN BOLT	4	4	4
26	150 40 28	ALLEN BOLT	8	8	8
27	150 40 25	HEX NUT	12	12	12
28	500 90 48	SPRING WASHER	4	4	4
29	022 40 21	HEX NUT	4	4	4
30	805 98 01	SILENCER	1	1	1

## **Bill of Materials for DP 25 ALV Pumps**

ILLU. NO.	PART NO	DESCRIPTION	DP525ALV-CR	DP25ALV-CG	DP25ALV-CP
1	160 10 41	SHAFT HOUSING	1	1	1
2	160 10 02	INLET BASE	1	-	-
2*	160 10 08	INLET BASE	-	1	-
2**	160 10 11	INLET BASE	-	-	1
3	160 10 03	OUTLET	1	-	-
3*	160 10 09	OUTLET	-	1	-
3**	160 10 12	OUTLET	-	-	1
4	160 30 12	INNER FLANGE	2	2	2
5	160 10 05	OUTER FLANGE	2	2	2
6	160 10 04	OUTER CHAMBER SIDE	2	2	2
7	160 21 10	SHAFT	1	1	1
8	160 40 21	RUBBER RINGS	4	4	4
9	160 30 13	BIG CLAMP	4	4	4
10	160 30 14	SMALL CLAMP	8	8	8
11	160 40 20V	DIAPHRAGM (VITON))	2	2	2
12	160 40 15V	BALL (VITON)	4	4	4
13	160 40 16V	SEAL (VITON)	4	4	4
14	163 04 01	AIR VALVE BODY	1	1	1
14*	163 04 02	AIR VALVE BODY	-	1	-
14**	163 04 05	AIR VALVE BODY	-	-	1
15	160 40 36	GASKET	1	1	1
16	163 20 01	AIR VALVE	1	1	1
17	160 08 03	VALVE END CAP	1	1	1
18	160 08 02	VALVE END CAP WITH PIN	1	1	1
19	163 40 01	O RING	2	2	2
20	1609025S	INT CIRCLIP	2	2	2
21	160 10 42	BLOCKING PAD	1	1	1
22	160 40 35	GASKET	1	1	1
23	160 21 09	STUD	2	2	2
24	160 90 51	ALLEN BOLT	4	4	4
25	160 90 32	ALLEN BOLT	4	4	4
26	150 40 28	ALLEN BOLT	8	8	8
27	150 40 25	HEX NUT	12	12	12
28	500 90 48	SPRING WASHER	4	4	4
29	022 40 21	HEX NUT	4	4	4
30	805 98 01	SILENCER	1	1	1



## **Bill of Materials for DP 25 ALT Pumps**

ILLU. NO.	PART NO	DESCRIPTION	DP25ALT-CR	DP25ALT-CG	DP25ALT-CP
1	160 10 41	SHAFT HOUSING	1	1	1
2	160 10 49	INLET BASE	1	-	-
2*	160 10 10	INLET BASE	-	1	-
2**	160 10 13	INLET BASE	-	-	1
3	160 10 03	OUTLET	1	-	-
3*	160 10 09	OUTLET	-	1	-
3**	160 10 12	OUTLET	-	-	1
4	160 30 12	INNER FLANGE	2	2	2
5	160 10 05	OUTER FLANGE	2	2	2
6	160 10 48	OUTER CHAMBER SIDE	2	2	2
7	160 21 34	SHAFT	1	1	1
8	160 40 21	RUBBER RINGS	4	4	4
9	160 30 13	BIG CLAMP	4	4	4
10	160 30 14	SMALL CLAMP	8	8	8
11	160 40 33N	BAKUP DIAPHRAGM	2	2	2
11A	160 36 20T	DIAPHRAGM (PTFE)	2	2	2
12	160 36 15T	BALL (PTFE)	4	4	4
13	160 20 51A	SEAL (PTFE)	4	4	4
13A	160 36 50T	O RING (PTFE)	4	4	4
14	163 04 01	AIR VALVE BODY	1		
14*	163 04 02	AIR VALVE BODY	-	1	-
14**	163 04 05	AIR VALVE BODY	-	-	1
15	160 40 36	GASKET	1	1	1
16	163 20 01	AIR VALVE	1	1	1
17	160 08 03	VALVE END CAP	1	1	1
18	160 08 02	VALVE END CAP WITH PIN	1	1	1
19	163 40 01	O RING	2	2	2
20	1609025S	INT CIRCLIP	2	2	2
21	160 10 42	BLOCKING PAD	1	1	1
22	160 40 35	GASKET	1	1	1
23	160 27 09	HEX. BOLT	2	2	2
23A	160 21 35	PLAIN WASHER	2	2	2
24	160 90 51	ALLEN BOLT	4	4	4
25	160 90 32	ALLEN BOLT	4	4	4
26	150 40 28	ALLEN BOLT	8	8	8
27	150 40 25	HEX NUT	12	12	12
28	500 90 48	SPRING WASHER	4	4	4
29	022 40 21	HEX NUT	4	4	4
30	805 98 01	SILENCER	1	1	1
30	805 98 01	SILENCER	1		

## **Bill of Materials for DP 25 SSN Pumps**

ILLU. NO.	PART NO	DESCRIPTION	DP25SSN-CR	DP25SSN-CG	DP25SSN-CP
1	160 10 41	SHAFT HOUSING	1	1	1
2	163 07 01	INLET BASE	1	-	-
2*	163 07 11	INLET BASE	-	1	-
2**	163 07 09	INLET BASE	-	-	1
3	163 07 02	OUTLET	1	-	-
3*	163 07 12	OUTLET	-	1	-
3**	163 07 10	OUTLET	-	-	1
4	160 30 12	INNER FLANGE	2	2	2
5	160 27 05S	OUTER FLANGE	2	2	2
6	163 07 03	OUTER CHAMBER SIDE	2	2	2
7	160 21 10	SHAFT	1	1	1
8	1604021	RUBBER RINGS	4	4	4
9	1603013	BIG CLAMP	4	4	4
10	1603014	SMALL CLAMP	8	8	8
11	160 40 20B	DIAPHRAGM (BUNA N)	2	2	2
12	160 40 15B	BALL (BUNA N)	4	4	4
13	160 40 16B	SEAL (BUNA N)	4	4	4
13A	1604016	SEAL (NEOPRENE)	4	4	4
13B	612 36 13	BALL SEAT	4	4	4
14	1630401	AIR VALVE BODY	1	-	-
14*	1630402	AIR VALVE BODY	-	1	-
14**	1630405	AIR VALVE BODY	-	-	1
15	160 40 36	GASKET	1	1	1
16	1632001	AIR VALVE	1	1	1
17	160 08 03	VALVE END CAP	1	1	1
18	160 08 02	VALVE END CAP WITH PIN	1	1	1
19	163 40 01	O RING	2	2	2
20	1609025S	INT CIRCLIP	2	2	2
21	160 10 42	BLOCKING PAD	1	1	1
22	160 40 35	GASKET	1	1	1
23	160 21 09	HEX. BOLT	2	2	2
23A	160 21 35	PLAIN WASHER	2	2	2
24	160 90 51	ALLEN BOLT	4	4	4
25	160 90 32	ALLEN BOLT	4	4	4
26	150 40 28	ALLEN BOLT	8	8	8
27	150 40 25	HEX NUT	12	12	12
28	500 90 48	SPRING WASHER	4	4	4
29	022 40 21	HEX NUT	4	4	4
30	805 98 01	SILENCER	1	1	1

# **Bill of Materials for DP 25 SSB Pumps**

ILLU. NO.	PART NO	DESCRIPTION	DP25SSB-CR	DP25SSB-CG	DP25SSB-CP
1	160 10 41	SHAFT HOUSING	1	1	1
2	163 07 01	INLET BASE	1	-	-
2*	163 07 11	INLET BASE	-	1	-
2**	163 07 09	INLET BASE	-	-	1
3	163 07 02	OUTLET	1	-	-
3*	163 07 12	OUTLET	-	1	-
3**	163 07 10	OUTLET	-	-	1
4	160 30 12	INNER FLANGE	2	2	2
5	160 27 05S	OUTER FLANGE	2	2	2
6	163 07 03	OUTER CHAMBER SIDE	2	2	2
7	160 21 10	SHAFT	1	1	1
8	160 40 21	RUBBER RINGS	4	4	4
9	160 30 13	BIG CLAMP	4	4	4
10	160 30 14	SMALL CLAMP	8	8	8
11	160 40 20B	DIAPHRAGM (BUNA N)	2	2	2
12	160 40 15B	BALL (BUNA N)	4	4	4
13	612 36 15T	O' RING (PTFE)	4	4	4
13A	612 08 03	BALL CAGE	4	4	4
13B	612 36 13	BALL SEAT	4	4	4
14	163 04 01	AIR VALVE BODY	1		
14*	163 04 02	AIR VALVE BODY	-	1	-
14**	163 04 05	AIR VALVE BODY	-	-	1
15	160 40 36	GASKET	1	1	1
16	163 20 01	AIR VALVE	1	1	1
17	160 08 03	VALVE END CAP	1	1	1
18	160 08 02	VALVE END CAP WITH PIN	1	1	1
19	163 40 01	O RING	2	2	2
20	160 90 25S	INT CIRCLIP	2	2	2
21	160 10 42	BLOCKING PAD	1	1	1
22	160 40 35	GASKET	1	1	1
23	160 21 09	HEX. BOLT	2	2	2
23A	160 21 35	PLAIN WASHER	2	2	2
24	160 90 51	ALLEN BOLT	4	4	4
25	160 90 32	ALLEN BOLT	4	4	4
26	150 40 28	ALLEN BOLT	8	8	8
27	150 40 25	HEX NUT	12	12	12
28	500 90 48	SPRING WASHER	4	4	4
29	022 40 21	HEX NUT	4	4	4
30	805 98 01	SILENCER	1	1	1

# **Bill of Materials for DP 25 SSS Pumps**

ILLU. NO.	PART NO	DESCRIPTION	DP25SSS-CR	DP25SSS-CG	DP25SSS-CP
1	160 10 41	SHAFT HOUSING	1	1	1
2	163 07 01	INLET BASE	1	-	-
2*	163 07 11	INLET BASE	-	1	-
2**	163 07 09	INLET BASE	-	-	1
3	163 07 02	OUTLET	1	-	-
3*	163 07 12	OUTLET	-	1	-
3**	163 07 10	OUTLET	-	-	1
4	160 20 12S	INNER FLANGE SST	2	2	2
5	160 27 05S	OUTER FLANGE	2	2	2
6	163 07 03	OUTER CHAMBER SIDE	2	2	2
7	160 21 10	SHAFT	1	1	1
8	160 40 21	RUBBER RINGS	4	4	4
9	160 30 13	BIG CLAMP	4	4	4
10	160 30 14	SMALL CLAMP	8	8	8
11	163 41 01	DIAPHRAGM (SANTOPRENE)	2	2	2
12	163 414 02	BALL (SANTOPPRENE )	4	4	4
13	612 36 15T	O' RING (PTFE)	4	4	4
13A	612 08 03	BALL CAGE	4	4	4
13B	612 36 13	BALL SEAT	4	4	4
14	163 04 01	AIR VALVE BODY	1	-	-
14*	163 04 02	AIR VALVE BODY	-	1	-
14**	163 04 05	AIR VALVE BODY	-	-	1
15	160 40 36	GASKET	1	1	1
16	163 20 01	AIR VALVE	1	1	1
17	160 08 03	VALVE END CAP	1	1	1
18	160 08 02	VALVE END CAP WITH PIN	1	1	1
19	163 40 01	O RING	2	2	2
20	160 90 25S	INT CIRCLIP	2	2	2
21	160 10 42	BLOCKING PAD	1	1	1
22	160 40 35	GASKET	1	1	1
23	160 27 09	HEX. BOLT	2	2	2
23A	160 21 35	PLAIN WASHER	2	2	2
24	160 90 51	ALLEN BOLT	4	4	4
25	160 90 32	ALLEN BOLT	4	4	4
26	150 40 28	ALLEN BOLT	8	8	8
27	150 40 25	HEX NUT	12	12	12
28	500 90 48	SPRING WASHER	4	4	4
29	022 40 21	HEX NUT	4	4	4
30	805 98 01	SILENCER	1	1	1



## **Bill of Materials for DP 25 SSH Pumps**

ILLU. NO.	PART NO	DESCRIPTION	DP25SSH-CR	DP25SSH-CG	DP25SSH-CP	
1	160 10 41	SHAFT HOUSING	1	1	1	
2	163 07 01	INLET BASE	1	-	-	
2*	163 07 11	INLET BASE	-	1	-	
2**	163 07 09	INLET BASE	-	-	1	
3	163 07 02	OUTLET	1	-	-	
3*	163 07 12	OUTLET	-	1	-	
3**	163 07 10	OUTLET	-	-	1	
4	160 20 12	INNER FLANGE ALT	2	2	2	
5	160 27 05S	OUTER FLANGE	2	2	2	
6	163 07 03	OUTER CHAMBER SIDE	2	2	2	
7	160 21 10	SHAFT	1	1	1	
8	160 40 21	RUBBER RINGS	4	4	4	
9	160 30 13	BIG CLAMP	4	4	4	
10	160 30 14	SMALL CLAMP	8	8	8	
11	163 43 01	DIAPHRAGM (HYTREL)	2	2	2	
12	163 43 02	BALL (HYTREL )	4	4	4	
13	612 36 15T	O' RING (PTFE)	4	4	4	
13A	612 08 03	BALL CAGE	4	4	4	
13B	612 36 13	BALL SEAT	4	4	4	
14	163 04 01	AIR VALVE BODY	1	-	-	
14*	163 04 02	AIR VALVE BODY	-	1	-	
14**	163 04 05	AIR VALVE BODY	-	-	1	
15	160 40 36	GASKET	1	1	1	
16	163 20 01	AIR VALVE	1	1	1	
17	160 08 03	VALVE END CAP	1	1	1	
18	160 08 02	VALVE END CAP WITH PIN	1	1	1	
19	163 40 01	O RING	2	2	2	
20	160 90 23	INT CIRCLIP	2	2	2	
21	160 10 42	BLOCKING PAD	1	1	1	
22	160 40 35	GASKET	1	1	1	
23	160 27 09	HEX. BOLT	2	2	2	
23A	160 21 35	PLAIN WASHER	2	2	2	
24	160 90 51	ALLEN BOLT	4	4	4	
25	160 90 32	ALLEN BOLT	4	4	4	
26	150 40 28	ALLEN BOLT	8	8	8	
27	150 40 25	HEX NUT	12	12	12	
28	500 90 48	SPRING WASHER	4	4	4	
29	022 40 21	HEX NUT	4	4	4	
30	805 98 01	SILENCER	1	1	1	

## **Bill of Materials for DP 25 SSV Pumps**

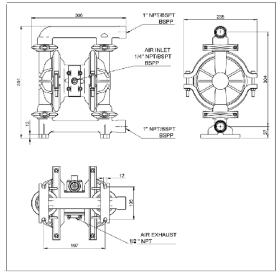
ILLU. NO.	PART NO	DESCRIPTION	DP25SSV-CR	DP25SSV-CG	DP25SSV-CP
1	160 10 41	SHAFT HOUSING	1	1	1
2	163 07 01	INLET BASE	1	-	-
2*	163 07 11	INLET BASE	-	-	
2**	163 07 09	INLET BASE	-	-	1
3	163 07 02	OUTLET	1	-	-
3*	163 07 12	OUTLET	-	1	-
3**	163 07 10	OUTLET	-	-	1
4	160 30 12	INNER FLANGE	2	2	2
5	160 27 05S	OUTER FLANGE	2	2	2
6	163 07 03	OUTER CHAMBER SIDE	2	2	2
7	160 21 10	SHAFT	1	1	1
8	160 40 21	RUBBER RINGS	4	4	4
9	160 30 13	BIG CLAMP	4	4	4
10	160 30 14	SMALL CLAMP	8	8	8
11	160 40 20V	DIAPHRAGM (VITON)	2	2	2
12	160 40 15V	BALL (VITON)	4	4	4
13	612 36 15T	O' RING (PTFE)	4	4	4
13A	612 08 03	BALL CAGE	4	4	4
13B	612 36 13	BALL SEAT	4	4	4
14	163 04 01	AIR VALVE BODY	1	-	-
14*	163 04 02	AIR VALVE BODY	-	1	-
14**	163 04 05	AIR VALVE BODY	-	-	1
15	160 40 36	GASKET	1	1	1
16	163 20 01	AIR VALVE	1	1	1
17	160 08 03	VALVE END CAP	1	1	1
18	160 08 02	VALVE END CAP WITH PIN	1	1	1
19	163 40 01	O RING	2	2	2
20	160 90 25S	INT CIRCLIP	2	2	2
21	160 10 42	BLOCKING PAD	1	1	1
22	160 40 35	GASKET	1	1	1
23	160 21 09	HEX. BOLT	2	2	2
23A	160 21 35	PLAIN WASHER	2	2	2
24	160 90 51	ALLEN BOLT	4	4	4
25	160 90 32	ALLEN BOLT	4	4	4
26	150 40 28	ALLEN BOLT	8	8	8
27	150 40 25	HEX NUT	12	12	12
28	500 90 48	SPRING WASHER	4	4	4
29	022 40 21	HEX NUT	4	4	4
30	805 98 01	SILENCER	1	1	1



## **Bill of Materials for DP 25 SST Pumps**

ILLU. NO.	PART NO	DESCRIPTION	DP25SST-CR	DP25SST-CG	DP25SST-CP
1	160 10 41	SHAFT HOUSING	1	1	1
2	163 07 01	INLET BASE	1	-	-
2*	163 07 11	INLET BASE	-	1	-
2**	163 07 09	INLET BASE	-	-	1
3	163 07 02	OUTLET	1	-	-
3*	163 07 12	OUTLET	-	1	-
3**	163 07 10	OUTLET	-	-	1
4	160 20 12S	INNER FLANGE SST	2	2	2
5	160 27 058	OUTER FLANGE	2	2	2
6	163 07 03	OUTER CHAMBER SIDE	2	2	2
7	160 21 34	SHAFT	1	1	1
8	160 40 21	RUBBER RINGS	4	4	4
9	160 30 13	BIG CLAMP	4	4	4
10	160 30 14	SMALL CLAMP	8	8	8
11	160 40 33N	BACKUP DIAPHRAGM	2	2	2
11A	160 36 20T	DIAPHRAGM (PTFE)	2	2	2
12	160 36 15T	BALL (PTFE)	4	4	4
13	612 36 15T	O' RING (PTFE)	4	4	4
13A	612 08 03	BALL CAGE	4	4	4
13B	612 36 13	BALL SEAT	4	4	4
14	163 04 01	AIR VALVE BODY	1	-	-
14*	163 04 02	AIR VALVE BODY	-	1	-
14**	163 04 05	AIR VALVE BODY	-	-	1
15	160 40 36	GASKET	1	1	1
16	163 20 01	AIR VALVE	1	1	1
17	160 08 03	VALVE END CAP	1	1	1
18	160 08 02	VALVE END CAP WITH PIN	1	1	1
19	163 40 01	O RING	2	2	2
20	160 90 25S	INT CIRCLIP	2	2	2
21	160 10 42	BLOCKING PAD	1	1	1
22	160 40 35	GASKET	1	1	1
23	160 27 09	HEX. BOLT	2	2	2
23A	160 21 35	PLAIN WASHER	2	2	2
24	160 90 51	ALLEN BOLT	4	4	4
25	160 90 32	ALLEN BOLT	4	4	4
26	150 40 28	ALLEN BOLT	8	8	8
27	150 40 25	HEX NUT	12	12	12
28	500 90 48	SPRING WASHER	4	4	4
29	022 40 21	HEX NUT	4	4	4
30	805 98 01	SILENCER	1	1	1

#### **Dimensional Data**



DP 25 AL N/B/S/H/V/T

DP 25 SS N/B/S/H/V/T

### **Air Valve Replacement Kits For ALX/SSX**

Replacement KIT Orde- ring No	Suitable for
163 97 03	NPT Fitted ALX or SSX Pumps With Any Diaphragm Variant
163 97 04	BSPT Fitted ALX or SSX Pumps With Any Diaphragm Variant
163 97 05	BSPP Fitted ALX or SSX Pumps With Any Diaphragm Variant

### **Repair Kits for ALX Pumps**

Repair KIT Ordering No	Suitable for
163 97 06N	DP 25 ALN
163 97 06B	DP 25 ALB
163 97 06S	DP 25 ALS
163 97 06H	DP 25 ALH
163 97 06V	DP 25 ALV
163 97 06T	DP 25 ALT

### **Repair Kits for SSX Pumps**

Repair KIT Ordering No	Suitable for
163 97 06SN	DP 25 SSN
163 97 06SB	DP 25 SSB
163 97 06SS	DP 25 SSS
163 97 06SH	DP 25 ALH
163 97 06SV	DP 25 SSV
163 97 06ST	DP 25 SST





### **Repair and Replacement Kits**

•		Replacement Kits	CR	CG	СР		1	ALX I	Pump	os		SSX Pumps					
Illu. No.	Part No.	Description	1639703 replacement Kit	1639704 replacement kit	1639705 replacement kit	Repair Kit 1639706B	Repair Kit 1639706N	Repair Kit 1639706V	Repair Kit 1639706S	Repair Kit 1639706H	Repair Kit 1639706T	Repair Kit 1639706SB	Repair Kit 1639706SN	Repair Kit 1639706SV	Repair Kit 1639706SS	Repair Kit 1639706SH	Repair Kit 1639706ST
8	160 40 21	RUBBER RINGS				4	4	4	4	4	4	4	4	4	4	4	4
11	160 40 20B	DIAPHRAGM (BUNA N)				2						2					
11	160 40 20	DIAPHRAGM (NEOPRENE)					2						2				
11	160 40 20V	DIAPHRAGM (VITON)						2						2			
11	163 41 01	DIAPHRAGM (SANTOPRENE)							2						2		
11	163 43 01	DIAPHRAGM (HYTREL)								2						2	
11	160 40 33N	BACKUP DIAPHRAGM									2						2
11A	160 36 20T	DIAPHRAGM (PTFE)									2						2
12	160 40 15B	BALL (BUNA N)				4						4					
12	160 40 15	BALL (NEOPRENE)					4						4				
12	160 40 15V	BALL (VITON)						4						4			
12	163 41 02	BALL (SANTOPRENE)							4						4		
12	163 43 02	BALL (HYTREL)								4						4	
12	160 36 15T	BALL (PTFE)									4						4
13	160 40 16B	SEAL (BUNA N)				4											
13	160 40 16	SEAL (NEOPRENE)					4										
13	160 40 16V	SEAL (VITON)						4									
13	160 20 51A	VALVE SEAT							4	4	4						
13A	160 36 50T	O RING (PTFE)							4	4	4						
13	612 36 15T	O RING (PTFE)										4	4	4	4	4	4
13A	612 08 03	BALL CAGE										4	4	4	4	4	4
13B	612 36 13	BALL SEAT										4	4	4	4	4	4
14	163 04 01	AIR VALVE BODY	1	1	1												
15	160 40 36	GASKET	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16	163 20 01	AIR VALVE	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17	160 08 03	VALVE END CAP	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18	160 08 02	VALVE END CAP WITH PIN	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19	163 40 01	O RING	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
20	160 90 25S	INT CIRCLIP	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
22	160 40 35	GASKET	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24	160 90 51	ALLEN BOLT	4	4	4												
27	150 40 25	HEX NUT	4	4	4												
28	500 90 48	SPRING WASHER	4	4	4												
32	171 04 03	Adaptor 1/4" BSPT(F)		1													
32	171 04 05	Adaptor 1/4" BSPP(F)			1												

#### **EU DECLARATION OF CONFORMITY**

#### Object of declaration

PRODUCT : AIR OPERATED DOUBLE DIAPHRAGM PUMP

MODEL : DP25 Series

MANUFACTURER'S NAME : TERYAIR EQUIPMENT PVT. LTD.

ADDRESS : SITE - 1 : BUILDING A - 1/2, 102 TO 105 & BUILDING C 12 & 13,

TIRUPATI UDYOG NAGAR, SATIVALI ROAD, VASAI (E),

PALGHAR: 401208.

SITE - 2: AUGUSTINE - II, COLACO INDUSTRIAL COMPLEX, GALA NO - 101 TO 107, SATIVALI ROAD, VILLAGE WALIV,

VASAI (E), PALGHAR: 401208

To provide presumption of conformity in order to directive 2014/34/EU; the following harmonized standards and/or other normative documents as referenced within the following official journals are applied:

APPLICABLE DIRECTIVE: ATEX DIRECTIVE (2014/34/EU)

#### **APPLICABE STANDARDS:**

EN ISO 80079-36: 2016 : Explosive atmospheres — Part 36: Non-electrical equipment for explosive

atmospheres —Basic method and requirements.

EN ISO 80079-37:2016 : Explosive atmospheres —Part 37: Non-electrical equipment for explosive

atmospheres —Non- electrical type of protection constructional safety 'c', control

of ignition sources 'b', liquid immersion 'k'.

Notified body to whom Technical file has logged with: - Technicka Inspekcia (Ref: 1354).

**DECLARATION:** - **TERYAIR EQUIPMENT PVT. LTD.,** declare that under our sole responsibility for the supply of the product defined above, the said product complies with all the applicable Directives, Regulations and all essential Health and Safety requirements applying to it.

I, the undersigned, hereby declare that the product specified above conforms to the above standard(s).

ATEX MARKING APPLIED

⟨€x⟩ **( €** 

Please Refer ATEX Rating for Teryair Aodd Models Table

Signed for and on behalf of

TERYAIR EQUIPMENT PVT. LTD.

Place of Issue : Vasai



#### 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			
				Buna-N	Ex h IIIC T85°C Db (IP65)			
		Aluminium	Aluminium	Viton-FKM	ll 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65)			
				Sentoprene	lla op n. l. woma ol			
				Hytrel	ll 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65)			
				PTFE	2 1110 1100 0 20 (11 00)			
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 <b>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)			
		DP Aluminium	Aluminium	Neoprene	ll 2 GD Ex h IIC T6 Gb			
				Buna-N	Ex h IIIC T85°C Db (IP65)			
	DP/SDP			Viton-FKM	ll 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65)			
				Sentoprene	lla op n. l. woma ol			
				Hytrel	ll 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65)			
				PTFE	Ex II III O 1100 O DO (II 03)			
12 (1/2")				Neoprene	ll 2 GD Ex h IIC T6 Gb			
(1/2)				Buna-N	Ex h IIIC T85°C Db <b>I M2 Ex h I Mb (IP65)</b>			
	SDP	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)			
25 (1")	DP /	Aluminium	Viton-FKM	ll 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65)				
	SDP	less Steel		Sentoprene	He op P I wome o'			
					Hytrel	ll 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65)		
				PTFE	LA II III C 1 100 C DU (11 03)			

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

Neoprenc   Buna-N	Pump Size	Series	Wetted Materials	Center Section	Dipharagm Materials	ATEX Rating			
Aluminium   Stain-less Steel   Aluminium   Aluminium   Stain-less Steel   Aluminium   Aluminium   Aluminium   Stain-less Steel   Aluminium   Alu					Neoprene				
Aluminium   Stain-less Steel   Aluminium   Stain-less Steel   Ess Steel   Aluminium   Stain-less Steel   Ess Steel   Hytrel   Ess HIIC T200°C Db (IP65)					Buna-N	Ex h IIIC T85°C Db (IP65)			
Sentoprene				Aluminium	Viton-FKM				
Piyted   Ex h IIIC T100°C Db (IP65)	(1-1/2)	SDP	less steel		Sentoprene	N - ap p 1 7 ap - al			
DP					Hytrel				
DP / SDP					PTFE				
DP / SDP					Neoprene				
SDP					Buna-N	Ex h IIIC T85°C Db (IP65)			
Sentoprene   Hytrel   Hytrel   Buna-N   Hytrel   Hytrel   Buna-N   Hytrel   Hytrel   Buna-N   Hytrel   Hytrel   Hytrel   Buna-N   Hytrel   Hytrel   Hytrel   Buna-N   Hytrel   Hytrel				Aluminium	Viton-FKM				
SDP   Cast Iron   Cast Iron		SDP	less Steel		Sentoprene				
SDP   Cast Iron   Cast Iron   Cast Iron   Cast Iron   DP / SDP   Aluminium   Aluminium   Sentoprene   Il 2 GD Ex h IIC T3 Gb Ex h IIIC T3 Gb					Hytrel				
SDP   Cast Iron   Cast Iron   Cast Iron   Ex h IIIC T85°C Db   I M2 Ex h I Mb (IP65)					PTFE	Ex ii iii C 1100 C Db (ii 03)			
SDP   Cast Iron   Cast Iron   Cast Iron   Cast Iron   Fil 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65)	50 (2")				Neoprene				
SDP   Cast Iron   Cast Iron   Sentoprene   Il 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65)			Cast Iron	Cast Iron	Buna-N				
Hytrel		SDP			Viton-FKM	Ex h IIIC T200°C Db (IP65)			
Hytrel					Sentoprene	ll 2 GD Ex h IIC T5 Gb			
DP / SDP					Hytrel	Ex h IIIC T100°C Db (IP65)			
DP / SDP					PTFE	I M2 Ex h I Mb (IP65)			
DP / SDP					Neoprene	ll 2 GD Ex h IIC T6 Gb			
Aluminium					Buna-N	Ex h IIIC T85°C Db (IP65)			
Sentoprene			Aluminium	Aluminium	Viton-FKM				
SDP   Cast Iron   Cast Iron   Cast Iron   Hytrel   Ex h IIIC T100°C Db (IP65)		SDP			Sentoprene				
Neoprene					Hytrel				
SDP   Cast Iron   Cast Iron   Ex h IIIC T85°C Db   I M2 Ex h I Mb (IP65)					PTFE	Ex II III C 1100 C Db (II 03)			
SDP Cast Iron Cast Iron Ex h IIIC T85°C Db I M2 Ex h I Mb (IP65)  Uiton-FKM Ex h IIIC T3 Gb Ex h IIIC T200°C Db (IP65) I M2 Ex h I Mb (IP65)  Sentoprene Il 2 GD Ex h IIC T5 Gb Ex h IIIC T5 Gb Ex h IIIC T5 Gb Ex h IIIC T100°C Db (IP65)	75 (3")				Neoprene				
SDP Cast Iron Cast Iron 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 Hytrel Il 2 GD Ex h IIC T5 Gb Ex h IIIC T5 Gb Ex h IIIC T100°C Db (IP65)					Buna-N				
SDP Cast Iron Cast Iron Viton-FKM Ex h IIIC T200°C Db (IP65) I M2 Ex h I Mb (IP65)  Sentoprene Il 2 GD Ex h IIC T5 Gb Hytrel Ex h IIIC T100°C Db (IP65)									
Sentoprene ll 2 GD Ex h IIC T5 Gb Hytrel Ex h IIIC T100°C Db (IP65)		SDP	Cast Iron	Cast Iron	Viton-FKM	Ex h IIIC T200°C Db (IP65)			
Hytrel Ex h IIIC T100°C Db (IP65)					Sentoprene				
PTFE I M2 Ex h I Mb (1P65)					· · · · · · · · · · · · · · · · · · ·				





# Warranty Certificate

Every product manufactured by Teryair is built to meet the highest standards of quality.

Teryair warrants that the Products, accessories and parts manufactured or supplied by the company be free from defects in material and workmanship for a period of six months from date of Teryair authorized dealer invoice to customer, or one year from date of Teryair invoice to dealer, whichever is earlier. Failure due to normal wear, misapplication, or abuse is, of course, excluded from this warranty.

Since the use of Teryair products and parts is beyond our control, Teryair cannot guarantee the suitability of any product or part for a particular application and Teryair shall not be liable for any consequential damage or expense arising from the use or misuse of its products on any application. Teryair does not warranty bought out products or components such as electric motors and hardware but will assist in directing warranty queries to the dealer/manufacturer responsible. Teryair responsibility is limited solely to replacement or repair of defective Teryair products or components.

Dealer/End User shall have no right or remedy and Teryair shall have no liability or obligation under the warranty, if: (i) a Product is altered, changed, modified or tampered with in any way, (ii) a Product is damaged after deposit with the transporter for shipment; (iii) a Product is not properly preserved, packaged, stored, processed or handled after receipt; (iv) a Product is not used and maintained in accordance with Teryair's recommended operating and maintenance manuals, instructions and procedures, if any; (v) a Product is not properly incorporated or installed in, or not properly combined with, an Other Product; (vi) the issue with a Product is directly or indirectly attributable to, or directly or indirectly results from or arises out of, a failure, substandard performance or other issue with another product, material, component or part not supplied by Teryair; (vii) the issue with a Product is directly or indirectly attributable to, or directly or indirectly results from or arises out of, compliance with any design, specification or other specific requirement of Dealer/End User; (viii) a Product is used in a manner, with a substance or for a purpose other than the normal manner, substance and purpose for which it is intended or is otherwise subjected to abnormal use or service; (ix) a Product is subjected to a power surge, brown out or other similar occurrence; (x) the issue with a Product is directly or indirectly results from or arises out of, normal wear and tear of such Product (including, without limitation, things such as worn seals, diaphragms, balls, O rings, gaskets, chisels, cutters, hoses and other such wearing components; (xi) the issue with a Product is directly or indirectly.

Model Number : DP25 Series

M. Yadav, Q.A. Manager

(Company Seal)

