

Clear knockout for diaphragm blowers

The base of this piston-blowers and diaphragm-blower comparison is our LD series. The LD series diaphragm blower was produced between 1990 and 1995 and was similar in construction to diaphragm models which are currently produced by other Far-eastern manufacturers today. The production of our LD series finished in 1995 due to bad experiences in the market. New blowers using our well proven linear piston principle have replaced the old style LD series.

The essential reasons for this finishing have been:

1. The biggest demand for LD model spare parts was in summer. This means that the diaphragms were not resistant to heat and that they showed wear early when used at high temperatures. Especially during summer operation a failure of the blower stops the cleaning process which leads to unpleasant smells.
2. 10% of all LD models used worldwide have had their spare parts replaced. With our linear piston pumps this rate is only 1%. This means that the life time for piston units is much longer than the life time for diaphragm units.

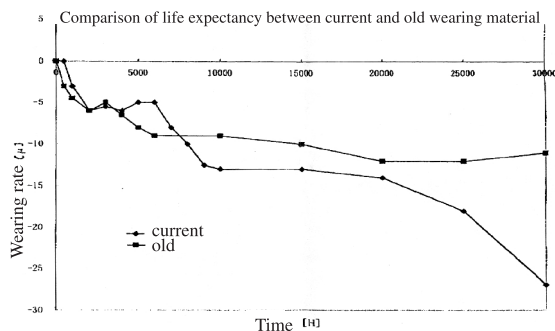
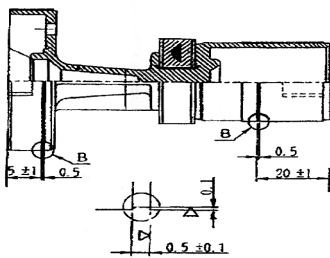
3. Another feature of the linear piston pumps is their low noise level. Due to this low noise level the linear pumps need only a plastic housing, whilst diaphragm units need a metal housing to eliminate noise. Plastic housing do not need any additional earthing and are not subject to corrosion.

Sales of friction parts in 2000

Month	LD-60	LA-28B	Sales of LD-models versus piston type LA-28B		
Januar	152	489			
Februar	161	408			
März	354	449			
April	160	573			
Mai	272	697			
Juni	421	659	Year	LD-60	LA-28B
Juli	734	334	1991	8.898	125.570
August	1005	497	1992	16.304	103.560
September	738	450	1993	12.048	104.175
Oktober	512	678	1994	5.833	95.347
November	497	561	1995	4.987	89.749
Dezember	252	405	1996	3.931	96.438
Summe	5258	6200	Summe	52.001	614.839

LD-60 versus LA-60A

	LD-60	LA-60A
Airflow l/min at 1,5 m water level	60,5	63,5
Power consumption (W)	49,2	56,7
Current (A)	1,16	0,98
Noise level dB(A)	39,43	35,6
Max. pressure mbar	300	400



4. Some years ago the brown material on the piston of linear units was replaced with black material. This change took place on all models except the LA-28B. All pistons have two slits in the friction part. These slits are the base for judging the friction degree, and so whether the piston needs changing. The following curve shows the friction rate between brown and black material. It is recommended to replace the piston when these slits have almost disappeared. This condition is reached when 0,012mm are worn out, which refers to a continuous rate condition running time of a minimum of 30.000 hours. The blower must run for 250.000 hours to let these slits disappear completely. This extreme lifetime is not achieved by diaphragm units.

We hope that this statement clearly illustrates the features and resulting benefits of using our linear piston models. We look forward to you having reliable and trouble free plant.