PVDF PUMPS

MATERIAL INTRODUCTION

The fluorinated polymers are widely appreciated for their remarkable chemical inertness and their excellent resistance to aging.

Polyvinylidene fluoride offers the specific advantage of easy processing in accordance with all the convection methods used in the plastic industry. PVDF, polymerized according to its own special process, offers a high degree of crystallinity to that by other processes, resulting among other things in superior thermomechanical properties.
The intrinsic technical superiority is one of the reasons for the success which PVDF has achieved on the world market for more then 25 years.

Chemically inert to most acids, aliphatic and aromatic organic compounds, chlorinated solvents, alcohols, etc.

Excellent mechanical properties over a wide range of temperatures :tensile yield strength up to 55 MPa at 23°C and 10 MPa at 150° C.

Abrasion resistance comparable to that of polyamides, and relatively low coefficient of friction.

Excellent intrinsic fire resistance.

Excellent thermal aging resistance : tensil yield strength retention over 90% after 25,000 hours at 150°C in a ventilated oven.

Continuous use temperatures as high as 150°C for the homopolymer grades with out mechanical stress.

Unaffected by UV (>232nm) and good resistance to gamma radiation.

Physiologically harmless and approved for contact with food products (FDA)

Casing liner , Back Plate and impeller

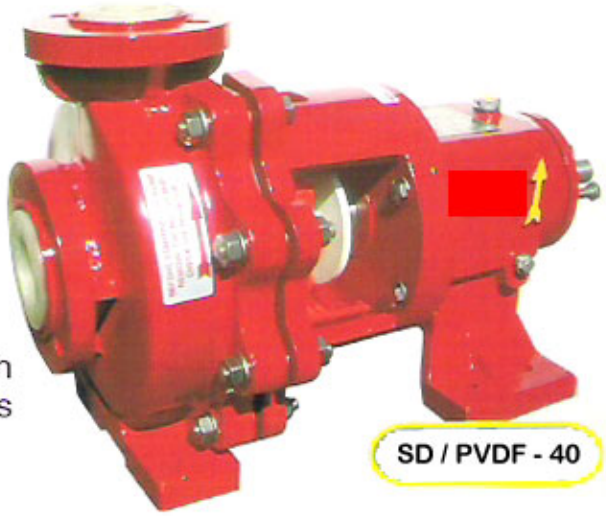
Thick walled casing liner and back plate is made of PVDF
Replaceable Casing liner
Semi-open impeller
A large metal insert in the PVDF impeller increases mechanical strength

PERFORMANCE RANGE

Flow rate up to 300m3/Hr.

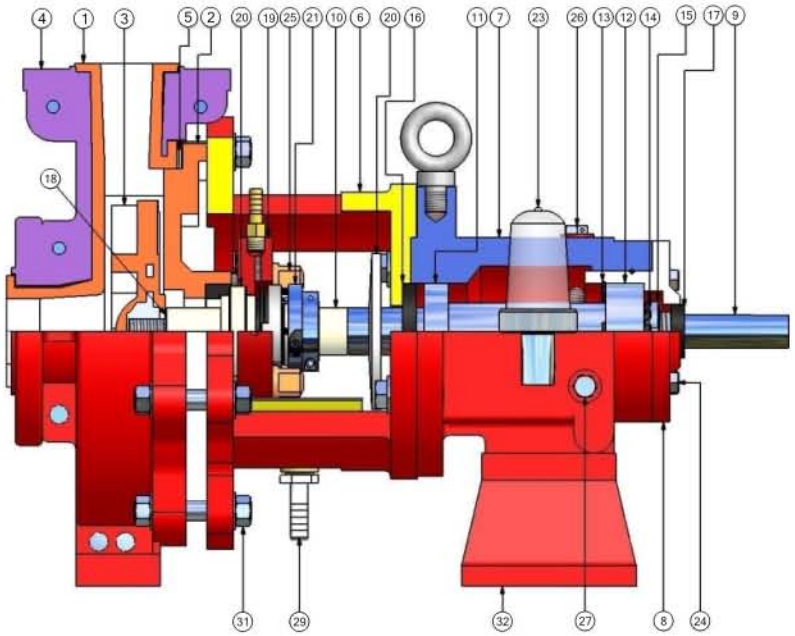
Head up to 90 mts liquid column.

Pumps size chosen in accordance with ISO/DIN enable economical spare parts stocking



SD / PVDF - 40

Cross Section Drawing



Parts List

Sr. No.	Part Name	M.O.C.	Sr. No.	Part Name	M.O.C.
1	Casing Liner	PVDF	*17	Oil Seal	NEOPRENE
2	BackPlate	PVDF	*18	"O " Ring	NEOPRENE
*3	Impeller	PVDF	19	Locating Flange	HYLAM
4	Casing Armour	C.I.	*20	Stationary Unit of Mech. Seal	Ceramic / Sic
*5	Envelope Gasket	C.I.	*21	Rotary Unit of Mech. Seal	GFT / Sic
6	Adaptor	C.I.	22	Deflector	Polypropylene
7	Bearing Block	C.I.	23	Constant Oil Leveler	Polycarbonate
8	Bearing Cover	C.I.	24	Hardware	Steel
*9	Shaft	EN - 24	25	Bolt for Clamping Mech. Seal	SS With PP Nut
*# 10	Shaft Sleeve	Ceramic	26	Oil Breather	Steel
11	Ball Bearing (Inboard)	SKF - 6207	27	Oil Drain Plug	Steel
12	Ball Bearing (Outboard)	ZKL - 3306	28	Coupling**	C.I.
13	Circlip	Spring Steel	29	Drip Tray	Poly Propylene
14	Star Washer	Steel	30	Base Plate**	M.S. Fabricated
15	Locknut	Steel	31	Casing Hardware	S.S.
*16	Oil Seal	Neoprene	32	Bearing Block Leg	C.I.

Different Sleeve material available for different fluids - SiC/ HAST-B/ ALLOY 20/TITANIUM

* Parts normally stocked for emergency repairs.

** Parts not shown in Cross Sectional view