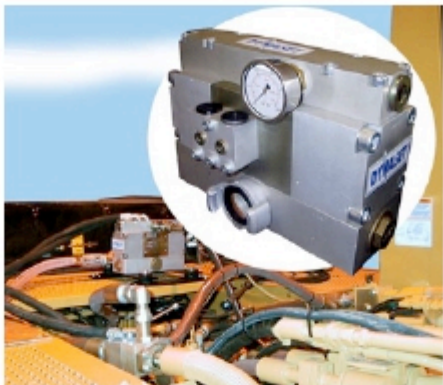


## DRILLING FLUID PUMPS

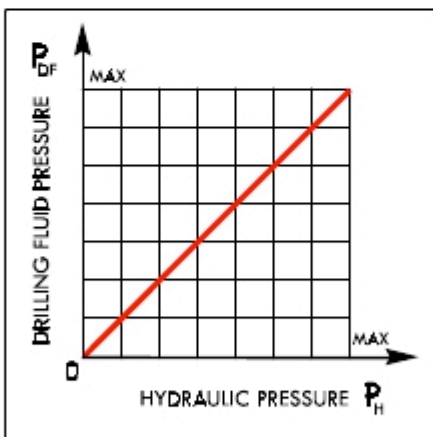


**DRILLING FLUID PUMPS**  
 The operation principle of DYNASET HDF drilling pump is based on a linear reversal movement of hydraulic piston, when the pump doesn't include any rotating parts.

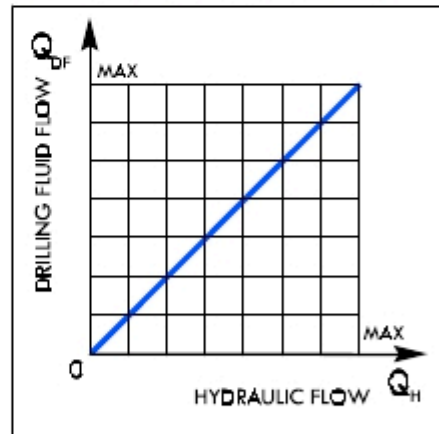


**COMPACT AND POWERFUL**  
 Designed and manufactured in Finland, DYNASET HDF-pump is patented world-wide. Due to its perfect output characteristics and high power/size ratio DYNASET HDF-pump suits perfectly for directional drilling applications.

**RELIABLE UNIT WITH LONG SERVICE LIFE**  
 Forged heavy-duty pistons with abrasion-resistant coating as well as self-lubricated seals and forged poppet valves run over thousand hours ensuring low operating and maintenance costs.



**EASY TO USE AND ADJUST**  
 To put the HDF-pump into operation, just connect the hydraulic and drilling fluid lines to the pump's couplings. No extra lubrication or cooling is needed. Drilling fluid flow and pressure can be easily adjusted linearly by hydraulics.



**DRILLING FLUIDS**  
 Owing to the high abrasion and chemical resistance of the HDF-pump, different drilling fluids, such as bentonite water mix, polymer-based fluids and water mixes with foaming agents can be used.  
 Content of solid fraction in drilling fluid can be up to 25% !

DYNA SET DRILLING FLUID PUMPS	HYDRAULIC REQUIREMENTS				DRILLING FLUID OUTPUT				OUTER DIMENSIONS			WEIGHT	
	Oil flow		Oil pressure		Fluid flow		Fluid pressure		Length	Width	Height	kg	lbs
	l/min	GPM	bar	psi	l/min	GPM	bar	psi	cm/in	cm/in	cm/in		
HDF 180/23-35	35	9	210	3000	23	6	180	2610	240/9.5	160/6.3	200/7.9	8	18
HDF 90/150-85	85	22	210	3000	150	40	90	1300	32/12.6	18/7.0	24/9.5	30	66
HDF 200/250-280	280	73	210	3000	250	66	200	2900	48/18.9	20/7.9	31/12.2	98	215