



DOP-160 - Skimmer and offloading pump

PROVEN OIL SPILL TECHNOLOGY

DOP-160 - Skimmer and offloading pump

The DOP-160 is a fully submersible vertical screw pump which is able to pump a wide variety of oils and liquids up to 30 m³/hr / 132 US gallons per minute.

The DOP-160 pump is a positive displacement pump, making it ideal for oil spill applications. It is capable of handling a wide range of fluids from water to extremely viscous oil, even with some trash content. The screw and casing are fitted with a sturdy cutting knife arrangement that can slice through or crush items such as marine grasses, seaweed, line and plastic.

The maximum discharge pressure this pump can generate is 10 bar / 145 psi - far greater than most centrifugal or diaphragm pumps.

This high output pressure enables the pump to deliver oil through long lengths of hose. The gentle action of the DOP-160 does not emulsify oil and water when pumping. This means that water can be quickly and easily separated from the recovered oil before storage. The pump can be operated at variable speeds from zero to maximum. As it has positive displacement the output is directly proportional to the screw rpm. This allows the operator to accurately set the flow rate to the optimum setting.



Advantages of DOP:

- Low weight only 31 kg / 68 lbs
- Capacity to 30 m³/hr / 132 US gpm
- Positive displacement
- Vertical screw design that can handle high viscosity
- A cutting knife is fitted on the pump inlet
- Bottom suction
- Install in oil skimmers or offloading tanks
- Water injection flange for reduction of backpressure
- Single piece cast pump housing
- Strong rugged construction

Technical data

The DOP-160 is very versatile and can be used in a wide variety of applications - such as emergency response, offloading, fire fighting or contract cleaning work. It is capable of pumping a wide variety of liquids from water to highly viscous mud and sludge - even when contaminated with trash. It is capable of pumping in excess of 30 cubic metres per hour (132 US gallons per minute). The DOP-160 provides high performance and compact dimensions. The DOP-160 is capable of handling solids up to 30 mm / 1" diameter. A cutting knife is fitted to the leading edge of the screw.

	DOP-160
Dimensions	0.39 x 0.24 x 0.53 m / 15.3 x 9.4 x 21 in
Max. pump rate	30 m ³ per hour / 132 US gpm
Max. discharge pressure	10 bar / 145 psi
Viscosity range	The DESMI DOP-160 pump can handle most oil that will flow
Weight	31 kg / 70 lbs
Minimum manhole dia.	400 mm / 15.7 in
Pump Inlet	Ø 160 mm / 6 ¼ in
Pump Outlet	3 in NPSM male thread for screw on discharge flange
Discharge connection	2,3,4 or 5 in Camlock type or other on request. DIN and ANSI flanges available.
Standard Materials	Seawater resistant aluminium (standard) or stainless steel. Replaceable polyethylene sealing ring. High Alloy Steel Screw.
Hydraulic Motor	Sauer Danfoss OMSS 80
Max. hydraulic requirement	Flow: 80 L/min. (21 US gpm) Pressure: 210 bar (3,050 psi)
Hydraulic connections	Pressure and return: ¾ in Drain: 3/8 in
Hose set	10, 20, 30 or 40m hydraulic and discharge hoses with quick couplings
Hose reel	Optional

Recommended diesel-hydraulic power unit: 25kw