

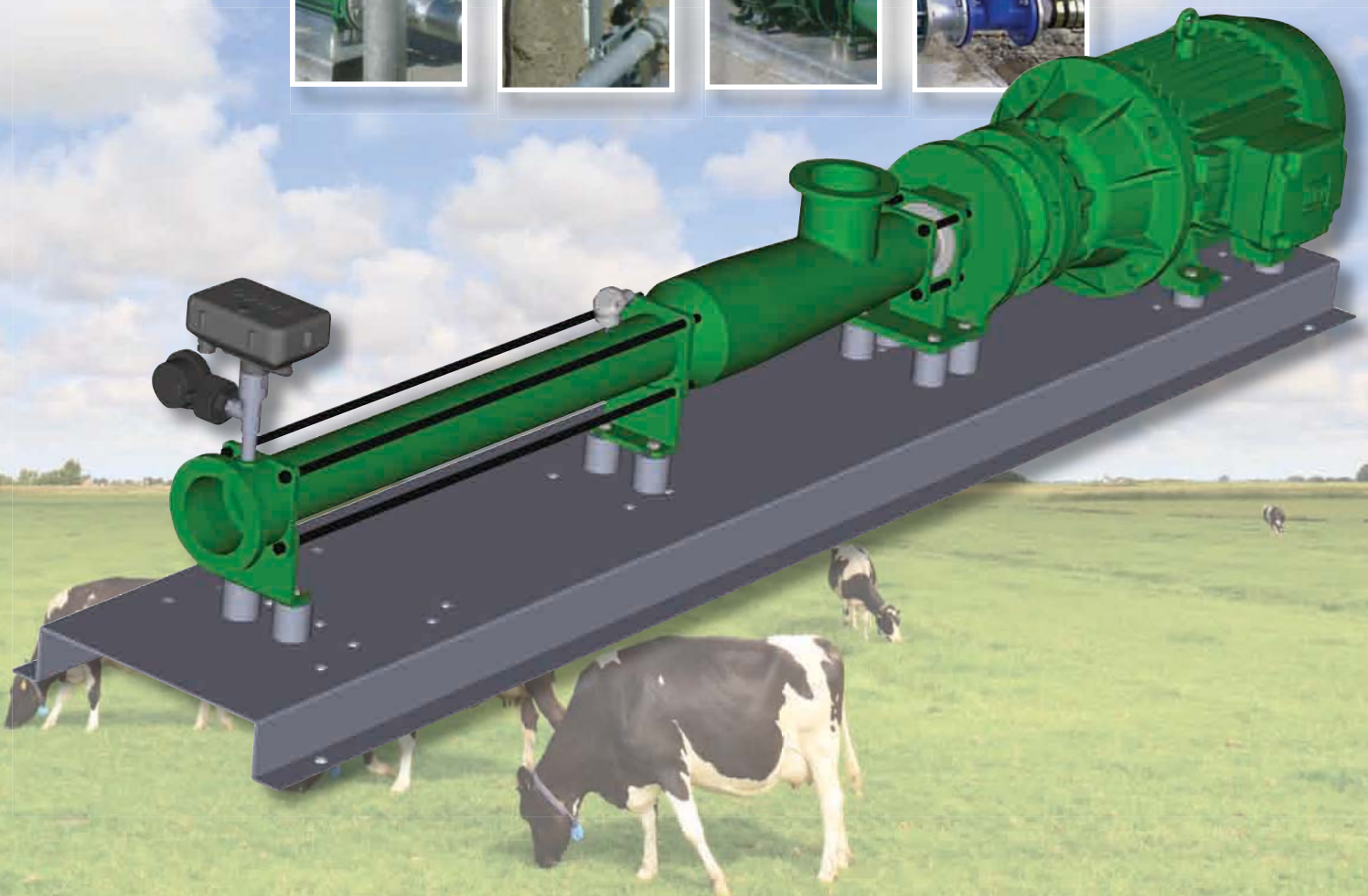


PUMP & VALVE

SPECIALTIES LTD

Providing Pumping Solutions

Sabre Effluent Pumps



Sabre Effluent Pumps

In an increasingly demanding environment, heavy duty solutions are required for the transfer and process of cow shed effluent.

Sabre offer the toughest solutions with the "EF" range of progressing cavity pumps. EF pumps are heavily built units that can handle the rigors of daily usage and have smarts that make them the best choice on the market today.

Benefits Include

- Heavy duty bearings—pump with peace of mind
- No high tension bending shaft—Sabre's over engineered sealed universal joints take out the elliptical motion professionally
- Extended pumping end geometry—reducing rubbing velocity and increasing parts life
- Flows from 3l/sec – 18.4l/sec
- Pressures to 115meters
- 3 – 15kW

Base Pump:

- The Base Pump includes the pump, gearbox, motor and baseplate
- Standard shaft seal is a Silicon carbide vs silicon carbide mechanical seal
- Packed gland available on request
- Pump materials of construction are cast iron body, hard chrome plated stainless steel shaft and rotor and nitrile stator
- Suction lift has been calculated on 25°C water and 1m suction pipe friction loss

Package Pumpset

- Includes the base pump as described above however is supplied complete pre-wired with a control panel that includes:
 - Dry run protection,
 - High & low pressure cut-out,
 - Kelco flow switches,
 - Motor overload protection,
 - Visual and audible alarm
- 3m cable with IP65 PDL plug for ease of installation.
- Designed as a 'Plug and Play unit' (connect the inlet and outlet of the pump, plug it in and turn it on)
- Minimises electrical onsite costs



Sabre advantages

- 24 month warranty on our superior Cardin universal joint system
- 12 months warranty on all other components
- Stronger more reliable planetary gearbox
- Heavy duty galvanised dipped baseplate fully supports pump and motor for ease of maintenance
- WEG motors with standard IEC flanges are used as they have local support, exceed MEPS 2006 standards and have IP55 protection. Note that we do not use wet flanged motors.
- Rotors in 410 s/steel and hard chrome plated = harder stainless and better wear life
- Improved rotor / stator geometry resulting in lower rubbing speeds and zero leakage
- Self priming, non clogging operation with high suction lift capabilities

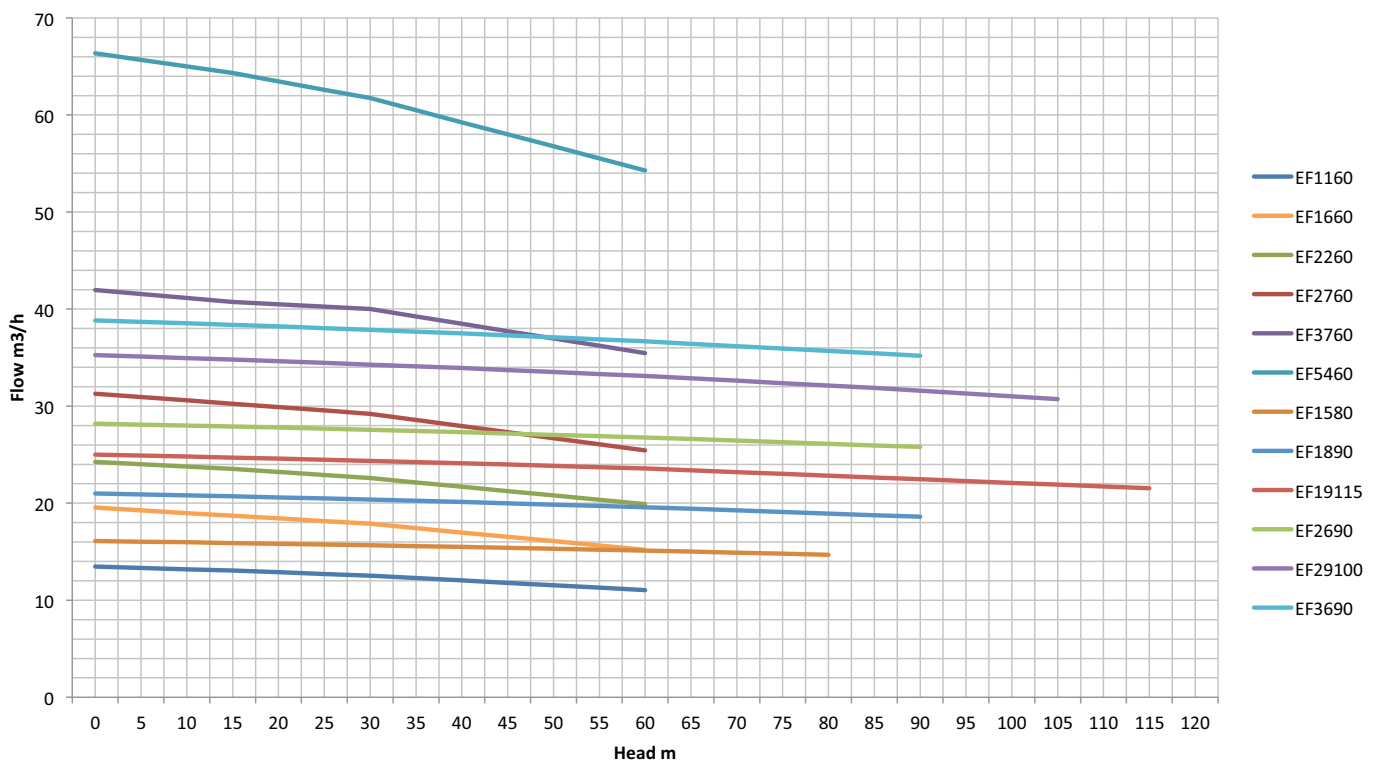
- Drawn power directly fluctuates to the system pressure, eg; low pressure = low power
- More consistent irrigation pattern across the farm due to a more consistent flow rate
- Pump has been tested and pre-commissioned in-house before dispatch

Accessories (please enquire)

- Stone catchers • Countdown timers • Pulse timers
- Inlet and outlet connections



Sabre Effluent Pumps

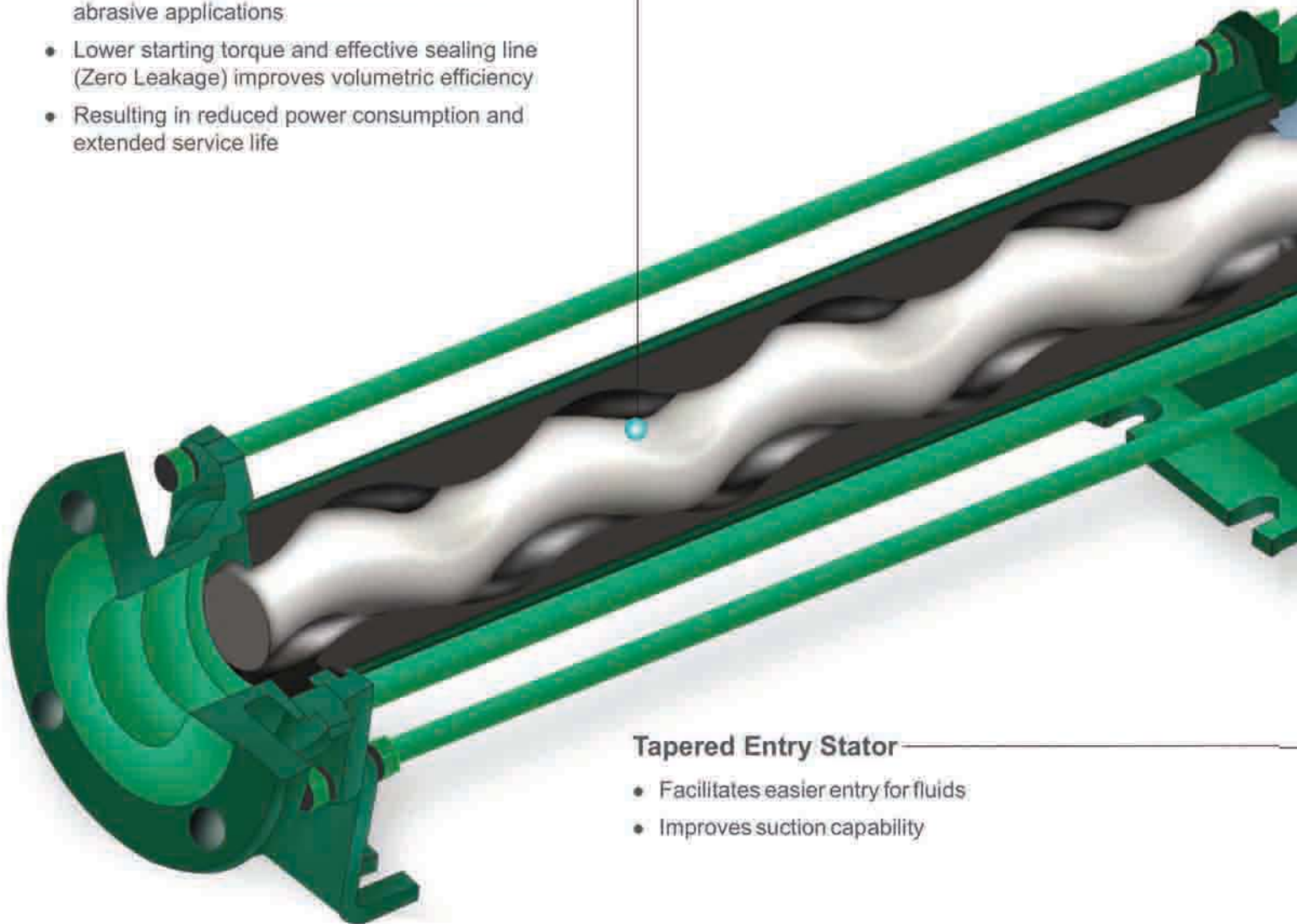


Improved Pump Housing

- A sloped housing design reduces entry losses
- Facilitates easy drainage
- Its flexible housing orientation allows the suction port to be rotated in steps of 90° to suit any installation

Optimised Rotor Stator Geometry

- Improved Rotor - Stator geometry minimises wear due to lower rubbing velocities as compared to conventional geometry, particularly useful in abrasive applications
- Lower starting torque and effective sealing line (Zero Leakage) improves volumetric efficiency
- Resulting in reduced power consumption and extended service life

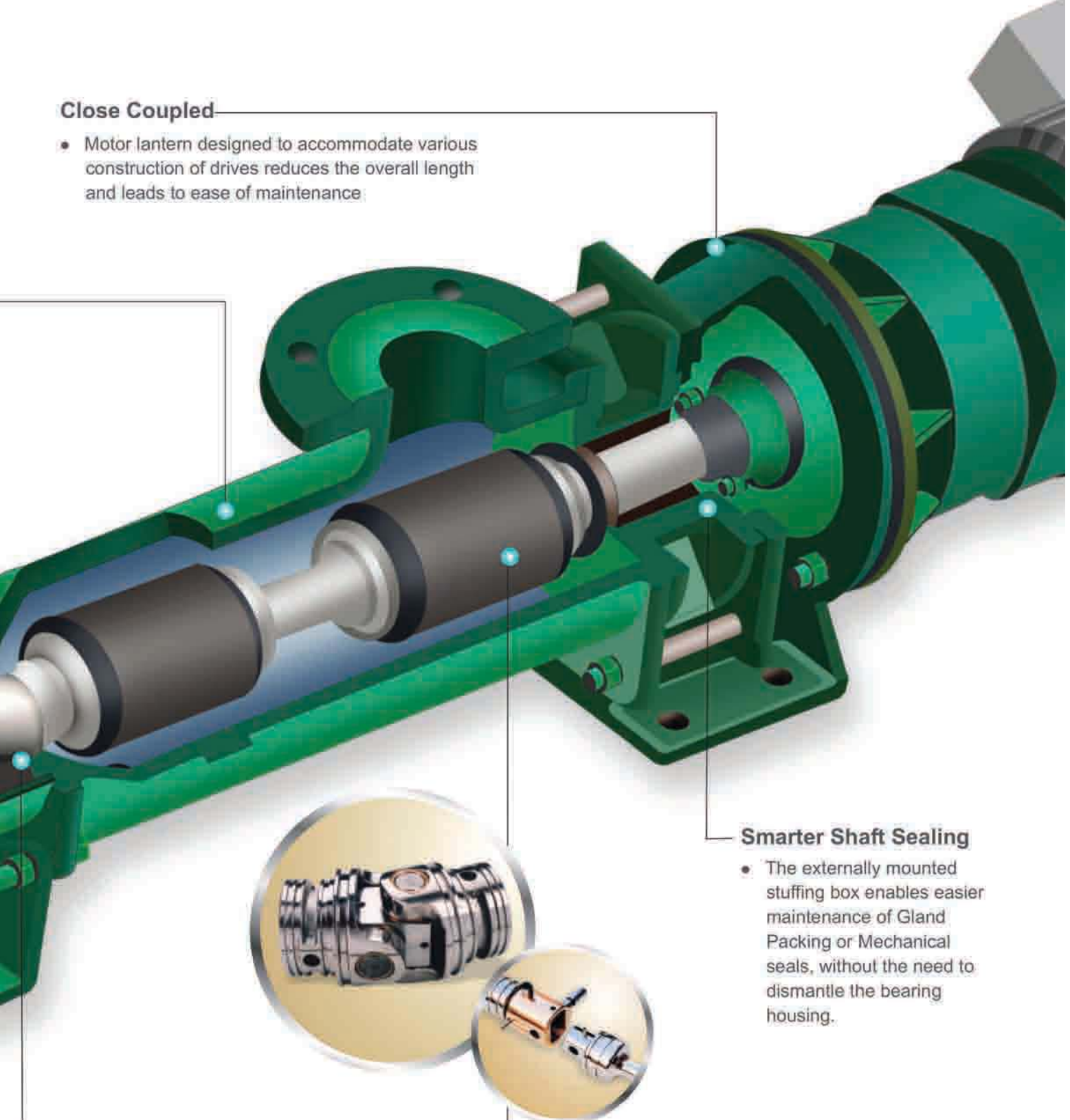


Tapered Entry Stator

- Facilitates easier entry for fluids
- Improves suction capability

Close Coupled

- Motor lantern designed to accommodate various construction of drives reduces the overall length and leads to ease of maintenance



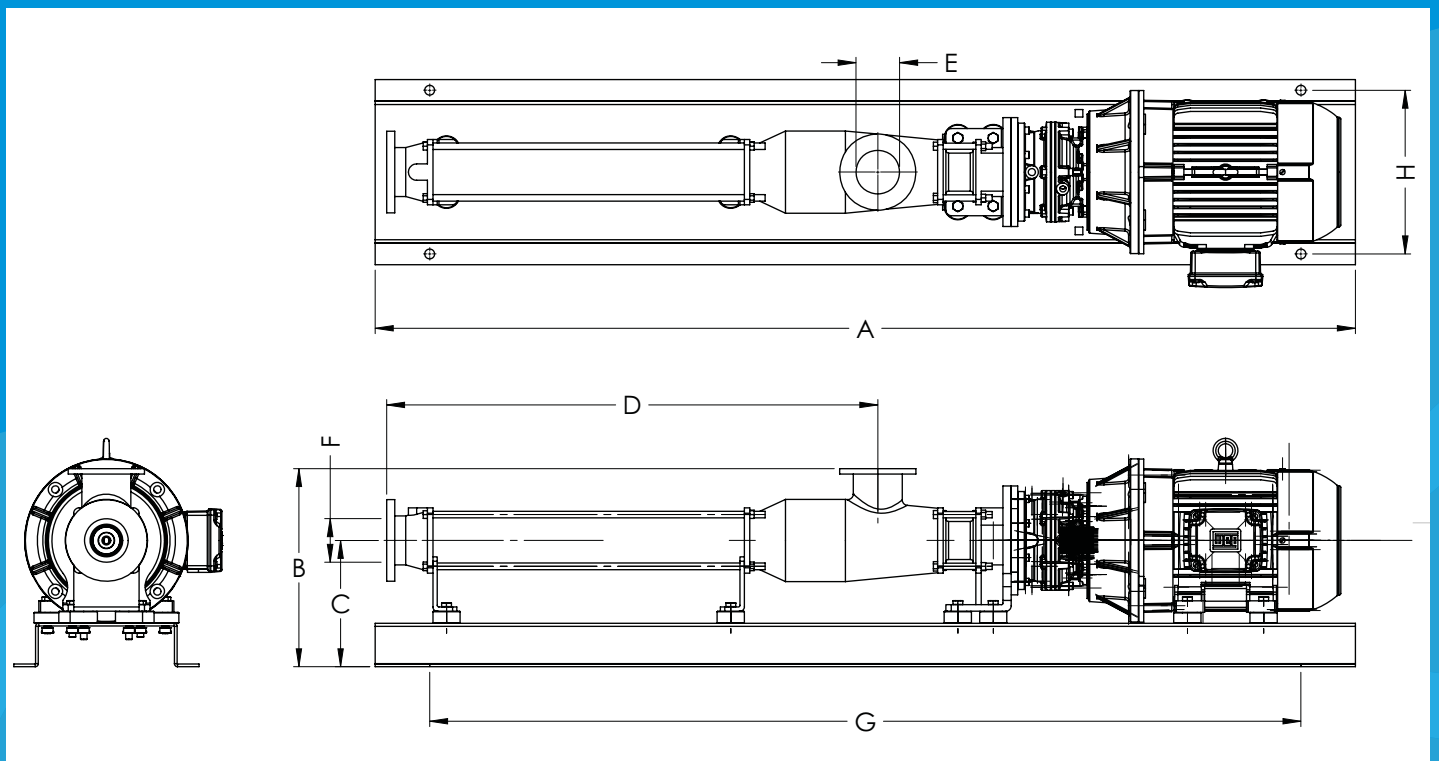
Smarter Shaft Sealing

- The externally mounted stuffing box enables easier maintenance of Gland Packing or Mechanical seals, without the need to dismantle the bearing housing.

Cardan Universal Joint

- The Cardan type universal joint used in this pump is acknowledged to be far superior to the conventional gear joint, or single pin & bush joint which is subjected to extreme concentrated loads, resulting in high wear rates
- The Cardan type of UJ joint employs two sets of perpendicular pins, each providing freedom of angular movement, which facilitates smoother transmission of angular loads
- The Cardan type UJ joint is also designed to withstand high axial forces which are dominant in Progressive Cavity Pumps

Sabre Dimensions	Basic Dimensions							
Model	A	B	C	D	E	F	G	H
EF1160	1800	294	192	649	65	65	1600	300
EF1660	1800	344	210	902	80	80	600	300
EF2260	1800	344	210	902	80	80	1600	300
EF2760	2400	374	230	1202	100	100	2200	400
EF3760	2400	402	230	1255	100	100	2200	400
EF5460	3200	460	250	1521	125	125	3000	400
EF1580	2400	372	230	1135	100	100	2200	400
EF1890	2400	372	230	1261	100	100	2200	400
EF19115	2400	402	250	1261	100	100	2200	400
EF2690	2400	394	250	1261	100	100	2200	400
EF29100	3200	450	270	1595	125	125	3000	400
EF3690	3200	472	290	595	125	125	3000	400



Performance

P/N	Actual performance	Motor	Ports Flanged DIN	Solids (hard / soft)	Suction lift
EF1160	11.04m ³ /h @ 60m	3kW	65mm	7/28	5.6m
	12.54m ³ /h @ 30m				
	13.46m ³ /h @ 0m				
EF1660	15.19m ³ /h @ 60m	5.5kW	80mm	9.5/38	5.4m
	17.88m ³ /h @ 30m				
	19.54m ³ /h @ 0m				
EF2260	19.9m ³ /h @ 60m	5.5kW	80mm	9.5/38	5.4m
	22.59m ³ /h @ 30m				
	24.26m ³ /h @ 0m				
EF2760	25.43m ³ /h @ 60m	7.5kW	100mm	11/44	5.6m
	29.21m ³ /h @ 30m				
	31.28m ³ /h @ 0m				
EF3760	35.46m ³ /h @ 60m	11kW	100mm	12/48	5.2m
	40.00m ³ /h @ 30m				
	41.97m ³ /h @ 0m				
EF5460	54.28m ³ /h @ 60m	15kW	125mm	17/68	5.8m
	61.74m ³ /h @ 30m				
	66.36m ³ /h @ 0m				
EF1580	14.68m ³ /h @ 80m	5.5kW	100mm	10/40	5.9m
	15.12m ³ /h @ 60m				
	15.49m ³ /h @ 40m				
	15.82m ³ /h @ 20m				
	16.11m ³ /h @ 0m				
EF1890	18.60m ³ /h @ 90m	7.5kW	100mm	12/48	6.1m
	19.58m ³ /h @ 60m				
	20.12m ³ /h @ 40m				
	20.60m ³ /h @ 20m				
	21.01m ³ /h @ 0m				
EF19115	21.54m ³ /h @ 115m	11kW	100mm	12/48	5.9m
	23.57m ³ /h @ 60m				
	24.11m ³ /h @ 40m				
	24.59m ³ /h @ 20m				
	25.00m ³ /h @ 0m				
EF2690	25.79m ³ /h @ 90m	11kW	100mm	12/48	5.5m
	26.77m ³ /h @ 60m				
	27.31m ³ /h @ 40m				
	27.79m ³ /h @ 20m				
	28.20m ³ /h @ 0m				
EF29100	30.72m ³ /h @ 105m	15kW	125mm	15/60	6.0m
	31.89m ³ /h @ 85m				
	33.10m ³ /h @ 60m				
	33.92m ³ /h @ 40m				
	34.64m ³ /h @ 20m				
	35.26m ³ /h @ 0m				
EF3690	35.19m ³ /h @ 90m	15kW	125mm	15/60	5.8m
	36.67m ³ /h @ 60m				
	37.49m ³ /h @ 40m				
	38.22m ³ /h @ 20m				
	38.83m ³ /h @ 0m				

OTHER QUALITY SABRE PRODUCTS

- Mixers
- Separator Feed Pumps (Vortex and Chopper)
- Raw effluent transfer pumps (dry mount and submersible)



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