



# FXG

DUPLEX DOUBLE ACTING  
RECIPROCATING PISTON PUMP

## MOBILE | SIMPLE MAINTENANCE | CUSTOMISED SOLUTIONS

The Scamont FXG is a versatile slurry pump that has a wide universe of applications by virtue of its compact design and low power requirements, whilst still delivering impressive flow rates over a range of pressure duties.

## UNIQUE DESIGN FEATURES

- Robust design with fabricated steel frame allowing for refurbishment
- Clear water or slurry service with solids up to 8mm in size
- Low rpm
- Simple maintenance
- Mobility on a skid
- From 4.32 l/sec at 609m vertical head to 1245 l/sec at 219m vertical head (SG = 1.0), or similar pressures.
- Different materials of construction available in order to deal with a multitude of corrosive forces
- Electric or diesel motor driven
- Customised solutions available
- Proudly manufactured in South Africa

## APPLICATIONS

- Underground and Surface Mining Operations
- High pressure jetting or hosing
- Mud Drilling
- Horizontal and vertical transfer
- Shaft bottom de-watering
- Stage mounting during shaft sinking
- Backfill pumping
- Grout plants
- Agriculture

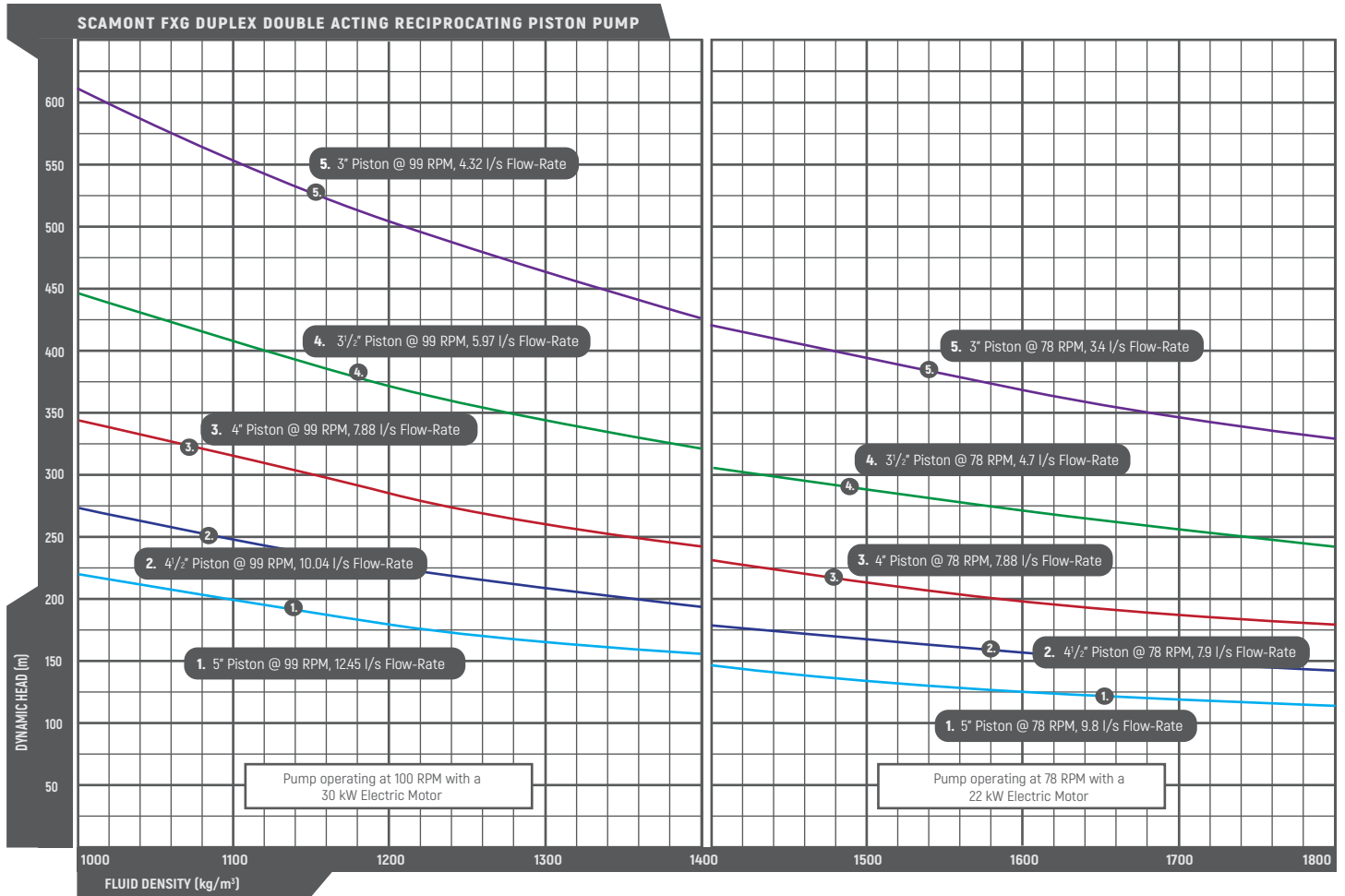
*DYNAMIC | POWER | MOTION*



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## PERFORMANCE CURVES



- The curves shown were calculated assuming a 90% mechanical efficiency and a 100% volumetric efficiency.
- Maximum pressure applies to the fluid ends.
- Maximum pressures for any given piston size must not be exceeded even at reduced RPM
- These speeds are recommended for suction lines shorter than 6m and are recommended for favourable suction line conditions however consideration must be given to viscosity and character of fluids.



## TECHNICAL SPECIFICATIONS

### Motor Size:

- 1" > Specific Gravity < 1.4 : 30 kW
- 1.4" > Specific Gravity < 1.8 : 22 kW

Larger motors can be installed however maximum pressure cannot be exceeded

### Max Pressure:

- 3" Liner : 5.97 MPa
- 3 1/2" Liner : 4.39 MPa
- 4" Liner : 3.36 MPa
- 4 1/2" Liner : 2.65 MPa
- 5" Liner : 2.15 MPa

Based on Piston load of 2777kg

### Crank Speed:

- 1" > Specific Gravity < 1.4 : 100 RPM
- 1.4" > Specific Gravity < 1.8 : 78 RPM

Speeds can be altered by changing the pulleys. Greater speeds result in greater flow which requires more power. Contact a Scamont representative before attempting to change flow rates.

### Recommend NPSH: 1m

This is measured from the fluid surface level to the centre line of the pump. Suction lines longer than 6m will result in a greater NPSHR. Please contact a Scamont representative to assist. Negative suction heads are possible when pump is properly primed, contact Scamont representative for assistance.

### Max Particle Size: 8mm

Use a mesh screen to remove any particle which is larger than 8mm. This mesh must be cleaned regularly to avoid suction problems.

### Pump Weight: 1700 kg

This is complete with motor and base frame. Pump without motor and base frame weighs 1150 kg.

### Pump Accessories

Scamont offers a full range of accessories for the FXG pump. This includes and is not limited to:

- Non Return Valves (Installed in order to limit slip flow on discharge valve)
- Shear Relief Valves (necessary in every installation to limit max. pressure)
- Plug Valves (used at start-up to obtain operating speed without load)
- Accumulators (Used to obtain steady flow in discharge line).
- Valve Seat Pullers (used to remove valve seats)
- Starter Panel (Designed to be used with the FXG pump, details obtainable from Scamont representative)

### Material of Construction

Scamont Engineering can alter the materials of construction for any application including mud and acid water.

### Note

- The five different sized pistons are interchangeable to provide for varying capacities and pressures.
- Data subject to change as required

## PERFORMANCE TABLE

PLUNGER SIZE		STROKE		DISPLACEMENT PER REVOLUTION (SINGLE ACTION)	MAXIMUM PISTON LOAD	MAXIMUM PRESSURE	DISPLACEMENT AT PUMP RPM		BYPASS VALVE SIZE	RECOMM. PRESSURE RATING
In.	mm	In.	mm	cc	kg	MPa	l/s		(NPS) DN	(Class) PN
5	127	6	152,4	1931	2777	2,15	12,53	9,83	(2") 50mm	(300)50
4.5	114,3	6	152,4	1564	2777	2,65	10,10	7,93	(2") 50mm	(300)50
4	101,6	6	152,4	1236	2777	3,36	7,93	6,22	(2") 50mm	(300)50
3,5	88,9	6	152,4	946	2777	4,39	6,01	4,71	(2") 50mm	(300)50
3	76,2	6	152,4	695	2777	5,97	4,35	3,41	(2") 50mm	(600)100
INPUT POWER						kW	30	22		
PUMP RPM						RPM	100	78		
SPECIFIC GRAVITY OF FLUID						SG	0.9>SG<1.4	1.4>SG<1.8		

### Bypass Valve Size\*

When selecting the bypass valve pressure rating multiply the maximum system pressure by 1.15 to determine maximum valve rating