



SP200

TRIPLEX SINGLE ACTING
RECIPROCATING PLUNGER PUMP

INTERCHANGABLE CONFIGURATION | CUSTOMISED SOLUTIONS

The SP200 is the pump of choice in high head slurry applications and is adaptable to a wide range of applications.

UNIQUE DESIGN FEATURES

- Robust design with fabricated steel frame allowing for refurbishment
- Fluid end configuration interchangeable with Scamont SP-600
- Clear water or slurry service with solids up to 8mm in size
- Low rpm
- Simple maintenance
- From 6.5 l/sec at 2615 m vertical head to 14.7 l/sec at 1162m 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
- Proudly manufactured in South Africa

APPLICATIONS

- High dynamic head applications
- Horizontal or vertical transfer
- Underground and Surface Mining Operations
- Settler Underflow
- High pressure jetting or hosing
- Shaft bottom de-watering
- Stage mounting during shaft sinking
- Backfill pumping
- Grout plants
- Tailings

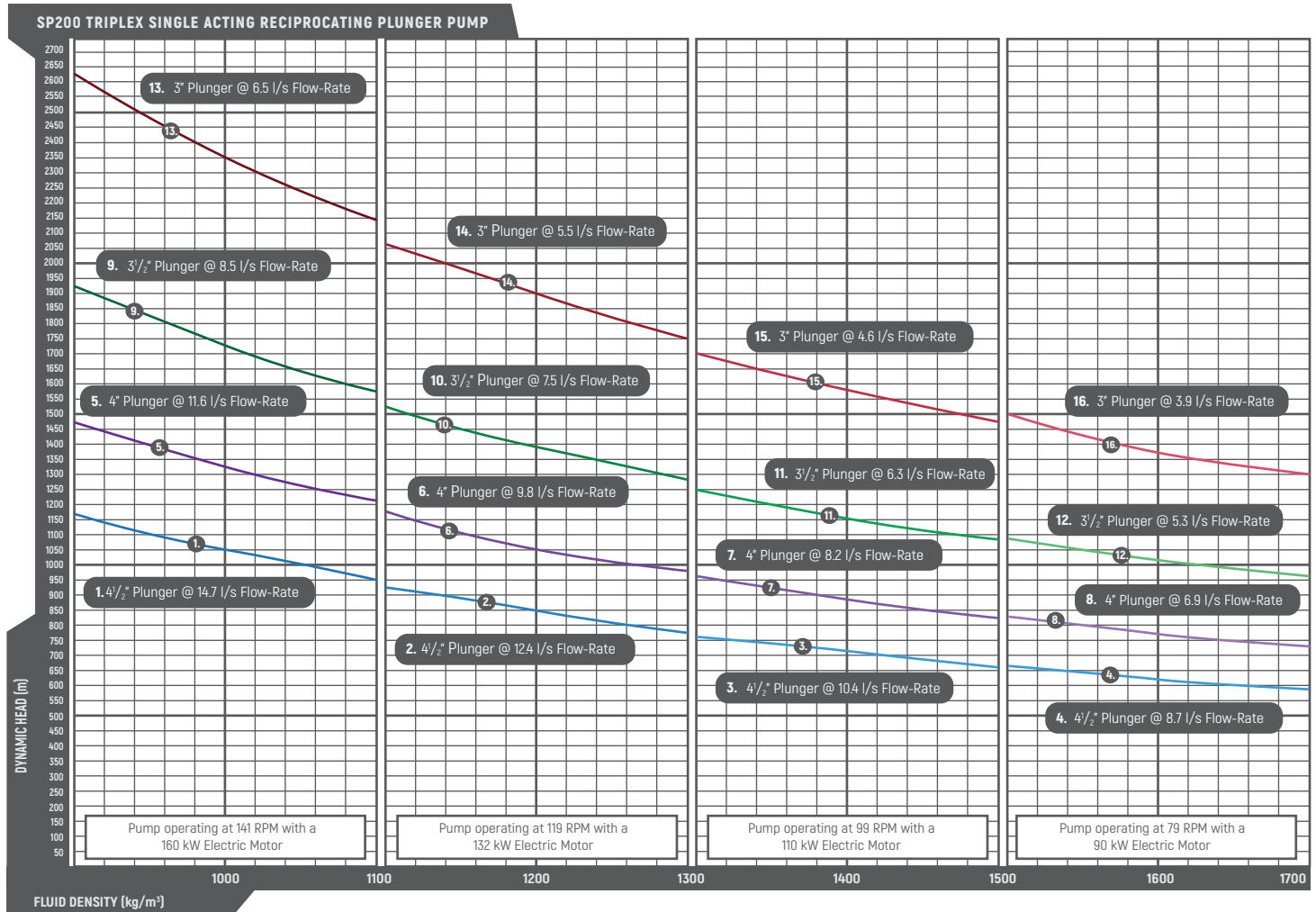
DYNAMIC | POWER | MOTION



SP200

TRIPLEX SINGLE ACTING
RECIPROCATING PLUNGER PUMP

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.



SP200

TRIPLEX SINGLE ACTING
RECIPROCATING PLUNGER PUMP

TECHNICAL SPECIFICATIONS

Motor Size:

- 0.9 > Specific Gravity < 1.1 : 160 kW
- 1.1 > Specific Gravity < 1.3 : 132 kW
- 1.3 > Specific Gravity < 1.5 : 110 kW
- 1.5 > Specific Gravity < 1.7 : 90 kW

Larger motors can be installed however maximum pressure cannot be exceeded

Max Pressure:

- 4 1/2" Plunger : 9.55 MPa
- 4" Plunger : 12.09 MPa
- 3 1/2" Plunger : 15.79 MPa
- 3" Plunger : 21.49 MPa

Based on Piston load of 9990kg

3" only supplied with Forged Front Discharge Fluid End and Class 1500 discharge manifold

Crank Speed:

- 0.9 > Specific Gravity < 1.09 : 141 RPM
- 1.1 > Specific Gravity < 1.29 : 119 RPM
- 1.3 > Specific Gravity < 1.49 : 99 RPM
- 1.5 > Specific Gravity < 1.7 : 79 RPM

Speeds can be altered by changing the pulleys. Greater speeds result in greater flow which absorb 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.

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: 6400 kg

This is complete with motor and base frame. Pump without motor and base frame weighs 5100 kg.

Pump Accessories

Scamont offers a full range of accessories for the SP200 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)
- Plunger Extracting Tool (used to assist in removing plungers)
- Sockets (specific to stuffing box, jackshaft and eccentric nuts)
- Starter Panel (Designed to used with the SP200 pump, details obtainable from Scamont representative)
- External lubrication system with 100% redundancy

Pump Monitoring Device

Scamont offers a lubrication monitoring system which trips the pump on low oil, filter block or oil temperature limit.

Material of Construction

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

Note

- Crank speed can be varied 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
4,5	114,3	8	203,2	2 085	9 990	9,55	14,66	12,37	10,37	8,23	(2") 50mm	(900)100
4	101,6	8	203,2	1 647	9 990	12,09	11,58	9,77	8,19	6,51	(2") 50mm	(900)100
3,5	88,9	8	203,2	1 261	9 990	15,79	8,87	7,48	6,27	4,98	(2") 50mm	(1500)250
3	76,2	8	203,2	927	9 990	21,49	6,51	5,50	4,61	3,66	(2") 50mm	(1500)250
INPUT POWER						kW	160	132	110	90		
PUMP RPM						RPM	141	119	99	79		
SPECIFIC GRAVITY OF FLUID						SG	0.9>SG<1.09	1.1>SG<1.29	1.3>SG<1.49	1.5>SG<1.7		

Bypass Valve Size*

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