

Submersible Pump Cable Selection Guide (by HP)

Which flat submersible cable size to use for borewell pumps, by motor rating.

Overview

Submersible pumps use a **flat 3-core** cable that runs down the borewell beside the pipe and resists water. Size it for the motor rating and, importantly, the depth — voltage drop over a long drop cable often means going one size up.

Pump motor	Approx. current (1-ph)	Flat copper cable	Note
0.5 HP	~4 A	1.5 sq mm	Shallow depths
1 HP	~7 A	2.5 sq mm	Most common
1.5 HP	~10 A	2.5–4 sq mm	Size up for deep wells
2 HP	~13 A	4 sq mm	—
3 HP	~19 A	6 sq mm	Check voltage drop

Use a flat submersible-grade cable and account for depth. See which cable is best for a submersible pump and the multicore range.

Guidance only. Figures follow common Indian domestic practice (IS 732 / IS 694), assume copper conductors unless stated, and depend on run length, grouping, ambient temperature and installation. Always have the final design confirmed by a licensed electrician.