



Flygt PP 4200 Series Adaptive Ultra-Low Head Propeller Pumps

The Flygt PP 4200 series represents a new level of ultra-low-head pumping. Thanks to the integrated power electronics and remote operation capabilities of the Flygt Dirigo technology platform, you can easily adjust and control the pump performance.



SAVE UP TO 40% ON ENERGY

With its high efficiency IE4 equivalent motor, integrated power electronics and optimized propeller design, the Flygt PP 4200 series minimizes energy costs at a wide range of duty points. Thanks to its adaptability, even larger savings can be realized by changing the pump curve to match varying conditions.



IMPROVE PROCESS RESILIENCY

Put yourself in control and adapt the pump’s performance to changing conditions to secure process and pumping results. Operate the pump with a user-friendly operator panel or remotely via a plant-wide SCADA system.



BUILT-IN SIMPLICITY

Integrated and pre-engineered variable speed pumping capabilities make system design, installation, commissioning and operation quick and easy.



ENHANCE RELIABILITY

Built-in motor control including automatic overload protection, together with a full set of operational statistics such as speed, power, alarms and running time, secure reliable pumping operation. Automatic rotation direction control, and a setup wizard for quick and simple start of the integrated and pre-engineered drive and motor system, virtually eliminates the risk for installation mistakes.

Scalable Pump System

Whether you choose a standard or adjustable pump of the Flygt PP 4200 series you can be assured of its unparalleled performance to meet your shifting process demands.



	FLYGT PP 4220 AD FLYGT PP 4230 AD	FLYGT PP 4220 ADF FLYGT PP 4230 ADF
Gateway FPG 415		✓
IE4 motor efficiency	✓	✓
High efficiency propeller	✓	✓
Soft start	✓	✓
Power factor close to 1	✓	✓
Always correct propeller rotation	✓	✓
Automatic overload speed control	✓	✓
Easily adjustable speed		✓
Analog I/O and Modbus RTU/TCP		✓
Full status and alarms information		✓
Jog wheel operator panel FOP 315 (optional)		✓
Touch screen operator panel FOP 402 (optional)		✓

AD - STANDARD CONTROL

Standard system with pre-set control incorporates many built-in valuable features providing energy savings, key autonomous protection features, and scalability for ADF functionality at a later stage.

ADF - FLEXIBLE CONTROL

Gear up your Flygt PP 4220 or PP 4230 for tankside and remote operation by adding the FPG 415 gateway with analog I/O and fieldbuses. Ease of connectivity and connections to the operator panel allow fully integrated monitoring functions, so you can be assured of optimal pump operation wherever you may be.

Gateway and Operator Panels

GATEWAY - FPG 415

The FPG 415 gateway enables monitoring and control of pump's performance and status, including speed, power, alarms, running time and energy consumption, via operator panel or remote communications.

Communication	Modbus RTU / TCP, 4-20 mA
Standard Input/Output	4×DO, 4×DI, 1×AO, 1×AI
Ports	USB, RS485, Ethernet, operator panel, mixer
Environment class	IP 20, operation temperature -20°C to +65°C (-4°F to 149°F)
Power supply	24 VDC
Size (W×L×H)	45×100×100 mm, (1.77 x 3.94 x 3.94 in.), DIN mount
Approvals	CE, UL, CSA, RCM



JOG WHEEL OPERATOR PANEL - FOP 315

The FOP 315 jog wheel operator panel is a traditional push-button interface for operator's inspection and pump control.

Screen	3.5" monochrome LCD
Environment class	Handheld: IP20 Door mount. Front: IP 54; Back: IP21 Operation temp: -20°C to +70°C (-4°F to 158°F)
Power supply	24 VDC
Size (W×L×H)	205×33×110 mm, (8.07 x 1.3 x 4.33 in.), DIN or door mount
Approvals	CE, UL



TOUCH SCREEN OPERATOR PANEL - FOP 402

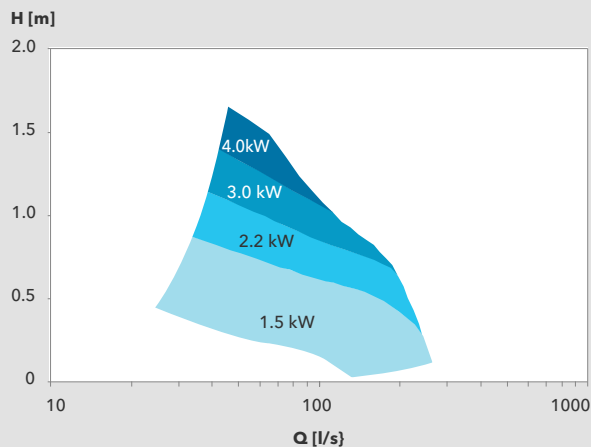
The FOP 402 touch screen operator panel is a full text and graphics interface for quick and easy operator's management.

Screen	7" color touch screen
Environment class	Front: IP65; Back: IP20 Operation temp: -20°C to +60°C (-4°F to 140°F)
Power supply	24 VDC
Size (W×L×H)	197×42×140 mm (7.76 x 1.65 x 5.51 in.), Door mount
Approvals	CE, UL

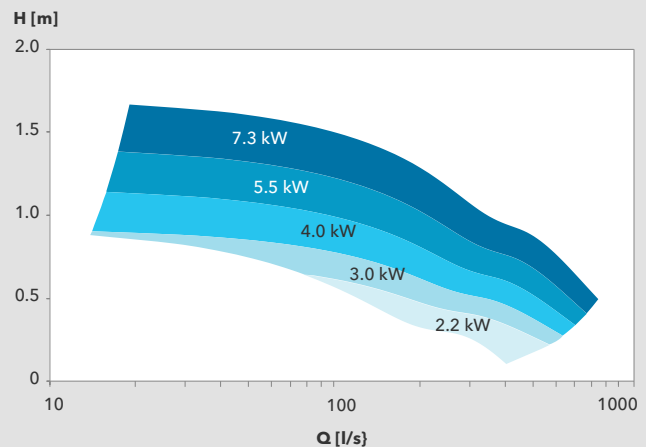


PERFORMANCE - FLYGT PP 4200 SERIES

FLYGT PP 4220



FLYGT PP 4230



Flygt PP 4200 Series ADAPTIVE ULTRA-LOW HEAD PROPELLER PUMPS

		Flygt PP 4220	Flygt PP 4230
Motor data	Speed, max Type Efficiency Frequency Voltage Insulation class	792 rpm Synchronous permanent magnet motor IE4 level according to IEC/TS 60034-30-2 Ed. 1 50-60 Hz 380-480 V H (180°C, 356°F)	516 rpm Synchronous permanent magnet motor IE4 level according to IEC/TS 60034-30-2 Ed. 1 50-60 Hz 380-480 V H (180°C, 356°F)
Materials	Stator housing Wetted metal parts Connection housing Lifting handle and guide bar bracket Hub and propeller blades Propeller shaft O-rings Oil	Cast iron, ASTM 35B Stainless steel, ASTM 316L Stainless steel, ASTM 316L Stainless steel, ASTM 316L Stainless steel, ASTM 316L Stainless steel, ASTM 316L Stainless steel, ASTM/AISI 431 Flourinated rubber Paraffin oil ISO VG32	Cast iron, ASTM 35B Stainless steel, ASTM 316L Stainless steel, ASTM 316L Stainless steel, ASTM 316L Stainless steel, ASTM 316L Stainless steel, ASTM 316L Stainless steel, ASTM/AISI 431 Flourinated rubber Paraffin oil ISO VG32
Cable	Screened Flygt SUBCAB® with integrated control leads	10 or 20 m (30 or 65 ft)	10 or 20 m (30 or 65 ft)
Application data	Liquid temperature, max Liquid density, max pH-range of mixed liquid Depth of immersion, max	40°C (104°F) 1,100 kg/m ³ (9.2 lb per US gal) 1-12 20 m (65 ft)	40°C (104°F) 1,100 kg/m ³ (9.2 lb per US gal) 1-12 20 m (65 ft)
Weight and dimensions	Weight, max Length, excl. bracket Propeller diameter Double guide bar installation, diameter	105 kg (232 lb) 585 mm (23 in.) 370 mm (14.5 in.) 50.8 (2 in.)	265 kg (585 lb) 895 mm (35.25 in.) 580 mm (22.8 in.) 50.8 (2 in.)
Approvals	CE, CSA, UL	Yes	Yes