



CPE SYSTEMS INC

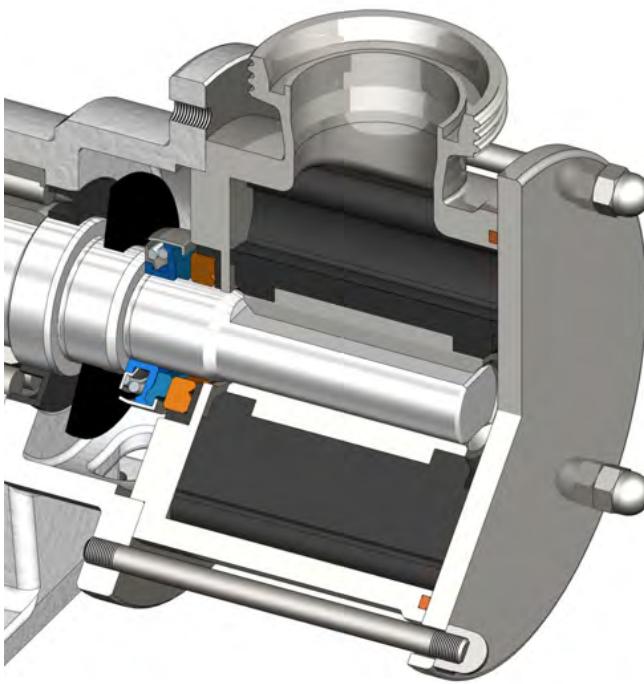
CPE SYSTEMS
INCORPORATED

RF-30/65

TECHNICAL SPECIFICATIONS



The Inoxpa RF-30/65 is a flexible impeller pump designed for the transfer of beer wort, dairy products, edible oils, wine, concentrates and beverages in general. This pump can also be used with viscous food products such as jam, marmalade, and custard, as well as cosmetic products, such as soap, gel, and creams. The RF pump series features a food-grade neoprene impeller that is both gentle and powerful. The RF pumps are self-priming and reversible making them versatile and easy to use for multiple applications. The RF-30/65 pump head is paired with a 5 HP motor with a TEFC enclosure and a gear drive.



DESIGN

Flexible Impeller pumps have a unique design that sets them apart from standard centrifugal pumps. The RF 30-65 is designed with a food-grade neoprene flexible impeller and an external mechanical seal. The housing is eccentrically shaped to create suction and discharge. On the suction side the blades enlarge creating a vacuum that sucks in the product. The product is carried by the impeller to the discharge side where the blades are bent to reduce the volume and the product is forced out the discharge outlet.



TECHNICAL SPECIFICATIONS

Style:	Bare Shaft
Connections:	2 ½" Tri-Clamp
Materials	
Parts in Contact With Product:	316L Stainless Steel
Lantern and Bearing Support:	GG 22
Other Parts	EPDM (Buna & Viton optional)
Impeller:	CR (Neoprene)
Gaskets:	NBR
Mechanical Seal:	Cer/C/NBR
Rotary Part	Ceramic
Stationary part	Carbon
Gaskets	NBR
Surface Finish:	Polished, Ra ≤ 0.8 µm
Specifications	
Weight:	46.3 lbs (21 kg)
Motor	
RPM	1800
Voltage	230/460V
Enclosure	TEFC
Horsepower	5 HP
Compliances	Class I, Division II, Groups A, B, C and D compliant
Material	Performance cast aluminum
Weight	73.5 lbs
Performance	
Flow	28 m³ /h (123.28 US GPM)
Max. Working Pressure	2 - 4 bar (29 - 58 PSI)
Max. Working Temperature	80 °C (176 °F)
Max. Speed	1450 rpm
Max. Differential Pressure:	4 bar
Starting Torque	64.3 Nm
Reverse Torque:	110.5 Nm



Assemblies

The RF-30/65 is available as a portable pump assembly and as pump and motor by special order. The portable pump assembly includes a VFD, a 5 HP NEMA TEFC motor paired with a gear drive, a cart, cord, and a plug. The portable assembly comes fully programmed and has several voltage options. The pump and motor assembly is mounted on a stainless steel base.

PORTABLE ASSEMBLY COMPONENTS:

- RF-30/65 Pump Head
- NEMA TEFC Motor (5 HP)
- LENZE VFD (5 HP)
- Gear Drive
- Heavy Duty Cart
- Electrical Cord and Plug of Choice

PUMP AND MOTOR COMPONENTS:

- RF-30/65 Pump Head
- NEMA TEFC Motor (5 HP)
- Gear Drive
- Stainless Steel Base

LENZE Variable Frequency Drive

The Lenze i550 Protec is our new inverter series in the $\frac{1}{2}$ HP to 20 HP range. The slim and sleek casing is also extremely durable, featuring both impact resistance and IP66 washdown protection. A micro USB interface is provided for more efficient programming. This user-friendly VFD is programmable and has scalable functionality. This trustworthy and powerful VFD can be implemented into your operations with ease. The i550 can be controlled by the keypad, a potentiometer, or a remote control (the remote control is available at additional cost). Our portable pump assemblies feature this VFD to achieve optimal efficiency.

FEATURES

- IP66 (NEMA 4X) approved; it is both dust and water resistant.
- Equipped with a micro USB interface for programming and diagnostics.
- Full onboard PID programming for interfacing with flow meters, level controls, pressure sensors, and can/bottle fillers.
- The i550 Protec has a sensorless vector control for synchronous motors.
- Equipped with multiple digital and analog inputs for remote control and safety interlocks.
- Compatible with our wireless remote controls, pressure switches, and run dry protection.
- Equipped with a potentiometer.



TECHNICAL SPECIFICATIONS

Horsepower:	5 HP
1Ø/3Ø Input:	3Ø 230/460 VAC
3Ø Output:	208-230/460 VAC
Ambient Temperature:	-22°F - 131°F (-30°C - 55°C)
Standard IO:	5x digital input, 1x digital output, 2x analog input, 1x analog output
Communication Networks:	CANopen, Modbus RTU, Modbus TCP, IO-Link, EtherCAT, EtherNet/IP, PROFINET (optional)
Approvals:	CE, UL, CSA, EAC, RoHS

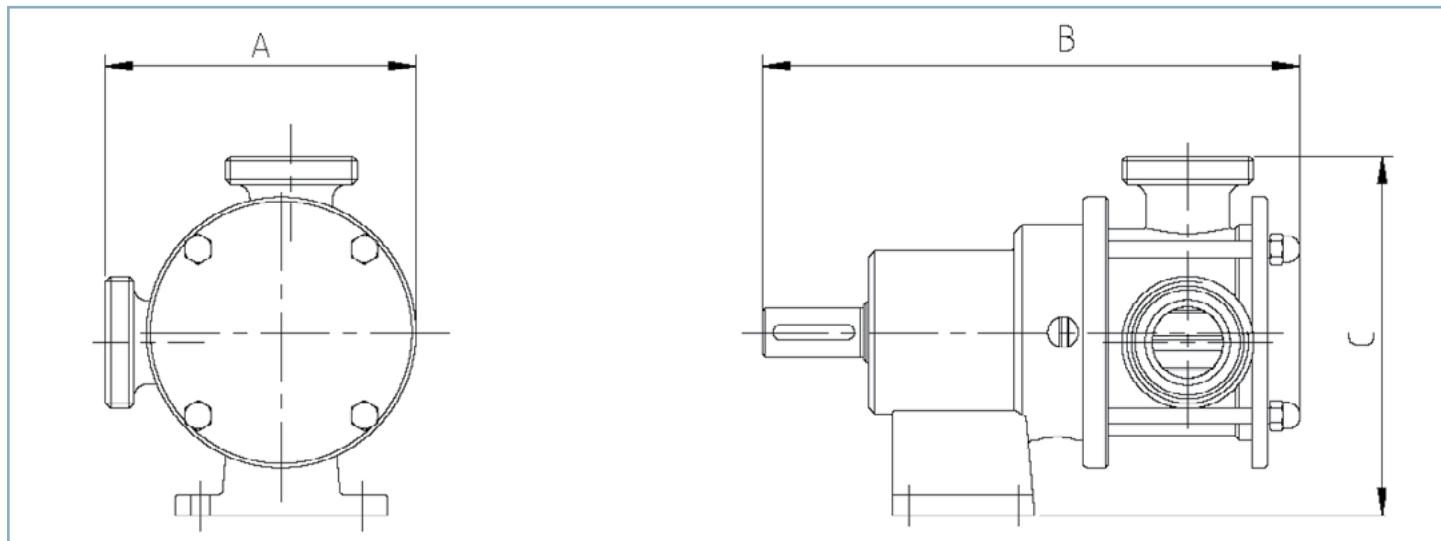
Heavy Duty Cart



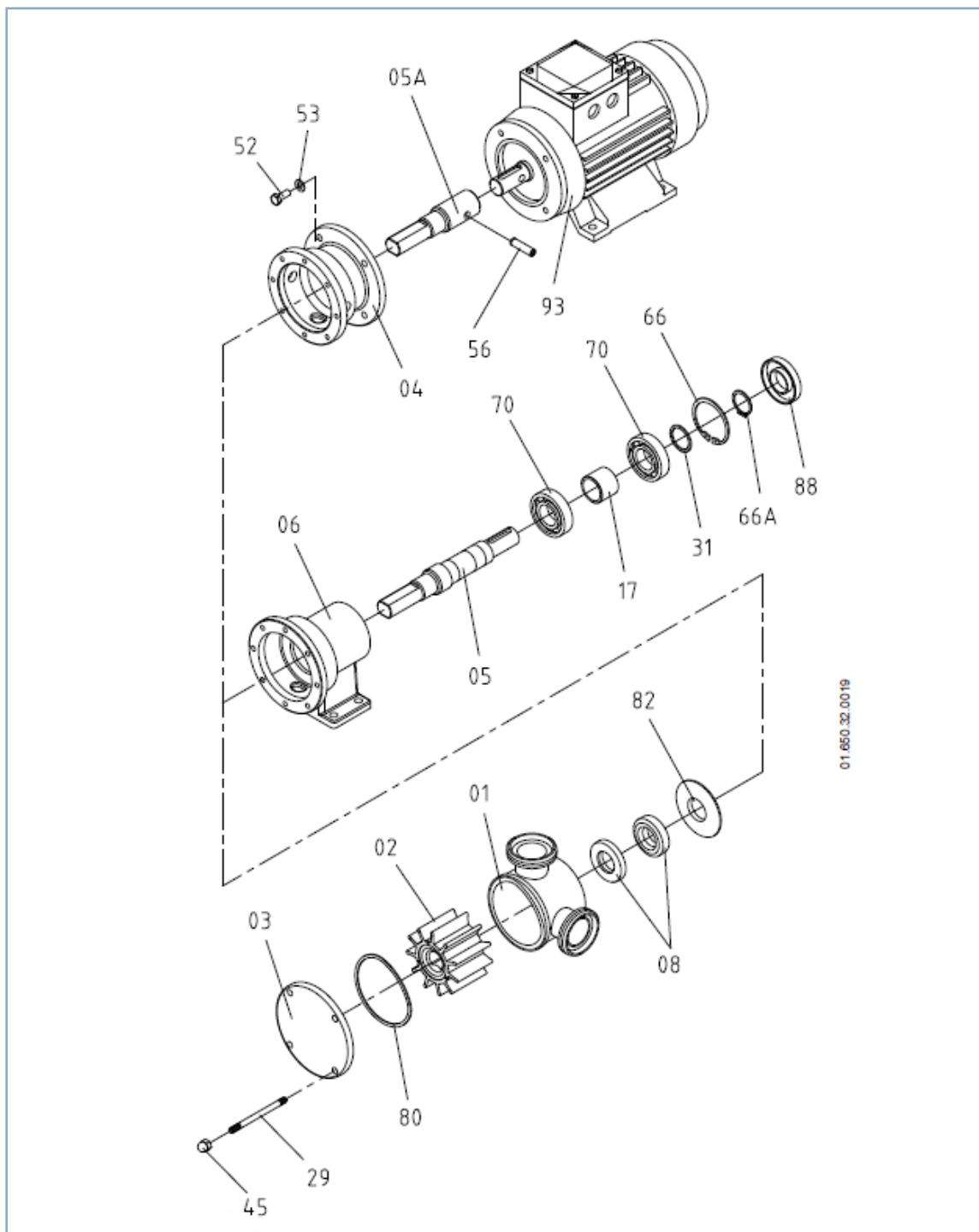
Custom designed for the craft food and beverage industry, this is our large scale pump cart, built for pumps with a 213TC frame size and pumps with gear drives. This cart is sturdy, durable, and capable of handling the harsh environments of large scale processing plants. All parts are hand welded in Canada for quality assurance and durability.

Frame:	16 ga stainless steel round tube with foot
Handle:	16 ga stainless steel round tube
Platform:	11 ga Stainless steel AISI 304
	Pre-drilled to fit 213 NEMA frame
Axle:	1/2 " Stainless steel rod axle
Wheels:	8" foam filled tires

STYLE: BARE SHAFT

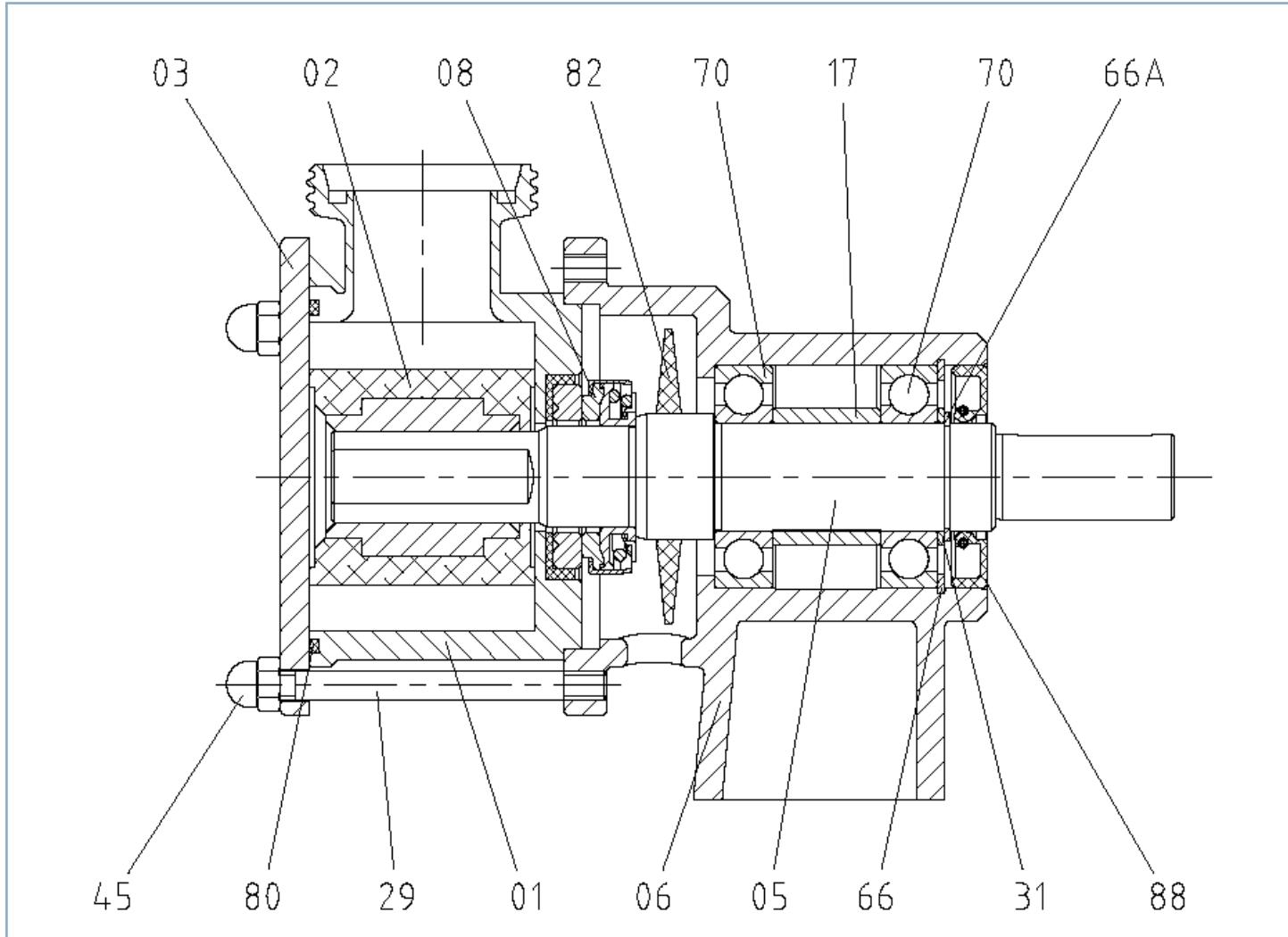


Pump Model	A			B	C		
	DIN	SMS	CLAMP		DIN	SMS	CLAMP
RF-02/20	124	121	114	206	154	151	144
RF-05/25	128	125	118	225	158	155	148
RF-10/40	151	152	142	265	178	179	169
RF-20/50	183	183	173	335	203	203	193
RF-30/65	195	197	183	350	210	212	198



Part #	Part Name	Quantity	Material
01.	Pump Casing	1	AISI 316L
02.	Impeller	1	Neoprene
03.	Pump Cover	1	AISI 316L
04.	Lantern	1	GG 15
05A	Shaft	1	AISI 316L
08.	Mechanical Seal	1	Cer/C/NBR
29.	Tie Bar	4	AISI 316L

Part #	Part Name	Quantity	Material
45.	Blind Nut	4	A2
56.	Elastic Pin	1	A2
52.	Hexagonal Screw	4	8.8
53.	Flat Washer	4	Steel
80.	O-Ring	1	NBR
82.	Splash Ring	1	EPDM
93.	Motor	1	-



Part #	Part Name	Quantity	Material
01.	Pump Casing	1	AISI 316 L
02.	Impeller	1	Neoprene
03.	Pump Cover	1	AISI 316L
05.	Shaft	1	AISI 316L
06.	Bearings Support	1	GG 15
08.	Mechanical Seal	1	Cer/C/NBR
17.	Spacer Bushing	1	F-114
29.	Tie bar	4	AISI 304

Part #	Part Name	Quantity	Material
31.	Stop Ring	1	F-114
45.	Blind Nut	4	A2
66.	Elastic Ring	1	Steel
66A.	Elastic Ring	1	Steel
70.	Bearing	2	Steel
80.	O-Ring	1	NBR
82.	Splash Ring	1	EPDM
88.	Seal	1	NBR



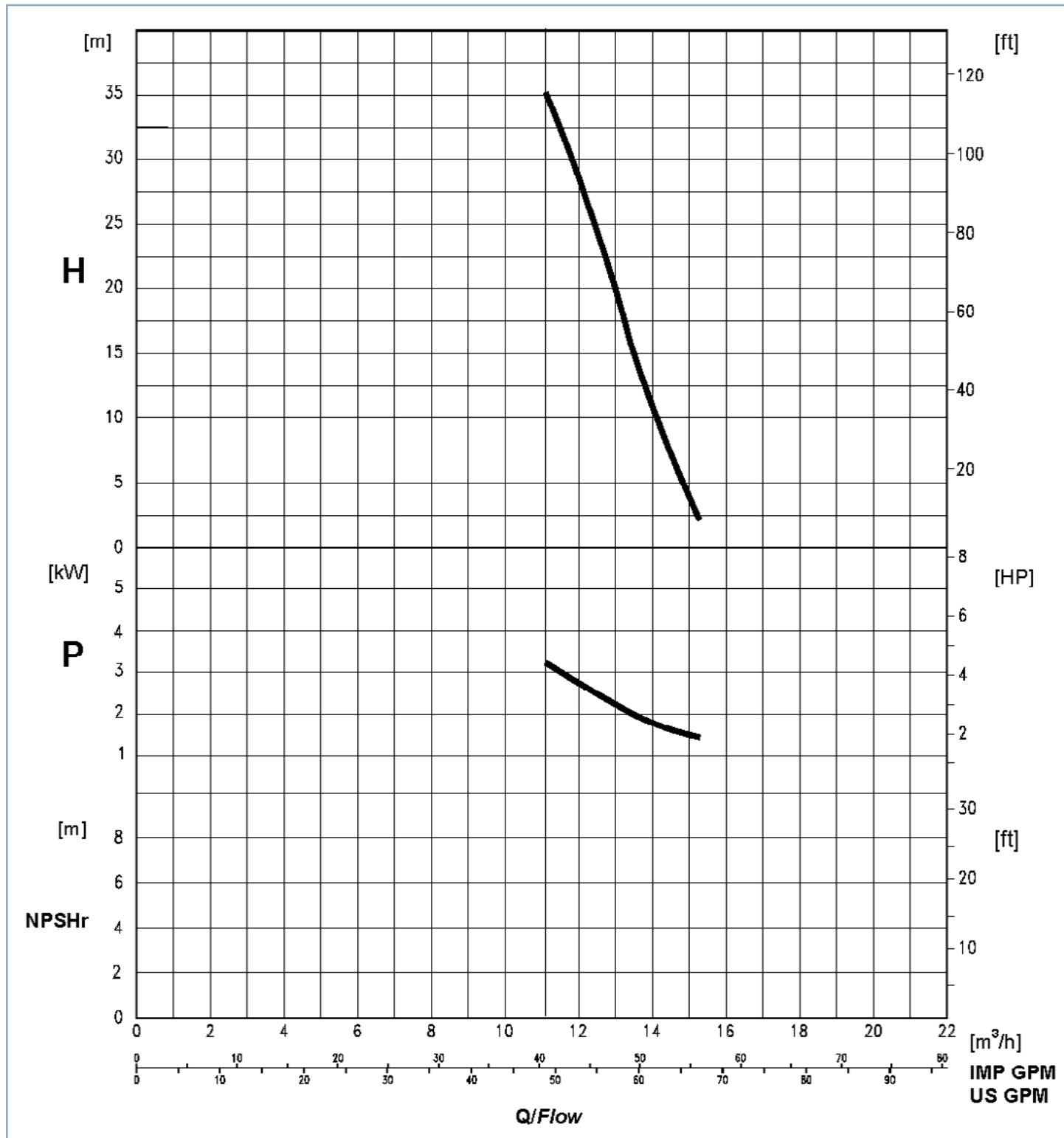
Capacity Curves

MODEL: RF 30/65

Frequency: 50hz

RPM: 900

Self-Priming: 4.2 m





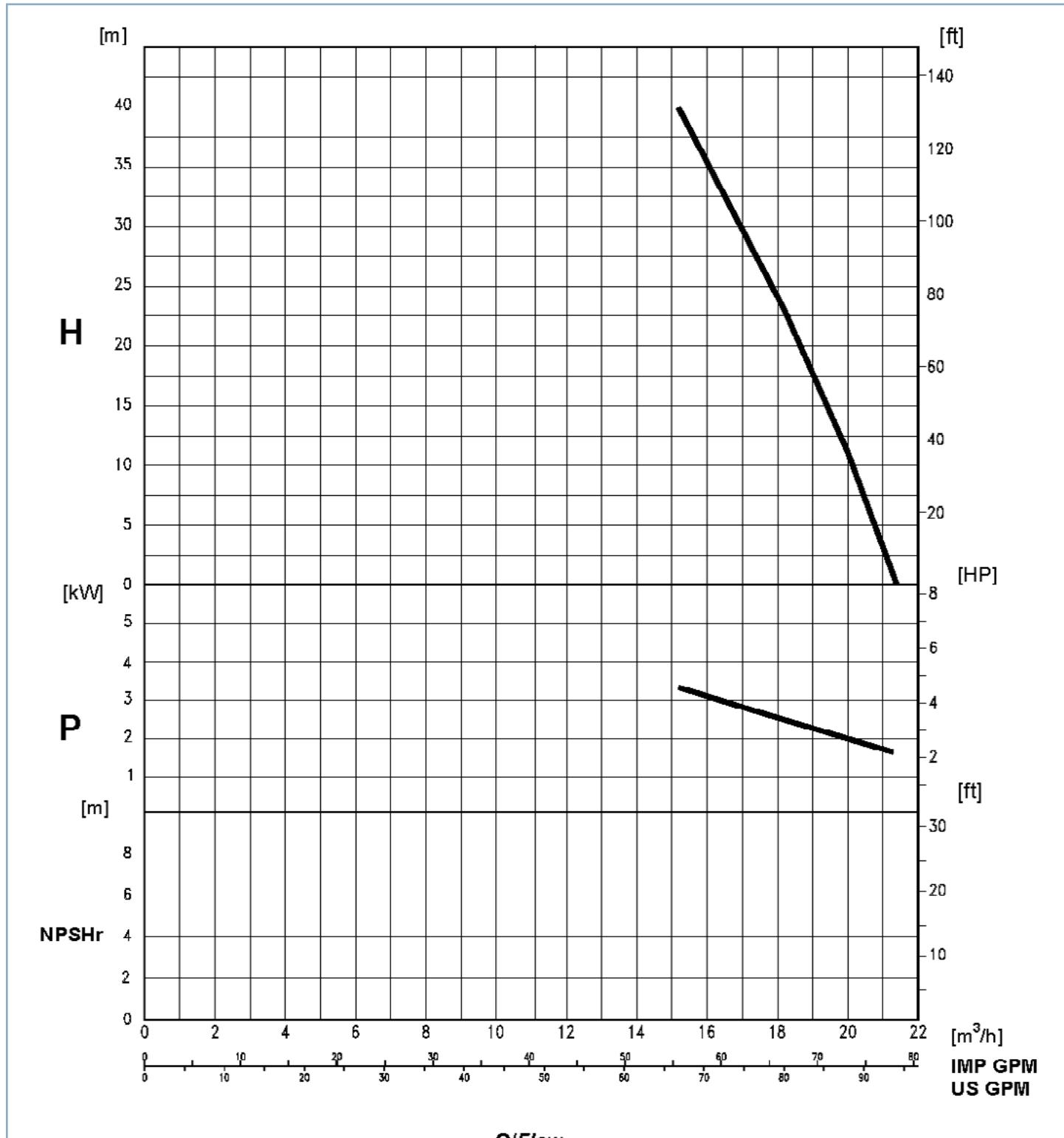
Capacity Curves

MODEL: RF 30/65

Frequency: 60hz

RPM: 1150

Self-Priming: 4.6 m





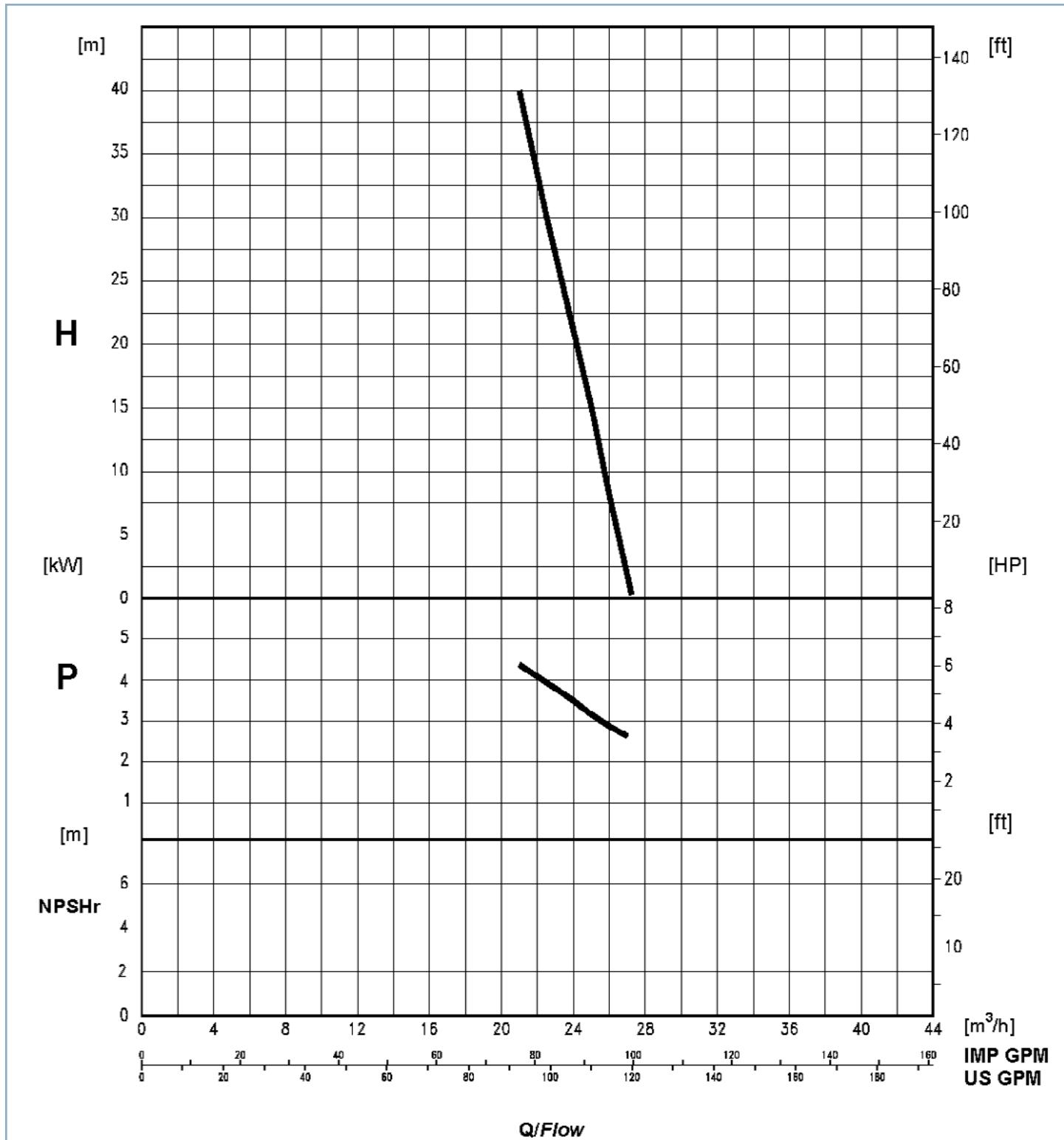
Capacity Curves

MODEL: RF 30/65

Frequency: 50hz

RPM: 1450

Self-Priming: 5 m





Capacity Curves

MODEL: RF 30/65

Frequency: 60hz

RPM: 1750

Self-Priming: 5.4 m

