



THE WILLIAMS - CARVER COMPANY, INC.

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APV Puma+ Centrifugal Pump

- reliability in standard duty applications



Description

The APV Puma+ centrifugal pump is a hygienic, single-stage pump designed for use in the food, dairy and beverage industries. Customisable to individual needs, the pump complies with the strictest hygienic demands and features easy change from single into double mechanical shaft seals. The basic configuration features adjustable support legs.

Flexible features:

- Differential pressure rates up to 7.8 bar
- Flow rates up to 135m³/h
- Motor sizes from 1.1 kW to 37 kW
- Pipe connections from DN40 to DN125
- CIP capability

Reliable components:

- Cylindrical pump housing
- Open or semi-open impeller with double bend vanes
- Volute back plate
- Stub shaft
- Mechanical seal
- Shaft guards
- Extension frame permitting visual inspection of shaft seal area
- Standard ABB motor with enclosure class IP55 and protective stainless steel shroud

Typical applications

- Liquid transfer in dairies and breweries
- Mixing in soft drink applications
- Food processing
- CIP systems

Features and benefits

▪ Reliability at reduced cost

The APV Puma+ pump is designed and built to perform and last using high-quality shaft seals to cut downtime to an absolute minimum.

▪ Easy maintenance

Front-loaded seals and the use of clamp ring in stead of bolts enable fast and easy maintenance.

▪ Fits into existing system designs

The APV Puma+ pump can easily be built into existing plant designs, often without any changes to piping layout and drawings. For specific measurements and drawings, please see the APV Puma+ operating manual.

▪ Variable height

The APV Puma+ pump is available with two types of brackets in various heights and with adjustable legs.

▪ Save money on lower spare parts stocks

Wear parts such as shaft seals and O-rings are identical to those of the APV W+ and Ws+ series. This helps you save money by limiting your on-site spare parts inventory.

Product specifications

Materials

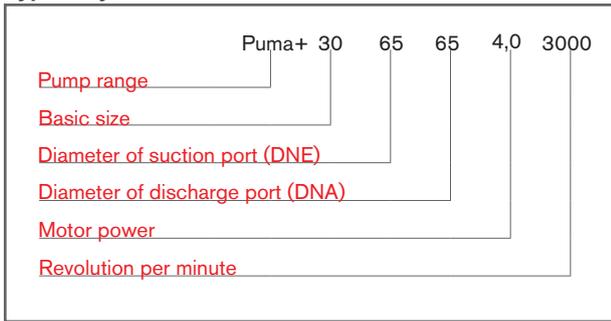
Product wetted parts:	
Impeller	AISI 316L – surface finish Ra < 3.2 micron
Impeller nut	AISI 316L – surface finish Ra < 3.2 micron
Pump housing	AISI 316L – surface finish Ra < 3.2 micron
Back plate	AISI 316L – surface finish Ra < 3.2 micron
Shaft seal	Carbon/Silicon Carbide
Elastomers	EPDM (FDA approved)

Other parts:	
Pump shaft	AISI 304
Extension frame	AISI 304
Support	AISI 304
Motor shroud	AISI 304
Motor	ABB two pole motor according to the IEC metric standard (EFF II), IP 55, insulation class F.

Technical data

Max outlet pressure	16 bar
Max seal flush pressure	7 bar
Water consumption/flushed seal	15-30 l/h
Max operating temperature	150°C

Type key



Range overview

Pump model	Motor			Connections DNE/A (mm)
	KW (50Hz)	Size	Rpm (50Hz)	
APV Puma+20	1.5	90L	1450	40/25 40/40 50/40 50/50 65/40 65/50
	2.2	100LA		
	3.0	100LB		
	1.5	90S	2900	
	2.2	90L		
	3.0	100L		
	4.0	112M		
	5.5	132SA		
	7.5	132SB		
	11.0	160MA		
15.0	160M			

Pump model	Motor			Connections DNE/A (mm)
	KW (50Hz)	Size	Rpm (50Hz)	
APV Puma+30	1.5	90L	1450	50/50 65/50 65/65 80/50 80/65 80/80 100/65 100/80 100/100 125/80 125/100
	2.2	100LA		
	3.0	100LB		
	4.0	112M		
	5.5	132S		
	1.5	90S	2900	
	2.2	90L		
	3.0	100L		
	4.0	112M		
	5.5	132SA		
	7.5	132SB		
	11.0	160MA		
	15.0	160M		
	18.5	160L		
	22.0	180M		
	30.0	200LA		
	37.0	200L		

Connections

The following connections are offered as standard:

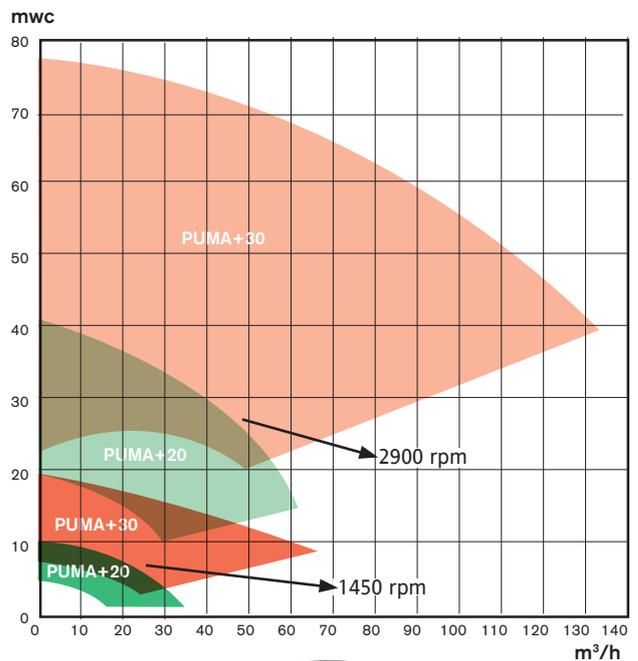
- DIN 11851 welding male part
- ISO 2852 clamp
- BS 4825 clamp
- DIN 32676 clamp
- APV FN1 PN10 flange
- APV FG1 PN10 flange

Options

The APV Puma+ pump offers a number of options enabling you to customise the pump for your special needs:

- FPM elastomers
- Silicon carbide/silicon carbide seal rings
- Double mechanical shaft seal/flushed
- Two different bracket options for every motor size
- Motor with thermistor
- 4 pole motor/1,500 rpm
- PUMAi+ with inducer for handling viscous products and reducing NPSH requirements to a minimum

Performance curves 1450/2900 rpm



A popular option
- The APV Puma+
pump with bracket



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For more information about our worldwide locations, approvals, certifications, and local representatives, please visit www.apv.com.

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