Progressive cavity pump

BN 17-12 / A6-J0-J0-H5-GAM

Application data

C 000 XXX001

Conveyed product	Gums / Oil / FFA / Water
Remark	WEP TAG: 19-J-853B PROJECT - WORPAR ITEM NBR - PW582G.2/2 eB NBR - 100212292.000 DATE - 18.10.2021
Flowability	flowable
Viscosity	2500 cPs
Solids content	not specified
Size of solids	not specified
Density	0.979
Product temperature	50°F - 176°F
pH value	5-9
Kind of operation	continuous
Operating hours	8 h/day
Location	outdoor, humid atmosphere
Altitude of installation	up to 1000 m assumed
Surrounding temperature	normal (32-104F)

Performance data

Capacity	**Pressure**	**Speed**	
7.2 USGPM	147 psi	89 rpm	
36.2 USGPM	147 psi	257 rpm	- Speeds adjusted for viscosity

Starting torque	280 lb.ft
Req. operating power at pump shaft	5.9 HP
Inlet pressure	flooded suction (up to 0,5bar)
NPSHr	17 ft

Tolerances according to SEEPEX standards.

Materials and executions

Installation	horizontal
Direction of rotation	counter clockwise (left)
Lantern - Design	with cover plates
Lantern - Material	EN-JL 1040 (gci-25)
Lantern - Flange diameter	250 mm
Suction casing - Design	standard
Suction casing - Material	1.4408 / ASTM A351 grade CF8M
Pressure branch - Design	standard
Pressure branch - Material	1.4408 / ASTM A351 grade CF8M
Position of branch	position 1
Suction connection	NPS 6, drilled acc. to ASME B 16.5, Class 150, RF
Pressure connection	NPS 4, drilled acc. to ASME B 16.5, Class 150, RF
Joint - Design	pin joint with joint sleeve, grease filled
Joint - Material	standard, holding bands 1.4401
Joint - Universal joint sleeve: material	FPM
Joint - Joint Grease	joint grease SEEPEX 30321
Coupling rod - Design	standard
Coupling rod - Material	1.4404 / AISI 316L
Rotor - Design	standard
Rotor - Undersize	N/A
Rotor - Material	1.4404 / AISI 316L
Rotor - Coating	ductile chromium coating
Stator - Design	standard, with TSE, sensor sleeve 1.4404
Stator - Material	FPM special
Shaft sealing	mechanical seal
Code	GAM - single acting mechanical seal

Quench	design 3 With refillable supply tank. Quench chamber is filled with SEEPEX 50300 (glycerine) or for food applications with SEEPEX 60200, container is empty and has to be filled before commissioning. - capacity of supply tank: approx. 140 ml - materials of construction: nickel plated brass, plexiglass, NBR
Shaft diameter	70 mm
Make	Burgmann
Rotating/stationary seal face	SiC SiC
Elastomers	FPM
Spring	1.4571 / AISI 316Ti
Metal parts	1.4571 / AISI 316Ti
Type	MG1-G60 Q1Q1 VGG
Casing - material	1.4408 / ASTM A351 grade CF8M
Casing - connection standard	NPT
Plug-in Shaft - Design	standard
Plug-in Shaft - Material	1.4404 / AISI 316L
Plug-in Shaft - Drilling diameter	40
Plug-in Shaft - Drilling depth	75
Bolting - Design	completely stainless steel
Painting - Number of colors	single-colored
Painting - Painted components	complete combination
Painting - Color	Epoxy System (SEEPEX Blue)
Painting - Surface protection	std. surface protection C2 (NDFT 95 µm)

Drive

Drive Type	Gear motor at freq. inv.
Type	Gearmotor
Make	Nord
Model	SK42F-132MP/4
Mounting position	M1
Ratio (i)	6.65
Speed	265 rpm
Flange diameter	250 mm
Shaft diameter	40 mm
Shaft length	80 mm
Shaft drawing	716/0170-002B4

	Norm	**Min**	**Max**
Speed	265 rpm	89 rpm	257 rpm
Motor speed	1760 rpm	590 rpm	1709 rpm
Frequency	60 Hz	20 Hz	58 Hz

Rated output	10 HP
Power factor	0.77
Rated speed	1760 rpm
Starting	direct on frequency inverter
Efficiency class	premium efficiency
Winding protection	TW - Thermostat
Voltage	3x230/460 VAC
Frequency	60Hz
Rated current	26,7 / 13,4
Thermal class	F
Enclosure	IP55 / TEFC
Other	Magnetic Drain plug
Gear accessories	Oil sight glass
Gear sealing	Sealing ring Viton and syn. Oil
Remark for drive	Motor: - 20:1 CT turndown capable (4-80 Hz)

The frequency inverter has to follow a linear U/f characteristic curve (constant torque).
It’s essential to have a minimum overload capability of 150% for at least 60 seconds. (see technical data sheet)

Baseplate

Design	design B with side feet w/ drain connection
Material	steel, painted
GPU Type Code	B-ST-LS

TSE

Design	standard design, pump sided parts for hook up to a 4-20ma connection with prosense connection head, prosense transmitter, niples and reducer.
Voltage	not available
Temperature coefficient	Pt100
Material sensor sleeve	1.4404 / AISI 316L
Material connection head	aluminium

Accessories

Design	Metal Name Tag in addition to seepex info must also have info below WEP TAG: 19-J-853B DESMET TAG: PW582G.2/2

Quality Assurance

Design	Certified GA Drawing
Document Standard	standard
QA Testing Standard	standard

Documentation