Progressive cavity pump

BN 2-24 / A6-J0-J0-R0-GAM

Application data

C 000 XXX001

Conveyed product	Caustic Soda (20%)
Remark	WEP tag # 19-J-769A PROJECT - WORPAR ITEM NBR - PW534NA1 eB NBR - 100212287.000 DATE - 18.10.2021
Flowability	flowable
Viscosity	5.218 cPs
Solids content	not specified
Size of solids	not specified
Density	1.219
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**
	1.6 USGPM	144 psi	59 rpm
	8 USGPM	144 psi	269 rpm
Starting torque	100 lb.ft		
Req. operating power at pump shaft	2 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	160 mm
Suction casing - Design	standard
Suction casing - Material	1.4408 / ASTM A351 grade CF8M
Pressure branch - Design	standard
Pressure branch - Material	1.4404 / AISI 316L
Position of branch	position 1
Suction connection	NPS 3, drilled acc. to ASME B 16.5, Class 150, RF
Pressure connection	NPS 2, ASME B 16.5, Class 300, RF
Joint - Design	pin joint with joint sleeve, grease filled
Joint - Material	standard, holding bands 1.4401
Joint - Universal joint sleeve: material	EPDM
Joint - Joint Grease	joint grease SEEPEX 30321
Coupling rod - Design	standard
Coupling rod - Material	1.4404 / AISI 316L
Rotor - Design	Undersize acc. to GI.ROT.02
Rotor - Undersize	-0.4 mm
Rotor - Material	1.4404 / AISI 316L
Rotor - Coating	ductile chromium coating
Stator - Design	standard, with TSE, sensor sleeve 1.4404
Stator - Material	EPDM
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	45 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	30
Plug-in Shaft - Drilling depth	55
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	SK22FVL-100LP/4
Mounting position	M1
Ratio (i)	6.51
Speed	262 rpm
Flange diameter	160 mm
Shaft diameter	30 mm
Shaft length	55 mm
Shaft drawing	716/0050-006B4

	Norm	**Min**	**Max**
Speed	262 rpm	59 rpm	269 rpm
Motor speed	1710 rpm	385 rpm	1754 rpm
Frequency	60 Hz	14 Hz	62 Hz

Rated output	3 HP
Power factor	0.81
Rated speed	1710 rpm
Starting	direct on frequency inverter
Efficiency class	standard efficiency
Voltage	3x 230/460 V
Frequency	60Hz
Thermal class	F
Enclosure	IP66 / Washdown

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-769A DESMET TAG: PW534NA1

Quality Assurance

Design	SEEPEX Standard 2 Point Perfomance Test
Document Standard	SEEPEX form FO.QA.04e
QA Testing Mode	customer witnessed

Quality Assurance

Design	Certified GA Drawing Actual Dimensions After Pump Assembly

Documentation