

Data Sheet

Munsch Chemical-Pump



Serial-No's: **W52390-01**

01	Customer: SMS Siemag Process	Designation: Vertical Chemical Pump	Quotation-No.: P050148-05
02	Customer-No.: 14469	Type/ Size: TNP-KL 65- 40-250	Contact: Richard Konradi
03	Order-No.: AT004307	Main Material: PP	MUNSCH-Order-No.: P632143 Pos.: 70
04	Date: 10.10.2014	Total setting depth: 2500.0 mm	Quantity: 1
05	Reference: TEZCAN-CPL		Revision: 00 of 2014.10.13
06	Name: Sump Pump		
07	Customer-Item-No.: 10-P01		

Site / Environment

08	Installation: Indoor	Altitude: m	Site condition: -
09	Details: Wet installation	Hazardous area: -	Ambient temperature min/max.: / °C

Liquid

10	Liquid: Description	Description: Pickling Solution with max.	
11	Components:	Solids: Traces	Operating temperature: °C
12	1 HCl % 0-220 g/l	Solid content: % g/l	Operat. temp. min/max.: / 90.0 °C
13	2 Fe % 0-130 g/l	Solid size: mm	Density: 1.30 kg/dm³
14	3 % g/l	SiO2 &lt; 0,1% + Fe2O3 &lt; 1%	Vapour pressure: bar
15	pH-value at top: min: max		Dynamic viscosity: mPas

Operating conditions

16	Flow rated: 15.0 m³/h	Total head rated: 30.0 m	Design speed: 1450 1/min
17	Flow min./max.: / m³/h	Total head min./max.: m m	Rotation (1): cw
18	Flow min.required: m³/h	Inlet gauge pressure: bar	Power consumption P: 3.95 kW
19	NPSH available: m	Outlet gauge pressure: bar	Efficiency: 40.4 %
20	NPSH required: 1.8 m	Differential pressure: 3.8 bar	P _{max} at rated Impeller-φ: kW
21	Frequency inverter operation: -		P _{max} at max. Impeller-φ: kW

Construction features

22	Flange connection: DIN 2501, PN 16	Impeller design: closed	Bearing lantern: LL 20
23	Inlet flange: DN 65	Impeller-φ min./max.: 220.0 / 285.0 mm	Bearing lubrication: Grease - lifetime
24	Outlet flange: DN 40	Impeller-φ rated: 281.0 actual: 281.0 mm	Radial bearing: 6310 2Z C3
25	Column pipe: with elbow and flange	Balancing hole(s): -	Sole plate: angular
26	- Design: left-right pipe union (with ring)	Setting depth: 1600.0 mm	Fixing holes: with
27	Shaft sealing: Labyrinth seal	Flushing sleeve bearing: medium	Center to pump center: excentric
28	Seal type: MUNSCH Typ 10	Flange connection flushing pipe: -	Remarks: -
29	-	Flange design flushing pipe: -	Support flange: -
30	Intermediate bearing: -	Flushing Rate Pressure	Remarks -
31		Sleeve bearing: l/min 0.0bar	

Accessories

32	Coupling: Without spacer piece	Suction strainer: - Length: mm	Earthing lug: -
33	Type: Flender N-Eupex	Suction pipe: PP Length: 900.0 mm	Add. name plate: Plastic
34	Size: B 95	Suction str. basket: - Length: mm	Lifting device: -
35		Inlet: with suction pipe	UV-protection sole plate: -

Materials

36	Pump casing: PP	Secondary seals: FPM	Connecting bolts: Stainless steel
37	Casing cover: PP	Casing seal (O-ring): FPM	Bolts pump casing: Steel/PVC-coated
38	Impeller: PP	Impeller screw: FPM	Sole plate: PP
39	Pump shaft: Steel	Mechanical seal	Delivery suspension: PP
40	Shaft sleeve: PP	O-Ring dynamic (412.2): -	Casing flange: PP
41	Sleeve bearing: SSiC / SSiC	O-Ring static (412.3): -	Column pipe: PP
42	Stationary / rotating seal ring Product: -		

Driver

43	Delivery: with motor	Nominal power: 5.5 kW	Nominal current at 400 V: 11.4 A
44	- supplied by: Customer	Nominal speed: 1450 1/min	Start-up current: A
45	- mounted by: Munsch	Frequency: 50 Hz	cos φ: 0.8
46	Manufacturer: Siemens	Voltage: 400 V	Enclosure: IP 55
47	Standard: IEC	Thermistors: -	Insulation class: F to B
48	Hazard designation: -	VIK-design: -	Anticondensation heaters: -
49	Design: IM V1 with canopy	Efficiency class: IE2	Located bearing: -
50	Frame size: 132 S		Sound pressure level: 64 db(A)

Painting specification

51	Painting on 2-component epoxy basis, 3 layers	Pump: RAL 2003	Coupling guard: RAL 1003
52	Total dry-film thickness: 130-150 μm	Motor: RAL 7030	

Special painting, special documentation and additional tests are possible upon request

Remarks:

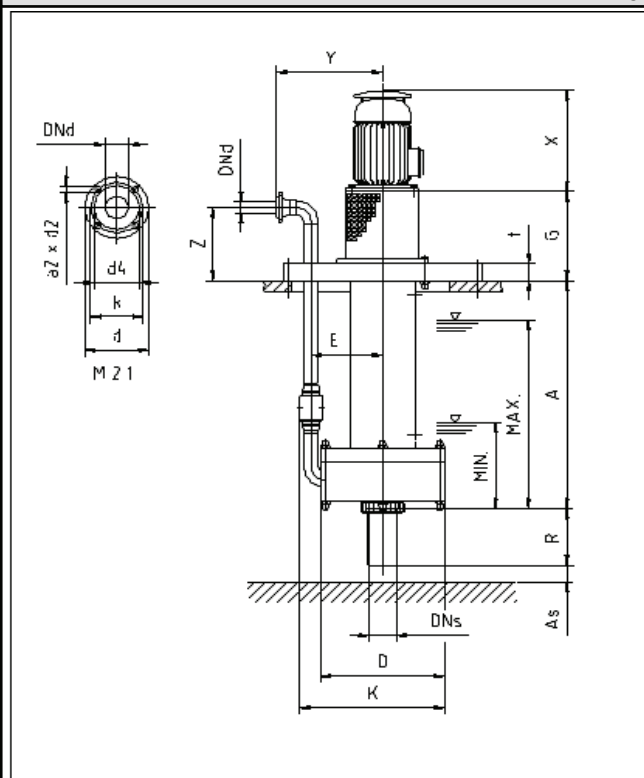
Dimension Drawing Munsch Chemical-Pump



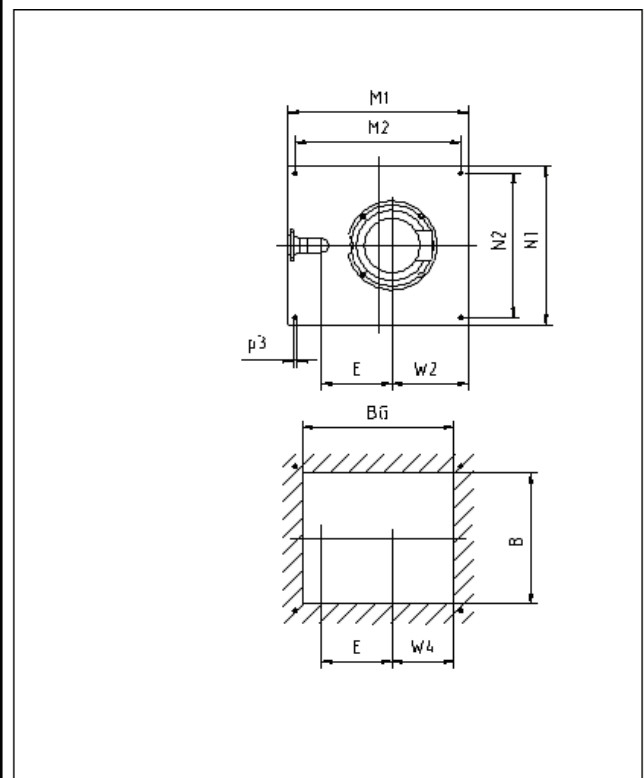
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55	Reference: TEZCAN-CPL	Main Material: PP	Quantity: 1
56	Name: Sump Pump	Revision: 00 of 2014.10.13	
57	Customer-Item-No.: 10-P01	Nominal power: 5.5 kW Speed: 14501/min	

Dimension drawing



Bilddatei: **12301100**



Bilddatei: **1730**

Connection dimensions

58	Flange connection: DIN 2501, PN 16		
59	DNs: DN 65	DNd: DN 40	h: mm
60	Gs: mm	a2: 4	h2: mm
61	Y2: mm	d: 150.0 mm	Y: 350.0 mm
62	Zs: mm	d2: 18.0 mm	Z: 200.0 mm
63	DNd: -	d4: 88.0 mm	
64	Y1: mm	k: 110.0 mm	
65	Z4: mm		

Main dimensions

66	D: 425.0 mm	A: 1600.0 mm	R: 900.0 mm
67	E: 245.0 mm	As: 150.0 mm	R2: mm
68	K: 485.0 mm	MAX: 1500.0 mm	R3: mm
69	t: 60.0 mm	MIN: 270.0 mm	R4: mm
70	Pump type TNP	MIN: Liquid level when starting the pump (For further shift points, please refer to the operating manual)	R5: mm
71	F: mm		R6: mm
72	Pump type TNP-KL		TNP / TNP-KL (AH)
73	G: 335.0 mm	AMIN-AMAX: mm	SA: mm
74	tzf: 20.0 mm	F2: mm	

Special measures, remarks (pump)

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Motor

76	M: 265.0 mm	F: 10.0 mm
77	Z: 4	GA: 41.0 mm
78	S: 14.5 mm	D: 38.0 mm
79	N: 230.0 mm	T: 4.0 mm
80	P: 300.0 mm	E: 80.0 mm
81	X: 500.0 mm	LA: 12.0 mm
82	Q: 266.0 mm	
83	Motor dimensions to european standard	
84		

85	Design: circular	Design: rectangular	Support flange
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86	C: mm	M1: 650.0 mm	M3: mm
87	a: mm	M2: 600.0 mm	M4: mm
88	E2: mm	N1: 560.0 mm	N3: mm
89	LK: mm	N2: 510.0 mm	N4: mm
90	p: mm	p3: 14.5 mm	p4: mm
91	$\alpha 2^\circ$ °	W2: 275.0 mm	t2: mm
92			W3: mm

Option Mechanical Seal (TNP-KL)

93	α 0.0 °	SP1: 0.0 mm
94		

Installation opening

95	B: 460.0 mm	b: mm	BSP2: mm
96	BG: 527.5 mm	E3: mm	BSP3: mm
97	E: 245.0 mm	W4: 215.0 mm	B (AH): mm
98			L: mm

Option Flushing to plain bearing

99	Further Details : attached sheet	Connection: -	Z2: 0.0 mm
100	flushing to plain bearing	SP2: 0.0 mm	h3: 0.0 mm
101		SP3: 0.0 mm	h4: 0.0 mm

The flushing pressure must be 0,5 bar above the pump discharge pressure.
The flushing medium used must be compatible to medium being handled and process .
Please draw your attention to the instruction handbook.

Special measures, remarks (sole plate)

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Weights

103	Pump: 91.80kg	Bearing lantern: 20.70 kg
104	Motor: 45.00kg	Intermediate flange: 7.50 kg
105	Coupling: 2.60kg	Total weight: 167.60 kg

Dimensions

Length: 3291.0 mm	P2Plus 4.2
Width: 560.0 mm	Technical and dimensional details may be subject to changes.
Height: 650.0 mm	