

Burnemann
pumpen



D - 31683 Obernkirchen

Tel. 05724 / 3900 Fax 4344

Order-No.

803 412

Serial. No.

77934

Type

W8.4ZK-144

Capacity

896 m³ / h

Disch. Press.

4,5 bar

Speed

1487 min⁻¹

manufact. year

1999

Abs. Power

217 kW

Viscosity

200 CST

Hacoc №11

Technical specification 1

Item 1 1 pc Ship loading pump

pump type	: W 8.4 zk-144
liquid handled	: heavy fuel oil, M40, M100
operating temperature	: 50..80 °C
operating viscosity	: 200 cSt
specific gravity	: app. 960 kg/m ³
Q	: 895,8 m ³ /h / 200 cSt
press. in suction flange	: ± 0 bar
press. in discharge flange	: 4,5 bar
differential pressure	: 4,5 bar
n	: 1487 r/min
p	: 217,1 kW / 200 cSt
Pm	: 250 kW
NPSH req.	: 4,9 m / 200 cSt

Materials :

casing	- GG-25, cast iron
by-pass valve	- GG-25, cast iron, by-pass valve with internal circulation
screws	- GGG-40, nodular iron
shafts	- 1.4542, Cr-steel
shaft seals	- 4 pcs BURGMANN single acting mechanical seals, M7SF, carbon / Cr-steel/Viton
bearing design	- 4 pcs ball-/roller bearings, oil/grease lubricated
timing gears	- 2 pcs external timing gears, oil lubricated
connections	- suction : DN 300 PN 10, left side discharge : DN 300 PN 16, top
installation	- horizontal
painting	- BORNEMANN standard

PLEASE NOTE !

The pump is equipped with heating coil for medium heating (steam, hot oil, hot water etc.)

El.motor : ABB M2KA 355 S, 250 kW, 1487 r/min, B3, IP-55, EExde IIB T4, 3 x 400 V, 50 Hz, I_N = 430 A, I_S / I_N = 7,2, D.O.L. starting

Scope of supply :

- pump
- by-pass valve, **WITHOUT** handwheel
- heating coil for pump heating (steam, hot oil, hot water)
- coupling, rubber ring, spacer type flexible coupling
- coupling guard, non-sparking
- base plate, without foundation bolts
- el.motor, ready mounted on the pump

Testreport for rotary positive displacement

Qualitätsprüf-Zertifikat DIN 55350-18-4.2.2

Serial.- No.	: 77934	Type	: W8.4zk-144
Comm.- No.	: NP 803.412	Customer	:
Order- No.	: 9-728-13	Item- No.	:
representative :			

Order conditions

Medium	: H.Fuel Oil				
Liquid temperature:	50-80	°C	Viscosity	: 200	mm ² /s
density	: 0,960	kg/dm ³	Capacity	: <u>896</u>	m ³ /h
Suct. pressure	: 0	bar	Disch. pressure	: <u>4.5</u>	bar
Power absorbed	: 217	kW	Speed	: <u>1487</u>	1/min

Test results

Testing medium	: Wasser				
Gear box temp.	: 33	°C	Bearing temp.	: 39	°C
Testing viscosity	: 1	mm ² /s	Hydrostatic test pressure:	PG30 VG30	bar

Measuring date : 19.11.99

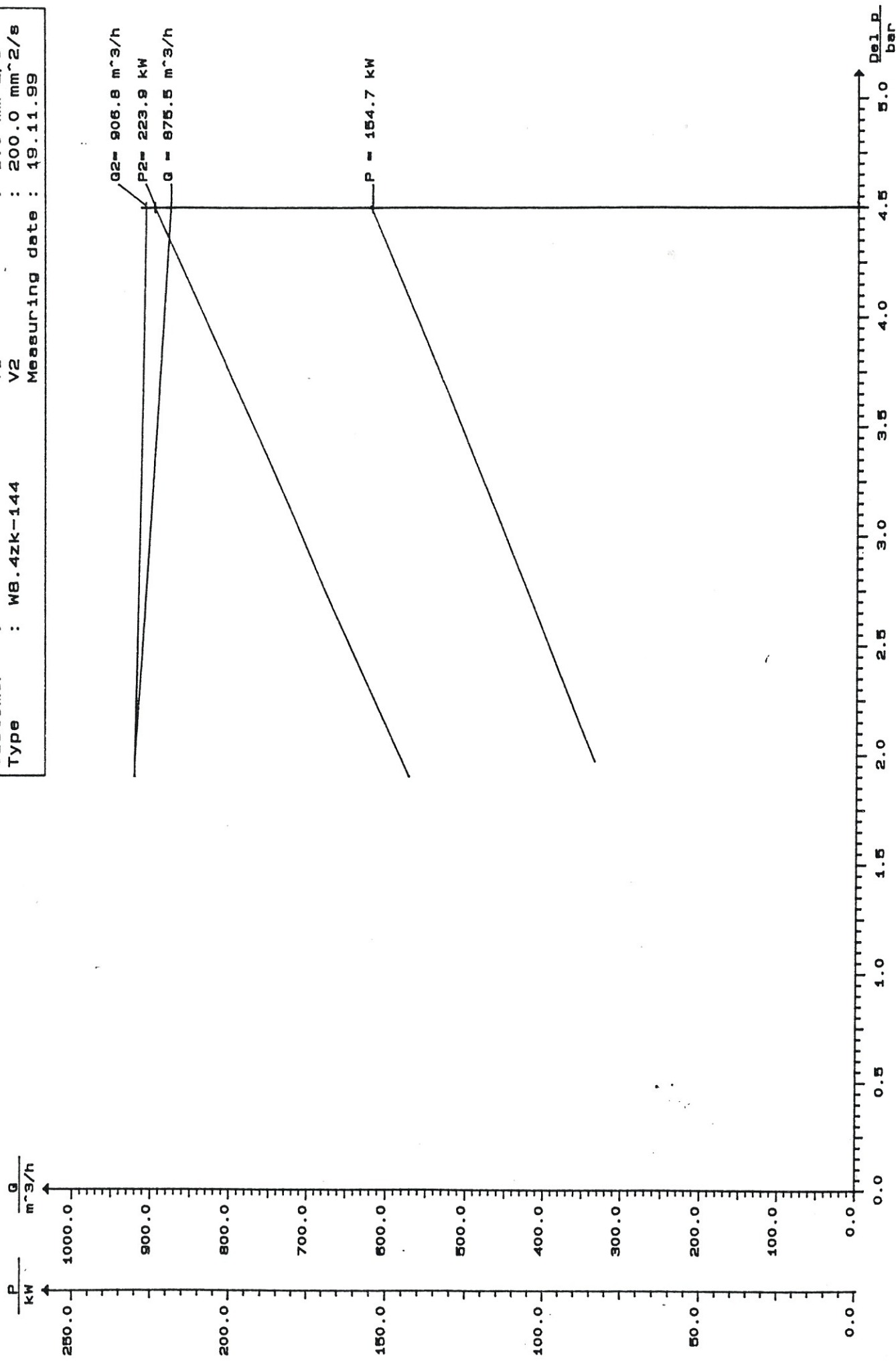
Curve details

Nr	n1 1/min	V1 mm ² /s	T1 °C	ps bar	pd bar	^a p bar	Q1 m ³ /h	M1 Nm	P1 kW	n2 1/min	V2 mm ² /s	Q2 m ³ /h	P2 kW
1	1487	1.00	21.0	1.93	3.90	1.97	921	540	84.1	1487	200	921	146
2	1487	1.00	21.0	1.96	5.05	3.10	900	738	115	1487	200	914	178
3	1486	1.00	20.9	1.98	6.04	4.06	883	924	144	1487	200	909	213
4	1485	1.00	20.8	1.99	6.50	4.51	875	995	155	1487	200	907	222

Pumpen - Prüfstand Bornemann

Serial Nr.: 77934
Comm.- Nr.: NP 803.412
Customer :
Type : WB.4zk-144

n1 : 1487 1/min
n2 : 1487 1/min
V1 : 1.0 mm²/s
V2 : 200.0 mm²/s
Measuring date : 19.11.99



Hydrostatischer Drucktest DIN EN 10204 - 3.1.B

Hydrostatic Pressure Test
Epreuve Hydrostatique
Prueba De Presion Hidrostatica

JHB-Auftrags Nr.: NP 803 412 JHB workshop order no. no. de repère JHB no. ref. JHB	Kunde: client client cliente
Pumpentyp : W 8.4zk - 144 pump type type de pompe tipo de la bomba	Bestell Nr.: 9 - 728 - 13 order no. no. de comm no. del pedido
Maschinen Nr.: 77934 serial no. no. de machine no. de serie	Projekt : project projet proyecto
Betriebsdruck: 4,5 bar g operating pressure pression de service	
Hydr. Testdruck hydrost. test pressure pression d' épreuve	pump casing 30,0 barg valve housing 30,0 barg discharge branch backflow line
Teilebenennung denomination of parts dénomination des pièces	p.casing drwg no 1230 011 05 - 01 v.housing -" 1180 601 01 - 01 d.branch -" b.line -"
Testmedium test medium medium de test	water 20°C
Test-Haltezeit duration of test durée de l' épreuve	30 min

Prüfergebnis: ohne Befund (keine Leckage, kein Druckabfall)

Test result: no objections (no leakage, no pressure drop)

Résultat du contrôle: sans objections (sans chute de pression)

Obernkirchen
date

11.11.1999

Werkssachverständiger
Bornemann qualified expert



Geißler

Joh. Heinr. Bornemann GmbH
Postfach 1162
D-31676 Obernkirchen
Tel. +49 (0) 57 24/3 90-0
Fax +49 (0) 57 24/91 38 46
E-mail: info@bopump.de
Lieferanschrift:
Industriestraße 2
D-31683 Obernkirchen

Geschäftsführer:
Michael Bornemann-Galensa
Wolfgang Heil
Handelsregister Bückeburg; HRB 1597
USt.-IdNr. DE 186998072
Bankverbindungen:
Norddeutsche Landesbank Hannover
BLZ 250 500 00, Kto. 101 032 118
S.W.I.F.T.-Adresse NOLA DE 2H

Commerzbank AG Bückeburg
BLZ 255 414 26, Kto. 819 500 000
S.W.I.F.T.-Adresse COBADEFF 254
IBAN DE 39 2554, 1426 0819 5000 00
Dresdner Bank AG Stadthagen
BLZ 250 800 20, Kto. 4 650 207 00
S.W.I.F.T.-Adresse DRESDEFF 250
Sparkasse Schaumburg-Lippe
BLZ 255 514 80, Kto. 363 101 528



Materialzertifikat DIN EN 10204-2.1

Material Certificate
Certificat des matériaux
Certificado del material

JHB-Auftrags Nr.: NP 803 412 JHB workshop order no. no. de repère JHB no. ref. JHB	Kunde: client client cliente
Pumpentyp : W 8.4zk - 144 pump type type de pompe tipo de la bomba	Bestell Nr.: 9 - 728 - 13 order no. no. de comm no. del pedido
Maschinen Nr.: 77934 serial no. no. de machine no. de serie	Projekt : project projet proyecto
Werkstoffe : materials matériaux materiales	Pump casing 0.6025 Intermediate flange 0.6025 Valve housing 0.6025 Shafts 1.4542 Screws 0.7040 Grooved nuts 1.4542

Hiermit bestätigen wir , daß die von uns eingesetzten Materialien den chemischen Analysewerten und den Festigkeitseigenschaften der DIN ENVorschriften entsprechen

We herwith confirm that the materials used by us correspond to the values of the chemical analysis and to the physical properties of the DIN EN regulations.

Par la présente nous confirmons que les matériaux utilisés par nous correspondent aux valeurs de l'analyse chimique et aux propriétés de résistance.

Por la presente confirmamos que los materiales usados por nosotros se corresponden a los valores quimicos análisis y las propiedades de resistencia de las normas DIN EN.

Obernkirchen
date

23.11.1999

Prüfstandsleiter
Head of the testfield



Geißler

Joh. Heinr. Bornemann GmbH
Postfach 1162
D-31676 Obernkirchen
Tel. +49 (0) 57 24/3 90-0
Fax +49 (0) 57 24/91 38 46
E-mail: info@bopump.de
Lieferanschrift:
Industriestraße 2
D-31683 Obernkirchen

Geschäftsführer:
Michael Bornemann-Galensa
Wolfgang Heil
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Bankverbindungen:
Norddeutsche Landesbank Hannover
BLZ 250 500 00, Kto. 101 032 118
S.W.I.F.T.-Adresse NOLA DE 2H

Commerzbank AG Bückeburg
BLZ 255 414 26, Kto. 819 500 000
S.W.I.F.T.-Adresse COBADEFF 254
IBAN DE 39 2554, 1426 0819 5000 00
Dresdner Bank AG Stadthagen
BLZ 250 800 20, Kto. 4 650 207 00
S.W.I.F.T.-Adresse DRESDEFF 250
Sparkasse Schaumburg-Lippe
BLZ 255 514 80, Kto. 363 101 528

