

Effektive Fjernvarmepumper

PROVEN TECHNOLOGY



PROVEN TECHNOLOGY

DESMI Group Companies



● DESMI Group companies

Americas:

DESMI Inc. Chesapeake
Applied Fabric Technologies Inc., New York
DESMI Ro-Clean Latinoamerica S.A., Ecuador

EMEA:

DESMI A/S, Denmark
DESMI Pumping Technology A/S, Denmark
DESMI Danmark A/S, Denmark
DESMI Ro-Clean A/S, Denmark
DESMI Ocean Guard A/S, Denmark
DESMI Contracting A/S, Denmark
DESMI Ro-Clean Ltd, U.K.
DESMI Ltd., U.K.
DESMI AS, Norway
DESMI GmbH, Germany
DESMI B.V., The Netherlands
DESMI France, France
DESMI Middle East, U.A.E.

APAC:

DESMI Pumping Technology (Suzhou) Co., Ltd., China
- Shanghai Liaison Office, China
- Tianjin Liaison Office, China
- Guangzhou Liaison Office, China
- Chongqing Liaison Office, China
DESMI Korea, Seoul, Korea
DESMI Korea, Busan, Korea
DESMI Singapore Pte. Ltd., Singapore
DESMI Ro-Clean Asia, Indonesia
DESMI India, Mumbai, India



PROVEN TECHNOLOGY

Central Heating Systems

- Transfer-/ Netpumps
- Loading-/shuntpumps etc
- Jockey pumps
- Condensate pumps
- El-motors
- Converter
- Accessories



PROVEN TECHNOLOGY

Transfer- /Netpumps

DESMI's In-line pumps

Capacity:

- Max. 4000 m³/h
- Max. 220 mVs
- Max. 150°C



PROVEN TECHNOLOGY

Construction

- ESL for low capacity
- NSL for high capacity
- DSL for extra high capacity

- Pump casing: Cast iron, Ductile iron
- Impeller: Bronze
- Shaft: St. steel
- Shaft seal: Mechanical



PROVEN TECHNOLOGY

Vertical pumps DPV

- Capacity:
- Max. 90 m³/h
- Max. 400 mVs



PROVEN TECHNOLOGY

Assessories

- Concrete base
- Flange
- Compensatorer
- Valve
- Manometers
- Coatning



PROVEN TECHNOLOGY

Pump Selection Program WinPSP

Selection of pumps for central heating

- Pump Selection
- Selection of el-motor
- Selection of converter
- DESMI TEST BED

WinPSP 2005 Pumpe Udvælgelses Program - Version 1.23 (13.07.2006) - DB: 032 (04.07.2006)

DESMI Pumper

Pumpe udvælgelseskræterier

Pumpetype: Vertical Inline Centrifugal Pump
 Pumpeserie: NSL
 Kapacitet: 650,00 m³/h
 Tryk: 32,00 mLC
 Vægtfylde: 0,970 kg/l
 Min. eff.: 50,00 %
 Max afvigelse: 10,00 %
 Drivenhed: El-motor 3 x 400V - 50Hz + 5%
 specific

Kurvedata

H (Q) NPSH (Q) P (Q) Eta (Q)

NSL250-330B

Motor type	Løbehjul	Rpm	H (mLC)	P (kW)	IOL (kW)	Eta (%)	ig NPSH	ægtfylde	fiskositet
67,00 kW ABB M3AA 225SM	330	1475	29,44	60,59	63,16	83,47	5,08	0,97	1,00
75,00 kW ABB M3AA 250SM	345	1475	32,17	70,38	74,68	78,53	4,83	0,97	1,00
88,00 kW ABB M3AA 250SM	375	1475	32,23	72,95	75,79	75,91	5,38	0,97	1,00
88,00 kW ABB M3AA 250SM	415	1475	30,68	86,91	87,59	60,66	10,44	0,97	1,00
90,00 kW SEVER 1.2K 315 I	501	985	32,16	69,12	84,72	79,95	2,73	0,97	1,00

Vælg motor Kurve markering Design valg Målskiter
 Bruger værdier **Fjern makeringer** Yderlige informationer Flyt til Word

WinPSP 2005 Pumpe Udvælgelses Program - Version 1.23 (13.07.2006) - DB: 032 (04.07.2006)

DESMI Pumper

Pumpe udvælgelseskræterier

Pumpetype: Vertical Inline Centrifugal Pump
 Pumpeserie: NSL
 Kapacitet: 650,00 m³/h
 Tryk: 32,00 mLC
 Vægtfylde: 0,970 kg/l
 Min. eff.: 50,00 %
 Max afvigelse: 10,00 %
 Drivenhed: El-motor 3 x 400V - 50Hz + 5%
 Motorleverandør: No specific

Kurvedata

H (Q) NPSH (Q) P (Q) Eta (Q)

NSL250-330B

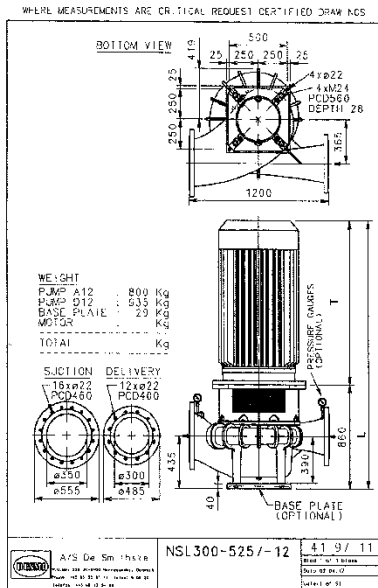
Pumpe	Motor type	Løbehjul	Rpm	H (mLC)	P (kW)	IOL (kW)	Eta (%)	ig NPSH	ægtfylde	fiskositet
NSL250-330B	67,00 kW ABB M3AA 225SM	330	1475	29,44	60,59	63,16	83,47	5,08	0,97	1,00
NSL250-330B	Ingen motor valgt	330	1523	31,99	66,11	69,53	83,15	5,28	0,97	1,00
NSL250-330B	37,00 kW SEVER 1.2K 225 I	270	1470	12,29	30,91	30,94	68,32	5,07	0,97	1,00
NSL250-330B	67,00 kW ABB M3AA 225SM	330	1475	29,44	60,59	63,16	83,47	5,08	0,97	1,00

Næste Vælg motor Kurve markering Design valg Målskiter
 Tilbage Bruger værdier Fjern makeringer Yderlige informationer Flyt til Word

↑ Selection of pump

← Selection of speed / impeller Efficiency

PROVEN TECHNOLOGY



XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

XXXX

THE DESMI GROUP

DESMI

Tekniske Specifikationer H. H. Hansen

Yderlige informationer

Tilbuds nr.	Positions nr.	Fjernvarme, Hovedpumpe
Pumpe	NSL300-525/A12	
Pumpetype	Vertical Inline Centrifugal Pump	Pumpeserie NSL Vægtfylde 0,970 kg/l
Væskemedie	Fjernvarmevand	Pumpe model NSL300-525

Pumpedata

Kapacitet	800,00 m³/h
Total trykhøjde	49,97 mLC
Hastighed	1156 Rpm
Effektforbrug	126,05 kW
Nødvendig NPSH	3,98 mLC
Max belastning	153,68 kW

Motor Data

Fabrikat	DESMI
Motor type	3x400V – 50Hz – 5%
Drivenhed	2D315L2-6
Konstruktion	T.E.F.C
Isolerings Class	F-IP55
Motor hastighed	985 Rpm
Ydelse	132 kW
Leveret af	DESMI A/S

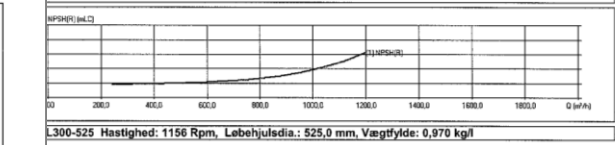
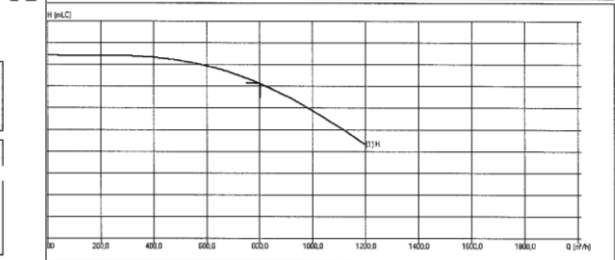
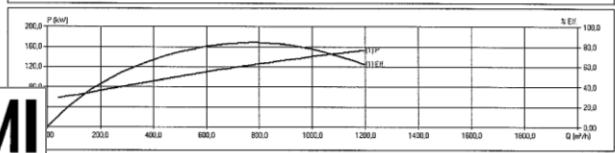
Max drifttryk 137,7 mLC
 Test tryk
 Tolerance: ifølge ISO 9906 ver. 2

Specifikation:

Pumpehus	Støbejern
Suge/tryk flange	350/300 mm.
Løbehjul	Bronze
Løbehjulsdiameter	525,00 mm
Aksel/Tap	Rustfrit stål
Aksetlætning	Mekanisk kul/ keramik
Kugleleje	-
Kobling	Monoblok
Omdrejningsretning	Med ur
Manometer	Inkluderet
Klasse selskab	Ikke inkluderet

H. H. Hansen

Ifølge ISO 9906 ver. 2



L300-525 Hastighed: 1156 Rpm, Løbehjulsdia.: 525,0 mm, Vægtfylde: 0,970 kg/l

Dynamic and hydrostatic test

- Performance test of pumps
- Performance test of pumps and Converter
- Hydrostatic test



PROVEN TECHNOLOGY

Energigruppen Herning

2 stk. DESMI NSL-pumpe





Vestforbrænding

12 stk.

NSL200-415B

200kW

6 stk. Fremløbspumper

6 stk. Returpumper



Aalborg
Fjernvarme,
Gasværksvej
4 stk. DESMI NSL-pumper

DESMI



AffaldVarme Århus NSLH300-525

500 kW
1100 m³/h
115 mvs

PROVEN TECHNOLOGY

MARINE & OFFSHORE

INDUSTRY

OIL SPILL RESPONSE

DEFENCE & FUEL

UTILITY

Central Heating Systems

Lower temperature

- Lower temperature 80-90⁰ C compare to 105-115⁰ C is the best way to reduce the total use of energy in district heating system (reduce energy loss from pipeline)
- Possibly 80% of time 80-90⁰ C
20% of time 105-115⁰ C (summer – winter)
- 100% of time 80-90⁰ C may demand bigger pumps (higher flow)

Central Heating Systems

4-pol motor 1900 rpm

- A better selection of the main pumps for circulation can be a relative smaller pump size - running 1900 instead of 1450 to reach the peak-point (a few winter days)
- A relative smaller pump ensure high efficiency in spring, summer and autumn (many running hours)

PROVEN TECHNOLOGY

Central Heating Systems

Examples list of Norway installations

- Hønefoss
- Lillestrøm
- Eidsvoll
- Moss
- Larvik
- Bø
- Tussa Energi/Ørsta
- Mo i Rana
- Hamar
- Trysil