

Introduction to DESMI Pumps Selection Program WinPSP (A)

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Table of Contents:

Disclaimer	3
Example on how to select a DESMI pump in Win-PSP	4
Step 1: DESMI pump type and series	4
Step 2: Capacity and pressure	4
Step 3: Features	4
Step 4: Voltage and frequency	5
Step 5: Search	5
Step 6: Selecting pump model	5
Step 7: Selecting pump working scenario	6
Step 8: Design values	8
Step 9: Configuration and feature options	8
Step 9a: Priming Ejector as an option	9
Step 9b: Priming Pump B114 as an option	10
Step 10: Delivery terms	11
Step 11: Additional information	12
Step 12: Move to Word	13
Supplement	13

Disclaimer

DESMI will not be responsible for any damages caused by the use or misuse of this selection program.

The program is distributed with no warranty expressed or implied.

DESMI will not be responsible for any losses incurred, either directly or indirectly, by the use of this program.

DESMI reserves the right to make modifications at any time.

Specifications are subject to change without notice.

Example on how to select a DESMI pump in Win-PSP

When selecting a pump, all the white areas are used to specify the pumps performance.

This pump selection example is based on the following specifications:

Media:	Fresh water
Pump type:	Vertical in-line
Pump series:	NSL
Capacity:	100 m³/h
Pressure:	25 mLC

Pump Statestims With PSP Pump Statestims	WinPSP 2012 Pump Selection Program Ets (Q)	P (Q)	NPSH (Q)	Curves Data H (Q)	-		Pump Solection 1 Pump Query Criteria Pump Type Pump series
Stramp Lowery Contern Universe	Eta (Q)	P (Q)	NPSH (Q)	H (Q)	[Pump Query Criteria Pump Type Pump series
Parage Tayles Image Tayles	Eta (Q)	Ρ (Q)	NPSH (Q)	н (q)		-	Pump Type
Plang naming		2				¥	Pump series
Capacity 0.00 a/h Directed person 0.00 aLC Station Pressor 0.00 aLC Versenty 1.00 bg1 Min. Els. 0.00 k Press Staty Factor 0.00 k	+	8					
Olderecting pressure 0.00 aLC					m ³ /h	0.00	Capacity
Statistic Pressure 0.00 att. Pressing 0.00 att. Viscosity 1.00 bg/s Mass Staty 0.00 att. Press Staty Factor 0.00 att. Press Staty Factor 0.00 att. Press Staty Factor 0.00 att.					mLC	0,00	Differential pressure
Jonniky 1.000 kg/l 1.000 kg/l Viscosity 1.000 kg/l 1.000 kg/l Nine EL, 50.000 kg/l 1.000 kg/l Power Safety Factor 0.000 kg/l 1.000 kg/l Power Safety Factor 0.000 kg/l 1.000 kg/l Power Safety Factor 0.000 kg/l 1.000 kg/l					mLC	0.00	Suction Pressure
Structury 1000 bS1 Hin, EB, 50.00 kg, Max, day, 90.00 kg, Max, day, 90.00 kg, Max, day, M			/		kg/l	1,000	Density
Nin, Eli, 5003 & Nin, dev. 90.0 & Pores Study Enclar, 1907-001 - 51 - 51 - 51 - 52 - 52 - 52 - 52 - 5			1		cSI	1,000	Viscosity
Power Safety Factor 0.00 2 Power Symphy Einotra 3.4 60/0-1601a + 5% - Presetch Monard March March March 100 Presetch Monard Ma			1		2	100 \$ Max.dev. 90.00	Min. ER. 50.00
Power Supply Elector 3 x 4607 - 50Hz + 55 + Pre-selected Motorsy/Manufactures standard +	A Constanting		1.1			100 %	Power Safety Factor: 0.00
Pre-selected Motorsy Manufactures standard +						otor 3 x 460V - 60Hz +- 5% *	Power Supply Elector
			-			sufacturers standard 🛛 🔸	Pre-selected Motorsu Manufac
Search Pump					1	Search Pump	
				100			
Pump List							Pump List

Pump Query Criteria

Pump Type

Pump series

Step 1: Pump type and series

To select pump type click on "Pump Type" and "Pump series" scroll bars. The DESMI pump types are now displayed. Select required type and series.

Series description can be found in pump manual on www.desmi.com

Step 2: Capacity and pressure

Type in required capacity and differential pressure. Type in suction pressure while it is required or keep it zero. Press enter to make next input field available.

25,00	mLC
0,00	mLC
	25,00 0,00

NSL

Vertical Inline Centrifugal Pump

-

•

Step 3: Features

Type in each white field under following guide.

Density: Fresh water has a density of 1.000 kg/l, and seawater 1.025 kg/l.

Density				1.000	kg/l
Viscosity (>=10 cSt)				1.000	cSt
Min. Eft.	50.00	%	Max.dev.	20.00	%
Power Safety Factor:	5.00	%			

Viscosity: Clean water has a viscosity of 1.000 cSt.

Min. Eft: This feature will automatically force the program to select a pump, which has a minimum efficiency of 50% in the duty point.

Max. dev.: This feature will automatically force the program to select a pump, which differential pressure is within +/-20% on user's pre-selected differential pressure.

Power Safety Factor: This feature will automatically force the program to select a motor, which rate power output is at least 5% larger than maximum pump shaft power.

Step 4: Voltage and frequency

Power Supply: Click on "Power Supply" scroll bar and select one type that meets your requirements.

Power Supply	El-motor 3 x 460V - 60Hz +- 5%	•
Pre-selected Motorsu	Manufacturers standard	-

Search Pump

Pre-selected Motor: This feature allows the user to select between a various ranges of electric motors. The manufacturer's standard is DESMI motor produced by BEVI. *If your preference is not in DESMI default supply scope, other brand IEC standard motors or NEMA*

standard motors can be delivered according to agreement with DESMI. Please continue the selection with choosing manufacturer's standard and later ask DESMI to revise the motor brand in selection output.

Step 5: Search

Press "Search Pump" button and the program will now find the pumps that meets your specifications.

Step 6: Selecting pump model

Given the different options of the NSL models, NSL125-265 is chosen on the basis of:

Efficiency, NPSH, speed, el-motor size and cost index etc.:

	ow License to date: 2019-01-31								
Pump Selection 1									
Pump Selection 1								WinPS	P 201
Pump Query Crite	ria		Curves D	ata				Pump Selecti	on Progra
Ритр Туре	Vertical Inline Centrifugal Pump 🗨		Н	(Q)	NPSH (Q)	P (Q)	Eta	a (Q)
Pump series	NSL 💌					NSL	125-265		
Capacity	100.00	m³/h		^{30.0} T					
Differential pressure	25.00	mLC		24.0					
Suction Pressure	0.00	mLC		24.0		1			
Density	1.000	kg/l		18.0 -		-/			-
Viscosity (>=10 cSt)	1.000	cSt	mLC	10.0		1 1		X	
Min. Eft.	50.00 % Max.dev. 20.00	%		12.0 -		/ /		10000	
Power Safety Factor:	Electric mater 2 # 4601/ 60Hz + -			6.0 -					-
Power Supply Proceeded Motorey	Manufacturers standard								
	Search Pump			U.U -+ 0.1	0 50.0	100.0	150.0	200.0	250.0
							m³/h		
Pump List			Ľ	-	-				
EU CH US Pum	p (Best price unit Motor	Im 01.4 15/19KW Ma	p. Dia rpm	H(mLC) F	P(kW) NOL(kW)	Eta(%) BE	P(%) NPSHr(mL	C) Density Vi	scosity
	00-330 (2,328 EUR) 18.00 kW 3D 16	0 L-4 15/18KW Ma	270 1752	30.09	11.75 14.65	69.80	71.18 2.	.00 1.00	1.00
F F F NSL	25-265C (2,456 EUF 18.00 kW 3D 16 25-265B (2,330 EUF 22,20 kW 3D 16	0 L-4 15/18KW Ma	238 1752	24.96	9.84 14.82 12.35 18.09	69.11	76.09 1. 68.72 2	.68 1.00	1.00
E E E NSL1	50-265 (2,284 EUR) 18.00 kW 3D 16	0 L-4 15/18KW Ma	238 1752	24.95	12.40 17.04	54.83	79.05 3.	.81 1.00	1.00
	50-2158 (1,935 EUF 18.00 kW 3D 16 30-330 (2,276 EUR) - 18.00 kW 3D 16	i0 L-4 15/18KW Ma i0 L-4 15/18KW Ma	215 1752 308 1752	22.11	11.10 15.22 12.84 13.59	54.28 53.41	79.50 4. 60.96 2.	.09 1.00	1.00
E NSL1	00-330E (2,328 EUF 13.20 kW 3D 16	0 L-6 11/13,2KW M	330 1164	21.41	7.79 9.58	74.92	75.03 1.	.35 1.00	1.00
	20-330 (2,036 EUR) 13.20 KW 30 16		330 1164	22.66	8.64 12.43	71.46	73.37		1.00
	Select Motor	Part list		Design Va	alues	Dimensional	Sketch		
Next							4		

Pump (Best price unit) is only an estimated guide price for pump unit only. Click on the bar of NSL125-265, and press "Next" button at the bottom left, the pump model is now selected.

Step 7: Selecting pump working scenario

Four pump working scenarios on selected pump model are given.

- 1. Required capacity and differential pressure with system calculated impeller diameter and nominal rotation speed.
- 2. Required capacity and differential pressure with full size impeller and system calculated rotation speed.
- 3. Required capacity and system calculated differential pressure with minimum impeller diameter and nominal rotation speed.
- 4. Required capacity and system calculated differential pressure with full size impeller and nominal rotation speed.

The working scenario is selected on the basis of:

	1.2018)		
Pump Selection 1			×
Pump Selection 1			WinPSP 2018
Pump Query Criteria	Curves Data		Fullip Selection Flogram
Pump Type Vertical Inline Centrifugal Pump 💌	н (Q)	NPSH (Q) P (Q)	Eta (Q)
Pump series NSL 💌		NSI 125-265	
Capacity 100.00 m³/h	30.0		
Differential pressure 25.00 mLC			
Suction Pressure 0.00 mLC	24.0		
Density 1.000 kg/l	18.0		
Viscosity (>=10 cSt)	mLC		
Min. Eft. 50.00 % Max.dev. 20.00 %	12.0		
Power Safety Factor: 5.00 %	6.0		Allaca
Power Supply Electric motor 3 x 460V · 60Hz +· -			
Pre-selected Motorsu Manufacturers standard	0.0	50.0 100.0 150.0	200.0 250.0
Search Pump	0.0	m³/h	200.0 200.0
Pump List	1		
EU CH US Pump (Best price unit on Motor	Imp. Dia rpm H(mLC) P(i		Hr(mLC) Density Viscosity
E E F NSL125-265 (2,237 EUR) 18:00 kW 3D 160 L-4 15	/18KW Ma 238 1752 25.21 265 1585 25.00	9.39 12.97 73.14 78.37 9.17 12.29 74.29 78.37	2.26 1.00 1.00
E E F NSL125-265 (2,237 EUR) 9.00 kW 4A 132 M1-4 7,	5/9KW Mai 205 1740 17.55	6.40 8.53 74.78 78.37	3.31 1.00 1.00
E E F NSL125-265 (2,237 EUR) 18.00 kW 3D 160 L-4 15	/18KW/Ma 265 1752 31.17 1	1.80 16.59 71.95 78.37	1.85 1.00 1.00
Next Select Motor D	urve mark Design Values	Dimensional Sketch	
Back Custom Values R	eset mark General Informatio	n Move to Word	(C) 2012 · DESMI A/S

Required duty point and rotation speed:

In this case, system calculated impeller diameter and nominal rotation speed is selected. As a consequence the suitable motor is selected by system. It is 18.00 kW manufacturer's standard 3D 160 L-4.

Press "Next" button at the bottom left, to finalize the pump working scenario. Press "Back" button at the bottom left, to re-select pump model.

Below description is prepared for advanced user who has adequate pump, pumping and motor technical knowledge to customize working scenario by own. DESMI does not guarantee that your designed working scenario can be achieved by DESMI pumps. Please consult DESMI on the feasibility of your customized working scenario.

1. If you want to select another size of motor, press "Select Motor" button at the bottom left side, to select another motor in pop up window. Click on "OK" button to finish the selection and close the sub-window. Now your selection is displayed in working scenario list.

WinPSP 2018 Pump Selection Pro	gram - Version 3.102 (11.01.2018) - [DB: 446 (12.01.2018)			
File Option Tools Window	License to date: 2019-01-31				
D Pump Selection 1					23
Pump Selection 1	. (WinPSP 2018
Pump Query Criteria	Motor Selection				
Pump Type Vertic	^{alln} Pump informati	on			WinPSP 2018
Pump series NSL	Pump	NSL125-265			Pump Selection Program
Capacity	NOL		12.97 kW		
Differential pressure	Speed		1752 rpm		MEN S
Suction Pressure	Motor Data				8-11
Density	Motor	3D 160 L-4 1	 5/18KW		
Viscosity (>=10 cSt)	Brand	Manufacturers	standard		
Min. Eft. 50.0	Power Supply	Electric motor 3 x 460V · 6)Hz +- 5%		
Power Sarety Factor: Flectri	em Power		18 kW		Dr
Pre-selected Motorsu Manu	ach Poles		4		
	Speed		1752 rpm		
	Colort Motor				
Pump List					
EU CH US Pump (Bes		5peed Power 1 1752 18.00 3	Totor D 160 L-4 15/18KW	Brand Manufacturers standard	Size Buildsize Poles y 160 V1 4
E E F NSL125-265	12.	3516 18.00 3	D 160 M2-2 15/18KW	Manufacturers standard	
E E F NSL125-265		876 13.20 3	D 180 L-2 18,3722,2KW	Manufacturers standard	180 V1 2 0
		1164 18.00 3	D 180 L-6 15/18KW	Manufacturers standard	180 V1 6
				Ok	Cancel
Next	Select Motor	Curve mark	Design Values	Dimensional Sketch	
Back	Custom Values	Reset mark	General Information	Move to Word	(C) 2012 · DESMI A/S

2. If you want to change the rotation speed and impeller diameter, press "Custom Values" button at the bottom left side, to enter in designed speed and impeller diameter in pop up window. Click on "OK" button to finish the selection and close the sub-window. Now your selection is displayed in working scenario list.

WinPSP 2018 Pump Selection	on Program - Version 3.102 (11.01.2018) ow License to date: 2019-01-31	- DB: 446 (12.01.2018)				
B • Pump Selection 1						×
Pump Selection 1						WinPSP 2018
Pump Query Criter	ia	_	Curves Data			Pump Selection Program
Pump Type	/ertical Inline Centrifugal Pump 💌		н (Q)	NPSH (Q)	P (Q)	Eta (Q)
Pump series	NSL 💽				NSL125-265	
Capacity	100.00	m³/h	30.0			
Differential pressure	25.00	mLC	24.0			
Suction Pressure	0.00	mLC	24.0			
Density	1.000	kg/l	18.0			
Viscosity (>=10 cSt)	1.000	cSt	mLC			
Min. Eft.	50.00 % Max.dev. 20.00	%	12.0			100000
Power Safety Factor:	5.00 %		Pump Query Crite	ria		
Power Supply	Alamafacturare standard		Speed (0 - 3600)		1752.00 rom	
Fie-selected motorsuj	Search Pump		Imp. Dia (205 - 265)	· · · · · ·	238.00 mm 0.0	200.0 250.0
-	Collor Hanp		Density		1.000 kg/l	
	10			Ok	Cancel	
EU CH US Pump	(Best price unit on Motor 5-265 (2,237 EUR) 18.00 kW 30	0 160 L-4 15/18KW Ma	238 1752 25.21	9.39 12.97	73.14 78.37	r(mLC) Density Viscosity 2.26 1.00 1.00
E E F NSL12	5-265 (2,237 EUR) No motor sele 5-265 (2,237 EUR) 9.00 kW 44	ected 132 M1-4 - 7 5/9KW Mai	265 1585 25.00	9.17 12.29	74.29 78.37	<u>1.54 1.00 1.00</u> 3.31 1.00 1.00
E E F NSL12	5-265 (2,237 EUR) 18.00 kW 30	0 160 L-4 - 15/18KW Ma	265 1752 31.17	11.80 16.59	71.95 78.37	1.85 1.00 1.00
	5-265 (2,237 EUH) 18:00 kw -30	9 160 E-4 15/18KW Ma	238 1752 25:21	9.39 12.97	73.14 78.37	2.26 1.00 1.00
Next	Select Motor	Curve mark	Design Valu	ues Dime	ensional Sketch	
Back	Custom Values	Reset mark	General Inform	nation M	love to Word	(C) 2012 - DESMI A/S

3. Press "Next" button at the bottom left, to finalize the pump working scenario.

Step 8: Design values

Press "Design values" button at the bottom right to pop up a sub-window to select pump features on main parts material, configuration, motor, manometers and shaft seal material, etc.

File Option Tools Win	tion Program - Version 3.102 (11.01.2018) dow License to date: 2019-01-31	- DB: 446 (12.01.2018)				I	- • ×
Pump Selection 1							×
Pump Selection 1	I	1				Winl	PSP 2018
Pump Query Crite	ria	<u>Cur</u>	ves Data			Pump Se	Jection Program
Ритр Туре	Vertical Inline Centrifugal Pump 🗨		н (Q)	NPSH (Q)	P (Q)	Ý	Eta (Q)
Pump series	NSL 💌			N	SL125-265	5	
Capacity	100.00	m³/h	30.0			-	
Differential pressure	25.00	mLC	24.0				
Suction Pressure	0.00	mLC	24.0				
Density	1.000	kg/l	18.0				_
Viscosity (>=10 cSt)	1.000	cSt m	12.0				
Min. Eft.	50.00 % Max.dev. 20.00	x	12.0	11			
Power Safety Factor:	Electric motor 3 v 460V - 60Hz +		6.0				
Power Supply Pre-selected Motors	Manufacturers standard						
	Search Pump		0.0	50.0 10	0.0 150.0	200.0	250.0
					m³/h		
Part and price sp	ecifications						
Item no.	EU CH US Description	re standard 2D 1601.4 15/19K)	u (19.00 k)u)		Quantity 1.00	Discount %	Price EUR
Total price	Motor. Manuacture	15 standard 50 100 E-4 115/10(3	(10.00 KW)		1.00	0.00	0.00
Nevt	Select Motor	Curve mark	Design Values	Dimensir	anal Sketch		
Back	Custom Values	Beset mark	General Informat	ion Move	to Word	(0) 001	
Dack				M0V6	10 11 010	(C) 201	2-DESMI A/S

Step 9: Configuration and feature options

Known combination: Click on one bar to select suitable material and configuration. Other material can be delivered according to agreement with DESMI.

Pump configuration description can be found in pump manual on www.desmi.com

ĸ	now	n co	mbinatior	IS											
E	L CI	- U	E Material	Pump Casing	Impeller	Shaft	Shaft Seal	1	Configur	ation	Cor	nfigura	tionsc	ode	Description
	G		A	Grey cast iron (G	NiAlBz DS/EN 1	Duplex Stainless	Mechanical Carbon/Cei	12							▲
E	E	G	A	Grey cast iron (G	NiAlBz DS/EN 1	Duplex Stainless	Mechanical Carbon/Cer	02							(+/-) concept see FO structure
	G	G	A	Grey cast iron (G	NiAlBz DS/EN 1	Duplex Stainless	Mechanical Carbon/Cer	12							(+/-) concept see FO structure
	i G	G	A	Grey cast iron (G	NiAlBz DS/EN 1	Duplex Stainless	Mechanical Carbon/Cer	13							(+/-) concept see FO structure
	i G	G	A	Grey cast iron (G	NiAlBz DS/EN 1	Duplex Stainless	Mechanical Carbon/Cer	14							(+/-) concept see FO structure
	i G	G	A	Grey cast iron (G	NiAlBz DS/EN 1	Duplex Stainless	Mechanical Carbon/Cer	15							(+/-) concept see FO structure
E	E	F	D	Bronze (RG5)	NiAlBz DS/EN 1	Duplex Stainless	Mechanical Carbon/Cer	02							(+/-) concept see FO structure
E	G	G	D	Bronze (RG5)	NiAlBz DS/EN 1	Duplex Stainless	Mechanical Carbon/Cer	13							(+/-) concept see FO structure
	E	G	D	Bronze (RG5)	NiAlBz DS/EN 1	Duplex Stainless	Mechanical Carbon/Cer	14							(+/-) concept see FO structure
E	E	G	D	Bronze (RG5)	NiAlBz DS/EN 1	Duplex Stainless	Mechanical Carbon/Cei	15							(+/-) concept see FO structure

Select Motor: Click on one bar to select suitable efficiency class, heating element and rain cap. More features can be delivered according to agreement with DESMI.

Coloct Motor	da	da	da	Manias Itom No.	Puildaiza	Heat	Can	
SEIECL MULUI	uc	uc	uc	mapics item no	Dullusize	пеас	Lah	
844400	D	E	G	Manufacturers standard 3D 160 L-4 15/18KW (18.00	V1	False	False	
844400IE2	D	Е		Manufacturers standard 3D 160 L-4 15/18KW (18.00	V1	False	False	
844403	D	Ε		Manufacturers standard 3D 160 L-4 15/18KW (18.00	V1	True	False	
844403IE2	D			Manufacturers standard 3D 160 L-4 15/18KW (18.00	V1	True	False	-
•								•

Feature Option: Click on scroll bars to select manometers and shaft seal material. NITRIL is for seawater application and EPDM for high temperature applications. Keep "Select Addon" scroll bar unselected if pump should not be with priming function.

Press "Ok" button at the bottom to finish the configuration and feature option selection, and close the sub-window.

Design Values													
Design Values										Feature Opti	on	Selected I	temNo
Pump	NSL12	25-265 (Imp. Dia = 2	38.00 mm)							MANOMETER -1/	'5 BAR 💌	672515	
Motor	Manuf	acturers standard 3D	160 L-4 15/18	KW (18.00 kW)					NITRIL Ø38	•	672573	
Material	A	Pump casing: Cast	iron + cast iron a	loys. Impeller: N	NiAlBz					Select AddOn	•		
Configuration	02	Monobloc design w	ith bearing										
Configuration													
Configurationscode													
Configurationscode													
Standart/Spec.	Standa	ard											
Description	(+/·) c	oncept see FO struc	ure										
Partlist	67264	1	As	sambly drawi	ing	410326							
Dimensional Sketch	41039	4	Sp	arepart draw	ving								
Select Motor dc dc	dc Ma	apics Item No			Buildsize	He	ıt	Сар	•				
844400 D E	G Ma	anufacturers standari anufacturers standari	3D 160 L-4 15 13D 160 L-4 15	/18KW (18.00 /18KW (18.00	V1 V1	Fals	e •	False					
844403 D E	Ma	anufacturers standari	3D 160 L-4 15	/18KW (18.00	V1	True		False					
844403IE2 D	Ma	anufacturers standari	3D 160 L-4 15	/18KW (18.00	[V1	True	•	False	► ►				
Known combinations									_				
EL CH US Material Pump	Casing	Impeller	Shaft	Shaft Seal		Confi	uration	Configu	rationscode		Description		
G G A Grey	cast iron	(G NiAlBz DS/EN 1	Duplex Stainles:	Mechanical (Carbon/Cei	12				1			-
E E G A Grey	cast iron	(G NIAIB2 DS/EN 1 (G NIAIB2 DS/EN 1	Duplex Stainles: Dupley Stainles	Mechanical (Carbon/Cer	02				(+/-) concept se	e FO structure		
G G G A Grey	cast iron	G NIABZ DS/EN 1	Duplex Stainles: Duplex Stainles:	Mechanical (Carbon/Cei	13				(+/-) concept se	e FO structure		
G G G A Grey	cast iron	(G NiAlBz DS/EN 1	Duplex Stainles:	Mechanical 0	Carbon/Cei	14				(+/-) concept se	e FO structure		
G G G A Grey	cast iron	(G NiAlBz DS/EN 1	Duplex Stainles:	Mechanical (Carbon/Cei	15				(+/-) concept se	e FO structure		
E E F D Bronz	te (RG5)	NiAlBz DS/EN 1	Duplex Stainles:	Mechanical 0	Carbon/Cei	02				(+/-) concept se	e FO structure		
E G G D Bronz	te (RG5)	NiAlBz DS/EN 1	Duplex Stainles	Mechanical 0	Carbon/Cei	13				(+/-) concept se	e FO structure		
L L D Bronz	e (HG5)	NAB2 DS/EN 1	Duplex Stainles:	Mechanical U	Carbon/Cei	14				(+/-) concept se	e FU structure		
Bronz	e (Rub)	NIAIBZ DSZEN T	Duplex Stainles:	imechanical L	Jaioon/Cei	10				(+/-) concept se	e no structure		_
						Ok			Reset Se	elections	C	ancel	

If pump should be with priming function, instead of press "Ok" button at the bottom, click on "Select Addon" scroll bar to configure priming device according to following guide.

Step 9a: Priming Ejector as an option

Please read user manual while priming ejector to be configured. https://www.desmi.com/UserFiles/file/Manuals/Marine_and_Offshore/T1521UK.pdf

Click on "Select Addon" scroll bar, select one type of priming device. In this case "DESMI ½" EJECTOR RG5" is selected. Now a new selection area pop up. Click on each scroll bar and select the required feature. After all features have been selected, press "Ok" button in pop up area to finish the priming feature selection and close the pop up area. Press "Ok" button at the bottom to finish the configuration and feature option selection and close the sub-window.

Design Values						Feature Option	Selected ItemNo
Pump	NSL125-265 (Imp. E)ia = 238.00 mm)				MANOMETER -1/5 BAR	
Motor	Manufacturers stand	ard 3D 160 L-4 15	/18KW (18.00 kW)			NITRIL Ø38	▼ 672573
Material	A Pump casing	: Cast iron + cast iro	n alloys. Impeller: NiAlBz			DESMI 1/2" EJECTOR RG5	•
Configuration	02 Monobloc de	sign with bearing					
Configuration							
Configurationscode							
Configurationscode			íí_				
Standart/Snec	Standard					Salact AddOn DESM	
Description	, (+/-) concept see FC	l structure					TZ LILCTOR
Partlist	672641		Assamblu drawing	410326			
Nimensional Sketch	, 410394		Sparepart drawing			CRUENCIE VALVE 1 IOU 2007/1	-0.100
	,		sparepart arawing	1		SULENUID VALVE 172 230V	50/60 💌
Calcar Maran Jacida	do Marian Isan &		D.::14-		C	Plate for ESL ejector	
844400 D E	G Manufacturers st	andard 3D 160 L-4	15/18KW (18.00 V1	False	False		
844400IE2 D E	Manufacturers sl	andard 3D 160 L-4	15/18KW (18.00 V1	False	False		
844403 D E	Manufacturers sl	andard 3D 160 L-4	15/18KW (18.00 V1	True	False		
844403IE2	Manufacturers sl	andard 3D 160 L-4	15/18KW (18.00 V1	True	False	Ok	1
Kanna anakinatina							
EL CL US Material Dumo	Cosing	Chat	Chaff Coal	Configuration	Configurationscore	to Descriptio	
	n Casing I I Inipelier Cast iron (GI NiAIB z DS	/EN 1 Dupley Stair	Jonan Jean Jess Mechanical Carbon/C	al 12		Je j Descriptio	
E E B A Grev	cast iron (G_NiAlBz DS	/EN 1 Duplex Stair	less Mechanical Carbon/C	ei 02	والمحر المحر المحر الم	(+/-) concept see E0 structure	
G G G A Grey	cast iron (G_NiAlBz DS	/EN 1 Duplex Stair	less Mechanical Carbon/C	ei 12		(+/-) concept see F0 structure	
G G G A Grey	cast iron (G NiAlBz DS	/EN 1 Duplex Stair	less Mechanical Carbon/C	ei 13		(+/-) concept see F0 structure	
G G G A Grey	cast iron (G NiAlBz DS	/EN 1 Duplex Stair	iless Mechanical Carbon/C	ei 14		(+/-) concept see FO structure	
G G G A Grey	cast iron (G NiAlBz DS	/EN 1 Duplex Stair	iless Mechanical Carbon/C	ei 15		(+/-) concept see FO structure	
E E F D Bronz	e (RG5) NiAlBz DS	/EN 1 Duplex Stair	iless Mechanical Carbon/C	ei 02		(+/-) concept see FO structure	
E G G D Bronz	e (RG5) NiAlBz DS	/EN 1 Duplex Stair	iless Mechanical Carbon/C	ei 13		(+/-) concept see FO structure	
G E G D Bronz	e (RG5) NiAlBz DS	/EN 1 Duplex Stair	iless Mechanical Carbon/C	ei 14		(+/-) concept see FO structure	
	COOD DUMD DO	20M HED. LEW CASE	the set likely and south and Charles and Ch	od 16		If (1) concept one E0 structure	

Step 9b: Priming Pump B114 as an option

Please read user manual while priming pump to be configured.

https://www.desmi.com/UserFiles/file/Manuals/Marine_and_Offshore/T1488UK.pdf

Click on "Select Addon" scroll bar, select one type of priming device. In this case "B114N PRIMING PUMP" is selected. Now a new selection area pop up. Click on each scroll bar and select the required feature. After all features have been selected, press "Ok" button in pop up area to finish the priming feature selection and close the pop up area. Press "Ok" button at the bottom to finish configuration and feature option selection and close the sub-window.

Design Values												
Design Values										Feature Opt	ion	Selected ItemNo
Pump	NSL12	5-265 (Imp. Dia = 2	38.00 mm)							MANOMETER -1	/5 BAR 💌	672515
Motor	Manufacturers standard 3D 160 L-4 15/18KW (18.00 kW)									NITRIL Ø38	•	672573
Material	A	Pump casing: Cast	ron + cast iron all	oys. Impeller: N	iAlBz					B114N PRIMING	PUMP 💌	
Configuration	02	Monobloc design w	ith bearing									
Configuration												
Configurationscode												
Configurationscode												
- Standart/Spec.	Standa	rd			,					Select Add(n - B114N PE	
Description	(+/·) co	ncept see FO struct	ure							DESMI 909215	(W/50Hz	
Partlist	672641		Ass	ambly drawi	na	410326				NSL-215/265/02	/16 100/112-200	
Dimensional Sketch	410394		Spa	arepart drawi	na					NAME PLATE LZ		
	,					,				1 10 PAD DDI	COLL W. CL	
Select Motor dc dc	de Ma	nics Item No			Buildsize	He	at	Can		MACNIVEN 200	550HE GAOGES	
844400 D E	G Mai	nufacturers standard	13D 160 L-4 15/	18KW (18.00	V1	Fal	e	False	_	MAGN.VEN.230	/00/60HZ	-
844400IE2 D E	Mar	nufacturers standar	3D 160 L-4 15/	18KW (18.00	V1	Fals	e	False		BITAN ONIT OF	TIUN	-
844403E2 D	Ma	nufacturers standard	3D 160 L-4 15/	18KW (18.00	V1	Tru	3	False	-			
•									•		Ük	
Known combinations												
EL CH US Material Pump	o Casing	Impeller	Shaft	Shaft Seal		Confi	guration	Cont	igurationscoo	le	Description	
G G A Grey	cast iron (G NiAlBz DS/EN 1	Duplex Stainless	Mechanical C	arbon/Cei	12				(+/) concept of	a E0 structure	<u> </u>
G G G A Grey	cast iron (G NiAlBz DS/EN 1	Duplex Stainless	Mechanical C	arbon/Cei	12				(+/-) concept s	ee FO structure	
G G G A Grey	cast iron (G NiAlBz DS/EN 1	Duplex Stainless	Mechanical C	arbon/Cei	13				(+/-) concept s	ee FO structure	
G G G A Grey	cast iron (G NIAIBZ DS/EN 1	Duplex Stainless	Mechanical C	arbon/Cei	14				(+/-) concept s	ee FO structure	
E E E D Roma	cast iron (NIAIBZ USZEN T	Duplex Stainless	Mechanical C Mechanical C	arbon/Lei	15				(+/-) concept s	ee FU structure	
E G G D Bronz	e (RG5)	NiAlBz DS/EN 1	Duplex Stainless	Mechanical C	arbon/Cei	13				(+/-) concept s	ee FO structure	
G E G D Bronz	e (RG5)	NiAlBz DS/EN 1	Duplex Stainless	Mechanical C	arbon/Cei	14				(+/-) concept s	e FO structure	
E E G D Bronz	e (RG5)	NiAlBz DS/EN 1	Duplex Stainless	Mechanical C	arbon/Cei	15				(+/-) concept s	ee FO structure	-
						Ok			Reset	Selections	Ca	ancel

Step 10: Delivery terms

A three-column codes are displayed on right side of "Item no." list. The codes describe the expected delivery time for each item. "EU" means expected delivery time in EMEA (Europe). "CH" means expected delivery time in APAC (Asia). "US" means expected delivery time in North America. Click any frame in the column, a list with the expected delivery time definition will pop up. Click "Ok" in pop up area to close the sub-window. Please note that only delivery times marked with green color need not to be verified by the DESMI Planning Department.

B Pump Selection 1						X	
Pump Selection 1					Win	PSP 2018	
Pump Query Criteria	Cu	ves Data			Pump S	election Program	
Pump Type Vertical Inline Centrifugal Pump 👻		H (Q)	NPSH (Q)	P (Q)	Ì	Eta (Q)	
Pump series NSL 💌	ies NSL 🔹						
Capacity 100.00	m³/h	U Descript	ion			1	
Differential pressure 25.00	mLC A	1-3 workin	g days - high priority (De	elivery categories)			
Suction Pressure 0.00	mLC B	1 working	week (Delivery categor	ies)			
Density 1.000	kg/l D	2 working	week (Delivery categor weeks (Delivery catego	iesj iries]			
Viscosity (>=10 cSt) 1.000	cSt E	5 working	weeks (Delivery catego	ries)			
Min. Eft. 50.00 % Max.dev. 20.00	% F	10 working By reques	g weeks (Delivery categ : (Delivery categories)	pories)			
Power Safety Factor 5.00 %		By reques	(Delivery categories)				
Bower Supply Electric motor 3 x 460V - 60Hz +- V		By reques	(Delivery categories)				
Pre-selected Motorey Manufacturers standard		CTO - Cor	figure To Order				
Courte During	E	TO ETO - Eng	ineer To Order				
Search Fump							
Part and price specifications	L	Max. Order Quant	ity (EMEA)	Max. Order Quantity	(ASIA US)	Ok	
Item no. EU CH US Description				Quantity	Discount %	Price EUR	
672641 E E G NSL125-265/A02				1.00	0.00	2,456.00	
672119 C E G DRIVING UNIT 160				1.00	0.00	356.00	
672515 D E G MANOMETER -1/5	BAR			1.00	0.00	163.00	
672573 C D B NITRIL Ø38				1.00	0.00	206.00	
Tatalasia	15/18KW			1.00	0.00	1,021.00	
Totalpice						4,202.00	
Next Select Motor	Part list	Design Valu	ies Dime	ensional Sketch			
Back Custom Values	Find part	General Inform	nation M	ove to Word	(C) 20	12 - DESMI A/S	

Step 11: Additional information

Click on "General Information", a sub-window pop up, it is possible to add further terms and conditions such as delivery terms, method of delivery, class society, special paint, certificates etc.

Press "Ok" button at the bottom right to finish the selection and close this sub-window.

🖏 General Information				
General Information		Pump		
Quotation No.		Capacity	100.00	m³/h
Pos. No.		Total Man. Head	25.21	mLC
Pump	NSL125-265/A02	Speed	1752	rpm
Pump Media	Sea water	Power Consumption	9.39	k₩
Pump Casing	Grey cast iron (GG20)	NPSH	2.26	mLC
Suction/Pressure	125/125 mm.	Non-Overl. Power	12.97	k₩
Impeller	NiAlBz DS/EN 1982 CC333	Max partical size	15.00	
Impeller Diameter	238.00 mm			
Shaft	Duplex Stainless Steel AISI 329	Motor		
Mechanical Shaft Seal	NITRIL Ø38	Brand	Manufacturers standard	
Bearings	Ball Bearings	Motor	3D 160 L-4 15/18KW	
Coupling	Monobloc	Power Supply	Electric motor 3 x 460V - 60Hz +-	5%
Rotation	Clockwise	Construction	T.E.F.C	
Manometer	MANOMETER -1/5 BAR	Insulation Cl.	F-IP55	
Delivery Terms	EXW INCOTERMS 2010	Speed	1752	rpm
Method of Delivery	Most Cost Effective Way	Performance	18.00	kW
Paint Specifications	RAL 1007 (Daffodil yellow), Gloss 50, Tema 👻	Delivered by	DESMI A/S	
Class Society	No DESMI Test 🗾	Material Certificate	TIFICATE 3.1 (Stainless- and Car	bon Steel 💌
Class Society Test	No DESMI Test 🗸	Test Criteria	ISO 9906 Grade 2B (Standard) (C	F) 👻
Delivery Time	Working weeks from receipt o 💌			
	Guide - Delivery Time			
Additional Comments	3			
1			Ok	

Step 12: Move to Word

Click on "Move to Word" at the bottom, one sub-window will pop up. Select required subjects, and press "Move to Word" button in pop up area, It is now possible to generate a Word file including technical specification, parts and price list, terms and conditions, pump curves and dimensional sketch.

Pump Selection 1								23
Pump Selection 1	l						Win	PSP 2018
Pump Query Crite	ria		c	Curves Data			Pump Se	election Program
Ритр Туре	Vertical Inline Centrifugal Pump		Ī	H (Q)	NPSH (Q)	P (Q)	I Ì	Eta (Q)
Pump series	NSL 💌		[N	ISL125-26	5	
Capacity	100.00	m³/h		^{30.0} T				
Differential pressure	25.00	mLC		P				
Suction Pressure	0.00	mLC	Select Informatio	n				
Density	1.000	kg/l	Select W	ord Form				
Viscosity (>=10 cSt)	1.000	cSt	Combo1		•			
Min. Eft.	50.00 % Max.dev. 20.00	%	✓ Technica	I Specification	\overline{D}			-
Power Safety Factor:	5.00 %		Part and	price specifications			1 1 1 1 1	0
Power Supply	Electric motor 3 x 460V - 60Hz +- 💌		🔽 Terms an	d Conditions 🗟				-11/2/201
Pre-selected Motorsu	Manufacturers standard 🔹 💌		🗹 Pump Cur	ives				
	Search Pump		Dimensio	nal Sketch		0.0 150.	.0 200.0	250.0
						m³/h		
Part and price sp	ecifications		Movel	o Word	Cancel			
Item no.	EU CH US Description	1		1000		Quantity	Discount %	Price EUR
672641	E E G NSL125-265/A02					1.00	0.00	2,456.00
672515	D E G MANOMETER 1/5	BAB				1.00	0.00	163.00
672573						1.00	0.00	206.00
844400	D E G MOTOR 3D 160 L-	15/18KW				1.00	0.00	1.021.00
Total price								4,202.00
Next	Select Motor		Part list	Design Va	lues Dimen	sional Sketch		
Back	Custom Values		Find part	General Info	mation Mov	ve to Word	(C) 201	2 - DESMI A/S

Supplement

1. The program default unit is metric system. If other measuring systems is preferred, please choose your preference by click "Option" menu in upper main menu bar.

WinPSP 2018 Pump Selection Program - Version 3.102 (11.01.2018) - DB: 446 (12.01.2018)												
File Option Tools Window License to date: 2019-01-31												
Di Unit	Viscosity	+										
Use MS Office Application	Capacity	•	✓ m³/h - Cubic metres per hour									
	Differential pressure	- +	ft ^{\$} /m - Cubic foot per minute									
Pump Query Criteria	Density	•	UK gpm - UK Gallon per minute									
Pump Type	Lengths	•	US gpm - US Gallon per minute									
Pump series	Lengths (Diameters and Dimension Sketch)	•	l/m - Litres per minute									
Capacity	Weight	+	l/s - Litres per second									
Differential pressure	Power	+	8									

2. If you want the program to calculate with multi specifications, please click "File" to open more selection window.

File Option Tools Window License to date: 2019-01-31									
B + Pump Selection 1 B + Pump Selection 2									
Pump Selection 1	Pump Selection 1 Pump Selection 2								
Pump Query Criteria Pump Query Criteria Curves Data									
Pump Type	Pump Type	•		H (Q)					
Pump series	Pump series	v							
Capacity	Capacity	0.00	m³/h	-					
Differential pressure	Differential pressure	0.00	mLC						
Suction Pressure	Suction Pressure	0.00	mLC	-					

3. In step 7: Selecting pump working scenario, if you want to review H(Q), NPSH(Q), P(Q) and Eta(Q) in one sheet, double click frame of any one curve, a sub-window will pop up with all curves in one sheet.



Click on the curve in sub-window, you may read the Q, H, P, Eta and NPSHr value on any point of the curve. Click on "Move to Word" button in sub-window, you may export the curve to Word file. Click on "Cancel" button in sub-window, close the sub-window.

4. In step 12: Move to Word, if you want to review the dimensional sketch before export it, click on "Dimensional Sketch" button, a sub-window will pop up with dimensional sketch and pump weight. If you want to export the Sketch individually, click on "Move to Word" button to generate a Word file. Click on "Cancel" button to close the sub-window.



Thank you for your interest in DESMI's products.

For a price quote please send the selection to <u>ssemea@desmi.com</u> or call the DESMI Support Team on Tel. +45 96328111.

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The mission of DESMI is to develop, manufacture, sell and service pumps and pumping systems, environmental equipment, and special products related to these areas.

MARINE & OFFSHORE

INDUSTRY OIL SPILI

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