

Customer

Supplier

Company name
Editor
Phone number
E-mail

Fields of Application

Water supply and booster stations
Irrigation, overhead irrigation and draining
Filling and emptying of tanks and containers
Circulating of hot and cold water in HVAC systems
Pumping of condensate
Water circulating for swimming pools
Sanitary and cleaning installations
For industrial applications and public services
Fresh water supply on ships



Design Specification

NMM series pumps are volute casing, single stage, end suction, monoblock type centrifugal pumps with closed impeller and mechanical seal.

Main dimensions and the nominal flow rates of the pumps comply with the DIN 24255 and EN 733 standards.

Single entry, closed impeller is hydraulically thrust compensated and dynamically balanced.

Pump and motor are separate components. Motor shaft is passed into the pump shaft for coupling. After a certain motor power, a coupling system is used between the motor shaft and pump shaft.

Maintenance is very much easier, the impeller shaft and other rotating parts being removable with no need to disconnect the suction and delivery pipes, due to back pull-out design.

Maximum interchangeability of components, identical parts can be used along various pumps of the NMM series, which greatly simplifies and reduces stock of spare parts in addition to reduced delivery times.

Single-stage centrifugal pump coupled by means of a support, to a standard asynchronous motor, closed type, with external ventilation.

NMM series are fitted with mechanical shaft seal and pump shaft is supported by motor bearings.

Technical Data

Suction Flange	: DN50 - DN150
Discharge Flange	: DN32 - DN125
Operating Pressure	: 10 bar
Temperature Range	: Up to 120 °C
Speed Range	: 1450 - 3500 rpm
Flow Range	: 5 - 400 m ³ /h
Head Range	: 4 - 105 m

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Operating data specification

Pumped fluid	Water	Rated flow	250	m ³ /h
Solids		Rated head	60	m
Kind		Geodetic head	0	m
Percentage of solid content	0	Available system NPSH		m
pH value		Inlet pressure (pin)	0	kPa
Temperature	20	Altitude above sea level	100	m
Density	998.3	Max. operating pressure	439	kPa
Kin. viscosity	1.005	Max. diff. pressure	439	kPa
Vapour pressure	2.34			

Pump

Make	MAS DAF	Impeller type		
Pump type	NMM 125-400	Impeller construction		
Frame size		Impeller Ø		
Design	End Suction Monoblock Type	Max.	428	mm
Self priming	<input checked="" type="checkbox"/> No	designed	355	mm
Speed	1460	Min.	335	mm
Stages	1	Flow		
Suction port		Nominal	268	m ³ /h
Pressure rating	PN16	Max.	411	m ³ /h
Nominal pipe size	DN150	Min.	0	m ³ /h
Standard	DIN	Head		
Discharge port		Nominal	39.1	m
Pressure rating	PN16	Min.	24.3	m
Nominal pipe size	DN125	Max.	44.8	m
Standard	DIN	Shut off head	44.8	m
Shaft power	32.6	NPSH3	2.33	m
Shaft power P2(Q=max.)	44.9	Efficiency	74.2	%

Motor

Make/Type	37 KW-1500 RPM / 225S
Specific design	IE3 / 50 Hz / Pole pairs 2
Rated power	37 kW
Electric voltage	3~ 400 V
Speed	1470 rpm
Electric current	67 A
Frame size	225S
Degree of protection	IP 55
Type of protection	
Explosion protection	

Coupling

Make/Type	
Series	
Spacer length	mm
Frame size	

Materials

Pump		Shaft seal	AQ1EGG
Pump Casing	GJL-250 (GG25)	Material code	AQ1EGG
Impeller	GJL-250 (GG25)	Seal face	Carbon graphite antimony impregnated (A)
Shaft	A 276 Type 420 (X20Cr13)	Seat	Silicon carbide (Q1, eSiC-Q7)
		Elastomer	EPDM (E)
		Metal parts	CrNiMo steel (G)

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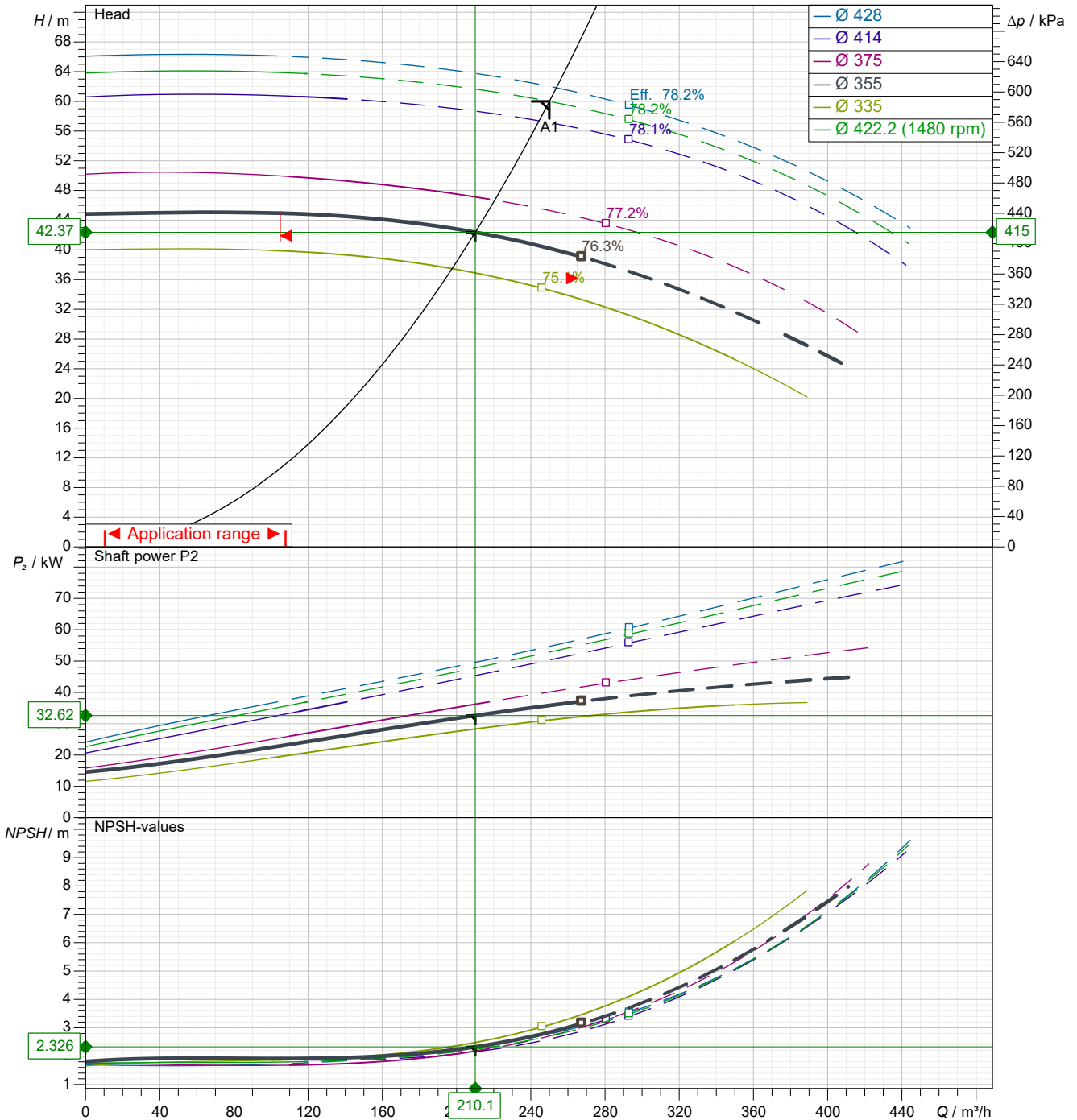
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Power data referred to:

 Water; 20°C; 998.3kg/m³; 1.005mm²/s

Sense of rotation

Clockwise from the drive end



Pump curves in accordance with ISO 9906 2B

Pumped fluid	Water	Rated flow	250	m ³ /h
Temperature	20 °C	Rated head	60	m
Density	998.3 kg/m ³	Shaft power	32.6	kW
Kin. viscosity	1.005 mm ² /s	Speed	1460	rpm
Vapour pressure	2.34 kPa	NPSH3	2.33	m
Impeller Ø	355 mm	Efficiency	74.2	%

Subject to change

Projec

Issue date

2023-07-30

Last update

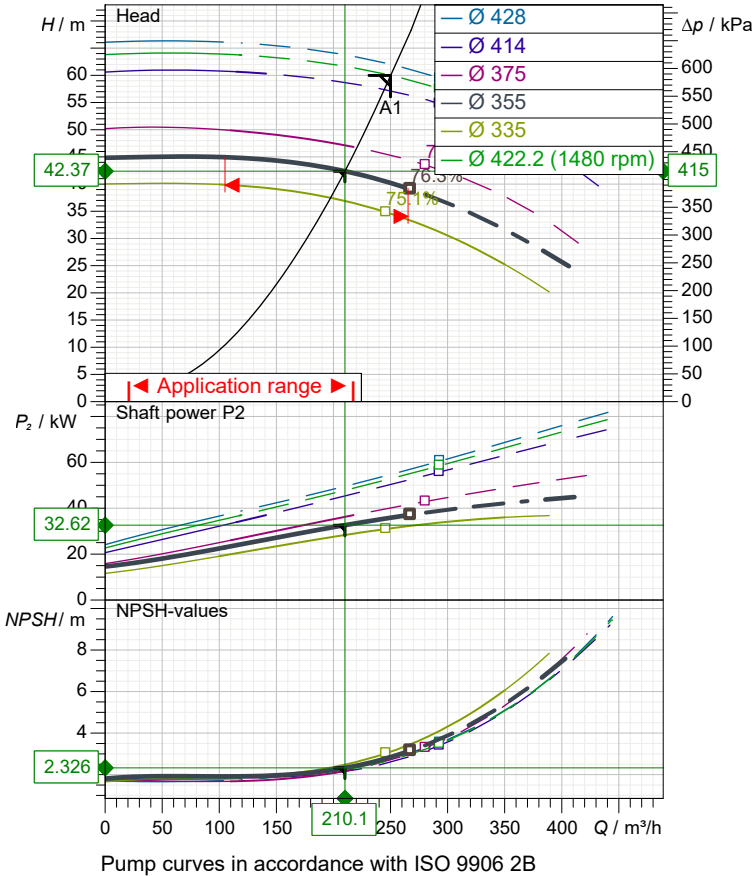
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Performance curves



Pump

Make	MAS DAF
Pump type	NMM 125-400
Design	End Suction Monoblock Type
Suction port	
Pressure rating	PN16
Nominal pipe size	DN150
Standard	DIN
Discharge port	
Pressure rating	PN16
Nominal pipe size	DN125
Standard	DIN

Operating data specification

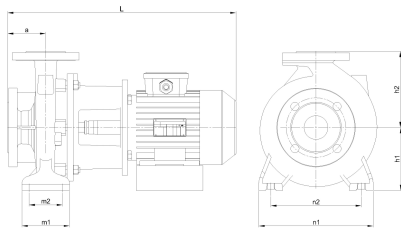
Pumped fluid	Water	
Temperature	20	°C
Density	998.3	kg/m ³
Kin. viscosity	1.005	mm ² /s
Vapour pressure	2.34	kPa
Rated flow	250	m ³ /h
Rated head	60	m
Shaft power	32.6	kW
Speed	1460	rpm
NPSH3	2.33	m
Efficiency	74.2	%
Impeller Ø	355	mm

Motor

Make/Type	37 KW-1500 RPM / 225S
Specific design	IE3 / 50 Hz / Pole pairs 2
Rated power	37 kW
Speed	1470 rpm
Electric voltage	3~ 400 V
Electric current	67 A
Degree of protection	IP 55

Materials

Shaft seal	AQ1EGG
Material code	AQ1EGG
Seal face	Carbon graphite antimony impregnated (A)
Seat	Silicon carbide (Q1, eSiC-Q7)
Elastomer	EPDM (E)
Metal parts	CrNiMo steel (G)



Dimensions

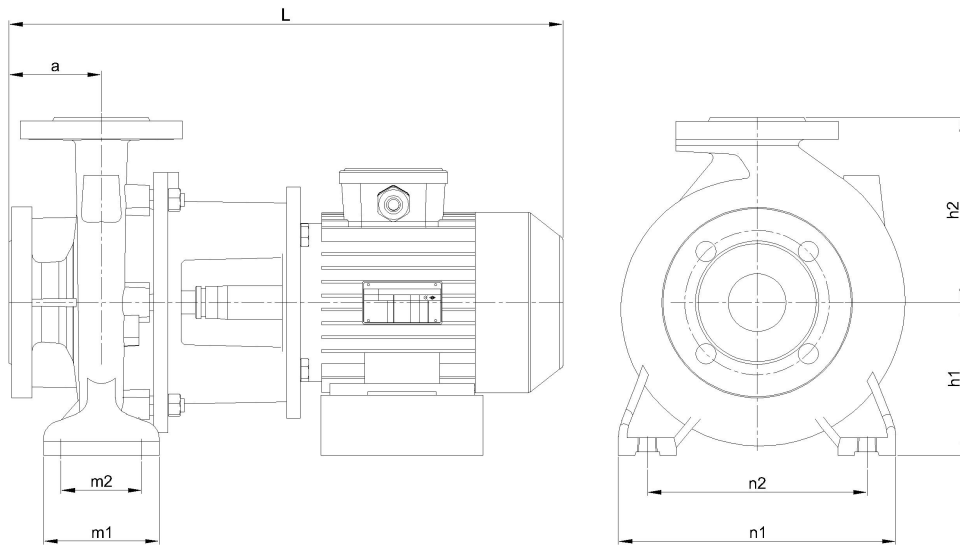
	mm
a	140
h1	315
h2	400
L	1150
m1	200
m2	150
n1	500
n2	400

Pump Casing	GJL-250 (GG25)
Impeller	GJL-250 (GG25)
Shaft	A 276 Type 420 (X20Cr13)

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Dimensions	mm
a	140
h1	315
h2	400
L	1150
m1	200
m2	150
n1	500
n2	400

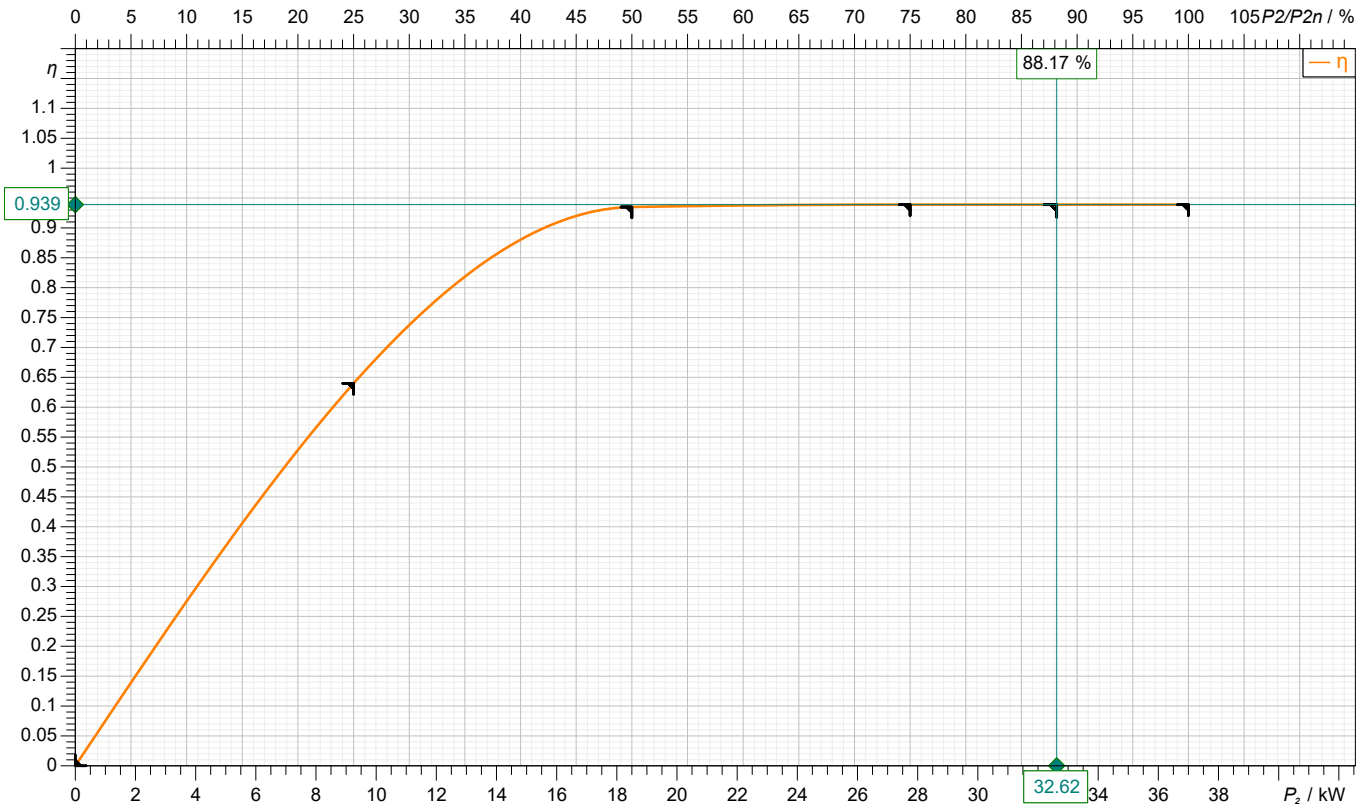
Inlet / outlet	
Suction port	Discharge port
DN150	DN125
PN16	PN16

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motor data



Symbol	No load	25 %	50 %	75 %	100 %	125 %
P ₂ / kW	0	9.25	18.5	27.75	37	
P ₁ / kW		14.45	19.79	29.55	39.4	
η / %	0	63.98	93.5	93.9	93.9	

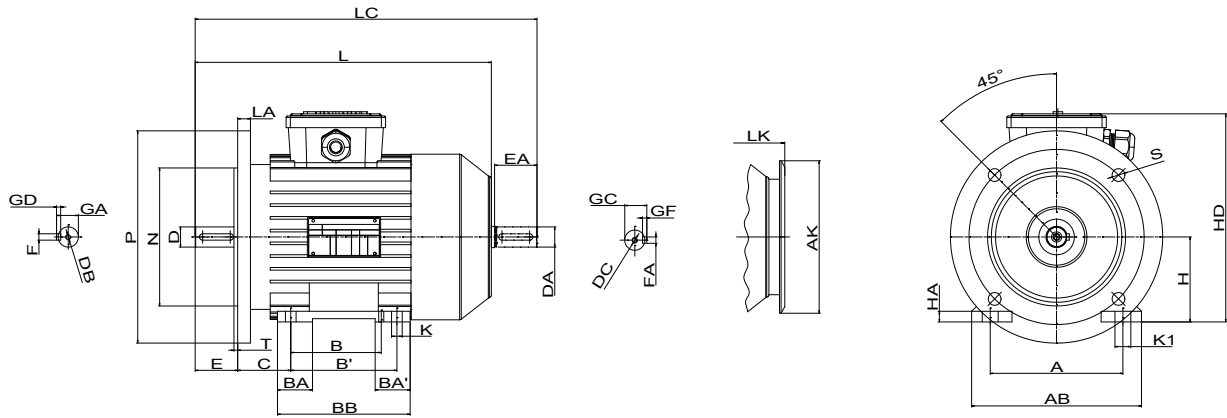
Motor

Make/Type	37 KW-1500 RPM / 225S	Degree of protection	IP 55
Specific design	IE3 / 50 Hz / Pole pairs 2	Type of protection	
Rated power	37 kW	Explosion protection	
Electric voltage	3~ 400 V	Service factor	1.15
Number of poles	4	Starting current	
Speed	1470 rpm	Starting torque	
Electric current	67 A	Moment of inertia	
Power factor	0.85	No. starts per hour	
Frame size	225S	Rated torque	240 Nm
Efficiency class	IE3	Insulation class	F (155C°)

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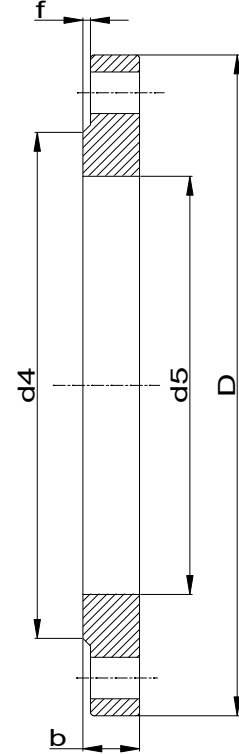
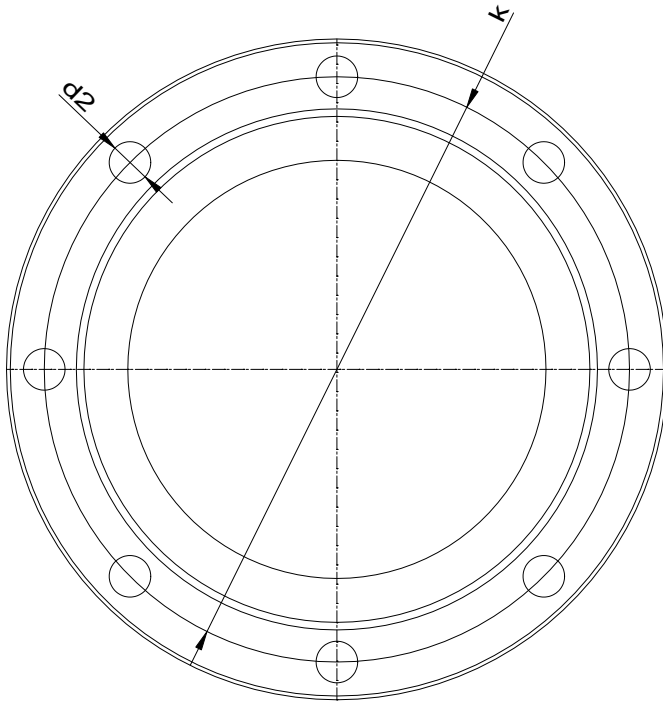


Dimensions	mm		
A	356	FxGD	18X11
AB	438	GA	64
AK	370	GC	64
B	311	H	225
B'	76	HA	30
BA	92.5	HD	510
BA'	363	K	19
C	149	K1	286
D	60	L	795
DA	60	LA	20
DB	M20	LC	943
DC	M20	LK	851
E	140	M	400
EA	140	N	350
FxGF	18X11	NO	8

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Suction connection

DN150
PN16

Discharge connection

DN125
PN16

Dimensions	mm
b	24
D	285
d2	22
d4	212
d5	170.5
DN	150
f	2
k	240
n	8

Dimensions	mm
b	22
D	250
d2	18
d4	188
d5	141.5
DN	125
f	2
k	210
n	8



Spare part list
NMM 125-400

Revision number

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Subject to change

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NMM 125-400

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