

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**

Single-stage, end suction, centrifugal volute pump.

Main dimensions according to EN 733.

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

Pump and motor are separate components, connected to each other via a flexible coupling and mounted on a common base plate.

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

In fact the use of one extension coupling enables a pump to be dismantled without moving either the driver or the pump casing.

Maximum interchangeability of components, identical parts can be used with various sizes of a pump, which greatly simplifies and reduces stock of spare parts.

Technical Data

Suction Flange	: DN50 - DN400
Discharge Flange	: DN32 - DN350
Operating Pressure	: 10 bar
Temperature Range	: Up to 140 °C
Speed Range	: 1000 - 3500 rpm
Flow Range	: 5 - 3500 m ³ /h
Head Range	: 4 - 105 m

Bearings

The pump has sturdy maintenance-free antifriction bearings, which are greased for life with high-temperature grease. A deflector on the shaft prevents leakage fluid from getting into bracket.

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Operating data specification

Pumped fluid	Water	Rated flow	157	m ³ /h
Solids		Rated head	26	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	415	kPa
Kin. viscosity	1.005	Max. diff. pressure	415	kPa
Vapour pressure	2.34			

Pump

Make	MAS DAF	Impeller type		
Pump type	NM 100-315	Impeller construction		
Frame size	100-315	Impeller Ø		
Design	End Suction	Max.	328	mm
Self priming	<input checked="" type="checkbox"/> No	designed	328	mm
Speed	1460	rpm	263	mm
Stages	1	Flow		
Suction port		Nominal	239	m ³ /h
Pressure rating	PN16	Max.	344	m ³ /h
Nominal pipe size	DN125	Min.	0	m ³ /h
Standard	DIN	Head		
Discharge port		Nominal	35.3	m
Pressure rating	PN16	Min.	22.2	m
Nominal pipe size	DN100	Max.	42.4	m
Standard	DIN	Shut off head	42.4	m
Shaft power	25.3	kW	NPSH3	2.9
Shaft power P2(Q=max.)	32.7	kW	Efficiency	78.8

Motor

Make/Type	30 KW-1500 RPM / 200L
Specific design	IE3 / 50 Hz / Pole pairs 2
Rated power	30 kW
Electric voltage	3~ 400 V
Speed	1470 rpm
Electric current	55 A
Frame size	200L
Degree of protection	IP 55
Type of protection	
Explosion protection	

Coupling

Make/Type	
Series	
Spacer length	mm
Frame size	

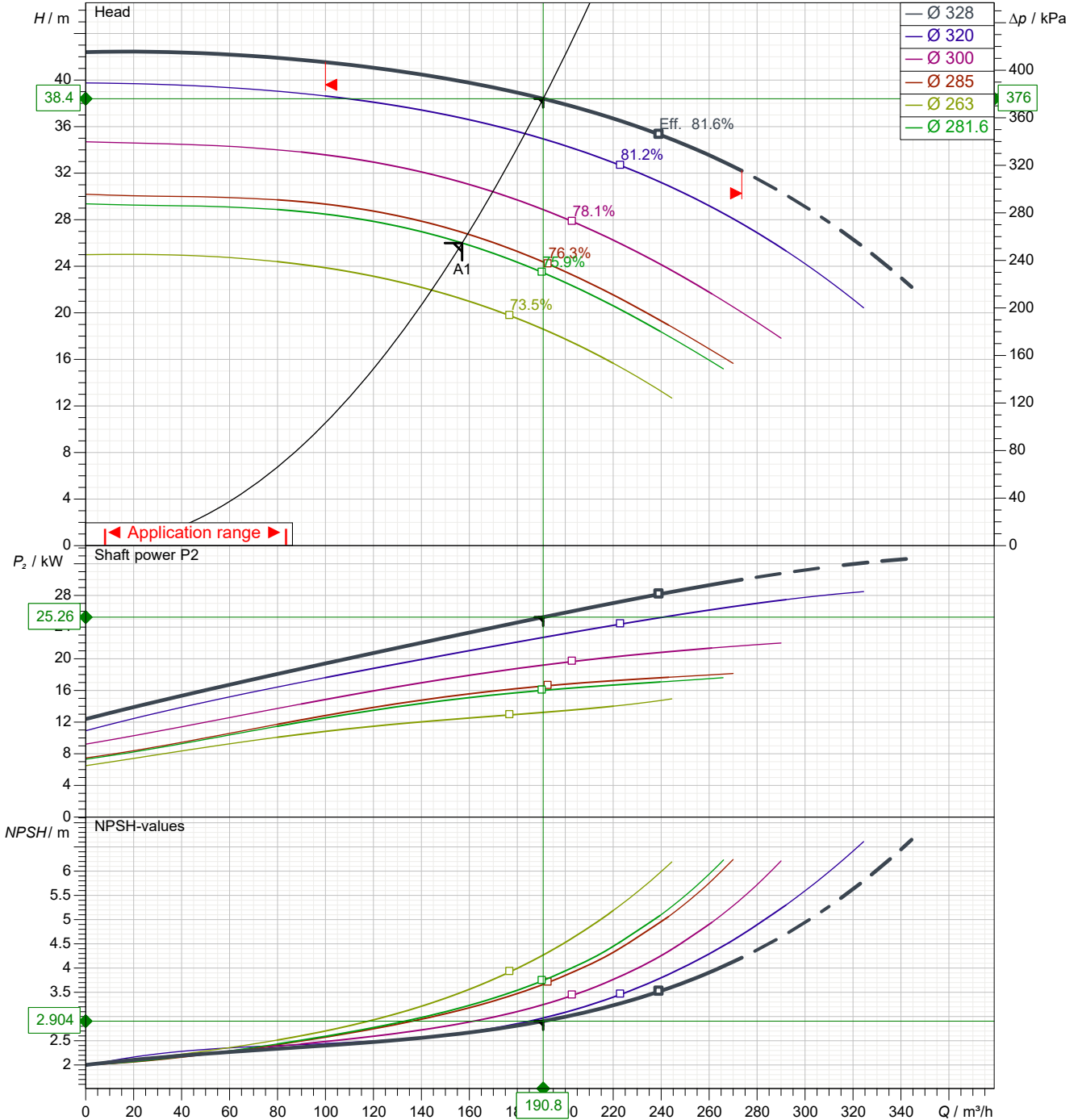
Materials

Pump		Shaft seal	Soft Packing
Pump Casing	GJL-250 (GG25)	Material code	
Impeller	GJL-250 (GG25)		
Shaft	A 276 Type 420 (X20Cr13)		
Bearing Housing	GJL-250 (GG25)		

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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	157	m ³ /h
Temperature	20	°C	Rated head	26	m
Density	998.3	kg/m ³	Shaft power	25.3	kW
Kin. viscosity	1.005	mm ² /s	Speed	1460	rpm
Vapour pressure	2.34	kPa	NPSH3	2.9	m
Impeller Ø	328	mm	Efficiency	78.8	%

Subject to change

Projec

Issue date

Last update

2023-07-29

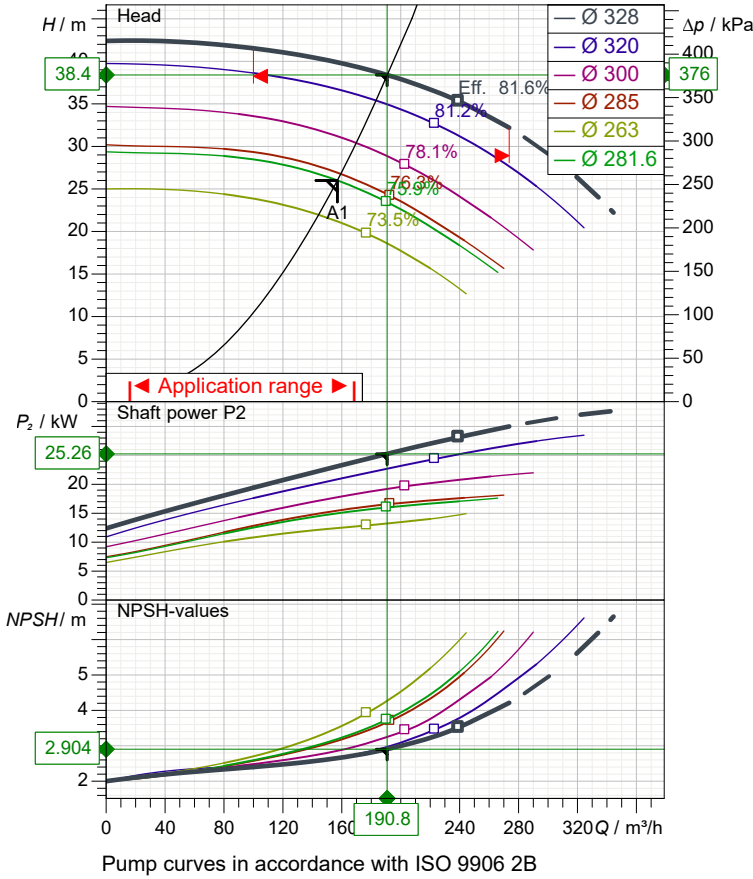
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Performance curves



Pump

Make MAS DAF
 Pump type NM 100-315
 Design End Suction
 Suction port
 Pressure rating PN16
 Nominal pipe size DN125
 Standard DIN
 Discharge port
 Pressure rating PN16
 Nominal pipe size DN100
 Standard DIN

Operating data specification

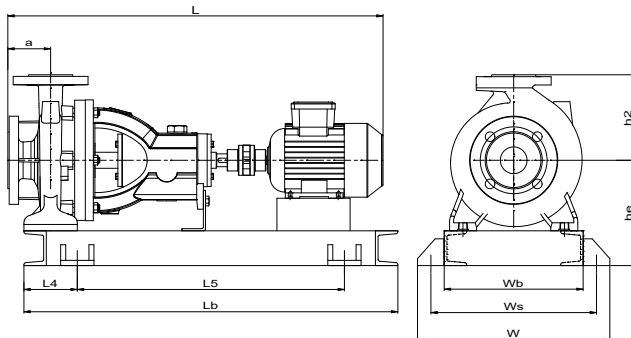
Pumped fluid Water
 Temperature 20 °C
 Density 998.3 kg/m³
 Kin. viscosity 1.005 mm²/s
 Vapour pressure 2.34 kPa
 Rated flow 157 m³/h
 Rated head 26 m
 Shaft power 25.3 kW
 Speed 1460 rpm
 NPSH3 2.9 m
 Efficiency 78.8 %
 Impeller Ø 328 mm

Motor

Make/Type 30 KW-1500 RPM / 200L
 Specific design IE3 / 50 Hz / Pole pairs 2
 Rated power 30 kW
 Speed 1470 rpm
 Electric voltage 3~ 400 V
 Electric current 55 A
 Degree of protection IP 55

Materials

Shaft seal Soft Packing
 Material code



Dimensions

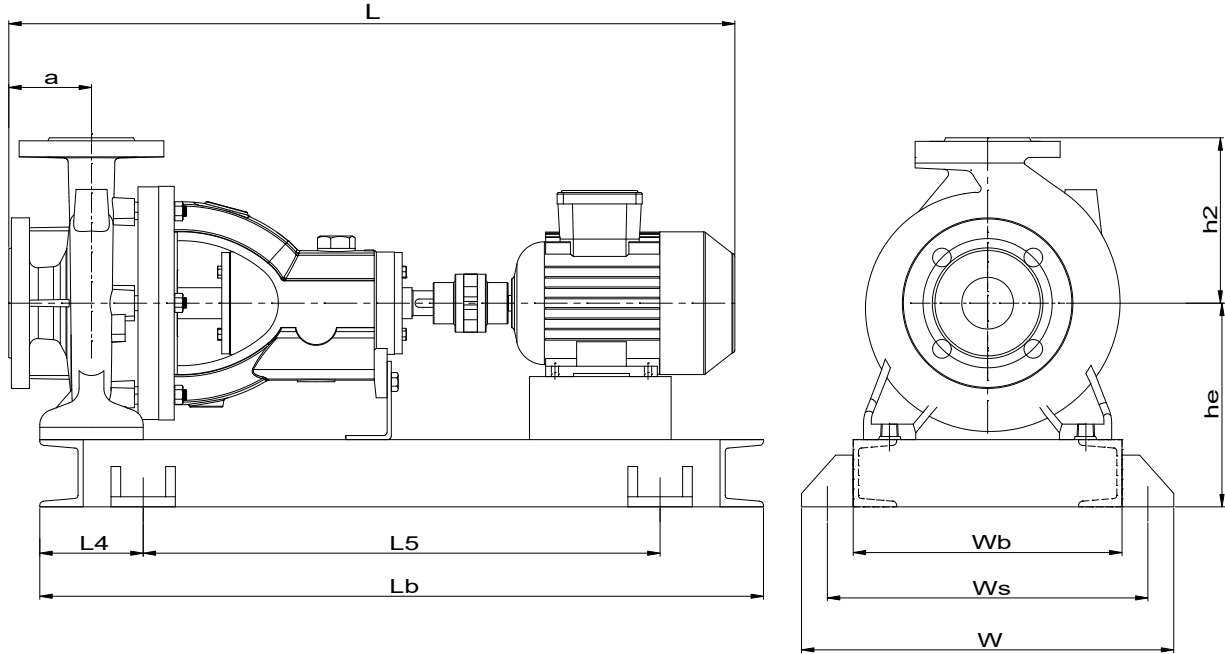
Dimensions	mm
a	140
h2	315
he	350
L	1391
L4	150
L5	950
Lb	1250
w	520
wb	420
ws	470

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

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Dimensions	mm
a	140
h2	315
he	350
L	1391
L4	150
L5	950
Lb	1250
w	520
wb	420
ws	470

Inlet / outlet

Suction port
DN125
PN16

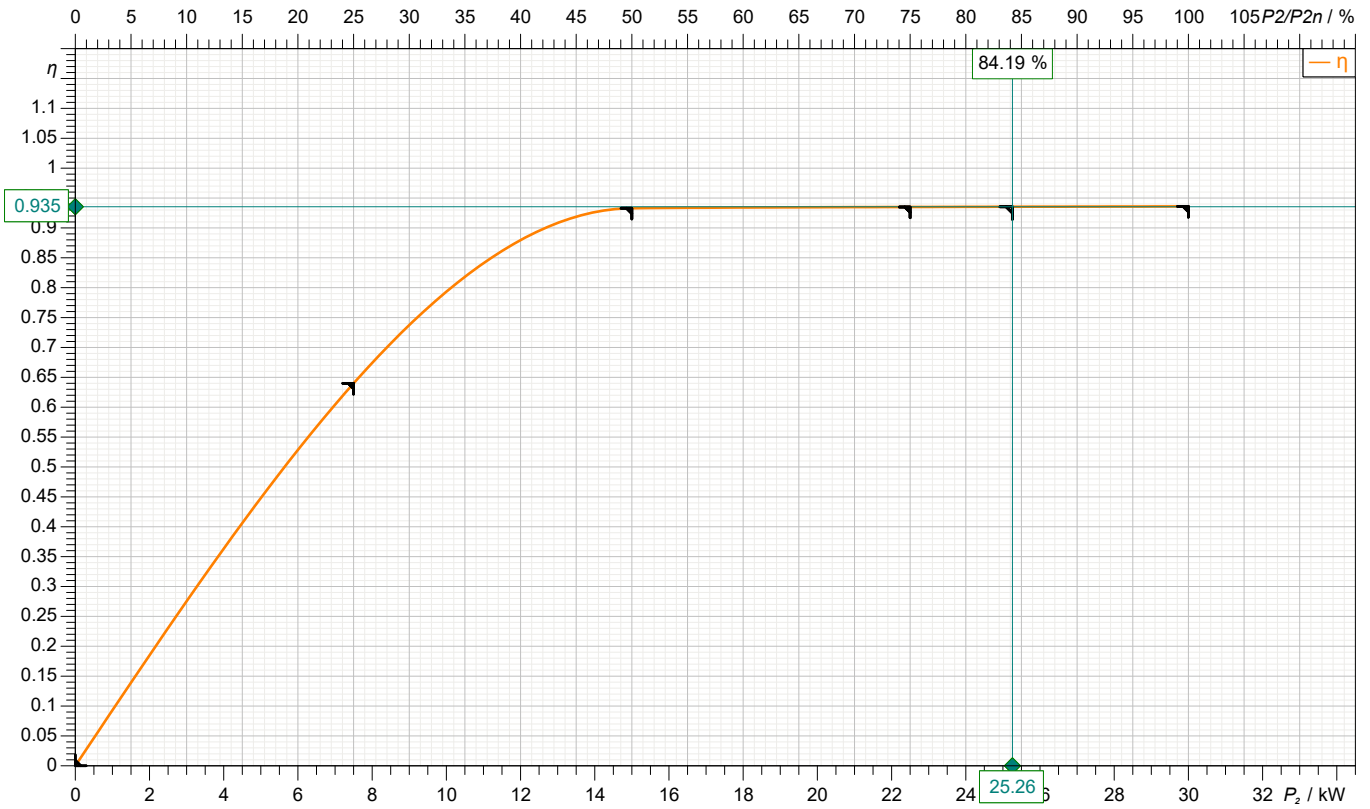
Discharge port
DN100
PN16

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motor data



Symbol	No load	25 %	50 %	75 %	100 %	125 %
P ₂ / kW	0	7.5	15	22.5	30	
P ₁ / kW		11.72	16.08	24.06	32.05	
η / %	0	63.99	93.3	93.5	93.6	

Motor

Make/Type	30 KW-1500 RPM / 200L	Degree of protection	IP 55
Specific design	IE3 / 50 Hz / Pole pairs 2	Type of protection	
Rated power	30 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	55 A	Moment of inertia	
Power factor	0.84	No. starts per hour	
Frame size	200L	Rated torque	195 Nm
Efficiency class	IE3	Insulation class	F (155C°)

Subject to change

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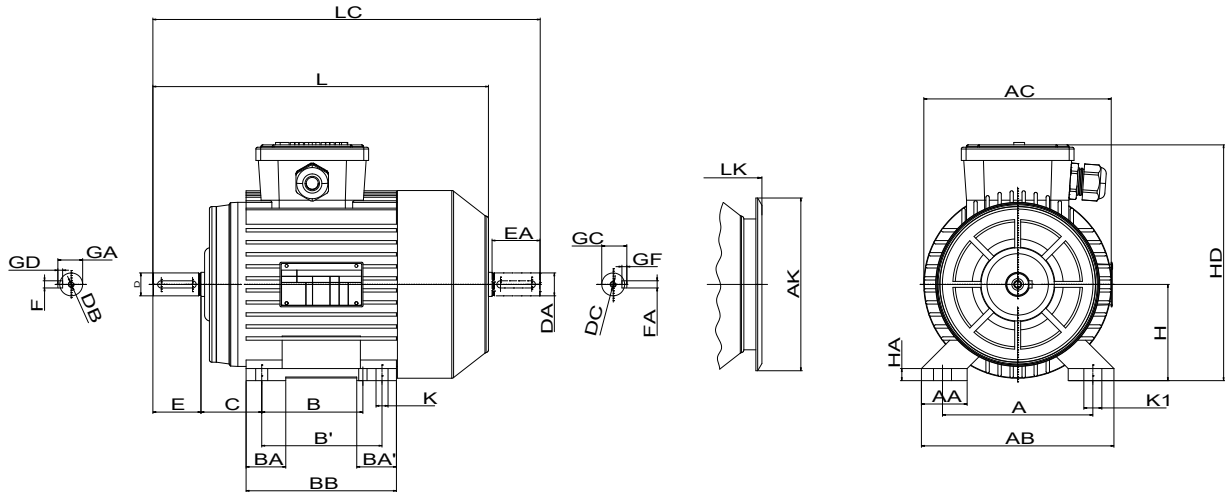
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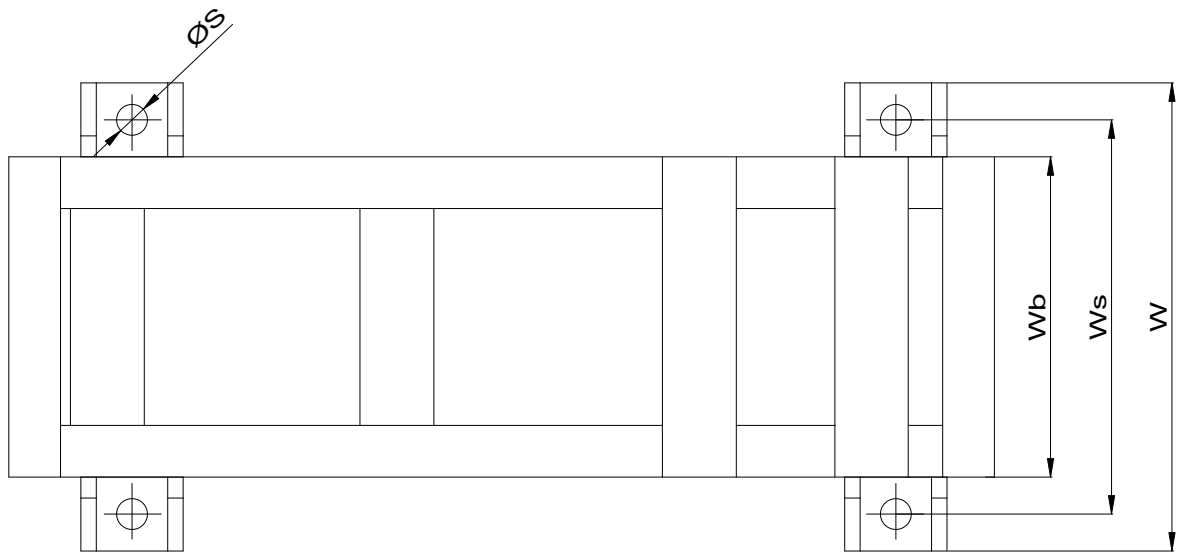


Dimensions	mm		
A	318	E	110
AA	80	EA	110
AB	396	FxGF	16X10
AC	390	FxGD	16X10
AK	370	GA	59
B	305	GC	59
B'	-	H	200
BA	68	HA	26
BA'	-	HD	477
BB	355	K	19
C	133	L	747
D	55	LC	865
DA	55	LK	803
DB	M20		
DC	M20		

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Dimensions	mm
hb	100
L4	150
L5	950
Lb	1250
S	19
w	520
wb	420
ws	470



Spare part list
NM 100-315

Revision number

Page
9

Company name
Editor
Phone number
E-mail

Customer

Supplier

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Spare part list
NM 100-315

Revision number

Page
10

Company name
Editor
Phone number
E-mail

Customer

Supplier

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