Product description

NM 80-200

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 m³/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		m³/h
Solids			Rated head		m
Kind			Geodetic head		m
Percentage of solid content	0		Available system NPSH		m
pH value			Inlet pressure (pin)	0	kPa
Temperature	20	°C	Altitude above sea level	100	m
Density	998.3	kg/m³	Max. operating pressure	689	kPa
Kin. viscosity	1.005	mm²/s	Max. diff. pressure	689	kPa
Vapour pressure	2.34	kPa			

Pump

Make	MAS DAF		Impeller type		
Pump type	NM 80-200		Impeller construction		
Frame size	80-200		Impeller Ø		
Design	End Suction		Max.	218	mm
Self priming	☒ No		designed	218	mm
Speed	2960	1/min	Min.	183	mm
Stages	1		Flow		
Suction port			Nominal	204	m³/h
Pressure rating	PN16		Max.	278	m³/h
Nominal pipe size	DN100		Min.	0	m³/h
Standard	DIN		Head		
Discharge port			Nominal	63.4	m
Pressure rating	PN16		Min.	45.2	m
Nominal pipe size	DN80		Max.	70.4	m
Standard	DIN		Shut off head	70.4	m
Shaft power		kW	NPSH3		m
Shaft power P2(Q=max.)	52.2	kW	Efficiency		%

Motor

Make/Type	55 KW-2900 RPM / 250M		Make/Type		
Specific design	IE3 / 50 Hz / Pole pairs 1		Series		
Rated power	55	kW	Spacer length		mm
Electric voltage	3~ 400	V	Frame size		
Speed	2980	1/min			
Electric current	92	A			
Frame size	250M				
Degree of protection	IP 55				
Type of protection					
Explosion protection					

Coupling

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)		

masdaf

Performance curves

NM 80-200

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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

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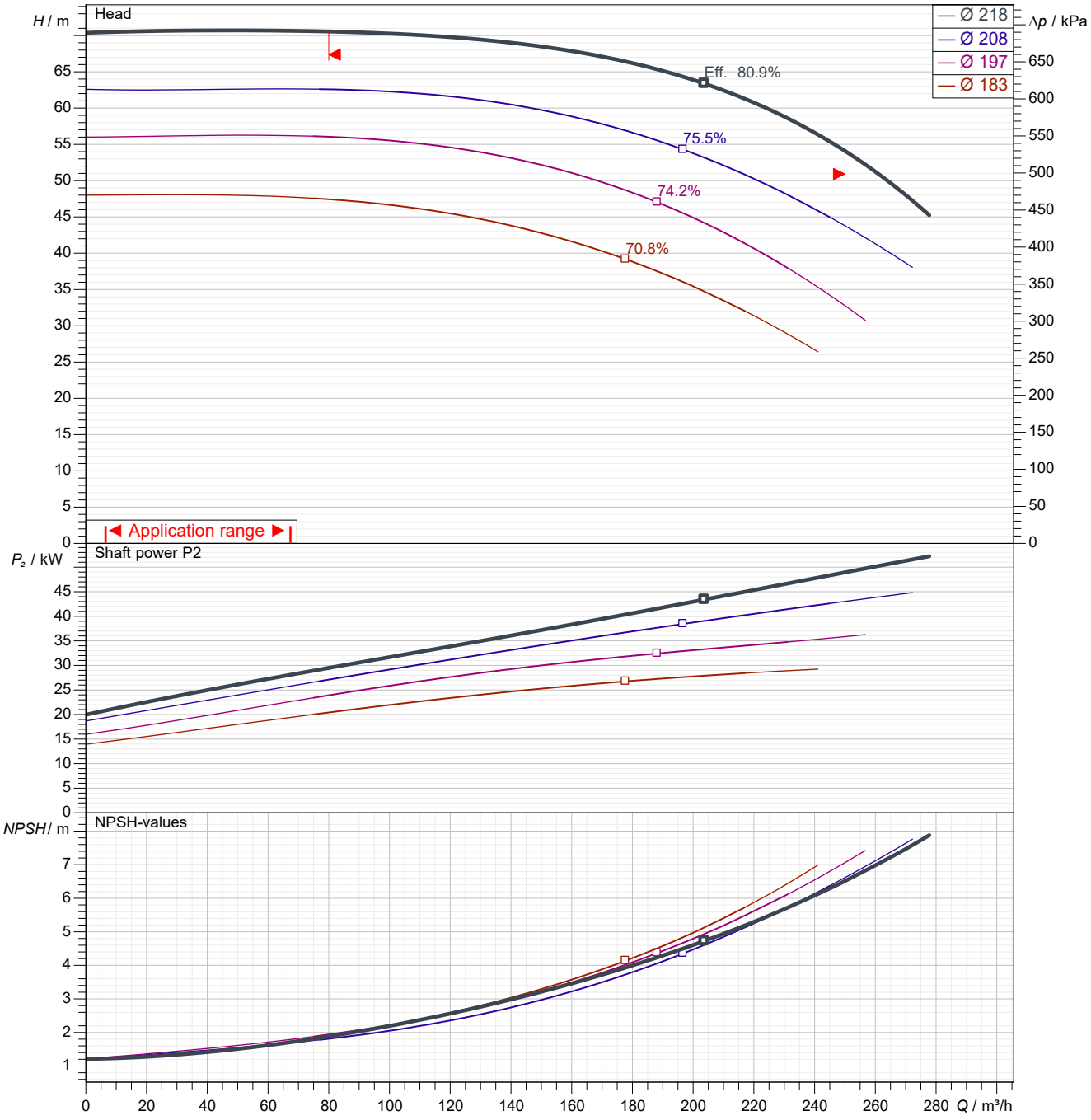

Pump curves in accordance with ISO 9906 2B

Pumped fluid	Water		Rated flow		m³/h
Temperature	20	°C	Rated head		m
Density	998.3	kg/m³	Shaft power		kW
Kin. viscosity	1.005	mm²/s	Speed	2960	1/min
Vapour pressure	2.34	kPa	NPSH3		m
Impeller Ø	218	mm	Efficiency		%

Brief description of pump

NM 80-200

Customer

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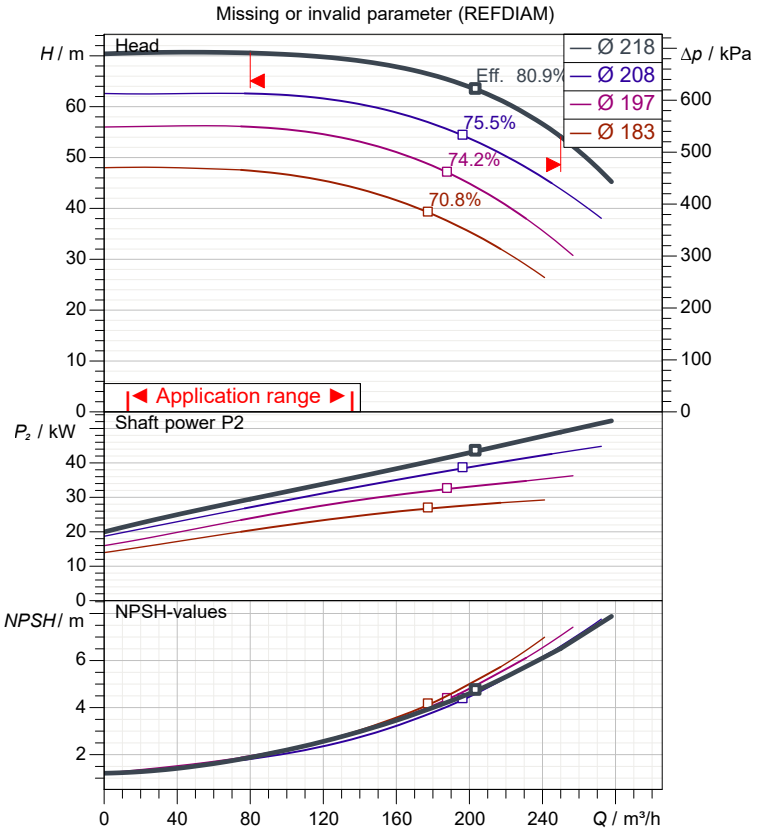
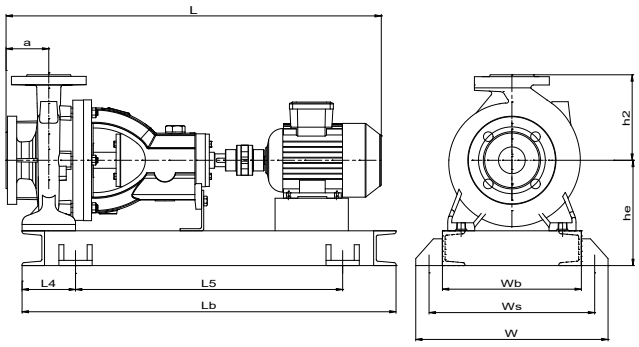
Supplier

Performance curves



Pump curves in accordance with ISO 9906 2B



Dimensions	mm
a	125
h2	250
he	370
L	1535
L4	200
L5	950
Lb	1350
w	640
wb	520
ws	580

Pump

Make	MAS DAF
Pump type	NM 80-200
Design	End Suction
Suction port	
Pressure rating	PN16
Nominal pipe size	DN100
Standard	DIN
Discharge port	
Pressure rating	PN16
Nominal pipe size	DN80
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		m³/h
Rated head		m
Shaft power		kW
Speed	2960	1/min
NPSH3		m
Efficiency		%
Impeller Ø	218	mm

Motor

Make/Type	55 KW-2900 RPM / 250M	
Specific design	IE3 / 50 Hz / Pole pairs 1	
Rated power	55	kW
Speed	2980	1/min
Electric voltage	3~ 400	V
Electric current	92	A
Degree of protection	IP 55	

Materials

Shaft seal	Soft Packing
Material code	

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

Pump dimensions

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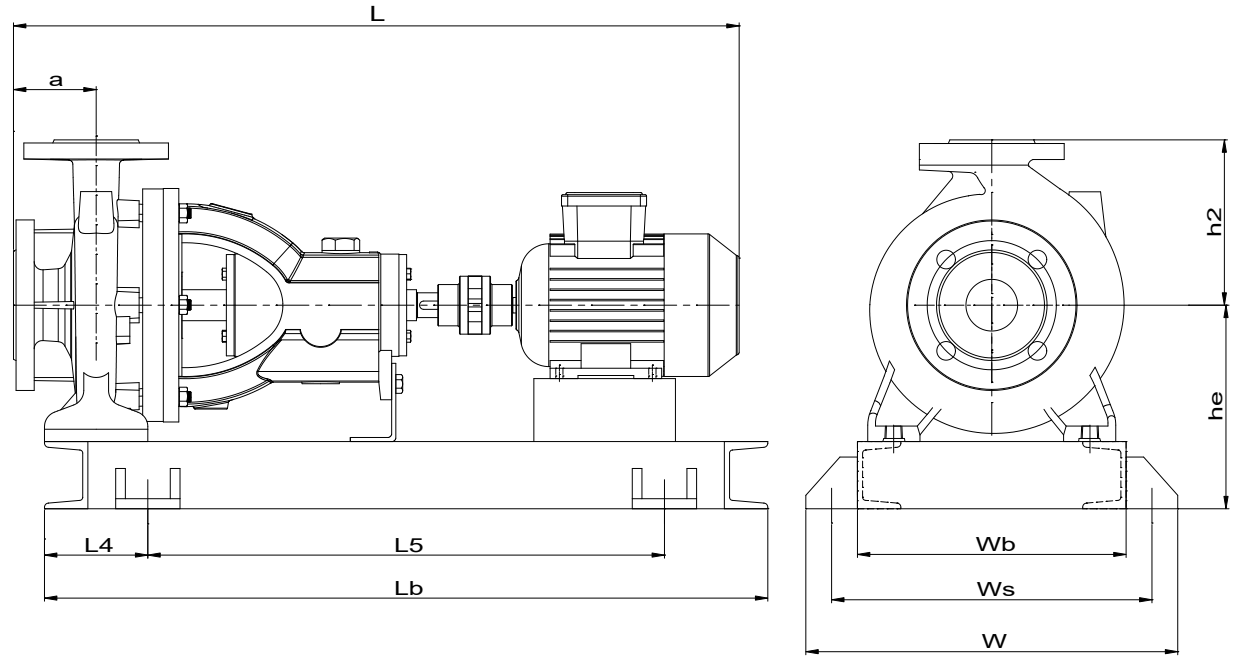

Dimensions	mm
a	125
h2	250
he	370
L	1535
L4	200
L5	950
Lb	1350
w	640
wb	520
ws	580

Inlet / outlet

Suction port	Discharge port
DN100	DN80
PN16	PN16

Motor performance curve

55 KW-2900 RPM / 250M

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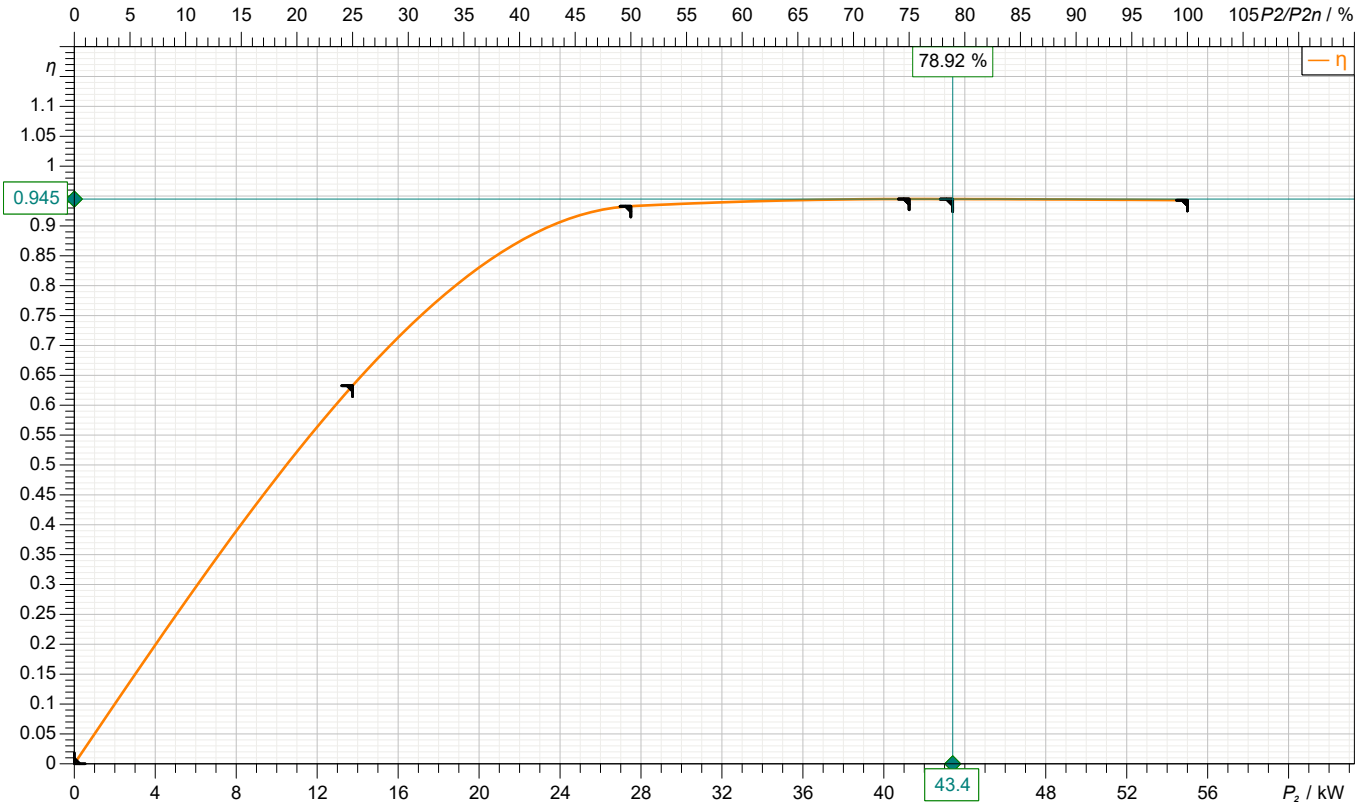
motor data



Symbol	No load	25 %	50 %	75 %	100 %	125 %
P_2 / kW	0	13.75	27.5	41.25	55	
P_1 / kW		21.73	29.47	43.65	58.32	
η / %	0	63.27	93.3	94.5	94.3	

Motor

Make/Type	55 KW-2900 RPM / 250M		Degree of protection	IP 55	
Specific design	IE3 / 50 Hz / Pole pairs 1		Type of protection		
Rated power	55	kW	Explosion protection		
Electric voltage	3~ 400	V	Service factor	1.15	
Number of poles	2		Starting current		
Speed	2980	1/min	Starting torque		
Electric current	92	A	Moment of inertia		
Power factor	0.92		No. starts per hour		
Frame size	250M		Rated torque	176 Nm	
Efficiency class	IE3		Insulation class	F (155C°)	

Motor dimensions

55 KW-2900 RPM / 250M

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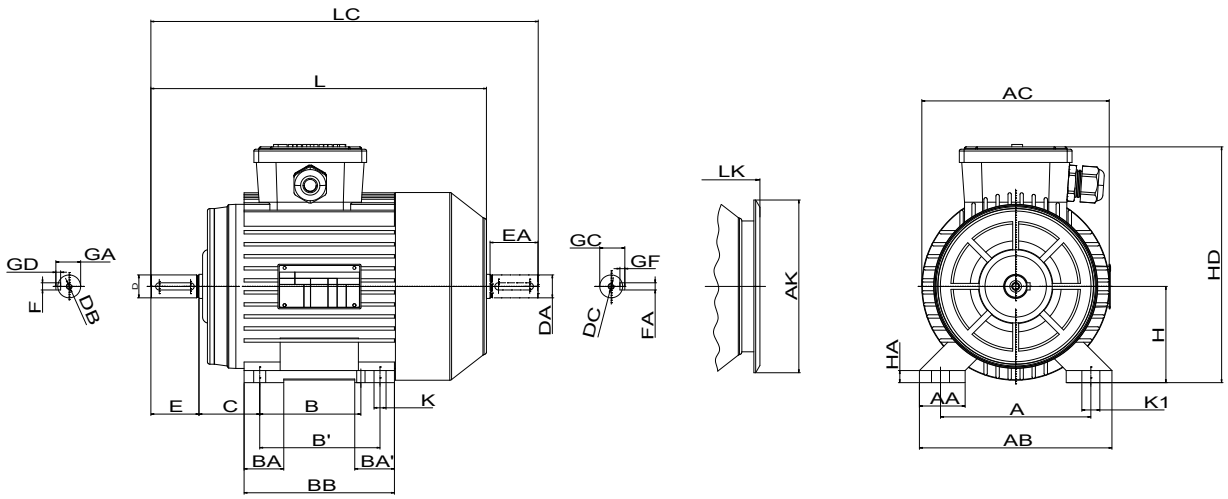

Dimensions	mm		
A	406	E	140
AA	80	EA	140
AB	484	FAxGF	18X11
AC	480	FxGD	18X11
AK	440	GA	69
B	349	GC	69
B'	–	H	250
BA	75	HA	35
BA'	–	HD	572
BB	410	K	24
C	168	L	896
D	65	LC	1044
DA	65	LK	952
DB	M20		
DC	M20		

Base plate

NM 80-200

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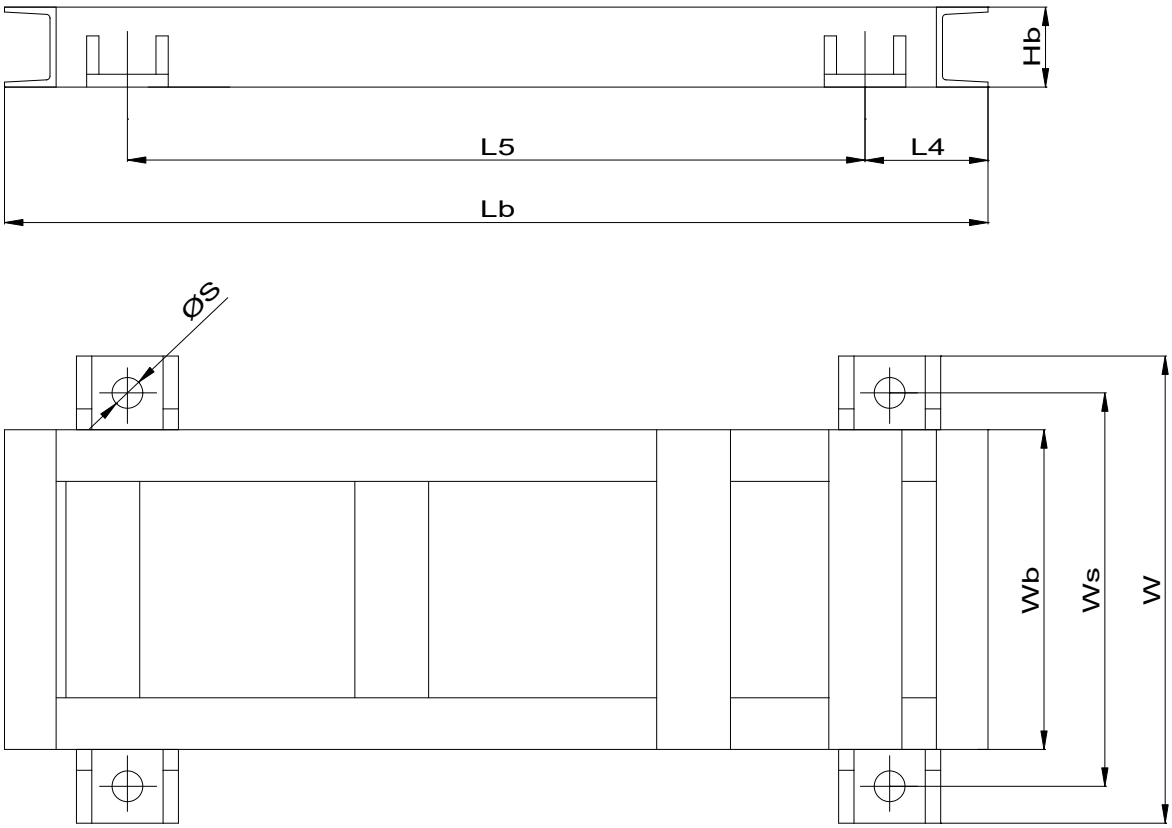

Dimensions	mm
hb	120
L4	200
L5	950
Lb	1350
S	24
w	640
wb	520
ws	580

Spare part list

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