

## Thermal Oil Pumps

Sealless, with mag-drive

### Automation products available:

- PumpExpert
- Hyamaster
- hyatronic

## Fields of Application

Etamagno SY pumps are mainly used for handling thermal oils in heat transfer systems to DIN 4754.

## Operating Data

	50 Hz	60 Hz
Q	up to 660 m <sup>3</sup> /h, 183 l/s	up to 700 m <sup>3</sup> /h, 195 l/s
H	up to 102 m	up to 97 m
t	up to +350 °C	
p <sub>2</sub>	16 bar <sup>1)</sup>	

1) The sum of inlet pressure and head at zero flow point must not exceed the value indicated.

## Design

Horizontal volute casing pump, single-stage, with ratings and main dimensions to EN 733.

Sealless, with magnetic drive.

Volute casing and impeller with replaceable wear rings.

Volute casing with integrally cast pump feet.

Any Etanorm SYN/SYA pump with shaft seal can easily and economically be converted to a sealless design with a new back pull-out unit.

## Designation

	Etamagno	S	Y	80 - 160 / 165-30
Type series (code EMA)	[Line to S]			
Casing material, e.g. JS 1025 <sup>2)</sup>	[Line to S]			
Thermal oil variant	[Line to Y]			
Discharge nozzle DN	[Line to 80 - 160 / 165-30]			
Nominal impeller diameter in mm	[Line to 80 - 160 / 165-30]			
Magnetic coupling	[Line to 80 - 160 / 165-30]			

## Materials

Volute casing	Nodular cast iron JS 1025 <sup>2)</sup>
Discharge cover	Steel P250GH
Shaft, plain bearing	elevated temp. resistant steel 1.7709+QT
Shaft, rolling element bearings	Tempered steel C45+N
Impeller	Grey cast iron JL 1040 <sup>3)</sup>
Casing wear ring	Grey cast iron
Bearing bracket	Grey cast iron JL 1040 <sup>3)</sup>
Bearing bracket lantern	Grey cast iron JL 1040 <sup>3)</sup>
Plain bearing	1.4462/carbon or Sicadur <sup>®</sup> <sup>4)</sup>
Containment shroud (flange, can, bottom)	1.4571/2.4610/1.4462
Internal rotor	St/1.4539

2) GJS-400-18-LT to EN 1563

3) GJL-50 to EN 1561

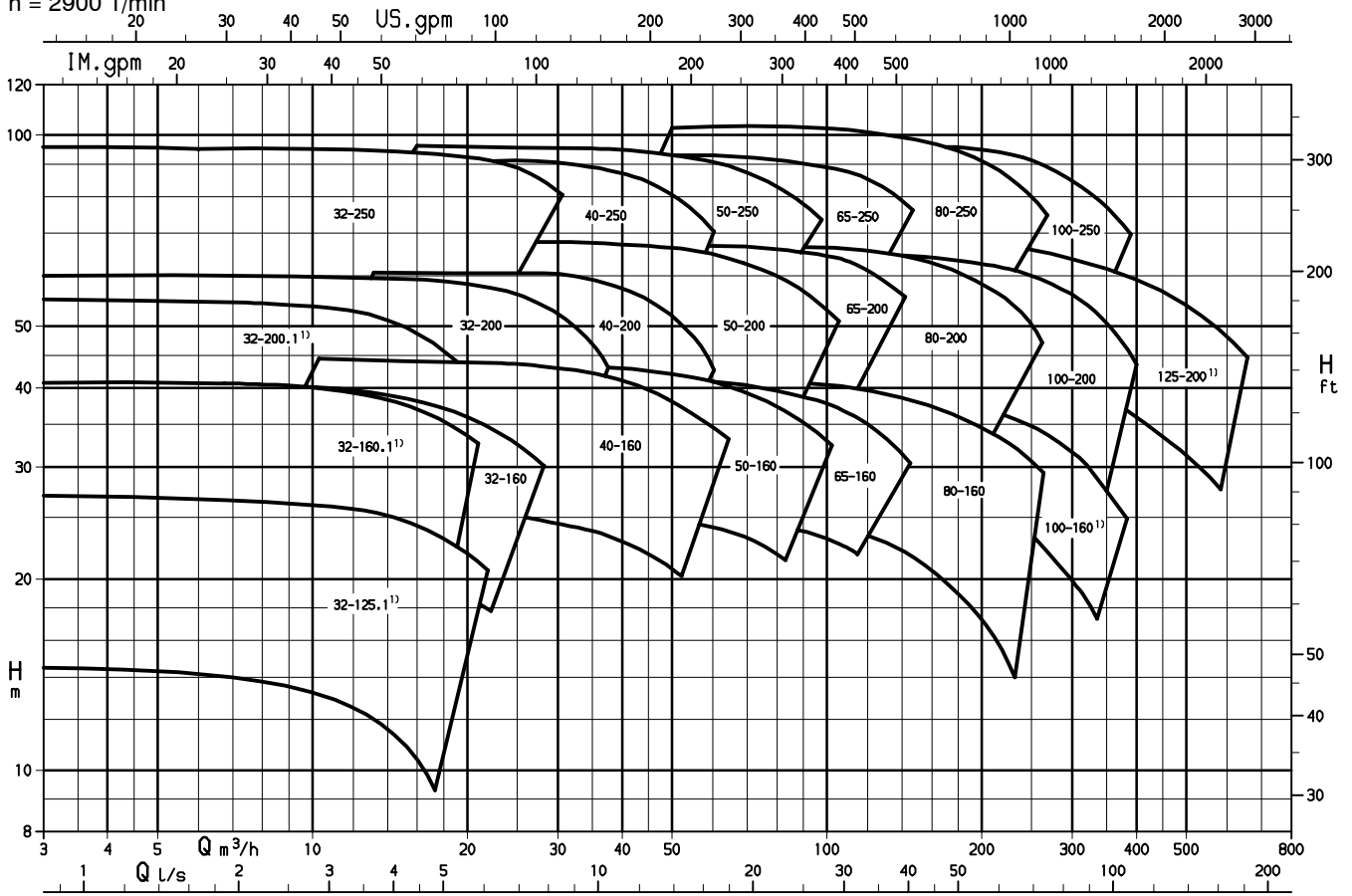
4) Sicadur<sup>®</sup> = SiC/SiC

## Certification

Certified quality management ISO 9001.

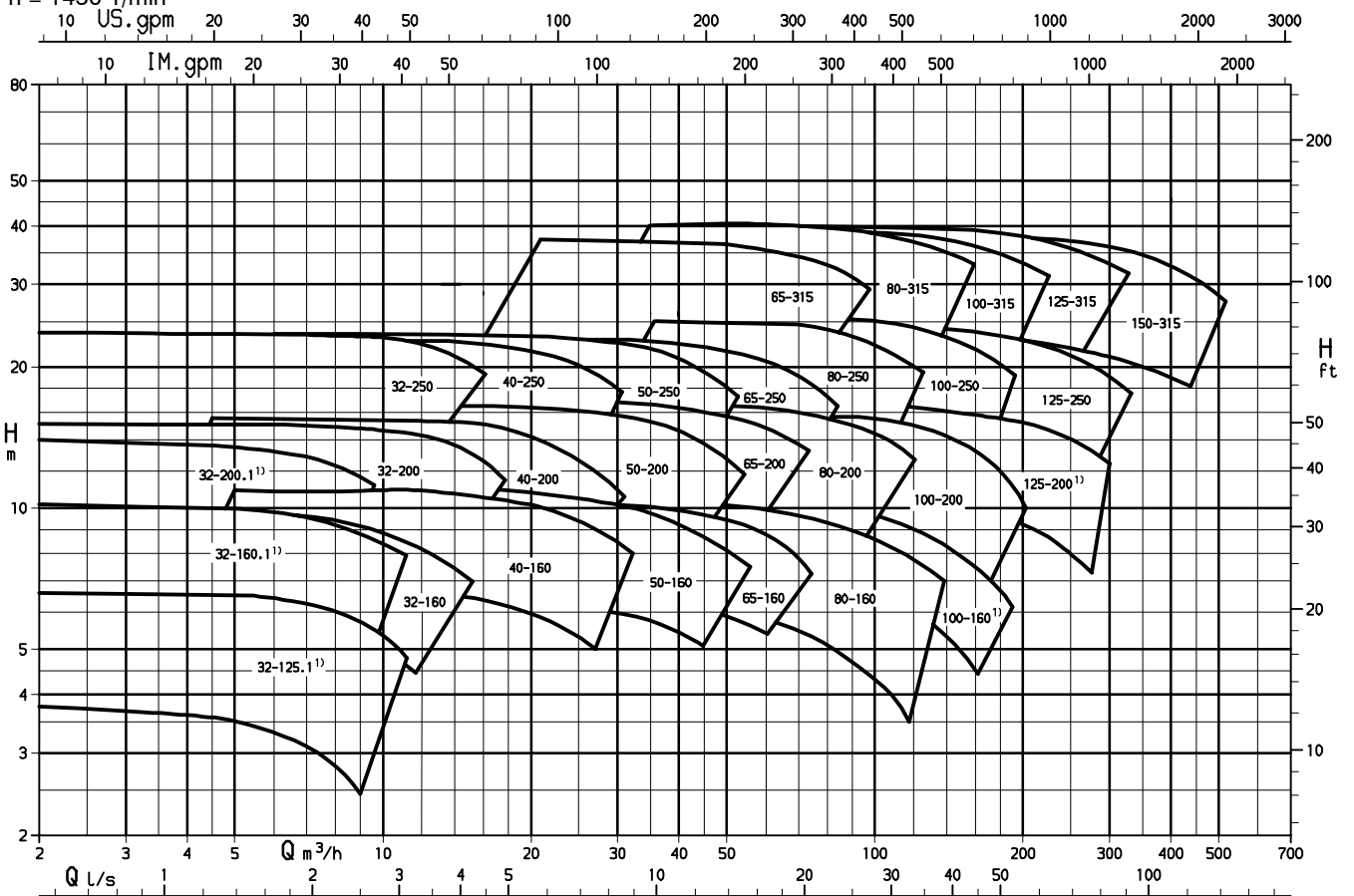
**Selection charts 50 Hz**

n = 2900 1/min



1218:4052

n = 1450 1/min



1218:4054

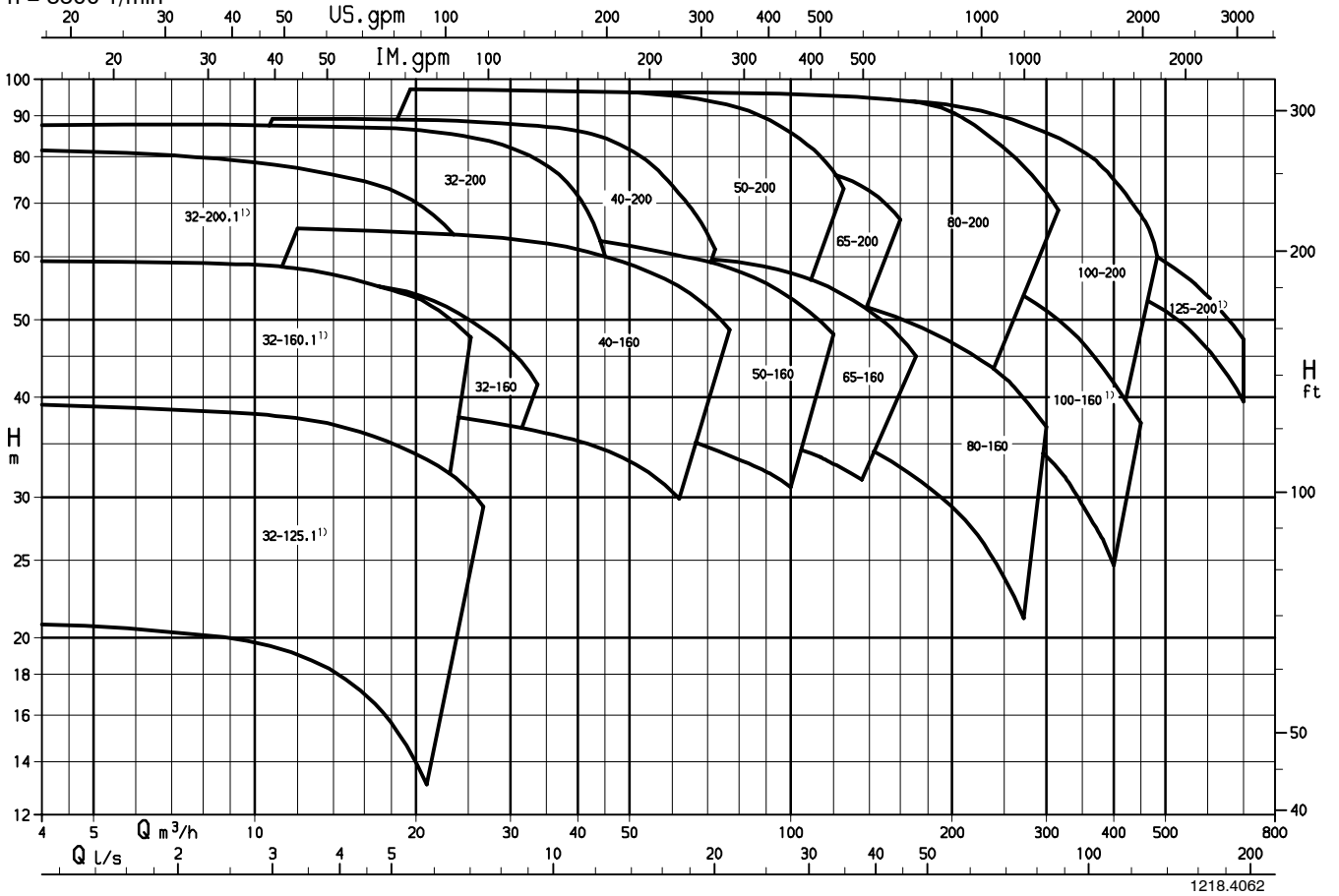
1) Ergänzungsgrößen in EN 733 nicht enthalten  
 1) Tamaños suplementarios no incluidos en EN 733

1) Supplementary sizes not included in EN 733  
 1) Grandezze supplementari non incluse in EN 733

1) Les tailles complémentaires ne sont pas couvertes par EN 733  
 1) Aanvullende grootten niet in EN 733 inbegrepen

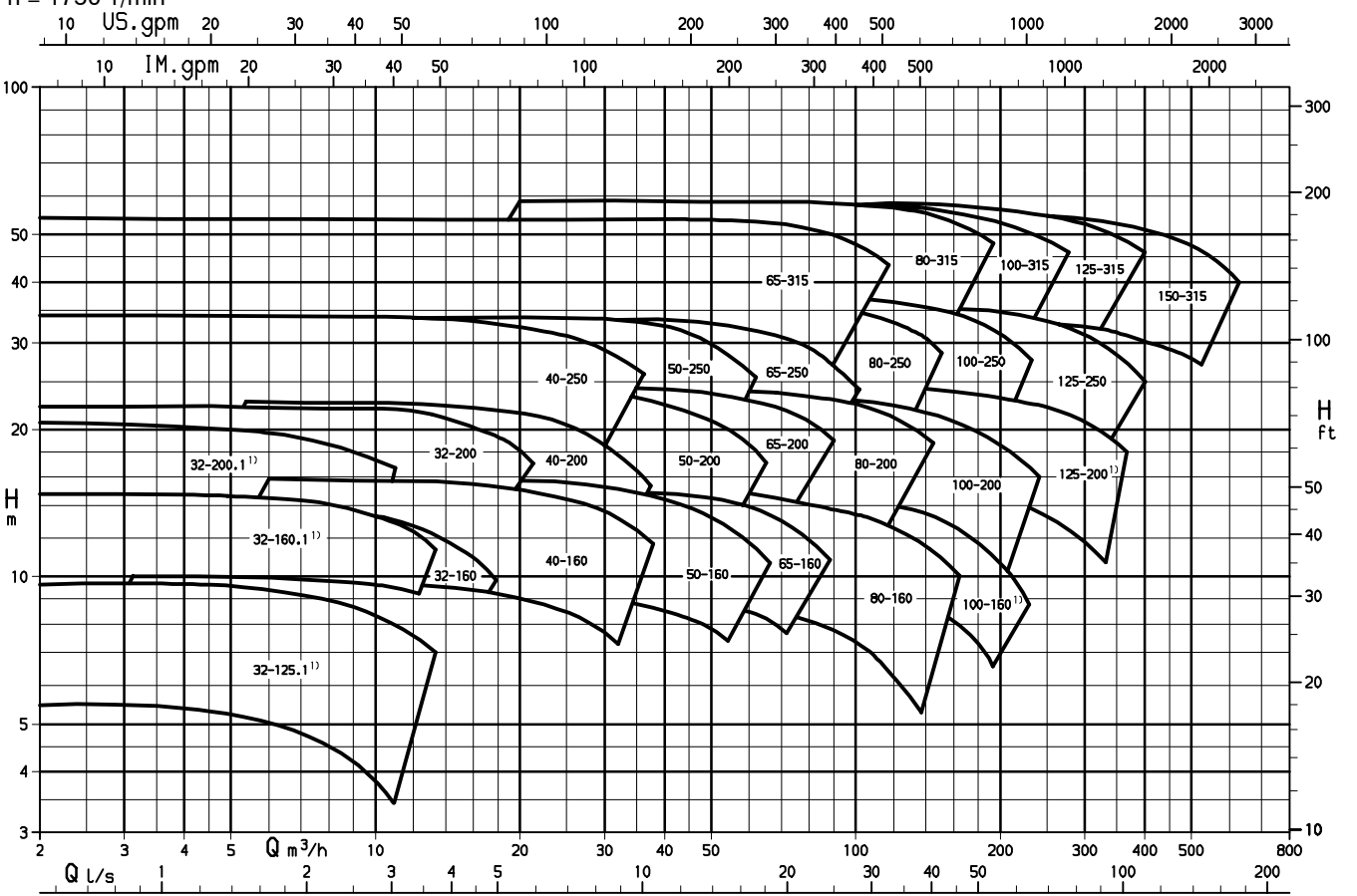
**Selection charts 60 Hz**

n = 3500 1/min



1218.4062

n = 1750 1/min



1218.4064

1) Ergänzungsgrößen in EN 733 nicht enthalten  
1) Tamaños suplementarios no incluidos en EN 733

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**Benefits at a glance**

Pressure jacket designed for 16 bar, made of tough material JS 1025 <sup>1)</sup>

Product-lubricated anti-seize carbon bearing (optional: SiC), high operating reliability

Cooler: sturdy, insensitive to dirt, dissipates heat losses of magnetic drive independent of the air flow of the motor

Rugged bearing assembly (drive), rolling element bearings greased for life (Lh = 25,000 h)

Overall length to EN 733

Connecting dimensions and power ratings to EN 733

Casing wear rings easy to replace, no wear on the casing/impeller

Impeller with optimized hydraulics, excellent efficiencies

Hydraulically balanced impeller, little axial thrust on the plain bearings, long service life

Back pull-out design: easy dismantling, the casing may remain in the pipeline when the pump is dismantled

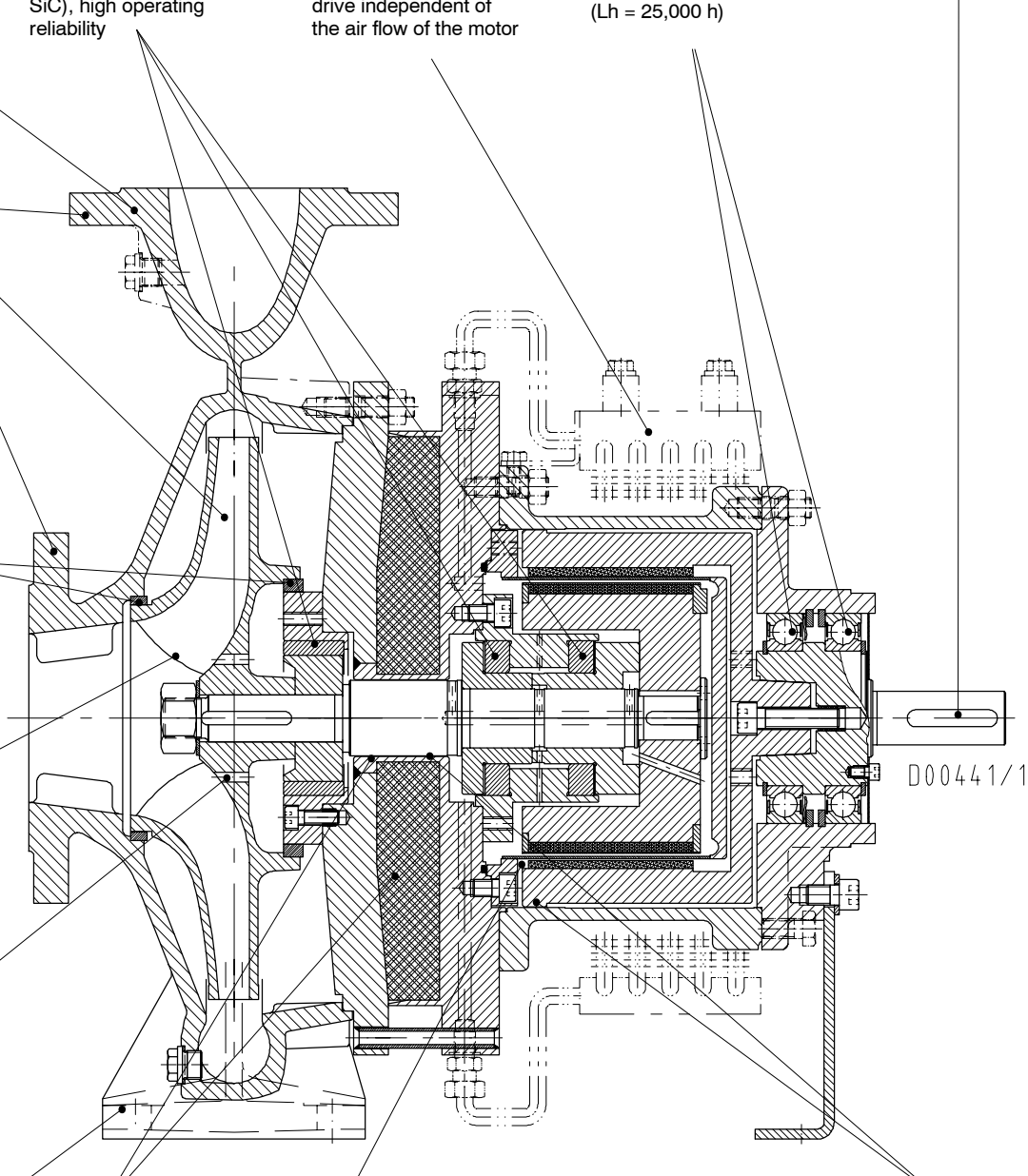
Casing cover with optimum heat barrier

Containment shroud made of Hastelloy, for optimum corrosion resistance at minimal magnetic losses.

Handling: Easy installation; when the drive unit is removed, the containment shroud remains bolted to the casing; the pump need not be drained.

Safety: Pump with magnetic coupling, absolutely leakage-free. Only 2 static sealing points

Backup ring and assembling aid protect the containment shroud from damage



D00441/1

1) GJS-400-18-LT to EN 1563

