

In-line Pump

Etaline

50 Hz

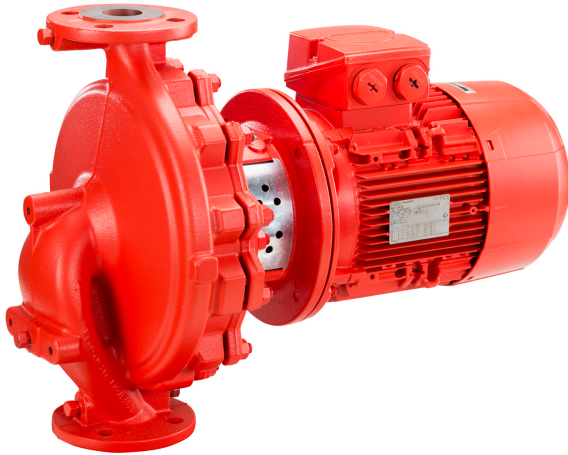
Type Series Booklet



Heating / Air-conditioning / Ventilation

In-line Pumps

Etaline



Main applications

- Heating systems
- Air-conditioning systems
- Cooling circuits
- Water supply systems
- Service water supply systems
- Industrial recirculation systems
- Swimming pools

Fluids handled

- Fluids not chemically or mechanically aggressive to the materials

Further information on fluids handled

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Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m ³ /h]	700
	Q [l/s]	194
Head	H [m]	96
Fluid temperature	T [°C]	-30 to +140
Operating pressure	p [bar]	≤ 16

Designation

Example: ETL 050-050-160 GG X AA 06 D 2

Designation key

Code	Description
ETL	Type series
	ETL Etaline
050	Nominal suction nozzle diameter [mm]
050	Nominal discharge nozzle diameter [mm]
160	Nominal impeller diameter [mm]
G	Casing material
	G Grey cast iron
G	Impeller material if different from casing material
	G Grey cast iron
	C Stainless steel
B Bronze	
X	Additional code
	X Special design
A	Casing cover
	A Conical seal chamber
A	Sealing system
	A Conical seal chamber
V Conical seal chamber with vent	
06	Seal code
	06 Mechanical seal material U3BEGG (SU 25, 35)
	07 Mechanical seal material Q1Q1EGG
	09 Mechanical seal material U3U3VGG
	10 Mechanical seal material Q1Q1X4GG
	11 Mechanical seal material BQ1EGG
22 Mechanical seal material AQ1EGG (SU 55)	
D	Scope of supply
	D Pump with motor
	A Pump without motor
2	Shaft unit
	2 SU 25
	3 SU 35
	5 SU 55

Further information on the designation

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Design details

Design

- Close-coupled design/in-line design
- Single-stage
- Horizontal/vertical installation
- Rigid connection between pump and motor

Pump casing

- Radially split volute casing

Impeller type

- Closed radial impeller

Shaft seal

- Standardised mechanical seal to EN 12756
- Shaft equipped with a replaceable shaft sleeve in the shaft seal area

Bearings

- Radial ball bearing in the motor housing

- Grease lubrication

Drive

Standard design:

- KSB/Siemens surface-cooled IEC three-phase current squirrel-cage motor

Winding	Up to 2.2 kW: 220-240 V/ 380-420 V From 3 kW: 380-420 V/ 660-725 V
Type of construction	Up to 4 kW: IM V1 From 5.5 kW: IM V15
Enclosure	IP55
Thermal class	F
Motor protection	3 PTC thermistors
Efficiency class	IE2 or IE3
Mode of operation	Continuous operation S1

SuPremE motor (up to 45 kW only):

- KSB SuPremE motor: surface-cooled, IEC-compatible, magnetless synchronous reluctance motor (PumpDrive required)

Frequency	50 Hz/ 60 Hz (at PumpDrive input)
Voltage	380 - 480 V (at PumpDrive input)
Type of construction	IM V15
Enclosure	IP55
Thermal class	F
Motor protection	3 PTC thermistors
Mode of operation	Continuous operation S1
Efficiency class	IE4, as per IEC/CD 60034-30 Ed.2

Automation

Automation options:

- PumpDrive
- PumpMeter

Materials

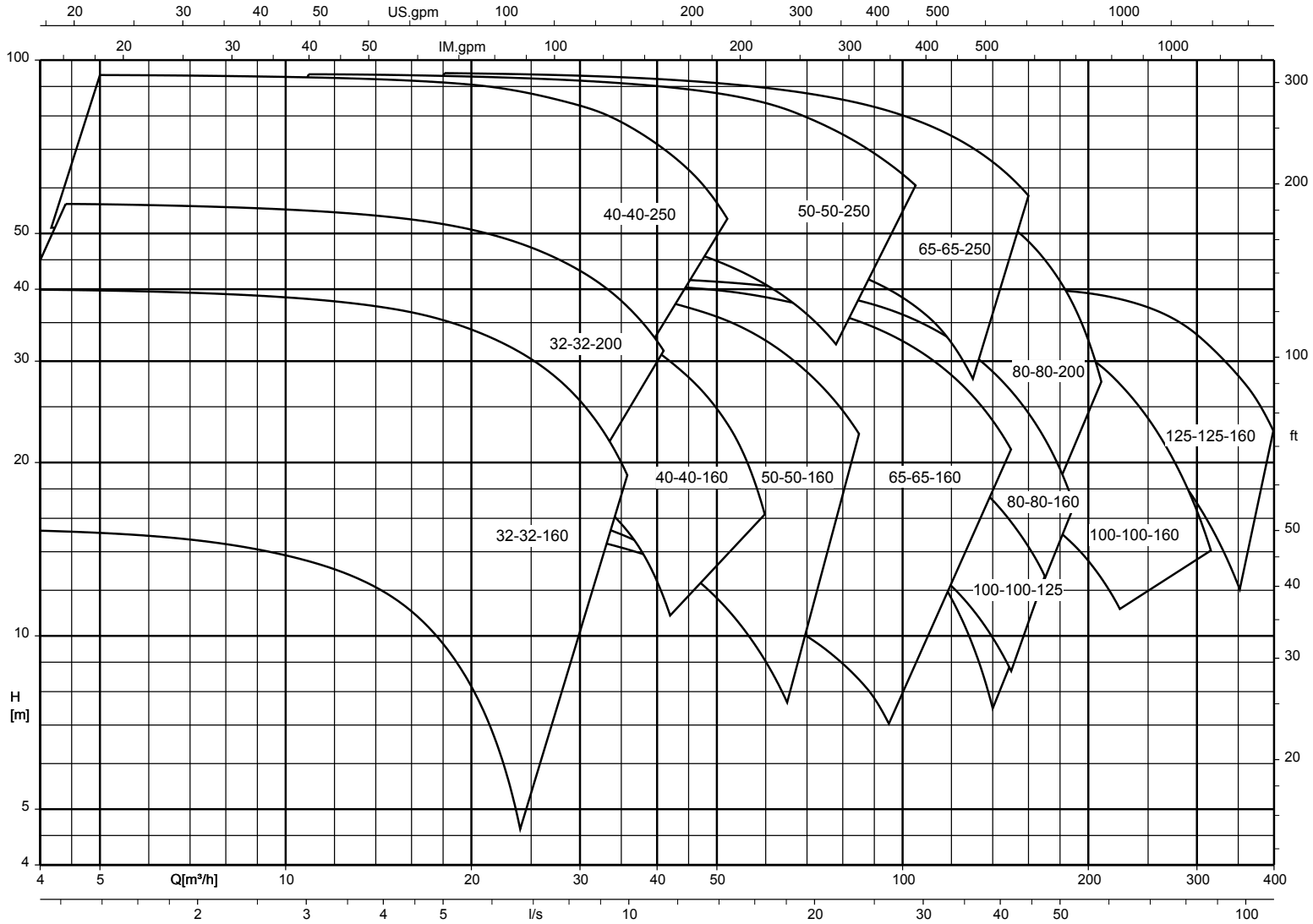
Overview of available materials

Part No.	Description	Material	Material variant		
			G	GB	GC
102	Volute casing	Grey cast iron EN-GJL-250 / A 48 CL 35B	X	X	X
161	Casing cover, conical	Grey cast iron EN-GJL-250 / A 48 CL 35B	X	X	X
210	Shaft	Tempered steel C45+N	X	X	X
		Stainless steel 1.4571 (optional)	X	X	X
230	Impeller	Grey cast iron EN-GJL-250 / A 48 CL 35B	X	-	-
		Bronze CC480K-GS / B30 C90700	-	X	-
		Stainless steel 1.4408 / A743 Gr CF8 M ¹⁾	-	-	X
341	Drive lantern	Grey cast iron EN-GJL-250 / A 48 CL 35B	X	X	X
400	Sealing elements	DPAF, asbestos-free	X	X	X
502.01	Casing wear ring, suction side	Grey cast iron EN-GJL-250 / A 48 CL 35B	X	X	X
		Bronze CC495K-GS	-	X	-
502.02	Casing wear ring, discharge side	Grey cast iron EN-GJL-250 / A 48 CL 35B	X	X	X
		Bronze CC495K-GS	-	X	-
523	Shaft sleeve	Stainless steel (CrNiMo steel)	X	X	X
902	Studs	Steel 8.8	X	X	X
903	Plug	Steel	X	X	X
920	Nut	8+A2A / 8+B633 SC1 TP3	X	X	X
920.95	Impeller nut	Stainless steel (CrNiMo steel)	X	X	X
		Steel 8	X	X	-

¹⁾ Size Etaline GC 125-125-250 not available in Europe.

Selection charts

Etaline, n = 2900 rpm



Etaline, n = 1450 rpm

