

In-line Pump

Etaline

50 Hz

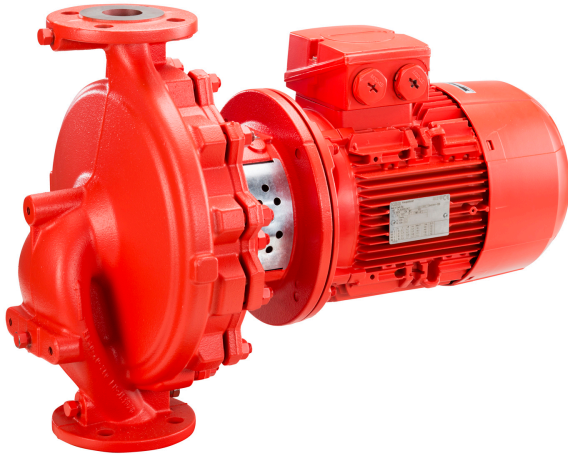
Type Series Booklet



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

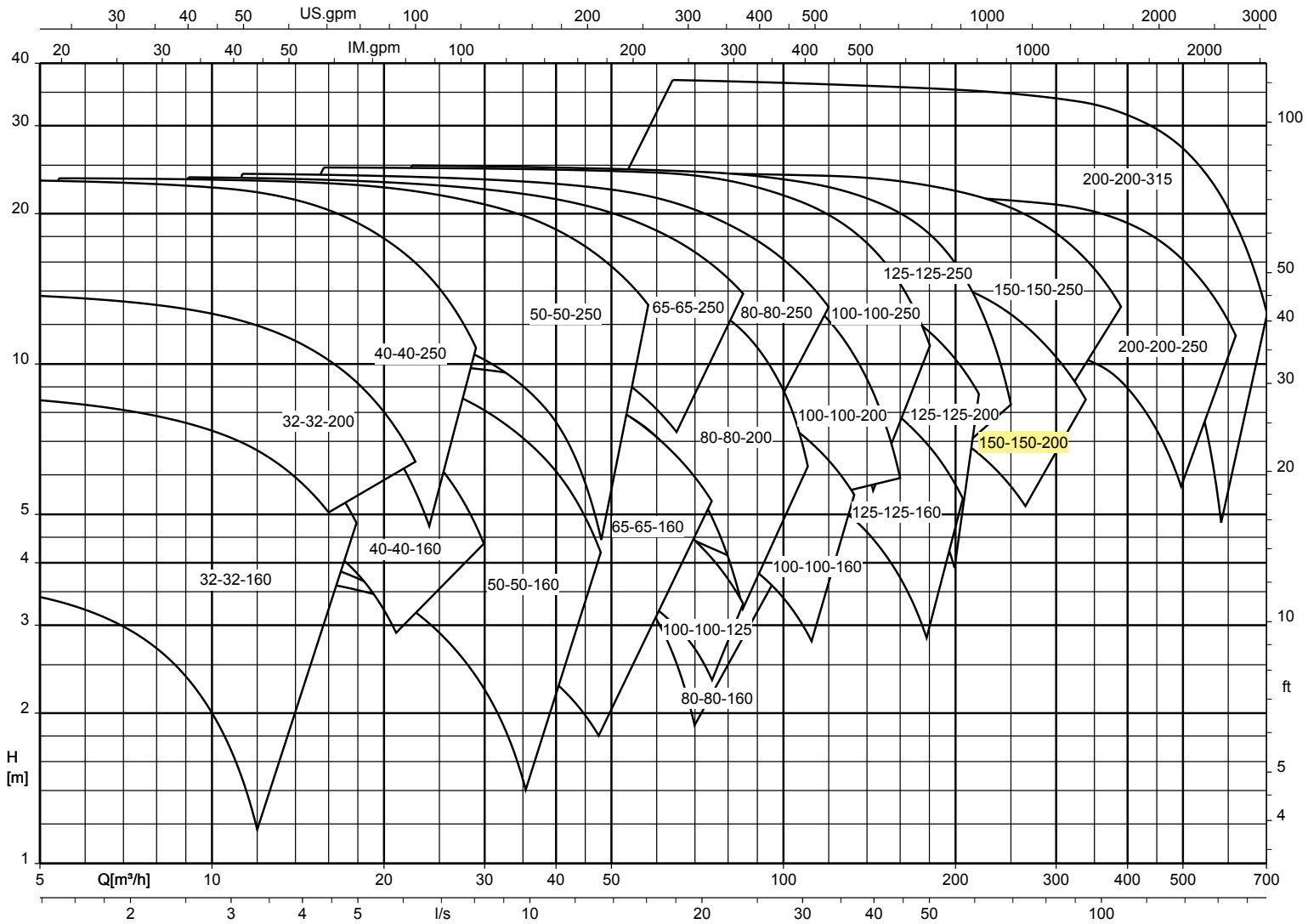
Size	Motor			[kg]
	Size	[kW]	400 V [A]	
100-100-200	100L	3,00	6,18	107.64
100-100-200	112M	4,00	8,23	112.64
100-100-200	132S	5,50	11,32	124.54
100-100-200	132M	7,50	14,70	138.54
100-100-200	160M	11,00	20,80	164.75
100-100-250	100L	3,00	6,18	119.56
100-100-250	112M	4,00	8,23	124.56
100-100-250	132S	5,50	11,32	136.46
100-100-250	132M	7,50	14,70	150.46
100-100-250	160M	11,00	20,80	176.67
100-100-250	160L	15,00	28,11	192.67
100-100-250	180M	18,50	35,28	267.29
125-125-160	100L	2,20	4,67	128.37
125-125-160	100L	3,00	6,18	130.37
125-125-160	112M	4,00	8,23	135.37
125-125-160	132S	5,50	11,32	147.27
125-125-160	132M	7,50	14,70	161.27
125-125-200	100L	3,00	6,18	127.46
125-125-200	112M	4,00	8,23	132.46
125-125-200	132S	5,50	11,32	144.36
125-125-200	132M	7,50	14,70	158.36
125-125-200	160M	11,00	20,80	184.57
125-125-200	160L	15,00	28,11	200.57
125-125-250	132S	5,50	11,32	156.47
125-125-250	132M	7,50	14,70	170.47
125-125-250	160M	11,00	20,80	196.68
125-125-250	160L	15,00	28,11	212.68
125-125-250	180M	18,50	35,28	287.3
125-125-250	180L	22,00	41,27	302.3
150-150-200	132S	5,50	11,32	175.85
150-150-200	132M	7,50	14,70	189.85
150-150-200	160M	11,00	20,80	216.06
150-150-200	160L	15,00	28,11	232.06
150-150-200	180M	18,50	35,28	306.68
150-150-250	132M	7,50	14,70	204.14
150-150-250	160M	11,00	20,80	230.35
150-150-250	160L	15,00	28,11	246.35
150-150-250	180M	18,50	35,28	320.97
150-150-250	180L	22,00	41,27	335.97
150-150-250	200L	30,00	55,19	400.26
150-150-250	225S	37,00	65,47	466.65
200-200-250	160M	11,00	20,80	285.87
200-200-250	160L	15,00	28,11	301.87
200-200-250	180M	18,50	35,28	376.49
200-200-250	180L	22,00	41,27	391.49
200-200-250	200L	30,00	55,19	455.78
200-200-250	225S	37,00	65,47	522.17
200-200-250	225M	45,00	80,19	552.17
200-200-315	180L	22,00	41,27	430.01
200-200-315	200L	30,00	55,19	490.01
200-200-315	225S	37,00	65,47	556.25
200-200-315	225M	45,00	80,19	586.25
200-200-315	250M	55,00	99,89	699.62

Technical data of the pump

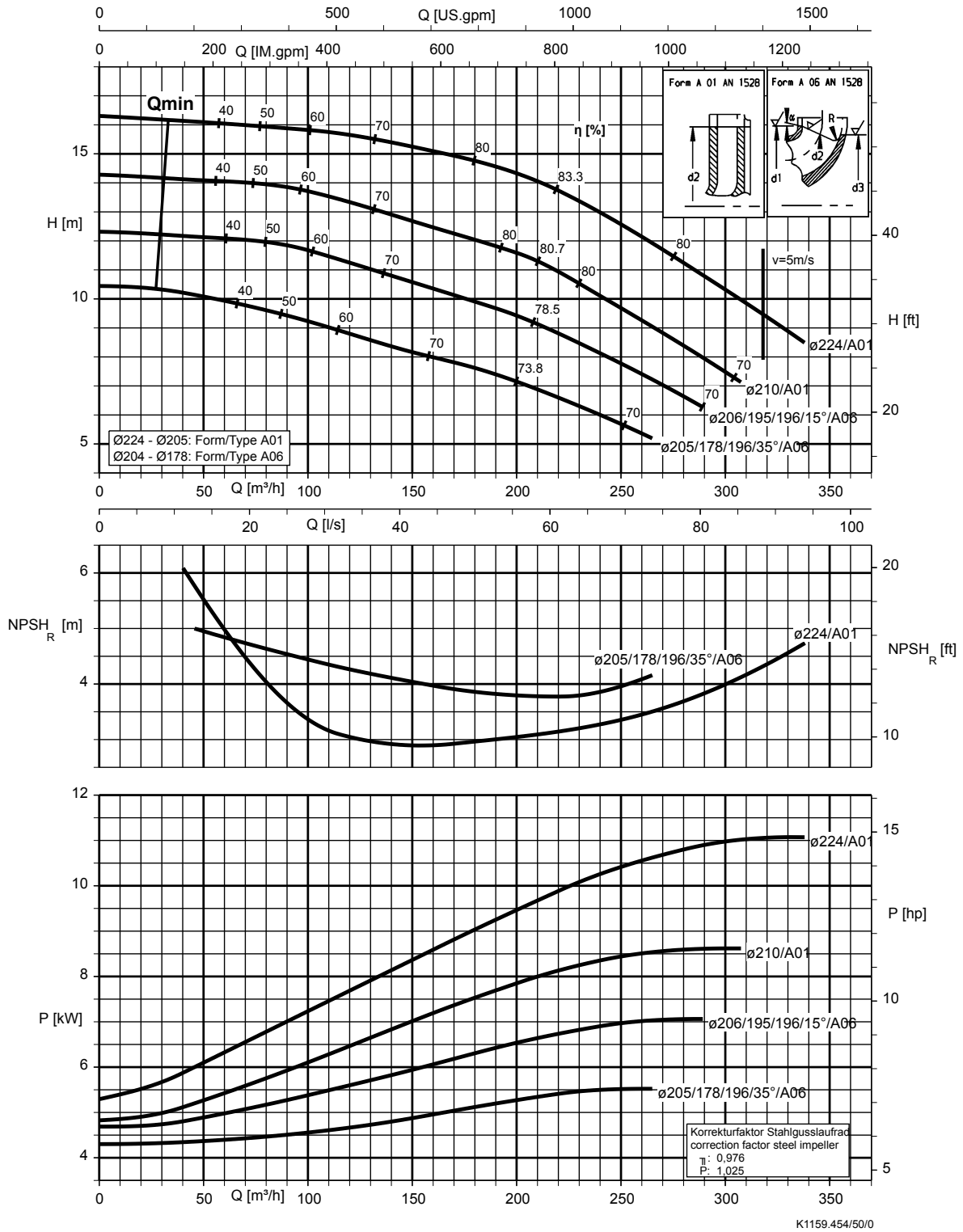
Overview

Size	Shaft unit	Impeller				Speed limit	
		Impeller outlet width	Impeller inlet diameter	Impeller diameter		Minimum	Maximum
				Minimum	Maximum		
[mm]	[mm]	[mm]	[mm]	[rpm]	[rpm]		
032-032-160	WS_25	5,7	52,7	112	170	500	4400
032-032-200	WS_25	5,6	54,0	165	204	500	3800
040-040-160	WS_25	8,5	60,6	136	174	500	3500
040-040-250	WS_25	7,5	62,6	197	261	500	3000
050-050-160	WS_25	13,0	70,0	120	174	500	4400
050-050-250	WS_25	8,4	74,1	198	260	500	3000
065-065-160	WS_25	16,9	86,9	108	174	500	4400
065-065-250	WS_25	10,5	84,0	196	260	500	3000
080-080-160	WS_25	21,0	92,0	132	174	500	3900
080-080-200	WS_25	17,0	99,7	170	219	500	3000
080-080-250	WS_35	15,1	101,0	190	260	500	3000
100-100-125	WS_25	25,8	99,0	124	141	500	4000
100-100-160	WS_25	31,6	124,0	138	174	500	3500
100-100-200	WS_35	24,5	115,0	178	219	500	3500
100-100-250	WS_35	19,0	115,0	215	269	500	2900
125-125-160	WS_35	37,6	135,0	155	185	500	3600
125-125-200	WS_35	32,5	142,0	179	219	500	3300
125-125-250	WS_35	27,0	145,0	210	269	500	2500
150-150-200	WS_35	40,7	159,0	178	224	500	2600
150-150-250	WS_35	37,0	162,4	218	269	500	2000
200-200-250	WS_35	48,8	191,0	220	269	500	1800
200-200-315	WS_55	39,7	191,5	264	334	500	2100

Etaline, n = 1450 rpm



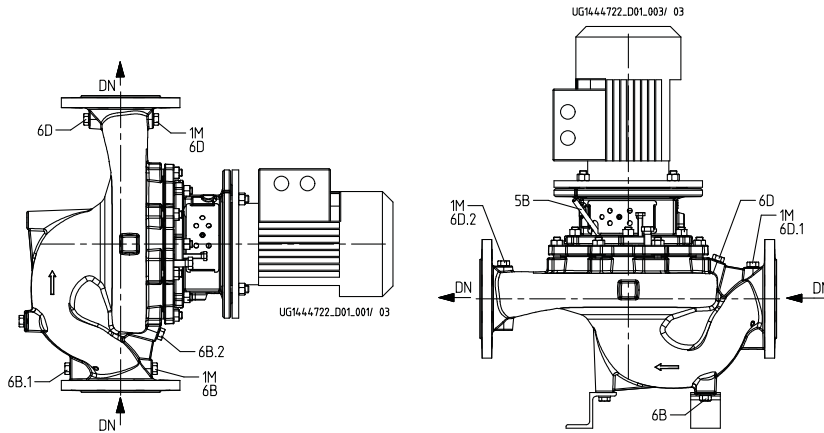
Etaline 150-150-200, n = 1450 rpm



K1159.454/50/0

Dimensions and connections

Connections



Connections

Connection types

Connection	Description	Configuration	Position
1M	Pressure gauge connection	Drilled and closed, or pressure sensor for PumpMeter (if selected)	Suction and discharge flanges
5B	Vent connection for the mechanical seal chamber	Plugged with vent plug	Casing cover
6B, 6B.1, 6B.2	Fluid drain	Drilled and closed	Volute casing
6D, 6D.1, 6D.2	Fluid priming and venting	Drilled and closed	Volute casing

Connection¹⁾[mm]

Size	1M, 5B, 6B/1/2, 6D/1/2
032-032-160	Rc 1/4
032-032-200	Rc 1/4
040-040-160	Rc 1/4
040-040-250	Rc 1/4
050-050-160	Rc 1/4
050-050-250	Rc 1/4
065-065-160	Rc 1/4
065-065-250	Rc 1/4
080-080-160	Rc 3/8
080-080-200	Rc 3/8
080-080-250	Rc 3/8
100-100-125	Rc 3/8
100-100-160	Rc 3/8
100-100-200	Rc 3/8
100-100-250	Rc 3/8
125-125-160	Rc 1/2
125-125-200	Rc 1/2
125-125-250	Rc 1/2
150-150-200	Rc 1/2
150-150-250	Rc 1/2
200-200-250	Rc 1/2
200-200-315	Rc 1/2

1) Rc=ISO 7/1

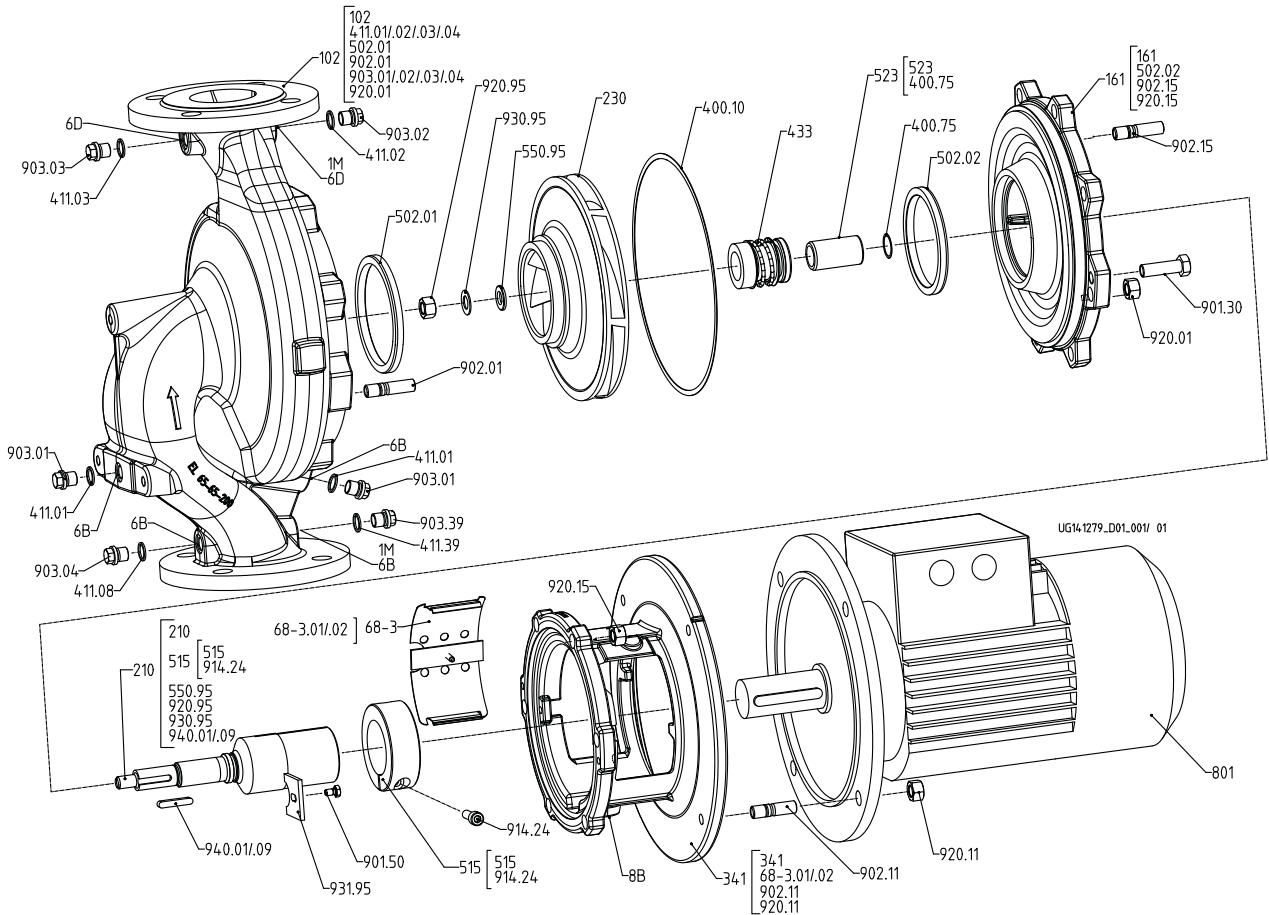
General assembly drawings

Variant with bolted casing cover

[Supplied in packaging units only

This view applies to the following pump sizes:

032-032-200 040-040-250 050-050-250 065-065-250 080-080-200 100-100-250 125-125-250 150-150-250 200-200-250
080-080-250 200-200-315



Model with bolted casing cover

List of components

Part No.	Description	Part No.	Description
102	Volute casing	901.30/50	Hexagon head bolt
161	Casing cover	902.01/11/15	Stud
210	Shaft	903.01/02/03/04/08/39	Screw plug
230	Impeller	914.24	Hexagon socket head cap screw
341	Drive lantern	920.01/11/15/95	Hexagon nut
400.10/75	Gasket	930.95	Safety device
411.01/02/03/04/08/39	O-ring	931.95	Lock washer
433	Mechanical seal	940.01/09	Key
502.01/02	Casing wear ring		
515	Taper lock ring	Auxiliary connections	
523	Shaft sleeve	1M	Pressure gauge
550.95	Disc ²¹⁾	6B	Fluid drain

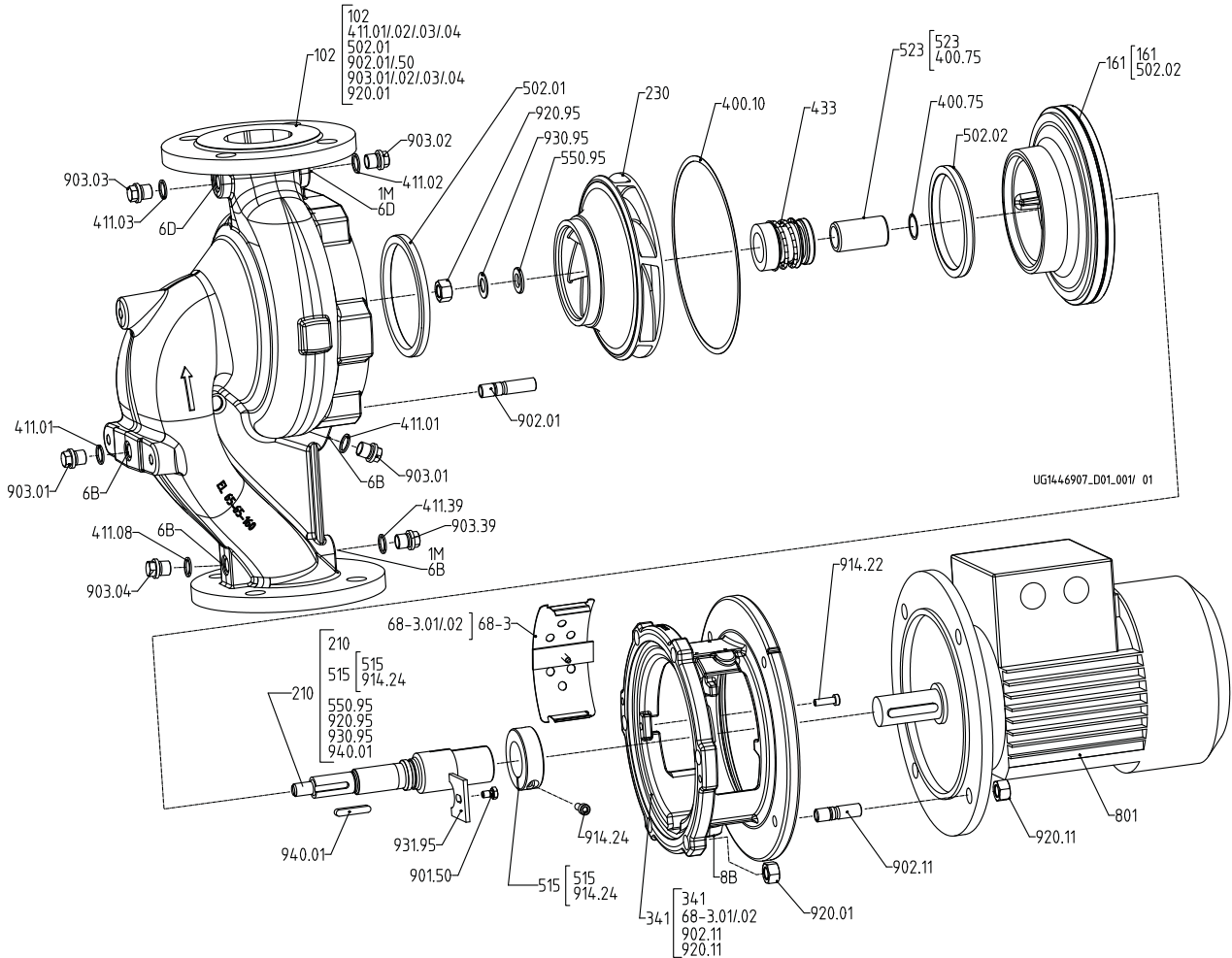
21) For shaft unit 25 only

Variant with clamped casing cover

[Supplied in packaging units only

This view applies to the following pump sizes:

- | | | | | | | | |
|-----------|-----------|-----------|-----------|-----------|-------------|-------------|-------------|
| 32-32-160 | 40-40-160 | 50-50-160 | 65-65-160 | 80-80-160 | 100-100-125 | 125-125-160 | 150-150-200 |
| | | | | | 100-100-160 | 125-125-200 | |
| | | | | | 100-100-200 | | |



Pump set with single mechanical seal and clamped casing cover

List of components

Part No.	Description	Part No.	Description
102	Volute casing	901.50	Hexagon head bolt
161	Casing cover	902.01/11/50	Stud
210	Shaft	903.01/02/03/04/08/39	Screw plug
230	Impeller	914.22/24	Hexagon socket head cap screw
341	Drive lantern	920.01/11/95	Hexagon nut
400.10/75	Gasket	930.95	Safety device
411.01/02/03/04/08/39	O-ring	931.95	Lock washer
433	Mechanical seal	940.01	Key
502.01/02	Casing wear ring		
515	Taper lock ring	Auxiliary connections	
523	Shaft sleeve	1M	Pressure gauge
550.95	Disc ²²⁾	6B	Fluid drain

²²⁾ For shaft unit 25 only