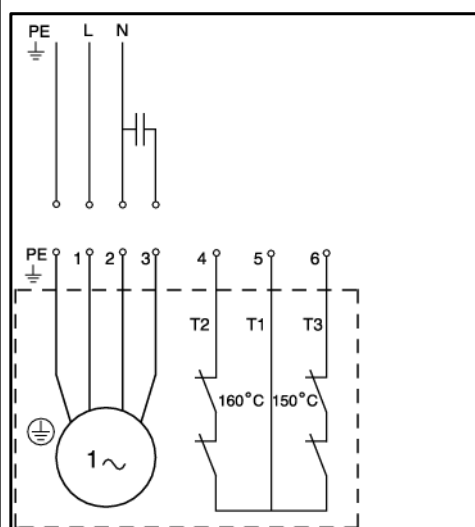
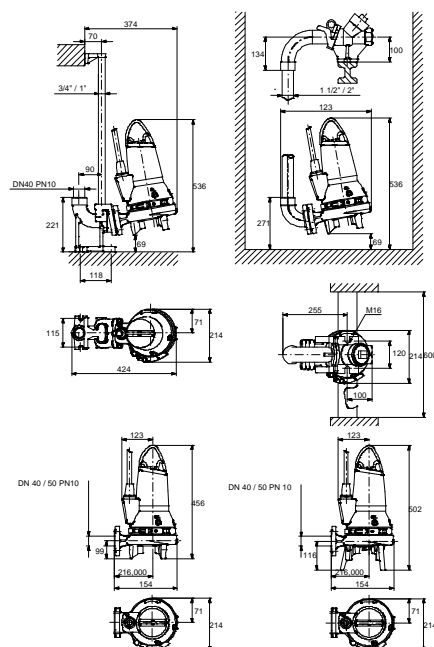
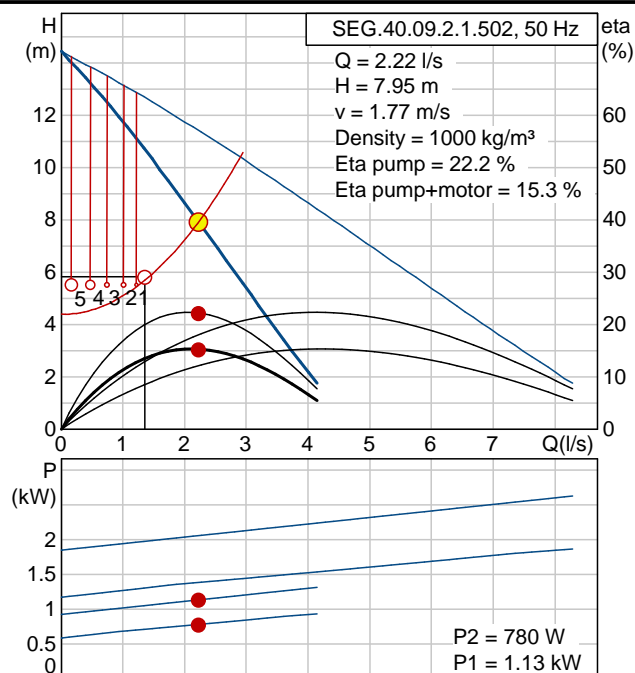
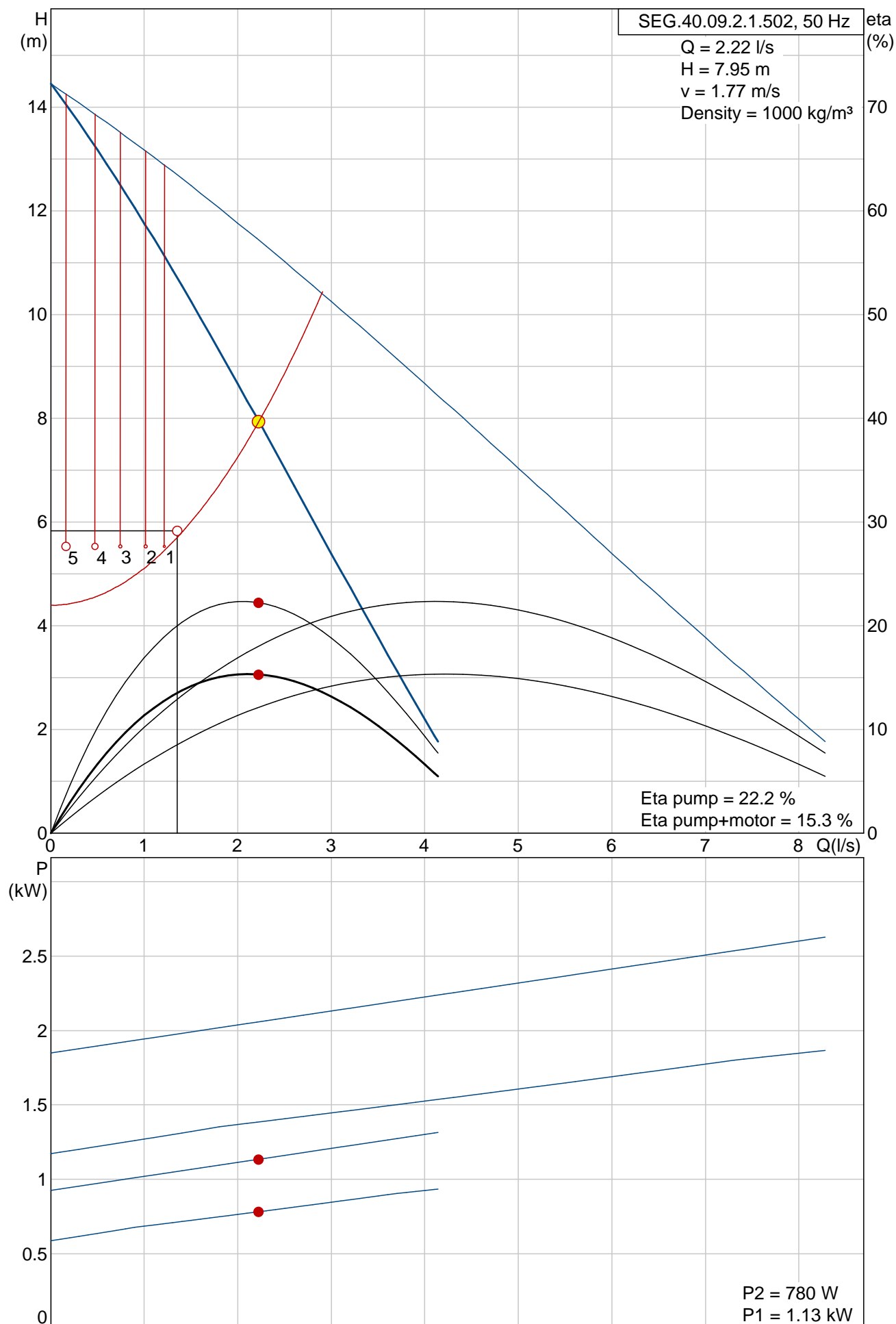


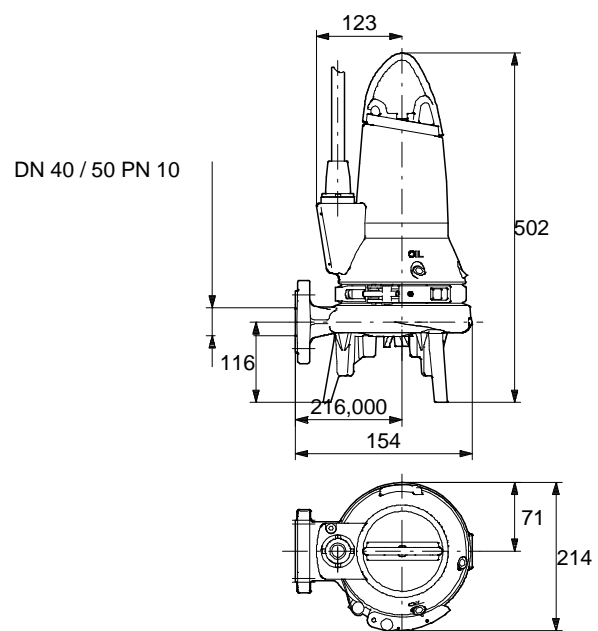
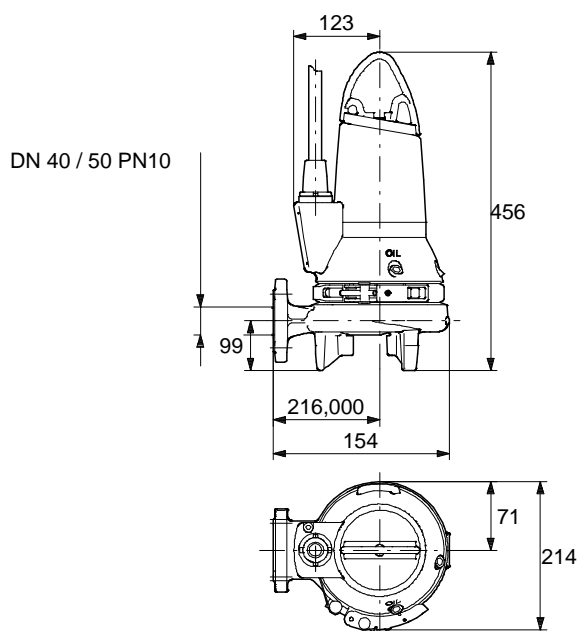
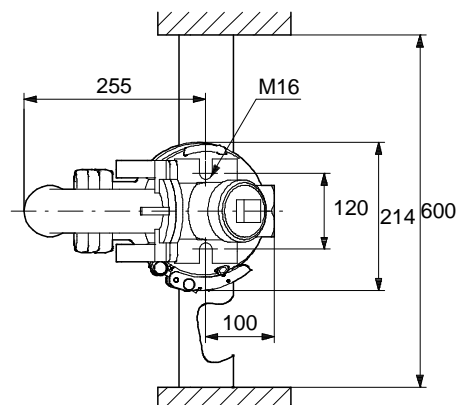
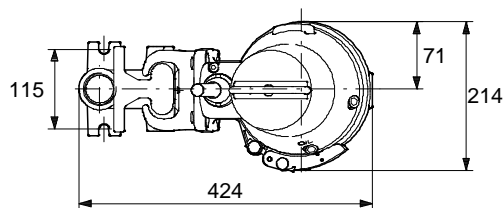
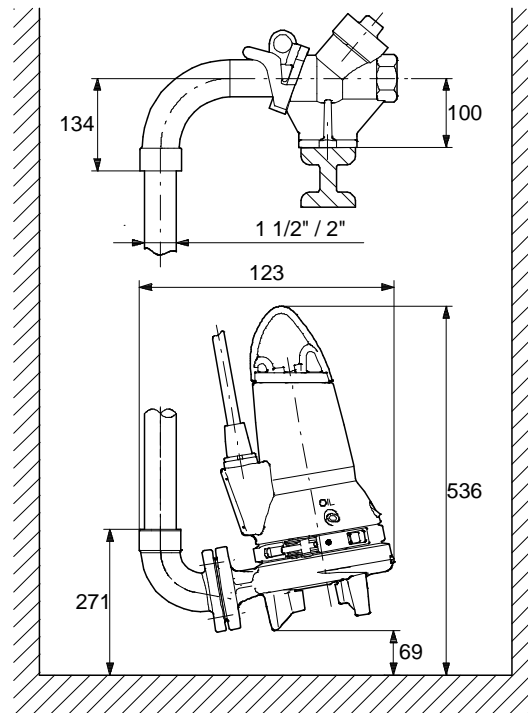
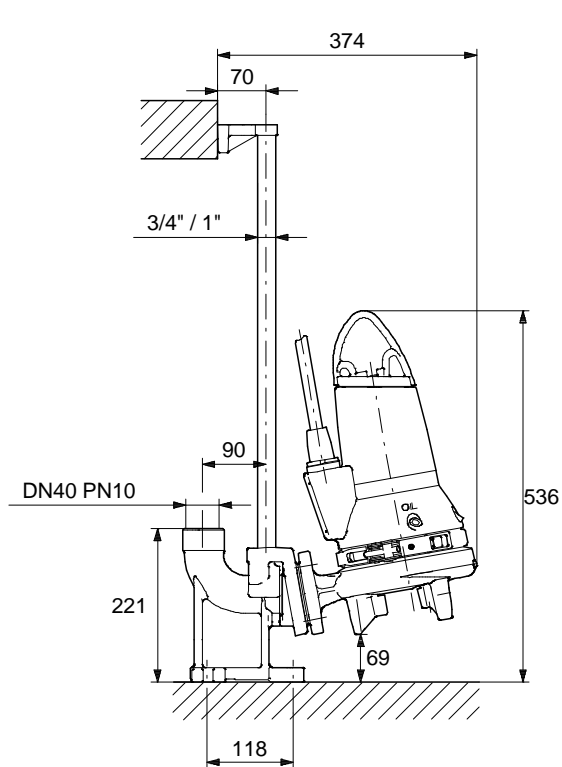
Description	Value
Product name:	SEG.40.09.2.1.502
Product No:	96075893
EAN number:	5700394850650
Technical:	
Actual calculated flow:	2.22 l/s
Max flow:	14.8 m³/h
Resulting head of the pump:	7.95 m
Head max:	14.4 m
Type of impeller:	GRINDER SYSTEM
Primary shaft seal:	SIC/SIC
Maximum operating pressure	6 bar
Approvals on nameplate:	PA-I
Materials:	
Pump housing:	Cast iron EN-JL1030
Impeller:	Cast iron EN-JL1030
Gasket:	SIC/SIC
Installation:	
Maximum ambient temperature:	40 °C
Maximum operating pressure	6 bar
Flange standard:	DIN
Pump outlet:	DN 40
Pressure stage:	PN 10
Maximum installation depth:	10 m
Inst dry/wet:	S
Installation	vertical
Liquid:	
Liquid temperature range	0 .. 40 °C
Liquid temp:	20 °C
Density:	1000 kg/m³
Electrical data:	
Number of poles:	2
Power input - P1:	1.4 kW
Rated power - P2:	0.9 kW
Mains frequency:	50 Hz
Rated voltage:	1 x 230 V
Voltage tolerance	+6/-10 %
Start. method:	direct-on-line
Max starts per. hour:	30
Rated current:	6.2 A
Starting current	38 A
Rated current at no load:	2.9 A
Cos phi - power factor	0,99
Cos phi - p.f. at 3/4 load	0,98
Cos phi - p.f. at 1/2 load	0,94
Rated speed:	2890 rpm
Moment of inertia:	0.0036 kg m²
Motor efficiency at full load:	71 %
Motor efficiency at 3/4 load:	67 %
Motor efficiency at 1/2 load:	58 %
Capacitor size - run	30 µF
Capacitor size - start	150 µF
Enclosure class (IEC 34-5):	68
Insulation class (IEC 85):	F
Motor protec:	THERMAL SWITCH
Thermal protec:	external
Length of cable:	10 m
Cable type:	H07RN-F
Type of cable plug:	No plug
Controls:	
Control box:	not included
Additional I/O:	External
Moisture sensor:	without moisture sensors
Others:	
Net weight:	38 kg



# 96075893 SEG.40.09.2.1.502 50 Hz



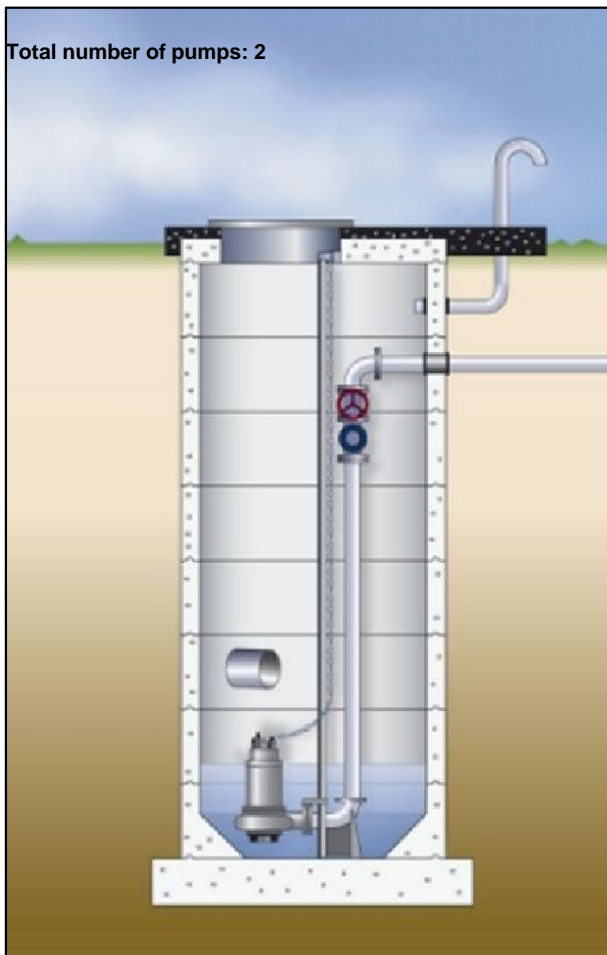
**96075893 SEG.40.09.2.1.502 50 Hz**



Note! All units are in [mm] unless others are stated.  
Disclaimer: This simplified dimensional drawing does not show all details.

## Installation illustration

Total number of pumps: 2



### Head:

Pipe friction losses (in the pit): 0.636 m  
 Pipe friction losses (outside pit): 0.75 m  
 Pressure loss from manifold: 0.04 m  
 Resulting head of the pump: 7.95 m

## Pressure Loss in Pipes

Pipe	Length	Material	Size	Roughness	Velocity	Zeta	Friction losses
<i>Pipe friction losses (in the pit)</i>							
A	5 m	Galvanized steel	DN 40 (40 mm)	1 mm	1.07 m/s	4.3	0.636 m
<i>Recommended diameter (<math>v &gt; 1</math> m/s): 41.46 mm</i>							
<i>Total friction losses: 0.636 m</i>							
<i>Pipe friction losses (outside pit), operation with all pumps</i>							
1	15 m	PEM/PEH PN10	DN 50 (40.8 mm)	0.25 mm	1.03 m/s	1.5	0.75 m
<i>Recommended diameter (<math>v &gt; 0.7</math> m/s): 49.5533390166 952</i>							
<i>Total friction losses: 0.75 m</i>							
<i>Pipe friction losses (outside pit), operation with one pump (worst case scenario)</i>							
1	15 m	PEM/PEH PN10	DN 50 (40.8 mm)	0.25 mm	1.03 m/s	1.5	0.75 m
<i>Recommended diameter (<math>v &gt; 0.7</math> m/s): 49.5533390166 952</i>							
<i>Total friction losses: 0.75 m</i>							

## Pressure Loss from Manifold

i	DNi	Inflow	Cross expansion	v min	v max
1	DN 40 (40 mm)	Bend 90	Widening less than 20°	1.07 m/s	1.07 m/s
2	DN 40 (40 mm)	lateral Y-branch, confluence		1.07 m/s	2.15 m/s
Pressure loss from manifold: 0.04 m					

**Zeta Values**

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<i>Pipe friction losses in the pit (Discharge side) Pipe = A</i>		
Isolating Valve	1	(0.3)
Non-return valve ball type	1	(1.0)
Autocoupling	1	(0.5)
Bend 45	2	(0.25)
Bend 90	2	(0.5)
Additional Zeta values	1	(1.0)
Zeta =		4.3

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<i>Pipe friction losses (outside pit) Pipe = 1</i>		
Bend 90	1	(0.5)
Outlet	1	(1.0)
Zeta =		1.5

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