

# EGT/EGF – SUBMERSIBLE DRAINAGE PUMP FOR DIRTY WATER

## CONSTRUCTION

- Single-impeller submersible pumps, with free-flow (vortex) impeller
- **EGT:** with vertical threaded delivery port (G 2")
- **EGF:** with horizontal flanged and threaded delivery port (DN 50 - G 2")
- Double mechanical shaft seal with interposed oil chamber, to protect against dry-running

## APPLICATIONS

- For domestic or industrial waste water, dirty water with solids up to 50 mm grain size, for liquids which are compatible with the pump materials
- For draining rooms or emptying tanks
- Extraction of water from ponds, streams or pits and for rainwater recovery

## OPERATING CONDITIONS

- Liquid temperature up to 35 °C
- pH value: 6-11
- Maximum immersion depth: 5 m
- Minimum immersion depth: 275 mm
- Continuous duty (with submerged motor)

## MOTOR SPECIFICATION

- 2-pole induction motor, 50 Hz ( $n \approx 2900$  rpm)
- **EGF/EGT:** Single-phase 230 V  $\pm$  10%, with float switch and thermal protector  
Incorporated capacitor  
Cable: H07Rn-F, 3G1 mm<sup>2</sup>, length 10 m, with plug Cel-Unel 47166
- **EGFT/EGTT:** Three-phase 230 V  $\pm$  10%; Three-phase 400 V  $\pm$  10%  
Cable: H07Rn-F, 4G1 mm<sup>2</sup>, length 10 m, without plug
- Insulation class F
- Protection IPX8 (for continuous immersion)
- Triple impregnation humidity-proof dry winding
- Constructed in accordance with: EN 60034-1; EN 60335-1, EN 60335-2-41

## AVAILABLE ON REQUEST

- Other voltages
- Frequency 60 Hz
- Other mechanical seal
- Cable length 20 m
- Motor suitable for operation with frequency converter
- Three-phase pumps with incorporated float switch

## PUMP IDENTIFICATION CODE

**EGT 7 T 400 50 F**

- F for pump with float switch (empty without float switch)
- Motor frequency
- Motor voltage
- Three phase version (empty for single phase)
- Nominal power
- Pump model  
(EGT: with vertical threaded delivery port G 2")  
(EGF: with horizontal flanged and threaded delivery port G 2" - DN50)

0044002EN 02/2018



# EGT/EGF

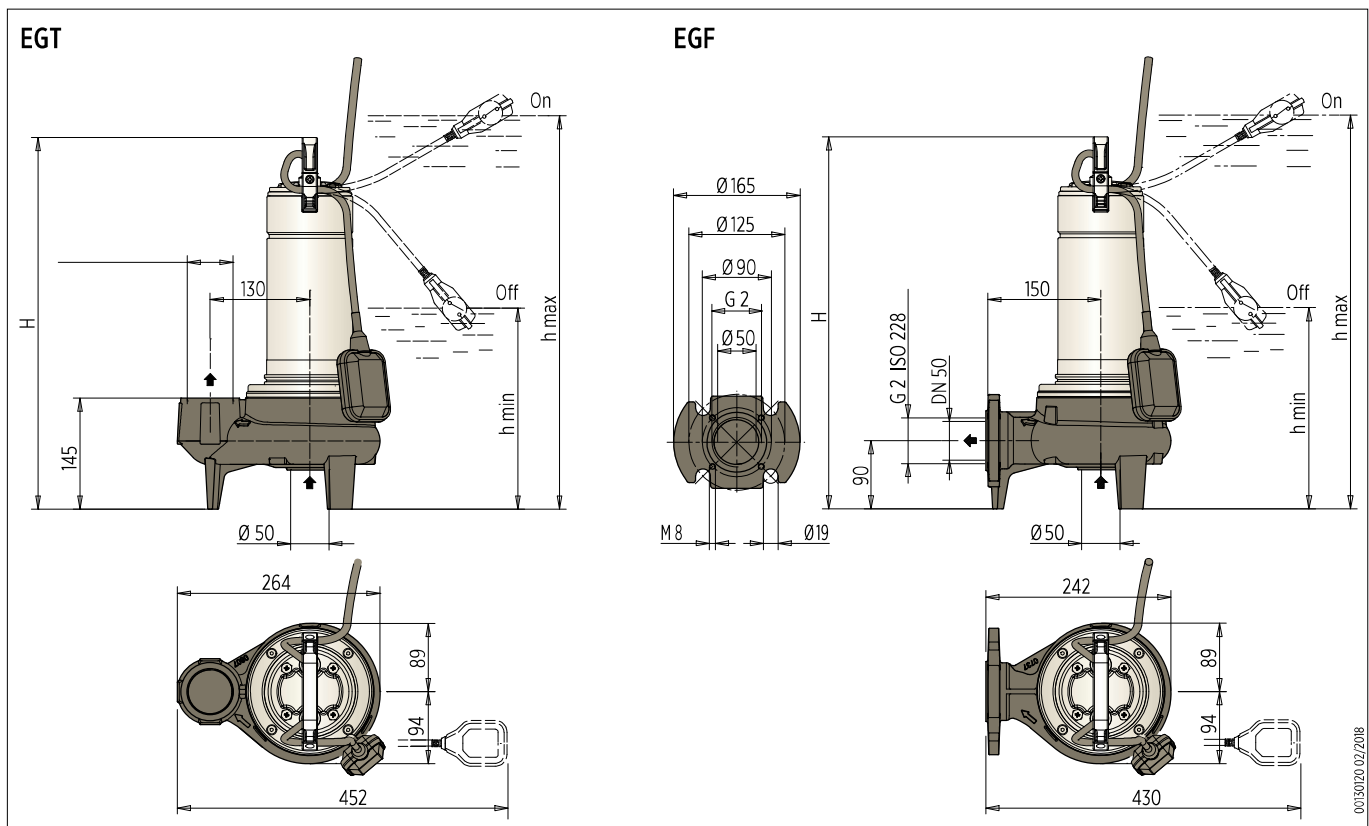
## MATERIALS TABLE

Components	Materials
Pump casing / Impeller	Cast iron GJL 200 EN 1561
Strainer / Motor jacket / Jacket cover / Casing cover	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Handle	Polypropylene (with frame in AISI 304)
Shaft	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Mechanical seal upper / Mechanical seal lower	Ceramic alumina / Carbon / NBR
Seal lubrication oil	Oil for food/pharmaceutical machinery

## DIMENSIONS AND WEIGHTS

Pump model	EGT			Weight [kg]	
	Dimensions [mm]			1 ~	3 ~
	H	h max	h min		
EGT 5 (T)	460	535	275	15,8	14,8
EGT 7 (T)	460	535	275	16	15
EGT 9 (T)	485	560	300	17,8	15,8
EGT 11 (T)	505	580	320	20,3	18,8
EGT 15 T	505	580	320	-	20,3
EGT 15	535	610	350	21,8	-

Pump model	EGF			Weight [kg]	
	Dimensions [mm]			1 ~	3 ~
	H	h max	h min		
EGF 5 (T)	460	535	275	16	15
EGF 7 (T)	460	535	275	16,2	15,2
EGF 9 (T)	485	560	300	18	16
EGF 11 (T)	505	580	320	20,5	19
EGF 15 T	505	580	320	-	20,5
EGF 15	535	610	350	22	-



# EGT/EGF

TABLE OF HYDRAULIC PERFORMANCE  $n \approx 2900$  1/min

Pump model	1x230 V			Capacitor		P <sub>2</sub>		Q = DELIVERY									
	[A]	[µf]	[Vc]	[kW]	[HP]	l/min	50	100	150	200	250	300	350	400	500	550	600
						0	3	6	9	12	15	18	21	24	30	33	36
EGT/F 5	4.3	16	450	0.55	0.75	8	7.4	6.9	6.3	5.6	4.8	4	3	1.8	-	-	-
EGT/F 7	4.8	16	450	0.75	1	9.3	8.8	8.3	7.7	7	6.2	5.3	4.3	3.2	2.2	-	-
EGT/F 9	6.6	25	450	0.9	1.2	11	10.5	10	9.3	8.6	7.8	7	6.2	5.2	4.2	1.8	-
EGT/F 11	8.4	30	450	1.1	1.5	12.8	12.2	11.6	11	10.3	9.5	8.6	7.7	6.7	5.7	3.3	2
EGT/F 15	12	35	450	1.5	2	15	14.4	13.7	13	12.2	11.3	10.4	9.5	8.5	7.4	4.5	3.5

Pump model	3x230 V		3x400 V		P <sub>2</sub>		Q = DELIVERY									
	[A]	[A]	[kW]	[HP]	l/min	50	100	150	200	250	300	350	400	500	550	600
					0	3	6	9	12	15	18	21	24	30	33	36
EGT/F 5 T	2.6	1.5	0.55	0.75	8	7.4	6.9	6.3	5.6	4.8	4	3	1.8	-	-	-
EGT/F 7 T	3.1	1.8	0.75	1	9.3	8.8	8.3	7.7	7	6.2	5.3	4.3	3.2	2.2	-	-
EGT/F 9 T	4	2.3	0.9	1.2	11	10.5	10	9.3	8.6	7.8	7	6.2	5.2	4.2	1.8	-
EGT/F 11 T	5.2	3	1.1	1.5	12.8	12.2	11.6	11	10.3	9.5	8.6	7.7	6.7	5.7	3.3	2
EGT/F 15 T	6.9	4	1.5	2	15	14.4	13.7	13	12.2	11.3	10.4	9.5	8.5	7.4	4.5	3.5

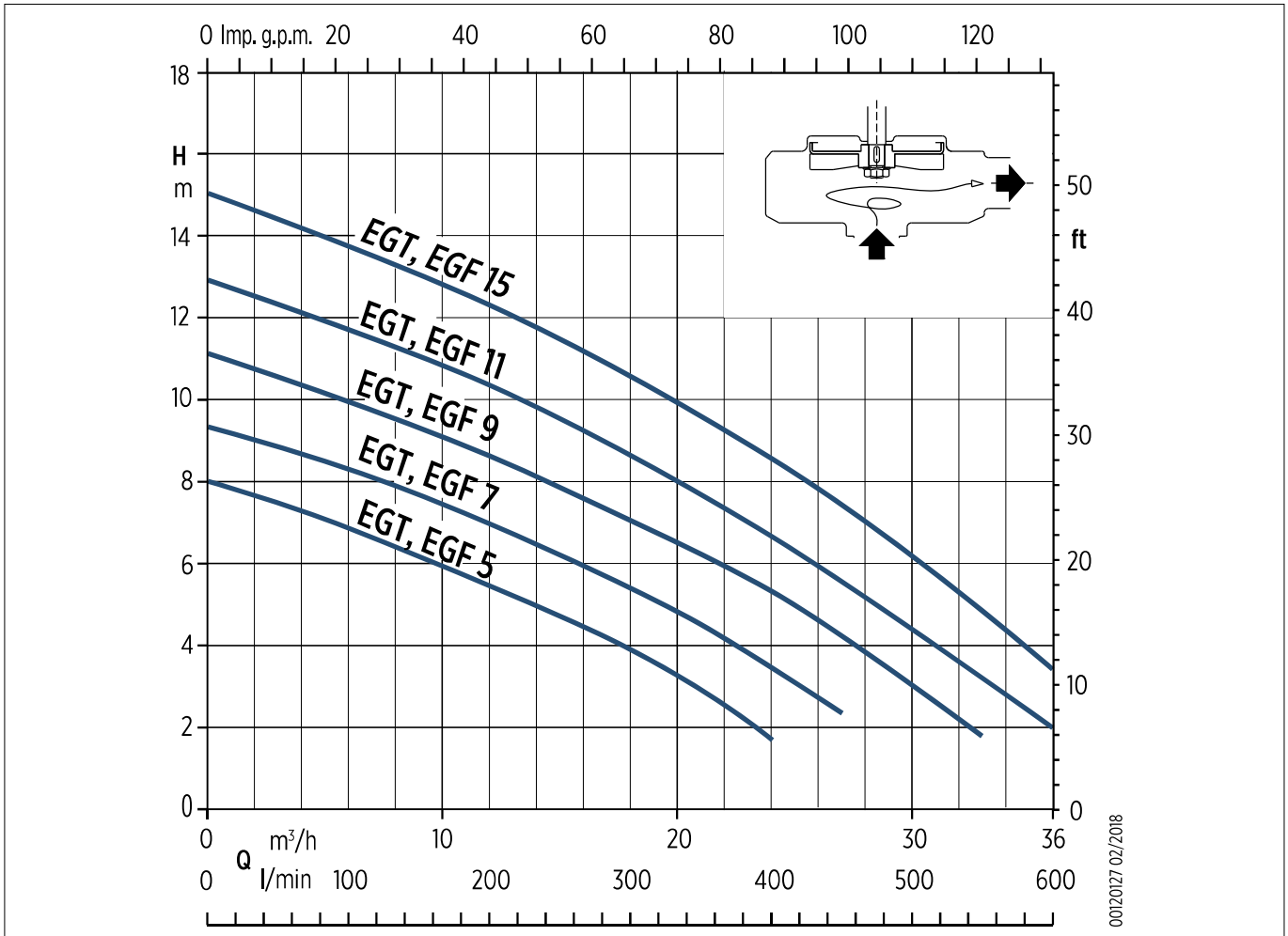
P<sub>1</sub>: Max absorbed power

P<sub>2</sub>: Motor nominal power

Density  $\rho = 1000$  Kg/m<sup>3</sup>

Viscosity kinematic  $\nu = \max 20$  mm<sup>2</sup>/sec

PERFORMANCE CURVES  $n \approx 2900$  rpm

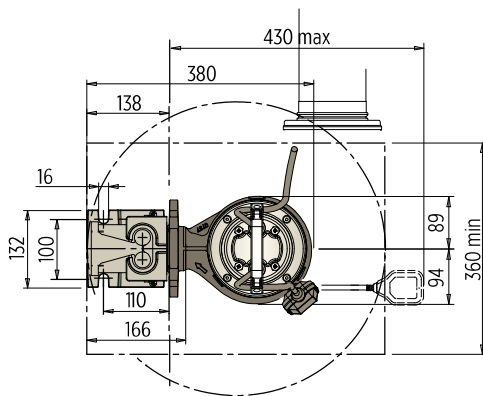
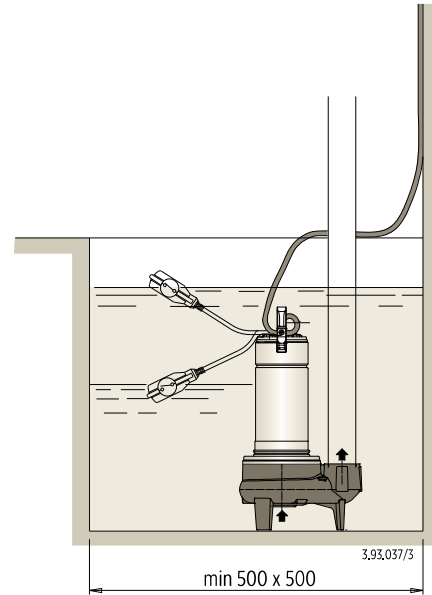
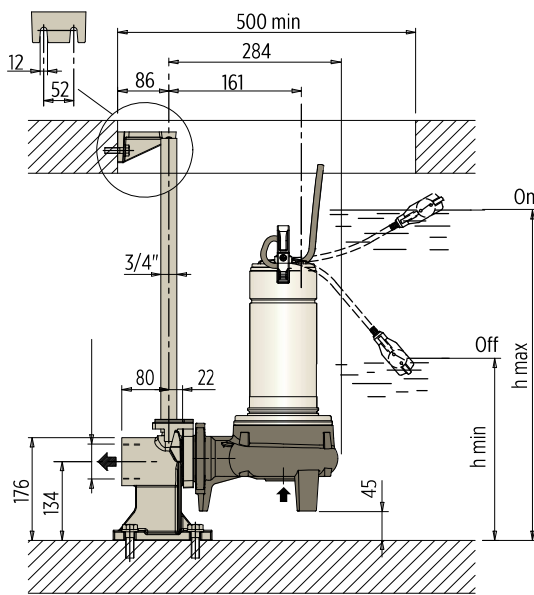


00120127 02/2018



# EGT/EGF - INSTALLATION EXAMPLES AND DIMENSIONS

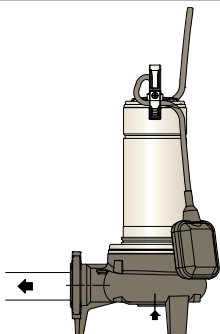
## INSTALLATION



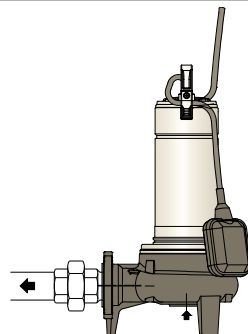
0033002102/2018

Pump model	EGT		EGF		
	Dimensions [mm]		Dimensions [mm]		
	h max	h min	h max	h min	
EGT 5 (T)	535	275	EGF 5 (T)	535	275
EGT 7 (T)	535	275	EGF 7 (T)	535	275
EGT 9 (T)	560	300	EGF 9 (T)	560	300
EGT 11 (T)	580	320	EGF 11 (T)	580	320
EGT 15 T	580	320	EGF 15 T	580	320
EGT 15	610	350	EGF 15	610	350

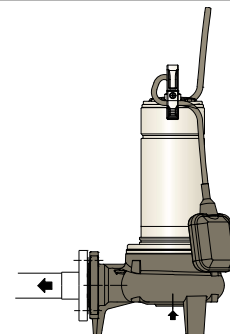
## CONNECTION EXAMPLES



Pump with threaded ports:  
pipes screwed into the ports



Pump with threaded ports:  
pipes with union couplings (locally available)



Pump with DN 50 flanged ports:  
pipes with counter-flanges

0033002102/2018

# EGT/EGF - FEATURES

Cable length 10 m,  
pump single-phase with plug

Handle in polypropylene,  
with frame in stainless steel

Easy inspection of the capacitor area

Easy adjustment of the float switch:  
to allow the adjustment of  
start/ stop pump levels

Ring against accidental extraction  
of the cable

The double shaft seal with oil  
chamber separates the motor  
from the water and provides  
further protection against  
accidental operation when dry

Relief valve: the pump is fitted to a relief  
valve for air release around the impeller  
granting a proper pump priming also after  
long standstill periods

Chamber with  
food/ pharmaceutical  
machinery oil

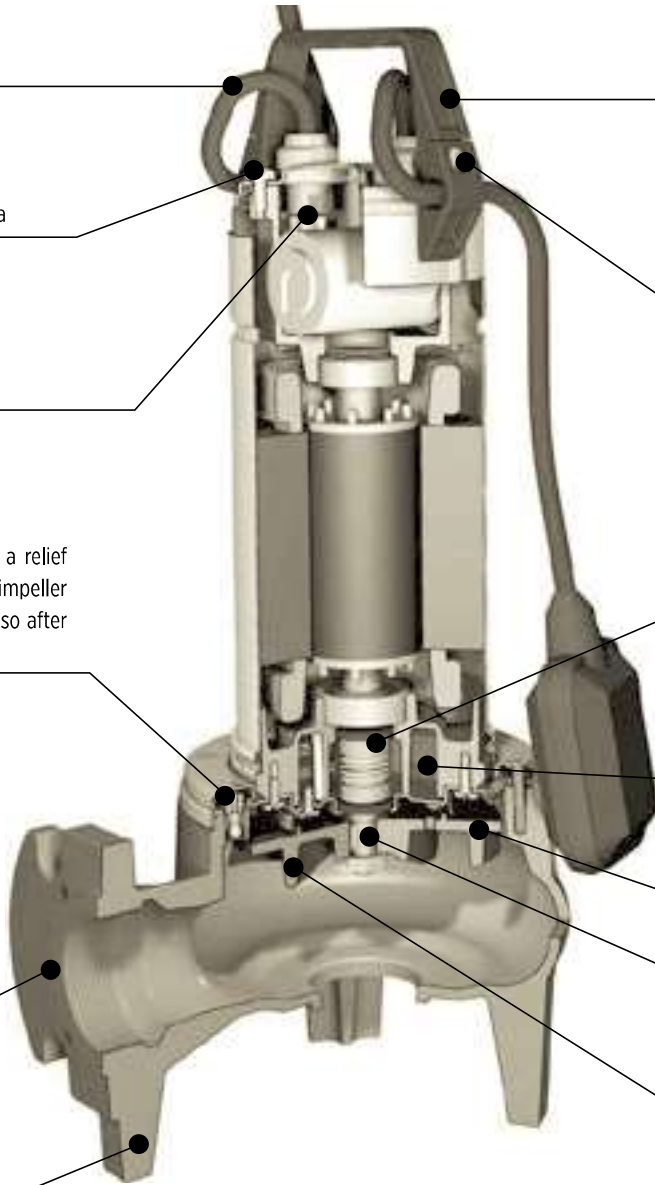
Maximum flexibility of  
connection:  
- Flange DN 50  
PN 10 EN 1092-2  
- N. 4 M8 holes on Ø 90  
for duck foot coupling SA-G2"  
- G 2 ISO 228

Impeller with epoxy  
cataphoresis treatment  
for a greater protection  
against corrosion

Pump casing with epoxy  
cataphoresis treatment joined  
to the external paint for a  
greater protection against the  
corrosion

Shaft in chrome- nickel  
stainless steel

The free-fow impeller (vortex)  
costruction is particulary  
suitable for liquids containing  
solids up to 50 mm grain size



G 2 vertical, upward delivery  
port for installation in small  
pits, without the need for an  
elbow on the pump

