

ANAVALOS Submersible Wastewater Sewage Pump Type RC Cutting System

Applications

Submersible sewage pumps RC with integrated cutting system have been designed for handling effluent or sewage for considerably higher head and low capacity in municipal pumping stations or other domestic waste water. The installation of these pumps can be in fixed position with auto coupling system or in free standing position as portable pumps.

Design

All pumps are produced according to the standards of ISO 9001 making a robust and compact construction for pump unit

Casting parts are made of high-grade cast iron, free of defects tested 1:1 and machined.

Impellers are perfectly balanced and combined with a special cutting system fitted on acuter blade. Rotating part is connected by rotor before the impeller for non-blocking operation

Pump and motor are designed for submersible continuous use (S1) and for maximum 40°C medium temperature.

A sensor for water leakage is protecting the motor from failure, in case there is a leakage in the shaft seal.

Motor

IE2 efficiency class as standard (IE3 on request). Three Phase 400V, 50Hz, 2 pole (2900 r.p.m.) and 4 pole (1450 r.p.m.). Insulation class F, protection IP68

Bearings

Life lubricated bearings, series 3300, 6200 and 6300 designed for many hours life time



Sealing

Shaft sealing is protecting the motor from wet operation. Double mechanical seal of silicon carbide, independent of direction of rotation. Motor side seal is cooled and lubricated by oil. Pump side seal is cooled by the pumped liquid.

Identification

Example RC 5020 M55-2

RC: Pump series with cutting system
 50: Discharge outlet DN 50
 20: Impeller type (15 or 20)
 M: Motor
 55: Motor rated power P_2 kW x 10
 2: Number of Poles

Materials

Motor housing:	Cast iron EN-GJL-250
Pump casing:	Cast iron EN-GJL-250
Impeller:	Cast iron EN-GJL-250
Shaft:	Stainless steel AISI 420
Mechanical seal:	Silicon carbide
Cutting plate:	Stainless steel
Cutting blade:	Stainless steel

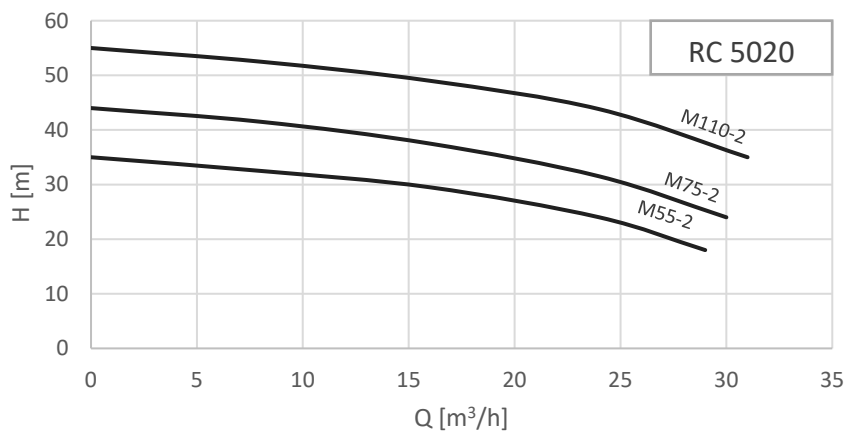
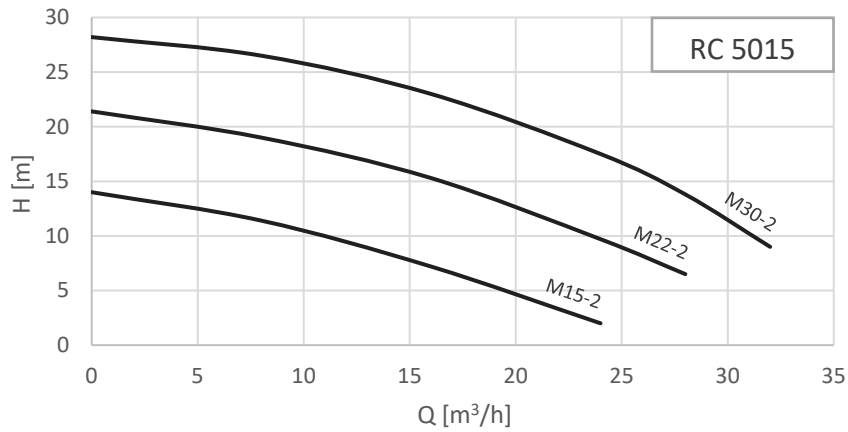
ANAVALOS Submersible Wastewater Sewage Pump Type RC

Technical Data

Type	Discharge	Free Passage [mm]	Motor Power P ₂ [kW]	Rated Current I _N [A]	Rated Voltage [V]	Nominal Speed [r.p.m.]	Cable [10m]
RC 5015 M15-2	DN50	10	1.5	3.4	400	2900	4G1.5+3G1.5
RC 5015 M22-2	DN50	10	2.2	4.5	400	2900	4G1.5+3G1.5
RC 5015 M30-2	DN50	10	3	6	400	2900	4G1.5+3G1.5
RC 5020 M55-2	DN50	10	5.5	10.9	400	2900	4G2.5+3G1.5
RC 5020 M75-2	DN50	10	7.5	13.8	400	2900	4G2.5+3G1.5
RC 5020 M110-2	DN50	10	11	20	400	2900	4G4+3G1.5

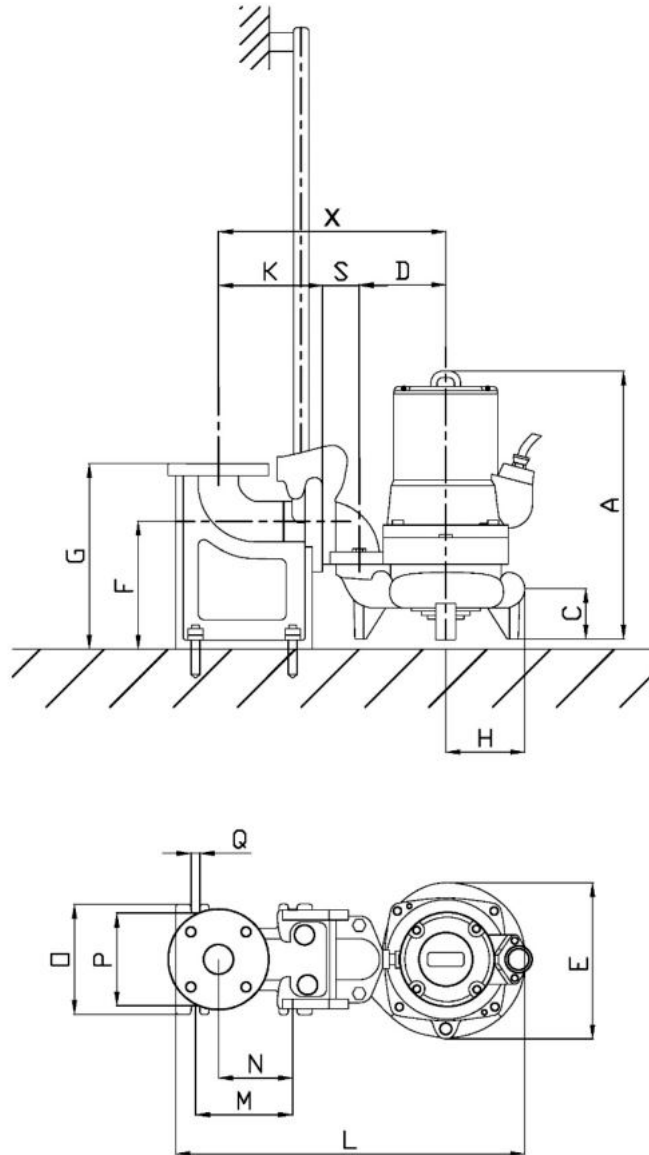
ANAVALOS Submersible Wastewater Sewage Pump Type RC

Performance curves at 2900 r.p.m.



ANAVALOS Submersible Wastewater Sewage Pump Type RC 5015

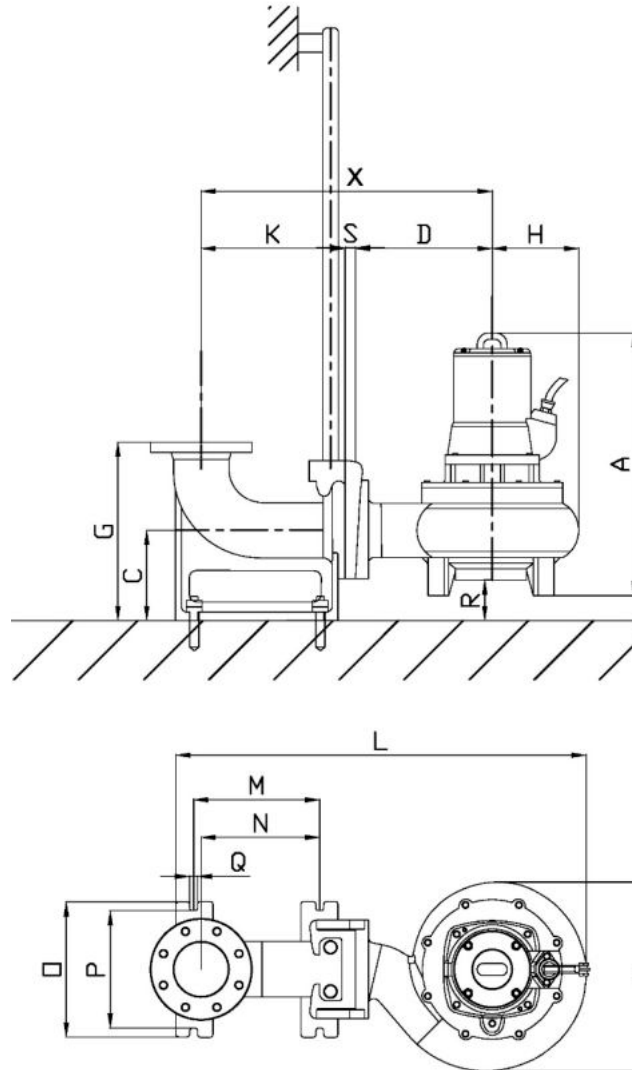
Installation dimension auto coupling with guide rail system



Type	A	C	D	E	F	G	H	K	L	M	N	O	P	Q	S	X
	[mm]															
RC 5015 M30-2	506	80	141	255	210	305	133	170	568	160	122	180	150	14	60	371
RC 5015 M22-2	470	80	141	255	210	305	133	170	568	160	122	180	150	14	60	371
RC 5015 M15-2	470	80	141	255	210	305	133	170	568	160	122	180	150	14	60	371

ANAVALOS Submersible Wastewater Sewage Pump Type RC 5020

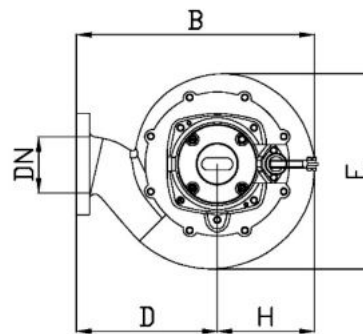
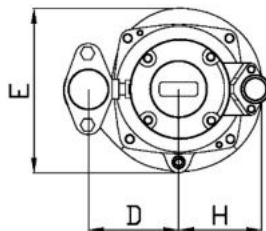
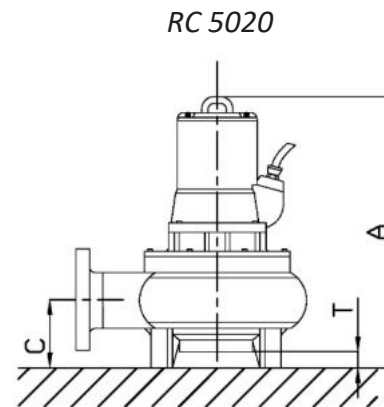
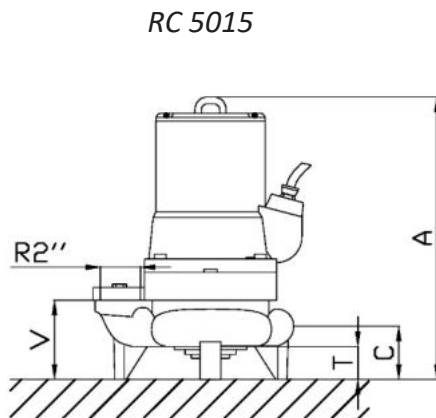
Installation dimension auto coupling with guide rail system



Type	A	C	D	E	G	H	K	L	M	N	O	P	Q	R	S	X
[mm]																
RC 5020 M110-2	680	85	227	313	245	160	170	645	160	122	180	150	14	115	20	417
RC 5020 M75-2	580	85	227	313	245	160	170	645	160	122	180	150	14	115	20	417
RC 5020 M55-2	560	85	227	313	245	160	170	645	160	122	180	150	14	115	20	417

ANAVALOS Submersible Wastewater Sewage Pump Type RC

Pump Dimension



Type	DN	A	C	D	E	H	T	V
[mm]								
RC 5015 M15-2	50	470		80	141	255	133	51
RC 5015 M22-2	50	470		80	141	255	133	51
RC 5015 M30-2	50	506		80	141	255	133	51
RC 5020 M55-2	50	560	387	85	227	313	160	50
RC 5020 M75-2	50	580	387	85	227	313	160	50
RC 5020 M110-2	50	680	387	85	227	313	160	50