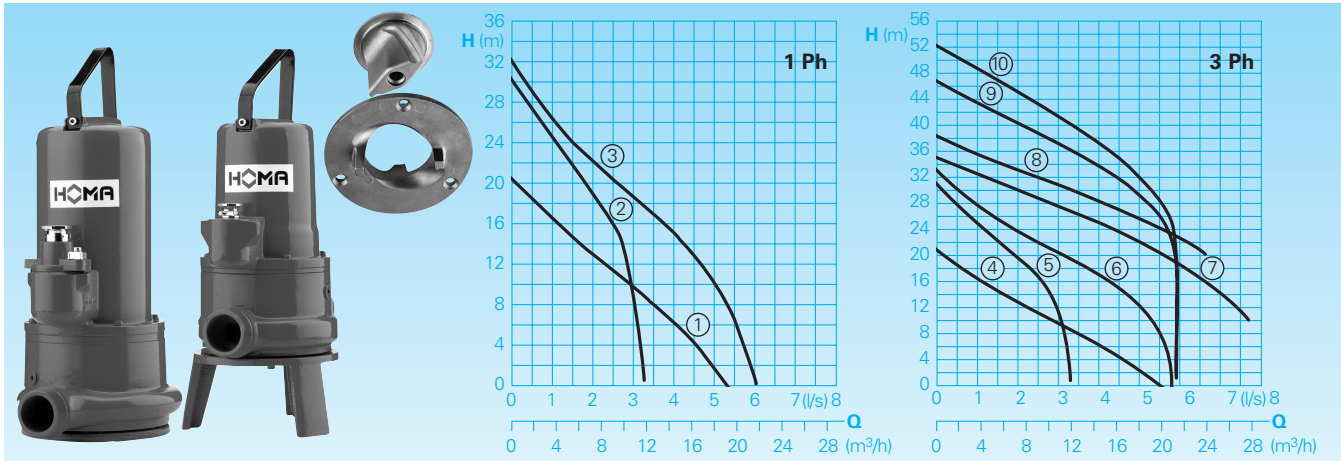


Submersible pumps with cutter system for pumping domestic and municipal wastewater and sewage.

Barracuda GRP16 - 50

Conveying capacities



Application

Sewage disposal with small pipe cross-sections, high head at relatively low flow rates, pressure drainage systems in topographically difficult areas. The Barracudas break up solids carried along in fractions of a second, so that plastic pipes with cross sections from 1½" are already sufficient for the pipelines. In this way, the costs for the use of materials and the laying of wastewater systems can be reduced considerably.

DIN EN 12050-1: Design tested and monitored.

Installation: Stationary or mobile. Version with float switch for use as automatic water level controlled drainage pump.

Pumped medium: Clean water and waste water with solid and fibrous content and feces.

Max. temperature of pumped medium: 40°C, for brief periods up to 60°C.

Operating mode: Continuous operation (S1).

Design

Fully submersible pump, consisting of:
Pump: Single stage centrifugal pump with horizontal discharge G2.

Impeller: Open multi-blade impeller with upstream cutting device for breaking up solids.

Motor: Fully submersible motor, sealed against pressurized water. Single phase or three phase version. Thermal sensor for temperature monitoring in the winding. Insulation class H, Protection rating IP 68.

Type of start: GRP16- 36: direct-start. GRP44- 50: star-delta-start.

Connecting cable:

GRP16W: H07RN8-F 4G1,5

GRP16D: H07RN8-F 6G1,5

GRP20-36: H07RN8-F 6G1,5

GRP16-36EX: H07RN8-F 6G1,5

GRP44-50(EX): H07RN8-F 10G1,5

Technical data

Curve No.	Pump type	Motor input P ₁ (kW)	P ₂ (kW)	Operation-/Start-Capacitor* (µF)	Rotational speed (rpm)	Nominal current (A)	Weight (kg)
①	GRP 16 (B) W (A) (Ex)	1,5	1,1	30/60	2900	7,5	27
②	GRP 20 W (A) (Ex)	2,1	1,5	50/100	2900	9,5	33
③	GRP 26 W (A) (Ex)	2,5	1,8	50/100	2900	11,5	33
④	GRP 16 (B) D (A) (Ex)	1,3	0,9		2900	2,5	27
⑤	GRP 20 D (A) (Ex)	2,1	1,6		2900	3,9	33
⑥	GRP 26 D (A) (Ex)	2,5	1,9		2900	4,4	33
⑦	GRP 36 D (A) (Ex)	3,7	3,1		2900	6,4	44
⑧	GRP 36 HD (A) (Ex)	3,7	3,1		2900	6,4	44
⑨	GRP 44 D (Ex)	4,4	3,7		2840	7,5	56
⑩	GRP 50 D (Ex)	5,2	4,4		2840	8,7	56

Model W: 230V/1Ph 50Hz

Model D: 400V/3Ph 50Hz

* **Capacitor:** for the operation it is necessary to install a capacitor into the switchgear.


Model GRP 16 B: with support feet

Model A: with automatic HOMA-Nivomatik float switch

Model Ex: explosion-proof

Shaft/bearing: Shaft made of chrome-steel, permanently lubricated roller bearings.

Seal: GRP16 with combination of mechanical seal (Silicon carbide) and radial seal in oil barrier chamber, ab GRP20 with 2 mechanical seals (Silicon carbide) in oil barrier chamber. Oil control possible from the outside. On request available with electronic seal monitoring to control the oil barrier chamber.

Explosion protection: All pump models are also available in EX version according to  II 2 G Ex c d II BT4(T3).

Materials

Motor housing, pump housing, impeller	Cast iron EN-GJL250
Motor shaft, screws	Stainless steel
Cutter system	Stainless steel 1.4122 50-55 HRC
Mechanical seal	Silicon carbide
Elastomers	NBR

Scope of supply

Model W (230V/1Ph):

With 10 m of connecting cable and loose cable end. Switchgear W19 (GRP16W); WT19 (GRP20-26W) available as accessories

Model D (400V/3 Ph):

With 10 m of connecting cable and loose cable end. Switchgear DT32 available as accessories

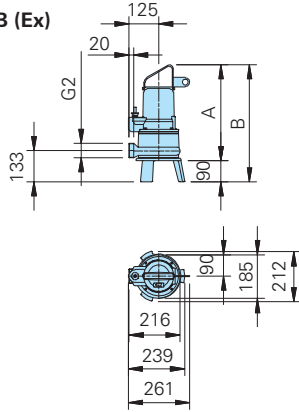
Model A: Additionally with automatic float switch HOMA-Nivomatik, with AS-float, with 10 m of connecting cable, switchgear WA10/19; DA10/32; DA10/12 with motor protection, Hand-o-auto-switch.

1 Ph-Model with built-in capacitor and plug. 3 Ph-Model with CEE-reversing plug. Ex-Model with relays for intrinsically safe control circuit.

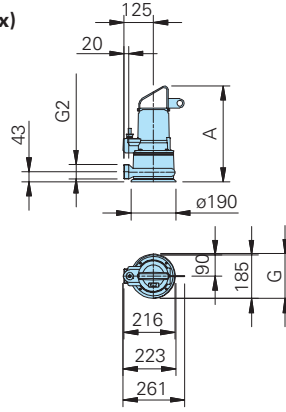
Model GRP16 B: With integrated support feet for floor installation.

Dimensions and installation example (all dimensions in mm)

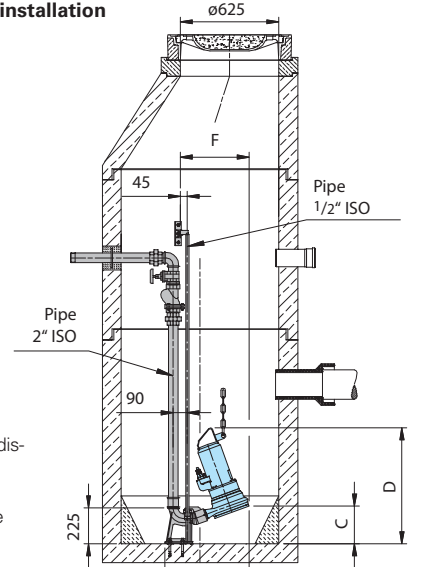
GRP16 B (Ex)



GRP16 (Ex)



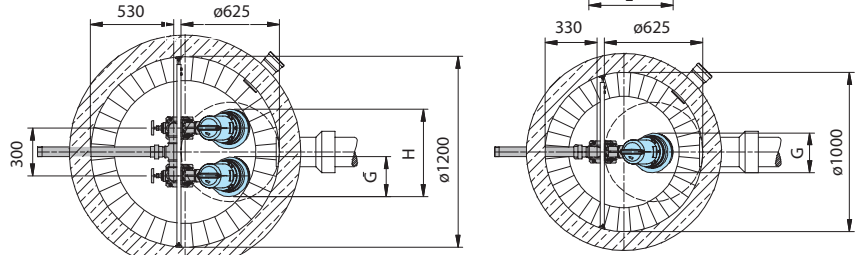
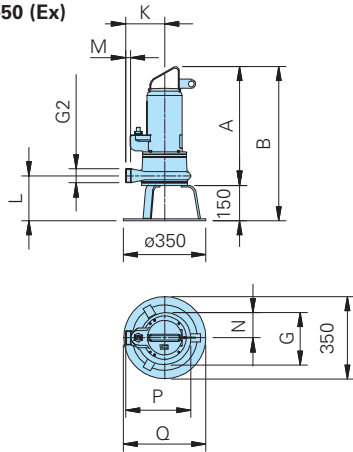
Permanent installation



Shaft installation with automatic coupling system

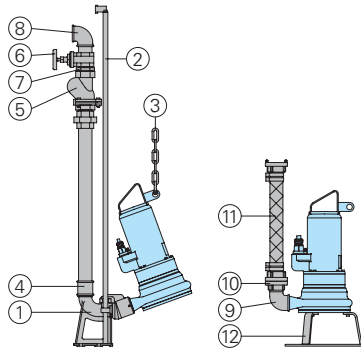
Permanent installation utilising a submerged auto-coupling guide rail system for automatic connection and dis-connection of the pump from the pipework from outside the sump. Applicable for single and multi pump stations. Advantages: Little space requirement, easy pump service and maintenance.

GRP20-50 (Ex)



Pump type	A	B	C	D	E	F	G	H	K	L	M	N	P	Q
GRP16 (B)(Ex)	406	496	212	578	461	364	190	490						
GRP20 (Ex), 26 (Ex)	468	618	228	651	501	403	223	523	165	191	20	107	277	350
GRP36 (HD) (Ex)	505	655	228	686	501	403	223	523	165	191	20	107	277	350
GRP44 (Ex), 50 (Ex)	545	695	238	728	533	436	250	550	180	193	25	119	304	355

Accessories



Description	Size	Part no.
① Automatic coupling system with mating flange, base elbow		
- for slide rail bracket BSP1/2", GG		
KKR50S/BSP2" BSP2"/BSP2" 8604008		
- for slide rail bracket BSP1/2", Stainless steel		
KKR50S/BSP2" BSP2"/BSP2" 8604009.01		
- for slide rail bracket BSP1", Stainless steel		
KKR50S-1/BSP2" BSP2"/BSP2" 8604018		
○ Coupling system completely or partly in stainless steel	all	on request
○ Screw-Kits for fastening coupling systems		on request

Description	Size	Part no.	Description	Size	Part no.
○ Intermediate bracket for slide rail bracket extension	Ø 1/2" for KKR50S and KKR50S 7320271		⑨ 90° bend, galvanized	BSP 2" F x BSP 1 1/2" F	2112605
	Ø 1" for KKR50S-1 7323714			BSP 2" F/M	2111506
② Guide rails, in pairs, per m, Galvanized steel	Ø 1/2" 2190085		⑩ STORZ-fixed coupling	C-G 1 1/2" M	2010003
	Ø 1" 2190135			C-G 2" F	2010204
Stainless steel	Ø 1/2" 2190250		⑪ Plastic spiral hose, per m	1 1/2" Ø 38 mm	2632042
	Ø 1" 2190252			Ø 50 mm	2632050
③ Pump chain sets, tested. With shackle, single or dual row, different lengths and load bearing capacities	on request		STORZ-hose-coupling	C-38 mm Ø	2013002
				C-52 mm Ø	2013003
④ Double socket, galvanized	BSP 2" F 2109102		STA-threaded hose fitting, brass	BSP 1 1/2" M	2001513
	BSP 2" F x BSP 1 1/2" F 2109210		Hose clamp	1 1/2" 2304854	
				2" 2306009	
⑤ Non-return ball valve, GG	BSP 1 1/2" F 2212902		Synthetic-pressure-hose with couplings	10 m 2611310	
	BSP 2" F 2212903			15 m 2611315	
⑥ Shut-off gate valve, Brass	BSP 1 1/2" F 2216015			20 m 2611320	
	BSP 2" F 2216020			30 m 2611330	
⑦ Double nipple, galvanized	BSP 1 1/2" M 2009020		⑫ Ring base stand for GRP 20, GRP 26 and GRP 36 7321445		
	BSP 2" M 2009018			GRP 44, GRP 50 7324535	
⑧ 90° bend, galvanized	BSP 1 1/2" F 2113605		○ For pump controllers and switchgears for mobile and stationary applications, measuring systems and monitoring devices, see HOMA accessories		
	BSP 2" F 2113606				
T-piece for merging the pressure pipe in double pump stations	BSP 1 1/2" F 2114302				
	BSP 2" F 2114306				



We reserve the right to alter our specifications without notice!