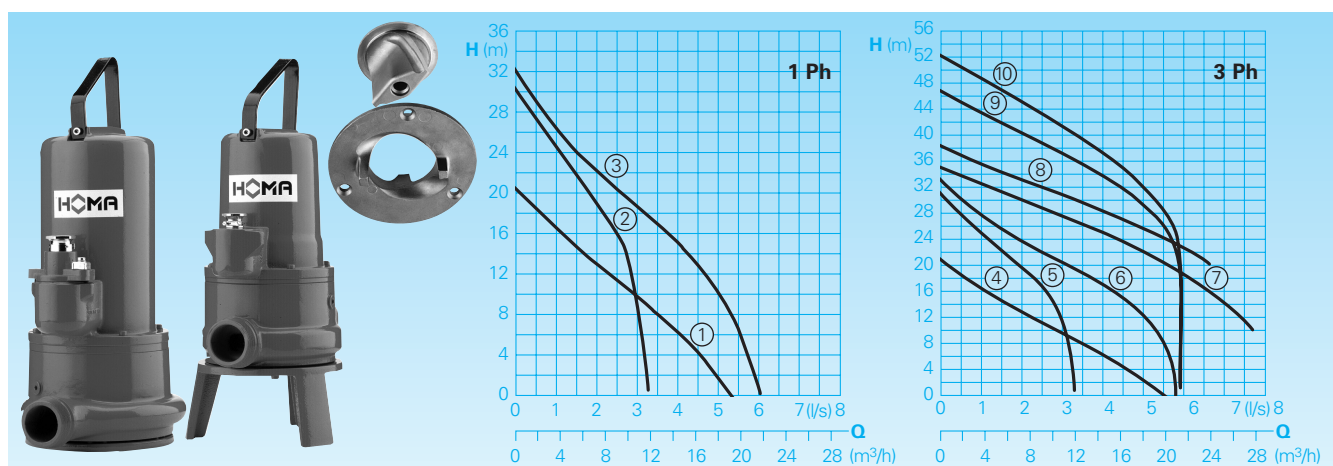


Submersible pumps with cutter system
for pumping domestic and municipal
wastewater and sewage.

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 Ex 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

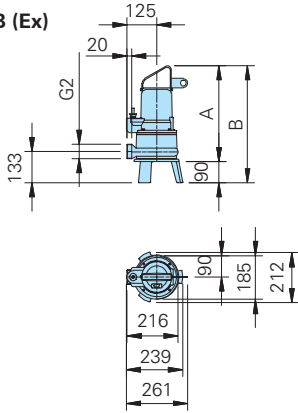
Model A: Additionally with automatic float switch HOMA-Nivomatik, with AS-float, with 10 m of connecting cable, switchgear WA10/19; DA10/32; DA10/12 with motor protection, Hand-o-auto-switch.

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.

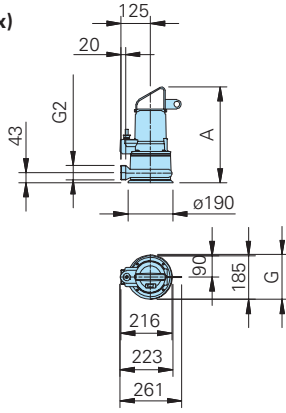
Modell GRP16 B: With integrated support feet for floor installation.

Dimensions and installation example (all dimensions in mm)

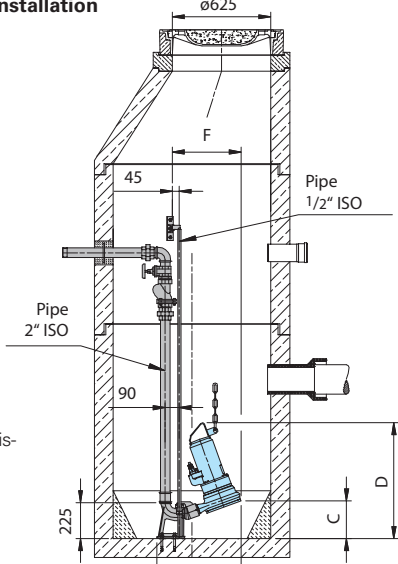
GRP16 B (Ex)



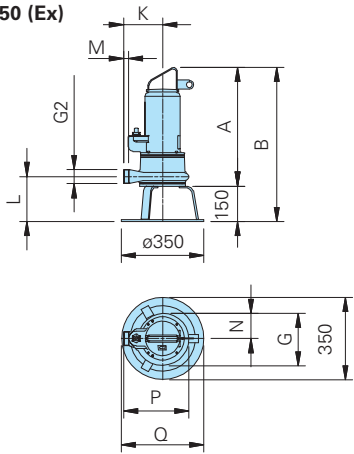
GRP16 (Ex)



Permanent installation

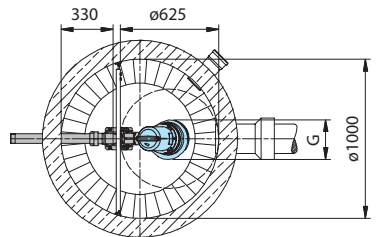
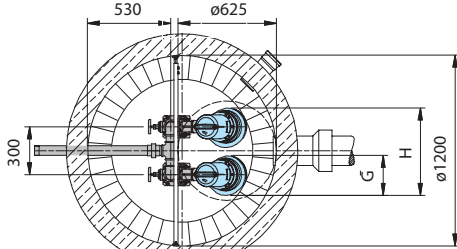


GRP20-50 (Ex)



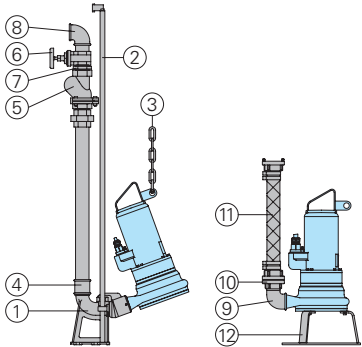
Shaft installation with automatic coupling system

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. Advantages: Little space requirement, easy pump service and maintenance.



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		
KK50S/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 KK50S and KKR50S Ø 1" for KKR50S-1	7320271 7323714	⑨ 90° bend, galvanized	BSP 2" F x BSP 1 1/2" F BSP 2" F/M	2112605 2111506
② Guide rails, in pairs, per m, Galvanized steel	Ø 1/2" Ø 1" Ø 1/2" Ø 1"	2190085 2190135 2190250 2190252	⑩ STORZ-fixed coupling	C-G 1 1/2" M C-G 2" F	2010003 2010204
Stainless steel			⑪ Plastic spiral hose, per m	1 1/2" Ø 38 mm Ø 50 mm	2632042 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 C-52 mm Ø	2013002 2013003
④ Double socket, galvanized	BSP 2" F BSP 2" F x BSP 1 1/2" F	2109102 2109210	STA-threaded hose fitting, brass	BSP 1 1/2" M	2001513
⑤ Non-return ball valve, GG	BSP 1 1/2" F BSP 2" F	2212902 2212903	Hose clamp	1 1/2" 2" 10 m 15 m 20 m 30 m	2304854 2306009 2611310 2611315 2611320 2611330
⑥ Shut-off gate valve, Brass	BSP 1 1/2" F BSP 2" F	2216015 2216020	⑫ Ring base stand for GRP 20, GRP 26 and GRP 36 GRP 44, GRP 50		7321445 7324535
⑦ Double nipple, galvanized	BSP 1 1/2" M BSP 2" M	2009020 2009018	○ For pump controllers and switchgears for mobile and stationary applications, measuring systems and monitoring devices,		see HOMA accessories
⑧ 90° bend, galvanized	BSP 1 1/2" F BSP 2" F	2113605 2113606			
T-piece for merging the pressure pipe in double pump stations	BSP 1 1/2" F BSP 2" F	2114302 2114306			



We reserve the right to alter our specifications without notice!

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