



### TECHNICAL DATA

**Operating range:** from 2 to 9 m<sup>3</sup>/h with head up to 24,5 m for the single-phase version, and 26,5 m for the three-phase version.

**Pumped liquid:** grey waste water, rough loaded water containing solid matter and/or long fibre, non aggressive.

**Liquid temperature range:** from 0 °C to +55 °C

**Maximum ambient temperature for operation with motor above water:** +40 °C

**Max. immersion depth:** 7 metres.

**Protection class:** IP68

**Insulation class:** F

**Standard voltage:** 220-240 V - 50Hz single-phase.  
380-415 V - 50Hz three-phase.

**Power cable:** H07RN-F, 10 metres.

**Installation:** fixed or portable, vertical position.

### APPLICATIONS

Cast-iron centrifugal submersible pump with grinder, suitable for lifting and decanting dirty waste civil and industrial water. Thanks to the grinding system, the matter found in the sewage (organic waste, textiles, rubber, etc.), is ground, enabling the lifting of the liquid without the risk of clogging or obstruction in the delivery piping.

### CONSTRUCTION FEATURES OF THE PUMP

Cast-iron pump body, motor casing and suction cover. High resistance cast-iron ring impeller. Microcast tempered steel grinder to ensure strength and durability. Stainless steel rotor shaft, handle, and bolts and screws. Inspectable oil seal chamber. Silicon carbide mechanical seal. GAS threaded 2" radial delivery port, to facilitate the installation of lifting devices (DSD 2).

### CONSTRUCTION FEATURES OF THE MOTOR

Continuous duty, dry asynchronous submersible motor in watertight casing. Rotor running on ball bearings, oversized and permanently lubricated. Thermal protection in the winding, to be connected to the control panel.

In order to operate, the pumps must be equipped with control and protection systems, supplied separately and not connected to the electric pumps. The single-phase version must be equipped with an ED HS control panel.

Supplied with 10 metre neoprene rubber power input cable 6x(4x1,5)+(2x0,5).

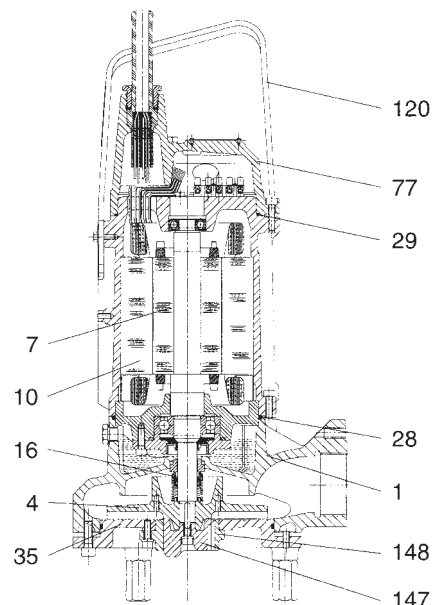
Number of poles: 2

Max starts/hour: 20

### MATERIALS

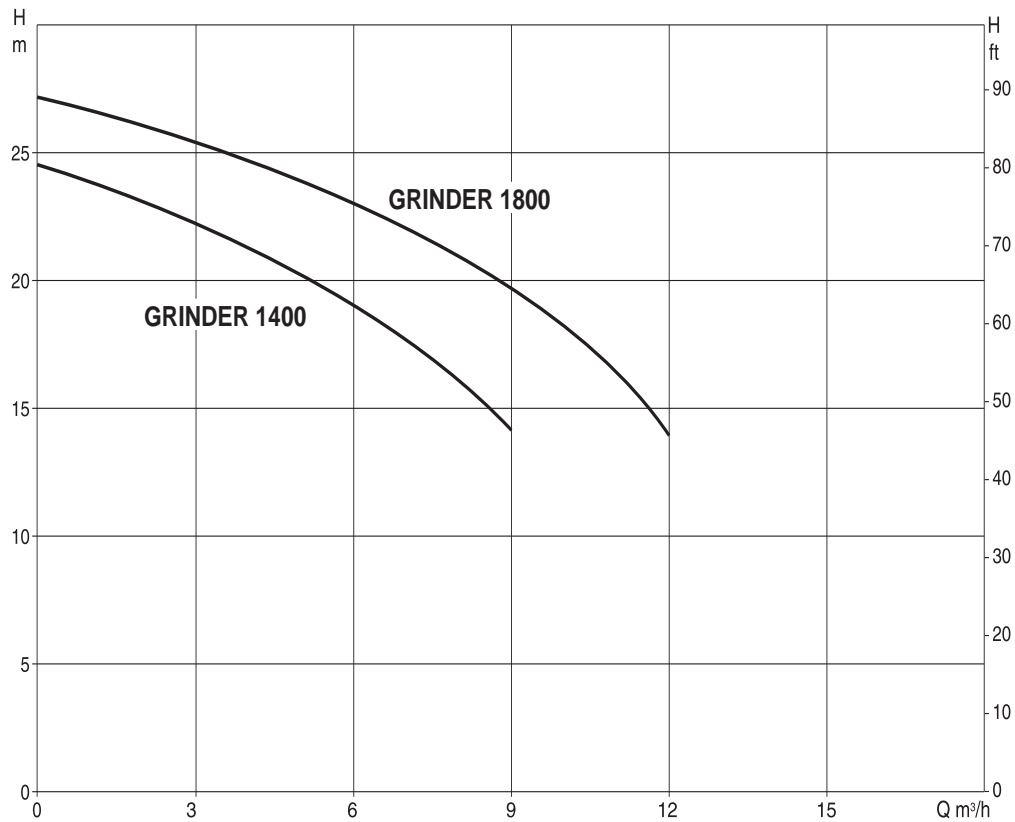
N.	PARTS*	MATERIALS
1	PUMP BODY	CAST IRON 200 UNI ISO 185
4	IMPELLER	CAST IRON 200 UNI ISO 185
7	MOTOR SHAFT	AISI 416 STAINLESS STEEL X12CrS13 - UNI 6900/71
10	MOTOR CASING	CAST IRON 200 UNI ISO 185
16	MECHANICAL SEAL	SILICON CARBIDE
28	OR RING	VITON
29	OR RING	VITON
35	SUCTION COVER	CAST IRON 200 UNI ISO 185
77	PROTECTION COVER	CAST IRON 200 UNI ISO 185
120	HANDLE	AISI 304 STAINLESS STEEL X5CrNi 1810- UNI 6900/71
147	FIXED GRINDER SECTION	AISI 440 TEMPERED STAINLESS STEEL
148	FIXED GRINDER SECTION	AISI 440 TEMPERED STAINLESS STEEL

\* In contact with the liquid

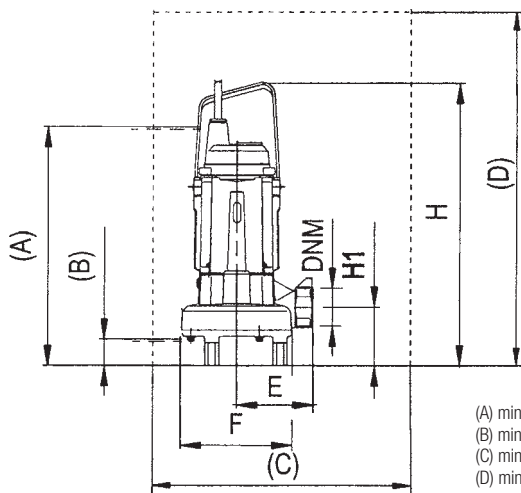


# GRINDER 1400 - 1800 - SUBMERSIBLE PUMPS FOR LIFTING WASTE WATER FOR GRINDING

Liquid temperature range: from 0 °C to +55 °C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.



- (A) minimum level for continuous operation
- (B) minimum residual level in manual operation
- (C) minimum well base size
- (D) minimum well height size

MODEL	ELECTRICAL DATA						
	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	CAPACITOR	
			kW	HP		µF	Vc
GRINDER 1400 M	1 x 220V-240V ~	1.95	1.1	1.5	8.7	40	450
GRINDER 1800 T	3 x 400V ~	2	1.5	2	3.8	-	-

MODEL	A	B	C	D	E	F Ø	DNM	H	H1	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT kg
										L/A	L/B	H		
GRINDER 1400 M	500	50	500 X 500 min	600 min	150	219	2" G	549	109	680	330	446	0.1	43.2
GRINDER 1800 T	500	50	500 X 500 min	600 min	150	219	2" G	549	109	680	330	446	0.1	43.8

# GM 90 M Aut

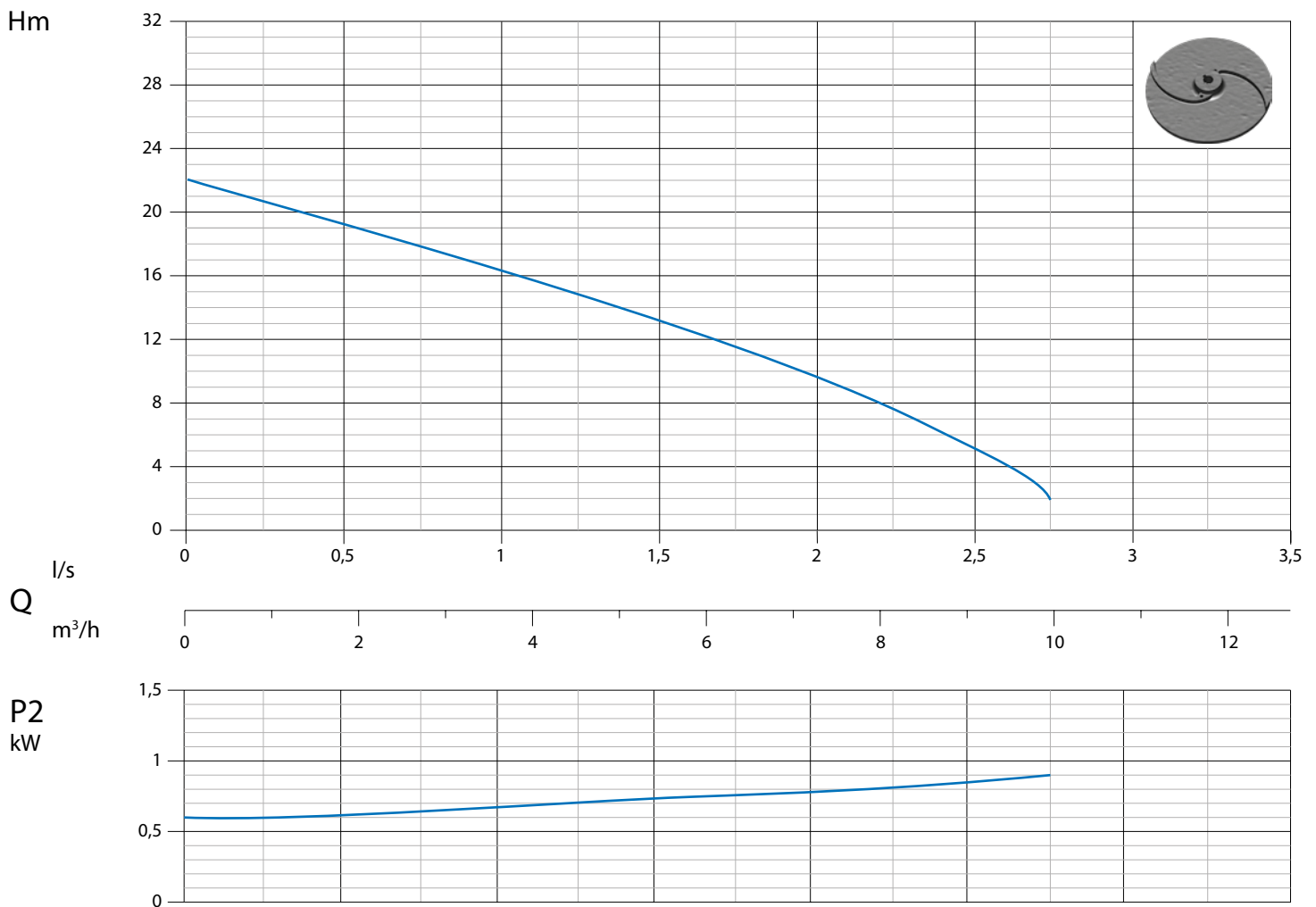
## Mandata Orizzontale DN32 - PN6 - G 1<sup>1/4</sup> RPM 2850 1/min 2 poli

Horizontal Outlet DN32 PN6 - G 1<sup>1/4</sup>  
RPM 2850 1/min 2 poles

Immagine a solo scopo illustrativo  
Picture for illustration purposes only



## Curva di Prestazione Performance Curve

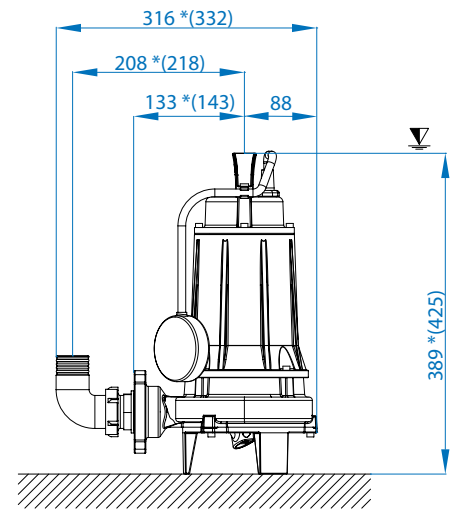
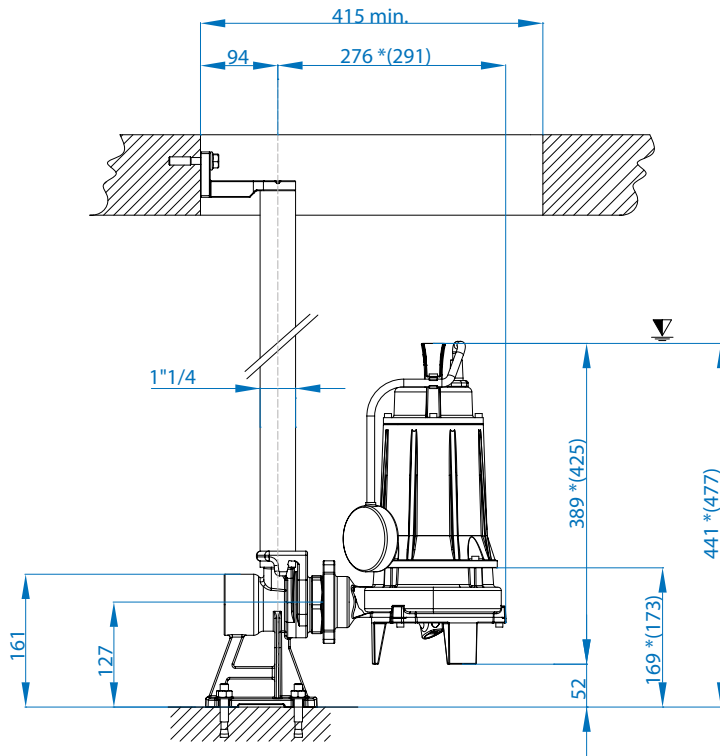


N°	Tipo Type	I/s	0,25	0,5	1	1,25	1,5	2	2,25	2,5	2,75	3
		l/m	15	30	60	75	90	120	135	150	165	180
		m³/h	0,9	1,8	3,6	4,5	5,4	7,2	8,1	9	9,9	10,8
	<b>GM 32-2 90 M Aut</b>	mt	21	19	16,5	15	13	10	7,5	5	2	

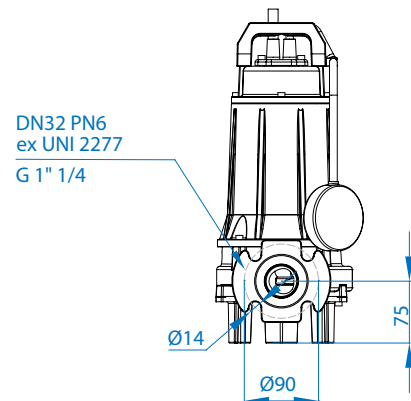
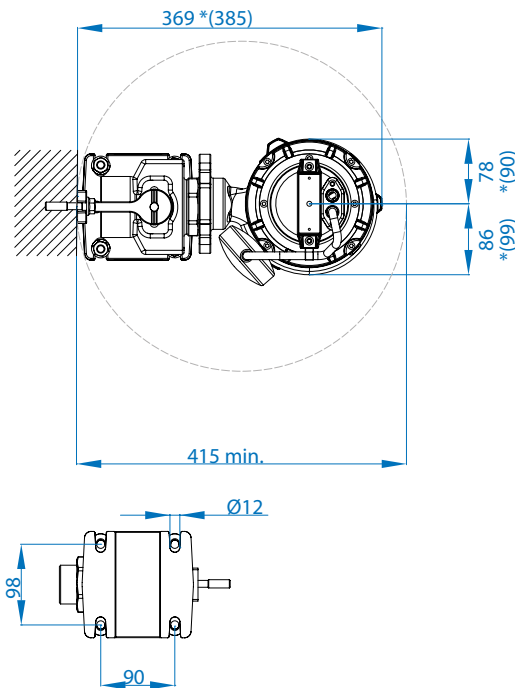
N°	Tipo Type	Mandata Delivery	Passaggio Free Passage	kW		HP	R.P.M. 1/min	A		Hz	
				P1	P2			1 Phase - 230V	3 Phase - 400V		
	<b>GM 32-2 90 M Aut</b>	<b>DN32 PN6 G 1<sup>1/4</sup></b>	-	1,2	0,9	1,2	2850	5	25	2,1	50

# GM 90 M Aut

∇ Sommergenza minima  
Minimum submersion



\*(Grix 150-200)



## Cavi / Cables

Fasi Phases	Cavo Cable	Sezione cavo mm <sup>2</sup> Cable cross section mm <sup>2</sup>	mt
1 ~ 230V	H07RN8F	4x1 Ø10*	10

\* Di serie con Control Box (condensatore di marcia ed avviamento incluso)  
Standard with Control Box (main and start capacitors included)

\*\* Terminali liberi - Free terminals

## Dimensioni imballo - Packaging dimension

Tipo - Type	X mm	Y mm	Z mm	Kg
GM 32-2 90 M Aut	230	450	270	21,5



## Accessori - Optional



Piede accoppiamento  
Tipo: Duty 50 e EASY E 1.1/1.2  
Automatic coupling foot  
Type: Duty 50 and EASY E 1.1/1.2



Curva filettata con portagomma  
1"1/4  
Thread hose connection 1"1/4

## Mandata orizzontale G 2" - RPM 2850 1/min 2 poli

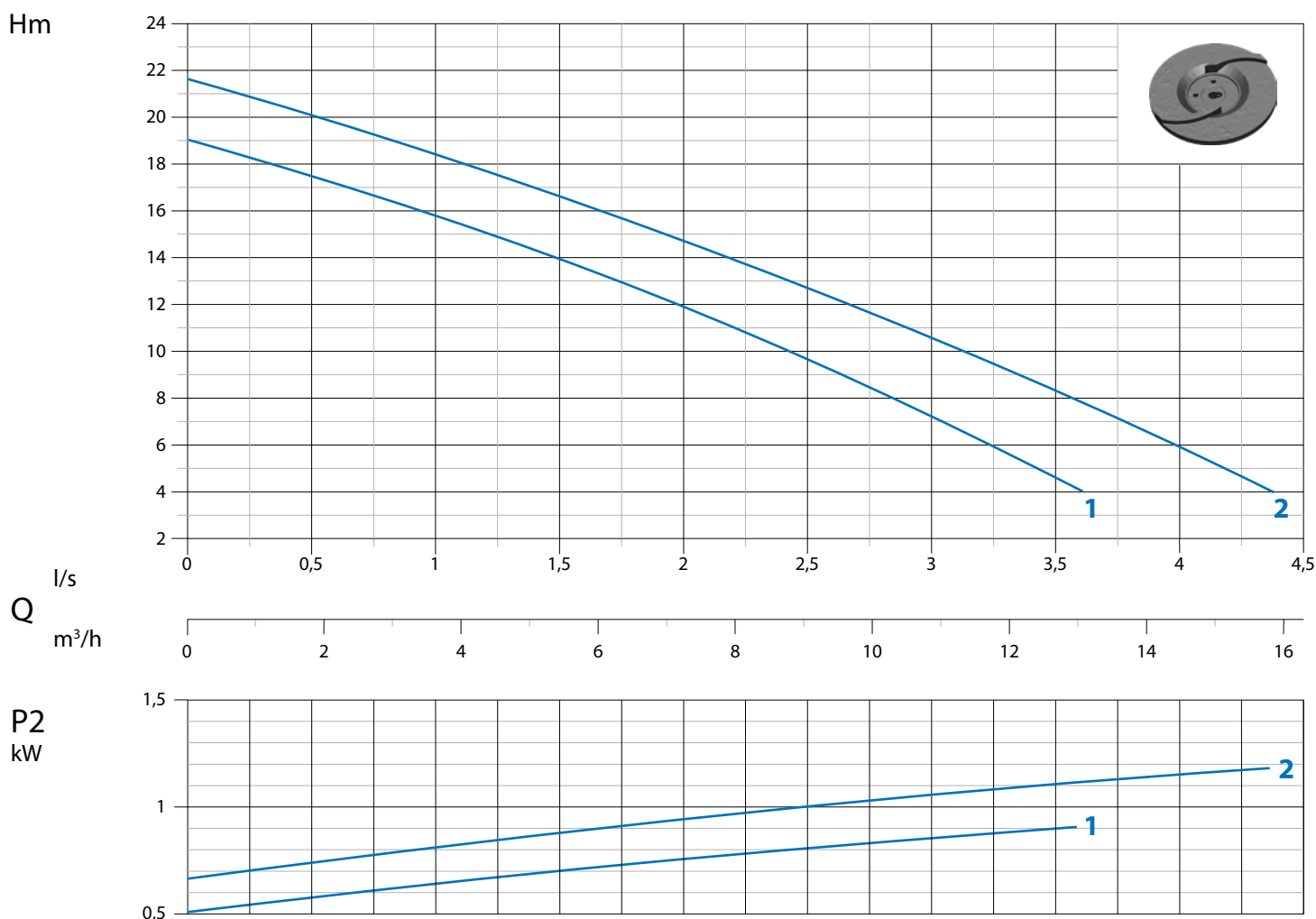
Horizontal Outlet DNG 2" - RPM 2850 1/min 2 poles

Immagine a solo scopo illustrativo  
Picture for illustration purposes only



### Curva di Prestazione

Performance Curve

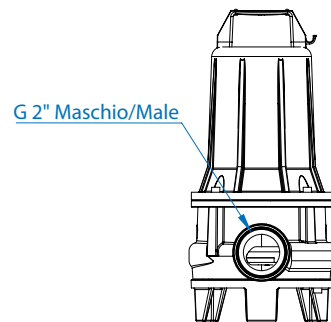
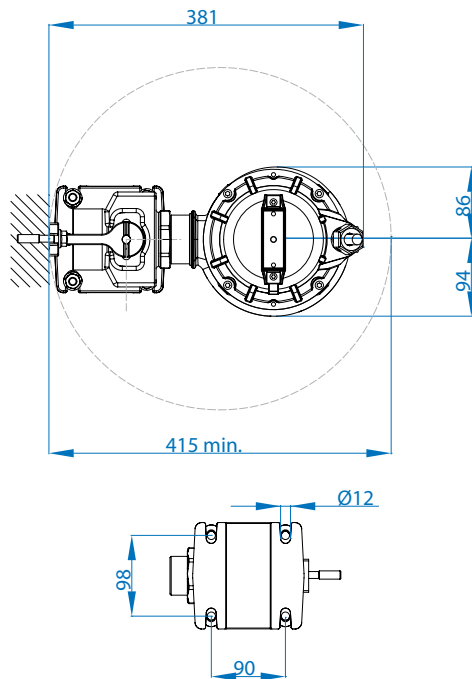
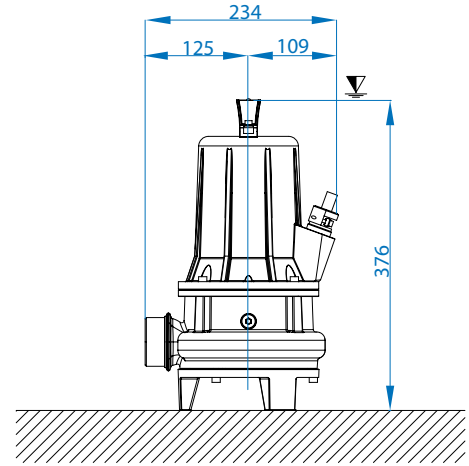
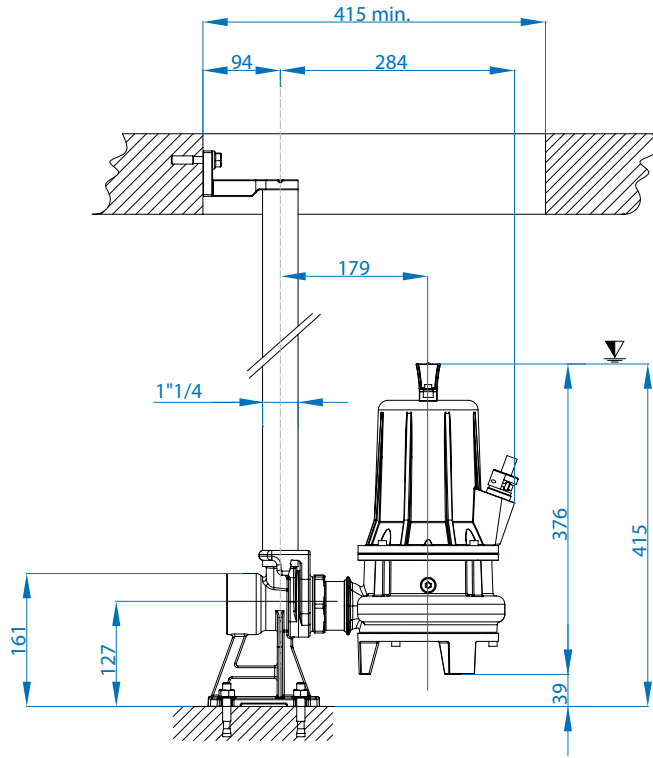


N°	Tipo Type	l/s	0,25	0,5	1	1,5	2	2,5	3	3,5	4	4,5
			l/m	15	30	60	90	120	150	180	210	240
		m³/h	0,9	1,8	3,6	5,4	7,2	9	10,8	12,6	14,4	16,2
1	GM-GT 50/2 C.149	mt	18,5	17,5	16	14	12	9,5	7	4,25		
2	GM-GT 50/2 C.150		21	20	18,5	16,5	14,5	12,5	10,5	8,5	6	4,5

N°	Tipo Type	Mandata Delivery	Passaggio Free Passage	kW		HP	R.P.M. 1/min	A		Hz
				P1	P2			1 Phase - 230V	3 Phase - 400V	
1	GM-GT 50/2 C.149	G 2"	-	1,2	0,9	1,2	2850	5,5	25	2,3
2	GM-GT 50/2 C.150	(maschio/ male)	-	1,5	1,1	1,5		8,0	30	3,1

# G2

∇ Sommergenza minima  
Minimum submersion



### Cavi / Cables

Versione Version	Fasi Phases	Cavo Cable	Sezione cavo mm <sup>2</sup> Cable cross section mm <sup>2</sup>	mt
Standard	1 ~ 230V	H07RN8F	4x1,5+2x0,5 Ø12*	10
	3 ~ 400V		4x1,5+2x0,5 Ø12**	10

\* Di serie con Control Box  
Standard with Control Box

\*\* Terminali liberi - Free terminals

### Dimensioni imballo / Packaging dimension

Tipo - Type	X mm	Y mm	Z mm	Kg
GM-GT 50/2 C.149	230	450	270	25
GM-GT 50/2 C.150				25



### Accessori - Optional



Piede accoppiamento  
Tipo: EASY E4.1 o E4.2  
Automatic coupling foot  
Type: EASY E4.1 or E4.2

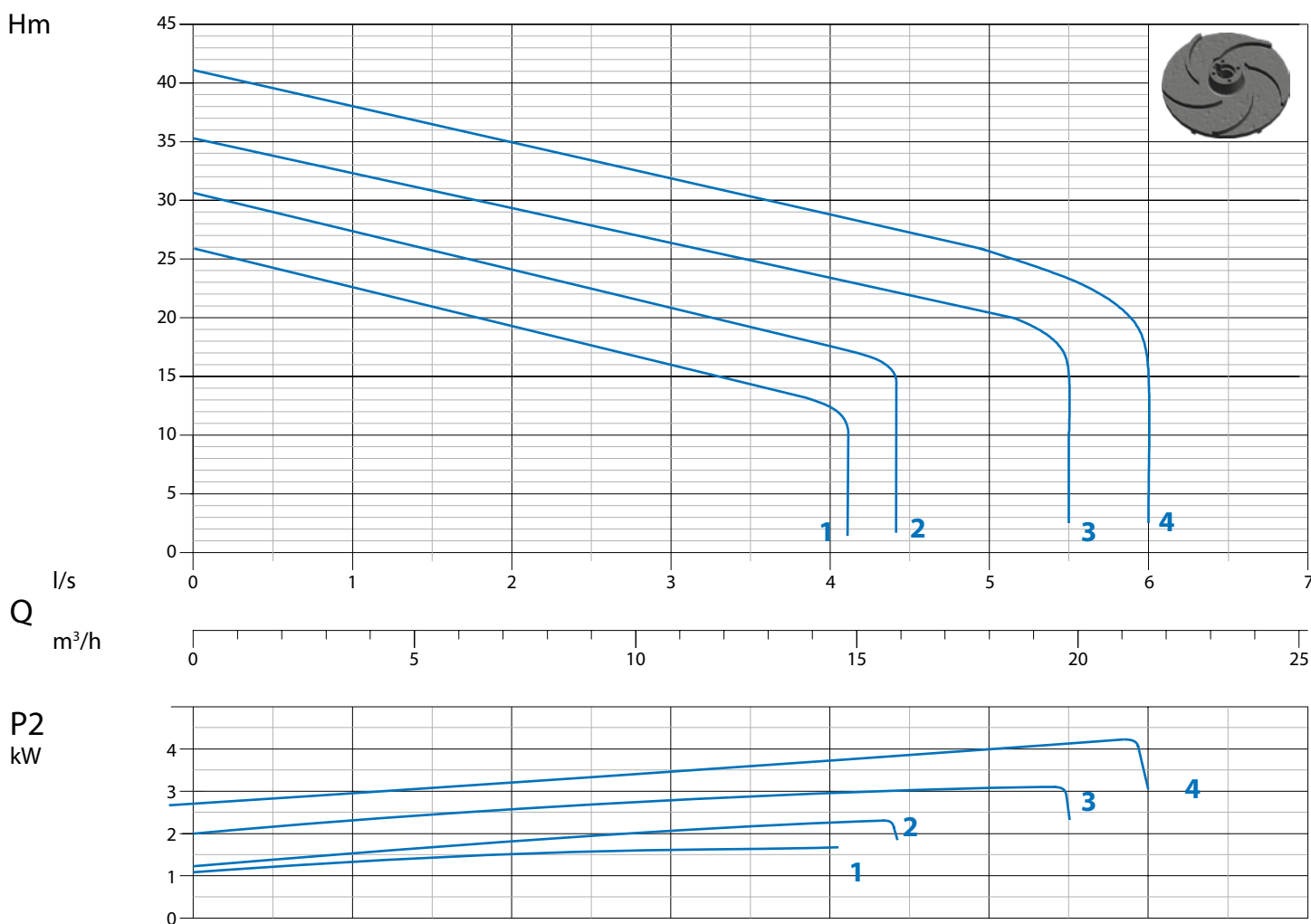
## Mandata orizzontale DN32 e DN50 - G 2" - RPM 2850 1/min 2 poli

Horizontal Outlet DN32 and DN50 - G 2" - RPM 2850 1/min 2 poles

Immagine a solo scopo illustrativo  
Picture for illustration purposes only



### Curva di Prestazione Performance Curve

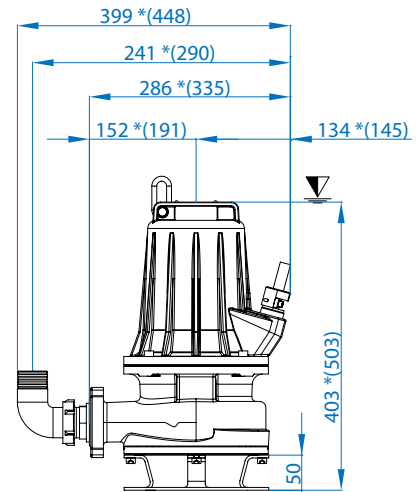
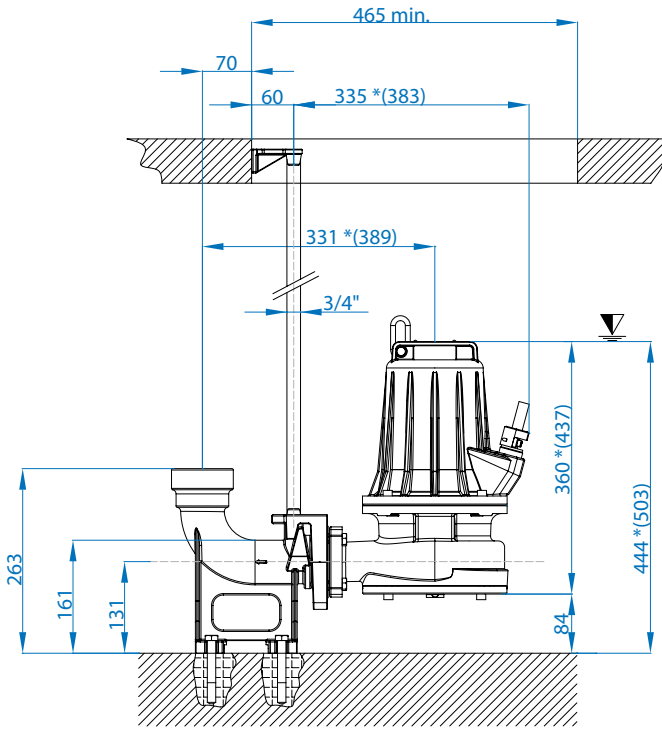


N°	Tipo Type	l/s	0,5	1	1,5	2	2,5	3	3,5	4	5	6
			l/m	30	60	90	120	150	180	210	240	300
		m³/h	1,8	3,6	5,4	7,2	9	10,8	12,6	14,4	18	21,6
1	GM-GT 50/2 C.155	mt	24	22,5	21	19	17,5	16	14	12		
2	GM-GT 50/2 C.160		29	27	26	24	22,5	21	19	17,5		
3	GT 50/2/152 C.165		34	32	31	29	28	26	25	23	20,5	
4	GT 50/2/152 C.170		39,5	38	36,5	35	33	32	30	29	26	3

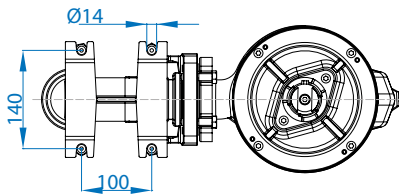
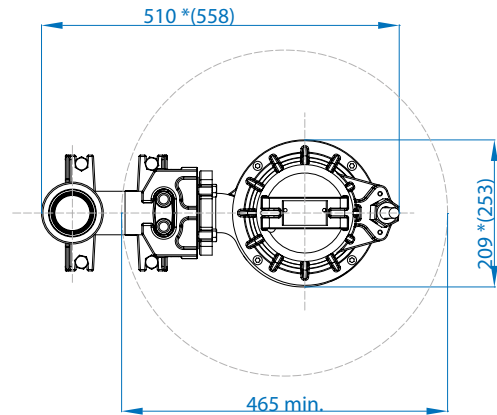
N°	Tipo Type	Mandata Delivery	Passaggio Free Passage	kW			R.P.M. 1/min	A			Hz
				P1	P2	HP		1 Phase - 230V	µf	3 Phase - 400V	
1	GM-GT 50/2 C.155	DN32 PN6 - G 2"	-	2,4	1,6	2,5	2850	11	35	3,7	50
2	GM-GT 50/2 C.160			2,9	2,3	3		13,2	50	5,2	
3	GT 50/2/152 C.165	DN50 PN10 - G 2"	-	4,0	3,2	4,5			6,9		
4	GT 50/2/152 C.170			5,2	4,2	6		8,9			

# G2

∇ Sommergenza minima  
Minimum submersion

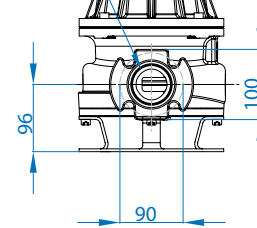


\*(GT 50/2/152 C.165-170)



DN32 PN6  
ex UNI 2278  
G 2"

\*(DN50 PN10  
ex UNI 2278  
G 2")



## Cavi / Cables

Pompe Pumps	Versione Version	Fasi Phases	Cavo Cable	Sezione cavo mm <sup>2</sup> Cable cross section mm <sup>2</sup>	mt
50/2/125	Standard	1 ~ 230V	H07RN8F	4x1,5+3x0,50 Ø15*	10
50/2/125	Standard	3 ~ 400V	H07RN8F	4x1,5+3x0,50 Ø15**	10
50/2/152	Standard	3 ~ 400V	H07RN8F	4x1,5+3x0,50 Ø15**	10

\* Di serie con Control Box (condensatore di marcia ed avviamento incluso)  
Standard with Control Box (main and start capacitors included)

\*\* Terminali liberi - Free terminals

## Dimensioni imballo / Packaging dimension

Tipo - Type	X mm	Y mm	Z mm	Kg
GM-GT 50/2 C.155	295	460	330	39,5
GM-GT 50/2 C.160				40,5
GT 50/2/152 C.165	355	580	420	63
GT 50/2/152 C.170				66

## Accessori - Optional



Piede di accoppiamento rapido  
Tipo: DUTY 50 e B4/PN6  
(solo C.165-170)  
Automatic coupling foot  
Type: DUTY 50 and B4/PN6  
(only C.165-170)



50/2/125 Curva filettata G2"  
Base di sostegno P1  
50/2/152 Curva flangiata N1  
Base di sostegno P2

50/2/125 Thread hose connection G2"  
Foot support P1  
50/2/152 Flanged curve N1  
Foot support P2



Manico inox  
Stainless steel handle



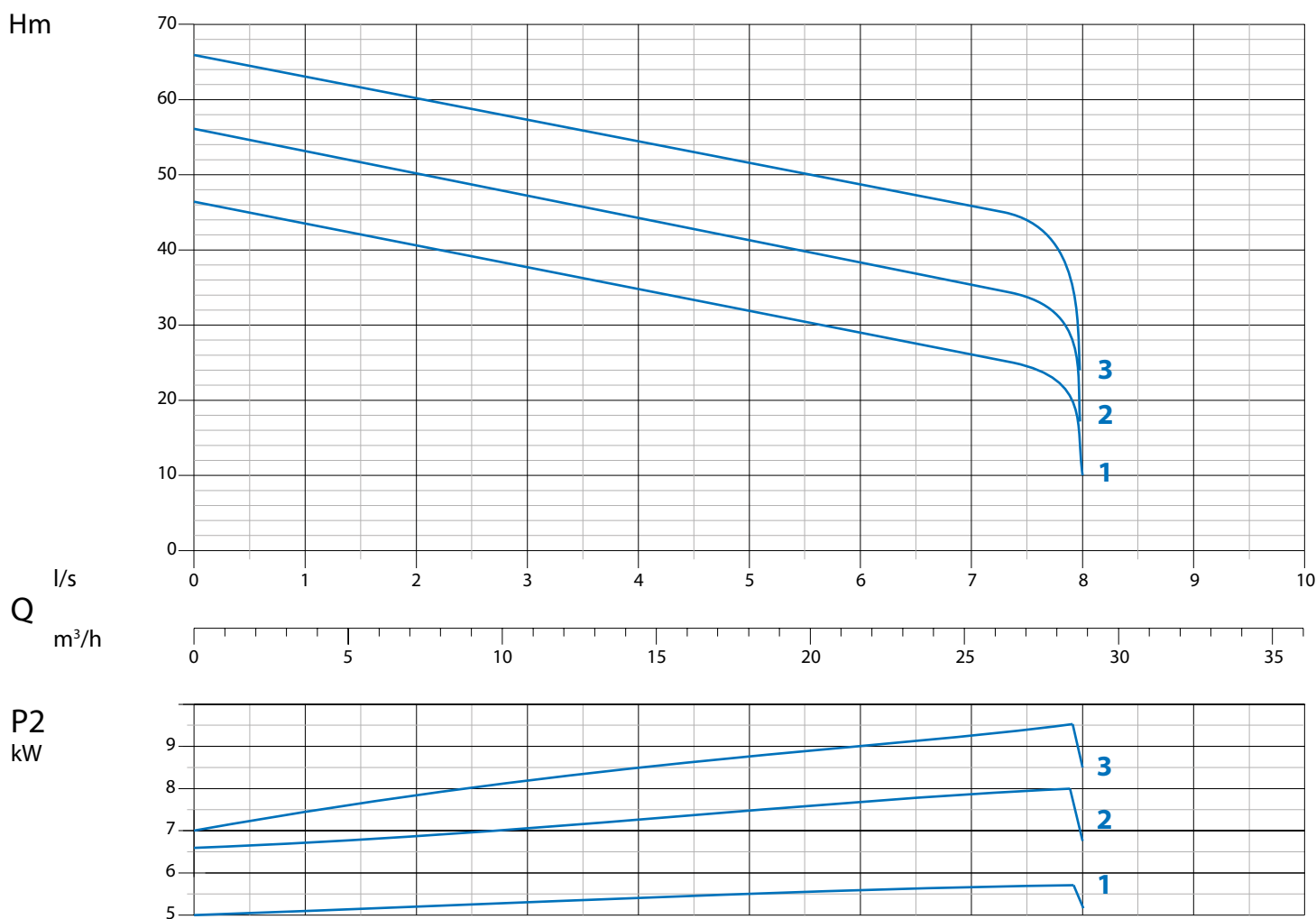
## Mandata orizzontale - DN50 PN10 G 2" - RPM 2850 1/min 2 poli

Horizontal Outlet - DN50 PN10 G 2" - RPM 2850 1/min 2 poles

Immagine a solo scopo illustrativo  
Picture for illustration purposes only



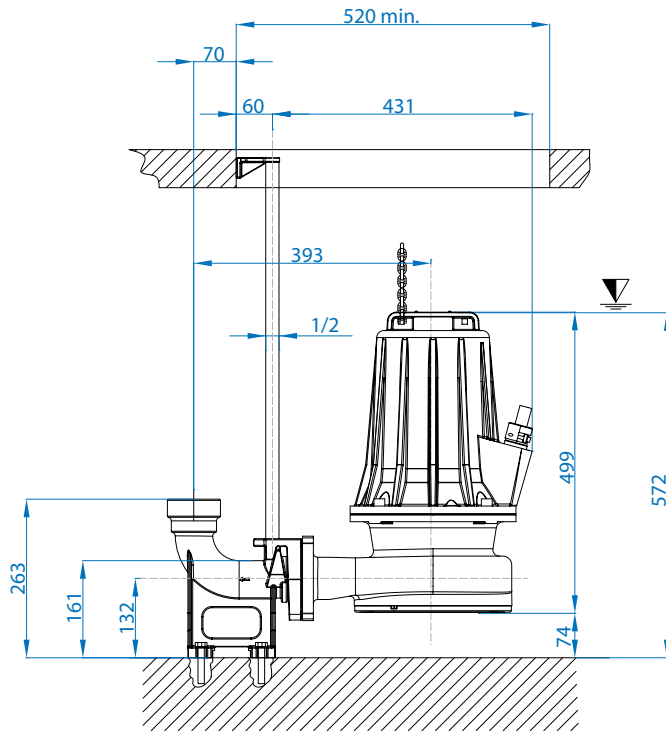
### Curva di Prestazione Performance Curve



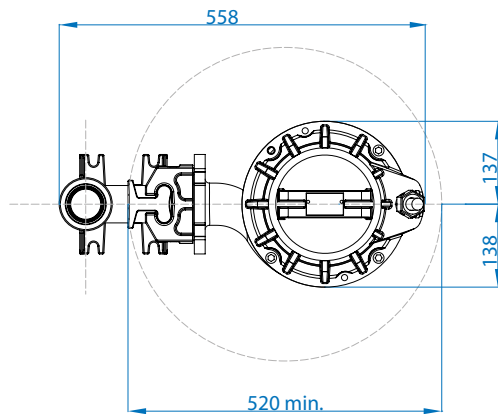
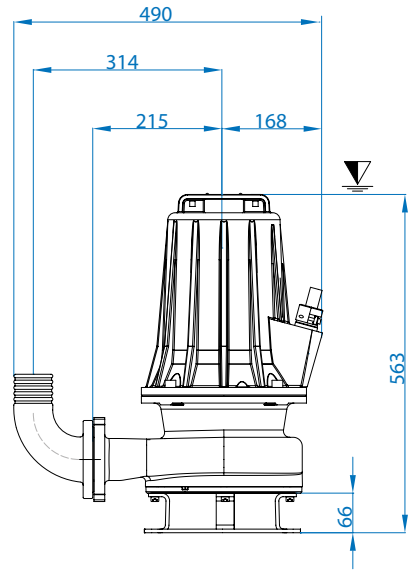
N°	Tipo Type	Flow Rate (Q)										
		l/s	0,5	1	2	3	4	5	6	7	7,5	8
		l/m	30	60	120	180	240	300	360	420	450	480
		m³/h	1,8	3,6	7,2	10,8	14,4	18	21,6	25,2	27	28,8
1	GT 50/2 C.175	mt	42,5	43	41	37,5	35	32	28	26	25	10
2	GT 50/2 C.180		52	52,5	50	47,5	45	41	38	35	34	20
3	GT 50/2 C.185		62	62,5	60	57,5	55	52	48	46	44	30

N°	Tipo Type	Mandata Delivery	Passaggio Free Passage	kW		HP	R.P.M. 1/min	A		Hz
				P1	P2			3 Phase - 400V		
1	GT 50/2 C.175		-	7,6	6,2	8,5		12,4		
2	GT 50/2 C.180	DN50 PN10 - G 2"	-	9,6	7,8	10,5	2850	16,2		50
3	GT 50/2 C.185		-	11,5	9,5	13		20		

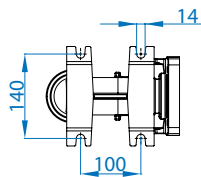
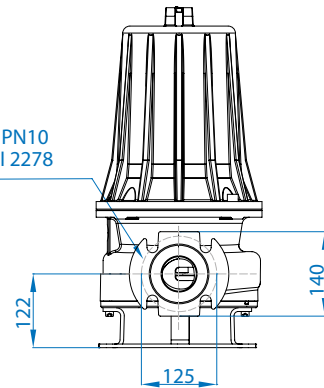
# G2



▽ Sommergenza minima  
Minimum submersion



DN50 PN10  
ex UNI 2278  
G 2"



## Cavi / Cables

Versione Version	Fasi Phases	Cavo Cable	Sezione cavo mm <sup>2</sup> Cable cross section mm <sup>2</sup>	mt
Standard	3 ~ 400V	H07RN8F	7x1,5+3x0,50 Ø17*	10

\* Terminali liberi - Free terminals

## Dimensioni imballo / Packaging dimension

Tipo - Type	X mm	Y mm	Z mm	Kg
GT 50/2/173 C.175				94
GT 50/2/173 C.180	355	580	420	95
GT 50/2/173 C.185				96

## Accessori - Optional



Piede di accoppiamento rapido Tipo: DUTY 50 e B4  
Automatic coupling foot  
Type: DUTY 50 and B4



Curva flangiata portagomma N1  
Base di sostegno P3  
Flanged hose connection N1  
Foot support P3



Manico inox  
Stainless steel handle