

FV 160-1000



Pompe da drenaggio per liquidi carichi con girante arretrata di tipo Vortex per applicazioni civili e industriali; sono state particolarmente progettate per uso estremamente gravoso; disponibili sia per applicazioni mobili e fissa con piede di accoppiamento.

Drainage pump for charged liquids with set-back Vortex type impeller for civil and industrial applications; specifically designed for very heavy use; available in the mobile or permanent versions with coupling feet.

Bombas de drenaje para líquidos cargados con turbina retraída de tipo Vortex para aplicaciones civiles e industriales; se han proyectado especialmente para un uso gravoso; disponibles para aplicaciones móviles y fija con pie de acoplamiento.

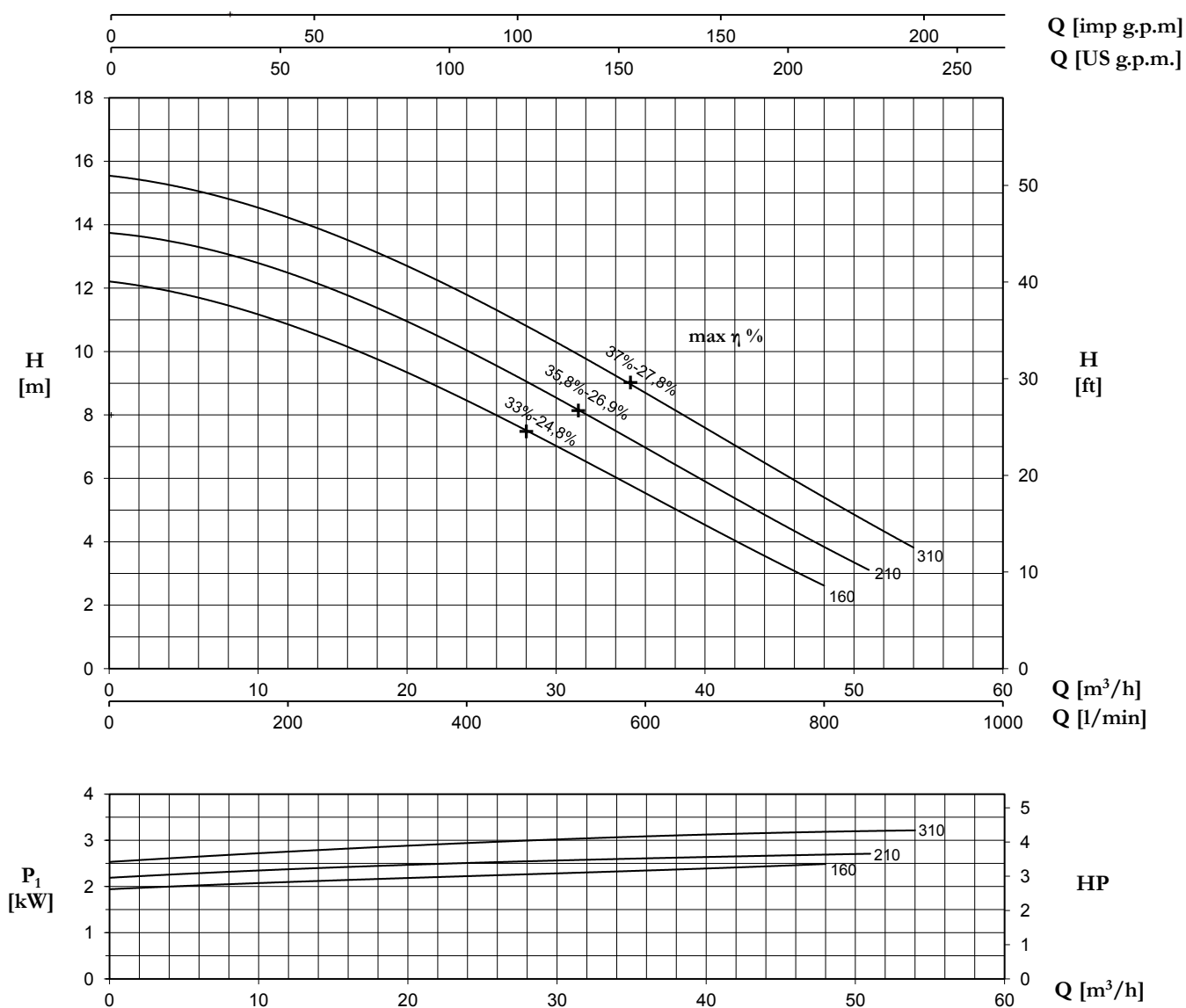
Pompes de drainage pour liquides chargés avec roue décalée de type Vortex, pour applications civiles et industrielles; elles ont été spécialement conçues pour un service très intense; disponibles pour applications aussi bien mobiles que fixes, avec pied d'accouplement.



TYPE	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
FV 160-310	85X110X145	18	85X110X190	27
FV 400-550 T	85X110X170	12	85X110X170	12
FV 750-1000 T	100X120190	12	100X120190	12

CARATTERISTICHE COSTRUTTIVE / CONSTRUCTION FEATURES CARACTERÍSTICAS CONSTRUCTIVAS / CARACTÉRISTIQUES D'EXÉCUTION

Corpo pompa Pump body Cuerpo bomba Corps de pompe	ghisa cast iron fundición fonte
Girante Impeller Rodete Turbine	ghisa cast iron fundición fonte
Tenuta meccanica Mechanical seal Sello mecánico Garniture mécanique	doppia tenuta con barriera d'olio:carburo di silicio lato pompa, ceramica-grafite lato motore double seal with oil barrier: silicon carbide on pump side, ceramic-graphite on motor side doble sello con cámara interpuesta:carburo de silicio lado bomba, cerámica-grafito lado motor double garniture avec film lubrifiant:carbure de silice côté pompe, céramique-graphite côté moteur
Albero motore Motor shaft Eje motor Arbre moteur	acciaio AISI 304 stainless steel AISI 304 acero AISI 304 acier AISI 304
Passaggio corpi solidi Passage of solids Paso de solidos Passage corps solides	50 mm (FV160-310; 750-1000) 45 mm (FV400-550)
Profondità di immersione Depth of immersion Profundidad inmersión Profondeur immersion	max 20 m
Temperatura del liquido Liquid temperature Temperatura del liquido Température du liquide	0 - 40 °C
Cavo Cable Cable Câble	H07 RNF, 10 m
Viteria Bolts Tornillos Vis	acciaio inossidabile A2 A2 stainless steel acero A2 acier A2
Base appoggio Foot support Placa base Plaque de base	ferro zincato galvanized iron hierro galvanizado fer galvanisé
Guarnizioni Gaskets Anillos Joints	gomma NBR NBR rubber goma NBR caoutchouc NBR
MOTORE / MOTOR / MOTOR / MOTEUR	
Motore 2 poli a induzione in bagno d'olio	3~ 230/400V-50Hz P ≤ 4kW 3~ 400/690V-50Hz P > 4kW
2 pole induction motor in oil bath	1~ 230V-50Hz necessario condensatore d'avviamento (35µF per modello da 1,5HP, 50µF per modello da 2HP)
Motor de 2 polos a inducción en baño de aceite	required starter capacitor (35µF for 1,5HP model, 50µF for 2HP model)
Moteur à induction à 2 pôles en bain d'huile	necesario condensador de arranque (35µF para modelo 1,5HP, 50µF para modelo 2HP)
	nécessaires condensateur de démarrage (35µF pour modèle 1,5HP, 50µF pour modèle 2HP)
Classe di isolamento Insulation class Clase de aislamiento Classe d'isolation	F
Grado di protezione Protection degree Grado de protección Protection	IP68



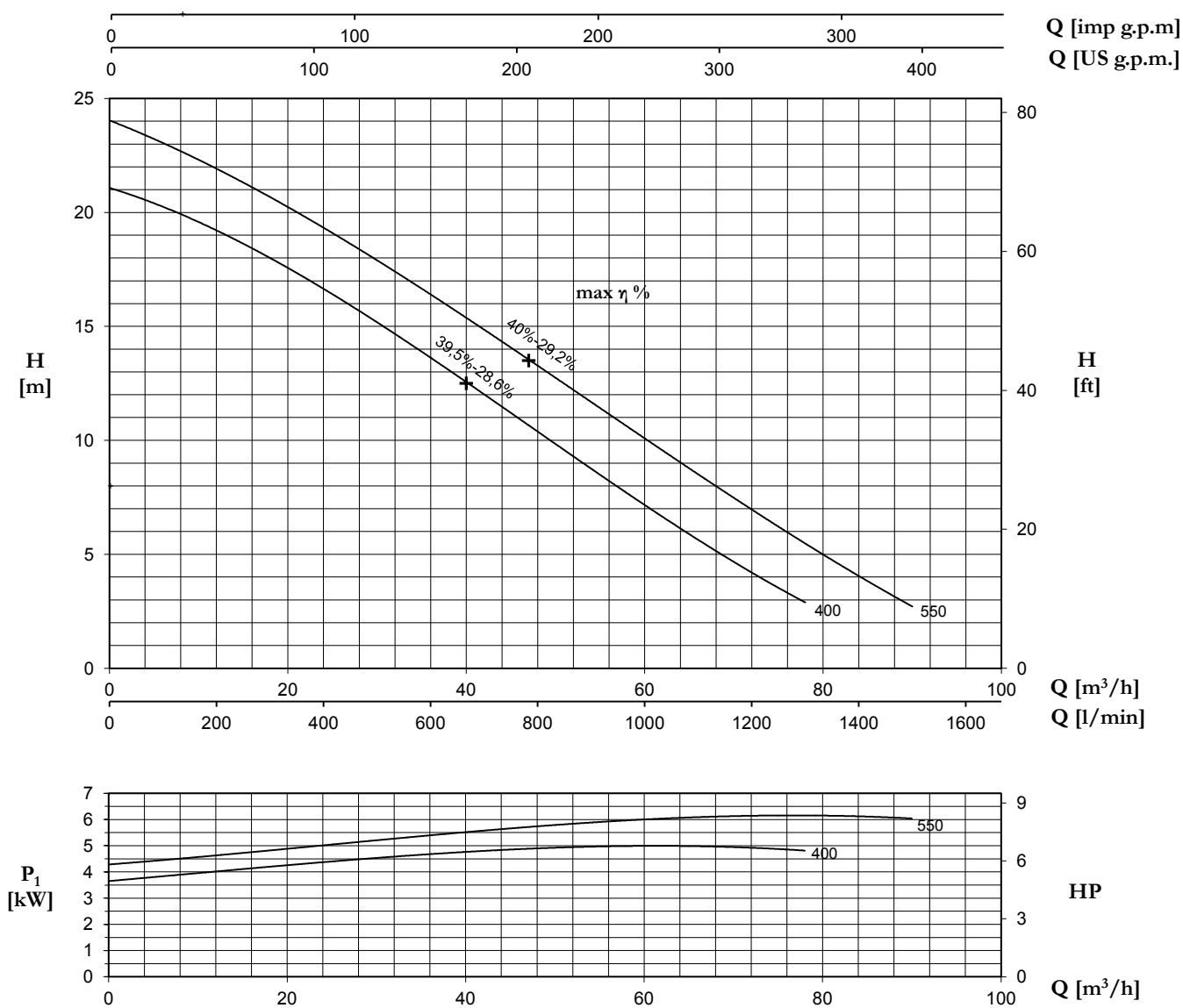
TYPE		AMPERE				
1~	3~	230 V 50 Hz	3x230 V 50 Hz (*)	3x400 V 50 Hz	230/400 V 50 Hz λ / Δ (*)	400/690 V 50 Hz λ / Δ
FV 160	FV 160 T	11,3	7,1	4,1	-	-
FV 210	FV 210 T	12,6	8,7	5,0	-	-
-	FV 310 T	-	9,9	5,7	-	-

+ max η %

max rendimento idraulico e rispettivo rendimento totale
 max hydraulic efficiency and respective total efficiency
 máx rendimiento hidráulico y correspondiente rendimiento total
 max rendement hydraulique et rendement total

(*) no standard execution

TYPE		P2		P1 (kW)		Q (m³/h - l/min)							
1~	3~					0	12	24	36	42	48	51	54
						0	200	400	600	700	800	850	900
						H (m)							
		(HP)	(kW)	1~	3~								
FV 160	FV 160T	1,5	1,1	2,5	2,3	12,2	10,9	8,4	5,6	4,1	2,6	-	-
FV 210	FV 210T	2	1,5	2,8	2,7	13,7	12,6	9,9	7,0	5,4	3,8	3,1	-
-	FV 310T	3	2,2	-	3,3	15,5	14,4	11,6	8,8	7,1	5,4	4,5	3,8



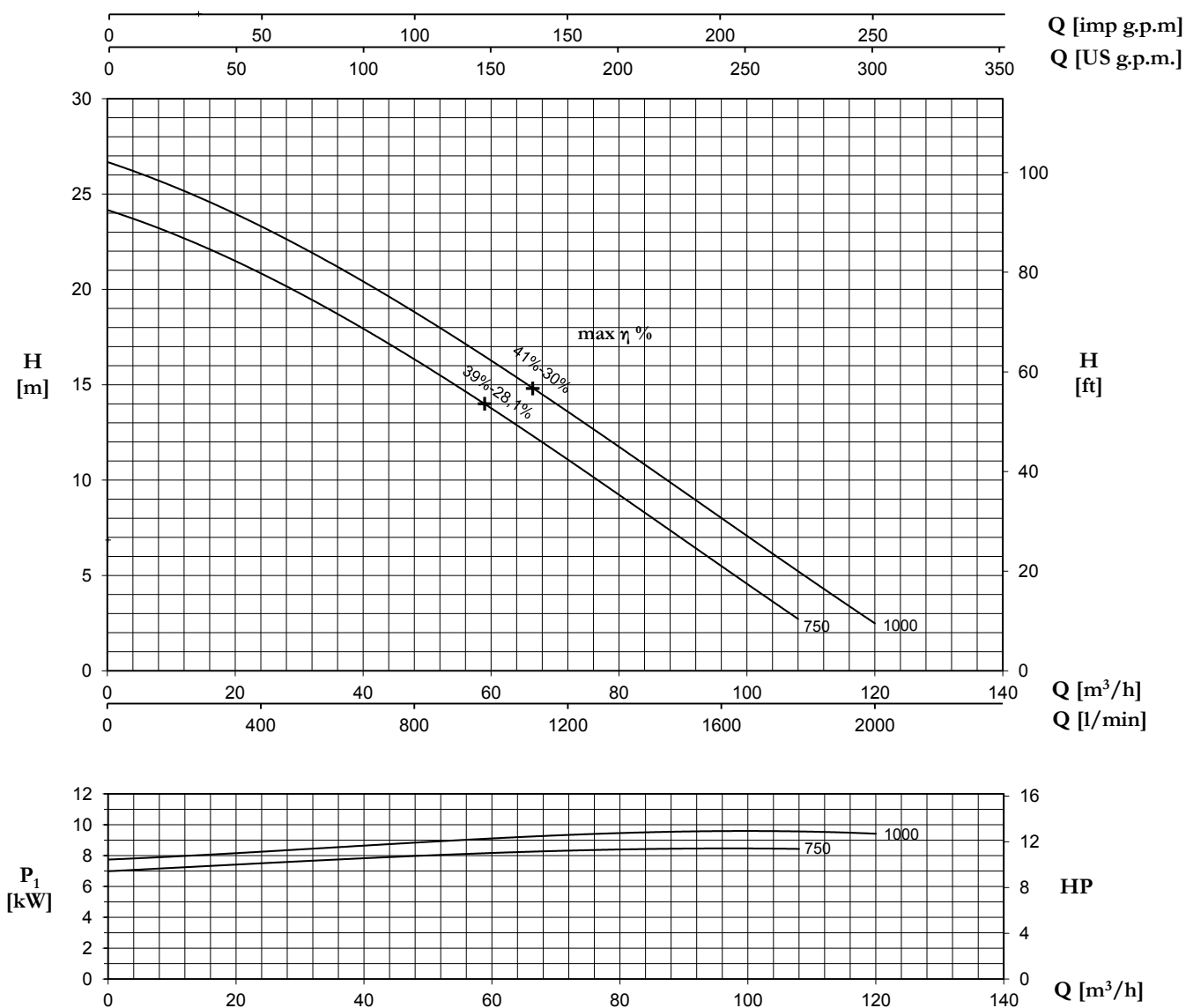
TYPE	AMPERE			
3~	3x230 V 50 Hz (*)	3x400 V 50 Hz	230/400 V 50 Hz Δ / Δ (*)	400/690 V 50 Hz Δ / Δ
FV 400T	14,1	8,1	-	-
FV 550T	18,1	10,4	-	-

(*) no standard execution

+ max η %

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TYPE	P2		P1 (kW)	Q (m³/h - l/min)								
3~				0	12	24	36	48	60	72	78	90
				0	200	400	600	800	1000	1200	1300	1500
				H (m)								
	(HP)	(kW)	3~									
FV 400 T	4	3	4,9	21,0	19,4	16,6	13,5	10,4	7,2	4,3	2,8	-
FV 550 T	5,5	4	6,1	23,9	22,2	19,3	16,3	13,2	10,0	7,1	5,6	2,6



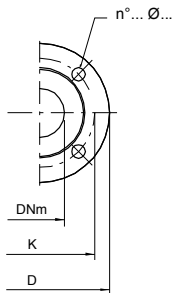
TYPE	AMPERE			
	3x230 V 50 Hz (*)	3x400 V 50 Hz	230/400 V 50 Hz Δ / Δ (*)	400/690 V 50 Hz Δ / Δ
FV 750 T	-	14,4	25,0	14,4
FV 1000 T	-	16,4	28,5	16,4

(*) no standard execution

+ max η %

max rendimento idraulico e rispettivo rendimento totale
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TYPE	P2		P1 (kW)	Q (m³/h - l/min)												
3~				0	12	24	36	48	60	72	84	96	108	114	120	
				0	200	400	600	800	1000	1200	1400	1600	1800	1900	2000	
				H (m)												
	(HP)	(kW)	3~													
FV 750 T	7,5	5,5	8,5	24,2	22,7	20,7	18,7	16,4	13,9	11,1	8,2	5,4	2,8	-	-	
FV 1000 T	10	7,5	9,6	26,7	25,2	23,2	21,2	18,8	16,3	13,7	10,8	8,0	5,1	3,8	2,6	



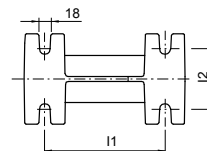
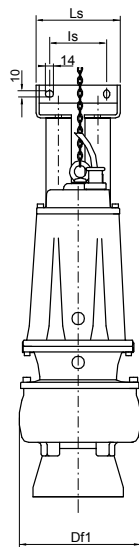
This diagram shows an exploded view of a mechanical assembly. On the left is a pump housing with a circular flange. In the center is a pump head with a central shaft. On the right is a pump shaft with a pulley. The components are shown in their relative positions as they would be assembled.

Technical drawing of a circular flange. It features a central circular hole with a hatched pattern, surrounded by a ring. Four small circles, representing bolt holes, are evenly spaced around the outer edge of the flange.

Counterflange

Technical drawing of a pump assembly showing dimensions and components. The drawing includes a side view of the pump and a detail view of the impeller. Key dimensions and labels are as follows:

- Dimensions:**
 - Cf : Total height from the base to the top of the pump.
 - Mf : Height from the base to the motor mounting flange.
 - m_f : Height from the base to the motor mounting flange (lower section).
 - Ef : Horizontal distance from the motor mounting flange to the impeller centerline.
 - Bf : Horizontal distance from the impeller centerline to the discharge flange.
 - $Df2$: Total horizontal distance from the base to the discharge flange.
 - $Dp2$: Horizontal distance from the motor mounting flange to the discharge flange.
 - Hf : Height from the base to the discharge flange.
 - Cp : Height from the base to the top of the discharge flange.
 - K : Height from the base to the impeller centerline.
 - D : Total height from the base to the top of the discharge flange.
- Components and Labels:**
 - $n' \dots \phi \dots$: Impeller detail view showing the number of vanes and diameter.
 - DNm : Motor mounting flange diameter.
 - DNt : Discharge flange diameter.



Mt/Mf: livello minimo di funzionamento continuo
Mt/Mf: lowest level for continuous duty
Mt/Mf: nivel minimo de funcionamiento continuo
Mt/Mf: niveau minimum de fonctionnement continuu

Flange UNI PN 10 (mm)

DNm	K	D	n°... ø...
65	145	185	4... 18...
80	160	200	8... 18...

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