

CAMPO DELLE PRESTAZIONI

- Portata fino a **1250 l/min** (75 m^3/h)
- Prevalenza fino a **20 m**

PERFORMANCE RANGE

- *Flow rate up to **1250 l/min** (75 m3/h)*
- *Head up to **20 m***

UTILIZZI E INSTALLAZIONI

Le elettropompe della serie **VRF**, costruite in ghisa di notevole spessore, eccezionale robustezza, resistenza all'abrasione e durata nel tempo, sono equipaggiate con girante di TIPO VORTEX, quindi adatte al drenaggio di **acque reflue, acque miste a fango, liquidi contenenti aria o gas**, nonché fanghi ravvivati e putridi. Sono consigliate per l'installazione fissa in fognature, gallerie, pozzi, parcheggi sotterranei, entro appositi pozzetti.

USES AND INSTALLATIONS

*The electric pumps of the **VRF** series are made of cast iron of considerable thickness, exceptional strength, abrasion resistance and durability. They are equipped with a VORTEX-type impeller, and are therefore suitable for **draining sewage water, water mixed with sludge, liquids containing air or gas**, as well as revived and putrid sludge. They are recommended for stationary installation in sewers, tunnels, wells, underground car parks, within suitable sumps.*

ESECUZIONE

- Cavo di alimentazione di lunghezza **10 m**
- Galleggiante esterno per versioni monofase
- Quadro elettrico per versioni monofase

STANDARD

- *Power supply cable length **10 m***
- *External float for Single-phase versions*
- *Electric panel for Single-phase versions*

LIMITI D'IMPIEGO

- Profondità sotto il livello dell'acqua fino a **10 m** (con cavo di alimentazione di lunghezza adeguata)
- Temperatura del liquido fino a **+40 °C**
- Passaggio Solids in sospensione:
  – fino a **Ø 50 mm** per **VRF /50**
  – fino a **Ø 65 mm** per **VRF /65**
- **Funzionamento continuo dell'elettropompa anche se completamente scoperta.**

LIMITS OF USE

- *Depth below water level up to 10 m (with appropriate length of power cable)*
- *Liquid temperature up to +40 °C*
- *Passage of suspended solids*
  *– up to **Ø 50 mm** for **VRF /50***
  *– up to **Ø 65 mm** for **VRF /65***
- ***Continuous operation of the electric pump even when completely uncovered.***

ESECUZIONI A RICHIESTA

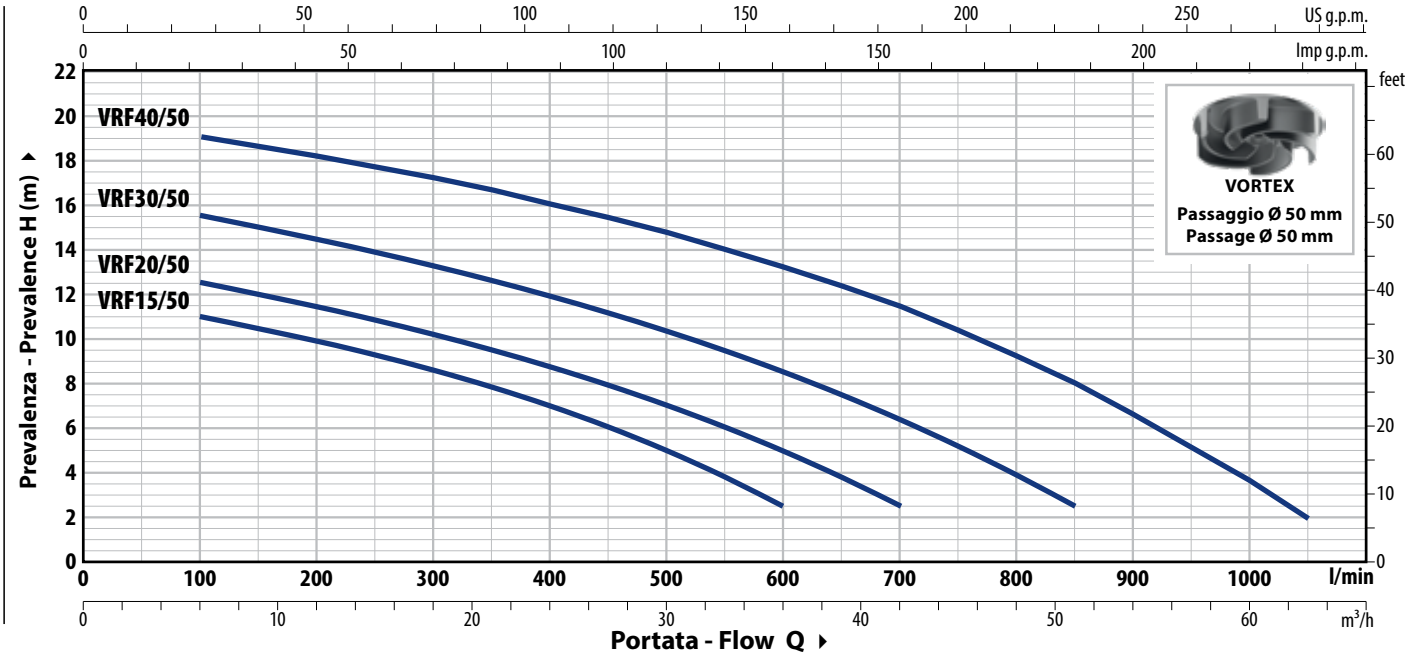
- KIT piede di accoppiamento
- Quadro elettrico **QES** per elettropompe trifase
- Altre tensioni o frequenza a 60 Hz

POSSIBLE ON DEMAND

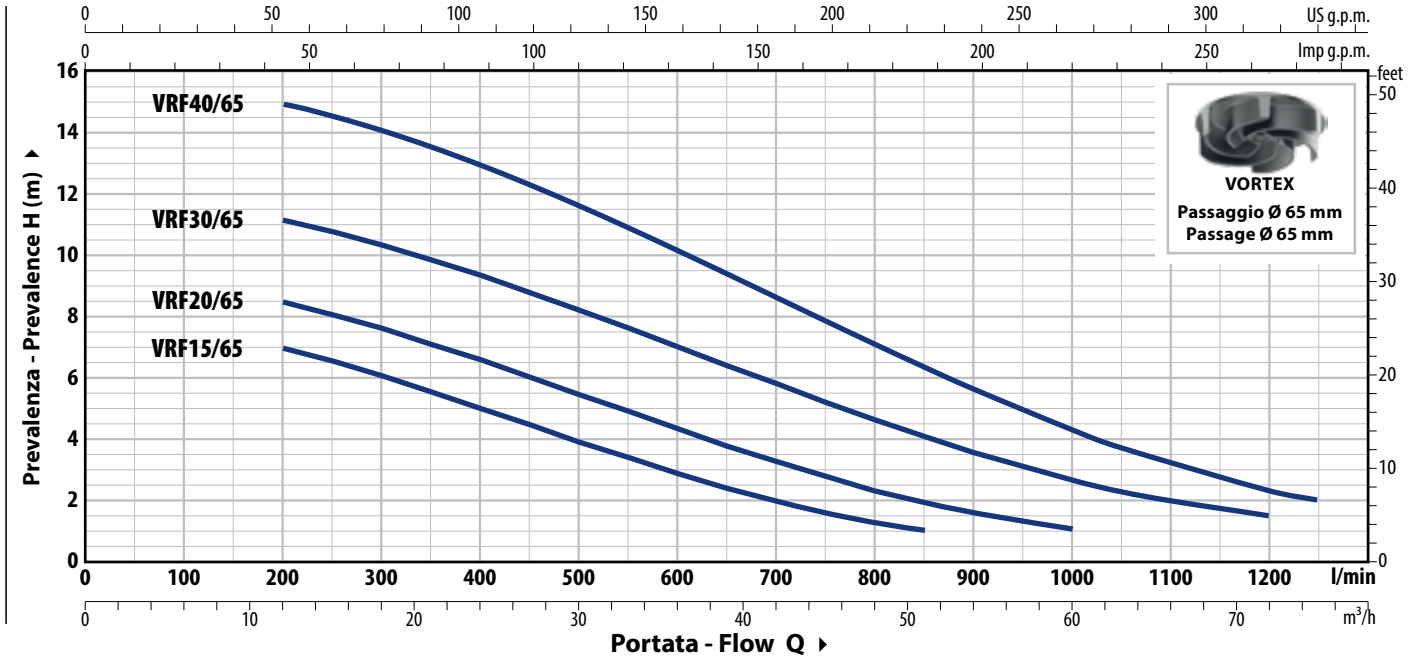
- *Coupling foot kit*
- ***QES** control panel for Three-phase electric pumps*
- *Other voltages or frequency at 60 Hz*

CARATTERISTICHE IDRAULICHE - HYDRAULIC PERFORMANCES

50 Hz



TIPO - TYPE		POWER (P2)		Q m³/h	0	6	12	18	24	30	36	42	51	60	63
Single-phase	Three-phase	kW	HP	l/min	**0**	**100**	**200**	**300**	**400**	**500**	**600**	**700**	**850**	**1000**	**1050**
VRFm 15/50	VRF 15/50	1.1	1.5	H (m)	12	11	9.9	8.6	7	5	2.5				
VRFm 20/50	VRF 20/50	1.5	2		13.5	12.5	11.4	10.2	8.7	7	5	2.5			
VRFm 30/50	VRF 30/50	2.2	3		16.5	15.5	14.4	13.2	11.9	10.3	8.5	6.4	2.5		
–	VRF 40/50	3	4		20	19	18.1	17.1	16	14.7	13.2	11.4	8	3.6	2



TIPO - TYPE		POWER (P2)		Q m³/h	0	6	12	18	24	30	36	42	51	60	63	72	75
Single-phase	Three-phase	kW	HP	l/min	**0**	**100**	**200**	**300**	**400**	**500**	**600**	**700**	**850**	**1000**	**1050**	**1200**	**1250**
VRFm 15/65	VRF 15/65	1.1	1.5	H (m)	8	–	7	6	5	3.9	2.8	2	1				
VRFm 20/65	VRF 20/65	1.5	2		9.5	–	8.5	7.6	6.6	5.4	4.3	3.3	2	1			
VRFm 30/65	VRF 30/65	2.2	3		12	–	11.1	10.3	9.3	8.2	7	5.8	4.1	2.6	2.3	1.5	
–	VRF 40/65	3	4		15.5	–	15	14	13	11.6	10.1	8.6	6.3	4.3	3.7	2.3	2

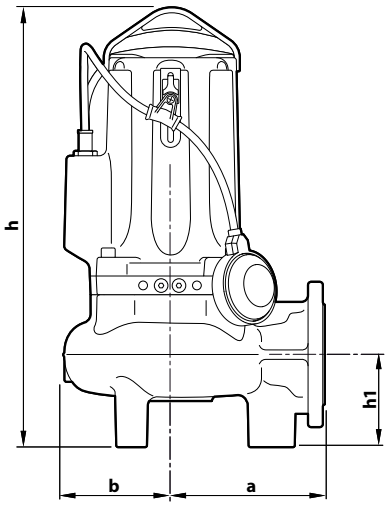
Tolleranza delle curve di prestazione secondo EN ISO 9906 Grado 3B.

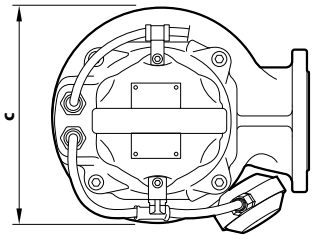
ASSORBIMENTI - ABSORPTION

TIPO - TYPE **Single-phase**	TENSIONE - VOLTAGE **230 V**
VRFm 15/50	8.5 A
VRFm 20/50	9.0 A
VRFm 30/50	12.0 A
VRFm 15/65	8.5 A
VRFm 20/65	9.0 A
VRFm 30/65	12.0 A

TIPO - TYPE **Three-phase**	TENSIONE - VOLTAGE **400 V**
VRF 15/50	3.4 A
VRF 20/50	3.7 A
VRF 30/50	5.0 A
VRF 40/50	6.2 A
VRF 15/65	3.4 A
VRF 20/65	3.7 A
VRF 30/65	5.0 A
VRF 40/65	6.2 A

DIMENSIONI E PESI - DIMENSIONS AND WEIGHTS

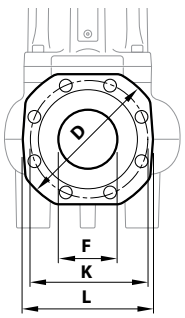




TIPO - TYPE		Solids passage	DIM mm					kg	
Single-phase	**Three-phase**		a	b	c	h	h1	1~	3~
VRFm 15/50	**VRF 15/50**	**50 mm**	170	119	242	487	102	43.5	42.0
VRFm 20/50	**VRF 20/50**							44.5	43.5
VRFm 30/50	**VRF 30/50**					513 | 487		49.5	44.5
–	**VRF 40/50**					513		–	49.5
VRFm 15/65	**VRF 15/65**	**65 mm**	210	120	246	521	123	46.0	44.5
VRFm 20/65	**VRF 20/65**							47.0	46.0
VRFm 30/65	**VRF 30/65**					547 | 521		52.0	47.0
–	**VRF 40/65**					547		–	52.0

FLANGIA DELLA BOCCA - PORT FLANGE

TIPO - TYPE	FLANGE	F	K	D	L	FORI - HOLES	
			mm	mm	mm	N°	Ø (mm)
VRF /50	**DN65** (PN10)	**2½"**	145	185	160	4	18
VRF /65	**DN80** (PN10)	**3"**	160	200	180	8	18



CARATTERISTICHE COSTRUTTIVE - CONSTRUCTION FEATURES

1	**Corpo pompa** ***Pump body***	Ghisa con trattamento di cataforesi con bocca flangiata e filettata ISO 228/1 *Cast iron with cataphoresis treatment with flanged and threaded ISO 228/1 port*
2	**Girante** ***Impeller***	Di tipo VORTEX in ghisa con trattamento di cataforesi *VORTEX type cast iron with cataphoresis treatment*
3	**Portamotore** ***Motor holder***	Ghisa con trattamento di cataforesi *Cast iron with cataphoresis treatment*
4	**Lanterna** ***Lantern***	Ghisa con trattamento di cataforesi *Cast iron with cataphoresis treatment*
5	**Albero motore** ***Motor shaft***	**AISI 431**

6 **Doppia tenuta meccanica con camera d'olio interposta** - ***Double mechanical seal with interposed oil chamber***

Tenuta - Seal	Albero - Shaft	Posizione - Position	Materiali - Material
STA-22	Ø 22 mm	Lato motore *Motor side*	Ceramica / Grafite / NBR *Ceramic / Graphite / NBR*
STA-20	Ø 20 mm	Lato pompa *Pump side*	Carburo di silicio / Carburo di silicio / NBR *Silicon carbide / Silicon carbide / NBR*

7 **Motore Elettrico** - ***Electric motor***

VRFm: monofase 230 V - 50 Hz
con salvamotore termico incorporato nell'avvolgimento

VRF: trifase 400 V - 50 Hz
con termico incorporato nell'avvolgimento da collegare al quadro elettrico

– Isolamento: classe F
– Protezione: IP X8

VRFm: *230 V - 50 Hz Single-phase*
with built-in thermal motor protection

VRF: *400 V - 50 Hz Three-phase - with built-in thermal winding to be connected to the Electric panel*

– Insulation: classe F
– Protection: IP X8

8 **Cavo di alimentazione** - ***Power cable***
- Da 10 metri di tipo "H07 RN-F"
- 10 m 'H07 RN-F' type

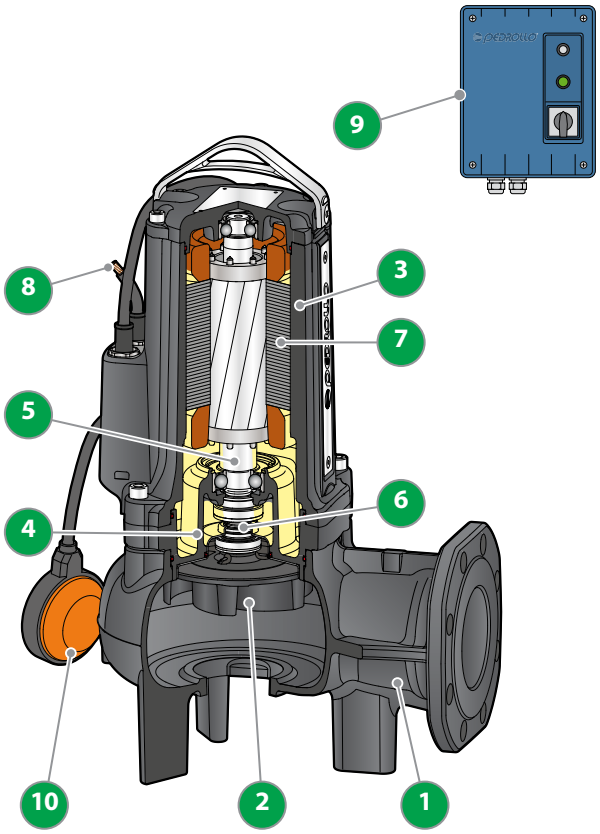
9 **Quadro elettrico** per VRFm 15-20-30
(solo per versioni monofase)

Con condensatore e salvamotore a riarmo manuale

Switchbox *for VRFm 15-20-30 - (only for Single-phase versions)*

With capacitor and manual reset motor protection switch

10 **Interruttore a galleggiante esterno**
External float switch



OPTIONAL – Base d'appoggio / *Support base*
(Cod. ASSBAVM)

