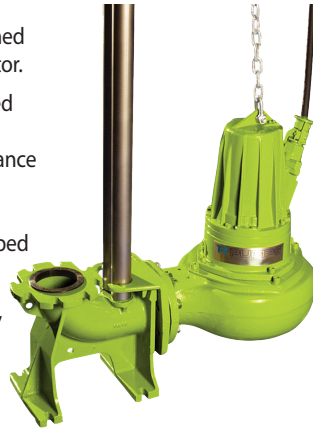


## Submersible sewage pump with explosion proof motors

The V-Flow 100 series of submersible effluent pumps are designed and manufactured to incorporate a Zone 1 explosion proof motor.

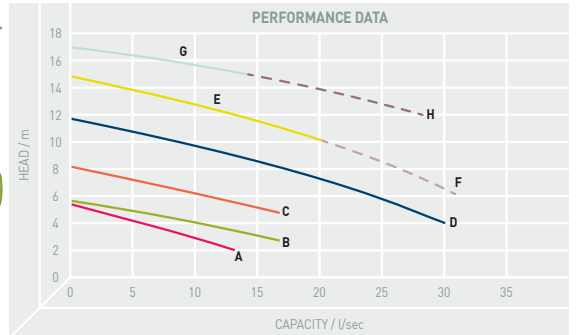
All models have a 100mm discharge size, and the design is based on years of experience of effluent and sewage applications requiring efficient pumps with high reliability and low maintenance costs. The vortex impeller enables the V-Flow to handle 100mm solids, and fibrous materials, and the double Silicon Carbide mechanical seal gives superior motor protection from the pumped liquid.

The V-Flow 100 series offers a range of motor and impeller sizes, enabling selection for specific applications and duties.



### Features:

- Cast Iron construction
- Auto-coupling available
- Oil seal leak sensor as standard



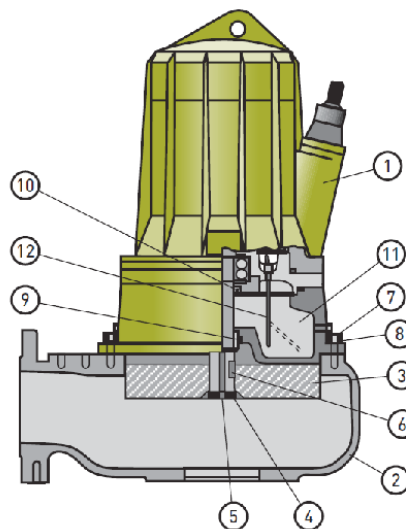
## TECHNICAL SPECIFICATION

PUMP TYPE	PRODUCT CODE	CURVE	OUTPUT	DISCHARGE		MAXIMUM		FREE PASSAGE mm	RPM	RATED CURRENT*	STARTING CURRENT*		CABLE (see notes)	P.T.B CERTIFICATION	CABLE	WEIGHT kg
			kW	mm	inch	HEAD M	CAPACITY LPS				DIR	YID				
V100-1.5-1 400V 3Ph	PB/V100-1.5-1/SL	/A	1.5	100	4	5.5	13	100	1355	4.0	14.4	-	1 x 10core x 1.5mm <sup>2</sup> x 15m	PTB 02 ATEX 1132	20	113
V100-2.2-1 400V 3Ph	PB/V100-2.2-1/SL	/B	2.2	100	4	6	17	100	1375	5.3	21.7	-	1 x 10core x 1.5mm <sup>2</sup> x 15m	PTB 02 ATEX 1132	20	116
V100-2.2-2 400V 3Ph	PB/V100-2.2-2/SL	/C	2.2	100	4	8	17	100	1375	5.3	21.7	-	1 x 10core x 1.5mm <sup>2</sup> x 15m	PTB 02 ATEX 1132	20	116
V100-4.0-3 ASD 400V/3Ph	PB/V100-4.0-3/SL	/D	4.0	100	4	12	30	100	1435	9.0	50.4	16.8	1 x 10core x 1.5mm <sup>2</sup> x 15m	PTB 02 ATEX 1132	20	142
V100-4.0-4 ASD 400V/3Ph	PB/V100-4.0-4/SL	/E	4.0	100	4	14.5	20	100	1435	9.0	50.4	16.8	1 x 10core x 1.5mm <sup>2</sup> x 15m	PTB 02 ATEX 1132	20	142
V100-5.5-4 ASD 400V/3Ph	PB/V100-5.5-4/SL	/F	5.5	100	4	14.5	31	100	1420	12.0	64.8	21.6	1 x 10core x 1.5mm <sup>2</sup> x 15m	PTB 02 ATEX 1132	20	144
V100-5.5-5 ASD 400V/3Ph	PB/V100-5.5-5/SL	/G	5.5	100	4	17	14.5	100	1420	12.0	64.8	21.6	1 x 10core x 1.5mm <sup>2</sup> x 15m	PTB 02 ATEX 1132	20	144
V100-7.5-5 ASD 400V/3Ph	PB/V100-7.5-5/SL	/H	7.5	100	4	17	28	100	1420	16.5	111.0	37.0	1 x 10core x 1.5mm <sup>2</sup> x 15m	PTB 02 ATEX 1092	20	165

\*at 400V 3Ph 50Hz. Cables outer diameter: 10core x 1.5mm<sup>2</sup> = 19/20mm; 12core x 2.5mm<sup>2</sup> = 24/25mm

## PARTS AND MATERIAL LISTS

No.	PART	MATERIAL	QTY
1	Motor	Casing - Cast Iron; Shaft - Stainless Steel	1
2	Pump Casing	Cast Iron BS1452, Gr 220	1
3	Impeller	Cast Iron BS1452, Gr 220	1
4	Impeller Washer	Bronze BS1400, LG2	1
5	Impeller Screw	Stainless Steel BS970 304, S15	1
6	Impeller Key	BS970 080, M30	1
7	Screw	Stainless Steel BS970 304, S15	4
8	Washer	Stainless Steel BS970 304, S15	4
9	Outer Mechanical Seal	SIC	1
10	Inner Seal	Carbon Ceramic	1
11	Oil Chamber	-	-
12	Seal Leakage Electrode	(when fitted)	-
-	Cable (see above)	Neoprene Sheath	1
-	O-Ring Seals	Viton	4
-	Free Standing Discharge Bend	Cast Iron (option)	1
-	Auto Coupling Pedestal Bend	Cast Iron (option)	1
-	Paint Finish: Chlorinated Rubber	-	-



Flameproof rating EExd IIB T4. Degree of protection IP68 to 30 metre submersion depth.

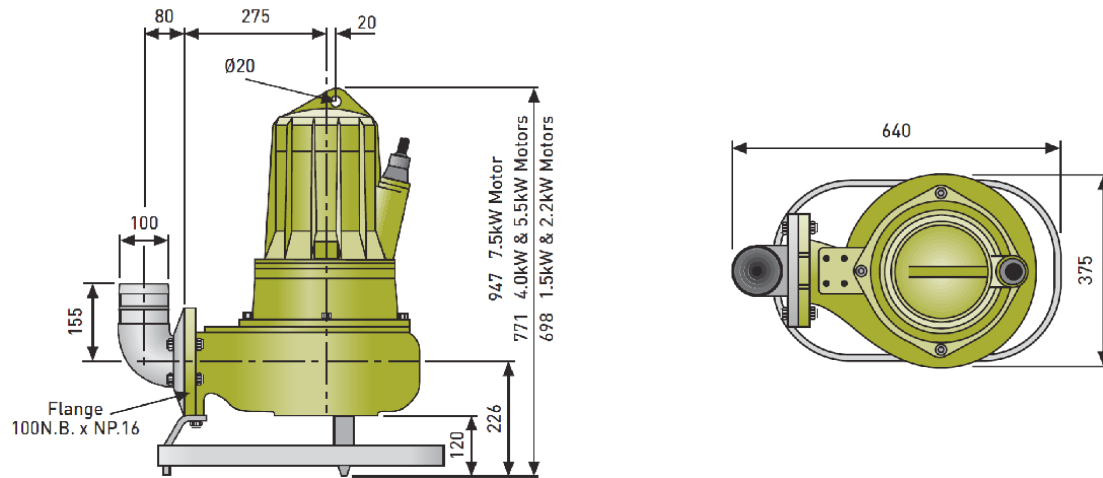
Insulation: Class F.

Motor thermal protection by thermostat: 3 x 105°C (control) + 3 x 120°C (limiting) 7.5kW = 3 x 120°C + 3 x 130°C.

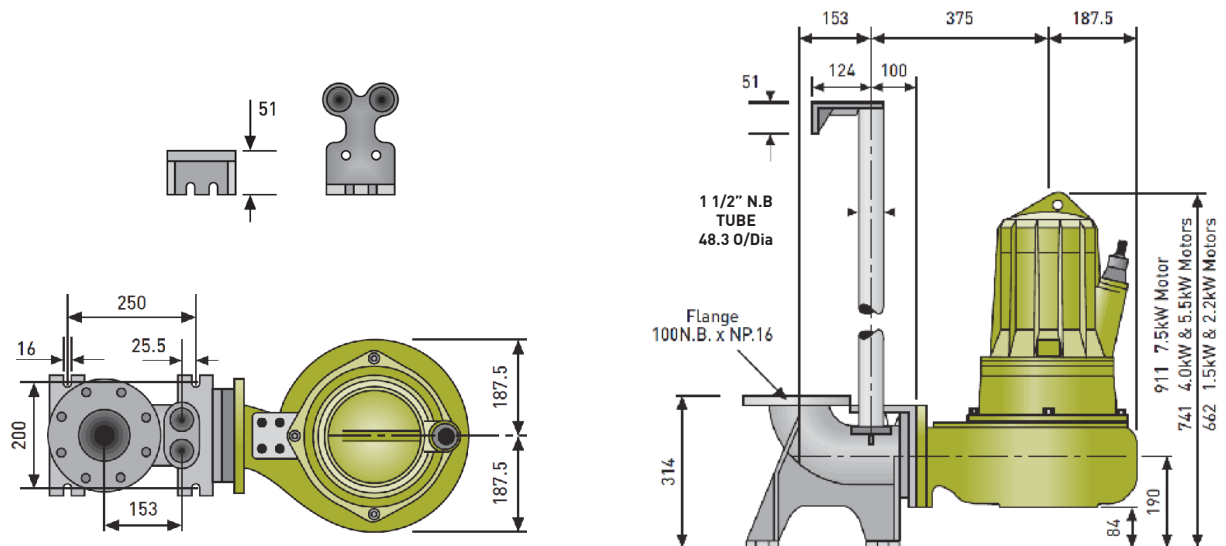
Maximum liquid temperature: 40°C. Pumps are available with seal leakage electrode fitted in motor as a factory fitted original-build optional extra, to provide indication of water leakage past the mechanical seal. Cable when electrode is fitted: 1 x 12core x 2.5mm<sup>2</sup> x 15m.

## DIMENSIONAL DRAWINGS

### FREE STANDING



### AUTO COUPLING



## WEIGHTS

	V100-1.5	V100-2.2	V100-4.0	V100-5.5	V100-7.5
<b>FREE STANDING</b>					
PUMP WITH 15M CABLE, DISCHARGE BEND & PUMP STAND	113kg	116kg	142kg	144kg	165kg
<b>AUTO COUPLING</b>					
PUMP WITH 15M CABLE & GUIDE HOOK	104kg	107kg	133kg	135kg	158kg
PEDESTAL BEND	23kg	23kg	23kg	23kg	23kg