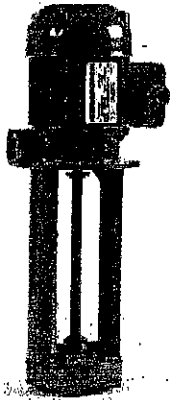


Submersible motor-driven pumps

Type SPV 12-18



Uses

They are suitable for transferring liquids containing impurities up to 3 mm in size. Their hydraulic components: impeller, feed screw and pump body in PBT allow them to be used with water, emulsions and oily substances in general, with a viscosity not exceeding 21 cSt (3° Engell). The temperature of the liquid must not exceed 70°C.

They are commonly used on:

- machine tools (milling and turning machines-drills)
- glass processing machinery (TRI version)
- printing machines

They are normally installed on a tank with a capacity which is proportional to their flow rate, about 3-4 cm from the bottom.

It is important to make sure that the maximum liquid level in the tank is always 3-4 cm lower than the support flange (see figure).

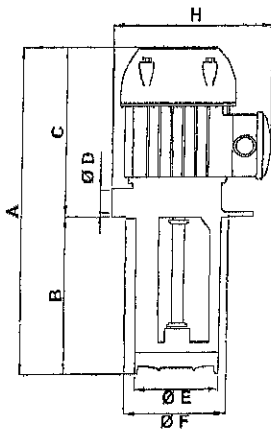
Should the liquid be particularly dirty, it is advisable to build a compartment tank in order to allow the sludge to deposit before it is sucked by the pump.

For different uses, please consult our Technical Office.

Size and weights table

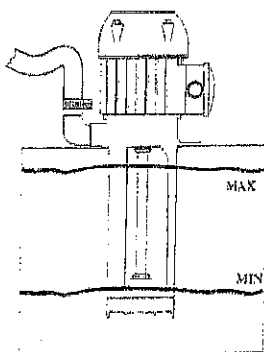
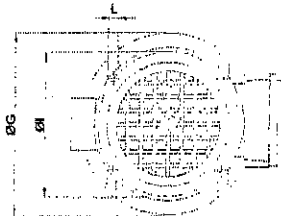
| Type of pump | A mm | B mm | C mm | ØD | ØE mm | ØF mm | ØG mm | H mm | ØI mm | L mm | Mass kg |
|--------------|------|-------|------|------|-------|-------|-------|------|-------|---------|---------|
| SPV 12 | 255 | 90 T | 165 | 3/4" | 98 | 100 | 130 | 151 | 115 | 7 (n.4) | 2.8 |
| | 285 | 120 T | | | | | | | | | 2.9 |
| | 335 | 170 T | | | | | | | | | 2.9 |
| | 385 | 220 T | | | | | | | | | 3.0 |
| | 435 | 270 T | | | | | | | | | 3.1 |
| SPV 18 | 515 | 350 | 165 | 3/4" | 98 | 100 | 130 | 151 | 115 | 7 (n.4) | 3.3 |
| | 255 | 90 T | | | | | | | | | 2.8 |
| | 285 | 120 T | | | | | | | | | 2.9 |
| | 335 | 170 T | | | | | | | | | 3.0 |
| | 385 | 220 T | | | | | | | | | 3.1 |
| | 435 | 270 T | 3.2 | | | | | | | | |
| | 515 | 350 | 3.3 | | | | | | | | |

On demand: T= TRI mode

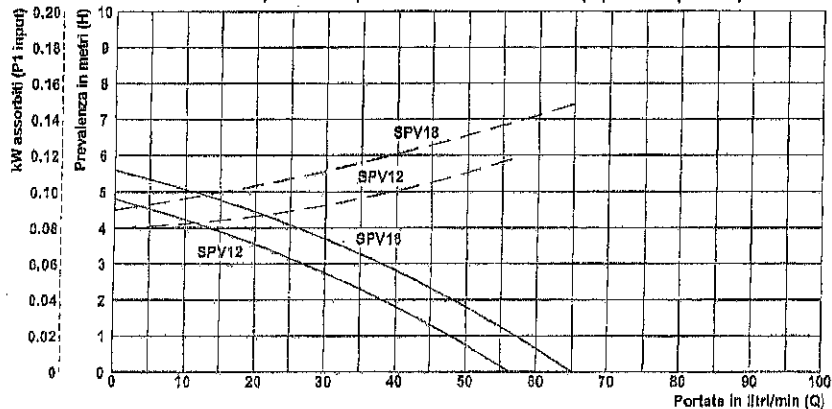


Rating plate data

| Type of pump | kW | | V 230/400 - Hz 50 | | | Q - maxQ litres/min | maxH - H metres |
|--------------|------------|-----------|-------------------|----------------------------------|-------|---------------------|-----------------|
| | Input (P1) | Nom. (P2) | In Amp. | n ₁ min ⁻¹ | cos φ | | |
| SPV 12 | 0.15 | 0.07 | 0.52/0.30 | 2770 | 0.71 | 6 - 56 | 4.5 - 0 |
| SPV 18 | 0.17 | 0.09 | 0.55/0.32 | 2730 | 0.72 | 2 - 65 | 5.5 - 0 |

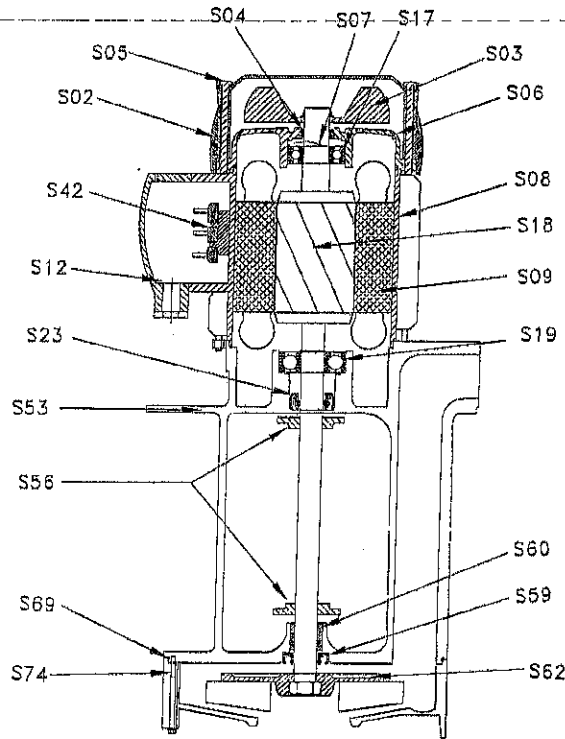


Hydraulic performance curves (open impeller)



Hydraulic performance table (open impeller)

| Type of pump | Flow rate in litres/min (Q) ↓ | | | | | | | | | | | | | |
|--------------|-------------------------------|-----|----|-----|----|-----|----|-----|----|-----|----|-----|---|--|
| | 0 | 0.5 | 1 | 1.5 | 2 | 2.5 | 3 | 3.5 | 4 | 4.5 | 5 | 5.5 | 6 | |
| SPV 12 | 56 | 52 | 48 | 43 | 38 | 33 | 27 | 21 | 13 | 6 | | | | |
| SPV 18 | 65 | 61 | 57 | 53 | 48 | 43 | 38 | 32 | 26 | 19 | 12 | 2 | | |



Spare parts nomenclature

| Component | |
|-----------|----------------------|
| S02. | Fan cover |
| S03. | Fan |
| S04. | V-ring |
| S05. | Stay rod |
| S06. | Upper shield |
| S07. | Balancing ring |
| S08. | Housing |
| S09. | Wound stator |
| S12. | Terminal board cover |
| S17. | Upper bearing |
| S18. | Axis + rotor |
| S19. | Lower bearing |
| S23. | Motor seal ring |
| S42. | Terminal board |
| S53. | Pump body |
| S56. | TRI washer |
| S59. | Feed screw seal ring |
| S60. | Bushing |
| S62. | Impeller |
| S69. | O-ring |
| S74. | Feed screw |

| SPV 12 | |
|-----------|-----------|
| Materials | |
| | Nylon |
| | Nylon |
| | NBR |
| | Steel |
| | Aluminium |
| | Steel |
| | Aluminium |
| | - |
| | Nylon |
| | - |
| | Steel* |
| | - |
| | - |
| | NBR |
| | - |
| | - |
| | PBT |
| | PBT |
| | NBR** |
| | Bronze** |
| | PBT |
| | NBR |
| | PBT |

| SPV 18 | |
|-----------|-----------|
| Materials | |
| | Nylon |
| | Nylon |
| | NBR |
| | Steel |
| | Aluminium |
| | Steel |
| | Aluminium |
| | - |
| | Nylon |
| | - |
| | Steel* |
| | - |
| | - |
| | NBR |
| | - |
| | - |
| | PBT |
| | PBT |
| | NBR** |
| | Bronze** |
| | PBT |
| | NBR |
| | PBT |

*On demand. Ax. AISi 316

*On demand. Ax. AISi 316

**Available only on suction pipe 220-270-350 **Available only on suction pipe 220-270-350