

Alfa Laval Peristaltic Pumps, IP Range

Application

The IP Range of peristaltic pumps is the solution to many fluid transfer problems. These pumps have no valves or glands that may leak, clog or stick, and the pumped medium contacts only the inside of the hose. Particular advantages apply to the pumping of abrasive mixtures and media containing long fibrous, stringy solids. Very high viscosity media and delicate suspended solids can also be handled.

The patented 'Hose-in-Hose' vacuum system incorporated in the IP Range design, enhances the inherent peristaltic pumping benefits offered by conventional peristaltic pump design. Suction lift and overall performance are improved and the 'Hose-in-Hose' system also offers early warning of an imminent hose failure as a result of normal hose wear.

The IP Range of pumps are capable of a dry suction lift of up to 9.5m, the excellent suction lift ability stemming from the near full vacuum achieved within the pump hose during operation. The sealed and lubricated pump housing ensures tolerance for dry running, critical in the transfer of liquid/gas mixtures. Flow rate is easily varied simply by regulating the speed of rotation.



Alfa Laval's peristaltic pumping experience covers a wide span of industries and applications. This, combined with state-of-the-art engineering technique, forms the basis of the IP Range development. Advanced production methods and stringent quality control underpin Alfa Laval's leadership in the field of positive pumping.

Standard Design

Pump Housing

The pump housing material for all IP Range pumps is high quality cast aluminium. This offers several advantages, including a large reduction in weight when compared to pumps constructed from cast iron. Furthermore, the thermal conductivity of aluminium is superior to both cast iron and stainless steel, resulting in more efficient heat dissipation and extended hose life. The exterior of the pump housing is protected by a quality epoxy paint system to protect against natural and corrosive elements. Alternative surface coatings including acid resistant polyurethane are available on request. The heavy duty bearing arrangement incorporated in all pump models provides maximum support to the drive shaft.

Hoses

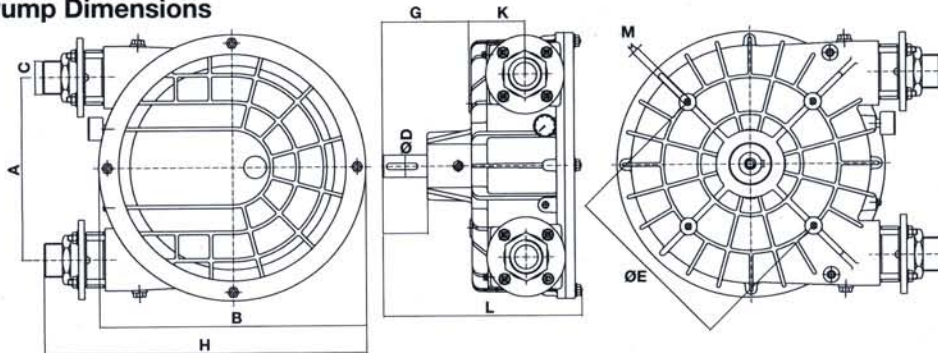
The wide range of hose materials available means that almost all fluid media can be handled, including acids and other corrosive products. Hoses are colour coded for easy identification:

| Hose material | Colour code |
|----------------|-------------|
| Natural rubber | yellow |
| Nitrile | red |
| EPDM | white |
| Butyl | green |
| Hypalon | black |

Pressure Rating

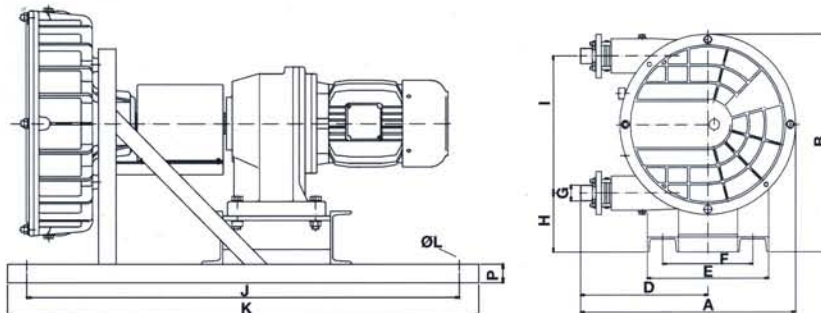
With the exception of the IP100 pump model, which has a maximum pressure rating of 9 bar, all IP Range pumps are rated to a maximum discharge pressure of 13 bar. For maximum efficiency, all pumps are constructed for specific pressure bands to suit application requirements.

Bareshaft Pump Dimensions



| PUMP MODEL | A | B | C | L | H | I | G | K | ØD | T | U | ØE | M |
|------------|-----|-----|-----|-----|------|-----|-----|-----|-------|--------|-------|-----|-----|
| IP100 | 152 | 242 | 1" | 290 | 318 | 60 | 160 | 60 | 30 k6 | 33-0.2 | 8 p9 | 192 | M10 |
| IP200 | 140 | 242 | 1¼" | 310 | 318 | 60 | 160 | 70 | 30 k6 | 33-0.2 | 8 p9 | 192 | M10 |
| IP300 | 336 | 470 | 1½" | 350 | 585 | 80 | 182 | 83 | 35 k6 | 38-0.2 | 10 p9 | 310 | M12 |
| IP400 | 322 | 470 | 2" | 355 | 570 | 80 | 155 | 100 | 40 k6 | 43-0.2 | 12 p9 | 310 | M12 |
| IP500 | 516 | 680 | 2" | 480 | 835 | 120 | 234 | 123 | 60 h6 | 64-0.2 | 18 p9 | 500 | M20 |
| IP600 | 510 | 680 | 2½" | 500 | 800 | 120 | 234 | 134 | 60 h6 | 64-0.2 | 18 p9 | 500 | M20 |
| IP800 | 692 | 890 | 3" | 600 | 1023 | 150 | 297 | 155 | 60 h6 | 64-0.2 | 18 p9 | 630 | M24 |

Mounted Pump Dimensions



| PUMP MODEL | A | B | D | E | F | G | H | I | J | K | L | P |
|------------|------|------|-----|-----|-----|-----|-----|-----|------|------|----|----|
| IP100 | 318 | 273 | 197 | 380 | 330 | 1" | 74 | 152 | 360 | 460 | 12 | 38 |
| IP200 | 318 | 273 | 197 | 380 | 330 | 1¼" | 80 | 140 | 360 | 460 | 12 | 38 |
| IP300 | 585 | 530 | 350 | 400 | 360 | 1½" | 118 | 336 | 270 | 350 | 14 | - |
| IP400 | 570 | 595 | 335 | 340 | 240 | 2" | 200 | 322 | 930 | 1010 | 18 | 50 |
| IP500 | 835 | 820 | 458 | 470 | 350 | 2" | 222 | 516 | 1330 | 1450 | 18 | 50 |
| IP600 | 800 | 820 | 458 | 470 | 350 | 2½" | 225 | 510 | 1330 | 1450 | 18 | 55 |
| IP800 | 1023 | 1080 | 578 | 606 | 446 | 3" | 289 | 692 | 1330 | 1490 | 18 | 65 |

With the exception of the connection sizes, all dimensions are in mm.

The above drawings are for guidance only and should not be used for installation or mounting purposes. Drive arrangements will vary dependent on pump size and required drive motor.