



Stainless Steel Pumps

Model 3LS 316 S/S Centrifugal Pumps (2 pole)

To DIN 24255



Stub shaft design

Uses IEC standard motors



Standard with high quality Silicon Carbide mechanical seal

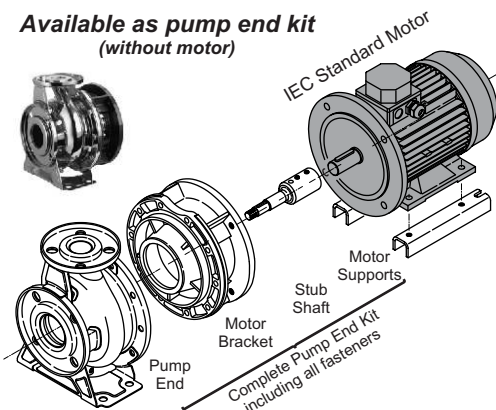
All the hydraulic and wetted components are manufactured in 316 Stainless Steel

This series of stainless steel pumps feature a unique one piece volute casing that is produced using an advanced computer controlled Plasma stamping system that ensures total quality control during manufacture. With the smooth surfaces of stamped stainless steel, this results in consistent high standard products, of superior quality and high efficiency. (Cast casing on 65-250 & 80 models)

The back pull-out construction permits the disassembly and overhaul of the impeller, mechanical seal and motor without removal of the suction or discharge piping, or pump casing.

The centre line discharge and foot support under the casing ensure maximum resistance to misalignment and distortion from pipe loads.

Available as pump end kit (without motor)



Standard IEC motors used, allowing for single phase, special enclosure, or specific brand motors to be fitted.

Specifications

- End suction centrifugal pump with closed impeller
- Maximum working pressure: 10 bar
- Liquid temperature: -10 °C to +110 °C

Materials

- Pump casing: 316 Stainless Steel
- Impeller: 316 Stainless Steel
- Casing cover: 316 Stainless Steel
- Shaft: 316 Stainless Steel (wetted part)
- Motor bracket: Cast Iron
- Mechanical seal: SiC/SiC/Viton

Motor Data

- IEC standard 2 pole 50 Hz motors
- Normally fitted with WEG motors
- 3 Phase, TEFC, IP55 or above, Class F or above

Range

- 32 to 80 mm Ø discharge
- 1.1 to 55 kW - 3 Phase

Supply

- Available complete with motor or as a pump end kit without motor

Options

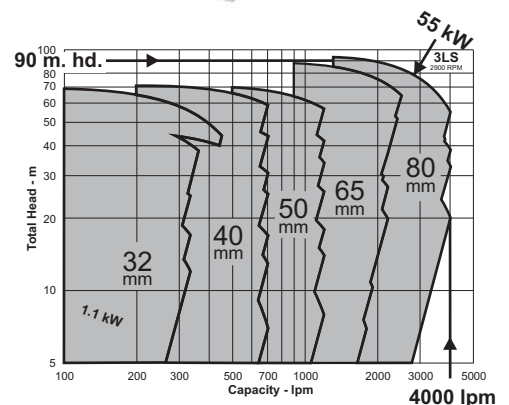
- Single phase motors (up to 3.0 kW)
- Other motor brands, types, etc. on request

Accessories

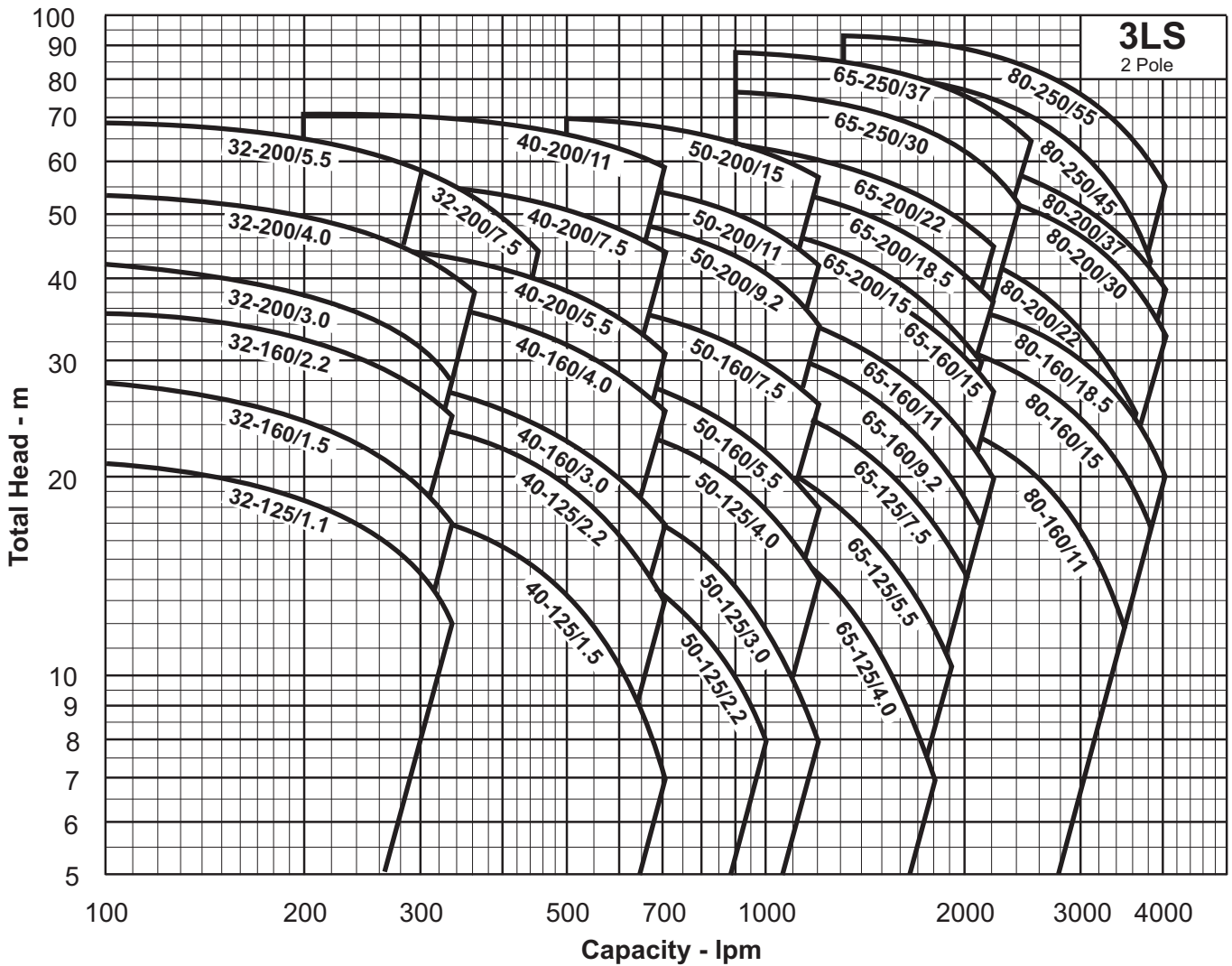
- Companion flange kits.



Precision cast casing on 65-250 & 80 models



- Over 40 model sizes
- 32 mm to 80 mm discharge
- 1.1 to 55 kW motor power
- Flows to 4000 lpm
- Heads to 90 metres



Model Code

3LS 40 - 200 / 7.5 M

- M = Single Phase
- Motor Size kW
- Nominal Impeller Diameter mm
- Discharge Size Ø mm
- Model; 3LS with motor; 3LSF without motor (kit)

Synchronous Speed:
3000 rpm

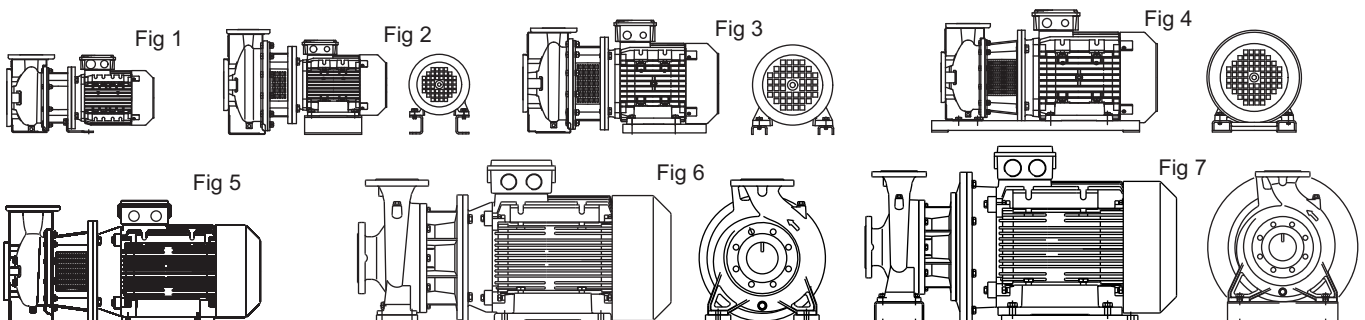
Water temp:
20 °C

Applicable standard of test :
ISO 2458 Class C

Configuration

3LS pumps use IEC standard motors. 3 phase WEG cast iron motors are generally fitted as standard, but single phase, specific brands, special enclosures, etc. can also be supplied. The requirements for frame size and mounting are in the dimension table. Note that B5 = Flange mount; B35 = Foot & Flange mount.

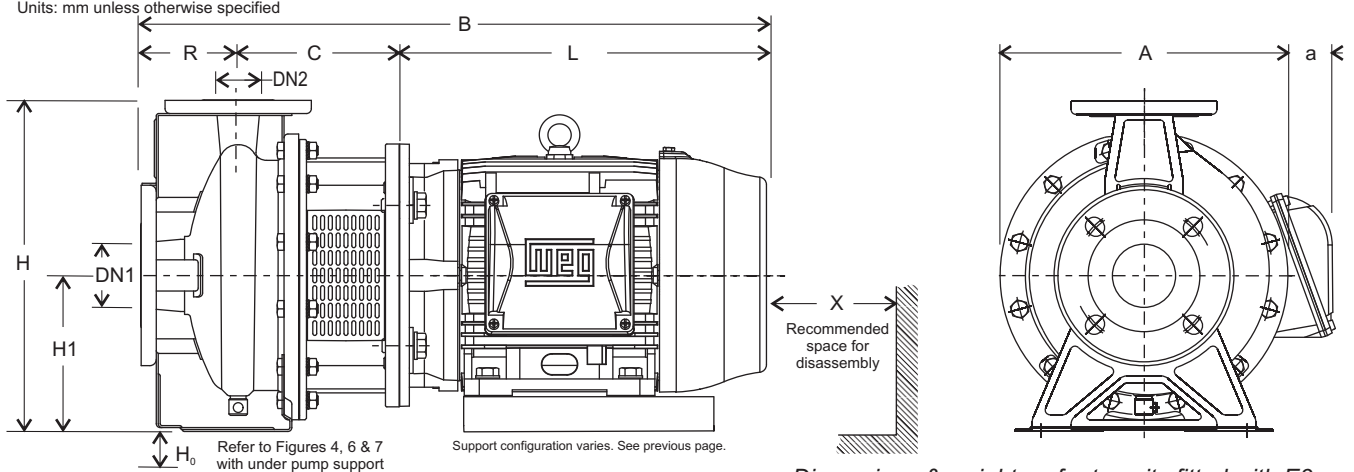
The style of motor support varies depending on model and motor size, as shown in the figures below and referred to in the dimension table.



Dimensions - with cast iron W22 WEG motors (E3)

Model **3LS**

Units: mm unless otherwise specified



Refer to Figures 4, 6 & 7 with under pump support
Support configuration varies. See previous page.

Dimensions & weights refer to units fitted with E3 high efficiency 3 Phase cast iron WEG W22 motors

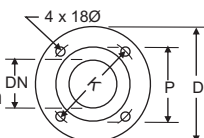
* FLC = Motor full load current (A) @ 400 V

| DN2 x DN1 | Pump Model (...../kW) | Motor details | | | | Dimensions (mm) | | | | | | | | | | | Weight (kg) | | |
|----------------|--------------------------|---------------|-------|-------|---------|-----------------|-----|----------------|-----|-----|------|------|-----|-----|-----|----------|-------------|-------|--|
| | | FLC* | Frame | Mount | Config. | H1 | H | H ₀ | R | C | L | B | A | a | X | Pump End | Motor | Total | |
| 32 mm x 50 mm | 3LS 32-125/1.1 | 2.29 | 80 | B5 | Fig 1 | 112 | 252 | - | 80 | 118 | 236 | 434 | 213 | 33 | 110 | 13 | 15 | 28 | |
| | 3LS 32-160/1.5 | 3.02 | 90S | B5 | Fig 1 | 132 | 292 | - | 80 | 130 | 254 | 464 | 254 | 30 | 110 | 17 | 19 | 36 | |
| | 3LS 32-160/2.2 | 4.36 | 90L | B5 | Fig 1 | 132 | 292 | - | 80 | 130 | 279 | 489 | 254 | 30 | 110 | 17 | 24 | 41 | |
| | 3LS 32-200/3.0 | 5.68 | 100L | B35 | Fig 2 | 160 | 340 | - | 80 | 142 | 316 | 538 | 296 | 19 | 110 | 24 | 32 | 54 | |
| | 3LS 32-200/4.0 | 7.49 | 112M | B35 | Fig 2 | 160 | 340 | - | 80 | 142 | 333 | 555 | 296 | 44 | 110 | 24 | 41 | 65 | |
| | 3LS 32-200/5.5 | 10.1 | 132S | B35 | Fig 3 | 160 | 340 | - | 80 | 165 | 372 | 617 | 296 | 70 | 110 | 28 | 65 | 93 | |
| 40 mm x 65 mm | 3LS 32-200/7.5 | 13.8 | 132S | B35 | Fig 3 | 160 | 340 | - | 80 | 165 | 372 | 617 | 296 | 70 | 110 | 28 | 69 | 97 | |
| | 3LS 40-125/1.5 | 3.02 | 90S | B5 | Fig 1 | 112 | 252 | - | 80 | 130 | 254 | 464 | 213 | 51 | 115 | 15 | 19 | 34 | |
| | 3LS 40-125/2.2 | 4.36 | 90L | B5 | Fig 1 | 112 | 252 | - | 80 | 130 | 279 | 489 | 213 | 51 | 115 | 15 | 24 | 39 | |
| | 3LS 40-160/3.0 | 5.68 | 100L | B35 | Fig 3 | 132 | 292 | - | 80 | 142 | 316 | 538 | 254 | 40 | 115 | 20 | 32 | 52 | |
| | 3LS 40-160/4.0 | 7.49 | 112M | B35 | Fig 3 | 132 | 292 | - | 80 | 142 | 333 | 555 | 254 | 65 | 115 | 20 | 41 | 61 | |
| | 3LS 40-200/5.5 | 10.1 | 132S | B35 | Fig 3 | 160 | 340 | - | 100 | 165 | 372 | 637 | 296 | 70 | 115 | 28 | 65 | 93 | |
| 50 mm x 65 mm | 3LS 40-200/7.5 | 13.8 | 132S | B35 | Fig 3 | 160 | 340 | - | 100 | 165 | 372 | 637 | 296 | 70 | 115 | 28 | 69 | 97 | |
| | 3LS 40-200/11.0 | 20.1 | 160M | B35 | Fig 4 | 160 | 340 | 42 | 100 | 198 | 488 | 786 | 296 | 116 | 115 | 42 | 115 | 157 | |
| | 3LS 50-125/2.2 | 4.36 | 90L | B5 | Fig 1 | 132 | 292 | - | 100 | 130 | 279 | 489 | 254 | 30 | 125 | 20 | 24 | 44 | |
| | 3LS 50-125/3.0 | 5.68 | 100L | B35 | Fig 3 | 132 | 292 | - | 100 | 142 | 316 | 558 | 254 | 40 | 125 | 20 | 32 | 52 | |
| | 3LS 50-125/4.0 | 7.49 | 112M | B35 | Fig 3 | 132 | 292 | - | 100 | 142 | 333 | 575 | 254 | 65 | 125 | 20 | 41 | 61 | |
| | 3LS 50-160/5.5 | 10.1 | 132S | B35 | Fig 3 | 160 | 340 | - | 100 | 165 | 372 | 637 | 296 | 70 | 125 | 29 | 65 | 94 | |
| | 3LS 50-160/7.5 | 13.8 | 132S | B35 | Fig 3 | 160 | 340 | - | 100 | 165 | 372 | 637 | 296 | 70 | 125 | 29 | 69 | 98 | |
| | 3LS 50-200/9.2 | 16.5 | 132M | B35 | Fig 3 | 160 | 360 | - | 100 | 165 | 410 | 675 | 296 | 70 | 125 | 29 | 78 | 107 | |
| 65 mm x 80 mm | 3LS 50-200/11.0 | 20.1 | 160M | B35 | Fig 4 | 160 | 360 | 42 | 100 | 198 | 488 | 786 | 296 | 116 | 125 | 42 | 115 | 157 | |
| | 3LS 50-200/15.0 | 27.1 | 160M | B35 | Fig 4 | 160 | 360 | 42 | 100 | 198 | 488 | 786 | 296 | 116 | 125 | 43 | 119 | 162 | |
| | 3LS 65-125/4.0 | 7.49 | 112M | B35 | Fig 2 | 160 | 340 | - | 100 | 142 | 333 | 575 | 254 | 65 | 145 | 26 | 41 | 67 | |
| | 3LS 65-125/5.5 | 10.1 | 132S | B35 | Fig 3 | 160 | 340 | - | 100 | 165 | 372 | 637 | 254 | 91 | 145 | 28 | 65 | 93 | |
| | 3LS 65-125/7.5 | 13.8 | 132S | B35 | Fig 3 | 160 | 340 | - | 100 | 165 | 372 | 637 | 254 | 91 | 145 | 29 | 69 | 98 | |
| | 3LS 65-160/9.2 | 16.5 | 132M | B35 | Fig 3 | 160 | 360 | - | 100 | 165 | 410 | 675 | 296 | 70 | 145 | 30 | 78 | 108 | |
| | 3LS 65-160/11.0 | 20.1 | 160M | B35 | Fig 4 | 160 | 360 | 42 | 100 | 198 | 488 | 786 | 296 | 116 | 145 | 40 | 115 | 155 | |
| | 3LS 65-160/15.0 | 27.1 | 160M | B35 | Fig 4 | 160 | 360 | 42 | 100 | 198 | 488 | 786 | 296 | 116 | 145 | 42 | 119 | 162 | |
| | 3LS 65-200/15.0 | 27.1 | 160M | B35 | Fig 3 | 180 | 405 | - | 100 | 208 | 488 | 696 | 296 | 116 | 145 | 30 | 119 | 149 | |
| | 3LS 65-200/18.5 | 33.3 | 160L | B35 | Fig 3 | 180 | 405 | - | 100 | 208 | 532 | 840 | 296 | 116 | 145 | 30 | 136 | 166 | |
| 80 mm x 100 mm | 3LS 65-200/22 | 38.8 | 180M | B35 | Fig 5 | 180 | 405 | - | 100 | 208 | 554 | 862 | 296 | 131 | 145 | 30 | 176 | 206 | |
| | 3LS 65-250/30 | 53.3 | 200L | B35 | Fig 5 | 200 | 450 | - | 100 | 208 | 657 | 965 | 400 | 117 | 150 | 70 | 244 | 314 | |
| | 3LS 65-250/37 | 65.6 | 200L | B35 | Fig 5 | 200 | 450 | - | 100 | 208 | 657 | 965 | 400 | 117 | 150 | 71 | 265 | 336 | |
| | 3LS 80-160/11 | 20.1 | 160M | B35 | Fig 3 | 180 | 405 | - | 125 | 208 | 488 | 821 | 350 | 89 | 150 | 52 | 115 | 167 | |
| | 3LS 80-160/15 | 27.1 | 160M | B35 | Fig 3 | 180 | 405 | - | 125 | 208 | 488 | 821 | 350 | 89 | 150 | 52 | 119 | 171 | |
| | 3LS 80-160/18.5 | 33.3 | 160L | B35 | Fig 3 | 180 | 405 | - | 125 | 208 | 532 | 865 | 350 | 89 | 150 | 53 | 136 | 189 | |
| | 3LS 80-200/22 | 38.8 | 180M | B35 | Fig 5 | 180 | 430 | - | 125 | 208 | 554 | 887 | 357 | 101 | 150 | 68 | 176 | 244 | |
| | 3LS 80-200/30 | 53.3 | 200L | B35 | Fig 6 | 180 | 430 | 20 | 125 | 208 | 657 | 990 | 400 | 117 | 150 | 72 | 244 | 316 | |
| 3LS 80-200/37 | 65.6 | 200L | B35 | Fig 6 | 180 | 430 | 20 | 125 | 236 | 657 | 1018 | 400 | 117 | 150 | 73 | 265 | 338 | | |
| 80 mm x 100 mm | 3LS 80-250/45 | 77.6 | 225SM | B35 | Fig 6 | 200 | 480 | 25 | 125 | 236 | 746 | 1107 | 450 | 183 | 150 | 88 | 416 | 504 | |
| | 3LS 80-250/55 | 93.5 | 250SM | B35 | Fig 7 | 200 | 480 | 80 | 125 | 248 | 825 | 1198 | 550 | 133 | 150 | 100 | 485 | 585 | |

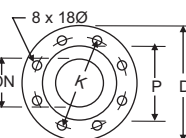
Specifications subject to change without notice

Flanges to DIN 2532

32,40,50 & 65 Ø mm

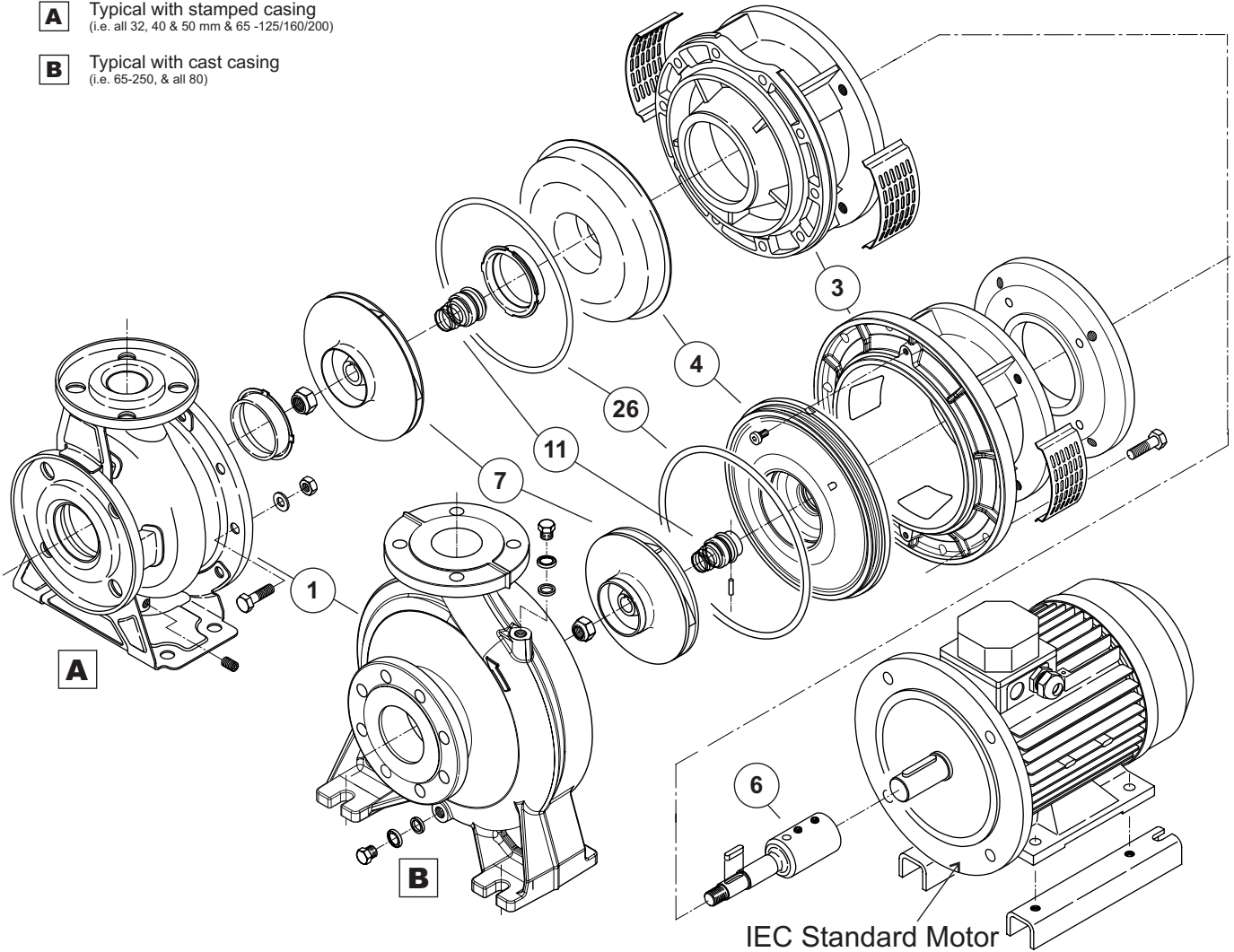


80 & 100 Ø mm



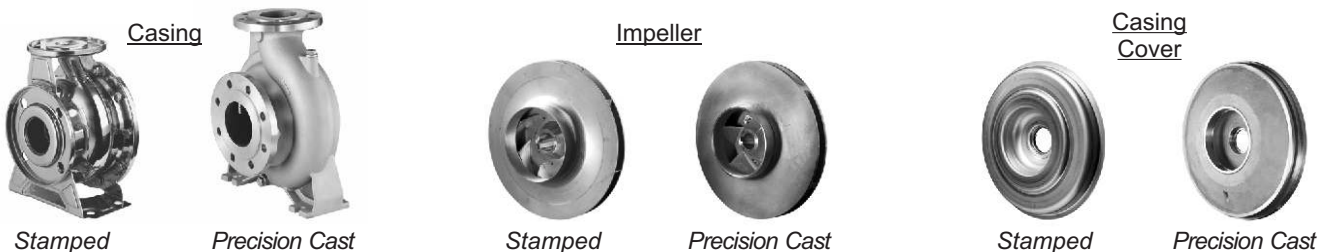
| | | | | | | |
|----|-----|-----|-----|-----|-----|-----|
| DN | 32 | 40 | 50 | 65 | 80 | 100 |
| P | 75 | 80 | 95 | 115 | 120 | 135 |
| K | 100 | 110 | 125 | 145 | 160 | 180 |
| D | 140 | 150 | 165 | 185 | 200 | 225 |

- A** Typical with stamped casing
(i.e. all 32, 40 & 50 mm & 65 -125/160/200)
- B** Typical with cast casing
(i.e. 65-250, & all 80)



Note: Mounting and support feet varies between models.

| Item | Description | Suits models | Materials |
|------|-----------------|-------------------------------------|---|
| 1 | Casing | All 32, 40 & 50; 65-125/160/200 | 316L Stainless Steel - <i>stamped</i> |
| | | 65-250; All 80 | 316 Stainless Steel - <i>precision cast</i> |
| 7 | Impeller | All 32, 40 & 50 | 316L Stainless Steel - <i>stamped</i> |
| | | All 65 & 80 | 316 Stainless Steel - <i>precision cast</i> |
| 4 | Casing cover | 32, 40 & 50; 65-125/160/200; 80-160 | 316L Stainless Steel - <i>stamped</i> |
| | | 65-250; 80-200/250 | 316 Stainless Steel - <i>precision cast</i> |
| 26 | O-Ring (casing) | All models | Viton |
| 11 | Mechanical seal | All models | SiC/SiC/Viton with anti rotation device for stationary seat. |
| 6 | Stub shaft | All models | 316 Stainless Steel (Up to 22 kW) Duplex Stainless Steel (30 to 55 kW) |
| 3 | Motor bracket | All models | Cast Iron |



Specifications subject to change without notice