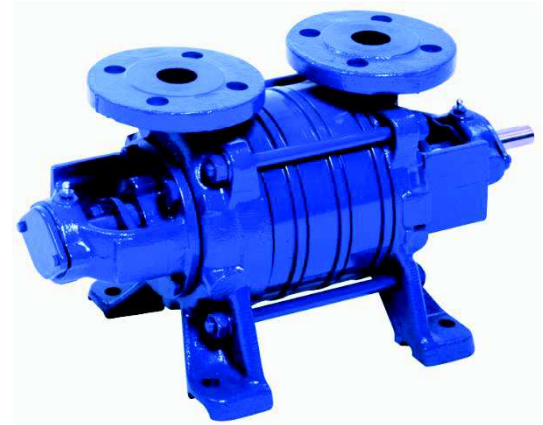


AKH

Sizes 1101 ... 6103

TECHNICAL DATA

| | |
|------------------------|---|
| Capacity: | max. 35 m ³ /h |
| Head: | max. 144 m |
| Speed: | max. 1800 rpm |
| Temperature: | max. 120 °C |
| Casing pressure: | PN 16 |
| Shaft sealing: | Stuffing box, mechanical seal |
| Flange connections: | DIN 2501 / PN 16 |
| Direction of rotation: | Clockwise (when viewed from the drive end) |



APPLICATION

The SIHI AKH pump is a self-priming side channel pump capable of handling gas along with the medium and operates at a low noise level. The AKH is suitable for trouble free handling of clean or turbid liquids without any abrasive particles.

The performance curve steepness admits a precise regulation of the pressure with a small change in capacity.

The AKH pump has been developed for a broad range of medium duty applications in:

- Chemical industry,
- Petro-Chemical industry,
- Oil industry,
- Machinery and automobile industry,
- Food industry,
- Building trades,
- Plastic and rubber industry,
- Surface treatment,
- Ship yards.

DESIGN

Pumps of the series AKH have a segmental type construction with open vane wheel impellers. The pump construction is either with one liquid surrounded slide bearing and one ball bearing or in a more industrial construction by using a double ball bearing design.

The program comprises 6 sizes with up to 4 stages (an extension with 5 or 6 stages is possible for certain sizes). The performance curves of the AKH are identical for all the material designs.

The applied hydraulic components are from our Modular Side Channel system (interchangeability of parts).

CONSTRUCTION

Casing pressure

Maximal 16 bar from -40 °C to + 120 °C.

Please observe

Technical rules and safety regulations.
Casing pressure = inlet pressure + delivery head at minimum pump capacity.

Position of branches

Suction and discharge branch point radially upwards.

Flanges

The flanges correspond to DIN EN 1092-2 / PN 16. Flange design as per DIN 2512 with groove or drilled according to ANSI 150 or 300 lbs is basically possible.

Bearing

Either by one grease lubricated ball bearing and one liquid surrounded sleeve bearing (design A) or by two grease lubricated ball bearings (design B). The ball bearings are according to DIN 625. The first grease filling is done in the factory.

Direction of rotation

Clockwise, when looking at the pump from the drive end. Anti-clockwise is possible.

Shaft sealing

The shaft can be sealed by either a stuffing box or a standard mechanical seal.

Material design

Cast iron

| Pos. | Components | Material design | | |
|----------------------|---------------------|-----------------|-------------------------|------|
| | | 0A | 0B | 0F |
| 1060 | Suction casing | EN-GJL-250 | | |
| 1070 | Discharge casing | EN-GJL-250 | | |
| 1090 1140 1141 | Intermediate piece | EN-GJL-250 | | |
| 2100 | Shaft | X 20 Cr 13 | | |
| 2350 | Vane wheel impeller | CuZn 40 Al 2 | G-X 3 CrNiMoCu 26 6 3 3 | PAEK |
| 0241 | Bearing bush | EK 2203 | | |

Bronze and stainless steel

| Pos. | Components | Material design | | | |
|----------------------|---------------------|----------------------|------------|-----------------------------|------|
| | | 2H* | 3B | 4B | 4F |
| 1060 | Suction casing | EN-GJL-250 | GC-CuSn 12 | G-X 6 CrNiMo 18 10 | |
| 1070 | Discharge casing | EN-GJL-250 | GC-CuSn 12 | G-X 6 CrNiMo 18 10 | |
| 1090 1140 1141 | Intermediate piece | G-SnBz 16 | | G-X 6 CrNiMo 18 10 | |
| 2100 | Shaft | X 5 CrNiMo 17 12 2 | | | |
| 2350 | Vane wheel impeller | G-CuSn chrome plated | | G-X 3 CrNiMoCuN 26 6 3 3 | PAEK |
| 0241 | Bearing bush | EK 2203 | | | |

* The construction of the AKH in material 2H is conform the construction of the AKH in Cast iron (see the next page).

Casing seal

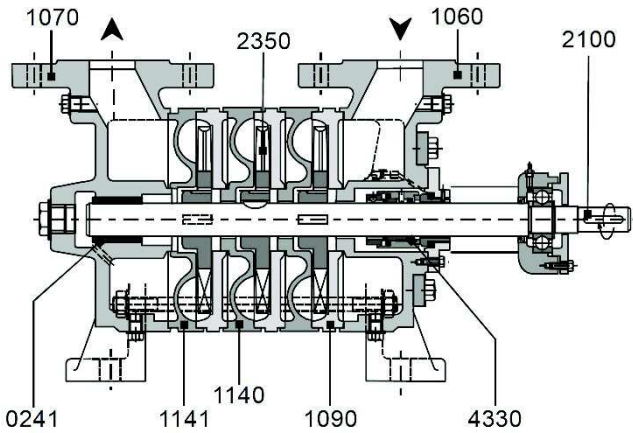
The casing can be sealed with a liquid sealing compound or soft Teflon.

Drive

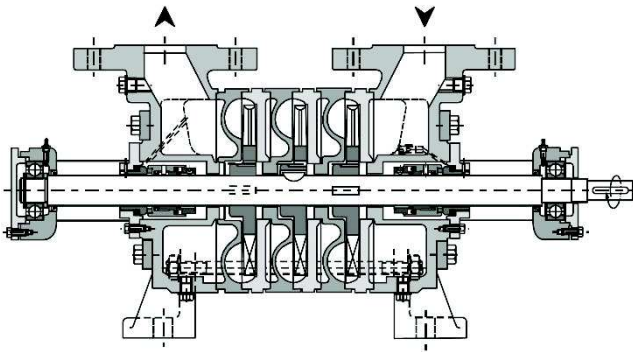
By electric motor, type of construction IM B3.

Sectional drawing with parts list

Cast iron (0A, 0B, 0F, 2H)



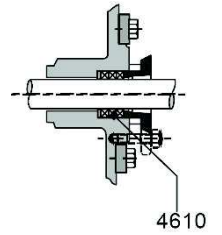
Design A (only for sizes 1100 up to 5100)



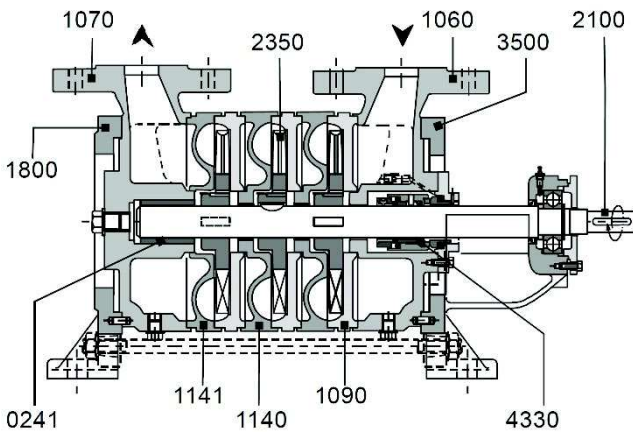
Design B

- 0241 Bearing bush
- 1060 Suction casing
- 1070 Discharge casing
- 1090 Suction intermediate piece
- 1140 Discharge intermediate piece
- 1141 Discharge intermediate piece
- 1800 Mounting flange
- 2100 Shaft
- 2350 Vane wheel impeller
- 3500 Bearing housing
- 4330 Mechanical seal
- 4610 Stuffing box

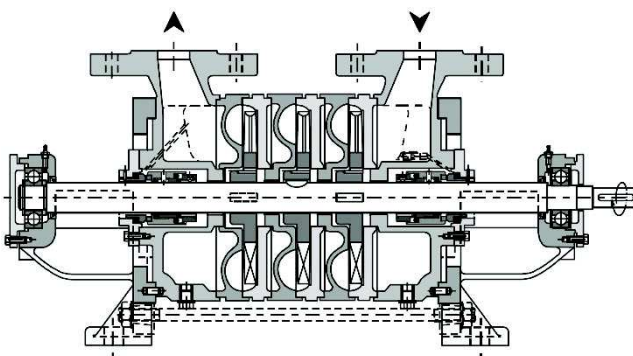
Stuffing box



Bronze (3B) and stainless steel (4B, 4F)



Design A (only for stainless steel in sizes 1200 up to 5100)



Design B

Performance range

General conditions

Liquid: Water
 Density: 1 kg/dm³
 Viscosity: 1 cSt
 Temperature: 20 °C
 Atmospheric pressure: 1013 mbar

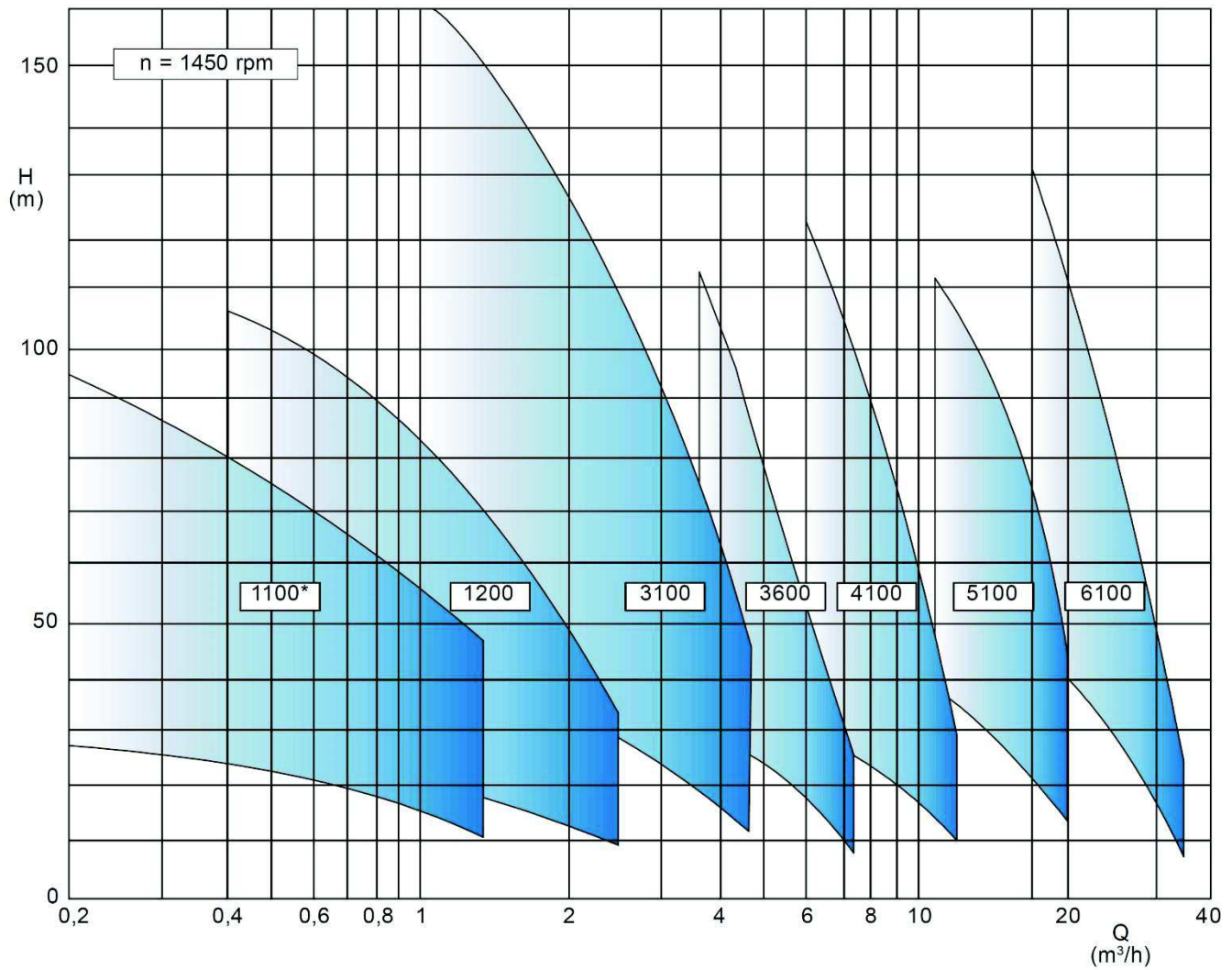
Characteristic tolerances

Capacity ± 10% - Delivery head ± 10% - Power + 10%

For designs with a mechanical seal or casing seal in soft Teflon, the tolerance for the delivery head is extended by 2% each.

Measuring standard

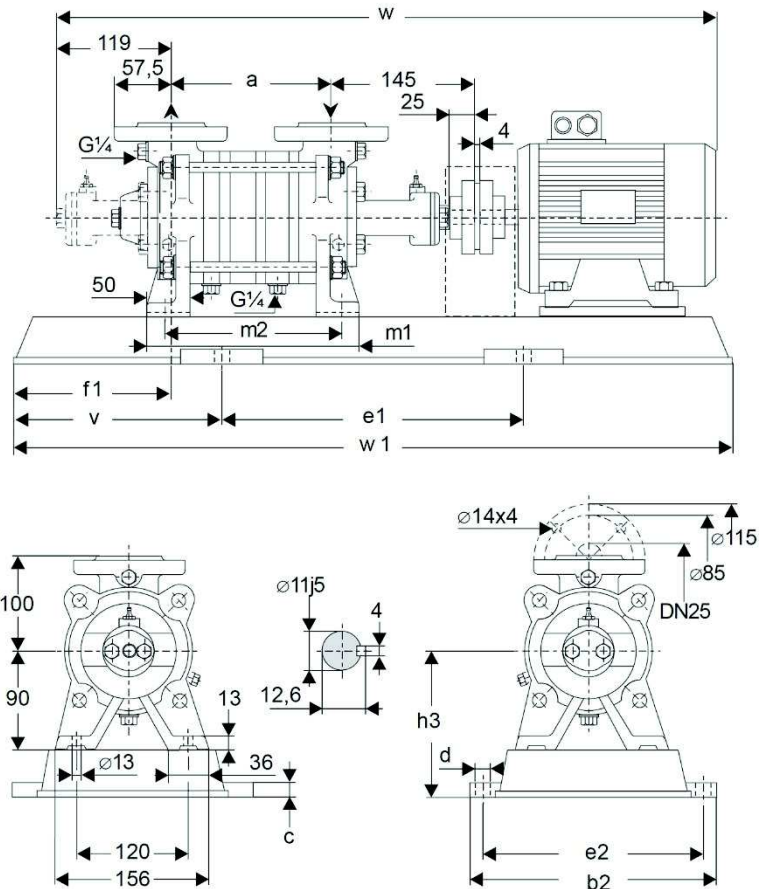
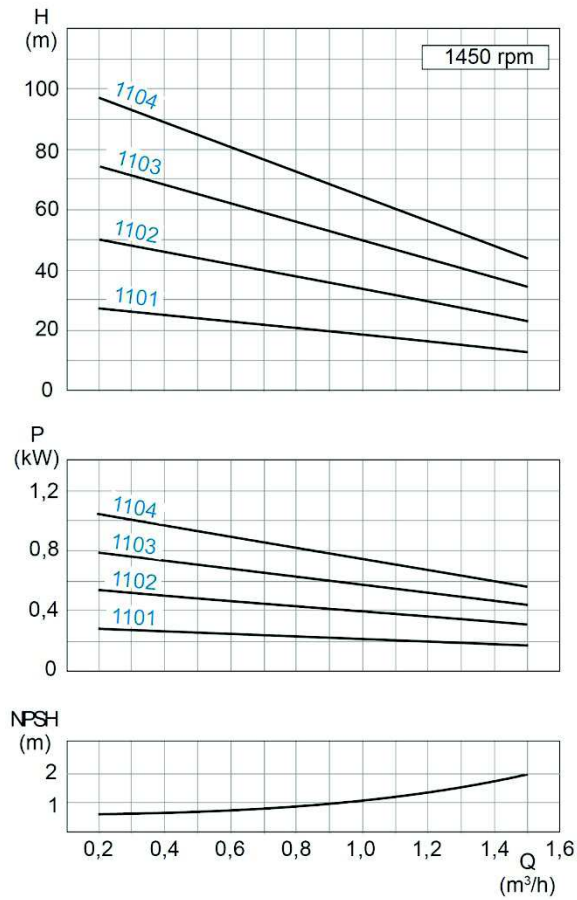
According ISO 5198.



* only for cast iron design.

Dimension chart, pump set drawing and performance curves

AKH 1100 in cast iron (0A, 0B, 0F, 2H)



Values are valid for water with density = 1 kg/dm³ and viscosity = 1 cSt.

Capacity ± 10% - Delivery head ± 10% - Power + 10%

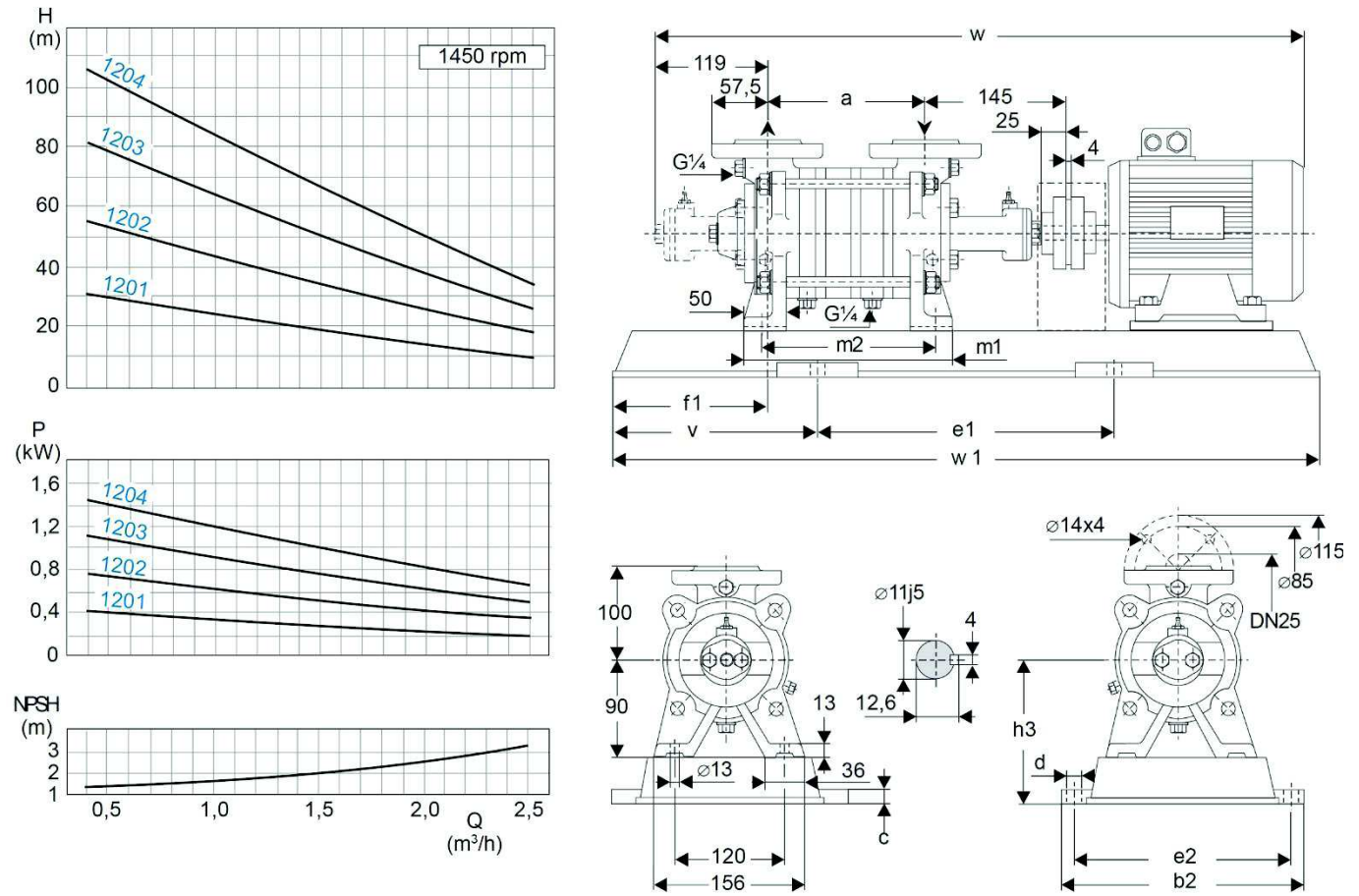
For designs with a mechanical seal or casing seal in soft Teflon, the tolerance for the delivery head is extended by 2% each.

| Pump size | Motor | | Base plate | Coupling | Weight [kg] | | Dimensions [mm] | | | | | | | | | | | | |
|-----------|-------|------|------------|----------|-------------|-----|-----------------|-----|----|----|-----|-----|-----|----|-----|-----|-----|-----|-----|
| | kW | size | | | Pump | Set | a | b2 | c | d | e1 | e2 | v | f1 | h3 | m1 | m2 | w* | w1 |
| 1101 | 0.37 | 71 | P007 | B68 | 14 | 35 | 120 | 317 | 20 | 15 | 350 | 285 | 110 | 53 | 125 | 182 | 146 | 627 | 570 |
| 1102 | 0.55 | 80 | P007 | B68 | 15 | 38 | 120 | 317 | 20 | 15 | 350 | 285 | 110 | 53 | 125 | 182 | 146 | 661 | 570 |
| 1103 | 0.75 | 80 | P008 | B68 | 17 | 45 | 154 | 297 | 20 | 15 | 400 | 265 | 120 | 53 | 130 | 216 | 180 | 695 | 640 |
| | 1.1 | 90S | | | | 753 | | | | | | | | | | | | | |
| 1104 | 0.75 | 80 | P008 | B68 | 19 | 50 | 188 | 297 | 20 | 15 | 400 | 265 | 120 | 53 | 130 | 250 | 214 | 729 | 640 |
| | 1.1 | 90S | P210 | | | 55 | | | | | | | | | | | | 300 | |

* Design B – dimensions depend upon motor brand.
The weight of the pump in design A will be approx. 1 kg less.

Dimension chart, pump set drawing and performance curves

AKH 1200 in cast iron (0A, 0B, 0F, 2H)



Values are valid for water with density = 1 kg/dm³ and viscosity = 1 cSt.

Capacity ± 10% - Delivery head ± 10% - Power + 10%

For designs with a mechanical seal or casing seal in soft Teflon, the tolerance for the delivery head is extended by 2% each.

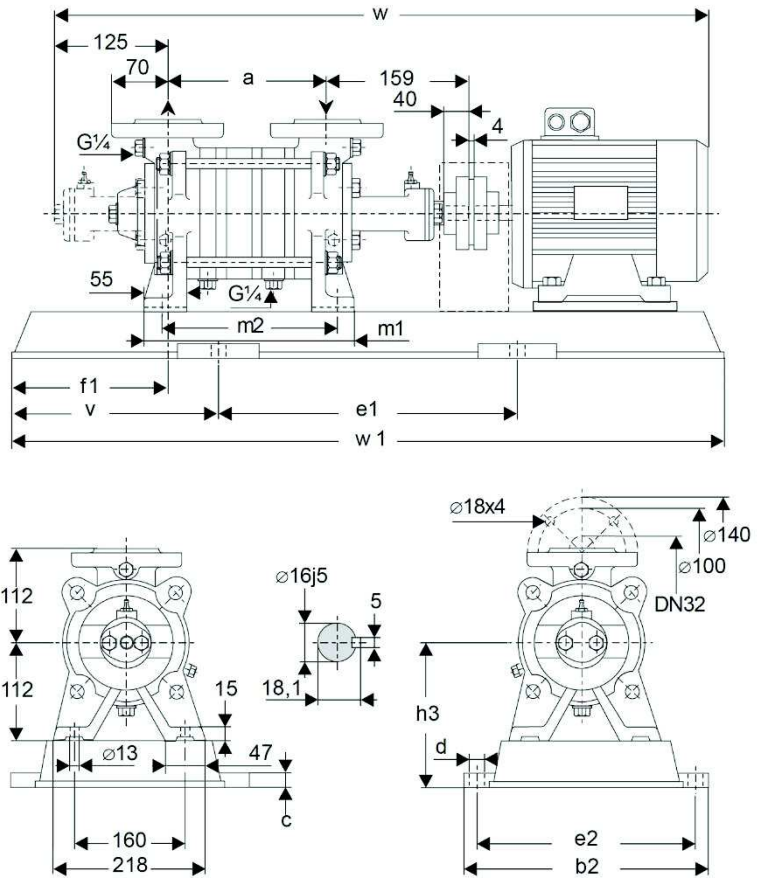
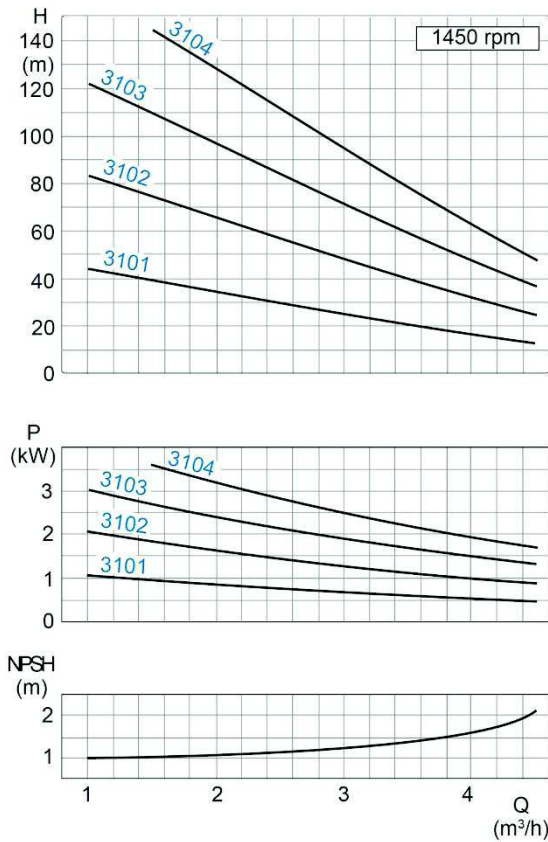
| Pump size | Motor | | Base plate | Coupling | Weight [kg] | | Dimensions [mm] | | | | | | | | | | | | | |
|-----------|-------|------|------------|----------|-------------|------|-----------------|-----|----|----|-----|-----|-----|----|-----|-----|-----|-----|-----|-----|
| | kW | size | | | Pump | Set | a | b2 | c | d | e1 | e2 | v | f1 | h3 | m1 | m2 | w* | w1 | |
| 1201 | 0.37 | 71 | P007 | B68 | 14 | 35 | 120 | 317 | 20 | 15 | 350 | 285 | 110 | 53 | 125 | 182 | 146 | 627 | 570 | |
| | 0.55 | 80 | | | | 37 | | | | | | | | | | | | 661 | | |
| 1202 | 0.55 | 80 | P007 | B68 | 15 | 38 | 120 | 317 | 20 | 15 | 350 | 285 | 110 | 53 | 125 | 182 | 246 | 661 | 570 | |
| | 0.75 | 80 | | | | 39 | | | | | | | | | | | | 661 | | |
| 1203 | 0.75 | 80 | P008 | B68 | 17 | 45 | 154 | 297 | 20 | 15 | 400 | 265 | 120 | 53 | 130 | 216 | 180 | 695 | 640 | |
| | 1.1 | 90S | | | | 48 | | | | | | | | | | | | 753 | | |
| 1204 | 1.1 | 90S | P210 | B68 | 19 | 52 | 188 | 300 | 25 | 19 | 420 | 260 | 115 | 53 | 155 | 250 | 214 | 787 | 650 | |
| | 1.5 | 90L | | | | P241 | | | | | 59 | | | | | | | 330 | | 290 |

* Design B – dimensions depend upon motor brand.

The weight of the pump in design A will be approx. 1 kg less.

Dimension chart, pump set drawing and performance curves

AKH 3100 in cast iron (0A, 0B, 0F, 2H)



Values are valid for water with density = 1 kg/dm³ and viscosity = 1 cSt.

Capacity ± 10% - Delivery head ± 10% - Power + 10%

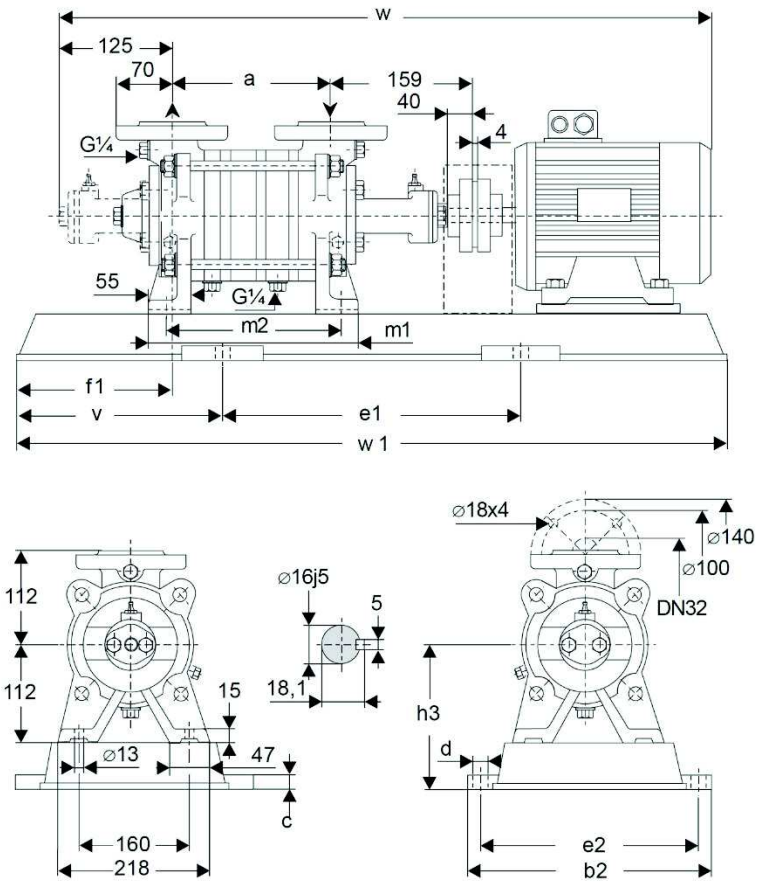
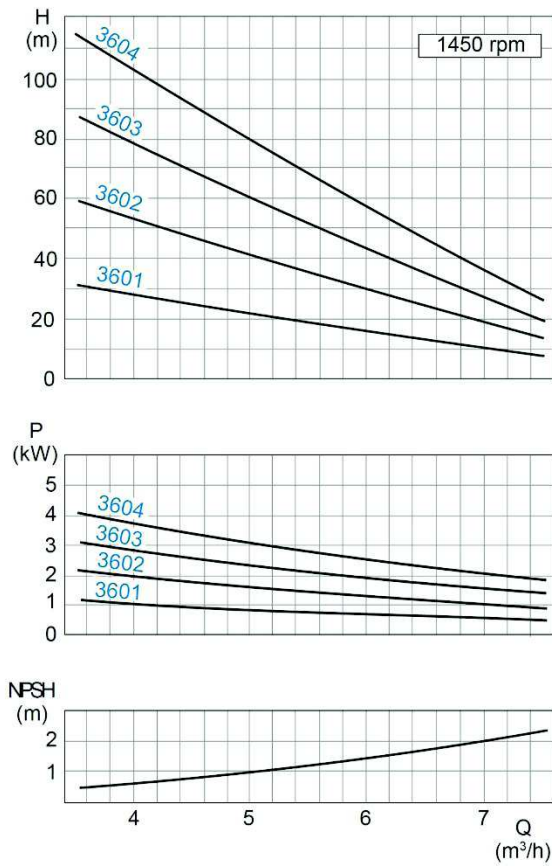
For designs with a mechanical seal or casing seal in soft Teflon, the tolerance for the delivery head is extended by 2% each.

| Pump size | Motor | | Base plate | Coupling | Weight [kg] | | Dimensions [mm] | | | | | | | | | | | | |
|-----------|-------|------|------------|----------|-------------|-----|-----------------|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | kW | size | | | Pump | Set | a | b2 | c | d | e1 | e2 | v | f1 | h3 | m1 | m2 | w* | w1 |
| 3101 | 0.75 | 80 | P008 | B68 | 22 | 50 | 145 | 297 | 20 | 15 | 400 | 265 | 120 | 56 | 152 | 214 | 178 | 706 | 640 |
| | 1.1 | 90S | | | | 56 | | | | | | | | | | | | 764 | |
| 3102 | 1.1 | 90S | P008 | B68 | 23 | 55 | 145 | 297 | 20 | 15 | 400 | 265 | 120 | 56 | 152 | 214 | 178 | 764 | 640 |
| | 1.5 | 90L | | | | 59 | | | | | | | | | | | | 805 | |
| | 2.2 | 100L | P241 | B80 | | 70 | 330 | 25 | 19 | 480 | 290 | 125 | 177 | 805 | 730 | | | | |
| 3103 | 2.2 | 100L | P241 | B80 | 26 | 73 | 185 | 330 | 25 | 19 | 480 | 290 | 125 | 56 | 177 | 254 | 218 | 845 | 730 |
| | 3.0 | 100L | | | | 74 | | | | | | | | | | | | 845 | |
| 3104 | 2.2 | 100L | P272 | B80 | 29 | 80 | 225 | 360 | 25 | 19 | 540 | 320 | 140 | 56 | 177 | 294 | 258 | 885 | 820 |
| | 3.0 | 100L | | | | 81 | | | | | | | | | | | | 906 | |
| | 4.0 | 112M | | | | 99 | | | | | | | | | | | | 906 | |

* Design B – dimensions depend upon motor brand.
The weight of the pump in design A will be approx. 2.5 kg less.

Dimension chart, pump set drawing and performance curves

AKH 3600 in cast iron (0A, 0B, 0F, 2H)



Values are valid for water with density = 1 kg/dm³ and viscosity = 1 cSt.

Capacity ± 10% - Delivery head ± 10% - Power + 10%

For designs with a mechanical seal or casing seal in soft Teflon, the tolerance for the delivery head is extended by 2% each.

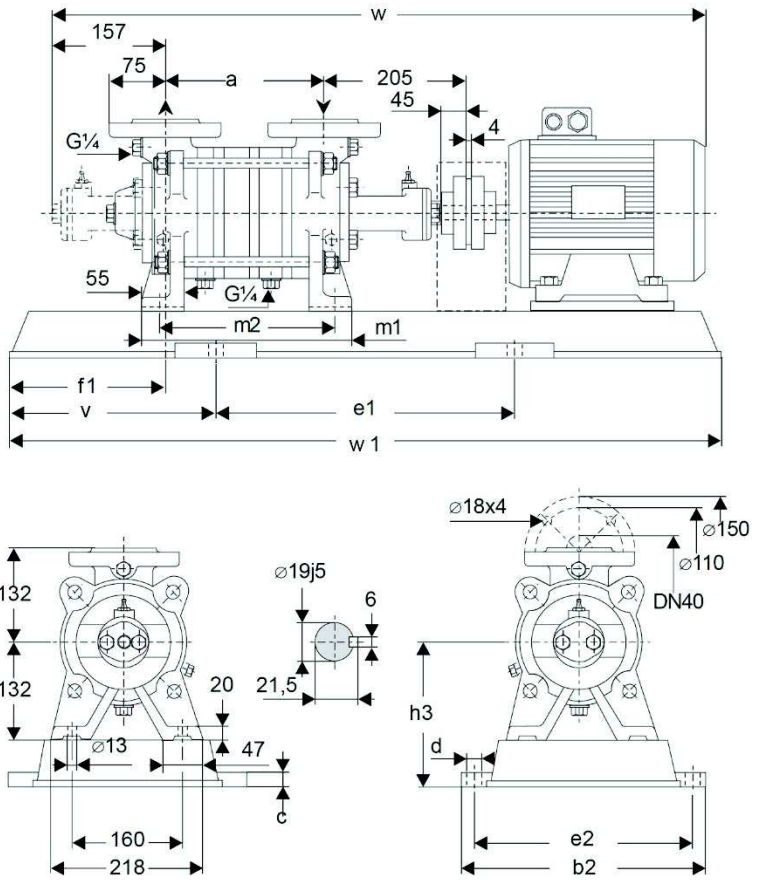
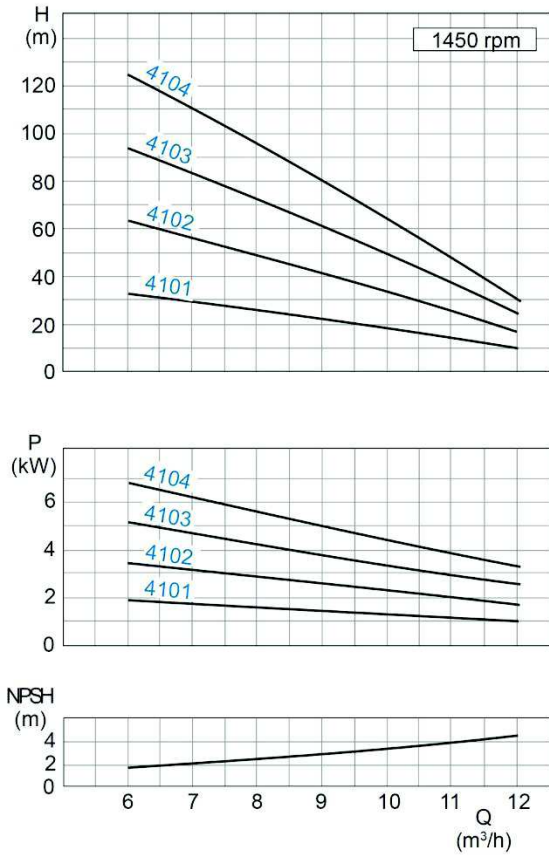
| Pump size | Motor | | Base plate | Coupling | Weight [kg] | | Dimensions [mm] | | | | | | | | | | | | |
|-----------|-------|------|------------|----------|-------------|-----|-----------------|-----|----|----|-----|-----|-----|----|-----|-----|-----|-----|-----|
| | kW | size | | | Pump | Set | a | b2 | c | d | e1 | e2 | v | f1 | h3 | m1 | m2 | w* | w1 |
| 3601 | 0.75 | 80 | P008 | B68 | 22 | 50 | 145 | 297 | 20 | 15 | 400 | 265 | 120 | 56 | 152 | 214 | 178 | 706 | 640 |
| | 1.1 | 90S | | | | 56 | | | | | | | | | | | | 764 | |
| 3602 | 1.5 | 90L | P241 | B80 | 23 | 59 | 145 | 297 | 20 | 15 | 400 | 265 | 120 | 56 | 152 | 214 | 178 | 764 | 640 |
| | 2.2 | 100L | | | | 70 | | | | | | | | | | | | 330 | |
| 3603 | 2.2 | 100L | P241 | B80 | 26 | 73 | 185 | 330 | 25 | 19 | 480 | 290 | 125 | 56 | 177 | 254 | 218 | 845 | 730 |
| | 3.0 | 100L | | | | 74 | | | | | | | | | | | | 866 | |
| | 4.0 | 112M | | | | 92 | | | | | | | | | | | | 885 | |
| 3604 | 3.0 | 100L | P272 | B80 | 29 | 81 | 225 | 360 | 25 | 19 | 540 | 320 | 140 | 56 | 177 | 294 | 258 | 885 | 820 |
| | 4.0 | 112M | | | | 99 | | | | | | | | | | | | 906 | |
| | 5.5 | 132S | | | | 126 | | | | | | | | | | | | 361 | |

* Design B – dimensions depend upon motor brand.

The weight of the pump in design A will be approx. 2.5 kg less.

Dimension chart, pump set drawing and performance curves

AKH 4100 in cast iron (0A, 0B, 0F, 2H)



Values are valid for water with density = 1 kg/dm³ and viscosity = 1 cSt.

Capacity ± 10% - Delivery head ± 10% - Power + 10%

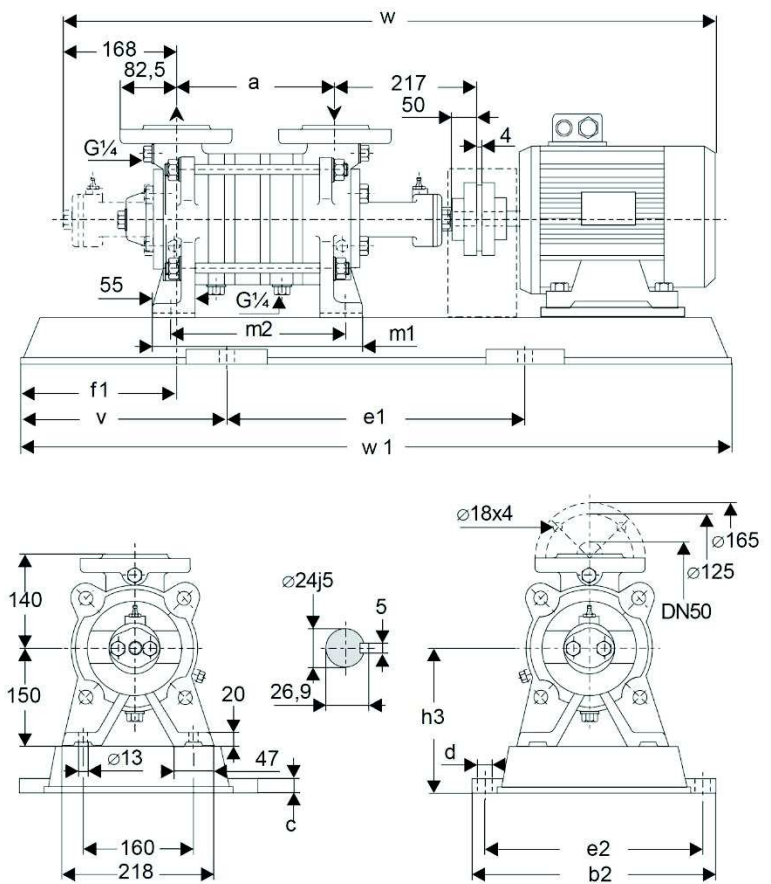
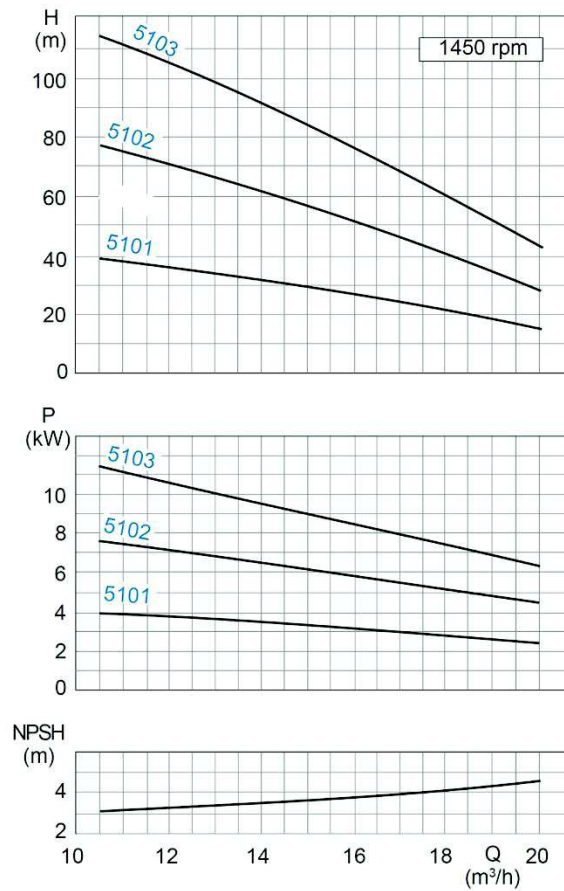
For designs with a mechanical seal or casing seal in soft Teflon, the tolerance for the delivery head is extended by 2% each.

| Pump size | Motor | | Base plate | Coupling | Weight [kg] | | Dimension [mm] | | | | | | | | | | | | | |
|-----------|-------|------|------------|----------|-------------|-----|----------------|-----|----|----|-----|-----|-----|----|-----|-----|-----|------|------|------|
| | kW | size | | | Pump | Set | a | b2 | c | d | e1 | e2 | v | f1 | h3 | m1 | m2 | w* | w1 | |
| 4101 | 1.5 | 90L | P241 | B68 | 28 | 69 | 155 | 330 | 25 | 19 | 480 | 290 | 125 | 42 | 197 | 195 | 159 | 852 | 730 | |
| | 2.2 | 100L | | | | 76 | | | | | | | | | | | | 893 | | |
| 4102 | 2.2 | 100L | P272 | B80 | 34 | 86 | 210 | 360 | 25 | 19 | 540 | 320 | 140 | 42 | 197 | 250 | 214 | 948 | 820 | |
| | 3.0 | 100L | | | | 87 | | | | | | | | | | | | 969 | | |
| | 4.0 | 112M | | | | 105 | | | | | | | | | | | | 969 | | |
| 4103 | 4.0 | 112M | P015 | B80 | 40 | 116 | 265 | 361 | 25 | 15 | 600 | 325 | 160 | 42 | 182 | 305 | 269 | 1024 | 920 | |
| | 5.5 | 132S | | B95 | | 137 | | | | | | | | | | | | 1100 | | |
| 4104 | 4.0 | 112M | P015 | B80 | 45 | 121 | 320 | 361 | 25 | 15 | 600 | 325 | 160 | 42 | 182 | 360 | 324 | 1079 | 1100 | |
| | 5.5 | 132S | | | | 158 | | | | | 700 | | | | | | | 200 | | 1155 |
| | 7.5 | 132M | | | | B95 | | | | | 168 | | | | | | | 700 | | 200 |

* Design B – dimensions depend upon motor brand.
The weight of the pump in design A will be approx. 3 kg less.

Dimension chart, pump set drawing and performance curves

AKH 5100 in cast iron (0A, 0B, 0F, 2H)



Values are valid for water with density = 1 kg/dm³ and viscosity = 1 cSt.

Capacity ± 10% - Delivery head ± 10% - Power + 10%

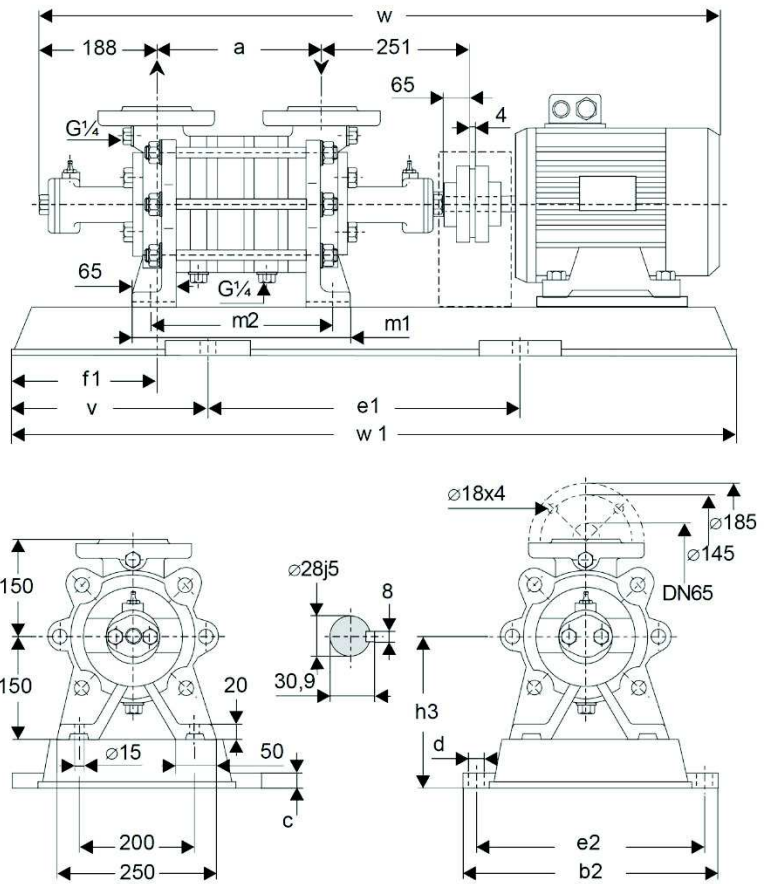
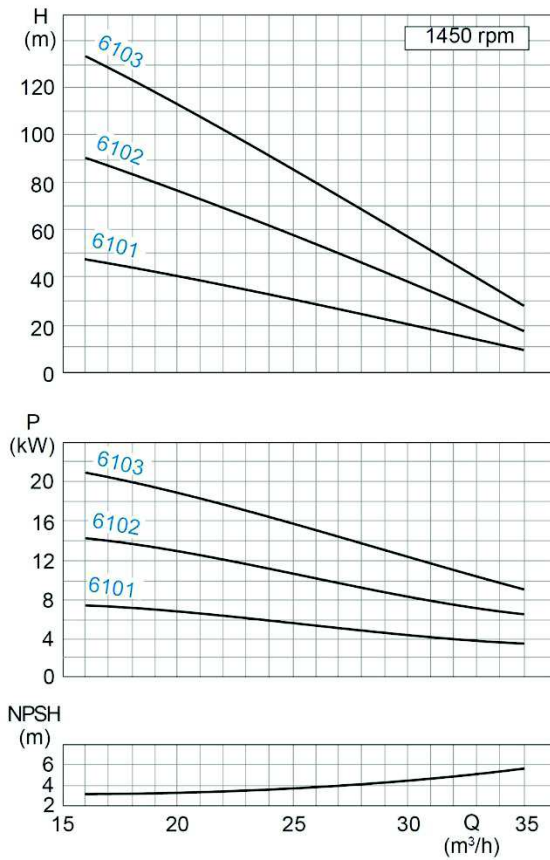
For designs with a mechanical seal or casing seal in soft Teflon, the tolerance for the delivery head is extended by 2% each.

| Pump size | Motor | | Base plate | Coupling | Weight [kg] | | Dimensions [mm] | | | | | | | | | | | | | | | | | |
|-----------|-------|------|------------|----------|-------------|------|-----------------|-----|----|----|-----|-----|-----|----|-----|-----|-----|------|------|------|-----|-----|-----|------|
| | kW | size | | | Pump | Set | a | b2 | c | d | e1 | e2 | v | f1 | h3 | m1 | m2 | w* | w1 | | | | | |
| 5101 | 3.0 | 100L | P272 | B80 | 36 | 89 | 170 | 360 | 25 | 19 | 540 | 320 | 140 | 48 | 215 | 220 | 185 | 931 | 820 | | | | | |
| | 4.0 | 112M | | | | 107 | | | | | | | | | | | | 952 | | | | | | |
| 5102 | 5.5 | 132S | P015 | B95 | 46 | 143 | 245 | 361 | 25 | 15 | 600 | 325 | 160 | 48 | 200 | 295 | 260 | 1103 | 920 | | | | | |
| | 7.5 | 132M | | | | 153 | | | | | | | | | | | | 1129 | | | | | | |
| | 11.0 | 160M | | | | 216 | | | | | | | | | | | | 1221 | | 1020 | | | | |
| 5103 | 7.5 | 132M | P017 | B95 | 55 | 178 | 320 | 361 | 25 | 15 | 700 | 325 | 200 | 48 | 210 | 370 | 335 | 1204 | 1100 | | | | | |
| | 11.0 | 160M | 262 | | | 1296 | | | | | | | | | | | | | | | | | | |
| | 15.0 | 160L | P385 | B110 | | 283 | | | | | | | | | 490 | | | 30 | | 24 | 740 | 440 | 240 | 1358 |
| | | | | | | 1358 | | | | | | | | | | | | | | | | | | |

* Design B – dimensions depend upon motor brand.
The weight of the pump in design A will be approx. 4 kg less.

Dimension chart, pump set drawing and performance curves

AKH 6100 in cast iron (0A, 0B, 0F, 2H)



Values are valid for water with density = 1 kg/dm³ and viscosity = 1 cSt.

Capacity ± 10% - Delivery head ± 10% - Power + 10%

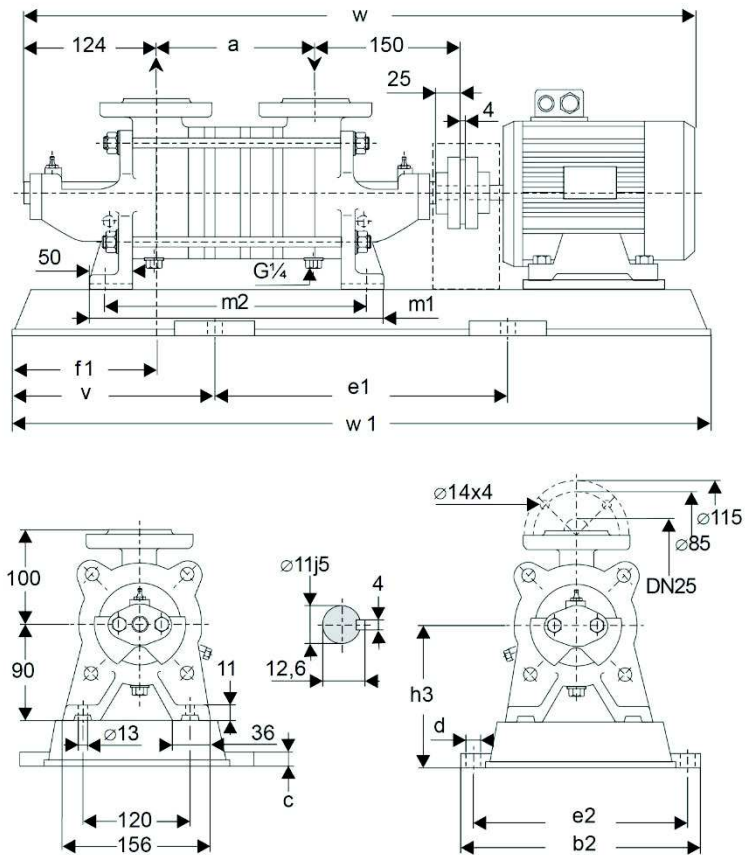
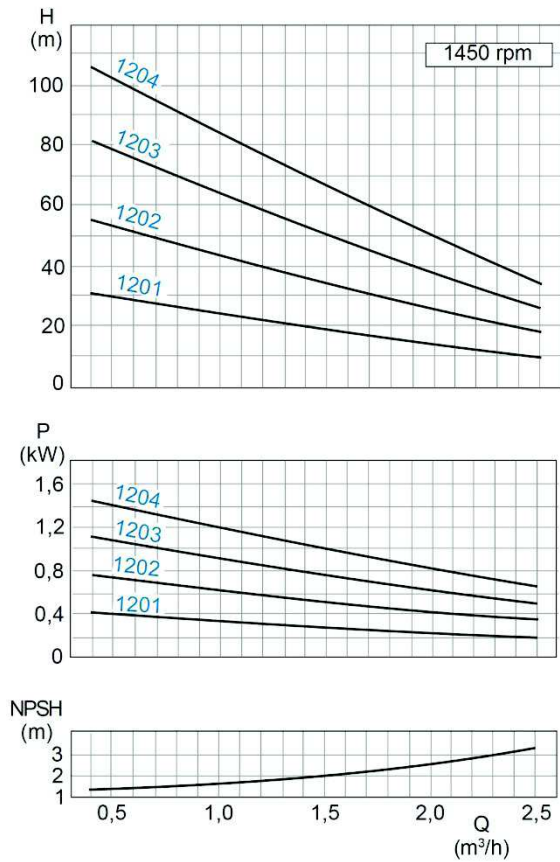
For designs with a mechanical seal or casing seal in soft Teflon, the tolerance for the delivery head is extended by 2% each.

| Pump size | Motor | | Base plate | Coupling | Weight [kg] | | Dimensions [mm] | | | | | | | | | | | | |
|-----------|-------|------|------------|----------|-------------|-----|-----------------|-----|----|----|-----|-----|-----|----|-----|-----|-----|------|------|
| | kW | size | | | Pump | set | a | b2 | c | d | e1 | e2 | v | f1 | h3 | m1 | m2 | w* | w1 |
| 6101 | 5.5 | 132S | P015 | B95 | 54 | 152 | 190 | 361 | 25 | 15 | 600 | 325 | 160 | 63 | 200 | 276 | 220 | 1102 | 920 |
| | 7.5 | 132M | | | | 161 | 1128 | | | | | | | | | | | | |
| 6102 | 11.0 | 160M | P385 | B95 | 65 | 272 | 280 | 490 | 30 | 24 | 740 | 440 | 200 | 63 | 240 | 366 | 310 | 1310 | 1140 |
| | 15.0 | 160L | | B110 | | 293 | 1372 | | | | | | | | | | | | |
| 6103 | 18.5 | 180M | P436 | B110 | 76 | 317 | 370 | 540 | 30 | 24 | 840 | 490 | 215 | 63 | 260 | 456 | 400 | 1524 | 1270 |
| | 22.0 | 180L | | B125 | | 337 | | | | | | | | | | | | | |

* Design B – dimensions depend upon motor brand.

Dimension chart, pump set drawing and performance curves

AKH 1200 in Bronze (3B) and stainless steel (4B, 4F)



Values are valid for water with density = 1 kg/dm³ and viscosity = 1 cSt.

Capacity ± 10% - Delivery head ± 10% - Power + 10%

For designs with a mechanical seal or casing seal in soft Teflon, the tolerance for the delivery head is extended by 2% each.

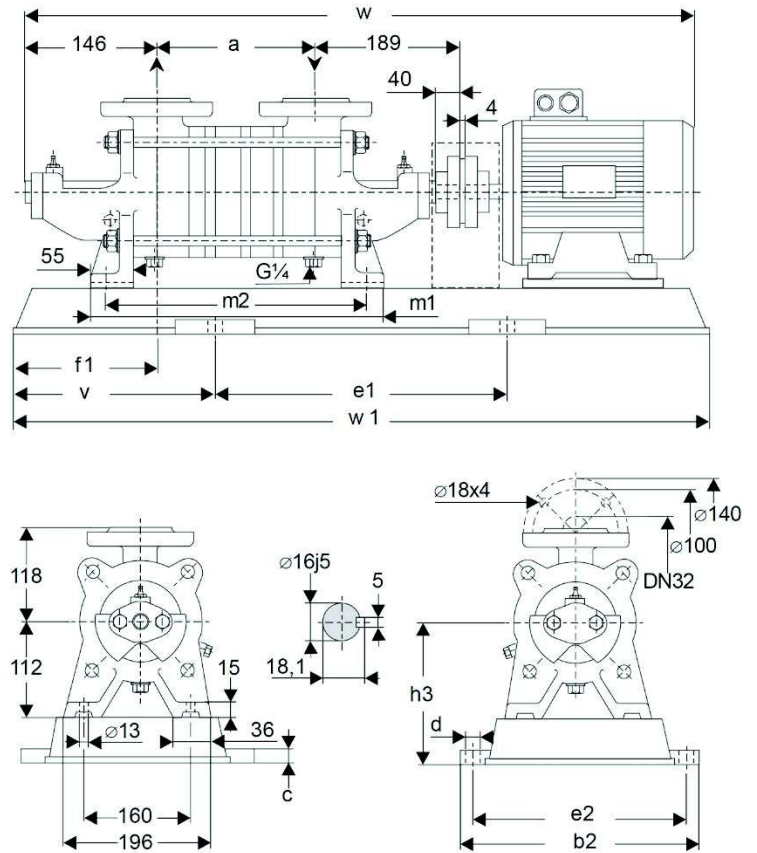
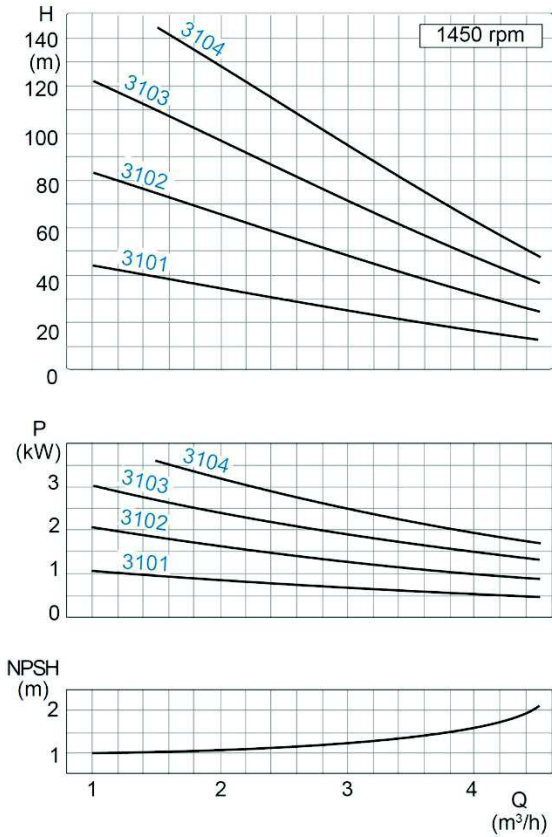
| Pump size | Motor | | Base plate | Coupling | Weight [kg] | | Dimension [mm] | | | | | | | | | | | | |
|-----------|-------|------|------------|----------|-------------|-----|----------------|-----|----|----|-----|-----|-----|----|-----|-----|-----|-----|-----|
| | kW | size | | | Pump | Set | a | b2 | C | d | e1 | e2 | v | f1 | h3 | m1 | m2 | w* | w1 |
| 1201 | 0.37 | 71 | P007 | B68 | 15 | 36 | 120 | 317 | 20 | 15 | 350 | 285 | 110 | 87 | 125 | 256 | 214 | 637 | 570 |
| | 0.55 | 80 | P008 | | | 42 | | | | | | | | | | | | 297 | 400 |
| 1202 | 0.55 | 80 | P008 | B68 | 16 | 43 | 120 | 297 | 20 | 15 | 400 | 265 | 120 | 87 | 130 | 256 | 214 | 671 | 640 |
| | 0.75 | 80 | | | | 44 | | | | | | | | | | | | 705 | 640 |
| 1203 | 0.75 | 80 | P008 | B68 | 18 | 46 | 154 | 297 | 20 | 15 | 400 | 265 | 120 | 87 | 130 | 290 | 248 | 705 | 640 |
| | 1.1 | 90S | P241 | | | 54 | | | | | | | | | | | | 330 | 25 |
| 1204 | 1.1 | 90S | P241 | B68 | 20 | 56 | 188 | 330 | 25 | 19 | 480 | 290 | 125 | 87 | 155 | 324 | 282 | 797 | 730 |
| | 1.5 | 90L | | | | 60 | | | | | | | | | | | | 730 | |

* Design B – dimensions depend upon motor brand.

The weight of the pump in design A (only available in stainless steel) will be approx. 1 kg less.

Dimension chart, pump set drawing and performance curves

AKH 3100 in Bronze (3B) and stainless steel (4B, 4F)



Values are valid for water with density = 1 kg/dm³ and viscosity = 1 cSt.

Capacity ± 10% - Delivery head ± 10% - Power + 10%

For designs with a mechanical seal or casing seal in soft Teflon, the tolerance for the delivery head is extended by 2% each.

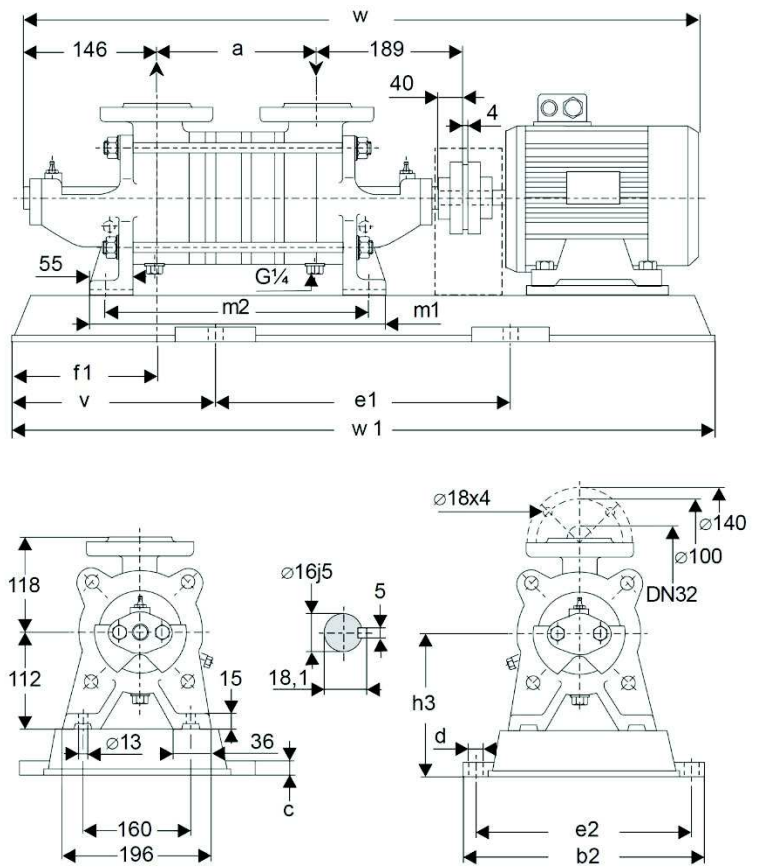
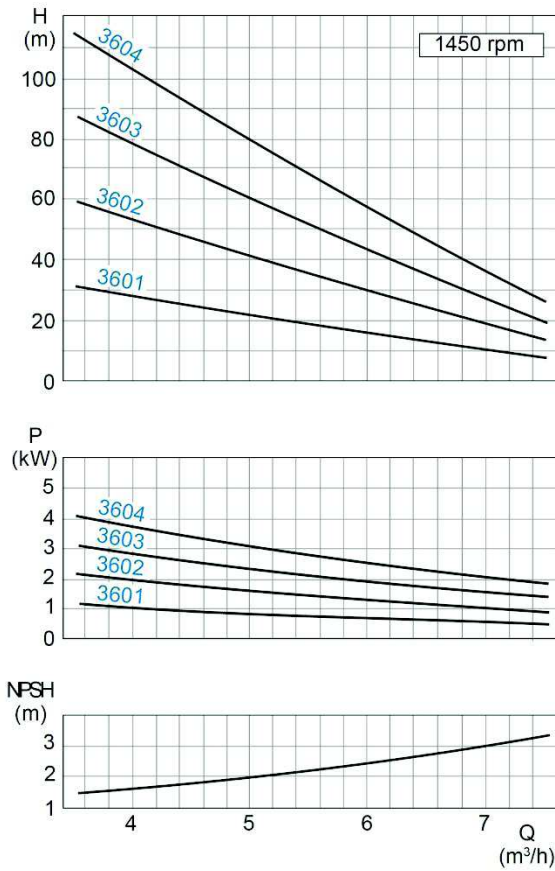
| Pump size | Motor | | Base plate | Coupling | Weight [kg] | | Dimension [mm] | | | | | | | | | | | | |
|-----------|-------|------|------------|----------|-------------|-----|----------------|-----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | kW | size | | | Pump | Set | a | b2 | c | d | e1 | e2 | v | f1 | h3 | m1 | m2 | w* | w1 |
| 3101 | 0.75 | 80 | P241 | B68 | 26 | 58 | 150 | 330 | 25 | 19 | 480 | 290 | 125 | 99 | 177 | 308 | 268 | 762 | 730 |
| | 1.1 | 90S | | | | 62 | | | | | | | | | | | | 820 | |
| 3102 | 1.1 | 90S | P241 | B68 | 27 | 63 | 150 | 330 | 25 | 19 | 480 | 290 | 125 | 99 | 177 | 308 | 268 | 820 | 730 |
| | 1.5 | 90L | | | | 67 | | | | | | | | | | | | 820 | |
| | 2.2 | 100L | P272 | B80 | | 78 | | | | | 360 | 540 | 320 | 140 | 99 | 177 | 308 | 268 | 861 |
| 3103 | 2.2 | 100L | P272 | B80 | 31 | 82 | 190 | 360 | 25 | 19 | 540 | 320 | 140 | 99 | 177 | 348 | 308 | 901 | 820 |
| | 3.0 | 100L | | | | 83 | | | | | | | | | | | | 901 | |
| 3104 | 2.2 | 100L | P272 | B80 | 34 | 96 | 230 | 360 | 25 | 19 | 540 | 320 | 140 | 99 | 177 | 388 | 348 | 941 | 820 |
| | 3.0 | 100L | | | | 97 | | | | | | | | | | | | 941 | |
| | 4.0 | 112M | P015 | | | 109 | | | | | | | | | | | | 361 | |

* Design B – dimensions depend upon motor brand.

The weight of the pump in design A (only available in stainless steel) will be approx. 2.7 kg less.

Dimension chart, pump set drawing and performance curves

AKH 3600 in Bronze (3B) and stainless steel (4B, 4F)



Values are valid for water with density = 1 kg/dm³ and viscosity = 1 cSt.

Capacity ± 10% - Delivery head ± 10% - Power + 10%

For designs with a mechanical seal or casing seal in soft Teflon, the tolerance for the delivery head is extended by 2% each.

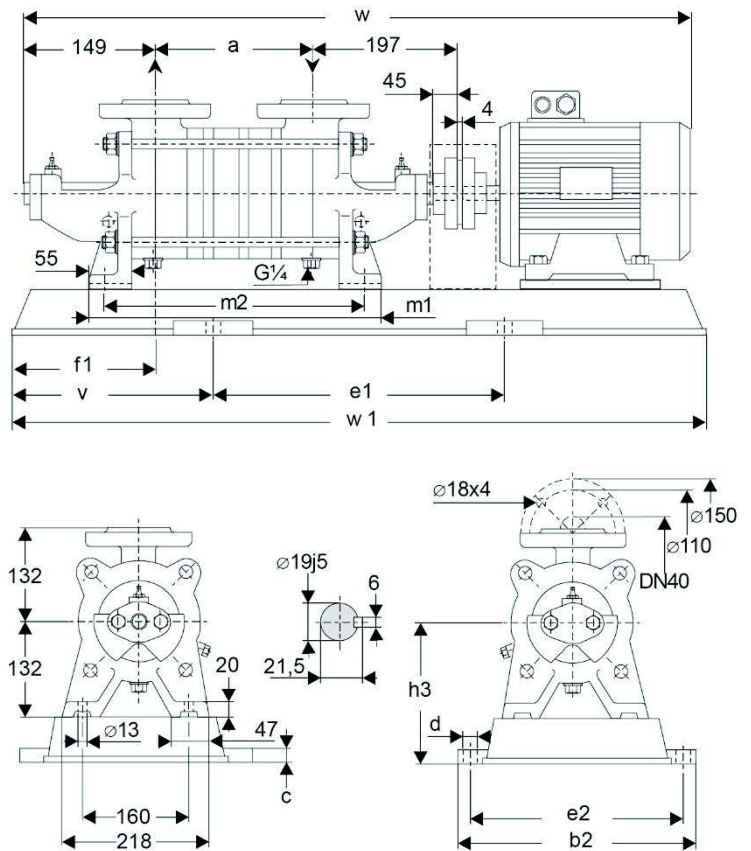
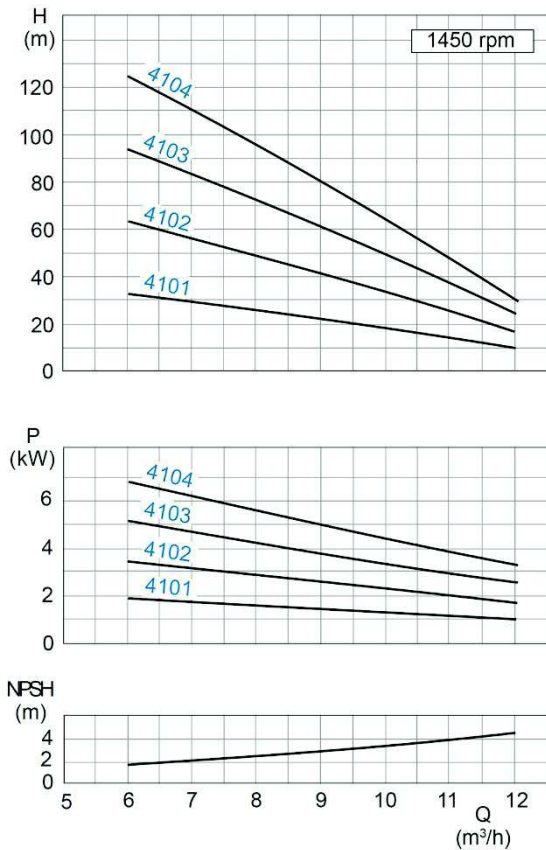
| Pump size | Motor | | Base plate | Coupling | Weight [kg] | | Dimension [mm] | | | | | | | | | | | | |
|-----------|-------|------|------------|----------|-------------|-----|----------------|-----|----|----|-----|-----|-----|----|-----|-----|-----|-----|-----|
| | kW | size | | | Pump | Set | a | b2 | c | d | e1 | e2 | v | f1 | h3 | m1 | m2 | w* | w1 |
| 3601 | 0.75 | 80 | P241 | B68 | 26 | 58 | 150 | 330 | 25 | 19 | 480 | 290 | 125 | 99 | 177 | 308 | 268 | 762 | 730 |
| | 1.1 | 90S | | | | 62 | | | | | | | | | | | | 820 | |
| 3602 | 1.5 | 90L | P241 | B68 | 27 | 67 | 150 | 330 | 25 | 19 | 480 | 290 | 125 | 99 | 177 | 308 | 268 | 820 | 730 |
| | 2.2 | 100L | P272 | B80 | | 78 | | 360 | | | | | | | | | | 540 | |
| 3603 | 2.2 | 100L | P272 | B80 | 31 | 82 | 190 | 360 | 25 | 19 | 540 | 320 | 140 | 99 | 177 | 348 | 308 | 901 | 820 |
| | 3.0 | 100L | | | | 83 | | | | | | | | | | | | 922 | |
| | 4.0 | 112M | | | | 101 | | | | | | | | | | | | 922 | |
| 3604 | 3.0 | 100L | P272 | B80 | 34 | 87 | 230 | 360 | 25 | 19 | 540 | 320 | 140 | 99 | 177 | 388 | 348 | 941 | 820 |
| | 4.0 | 112M | 109 | | | 962 | | | | | | | | | | | | | |
| | 5.5 | 132S | P015 | B95 | | 131 | | | | | | | | | | | | 15 | |

* Design B – dimensions depend upon motor brand.

The weight of the pump in design A (only available in stainless steel) will be approx. 2.7 kg less.

Dimension chart, pump set drawing and performance curves

AKH 4100 in Bronze (3B) and stainless steel (4B, 4F)



Values are valid for water with density = 1 kg/dm³ and viscosity = 1 cSt.

Capacity ± 10% - Delivery head ± 10% - Power + 10%

For designs with a mechanical seal or casing seal in soft Teflon, the tolerance for the delivery head is extended by 2% each.

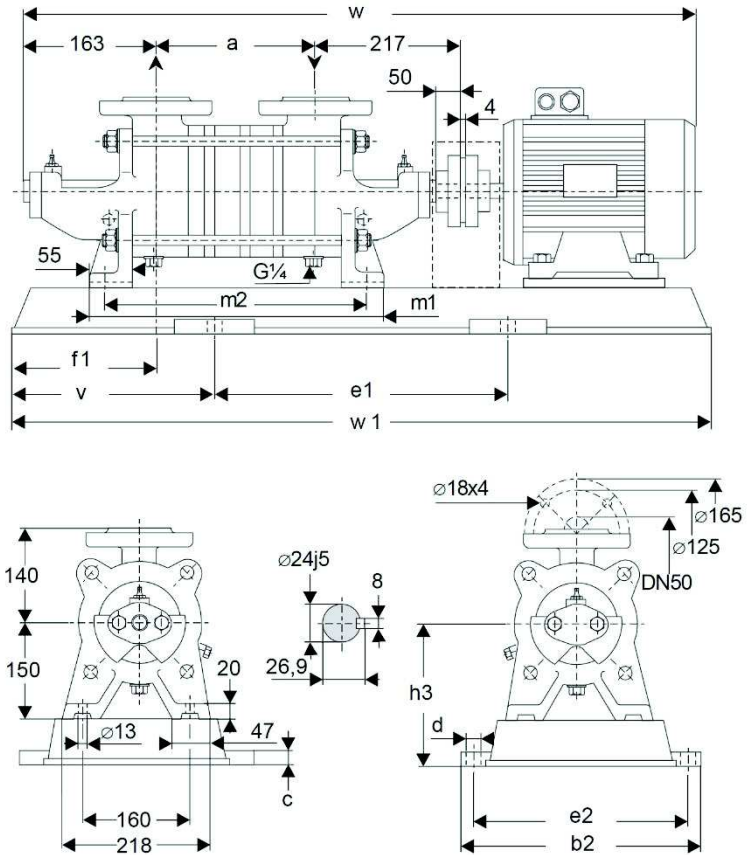
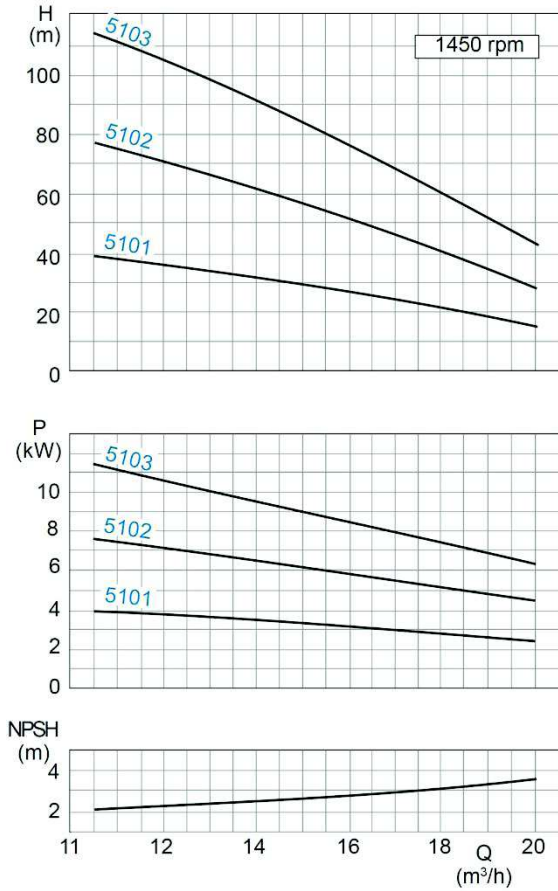
| Pump size | Motor | | Base plate | Coupling | Weight [kg] | | Dimension [mm] | | | | | | | | | | | | | |
|-----------|-------|------|------------|----------|-------------|-----|----------------|-----|----|----|-----|-----|-----|----|-----|-----|-----|------|------|------|
| | kW | size | | | Pump | Set | a | b2 | c | d | e1 | e2 | v | f1 | h3 | m1 | m2 | w* | w1 | |
| 4101 | 1.5 | 90L | P241 | B68 | 33 | 74 | 160 | 330 | 25 | 19 | 480 | 290 | 125 | 92 | 197 | 303 | 263 | 841 | 730 | |
| | 2.2 | 100L | P272 | B80 | | 85 | | | | | 360 | 540 | 320 | | | | | 140 | 882 | 820 |
| 4102 | 2.2 | 100L | P272 | B80 | 39 | 92 | 215 | 360 | 25 | 19 | 540 | 320 | 140 | 92 | 197 | 358 | 318 | 937 | 820 | |
| | 4.0 | 112M | | | | | | | | | | | | | | | | 109 | | 958 |
| 4103 | 4.0 | 112M | P015 | B80 | 44 | 118 | 270 | 361 | 25 | 15 | 600 | 325 | 160 | 92 | 182 | 413 | 373 | 1013 | 920 | |
| | 5.5 | 132S | P017 | B95 | | | | | | | 157 | | 700 | | 200 | | | 192 | 1089 | 1100 |
| 4104 | 4.0 | 112M | P017 | B80 | 50 | 140 | 325 | 361 | 25 | 15 | 700 | 325 | 200 | 92 | 192 | 468 | 428 | 1068 | 1100 | |
| | 5.5 | 132S | | B95 | | | | | | | | | | | | | | 163 | | 1144 |
| | 7.5 | 132M | | 173 | | | | | | | | | | | | | | 1170 | | |

* Design B – dimensions depend upon motor brand.

The weight of the pump in design A (only available in stainless steel) will be approx. 3.2 kg less.

Dimension chart, pump set drawing and performance curves

AKH 5100 in Bronze (3B) and stainless steel (4B)



Values are valid for water with density = 1 kg/dm³ and viscosity = 1 cSt.

Capacity ± 10% - Delivery head ± 10% - Power + 10%

For designs with a mechanical seal or casing seal in soft Teflon, the tolerance for the delivery head is extended by 2% each.

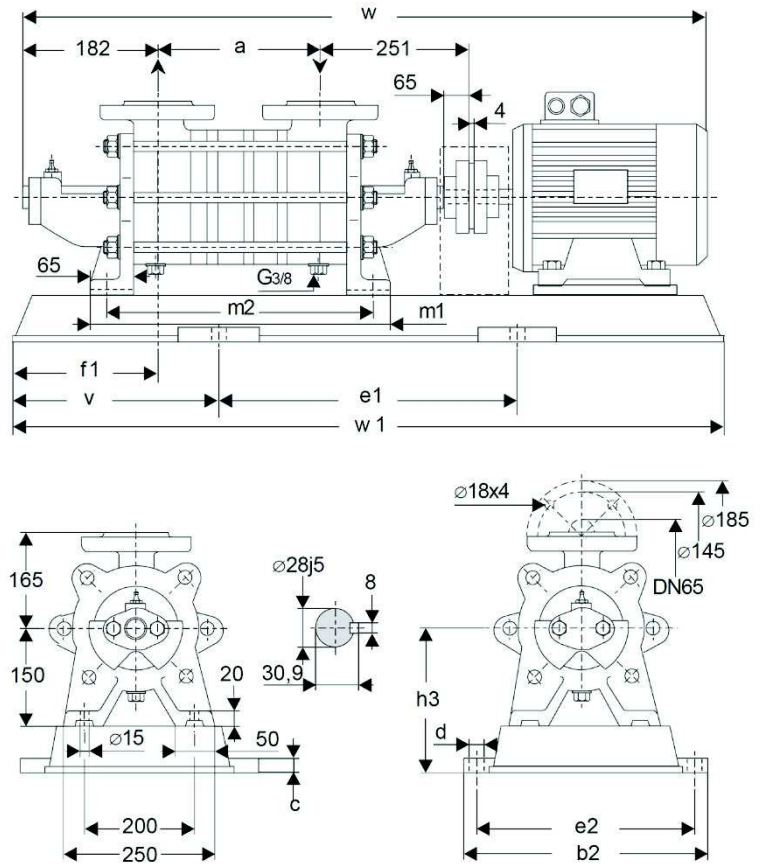
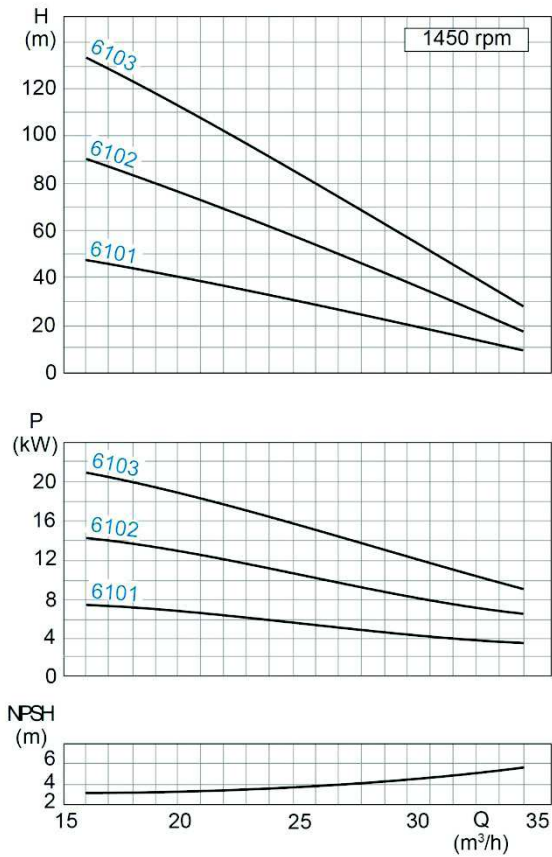
| Pump size | Motor | | Base plate | Coupling | Weight [kg] | | Dimension [mm] | | | | | | | | | | | | | | | | | | | | |
|-----------|-------|------|------------|----------|-------------|------|----------------|-----|----|----|-----|-----|-----|----|-----|-----|-----|------|------|-----|-----|----|-----|-----|-----|------|------|
| | kW | size | | | Pump | Set | a | b2 | c | d | e1 | e2 | v | f1 | h3 | m1 | m2 | w* | w1 | | | | | | | | |
| 5101 | 3.0 | 100L | P272 | B80 | 45 | 98 | 175 | 360 | 25 | 19 | 540 | 320 | 140 | 99 | 215 | 329 | 293 | 931 | 820 | | | | | | | | |
| | 4.0 | 112M | | | | 121 | | | | | | | | | | | | 952 | | | | | | | | | |
| 5102 | 5.5 | 132S | P017 | B95 | 55 | 168 | 250 | 361 | 25 | 15 | 700 | 325 | 200 | 99 | 210 | 404 | 368 | 1103 | 1100 | | | | | | | | |
| | 7.5 | 132M | | | | 178 | | | | | | | | | | | | 1129 | | | | | | | | | |
| | 11.0 | 160M | | | | P385 | | | | | | | | | | | | 262 | | 490 | 30 | 24 | 740 | 440 | 240 | 1221 | 1140 |
| 5103 | 7.5 | 132M | P017 | B95 | 64 | 217 | 325 | 361 | 25 | 15 | 700 | 325 | 200 | 99 | 210 | 479 | 443 | 1204 | 1100 | | | | | | | | |
| | 11.0 | 160M | | | | P385 | | | | | | | | | | | | 271 | | 490 | 30 | 24 | 740 | 440 | 240 | 1296 | 1140 |
| | 15.0 | 160L | | | | P436 | | | | | | | | | | | | B110 | | 283 | 540 | 30 | 24 | 840 | 490 | 215 | 240 |

* Design B – dimensions depend upon motor brand.

The weight of the pump in design A (only available in stainless steel) will be approx. 4.2 kg less.

Dimension chart, pump set drawing and performance curves

AKH 6100 in Bronze (3B) and stainless steel (4B)



Values are valid for water with density = 1 kg/dm³ and viscosity = 1 cSt.

Capacity ± 10% - Delivery head ± 10% - Power + 10%

For designs with a mechanical seal or casing seal in soft Teflon, the tolerance for the delivery head is extended by 2% each.

| Pump size | Motor | | Base plate | Coupling | Weight [kg] | | Dimension [mm] | | | | | | | | | | | | |
|-----------|-------|------|------------|----------|-------------|-----|----------------|-----|-----|-----|------|------|-----|-----|-----|-----|-----|------|------|
| | kW | size | | | Pump | Set | a | b2 | C | d | e1 | e2 | v | f1 | h3 | m1 | m2 | w* | w1 |
| 6101 | 5.5 | 132S | P017 | B95 | 62 | 175 | 195 | 361 | 25 | 15 | 700 | 325 | 200 | 117 | 210 | 388 | 328 | 1101 | 1100 |
| | 7.5 | 132M | | | | 182 | 1127 | | | | | | | | | | | | |
| 6102 | 11.0 | 160M | P385 | B95 | 75 | 282 | 285 | 490 | 30 | 24 | 740 | 440 | 200 | 117 | 240 | 478 | 418 | 1309 | 1140 |
| | 15.0 | 160L | P436 | B110 | | 294 | 540 | 840 | 490 | 215 | 1371 | 1270 | | | | | | | |
| 6103 | 18.5 | 180M | P487 | B110 | 87 | 342 | 375 | 610 | 35 | 28 | 940 | 550 | 240 | 117 | 280 | 568 | 508 | 1523 | 1420 |
| | 22.0 | 180L | | B125 | | 362 | | | | | | | | | | | | | |

* Design B – dimensions depend upon motor brand.

General comments

Side Channel pumps with the same hydraulic construction are manufactured in series as:

Series **AOH** Low duty pump with oval flanges, PN 10

Series **AEH** High duty pump, PN 40, also available with magnetic coupling

Series **CEH** High duty pump, PN 40, also available with magnetic coupling

Series **CEB** Vertical tank mounted pump, PN 25 with magnetic

Technical documents about these pump series will be readily supplied on request.