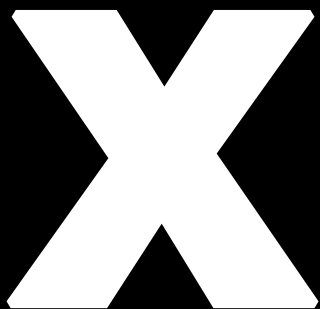




**STÜBBE**

**X-CLASS**

BUILT FOR THE EXTREME

## **STÜBBE X-CLASS HEAVY DUTY PUMP**

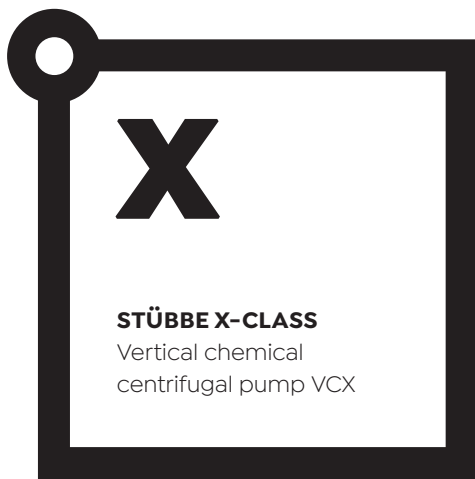
VERTICAL CHEMICAL CENTRIFUGAL  
PLASTIC PUMP – TYPE VCX

Shaft without any bearings in the wet area (Cantilever design)

### **FEATURES**

- Capacity up to 250 m<sup>3</sup>/h (1500 rpm)
- Delivery head up to 90 m (3000 rpm)
- Immersion depth up to max. 1500 mm
- Suction pipe extension up to max. 2500 mm
- Operating temperature
  - PE-UHMW (-20 °C up to max. +90 °C)
  - PVDF (-30 °C up to max. +115 °C)





## FEATURES

- STÜBBE X-CLASS: Heavy Duty model of STÜBBE pump family
- Non self-priming, vertical, single-stage submersible plastic pump without any bearings in the wet area (Cantilever design)
- Immersion depth / suspension pipe
  - Up to max. 1500 mm steel with coating of hard rubber or E-CTFE (Halar), max. speed 1750 rpm (60 Hz)
  - Up to 1000 mm
    - a) All-plastic (PP or PVDF)
    - b) Steel with coating of hard rubber or E-CTFE (Halar) and plastic protection tube
  - Optional: 650 mm made of all-plastic (PP or PVDF) suction pipe extension (max. 2500 mm)
- Sealing to the atmosphere
  - Without mechanical seal (hydrodynamic pressure reduction on the rear of the impeller)
  - With lip seal ring as standard (dust tight)
  - Optional with external flushing water connection
- Gap clearance is variably adjustable
- Vertical discharge nozzle integrated in the pump housing
- Efficient hydraulics due to up-to-date calculation programs
- Extreme durability

## USE

- Pumping of aggressive, crystallizing and toxic fluids as well as fluids filled with solid
- For open basins and tanks
- Do not use pump for flammable or explosive media.

## OPERATION MODE

- When starting the pump, the volute casing must be completely submerged (observe the lowest and highest switch-on level according to the dimension drawing)
- After start of pumping, the liquid level can be lowered to the end of the optional suction pipe extension (suction operation mode)

## PUMP VARIETY

- 10 different pump sizes with half-open impellers (H) up to 250 m³/h (VCX 32-200 up to VCX 100-315)

## CUSTOMIZED HYDRAULIC SYSTEM

### Half-open impellers (H)

- Best suited for fluids filled with solids
- For best possible efficiency

### 3-channel non-clogging impeller (F)

- Unique 3-channel non-clogging impeller (F) available for specifically gentle pumping in extreme solids applications with large solids

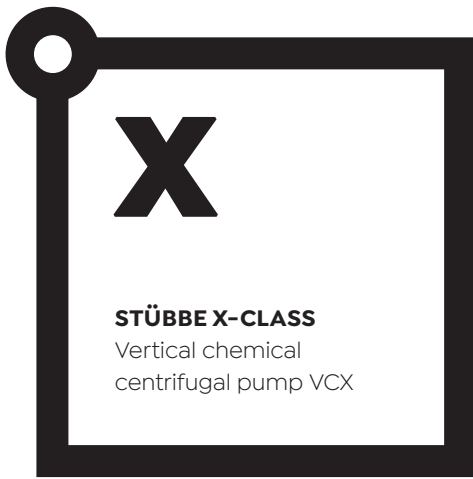
All designs are marked with the 3rd letter in the type designation.

## SAFETY

- Insensitive to short-term dry running (e.g. in the event of blockages on the suction side or tank emptying) due to missing bearings in wet area
- Pumping against closed shut-off valves on the pressure side is not permitted (furthermore observe direction of rotation)
- Thick-walled, corrosion- and diffusion-resistant plastic housing
- In the version with a suspension pipe made of plastic (PP or PVDF), the medium temperature may only deviate by max. +/- 20°C from the medium temperature specified in the quotation / order confirmation. Otherwise the linear expansion of the suspension pipe will lead to a blockage of the impeller (impeller comes in contact to the pump casing).

## LONG-LIVED AND STURDY

- Sturdy conical universal shaft with plastic shaft protection tube
- External, protected, robust double bearing arrangement (grease lubricated ball bearings)
- Stable mounting plate made of metal plated with plastic on product side
- Vertical discharge nozzle is a part from the pump housing (reduces pressure losses, eliminates the need of fastening of separate 90° elbow as a weak point)
- Standard screw connection made of 1.4301
- Screw connection in the wet area made of plastic-molded screws (made of 1.4301)
- High-quality painting of the metal components with a 2K protective lacquer (standard RAL 2002)



## **MATERIAL VARIANTS**

### **(volute casing + impeller)**

Two materials are available for different applications depending on chemical and thermal stress:

- UHMW-PE (ultra high molecular low-pressure polyethylene [E])  
(-20 °C up to max. +90 °C)
- PVDF (polyvinylidene fluoride [D])  
(-30 °C up to max. +115 °C)

All designs are marked with the 4th letter in the type designation.

## **OPTIONS**

- Further specifications on request

## **STÜBBE RESISTANCE LIST**

[www.stuebbe.com/pdf\\_resistance](http://www.stuebbe.com/pdf_resistance)

# X

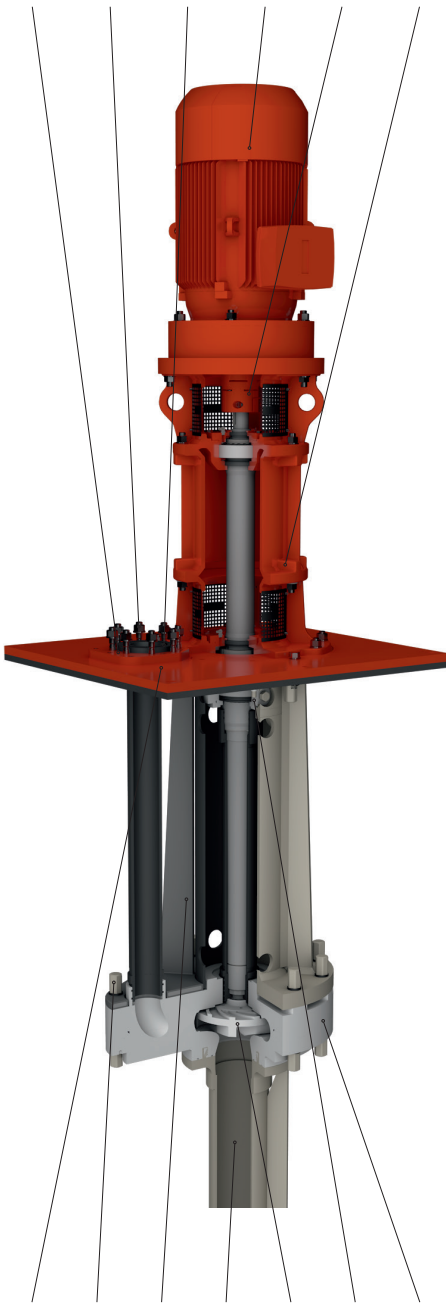
## STÜBBE X-CLASS

Vertical chemical centrifugal pump VCX

## VARIANTS

- ✓ STANDARD
- OPTIONAL
- NOT AVAILABLE
- METALLIC MATERIAL
- OTHER MATERIAL

- <sup>1</sup> Or equivalent  
<sup>2</sup> Also ATEX  
<sup>3</sup> Latern made of EN-GJS-400-15  
<sup>4</sup> Immersion depth max. 1000 mm, for 32-200, 32-250, 50-200 also 650 mm available. For 100-315 only 1500 mm available.  
<sup>5</sup> Depending on speed (2/4 poles)  
<sup>6</sup> With protection tube made of PE or PVDF  
<sup>7</sup> Max. 1750 rpm (60 Hz) at 1500 mm (max.) immersion depth  
<sup>8</sup> Length max. 2500 mm



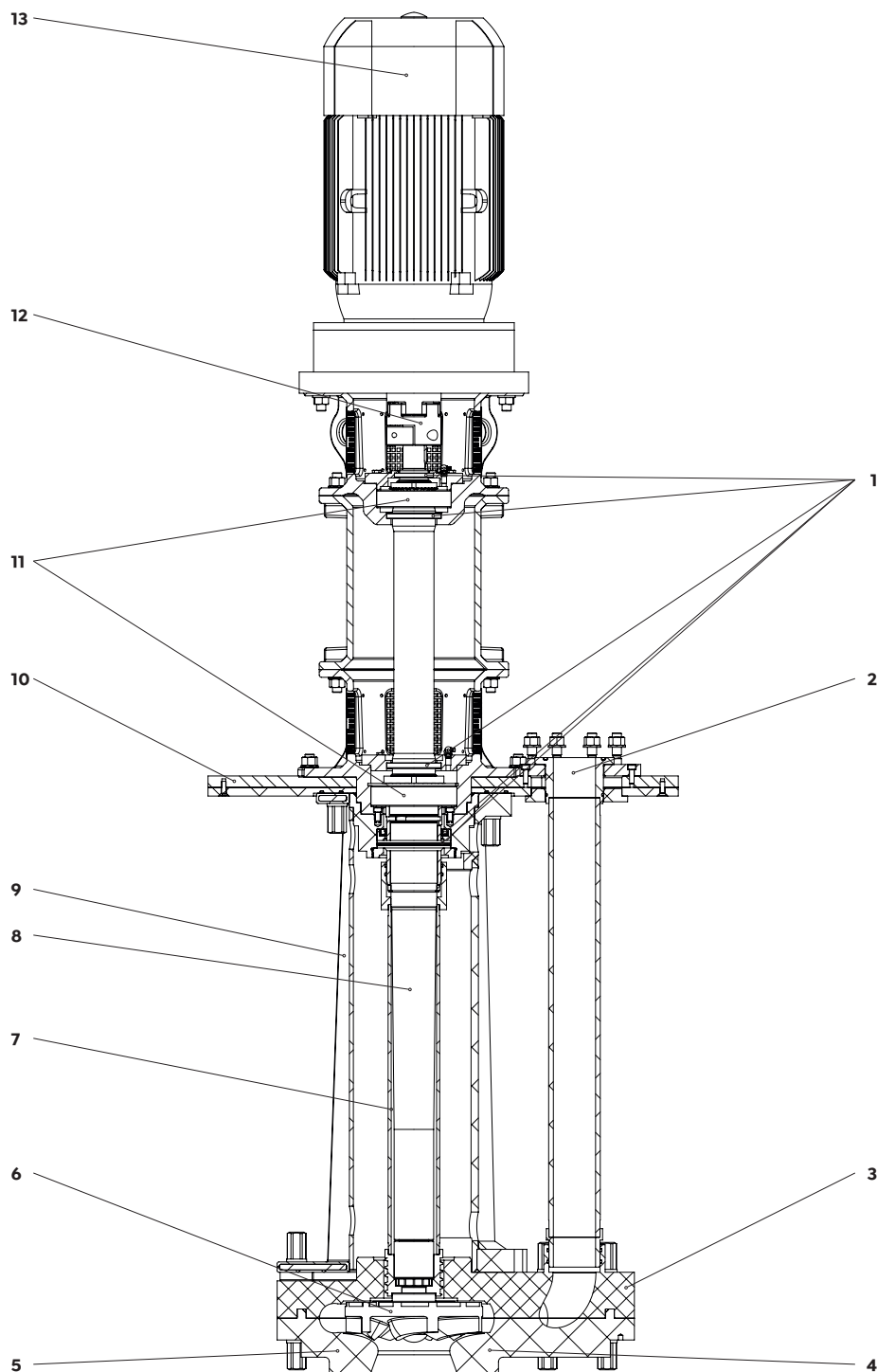
| PUMP TYPE                                        |                                                   | I      |        |        | II     |        |        |        |        |         | III     |   |
|--------------------------------------------------|---------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---|
| VCX bearing bracket size (LTG)                   |                                                   | 32-200 | 32-250 | 50-200 | 50-250 | 50-315 | 80-200 | 80-250 | 80-315 | 100-250 | 100-315 |   |
| <b>Connections</b>                               |                                                   |        |        |        |        |        |        |        |        |         |         |   |
|                                                  | DIN EN 1092-1                                     | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓       | ✓       | ✓ |
|                                                  | ANSI                                              | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓       | ✓       | ✓ |
| <b>O-rings</b>                                   |                                                   |        |        |        |        |        |        |        |        |         |         |   |
|                                                  | EPDM                                              | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓       | ✓       | ✓ |
|                                                  | FKM                                               | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓       | ✓       | ✓ |
|                                                  | Further (FFKM, FKM/FEP-covered)                   | •      | •      | •      | •      | •      | •      | •      | •      | •       | •       | • |
| <b>Screws</b>                                    |                                                   |        |        |        |        |        |        |        |        |         |         |   |
|                                                  | 1.4301 <sup>1</sup>                               | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓       | ✓       | ✓ |
|                                                  | 1.4571 <sup>1</sup>                               | •      | •      | •      | •      | •      | •      | •      | •      | •       | •       | • |
| <b>Motor</b>                                     |                                                   |        |        |        |        |        |        |        |        |         |         |   |
|                                                  | Lammers                                           | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓       | ✓       | ✓ |
|                                                  | Siemens                                           | •      | •      | •      | •      | •      | •      | •      | •      | •       | •       | • |
|                                                  | 2 poles (3000 / 3600 rpm [50/60 Hz]) <sup>2</sup> | ✓      | ✓      | ✓      | ✓      | ○      | ✓      | ○      | ○      | ○       | ○       | ○ |
|                                                  | Further on request                                | •      | •      | •      | •      | •      | •      | •      | •      | •       | •       | • |
| <b>Coupling</b>                                  |                                                   |        |        |        |        |        |        |        |        |         |         |   |
|                                                  | StS (WKE/H) <sup>3</sup>                          | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓       | ✓       | ✓ |
|                                                  | Further on request                                | •      | •      | •      | •      | •      | •      | •      | •      | •       | •       | • |
| <b>Bearing<sup>3</sup></b>                       |                                                   |        |        |        |        |        |        |        |        |         |         |   |
|                                                  | Greased bearings can be relubricated              | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓       | ✓       | ✓ |
|                                                  | Protected double bearing arrangement              | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓       | ✓       | ✓ |
| <b>Mounting plate</b>                            |                                                   |        |        |        |        |        |        |        |        |         |         |   |
|                                                  | Steel / PE plated (rectangular)                   | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓       | ✓       | ✓ |
|                                                  | Steel / PVDF plated (rectangular)                 | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓       | ✓       | ✓ |
|                                                  | Steel / PE or PVDF plated (round)                 | •      | •      | •      | •      | •      | •      | •      | •      | •       | •       | • |
| <b>Screw connection pump housing</b>             |                                                   |        |        |        |        |        |        |        |        |         |         |   |
|                                                  | 1.4301 / PP molded                                | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓       | ✓       | ✓ |
|                                                  | 1.4301 / PVDF molded                              | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓       | ✓       | ✓ |
| <b>Suspension pipe</b>                           |                                                   |        |        |        |        |        |        |        |        |         |         |   |
|                                                  | PP <sup>4</sup> (Tmax. 50/70°C) <sup>5</sup>      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓       | ✓       | ✓ |
|                                                  | PVDF <sup>4</sup> (Tmax. 70/90°C) <sup>5</sup>    | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓       | ✓       | ✓ |
|                                                  | Steel / hard rubber coating <sup>6,7</sup>        | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓       | ✓       | ✓ |
|                                                  | Steel / E-CTFE (Halar) coating <sup>6,7</sup>     | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓       | ✓       | ✓ |
| <b>Suction pipe extension / suction strainer</b> |                                                   |        |        |        |        |        |        |        |        |         |         |   |
|                                                  | PP <sup>8</sup>                                   | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓       | ✓       | ✓ |
|                                                  | PE <sup>8</sup>                                   | •      | •      | •      | •      | •      | •      | •      | •      | •       | •       | • |
|                                                  | PVDF <sup>8</sup>                                 | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓       | ✓       | ✓ |
| <b>Plastic (casing + impeller)</b>               |                                                   |        |        |        |        |        |        |        |        |         |         |   |
|                                                  | PE-UHMW                                           | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓       | ✓       | ✓ |
|                                                  | PVDF                                              | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓       | ✓       | ✓ |
| <b>Shaft sealing to the atmosphere</b>           |                                                   |        |        |        |        |        |        |        |        |         |         |   |
|                                                  | Lip seal ring                                     | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓       | ✓       | ✓ |
|                                                  | External flushing                                 | •      | •      | •      | •      | •      | •      | •      | •      | •       | •       | • |
| <b>Hydraulic</b>                                 |                                                   |        |        |        |        |        |        |        |        |         |         |   |
|                                                  | Half-open                                         | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓       | ✓       | ✓ |
|                                                  | Non-clogging                                      | •      | ○      | •      | •      | •      | •      | •      | ○      | ○       | ○       | ○ |

# X

## STÜBBE X-CLASS

Vertical chemical  
centrifugal pump VCX

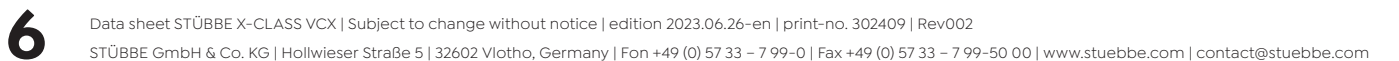
## SECTIONAL VIEW



| POSITION | DESCRIPTION            |
|----------|------------------------|
| 1        | Sealing ring           |
| 2        | Discharge nozzle       |
| 3        | Volute casing          |
| 4        | Strainer (optional)    |
| 5        | Suction pipe extension |
| 6        | Impeller               |
| 7        | Shaft protection tube  |
| 8        | Shaft                  |
| 9        | Suspension pipe        |
| 10       | Mounting plate         |
| 11       | Shaft bearing          |
| 12       | Coupling               |
| 13       | Motor                  |

**STÜBBE X-CLASS**  
Vertical chemical  
centrifugal pump VCX

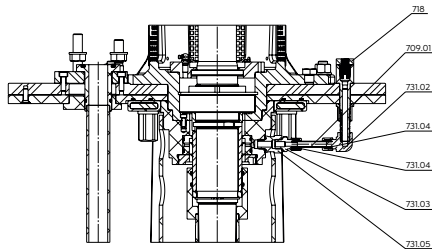
| POSITION               | DESCRIPTION                        |
|------------------------|------------------------------------|
| 010                    | Plating for mounting plate         |
| 020                    | Riser pipe adapter                 |
| 102.01, 102.02         | Volute casing                      |
| 132                    | Motorflange adapter                |
| 213                    | Drive shaft                        |
| 233                    | Impeller                           |
| 322                    | Cylindrical roller bearings        |
| 323                    | Four point bearing                 |
| 340                    | Bearing lantern                    |
| 341                    | Drive lantern                      |
| 342                    | Support bearing lantern            |
| 360.01, 360.02         | Bearing cover                      |
| 412.01                 | O-ring                             |
| 421.01, 421.02, 421.04 | Radial rotary shaft seal           |
| 421.05                 | Lip seal                           |
| 441.01                 | Sealing cover                      |
| 441.02                 | Clamping disk                      |
| 524                    | Shaft sleeve                       |
| 525.01                 | Driver for shaft protection sleeve |
| 525.02                 | Spacer ring                        |
| 543                    | Spacer                             |
| 550.14, 550.16         | Supporting washer                  |
| 551                    | Shim washer                        |
| 636.01, 636.02         | Lubrication nipple                 |
| 681.01, 681.02         | Coupling protection                |
| 709.01, 709.14, 709.16 | Hose pipe                          |
| 711                    | Riser pipe                         |
| 713                    | Suspension pipe                    |
| 714.01                 | Protection tube                    |
| 714.02                 | Shaft protection tube              |
| 723                    | Flange                             |
| 731.01 - 731.05        | Fitting                            |
| 739.01                 | Hose nozzle                        |
| 739.02                 | Nipple                             |
| 757                    | Flow regulator                     |
| 801                    | Flange motor                       |
| 842                    | Claw coupling                      |
| 893                    | Mounting plate                     |
| 912                    | Screw plug                         |
| 920.16                 | Molded hex nut                     |
| 921.01, 921.02         | Grooved nuts                       |
| 931.01, 931.02         | Circlip                            |
| 932.01, 932.02         | Retaining ring                     |



# X

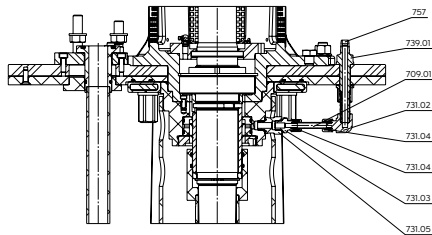
**STÜBBE X-CLASS**  
Vertical chemical  
centrifugal pump VCX

## SECTIONAL VIEW PUMP SHAFT SEAL



Pump shaft seal execution: SG

| POSITION        | DESCRIPTION    |
|-----------------|----------------|
| 412.01          | O-ring         |
| 709.01          | Hose pipe      |
| 718             | Nipple         |
| 731.01 - 731.05 | Fitting        |
| 739.01          | Hose nozzle    |
| 739.02          | Nipple         |
| 757             | Flow regulator |



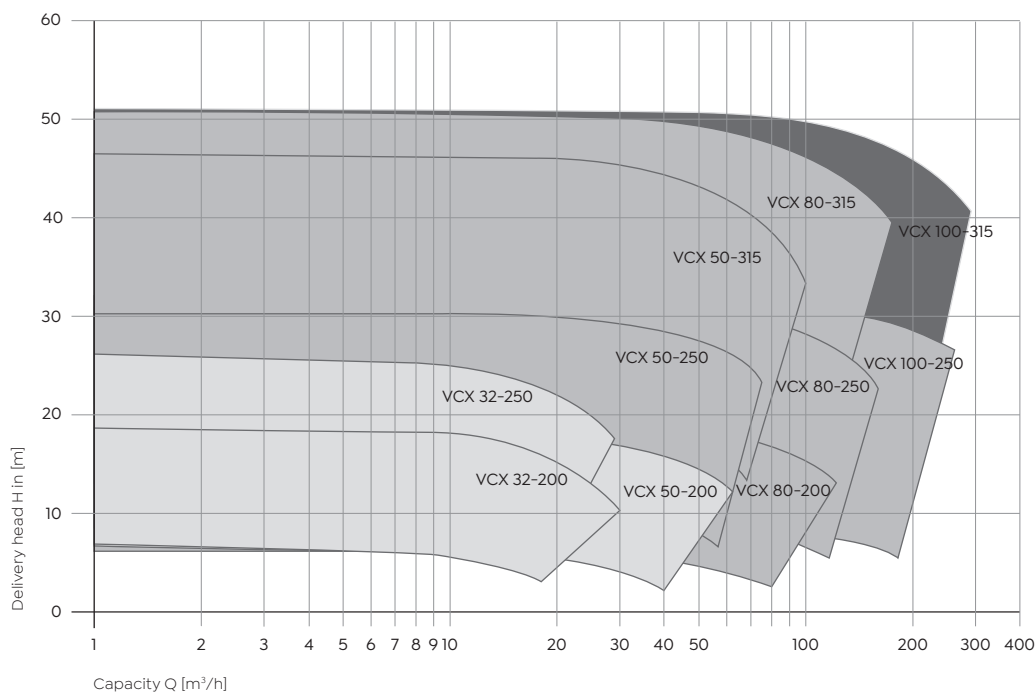
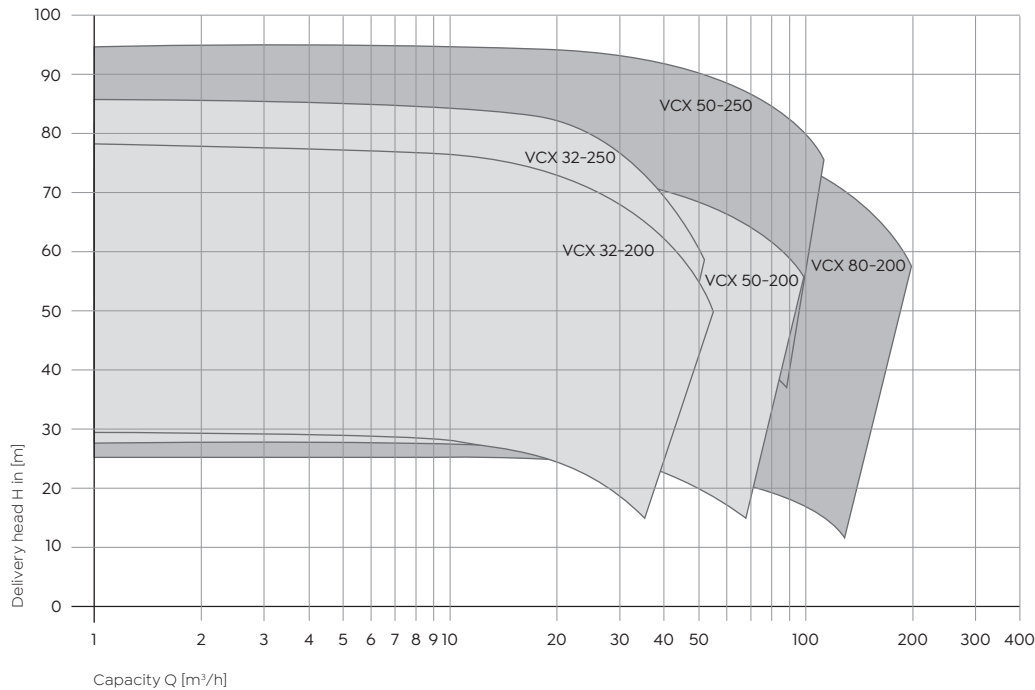
Pump shaft seal execution: ST

# X

**STÜBBE X-CLASS**  
Vertical chemical  
centrifugal pump VCX

- BEARING BRACKET  
SIZE I
- BEARING BRACKET  
SIZE II
- BEARING BRACKET  
SIZE III

## CHARACTERISTIC CURVES



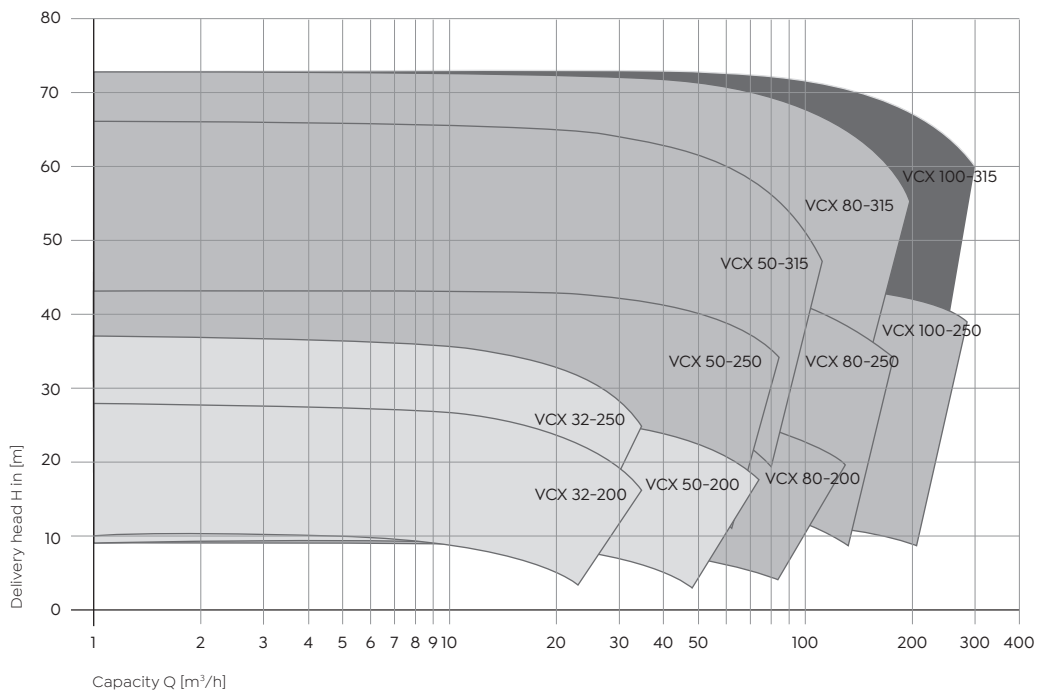
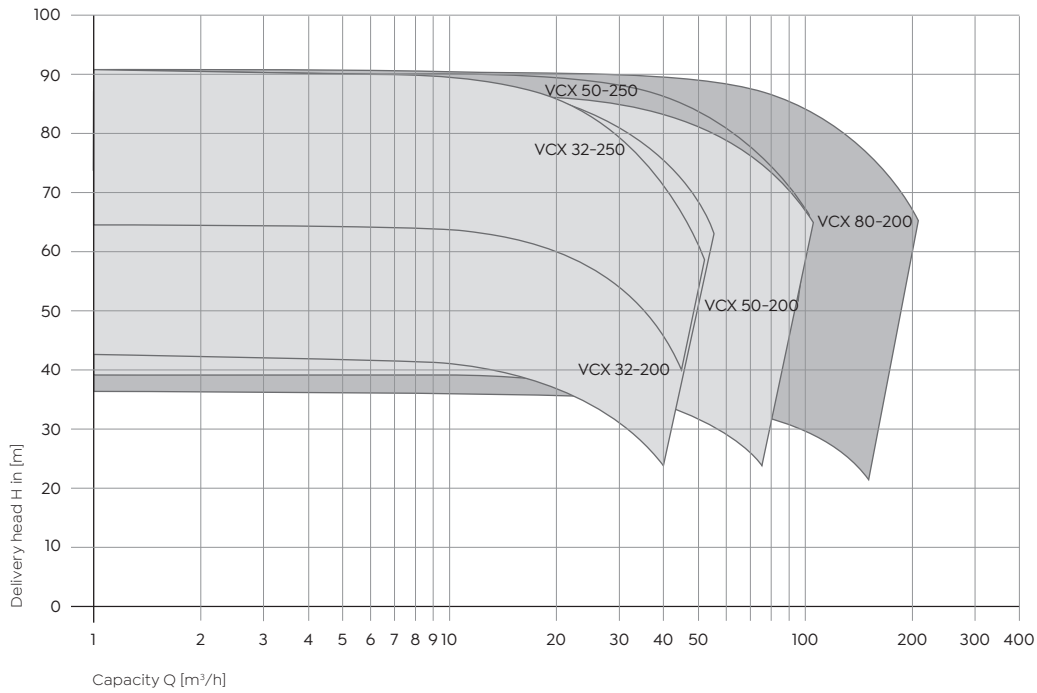


# X

## STÜBBE X-CLASS

Vertical chemical  
centrifugal pump VCX

- BEARING BRACKET  
SIZE I
- BEARING BRACKET  
SIZE II
- BEARING BRACKET  
SIZE III



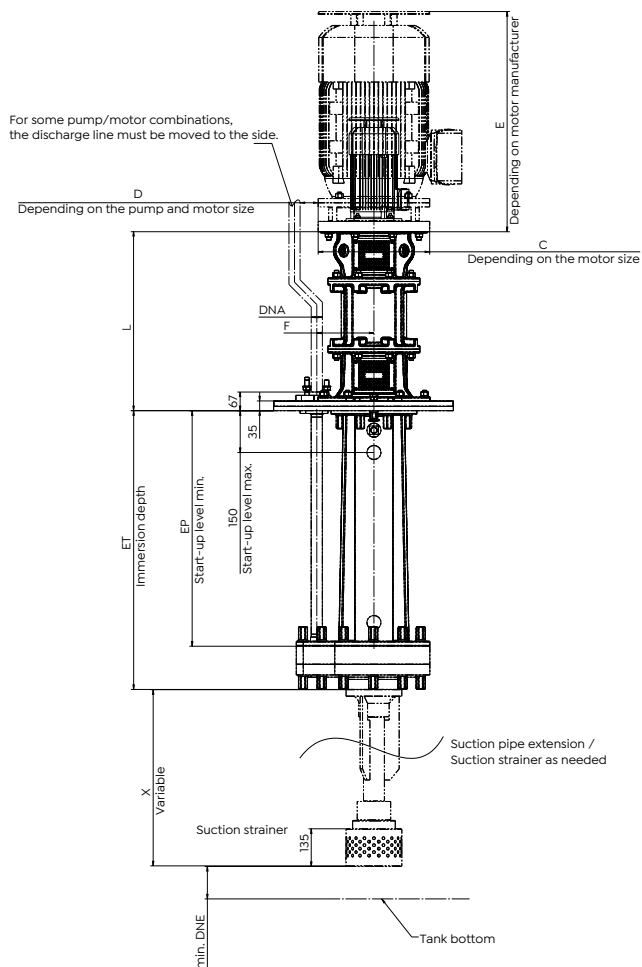
# X

## STÜBBE X-CLASS

Vertical chemical  
centrifugal pump VCX

## DIMENSIONS

### PUMP AND MOTOR



| Motor BG | C   | E    |
|----------|-----|------|
| 90L      | 400 | 365  |
| 100L     | 400 | 410  |
| 112M     | 400 | 395  |
| 132S/M   | 400 | 495  |
| 160M/L   | 400 | 655  |
| 180M/L   | 400 | 690  |
| 200L     | 400 | 735  |
| 225S     | 450 | 805  |
| 225M1    | 450 | 885  |
| 225M2    | 450 | 925  |
| 250M     | 550 | 955  |
| 280S1    | 550 | 1065 |

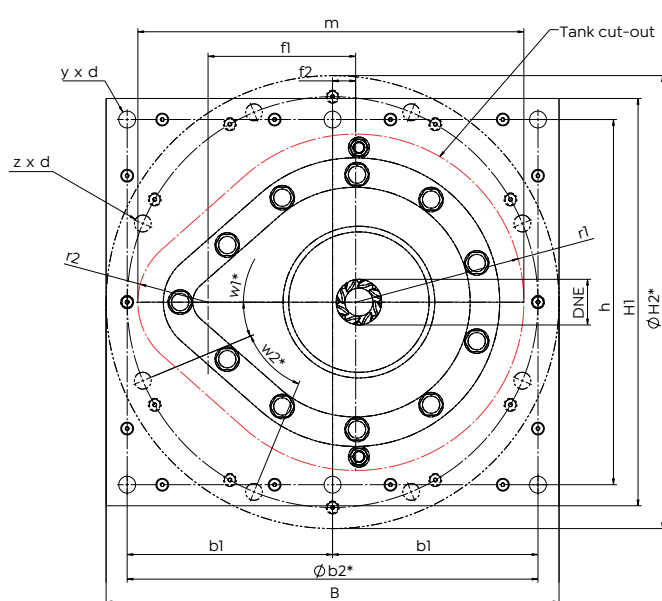
| Type    | DNE | DNA | D    | ET<br>short | ET<br>medium | ET<br>long | EP<br>short | EP<br>medium | EP<br>long | F   | L   |
|---------|-----|-----|------|-------------|--------------|------------|-------------|--------------|------------|-----|-----|
| 32-200  | 65  | 32  | 15   | 650         | 1000         | 1500       | 495         | 845          | 1345       | 205 | 651 |
| 32-250  | 65  | 32  | 15   | 650         | 1000         | 1500       | 495         | 845          | 1345       | 225 | 651 |
| 50-200  | 100 | 50  | 15   | 650         | 1000         | 1500       | 495         | 845          | 1345       | 215 | 651 |
| 50-250  | 100 | 50  | 13,5 | -           | 1025         | 1525       | -           | 830          | 1330       | 245 | 711 |
| 50-315  | 100 | 50  | 13,5 | -           | 1025         | 1525       | -           | 830          | 1330       | 245 | 711 |
| 80-200  | 150 | 80  | 35   | -           | 1025         | 1525       | -           | 830          | 1330       | 280 | 711 |
| 80-250  | 150 | 80  | 35   | -           | 1025         | 1525       | -           | 830          | 1330       | 280 | 711 |
| 80-315  | 150 | 80  | 45   | -           | 1025         | 1525       | -           | 830          | 1330       | 290 | 711 |
| 100-250 | 150 | 100 | 40   | -           | 1025         | 1525       | -           | 830          | 1330       | 295 | 711 |
| 100-315 | 150 | 100 | 60   | -           | -            | 1500       | -           | -            | 1282       | 315 | 851 |

# X

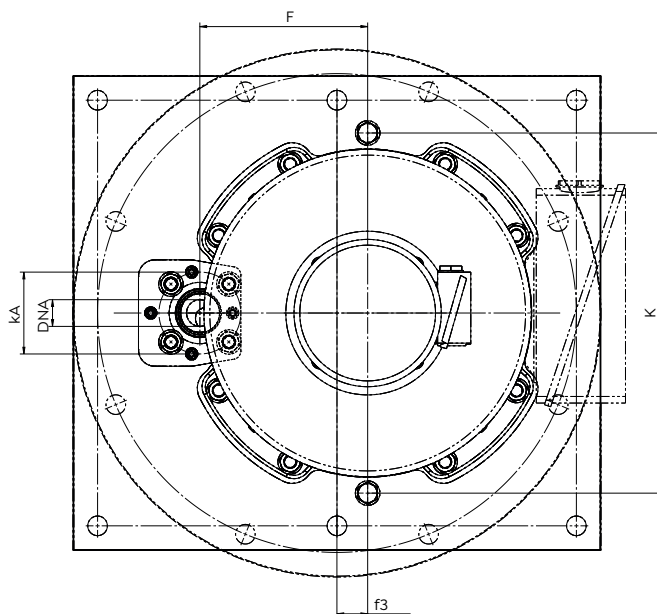
## STÜBBE X-CLASS

Vertical chemical  
centrifugal pump VCX

## DIMENSIONS CONNECTIONS



\* = Optional dimensions for the mounting plate in the round version

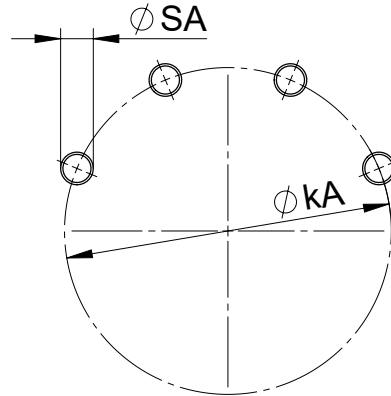
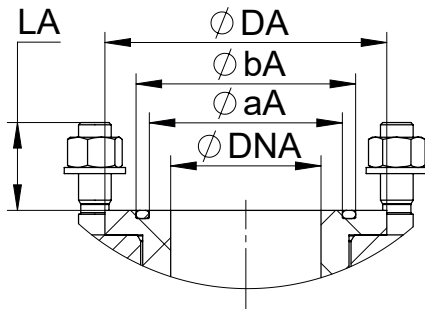


| Type    | DNE | DNA | B   | F   | H1  | Ø H2 | K   | b1    | Ø b2 | f1  | f2 | f3   | h   | m     | r1    | r2    | w1   | w2 | z x d | y x d |
|---------|-----|-----|-----|-----|-----|------|-----|-------|------|-----|----|------|-----|-------|-------|-------|------|----|-------|-------|
| 32-200  | 65  | 32  | 645 | 205 | 580 | 585  | 440 | 292,5 | 645  | 210 | 33 | 37,5 | 520 | 497,5 | 212,5 | 75    | 22,5 | 45 | 8X24  | 6X24  |
| 32-250  | 65  | 32  | 645 | 225 | 580 | 585  | 440 | 292,5 | 645  | 210 | 33 | 37,5 | 520 | 544,5 | 239,5 | 95    | 22,5 | 45 | 8X24  | 6X24  |
| 50-200  | 100 | 50  | 645 | 215 | 580 | 585  | 440 | 292,5 | 645  | 240 | 33 | 37,5 | 520 | 584,5 | 249,5 | 95    | 22,5 | 45 | 8X24  | 6X24  |
| 50-250  | 100 | 50  | 820 | 245 | 730 | 820  | 440 | 382,5 | 765  | 245 | 46 | 51   | 675 | 594,5 | 249,5 | 100   | 15   | 30 | 12X24 | 6X24  |
| 50-315  | 100 | 50  | 820 | 245 | 730 | 820  | 440 | 382,5 | 765  | 245 | 46 | 51   | 675 | 614,5 | 269,5 | 100   | 15   | 30 | 12X24 | 6X24  |
| 80-200  | 150 | 80  | 820 | 280 | 730 | 820  | 440 | 382,5 | 765  | 280 | 46 | 51   | 675 | 648   | 253,5 | 114,5 | 15   | 30 | 12X24 | 6X24  |
| 80-250  | 150 | 80  | 820 | 280 | 730 | 820  | 440 | 382,5 | 765  | 280 | 46 | 51   | 675 | 653   | 258,5 | 114,5 | 15   | 30 | 12X24 | 6X24  |
| 80-315  | 150 | 80  | 820 | 290 | 730 | 820  | 440 | 382,5 | 765  | 290 | 46 | 51   | 675 | 714   | 308,5 | 115,5 | 15   | 30 | 12X24 | 6X24  |
| 100-250 | 150 | 100 | 820 | 295 | 730 | 820  | 440 | 382,5 | 765  | 295 | 46 | 51   | 675 | 719,5 | 298,5 | 126   | 15   | 30 | 12X24 | 6X24  |
| 100-315 | 150 | 100 | 870 | 315 | 735 | 870  | 440 | 407,5 | 815  | 315 | 52 | 52   | 735 | 762,5 | 329,5 | 128   | 15   | 30 | 12X24 | 6X24  |

# X

**STÜBBE X-CLASS**  
Vertical chemical  
centrifugal pump VCX

## DIMENSIONS PUMP AND MOTOR



| TYP |     |     | OUTLET NOZZLE (ACC. TO DIN EN 1092-1) |       |     |      |     |     |        | OUTLET NOZZLE (ACC. TO ANSI B 16.5) |        |       |       |     |      |       |     |        |
|-----|-----|-----|---------------------------------------|-------|-----|------|-----|-----|--------|-------------------------------------|--------|-------|-------|-----|------|-------|-----|--------|
| DNE | DNA | Ø   | ØaA                                   | ØbA   | ØDA | LA   | ØkA | ØSA | Anzahl | DNE                                 | DNA    | ØaA   | ØbA   | ØDA | LA   | ØkA   | ØSA | Anzahl |
| 65  | 32  | 200 | 44,2                                  | 57,2  | 76  | 49,5 | 100 | M16 | 4      | 2 1/2"                              | 1 1/4" | 44,2  | 57,2  | 76  | 49,5 | 88,9  | M12 | 4      |
| 65  | 32  | 250 | 44,2                                  | 57,2  | 76  | 49,5 | 100 | M16 | 4      | 2 1/2"                              | 1 1/4" | 44,2  | 57,2  | 76  | 49,5 | 88,9  | M12 | 4      |
| 100 | 50  | 200 | 63                                    | 76    | 97  | 59,5 | 125 | M16 | 4      | 4"                                  | 2"     | 63    | 76    | 97  | 59,5 | 120,6 | M16 | 4      |
| 100 | 50  | 250 | 63                                    | 76    | 97  | 59,5 | 125 | M16 | 4      | 4"                                  | 2"     | 63    | 76    | 97  | 59,5 | 120,6 | M16 | 4      |
| 100 | 50  | 315 | 63                                    | 76    | 97  | 59,5 | 125 | M16 | 4      | 4"                                  | 2"     | 63    | 76    | 97  | 59,5 | 120,6 | M16 | 4      |
| 150 | 80  | 200 | 94,5                                  | 107,5 | 131 | 59,5 | 160 | M16 | 8      | 6"                                  | 3"     | 94,5  | 107,5 | 131 | 59,5 | 152,4 | M16 | 8      |
| 150 | 80  | 250 | 94,5                                  | 107,5 | 131 | 59,5 | 160 | M16 | 8      | 6"                                  | 3"     | 94,5  | 107,5 | 131 | 59,5 | 152,4 | M16 | 8      |
| 150 | 80  | 315 | 94,5                                  | 107,5 | 131 | 59,5 | 160 | M16 | 8      | 6"                                  | 3"     | 94,5  | 107,5 | 131 | 59,5 | 152,4 | M16 | 8      |
| 150 | 100 | 250 | 114,5                                 | 127,5 | 158 | 59,5 | 180 | M16 | 8      | 6"                                  | 4"     | 114,5 | 127,5 | 158 | 59,5 | 190,5 | M16 | 8      |
| 150 | 100 | 315 | 114,5                                 | 127,5 | 157 | 59,5 | 180 | M16 | 8      | 6"                                  | 4"     | 114,5 | 127,5 | 157 | 59,5 | 190,5 | M16 | 8      |