

## Vertical Mixed Flow Pumps

## VM/VMS

energy API CE



## ● Applications

- General Industrial
- Factory drainage
- Rain water drainage
- Agriculture

## ● Feature

- ✓ High efficiency / Heavy and sturdy construction
- ✓ Completely standardization for wide application
- ✓ Maximum parts interchangeability
- ✓ API standard 610 (API Code : VS1)

## ● Ratings

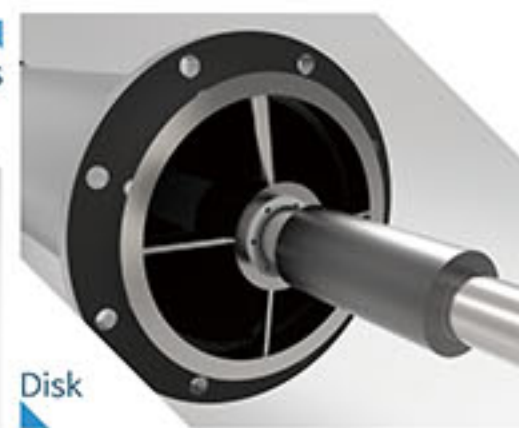
|                           |                                                |
|---------------------------|------------------------------------------------|
| Capacity                  | Up to 400 m <sup>3</sup> /min (105,669 US GPM) |
| Head                      | Up to 500 m (1,640ft)                          |
| Discharge Pressure        | Up to 60 kgf/cm <sup>2</sup> G (853 PSIG)      |
| Hydrostatic test Pressure | Up to 90 kgf/cm <sup>2</sup> G (1,280 PSIG)    |
| Max. allowable Speed      | Up to 3,600 min                                |
| Temperature               | ~180°C (~ 356°F)                               |
| Flanges                   | ANSI (other standards also available)          |
| Nozzles Location          | Bottom Suction : Side Discharge                |
| Seals                     | Conventional Packing or Mechanical Seal        |
| Materials                 | According to API 610 Material code             |

\*API610 latest edition is available on request

Detail



Seals

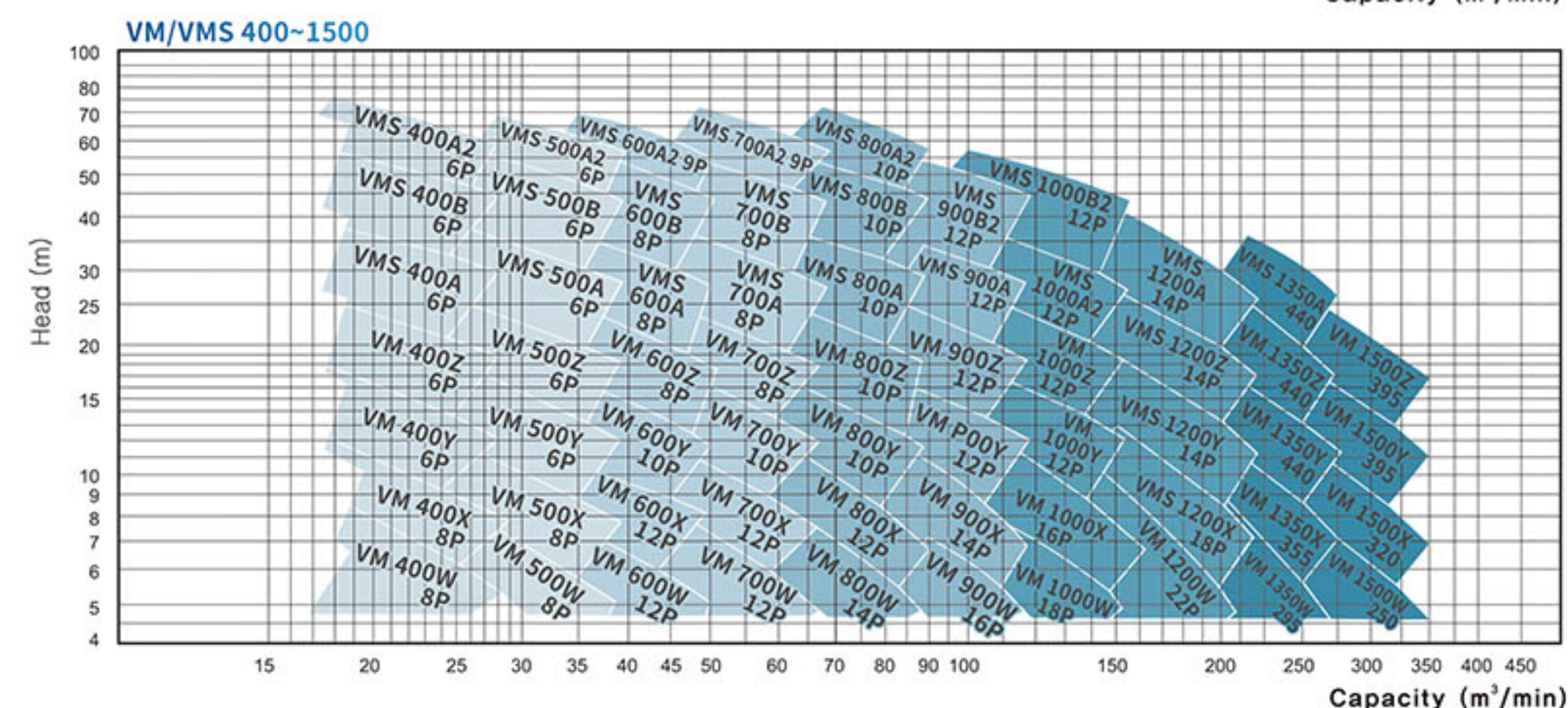
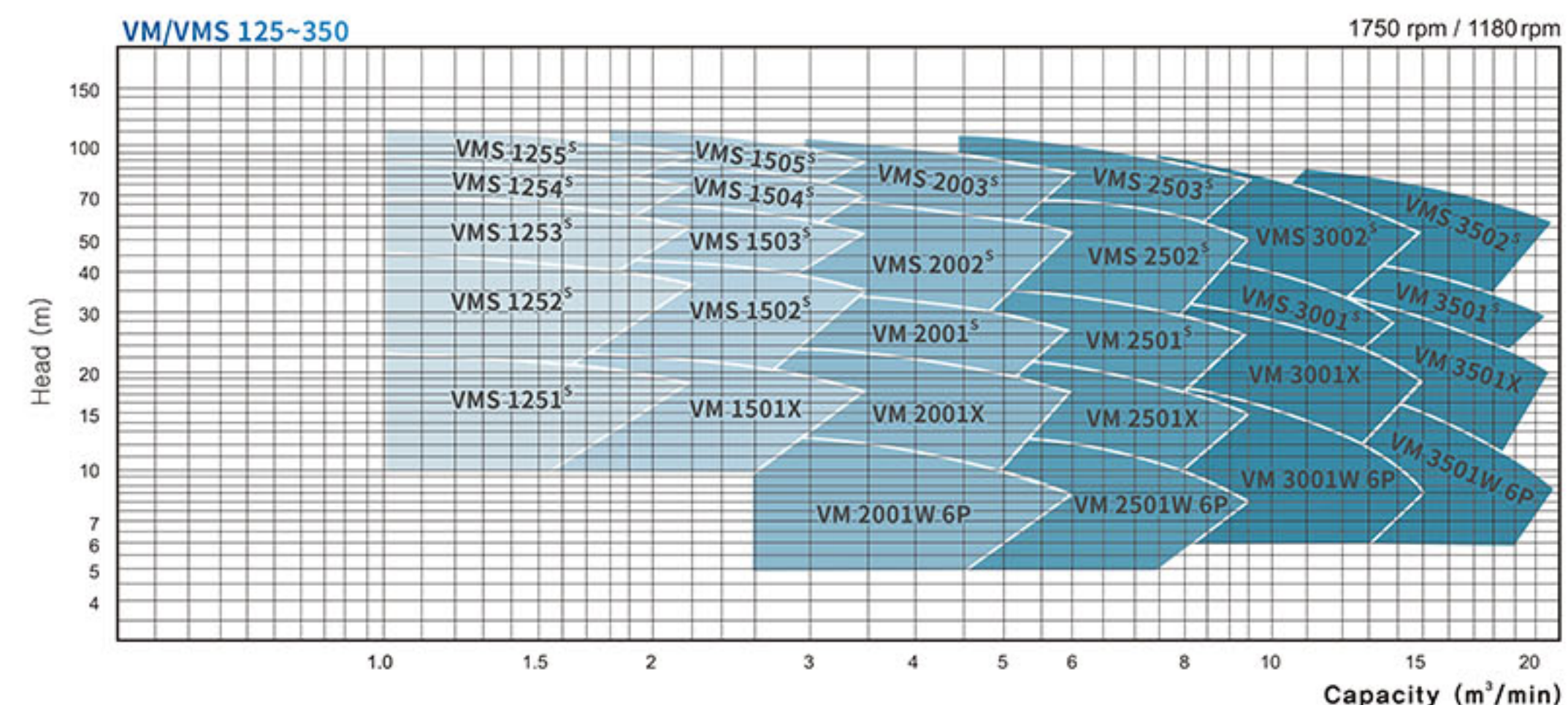
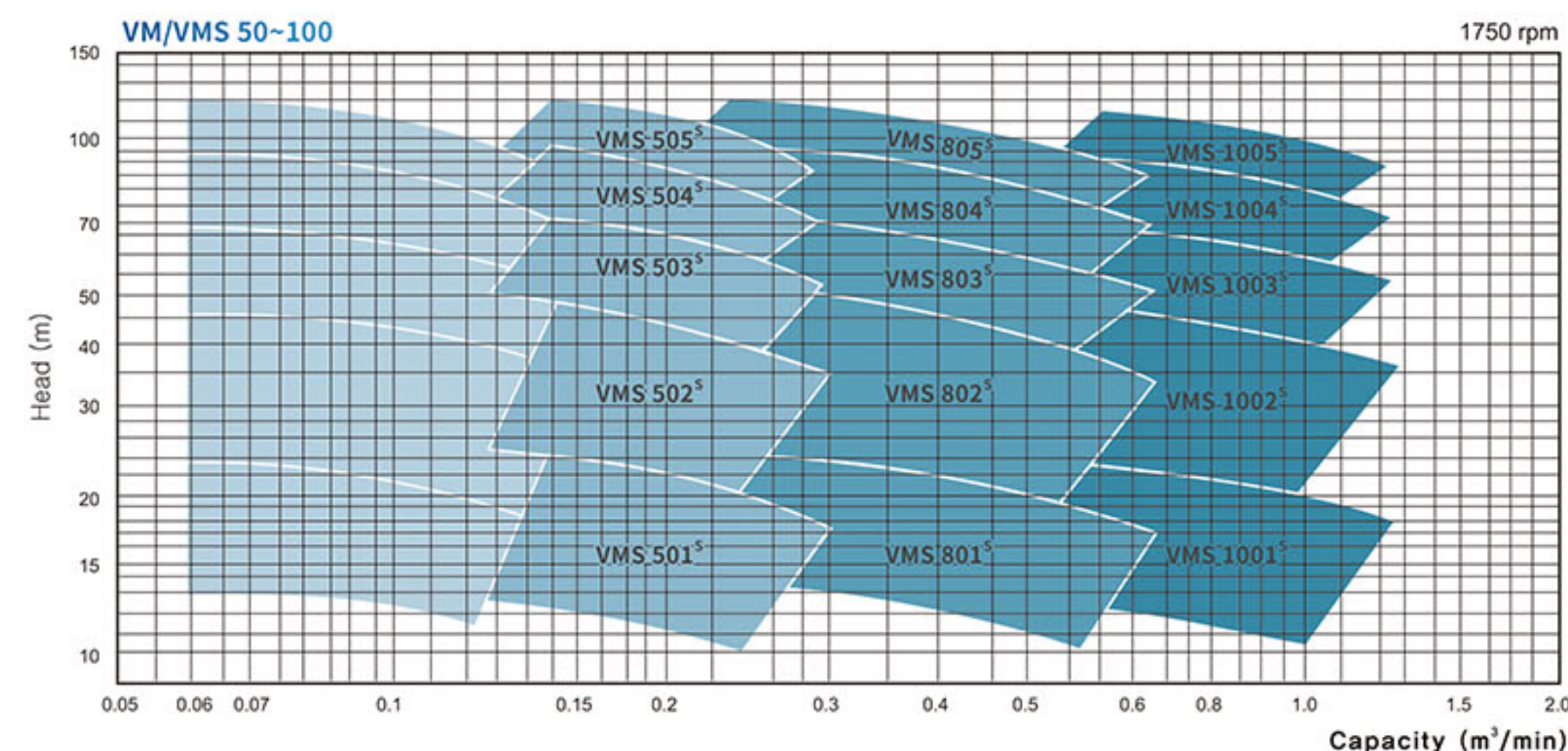


Disk



Impeller

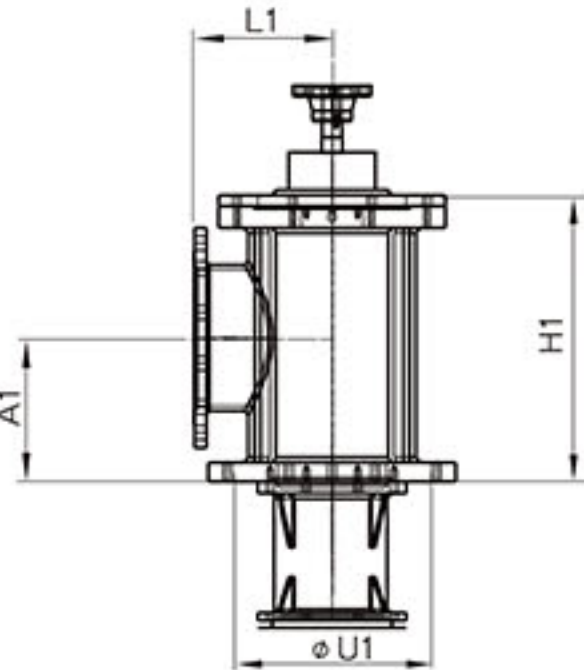
## ● Selection Charts



Note: \*. Performance ranges shown on these charts are preliminary selection only.

Model. VM/VMS

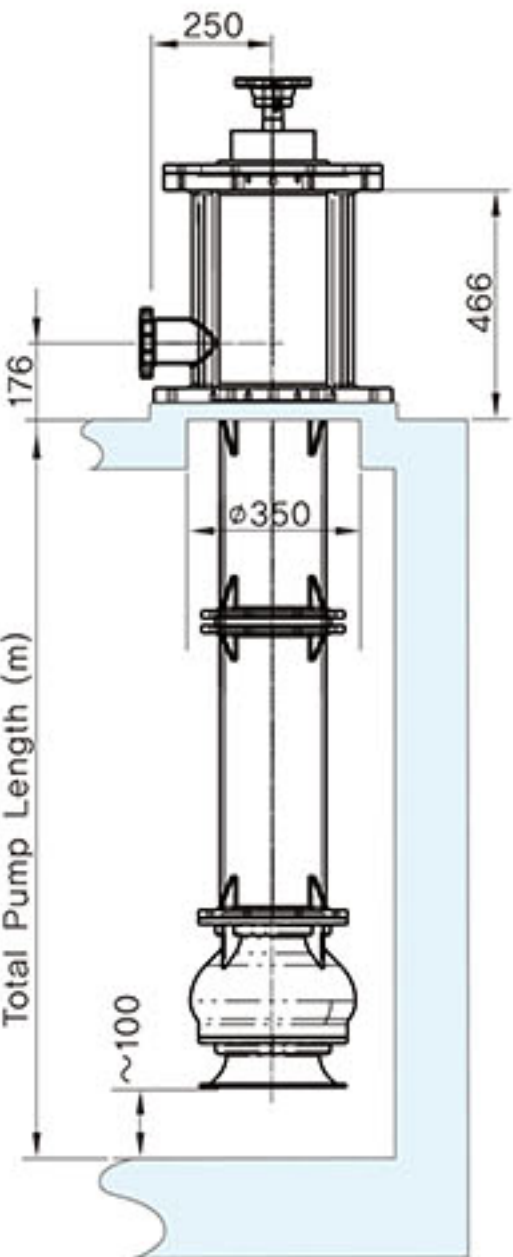
● Installation Dimension



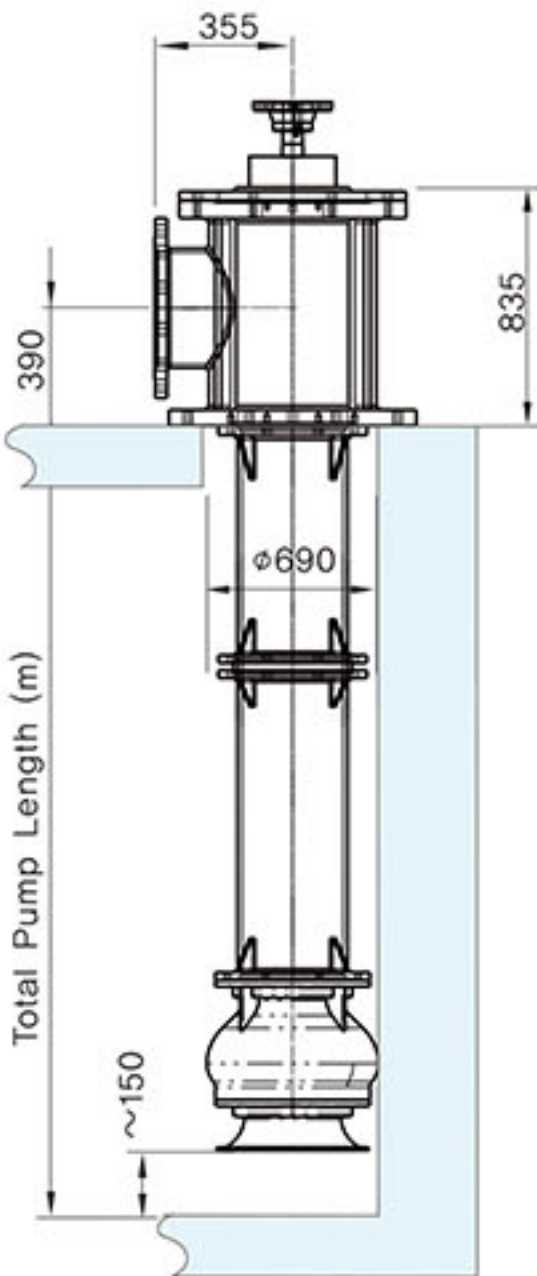
VM/VMS 125~250 Type

● VM/VMS 125~250

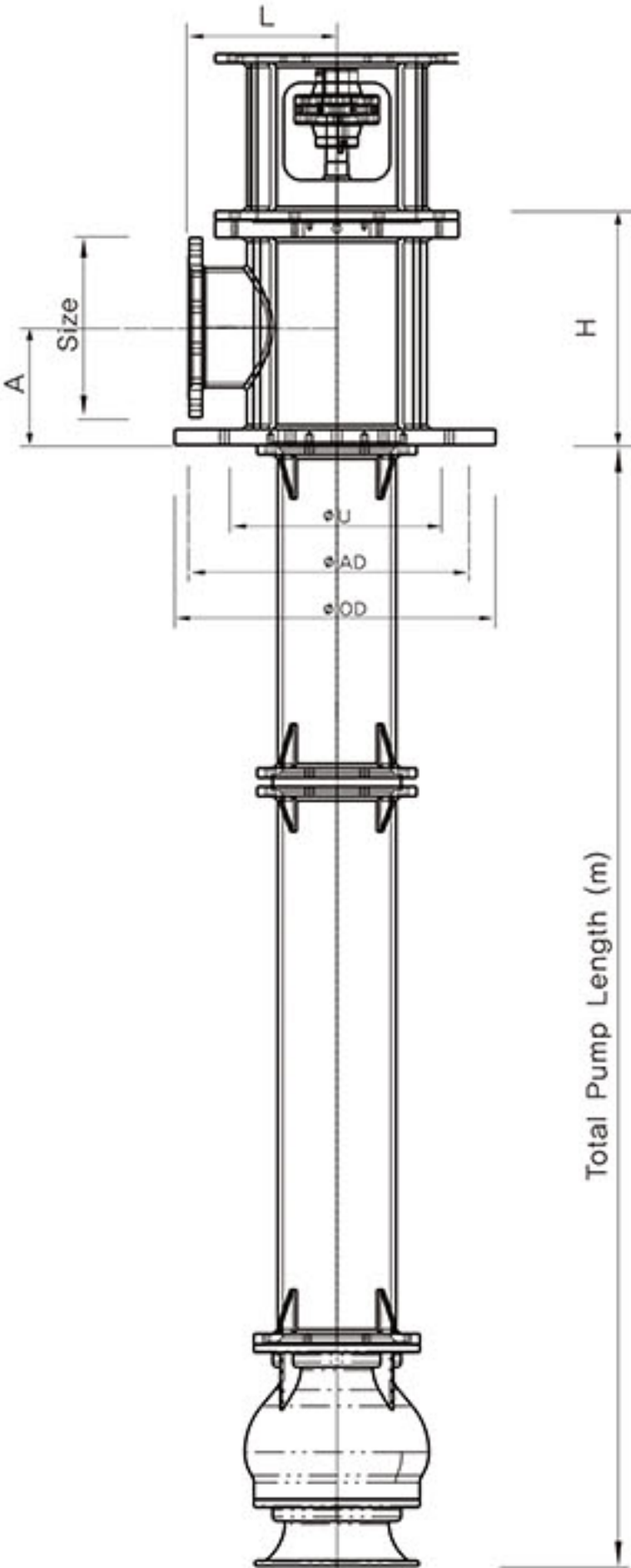
| Size | A1  | L1  | H1  | U1  |
|------|-----|-----|-----|-----|
| 125  | 230 | 280 | 550 | 480 |
| 150  | 230 | 280 | 550 | 480 |
| 200  | 295 | 315 | 690 | 580 |
| 250  | 295 | 315 | 690 | 580 |



VM/VMS 50~100 Type



VM/VMS 300~350 Type



VM/VMS 400~2000 Type

● VM/VMS 400~2000 (Discharge Head Dimensions)

(Unit: mm)

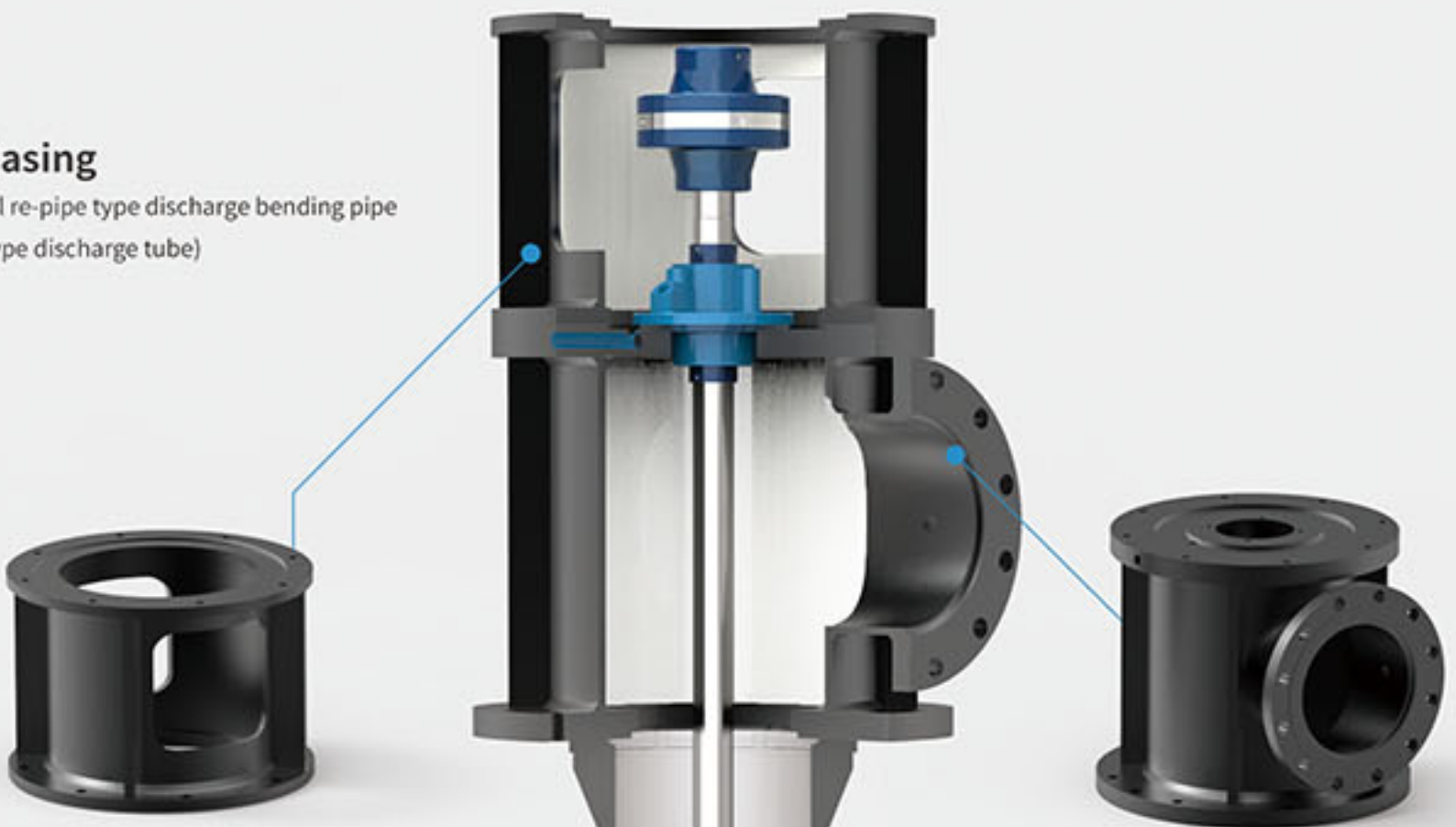
| Discharge Size | A    | L    | H    | U    | OD   | AD   |
|----------------|------|------|------|------|------|------|
| 400            | 450  | 400  | 900  | 650  | 950  | 850  |
| 450            | 525  | 425  | 970  | 800  | 1100 | 1000 |
| 500            | 550  | 450  | 1020 | 900  | 1200 | 1100 |
| 600            | 600  | 500  | 1150 | 1050 | 1350 | 1250 |
| 700            | 750  | 650  | 1400 | 1200 | 1500 | 1400 |
| 800            | 800  | 700  | 1550 | 1300 | 1700 | 1550 |
| 900            | 1000 | 900  | 1800 | 1550 | 1950 | 1800 |
| 1000           | 1050 | 950  | 1900 | 1700 | 2100 | 1950 |
| 1100           | 1100 | 1000 | 2050 | 1850 | 2250 | 2100 |
| 1200           | 1150 | 1050 | 2150 | 2000 | 2400 | 2250 |
| 1350           | 1375 | 1275 | 2450 | 2225 | 2725 | 2525 |
| 1500           | 1450 | 1350 | 2500 | 2450 | 2950 | 2750 |
| 1600           | 1500 | 1400 | 2600 | 2600 | 3100 | 2950 |
| 1700           | 1550 | 1450 | 2700 | 2750 | 3250 | 3050 |
| 1800           | 1600 | 1550 | 2800 | 2950 | 3500 | 3250 |
| 1900           | 1650 | 1550 | 2950 | 3050 | 3650 | 3400 |
| 2000           | 1700 | 1600 | 3000 | 3200 | 3800 | 3500 |

Model. VM/VMS

● Parts Feature

● Discharge Casing

- High strength steel re-pipe type discharge bending pipe  
(Option: casting type discharge tube)



● Axial diameter less than 65mm

- Screw the middle Coupling  
(Depending on the application, Split Middle coupling is applied)



● Axis diameter 65mm or more

- Split Middle Coupling



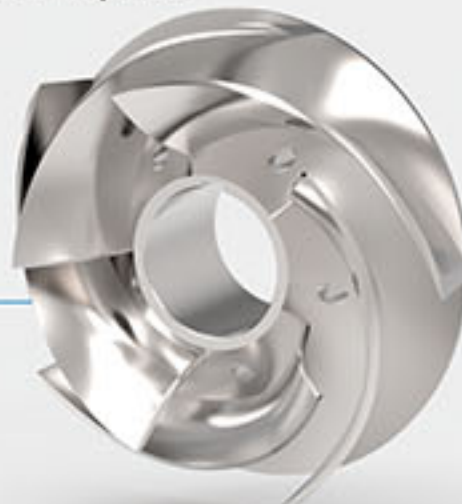
● Discharge head 20m or more

- Enclosed impeller (semi-open impeller)



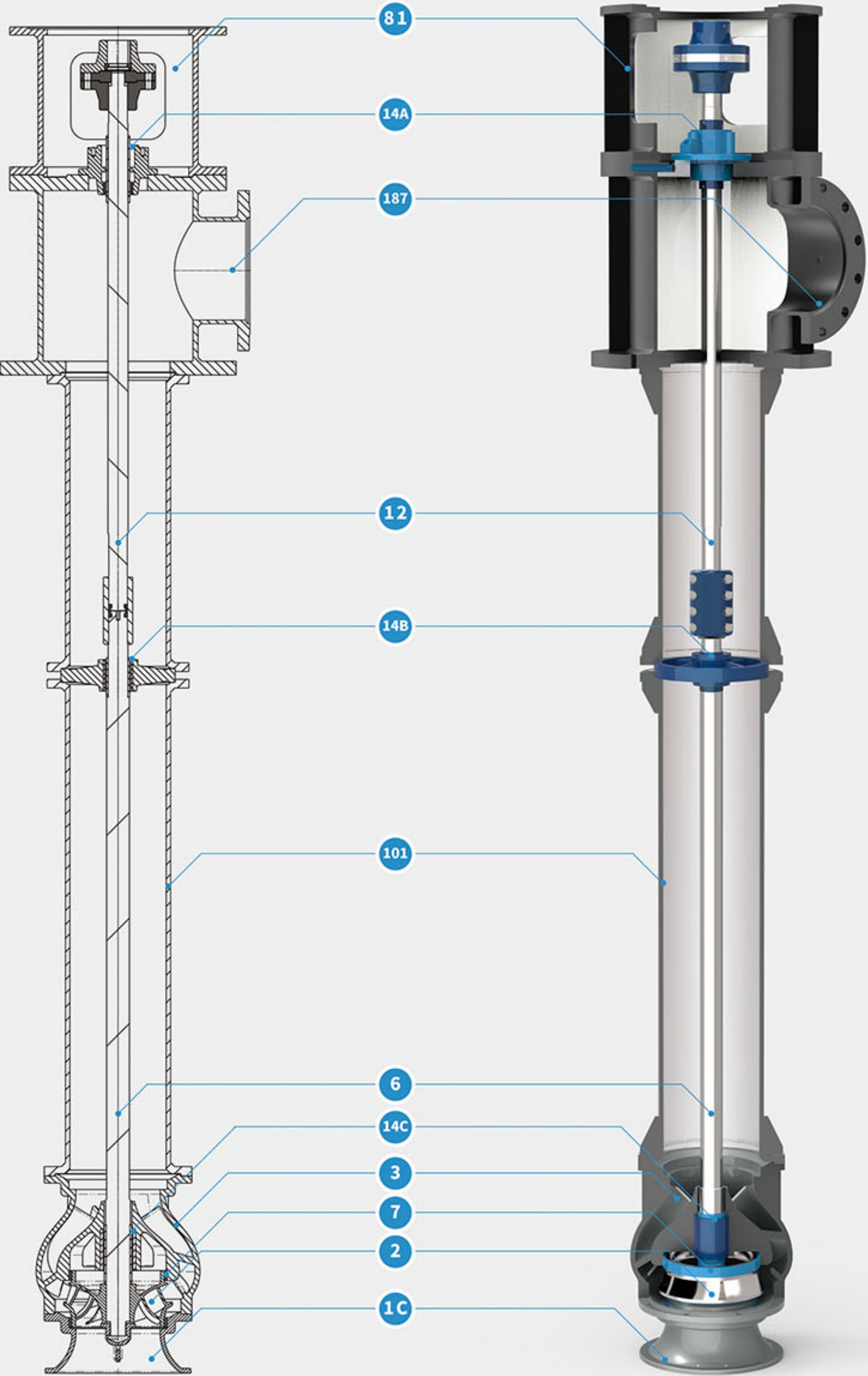
● Discharge head 20m or less

- semi-open impeller



Model. VM/VMS

● Parts List and Materials



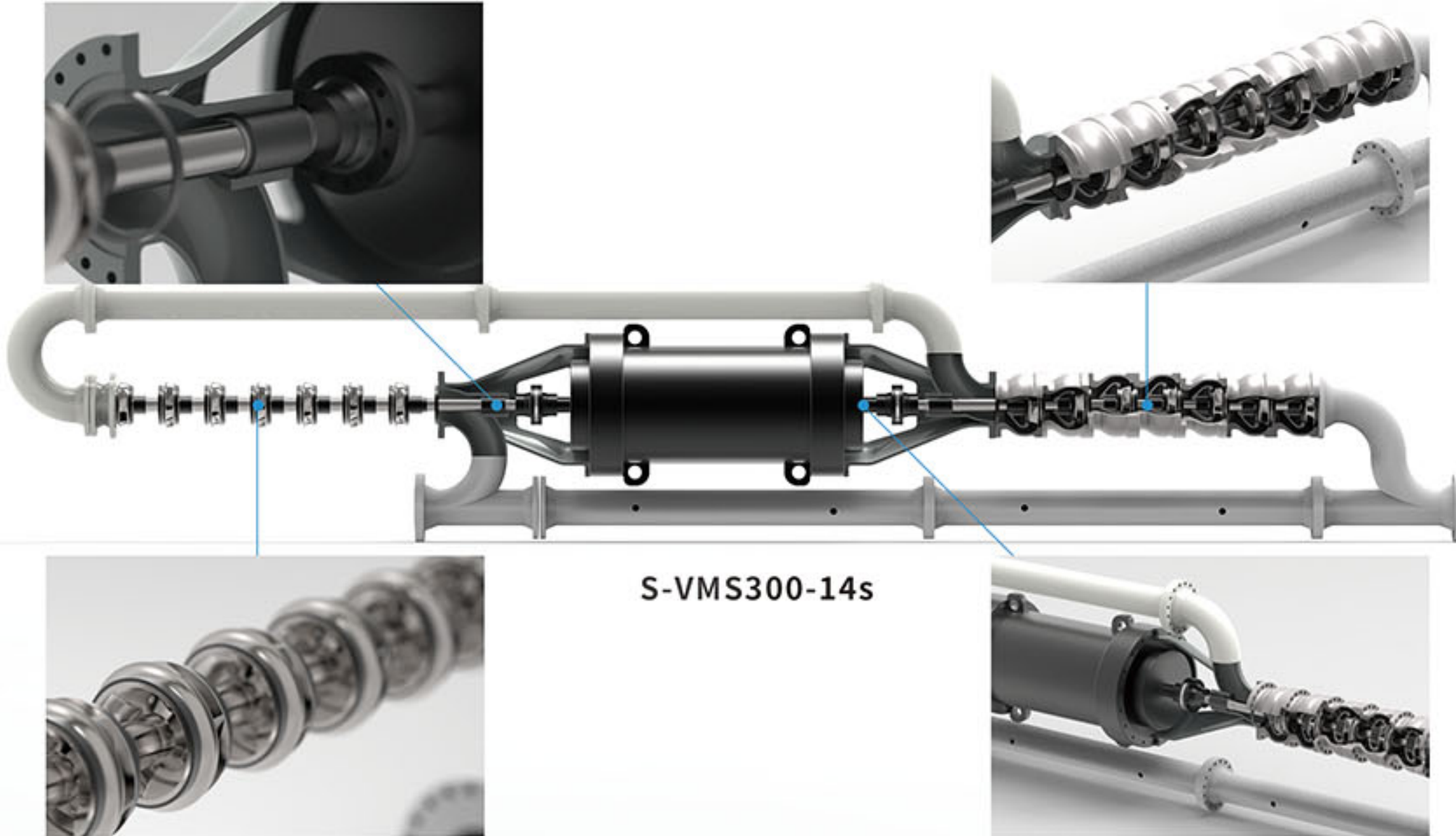
Model. VM/VMS

● Parts List

| No  | Name of part        | Material |        |
|-----|---------------------|----------|--------|
| 1C  | Suction Casing      | GC200    |        |
| 2   | Impeller            | GC200    | BC6    |
| 3   | Bowl                | GC200    |        |
| 6   | Pump Shaft          | SM45C    | STS304 |
| 7   | Casing Ring         | BC6      |        |
| 10  | Head Shaft          | SM45C    | STS304 |
| 12  | Line Shaft          | SM45C    | STS304 |
| 14A | Packing Sleeve      | STS304   |        |
| 14B | Retainer Sleeve     | STS304   |        |
| 14C | Impeller Sleeve     | STS304   |        |
| 37  | Bear. Housing Cover | GC200    |        |
| 39  | Bearing Holder      | GC200    |        |
| 72  | Thrust Bearing      | STEEL    |        |
| 81  | Driver Pedestal     | SPPS38   |        |
| 99  | Bearing Housing     | GC200    |        |
| 101 | Column Pipe         | SPPS38   |        |
| 129 | Baseplate           | SS400    |        |
| 187 | Discharge Head      | SPPS38   | GC200  |
| 209 | Strainer            | SS400    |        |

Note: \*. Other Materials are available on request

● Special Pumps



S-VMS300-14s