

|                                                                                  |                                                   |              |                        |
|----------------------------------------------------------------------------------|---------------------------------------------------|--------------|------------------------|
|  | <b>Product Information</b><br><br><b>LVR20-12</b> | Manufacturer | LEO                    |
|                                                                                  |                                                   | Address      | China,Zhejiang,Wenling |
|                                                                                  |                                                   | Contact      | 0576-89988888          |
|                                                                                  |                                                   | Date         | 2023/10/17             |
| <b>Project Name</b>                                                              |                                                   | Client Name  | Spaceport              |
|                                                                                  |                                                   | Client Addr. | Куйбышева 95           |
| <b>Item NO</b>                                                                   |                                                   | Contacts     |                        |
|                                                                                  |                                                   | Contact      |                        |

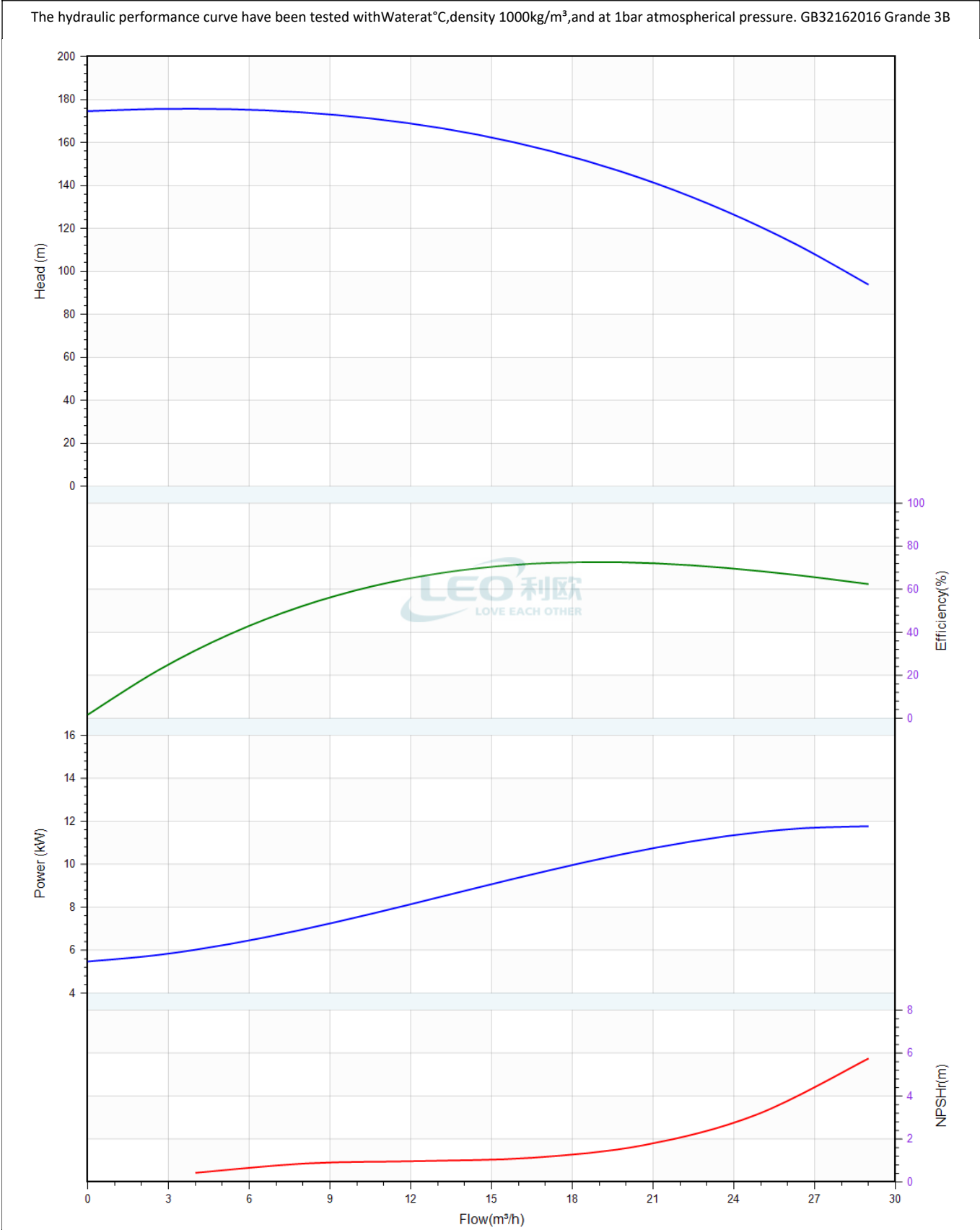
|                                                                                   |                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
|-----------------------------------------------------------------------------------|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Part NO.                                                                          | 50005538                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Product Picture                                                                   |                           | Note                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |
|  |                           | <p>LVR series verrtical multistage centrifugal pump is applicable to transfer liquids without solid particles&lt;0.2mm and fiberslow viscositynon-inflammable non-explosive and not easy vaporization. Widely used in high-rise building water supply and drainageWater filtration and transportation, pipeline pressurization. High pressure flushing and cleaning system. Boiler feed water, cooling water circulation, water treatment system and other equipment supporting system. Ultrafiltration system, reverse osmosis system, distillation system, separator, swimming pool and other water treatment systems. Irrigation and drip irrigation systems in agriculture. food and beverage and fire fighting systems.</p> |  |
| <b>Nameplate parameters</b>                                                       |                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| flow                                                                              | 20 m³/h                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| head                                                                              | 144 m                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| speed                                                                             | 2900 rpm                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| number of stages                                                                  | 12                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| <b>Technical</b>                                                                  |                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Flow range (m³/h)                                                                 | 10.5-29m3/h               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Curve tolerance                                                                   | ISO 9906 Annex A          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Head range (m)                                                                    |                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| <b>Material</b>                                                                   |                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Impeller                                                                          | AISI 304                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Diffuser                                                                          | AISI 304                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Pump shaft                                                                        | AISI 304                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Pump flange                                                                       | 0                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Motor base                                                                        | 0                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Coupling                                                                          | ferrous powder metallurgy |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Pump barrel                                                                       | AISI 304                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| <b>Working conditions</b>                                                         |                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Medium temperature (°C)                                                           | -20°C ~ +120°C            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Max. ambient temperature (°C)                                                     | +40°C                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Pumped medium                                                                     | Clean water               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Working pressure                                                                  | 25bar                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Maximum inlet pressure                                                            | 10bar                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| <b>Installation</b>                                                               |                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Connection method                                                                 | DIN flange                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Inlet / outlet dia.                                                               | DN50                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| <b>Motor</b>                                                                      |                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Motor phase                                                                       | Three phase               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Protection class                                                                  | IP55                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Motor poles                                                                       | 2                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Insulation class                                                                  | F                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Motor power (KW)                                                                  | 15kW                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Motor model                                                                       | YX3-160M2-2               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Frequency                                                                         | 50Hz                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Rated voltage (V)                                                                 | 380V                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |

|                                                                                  |                                                   |              |                        |
|----------------------------------------------------------------------------------|---------------------------------------------------|--------------|------------------------|
|  | <b>Product Information</b><br><br><b>LVR20-12</b> | Manufacturer | LEO                    |
|                                                                                  |                                                   | Address      | China,Zhejiang,Wenling |
|                                                                                  |                                                   | Contact      | 0576-89988888          |
|                                                                                  |                                                   | Date         | 2023/10/17             |
| <b>Project Name</b>                                                              |                                                   | Client Name  | Spaceport              |
|                                                                                  |                                                   | Client Addr. | Куйбышева 95           |
| <b>Item NO</b>                                                                   |                                                   | Contacts     |                        |
|                                                                                  |                                                   | Contact      |                        |

|                         |                |
|-------------------------|----------------|
| Rated current (A)       | 28.8A          |
| Efficiency class        | IE2\\IE3       |
| Power factor            | 0.89           |
| Efficiency (%)          |                |
| <b>Weight/Packaging</b> |                |
| Net weight (kg)         | 134.67         |
| Gross weight (kg)       | 154.27         |
| Package size            | 1550*395*580mm |

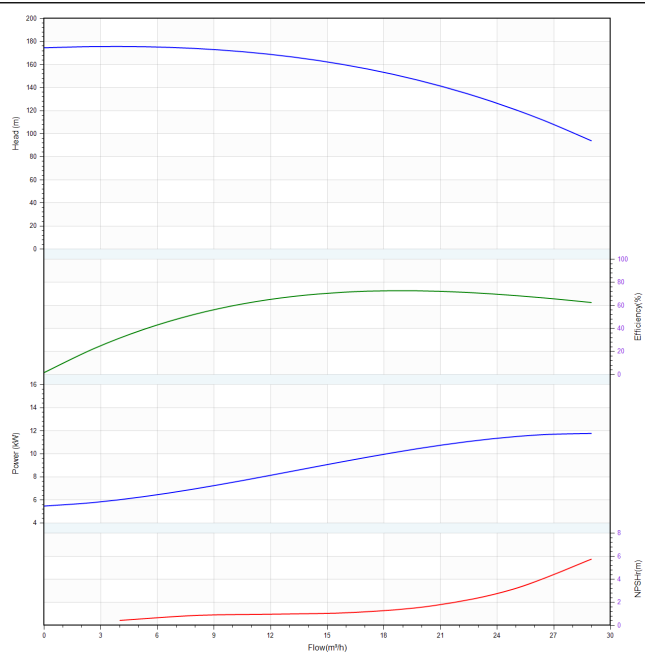


|                                                                                  |                                                 |              |                        |
|----------------------------------------------------------------------------------|-------------------------------------------------|--------------|------------------------|
|  | <b>Performance Curve</b><br><br><b>LVR20-12</b> | Manufacturer | LEO                    |
|                                                                                  |                                                 | Address      | China,Zhejiang,Wenling |
|                                                                                  |                                                 | Contact      | 0576-89988888          |
|                                                                                  |                                                 | Date         | 2023/10/17             |
| Project Name                                                                     |                                                 | Client Name  | Spaceport              |
|                                                                                  |                                                 | Client Addr. | Куйбышева 95           |
| Item NO                                                                          |                                                 | Contacts     |                        |
|                                                                                  |                                                 | Contact      |                        |

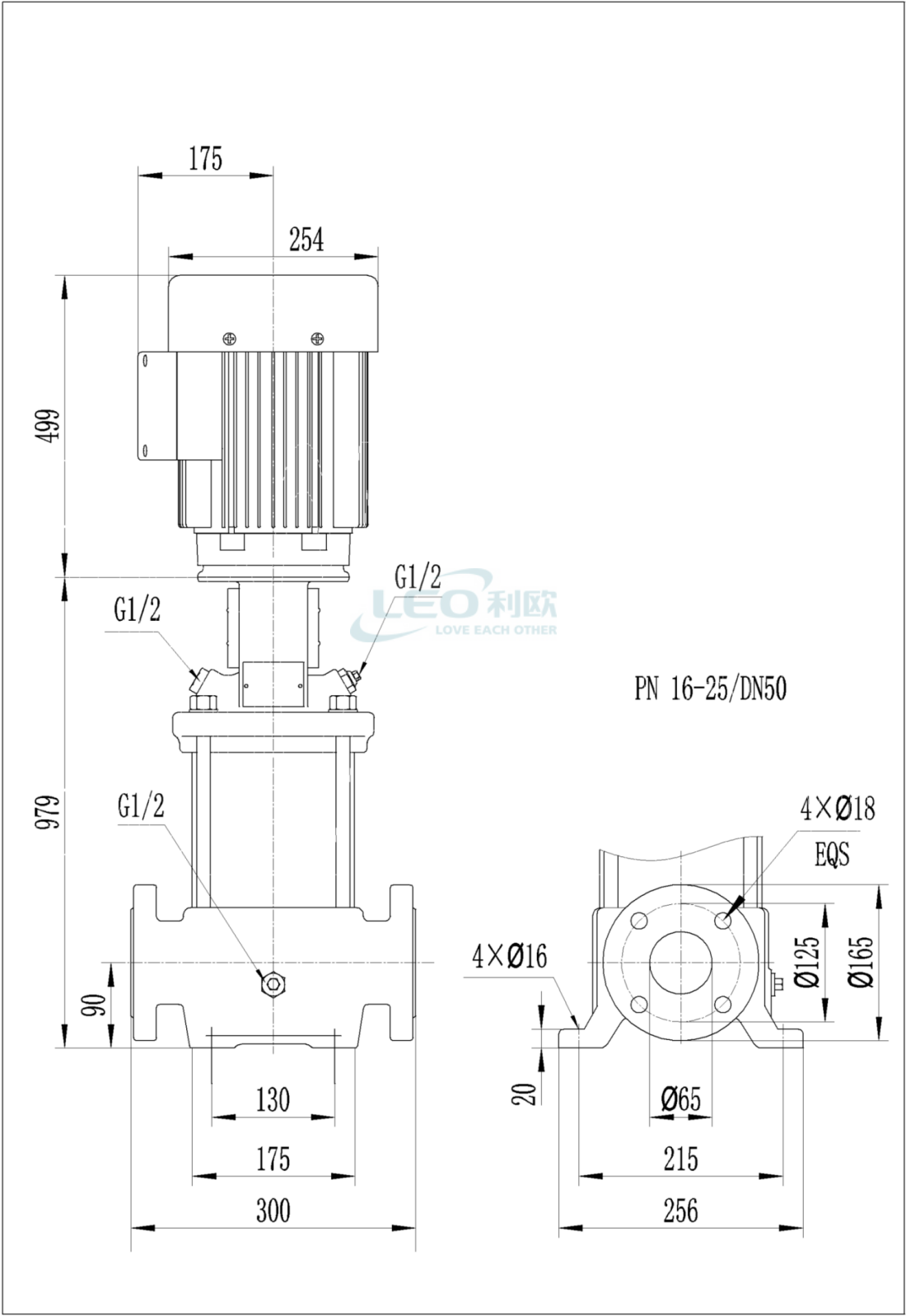


|                                                                                  |                                                         |              |                        |
|----------------------------------------------------------------------------------|---------------------------------------------------------|--------------|------------------------|
|  | <b>Pump Technical Parameters</b><br><br><b>LVR20-12</b> | Manufacturer | LEO                    |
|                                                                                  |                                                         | Address      | China,Zhejiang,Wenling |
|                                                                                  |                                                         | Contact      | 0576-89988888          |
|                                                                                  |                                                         | Date         | 2023/10/17             |
| Project Name                                                                     |                                                         | Client Name  | Spaceport              |
|                                                                                  |                                                         | Client Addr. | Куйбышева 95           |
| Item NO                                                                          |                                                         | Contacts     |                        |
|                                                                                  |                                                         | Contact      |                        |

| Rated parameters         |          |
|--------------------------|----------|
| Pump model               | LVR20-12 |
| Part NO.                 | 50005538 |
| Rated flow               | 20 m³/h  |
| Rated head               | 144 m    |
| Rated efficiency (%)     | 72       |
| Power (kW)               | 10.9     |
| Speed (rpm)              | 2900     |
| Medium                   |          |
| Pumped medium            | Water    |
| Working temperature (°C) | 20       |
| Medium density (kg/m³)   | 1000     |
| Viscosity (mm²/s)        | 1        |

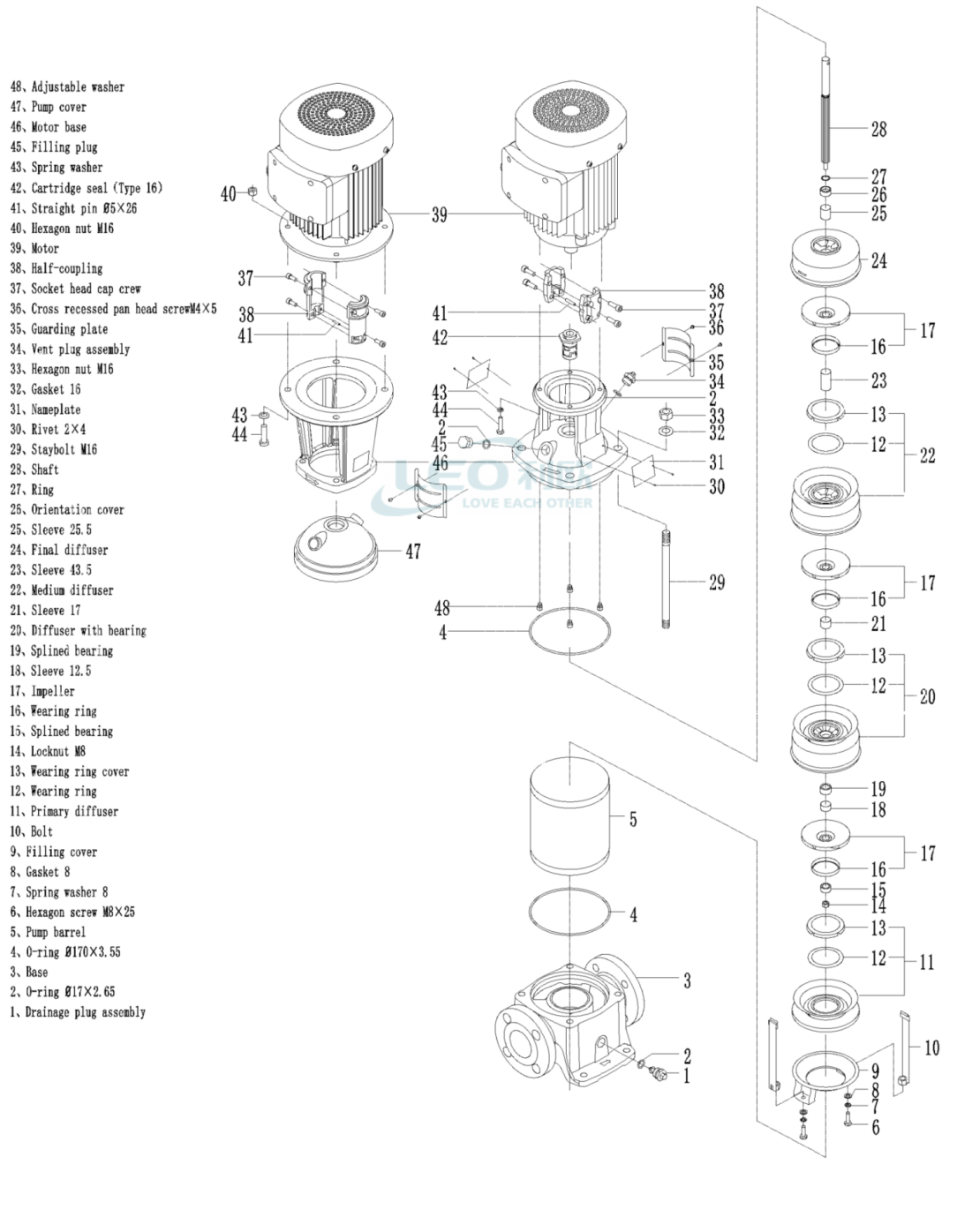


|                                                                                  |                                             |              |                        |
|----------------------------------------------------------------------------------|---------------------------------------------|--------------|------------------------|
|  | <b>Dimension Drawing</b><br><b>LVR20-12</b> | Manufacturer | LEO                    |
|                                                                                  |                                             | Address      | China,Zhejiang,Wenling |
|                                                                                  |                                             | Contact      | 0576-89988888          |
|                                                                                  |                                             | Date         | 2023/10/17             |
| Project Name                                                                     |                                             | Client Name  | Spaceport              |
| Item NO                                                                          |                                             | Client Addr. | Куйбышева 95           |
|                                                                                  |                                             | Contacts     |                        |
|                                                                                  |                                             | Contact      |                        |



|                                                                                  |                                                 |              |                        |
|----------------------------------------------------------------------------------|-------------------------------------------------|--------------|------------------------|
|  | <b>Structure picture</b><br><br><b>LVR20-12</b> | Manufacturer | LEO                    |
|                                                                                  |                                                 | Address      | China,Zhejiang,Wenling |
|                                                                                  |                                                 | Contact      | 0576-89988888          |
|                                                                                  |                                                 | Date         | 2023/10/17             |
| <b>Project Name</b>                                                              |                                                 | Client Name  | Spaceport              |
|                                                                                  |                                                 | Client Addr. | Куйбышева 95           |
| <b>Item NO</b>                                                                   |                                                 | Contacts     |                        |
|                                                                                  |                                                 | Contact      |                        |

## LVR15, 20



|                                                                                  |                                            |              |                        |
|----------------------------------------------------------------------------------|--------------------------------------------|--------------|------------------------|
|  | <b>Physical picture</b><br><b>LVR20-12</b> | Manufacturer | LEO                    |
|                                                                                  |                                            | Address      | China,Zhejiang,Wenling |
|                                                                                  |                                            | Contact      | 0576-89988888          |
|                                                                                  |                                            | Date         | 2023/10/17             |
| <b>Project Name</b>                                                              |                                            | Client Name  | Spaceport              |
|                                                                                  |                                            | Client Addr. | Куйбышева 95           |
| <b>Item NO</b>                                                                   |                                            | Contacts     |                        |
|                                                                                  |                                            | Contact      |                        |

