# Technical Data

**Pump Name** 3LP4 40-200/1.1R

| | | | |
|---|---|---|---|
| Customer | Date 10.06.2024 | Company | |
| Contact | Item no. | Issued by | |
| Phone | Project | Phone | |
| E-mail | Project ID | E-mail | |

**Requested data**

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | Pump type | | CENTRIFUGAL PUMPS | Fluid | | Water |
| 2 | Number of pumps / Reserve | | 1 / 0 | Liquid temperature | °C | 20 |
| 3 | Flow | m³/h | | Kin. viscosity | cSt | 1.005 |
| 4 | Head | m | | Vapour pressure | kPa | 2.34 |
| 5 | Geodetic head | m | | PH value | | |
| 6 | Inlet pressure (pin) | kPa | 0 | Density | kg/m³ | 998.3 |
| 7 | Available system NPSH | | | Solids | Weight % | 0 |
| 8 | Ambient temperature | °C | 20 | | | |

**Pump**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 9 | Pump Name | | 3LP4 40-200/1.1R | Frequency | | Hz | 50 |
| 10 | Design | | CENTRIFUGAL PUMPS | Installation type | | | STANDARD |
| 11 | Manufacturer | | EBARA | Impeller Diameter | Max. | mm | 183 |
| 12 | Speed | rpm | 1400 | | Designed | mm | 183 |
| 13 | No. of Stage | | 1 | | Min. | mm | 183 |
| 14 | Connection Suction side | | DIN 2532 | Flow | Operating | m³/h | |
| 15 | Connection Discharge side | | DIN 2532 | | Max- | m³/h | 21 |
| 16 | Max Working Pressure | kPa | 1000 | | Min- | m³/h | 6 |
| 17 | Shut-off head | kPa | 113.59 | Head | Operating | m | |
| 18 | Total weight | kg | See the table of "Dimensions". | | - (Qmax.) | m | 7.8 |
| 19 | Shaft power | kW | | | - (Qmin.) | m | 11.2 |
| 20 | | | | Max. Shaft Power at max. impeller | | kW | 0.67 |
| 21 | Required pump NPSH | m | | Efficiency | | % | |

**Materials**

| | | | | |
|---|---|---|---|---|
| 22 | Impeller | AISI 316L | | |
| 23 | Casing | AISI 316L | | |
| 24 | Shaft | AISI 316L | | |
| 25 | | | | |
| 26 | | | | |
| 27 | | | | |

**Motor**

| | | | | | | |
|---|---|---|---|---|---|---|
| 28 | Manufacturer | | LAFERT | Insulation class | | F |
| 29 | Type | | TEFC_3P440-200/1.1R_230_Three Phase | Phases | | 3~ |
| 30 | Specific design | | IE3 / 50 Hz / Pole pairs 2 | Frame size | | 90 S |
| 31 | Rated power | kW | 1.1 | Weight | kg | |
| 32 | Number of poles | | 4 | Electric voltage | V | 230 |
| 33 | Speed | rpm | 1400 | Electric current | A | 4.3 |
| 34 | Degree of protection | | IP 55 | | | |
| 35 | | | | | | |

**Remarks**

EBARA

# Performance Curve

**Pump Name** 3LP4 40-200/1.1R

| | | |
|---|---|---|
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| Contact | Item no. | Issued by |
| Phone | Project | Phone |
| E-mail | Project ID | E-mail |

**Requested data**

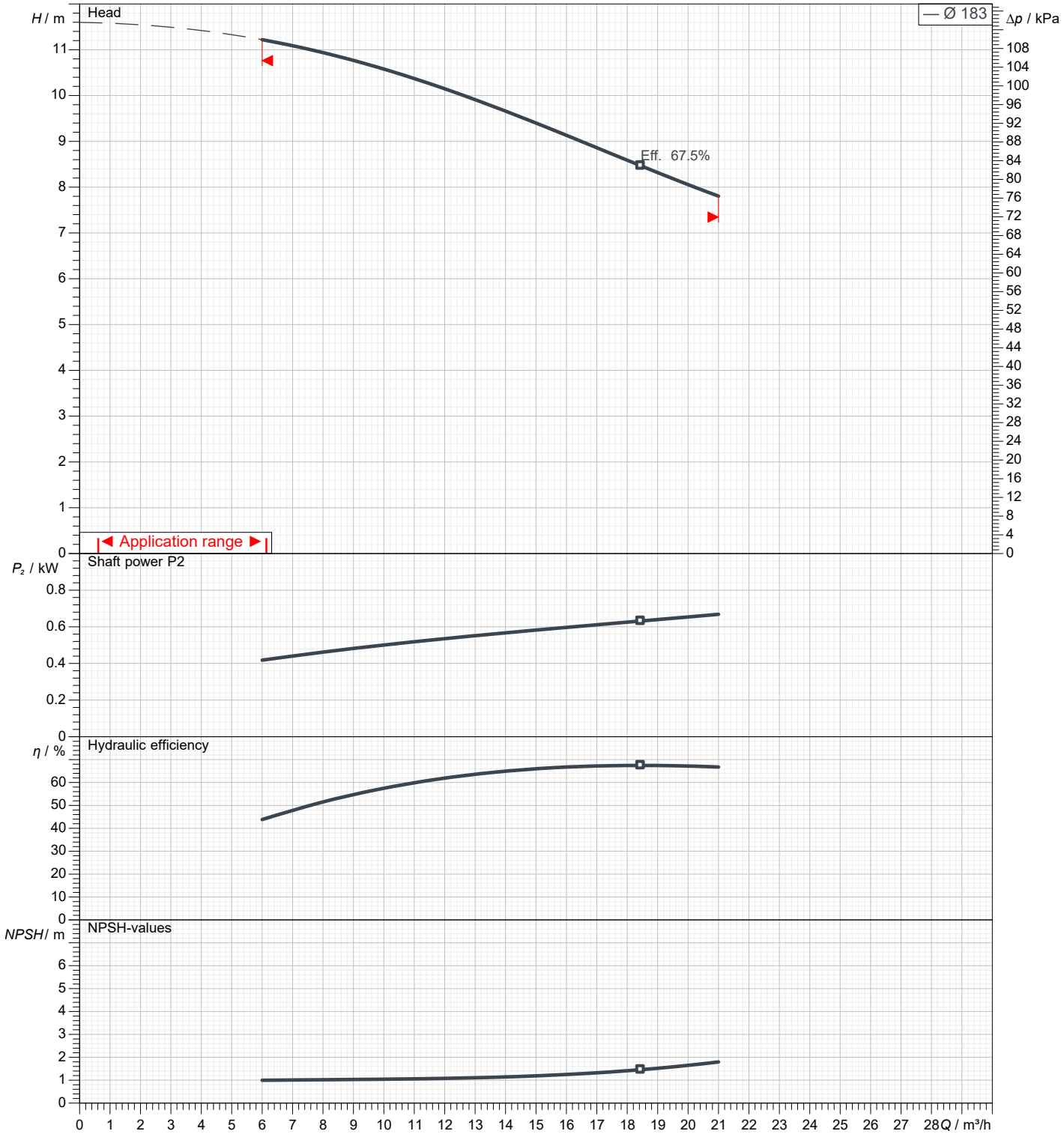
| | | | |
|---|---|---|---|
| 1 | Flow | m³/h | |
| 2 | Head | m | |
| 3 | Geodetic head | m | |

**Pump**

| | | | | | |
|---|---|---|---|---|---|
| Operating flow | m³/h | | Frequency | Hz | 50 |
| Operating head | m | | Number of poles | | 4 |
| Impeller diameter designed | mm | 183 | Speed | rpm | 1400 |

Test standard: ISO 9906:2012 - Grade3B

Water; 20°C; 998.3kg/m³; 1cSt



# Dimensions

**Pump Name** 3LP4 40-200/1.1R

| | | |
|---|---|---|
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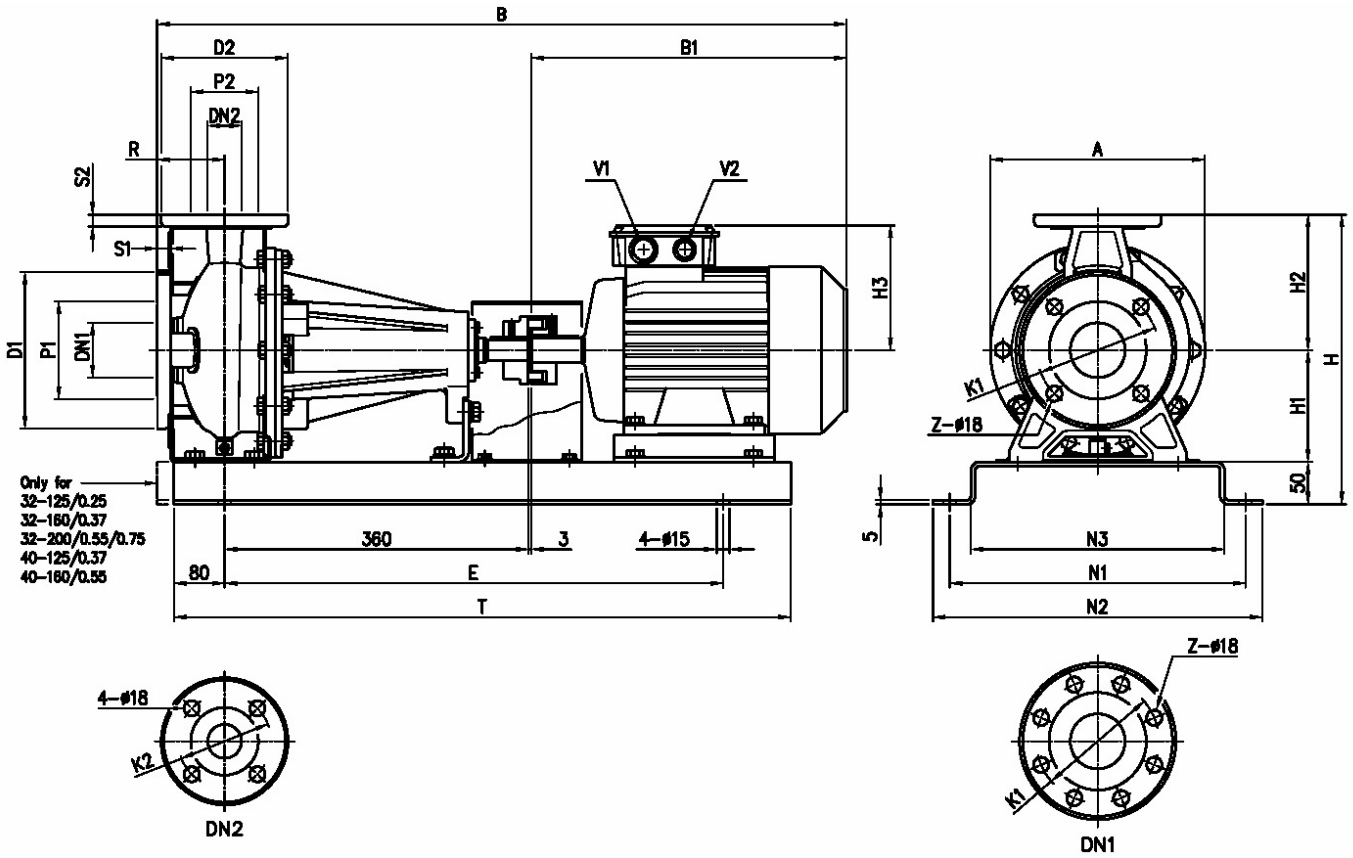
| Contact | Item no. | Issued by |
| Phone | Project | Phone |
| E-mail | Project ID | E-mail |




| Dimensions in | mm | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | A | 296 | H3 | 148 | | | | |
| 2 | B | 780 | N1 | 350 | | | | |
| 3 | B1 | 317 | N2 | 390 | | | | |
| 4 | Dia D1 | 185 | N3 | 300 | | | | |
| 5 | Dia D2 | 150 | R | 100 | | | | |
| 6 | Dia DN1 | 65 | S1 | 16 | | | | |
| 7 | Dia DN2 | 40 | S2 | 14 | | | | |
| 8 | Dia K1 | 145 | T | 750 | | | | |
| 9 | Dia K2 | 110 | V1 | M25X1,5 | | | | |
| 10 | Dia P1 | 115 | V2 | M20X1,5 | | | | |
| 11 | Dia P2 | 80 | Weight P&M | 59,3 kg | | | | |
| 12 | E | 590 | Z | 4 | | | | |
| 13 | H | 390 | | | | | | |
| 14 | H1 | 160 | | | | | | |
| 15 | H2 | 180 | | | | | | |

EBARA

# (1/3)
# Construction

**Pump Name** 3LP4 40-200/1.1R

| | | |
|---|---|---|
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| Phone | Project | Phone |
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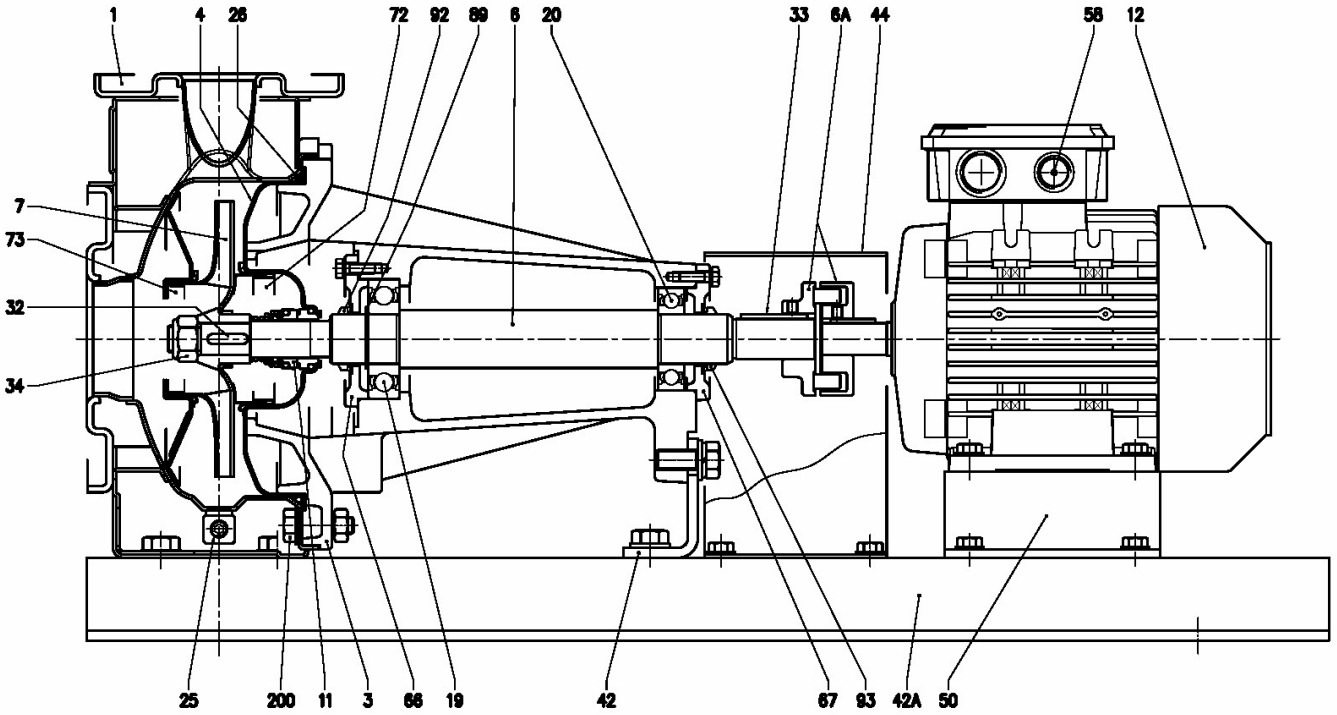

# (2/3)
# Construction

**Pump Name** 3LP4 40-200/1.1R

| | | |
|---|---|---|
| Customer | Date 10.06.2024 | Company |
| Contact | Item no. | Issued by |
| Phone | Project | Phone |
| E-mail | Project ID | E-mail |

| N° | PART NAME | | MATERIAL 3P4 | MATERIAL 3LP4 | DIMENSIONS | STANDARD | Q.TY |
|---|---|---|---|---|---|---|---|
| 001 | Casing | | EN 1.4301 (AISI 304) | EN 1.4404 (AISI 316L) | | | 1 |
| 003 | Support | | Cast iron EN-GJL-200-EN 1561 | | | | 1 |
| 004 | Casing cover | | EN 1.4301 (AISI 304) | EN 1.4404 (AISI 316L) | | | 1 |
| 006 | Shaft - Part in contact with liquid | | EN 1.4301 (AISI 304) | EN 1.4404 (AISI 316L) | | | 1 |
| 006 A | Flexible coupling | | Cast iron EN-GJL-250-EN 1561 | | | | 1 |
| 007 | Impeller | 32-40-50 | EN 1.4301 (AISI 304) | EN 1.4404 (AISI 316L) | | | 1 |
| | | 65-125/160/200 | CF8M - EN 1.4408 (AISI 316) | | | | |
| 011 | Mechanical seal | [3] | Carbon/Ceramic/NBR | SiC/SiC/FPM | | | 1 |
| 012 | Motor | | - | | | | 1 |
| 019 | Bearing | | - | | | | 1 |
| 020 | Bearing | | - | | | | 1 |
| 025 | Draing plug | | EN 1.4401 (AISI 316) / PTFE | | R 1/8" L=8 | DIN 906 | 1 |
| 026 | "O" ring | 32-125, 40-125 | NBR [4] | FPM | 158.11x5.34 | OR 6625 | 1 |
| | | 32-160, 40-160, 50-125, 65-125 | | | 183.52x5.34 | OR 6720 | |
| | | 32-200, 40-200, 50-160, 50-200, 65-160, 65-200 | | | 227.96x5.34 | OR 6895 | |
| 032 | Key | | EN 1.4401 (AISI 316) | | 6x6x25 | UNI 6604 | 1 |
| 033 | Key | | C 40 | | 8x7x40 | UNI 6604 | 1 |
| 034 | Impeller nut | Other model | EN 1.4301 (AISI 304) | EN 1.4404 (AISI 316L) | M16x1.5 | UNI 7474 | 1 |
| | | 50-200/2.2 | | | M18x1.5 | | |
| 042 | Pump support | | Galvanized steel | | | EBARA DRAWING | 1 |
| 042 A | Base | | Galvanized steel | | | | 1 |
| 044 | Protection | | Galvanized steel | | | | 1 |
| 050 | Foot | | Galvanized steel | | | | 1 |
| 058 | Fasting nut | | - | | | | 1 |
| 066 | Impeller side bearing cover | | Cast iron EN-GJL-200-EN 1561 | | | | 1 |
| 067 | Motor side bearing cover | | Cast iron EN-GJL-200-EN 1561 | | | | 1 |
| 072 | Casing ring (not for 65 version) [1] | | EN 1.4301 (AISI 304) | EN 1.4404 (AISI 316L) | | | 1 |
| 073 | Casing ring (not for 65 version) | | EN 1.4301 (AISI 304) | EN 1.4404 (AISI 316L) | | | 1 |
| 089 | Snap ring | 32-125, 32-160, 40-125, 50-125 | Carbon tool steel TC 80 | | Ø30 | UNI 7435 | 1 |
| | | Other model | | | Ø40 | | |
| 092 | "V" ring | | - | | VS - 0030 | | 1 |
| 093 | "V" ring | | - | | VS - 0030 | | 1 |
| 200 | Screw | 32-125, 40-125 | Stainless steel A2 70 class ISO 3506/1 | | M 8x30 | UNI 5739 | 8 |
| | | 40-160, 40-200, 50-125, 50-160, 50-200, 65-125, 65-160, 65-200 | | | M 10x35 | UNI 5739 | [2] |

[1] For version: 32-200, 40-200, 50-160, 50-200
[2] Quantity = 10 for 32-160, 40-160, 50-125, 65-125
Quantity = 12 for 32-200, 40-200, 50-160, 50-200, 65-160, 65-200
[3] Special version: see CONSTRUCTION 3
[4] FPM (H-HS-HW-HSW version)
EPDM (E version)

# (3/3)
# Construction

**Pump Name** 3LP4 40-200/1.1R

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|---|---|---|
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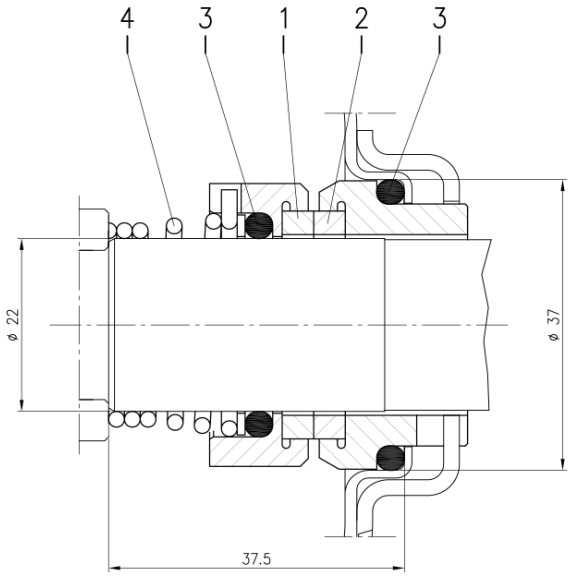


| Version | Pump type | Material 1 Stationary seal ring | 2 Rotary seal ring | 3 Rubber | 4 Frame + spring |
|---|---|---|---|---|---|
| L ø22 | 32-125/160/200<br>40-125/160/200<br>50-125/160/200<br>65-125/160/200<br>80-160 | SiC | SiC | FPM | EN 1.4571 (AISI 316Ti) |