# Technical data

**Pump name** 3LSF4 50-200/2.2

| | | |
|---|---|---|
| Customer | Date 19-May-2020 | Company |
| Contact | Item no. | Issued by |
| Phone | Project | Phone |
| E-mail | Project ID | E-mail |

**Requested data**

| | | | | | |
|---|---|---|---|---|---|
| 1 | Pump type | CENTRIFUGAL PUMPS | Fluid | | Water, clean |
| 2 | Number of pumps / Reserve | 1 / 0 | Liquid temperature | K | 293 |
| 3 | Flow l/min | 0 | Kin. viscosity | mm²/s | 1 |
| 4 | Head m | 0 | Vapour pressure | kPa | 2.2 |
| 5 | Geodetic head m | 0 | PH value | | 7 |
| 6 | Inlet pressure (pin) kPa | 10 | Density | kg/m³ | 1000 |
| 7 | Available system NPSH | 0 | Solids | Weight % | 0 |
| 8 | Ambient temperature K | 290 | | | |

**Pump**

| | | | | | | |
|---|---|---|---|---|---|---|
| 9 | Pump name | 3LSF4 50-200/2.2 | Frequency | | Hz | 50 |
| 10 | Design | CENTRIFUGAL PUMPS | Installation type | | | STANDARD |
| 11 | Manufacturer | EPE | Impeller Diameter | Max. | mm | 224 |
| 12 | Speed 1/min | 1400 | | Designed | mm | 224 |
| 13 | No. of Stage | 1 | | Min. | mm | 224 |
| 14 | Connection Suction side | DIN 2532 | Flow | Operating | l/min | |
| 15 | Connection Discharge side | DIN 2532 | | Max- | l/min | 650 |
| 16 | Max Working Pressure kPa | 1000 | | Min- | l/min | 200 |
| 17 | Shut-off head kPa | 174.32 | Head | Operating | m | |
| 18 | Total weight kg | See the table of "Dimensions". | | - (Qmax.) | m | 13.1 |
| 19 | Shaft power kW | | | - (Qmin.) | m | 17.5 |
| 20 | | | Max. Shaft Power at max. impeller | | kW | 2.03 |
| 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 | without motor | Insulation class | | |
| 29 | Type | without motor 3 | Phases | | 3~ |
| 30 | Specific design | without motor / 50 Hz / Pole pairs 2 | Frame size | | |
| 31 | Rated power kW | - | Weight | kg | 0 |
| 32 | Number of poles | 4 | Electric voltage | V | 0 |
| 33 | Speed 1/min | - | Electric current | A | 0 |
| 34 | Degree of protection | -- | | | |
| 35 | | | | | |

**Remarks**

EBARA

# Performance curve

**Pump name** 3LSF4 50-200/2.2

| | | |
|---|---|---|
| Customer | Date 19-May-2020 | Company |
| Contact | Item no. | Issued by |
| Phone | Project | Phone |
| E-mail | Project ID | E-mail |

**Requested data**

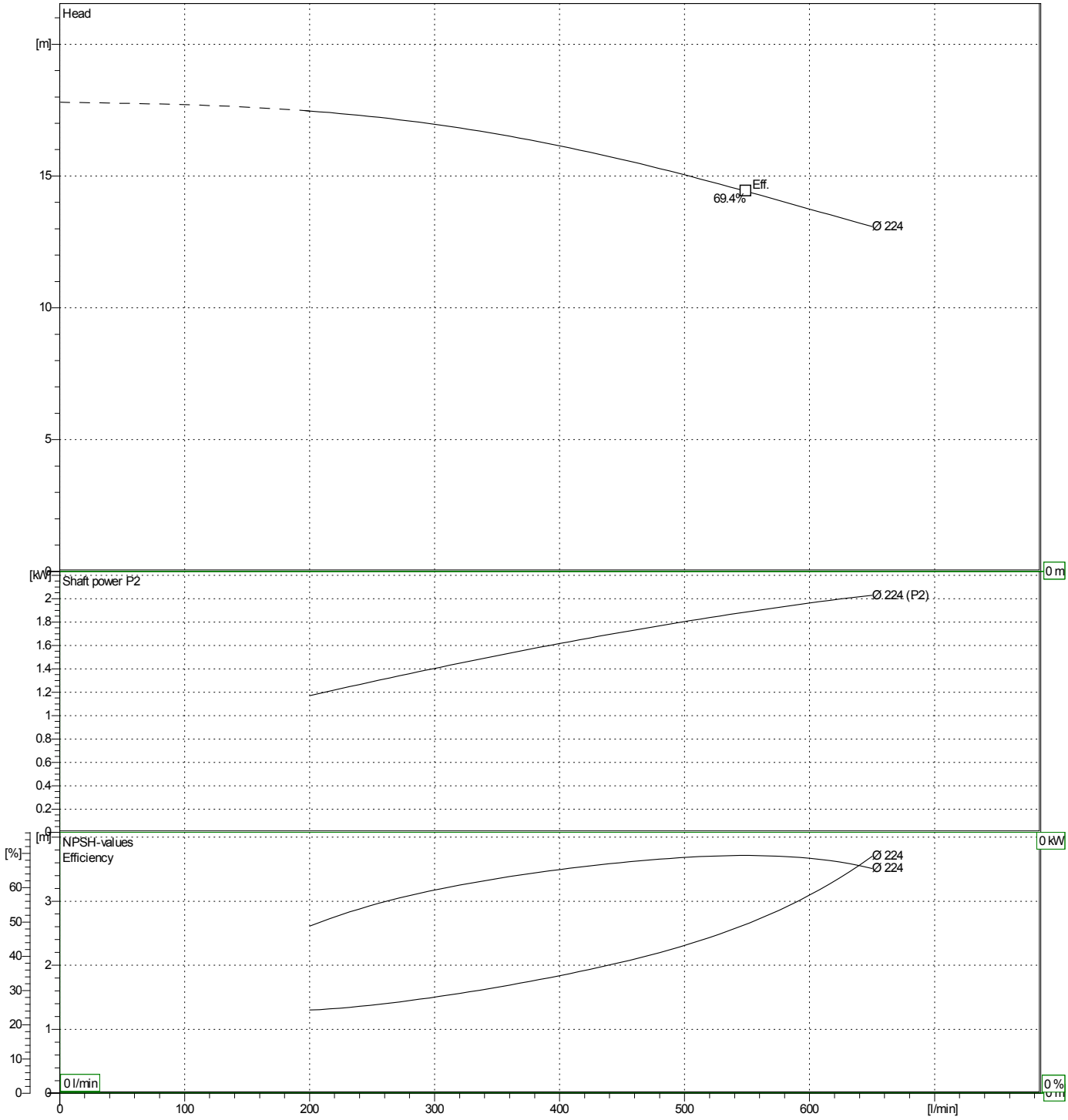
| | | | |
|---|---|---|---|
| 1 | Flow | l/min | 0 |
| 2 | Head | m | 0 |
| 3 | Geodetic head | m | 0 |

**Pump**

| | | | | | |
|---|---|---|---|---|---|
| Operating Flow | l/min | | Frequency | Hz | 50 |
| Operating Head | m | | Number of poles | | 4 |
| Impeller Diameter | Designed mm | 224 | Speed | 1/min | |

Test standard: ISO 9906:2012 - Grade3B

Water, clean [100%] ; 293K; 998.3kg/m³; 1mm²/s

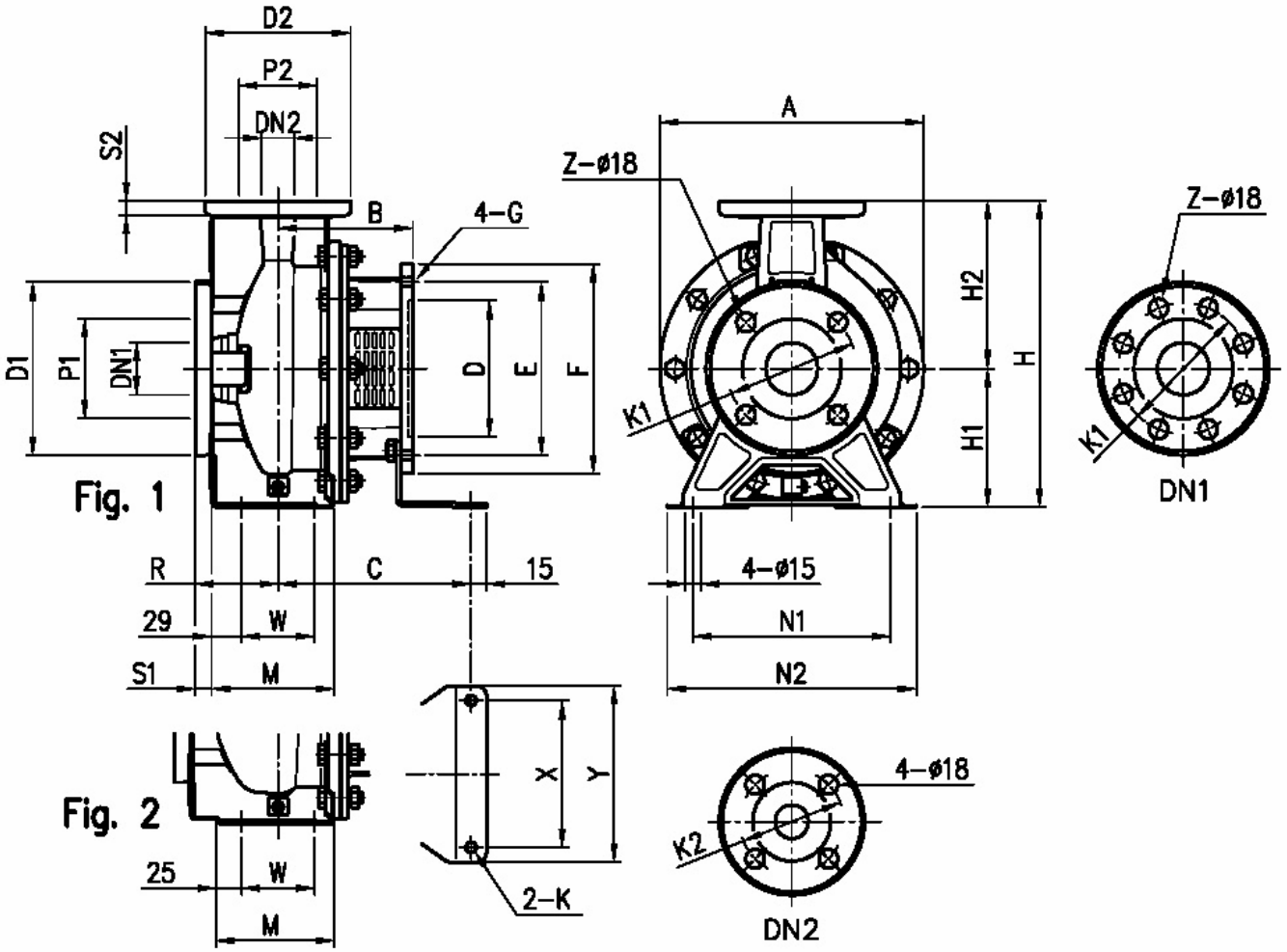



EBARA

# Dimensions

**Pump name** 3LSF4 50-200/2.2

| | | |
|---|---|---|
| Customer | Date 19-May-2020 | Company |
| Contact | Item no. | Issued by |
| Phone | Project | Phone |
| E-mail | Project ID | E-mail |



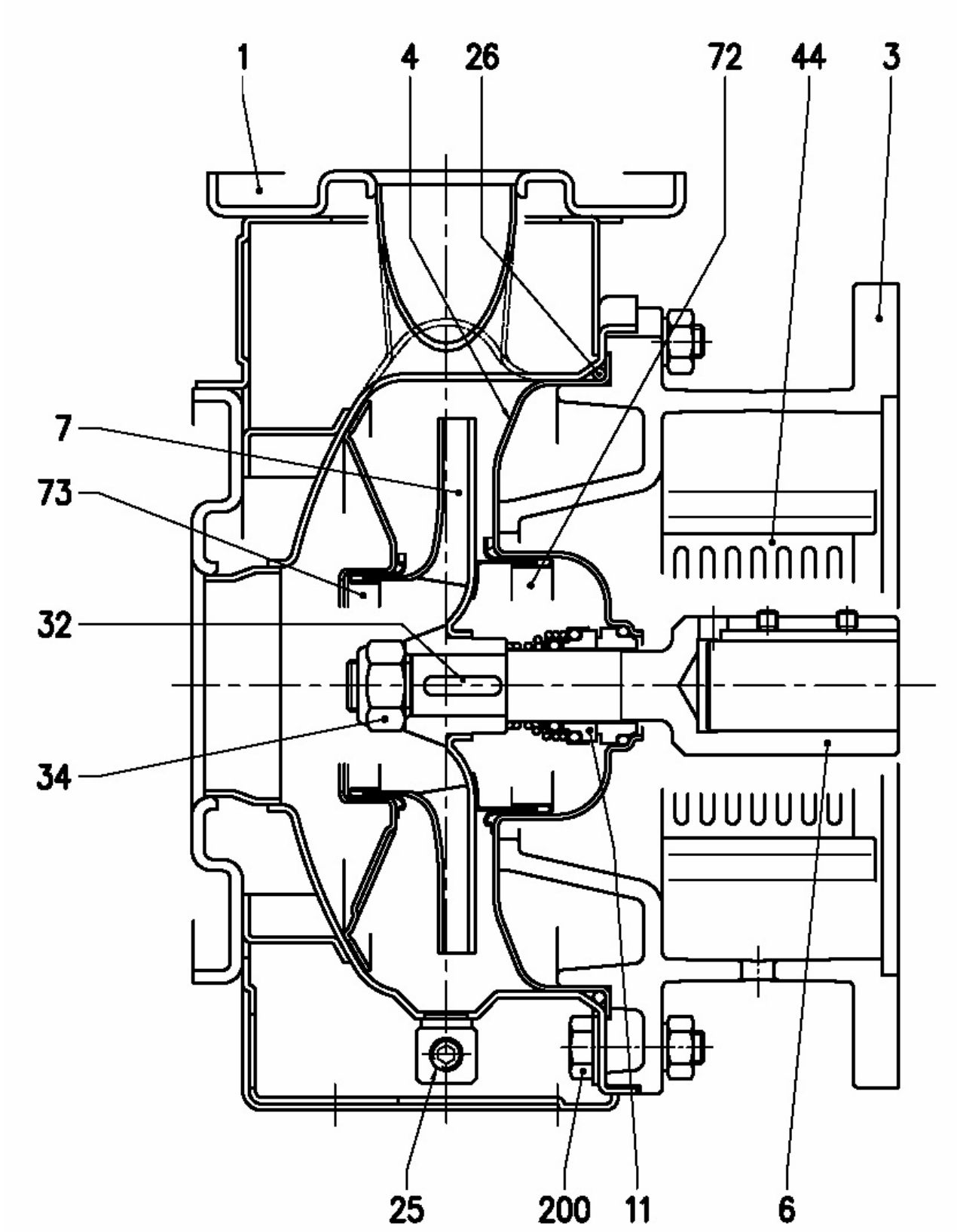

| Dimensions in mm | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | Dia D1 | 185 | N2 | 265 | | | | |
| 2 | Dia D2 | 165 | S1 | 16 | | | | |
| 3 | Dia DN1 | 65 | W | 70 | | | | |
| 4 | Dia DN2 | 50 | Weight PUMP | 29,5 kg | | | | |
| 5 | Dia K1 | 145 | Z | 4 | | | | |
| 6 | Dia K2 | 125 | | | | | | |
| 7 | Dia P1 | 115 | | | | | | |
| 8 | Dia P2 | 95 | | | | | | |
| 9 | H | 360 | | | | | | |
| 10 | H1 | 160 | | | | | | |
| 11 | H2 | 200 | | | | | | |
| 12 | M | 115 | | | | | | |
| 13 | N1 | 212 | | | | | | |

EBARA

# (1/3)
# Construction

**Pump name** 3LSF4 50-200/2.2

| | | |
|---|---|---|
| Customer | Date 19-May-2020 | Company |
| Contact | Item no. | Issued by |
| Phone | Project | Phone |
| E-mail | Project ID | E-mail |




EBARA

# (2/3)
# Construction

**Pump name** 3LSF4 50-200/2.2

| | | |
|---|---|---|
| Customer | Date 19-May -2020 | Company |
| Contact | Item no. | Issued by |
| Phone | Project | Phone |
| E-mail | Project ID | E-mail |

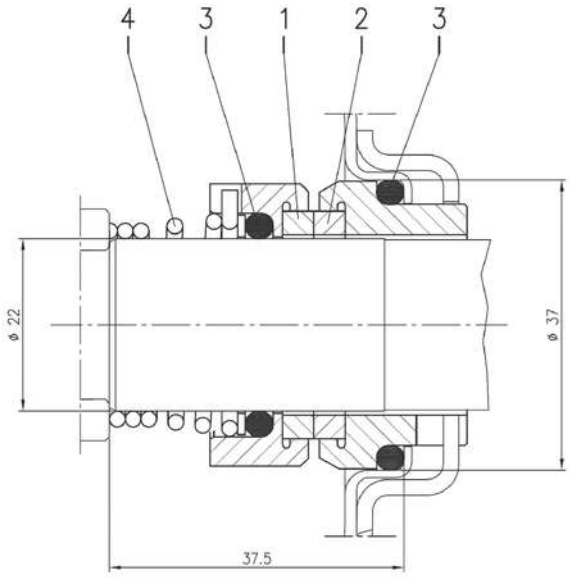
| N° | PART NAME | | MATERIAL 3SF4 | MATERIAL 3LSF4 | DIMENSIONS | STANDARD | Q.TY |
|---|---|---|---|---|---|---|---|
| 1 | Casing | | EN 1.4301 (AISI 304) | EN 1.4404 (AISI 316L) | | | 1 |
| 3 | Motor bracket | | Cast iron EN-G JL-200-EN 1561 | | | | 1 |
| 4 | Casing cover | | EN 1.4301 (AISI 304) | EN 1.4404 (AISI 316L) | | | 1 |
| 6 | Coupling - Part in contact with liquid | | EN 1.4301 (AISI 304) | EN 1.4404 (AISI 316L) | | | 1 |
| 7 | Impeller | 32, 40, 50 | EN 1.4301 (AISI 304) | EN 1.4404 (AISI 316L) | | | 1 |
| | | 65-125/160/200 | EN 1.4401 (AISI 316) | | | | |
| 11 | Mechanical seal [3] | | Carbon/Ceramic/NBR | SiC/SiC/FPM | | | 1 |
| 25 | Draing plug | | EN 1.4401 (AI SI 316) / PTFE | | R 1/8" L=8 | DIN 906 | 1 |
| 26 | "O" ring | 32-125, 40-125 | NBR [4] | FPM [3] | 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 | |
| 32 | Key | | EN 1.440 1 (AISI 316) | | 6x6x25 | UNI 6604 | 1 |
| 34 | 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 | | |
| 44 | Protection | | EN 1.430 1 (AISI 304) | | | EBARA DRAWING | 2 |
| 72 | Casing ring (not for 65 version) [1] | | EN 1.4301 (AISI 304) | EN 1.4404 (AISI 316L) | | | 1 |
| 73 | Casing ring (not for 65 version) | | EN 1.4301 (AISI 304) | EN 1.4404 (AISI 316L) | | | 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] Only for version 32-200, 40-200, 50-160, 50-200
[2] N° for 1 unit=10 for 32-160, 40-160, 50-125, 65-125
N° for 1 unit=12 for 32-200, 40-200, 50-160, 50-200, 65-160, 65-200
[3] Special version: see CONSTRUCTION 3
[4] FPM for H-HS-HW-HSW version
EPDM for E version , Q1AEGG, U3U3EGG, Q1Q1EGG, Q1U3EGG, U3CEGG

# (3/3)
# Construction

**Pump name** 3LSF4 50-200/2.2

| | | |
|---|---|---|
| Customer | Date 19-May-2020 | Company |
| Contact | Item no. | Issued by |
| Phone | Project | Phone |
| E-mail | Project ID | E-mail |




| 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) |