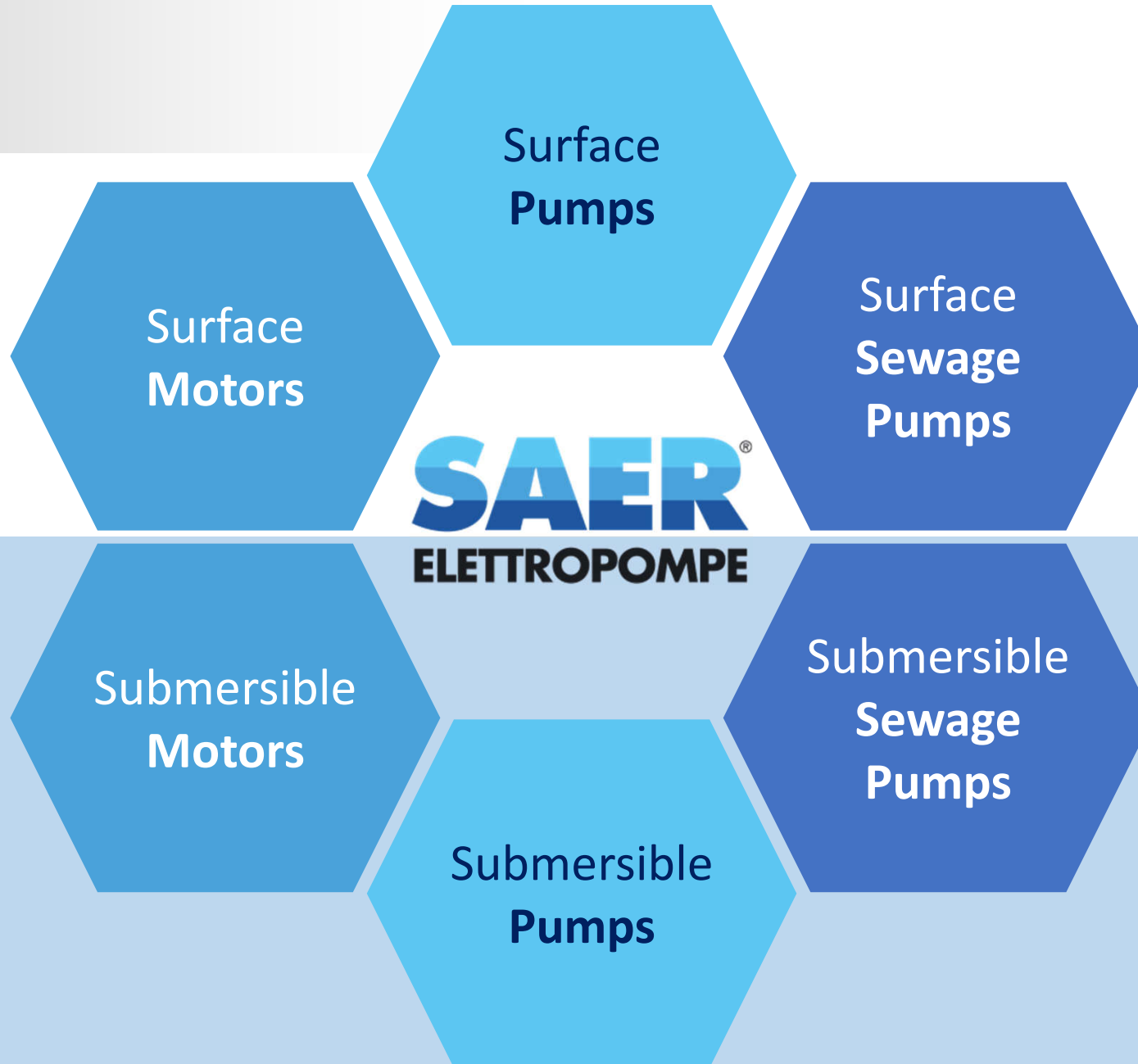


SAER[®]
ELETTROPOMPE

SAER

Production



HVAC
HVAC
HVAC



CIVIL
Civile
Civil



INDUSTRIAL
Industriale
Industrial



AGRICULTURE AND IRRIGATION
Agricoltura ed irrigazione
Agricultura y riego



UNDERGROUND EXTRACTION
Estrazione dal sottosuolo
Extracción del subsuelo



MINING
Minerario
Mineria



O&G
O&G
O&G



WATER TREATMENT
Trattamento acque
Tratamiento aguas

END SUCTION



MULTI-STAGE



IN-LINE



SPLIT CASE



DOMESTIC



MOTORS

Surface Motors

Surface Pumps

Surface Sewage Pumps



SEWAGE

SAER
ELETTROPOMPE



Submersible Motors

Submersible Pumps

Submersible Sewage Pumps



INVERTER
PANELS
CABLE
ACCESSORIES



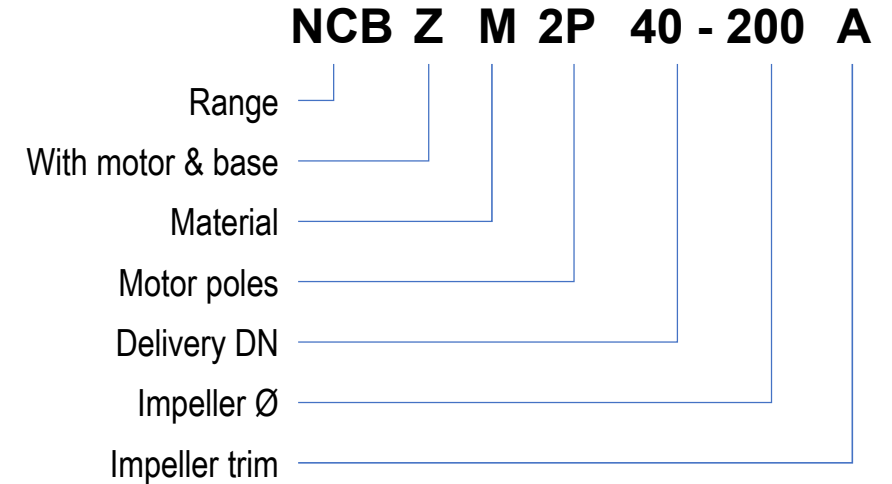
RADIAL

SEMI-AXIAL

END SUCTION

RANGE

- GENERAL PURPOSE PUMPS
- TOP PERFORMANCES
- LOW OPERATING COSTS



ADVANTAGES

- WIDE RANGE: > 600 models x 4 metallurgies (2400)
- COMPACT DESIGN - EN733 standard (NCBK n.a.)
- -15 +90 °C (+120 °C on request)
- BACK PULL-OUT system
- HIGH EFFICIENCY - ErP - IE2 and IE3
- HEAVY DUTY (oversized shaft and bearings)
- Large selection of SEALS and METALLURGIES

| Operation limits – rpm | 1000 | 1500 | 1800 | 3000 | 3600 |
|----------------------------|------|------|------|------|------|
| Max solids content - mg/l | 125 | 85 | 65 | 65 | 65 |
| Max solid diameter - mm | 3 | 3 | 3 | 3 | 3 |
| Max working t closed - min | 3 | 3 | 3 | 3 | 3 |

END SUCTION

RANGE

SAER[®]
ELETTROPOMPE

MG1



MG2



IR



NCB



NCBK



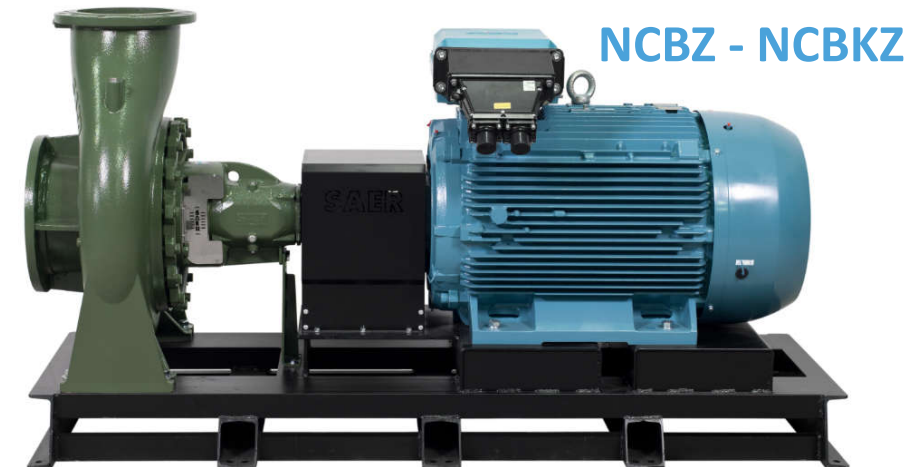
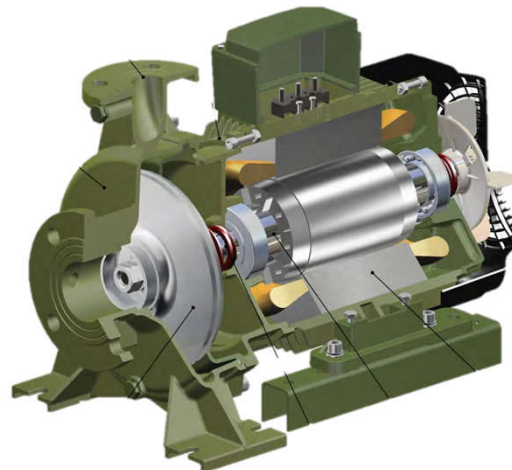
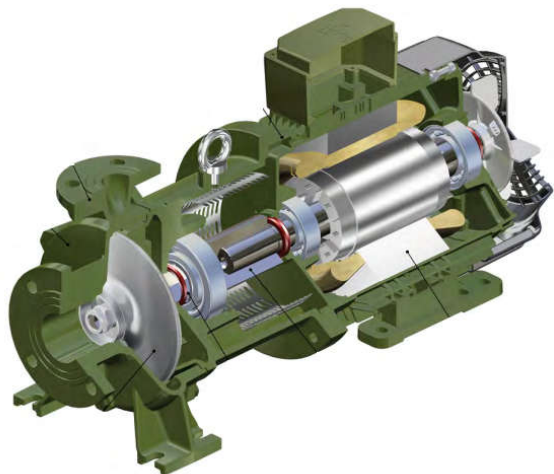
CLOSE-COUPLED

STUB-SHAFT

MONOBLOCK (SINGLE SHAFT)

LONG-COUPLED

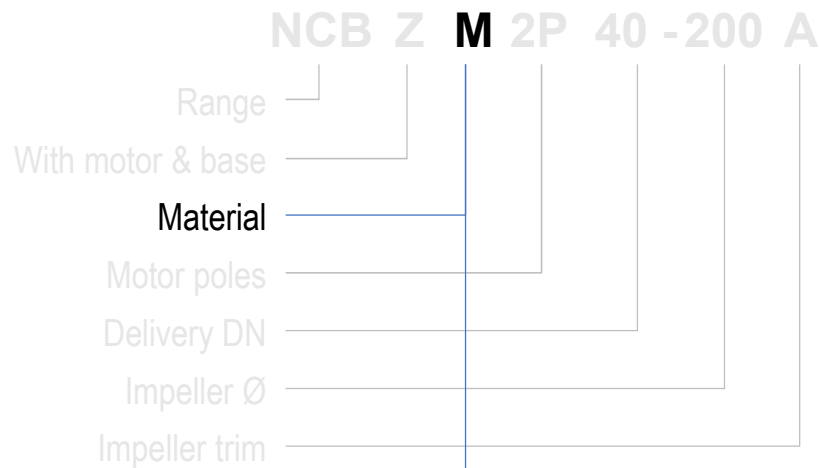
FLEXIBLE COUPLING



END SUCTION

OPTIONS

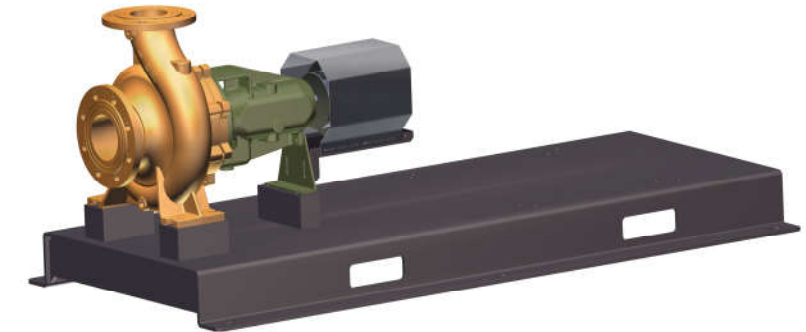
Material - metallurgies



SPACER Flexyble coupling



NCBW : option NO motor
Pump + Basement + Coupling



| | Material | Mechanical Seal | Elastomer | |
|-------------|------------------------------|-----------------|-----------|-------|
| - | Cast Iron | EN-GJL-250 | BVEGG | EPDM |
| "M" | Bronze | G-CuSn10 | Q1Q1VGG | VITON |
| "X" | Stainless Steel AISI 316 | 1.4408 | Q1Q1VGG | VITON |
| "XD" | Stainless Steel Super Duplex | 5A | Q1U3EG4G4 | EPDM |

END SUCTION

WIDE RANGE







| Range | Coupling | Connection | PN | Seal | STD Cast Iron | "X" AISI 316 | "M" Bronze | "XSD" Super Duplex |
|-------------|---------------|------------|-------|-----------------|-------------------|-------------------|-------------------|--------------------------|
| MG | Stub-Shaft | Flanged | 10/16 | Mech. | 70 <i>211</i> | 70 <i>211</i> | 70 <i>211</i> | 70 <i>211</i> |
| IR | Mono-Block | Flanged | 10/16 | Mech. | 170 <i>211</i> | 170 <i>211</i> | 170 <i>211</i> | 170 <i>211</i> |
| NCB | Flex Coupling | Flanged | 10/16 | Mech. | 206 | 206 | 206 | 206 |
| NCBK | Flex Coupling | Flanged | 16 | Soft Packing | 34 | 34 | 34 | 34 |

starting from 2021

Total end suction models: 2648

END SUCTION RANGE

DN

| | | | | | | | | | | | | |
|---|------|----|---------------|----|----|----|----|----|-----------|-----|-----------|-----|
|  | MG | 2P | | 32 | 40 | 50 | 65 | 80 | june 2020 | | | |
| | | 4P | december 2020 | | | | | | | | | |
|  | IR | 2P | | 32 | 40 | 50 | 65 | 80 | june 2020 | | | |
| | | 4P | | 32 | 40 | 50 | 65 | 80 | 100 | 125 | june 2020 | |
|  | NCB | 2P | | 32 | 40 | 50 | 65 | 80 | 100 | | | |
| | | 4P | | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | |
|  | NCBK | 4P | | | | | | | 150 | 200 | 250 | 300 |
| | | 6P | | | | | | | 150 | 200 | 250 | 300 |

kW

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|------|----|---------------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|----|----|----|----|-----------|----|-----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|
|  | MG | 2P | | | | | | | | 5,5 | 7,5 | 9,2 | 11 | | | 15 | | 18,5 | | 22 | | 30 | 37 | 45 | 55 | 75 | | | | | | | | | | | |
| | | 4P | december 2020 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | IR | 2P | | | 0,75 | 1,1 | 1,5 | | 2,2 | 3 | 4 | 5,5 | 7,5 | 9,2 | 11 | 12,5 | 13,5 | 15 | 17 | 18,5 | 20 | 22 | 25 | 30 | 37 | 45 | | | | | | | | | | | |
| | | 4P | | 0,37 | 0,55 | 0,75 | 1,1 | 1,5 | | 2,2 | 3 | 4 | 5,5 | 7,5 | 9,2 | 11 | | | 15 | 18,5 | | 22 | | 30 | june 2020 | | | | | | | | | | | | |
|  | NCB | 2P | | | 0,75 | 1,1 | 1,5 | | 2,2 | 3 | 4 | 5,5 | 7,5 | 9,2 | 11 | | | 15 | 18,5 | | 22 | | 30 | 37 | 45 | 55 | 75 | 90 | | | | | | | | | |
| | | 4P | | 0,37 | 0,55 | 0,75 | 1,1 | 1,5 | | 2,2 | 3 | 4 | 5,5 | 7,5 | 9,2 | 11 | | | 15 | 18,5 | | 22 | | 30 | 37 | 45 | 55 | 75 | 90 | | | | | | | | |
|  | NCBK | 4P | | | | | | | | | | | | 11 | | | | | | | | | | | 37 | 45 | 55 | 75 | 90 | 110 | 132 | 160 | 200 | 250 | 315 | 355 | 400 |
| | | 6P | | | | | | | | | | | | 11 | | 15 | 18,5 | | 22 | | 30 | 37 | 45 | 55 | 75 | 90 | 110 | | | | | | | | | | |



EN733



IR733



EN733



OVER EN733

MG

IR

NCB

NCBK

STUB SHAFT

MONO-BLOCK

BARE SHAFT / LONG COUPLED

PN

10 (PN16 on request)

16

Water Temp

-15° / +90°C (+120°C on request)

Q max - m³/h

50 / 60Hz

680 / 800

2000 / 1700

H max - m

50 / 60Hz

130 / 110

95 / 112

SEAL

standard

BVEGG

Packing Seal

option

Q1Q1VGG

BVEGG

Q1U3EG4G4

Q1U3EGG - Q1U3VGG

BEARINGS

standard

Grease

option

-

Oil Bath - on request

WEAR RING

option

-

On request

AISI 316

MATERIAL

standard

Cast Iron

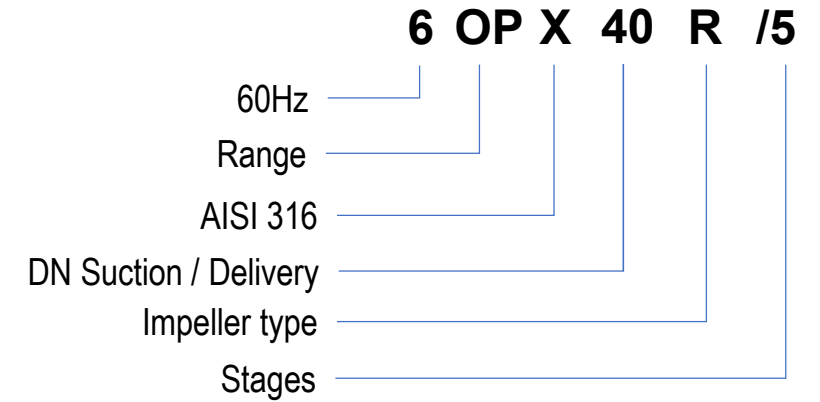
option

M - Bronze

X - AISI 316

XD - Super Duplex






- HIGH PRESSURE PUMPS
- PN10 – PN16
- LOW OPERATING COSTS



ADVANTAGES

- Compact design
- Mechanical seal EN 12756
- **Close-coupled**
- Threaded connections
- VFD versions

Horizontal MULTI-STAGE

| | | | | | | | | | | | | | | |
|---|-----------|--|------------|-------------|---|------------|-------------|---|------------|-------------|---|------------|-------------|---------------|
|  | |  | | |  | | |  | | |  | | | |
| | | OP (DN) | | | OP 32 - 40 | | | OP 50 | | | OP 65 | | | OP 100 |
| | | MONO-BLOCK | | | | | | | | | | | | |
| PN | | PN13 (T<45°C) PN6 (45°<T<90°C) | | | | | | PN16 (T<45°C) PN8 (45°<T<90°C) | | | | | | |
| Temp | | -15° / +90°C | | | | | | | | | | | | |
| Q max - m³/h | 50 / 60Hz | 18 / 16 | | | 24 / 27 | | | 40 / 48 | | | 110 / 110 | | | |
| H max - m | 50 / 60Hz | 100 / 80 | | | 128 / 108 | | | 160 / 150 | | | 130 / 150 | | | |
| Delivery | Thread | G 1" (OP32) - G1" 1/2 (OP40) | | | G 2" | | | G 2" | | | G 3" | | | |
| Suction | Thread | G 1" 1/4 (OP32) - G1" 1/2 (OP40) | | | G 2" | | | G 2" | | | G 4" | | | |
| SEAL | standard | BV1EGG | | | | | | | | | | | | |
| | option | | | | | | | | | | | | | |
| | | OP | OPX | OPTX | OP | OPX | OPTX | OP | OPX | OPTX | OP | OPX | OPTX | |
| MATERIAL | Sleeve | AISI 304 | AISI 316 | | AISI 304 | AISI 316 | - | AISI 304 | AISI 316 | | AISI 304 | AISI 316 | - | |
| | Impeller | AISI 304 | AISI 316 | | BRASS | AISI 316 | - | EN-GJL250 | AISI 316 | | BRASS | AISI 316 | - | |
| | Diffuser | AISI 304 | AISI 316 | | EN-GJL250 | AISI 316 | - | EN-GJL250 | AISI 316 | | EN-GJL250 | AISI 316 | - | |
| | Shaft | AISI 431 | | DUPLEX | AISI 431 | | - | AISI 431 | | DUPLEX | AISI 431 | | - | |
| | Wear ring | RESIN | BRONZE | | | | | | BRONZE | | | | | |
| | Suction | EN-GJL250 | | AISI 316 | EN-GJL250 | | - | EN-GJL250 | | AISI 316 | EN-GJL250 | | - | |
| | Discharge | EN-GJL250 | | AISI 316 | EN-GJL250 | | - | EN-GJL250 | | AISI 316 | EN-GJL250 | | - | |

MULTI-STAGE VERTICAL

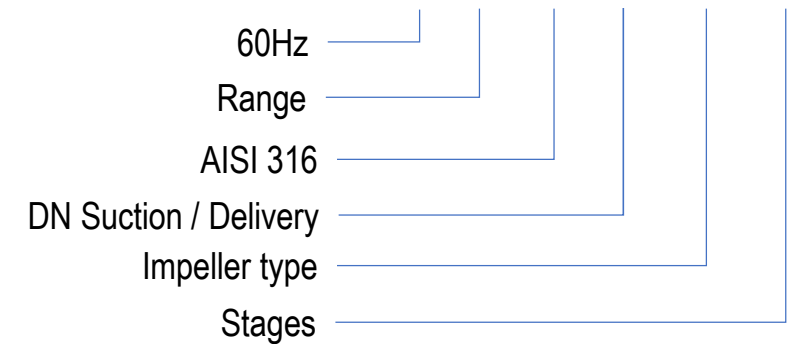
MKM – MK

SAER[®]
ELETTROPOMPE

- HIGH PRESSURE PUMPS
- PN16 – PN40
- LOW OPERATING COSTS



6 MK X 40 R /5



ADVANTAGES

- Compact design
- Mechanical seal EN 12756
- Double wear ring
- VFD versions
- Horizontal installation
- Over-sized shaft AISI431

MKM - MK

VERTICAL MULTI-STAGE

SAER[®]
ELETTROPOMPE

- 200 models
- DN 32, 40, 50, 65, 100
- 50 / 60Hz



MKM32



MKX32-I



MKX40



MK50



MK65



MK100

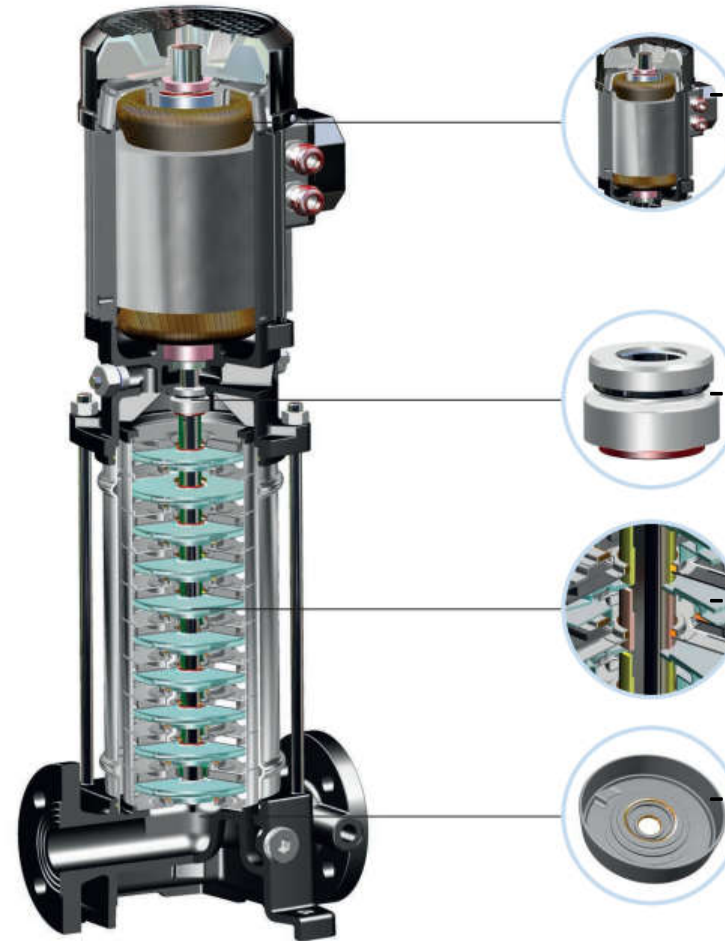


MKX100

MKM 32-40

VERTICAL MULTI-STAGE

- Mono-block pumps (single shaft)
- DN 32, 40
- Techno-polymer wear rings
- **AISI 304 hydraulics**



VFD Option

Normalized mechanical seal
UNI EN 12756

Wear proof bushings

Double wear rings

| MKM 32-40 | | |
|-----------------|--------------------------|---------------------------|
| 37 models | Q max | 15 m³/h |
| 2 poles | H max | 125 m |
| 3000 rpm | P₂ max | 4 kW |
| Type | Water Temp | Max Pressure |
| Circular flange | -15 ÷ +90 °C | 25 bar |
| | +90 ÷ 120 °C | 20 bar |
| Oval flange | -15 ÷ +90 °C | 16 bar |

Oval flange version includes threaded counter-flanges

MK 32-40

VERTICAL MULTI-STAGE

SAER[®]
ELETTROPOMPE

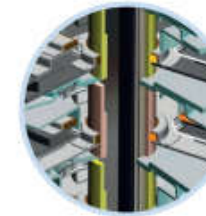
- Stub-shaft
- DN 32, 40
- Techno-polymer wear rings
- **AISI 304 hydraulics**



Thrust bearing



Normalized mechanical seal
UNI EN 12756



Wear proof bushings



Double wear rings

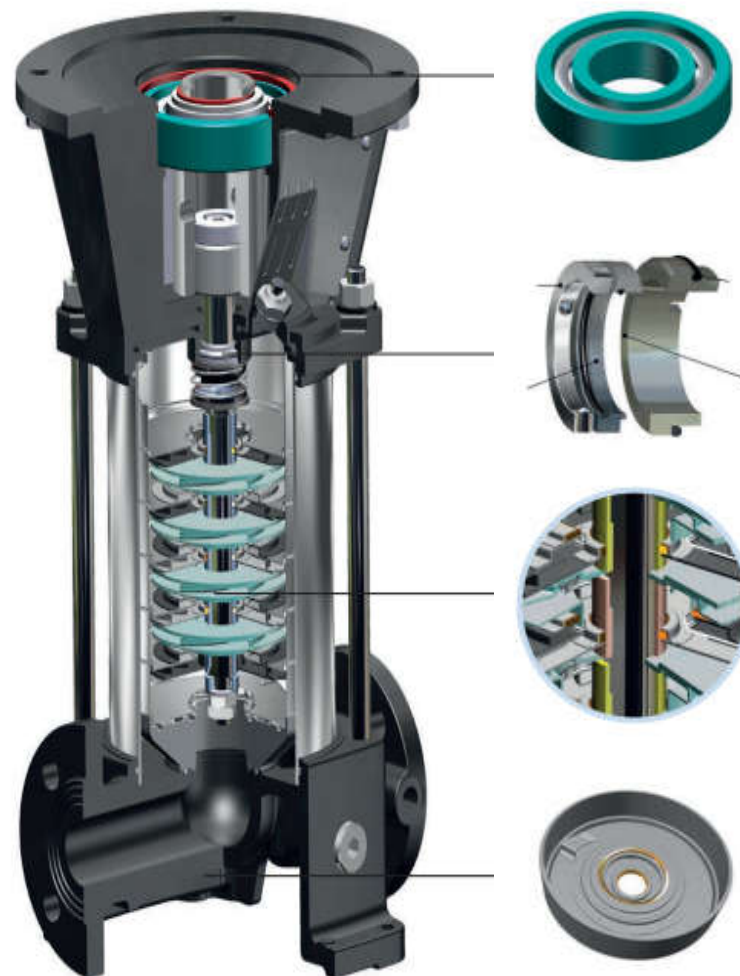
| MK 32-40 | | |
|-----------------|--------------------------|-----------------------------|
| 80 models | Q max | 15 m ³ /h |
| 2 poles | H max | 226 m |
| 3000 rpm | P₂ max | 9,2 kW |
| Type | Water Temp | Max Pressure |
| Circular flange | -15 ÷ +90 °C | 25 bar |
| | +90 ÷ 120 °C | 20 bar |
| Oval flange | -15 ÷ +90 °C | 16 bar |

Oval flange version includes threaded counter-flanges

MK 50-65-100

VERTICAL MULTI-STAGE

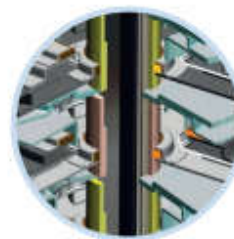
- Stub-shaft
- DN 32, 40
- Cast Iron impellers
- Cast Iron diffusers



Thrust bearing



Normalized mechanical seal
UNI EN 12756



Wear proof bushings



Double wear rings

| MK 50-65-100 | | |
|-----------------|--------------------------|----------------------------|
| 79 models | Q max | 110 m³/h |
| 2 poles | H max | 360 m |
| 3000 rpm | P₂ max | 55 kW |
| Type | Water Temp | Max Pressure |
| Circular flange | -15 ÷ +90 °C | 25 bar |
| | +90 ÷ 120 °C | 20 bar |
| Oval flange | -15 ÷ +90 °C | 16 bar |

In option threaded counter-flanges



Full AISI 316 version is available on:

MK32



Impellers
Precision casted
AISI 316

MK40



Diffusers
Precision casted
AISI 316

MK50



Outlet/Suction
Precision casted
AISI 316

MK65



Shaft
SS Duplex
1.4362

MK100









Mech. Seal
Q1U3VGG
or U3U3VGG

VERTICAL MULTI-STAGE

SAER[®]
ELETTROPOMPE

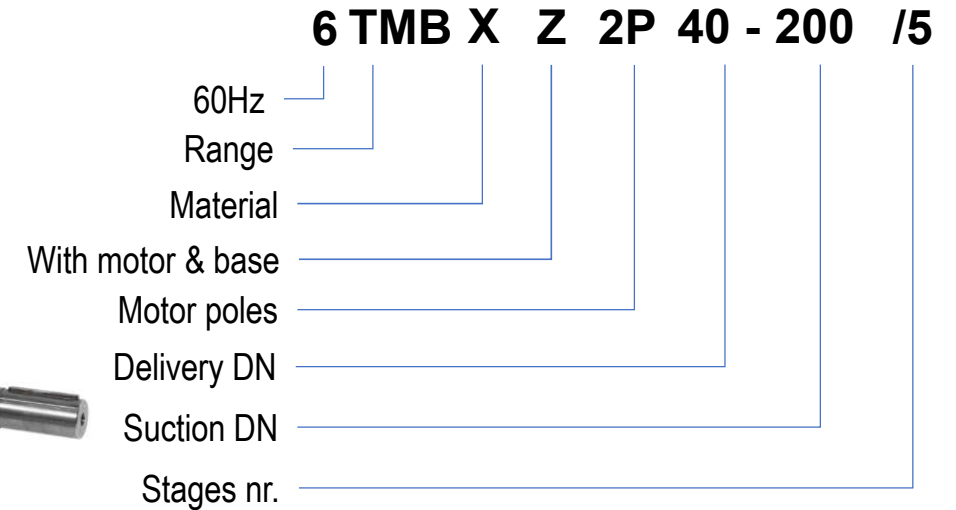


| MK (DN) | | MKM 32 - 40 | | MK 32 - 40 | | MK 50 - 65 | | MK 100 | |
|-----------------|-----------|---|--|---|---|---|------------|---|------------|
| | | MONO-BLOCK | | CLOSE-COUPLED STUB SHAFT | | | | | |
| Flange | |  |  |  |  |  | |  | |
| PN | | 16 | 25 | 16 | 25 | - | 25 - 40 | - | 40 |
| Temp | | -15° / +120°C | | | | | | | |
| Q max - m³/h | 50 / 60Hz | 13 / 17 | | 15 / 17 | | 40 / 45 | | 110 / 110 | |
| H max - m | 50 / 60Hz | 118 / 108 | | 235 / 230 | | 394 / 396 | | 329 / 375 | |
| SEAL | | BQ1EGG | | | | | | | |
| standard | | | | | | | | | |
| option | | BQ1EGG | | BQ1EGG | BQ1VGG | BQ1EGG | BQ1VGG | BQ1EGG | BQ1VGG |
| | | MKM | - | MK | MKX | MK | MKX | MK | MKX |
| MATERIAL | Sleeve | AISI 304 | - | AISI 304 | AISI 316 | AISI 304 | AISI 316 | AISI 304 | AISI 316 |
| | Impeller | AISI 304 | - | AISI 304 | AISI 316 | BRASS/G20Mn5 | AISI 316 | BRASS | AISI 316 |
| | Diffuser | AISI 304 | - | AISI 304 | AISI 316 | EN-GJL250 | AISI 316 | EN-GJL250 | AISI 316 |
| | Shaft | AISI 431 | - | AISI 431 | DUPLEX | AISI 431 | DUPLEX | AISI 431 | DUPLEX |
| | Suction | EN-GJL250 | - | EN-GJL250 | AISI 316 | EN-GJL250 | AISI 316 | EN-GJL250 | AISI 316 |
| | Discharge | EN-GJL250 | - | EN-GJL250 | AISI 316 | EN-GJL250 | AISI 316 | EN-GJL250 | AISI 316 |
| | Base | EN-GJL250 | - | - | EN-GJL250 | - | EN-GJL250 | - | EN-GJL250 |

TM TMB TMV

RING SECTION MULTISTAGE

- HIGH PRESSURE PUMPS
- PN16 – PN40 – PN63
- LOW OPERATING COSTS



ADVANTAGES

- HEAVY DUTY (oversized shaft and bearings)
- Balanced drum, impeller holes – axial loads reduction
- Wear rings – front & rear
- Wide configuration set
- Large selection of SEALS and METALLURGIES

| Operation limits – rpm | 1000 | 1500 | 1800 | 3000 | 3600 |
|----------------------------|------|------|------|------|------|
| Max solids content - mg/l | 65 | 65 | 65 | 65 | 65 |
| Max solid diameter - mm | 2 | 2 | 2 | 2 | 2 |
| T Max working closed - min | 2 | 2 | 2 | 2 | 2 |

TM TMB TMV

RING SECTION MULTISTAGE

- More than 150 models
- Delivery DN 40, 50, 65, 80, 100, 125, 150, 200
- 50 / 60Hz
- Flexible suction/delivery configuration



| TM | | |
|-----------|--------------------------|----------------------------|
| 42 models | Q max | 500 m³/h |
| 2/4 poles | H max | 330 m |
| | P₂ max | 400 kW |

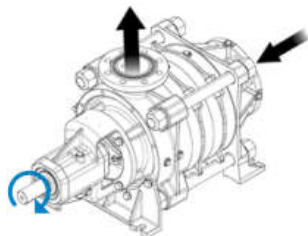
| TMB | | |
|-----------|--------------------------|----------------------------|
| 70 models | Q max | 850 m³/h |
| 2/4 poles | H max | 610 m |
| | P₂ max | 710 kW |

| TMV | | |
|-----------|--------------------------|----------------------------|
| 45 models | Q max | 500 m³/h |
| 2/4 poles | H max | 210 m |
| | P₂ max | 200 kW |

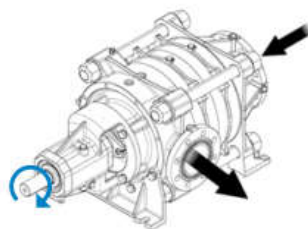
TM TMB TMV

CONFIGURATIONS

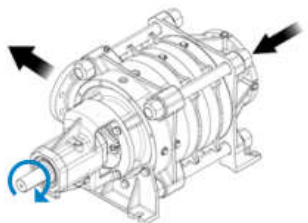
TM



1



2

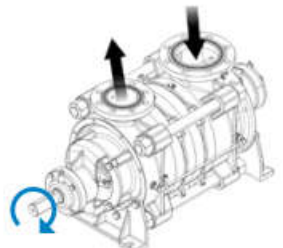


3

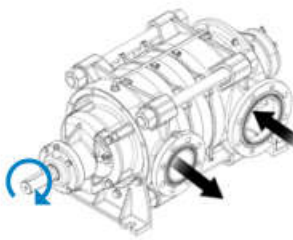
TMB



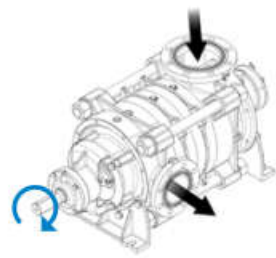
1



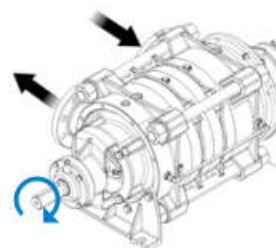
4



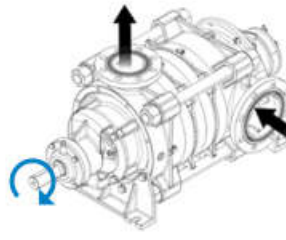
7



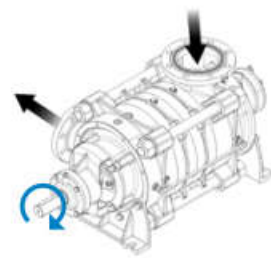
2



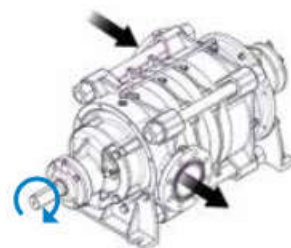
5



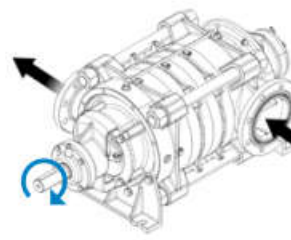
8



3

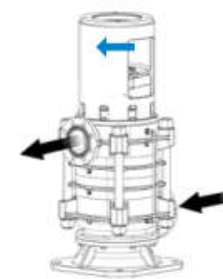


6

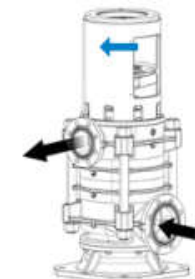


9

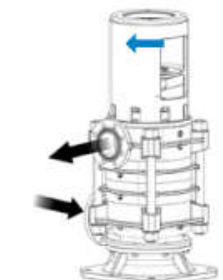
TMV



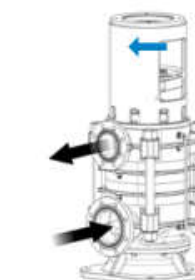
1



2



3



4

RING SECTION MULTI-STAGE

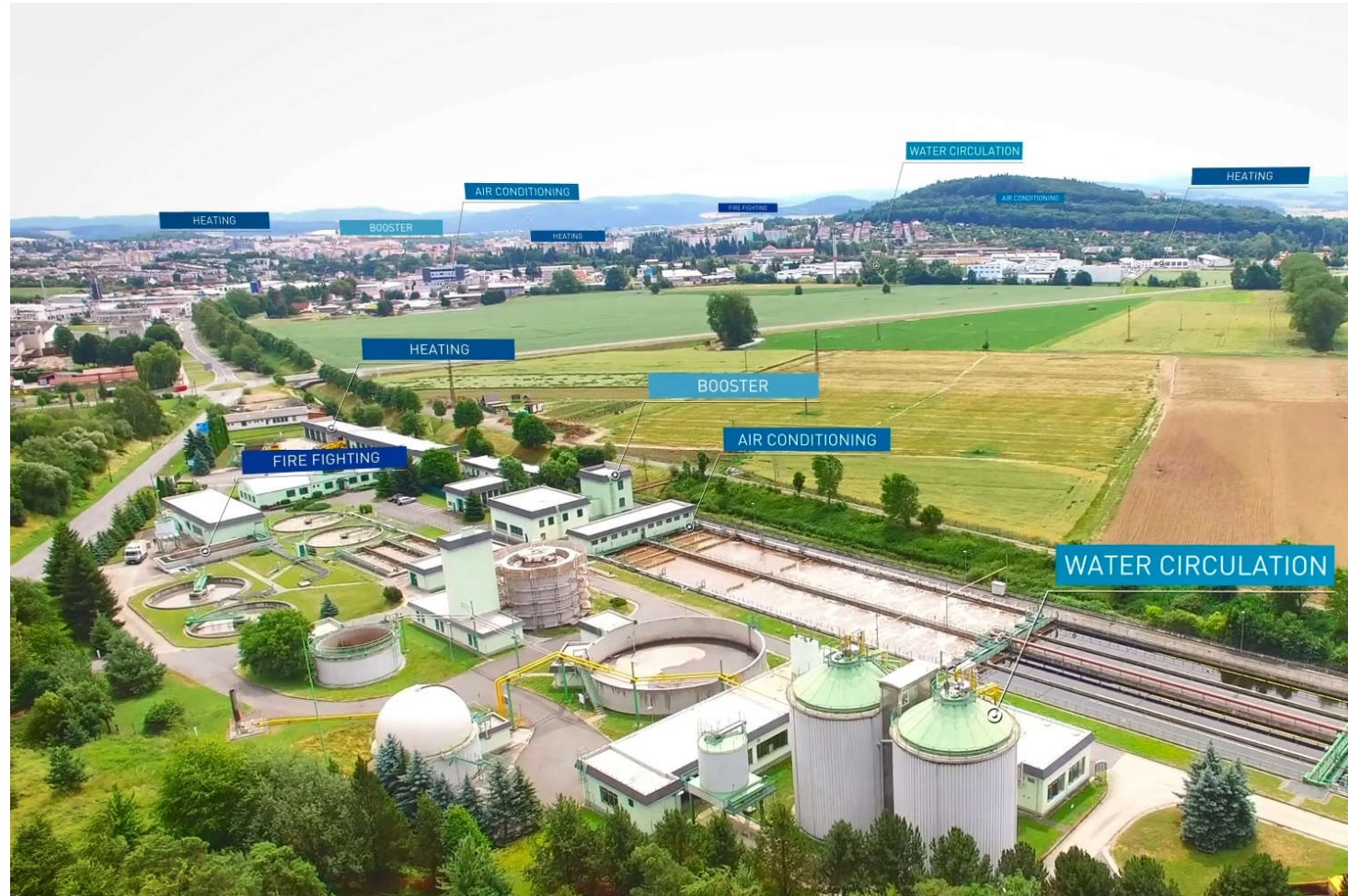
SAER[®]
ELETTROPOMPE



| | | TM | TMB | TMV |
|-------------------------------|-----------|--------------------------------------|-----------------------------|---------------------------|
| | | Horizontal - axial suction | Horizontal - radial suction | Vertical - radial suction |
| PN | standard | 40÷63 (T=20°C) | | |
| Water Temp | | -15° / +120°C | | |
| Q max - m³/h | 50 / 60Hz | 425 / 510 | 850 / 1020 | 300 / 330 |
| H max - m | 50 / 60Hz | 208 / 225 | 642 / 608 | 205 / 236 |
| SEAL balanced>12bar | standard | Packing Seal | Packing Seal | Packing Seal |
| | option | BQ1EFF A / B - Q1 / U3 - E / V GG | | |
| BEARINGS | standard | Grease | Grease + oiler | Grease + oiler |
| | option | Oil Bath | Oil Bath | - |
| WEAR RING | standard | Steel | | |
| | option | Bronze Techno-polymer | | |
| MATERIAL | standard | Cast Iron | | |
| | option | X - AISI 316 XD - Super Duplex | | |

The RING-SECTION multistage pumps TM are used in:

- water plants supply
- water filtration (RO)
- irrigation systems
- systems of high pressure lifting
- in heating and conditioning systems
- refrigeration
- snowing
- cleaning
- in condensed extraction



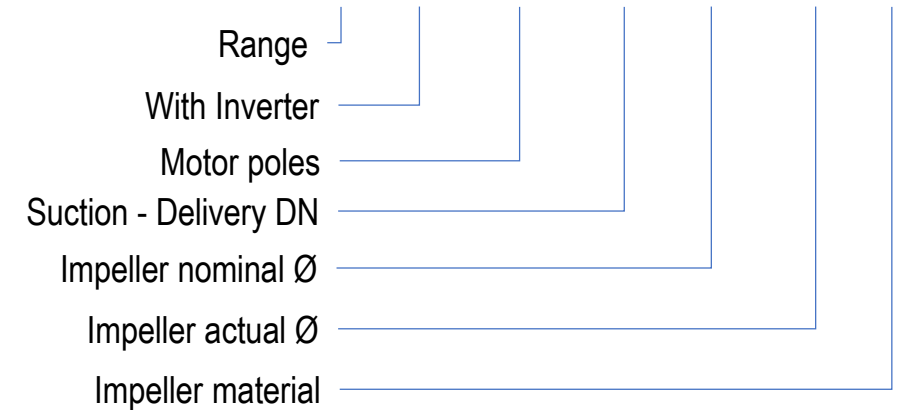
IN-LINE

L - RANGE

- CIRCULATING PUMPS
- PN16 - spheroidal CI
- LOW OPERATING COSTS
- Erp efficiency



L - IVE 2P 32 - 100 Ø95 O



ADVANTAGES

- Ductile Iron body -15 +140 °C
- High quality level - reliable
- Vertical installation
- High efficiency – MEI>0,7 most models
- On-board VFD option up to 15kW
- Selection of impeller metallurgies

Operation limits – rpm

| | 1500 | 3000 |
|---------------------------------------|------|------|
| Max solids content - mg/l | 85 | 65 |
| Max solid diameter - mm | 3 | 3 |
| T Max working closed (water 20°C) min | 5 | 5 |

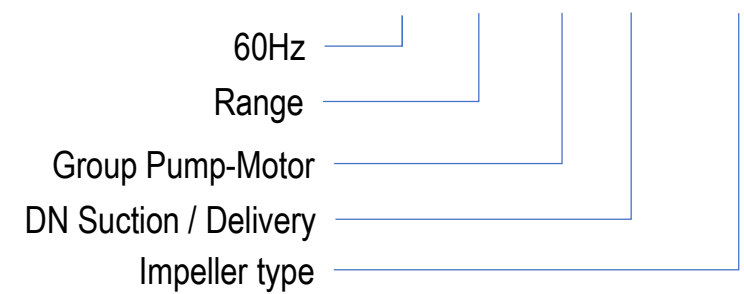


| DN | | 25 32 40 50 | 65 | 80 100 125 150 |
|--------------|----------|------------------------------------|-----|--------------------------|
| | | MONO-BLOCK | | CLOSE-COUPLED STUB SHAFT |
| PN | standard | 16 | | |
| | option | 25 | - | |
| Temp | | -15°C / +140°C | | |
| Q max - m³/h | 50Hz | 65 | 105 | 800 |
| H max - m | 50Hz | 100 | 93 | 60 |
| SEAL | standard | AQ1EGG | | |
| | option | BQ1EGG | | |
| | | Q1Q1VGG | | |
| MATERIAL | body | Spheroidal Cast Iron | | |
| | Impeller | Cast Iron (please check catalogue) | | |
| | | AISI 316 (please check catalogue) | | |
| | | Bronze (please check catalogue) | | |

- Split case body
- High efficiency
- Low NPSHr



6 SKD Z 200 - 315



ADVANTAGES

- Double wear rings
- Double volute design
- Low vibration (low radial pressure)
- No shaft flexion

| Operation limits – rpm | 1500 | 3000 |
|---------------------------------------|------|------|
| Max solids content - mg/l | 85 | 65 |
| Max solid diameter - mm | 3 | 3 |
| T Max working closed (water 20°C) min | 5 | 5 |

ADVANTAGES

- Double wear rings

Available in:

- AISI 304
- AISI 316
- Bronze
- Tecno-polymer



ADVANTAGES

- Double volute design
- Low vibration (low radial pressure)
- No shaft flexion





AISI 316



Bronze

Vertical
installation



SKD 250-630/2

- 2 stages
- 1200 m³/h
- 310 m

SAER[®]
ELETTROPOMPE



| SKD (DN delivery) | | 80 | 125 | 150 | 200 | 250 | 300 | 500 |
|---------------------------|-----------|--------------------------------|------------|------------|------------|------------|------------|------------|
| Impeller Ø | | 285-340 | 230-333 | 312-515 | 274-630 | 300-750 | 445-475 | 600 |
| PN | | 25 | 16 | | 25 | | 16 | 10 |
| Temp | | -15°C / +120°C | | | | | | |
| Q max - m ³ /h | 50 / 60Hz | up to 4000 m ³ /h | | | | | | |
| H max - m | 50 / 60Hz | up to 220 m | | | | | | |
| SEAL | standard | Packing Seal | | | | | | |
| | option | BQ1EFF | | | | | | |
| BEARINGS | standard | Grease | | | | | | |
| | option | Oil Bath | | | | | | |
| WEAR RING | standard | AISI 304 - Bronze | | | | | | |
| | option | AISI 316 - Techno-polymer | | | | | | |
| MATERIAL | standard | Cast Iron | | | | | | |
| | option | Bronze (on request) | | | | | | |
| | | X - AISI 316 (on request) | | | | | | |
| | | XD - Super Duplex (on request) | | | | | | |

The SKD split case pumps are suitable in:

- water plants supply
- irrigation systems
- systems of high pressure lifting
- in heating and conditioning systems
- refrigeration
- in condensed extraction
- fire fighting

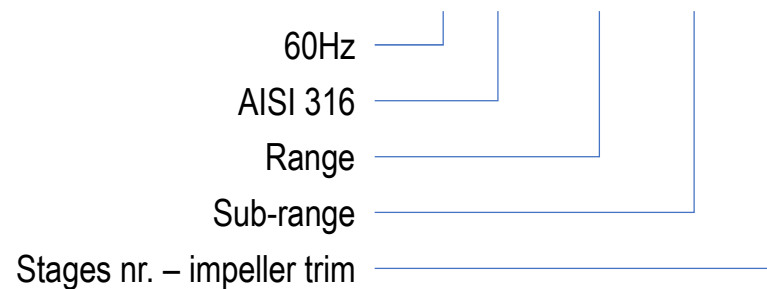


SUBMERSIBLE BORE-HOLE RANGE

- Wide range 4" 6" 8" 10" 12" 14"
- Quality components
- Metallurgies available
- Horizontal installation



6 X S-253 B /4A



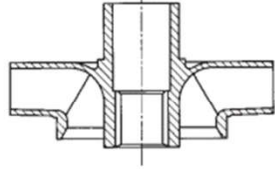
SUBMERSIBLE MOTORS

- Re-windable
- Heavy duty components
- 4" to 12"
- Up to 300kW
- Oil filled 4" 6"
- Water filled 6" 8" 10" 12"
- Horizontal installation



SUBMERSIBLE - RADIAL

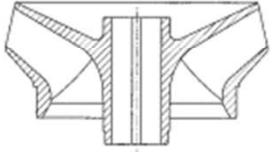
SAER
ELETTROPOMPE



| RADIAL Ø | | 4" | | 6" | | 8" | | 10" | | | | | |
|---------------------|-----------|-----------|------------|-------------------|------------|-----------|---|-----------|-----------|------------|-----------|-----------|--|
| | | FS-98 | | NS-96 | | NR-151 | | NR-152 | | NR-201 | | NR-250 | |
| Q max - m³/h | 50 / 60Hz | 12 / 15 | | 25 / 15 | | 48 / - | | 64 / 70 | | 120 / 130 | | 210 / 230 | |
| H max - m | 50 / 60Hz | 390 / 380 | | 350 / 520 | | 380 / - | | 540 / 450 | | 850 / 690 | | 950 / 880 | |
| Delivery | Gas | 1" 1/4 | | 2" 1/2 - 3" | | 3" | | 3" | | FLANGE | | | |
| Solids | % max | 300 g/m³ | | 220 g/m³ | | - | | - | | - | | - | |
| | Ø max | 3 mm | | 4 mm | | 4 mm | | 5 mm | | 3 mm | | | |
| Motor | | CL | | CL - MS | | CL - MS | | MS | | MS | | | |
| MATERIAL | | FS | XFS | NS | XNS | NR | - | NR | NR | XNR | NR | | |
| Impeller | | T-POLYM | | T-POLYM | | T-POLYM | | T-POLYM | BRASS | AISI 316 | BRASS | | |
| | option | | | | | BRASS | | BRASS | | | | | |
| Diffuser | | NORYL | | T-POLYM | | T-POLYM | | T-POLYM | EN-GJL250 | AISI 316 | EN-GJL250 | | |
| Suction | | STEEL | AISI 304 | BRASS | AISI 304 | EN-GJL250 | | EN-GJL250 | EN-GJL250 | AISI 316 | EN-GJS500 | | |
| Delivery | | STEEL | AISI 304 | BRASS | AISI 304 | EN-GJL250 | | EN-GJL250 | EN-GJL250 | AISI 316 | EN-GJS500 | | |
| Shaft | | AISI 420 | | Exagonal-AISI 431 | | AISI 431 | | AISI 431 | AISI 431 | DUPLEX | AISI 431 | | |
| Sleeve | | AISI 304 | AISI 304 | AISI 304 | AISI 304 | AISI 304 | | AISI 304 | STEEL | AISI 316 | STEEL | | |

SUBMERSIBLE – SEMI-AXIAL

SAER
ELETTROPOMPE

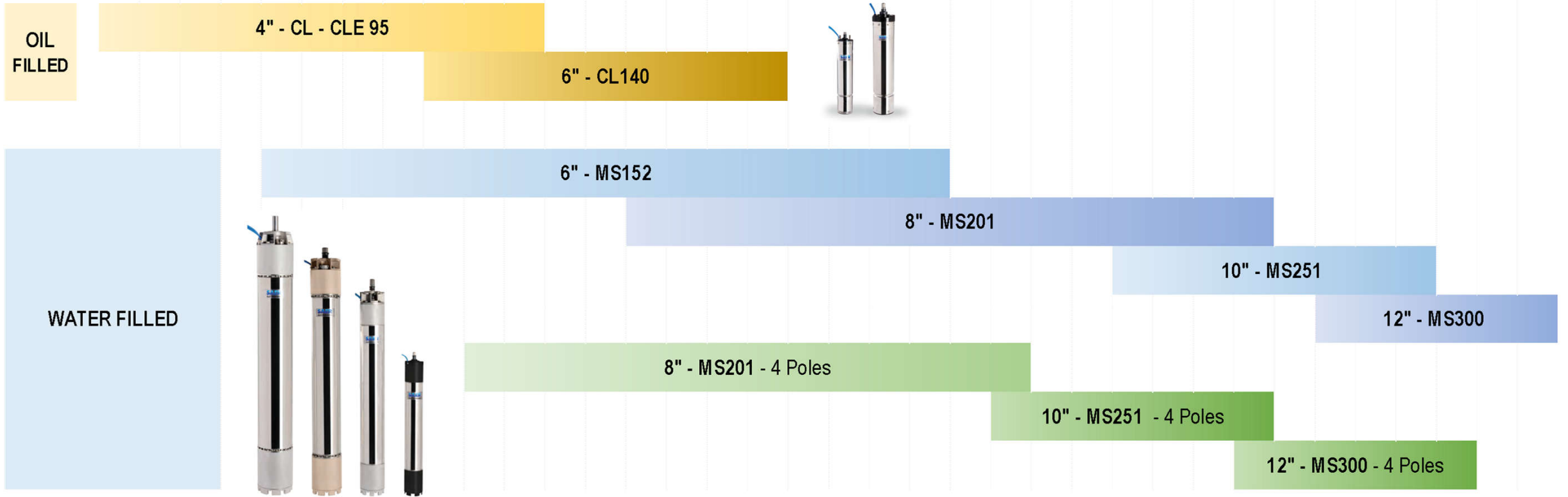


| SEMI-AXIAL Ø | | 6" | | | | 8" | | | | 10" | | | | 12" | | | | 14" | | | |
|----------------------------------|-----------|----------------------|--------|----------|-------------------|---------------------|--------|----------|----------------------|---------------------|--------|----------|-------------------|---------------------|--------|----------|-------------------|---------------------|--------|----------|-------------------|
| | | S-151 S-152 VS6 | | | | S-181 | | | | S-252 S-253 VS10 | | | | S-302 | | | | S-350 VS14 | | | |
| Q max - m ³ /h | 50 / 60Hz | 90 / 100 | | | | 220 / 260 | | | | 400 / 450 | | | | 570 / 600 | | | | 450 / 540 | | | |
| H max - m | 50 / 60Hz | 450 / 450 | | | | 360 / 430 | | | | 380 / 350 | | | | 380 / 360 | | | | 210 / 180 | | | |
| Delivery | Gas | 3" (FLANGE optional) | | XSD | S | SB | XS | XSD | 6" (FLANGE optional) | | XSD | FLANGE | | FLANGE | | FLANGE | | | | | |
| Solids | % max | 50 g/m ³ | | | | 50 g/m ³ | | | | 50 g/m ³ | | | | 50 g/m ³ | | | | 50 g/m ³ | | | |
| | Ø max | 2 mm | | | | 3 mm | | | | 3 mm | | | | 3 mm | | | | 5 mm | | | |
| Motor | | CL MS | | | | MS | | | | MS | | | | MS | | | | MS | | | |
| MATERIAL | | S | SB | XS | XSD | S | SB | XS | XSD | S | SB | XS | XSD | S | SB | XS | XSD | S | SB | XS | XSD |
| Impeller | | CAST IRON | BRONZE | AISI 316 | Super Duplex SD5A | CAST IRON | BRONZE | AISI 316 | Super Duplex SD5A | CAST IRON | BRONZE | AISI 316 | Super Duplex SD5A | CAST IRON | BRONZE | AISI 316 | Super Duplex SD5A | CAST IRON | BRONZE | AISI 316 | Super Duplex SD5A |
| Diffuser | | | | | | | | | | | | | | | | | | | | | |
| Suction | | | | | | | | | | | | | | | | | | | | | |
| Delivery | | | | | | | | | | | | | | | | | | | | | |
| Shaft | | AISI 431 | DUPLEX | | | AISI 431 | DUPLEX | | | AISI 431 | DUPLEX | | | AISI 431 | DUPLEX | | | AISI 431 | DUPLEX | | |

Submersible Motors

RANGE Overview

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------|-----|-----|-----|-----|-----|-----|-----|---|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| kW | 0,4 | 0,6 | 0,8 | 1,1 | 1,5 | 2,2 | 2,2 | 3 | 4 | 5,5 | 7,5 | 9,2 | 11 | 13 | 15 | 19 | 22 | 26 | 30 | 37 | 45 | 52 | 55 | 60 | 67 | 75 | 83 | 92 | 110 | 132 | 150 | 170 | 185 | 220 | 260 | 300 |
| HP | 0,5 | 0,8 | 1 | 1,5 | 2 | 3 | 3 | 4 | 5,5 | 7,5 | 10 | 13 | 15 | 18 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 75 | 80 | 90 | 100 | 113 | 125 | 150 | 180 | 200 | 230 | 250 | 300 | 350 | 400 |



6" Submersible Motors

Oil and Water filled - comparison

SAER[®]
ELETROPOMPE

MS WATER FILLED RE-WINDABLE

Winding: Copper winding with PVC or PE2+PA insulation

Filling: mono-propylene glycole and water.

Advantages:

- Motor fully repairable (motor replacement - not frequent)
- Water infiltration – no problem
- Heavy duty construction (kingsbury thrust bearing)
- Wide range of sizes and metallurgies

Disadvantages:

- Max water temp 50°C (PE+PA winding)
- Re-winding needs expert operator



PE2+PA wire (polyethylene with sheathing of polyamide)



CL OIL FILLED RE-WINDABLE

Winding: enamelled copper wire (same as surface motors)

Filling: non-toxic oil (FDA approved) suitable for potable water use

Advantages:

- Class F winding
- Motor fully repairable (same rewinding as normal el. motor)
- Commercial bearing for axial thrust
- Good price

Disadvantages:

- Often oil is not desirable for potable applications – non-toxic oil!
- Water leaking will be a problem
- Not heavy duty design
- Limited range and metallurgies



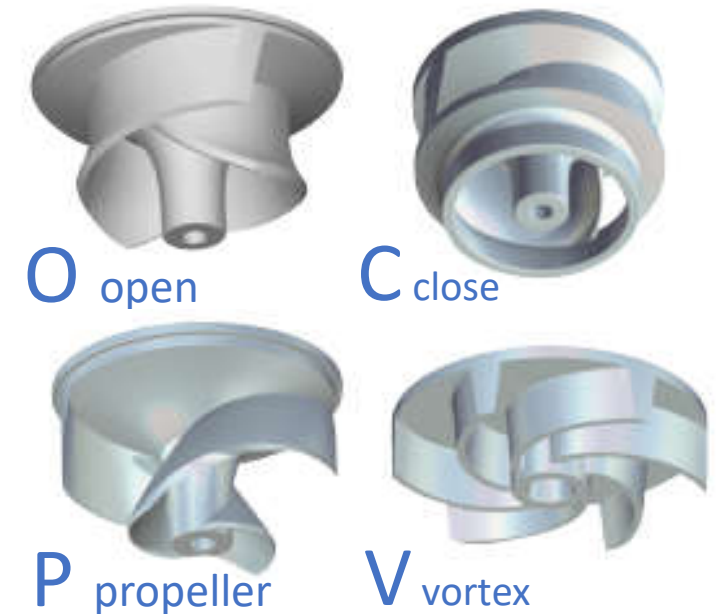
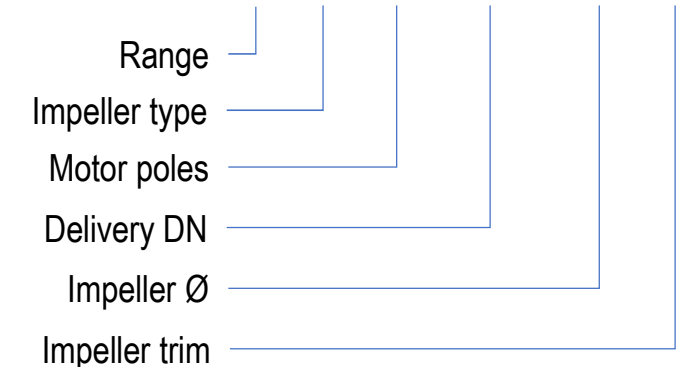
- 4 IMPELLER TYPE
- TOP PERFORMANCES - IE3
- EASY MAINTENANCE
- SUBMERSED USE

ADVANTAGES

- free passage up to 100 mm
- Viscous liquids (up to 150 cSt)
- Double mechanical seal
- Wear disk
- HEAVY DUTY (100,000 hours bearings)
- Adjustable wear ring distance



SD O 4P 150 - 200 A



SD

SEWAGE SUBMERSIBLE

SAER[®]
ELETTROPOMPE

WATER PROOF

Cable exit technology tested against water penetration up to 20 bars.

CORROSION RESISTANT

Two-component epoxy paint against corrosion according to En 12944-6 grade c3-m.

ENERGY SAVING

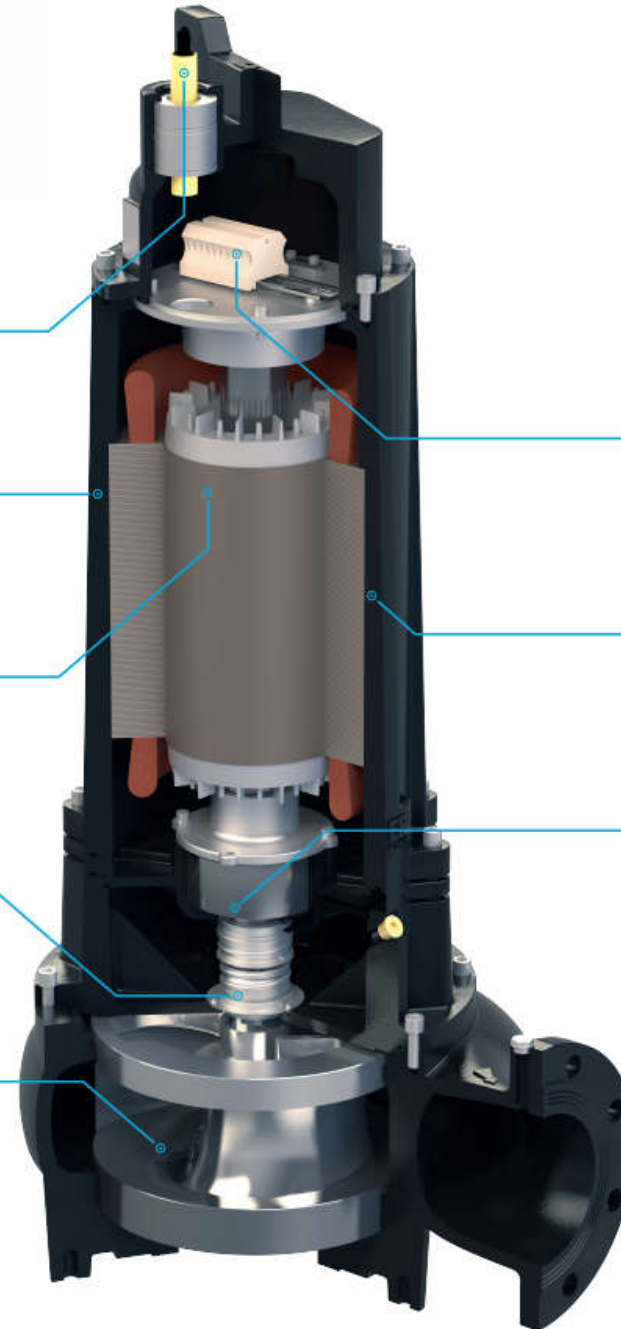
Saer premium ie 3 motors from 2,2 kW up to 55 kW, 2, 4 or 6 poles.

SAFE

Exclusive double mechanical seal in oil chamber protection for trouble-free functioning. Protection probes for humidity, temperature, overheating, ...

VERSATILE

Pump available in cast iron, aisi 316 and duplex. Several types of impellers availables. For submerged or dry installation.



SMART





Terminal block studied for easy maintenance.

RELIABLE

Heavy duty resistant materials for all components.

RESISTANT

Long life bearings for average life by 100.000 hours, continuous running (MTBF)

| | | |
|---|----------|--|
|  | V | Anti clogging vortex impellers Giranti a vortice anti intasamento |
|  | P | Multi-channel propeller open impeller to pump charged liquids, also in presence of fibrous substances Girante elicoidale multicanale aperta per pompare liquidi carichi, anche in presenza di sostanze fibrose |
|  | O | Multi-channel open impeller with helical channel wear disc. minimized risk of clogging Girante multicanale aperta con disco di usura a canale elicoidale. Rischio minimo di intasamento |
|  | C | Closed peripheral impeller for top efficiency in pumping charged liquids with low fibrous substances Girante periferica chiusa per la massima efficienza nel pompare liquidi carichi con sostanze fibrose basse |

SEWAGE – SUBMERSIBLE

SAER[®]
ELETTROPOMPE



* Under develop

| SD (DN delivery) | | 40* | 50* | 65* | 80 | | | | | 100 | | | | | 150 | | | | | 200 | | | | | 250 | 300 |
|-------------------------|-----------|--|------------|------------|-----------|-----|-----|-----|-----|------------|-----|-----|-----|-----|------------|-----|-----|-----|-----|------------|-----|-----|-----|-----|------------|------------|
| Impeller Ø | | 97 | 102 | 136 | 112 | 125 | 160 | 200 | 225 | 160 | 200 | 250 | 265 | 280 | 225 | 250 | 315 | 335 | 375 | 225 | 250 | 280 | 315 | 355 | 315 | 400 |
| | Open | | | | | | • | | | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| | Closed | | | | | | • | | | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| | Propeller | | | | | | • | | | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| | Vortex | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| PN | standard | PN16 | | | | | | | | | | | | | | | | | | | | | | | | |
| Temp | | -15°C / +40°C | | | | | | | | | | | | | | | | | | | | | | | | |
| Q max - m³/h | 50Hz | 25 | 35 | 55 | 150 | | | | | 300 | | | | | 660 | | | | | 1230 | | | | | 1200 | 1800 |
| H max - m | 50Hz | 13 | 11 | 20 | 38 | | | | | 32 | | | | | 58 | | | | | 46 | | | | | 27 | 25 |
| Temp | max | 40°C | | | | | | | | | | | | | | | | | | | | | | | | |
| Free Passage | mm | 40 | 50 | 55 | 55 | 48 | 75 | 75 | 80 | 40 | 40 | | 25 | 40 | 45 | 55 | 100 | 70 | 50 | 70 | 70 | 52 | 60 | 90 | 90 | 120 |
| SEAL | standard | Q1Q1PGG + AQ1PGG (secondary) | | | | | | | | | | | | | | | | | | | | | | | | |
| | option | Q1U3PGG + AQ1PGG (secondary) | | | | | | | | | | | | | | | | | | | | | | | | |
| SENSORS | standard | PTC on windings | | | | | | | | | | | | | | | | | | | | | | | | |
| | standard | WATER SENSOR in oil chamber | | | | | | | | | | | | | | | | | | | | | | | | |
| CABLE | 10m | NSSHOU 7-wire cable (3 + 3 + earth) + 4-wire cable (PTC + Water Level) | | | | | | | | | | | | | | | | | | | | | | | | |
| MATERIAL | Body | Cast Iron | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Cast Iron | | | | | | | | | | | | | | | | | | | | | | | | |
| | Impeller | X - AISI 304 - AISI 316 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | XD - Super Duplex | | | | | | | | | | | | | | | | | | | | | | | | |

SEWAGE

SD ACCESSORIES

SAER[®]
ELETTROPOMPE



**SUPPORT
FOOT**



**AUTOMATIC
COUPLING
SYSTEM**



**SAER
WATER
DETECTOR**

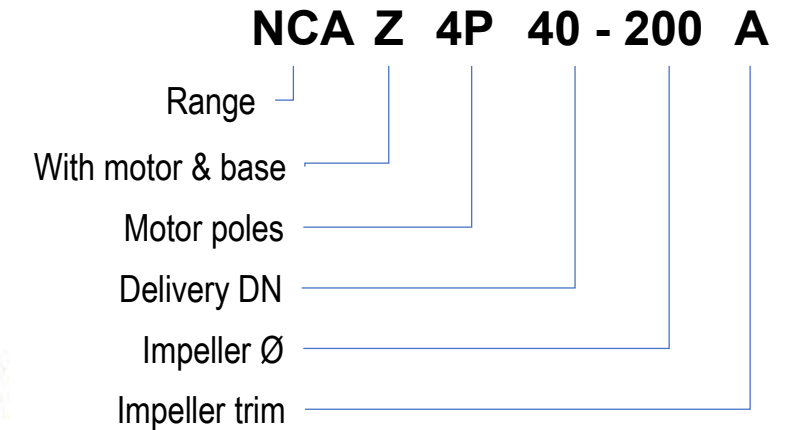


SEWAGE

SURFACE - NCA RANGE

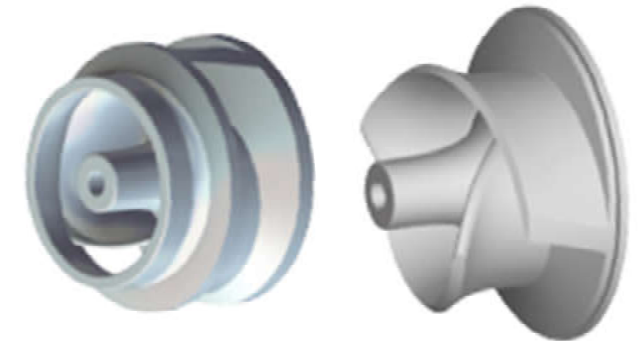
SAER[®]
ELETTROPOMPE

- OPEN IMPELLER
- TOP PERFORMANCES
- LOW OPERATING COSTS



ADVANTAGES

- free passage up to 100 mm
- Viscous liquids (up to 150 cSt)
- BACK PULL-OUT system
- HEAVY DUTY (oversized shaft and bearings)
- Adjustable wear ring distance



SAER[®]
ELETTROPOMPE



| NCA (DN delivery) | | 125 | 150 | 200 | 250 | 300 |
|----------------------------------|-----------|-------------------------------|------------|------------|------------|------------|
| Impeller Ø | | 315 | 315 - 400 | 315 - 400 | 315 - 400 | 400 - 500 |
| PN | | PN16 | | | | |
| Temp | | -10°C / +110°C | | | | |
| Q max - m ³ /h | 50 / 60Hz | 250 to 2400 m ³ /h | | | | |
| H max - m | 50 / 60Hz | up to 80 m | | | | |
| SEAL | standard | Packing Seal | | | | |
| | option | BQ1EFF | | | | |
| BEARINGS | standard | Grease | | | | |
| | option | Oil Bath | | | | |
| WEAR RING | standard | Carbon Steel | | | | |
| | option | AISI 316 | | | | |
| MATERIAL | standard | Cast Iron EN-GJS-500 | | | | |

T-ONE

COMPACT PRESSURIZATION SYSTEM

FEATURES

- Up to 15 m³/h - up to 4 bar
- Integrated VFD
- Silent (water immersed – 60 dBA)
- Easy interface (set point)
- Multi-pump configuration (8 max)
- Power supply 50 - 60 Hz



5 ranges - 10 models

| | Q max (m ³ /h) | H max (m) |
|-----------|------------------------------|--------------|
| A5 | 4 | 40 |
| A7 | 4 | 56 |
| X5 | 6 | 43 |
| X7 | 6 | 60 |
| B4 | 7,5 | 36 |
| B6 | 7,5 | 55 |
| C5 | 10 | 42 |
| C7 | 10 | 60 |
| D4 | 13 | 34 |
| D5 | 15 | 43 |

T-ONE

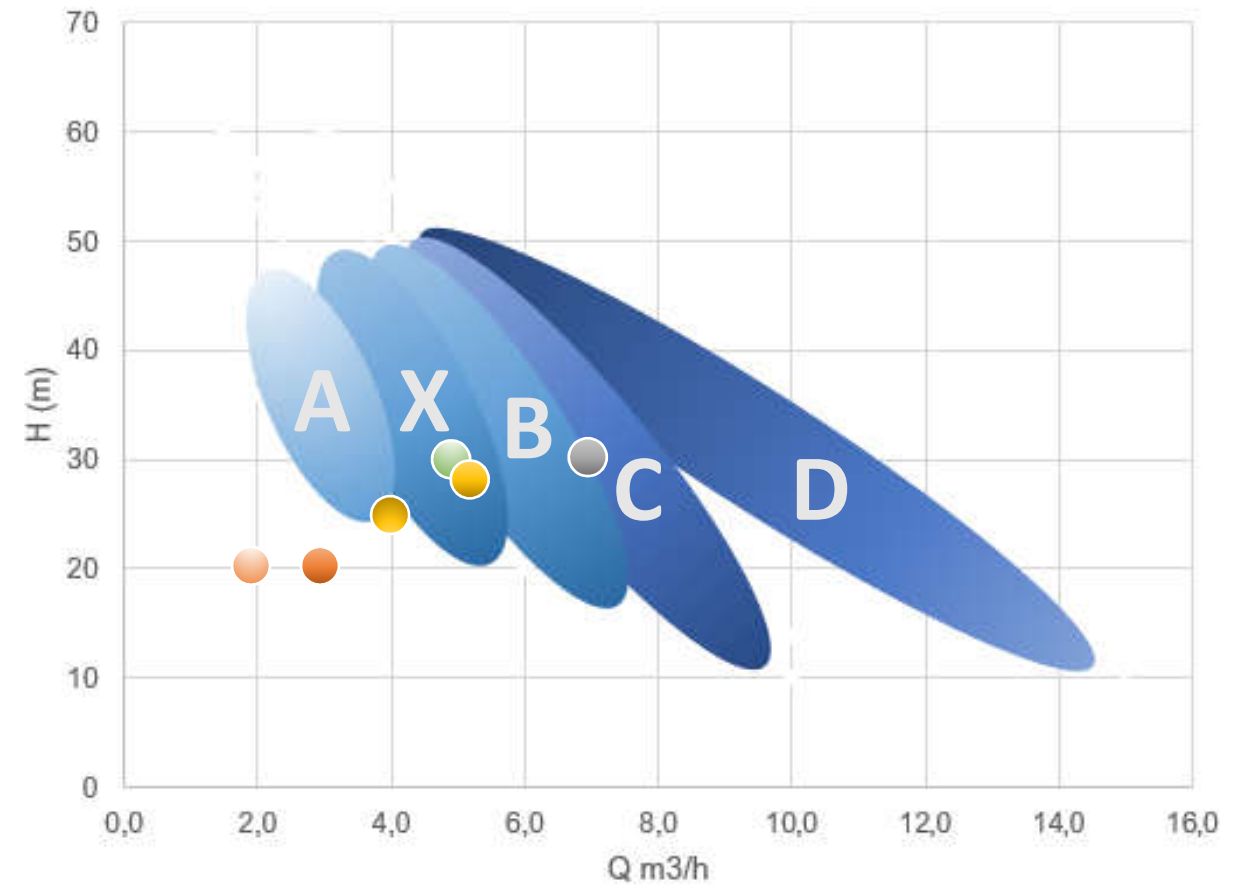
COMPACT PRESSURIZATION SYSTEM

SAER[®]
ELETTROPOMPE

- 3600 rpm motor
- Delivery DN 2" G
- Ambient temp max 50°C
- Water max 35°C



MULTI-PUMP
Max 8 T-one in parallel
Wireless communication



- | | | |
|------------------------|-------------------|-----------------|
| DAB - esybox | Grundfos - SCALA2 | WILO - HiMulti3 |
| Franklin - inline 1100 | Grundfos - MQ | WILO - HiMulti5 |

MT2 – MT4

SURFACE MOTORS 2/4 POLES – B3 B5

SAER
ELETTROPOMPE

50-60Hz
2/4 poles

IE1 IE2 IE3 IE4

SAER

Manufactures **Surface motors:**

- TEFC Normalized IEC 60034
- 50 – 60 Hz
- 2 and 4 poles
- 0,18 – 110 kW
- Mountings (EN 50347): **B3 B5 B14 B35**
- Efficiency class (IEC 60034-30): **IE1, 2, 3, 4**
- Single phase 1~ and three phases 3~



| MEC | 71 | 80 | 90 | 100 | 112 | 132 | 160 | 180 | 200 | 225 | 250 | 280 |
|------------------|-----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| IP | 54* | | 55 | | | | | | | | | |
| *IP55 on request | | | | | | | | | | | | |

50Hz MOTORS

2/ 4 poles – MM2 MT2 MT4

| | | | | | | | | | | | | | |
|----|-------|-----------|------|------|------|------|------|-----|-----|-----|-----|---|-----|
| 1~ | PHASE | kW | 0,18 | 0,25 | 0,37 | 0,55 | 0,75 | 0,9 | 1,1 | 1,5 | 2,2 | 3 | 4 |
| | | HP | 0,25 | 0,33 | 0,5 | 0,75 | 1 | 1,2 | 1,5 | 2 | 3 | 4 | 5,5 |

| | | | | | | | | | | | |
|---------------------|--|--|------|------|------|------|------|------|------|------|-------|
| MM2 - 1~ 2 POLES | | | 71MC | 71MC | 71MC | 71ML | 80MC | 80MC | 80ML | 100L | 112MC |
| | | | | | | 80MC | | | 90SC | 90LC | |

| | | | | | | | | | | | |
|---------------------|--------------|--|--|--|--|--|--|--|--|--|--|
| MM4 - 1~ 4 POLES | UPON REQUEST | | | | | | | | | | |
|---------------------|--------------|--|--|--|--|--|--|--|--|--|--|

50 Hz



| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----|-------|-----------|------|------|------|------|------|-----|-----|-----|---|-----|-----|-----|------|----|----|------|----|----|----|----|----|----|-----|-----|-----|
| 3~ | PHASE | kW | 0,18 | 0,25 | 0,37 | 0,55 | 0,75 | 1,1 | 1,5 | 2,2 | 3 | 4 | 5,5 | 7,5 | 9,2 | 11 | 15 | 18,5 | 22 | 26 | 30 | 37 | 45 | 55 | 75 | 92 | 110 |
| | | HP | 0,25 | 0,33 | 0,5 | 0,75 | 1 | 1,5 | 2 | 3 | 4 | 5,5 | 7,5 | 10 | 12,5 | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 75 | 100 | 125 | 150 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|----------------|----------|------|------|------|------|------|------|------|------|------|-------|--------|--------|--------|--------|--------|-------|-------|------|------|-------|-------|-------|--------|--------|--|
| IE2 | MT2 2 POLES | EN 50347 | | | 71MC | 71MC | 80MC | 80MC | 90SC | 90LC | 100L | 112MC | 132SMC | 132SMC | | 160LC | 160LC | 160LC | 180M | | 200L | 200L | 225SM | 250MC | 280SMC | 280SMC | |
| | | | | | | | 71MC | | 80MC | 90SC | | 100L | 112ML | | 132SMC | 132SMC | 132SMC | | 160LC | 180M | | | | | | | |
| | MT4 4 POLES | EN 50347 | | 71MC | 71ML | 80MC | 80ML | 90SL | 90LL | 100L | 100L | 112ML | 132SMC | 132SMC | | | 160LC | 180M | | | 200L | 225SM | 225SM | 250MC | 280SMC | 280SMC | |
| | | | 71MC | | | | | | | | | | | | 132SMC | 160LC | | | 180M | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|----------------|----------|------|------|------|------|------|------|------|------|------|-------|--------|--------|--------|--------|--------|-------|-------|------|------|-------|-------|-------|--------|--------|--------|
| IE3 | MT2 2 POLES | EN 50347 | | | 71MC | 71MC | 80MC | 80MC | 90SC | 90LC | 100L | 112MC | 132SMC | 132SMC | | 160LC | 160LC | 160LC | 180M | | 200L | 200L | 225SM | 250MC | 280SMC | 280SMC | |
| | | | | | | | 71ML | | 80ML | | | 100L | 112ML | | 132SMC | 132SMC | 132SML | | 160LC | 180M | | | | | | | 280SML |
| | MT4 4 POLES | EN 50347 | | 71MC | 71ML | 80MC | 80ML | 90SL | 90LL | 100L | 100L | 112ML | 132SMC | 132SMC | | 160LC | 160LL | 180M | | | 200L | 225SM | 225SM | 250ML | 280SMC | 280SML | |
| | | | 71MC | | | | | | | | | | | | 132SML | | | | 180M | | | | | | | | 280SML |

60Hz MOTORS

2/ 4 poles – MM2 MT2 MT4

| | | | | | | | | | | | | | |
|----|-------|-----------|------|------|------|------|------|-----|-----|-----|-----|---|-----|
| 1~ | PHASE | kW | 0,18 | 0,25 | 0,37 | 0,55 | 0,75 | 0,9 | 1,1 | 1,5 | 2,2 | 3 | 4 |
| | | HP | 0,25 | 0,33 | 0,5 | 0,75 | 1 | 1,2 | 1,5 | 2 | 3 | 4 | 5,5 |

| | | | | | | | | | | | |
|---------------------|--|--|------|------|------|------|------|------|------|------|-------|
| MM2 - 1~ 2 POLES | | | 71MC | 71MC | 71MC | 71ML | 80MC | 80MC | 80ML | 100L | 112MC |
| | | | | | | 80MC | | | 90SC | 90LC | |

| | | | | | | | | | | | |
|---------------------|--------------|--|--|--|--|--|--|--|--|--|--|
| MM4 - 1~ 4 POLES | UPON REQUEST | | | | | | | | | | |
|---------------------|--------------|--|--|--|--|--|--|--|--|--|--|

60 Hz



| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----|-------|-----------|------|------|------|------|------|-----|-----|-----|---|-----|-----|-----|------|----|----|------|----|----|----|----|----|----|-----|-----|-----|
| 3~ | PHASE | kW | 0,18 | 0,25 | 0,37 | 0,55 | 0,75 | 1,1 | 1,5 | 2,2 | 3 | 4 | 5,5 | 7,5 | 9,2 | 11 | 15 | 18,5 | 22 | 26 | 30 | 37 | 45 | 55 | 75 | 92 | 110 |
| | | HP | 0,25 | 0,33 | 0,5 | 0,75 | 1 | 1,5 | 2 | 3 | 4 | 5,5 | 7,5 | 10 | 12,5 | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 60 | 75 | 100 | 125 | 150 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|----------------|----------|------|------|------|------|------|------|------|------|------|-------|--------|--------|--------|--------|--------|-------|-------|------|------|-------|-------|-------|--------|--------|--|--------|
| IE2 | MT2 2 POLES | EN 50347 | | | 71MC | 71MC | 80MC | 80MC | 90SC | 90SC | 100L | 112MC | 132MC | 132MC | | 160LC | 160LC | 160LC | 180M | | 200L | 200L | 225SM | 250MC | 280SMC | 280SMC | | |
| | | | | | | | 71MC | | 80MC | 90LC | | 100L | 112ML | | 132SMC | 132SMC | 132SMC | | 160LC | 180M | | | | | | | | 280SMC |
| IE2 | MT4 4 POLES | EN 50347 | | 71MC | 71ML | 80MC | 80MC | 90SL | 90LL | 100L | 100L | 112ML | 132SMC | 132SMC | | 160LC | 160LC | 180M | | | 200L | 225SM | 225SM | 250MC | 280SMC | 280SMC | | |
| | | | 71MC | | | | | | | | | | | | | 132SMC | | | 180M | | | | | | | | | 280SML |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|----------------|----------|------|------|------|------|------|------|------|------|------|-------|--------|--------|--------|--------|--------|-------|-------|------|-------|-------|-------|-------|--------|--------|--------|
| IE3 | MT2 2 POLES | EN 50347 | | | 71MC | 71MC | 80MC | 80MC | 90SC | 90LC | 100L | 112MC | 132SMC | 132SMC | | 160LC | 160LC | 160LC | 180M | | 200L | 200L | 225SM | 250MC | 280SMC | 280SMC | |
| | | | | | | | 71MC | | 80ML | | | 100L | 112ML | | 132SMC | 132SMC | 132SML | | 160LC | 180M | | | | | | | 280SML |
| IE3 | MT4 4 POLES | EN 50347 | | 71MC | 71ML | 80MC | 80ML | 90SL | 90LL | 100L | 100L | 112ML | 132SMC | 132SMC | | 160LC | 160LL | 180M | | | 225SM | 225SM | 225SM | 250ML | 280SMC | 280SML | |
| | | | 71MC | | | | | | | | | | | | | 132SML | | | 180M | | | | | | | | 280SML |

Accessories

Control Panels & thermal sensors

SAER

Offers a wide range of **control panel** for submersible and surface motors:

- Direct start (electromechanical or electronic)
- Star-delta
- Impedance start
- Soft start
- Inverter (VFD)



As well as **sensors**

- PTC
- PT100
- anti-condensation heaters
- Vibration sensors



(to be requested at order confirmation)

SAFER[®]
Thank you for kind attention
ELETTROPOMPE