

# Micra®

Pompa • Yangın Söndürme Sistemleri • Hidrofor

MİCRA POMPA VE MAKİNA İMALAT LTD. ŞTİ.



**MICRA**  
POMPA

# SGB SERIES

MONOBLOCK  
CENTRIFUGAL PUMPS



**NFPA 20**  
COMPLIANT



**HIGH**  
PERFORMANCE



**RELIABLE**  
PROTECTION



**EASY**  
MAINTENANCE



**FIRE PROTECTION**



**INDUSTRY**



**BUILDING SERVICES**



**IRRIGATION**



**MARINE**

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PRODUCT CATALOG

POWERING **PROTECTION**. DELIVERING **TRUST**.



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## ABOUT MICRA POMPA

Micra Pompa has been producing high quality pumps and pumping systems since 1992. With our experienced engineering team, advanced production technology and customer-oriented approach, we provide reliable solutions for a wide range of applications.

Our products are manufactured in accordance with international standards and are preferred in many industries around the world.



**YEARS  
EXPERIENCE**



**HIGH QUALITY  
PRODUCTION**



**ADVANCED  
TECHNOLOGY**



**CUSTOMER  
SATISFACTION**



**GLOBAL  
SOLUTIONS**



**AFTER SALES  
SUPPORT**

**Micra®**



## SGB SERIES OVERVIEW

SGB series monoblock centrifugal pumps are designed for clean or slightly contaminated low viscosity liquids without solid & fibrous particles.

Thanks to their compact design, reliable performance and wide hydraulic coverage, they are the ideal solution for industrial applications, building services and water supply systems.



### KEY ADVANTAGES



#### COMPACT DESIGN

Monoblock construction provides space saving and easy installation.



#### HIGH EFFICIENCY

Optimized hydraulics ensure low energy consumption.



#### LOW NOISE

Balanced rotor and high quality components ensure quiet operation.



#### EASY MAINTENANCE

Back pull-out design allows easy inspection and maintenance.



#### RELIABLE PERFORMANCE

High quality materials and precise manufacturing for long service life.



#### WIDE APPLICATION RANGE

Suitable for heating, cooling, pressure boosting, irrigation and industry.



#### DIRECT COUPLED

Direct coupling with standard motors for maximum efficiency.



#### QUALITY ASSURED

All pumps are produced in accordance with international standards.



## DESIGN FEATURES

ENGINEERED FOR RELIABILITY & PERFORMANCE



### MONOBLOCK DESIGN

Monoblock design with horizontal shaft and back pull-out construction enables easy maintenance without disturbing the piping.



### HYDRAULIC PERFORMANCE

Single stage, end suction and closed impeller ensure high efficiency and low NPSH values across a wide performance range.



### COMPLIANCE

Main dimensions comply with EN 733 / DIN 24255 standards.



### QUALITY STANDARDS

Design in accordance with EU 547/2012 energy rating.



### LOW NOISE OPERATION

High quality components and precision balancing provide smooth and quiet operation.



### DRIVE SYSTEM

Equipped with high efficiency IE3 motors according to IEC standards.



### OPTIMIZED FOR EVERY APPLICATION

SGB series pumps are the ideal solution for clean or slightly contaminated low viscosity liquids without solid and fibrous particles.

- ✓ Suitable for various industrial and building service applications
- ✓ Reliable performance with robust construction
- ✓ Long service life with minimum maintenance requirement
- ✓ High efficiency with low energy consumption



### OPERATING CONDITIONS

Capacity : up to 500 m<sup>3</sup>/h  
Head : up to 160 m  
Temperature : -25 °C to +140 °C  
Pressure : 10 bar (16 bar)



### LIQUID TYPE

Clean or slightly contaminated low viscosity liquids without solid & fibrous particles.



### TEMPERATURE RANGE

-25 °C to +140 °C (standard version)  
Special versions available for higher temperatures.



### PRESSURE RATING

10 bar (16 bar) standard version.  
Higher pressures on request.



### TESTING

All pumps are hydrostatically tested according to international standards.



## MATERIAL OPTIONS

SGB series pumps are produced using high quality materials in accordance with international standards. Different material options are available to meet various application requirements.

| PART NAME       | STANDARD MATERIAL              | OPTIONAL MATERIALS                   |
|-----------------|--------------------------------|--------------------------------------|
| PUMP CASING     | GG25                           | G-CuSn10 (Bronze)<br>CF8M (AISI 316) |
| IMPELLER        | GG25                           | G-CuSn10 (Bronze)<br>CF8M (AISI 316) |
| SHAFT           | AISI 420                       | AISI 316                             |
| SHAFT SLEEVE    | AISI 304                       | AISI 316                             |
| WEAR RING       | Brass                          | Stainless Steel (AISI 316)           |
| MECHANICAL SEAL | SIC / SIC / EPDM<br>(Standard) | SIC / SIC / Viton<br>TC / TC / Viton |
| O-RINGS         | NBR (Standard)                 | EPDM / Viton                         |
| COUPLING        | Steel                          | Stainless Steel                      |
| BASEPLATE       | Steel                          | -                                    |



### CORROSION RESISTANCE & DURABILITY

Thanks to carefully selected materials and advanced manufacturing technology, SGB series pumps offer excellent resistance to corrosion, wear and impact. This ensures long service life even under demanding operating conditions.



HIGH  
CORROSION  
RESISTANCE



LONG  
SERVICE LIFE



RELIABLE  
PERFORMANCE

## MATERIAL COMBINATIONS

### CAST IRON (GG25)



- Standard material for general applications
- High strength and durability
- Cost effective solution

### BRONZE (G-CuSn10)



- Excellent corrosion resistance
- Suitable for sea water and aggressive liquids
- Long service life in harsh conditions

### STAINLESS STEEL (CF8M / AISI 316)



- Superior corrosion resistance
- Ideal for chemical and food applications
- High durability and reliability



### OTHER MATERIAL OPTIONS

Other material combinations can be provided upon request for special applications.



Operating Temperature  
-25 °C to +140 °C  
(Special versions available)



Max. Working Pressure  
10 bar (14 bar)



Suitable for clean or  
slightly contaminated  
low viscosity liquids



All materials are tested and  
approved in accordance with  
international standards

## SGB SERIES MONOBLOCK CENTRIFUGAL PUMPS

DESIGNED FOR RELIABLE PERFORMANCE

SGB monoblock series pumps are engineered for clean and slightly contaminated fluids transfer in industrial and building applications. The compact monoblock design with integrated motor ensures high efficiency, easy installation, low maintenance and long service life.



### SECTIONAL VIEW & PARTS LIST

| NO. | PART NAME       | MATERIAL (STANDARD)                |
|-----|-----------------|------------------------------------|
| 1   | Pump Casing     | Cast Iron (GG25)                   |
| 2   | Impeller        | Cast Iron (GG25) / Bronze (CuSn10) |
| 3   | Wear Ring       | Bronze (CuSn10)                    |
| 4   | Shaft           | Stainless Steel (AISI 420)         |
| 5   | Mechanical Seal | SIC / SIC / NBR                    |
| 6   | Electric Motor  | IE3 High Efficiency                |
| 7   | Base Plate      | Steel (S235JR)                     |
| 8   | Coupling        | Steel                              |
| 9   | Support Foot    | Cast Iron (GG25)                   |
| 10  | Bearing         | Deep Groove Ball Bearing           |

\* Materials may vary according to the application and customer request.

### MATERIAL OPTIONS

#### PUMP CASING & IMPELLER



- Cast Iron (GG25)
- Ductile Iron (GG40)
- Bronze (CuSn10)
- Stainless Steel (AISI 304 / AISI 316)

#### SHAFT



- Stainless Steel (AISI 420)
- Stainless Steel (AISI 304)
- Stainless Steel (AISI 316)

#### ELASTOMERS



- NBR
- EPDM
- FKM (Viton)
- PTFE (Optional)

### PAINT & COLOR

All Micra pumps are painted with high quality epoxy based industrial paint for excellent corrosion resistance and long lasting protection.

#### STANDARD COLOR



Other color options are available upon request.

PUMP COLOR CODE: BLUE - RAL 5002

### DESIGN FEATURES

- Back Pull-Out design for easy maintenance
- High efficiency closed impeller
- Replaceable wear ring
- Robust construction for heavy duty applications
- Low vibration and quiet operation
- Wide range of mechanical seal options
- Long service life with low operating cost

### EXPLODED VIEW (MONOBLOCK)



- |                   |                |                   |
|-------------------|----------------|-------------------|
| 1 Pump Casing     | 6 Shaft        | 10 Electric Motor |
| 2 Impeller        | 7 Bearing      |                   |
| 3 Wear Ring       | 8 Coupling     |                   |
| 4 Mechanical Seal | 9 Support Foot |                   |
| 5 Shaft Sleeve    |                |                   |



### TYPICAL APPLICATIONS

- Water Supply Systems
- HVAC Systems
- Industrial Applications
- Irrigation Systems
- Booster Systems

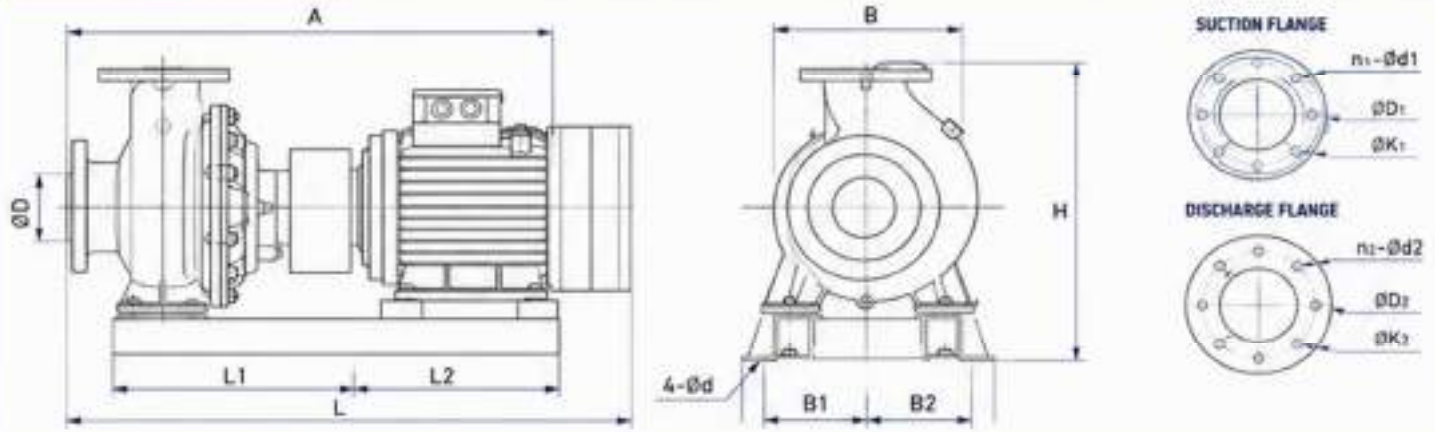


## OVERALL DIMENSIONS

### SGB SERIES

SGB series pumps have a compact construction and space saving design. The standard dimensional drawings shown below are according to EN 733.

#### DIMENSIONAL DRAWINGS



#### DIMENSION TABLE (mm)

| PUMP<br>SIZE | DIMENSIONS (mm) |     |     |     |      |     |      |     |     |    |    | SUCTION FLANGE (PN16) |     |    |     | DISCHARGE FLANGE (PN16) |     |    |     |
|--------------|-----------------|-----|-----|-----|------|-----|------|-----|-----|----|----|-----------------------|-----|----|-----|-------------------------|-----|----|-----|
|              | A               | B   | H   | H2  | L    | L1  | L2   | B1  | B2  | ØD | Ød | ØD1                   | ØK1 | n1 | Ød1 | ØD2                     | ØK2 | n2 | Ød2 |
| 32-80        | 400             | 240 | 315 | 160 | 820  | 120 | 700  | 260 | 200 | 19 | 12 | 140                   | 100 | 4  | 18  | 140                     | 100 | 4  | 18  |
| 40-100       | 440             | 250 | 335 | 180 | 880  | 140 | 740  | 280 | 210 | 19 | 14 | 150                   | 110 | 4  | 18  | 150                     | 110 | 4  | 18  |
| 50-125       | 500             | 280 | 365 | 200 | 1000 | 160 | 840  | 320 | 240 | 24 | 14 | 165                   | 125 | 4  | 18  | 165                     | 125 | 4  | 18  |
| 65-160       | 600             | 310 | 450 | 225 | 1150 | 180 | 970  | 360 | 280 | 24 | 14 | 185                   | 145 | 4  | 18  | 185                     | 145 | 4  | 18  |
| 80-200       | 700             | 360 | 525 | 250 | 1350 | 200 | 1150 | 420 | 320 | 28 | 18 | 200                   | 160 | 8  | 18  | 200                     | 160 | 8  | 18  |

#### FEATURES & BENEFITS

- ✓ Compact design for easy installation in limited spaces
- ✓ Standard dimensions according to EN 733
- ✓ Interchangeable with global standard pumps
- ✓ Reduced installation and maintenance cost
- ✓ Strong and rigid base frame for long lasting operation



#### NOTES

- All dimensions are in millimeters.
- Dimensions may vary according to motor brand and power.
- Micra Pompa reserves the right to change design and dimensions without prior notice.



## INSTALLATION DIMENSIONS (mm)

2900 rpm (2 Pole Motor)

SGB SERIES



| FORM | Pump Type | MOTOR |      | SGB INSTALLATION DIMENSIONS (mm) |     |     |      |      |     |     |     |     |     |    |     |     |     |     |     |     |     |    |    |
|------|-----------|-------|------|----------------------------------|-----|-----|------|------|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|-----|-----|-----|----|----|
|      |           | kW    | IEC  | DNe                              | DNb | A   | W    | Lm'  | L*  | H   | h1  | h2  | h3  | e  | m1  | m2  | m3  | m4  | n1  | n2  | n4  | Sp | Sm |
| F1   | 32-125    | 1,5   | 90L  | 50                               | 32  | 80  | 156  | 246  | 503 | 252 | 112 | 140 | 90  | 56 | 70  | 100 | 155 | 140 | 190 | 190 | 190 | 14 | 10 |
| F1   | 32-160    | 2,2   | 90L  | 50                               | 32  | 80  | 156  | 292  | 592 | 552 | 112 | 140 | 90  | 63 | 70  | 125 | 158 | 140 | 190 | 160 | 192 | 14 | 10 |
| F1   | 32-200    | 3     | 100L | 50                               | 32  | 80  | 179  | 296  | 595 | 252 | 112 | 160 | 100 | 63 | 70  | 140 | 158 | 140 | 190 | 160 | 192 | 14 | 12 |
| F1   | 32-250    | 4     | 112M | 50                               | 32  | 80  | 199  | 336  | 595 | 252 | 112 | 160 | 90  | 56 | 70  | 130 | 174 | 140 | 190 | 160 | 192 | 14 | 10 |
| F1   | 32-125    | 2,2   | 90L  | 50                               | 32  | 80  | 199  | 266  | 503 | 252 | 112 | 140 | 90  | 56 | 70  | 120 | 158 | 140 | 190 | 140 | 140 | 14 | 10 |
| F1   | 32-160    | 3     | 100L | 50                               | 32  | 80  | 179  | 292  | 551 | 551 | 112 | 160 | 112 | 63 | 70  | 120 | 158 | 140 | 190 | 160 | 192 | 14 | 12 |
| F1   | 32-160    | 4     | 112M | 50                               | 32  | 80  | 179  | 336  | 595 | 292 | 112 | 160 | 112 | 63 | 70  | 120 | 156 | 140 | 190 | 160 | 192 | 14 | 12 |
| F1   | 32-250    | 5,5   | 132S | 50                               | 32  | 80  | 179  | 396  | 595 | 292 | 112 | 160 | 112 | 63 | 70  | 125 | 156 | 140 | 190 | 190 | 198 | 14 | 12 |
| F1   | 32-160    | 7,5   | 132S | 50                               | 32  | 100 | 132S | 2985 | 685 | 252 | 112 | 205 | 100 | 80 | 70  | 170 | 178 | 140 | 220 | 296 | 166 | 14 | 12 |
| F1   | 40-250    | 7,0   | 160M | 50                               | 32  | 100 | 132M | 2926 | 795 | 551 | 112 | 220 | 100 | 65 | 70  | 210 | 178 | 160 | 220 | 254 | 166 | 14 | 12 |
| F2   | 42-250    | 16    | 180M | 50                               | 32  | 100 | 202S | 8976 | 685 | 252 | 112 | 220 | 100 | 89 | 70  | 210 | 343 | 260 | 220 | 254 | 166 | 14 | 12 |
| F1   | 32-250    | 2,5   | 180M | 50                               | 32  | 100 | 132M | 2936 | 665 | 292 | 112 | 225 | 100 | 89 | 70  | 270 | 343 | 250 | 220 | 254 | 166 | 14 | 12 |
| F1   | 40-125    | 2,2   | 90L  | 60                               | 40  | 80  | 156  | 656  | 503 | 252 | 112 | 140 | 90  | 56 | 70  | 210 | 178 | 140 | 210 | 190 | 140 | 14 | 10 |
| F1   | 40-160    | 3     | 100L | 60                               | 40  | 80  | 179  | 996  | 551 | 252 | 112 | 140 | 110 | 63 | 70  | 140 | 178 | 140 | 210 | 190 | 160 | 14 | 12 |
| F1   | 40-160    | 4     | 112M | 65                               | 40  | 80  | 179  | 336  | 598 | 252 | 112 | 140 | 112 | 80 | 70  | 140 | 176 | 140 | 210 | 190 | 166 | 14 | 12 |
| F1   | 40-220    | 8,5   | 132S | 65                               | 40  | 80  | 132B | 866  | 695 | 252 | 112 | 140 | 112 | 70 | 70  | 140 | 178 | 160 | 290 | 190 | 166 | 14 | 12 |
| F1   | 40-220    | 3     | 132M | 65                               | 40  | 80  | 132S | 663  | 793 | 252 | 112 | 140 | 100 | 90 | 70  | 160 | 345 | 160 | 210 | 252 | 166 | 14 | 12 |
| F2   | 65-200    | 18,5  | 160M | 65                               | 40  | 100 | 132S | 666  | 792 | 252 | 112 | 180 | 100 | 80 | 70  | 130 | 343 | 160 | 210 | 252 | 166 | 14 | 12 |
| F2   | 65-250    | 15    | 160L | 65                               | 40  | 100 | 288  | 863  | 593 | 252 | 112 | 160 | 190 | 93 | 75  | 170 | 343 | 260 | 290 | 252 | 160 | 14 | 15 |
| F2   | 65-125    | 18,5  | 180M | 65                               | 40  | 100 | 236  | 556  | 891 | 252 | 112 | 140 | 100 | 90 | 70  | 140 | 345 | 250 | 290 | 252 | 166 | 14 | 15 |
| F2   | 65-125    | 20    | 190M | 65                               | 40  | 100 | 288  | 555  | 893 | 252 | 112 | 140 | 100 | 90 | 70  | 140 | 344 | 260 | 290 | 252 | 166 | 14 | 15 |
| F2   | 80-160    | 4     | 100L | 65                               | 50  | 100 | 289  | 968  | 675 | 252 | 112 | 160 | 100 | 90 | 73  | 120 | 136 | 260 | 290 | 290 | 166 | 14 | 15 |
| F2   | 80-160    | 4     | 112M | 65                               | 50  | 100 | 179  | 696  | 675 | 292 | 112 | 160 | 102 | 90 | 103 | 140 | 125 | 260 | 290 | 290 | 166 | 14 | 15 |
| F2   | 50-225    | 5,5   | 132M | 65                               | 50  | 160 | 199  | 666  | 675 | 292 | 112 | 160 | 102 | 80 | 133 | 140 | 174 | 260 | 290 | 292 | 166 | 14 | 15 |
| F2   | 80-260    | 7,5   | 132S | 65                               | 50  | 100 | 399  | 675  | 693 | 252 | 112 | 160 | 100 | 95 | 135 | 140 | 348 | 260 | 290 | 270 | 166 | 14 | 15 |
| F2   | 80-200    | 11    | 132M | 65                               | 50  | 100 | 389  | 675  | 692 | 292 | 112 | 180 | 100 | 95 | 125 | 138 | 343 | 260 | 290 | 210 | 166 | 14 | 15 |
| F2   | 80-250    | 11    | 160L | 65                               | 50  | 100 | 198  | 866  | 692 | 292 | 112 | 180 | 100 | 95 | 125 | 130 | 348 | 260 | 290 | 290 | 166 | 14 | 15 |
| F2   | 80-250    | 11    | 160M | 65                               | 50  | 100 | 198  | 966  | 792 | 292 | 112 | 160 | 100 | 95 | 125 | 130 | 343 | 260 | 290 | 290 | 166 | 14 | 15 |
| F2   | 80-315    | 11    | 160L | 65                               | 50  | 100 | 299  | 668  | 992 | 263 | 112 | 160 | 100 | 99 | 125 | 290 | 343 | 265 | 290 | 290 | 166 | 14 | 15 |
| F2   | 100-200   | 26    | 160L | 65                               | 50  | 100 | 298  | 645  | 793 | 280 | 112 | 225 | 100 | 95 | 125 | 210 | 343 | 265 | 290 | 254 | 266 | 14 | 15 |
| F2   | 100-250   | 11    | 160L | 65                               | 40  | 100 | 296  | 643  | 793 | 280 | 112 | 225 | 100 | 95 | 125 | 210 | 343 | 265 | 290 | 290 | 254 | 14 | 15 |
| F2   | 120-315   | 11    | 160L | 65                               | 50  | 100 | 20M  | 668  | 793 | 280 | 112 | 225 | 100 | 95 | 125 | 210 | 343 | 260 | 290 | 290 | 266 | 14 | 15 |
| F2   | 125-200   | 15    | 160M | 60                               | 40  | 100 | 296  | 663  | 793 | 280 | 112 | 225 | 100 | 95 | 125 | 230 | 343 | 265 | 290 | 254 | 266 | 14 | 15 |
| F2   | 125-250   | 25    | 160L | 60                               | 40  | 100 | 278  | 665  | 793 | 280 | 182 | 225 | 100 | 95 | 125 | 230 | 343 | 265 | 290 | 298 | 254 | 14 | 15 |
| F2   | 125-315   | 22    | 180L | 60                               | 40  | 100 | 276  | 665  | 405 | 480 | 182 | 225 | 100 | 95 | 125 | 210 | 341 | 265 | 290 | 298 | 254 | 14 | 15 |

\* Differs according to motor manufacture.

Sp: Shaft End Sm: Support Connections



## INSTALLATION DIMENSIONS (mm)

1450 rpm (4 Pole Motor)

SGB SERIES



| FORM | Pump Type | MOTOR |      | SGB INSTALLATION DIMENSIONS (mm) |                 |     |     |     |     |     |     |     |     |    |     |     |     |     |     |     |     |    |    |
|------|-----------|-------|------|----------------------------------|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|-----|-----|-----|----|----|
|      |           | kW    | IEC  | DN <sub>e</sub>                  | DN <sub>b</sub> | A   | W   | Lm* | L*  | H   | h1  | h2  | h3  | e  | m1  | m2  | m3  | m4  | n1  | n2  | n3  | n4 | Sm |
| F1   | 32-125    | 0,37  | 71M  | 50                               | 32              | 80  | 136 | 222 | 429 | 252 | 112 | 140 | 71  | 45 | 70  | 100 | 90  | 140 | 190 | 142 | 128 | 14 | 7  |
| F1   | 32-160    | 0,55  | 80M  | 50                               | 32              | 80  | 156 | 244 | 480 | 252 | 112 | 140 | 80  | 50 | 70  | 100 | 100 | 140 | 190 | 126 | 165 | 14 | 10 |
| F1   | 32-200    | 0,37  | 71M  | 50                               | 32              | 80  | 156 | 222 | 429 | 292 | 112 | 160 | 71  | 45 | 70  | 100 | 90  | 166 | 140 | 142 | 128 | 14 | 7  |
| F1   | 32-250    | 0,75  | 80M  | 50                               | 32              | 80  | 156 | 223 | 480 | 252 | 112 | 160 | 80  | 43 | 70  | 100 | 100 | 140 | 190 | 126 | 165 | 14 | 10 |
| F1   | 40-125    | 1,1   | 90L  | 50                               | 32              | 80  | 196 | 222 | 429 | 252 | 112 | 160 | 71  | 45 | 70  | 100 | 90  | 140 | 190 | 142 | 128 | 14 | 7  |
| F1   | 40-160    | 1,5   | 90L  | 50                               | 32              | 80  | 159 | 266 | 503 | 252 | 112 | 140 | 90  | 45 | 70  | 125 | 158 | 140 | 190 | 140 | 146 | 14 | 10 |
| F1   | 40-200    | 2,2   | 100L | 50                               | 32              | 80  | 173 | 292 | 503 | 392 | 112 | 160 | 63  | 60 | 70  | 125 | 158 | 140 | 190 | 140 | 193 | 14 | 12 |
| F1   | 40-250    | 3     | 100L | 50                               | 32              | 80  | 179 | 336 | 595 | 292 | 112 | 160 | 63  | 69 | 70  | 120 | 156 | 140 | 190 | 140 | 192 | 14 | 12 |
| F1   | 50-125    | 4     | 112M | 50                               | 32              | 80  | 199 | 336 | 595 | 292 | 112 | 160 | 100 | 63 | 70  | 125 | 156 | 140 | 190 | 190 | 198 | 14 | 12 |
| F1   | 50-160    | 5,5   | 132S | 50                               | 32              | 110 | 195 | 336 | 685 | 552 | 112 | 205 | 112 | 63 | 70  | 210 | 158 | 140 | 220 | 290 | 166 | 14 | 12 |
| F1   | 50-250    | 7,5   | 132M | 50                               | 32              | 100 | 132 | 465 | 465 | 251 | 112 | 220 | 100 | 56 | 70  | 210 | 158 | 140 | 220 | 250 | 166 | 14 | 12 |
| F2   | 65-125    | 11    | 160M | 50                               | 32              | 100 | 132 | 393 | 603 | 252 | 112 | 220 | 100 | 89 | 70  | 210 | 178 | 230 | 220 | 254 | 146 | 14 | 12 |
| F2   | 65-160    | 15    | 160M | 65                               | 40              | 100 | 132 | 138 | 895 | 252 | 112 | 225 | 100 | 89 | 70  | 210 | 343 | 250 | 220 | 254 | 146 | 14 | 12 |
| F1   | 65-200    | 18,5  | 180L | 50                               | 40              | 100 | 156 | 286 | 695 | 252 | 112 | 225 | 100 | 96 | 70  | 260 | 152 | 260 | 210 | 290 | 146 | 14 | 12 |
| F2   | 65-250    | 22    | 100L | 65                               | 40              | 80  | 156 | 386 | 573 | 252 | 112 | 140 | 190 | 63 | 70  | 140 | 360 | 160 | 210 | 250 | 146 | 14 | 10 |
| F2   | 80-125    | 3     | 100L | 60                               | 40              | 80  | 179 | 396 | 551 | 252 | 112 | 140 | 111 | 63 | 70  | 140 | 178 | 160 | 210 | 190 | 146 | 14 | 12 |
| F1   | 80-160    | 4     | 112M | 65                               | 40              | 80  | 179 | 396 | 551 | 252 | 112 | 140 | 111 | 73 | 70  | 140 | 178 | 160 | 210 | 190 | 146 | 14 | 12 |
| F2   | 80-200    | 5,5   | 132M | 65                               | 40              | 80  | 199 | 366 | 675 | 252 | 112 | 140 | 112 | 70 | 70  | 140 | 178 | 160 | 210 | 190 | 146 | 14 | 12 |
| F2   | 80-250    | 7,5   | 132M | 65                               | 40              | 100 | 199 | 366 | 673 | 252 | 112 | 140 | 112 | 85 | 70  | 140 | 356 | 160 | 290 | 190 | 146 | 14 | 12 |
| F2   | 80-315    | 11    | 160M | 65                               | 40              | 100 | 192 | 132 | 968 | 695 | 112 | 180 | 192 | 90 | 125 | 140 | 363 | 250 | 220 | 290 | 146 | 14 | 12 |
| F2   | 100-200   | 11    | 160M | 65                               | 40              | 100 | 132 | 456 | 793 | 252 | 112 | 180 | 190 | 98 | 136 | 250 | 343 | 260 | 210 | 250 | 146 | 14 | 12 |
| F2   | 100-250   | 15    | 160M | 65                               | 40              | 100 | 132 | 666 | 793 | 252 | 112 | 180 | 190 | 98 | 70  | 270 | 343 | 250 | 220 | 250 | 146 | 14 | 15 |
| F2   | 100-315   | 11    | 160M | 65                               | 40              | 130 | 132 | 666 | 793 | 252 | 112 | 180 | 100 | 95 | 70  | 170 | 343 | 250 | 220 | 250 | 146 | 14 | 15 |
| F1   | 125-200   | 15    | 180L | 65                               | 80              | 130 | 288 | 665 | 693 | 252 | 112 | 180 | 190 | 85 | 75  | 170 | 343 | 250 | 290 | 252 | 146 | 14 | 15 |
| F1   | 125-250   | 15    | 180L | 65                               | 60              | 130 | 288 | 665 | 693 | 252 | 112 | 180 | 190 | 85 | 75  | 160 | 343 | 250 | 290 | 252 | 146 | 14 | 15 |
| F1   | 125-315   | 13    | 280L | 65                               | 60              | 100 | 289 | 665 | 693 | 252 | 112 | 280 | 190 | 95 | 70  | 230 | 343 | 250 | 290 | 292 | 146 | 14 | 15 |
| F1   | 100-250   | 15    | 180L | 65                               | 50              | 100 | 833 | 665 | 803 | 673 | 112 | 260 | 100 | 95 | 130 | 250 | 341 | 260 | 290 | 290 | 246 | 14 | 19 |
| F2   | 150-250   | 15    | 280L | 65                               | 50              | 100 | 573 | 803 | 683 | 679 | 112 | 280 | 190 | 95 | 130 | 250 | 341 | 260 | 290 | 252 | 246 | 14 | 19 |
| F1   | 150-315   | 37    | 280L | 65                               | 50              | 100 | 573 | 533 | 693 | 673 | 112 | 280 | 180 | 85 | 120 | 250 | 341 | 260 | 290 | 290 | 246 | 14 | 19 |
| F2   | 150-236   | 12    | 280L | 66                               | 65              | 100 | 573 | 893 | 635 | 673 | 112 | 260 | 100 | 95 | 120 | 250 | 343 | 260 | 290 | 290 | 264 | 14 | 19 |
| F2   | 150-250   | 2     | 132M | 60                               | 65              | 100 | 573 | 893 | 635 | 673 | 112 | 260 | 190 | 85 | 120 | 250 | 343 | 260 | 290 | 290 | 264 | 14 | 19 |
| F2   | 250-250   | 8     | 132M | 68                               | 65              | 100 | 573 | 565 | 635 | 673 | 112 | 260 | 190 | 85 | 120 | 250 | 343 | 260 | 290 | 290 | 264 | 14 | 19 |
| F2   | 250-315   | 6     | 132M | 65                               | 65              | 100 | 573 | 665 | 693 | 293 | 112 | 260 | 190 | 85 | 120 | 250 | 343 | 260 | 290 | 290 | 254 | 14 | 19 |
| F2   | 200-200   | 5,5   | 132M | 65                               | 60              | 100 | 396 | 545 | 693 | 263 | 112 | 226 | 100 | 95 | 135 | 290 | 343 | 260 | 290 | 290 | 264 | 14 | 19 |
| F2   | 250-250   | 7,5   | 160M | 68                               | 40              | 100 | 898 | 665 | 693 | 280 | 182 | 225 | 100 | 95 | 125 | 230 | 341 | 260 | 290 | 298 | 254 | 14 | 19 |
| F2   | 250-315   | 22    | 225M | 60                               | 40              | 100 | 276 | 465 | 405 | 480 | 182 | 225 | 100 | 95 | 125 | 210 | 341 | 265 | 250 | 298 | 254 | 14 | 19 |

\* Differs according to motor manufacture.

Sp: Shaft End Sm: Support Connections



## INSTALLATION & OPERATION

Correct installation and proper operation are essential for long service life and optimum performance.

### INSTALLATION GUIDELINES

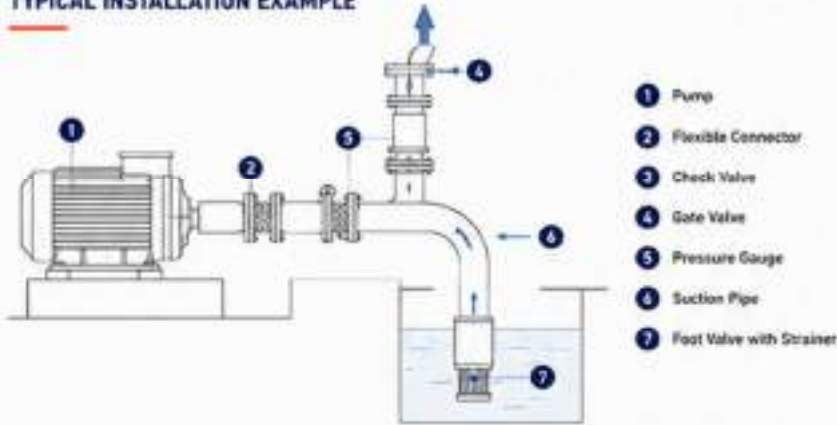
- ✓ Install the pump as close as possible to the liquid source.
- ✓ Ensure adequate space for maintenance and ventilation.
- ✓ Support piping independently; do not use the pump as a pipe support.
- ✓ Ensure the suction pipe is airtight and slope upwards to the pump.
- ✓ Use flexible connectors to minimize vibration transmission.
- ✓ Prime the pump before initial start-up.

### OPERATION RECOMMENDATIONS

- ✓ Do not operate the pump outside the specified range.
- ✓ Ensure the pump runs fully primed and without cavitation.
- ✓ Avoid running the pump with closed discharge valve.
- ✓ Monitor pressure, flow and current during operation.
- ✓ Regularly check for unusual noise, vibration and temperature.
- ✓ Follow the maintenance schedule for reliable operation.



### TYPICAL INSTALLATION EXAMPLE



### START-UP CHECKLIST

| CHECK ITEM                                                                                                                          | OK |
|-------------------------------------------------------------------------------------------------------------------------------------|----|
|  Pump and motor correctly aligned                 | ✓  |
|  All pipes and connections are properly tightened | ✓  |
|  Suction line is airtight and primed              | ✓  |
|  Valves are in correct position                   | ✓  |
|  Electrical connections are correct               | ✓  |
|  Motor rotation direction is correct              | ✓  |
|  No foreign material in the pump                  | ✓  |
|  All safety guards are in place                   | ✓  |

### DIRECTION OF ROTATION

The standard direction of rotation is clockwise viewed from the motor side.



CLOCKWISE (STANDARD)



COUNTER CLOCKWISE (NOT ALLOWED)

### ALLOWABLE FORCES & MOMENTS ON PUMP NOZZLES (EN 733)

| DN (mm) | MAX. ALLOWABLE FORCES (N) |                |                | MAX. ALLOWABLE MOMENTS (Nm) |                |                |
|---------|---------------------------|----------------|----------------|-----------------------------|----------------|----------------|
|         | F <sub>x</sub>            | F <sub>y</sub> | F <sub>z</sub> | M <sub>x</sub>              | M <sub>y</sub> | M <sub>z</sub> |
| 32      | 600                       | 600            | 800            | 210                         | 210            | 210            |
| 40      | 750                       | 750            | 1000           | 260                         | 260            | 260            |
| 50      | 900                       | 900            | 1200           | 310                         | 310            | 310            |
| 65      | 1200                      | 1200           | 1600           | 410                         | 410            | 410            |
| 80      | 1500                      | 1500           | 2000           | 510                         | 510            | 510            |
| 100     | 1900                      | 1900           | 2500           | 660                         | 660            | 660            |
| 125     | 2400                      | 2400           | 3200           | 810                         | 810            | 810            |
| 150     | 2900                      | 2900           | 3900           | 960                         | 960            | 960            |
| 200     | 3800                      | 3800           | 5100           | 1260                        | 1260           | 1260           |
| 250     | 4800                      | 4800           | 6400           | 1600                        | 1600           | 1600           |
| 300     | 5700                      | 5700           | 7600           | 1900                        | 1900           | 1900           |
| 350     | 6600                      | 6600           | 8800           | 2200                        | 2200           | 2200           |
| 400     | 7600                      | 7600           | 10200          | 2500                        | 2500           | 2500           |

NOTE: Forces and moments are based on EN 733 standard. Consult factory for special applications.

### PACKAGING & TRANSPORTATION

- ✓ Pumps are carefully packed to prevent damage during transportation.
- ✓ Do not lift the pump by the motor, terminal box or piping.
- ✓ Use appropriate lifting equipment and lifting points.
- ✓ Protect the pump from moisture, dust and impact.
- ✓ Store in a dry and well-ventilated area.



### PRE-COMMISSIONING

- Flush the system before connecting the pump.
- Check motor insulation resistance.
- Verify all protection devices and instruments.
- Run the pump for a short time and check for leaks and abnormal conditions.
- After successful test run, pump is ready for normal operation.





## QUALITY & RELIABILITY ENGINEERED TO LAST

At Micra Pompa, quality is not just a goal; it is a principle that guides every step of our engineering, production and service processes.

-  **HIGH QUALITY MATERIALS**  
Carefully selected high-grade materials ensure long service life and superior corrosion resistance.
-  **PRECISION MANUFACTURING**  
Advanced CNC machining and strict production tolerances guarantee consistent performance.
-  **RIGOROUS TESTING**  
Each pump is 100% tested for hydraulic performance, pressure and leakage before delivery.
-  **INTERNATIONAL STANDARDS**  
Our pumps comply with EN 733, ISO 9906, CE and other international standards.
-  **TRUSTED PERFORMANCE**  
Reliable solutions for demanding applications and challenging conditions worldwide.



### QUALITY CONTROL PROCESS



### CERTIFICATIONS

Micra Pompa products are manufactured in accordance with the highest quality and safety standards.



### WHY CHOOSE MICRA POMPA?

- ✓ 30+ years of experience
- ✓ Wide product range
- ✓ High efficiency & energy saving solutions
- ✓ Fast delivery & after-sales support
- ✓ Customer focused engineering approach

### AFTER SALES SUPPORT

Our experienced technical team is always ready to provide you with reliable support.

-  Technical Consultation
-  Maintenance & Service
-  Spare Parts Supply
-  Training & Installation Support



“Reliable pumps.  
Lasting solutions.  
Trusted worldwide.”

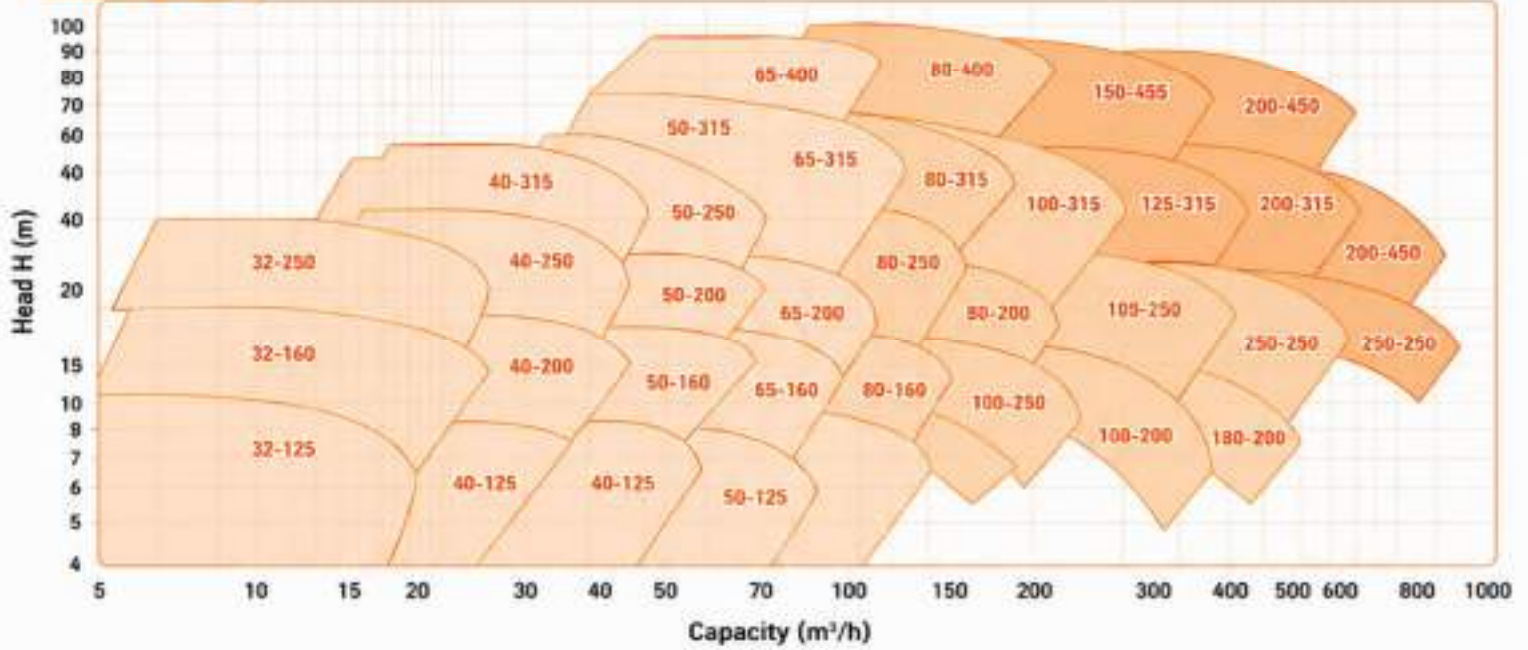




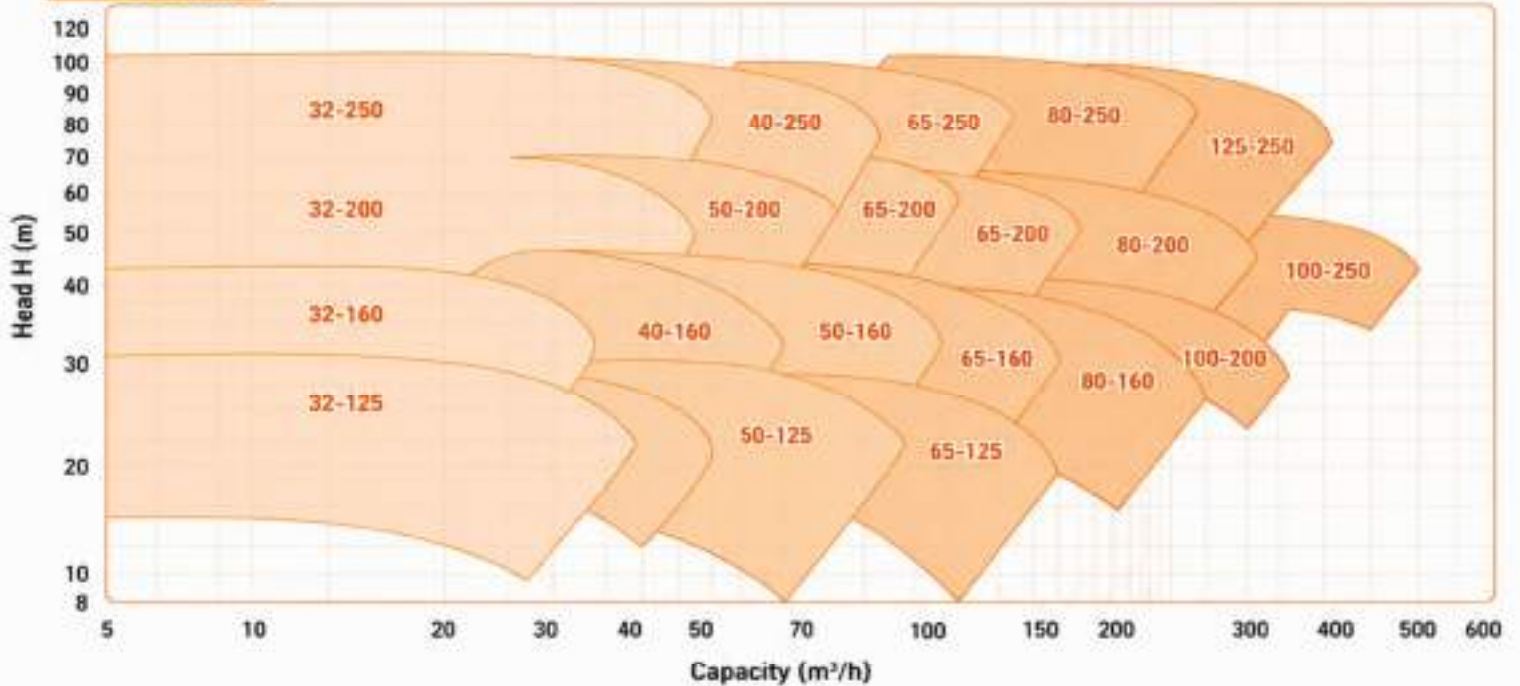
## FIELD CHARTS

### SGB SERIES – CENTRIFUGAL PUMPS

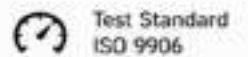
**1450 rpm**



**2900 rpm**



**NOTE** Performance curves are based on water ( $\rho = 1000 \text{ kg/m}^3$ ) at 20 °C.  
Tolerances according to ISO 9906 – Annex A.

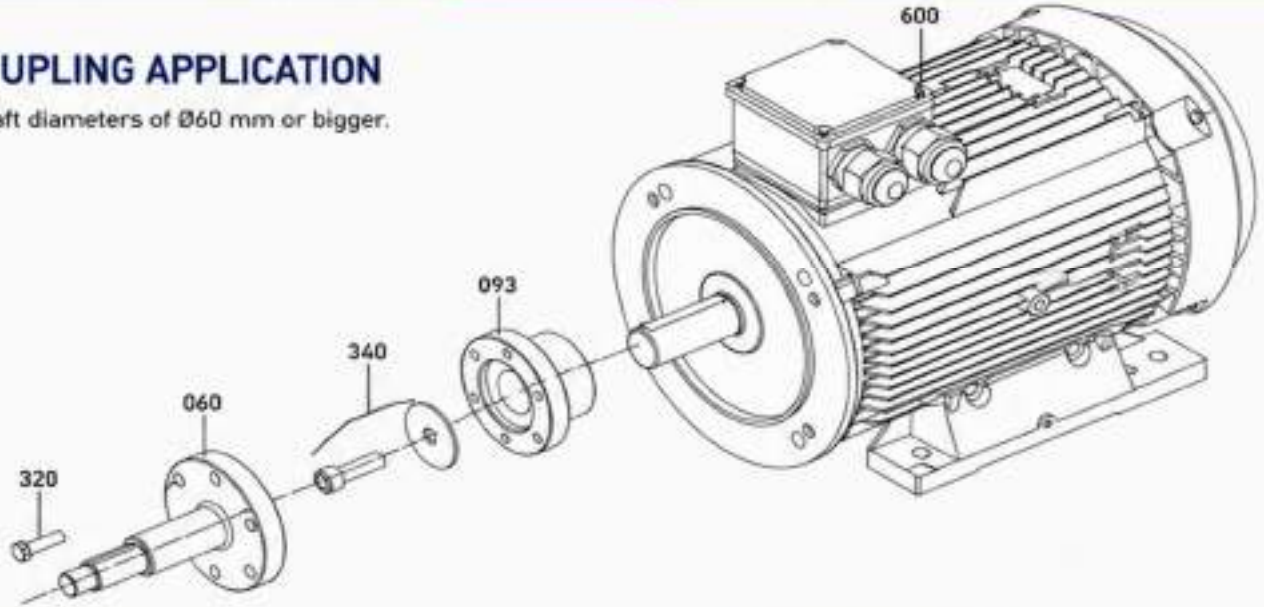




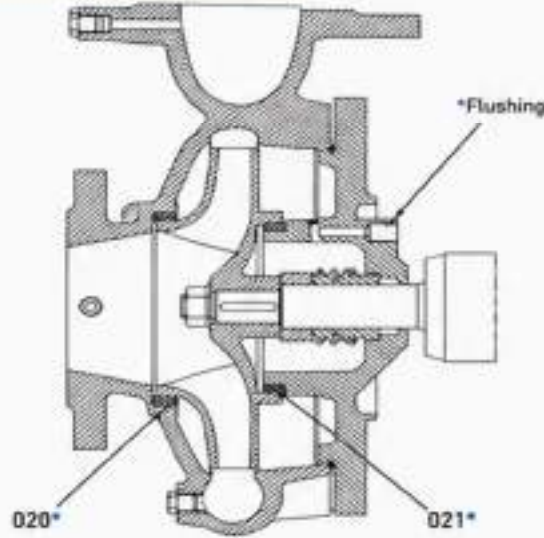
## RIGID COUPLING APPLICATION

For motor shaft diameters of Ø60 mm or bigger.

SGB SERIES



### OPTIONAL APPLICATIONS



### PART LIST

|      |                               |
|------|-------------------------------|
| 001  | Volute Casing                 |
| 005  | Motor Pedestal                |
| 020* | Wear Ring (Casing)            |
| 021* | Wear Ring (Seal Cover)        |
| 043  | Mechanical Seal Cover         |
| 049  | Mechanical Seal Spacer Sleeve |
| 050  | Impeller                      |
| 060  | Shaft                         |
| 065  | Impeller Nut and Washer       |
| 088  | Thrower                       |
| 093  | Rigid Coupling                |
| 210  | Impeller Key                  |
| 230  | Screw                         |
| 301  | Stud, Washer and Nut          |
| 320  | Screw                         |
| 340  | Allen Screw and Washer        |
| 380  | Set Screw                     |
| 405  | Mechanical Seal               |
| 420  | O-ring                        |
| 550  | Guard                         |
| 600  | Electric Motor                |

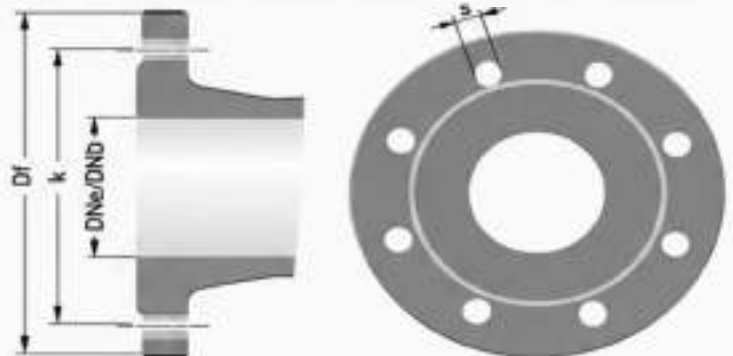
(\*) Optional

### FLANGE DIMENSIONS

EN 1092-2

| DNe/DNb | Suction & Discharge (PN 16) |     |    |    |  |
|---------|-----------------------------|-----|----|----|--|
|         | Df                          | k   | s  | n  |  |
| 32      | 140                         | 100 | 18 | 4  |  |
| 40      | 150                         | 110 | 18 | 4  |  |
| 50      | 165                         | 125 | 18 | 4  |  |
| 65      | 185                         | 145 | 18 | 4  |  |
| 80      | 200                         | 160 | 18 | 8  |  |
| 100     | 220                         | 180 | 18 | 8  |  |
| 125     | 250                         | 210 | 18 | 8  |  |
| 150     | 285                         | 240 | 22 | 8  |  |
| 200     | 340                         | 295 | 22 | 12 |  |
| 250     | 405                         | 355 | 26 | 12 |  |

"n" number of holes





## MATERIAL OPTION

## SGB SERIES

| Part List                | 10       | 30     | 35     | 20     | 60     | 6L     | 70     | 7L     | 8M     | 7D     | 75     | 8N     | 80     | 4A        | 40        | 80        | 8T     | 60        | 7E     | 7D     |
|--------------------------|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|-----------|-----------|--------|-----------|--------|--------|
|                          | 0.6025   | 0.7040 | 0.7043 | 1.0619 | 1.4308 | 1.4309 | 1.4408 | 1.4409 | 1.4500 | 1.4517 | 1.4469 | 1.4317 | 1.4008 | 2.1050.01 | 2.0975.01 | 2.1096.01 | 1.4021 | 1.4921-QT | 1.4404 | 1.4462 |
| Volute Casing            | ●        | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○         |           |           |        |           |        |        |
| Mechanical Seal Cover    | ●        | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○         |           |           |        |           |        |        |
| Impeller                 | ●        | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○         | ○         | ○         |        |           | ○      |        |
| Shaft                    |          |        |        |        |        |        |        |        |        |        |        |        |        |           |           |           | ●      | ○         | ○      | ○      |
| Bearing Housing          | ●        | ○      | ○      | ○      | ○      | ○      | ○      | ○      |        |        |        |        |        |           |           |           |        |           |        |        |
| Wear Ring                | ○        | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○         | ○         | ○         |        |           |        |        |
| Mech. Seal Spacer Sleeve |          |        |        |        |        |        |        |        |        |        |        |        |        |           |           |           | ●      | ○         | ○      | ○      |
| Mechanical Seal (*)      | EN 12756 |        |        |        |        |        |        |        |        |        |        |        |        |           |           |           |        |           |        |        |

(\*) Optional: Depending on customer requirement or request different types and brands of mechanical seals are applicable.

NOTE: Depends on the request, different than above casting and shaft material can be supplied.

● Standard manufacturing  
○ Optional

## MATERIAL EQUIVALENTS

| Description                                      |           | DIN / EN                   | AISI / SAE / ASTM |
|--------------------------------------------------|-----------|----------------------------|-------------------|
| Cast Iron                                        | 0.6025    | EN-GJL-250 (GG25)          | A48 Class 40B     |
| Nodular Cast Iron                                | 0.7040    | EN-GJS-400-15 (GGG40)      | A536 60-40-18     |
| Nodular Cast Iron                                | 0.7043    | EN-GJS-400-18-LT (GGG40.3) | A536 60-40-18     |
| Cast Steel                                       | 1.0619    | GP240GHGS-C25              | A216 WCB          |
| Chrome Nickel Cast Steel                         | 1.4308    | GX5CrNi19-10               | A351 CF8          |
| Chrome Nickel Cast Steel (low carbon)            | 1.4309    | GX2CrNi19-11               | A351 CF3          |
| Chrome Nickel Molybdenum Cast Steel              | 1.4408    | GX5CrNiMo19-11-2           | A351 CF8M         |
| Chrome Nickel Molybdenum Cast Steel (low carbon) | 1.4409    | GX2CrNiMo19-11-2           | A351 CF3M         |
| Austenitic Cast Steel                            | 1.4500    | GX7NiCrMoCuNb25-20         | A351 CN7M         |
| Austenitic - Ferritic Cast Steel (duplex)        | 1.4517    | GX2CrNiMoCuN25-6-3-3       | A890 CD4MCuN      |
| Austenitic - Ferritic Cast Steel (super duplex)  | 1.4469    | GX2CrNiMoN26-7-4           | A890 CE3MN        |
| Martenzitic Stainless Cast Steel                 | 1.4317    | GX4CrNi13-4                | A352 CA6NM        |
| Martenzitic Stainless Cast Steel                 | 1.4008    | GX7CrNiMo12-1              | A27 CA15          |
| Cast Bronze (tin alloy)                          | 2.1050.01 | G-CuSn10                   | B427 C90700       |
| Cast Bronze (nickel alloy)                       | 2.0975.01 | G-CuAl10Ni                 | B148 C95500       |
| Cast Bronze (Leaded)                             | 2.1096.01 | G-CuSn5ZnPb                | B584 C83600       |
| Chrome Steel                                     | 1.4021    | X20Cr13                    | A276 Type 420     |
| Chrome Steel(heat treated)                       | 1.4021    | X20Cr13                    | A276 Type 420-QT  |
| Chrome Nickel Steel                              | 1.4301    | X5CrNi18-10                | A276 Type 304     |
| Chrome Nickel Steel (low carbon)                 | 1.4404    | X2CrNiMo17-12-2            | A276 Type 316L    |
| Duplex (austenitic-ferritic) Steel               | 1.4460    | X3CrNiMoN27-5-2            | AISI 329          |
| Duplex (austenitic-ferritic) Steel               | 1.4462    | X2CrNiMoN22-5-3            | UNS S32205        |



# Micra®

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MICRA POMPA VE MAKİNA İMALAT LTD. ŞTİ.



**MICRA**  
POMPA

Pump • Fire Fighting Systems • Hydrophore

## ENGINEERED FOR PERFORMANCE BUILT TO LAST

SGB Series pumps are designed and manufactured to deliver high efficiency, reliable operation and long service life in a wide range of applications.

Quality materials, precise engineering and advanced production technologies ensure superior performance and customer satisfaction.



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Hydraulic design optimized for maximum efficiency and low energy consumption.



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Robust construction and high quality materials for long service life.



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