



product catalogue

SOMA Pumps GmbH
Your specialist for the
SOMA SINUS SODIAL® Pump



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Our Company



This is what sets us apart:



Passion for
our product



customer service



flexibility



ISO 9001
certified



Product
specialist



Quality & Service Made in Germany

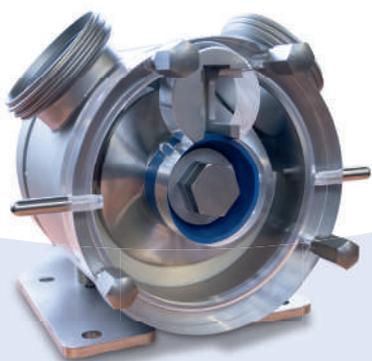
SOMA Pumps GmbH is a leading manufacturer of SOMA SINUS SODIAL® pumps, headquartered in Abstatt (Baden-Württemberg, Germany). The company was founded by Manfred Sommer, the inventor of the revolutionary pump system, under the name MASO-Prozesspumpen GmbH in 1982.

Manfred Sommer's vision was to create a pump that could convey products without causing any damage, ensuring gentle and soft handling. Since 2010, SOMA SINUS SODIAL® pumps have been continuously developed by its successors to provide the highest level of quality.

SOMA Pumps GmbH prides itself on offering application-specific and competent advice, as well as

individual solutions, thanks to its comprehensive knowledge and expertise in the field. The company is committed to providing excellent customer service and innovative pump solutions to meet the diverse needs of its clients.

With its focus on quality, innovation, and customer satisfaction, SOMA Pumps GmbH has established itself as a trusted and reliable partner in the pumping industry.



The operating principle

The SCN series of SOMA Pumps GmbH is a positive displacement pump based on the SINUS principle.

Our SOMA SINUS SODIAL® pumps are used for a flow rate of up to 90,000 l/h. The core of the pump is a sine wave, which is mounted as a disc (rotor) on a drive shaft. It gently and evenly transports the product to be conveyed through four equally divided chambers without any risk of reducing the product quality. This ensures virtually pulsation-free conveying.

A scraper separates the suction and discharge sides of the pump, allowing pressure equalization and thus preventing backflow. Due to the constantly open suction side, the viscosity of the products is

irrelevant. This supports the production of high viscous products, such as silicones or frozen orange juice concentrate, as well as low viscous products, such as water-like products. In addition, the pump avoids potential foaming and liquid separation.



SOMA SINUS SODIAL® PUMPS

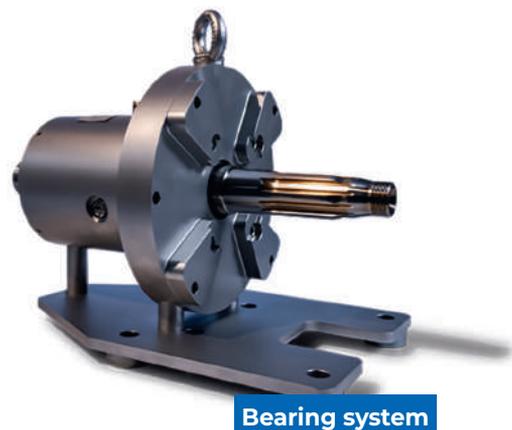
The SINUS rotor operates inside two separate liners so that the pump housing and cover are not subject to wear. Based on this design advantage, we are able to provide a lifetime warranty on the housing and cover.

The main seal of our SOMA SINUS SODIAL® pump is available in different versions, depending on the application. Various mechanical seals and special seals are offered.

Both the maintenance of the pump and the replace-

ment of wear parts can be carried out by the operator himself in just a few minutes. Likewise, the pump can be cleaned in its installed state in just a few minutes by means of CIP cleaning and SIP sterilization.

In order to achieve optimum efficiency and minimize energy costs as well as pump wear, the pump size must be precisely matched to the process requirements. Therefore, benefit from our decades of experience and extensive know-how in the field of sinusoidal pumps and let our experts advise you.



SOMA SINUS SODIAL® PUMP

BENEFITS IN THE FOOD INDUSTRY

SOMA SINUS SODIAL® pumps are ideal for the conveyance of food. They are suitable for the particularly gentle, low-pulsation conveyance of liquids with large particulate matter, high as well as low viscous products, and products with shear-sensitive ingredients.

Gentle conveyance: The SOMA SINUS SODIAL® pumps convey food gently without damaging it. The sinusoidal movement of the conveying medium avoids pressure peaks that could lead to damage or changes in the food.

High product quality: The gentle conveyance preserves the quality of the food. There is no damage to the structure.

Large product chambers: SOMA SINUS SODIAL® pumps are capable of conveying large particulates without damage.

Easy cleaning: The SOMA SINUS SODIAL® pump is easy to clean. This ensures compliance with hygiene regulations in the food industry and minimizes the risk of contamination.

Low maintenance effort: The SOMA SINUS SODIAL® pump is robust and low-maintenance. It requires minimal maintenance and is durable, leading to low operating costs.

Energy efficiency: SOMA SINUS SODIAL® pumps from Soma Pumps GmbH are extremely efficient as

they operate with low shear forces and almost pulse-free, consuming up to 50% less energy than comparable pump types.

Versatile applications: The SOMA SINUS SODIAL® pump can be used for a variety of foods, such as liquids, pasty products, viscous masses, or sensitive foods like fruits or vegetables.

Key points: Gentle conveyance, low shear forces, high suction capacity, almost pulse-free, high conveying performance, easy cleaning, low maintenance effort.

Product examples:

Mayonnaise, ketchup, sauces, deli salads, vegetables, fruits, convenience food, minced meat, chicken breast, chutney, pasta, and more.



SOMA SINUS SODIAL® PUMP

BENEFITS IN THE BEVERAGE INDUSTRY

SOMA SINUS SODIAL® pumps are excellent for the requirements in the beverage industry and offer a variety of benefits. With their gentle conveying process, they ensure gentle treatment of your valuable beverages. Whether you are producing juices, concentrates, soft drinks, syrups, or alcoholic beverages, the SOMA SINUS SODIAL® pump ensures consistent quality.

Gentle conveyance: The SOMA SINUS SODIAL® pumps operate with a gentle conveying principle that treats the medium gently and ensures high product quality. The sinusoidal movement of the pump prevents the product from being crushed or foamed, leading to better consistency and quality.

High suction capacity: The SOMA SINUS SODIAL® pump is characterized by its high suction capacity. The sinusoidal movement of the conveying medium creates a strong vacuum that allows for efficient suction of liquids or other media.

Low shear forces: The SOMA SINUS SODIAL® pump generates almost no shear forces, meaning that sensitive components are not damaged. This allows the conveyed medium to retain its natural properties.

High conveying performance: The SOMA SINUS SODIAL® pump can achieve high conveying performance, enabling large quantities to be conveyed quickly and efficiently.

Easy cleaning: The SOMA SINUS SODIAL® pump is easy to clean as it can be cleaned using CIP, SIP, or manual methods.

Reliability: The SOMA SINUS SODIAL® pump is robust and durable, resulting in low maintenance effort. This saves time and costs for maintenance.

Energy efficiency: SOMA SINUS SODIAL® pumps are highly efficient as they operate with low shear forces and almost pulse-free, consuming up to 50% less power than comparable pump types.

Product examples:

Concentrates, juices and juice drinks, syrups, wine, beer and malt beverages, brewer's yeast, water, smoothies, tea, coffee, herbal drinks, sports drinks, and more.



SOMA SINUS SODIAL® PUMP

BENEFITS IN THE MEAT INDUSTRY

SOMA SINUS SODIAL® pumps offer many benefits in the meat industry, leading to better quality, efficiency, and cost-effectiveness in production. Trust in the innovative technology of SOMA SINUS SODIAL® pumps and let your meat products shine in the best quality!

Gentle conveying: The sinusoidal movement of the SOMA SINUS SODIAL® pumps allows for gentle conveying of meat products such as minced meat, meat paste, sausages, or chicken breast. This preserves the texture and fibers of the meat without crushing or damaging it.

Efficient processing: Our SOMA SINUS SODIAL® pumps enable efficient processing of meat and meat products. They convey the meat quickly and continuously, leading to increased production speed and improved efficiency.

Easy cleaning and maintenance: The SOMA SINUS SODIAL® pumps is easy to clean by hand, CIP, or SIP and requires minimal maintenance. They are made of high-quality materials that comply with the strict hygiene regulations of the meat industry, ensuring food safety.

Versatile applications: Our SOMA SINUS SODIAL® pumps can be used for various types of meat and meat products, such as beef, pork, poultry, or sau-

sage products. Whether it's whole pieces, minced meat, or marinated meat, our sinus pumps can handle any challenge.

Key points: Almost pulse-free and cell-friendly conveying, gentle product handling maintains consistent high product quality, maintenance/part replacement, and pump disassembly within minutes.

Product examples:

Meat paste, boiled sausage, emulsions, meat pies, meat products like chicken breast, and more.

Choose SOMA SINUS SODIAL® pumps in the meat industry and benefit from gentle and efficient conveying that preserves the quality of your meat.



SOMA SINUS SODIAL® PUMP

BENEFITS IN THE CONFECTIONERY INDUSTRY

Thanks to its gentle conveying principle, the SOMA SINUS SODIAL® pump allows for the gentle treatment of your sweet delicacies. No shaking, no squeezing - your products retain their shape and consistency while being efficiently conveyed.

The low shear forces of the SOMA SINUS SODIAL® pump ensure that sensitive ingredients such as chocolate, creams, fillings with or without pieces are not damaged. This ensures that your confectionery maintains its quality and taste.

Gentle conveying: The sinusoidal movement of the SOMA SINUS SODIAL® pump allows for gentle conveying of chocolate, for example, without shaking or squeezing it. This preserves the shape and texture of the chocolate, which is crucial to maintain its quality and taste.

Low shear forces: The low shear forces of the SOMA SINUS SODIAL® pump protect sensitive ingredients like cocoa butter or fillings. This preserves the quality of the chocolate and maintains its creamy consistency.

Low maintenance effort: The SOMA SINUS SODIAL® pump is robust and durable, resulting in low maintenance effort. This saves time and costs for maintenance, enabling reliable production.

Easy cleaning: Cleaning the SOMA SINUS SODIAL®

pump is easy. There are no hard-to-reach areas or hidden corners that make thorough cleaning difficult. You can keep your production hygienic and clean without investing a lot of time and effort.

Key points: Gentle conveying, low shear forces, high suction capacity, almost pulse-free, high conveying performance, easy cleaning, low maintenance effort.

Product examples:

Syrup, caramel, chocolate, pralines, cocoa butter, candy and gummy mass, gummies, ice cream, and more.

Overall, the SOMA SINUS SODIAL® pump offers many benefits in conveying chocolate, leading to better quality, efficiency, and cost-effectiveness in production. Trust in the innovative technology of the SOMA SINUS SODIAL® pump and let your sweet delicacies shine in their best form.

SOMA SINUS SODIAL® PUMP

BENEFITS IN THE DAIRY INDUSTRY

Our SOMA SINUS SODIAL® pump is the perfect solution for the gentle conveying of your dairy-based products such as milk, yogurt, cream, and more. Thanks to its unique sinusoidal movement, the quality and freshness of your products are preserved while being efficiently conveyed.

The low shear forces of the SOMA SINUS SODIAL® pump protect the sensitive components of your dairy products. The texture, taste, and valuable nutrients remain intact, allowing your customers to experience the full enjoyment of your products.

High conveying performance: The SOMA SINUS SODIAL® pump can achieve high conveying performance, meaning that large quantities of dairy products can be conveyed quickly and efficiently.

Gentle conveying: The sinusoidal movement of the SOMA SINUS SODIAL® pump allows for gentle conveying of dairy-based products like milk, yogurt, or cream. This preserves the quality and freshness of the products without being affected by shaking or foaming.

Low shear forces: The low shear forces of the SOMA SINUS SODIAL® pump protect the sensitive components of dairy products. This is crucial to preserve the texture, taste, and nutrients of the products.

Easy cleaning: The SOMA SINUS SODIAL® pumps are manually cleanable and CIP/SIP compatible. There are no hard-to-reach areas or hidden corners that make thorough cleaning difficult. You can keep

your production hygienic and clean without investing much time and effort.

Low maintenance effort: The SOMA SINUS SODIAL® pump is robust and durable, resulting in low maintenance effort. This saves time and costs for maintenance and enables reliable production.

Key points: Gentle conveying, low shear forces, almost pulse-free, high conveying performance, easy cleaning, low maintenance effort.

Product examples:

Whey and whey drinks, butter, curd, cream, milk and milk drinks, yogurt, soft ice cream, frozen yogurt, and more.



SOMA SINUS SODIAL® PUMP

BENEFITS IN THE COSMETIC INDUSTRY

Our SOMA SINUS SODIAL® pump allows for gentle conveying of your precious cosmetic products such as creams, lotions, and serums. Thanks to its unique sinusoidal movement, the effectiveness of your products is maintained while protecting sensitive ingredients.

Discover the benefits of the SOMA SINUS SODIAL® pump in the cosmetics industry and enhance the quality, efficiency, and cost-effectiveness of your production! With impressive conveying performance, the SOMA SINUS SODIAL® pump enables efficient production. Large quantities of cosmetic products can be conveyed quickly, reliably, and pulse-free without compromising quality.

Gentle conveying: The sinusoidal movement of the SOMA SINUS SODIAL® pump enables gentle conveying without shaking or foaming, preserving the consistency and quality of the medium.

Low shear forces: The low shear forces of the SOMA SINUS SODIAL® pump protect sensitive ingredients.

Almost pulse-free: The SOMA SINUS SODIAL® pump conveys your products almost without pulsation, preventing foaming or product damage.

High conveying performance: The SOMA SINUS SODIAL® pump can achieve high conveying performance, meaning that large quantities can be conveyed quickly and efficiently.

Easy cleaning: The SOMA SINUS SODIAL® pump is easy to clean (CIP, SIP, or manual) as it has no hard-to-reach areas. This is crucial to ensure hygienic and clean production.

Low maintenance effort: The SOMA SINUS SODIAL® pump is robust and durable, resulting in low maintenance effort. This saves time and costs for maintenance, allowing for reliable performance.

Key points: Gentle conveying, low shear forces, almost pulse-free, high conveying performance, easy cleaning, low maintenance effort.

Product examples:

Hair shampoo, hair conditioner, hair color, shower gels, skin cream, hair gel, makeup, sunscreen, toothpaste, mouthwash, and more.



SOMA SINUS SODIAL® PUMP

BENEFITS IN THE CHEMICAL INDUSTRY

Our SOMA SINUS SODIAL® pumps provide an innovative solution for conveying chemicals. With their unique sinusoidal movement, they ensure precise and reliable conveying that meets the demands of the chemical industry.

Chemical resistance: SOMA SINUS SODIAL® pumps are made of high-quality materials that are resistant to a variety of chemicals. This allows them to convey aggressive or corrosive chemicals without damaging the pump.

Uniform conveying: The sinusoidal movement of the SOMA SINUS SODIAL® pump ensures uniform conveying of chemicals, ensuring a constant and reliable supply in production processes.

High pressure and suction performance: SOMA SINUS SODIAL® pumps offer high pressure and suction performance, which is often required in the chemical industry. They can convey chemicals over long distances and easily suction media with high viscosity.

Easy cleaning and maintenance: SOMA SINUS SODIAL® pumps are easy to clean and require minimal maintenance. They are designed without dead spaces where chemicals could accumulate, making cleaning easier.

Energy efficiency: SOMA SINUS SODIAL® pumps are extremely efficient as they operate with low shear forces and almost pulse-free, consuming up to 50% less power than comparable pump types.

Key points: Gentle conveying, minimal shear forces, high suction capacity, almost pulse-free, easy cleaning, low maintenance effort, chemical-resistant components.

Product examples:

Laundry detergents, cleaning agents, solvents, adhesives and sealants, silicones, soaps, polymers, and more.

Overall, SOMA SINUS SODIAL® pumps in the chemical industry provide reliable and precise conveying of chemicals that meet the industry's requirements and standards. They enable efficient and safe handling of chemicals in various processes.

Pump characteristics

Displacement volume: 0,11 l/rev

Speed range: 0-1.000 rpm

Pump pressure: max. 15 bar

Temperature: max. 180 °C

Suction Power: 0,85 bar

 Food

 Beverages

 Meat processing

 Confectionery

 Dairy Products

 Cosmetics/Pharma

 Chemicals

SCN20/SCN20-D

Benefits

- ✓ Smooth and gentle transfer especially when fragile particles are pumped
- ✓ Constant flow with nearly no pulsation
- ✓ high suction power
- ✓ No foaming of the product during the pumping process
- ✓ Perfect suitable for low and high viscous products
- ✓ CIP/SIP and manual cleaning able
- ✓ Heating/cooling jacket available
- ✓ Energy efficient
- ✓ Simple maintenance in the system
- ✓ Full life guarantee for the pump housing and pump cover
- ✓ Temperature up to 180°C
- ✓ Viscosities up to 9.000.000 cps
- ✓ ATEX- Execution up to T4
- ✓ FDA, EG1935-2004, 3.1 certified
- ✓ Classic SCN and compact SCN-D design available

Technical data

✓ Performance and features

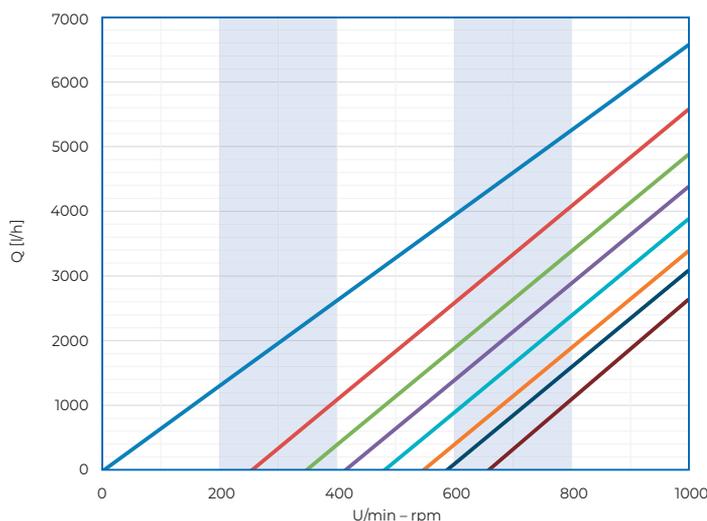
- Capacity: max. 4.000 l/h
- CIP / SIP capability
- Particle Size: max. 20 mm
- Suction Power: - 0,85 bar
- Viscosity: 1cps – 9 Mio. cps
- Temperature max. 180°C
- Pressure: max. 15 bar

✓ Certification

- Food and Drug Administration (FDA)
- EG 1935-2004
- ATEX
- 3.1 Stainless Steel

✓ Nozzles available

- Flange
- German Milk Fitting DIN 11851
- Tri-Clamp
- RJT
- SMS
- according to customer requirements



Performance curve depending on the type of medium and the application parameters.

- 0 bar
- 2 bar
- 4 bar
- 6 bar
- 8 bar
- 10 bar
- 12 bar
- 15 bar

Pump characteristics

Displacement volume: 0,45 l/rev

Speed range: 0-600 rpm

Pump pressure: max. 15 bar

Temperature: max. 180 °C

Suction Power: 0,85 bar

 Food

 Beverages

 Meat processing

 Confectionery

 Dairy Products

 Cosmetics/Pharma

 Chemicals

SCN25/SCN25-D

Benefits

- ✓ Smooth and gentle transfer especially when fragile particles are pumped
- ✓ Constant flow with nearly no pulsation
- ✓ high suction power
- ✓ No foaming of the product during the pumping process
- ✓ Perfect suitable for low and high viscous products
- ✓ CIP/SIP and manual cleaning able
- ✓ Heating/cooling jacket available
- ✓ Energy efficient
- ✓ Simple maintenance in the system
- ✓ Full life guarantee for the pump housing and pump cover
- ✓ Temperature up to 180°C
- ✓ Viscosities up to 9.000.000 cps
- ✓ ATEX- Execution up to T4
- ✓ FDA, EG1935-2004, 3.1 certified
- ✓ Classic SCN and compact SCN-D design available

Technical data

✓ Performance and features

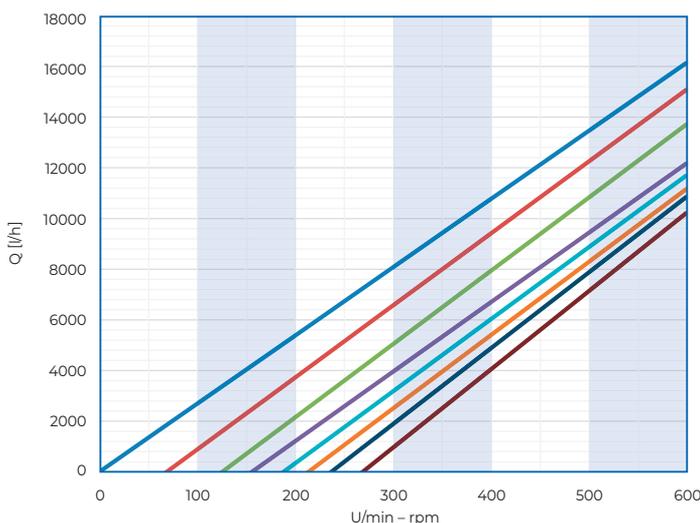
- Capacity: max. 18.000 l/h
- CIP / SIP capability
- Particle Size: max. 30 mm
- Suction Power: - 0,85 bar
- Viscosity: 1cps – 9 Mio. cps
- Temperature max. 180°C
- Pressure: max. 15 bar

✓ Certification

- Food and Drug Administration (FDA)
- EG 1935-2004
- ATEX
- 3.1 Stainless Steel

✓ Nozzles available

- Flange
- German Milk Fitting DIN 11851
- Tri-Clamp
- RJT
- SMS
- according to customer requirements



Performance curve depending on the type of medium and the application parameters.

- 0 bar
- 2 bar
- 4 bar
- 6 bar
- 8 bar
- 10 bar
- 12 bar
- 15 bar

Pump characteristics

Displacement volume: 1,15 l/rev

Speed range: 0-600 rpm

Pump pressure: max. 15 bar

Temperature: max. 180 °C

Suction Power: 0,85 bar

 Food

 Beverages

 Meat processing

 Confectionery

 Dairy Products

 Cosmetics/Pharma

 Chemicals

SCN40/SCN40-D

Benefits

- ✓ Smooth and gentle transfer especially when fragile particles are pumped
- ✓ Constant flow with nearly no pulsation
- ✓ high suction power
- ✓ No foaming of the product during the pumping process
- ✓ Perfect suitable for low and high viscous products
- ✓ CIP/SIP and manual cleaning able
- ✓ Heating/cooling jacket available
- ✓ Energy efficient
- ✓ Simple maintenance in the system
- ✓ Full life guarantee for the pump housing and pump cover
- ✓ Temperature up to 180°C
- ✓ Viscosities up to 9.000.000 cps
- ✓ ATEX- Execution up to T4
- ✓ FDA, EG1935-2004, 3.1 certified
- ✓ Classic SCN and compact SCN-D design available

Technical data

✓ Performance and features

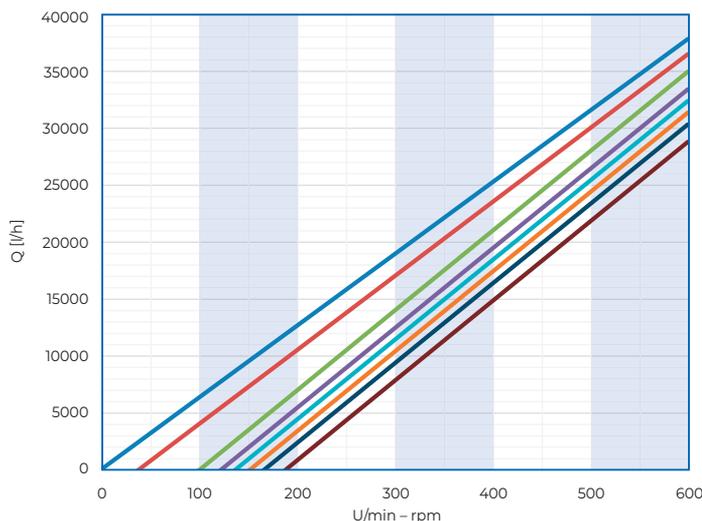
- Capacity: max. 40.000 l/h
- CIP / SIP capability
- Particle Size: max. 45 mm
- Suction Power: - 0,85 bar
- Viscosity: 1cps – 9 Mio. cps
- Temperature max. 180°C
- Pressure: max. 15 bar

✓ Certification

- Food and Drug Administration (FDA)
- EG 1935-2004
- ATEX
- 3.1 Stainless Steel

✓ Nozzles available

- Flange
- German Milk Fitting DIN 11851
- Tri-Clamp
- RJT
- SMS
- according to customer requirements



Performance curve depending on the type of medium and the application parameters.

- 0 bar
- 2 bar
- 4 bar
- 6 bar
- 8 bar
- 10 bar
- 12 bar
- 15 bar

SOMA SINUS SODIAL® Pump range SCN

The SCN series from SOMA Pumpen GmbH is a positive displacement pump. The heart of the pump is a sinus wave, which is mounted as a rotor on a drive shaft. It transports the product to be pumped gently

and evenly through four equally divided chambers, without any risk of reducing the product quality. This ensures almost pulsation-free conveying is ensured.

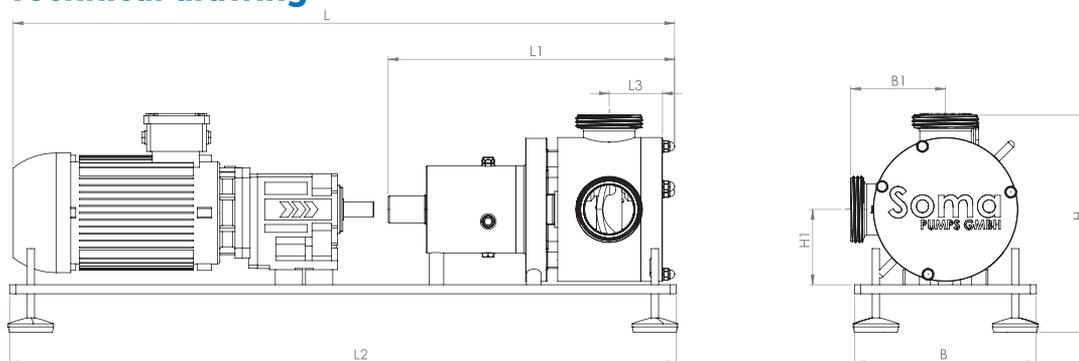
Benefits and technical data

- ✓ Smooth and gentle transfer especially when fragile particles are pumped
- ✓ Constant flow with nearly no pulsation
- ✓ high suction power
- ✓ No foaming of the product during the pumping process
- ✓ Perfect suitable for low and high viscous products
- ✓ CIP/SIP and manual cleaning able
- ✓ Heating/cooling jacket available
- ✓ Energy efficient
- ✓ Simple maintenance in the system
- ✓ Full life guarantee for the pump housing and pump cover
- ✓ Temperature up to 180°C
- ✓ Viscosities up to 9.000.000 cps
- ✓ ATEX- Execution up to T4
- ✓ FDA, EG1935-2004, 3.1 certified
- ✓ Classic SCN and compact SCN-D design available

Technical data

SCN	Capacity	Speed range	Solid size	Suction power	Pump pressure
SCN 10	max. 4.800 l/h	max. 1000 rpm	max. 10 mm	-0,85 bar	max. 10 bar
SCN 20	max. 6.900 l/h	max. 1000 rpm	max. 20 mm	-0,85 bar	max. 15 bar
SCN 25	max. 18.000 l/h	max. 600 rpm	max. 30 mm	-0,85 bar	max. 15 bar
SCN 40	max. 40.000 l/h	max. 600 rpm	max. 45 mm	-0,85 bar	max. 15 bar
SCN 50	max. 68.400 l/h	max. 600 rpm	max. 50 mm	-0,85 bar	max. 15 bar
SCN 60	max. 90.000 l/h	max. 600 rpm	max. 60 mm	-0,85 bar	max. 15 bar

Technical drawing



Dimensions

Model	L / mm	L1 / mm	L2 / mm	L3 / mm	B / mm	B1 / mm	H / mm	H1 / mm
SCN 20	909	333	800	65	240	101	290	105
SCN 25	1092	473	1100	88	300	156	360	125
SCN 40	1322	597	1300	111.5	380	186	440	175

Pump characteristics

Displacement volume: 1,90 l/rev

Speed range: 0-600 rpm

Pump pressure: max. 15 bar

Temperature: max. 180 °C

Suction Power: -0,85 bar

 Food

 Beverages

 Meat processing

 Confectionery

 Dairy Products

 Cosmetics/Pharma

 Chemicals

SCN50

Materials SCN-pump range

Pump housing/front cover	Stainless Steel 1.4404
Bearing unit	Stainless Steel 1.4301
Rotor	Stainless Steel 1.4404
Scrapergate guide	Stainless Steel 1.4404
Locking nut/locking screw	Stainless Steel 1.4404
Scraper/liner	Specific to the application
Elastomere	FFKM, FKM, EPDM, NBR, PTFE, KALREZ, SILIKON
Sealing system	Specific to the application

Technical data

✓ Performance and features

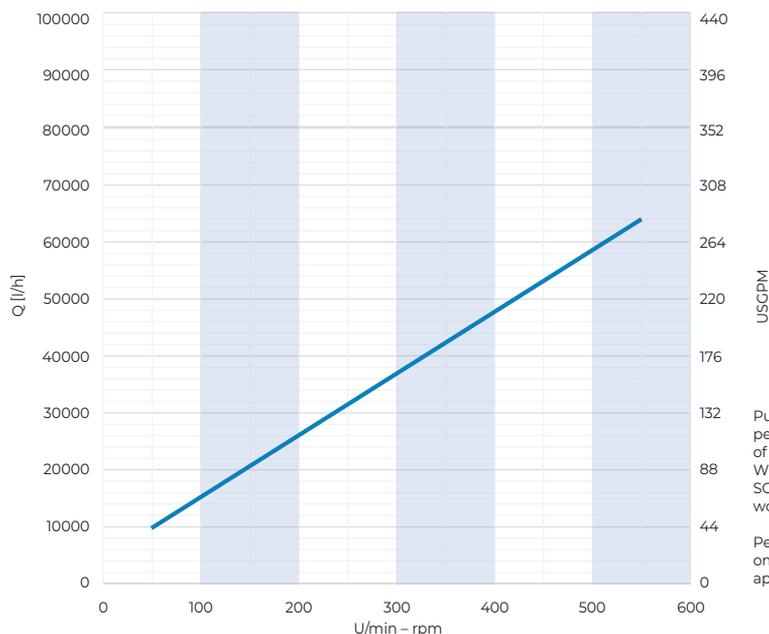
- Capacity: max. 68.400 l/h
- CIP / SIP capability
- Particle Size: max. 50 mm
- Suction Power: -0,85 bar
- Viscosity: 1cps – 9 Mio. cps
- Temperature max. 180°C
- Pressure: max. 15 bar

✓ Certification

- Food and Drug Administration (FDA)
- EG 1935-2004
- ATEX
- 3.1 Stainless Steel

✓ Nozzles available

- Flange
- German Milk Fitting DIN 11851
- Tri-Clamp
- RJT
- SMS
- according to customer requirements



Pump curve shows performance with a viscosity of approx. 1.000 cps. With higher viscosities, SOMA SINUS SODIAL® pumps work without slip.

Performance curve depending on the type of medium and the application parameters.

SOMA SINUS SODIAL® Pump SCN50

The SCN series from SOMA Pumps GmbH is a positive displacement pump. The heart of the pump is a sinus wave, which is mounted as a rotor on a drive shaft. It transports the product to be pumped

gently and evenly through four equally divided chambers, without any risk of reducing the product quality.

This ensures almost pulsation-free conveying.

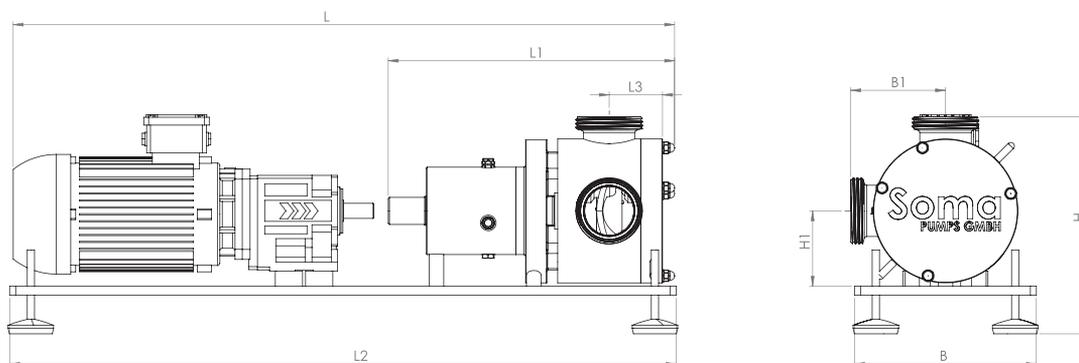
Benefits and technical data

- ✓ Smooth and gentle transfer especially when fragile particles are pumped
- ✓ Constant flow with nearly no pulsation
- ✓ high suction power
- ✓ No foaming of the product during the pumping process
- ✓ Perfect suitable for low and high viscous products
- ✓ CIP/SIP and manual cleanable
- ✓ Heating/cooling jacket available
- ✓ Energy efficient
- ✓ Simple maintenance in the system
- ✓ Full life guarantee for the pump housing and pump cover
- ✓ Temperature up to 180°C
- ✓ Viscosities up to 9.000.000 cps
- ✓ ATEX- Execution up to T4
- ✓ FDA, EG1935-2004, 3.1 certified
- ✓ Classic SCN and compact SCN-D design available

Technical data

SCN	Capacity	Speed range	Solid size	Suction power	Pump pressure
SCN50	max. 68.400 l/h	max. 600 rpm	max. 50mm	-0,85 bar	max. 15 bar

Technical drawing



Dimensions

Model	L / mm	L1 / mm	L2 / mm	L3 / mm	B / mm	B1 / mm	H / mm	H1 / mm
SCN50	1445	656	1300	129	400	201	460	179,5

Pump characteristics

Displacement volume: 2,5 l/rev

Speed range: 0-600 rpm

Pump pressure: max. 15 bar

Temperature: max. 180 °C

Suction Power: -0,85 bar

 Food

 Beverages

 Meat processing

 Confectionery

 Dairy Products

 Cosmetics/Pharma

 Chemicals

SCN60

Materials SCN-pump range

Pump housing/front cover	Stainless Steel 1.4404
Bearing unit	Stainless Steel 1.4301
Rotor	Stainless Steel 1.4404
Scrapergate guide	Stainless Steel 1.4404
Locking nut/locking screw	Stainless Steel 1.4404
Scraper/liner	Specific to the application
Elastomere	FFKM, FKM, EPDM, NBR, PTFE, KALREZ, SILIKON
Sealing system	Specific to the application

Technical data

✓ Performance and features

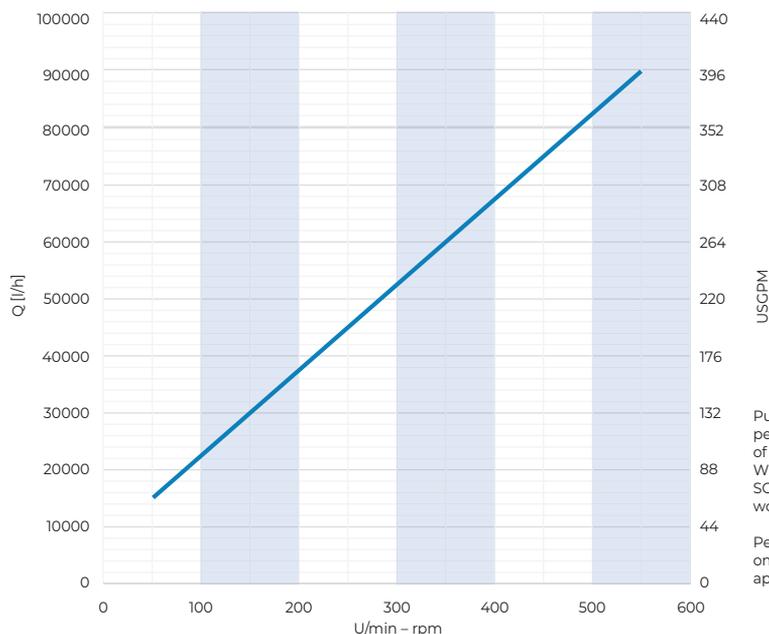
- Capacity: max. 90.000 l/h
- CIP / SIP capability
- Particle Size: max. 60 mm
- Suction Power: -0,85 bar
- Viscosity: 1cps – 9 Mio. cps
- Temperature max. 180°C
- Pressure: max. 15 bar

✓ Certification

- Food and Drug Administration (FDA)
- EG 1935-2004
- ATEX
- 3.1 Stainless Steel

✓ Nozzles available

- Flange
- German Milk Fitting DIN 11851
- Tri-Clamp
- RJT
- SMS
- according to customer requirements



Pump curve shows performance with a viscosity of approx. 1.000 cps. With higher viscosities, SOMA SINUS SODIAL® pumps work without slip.

Performance curve depending on the type of medium and the application parameters.

SOMA SINUS SODIAL® Pump SCN60

The SCN series from SOMA Pumps GmbH is a positive displacement pump. The heart of the pump is a sinus wave, which is mounted as a rotor on a drive shaft. It transports the product to be pumped

gently and evenly through four equally divided chambers, without any risk of reducing the product quality.

This ensures almost pulsation-free conveying.

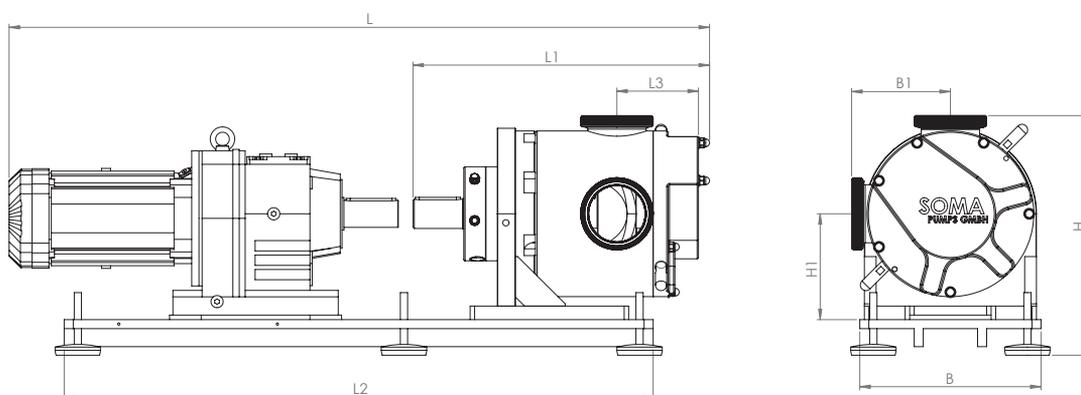
Benefits and technical data

- ✓ Smooth and gentle transfer especially when fragile particles are pumped
- ✓ Constant flow with nearly no pulsation
- ✓ high suction power
- ✓ No foaming of the product during the pumping process
- ✓ Perfect suitable for low and high viscous products
- ✓ CIP/SIP and manual cleanable
- ✓ Heating/cooling jacket available
- ✓ Energy efficient
- ✓ Simple maintenance in the system
- ✓ Full life guarantee for the pump housing and pump cover
- ✓ Temperature up to 180°C
- ✓ Viscosities up to 9.000.000 cps
- ✓ ATEX- Execution up to T4
- ✓ FDA, EG1935-2004, 3.1 certified
- ✓ Classic SCN and compact SCN-D design available

Technical data

SCN	Capacity	Speed range	Solid size	Suction power	Pump pressure
SCN60	max. 90.000 l/h	max. 600 rpm	max. 60mm	-0,85 bar	max. 15 bar

Technical drawing



Dimensions

Model	L / mm	L1 / mm	L2 / mm	L3 / mm	B / mm	B1 / mm	H / mm	H1 / mm
SCN60	1545	655	1300	180	400	218	532	235

SOMA SINUS SODIAL® Monobloc Pump range SCN-D

The innovative solution for minimum space requirements and maximum conveying volume.

With the SCN-D series of the SOMA SINUS SODIAL® pump, SOMA PUMPS GmbH was the first company in the world to introduce a Monobloc SINUS Pump on the market worldwide.

The further development of the SOMA SINUS SODIAL® pump as a monobloc version comes without a bearing bracket, coupling and complex base plate. In this version, the SOMA SINUS SODIAL® pump is

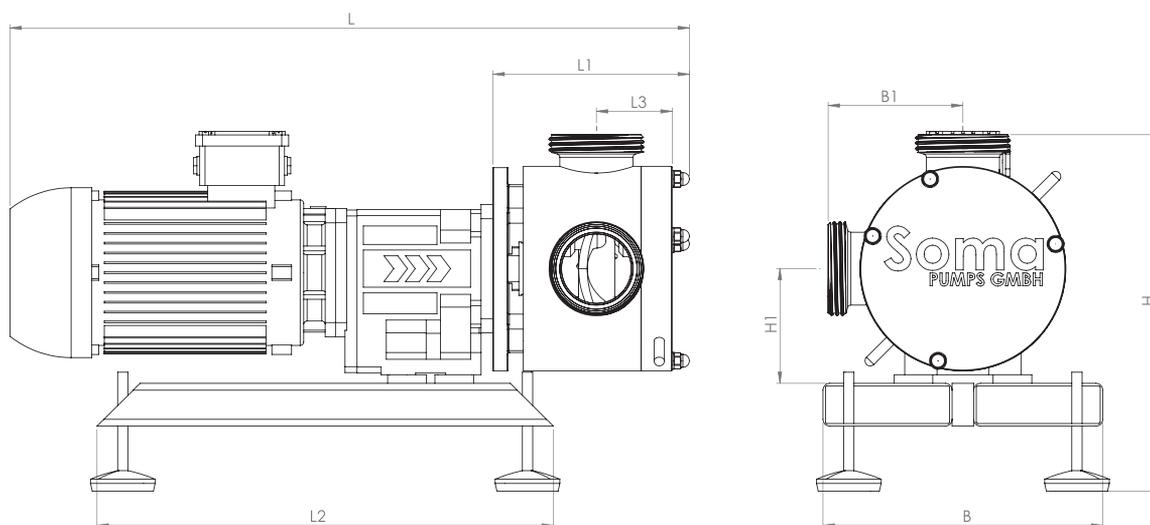
directly connected to the drive.

This version is available in various sizes with a flow rate of up to 40,000 l/h and a maximum back pressure of 10 bar. A major advantage is that all the wearing parts of the pump are identical to classic SINUS Pumps. This means – no separate storage for the wear parts – 100 % interchangeability between SCN and the SCN-D series.

Technical data

SCN	Capacity	Speed range	Solid size	Suction power	Pump pressure
SCN 20-D	max. 4.000 l/h	max. 600 rpm	max. 20 mm	-0,85 bar	max. 10 bar
SCN 25-D	max. 18.000 l/h	max. 600 rpm	max. 30 mm	-0,85 bar	max. 10 bar
SCN 40-D	max. 40.000 l/h	max. 600 rpm	max. 45 mm	-0,85 bar	max. 10 bar

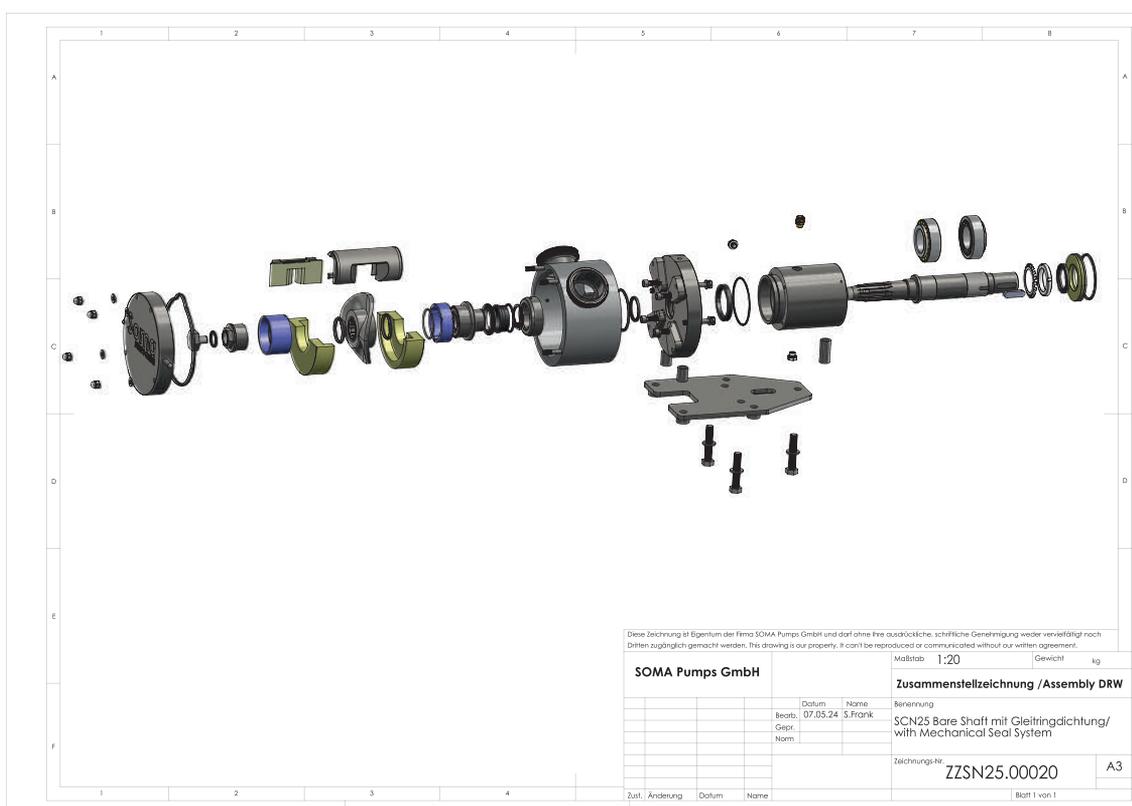
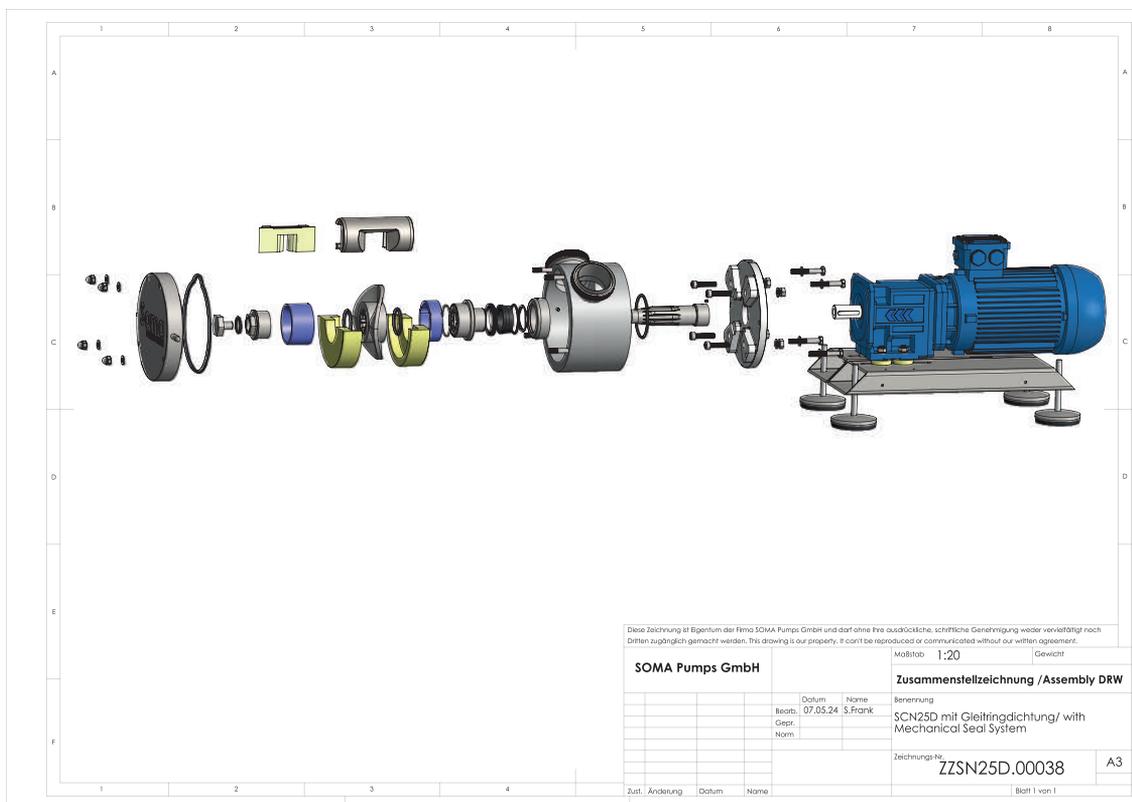
Technical drawing



Dimensions

Model	L / mm	L1 / mm	L2 / mm	L3 / mm	B / mm	B1 / mm	H / mm	H1 / mm
SCN20D	578	174,5	500	65	250	101	270	100
SCN25D	789	228	530	88	320	156	416	134
SCN40D	936	295	530	111,5	345	191	478	161

SOMA SINUS SODIAL® explosion view SCN-D/SCN series



Performance curve SOMA SINUS SODIAL® Type SCN20/SCN20-D

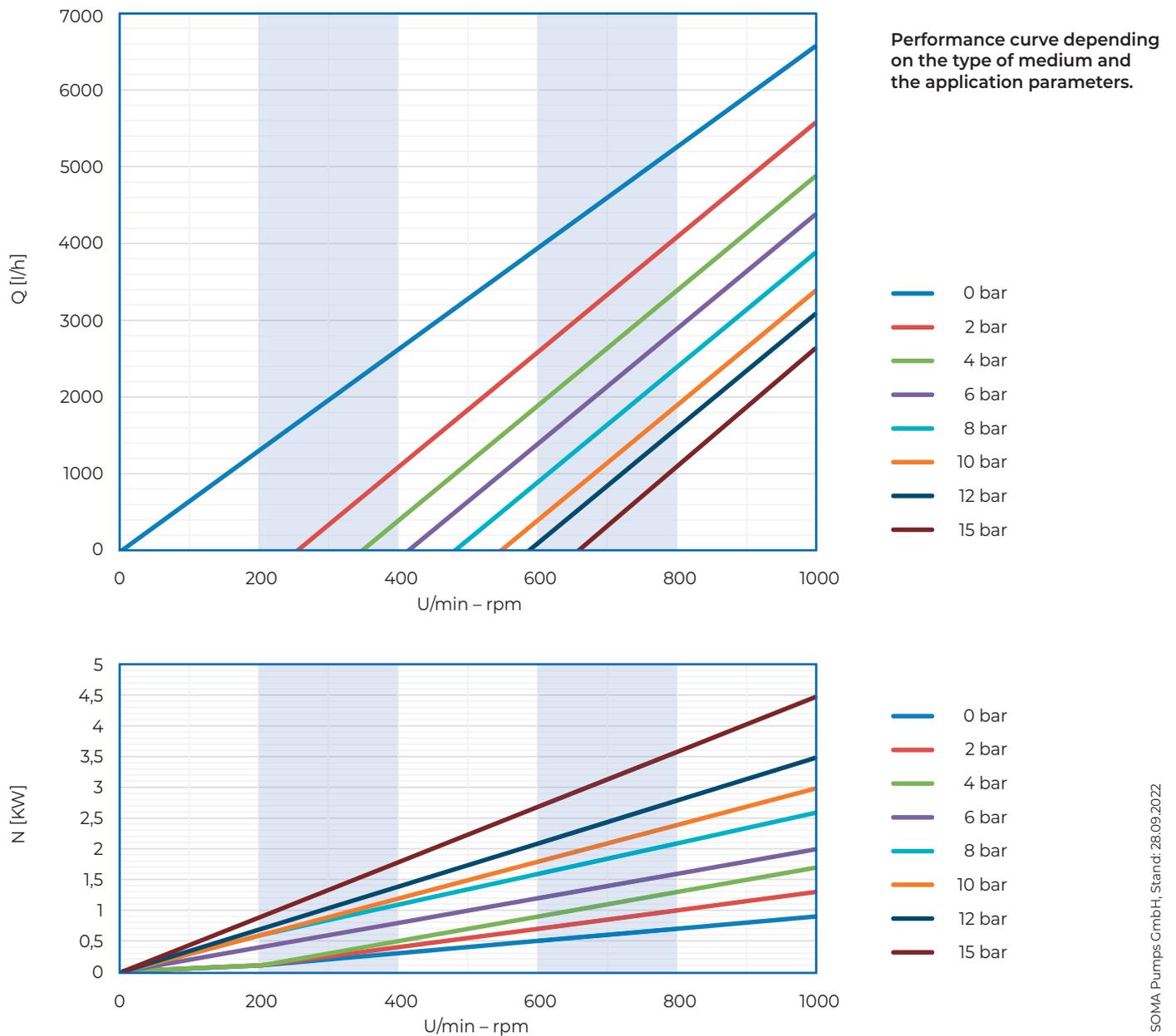
PUMP CHARACTERISTICS:

displacement volume: 0,11 l/rotation
 speed range: 0-1.000 rpm
 pump pressure: max. 15 bar
 temperature: max. 180 °C (with customized software)
 Customization: Each pump is equipped according to customer requirements

PUMP S/N: _____

required performance: _____ kW
 required torque: _____ Nm
 drive speed: min. _____ Upm/rpm
 max. _____ Upm/rpm

Pump curve shows performance with a viscosity of approx. 1.000 cps. With higher viscosities, SOMA SINUS SODIAL® pumps work without slip.



Performance curve SOMA SINUS SODIAL® Type SCN25/SCN25-D

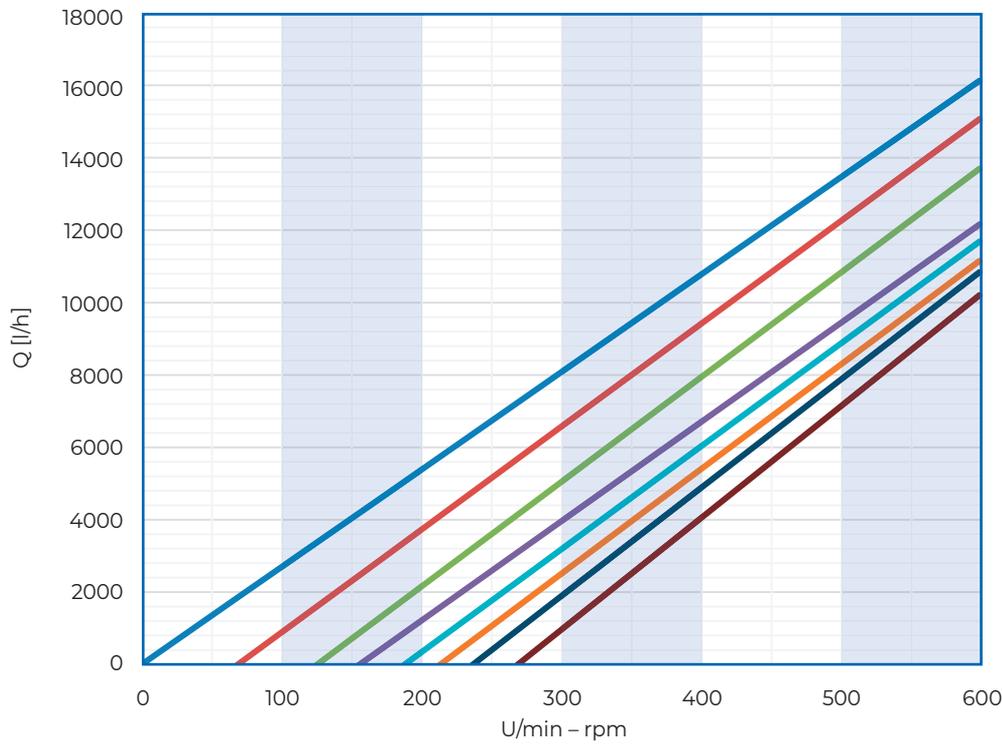
PUMP CHARACTERISTICS:

displacement volume: 0,45 l/rotation
 speed range: 0-600 rpm
 pump pressure: max. 15 bar
 temperature: max. 180 °C (with customized software)
 Customization: Each pump is equipped according to customer requirements

PUMP S/N: _____

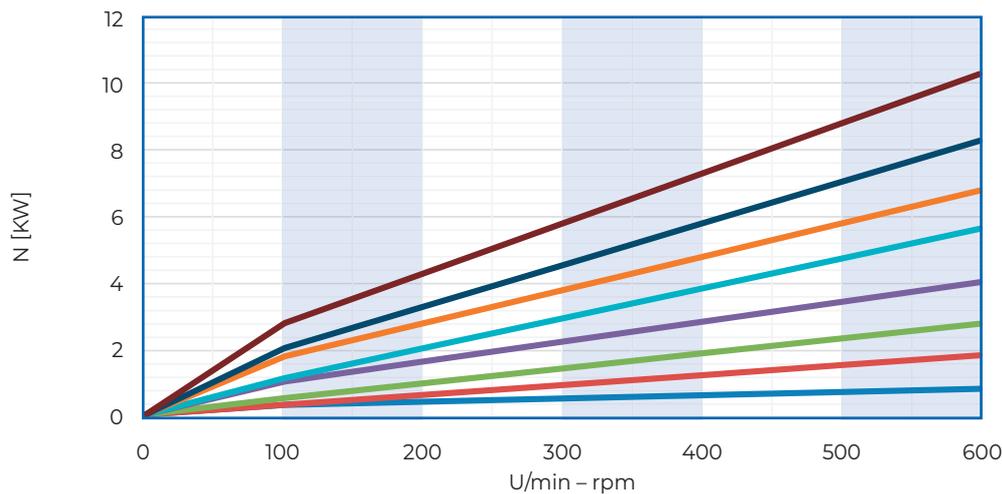
required performance: _____ kW
 required torque: _____ Nm
 drive speed: min. _____ Upm/rpm
 max. _____ Upm/rpm

Pump curve shows performance with a viscosity of approx. 1.000 cps. With higher viscosities, SOMA SINUS SODIAL® pumps work without slip.



Performance curve depending on the type of medium and the application parameters.

- 0 bar
- 2 bar
- 4 bar
- 6 bar
- 8 bar
- 10 bar
- 12 bar
- 15 bar



- 0 bar
- 2 bar
- 4 bar
- 6 bar
- 8 bar
- 10 bar
- 12 bar
- 15 bar

SOMA Pumps GmbH, Stand: 28.09.2022

Performance curve SOMA SINUS SODIAL® Type SCN40/SCN40-D

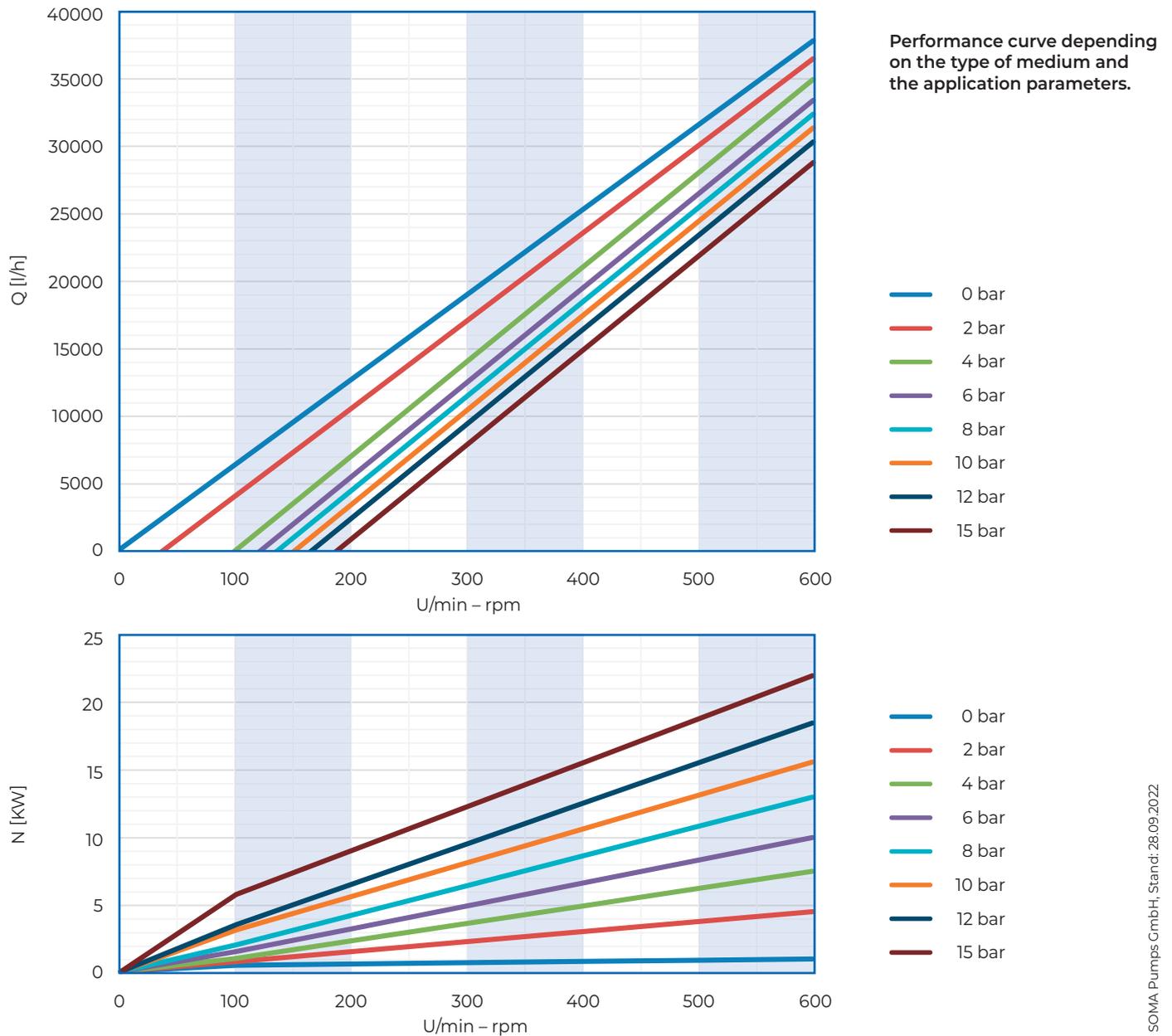
PUMP CHARACTERISTICS:

displacement volume: 1,15 L/rotation
 speed range: 0-600 rpm
 pump pressure: max. 15 bar
 temperature: max. 180 °C (with customized software)
 Customization: Each pump is equipped according to customer requirements

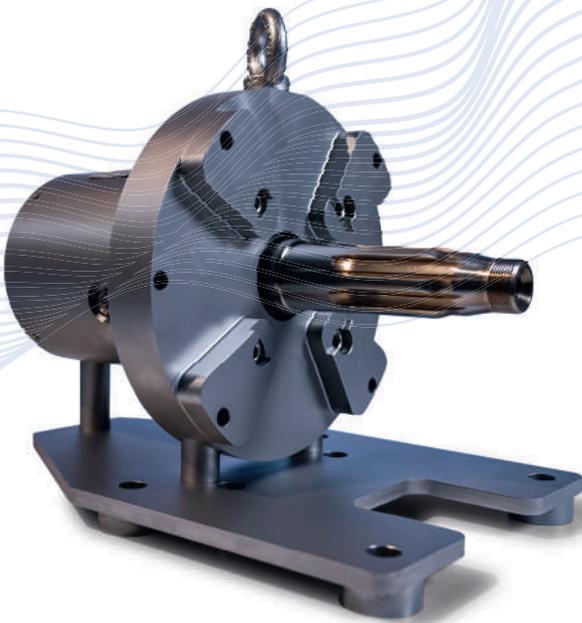
PUMP S/N: _____

required performance: _____ kW
 required torque: _____ Nm
 drive speed: min. _____ Upm/rpm
 max. _____ Upm/rpm

Pump curve shows performance with a viscosity of approx. 1.000 cps. With higher viscosities, SOMA SINUS SODIAL® pumps work without slip.



SOMA Pumps GmbH, Stand: 28.09.2022



SOMA SINUS SODIAL® Stainless Steel Bearing Unit

The perfect solution for the highest hygiene and quality requirements!

Advantages:

- ✓ **Hygienic Design:**
Ideal for sensitive applications.
- ✓ **Corrosion Resistant:**
No painted parts, therefore no rust!
- ✓ **Interchangeability:**
1:1 replacement for cast iron bearing units.
- ✓ **Stainless Steel Construction:**
Bearing unit completely made of stainless steel 1.4301.
- ✓ **Flexible:** With flushing option or clear separation between bearing unit and pump housing.
- ✓ **Easy Installation:**
No modifications needed!
- ✓ **Reduced Maintenance:**
Less spare parts, higher efficiency.
- ✓ **Warranty:**
25-year warranty – excludes wear parts.

Scope of Delivery:

Fully assembled bearing block unit including pump shaft and adapter plate.

Available Options:

- Stainless Steel Bearing Unit SCN20
- Stainless Steel Bearing Unit SCN25
- Stainless Steel Bearing Unit SCN40
- Stainless Steel Bearing Unit SCN50
- Stainless Steel Bearing Unit SCN60

Quality you can rely on:

Made in Germany –
SOMA Pumps GmbH
produces under the highest
quality standards.



Equipment and advantages



Stainless Steel motor protection

A stainless steel cover provides effective protection for the pump and motor against various external factors such as dust, dirt, moisture, and other potential damages. It minimizes the risk of harm and extends the lifespan of your pump and drive system.

Drain System

An emptying function is a valuable feature of a pump that supports the cleaning process and allows for complete drainage of the pump. Furthermore, it facilitates maintenance as no liquid residues remain in the pump.

Digital speed control

A digital speed display provides optimal process monitoring by showing the current speed of the pump. This feature allows operators to easily and accurately monitor the pump's performance in real-time.

Dry run protection

A dry run protection feature is designed to protect the pump from damage and wear caused by running without sufficient fluid or liquid.

Pump repair shop

Our service team is qualified to repair all types of pumps. Our experts have extensive experience and expertise in repairing pumps from various manufacturers and models. Regardless of the type of pump, our technicians are capable of identifying issues and performing efficient repairs. Our service includes fault diagnosis, replacement of faulty components, maintenance and servicing, as well as optimizing pump performance. We use high-quality spare parts and adhere to manufacturer specifications to ensure that repairs meet the highest quality standards.

Additionally, we also offer fast and reliable on-site service to minimize downtime and ensure that your pump is quickly back in operation.

Housing heating -cooling, cover heating -cooling

A heating or cooling option in a pump ensures optimal handling of the product.

In certain applications, it is crucial to maintain the product at a specific temperature to preserve its quality, prevent degradation, or enable proper processing. A heating option allows for the controlled increase in temperature, while a cooling option helps maintain a lower temperature.

Advantages of SOMA Pumps

Suction power

The SOMA SINUS SODIAL® pump is characterized by its high suction capacity. The sinusoidal movement creates a strong vacuum that allows for efficient suction of the product.

Pulsation Free

The SOMA SINUS SODIAL® pump conveys your products almost without pulsation, preventing foaming or product damage.

Easy and fast cleaning

The SOMA SINUS SODIAL® pumps are manually, CIP and SIP cleanable. There are no hard-to-reach areas or hidden corners that make thorough cleaning difficult.

Certified

All components which are in contact with the product parts are certified to the highest standards of the food industry. This ensures that our pump meets the stringent requirements and hygiene standards. You can rely on our pump to not compromise on the safety and quality of your products.

Inline maintenance

The SOMA SINUS SODIAL® pump is designed to be robust and durable, ensuring low maintenance requirements. The maintenance will take only a few minutes. It is not necessary to take the pump out of the system.

Energy efficiency

The ultimate in energy efficiency with SOMA SINUS SODIAL® pumps. Designed to operate with low shear forces and minimal pulsation, our pumps consume up to 50% less power compared to other pump types, making them an environmentally conscious choice.

Why You Should Choose SOMA Pumps

Quality: SOMA Pumps GmbH prioritizes quality and reliability. Our pumps are manufactured using high-quality materials and undergo rigorous quality control checks to ensure they meet the highest standards.

Experience and Expertise: The expert team at SOMA Pumps GmbH has decades of experience in the pumping industry. We possess the knowledge and expertise to provide customized solutions tailored to your specific requirements.

Customer Service and Support: We value customer satisfaction and offer excellent customer service. Our dedicated team is available to answer your questions, provide technical support, and assist you with any issues that may arise.

Innovative Developments: SOMA Pumps is committed to developing innovative technologies and solutions. We continually invest in research and development to offer our customers the latest and most advanced pumps on the market.

Competitive Pricing: At SOMA Pumps, we believe in offering fair prices. Our products provide excellent value for money, ensuring that you receive a high-quality pump at a reasonable price.

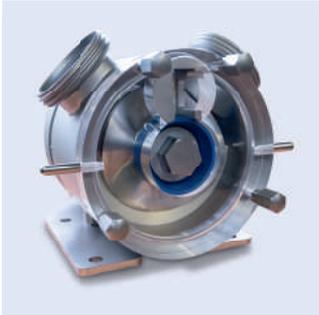
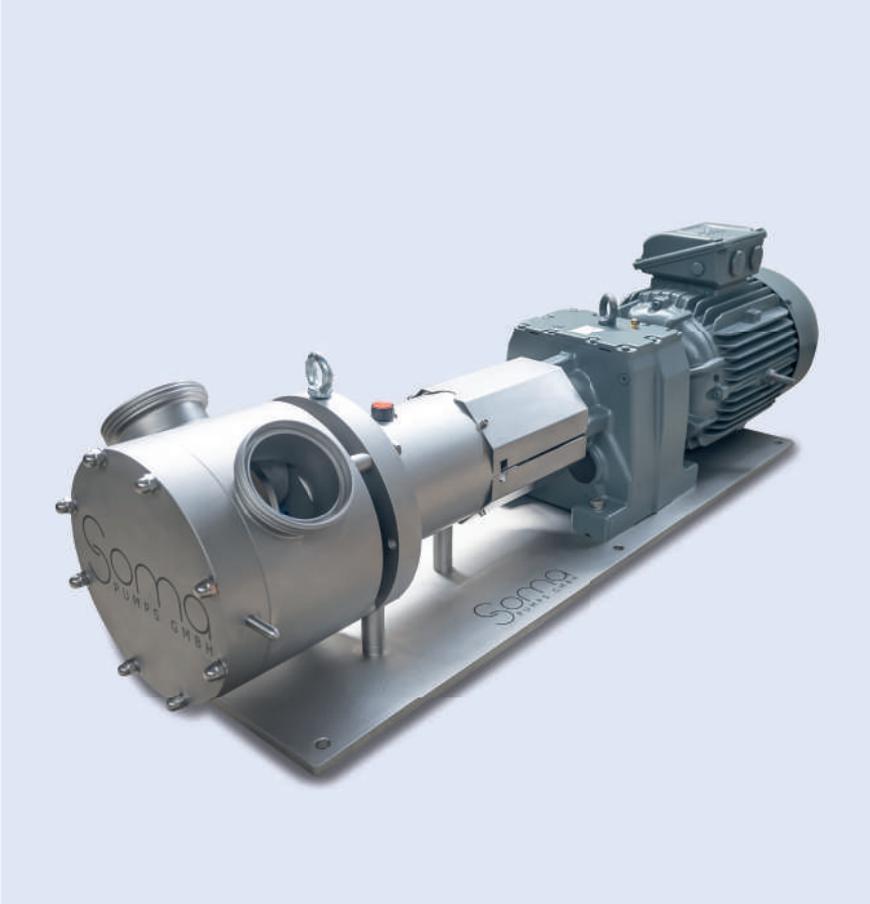
ISO 9001 Certification: SOMA Pumps is proud to be ISO 9001 certified. This internationally recognized quality management system ensures that our processes and procedures meet the highest quality standards. With ISO 9001:2015 certification, you can trust that we continuously work to improve our products and services to ensure your satisfaction.

Spare parts

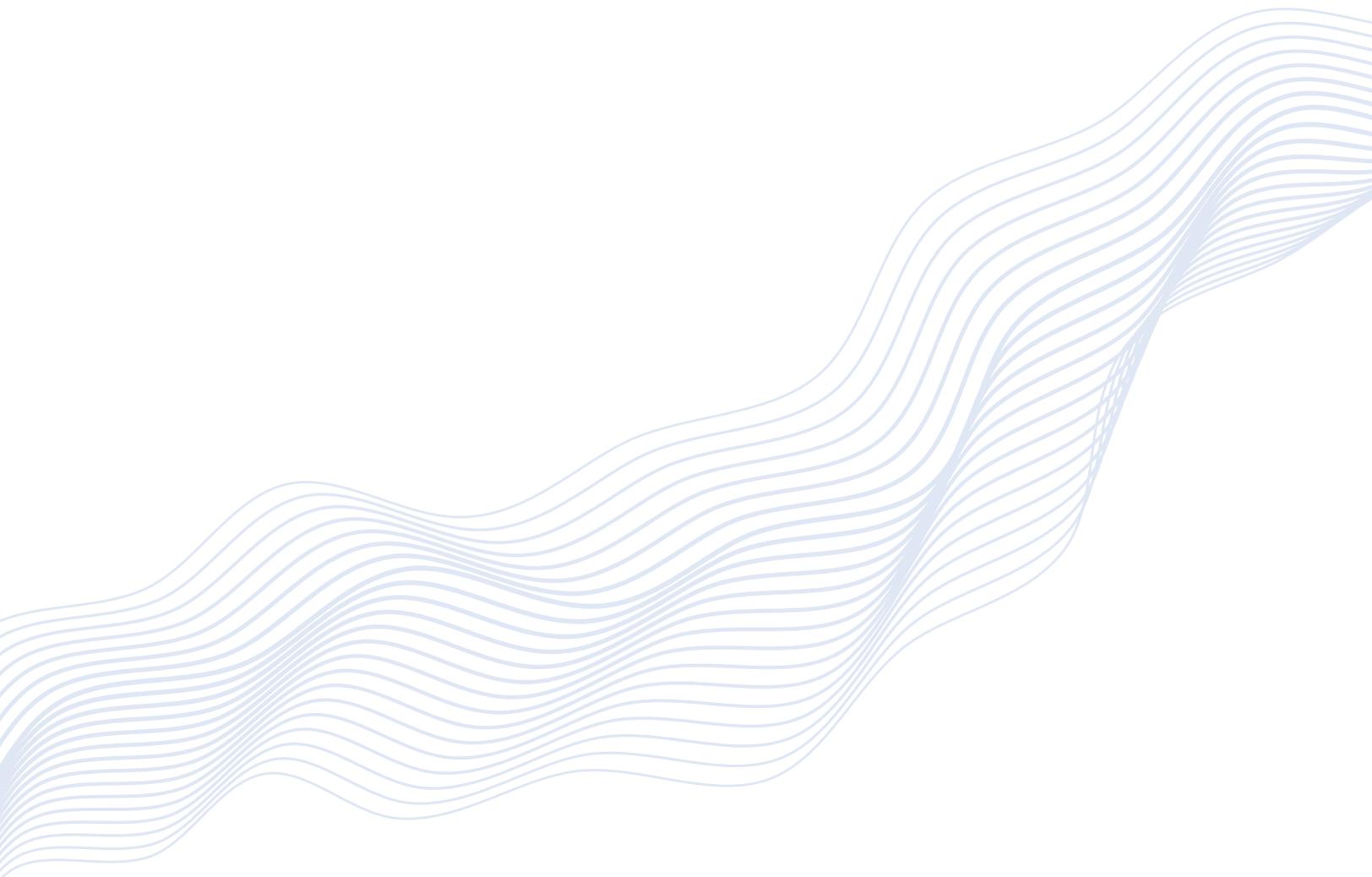
SOMA SINUS SODIAL® original spare parts guarantee maximum performance, long life with minimum wear. All internal part which are in contact with the product are Food and Drug Administration (FDA), EG 1935-2004 and 3.1 Stainless Steel certified.

Main spare parts are available within 24 hours. The shown below spare parts are available in different materials and versions XX-pump size (SCN10-SCN20-SCN25-SCN40-SCN60).





Soma
PUMPS GMBH



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