

MUNSCH CM+

THE MAGNETICALLY COUPLED CHEMICAL PUMP

NON-METALLIC PUMPS FROM THE SPECIALIST

As a family-owned company, MUNSCH has been a reliable partner to the chemical and process industries for more than 50 years, working shoulder to shoulder with their customers. From the very beginnings of our activities, our single-minded focus has been on non-metallic pumps for corrosive and abrasive service environments satisfying the highest quality, reliability and efficiency standards.

Our dedicated staff and their drive for innovation are steering us into the world of tomorrow. At MUNSCH, digitalization has long been part of our corporate philosophy, being lived out to the fullest and putting us in a position to respond flexibly to our customers' special product and service needs. Thanks to our high level of vertical integration and latest manufacturing technology, we are well placed for cost-effective manufacture.

TOGETHER WITH OUR CUSTOMERS ...

and built on many years of experience, we select optimal solutions from our product portfolio that guarantees reliable operation at ideal life cycle cost.

Competent advice by our field technicians and technical support throughout the lifecycle of the pump are the services that come with our products.

MUNSCH PUMPS ...

have earned an excellent reputation among industry users and our customers' project engineers over the years. They stand for reliability, safe operation, easy handling, high efficiencies and thick-walled plastic casings. The CM+ series unites these attributes and sets new standards of performance and application range.



THE MUNSCH CM+

The specialist for highly corrosive service environments in the chemical industry

The CM+ series pumps are specifically designed for the safe pumping of fluids posing an environmental or health hazard such as acids, alkalis, solvents or chemically contaminated fluids. Tolerating solids, their reliable function is also ensured under abrasive operating conditions.

Magnetically coupled chemical pumps are the solution of choice whenever hermetically sealed pumping service is a must.



APPLICATIONS

The series with unlimited possibilities

- The hermetically sealed design makes these pumps suited for use in sensitive areas posing high hazard potential for human health and the environment. CM+ series pumps are specifically tailored to meet the requirements for chemicals and solvent handling. Typical applications include:
- the chemical industry
- electrolysis plants
- the pharmaceutical industry
- electroplating plants
- the environmental sector



The CM+ and CM-B+ meet the requirements of EU-Guideline 2014/34/EU for use in explosion hazard areas.

THE MUNSCH CM+ THE PUMP WITH THE PLUS



THE SAFETY PLUS

Whether in operation, during an operating upset or in shut-down condition – we have built the CM+ with a solution concept that lets you sleep peacefully.

THE RELIABILITY PLUS

Reliability means: The pump lasts and lasts and lasts. Not only does the CM+ have a sound design concept, but it has also been subjected to thorough long-term testing. We make sure to keep our promises.

THE EFFICIENCY PLUS

We have never given up on getting better and invested in the latest technology. You will benefit from exceptional energy efficiency, a perfect suction behaviour and lowest NPSH requirements.

THE AVAILABILITY PLUS

Short delivery times and high spare parts availability are the hallmarks of MUNSCH. Solution-oriented and working closely together with you, we will be happy to help, also when time is of the essence. Give us a try!

THE HANDLING PLUS

Our MagPull and Quickfit easy-maintenance systems facilitate and accelerate pump maintenance, without having to remove the pump from your system.

THE APPLICATIONS PLUS

An expanded spectrum of pump sizes and capacities allows us to always find the right pump for your needs.

MUNSCH is the sole pump-manufacturer in the market to have in-house access to a tailor-made high-temperature test bench. This has put us in a position to consistently further develop our pumps and to make sure that we always live up to our promises!

THE QUALITY PLUS

Our owner-managed company has been manufacturing plastic-lined pumps in Germany's Westerwald region for more than 50 years with the focus on top quality.

THE SUSTAINABILITY PLUS

Sustainable, socially and ethically sound practices are just as important to MUNSCH as the operating reliability of its pumps, innovative products and maximum possible efficiency. As an EcoVadis member, we are aware of our responsibility and take pride in our ranking.

FACTS

The MUNSCH CM+ at a glance

FDA-
conformant
material grades
also available

TYPES OF CONSTRUCTION

CM+ series standardized pump with dimensions to EN 22858/ISO 2858/ISO 5199 or CM-B closed-coupled pump with casing dimensions to EN 22858/ISO 2858

IMPELLER TYPES

Closed, semi-open or vortex designs

DOCUMENTATION

Utilising broad technical and application knowhow, we prepare your important documents from the 3D-model through to the individual project documentation.

COATING SYSTEM

The pumps are provided with a highly resistant powder coating that withstands even the most challenging operating environments. An electrostatic dissipative coating > 108 ohm is available as an option.

- Base coat: epoxy resin, film thickness 60-80 µm
- Top coat: polyurethane, film thickness 60-80 µm
- Total film thickness: 130-150 µm

PERFORMANCE DATA

Capacity [Q]:	up to 200 m³/h
Differential head [H]:	up to 90 m
Operating temperature:	up to 180 °C
Solid content:	up to 5 %
Particle size:	up to 5 mm

PLAIN BEARING MATERIALS

The standard construction material is silicon carbide, known for its unsurpassed resistance against corrosion and wear. Dry run-protected plain bearings are available as an option. An additional surface treatment makes these bearings tolerant to temporary dry running.

SECONDARY SEAL MATERIALS

O-rings are available in:

- FFPM, FPM and EPDM;

gaskets in:

- TFM 1600, PTFE.

Special material grades are available on request.



SPACER CAN MATERIALS

The spacer can is designed as a metal-free double-wall unit consisting of a shell and a separate can liner. Essentially, this offers the following advantages:

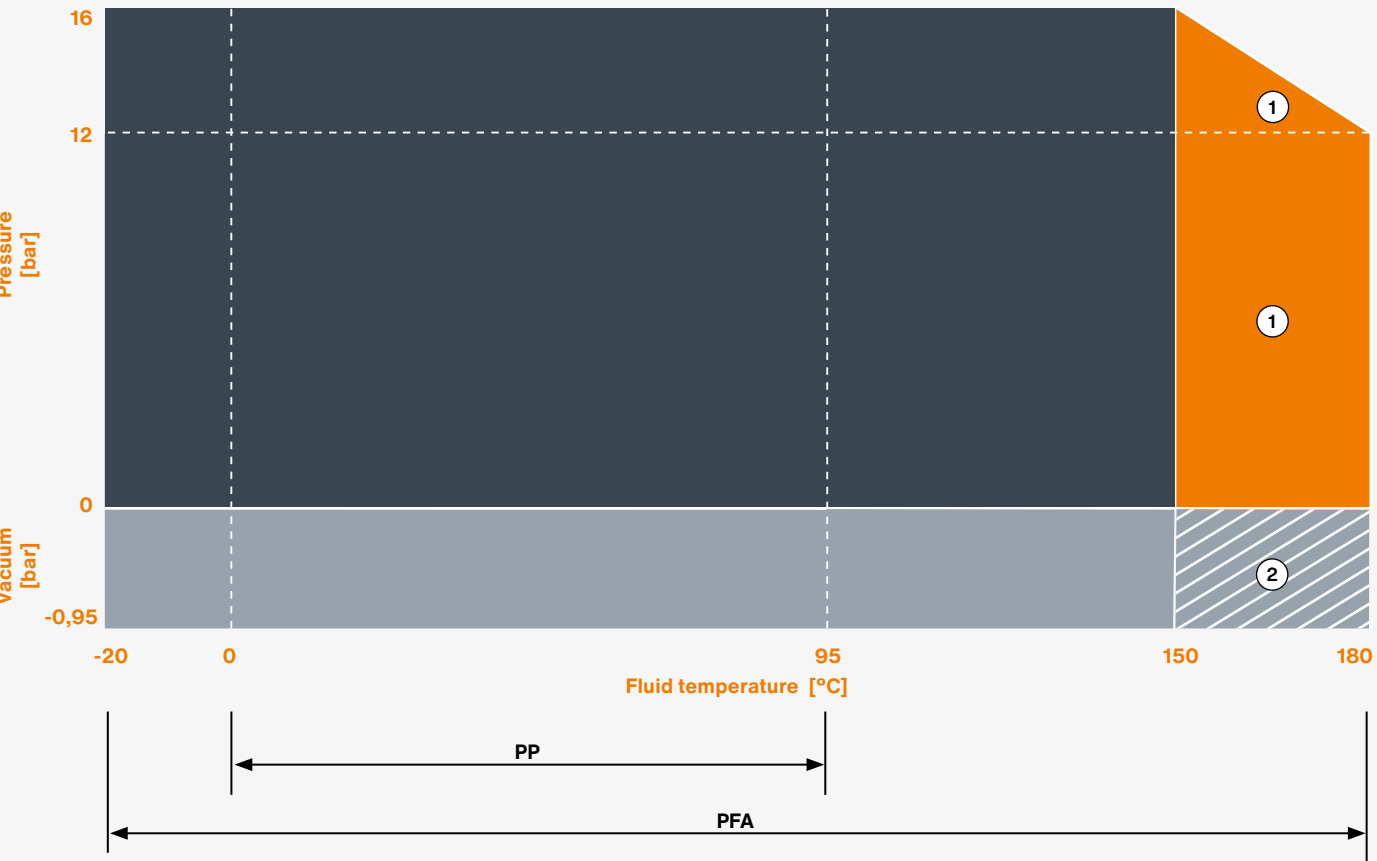
- no eddy currents and hence no heat transfer to the fluid pumped
- no energy losses and thereby no efficiency losses

The wetted spacer can liner is manufactured from pure, highly resistant PFA, the outer pressure-resistant can shell is made of high-temperature plastics. Thanks to its unique construction, the spacer can is extremely rigid and vacuum-resistant. Spacer cans fabricated from PTFE or zirconium oxide are available as an option for high vacuum applications.

PUMP MATERIALS

	PP	0 to 95 °C	The ecological option with good resistance to many inorganic acids
	PFA	-20 to 180 °C	Virtually universally applicable fluoropolymer with a broad temperature and application range.

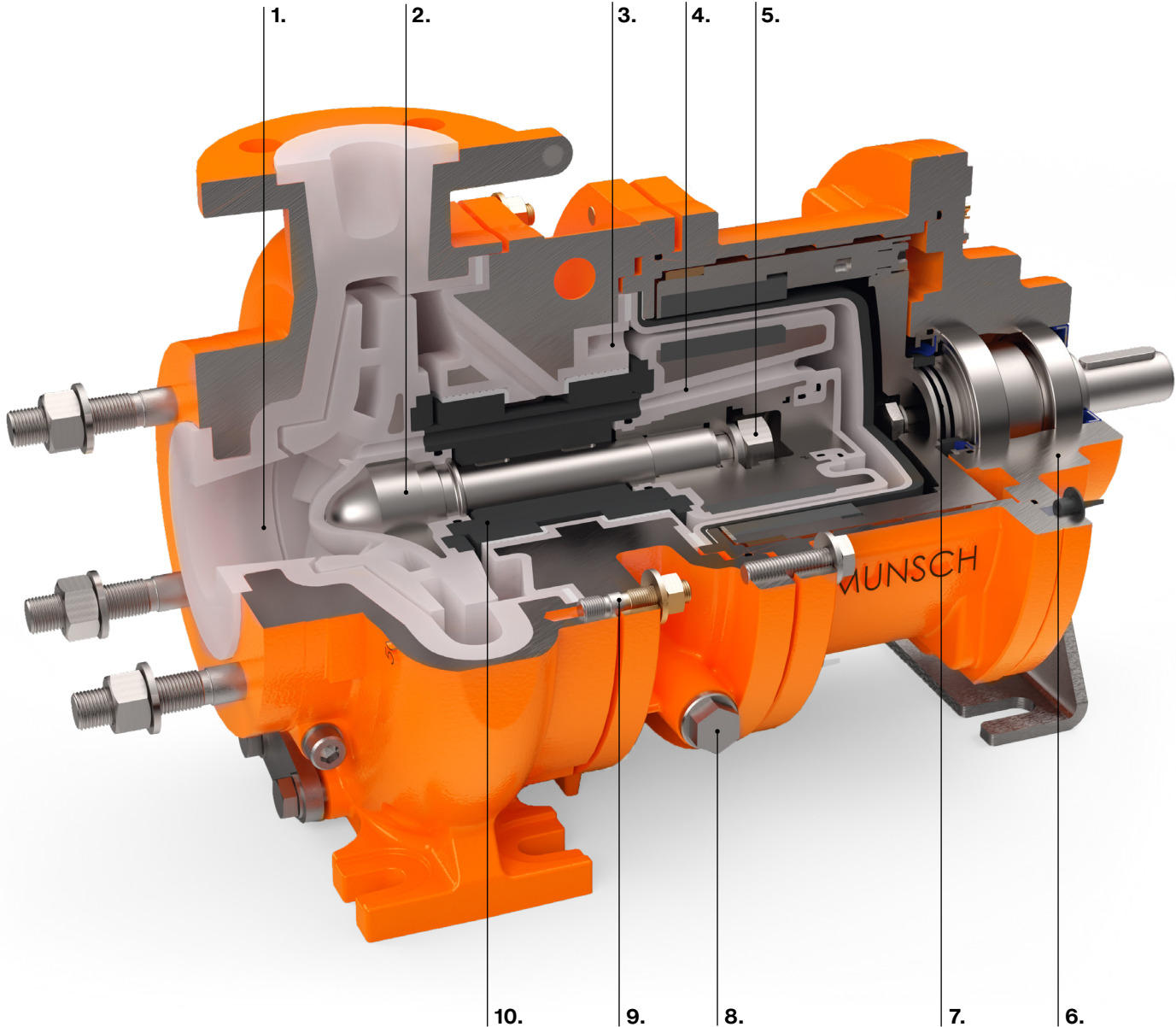
MAXIMUM ALLOWABLE SERVICE TEMPERATURES AND PRESSURES



- ① To be verified on a case-by-case basis. Please contact us.
- ② Special design

COMPONENTS AND FEATURES

A look inside the MUNSCH CM+ is worthwhile!
The inner values of this innovative magnetically coupled pump will convince any pump enthusiast.



1. VOLUTE CASING

Replaceable and with thick-walled 10 mm PFA liner.
For details, see Page 12

2. IMPELLER

Robust design through single-piece impeller-shaft construction. Massive pump shaft, radially sealing O-rings and a large impeller core ensure optimal operating reliability.

3. THERMOCONTROL

Fluid temperature monitoring with lowest latency.
For details, see Page 17

4. INTERNAL CIRCULATION

Perfect plain bearing lubrication through patented circulation technology. *For details, see Page 17*

5. INNOVATIVE IMPELLER MOUNTING

Maximum operating reliability through rotation-independent mounting and one-dimensional loading.
For details, see Page 14

6. MAGPULL

Easy maintenance of bearing bracket and outer magnet assembly. *For details, see Page 15*

7. SECONDARY SEALS

Additional extra protection for staff and plant. Pressure-resistant up to 10 bar and absolutely tight in case of pump failure!

8. EXTERNAL LUBRICATION OPTIONS

When pumping fluids with solid content or when there is a risk of dry-run. *For details, see Page 18*

9. QUICKFIT

Pump replacement within minutes.
For details, see Page 15

10. ROBUST PLAIN BEARING

The strongest all-SSiC plain bearing on the pump market. *For details, see Page 13*



SUSTAINABILITY & ENERGY EFFICIENCY

Conserving resources, boosting energy efficiency! In developing the CM+, our engineers have also kept an eye to the imperatives of our time. The result is a pump with stunning efficiency and thereby reduced energy consumption. Also, we have been able to translate our tried-and-tested design – separately replaceable volute casing and hence conservation of important resources – into our new pump series.

The new robust design not only convinces through its exceptional running smoothness, but also extends the pump service life. Our manufacturing facilities in Westerwald, Germany are certified under EcoVadis, underlining our sustainability efforts.

IN DETAIL:

Volute casing, plain bearing holder and spacer can – the static components of a centrifugal pump

VOLUTE CASING

The pump casing is designed as a self-supporting volute casing with a minimum wall thickness of 10 mm throughout. Compared to an annular casing, this offers the advantage of having no welds or joint prone to leak. The thick-walled plastics preclude casing deformation, especially at high temperatures and/or under vacuum conditions.

The volute casing is completely encased with a metal armour (material number 0.7043; formerly GGG-40.3). Suction and discharge flanges reliably absorb all allowable system pressures and piping loads.

Residual liquid collects at the lowest point of the volute casing from where it can be drained via a casing drain (available as an option).

PLAIN BEARING HOLDER

The volute casing and the intermediate lantern are individually connected to the plain bearing holder via bolted joints.

As the bolts or nuts are accessible from the outside, the gasket between the volute casing and the plain bearing holder or the spacer can and the plain bearing holder can be inspected at any time and re-tightened, if required.

The plain bearing holder is fitted with two pocket holes with G 1/2“ threads. One bore is designed for the installation of a temperature sensor to provide direct temperature monitoring of the spacer can. Via the second bore, the plain bearing can be cooled and lubricated with a product-compatible fluid.

SPACER CAN

The spacer can is designed as a metal-free double-wall unit consisting of a shell and separate can liner. This means:

- no eddy currents and hence no heat generation in the spacer can
- no energy losses and thereby no efficiency losses

Depending on the temperature and vacuum level, the spacer can is extremely rigid not only during operation, but also during pump shutdown.

Plain bearing – the crucial element and heart of the pump

PLAIN BEARING SLEEVE WITH CIRCULATION BORE

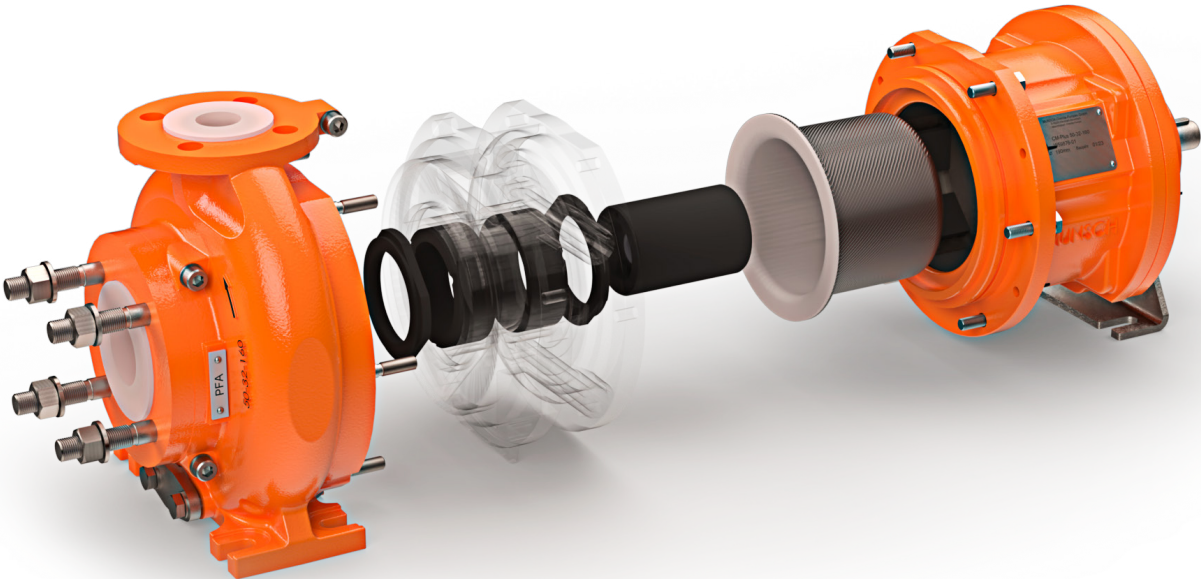
The single-piece bearing sleeve is radially secured between the axial bearings of the impeller and inner magnet assembly. A circulation bore provided underneath the running face ensures both direct venting of the spacer can interior and a fast, continuous forced lubricant flow to the plain bearing.

FORCED COOLANT AND LUBRICANT FLOW

A small branch stream of the pumped fluid enters the axial clearance between the bearing bushings and through the spacer can from where it is returned to the impeller inlet via the circulation bore.

BEARING BUSHING

Two identical bearing bushings are axially and radially secured in the plain bearing holder. The outward pointing faces of the bearing bushings are the contact faces for the axial thrust rings.



Impeller and inner magnet assembly – the rotating components of a magnetically coupled pump

ENERGY-EFFICIENT AND MATERIAL-FRIENDLY

Impellers with high efficiencies and low NPSH requirements help save energy and minimize pump wear, even in challenging service environments.



IMPELLER AND INNER MAGNET ASSEMBLY

Impeller core and shaft are of single-piece construction. Torque is transmitted by a polygon. If operating conditions change, it is possible for the plant operator to modify/replace the impeller and inner magnet assembly.

NUMERICALLY OPTIMIZED HYDRAULICS

The fluid dynamics of MUNSCH pumps are calculated, visualized and optimized using the latest numerical techniques (Computational Fluid Dynamics). The result is a hydraulic design with a virtually ideal flow profile.

This means:

- higher pump capacity at unchanged differential head
- reduced energy costs
- improved suction behaviour through low NPSH requirements
- minimized wear in abrasive service conditions
- reduced running noise

REDUCED LIFECYCLE COST

The numerically optimized hydraulic design is a key factor in minimizing the lifecycle costs of MUNSCH pumps. Capital and maintenance costs are reduced through the selection of the best suited hydraulic

design and optimal motor sizes. Smaller cable cross-sections and lower-rated motor breakers keep down installation costs. The high pump efficiencies directly translate into energy savings.

IMPELLER TYPES

MUNSCH has the right impeller design for your specific pumping application. Wear, suction behaviour and efficiency are key factors determining the choice of the impeller. The right combination of impeller (hydraulics) and material is all-decisive for a successful pump design and long service lives. MUNSCH pumps are available with closed, semi-open and vortex impellers.

FLUIDS WITH SOLID-CONTENT

A solids deflector in the pump casing causes the greater part of the solids to be re-directed into the flow path of the process fluid. For applications involving elevated solids loads, we offer our specially developed CM+ FA design (see page 18).

IMPELLER AND PUMP SHAFT – REVERSE ROTATION-SAFE

The impeller is positively locked to the pump shaft for reverse rotation protection (e.g. during the sense of rotation check).

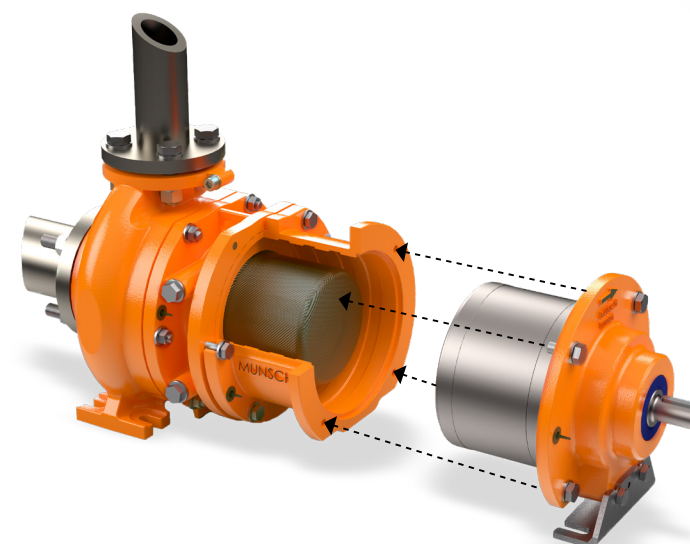
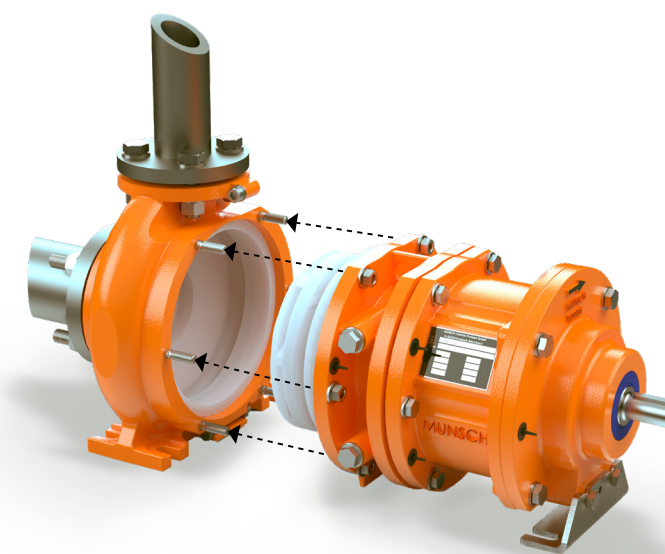
HANDLING

Our MagPull and Quickfit easy-maintenance systems facilitate and accelerate pump maintenance, without having to remove the pump from your system.

QUICKFIT

The pump casing can be removed from the remaining pump unit within a few minutes while remaining connected to the discharge- and suction-side piping.

The QUICKFIT unit can be replaced with the casing staying in line, which allows for the pump to be restarted with a minimum of downtime.



MAGPULL

Maintenance within the plant? No problem with our MagPull system! The bearing bracket can be removed from the remaining pump unit with the piping connections remaining connected.

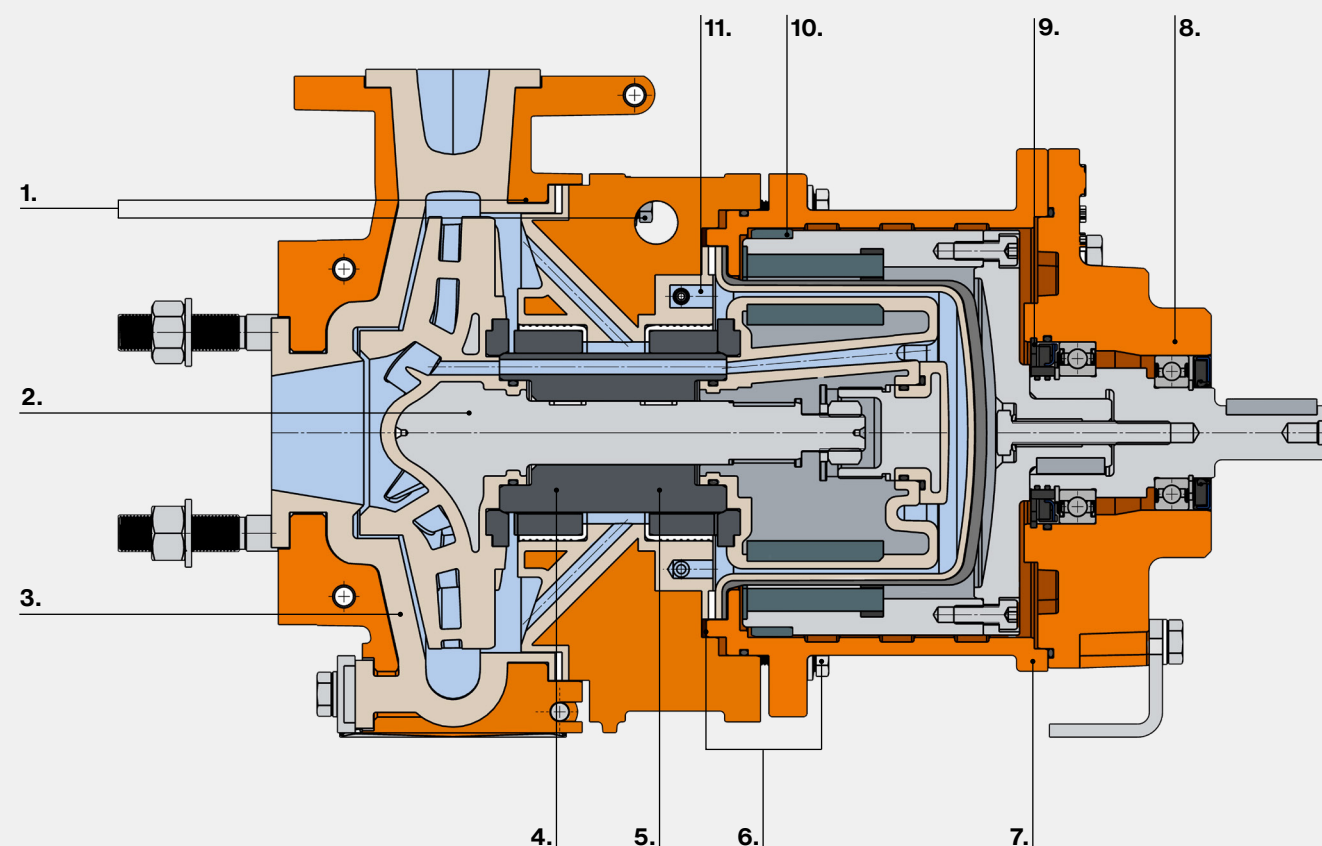
The pump will continue to be hermetically sealed while the bearing bracket and outer magnet assembly are being serviced.

SUSTAINABLE AND ENVIRONMENTALLY SOUND – OUR REMOVABLE PUMP CASING!



THE CM+ SAFETY CONCEPT

Whenever safety is top priority!



1. VOLUTE CASING GASKET

Bolts and nuts are accessible from the outside so that the gasket compression can be checked at any time and corrected, if necessary.

2. IMPELLER MOUNTING

Impeller and shaft are constructed as an integral unit for maximum stability even in critical applications. At the same time, the impeller cannot spin off the shaft in the case of reverse rotation.

3. VOLUTE CASING

The thick-walled volute casing is vacuum-resistant and offers excellent protection against undesired, high loads of abrasive solids.

4. PLAIN BEARING

No angular bearings; axial and radial bearings are separate; hence, no risk of fracture in the case of uneven load distribution.

5. DRY RUN-PROOF PLAIN BEARINGS

The CM+/CM-B+ series pumps can be equipped with dry run-proof plain bearings. Durable protection against dry running is, however, not guaranteed. Effective dry run protection is ensured by monitoring the suction head and flow rate.

6. SPACER CAN GASKET

The plain bearing holder and intermediate lantern are connected by a separate bolted flange. The gasket compression can be readily checked from the outside.

7. ASSEMBLY

There is no need to worry about gap dimensions during pump assembly. No precision measuring tools are needed for adjustment and alignment work. All that is needed for proper pump assembly are commercially available tools.

8. TEMPERATURE & VIBRATION MONITORING OF ANTI-FRICTION BEARINGS

Instrument taps for temperature sensors (PT 100) and/or the vibration monitor (M8 with SPM nipple) are available as an option.

9. SECONDARY SEAL COMPARTMENT

The seal-ring in front of the anti-friction bearings provides secondary containment and protection against uncontrolled fluid leakage. Direct fluid leakage to the atmosphere is ruled out (option). In conjunction with the secondary seal, the leak-tightness of the intermediate lantern can be monitored by a pressure sensor or pressure gauge G 1/4" (option).

10. SPACER CAN CONTACT PROTECTION

Mechanical protection

Worn anti-friction bearings reduce the running accuracy of the outer magnet assembly. Under these conditions, there is a risk of the spacer can being damaged by the sharp edges of the outer magnets. To eliminate this risk, the clearance between the outer magnet assembly and the intermediate lantern is smaller than that of the magnet and the spacer can. This prevents the

magnets from contacting the spacer can in the case of anti-friction bearing failure.

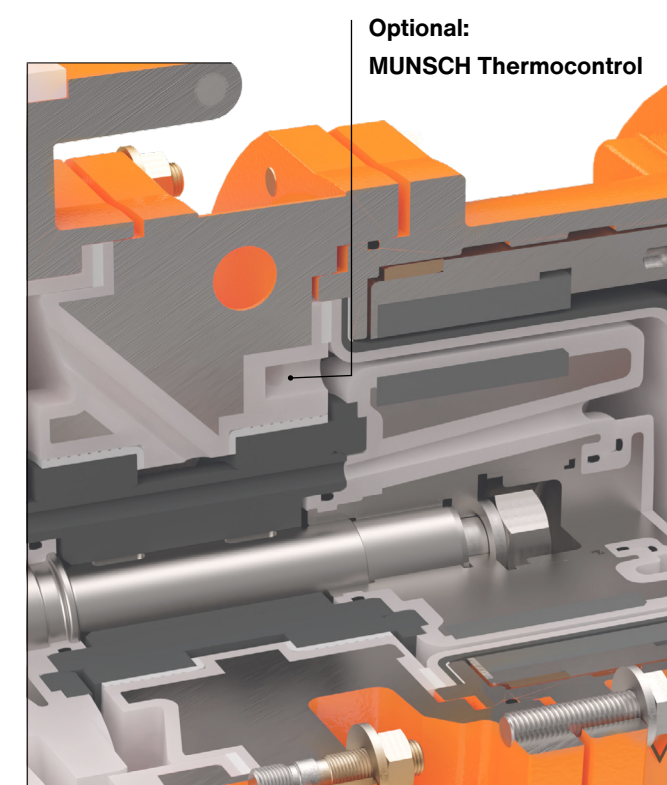
Electronic monitoring

Inductive proximity switches monitor the alignment of the outer magnet assembly. In the case of an excessive clearance ratio of the anti-friction bearings, the proximity switch triggers a signal (option).

11. THERMOCONTROL - SAFE AND SIMPLE

Our Thermocontrol pump monitoring option continuously monitors the temperature of your process fluid. The CM+ has been designed for the sensor tip to be located directly at the point of initial heat dissipation (e.g. caused by dry running).

- The temperature is measured directly at the plain bearing.
- The integrity of the double-wall spacer can system remains unimpaired.
- Highest measuring accuracy
- Allowed for use in explosion hazard zones



FLUIDS WITH SOLID-CONTENT

Solids require additional measures

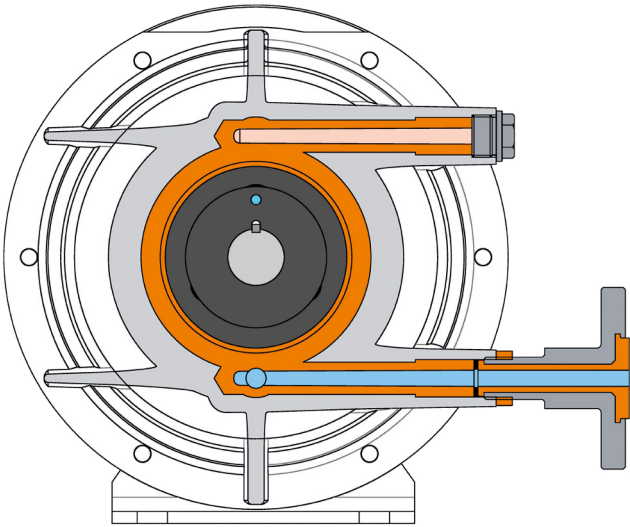
PUMP DESIGN WITH EXTERNAL LUBRICATION SOURCE FOR PLAIN BEARING

When permanently pumping fluids with solid-content, an external lubrication source will be needed for the plain bearing. Unlike the standard design, the impeller is not provided with a circulation bore in such cases. Instead, a product-compatible flushing medium or lubricant is fed to the spacer can via the G 1/2" flushing connection. The flushing medium/lubricant distributes in the spacer can and enters the fluid pumped via the axial clearance of the plain bearing bushes (see drawing on page 19).

The flow rate and pressure of the external lubricant depend on the internal pump pressure. As the delivery rate increases, the differential head decreases and thus the internal pressure in the spacer can. At the operating point, an external lubricant rate of approx. 0.9 l/min is required. The pressure of the external lubricating fluid should be roughly equal to the pressure at the pump discharge nozzle.

PUMP DESIGN WITH SOLIDS BARRIER, CM+ FA

This pump design is suitable for handling fluids with elevated solids loads. An external flushing source is not needed. There is no connection between the spacer can and the pump casing.



Flushing connection for plain bearing lubrication from an external source



PUMP DESIGN WITH VORTEX IMPELLER

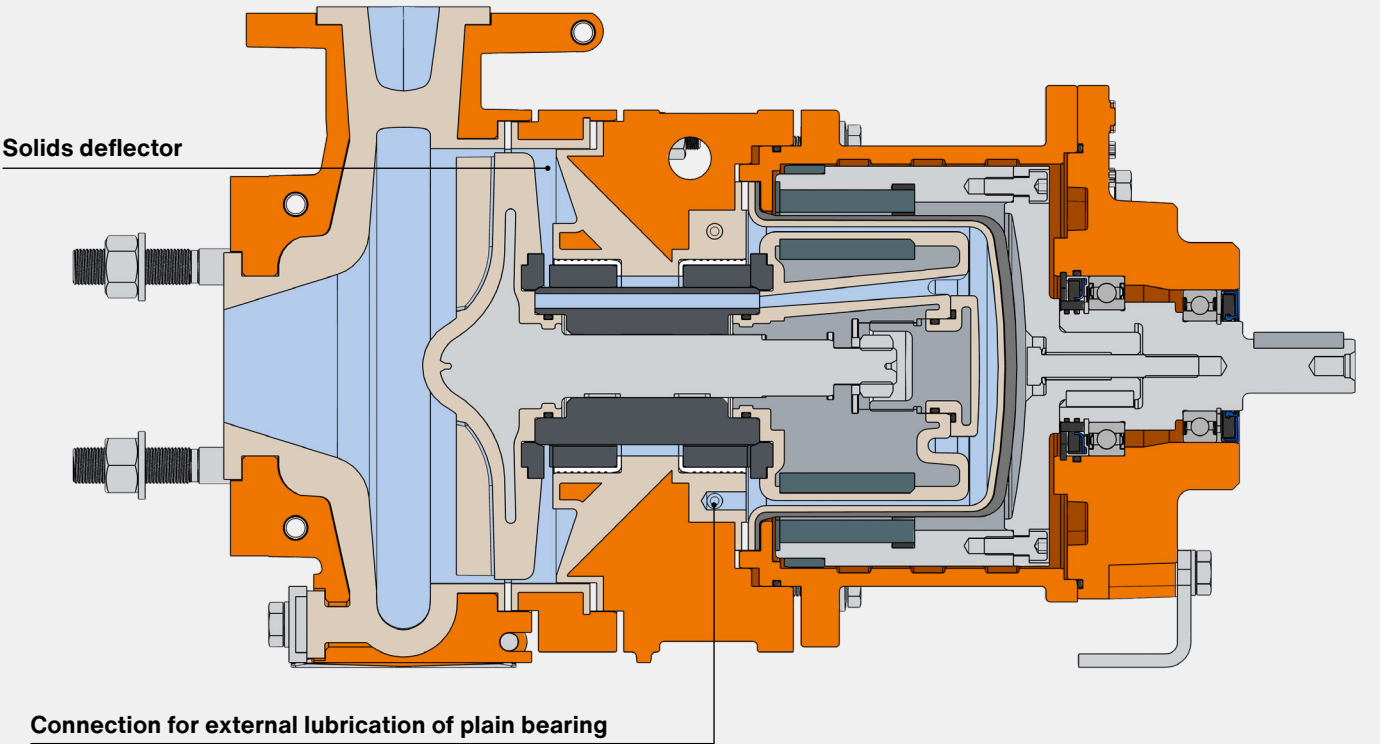
Pumps with vortex impellers have no vanes in the flow path of the volute. The impeller induces a vortex in the suction nozzle already, thereby continuously accelerating the fluid pumped.

As the impeller is located outside the flow path of the fluid being pumped, the clogging risk is reduced. Compared to centrifugal pumps with closed or semi-closed impellers, vortex impeller pumps are also better adapted to coping with fluids containing

entrained gases. Gas bubbles are captured by the liquid ring and enter the discharge line after only a few impeller rotations.

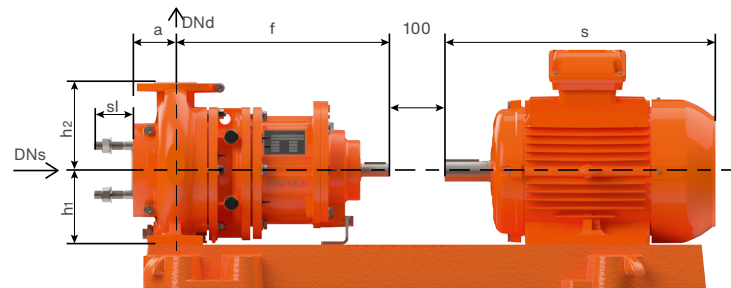
The CM+ and CM-B+ series pumps are available with a vortex impeller. A spacer ring is installed between the volute casing and the plain bearing holder to recess the impeller into the rear section of the volute. As a result, the "f" dimension increases by a few mm.

PUMP DESIGN WITH VORTEX IMPELLER AND EXTERNAL LUBRICATION SOURCE FOR PLAIN BEARING



PUMP SIZES AND DIMENSIONS

MOTOR DIMENSIONS CM+



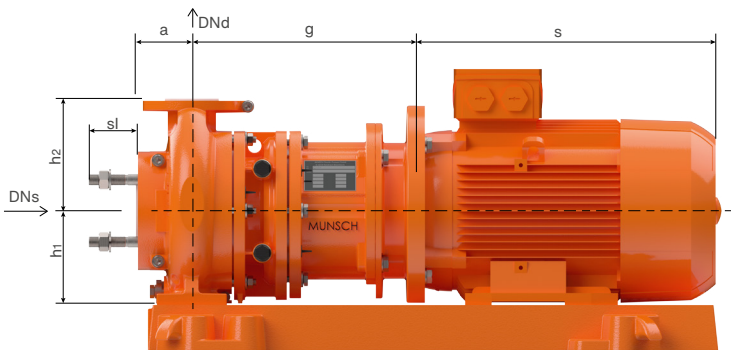
Speed 1450 min⁻¹

Frame size	IP55 [kW]	Ex eb IIC [kW]	S
100L	2,2	2	396
100L	3	2,5	396
112M	4	3,6	389
132S	5,5	5	465
132M	-	-	-
160M	-	-	-
160L	-	-	-
180M	-	-	-
180L	-	-	-
200L	-	-	-
225M	-	-	-

Speed 2900 min⁻¹

Frame size	IP55 [kW]	Ex eb IIC [kW]	S
100L	3	2,5	396
100L	-	-	-
112M	4	3,3	389
132S	7,5	4,6	465
132M	-	5,5	465
160M	15	10	604
160L	18,5	12,5	604
180M	22	15	668
180L	30	20	721
200L	-	24	721
225M	-	28	818

MOTOR DIMENSIONS CM-B+



Speed 1450 min⁻¹

Frame size	IP55 [kW]	Ex eb IIC [kW]	S
100L	2,2	2	336
100L	3	2,5	336
112M	4	3,6	329
132S	5,5	5	385
132M	-	-	-
160M	-	-	-
160L	-	-	-

Speed 2900 min⁻¹

Frame size	IP55 [kW]	Ex eb IIC [kW]	S
100L	3	2,5	336
100L	-	-	-
112M	4	3,3	329
132S	5,5	-	385
132M	7,5	4,6	385
160M	15	10	494
160L	18,5	12,5	494

Flanges to EN 1092, optionally PN 16

- drilled to ANSI B16.5, Class 150,
- drilled to JIS B2210, Class 10K

Suction-side studs to DIN 938

Dimensions in [mm]

Please note:

Motor length S relates to Siemens motors; dimensions non-binding

MAIN PUMP DIMENSIONS CM+

Pump size	DNs	DNd	a	f	h1	h2	sl
25-25-125	25	25	80	385	112	140	70
25-25-160	25	25	80	385	132	160	70
40-25-125	40	25	80	385	112	140	70
40-25-160	40	25	80	385	132	160	70
50-32-125	50	32	80	385	112	140	70
50-32-160	50	32	80	385	132	160	70
50-32-200	50	32	80	385	160	180	70
65-40-200	65	40	100	385	160	180	70
65-50-125	65	50	80	385	112	140	70
65-50-160	65	50	80	385	132	160	70
80-50-200	80	50	100	385	160	200	70
80-65-160	80	65	100	385	160	180	70
100-65-160	100	80	100	500	160	200	70

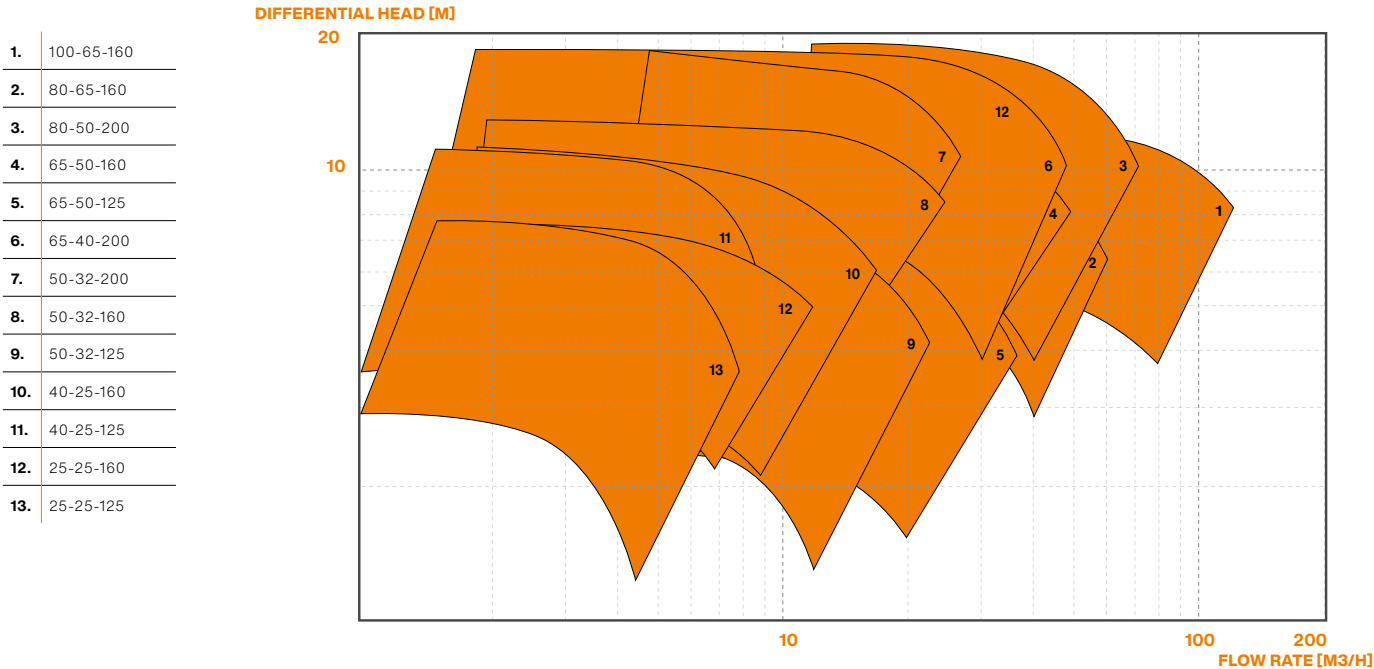
DIMENSION „G“ CM-B+

Pump size	g
100	321
112	321
132	343
160	373

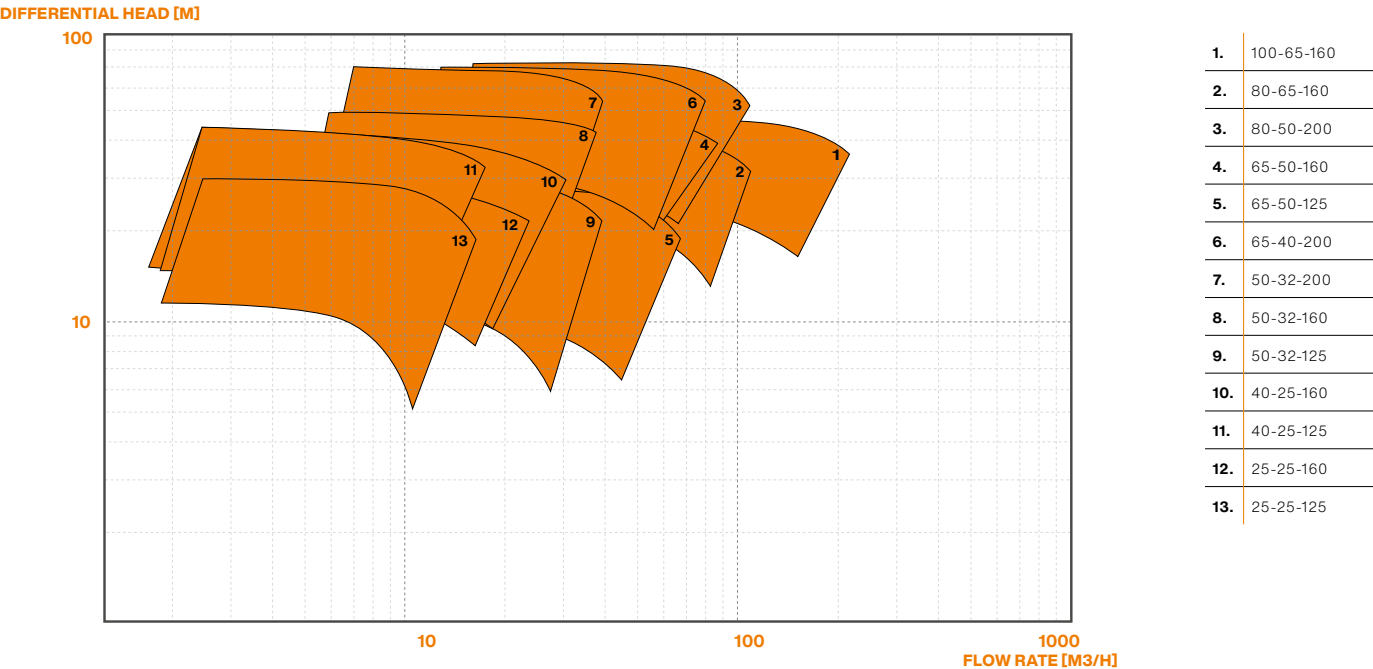


PERFORMANCE RANGES

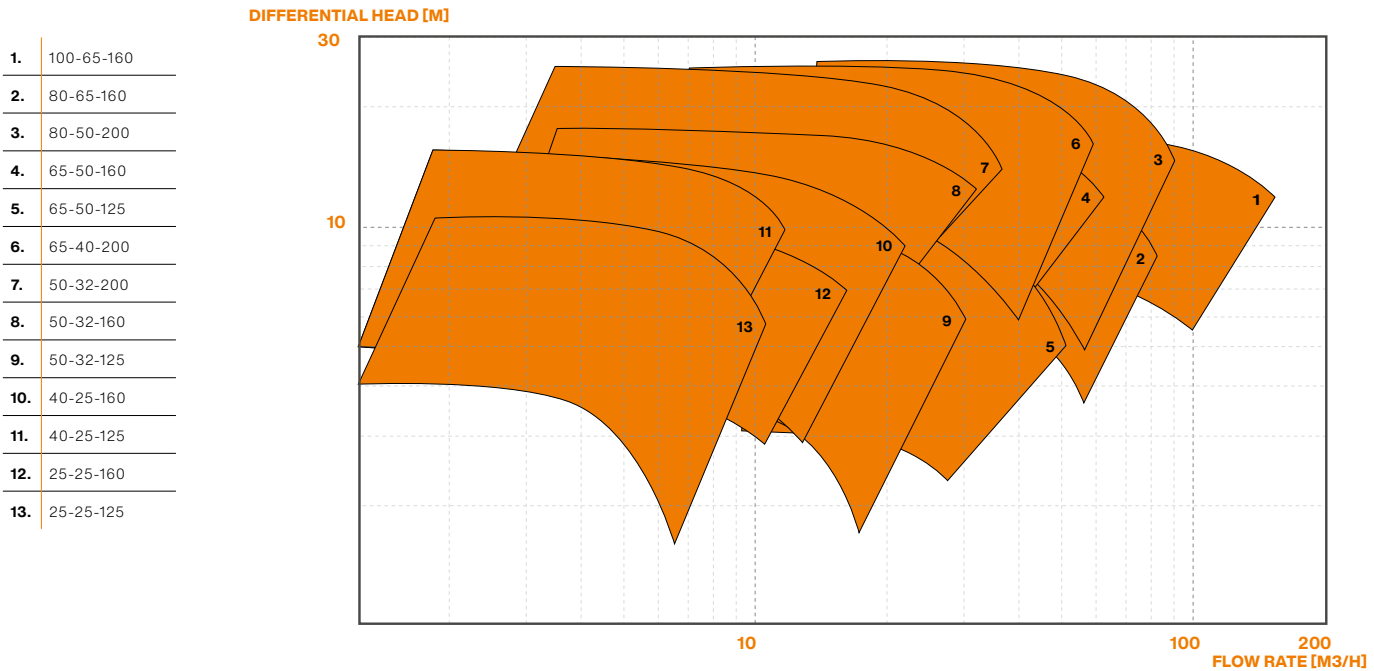
PERFORMANCE RANGE CHARTS 1.450 MIN⁻¹ (50 HZ)



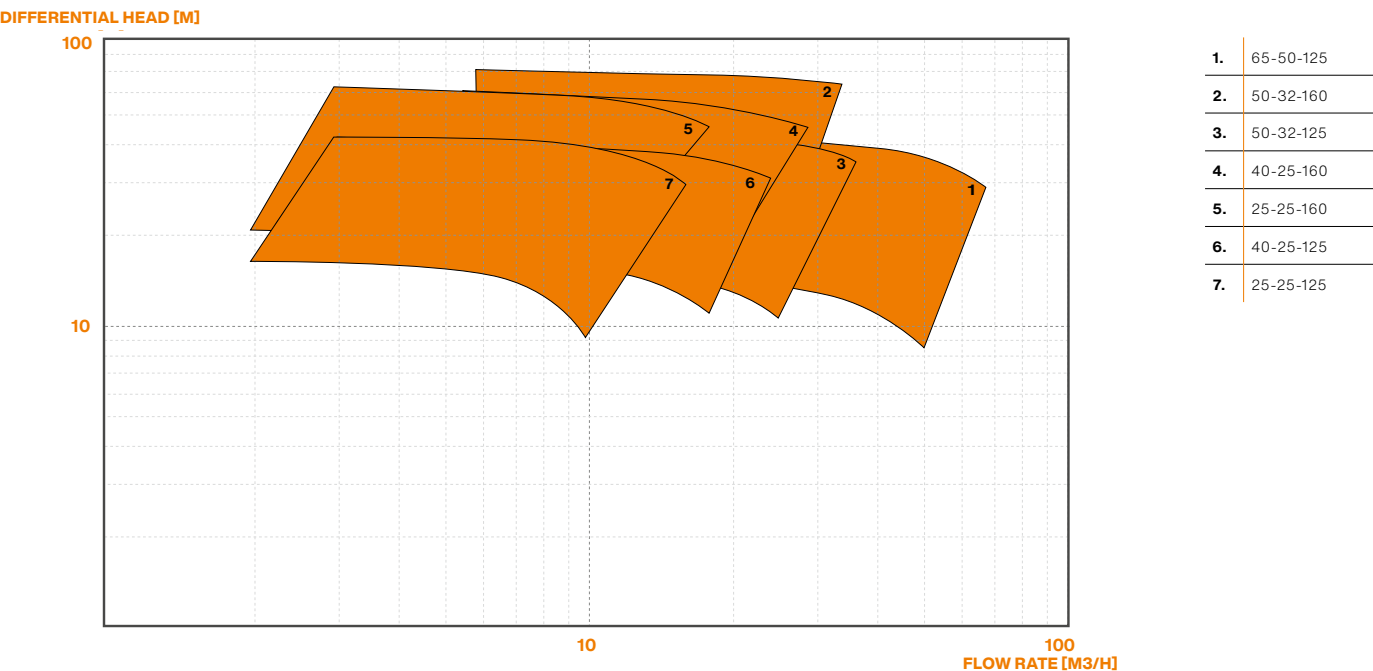
PERFORMANCE RANGE CHARTS 2.950 MIN⁻¹ (50 HZ)



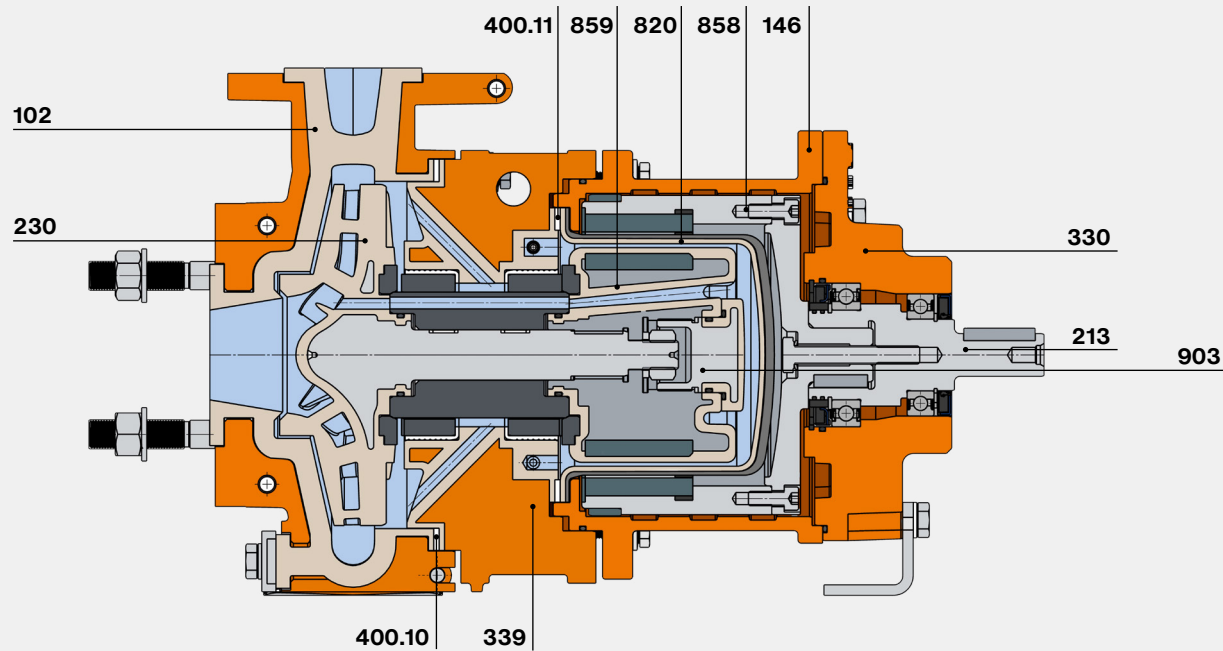
PERFORMANCE RANGE CHARTS 1.750 MIN⁻¹ (60 HZ)



PERFORMANCE RANGE CHARTS 3.550 MIN⁻¹ (60 HZ)



INTERCHANGEABLE PARTS



A large number of parts are interchangeable within the individual pump sizes, except for the volute casing, casing armour and impeller

Part no.	Part designation	25-25-125	40-25-125	50-32-125	65-50-125	25-25-160	40-25-160	50-32-160	65-50-160	80-65-160	80-65-160 transform	100-65-160	50-32-200	65-40-200	80-50-200
102	Volute casing	X	X	X	X	X	X	X	X	X	X	X	X	X	X
146	Intermediate lantern	X				X									
155	Metal armour	X	X	X	X	X	X	X	X	X	X	X	X	X	X
213	Drive shaft	X										X	X		
230	Impeller	X		X	X	X		X	X	X	X		X	X	X
330	Bearing bracket	X										X	X		
339	Plain bearing holder	X				X							X		
	Plain bearing (314, 380, 529, 545)	X													
400.10	Gasket – volute casing	X				X							X		
400.11	Gasket – spacer can	X													
820	Spacer can	X													
858	Outer magnet assembly Size 3 - Size 5	X													
859	Inner magnet assembly Size 3 - Size 5	X													
903	Sealing plug	X													



RELIABLE SUPPORT – FAST RESPONSE TIMES

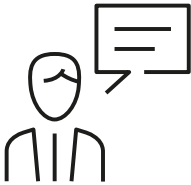
We believe that a pump is more than the sum of its components.

Get in touch with a MUNSCH engineer, service technician or with one of our competent partners worldwide. We are there for you throughout the lifecycle of your MUNSCH pump.

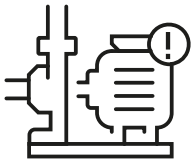
Spare parts have priority and leave our production site within the shortest possible time.

THE BEST SERVICE

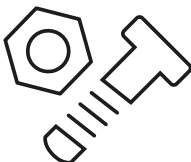
Service ranks high at MUNSCH. Our service team will also be there for you after placement of the order!



HIGHLY
MOTIVATED
SERVICE TEAM



PREVENTIVE
MAINTENANCE



SPARE PARTS AND
TAILOR-MADE
PARTS



REPAIRS AND
UPGRADES

PORTFOLIO

Our solutions for all applications



HORIZONTAL CENTRIFUGAL PUMPS WITH MECHANICAL SEALS

Capacity	up to 4,500 m³/h
Differential head	up to 90 m
Pump pressure	up to 16 bar
Main material	UHMW-PE (PE1000) · PP · PVDF · PTFE/PFA
Fluid temperature	up to 150 °C
Pump sizes	40-25-125 to 500-400-700
Seals	Single/double metal-free MUNSCH REA mechanical seal



HORIZONTAL CENTRIFUGAL PUMPS WITH MAGNETIC COUPLING

Capacity	up to 200 m³/h
Differential head	up to 90 m
Pump pressure	up to 16 bar
Main material	PP · PTFE/PFA
Fluid temperature	up to 180 °C
Seals	Sealless (magnetically coupled)



VERTICAL CENTRIFUGAL PUMPS FOR TANKS AND PUMP SUMPS

Capacity	up to 650 m³/h
Differential head	up to 70 m
Pump pressure	up to 10 bar
Main material	PE-UHMW · PP · PVDF
Fluid temperature	up to 120 °C
Pump sizes	50-32-125 to 200-150-250
Vertical setting depth	500 to 3,000 mm

VARIANTS AND ACCESSORIES

- Space-saving close-coupled design available
- High-quality motors to your specifications
- High-quality couplings
- Priming pots with limit switch for self-priming operation
- Pressure and temperature monitoring
- Leakage and pump monitoring systems
- Flange adapters and expansion joints
- Seal flush systems based on API ...



PLASTIC EXTRUSION WELDERS

MUNSCH offers you a broad range of hand-held plastic extrusion welders with a full suite of accessories for container engineering, hydraulic engineering and landfill construction applications.

For more information:
www.munschwelding.com



Have you heard?

WHAT YOU CAN EXPECT FROM MUNSCH

Expect more than just a pump! Our customers appreciate that we are accessible, listen to them and act swiftly. Our solutions do not stop at the pump discharge nozzle – we are interested in what our customers do and offer adapted solutions. We mean it – give us a try!

Your MUNSCH team is putting its heart and soul into problem solving and product development. Together with our worldwide partners, we put every effort into meeting your pumping needs.

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