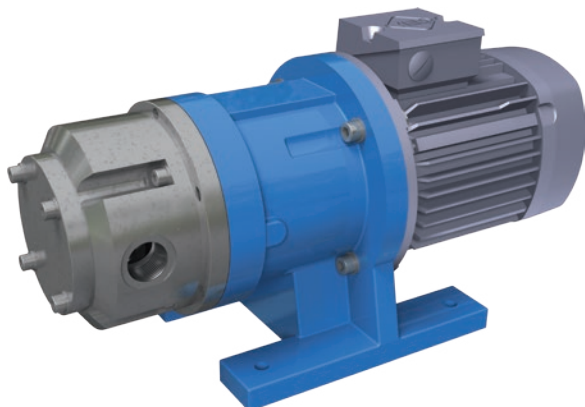


MAGNETICALLY COUPLED ROTARY SLIDING VANE PUMP

Series VANE-MAG MPA

MPA 1014 - 1514 - 2014 - 2414 (MPA III°R)



PERFORMANCE DATA

| | |
|--------------------------|--|
| Nominal speed: | 1450 1/min / 1750 1/min |
| Nominal frequency: | 50 Hz / 60 Hz |
| Nominal flow rate: | |
| MPA 1014: | 950 l/h / 1150 l/h (304 US gph) |
| MPA 1514: | 1150 l/h / 1850 l/h (489 US gph) |
| MPA 2014: | 1950 l/h / 2350 l/h (621 US gph) |
| MPA 2414: | 2400 l/h / 2800 l/h (740 US gph) |
| Discharge pressure, max: | 13 bar (188,55 psij) |
| Design pressure: | PN 16 bar (232,06 psi) >16 bar on request |
| Temperature, max.: | 120°C (248°F) >120°C on request |
| Viscosity, max.: | 5000 mPa s |
| Density, max.: | 1,9 kg/dm ³ |

APPLICATIONS

The VANE-MAG® sliding vane pumps have proven their performance in every application that requires lower flow rates at high discharge pressure, when corrosive liquids must be metered.

Typical Applications:

- Ammonia metering in Flue-Gas Denitrification Plants (SNCR)
- Pentane metering in Polyurethane Insulation Production Plants
- Metering pump for Sodium Methylate in Biodiesel production
- Pump for cooling agents in refrigeration technology
- Dosing / metering applications
- Plant Engineering
- Equipment Engineering
- Pharmaceutical-, Medical-, Bio- Engineering

MATERIALS

| | |
|-----------------|----------------------------|
| Housing: | Stainless steel AISI316Ti |
| O-Rings: | EPDM, Viton, Kalrez, FEP |
| Rotor: | Stainless steel AISI316Ti |
| Stator, Vanes:: | Carbon-Graphite SiC coated |
| Bearings: | SiC |

CONNECTIONS

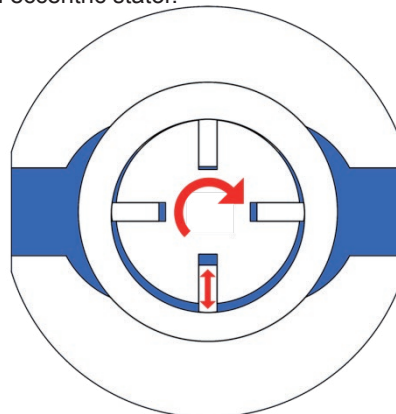
| | |
|--------------------|--------------------|
| Threads: | G1" female, 1" NPT |
| Lap Joint Flanges: | DN25 PN16, 1" ANSI |

DESIGN FEATURES

- Rotating positive displacement pump
- Sliding Vane Pump
- Metallic housing materials
- Magnetically coupled
- Leak-Free
- Rugged
- Wet self-priming
- Dry running capable
- For pure liquids w/o abrasive solids
- Compact block design
- Approximately no pulsation
- Middle to high discharge pressure
- Low capacity flow rates
- Metering capable

PRODUCT DESCRIPTION

MARCH Series: VANE-MAG® MPA pumps are rotary positive displacement pumps, magnetically coupled and made of stainless steel AISI316Ti. Characteristic wise, rotary sliding vane pumps generate low volumetric flows with middle to high discharge pressures and approximately no pulsation. The operating principle is based on radial sliding vanes, which are rotating in an eccentric stator.



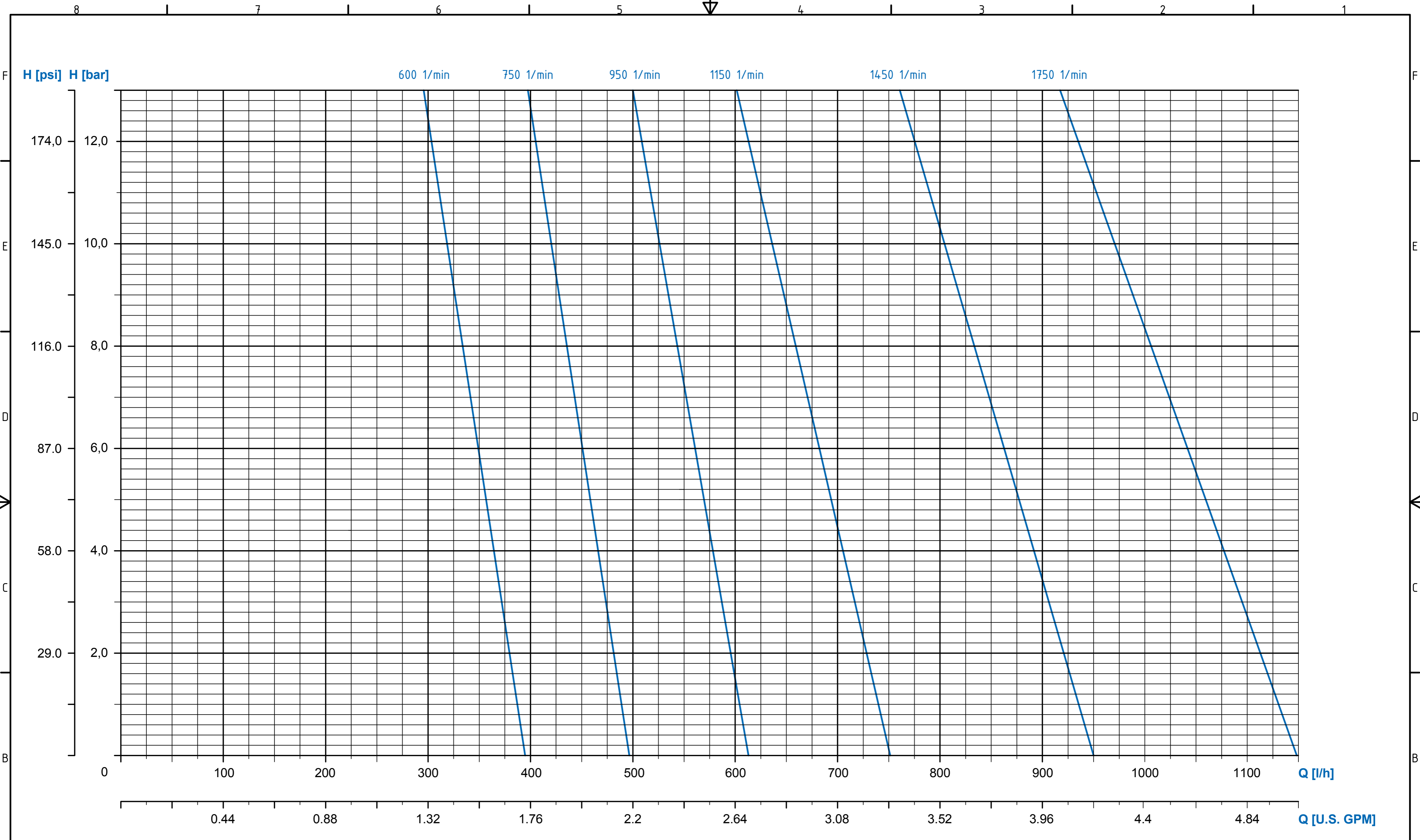
The pump housings are machined of solid block materials.

The motor power is transmitted by a frictional connection to the hydraulic part of the pumps by strong Neodymium-Permanent-Magnets. The pump is able to work without any shaft seals, which guarantees a save and maintenance-free transfer of the liquid without any leakage of corrosive, toxic and explosive fluids. Pumps for hazardous explosive areas, zone 1 or 2, are available upon request.

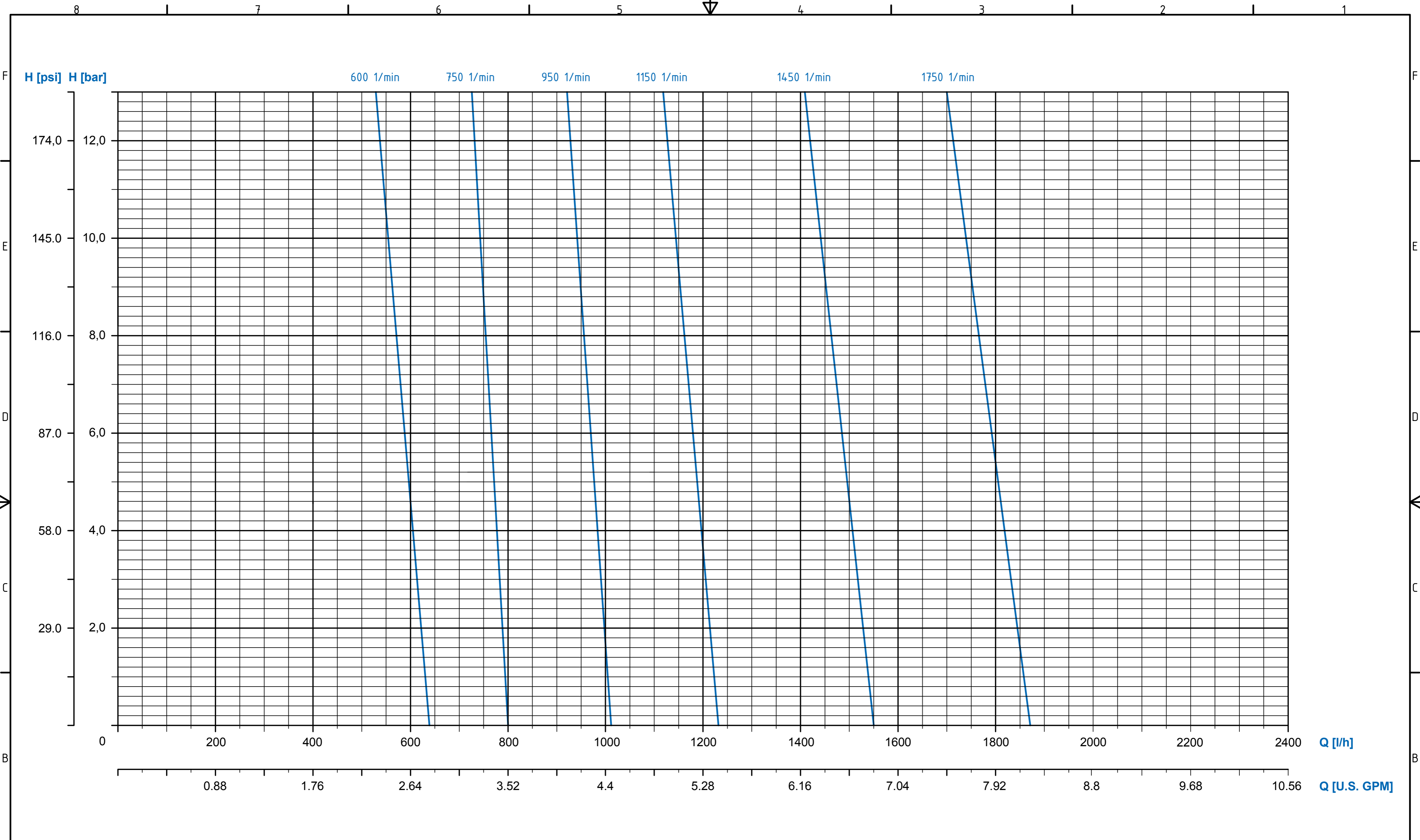
MOTOR ADAPTION

| | |
|-------------|-------------------------------------|
| EU Version: | IEC Size 90 B5, 1,5kW 1500 1/min |
| US Version: | NEMA143/145TC, 2.0 HP 1750 1/min |





| KENNLINIEN / PERFORMANCE CURVES | | | |
|---------------------------------|---------------------------|------------------|----------------------|
| Series | VANE-MAG | | |
| Pump Size | MPA1014 - III°Range Pumps | | |
| Motor Power | 0,55kW | 1,1kW | 1,5kW |
| Speed | 750 / 900 1/min | 900 / 1150 1/min | 1450 / 1750 1/min |
| Fluid Viscosity | 1 mm ² /s | Fluid Density | 1 kg/dm ³ |



MARCH PUMPEN
 MARCH PUMPEN GmbH
 Rathenaustraße 2
 D-35394 Gießen
 www.march-pumpen.com
 info@march-pumpen.com

| KENNLINIEN / PERFORMANCE CURVES | | | |
|---------------------------------|---------------------------|------------------|----------------------|
| Series | VANE-MAG | | |
| Pump Size | MPA1514 - III°Range Pumps | | |
| Motor Power | 0,55kW | 1,1kW | 1,5kW |
| Speed | 750 / 900 1/min | 900 / 1150 1/min | 1450 / 1750 1/min |
| Fluid Viscosity | 1 mm ² /s | Fluid Density | 1 kg/dm ³ |

H [psi] H [bar]

600 1/min 750 1/min 950 1/min 1150 1/min 1450 1/min 1750 1/min

174,0 12,0
145,0 10,0
116,0 8,0
87,0 6,0
58,0 4,0
29,0 2,0
0

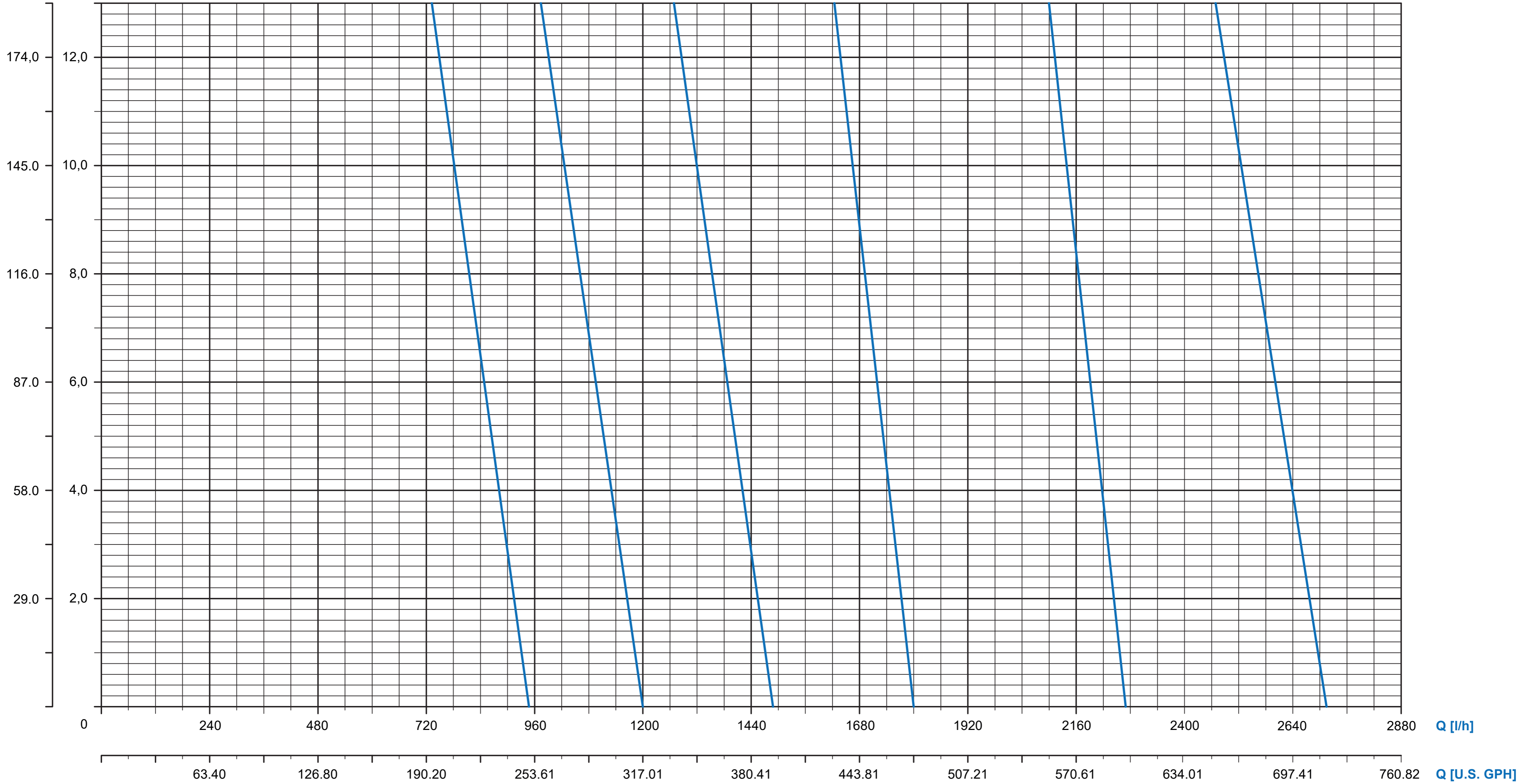
Q [l/h]
Q [U.S. GPM]

| KENNLINIEN / PERFORMANCE CURVES | | | |
|---------------------------------|---------------------------|------------------|----------------------|
| Series | VANE-MAG | | |
| Pump Size | MPA2014 - III°Range Pumps | | |
| Motor Power | 0,55kW | 1,1kW | 1,5kW |
| Speed | 750 / 900 1/min | 900 / 1150 1/min | 1450 / 1750 1/min |
| Fluid Viscosity | 1 mm ² /s | Fluid Density | 1 kg/dm ³ |



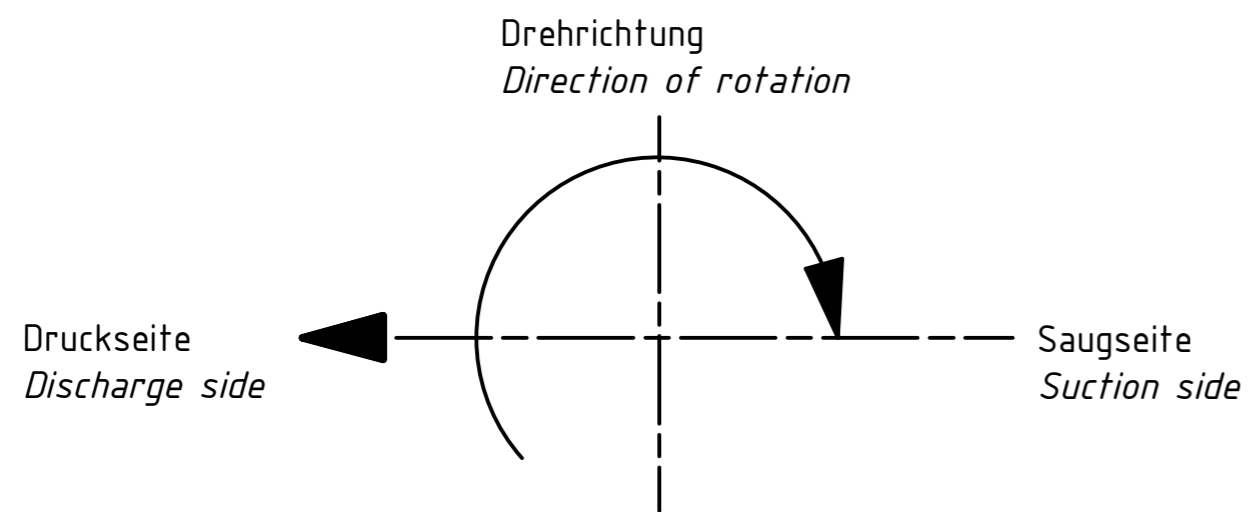
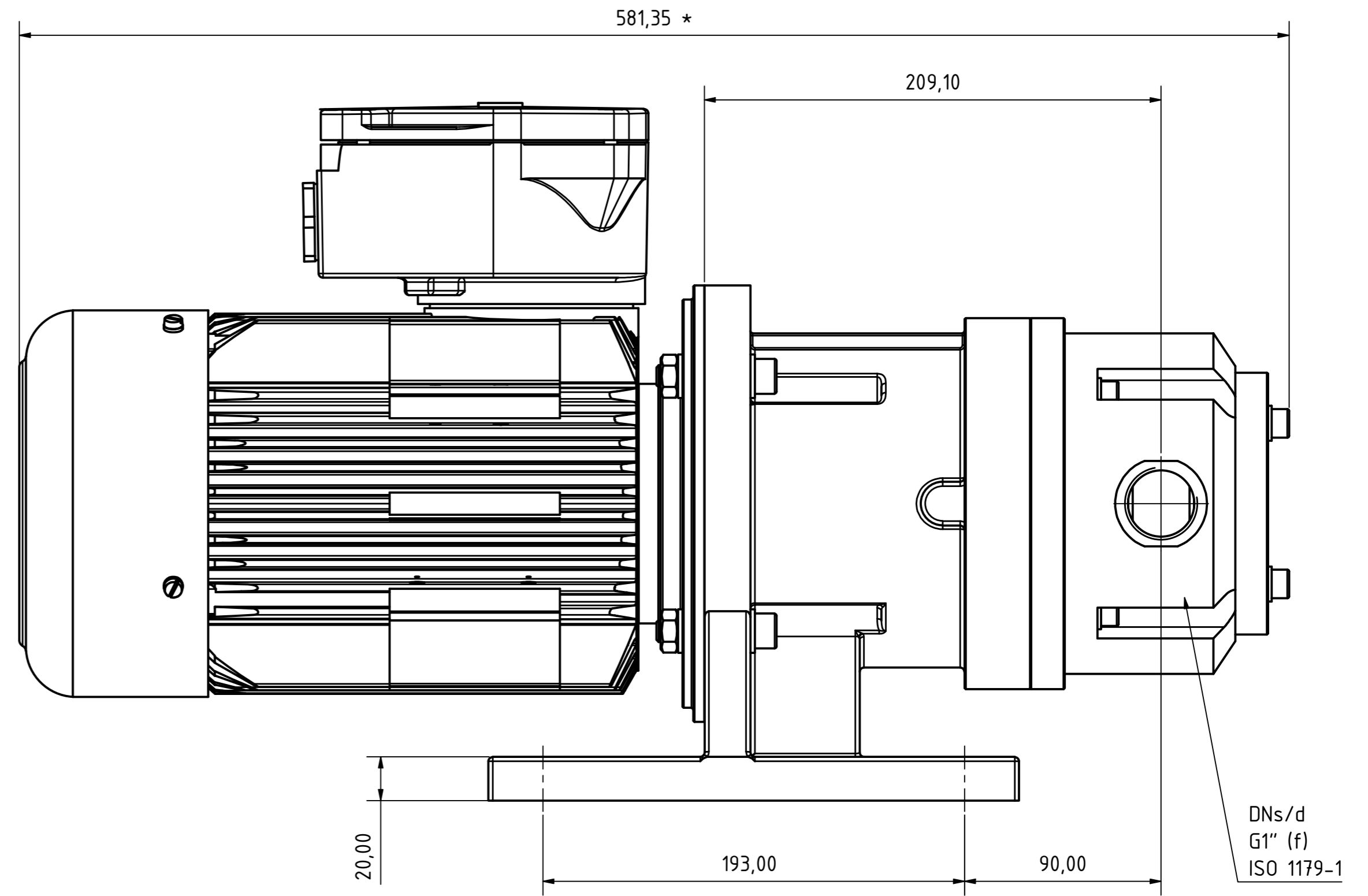
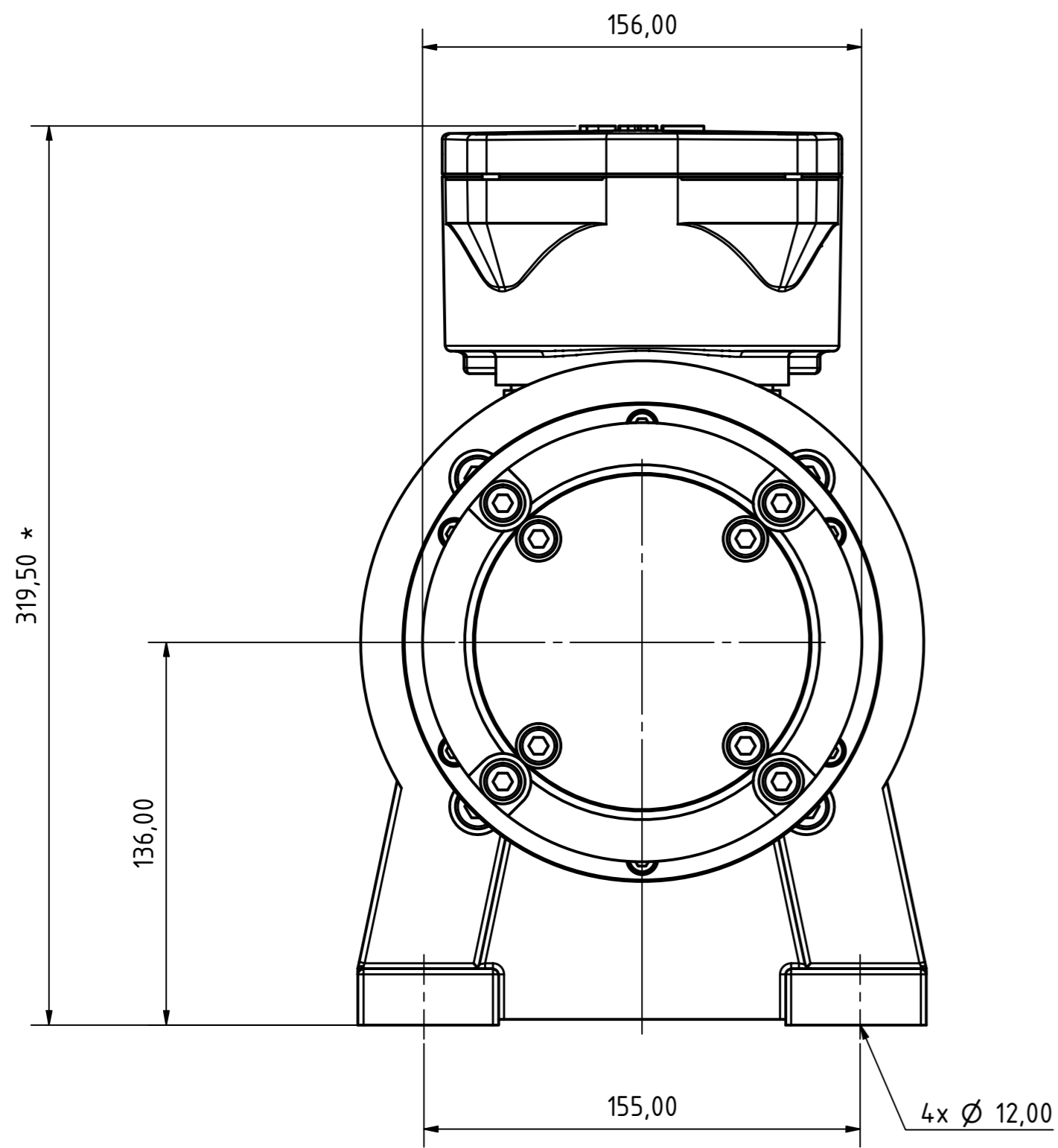
MARCH PUMPEN GmbH
Rathenaustraße 2
D-35394 Gießen
www.march-pumpen.com
info@march-pumpen.com

H [psi] H [bar]



MARCH PUMPEN GmbH
 Rathenaustraße 2
 D-35394 Gießen
 www.march-pumpen.com
 info@march-pumpen.com

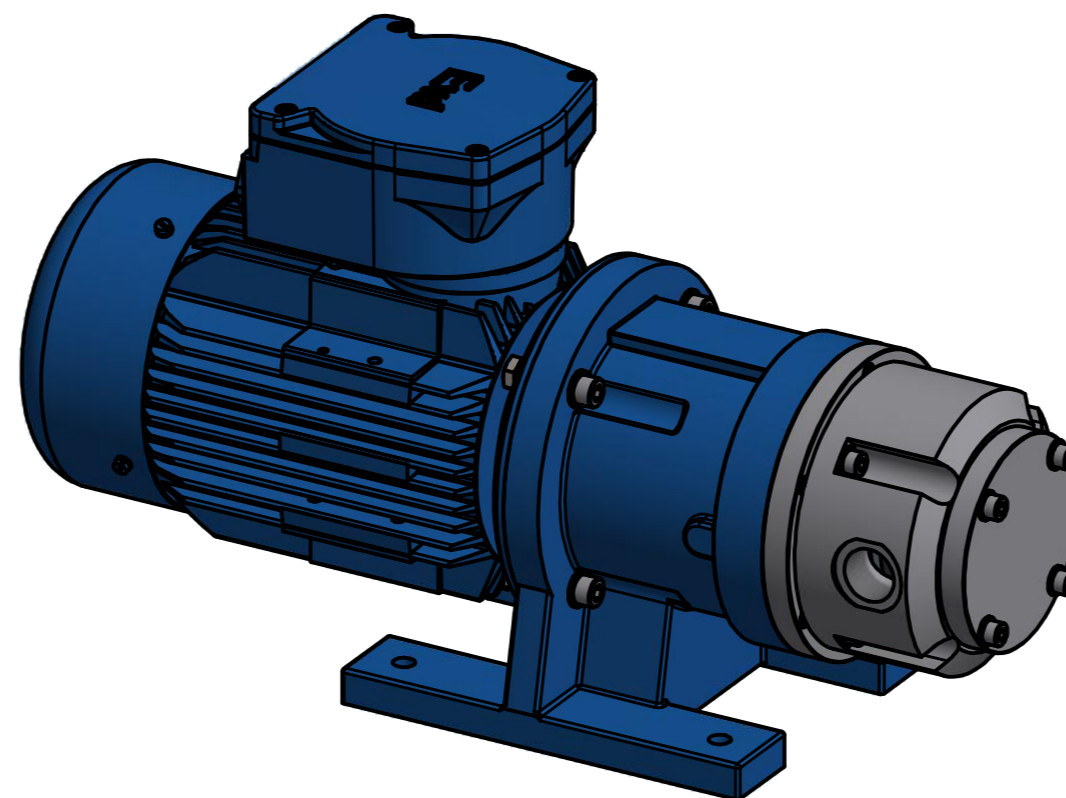
| KENNLINIEN / PERFORMANCE CURVES | | | |
|---------------------------------|----------------------|------------------|----------------------|
| Series | VANE-MAG | | |
| Pump Size | MPA 2414 (III°Range) | | |
| Motor Power | 1,5 kW / 1,5 kW | 1,5 kW / 1,5 kW | 1,5 / 2,2 kW |
| Speed | 750 / 900 1/min | 900 / 1150 1/min | 1450 / 1750 1/min |
| Fluid Viscosity | 1 mm ² /s | Fluid Density | 1 kg/dm ³ |



DIMENSIONS
in mm
* may change with different motor manufacturer

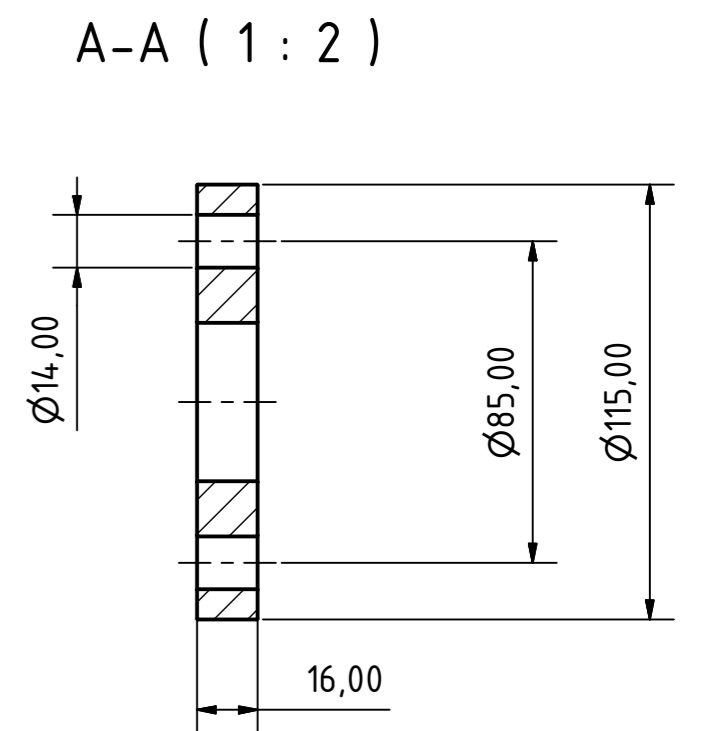
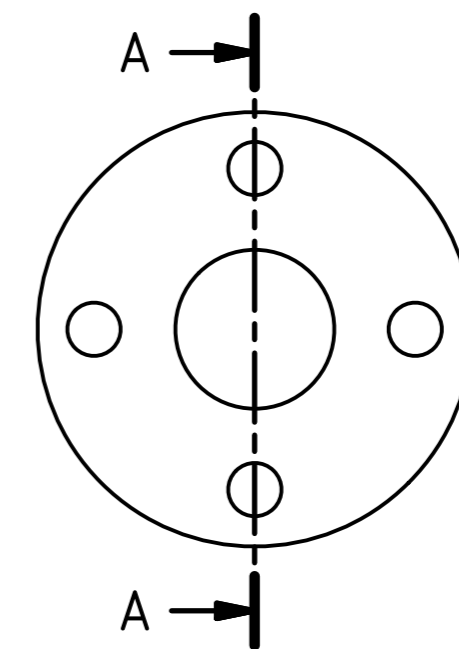
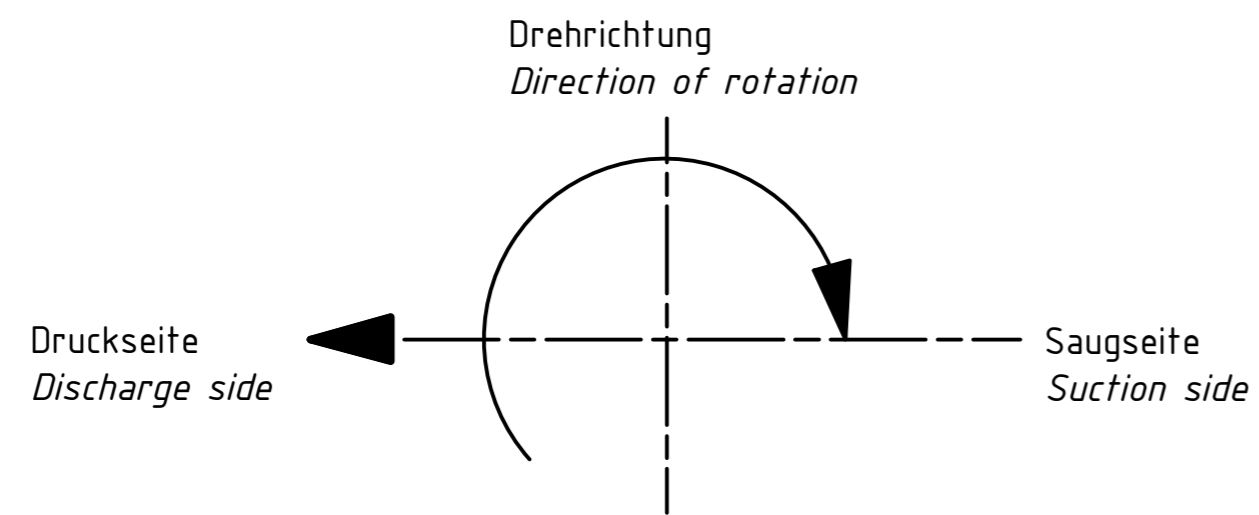
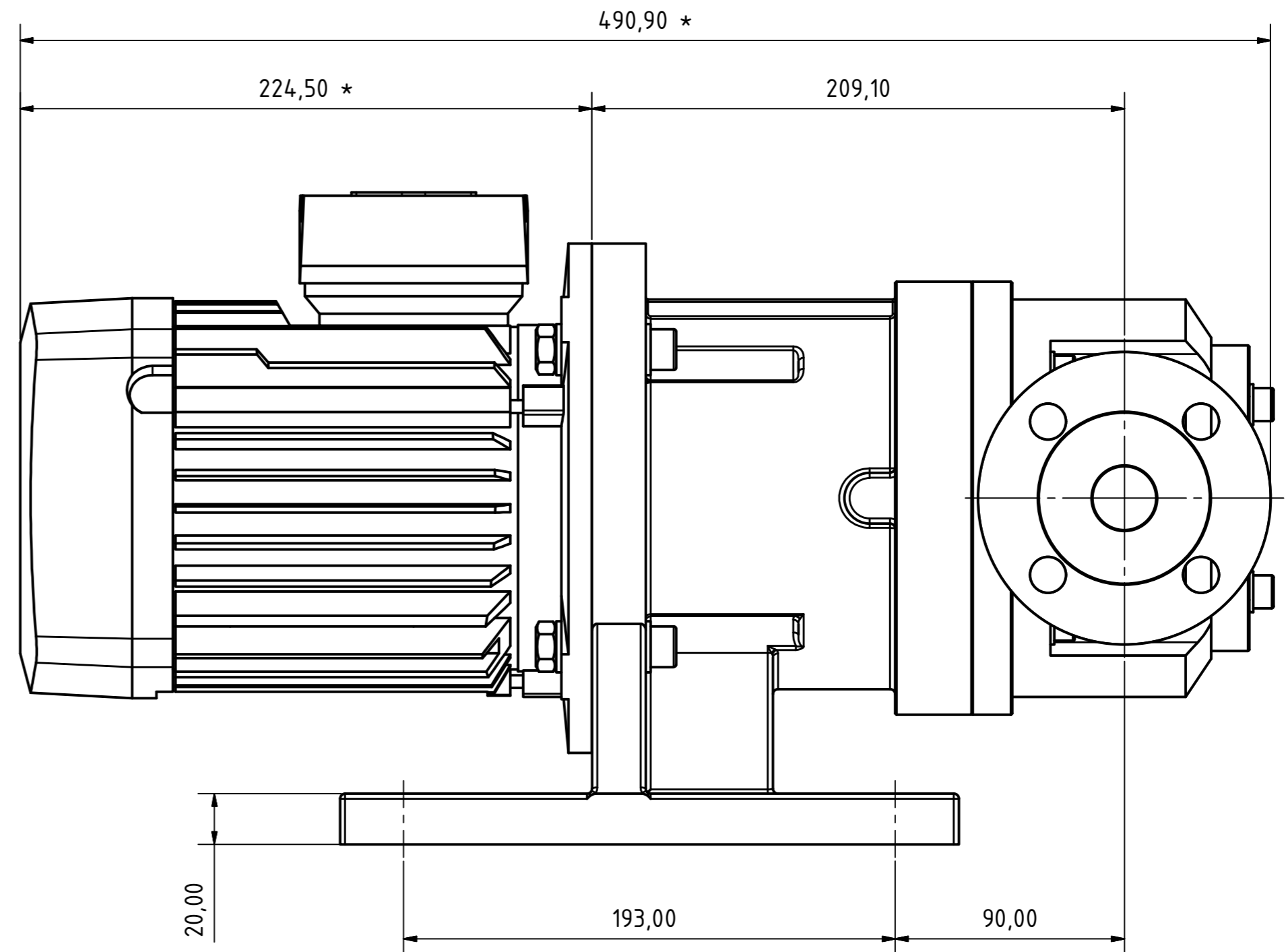
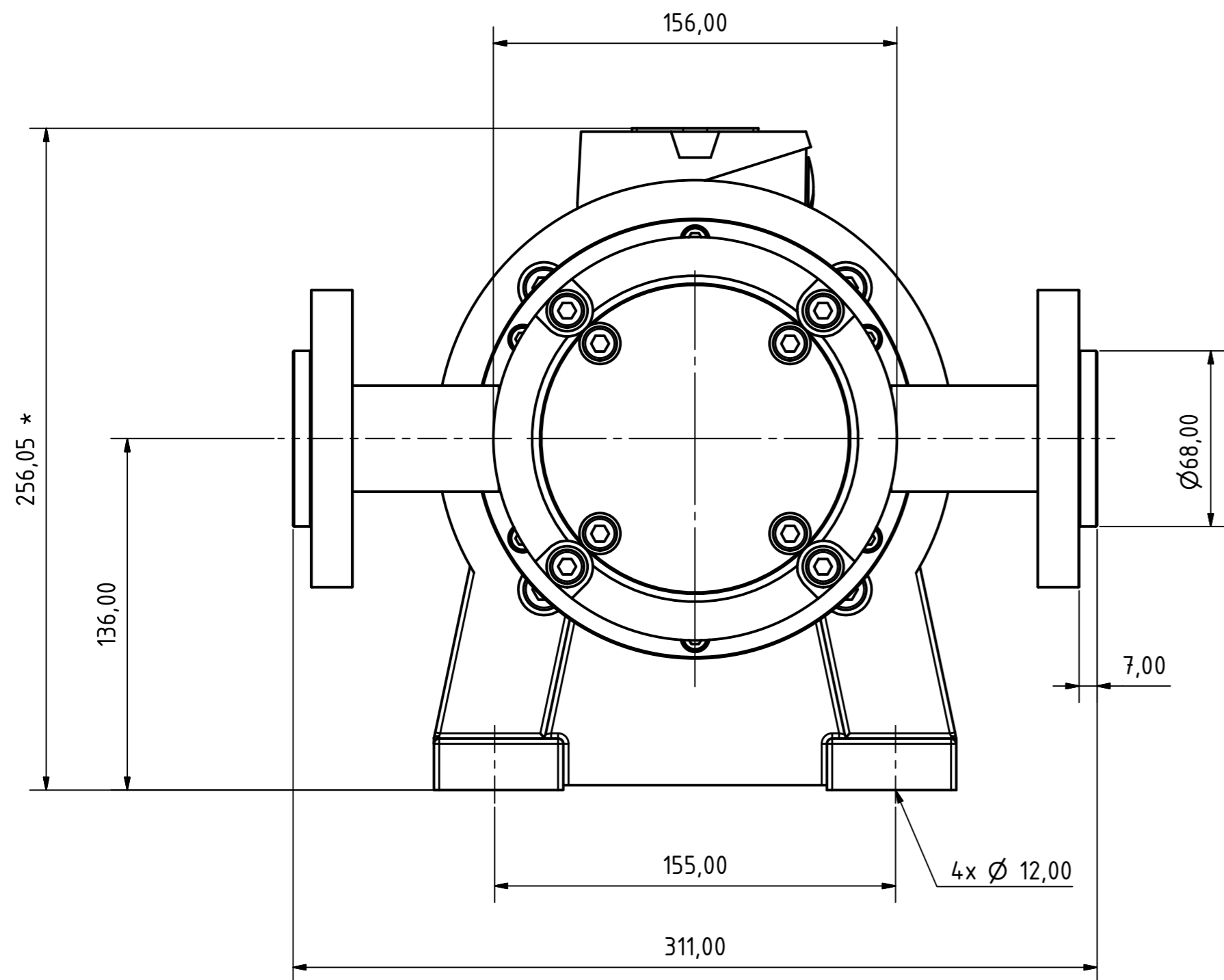
DRIVE
Explosion proof TEFC three phase asynchronous squirrel cage electric motor
acc. to IEC Standards
Manufacturer: Barterc Varnost
Size: IEC90 B5, 1,5kW, 1450 rpm

CONNECTIONS
1" BSP female
alternatively
Lap Joint Flange DN25 PN16-40



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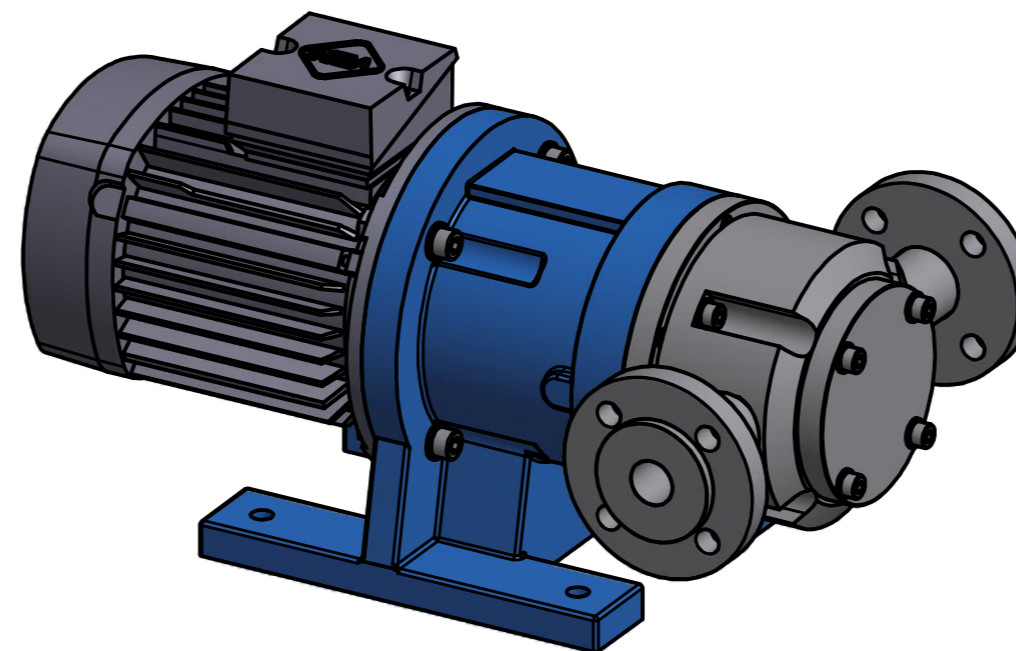
| | | | | | | |
|--------|------------|--|---------------------|------|---|-------------------|
| | | MARCH PUMPEN GmbH Rätthausstraße 2 D-35394 Gießen Tel.: (+49) (0)641-686806-0 Fax.: (+49) (0)641-686806-60 | | | 1:2 | Pump weight: 65kg |
| | | Gezeichnet 30.10.2019 | Datum 30.10.2019 | Lach | VANE-MAG MPA 3.2° Range SSR - IEC90 - 4KTC | |
| | | Kontrolliert Norm | | | DPMA-1014.2-2414.2 | |
| | | | | | 1 A2 | |
| Status | Änderungen | Datum | Name | | | |



DIMENSIONS
in mm
* may change with different motor manufacturer

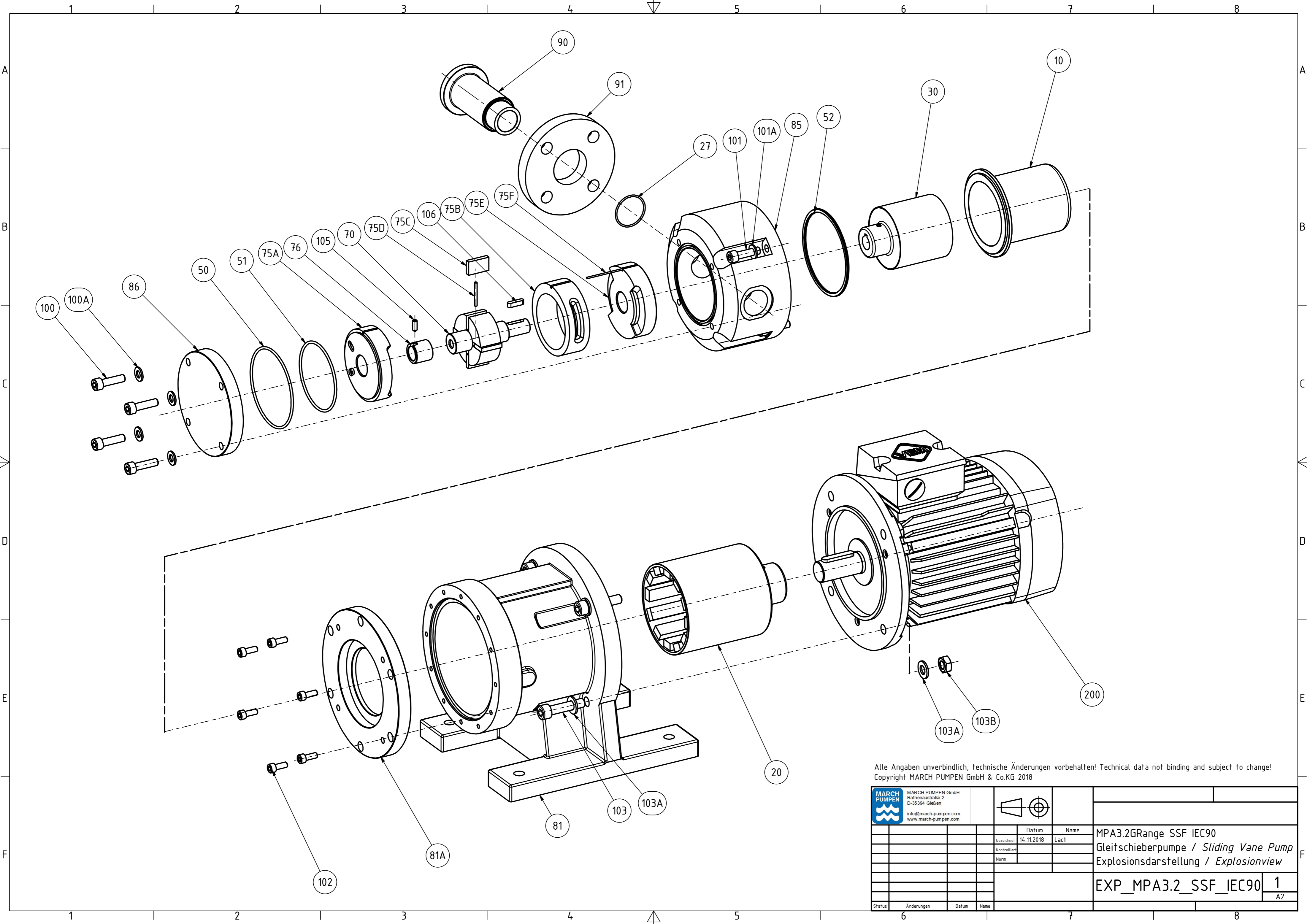
DRIVE
TEFC three phase asynchronous squirrel cage electric motor
acc. to IEC Standards
Manufacturer: VEM
Size: IEC90 B5, 1,5kW, 1450 rpm

CONNECTIONS
Lap Joint Flange DN25 PN16
or
1" BSP female


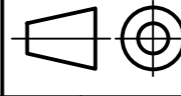


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| | | | | | | | | | |
|--------|------------|---|------|---------------|--|---|--|-------------------|--|
| | | MARCH PUMPEN GmbH Rätthausstraße 2 D-35394 Gießen Tel.: (+49) (0)641-686806-0 Fax: (+49) (0)641-686806-60 | | | | 1:2 | | Pump weight: 65kg | |
| | | Gezeichnet 14.11.2018 Lach | | Datum Name | | VANE-MAG MPA3.2G Range SSF - IEC90 VEM | | | |
| | | Kontrolliert Norm | | | | MPA3.2G_SSF_IEC90_VEM1 | | | |
| | | | | | | A2 | | | |
| Status | Änderungen | Datum | Name | | | | | | |



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| | | | | | |
|--|------------|---|------|--|----|
|  MARCH PUMPEN GmbH Rätthausstraße 2 D-35394 Gießen info@march-pumpen.com www.march-pumpen.com | |  | | | |
| | | Datum | Name | MPA3.2GRange SSF IEC90 | |
| | | Gezeichnet | Lach | Gleitschieberpumpe / Sliding Vane Pump | |
| | | Kontrolliert | | Explosionsdarstellung / Explosionview | |
| | | Norm | | | |
| | | | | EXP_MPA3.2_SSF_IEC90 | 1 |
| | | | | | A2 |
| Status | Änderungen | Datum | Name | | |