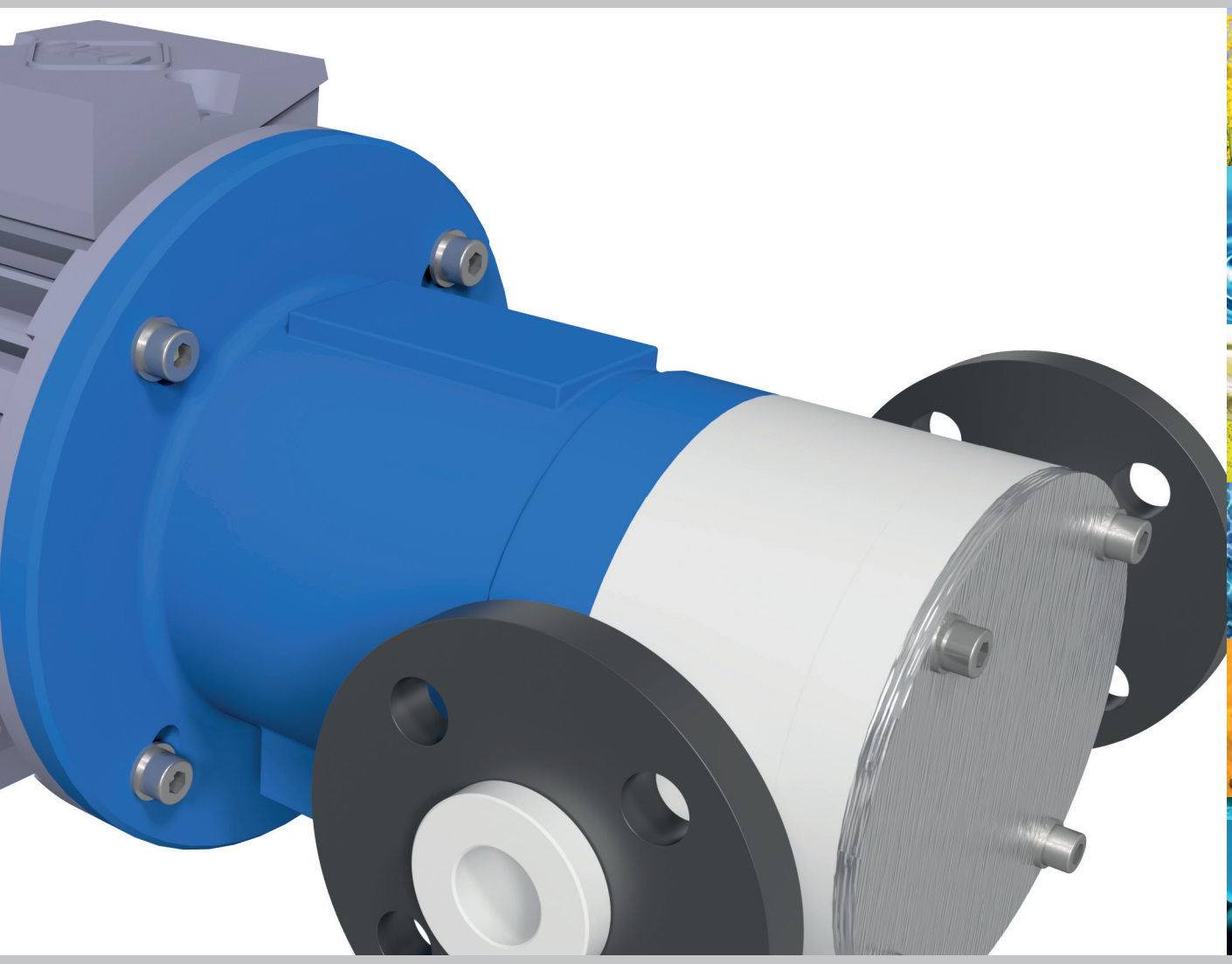
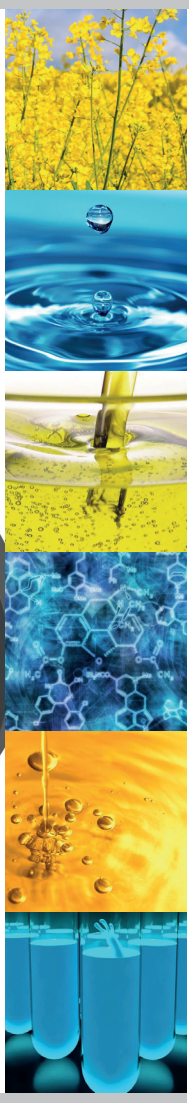
MAGNETIC DRIVEN
ROTARY SLIDING VANE PUMPS
Series VANE-MAG® MP





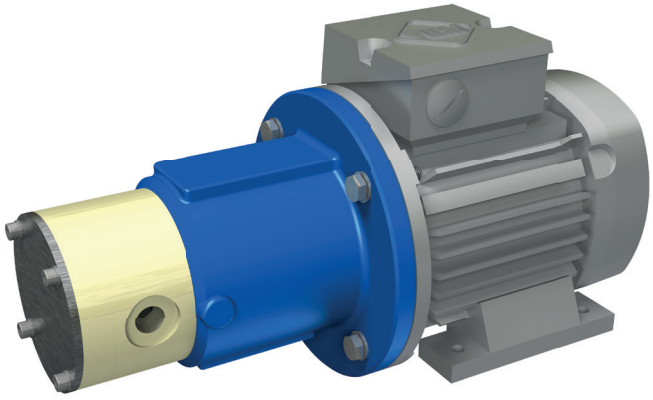
MARCH PUMPEN

...ADVANCED SOLUTIONS...

MAGNETICALLY COUPLED ROTARY SLIDING VANE PUMP

Series VANE-MAG MP

MP 114 - 214 - 314 - 414 - 514 (MP I° Range)



PERFORMANCE DATA

Nominal speed:	1450 1/min / 1750 1/min
Nominal frequency:	50 Hz / 60Hz
Nominal flow rate:	
MP 114:	150 l/h / 200 l/h (52,83 US gph)
MP 214:	240 l/h / 280 l/h (73,97 US gph)
MP 314:	290 l/h / 380 l/h (100,39 US gph)
MP 414:	400 l/h / 495 l/h (130,77 US gph)
MP 514:	500 l/h / 585 l/h (154,54 US gph)
Differential pressure, max:	5 bar (72.52 psi]
Design pressure:	PN 10 bar (145 psi)
Temperature, max.:	65°C (149°F)
Viscosity, max.:	1000 mPa s
Density, max.:	1,9 kg/dm³

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:

- Water treatment especially precipitation, flocculation, sedimentation and neutralisation
- Metering pump in Biodiesel production
- Metering pump in laboratory environments
- Chemical dosing / metering applications
- Plant Engineering
- Equipment Engineering
- Pharmaceutical-, Medical-, Bio- Engineering

MATERIALS

Housing:	Polypropylene, PVDF
O-Rings:	EPDM, Viton, Kalrez
Rotor:	PVDF-FCR
Stator, Vanes::	Phenoli Resin Carbon-Graphite
Bearings:	SiC

CONNECTIONS

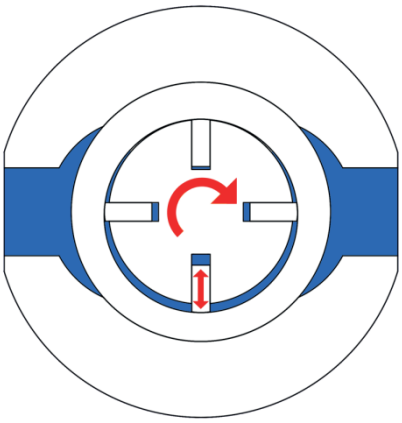
Threads:	G3/8” female, 1/2" NPT female
Lap Joint Flanges:	DN15 PN10, 1/2" ANSI

DESIGN FEATURES

- Rotating positive displacement pump
- Sliding Vane Pump
- Corrosion resistant du to non-metallic materials
- Magnetically coupled
- Leak-Free
- Rugged
- Wet self-priming
- Compact block design
- Approximately no pulsation
- Middle to high discharge pressure
- Low capacity flow rates
- Metering capable

PRODUCT DESCRIPTION

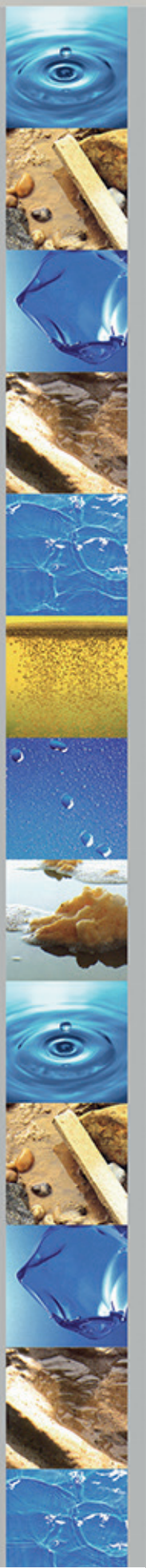
MARCH Series: VANE-MAG® MP pumps are rotary positive displacement pumps, magnetically coupled and made of non-metallic materials. Characteristic wise, rotary sliding vane pumps generate low volumetric flows with middle to high discharge pressures and approximately no pulsation. The operating principle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

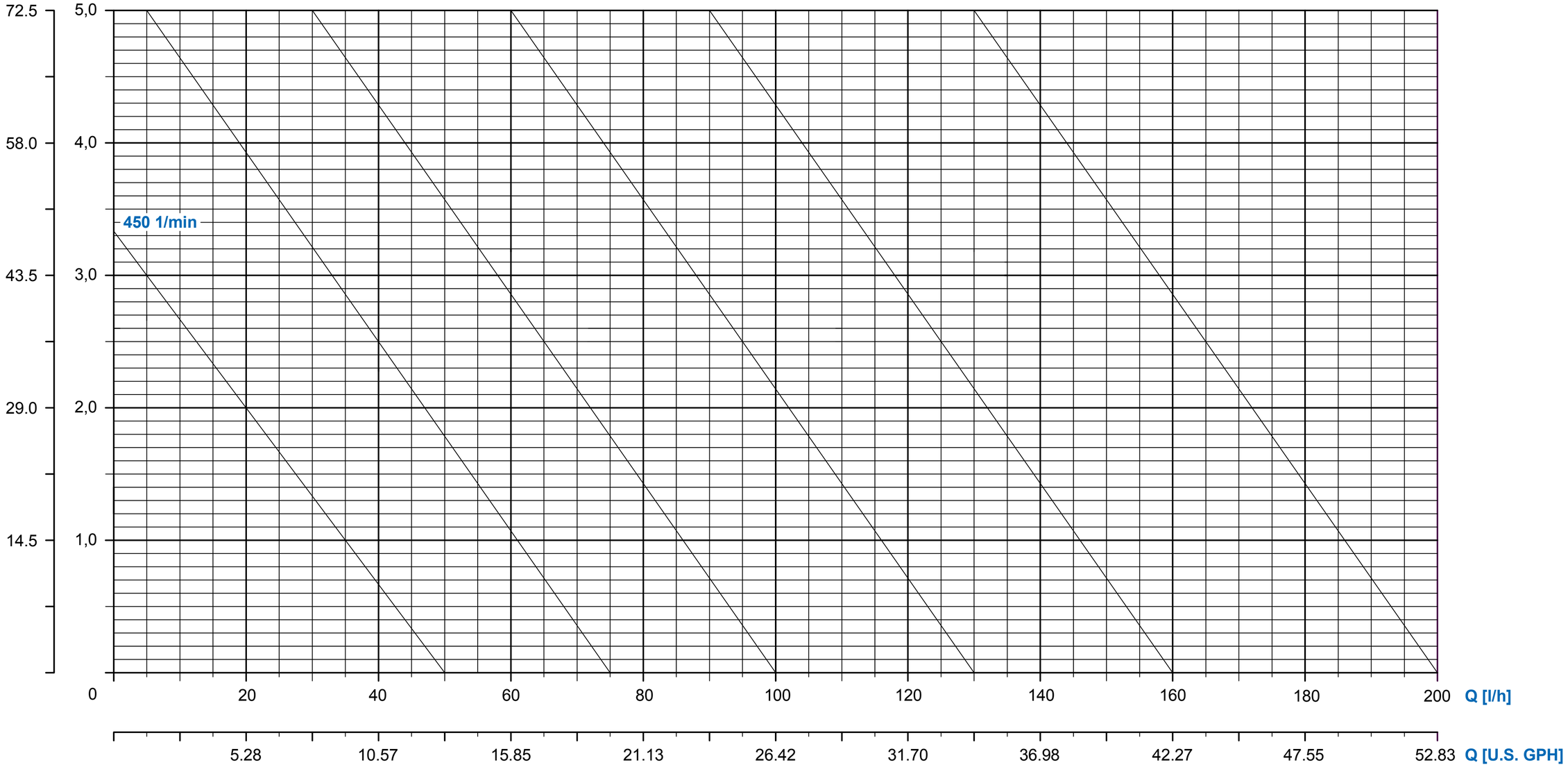


The pump housing is made of corrosion resistant solid block plastics like PP or PVDF.
The motor power is transmitted by a frictional connection to the hydraulic part of the pumps by strong Neodynium-Permanent-Magnets. So the pump is able to work without any shaft seals, which guarantees a save and maintenance-free transfer of the liquid without any leakage of corrosive, toxic and explosive fluids.
Pumps for hazardous explosive areas, zone 1 or 2, can be made out of conductive PVDF.

MOTOR ADAPTION

EU Version:	IEC Size 71 B35, 0,37kW 1500 1/min
US Version:	NEMA56C, 0.5 HP 1750 1/min





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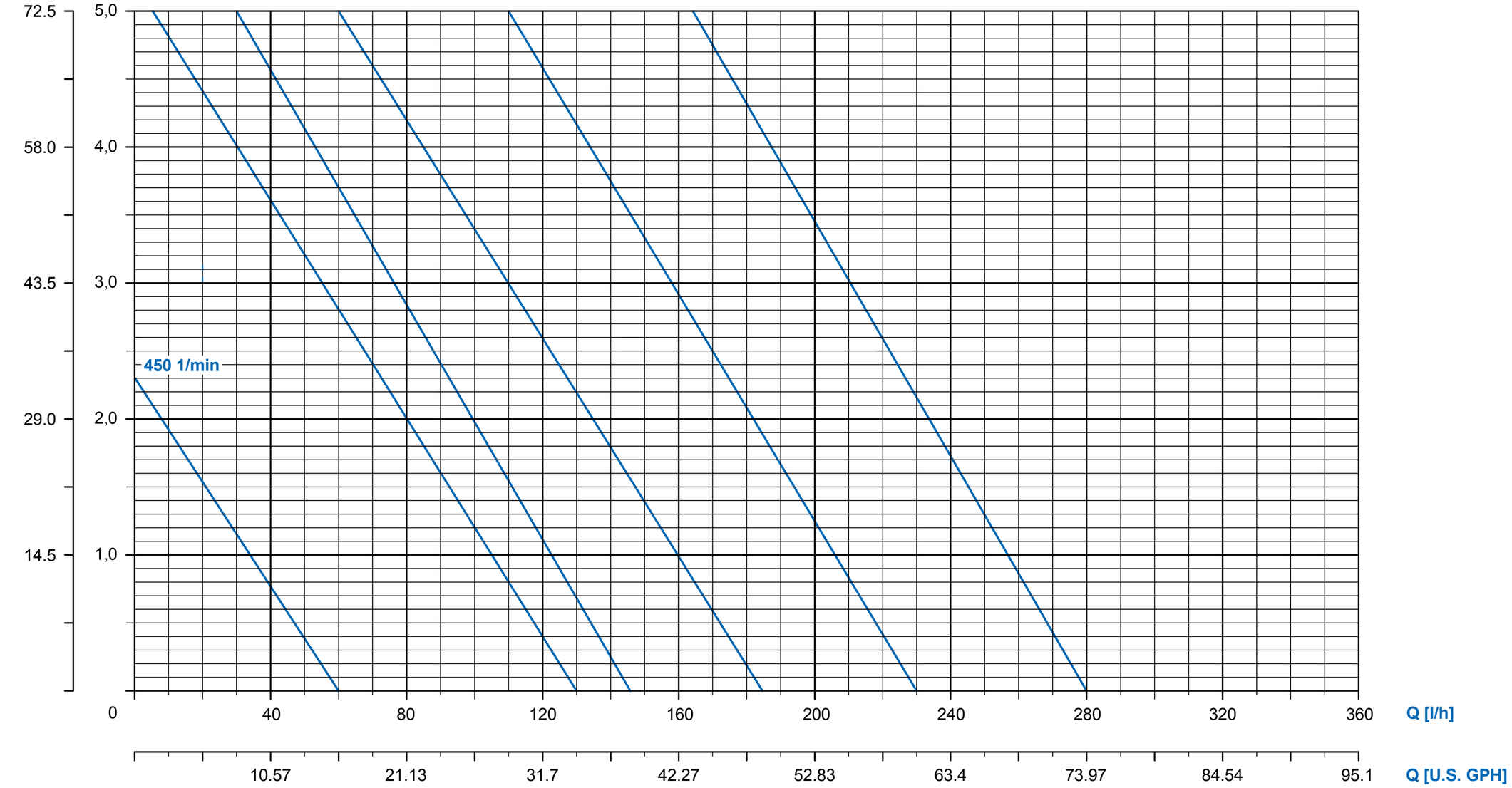
info@march-pumpen.com

KENNLINIEN / PERFORMANCE CURVES			
Series	VANE-MAG		
Pump Size	MP 114		
Motor Power	0,12kW	0,25kW	0,37kW / 0.5HP
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



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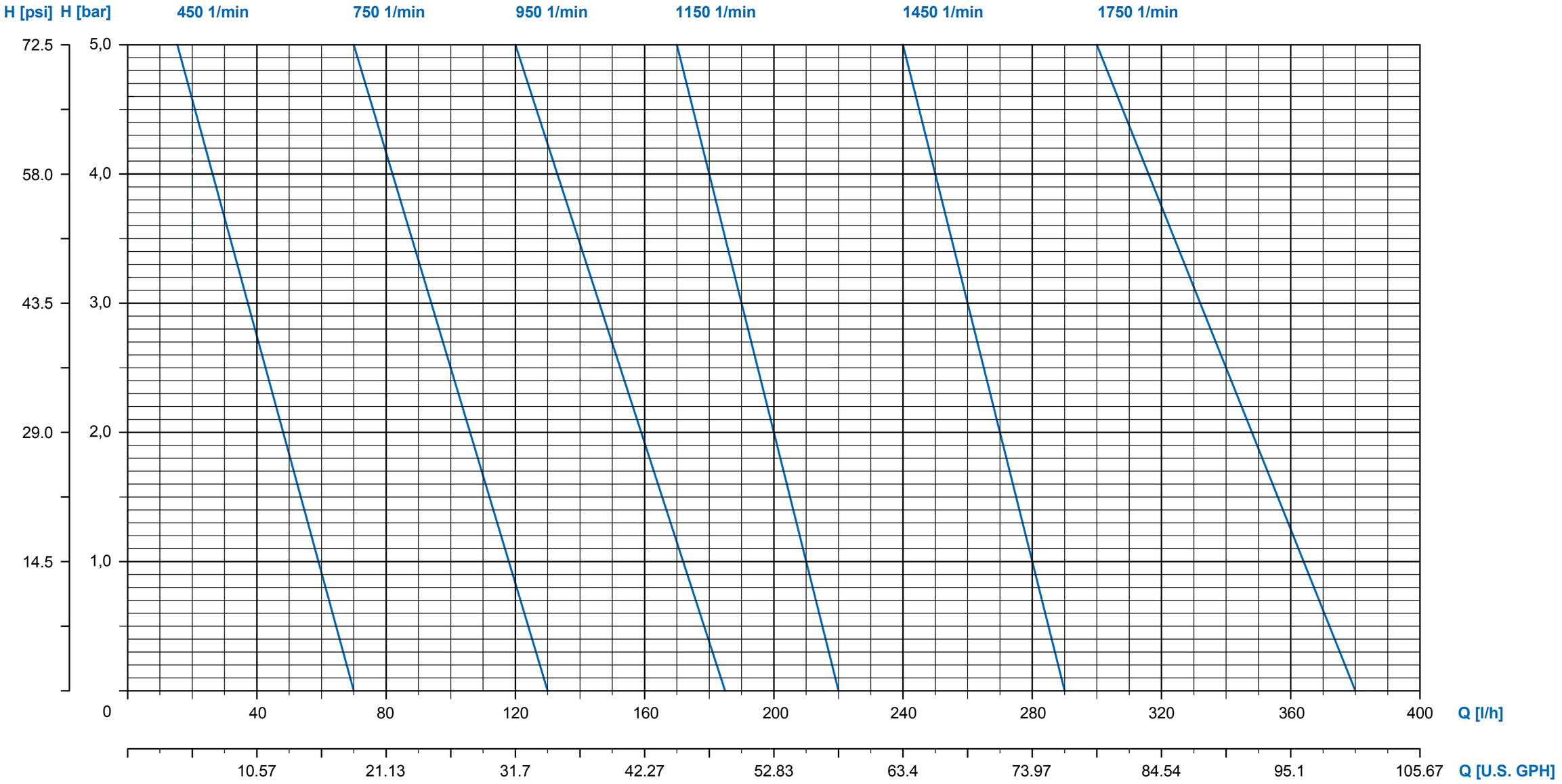
KENNLINIEN / PERFORMANCE CURVES			
Series	VANE-MAG		
Pump Size	MP 214		
Motor Power	0,12kW	0,25kW	0,37kW / 0.5HP
Speed	750 / 900 1/min	900 / 1150 1/min	1450 / 1750 1/min
Fluid Viscosity	1 mm^2/s	Fluid Density	1 kg/dm^3



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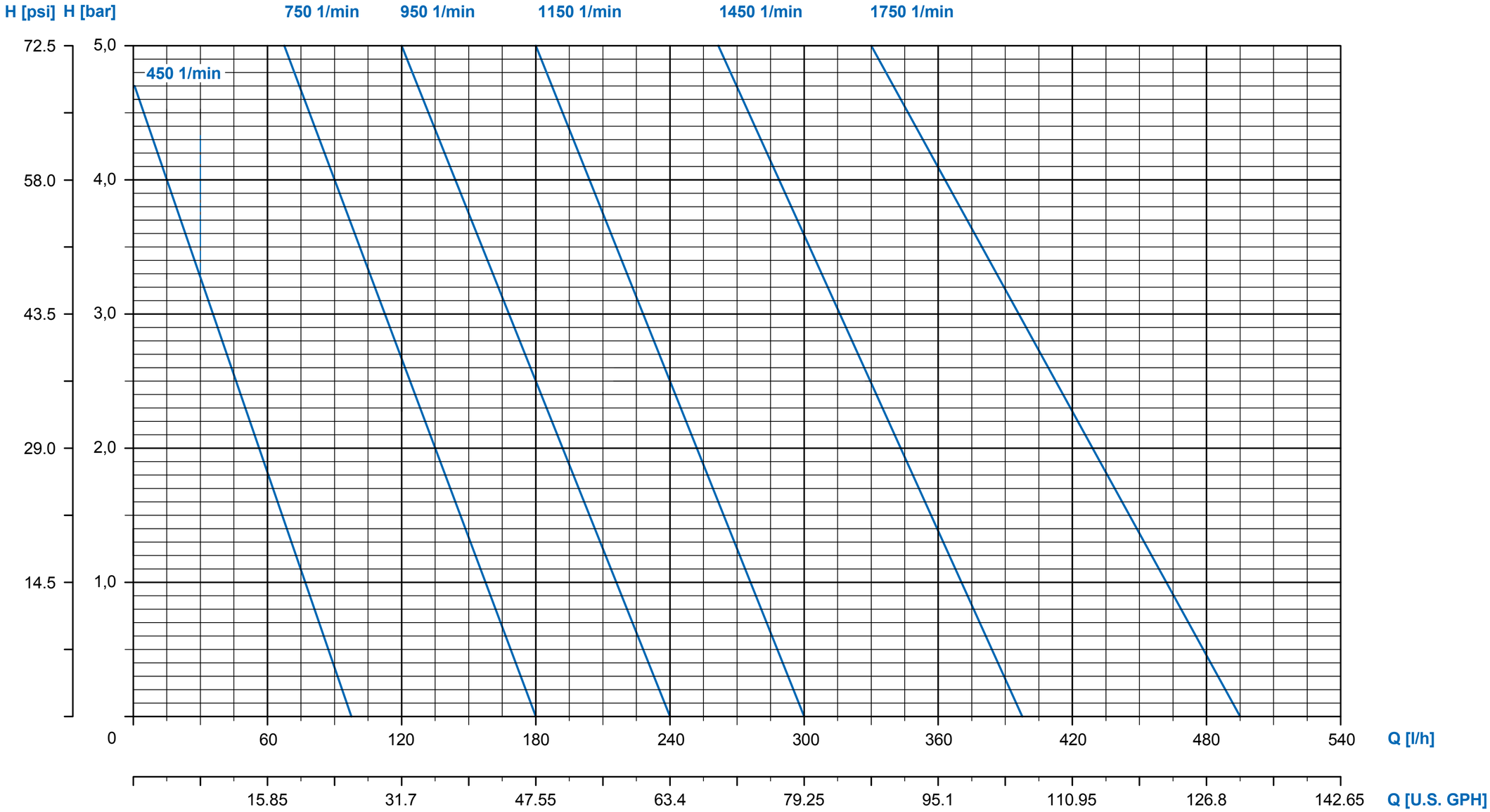
KENNLINIEN / PERFORMANCE CURVES			
Series	VANE-MAG		
Pump Size	MP 314		
Motor Power	0,12kW	0,25kW	0,37kW / 0.5HP
Speed	750 / 900 1/min	900 / 1150 1/min	1450 / 1750 1/min
Fluid Viscosity	1 mm^2/s	Fluid Density	1 kg/dm^3



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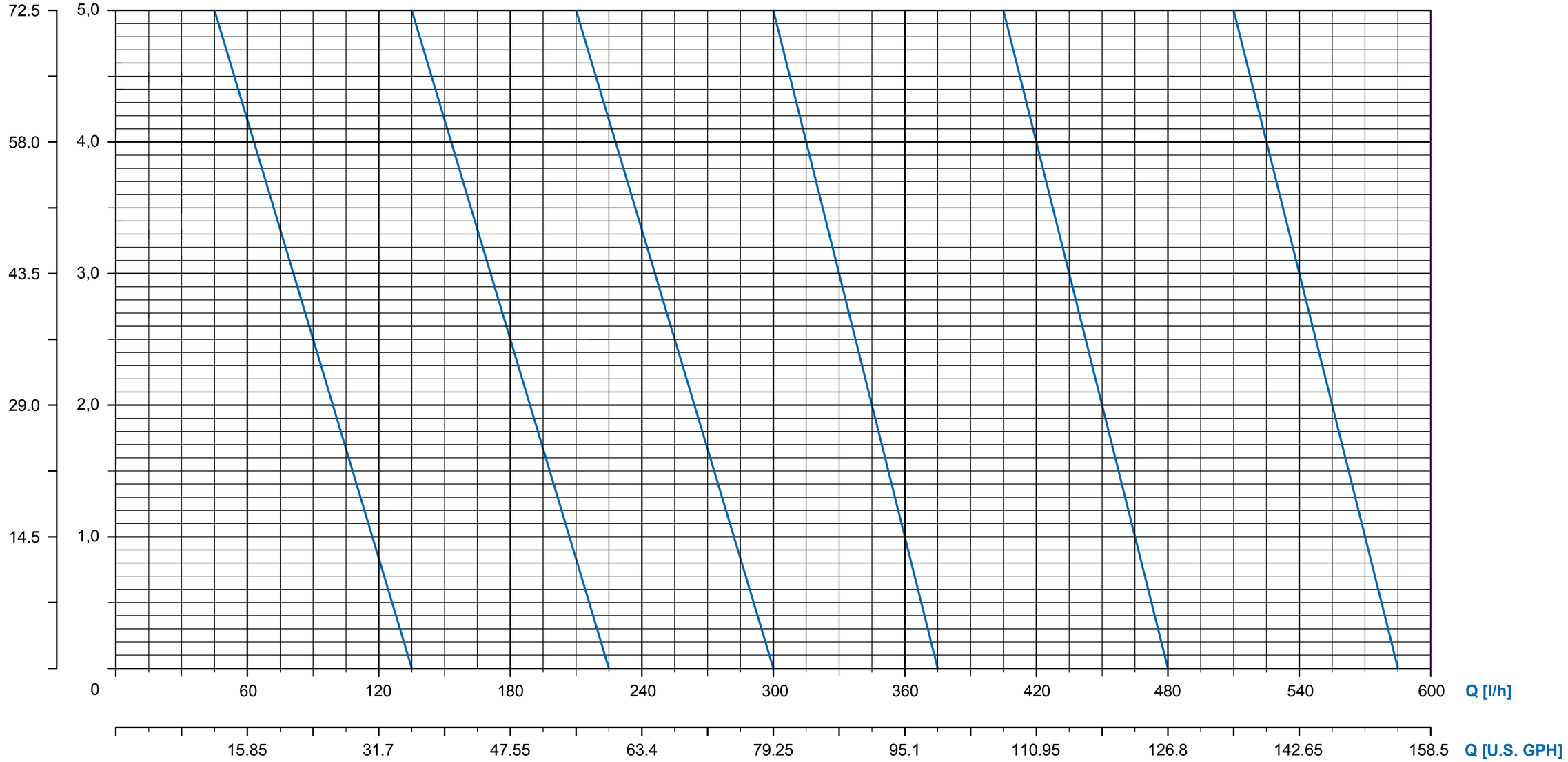
KENNLINIEN / PERFORMANCE CURVES			
Series	VANE-MAG		
Pump Size	MP 414		
Motor Power	0,12kW	0,25kW	0,37kW / 0.5HP
Speed	750 / 900 1/min	900 / 1150 1/min	1450 / 1750 1/min
Fluid Viscosity	1 mm^2/s	Fluid Density	1 kg/dm^3



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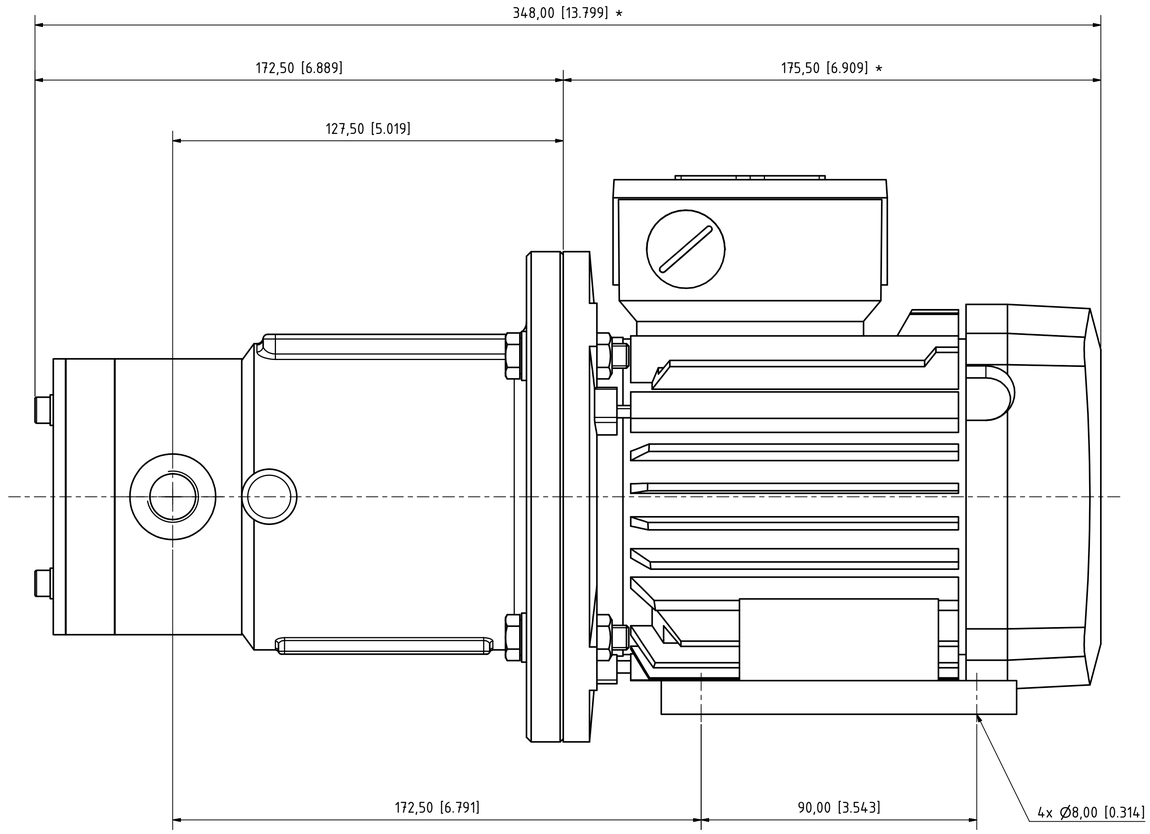
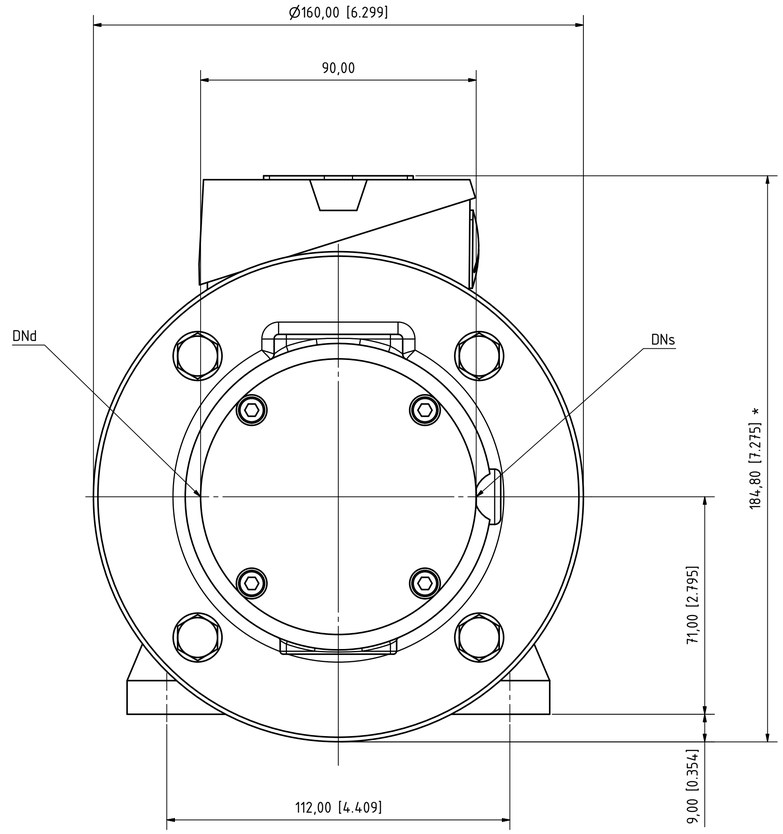
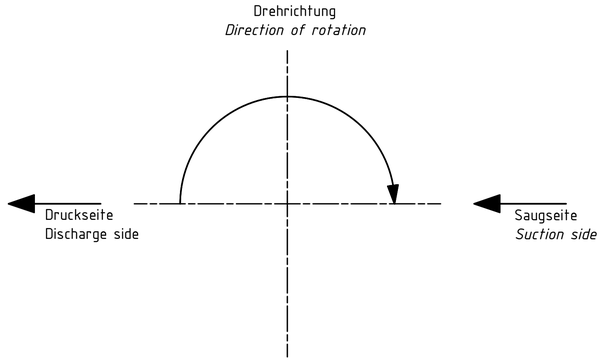
KENNLINIEN / PERFORMANCE CURVES			
Series	VANE-MAG		
Pump Size	MP 514		
Motor Power	0,12kW	0,25kW	0,37kW / 0.5HP
Speed	750 / 900 1/min	900 / 1150 1/min	1450 / 1750 1/min
Fluid Viscosity	1 mm^2/s	Fluid Density	1 kg/dm^3







- ABMESSUNGEN
mm [Zoll]
* Maß kann bei anderen Motorenfabrikaten abweichen

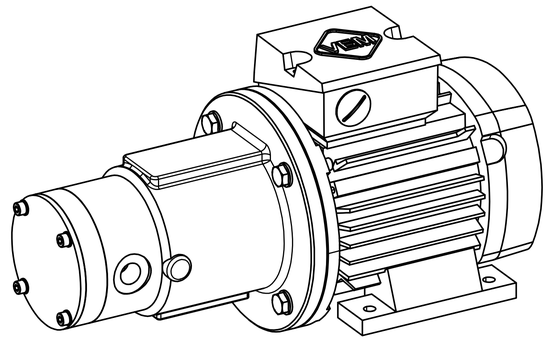
- *DIMENSIONS*
mm [Inch]
** may change with different motor manufacturer*

- ANTRIEB
Drehstrom-Asynchronmotor nach IEC Richtlinien.
Fabrikat: VEM
Größe: IEC BG71 IM B3/B5, 0,37kW , 1450 1/min

- *DRIVE*
Three phase TEFC electric motor acc. to IEC Standards
Manufacturer: VEM
Size: IEC71 B3/B5, 0,37kW, 1450 rpm

- ANSCHLÜSSE DNs/d
G3/8" Innengewinde

- *CONNECTIONS DNs/d*
Threaded G3/8" female



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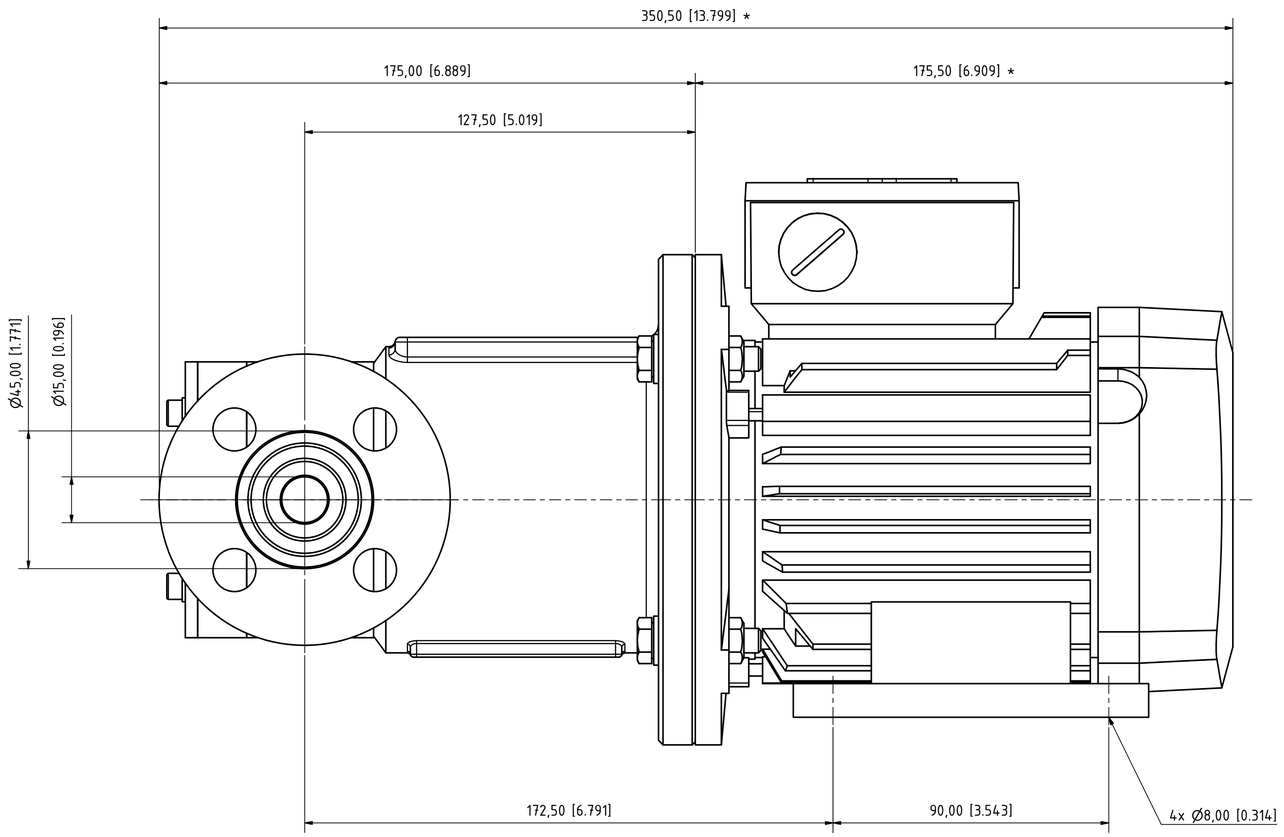
1:1

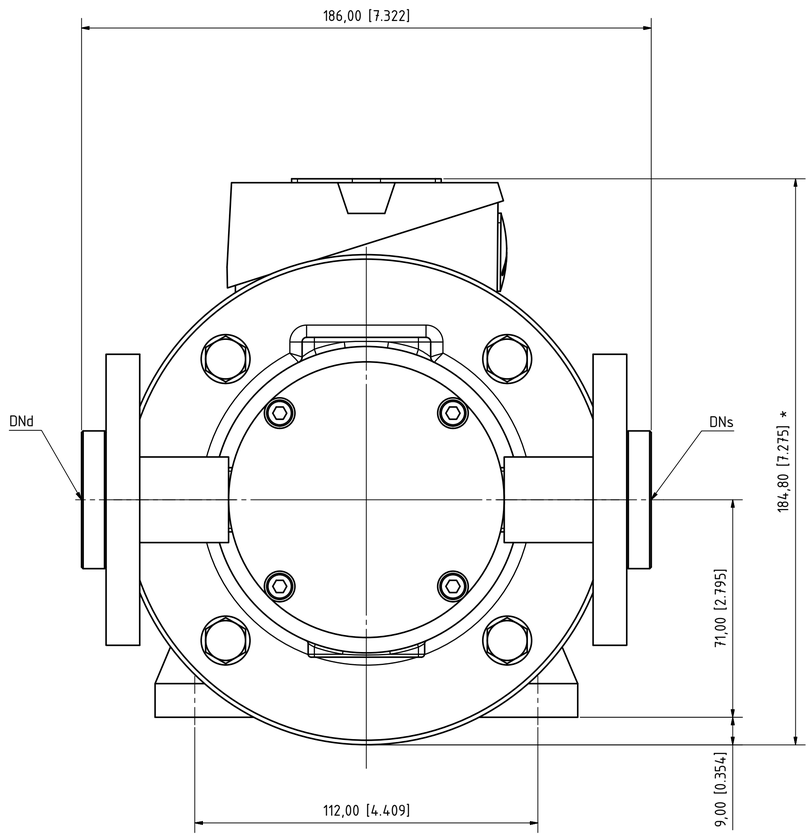
	Datum	Name
Gezeichnet	01.06.2017	Lach
Kontrolliert		
Norm		

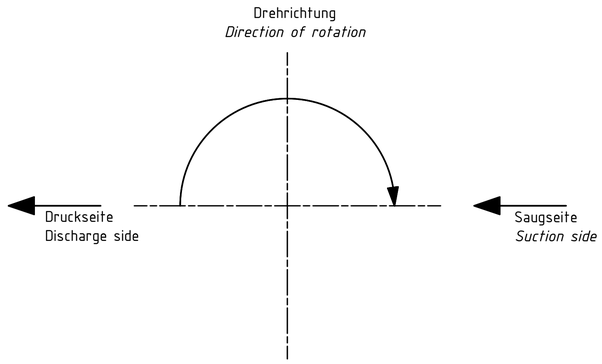
VANE-MAG MP 0100 P R IEC71 VEM
ABMESSUNGEN
DIMENSIONS

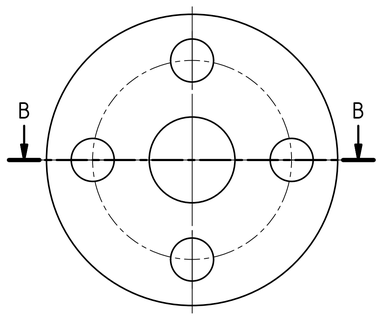
DPMP-0100-P-R-IEC71-VEM

Status	Änderungen	Datum	Name









- ABMESSUNGEN
mm [Zoll]
* Maß kann bei anderen Motorenfabrikaten abweichen

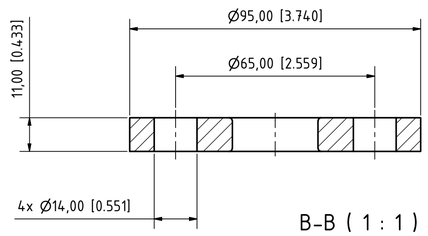
- *DIMENSIONS*
mm [Inch]
** may change with different motor manufacturer*

- ANTRIEB
Drehstrom-Asynchronmotor nach IEC Richtlinien.
Fabrikat: VEM
Größe: IEC BG71 IM B3/B5, 0,37kW , 1450 1/min

- *DRIVE*
Three phase TEFC electric motor acc. to IEC Standards
Manufacturer: VEM
Size: IEC71 B3/B5, 0,37kW, 1450 rpm

- ANSCHLÜSSE DNs/d
Losflansch DN15 PN10 - PPST

- *CONNECTIONS DNs/d*
Lap Joint Flange DN15 PN10 - PPST



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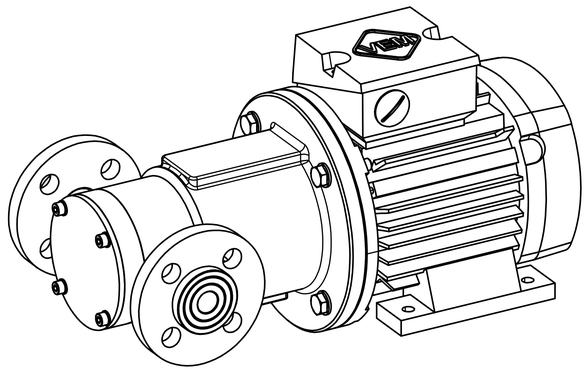

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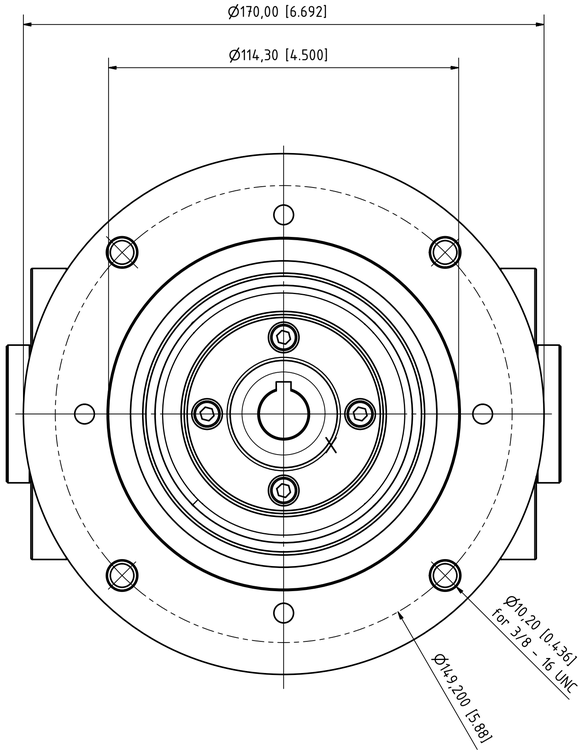
1:1

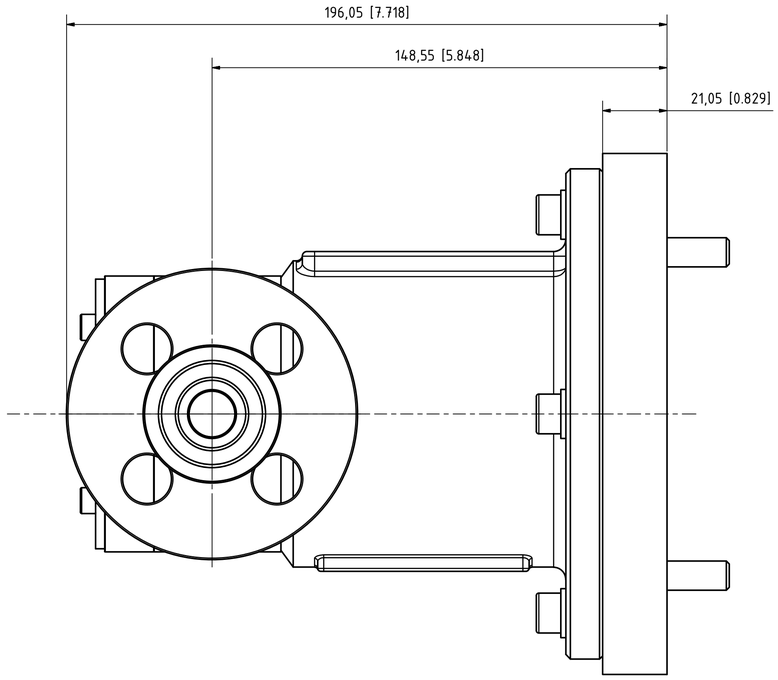
	Datum	Name
Gezeichnet	01.06.2017	Lach
Kontrolliert		
Norm		

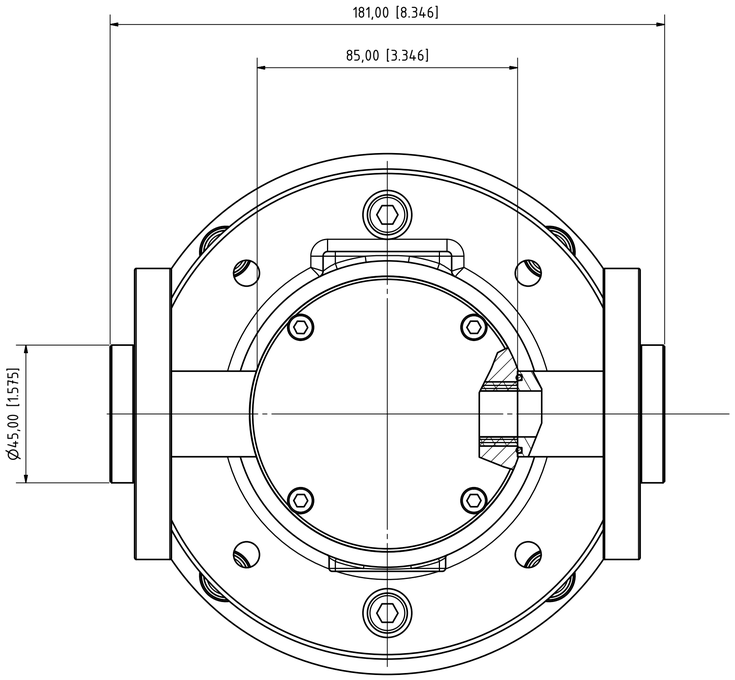
VANE-MAG MP 0100 P F IEC71 VEM
ABMESSUNGEN
DIMENSIONS

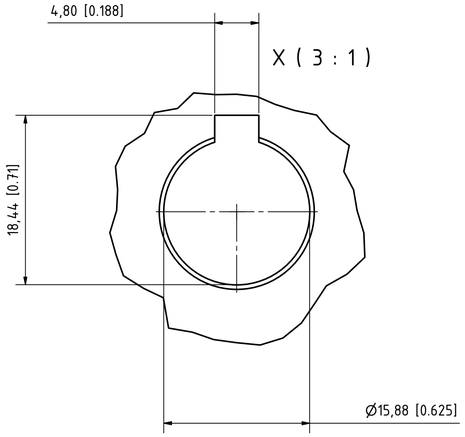
DPMP-0100-P-F-IEC71-VEM

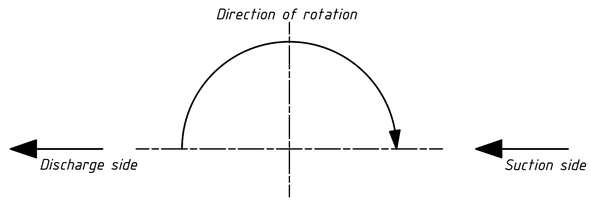
Status	Änderungen	Datum	Name

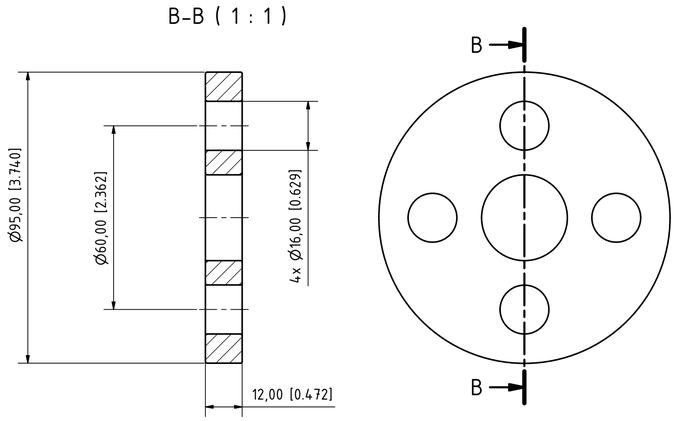












- *DIMENSIONS*
mm [Inch]

- *DRIVE*
Pump Bracket and Drive Magnet
are adapted for NEMA 56C electric motors

- *CONNECTIONS*
Lap Joint Flanges acc. to ASME B 16.5 / 1/2"
or
1/2" NPT female threads

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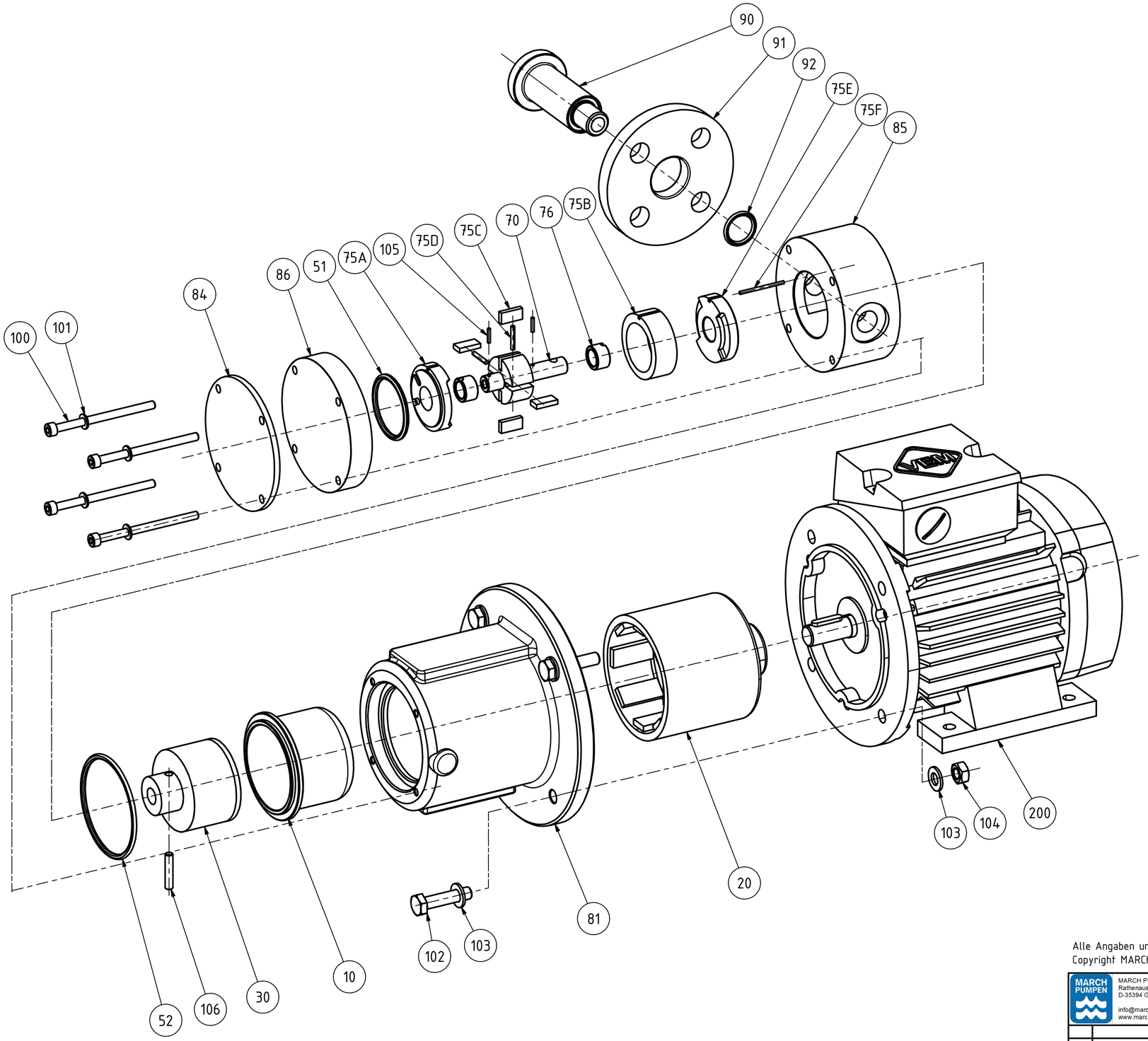
1:1

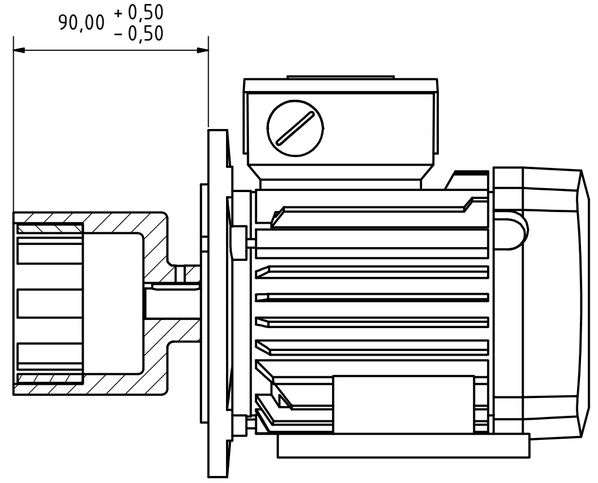
	Datum	Name
Gezeichnet	26.04.2017	Lach
Kontrolliert		
Norm		

VANE-MAG MP I°Range (114-514)
DIMENSIONS R NPT / FA 1/2"
BRACKET NEMA 56C

DPMP-0100-P-FA-NEMA56C

Status	Änderungen	Datum	Name





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www.march-pumpen.com

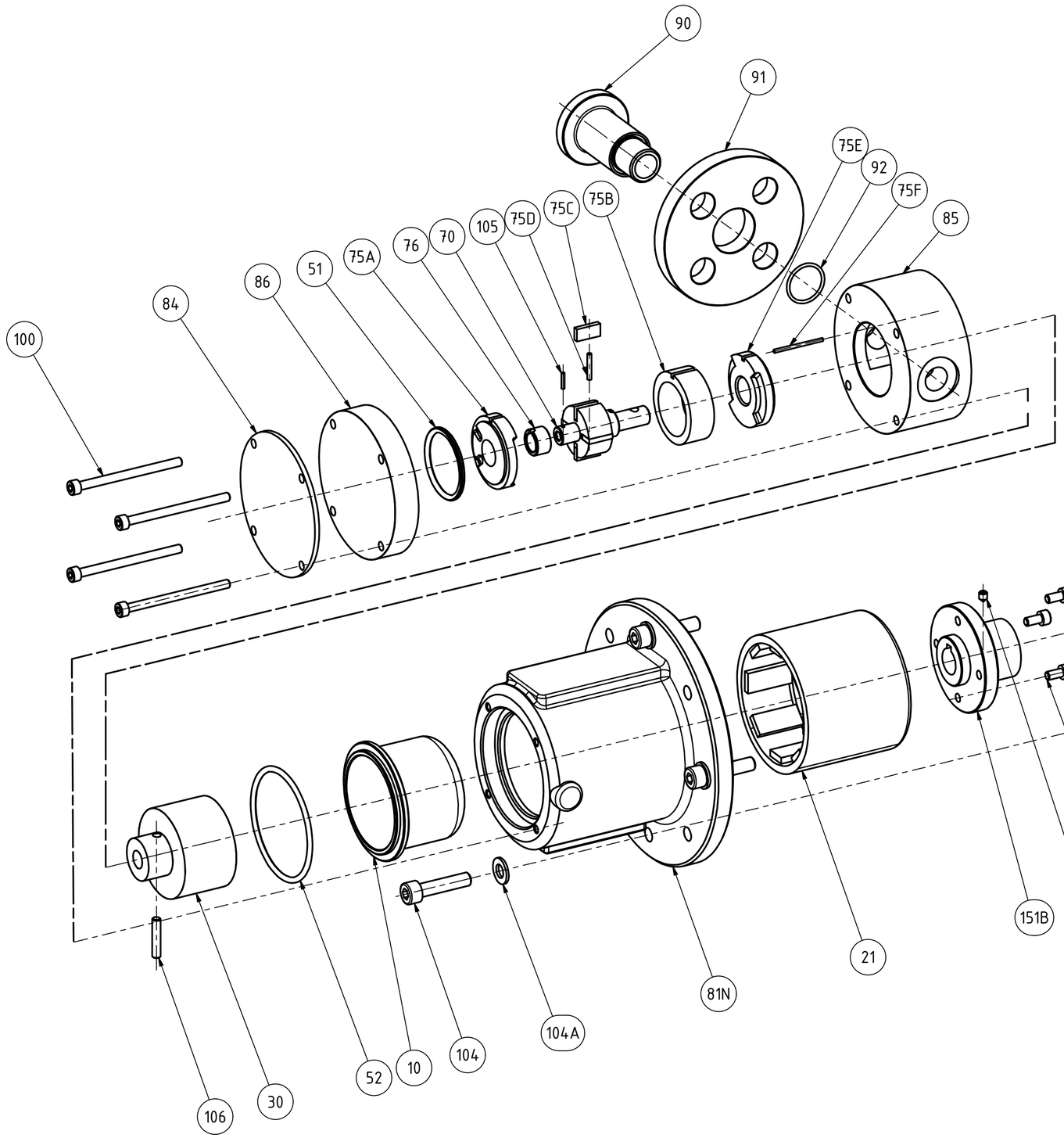
1:2

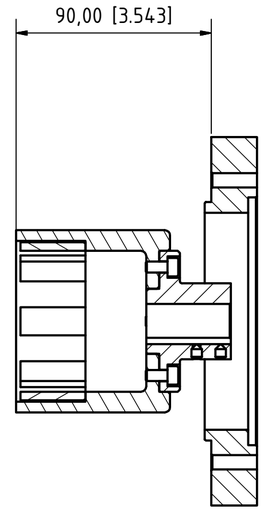
	Datum	Name
Gezeichnet	01.06.2017	Lach
Kontrolliert		
Norm		

VANE-MAG MP 0100 PP/PVDF BG71 B35
EXPLOSIONSDARSTELLUNG
EXPLODED VIEW

EXPL_MP-0100-P-F-BG71 1
A2

Status	Änderungen	Datum	Name





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www.march-pumpen.com

1:2

	Datum	Name
Gezeichnet	01.06.2017	Lach
Kontrolliert		
Norm		

VANE-MAG MP 0100 PP/PVDF NEMA56C
EXPLOSIONSDARSTELLUNG
EXPLODED VIEW

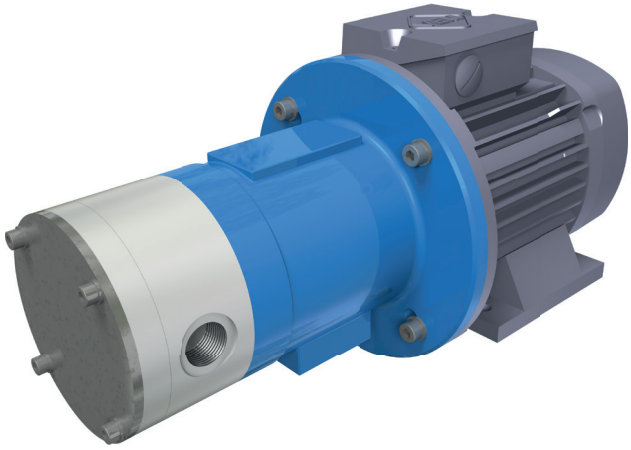
EXP_MP-0100-P-FA-NEMA56C

Status	Änderungen	Datum	Name

MAGNETICALLY COUPLED ROTARY SLIDING VANE PUMP

Series VANE-MAG MP

MP 614 - 814 - 1014 (MP II° Range)



PERFORMANCE DATA

Nominal speed:	1450 1/min / 1750 1/min
Nominal frequency:	50 Hz / 60Hz
Nominal flow rate:	
MP 614:	600 l/h / 750 l/h (165 US gph)
MP 814:	800 l/h / 1000 l/h (176 US gph)
MP 1014:	1000 l/h / 1200 l/h (264 US gph)
Discharge pressure, max:	10 bar (145 psi)
Design pressure:	PN 10 bar (145 psi)
Temperature, max.:	65°C (149°F)
Viscosity, max.:	1000 mPa s
Density, max.:	1,9 kg/dm³

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:

- Water treatment especially precipitation, flocculation, sedimentation and neutralisation
- Metering pump in Biodiesel production
- Metering pump in laboratory environments
- Chemical dosing / metering applications
- Plant Engineering
- Equipment Engineering
- Pharmaceutical-, Medical-, Bio- Engineering

MATERIALS

Housing:	PP, PVDF, conductive PVDF
O-Rings:	EPDM, Viton, Kalrez
Rotor:	PVDF-FCR
Stator, Vanes::	CHG „SiO2 coated Graphite“
Bearings:	SiC

CONNECTIONS

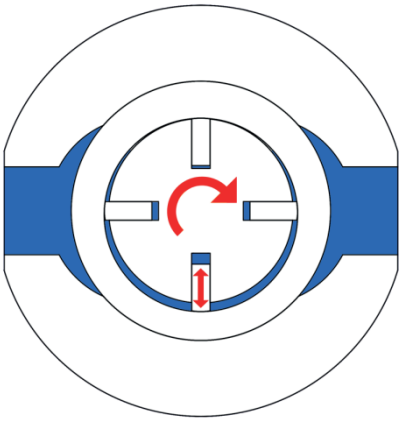
Threads:	G1/2” female, 1/2" NPT female
Lap Joint Flanges:	DN20 PN10, 1/2" ANSI

DESIGN FEATURES

- Rotating positive displacement pump
- Sliding Vane Pump
- Corrosion resistant due to non-metallic materials
- Magnetically coupled
- Leak-Free
- Rugged
- Wet self-priming
- Compact block design
- Approximately no pulsation
- Middle to high discharge pressure
- Low capacity flow rates
- Metering capable

PRODUCT DESCRIPTION

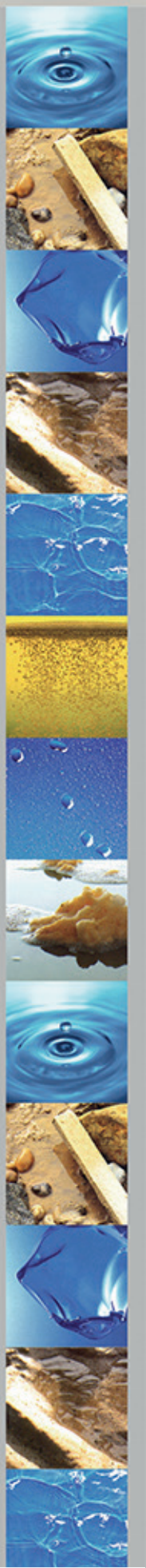
MARCH Series: VANE-MAG® MP pumps are rotary positive displacement pumps, magnetically coupled and made of non-metallic materials. Characteristic wise, rotary sliding vane pumps generate low volumetric flows with middle to high discharge pressures and approximately no pulsation. The operating principle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

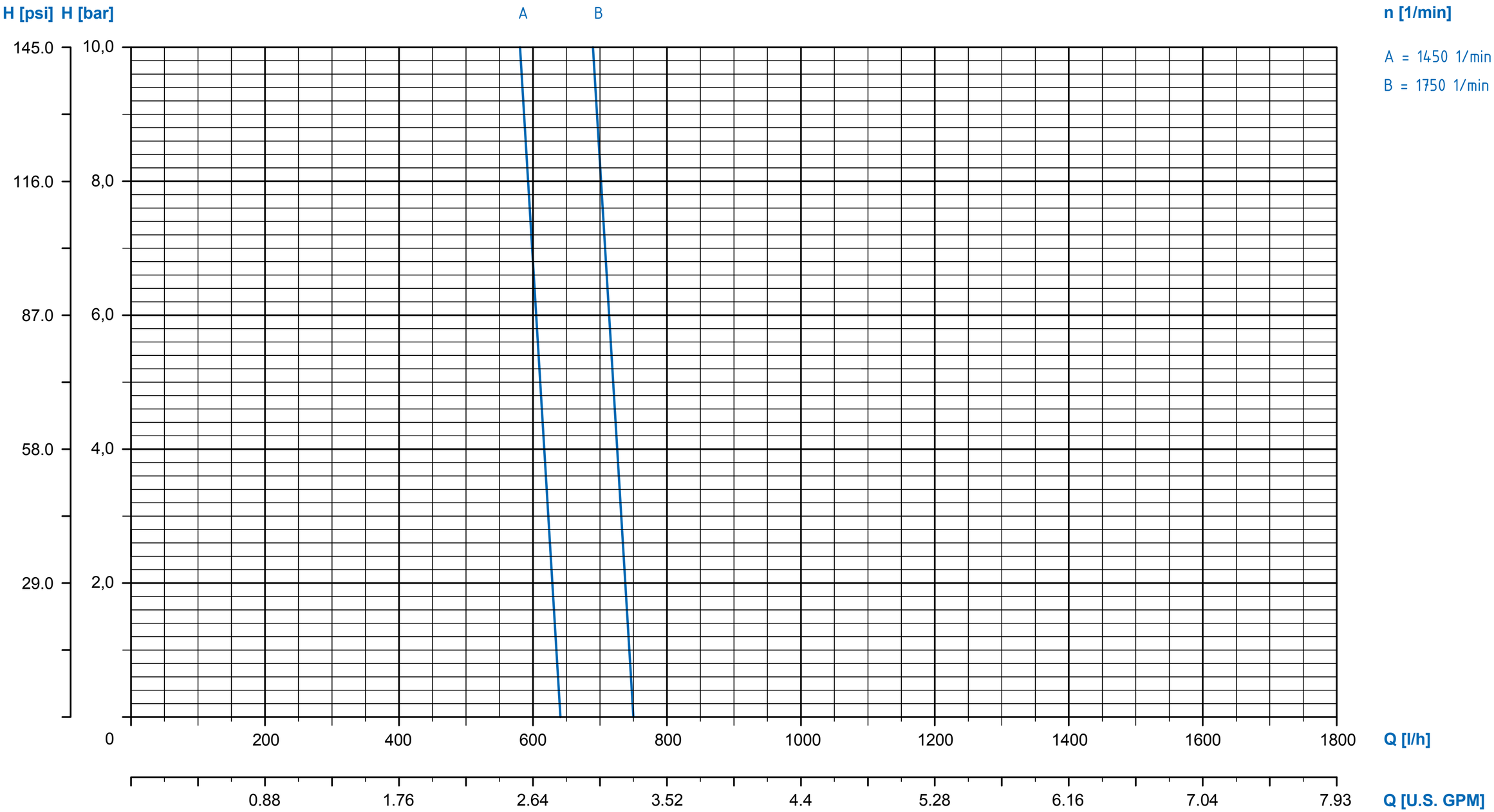


The pump housing is made of corrosion resistant solid block plastics like PP or PVDF.
The motor power is transmitted by a frictional connection to the hydraulic part of the pumps by strong Neodynium-Permanent-Magnets. So the pump is able to work without any shaft seals, which guarantee a save and maintenance-free transfer of the liquid without any leakage of corrosive, toxic and explosive fluids.
Pumps for hazardous explosive areas, zone 1 or 2, can be made out of conductive PVDF.

MOTOR ADAPTION

EU Version:	IEC Size 80 B35, 0,55 - 0,75kW, 1500 1/min
US Version:	NEMA56C, 0.75 HP NEMA145TC, 1.0 HP 1750 1/min





MARCH PUMPEN GmbH
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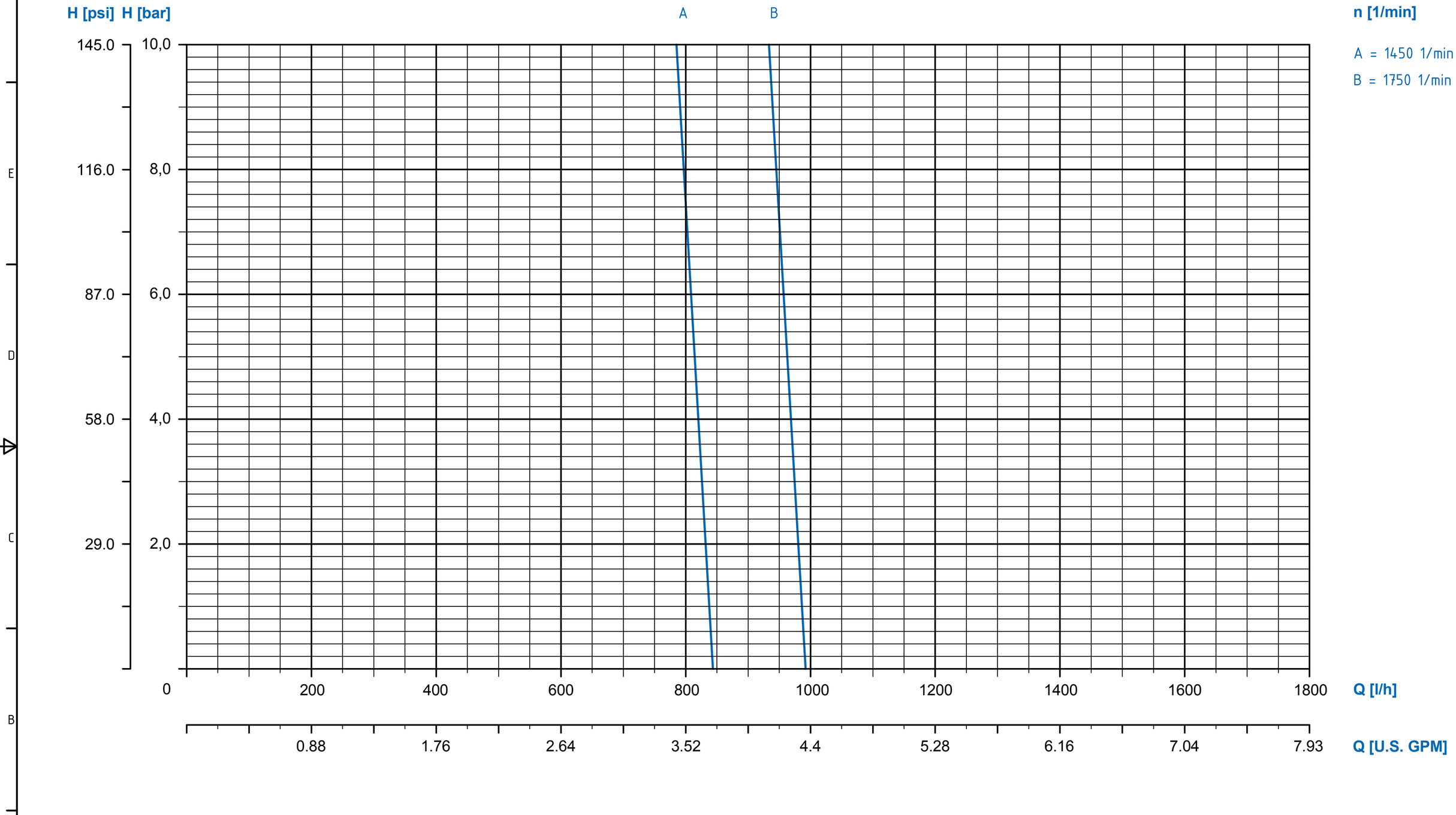
info@march-pumpen.com

KENNLINIEN / PERFORMANCE CURVES			
Series	VANE-MAG		
Pump Size	VANE-MAG MP 614		
Motor Power	0,55kW / 0.75HP		
Speed	1450 / 1750 1/min		
Fluid Viscosity	1 mm^2/s	Fluid Density	1 kg/dm^3



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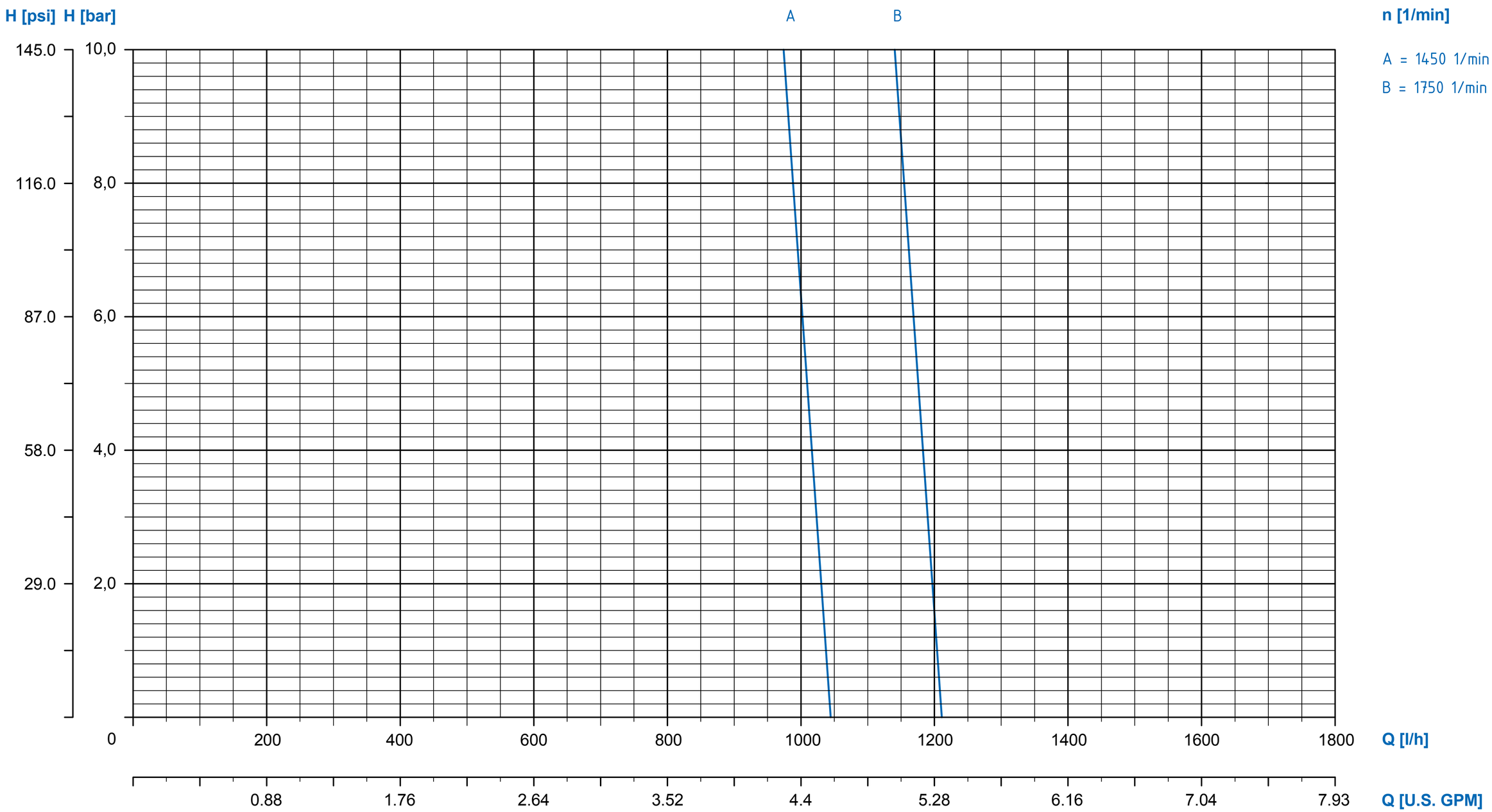
KENNLINIEN / PERFORMANCE CURVES			
Series	VANE-MAG		
Pump Size	VANE-MAG MP 814		
Motor Power	0,75kW / 1.0HP		
Speed	1450 / 1750 1/min		
Fluid Viscosity	1 mm^2/s	Fluid Density	1 kg/dm^3



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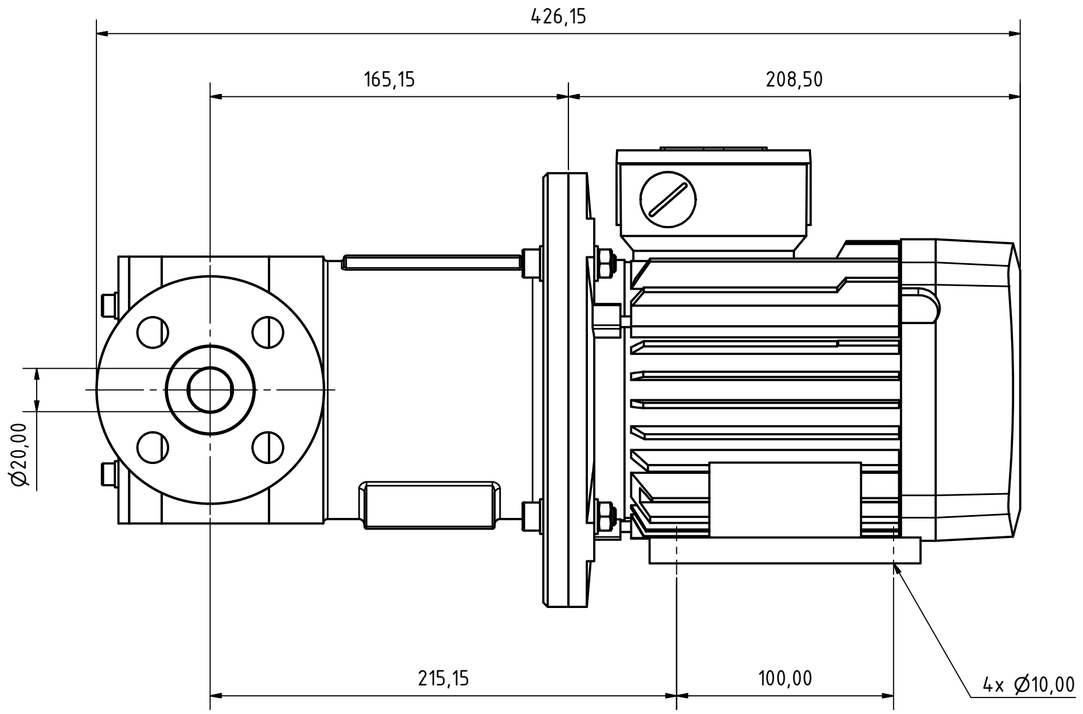
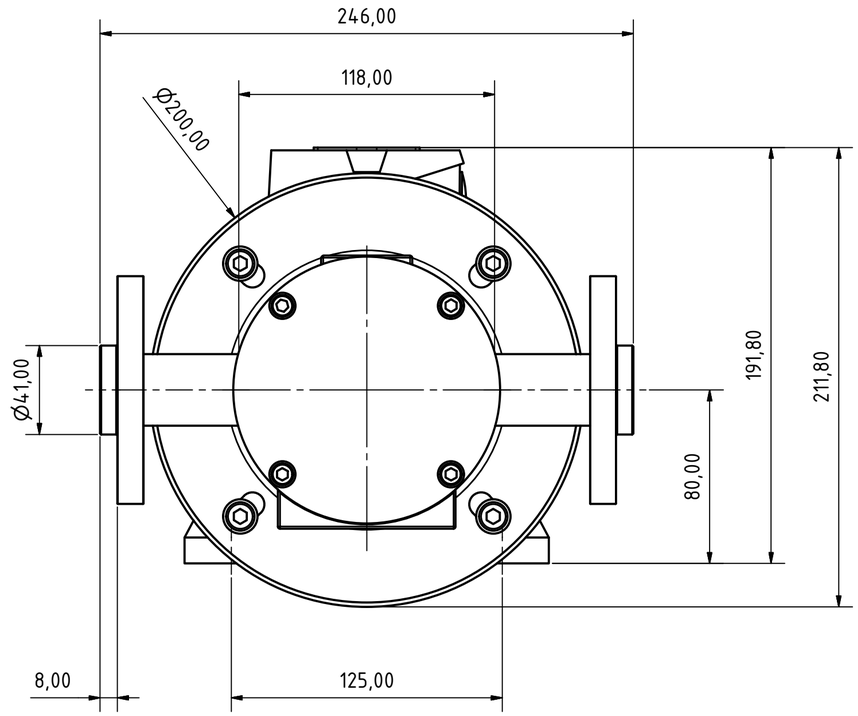
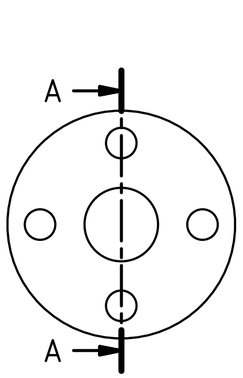
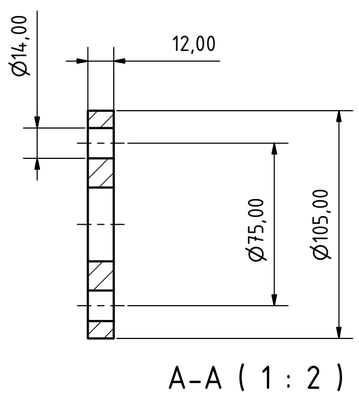
KENNLINIEN / PERFORMANCE CURVES			
Series	VANE-MAG		
Pump Size	VANE-MAG MP 1014		
Motor Power	0,75kW / 1.0HP		
Speed	1450 / 1750 1/min		
Fluid Viscosity	1 mm^2/s	Fluid Density	1 kg/dm^3









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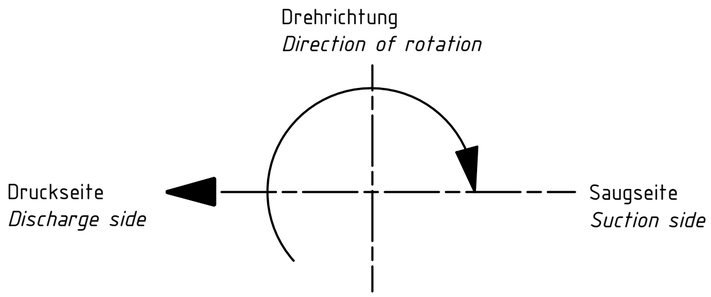
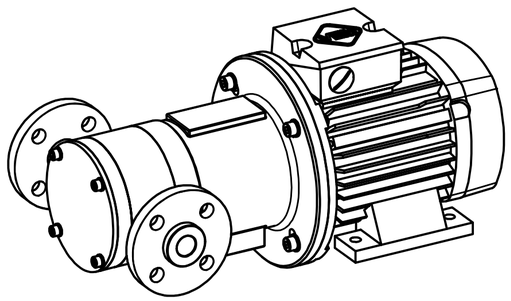


DIMENSIONS
mm [inch]

DRIVE
TEFC three phase asynchronous squirrel cage electric motor
acc. to IEC Standards
Manufacturer: VEM
Size: IEC80 B35, 0,55 - 0,75 kW, 1450 rpm

CONNECTIONS
Lap Joint Flange DN20 PN10
or
G3/4" female



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Tel.: (+49) (0)641-686806-0
Fax.: (+49) (0)641-686806-60

1:2

Pump weight: 15kg

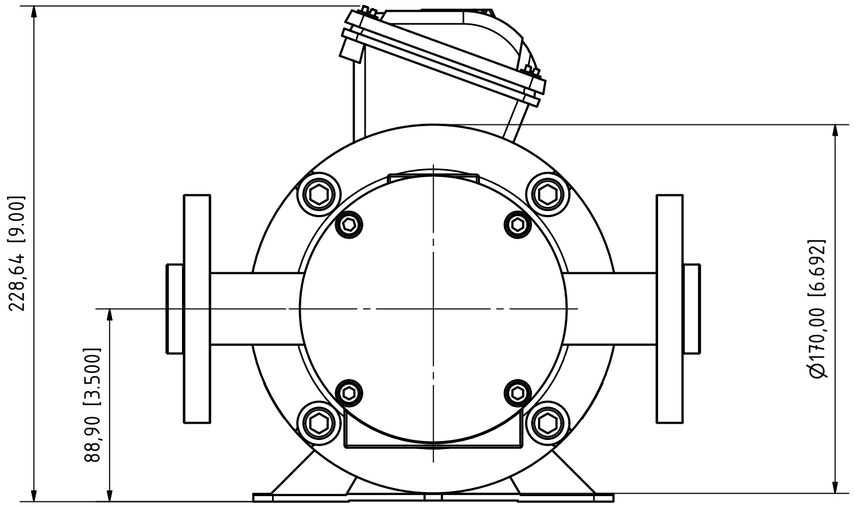
	Datum	Name
Gezeichnet	09.11.2018	Lach
Kontrolliert		
Norm		

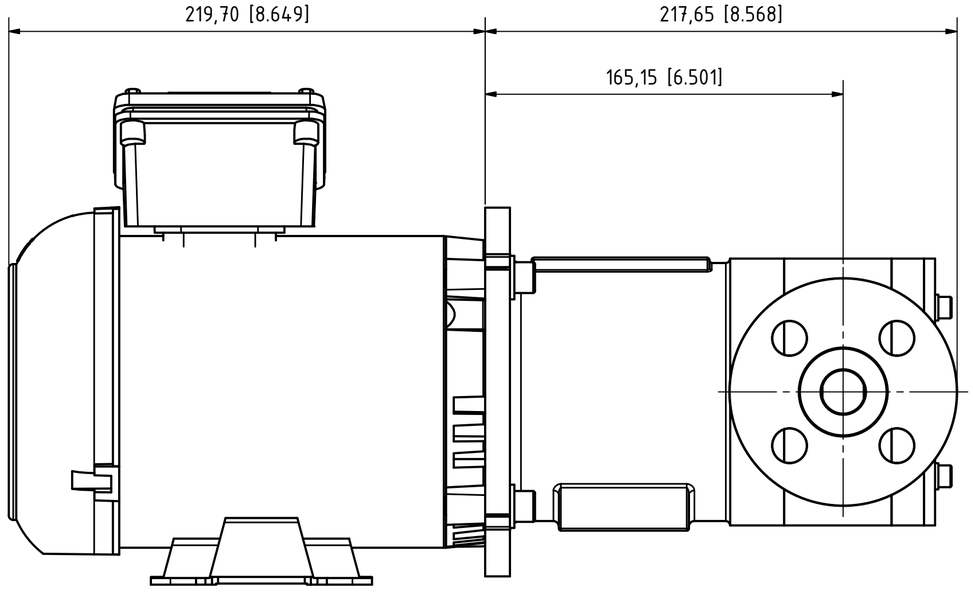
VANE-MAG MP 2G Range
PPF - IEC80

MP2G_PPFA_NEMA

1
A2

Status	Änderungen	Datum	Name

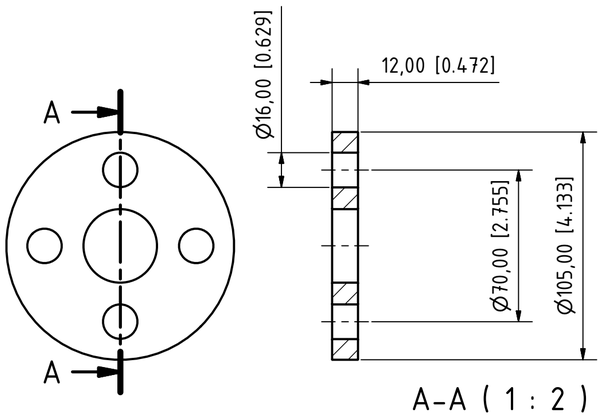




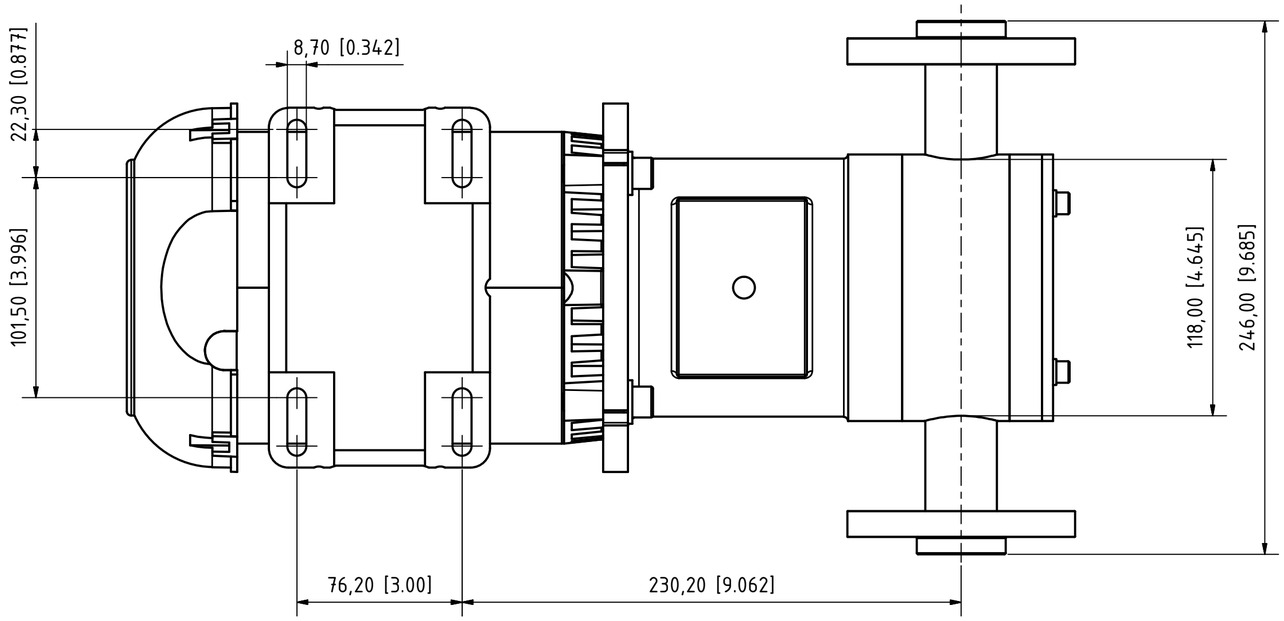
Drehrichtung
Direction of rotation

Druckseite
Discharge side

Saugseite
Suction side



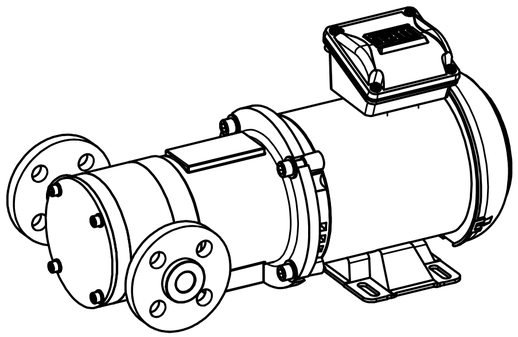
A-A (1 : 2)



DIMENSIONS
mm [inch]

DRIVE
TEFC three phase asynchronous squirrel cage electric motor
acc. to NEMA Standards
Manufacturer: WEG
Size: 56C-Face, 0.5 – 1.0 HP, 1750 rpm
Pump Bracket and Drive Magnet adapted to NEMA 56C-Face

CONNECTIONS
Lap Joint Flange ANSI 3/4" acc. to. ANSI B 16.5 #150lbs
or
3/4" BSP / NPT female



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Fax.: (+49) (0)641-686806-60

1:2

Pump weight: 15kg

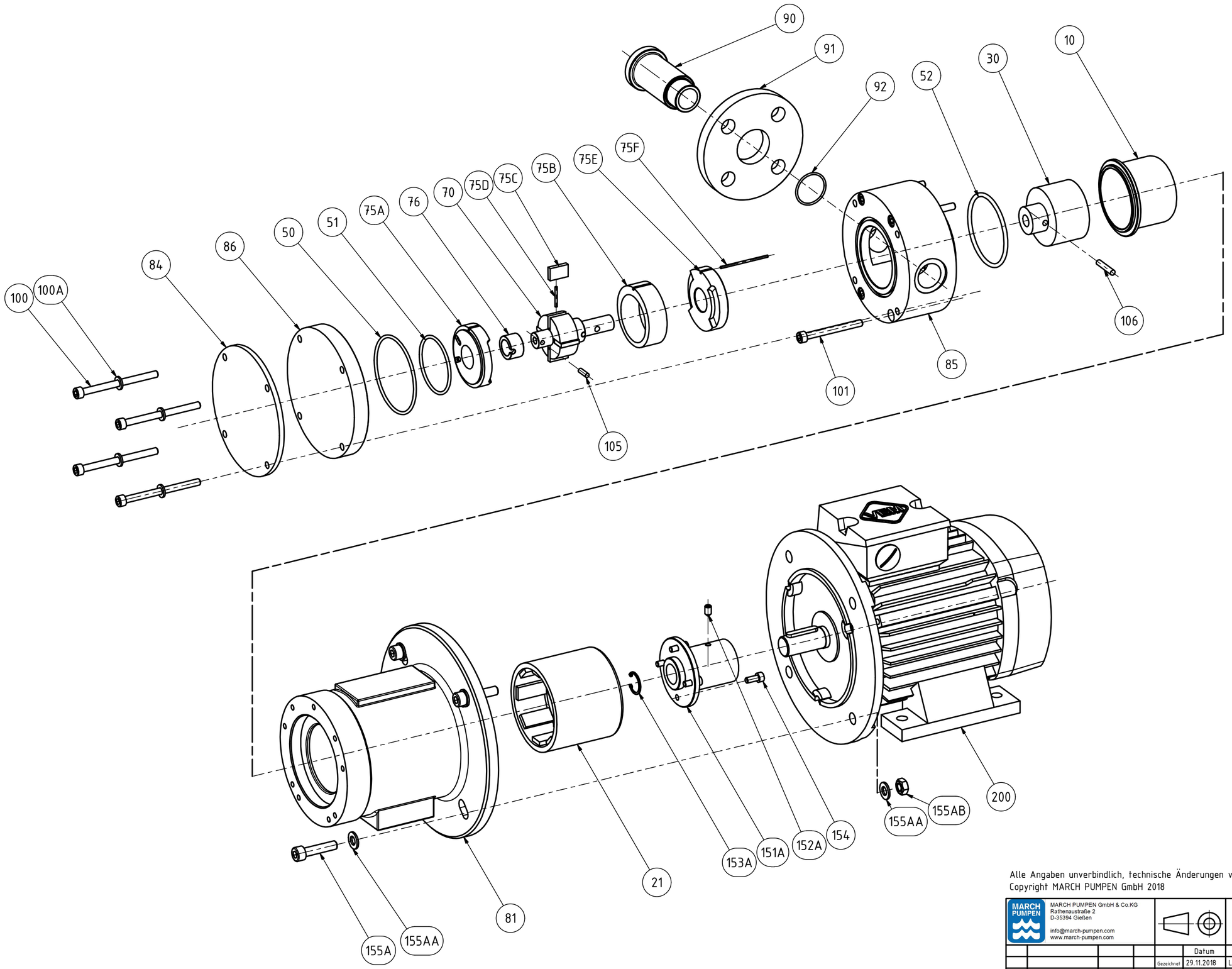
	Datum	Name
Gezeichnet	09.11.2018	Lach
Kontrolliert		
Norm		

VANE-MAG MP 2G Range
PPF ANSI - NEMA56C

MP2G_PPFA_NEMA

1
A2

Status	Änderungen	Datum	Name



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www.march-pumpen.com

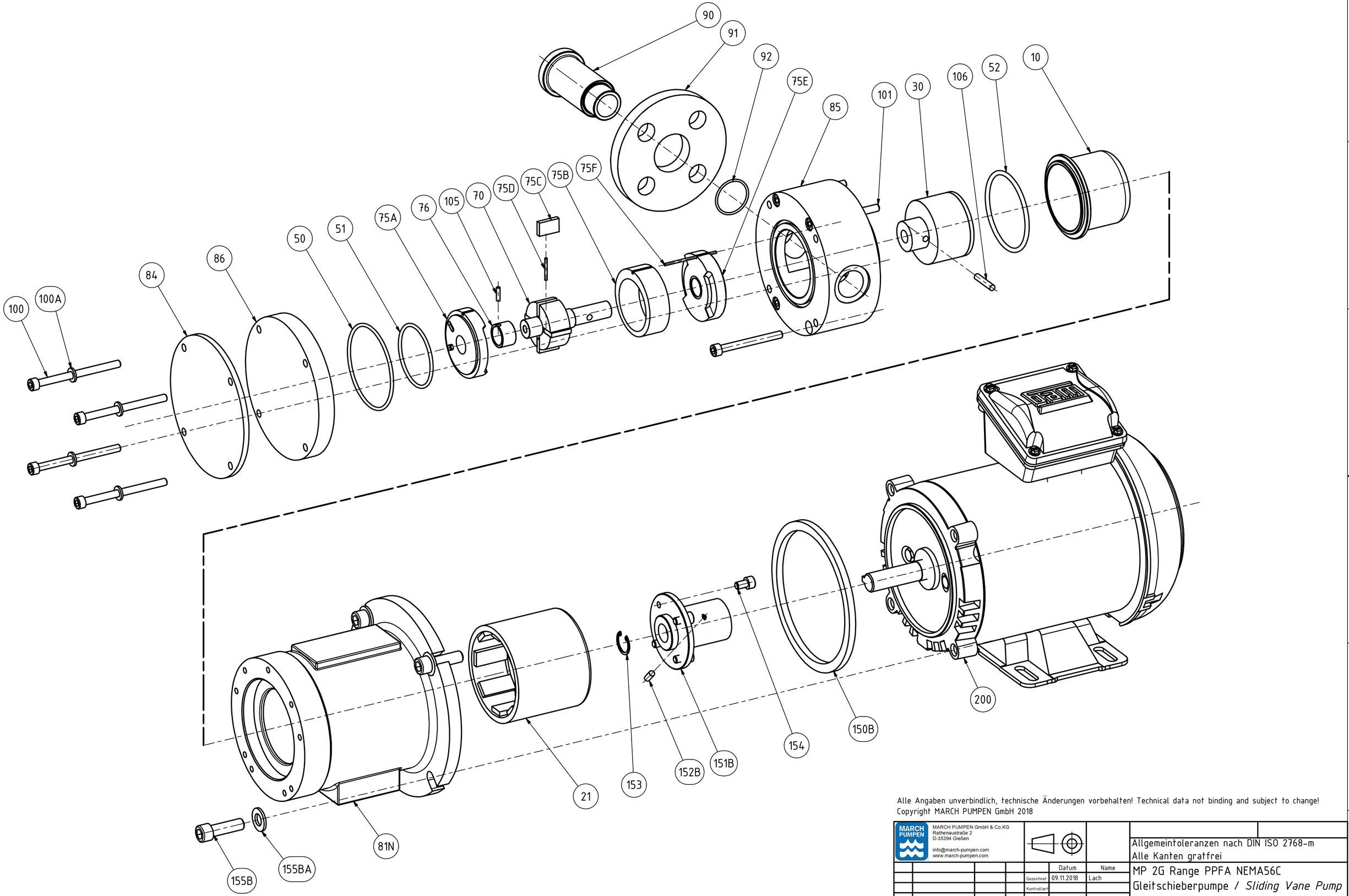
	Datum	Name
Gezeichnet	29.11.2018	Lach
Kontrolliert		
Norm		

Allgemeintoleranzen nach DIN ISO 2768-m
Alle Kanten gratfrei

MPA 2G Range PPF IEC80
Gleitschieberpumpe / *Sliding Vane Pump*
Explosionsdarstellung / *Explosion view*

EXP_MP2GR_PPF_IEC80 | 1 | A2

Status	Änderungen	Datum	Name



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Allgemeintoleranzen nach DIN ISO 2768-m
Alle Kanten gratfrei

	Datum	Name
Gezeichnet	09.11.2018	Lach
Kontrolliert		
Norm		

MP 2G Range PPFA NEMA56C
Gleitschieberpumpe / *Sliding Vane Pump*
Explosionsdarstellung / *Explosion view*

EXP_MP2_PPFA_NEMA | 1 | A2

Status	Änderungen	Datum	Name