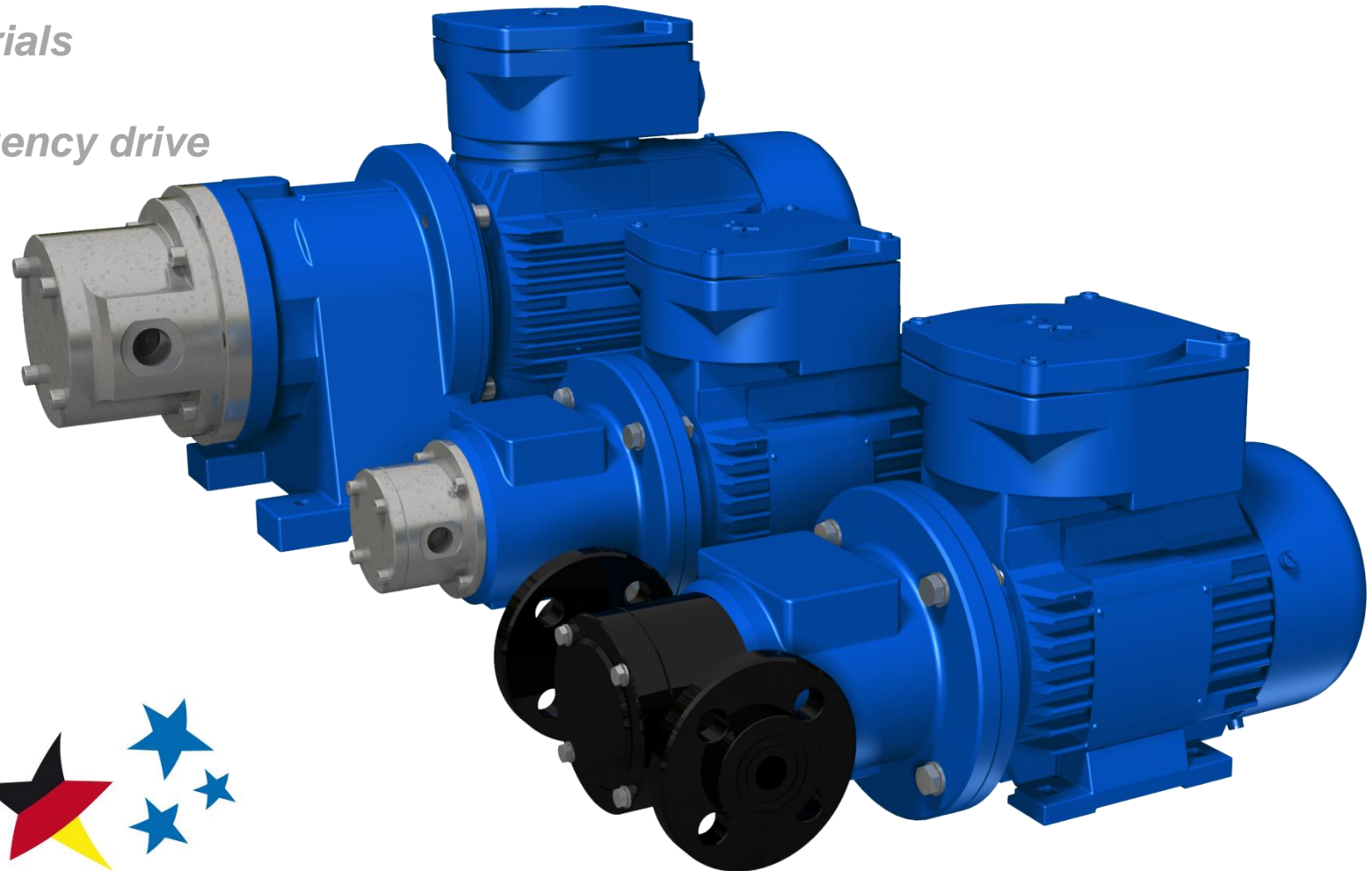


MAG-DRIVE ROTARY SLIDING VANE PUMP

Series: VANE-MAG® MP/MPA

Volumetric, rotary positive displacement pumps –
for low flow / high head applications

- *chemical resistant materials*
- *leak-free*
- *integrated variable frequency drive*
- *nearly pulsation free*
- *metering capable*
- *low flow*
- *high head*
- *acc. to ATEX*



**-QUALITY -
MADE IN GERMANY**



PRODUCT DESCRIPTION

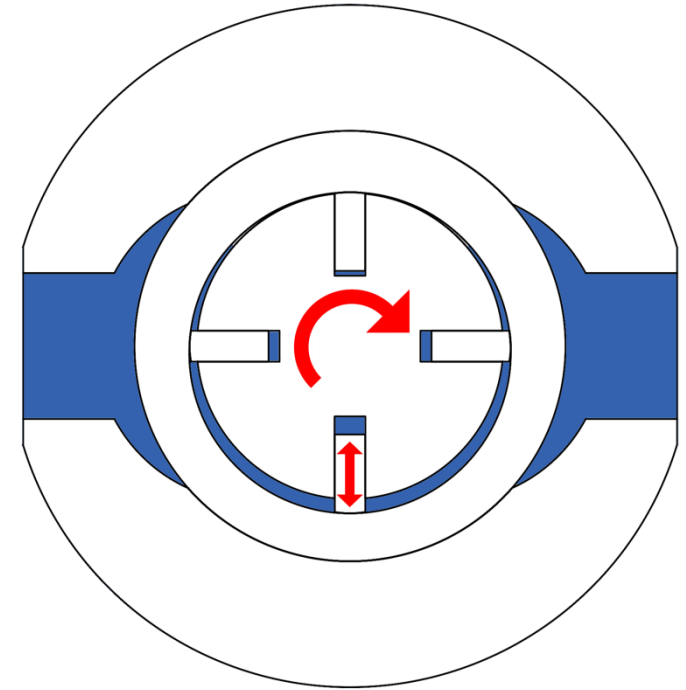
MARCH Series: VANE-MAG® MP/MPA pumps are rotary positive displacement pumps, magnetically coupled and made of:
non-metallic materials / plastic (MP)
Stainless Steel AISI316Ti (MPA)

Characteristic wise, rotary sliding vane pumps generate low volumetric flows with middle to high discharge pressure and almost no pulsation. The operating principle is based on radial sliding vanes, which are rotating in an eccentric stator. The pump housing is made of:

Chemical and corrosion resistant solid block plastics like PP or PVDF (MP)
Stainless Steel AISI316Ti (MPA)

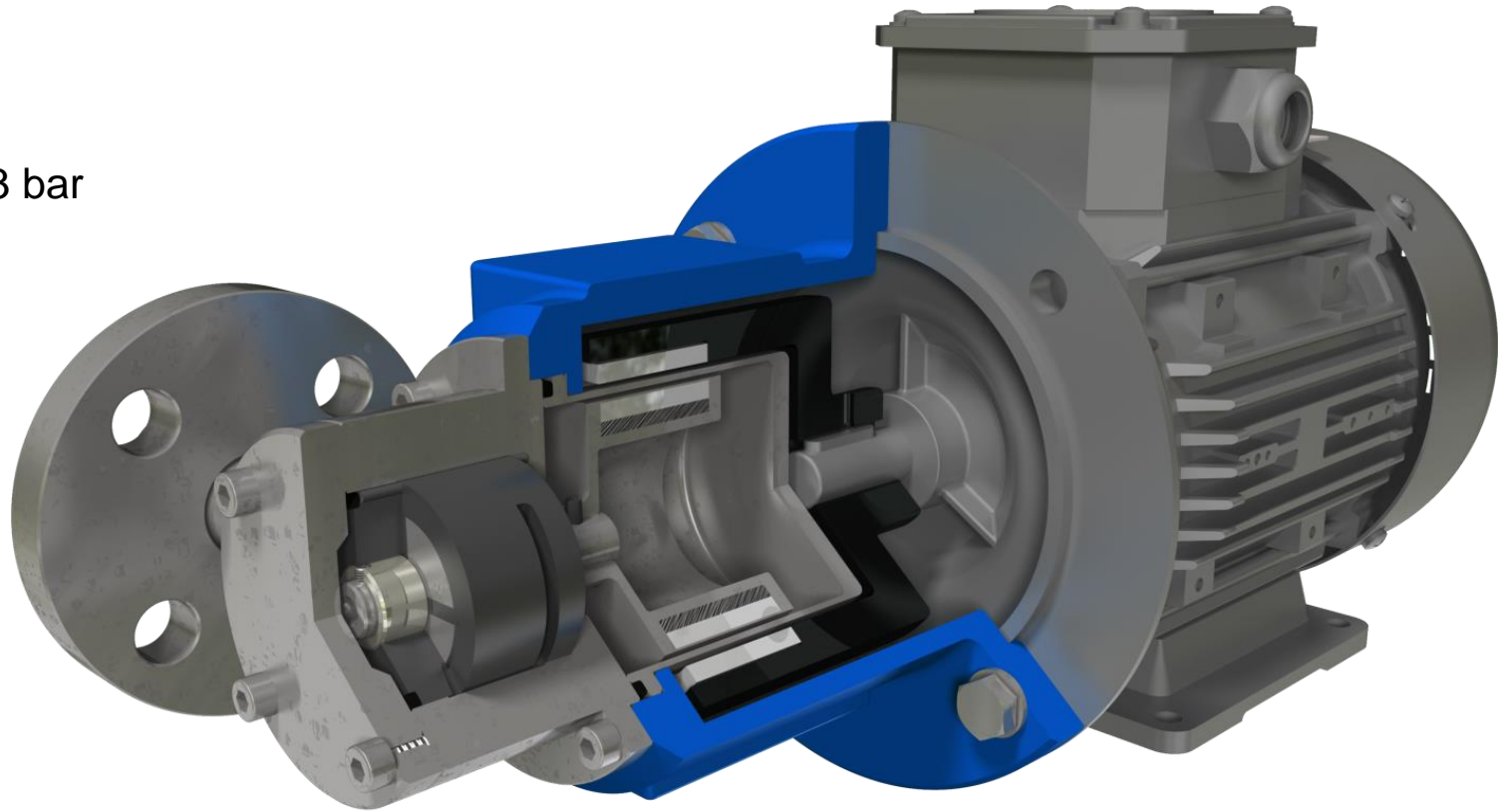
The motor power is transmitted by a frictional connection to the hydraulic part of the pumps by strong Neodymium-Permanent-Magnets. So the pump is able to work without any mechanical-seals, which guarantees a safe and maintenance-free transfer of the liquid without any leakage of corrosive, toxic and explosive fluids. Pumps for hazardous explosive areas, zone 1 or 2, can be made out of :

conductive PVDF (MP)
Stainless Steel (MPA).



FEATURES AND DESIGN

- Rotary positive displacement pump
- Magnetically coupled
- Leak-free
- Self-lubricating hydraulic parts
- Middle to high differential pressure up to 13 bar
- Low flow / high head
- Rugged design
- Corrosion resistant
- Self-priming
- Dry running capable (only MPA)
- Close coupled, compact design
- Almost pulsation free
- Ideal for use with frequency inverter
- Can handle low viscosity liquids

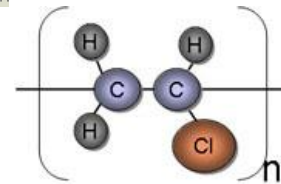
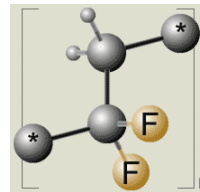


MATERIALS

To grant a maximum of security and corrosion resistance, a whole range of different material are suitable for the sliding vane pump series VANE-MAG®.

Materials for pump casings:

- PP (Polypropylen)
- PVDF (Polyvinylidenfluorid)
- PE (Polyethylen)
- PVC (Polyvinylchlorid)



Conductive and antistatic material for use in ATEX areas:

- PVDF-EL
- PTFE-EL
- PE-ESD
- AISI316Ti (1.4571)



Furthermore, pumps can be equipped with a variety of different O-Ring material:

- FKM
- EPDM
- FEP
- FFKM

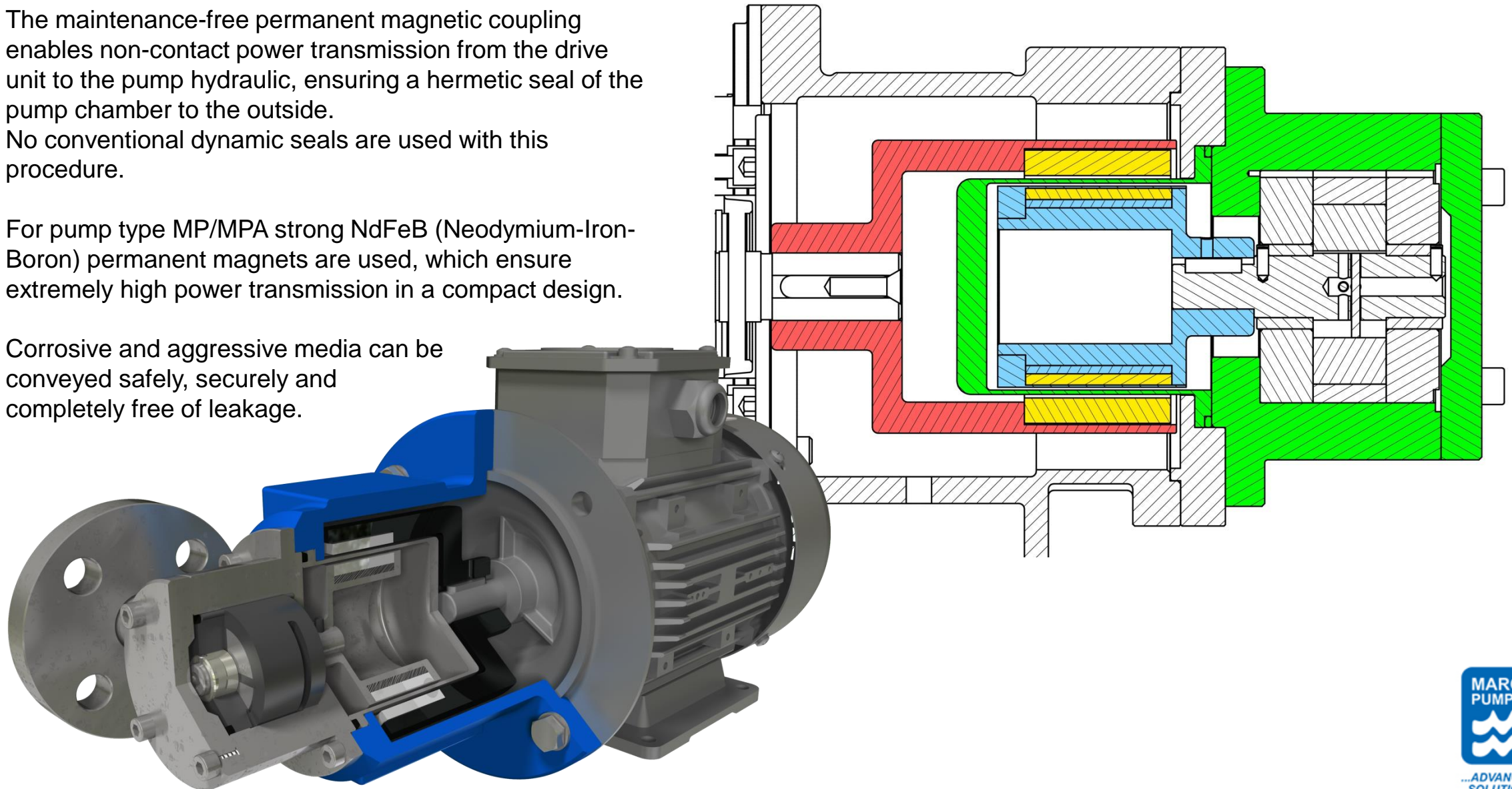


MAGNET DRIVE

The maintenance-free permanent magnetic coupling enables non-contact power transmission from the drive unit to the pump hydraulic, ensuring a hermetic seal of the pump chamber to the outside. No conventional dynamic seals are used with this procedure.

For pump type MP/MPA strong NdFeB (Neodymium-Iron-Boron) permanent magnets are used, which ensure extremely high power transmission in a compact design.

Corrosive and aggressive media can be conveyed safely, securely and completely free of leakage.

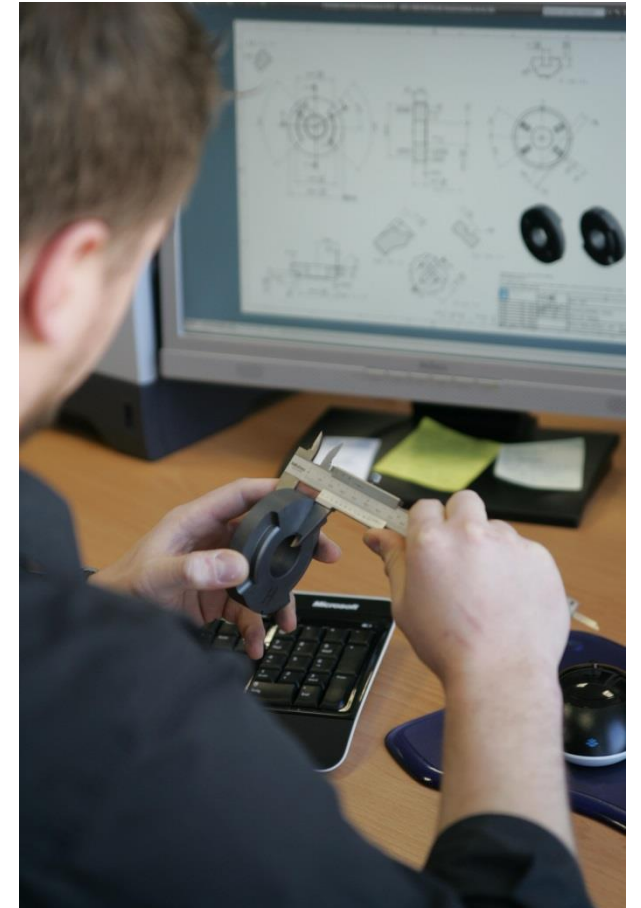


QUALITY CONTROL

Already during parts production the single components undergo precise tests for dimensional accuracy as well as tests for compliance of exactly form and position tolerances.

Before delivery, all of our pumps undergo extensive testing at our test bench, under the most extreme conditions.

This ensures a high standard of quality for our customers, at all times.



HIGH AVAILABILITY

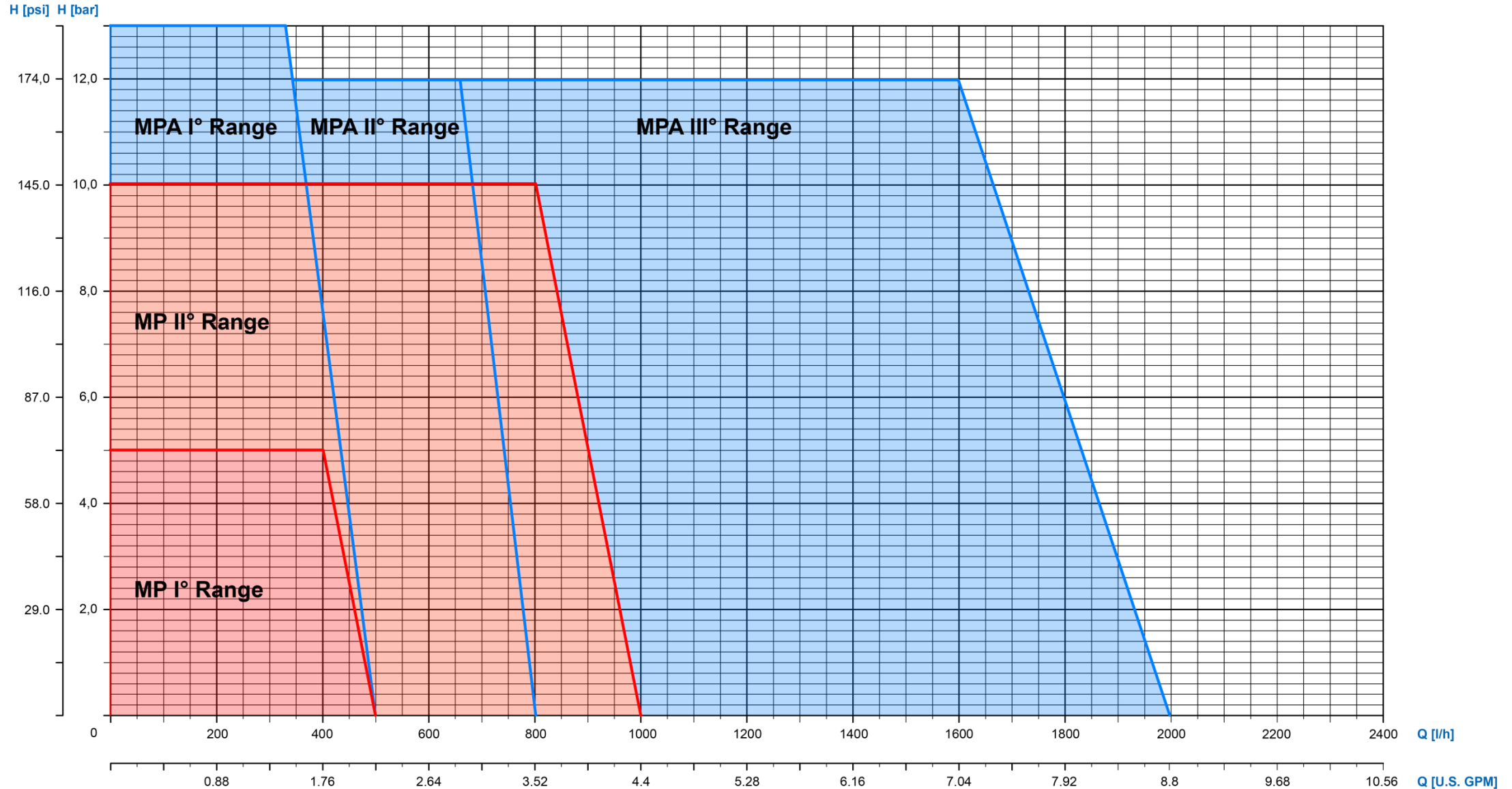
The production at our facility in Giessen and the local storage ensure short access time.

This means short delivery time for our customers.

In case of urgency, Over-Night delivery is only one of our customer services.

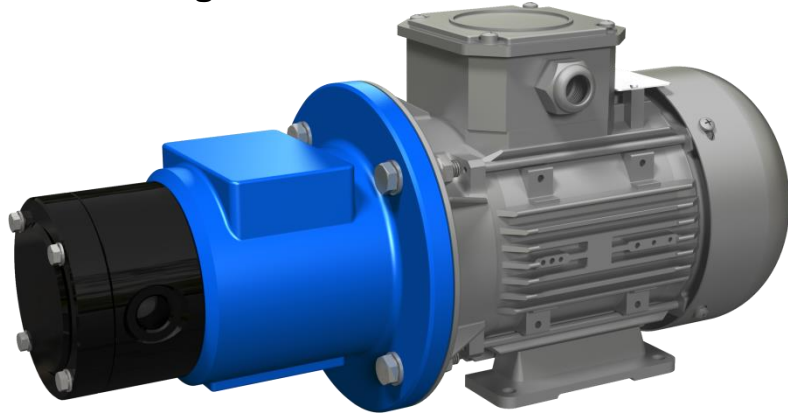


FAMILY CURVES / PERFORMANCE RANGE



SPECIFICATIONS VANE-MAG® MP I° Range

VANE-MAG® MP I° Range 114 - 514



PERFORMANCE DATA

Nominal speed:	1450 1/min / 1750 1/min
Nominal frequency:	50 Hz / 60Hz
Nominal flow rate:	
MP 114:	160 l/h / 200 l/h (52,83 US gph)
MP 214:	230 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:	480 l/h / 585 l/h (154,54 US gph)
Discharge pressure, max:	5 bar (72,52 psi)
Design pressure:	PN 6 bar (87,2 psi)
Temperature, max.:	65°C (149°F)
Viscosity, max.:	1000 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:

- 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:: Phenolic Resin Carbon-Graphite

Bearings: SiC

CONNECTIONS

Threads: G3/8" female, 1/2" NPT female

Lap Joint Flanges: DN15 PN10, 1/2" ANSI

MOTOR ADAPTION

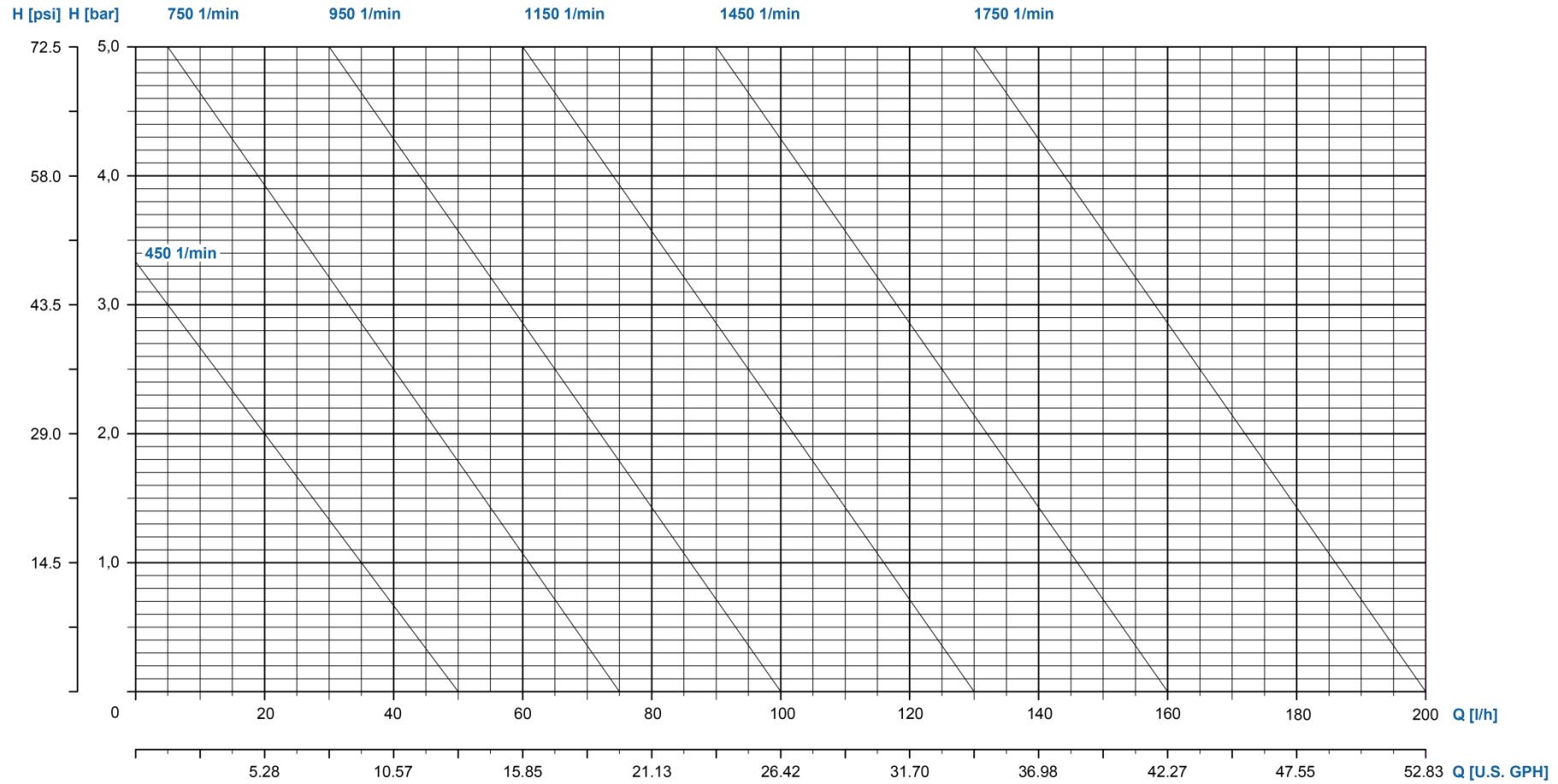
EU Version: IEC Size 71 B35, 0,37kW, 1500 1/min

US Version: NEMA56C, 0.5 HP, 1750 1/min



...ADVANCED SOLUTIONS...

CURVES VANE-MAG® MP I° Range - 114



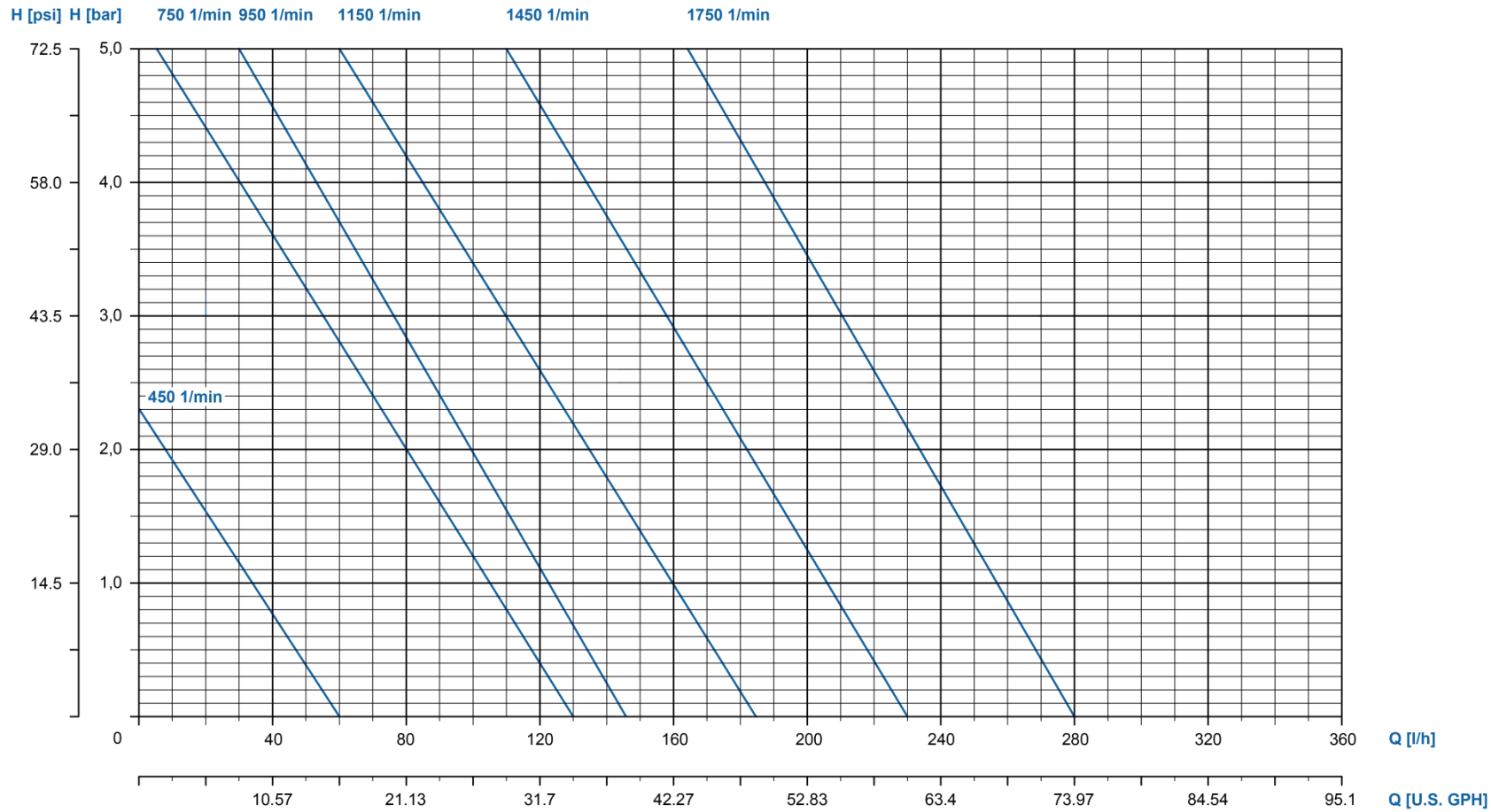
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KENNLINIEN / PERFORMANCE CURVES			
Series	VANE-MAG		
Pump Size	MP 114		
Motor Power	0,12kW	0,25kW	0,37kW / 0.5HP
Speed	750 / 900 1/min	900 / 1150 1/min	1450 / 1750 1/min
Fluid Viscosity	1 mm ² /s	Fluid Density	1 kg/dm ³



...ADVANCED SOLUTIONS...

CURVES VANE-MAG® MP 1° Range - 214



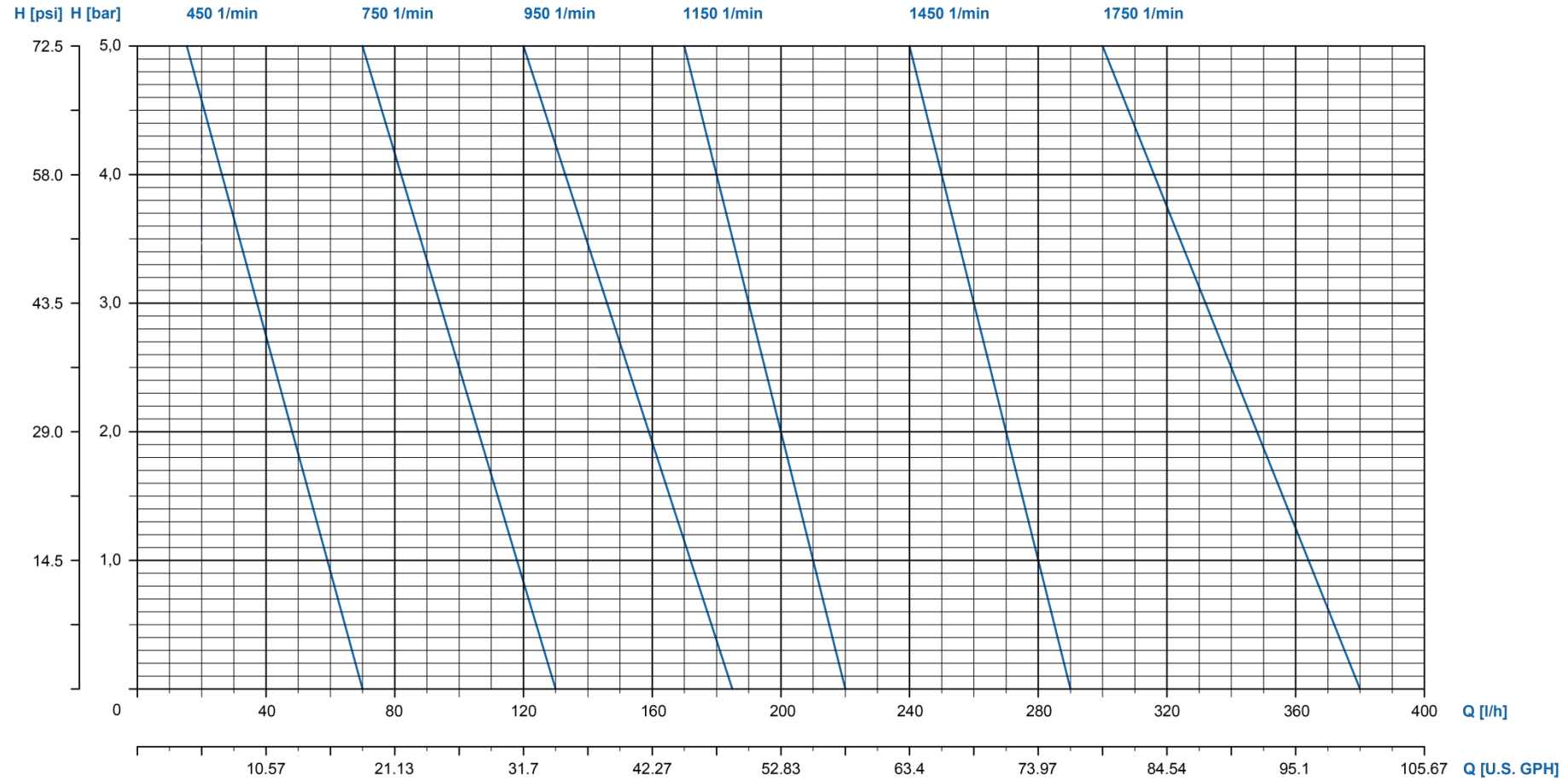
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 info@march-pumpen.com

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



...ADVANCED SOLUTIONS...

CURVES VANE-MAG® MP I° Range - 314

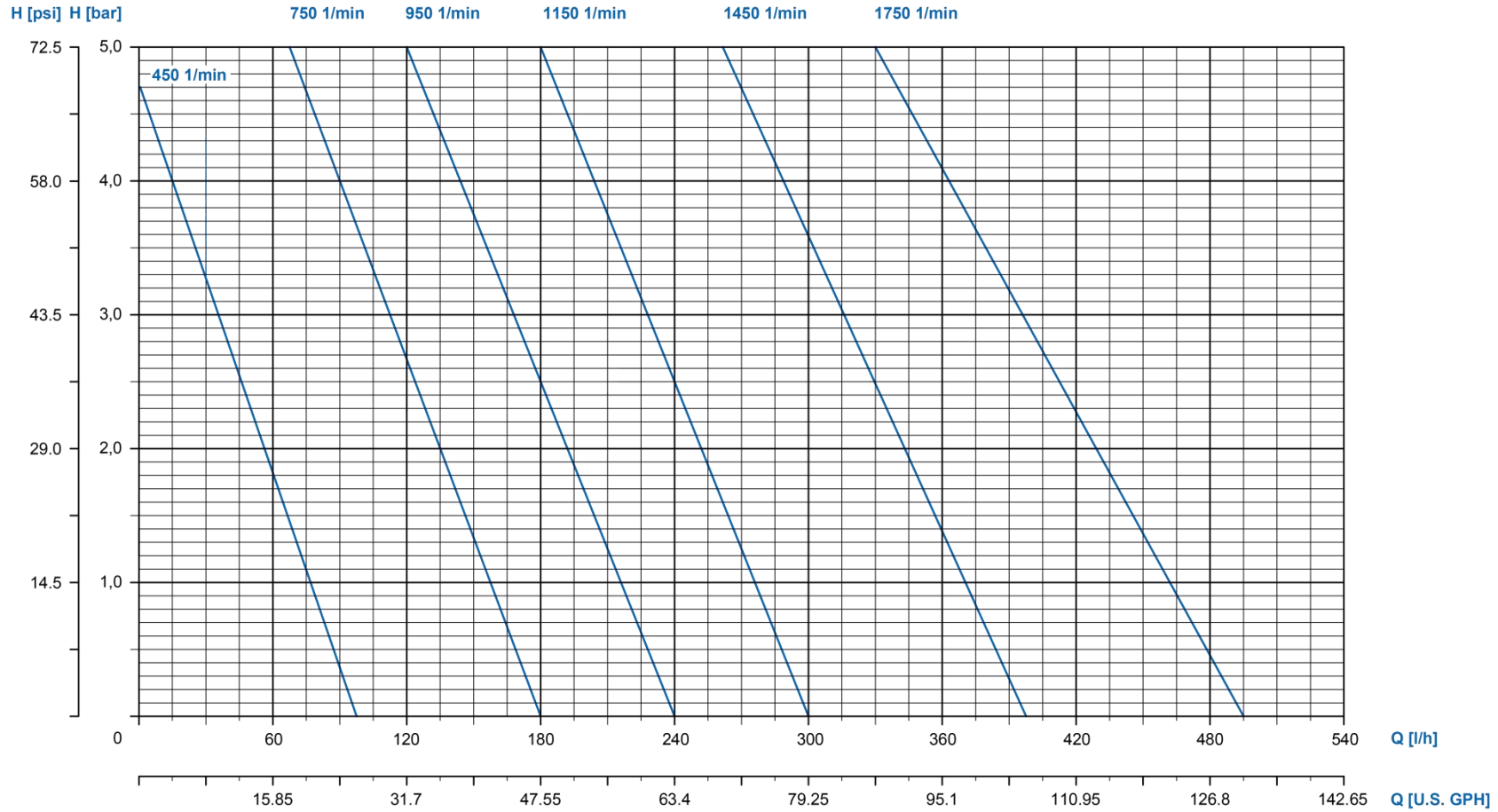


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KENNLINIEN / PERFORMANCE CURVES			
Series	VANE-MAG		
Pump Size	MP 314		
Motor Power	0,12kW	0,25kW	0,37kW / 0.5HP
Speed	750 / 900 1/min	900 / 1150 1/min	1450 / 1750 1/min
Fluid Viscosity	1 mm ² /s	Fluid Density	1 kg/dm ³



CURVES VANE-MAG® MP I° Range - 414



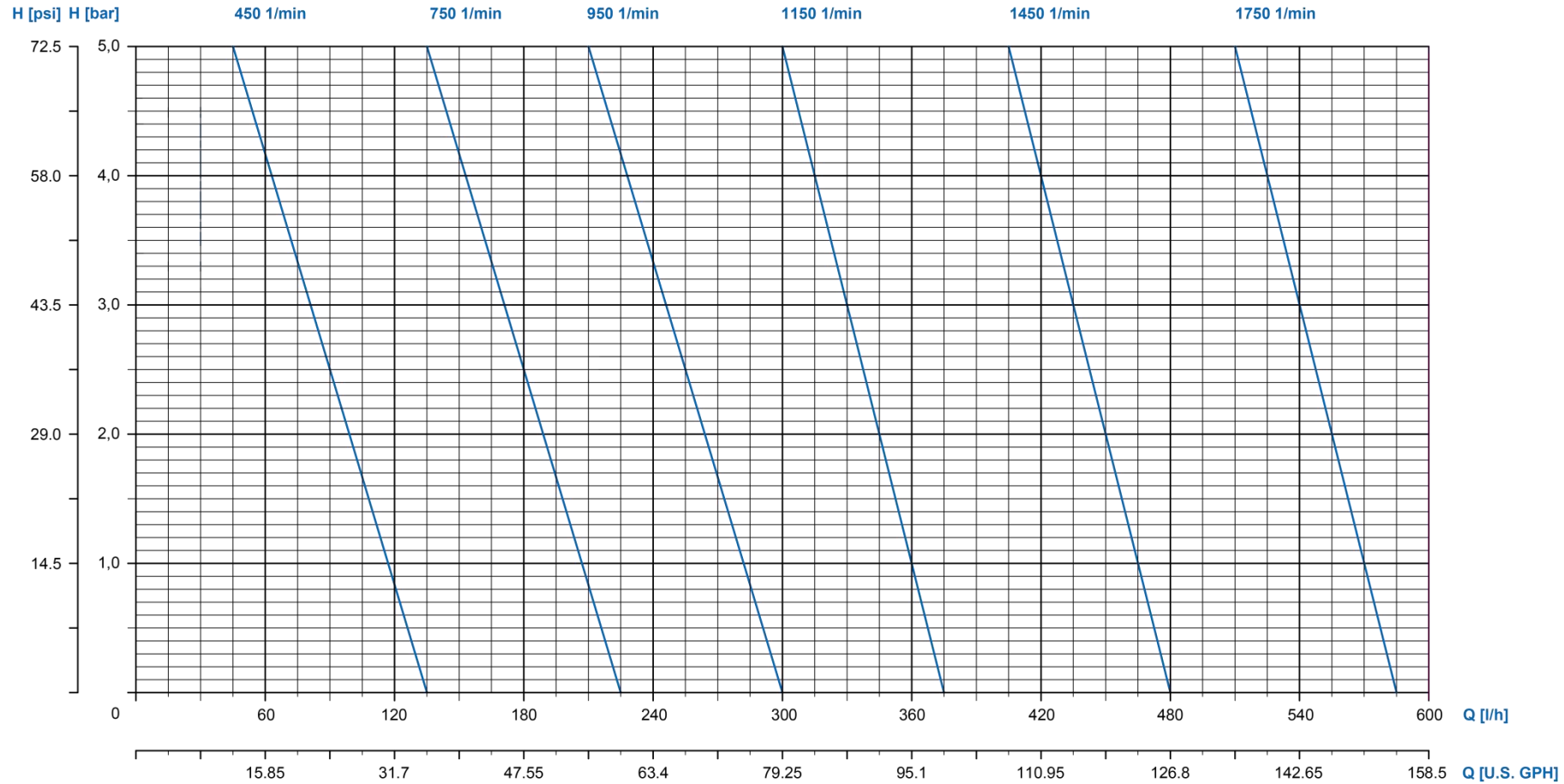
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KENNLINIEN / PERFORMANCE CURVES			
Series	VANE-MAG		
Pump Size	MP 414		
Motor Power	0,12kW	0,25kW	0,37kW / 0.5HP
Speed	750 / 900 1/min	900 / 1150 1/min	1450 / 1750 1/min
Fluid Viscosity	1 mm ² /s	Fluid Density	1 kg/dm ³



...ADVANCED SOLUTIONS...

CURVES VANE-MAG® MP 1° Range - 514

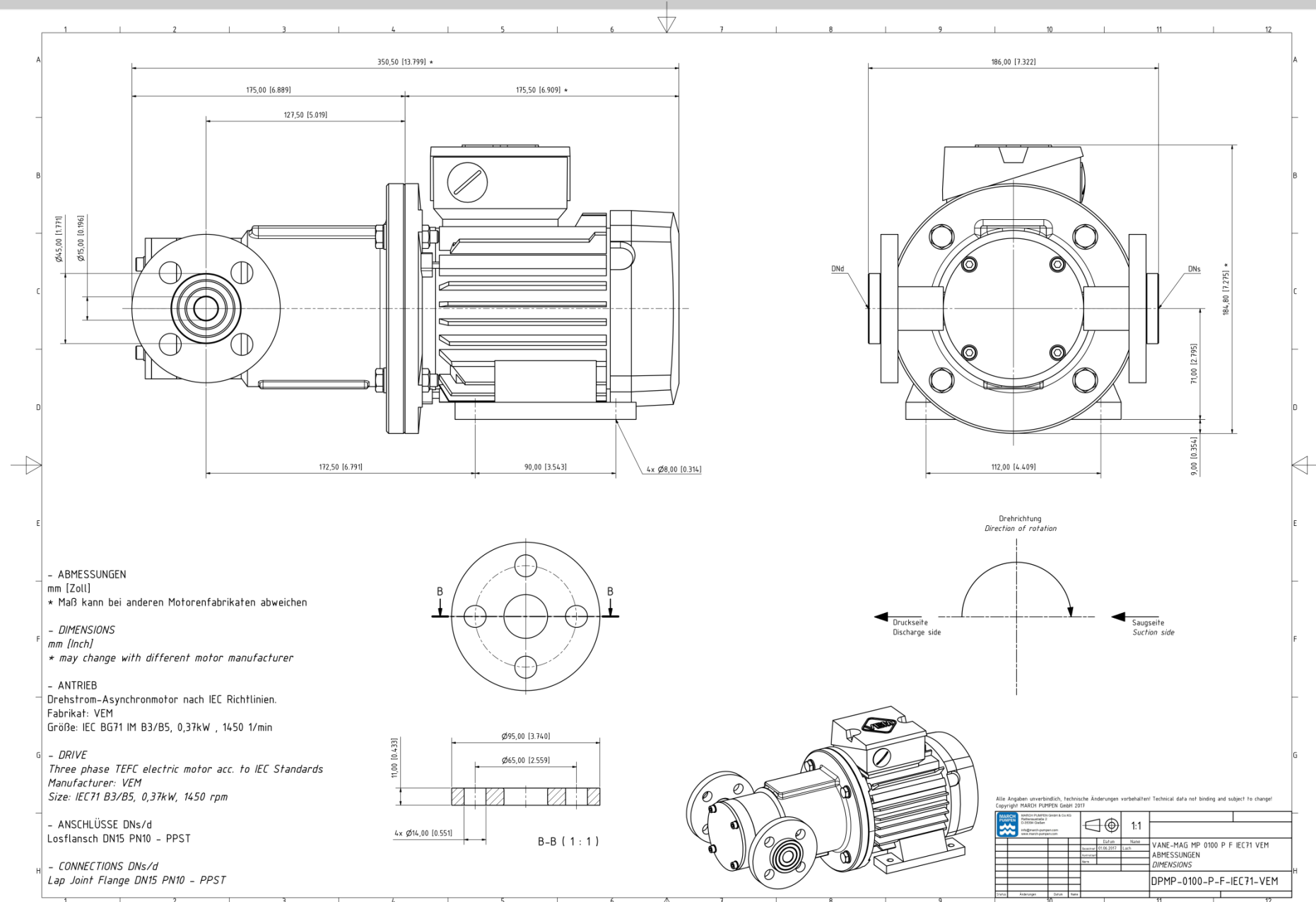


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KENNLINIEN / PERFORMANCE CURVES			
Series	VANE-MAG		
Pump Size	MP 514		
Motor Power	0,12kW	0,25kW	0,37kW / 0.5HP
Speed	750 / 900 1/min	900 / 1150 1/min	1450 / 1750 1/min
Fluid Viscosity	1 mm ² /s	Fluid Density	1 kg/dm ³

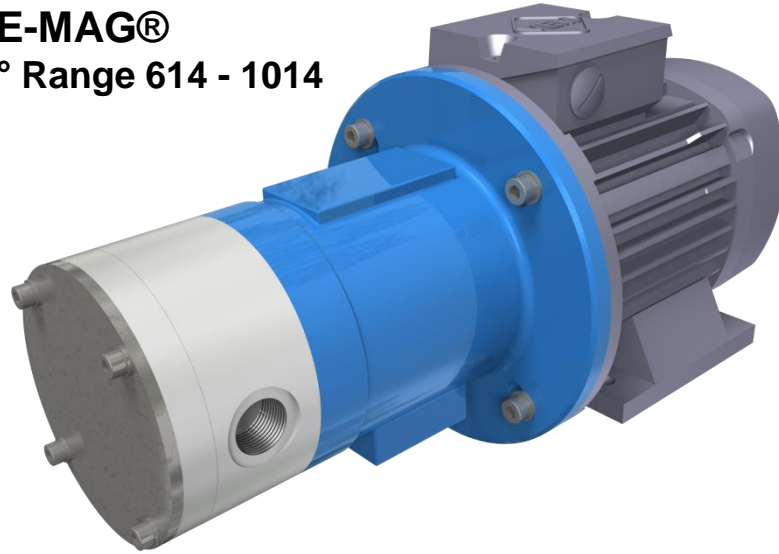


DIMENSIONS VANE-MAG® MP I° Range - 514



SPECIFICATIONS VANE-MAG® MP II° Range

VANE-MAG® MP II° Range 614 - 1014



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/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:

- 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:: Phenolic Resin Carbon-Graphite

Bearings: SiC

CONNECTIONS

Threads: G3/4" female, 3/4" NPT female

Lap Joint Flanges: DN20 PN10, 3/4" ANSI

MOTOR ADAPTION

EU Version: IEC Size 80 B35, 0,55-0,75kW, 1500 1/min

US Version: NEMA56C, 0.75 HP, 1750 1/min

US Version: NEMA145TC, 1.0 HP, 1750 1/min

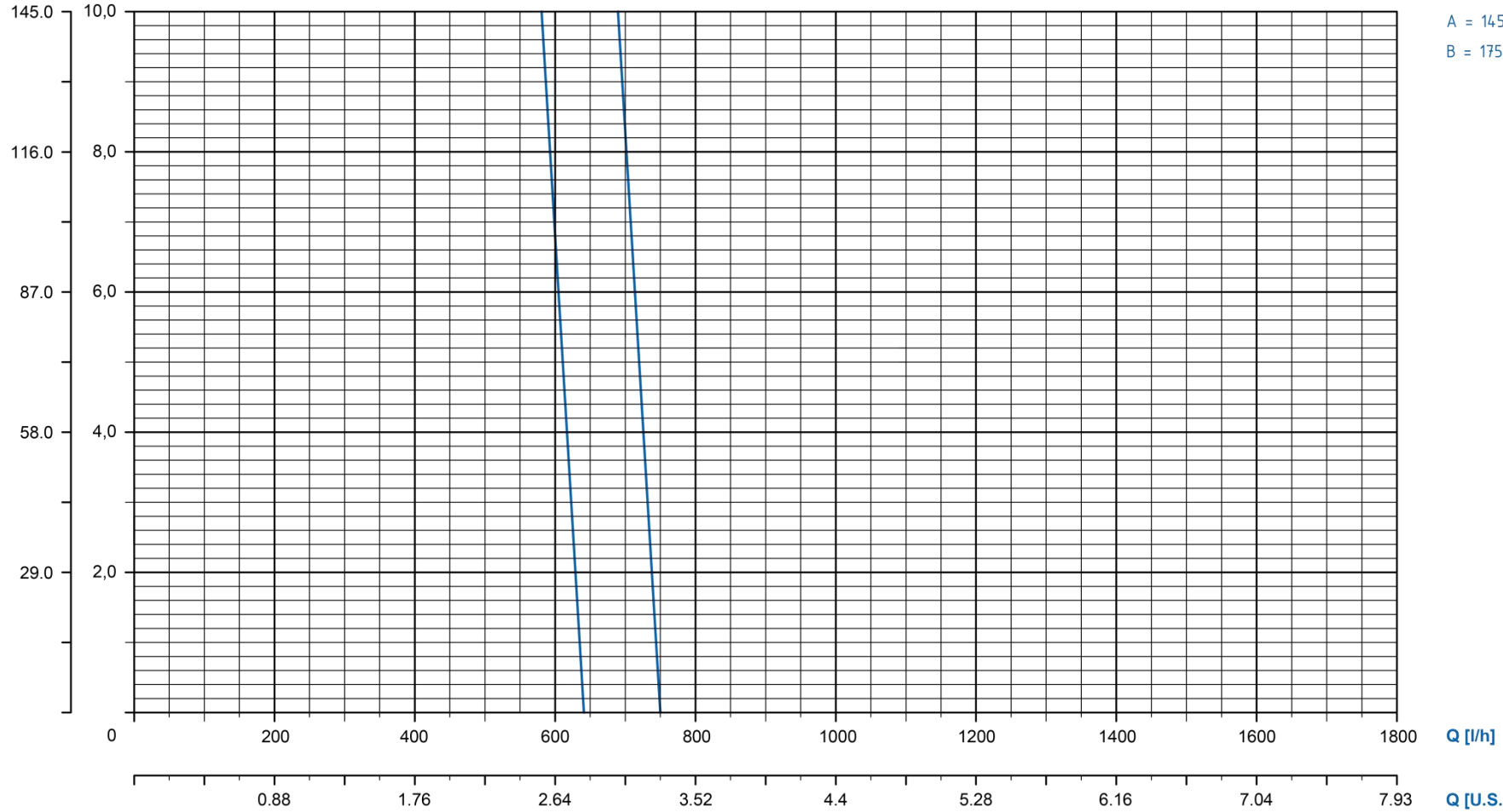
CURVES VANE-MAG® MP II° Range - 614

H [psi] H [bar]

n [1/min]

A = 1450 1/min

B = 1750 1/min



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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...ADVANCED SOLUTIONS...

CURVES VANE-MAG® MP II° Range - 814

H [psi] H [bar]

145.0 10.0

116.0 8.0

87.0 6.0

58.0 4.0

29.0 2.0

0

200

400

600

800

1000

1200

1400

1600

1800

Q [l/h]

0.88

1.76

2.64

3.52

4.4

5.28

6.16

7.04

7.93

Q [U.S. GPM]

n [1/min]

A = 1450 1/min

B = 1750 1/min

A

B



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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



...ADVANCED SOLUTIONS...

CURVES VANE-MAG® MP II° Range - 1014

H [psi] H [bar]

n [1/min]

145.0 10,0

A = 1450 1/min

B = 1750 1/min

116.0 8,0

87.0 6,0

58.0 4,0

29.0 2,0

0

200

400

600

800

1000

1200

1400

1600

1800

Q [l/h]

0.88

1.76

2.64

3.52

4.4

5.28

6.16

7.04

7.93

Q [U.S. GPM]



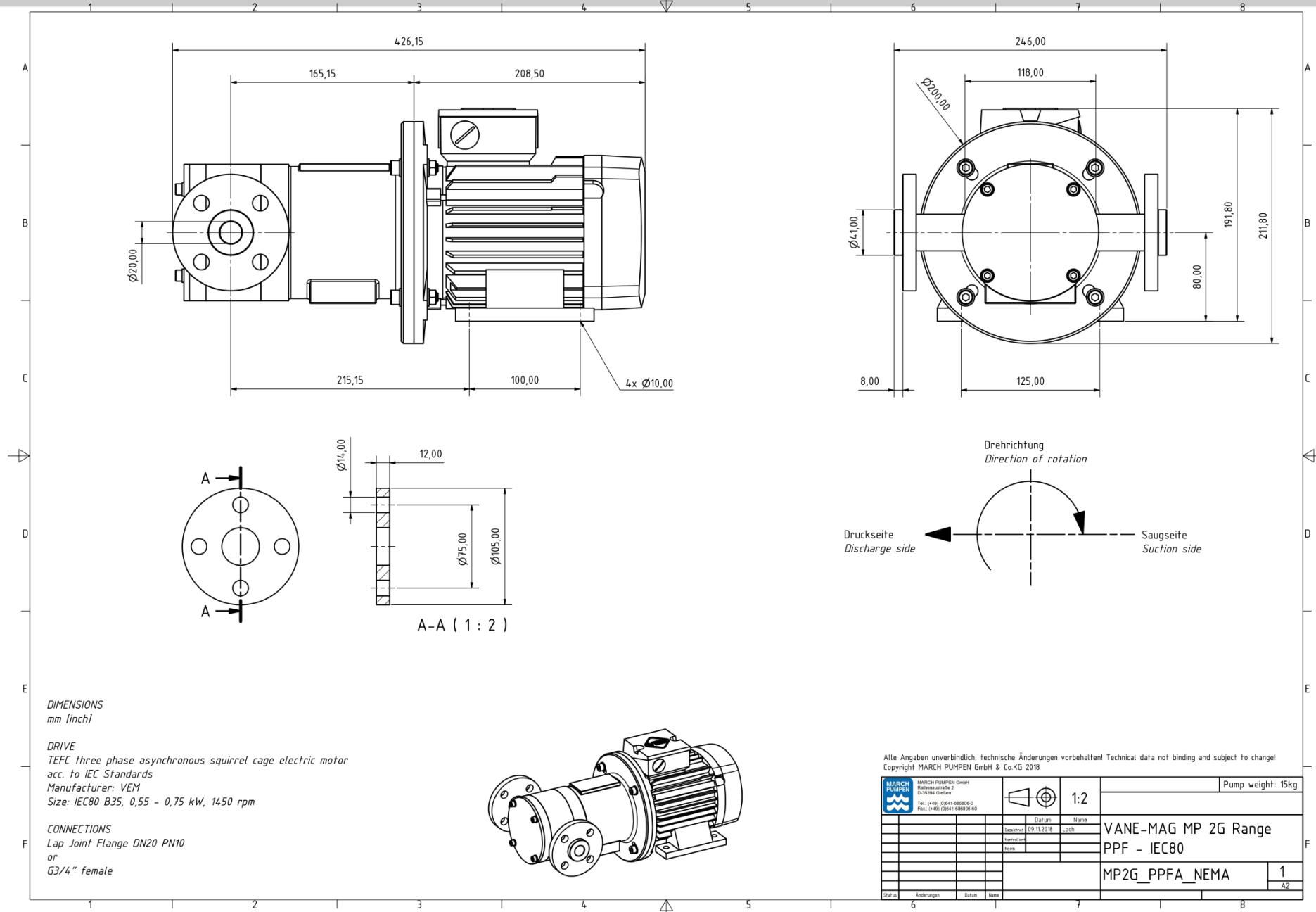
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info@march-pumpen.com

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



...ADVANCED SOLUTIONS...

DIMENSIONS VANE-MAG® MP II° Range



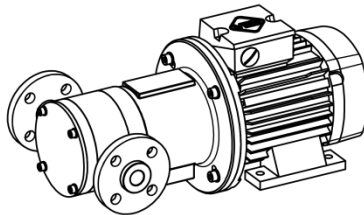
DIMENSIONS
mm [inch]

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



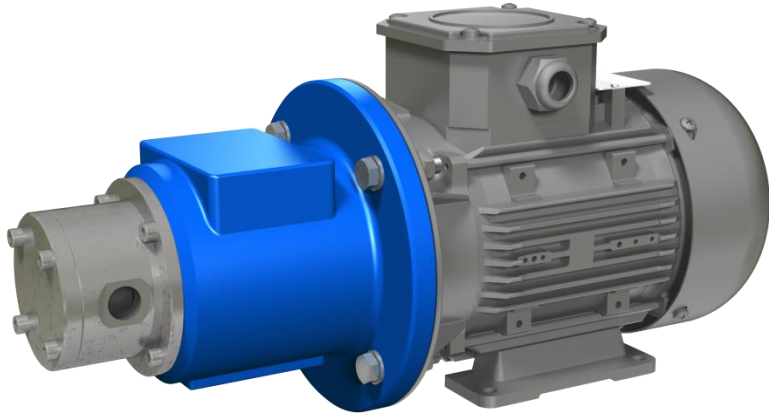
Alle Angaben unverbindlich, technische Änderungen vorbehalten! Technical data not binding and subject to change!
Copyright MARCH PUMPEN GmbH & Co.KG 2018

	MARCH PUMPEN GmbH Puffenstraße 2 D-30396 Göttingen			1:2	Pump weight: 15kg	
	Tel.: (+49) (0)541-690800-0 Fax.: (+49) (0)541-690800-40	Datum: 09.11.2018			Name:	VANE-MAG MP 2G Range PPF - IEC80
Status:	Änderungen:	Datum:	Name:	MP2G_PPF_A_NEMA	1 A2	F



SPECIFICATIONS VANE-MAG® MPA I° Range

VANE-MAG® MPA I° Range 114 - 514



PERFORMANCE DATA

Nominal speed:	1450 1/min / 1750 1/min
Nominal frequency:	50 Hz / 60 Hz
Nominal flow rate:	
MPA 114:	170 l/h / 210 l/h (55,48 US gph)
MPA 214:	240 l/h / 280 l/h (73,97 US gph)
MPA 314:	330 l/h / 395 l/h (104,35 US gph)
MPA 414:	410 l/h / 510 l/h (134,73 US gph)
MPA 514:	500 l/h / 575 l/h (151,9 US gph)
Discharge pressure, max:	13 bar (188,55 psi)
Design pressure:	PN 16 bar (232,06 psi)
Temperature, max.:	120°C (248°F)
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:

- 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: AISI316Ti

O-Rings: EPDM, Viton, FEP, Kalrez

Rotor: AISI316Ti

Stator, Vanes: Phenolic Resin Carbon-Graphite

Bearings: SiC

CONNECTIONS

Threads: G3/8" female, 1/2" NPT female

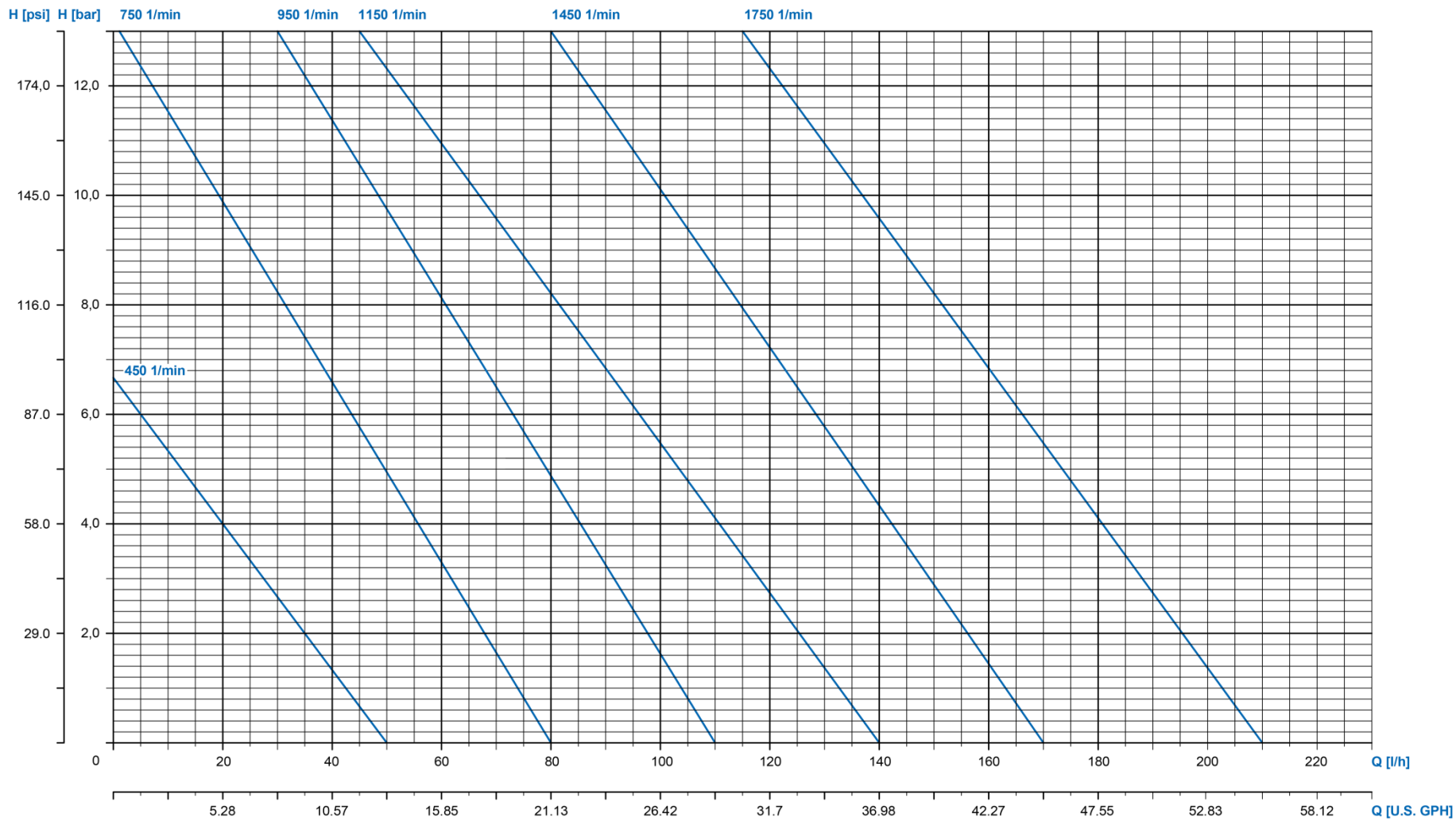
Lap Joint Flanges: DN15 PN16, 1/2" ANSI

MOTOR ADAPTION

EU Version: IEC Size 71 B35, 0,37kW, 1500 1/min

US Version: NEMA56C, 0.5 HP, 1750 1/min

CURVES VANE-MAG® MPA I° Range - 114



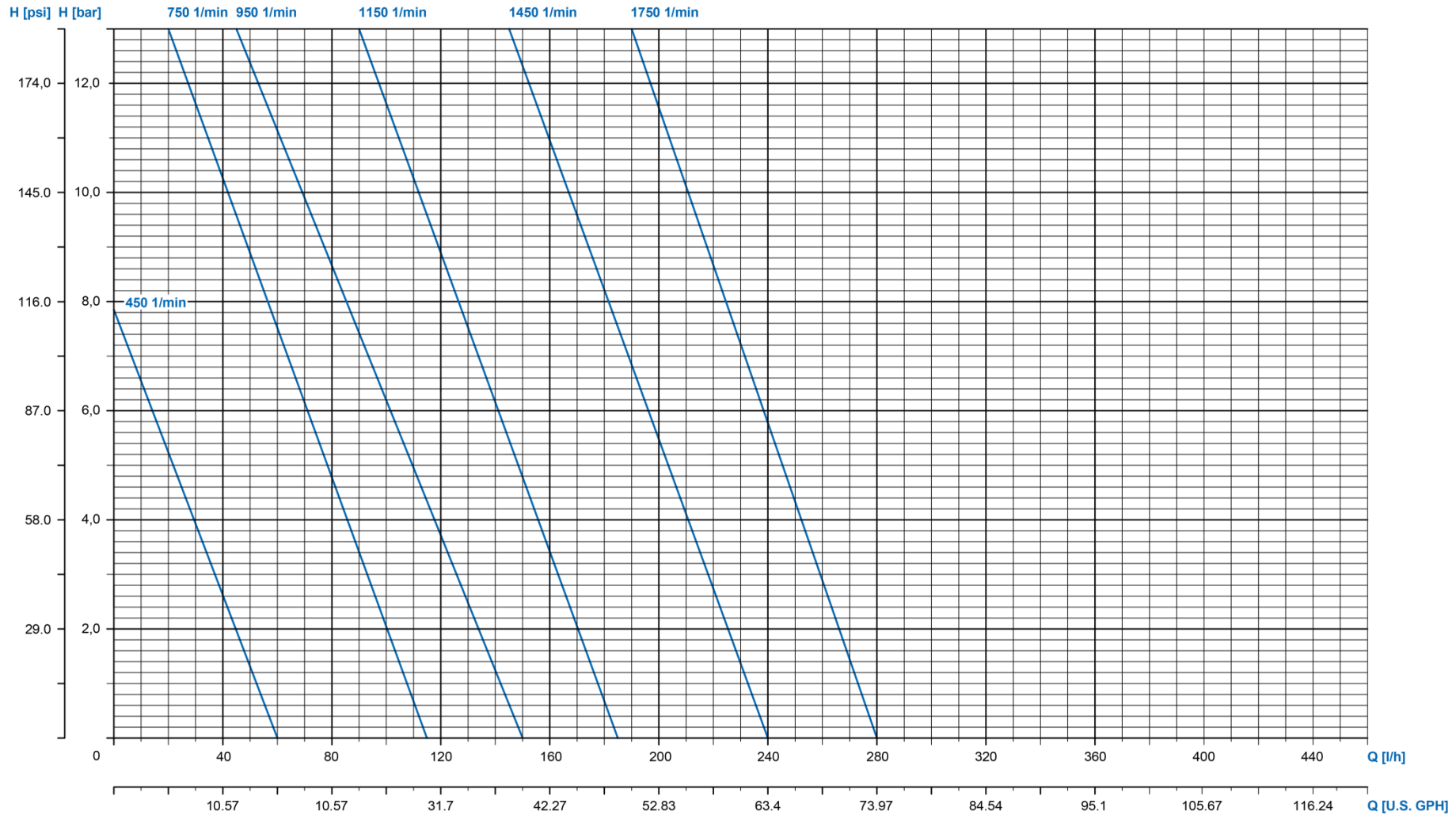
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KENNLINIEN / PERFORMANCE CURVES			
Series	VANE-MAG		
Pump Size	MPA 114		
Motor Power	0,12kW	0,25kW	0,37kW / 0.5HP
Speed	750 / 900 1/min	900 / 1150 1/min	1450 / 1750 1/min
Fluid Viscosity	1 mm ² /s	Fluid Density	1 kg/dm ³



...ADVANCED SOLUTIONS...

CURVES VANE-MAG® MPA I° Range - 214



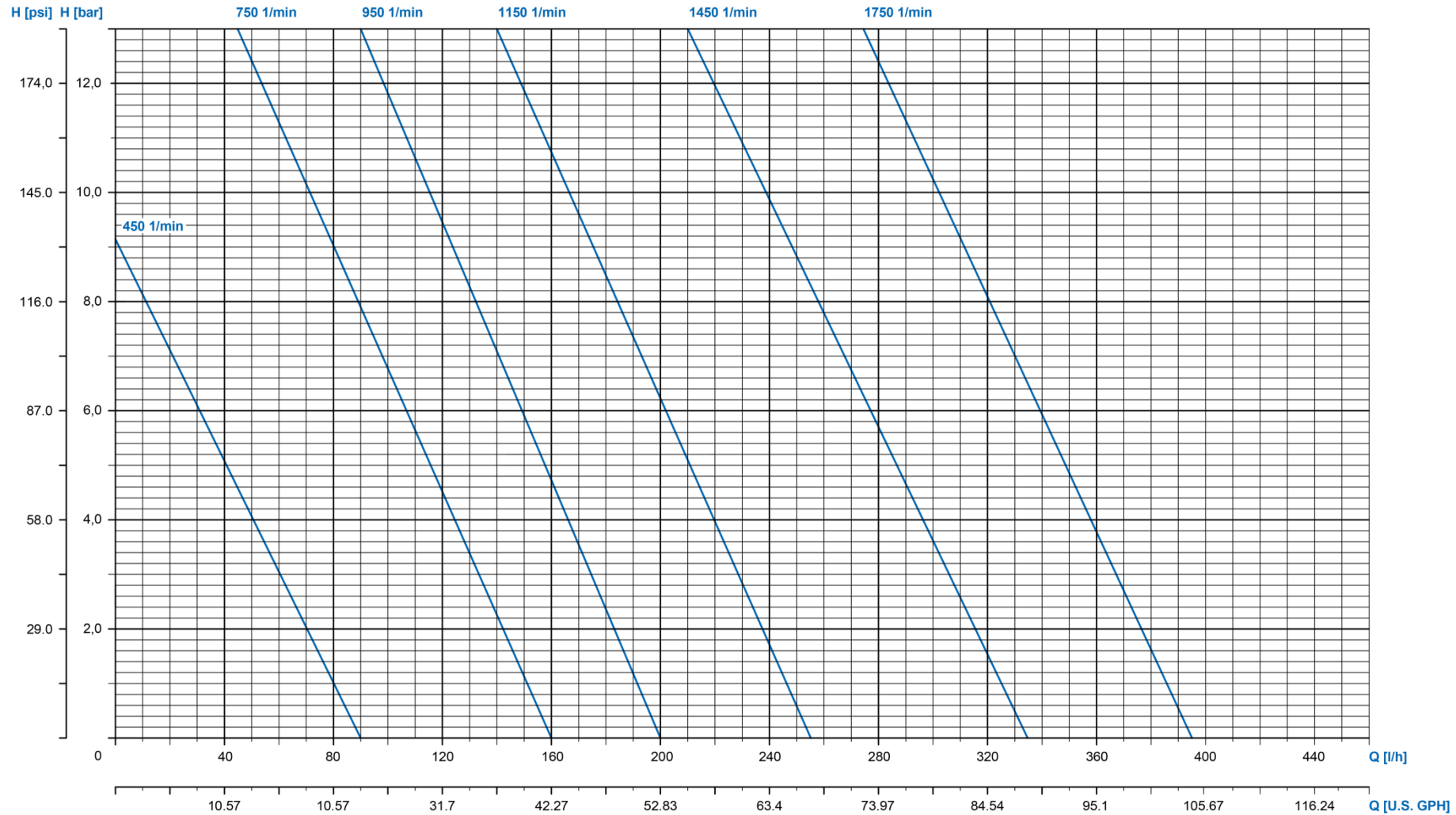
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 info@march-pumpen.com

KENNLINIEN / PERFORMANCE CURVES			
Series	VANE-MAG		
Pump Size	MPA 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



...ADVANCED SOLUTIONS...

CURVES VANE-MAG® MPA I° Range - 314



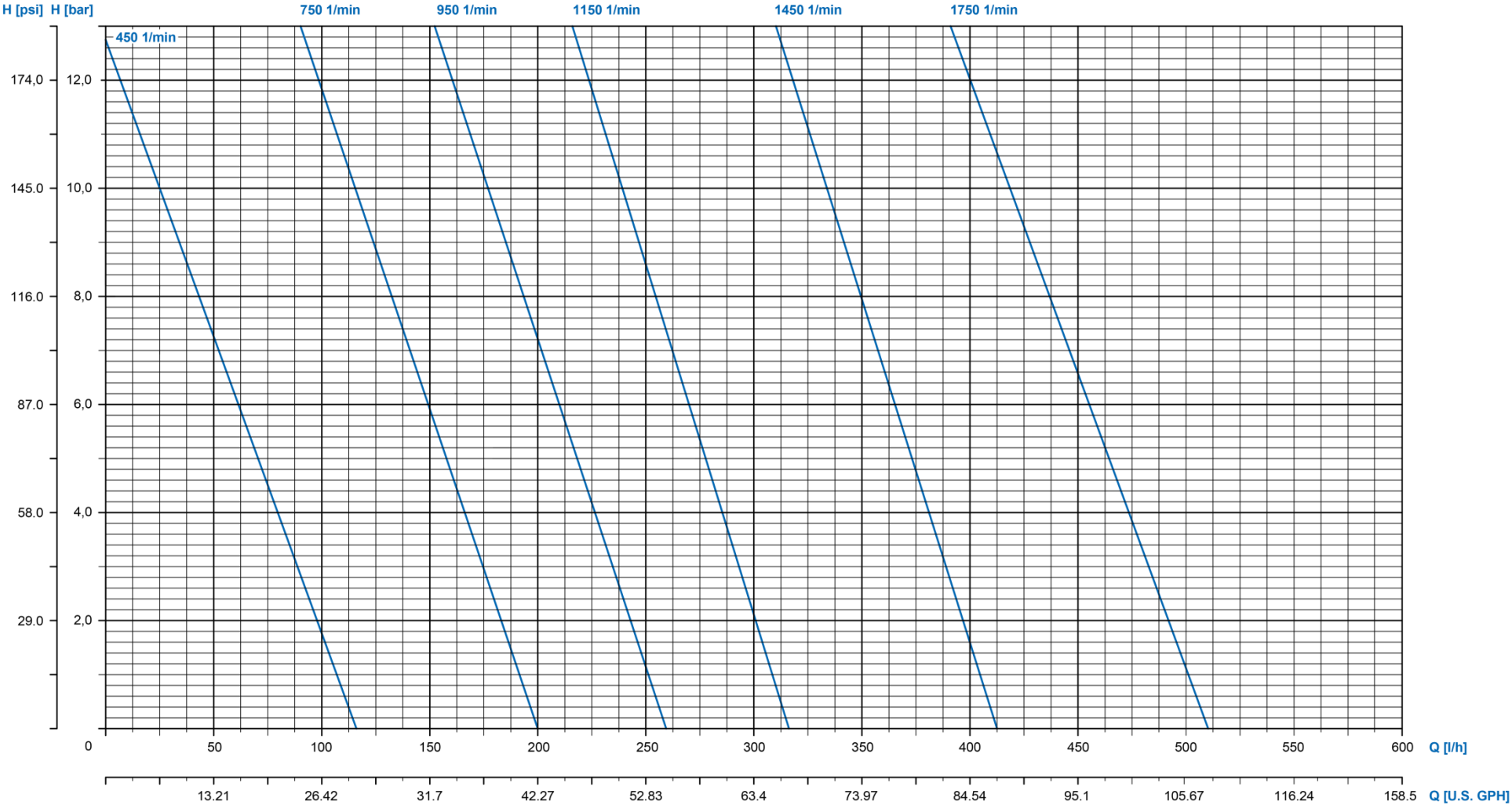
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KENNLINIEN / PERFORMANCE CURVES			
Series	VANE-MAG		
Pump Size	MPA 314		
Motor Power	0,12kW	0,25kW	0,37kW / 0.5HP
Speed	750 / 900 1/min	900 / 1150 1/min	1450 / 1750 1/min
Fluid Viscosity	1 mm ² /s	Fluid Density	1 kg/dm ³



...ADVANCED SOLUTIONS...

CURVES VANE-MAG® MPA I° Range - 414



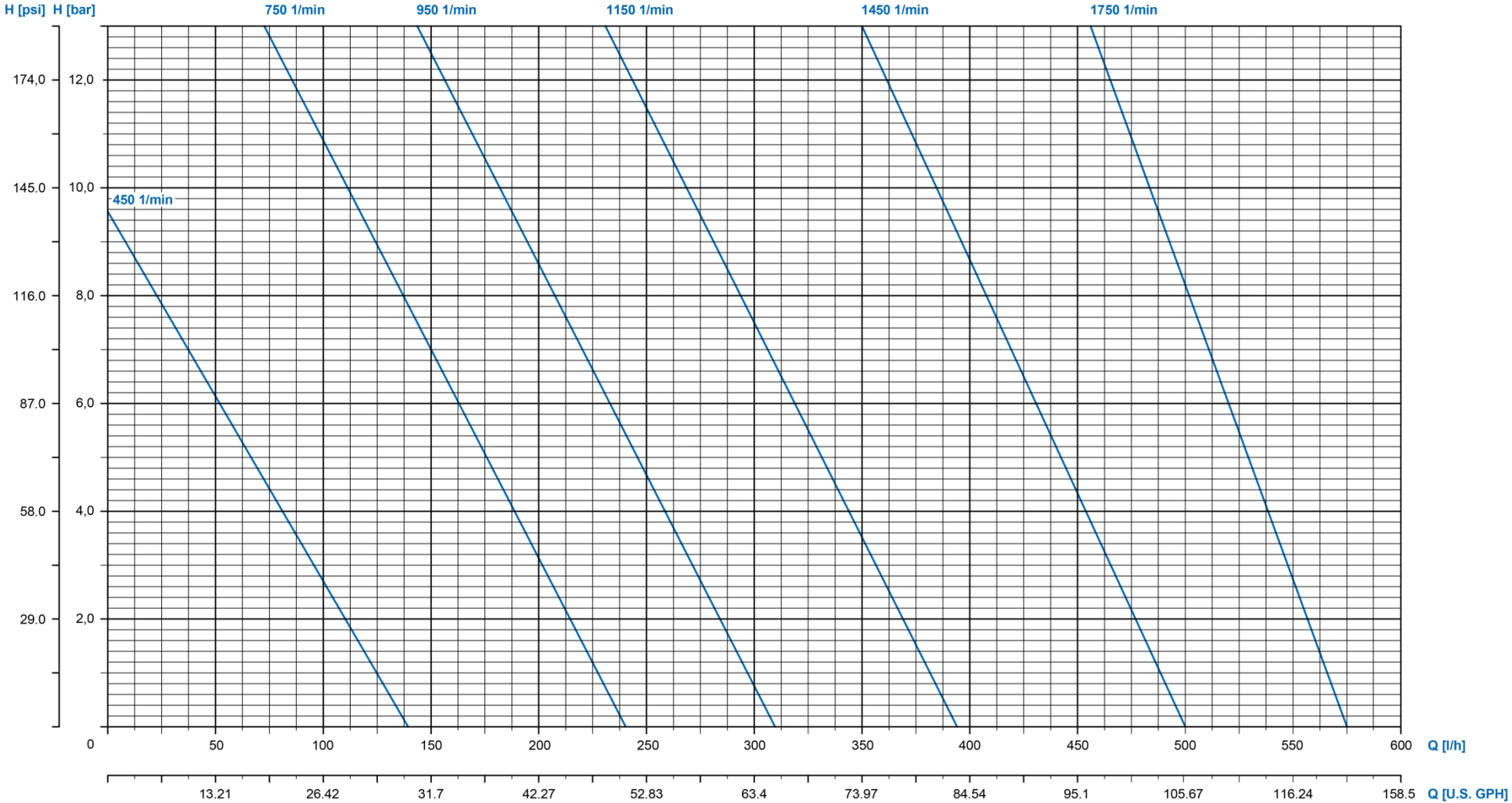
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KENNLINIEN / PERFORMANCE CURVES			
Series	VANE-MAG		
Pump Size	MPA 414		
Motor Power	0,12kW	0,25kW	0,37kW / 0.5HP
Speed	750 / 900 1/min	900 / 1150 1/min	1450 / 1750 1/min
Fluid Viscosity	1 mm ² /s	Fluid Density	1 kg/dm ³



...ADVANCED SOLUTIONS...

CURVES VANE-MAG® MPA I° Range - 514

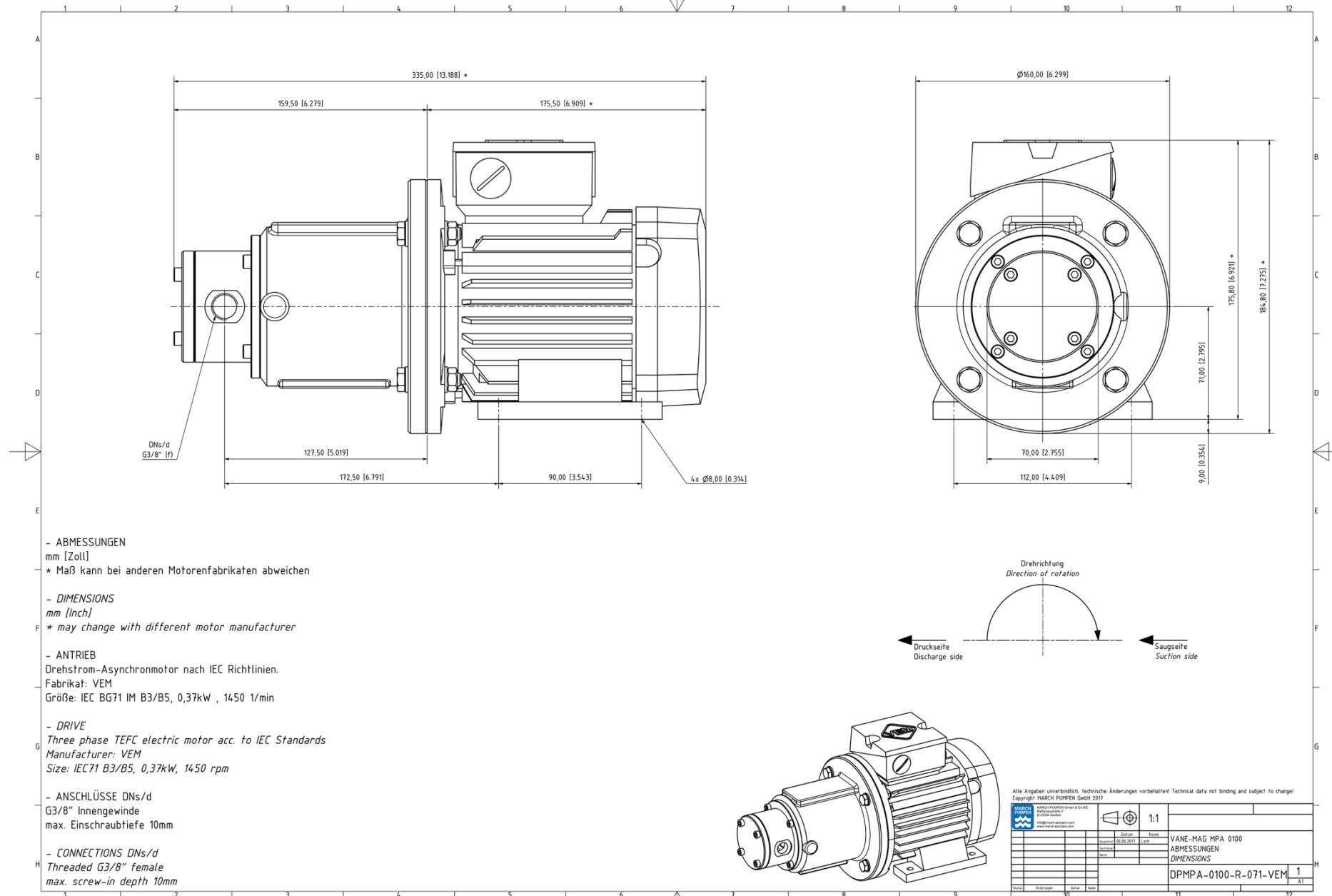


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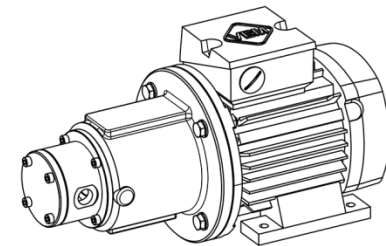
KENNLIINIEN / PERFORMANCE CURVES			
Series	VANE-MAG		
Pump Size	MPA 514		
Motor Power	0,12kW	0,25kW	0,37kW / 0.5HP
Speed	750 / 900 1/min	900 / 1150 1/min	1450 / 1750 1/min
Fluid Viscosity	1 mm ² /s	Fluid Density	1 kg/dm ³



DIMENSIONS VANE-MAG® MPA I° Range



- 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 DN_s/d
G3/8" Innengewinde
max. Einschraubtiefe 10mm
- CONNECTIONS DN_s/d
Threaded G3/8" female
max. screw-in depth 10mm



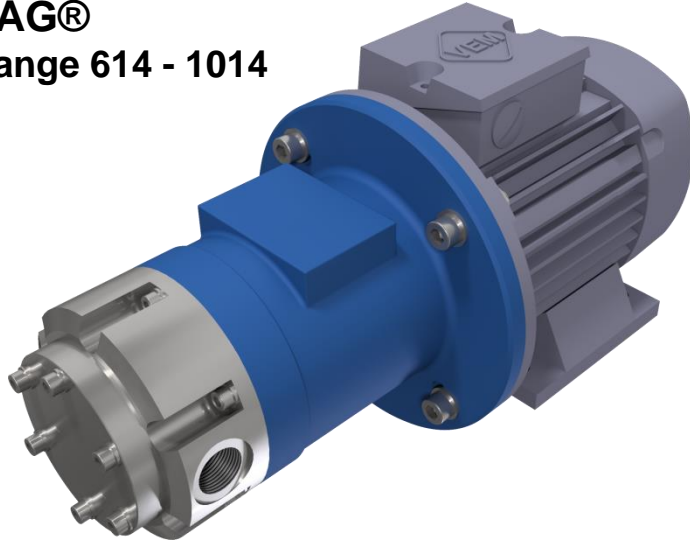
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MARCH PUMPEN MARCH PUMPEN GmbH Industriestraße 1 42699 Solingen Telefon: +49 (0)212 2400-0 Fax: +49 (0)212 2400-100 E-Mail: info@march-pumpen.com Web: www.march-pumpen.com		Datum: 08.05.2017 Zeichner: [] Name: [] Bearbeiter: [] Prüfer: [] Freigegeben: [] Unterschrift: [] Datum: []	VANE-MAG MPA 0100 ABMESSUNGEN DIMENSIONS DPMPA-0100-R-071-VEM
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SPECIFICATIONS VANE-MAG® MPA II° Range

VANE-MAG® MPA II° Range 614 - 1014



PERFORMANCE DATA

Nominal speed:	1450 1/min / 1750 1/min
Nominal frequency:	50 Hz / 60 Hz
Nominal flow rate:	
MPA 614:	600 l/h / 750 l/h (198,13 US gph)
MPA 814:	800 l/h / 975 l/h (257,57 US gph)
MPA 1014:	1000 l/h / 1200 l/h (264 US gph)
Differential pressure, max.:	13 bar (188,55 psi)
Design pressure:	PN 16 bar (232,06 psi)
Temperature, max.:	-40°C ... 120°C (-40° ... 248°F)
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:

- 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: AISI316Ti

O-Rings: EPDM, Viton, FEP, Kalrez

Rotor: AISI316Ti

Stator, Vanes: Phenolic Resin Carbon-Graphite

Bearings: SiC

CONNECTIONS

Threads: G3/4" female, 3/4" NPT female

Lap Joint Flanges: DN20 PN16, 3/4" ANSI

MOTOR ADAPTION

EU Version: IEC Size 80 B35, 0,55-0,75kW, 1500 1/min

US Version: NEMA56C, 0.5 HP - 0.75 HP, 1750 1/min

US Version: NEMA145TC, 1.0 HP, 1750 1/min

CURVES VANE-MAG® MPA II° Range - 614

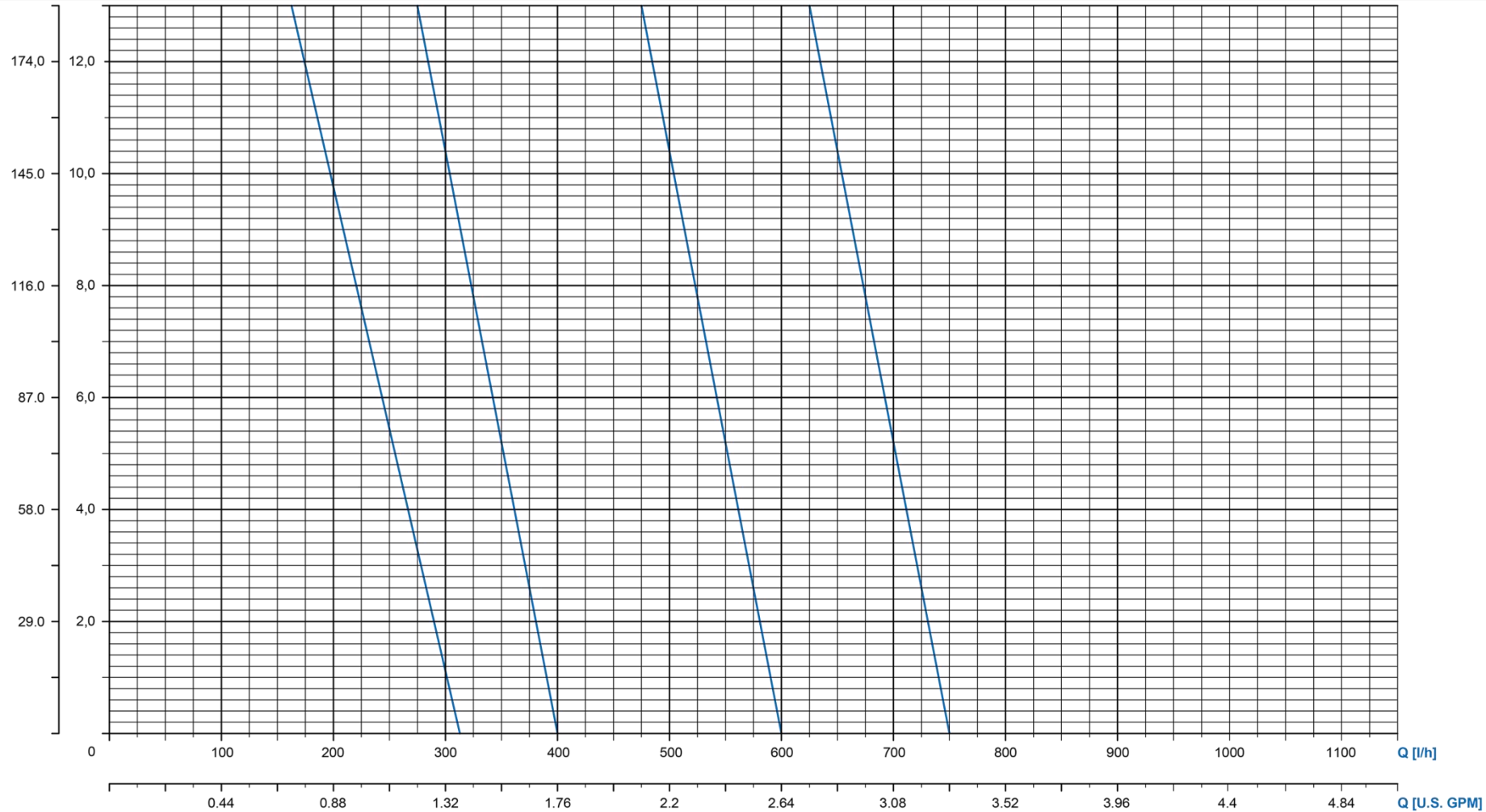
H [psi] H [bar]

750 1/min

950 1/min

1450 1/min

1750 1/min



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KENNLINIEN / PERFORMANCE CURVES			
Series	VANE-MAG		
Pump Size	MPA 614		
Motor Power	0,18 / 0,25 kW	0,37 / 0,55 kW	0,55 / 0,75 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



...ADVANCED SOLUTIONS...

CURVES VANE-MAG® MPA II° Range - 814

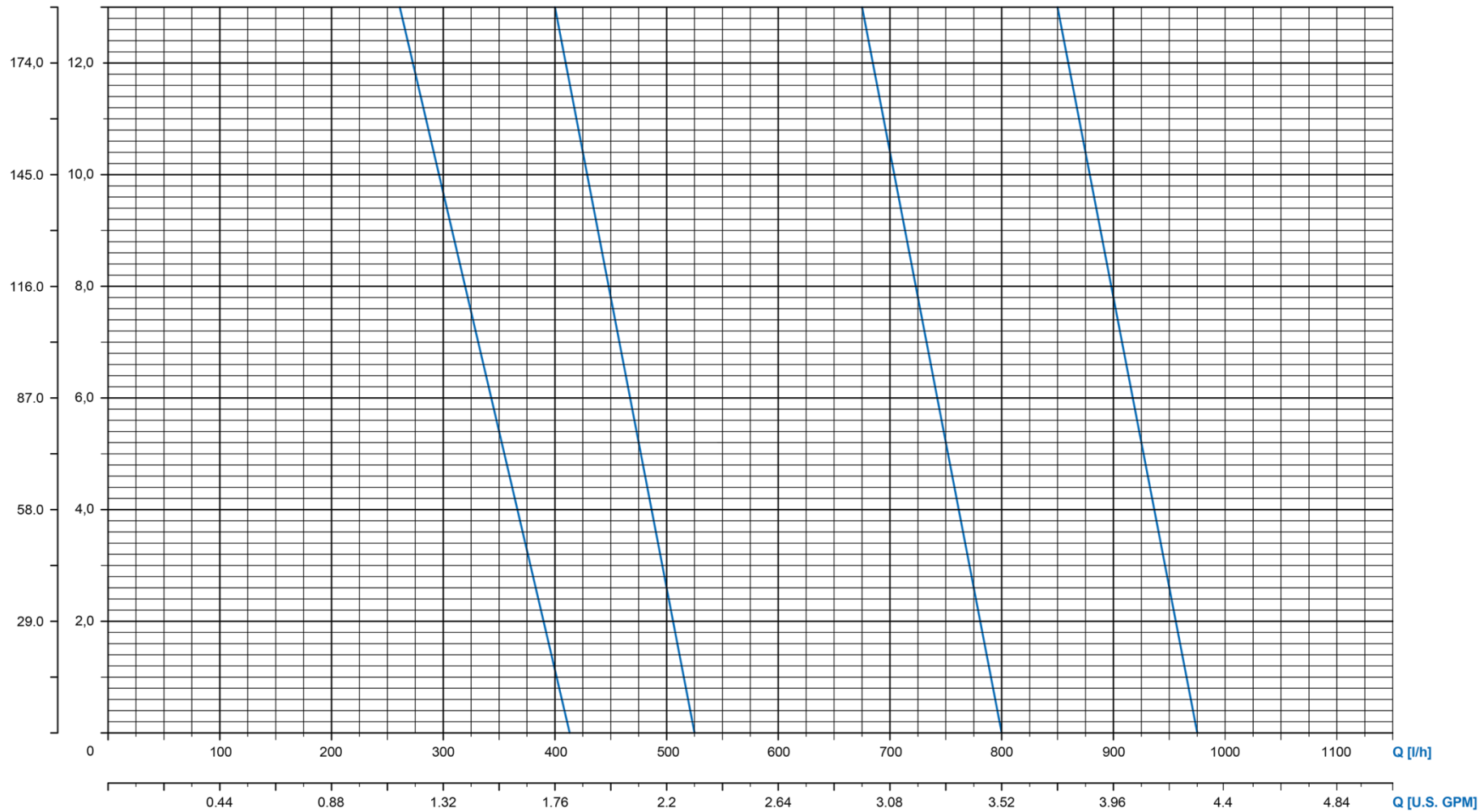
H [psi] H [bar]

750 1/min

950 1/min

1450 1/min

1750 1/min



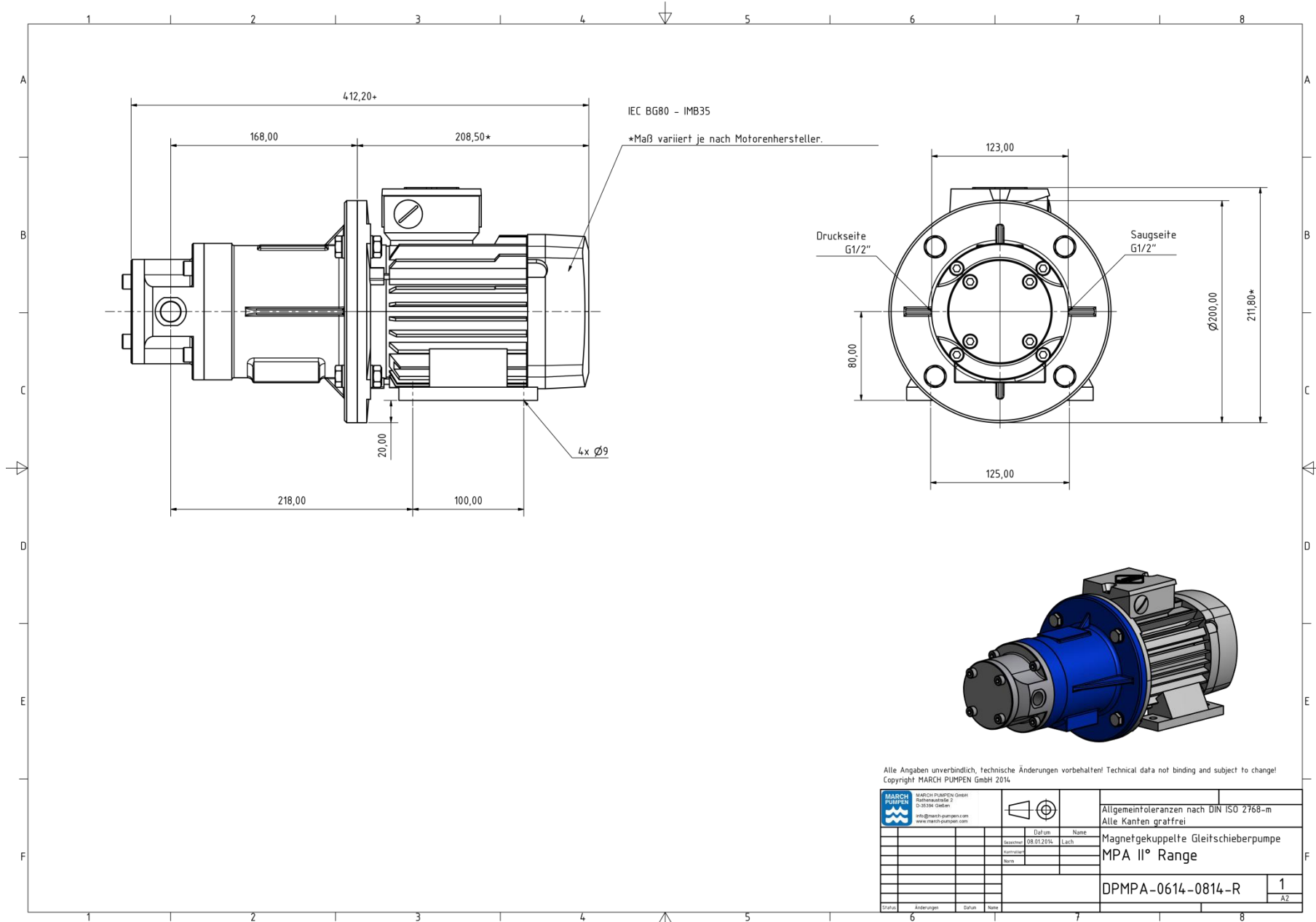
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info@march-pumpen.com

KENNLINIEN / PERFORMANCE CURVES			
Series	VANE-MAG		
Pump Size	MPA 814		
Motor Power	0,18 / 0,25 kW	0,37 / 0,55 kW	0,55 / 0,75 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



...ADVANCED SOLUTIONS...

DIMENSIONS VANE-MAG® MPA II° Range



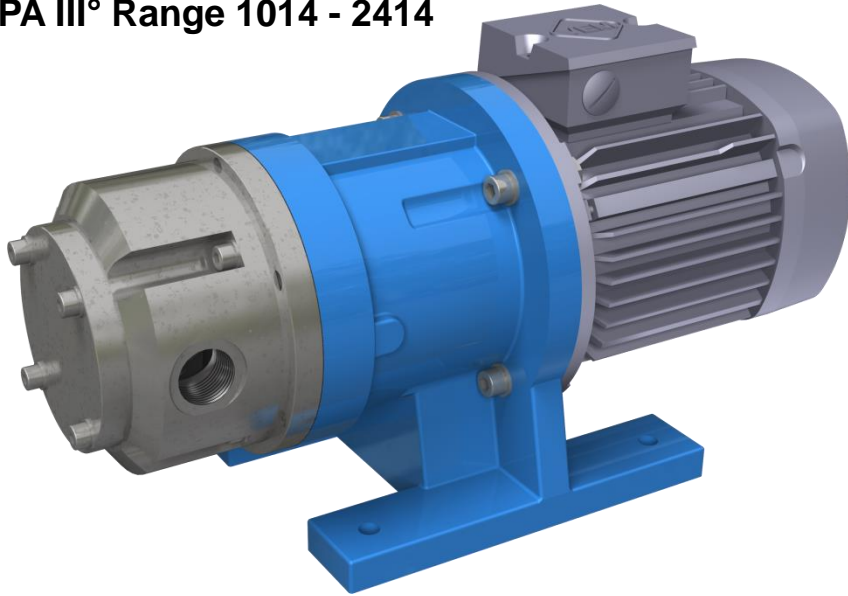
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		MARCH PUMPEN GmbH Röhrenstraße 2 D-38106 Gerdorf info@march-pumpen.com www.march-pumpen.com				Allgemeintoleranzen nach DIN ISO 2768-m Alle Kanten gratfrei	
		Datum: 08.07.2014 Zeichner: Name:		Name: E-Addr:		Magnetgekuppelte Gleitschieberpumpe MPA II° Range	
						DPMPA-0614-0814-R	
						1 AZ	
Status:	Änderungen:	Datum:	Name:				



SPECIFICATIONS VANE-MAG® MPA III° Range

VANE-MAG® MPA III° Range 1014 - 2414



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 psi)
Design pressure:	PN 16 bar (232,06 psi)
Temperature, max.:	120°C (248°F)
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:

- 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: AISI316Ti

O-Rings: EPDM, Viton, FEP, Kalrez

Rotor: AISI316Ti

Stator, Vanes: Phenolic Resin Carbon-Graphite

Bearings: SiC

CONNECTIONS

Threads: G1" female, 1" NPT female

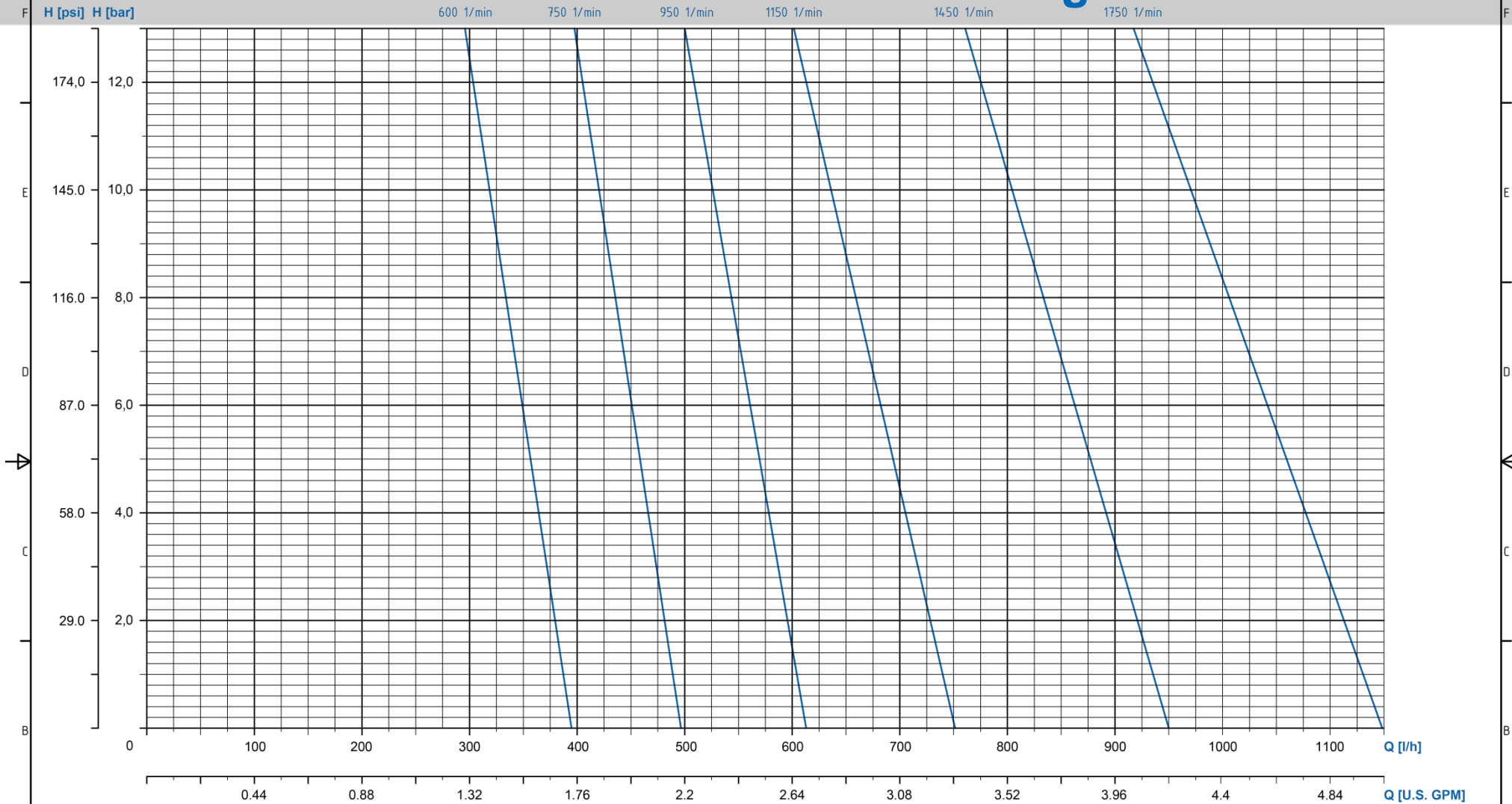
Lap Joint Flanges: DN25 PN16, 1" ANSI

MOTOR ADAPTION

EU Version: IEC Size 90 B35, 1,5kW, 1500 1/min

US Version: NEMA145TC, 2.0 HP, 1750 1/min

CURVES VANE-MAG® MPA III° Range - 1014



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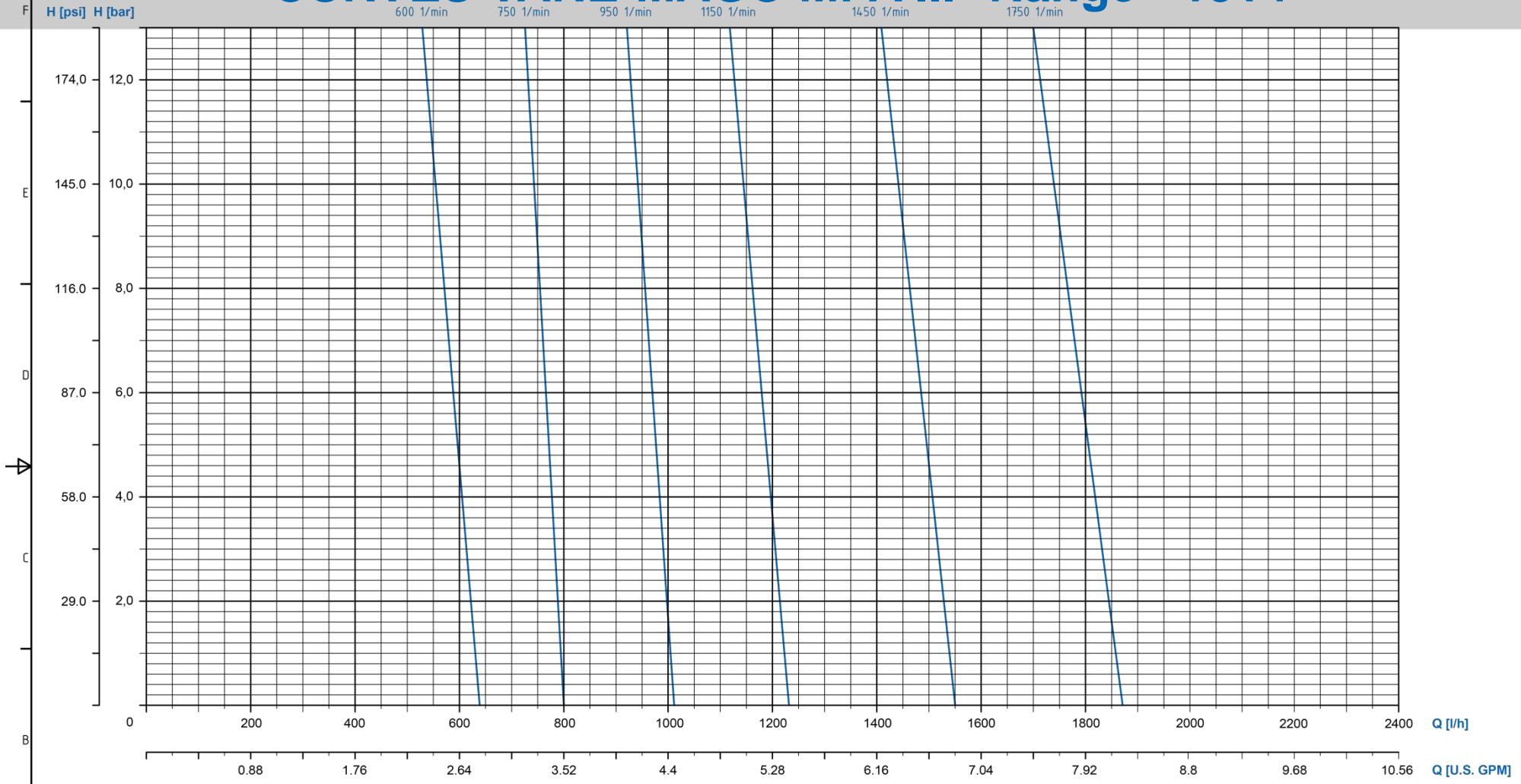
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KENNLINIEN / PERFORMANCE CURVES			
Series	VANE-MAG		
Pump Size	MPA1014 - III°Range Pumps		
Motor Power	0,55kW	1,1kW	1,5kW
Speed	750 / 900 1/min	900 / 1150 1/min	1450 / 1750 1/min
Fluid Viscosity	1 mm ² /s	Fluid Density	1 kg/dm ³



...ADVANCED SOLUTIONS...

CURVES VANE-MAG® MPA III° Range - 1514

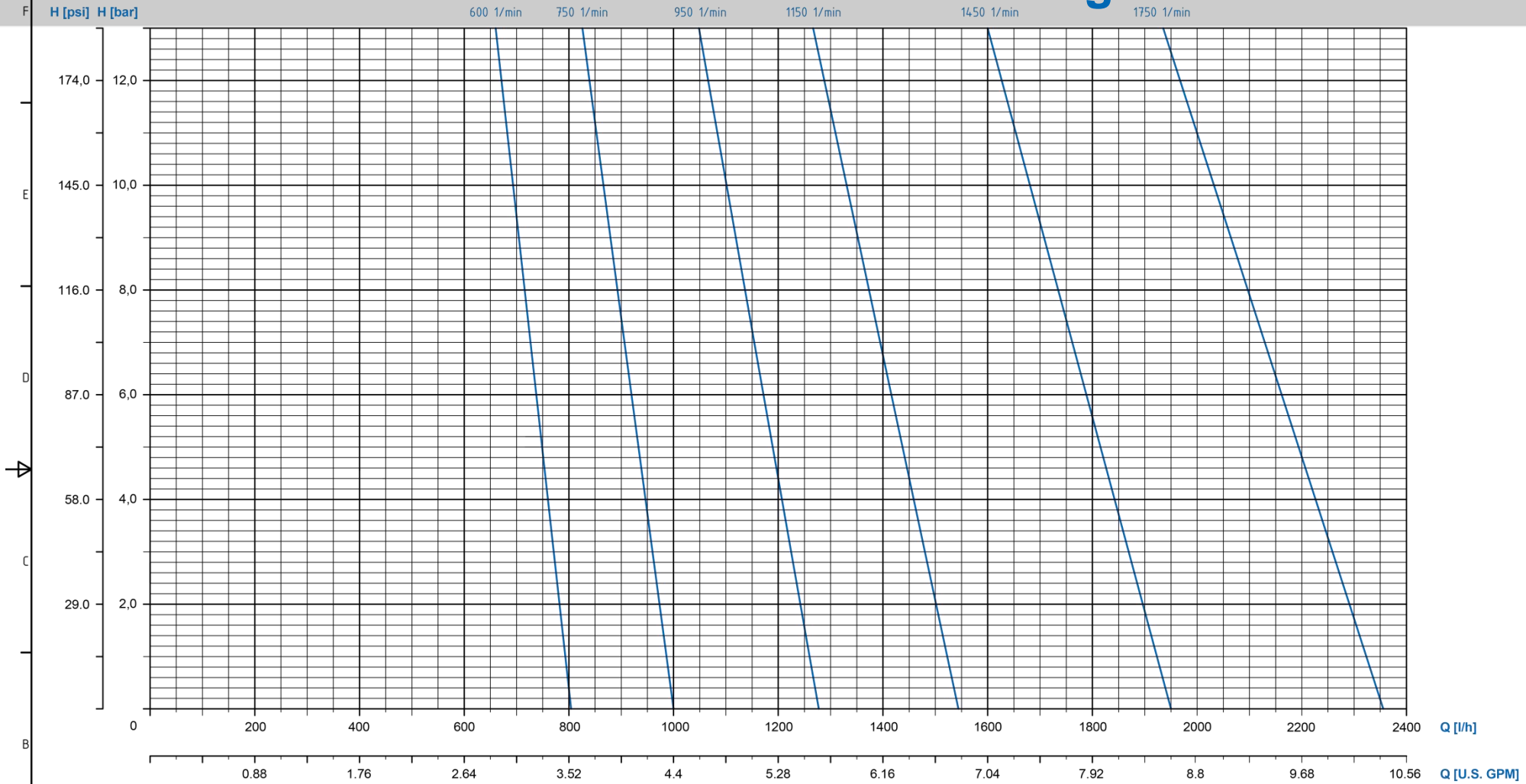


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KENNLINIEN / PERFORMANCE CURVES			
Series	VANE-MAG		
Pump Size	MPA1514 - III°Range Pumps		
Motor Power	0,55kW	1,1kW	1,5kW
Speed	750 / 900 1/min	900 / 1150 1/min	1450 / 1750 1/min
Fluid Viscosity	1 mm²/s	Fluid Density	1 kg/dm³



CURVES VANE-MAG® MPA III° Range - 2014



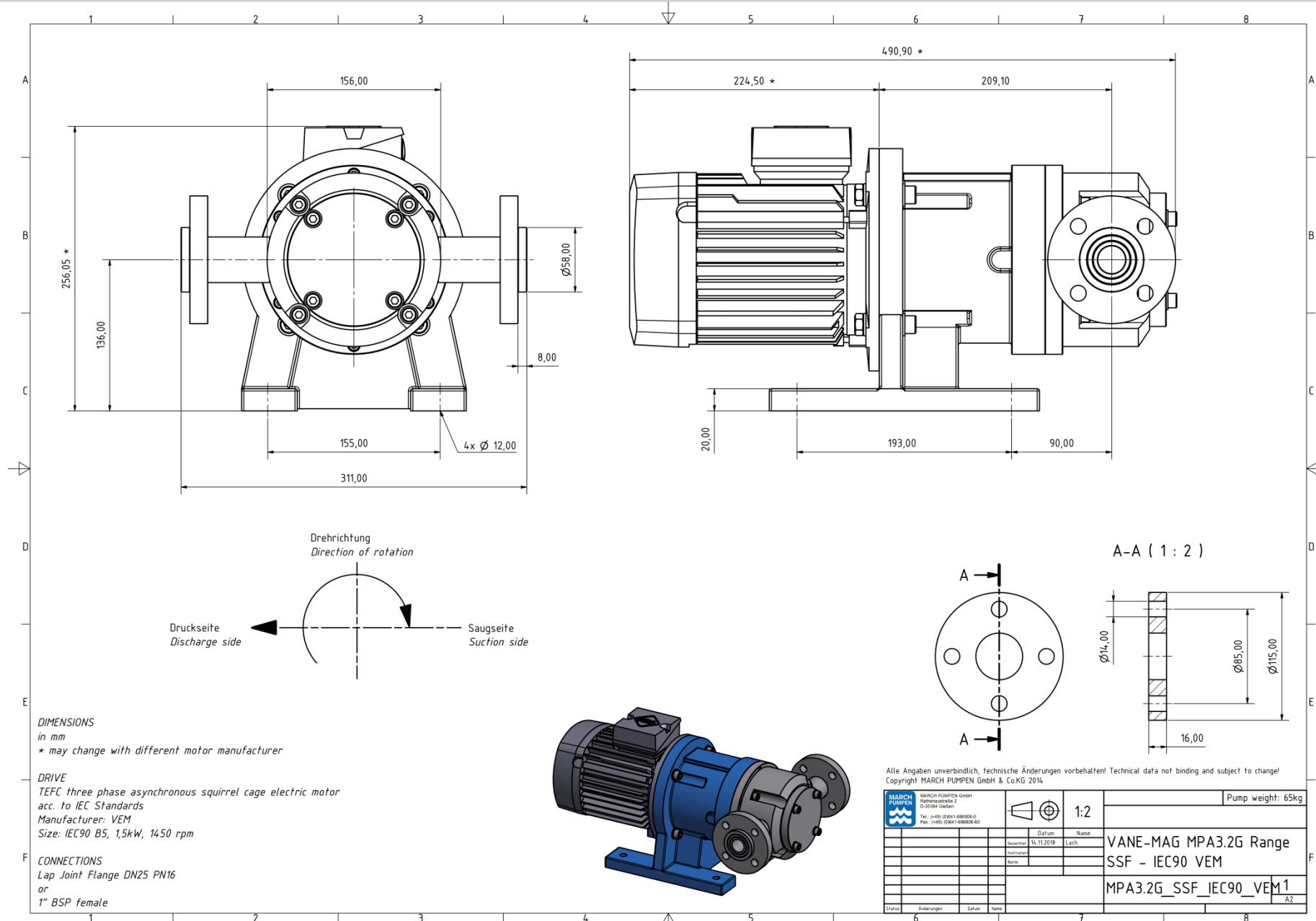
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KENNLINIEN / PERFORMANCE CURVES			
Series	VANE-MAG		
Pump Size	MPA2014 - III°Range Pumps		
Motor Power	0,55kW	1,1kW	1,5kW
Speed	750 / 900 1/min	900 / 1150 1/min	1450 / 1750 1/min
Fluid Viscosity	1 mm ² /s	Fluid Density	1 kg/dm ³



...ADVANCED SOLUTIONS...

DIMENSIONS VANE-MAG® MPA III° Range



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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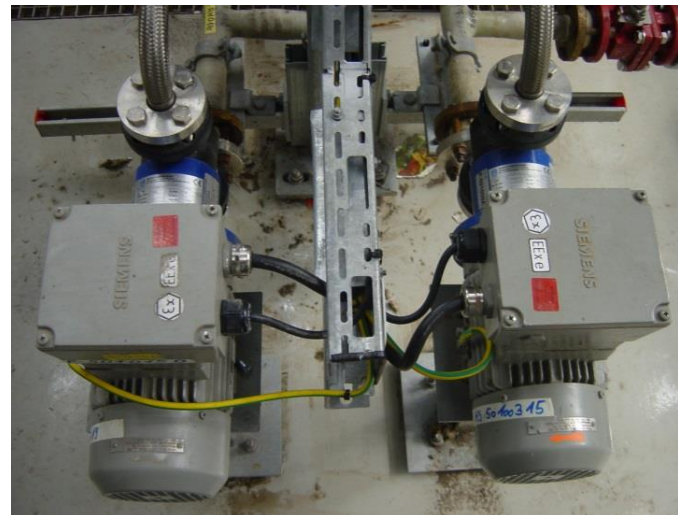
MARCH PUMPEN GmbH Rathenauerstraße 2 D-30306 Ganderkesee		1:2		Pump weight: 65kg
Tel: (+49) (0)561-688006-0 Fax: (+49) (0)561-688006-60		Datum: 16.11.2018 Name: VANE-MAG MPA3.2G Range Lach		
		Gezeichnet: SSF - IEC90 VEM		
		Norm: MPA3.2G_SSF_IEC90_VEM1		
		AZ		
Status:	Änderungen:	Datum:	Name:	



FIELD OF APPLICATIONS OVERVIEW

Designed to handle acids, alkalis and solvents in high head / low flow applications.

- Injection of Ammonia Water in selective non-catalytic reduction plants (SNCR)
- Neutralisation of industrial wastewater
- HCl / Catalyst dosing for Biodiesel Fuel production
- Handling of liquid gases, such as Pentane, Hexane, Isobutane and much more.
- Dosing / Metering applications in general when pulsation is not allowed.
- Feed or Booster Pump for mechanical seals with barrier liquid.
- Feed Pump in motor test rigs.
- Low Flow – High Head applications



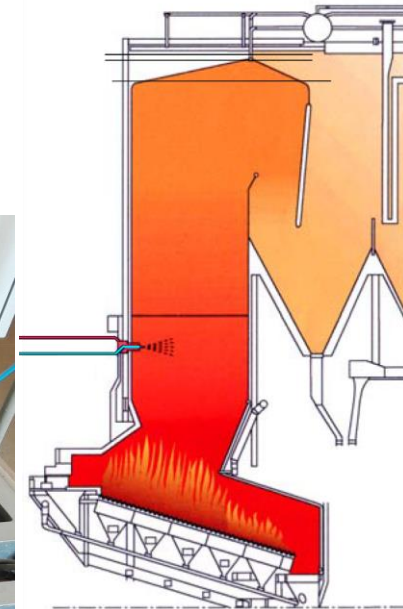
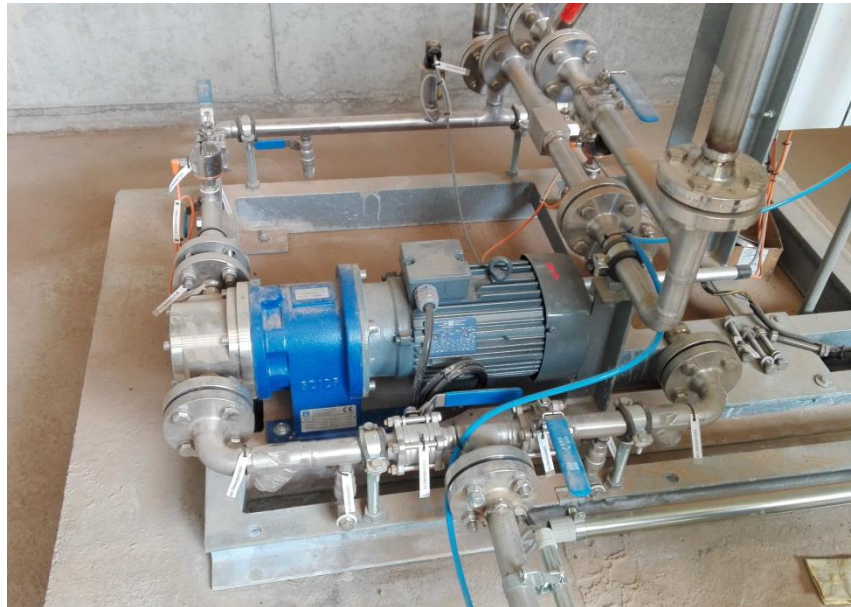
BEST FIELD APPLICATION

Flue-gas denitrification (SNCR) selective non-catalytic reduction -Best Available Technology for NOx Reduction in Waste To Energy Plants

In a selective non-catalytic reduction (SNCR) process of nitrogen oxides, reductants in an aqueous solution (ammonia water, urea) or in gaseous form (ammonia) are injected into hot flue gases.

SNCR plants are plants for reducing nitrogen oxides during combustion processes. So you can find SNCR plants in incineration or combustion plants such as:

- α Municipal waste incinerators
- α Incinerators for wood, biomass and Residual Derived Fuel (RDF)
- α Oil- and coal fired boilers
- α Fluidized bed boilers
- α Glaspans
- α Rotary kilns for cement and limestone
- α Thermal incinerators for soil treatment
- α Liquid waste



COMPETITION IN THIS APPLICATION

Usually this process needs low capacity flows (approx. 100-1000 l/h) at middle to high discharge pressures (approx. 10 bar)

A lot of plant engineers use vertical multistage centrifugal pumps to fulfill the process. The smallest multistage centrifugal pump hydraulic available has Q_{max} 1,1 m³/h. At the duty point of 0,5m³/h at 10 bar, which is the most occurring in the field the pump has a power consumption of ~0,6 kW and an eta at ~25%

The VANE-MAG has a lot of advantages against a centrifugal pump in this field. For the same duty point the VANE-MAG has a total power consumption < 0,37kW due to the better eta of an positive displacement pump. So the power consumption is quite the half and save a lot of money during the operation of the plant.

For SCNR plants with lower capacity flow needed, you must run a lot of liquid with a by-pass if you use a centrifugal pump. The VANE-MAG can be driven with a „Variable Frequency Drive“ to reach the needed duty point and flow without discharge pressure losses.

BEST FIELD APPLICATION

Neutralisation of industrial wastewater

Neutralization plants ensure compliance with the officially prescribed pH limits for wastewater from laboratory and various industrial sectors. All accumulating acidic and alkaline wastewater are neutralized in a fully automatic operation with hydrochloric acid or caustic soda and then fed to the waste water sewer.

Advantages when use VANE-MAG® MP Pumps

- α rotating pump hydraulic instead of oscillating
- α no pulsation dampener is needed
- α speed and flow regulation with VFD w/o pressure loss
- α wet-self-priming pump design
- α no need in multiple metering pumps when higher flows needed.



BEST FIELD APPLICATION

To be continued...



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