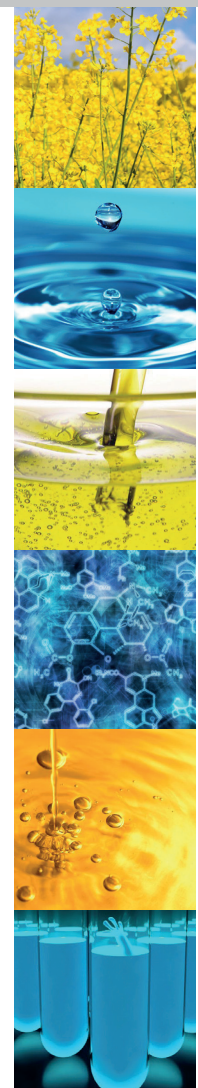
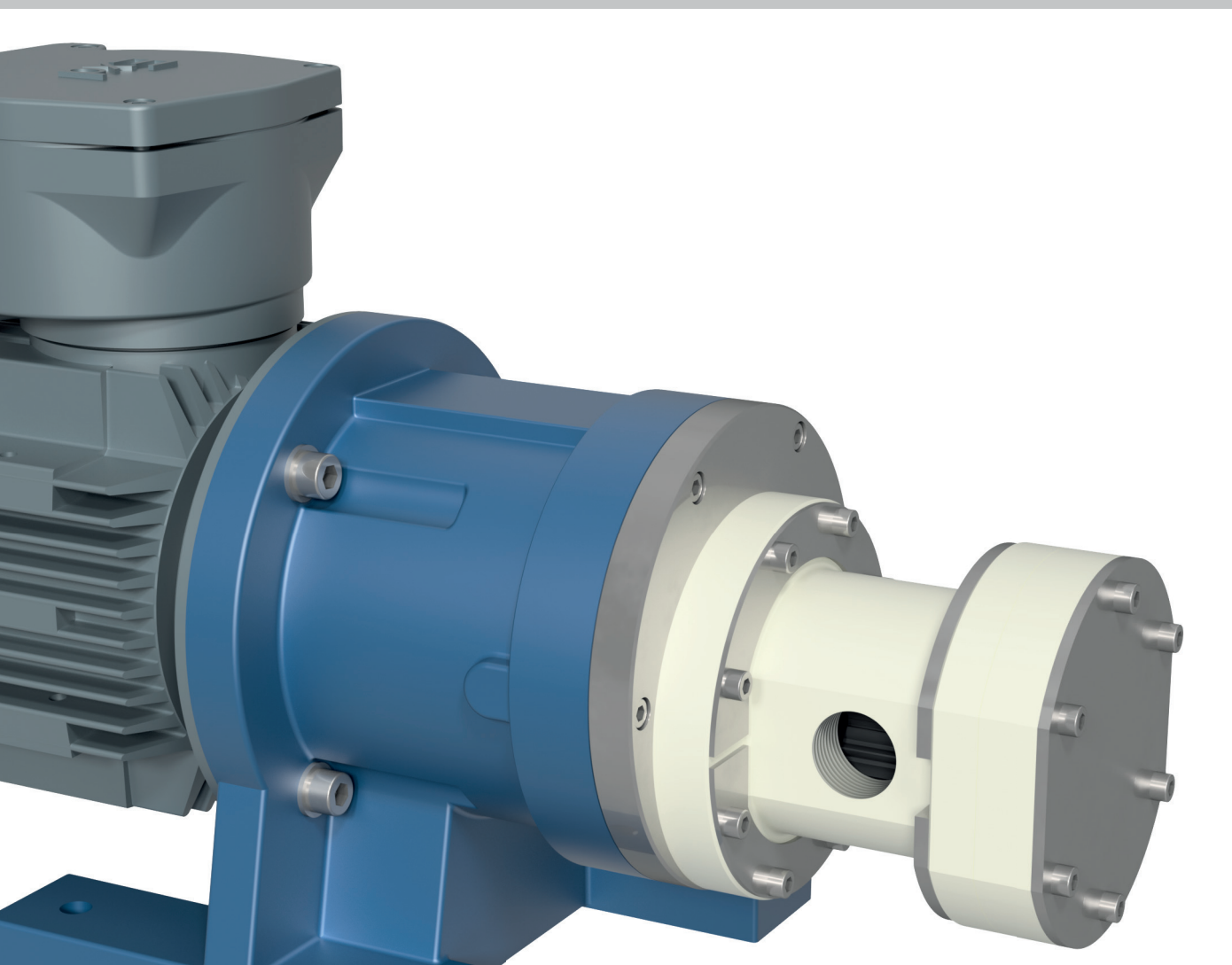


MAGNETIC DRIVEN NON-METALLIC GEAR PUMPS

Series TEF-MAG®

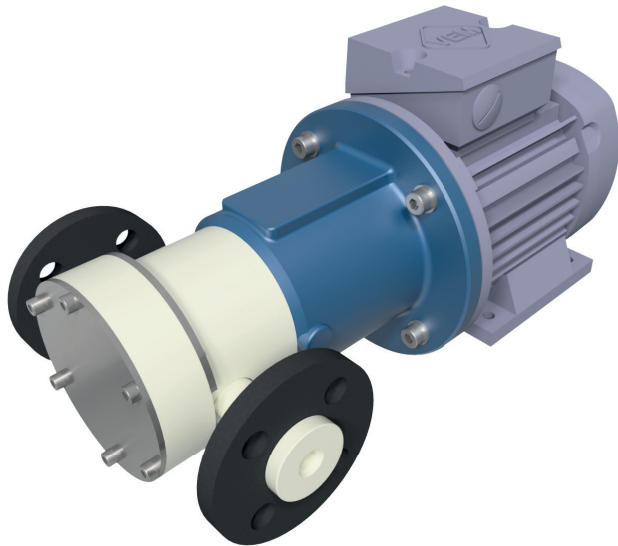


...ADVANCED
SOLUTIONS...

MAGNETICALLY COUPLED, NON-METALLIC GEAR PUMPS

Series TEF-MAG®

TEF-MAG 201



TECHNICAL DATA

Nominal speed:	1450 1/min (50Hz) 1750 1/min (60Hz)
Nominal flow:	260 l/h (68.68 us gph) 330 l/h (87.18 us gph)
Differential pressure, max.:	10 bar (145 psi)
Differential pressure, max.:	10 bar (145 psi)
Design pressure, max.:	PN 25 bar (362,59 psi)
Density, max.:	1,9 kg/dm ³
Viscosity, max.:	5000 cP
NPSHR:	0,5 m
Drive power:	0,37 kW

APPLICATIONS

The pumps have proven their performance in every application that requires lower flow rates and high discharge pressures in combination with corrosive liquids and pulsation-free supplies.

Typical Applications:

- Metering corrosive catalysts in Biodiesel Plants
- Waste Water Treatment, neutralisation, flocculation
- Battery recycling plants
- Alkaline water electrolysis
- Metering Applications
- Pharmaceutical-, Medical-, Bio- Engineering

CONNECTIONS

Flanged:	DN15 ANSI 1/2"
----------	-------------------

MATERIALS

Housings: PP, PE, PVC, PVDF, PEEK
O-Rings: EPDM, Viton, Kalrez
Shafts: Al₂O₃ >99%, SSiC
Gears: PTFEC, PVDF, PEEK, PPS
Bearings: PTFEC, Graphite, PEEK, SSiC, PPS

FDA compliant materials are available upon request.

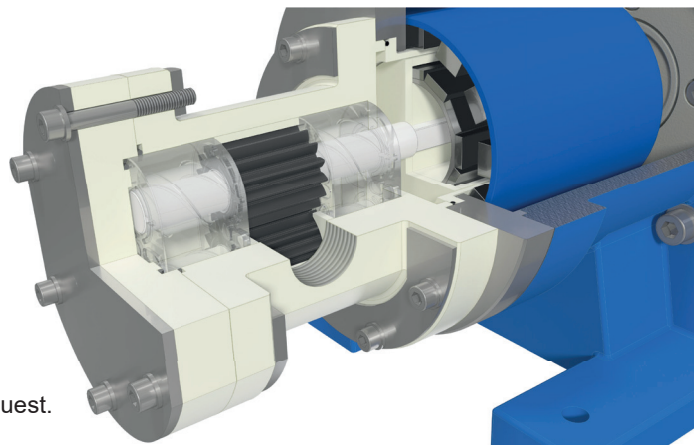
FEATURES AND BENEFITS

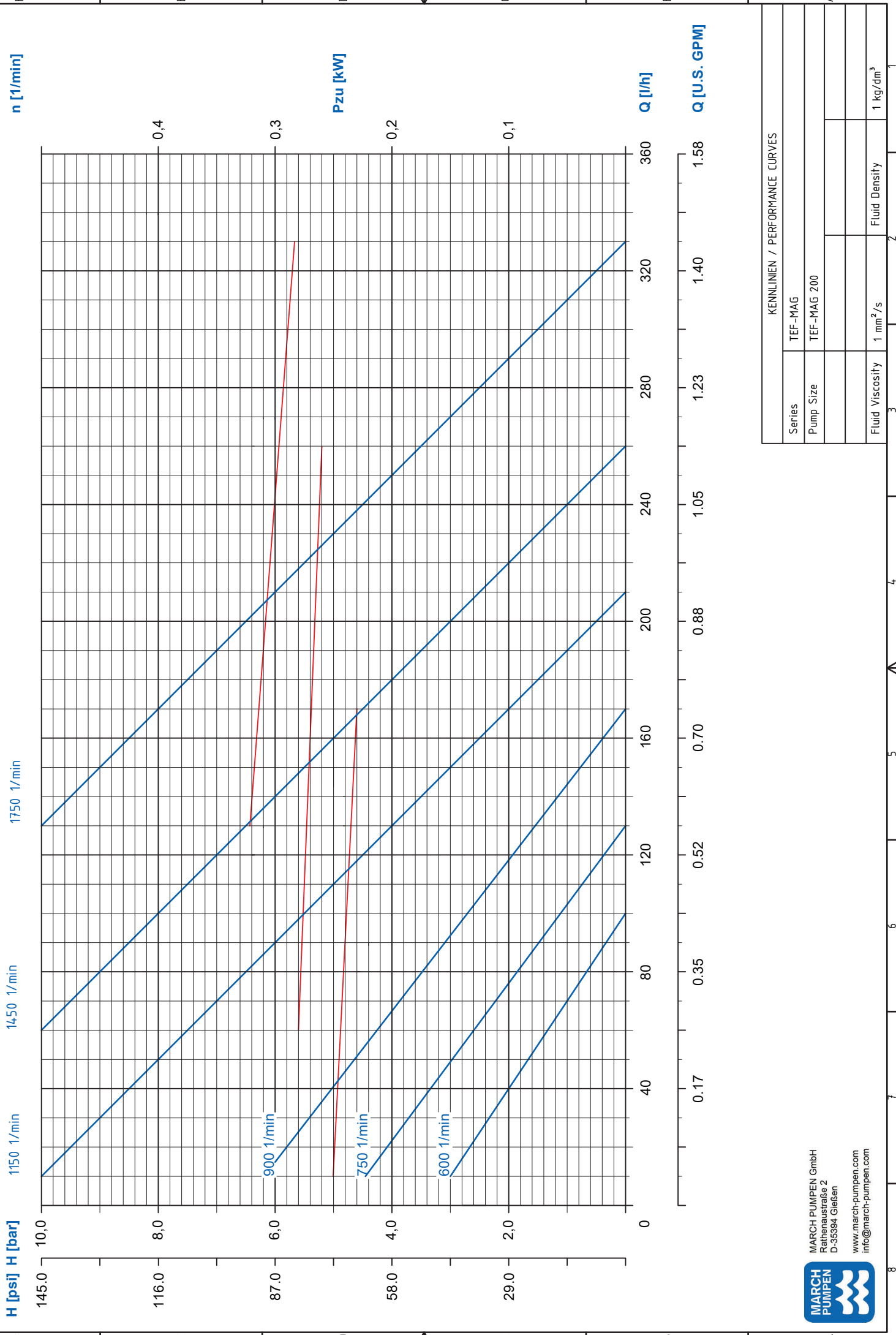
- European Patent No. 3786416
- USA Patent No. US 10,189,005 B2
- No need in expensive high alloys like Duplex, Hastelloy C or Titanium
- Rotary positive displacement pump
- External gear pump
- Nearby pulsation free
- Leak-free
- Magnetically coupled
- Low NPSHR value
- Designed for Industrial Heavy Duty
- Corrosion resistant
- Wetted parts complete non-metallic
- Self-priming (wet)
- Dry-run capable
- High discharge pressures
- Low flow rates
- Integrated Variable Frequency Drive (available on request)
- Pump acc. to ATEX 2014/34/EU

PRODUCT DESCRIPTION

MARCH Series TEF-MAG® gear pumps are chemical resistant, non-metallic, rotating positive displacement pumps, external gear type and magnetically coupled. TEF-MAG® gear pumps generate low volumetric flows with middle to high differential pressures and approximately no pulsation. The pump housings are machined from chemical resistant solid block polymers like PP, PE, PVC, PVDF or PEEK. The internal hydraulic parts like gears and shafts are also made of highly corrosion resistant non-metallic materials. The power transmission of drive and pump happens in a contactless way with strong NdFeB permanent magnets. So the pump is able to work without any mechanical shaft seals, which guarantees save supplies without any leakage of corrosive, toxic and explosive fluids.

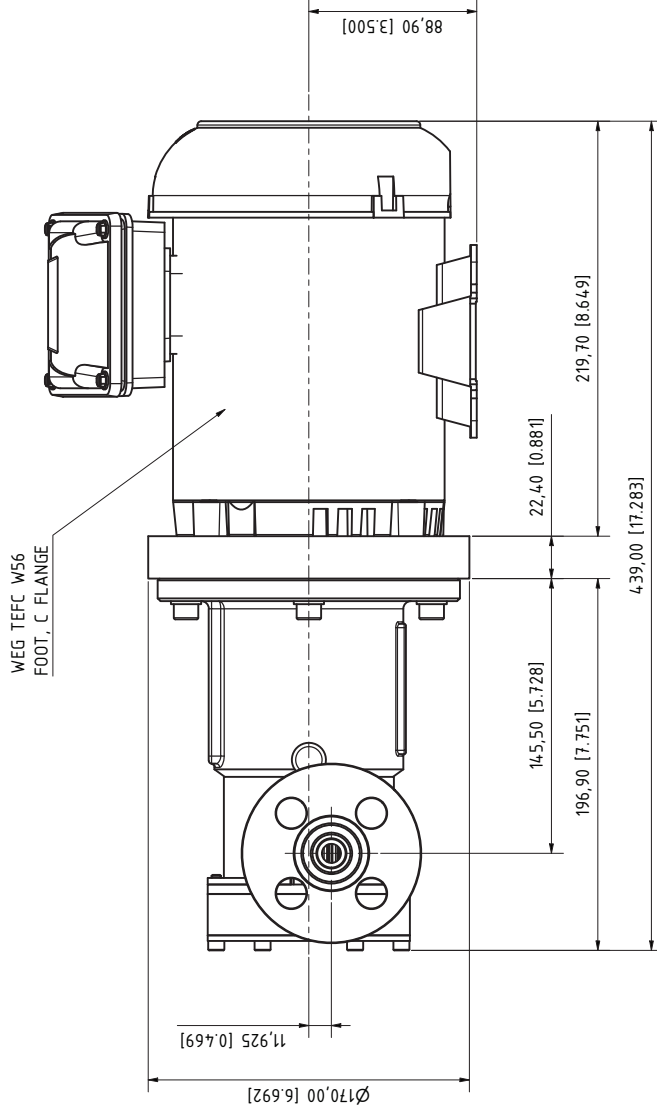
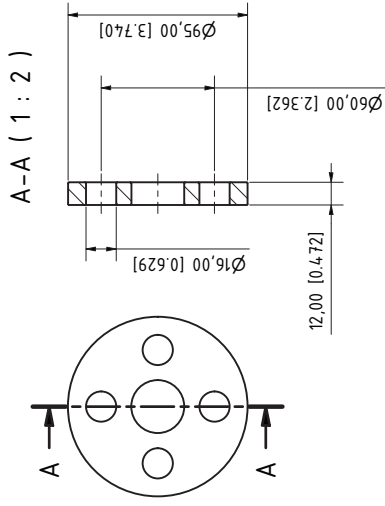
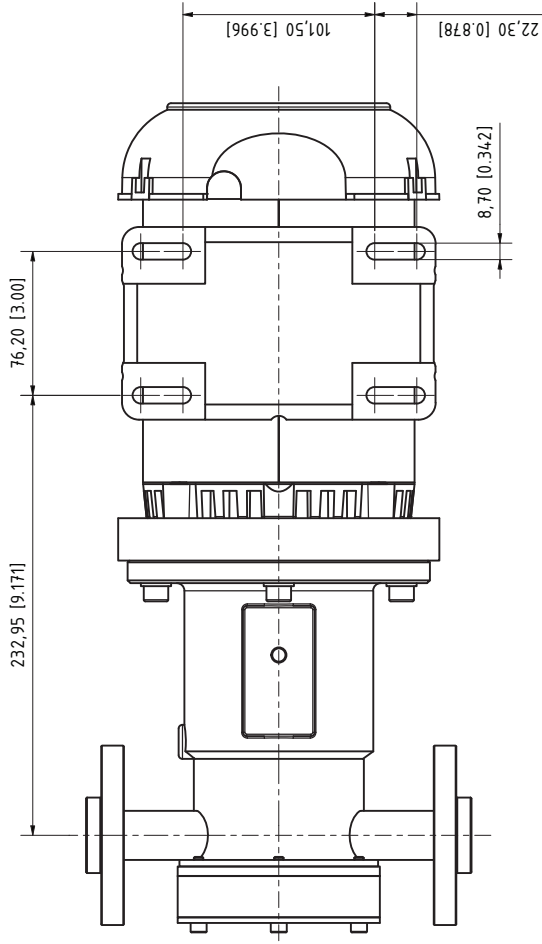
Pumps for potentially explosive ATEX Zones 1 or 2, are available in non-metallic materials



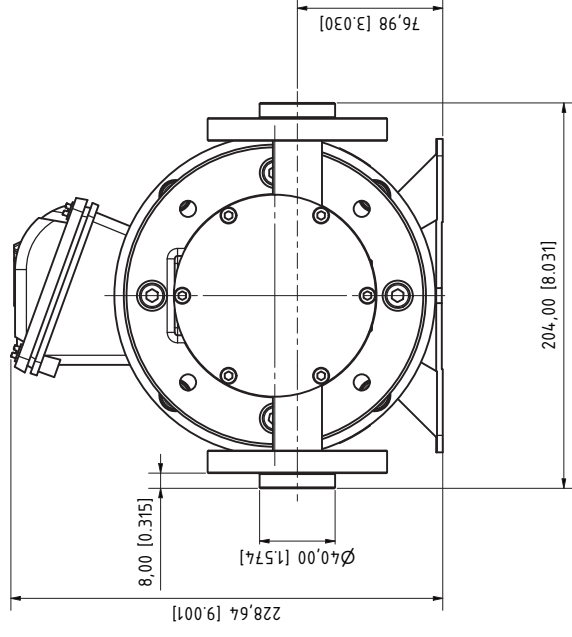


KENNLINIEN / PERFORMANCE CURVES	
Series	TEF-MAG
Pump Size	TEF-MAG 200
Fluid Viscosity	1 mm ² /s
Fluid Density	1 kg/dm ³

Execution:
 PP-GF (30% glass fiber reinforced) with steel insert
 Connection dimensions according to: ANSI / ASME B 16.5 class 150,
 ASTM D 4024, BS 1560, BS EN 1759



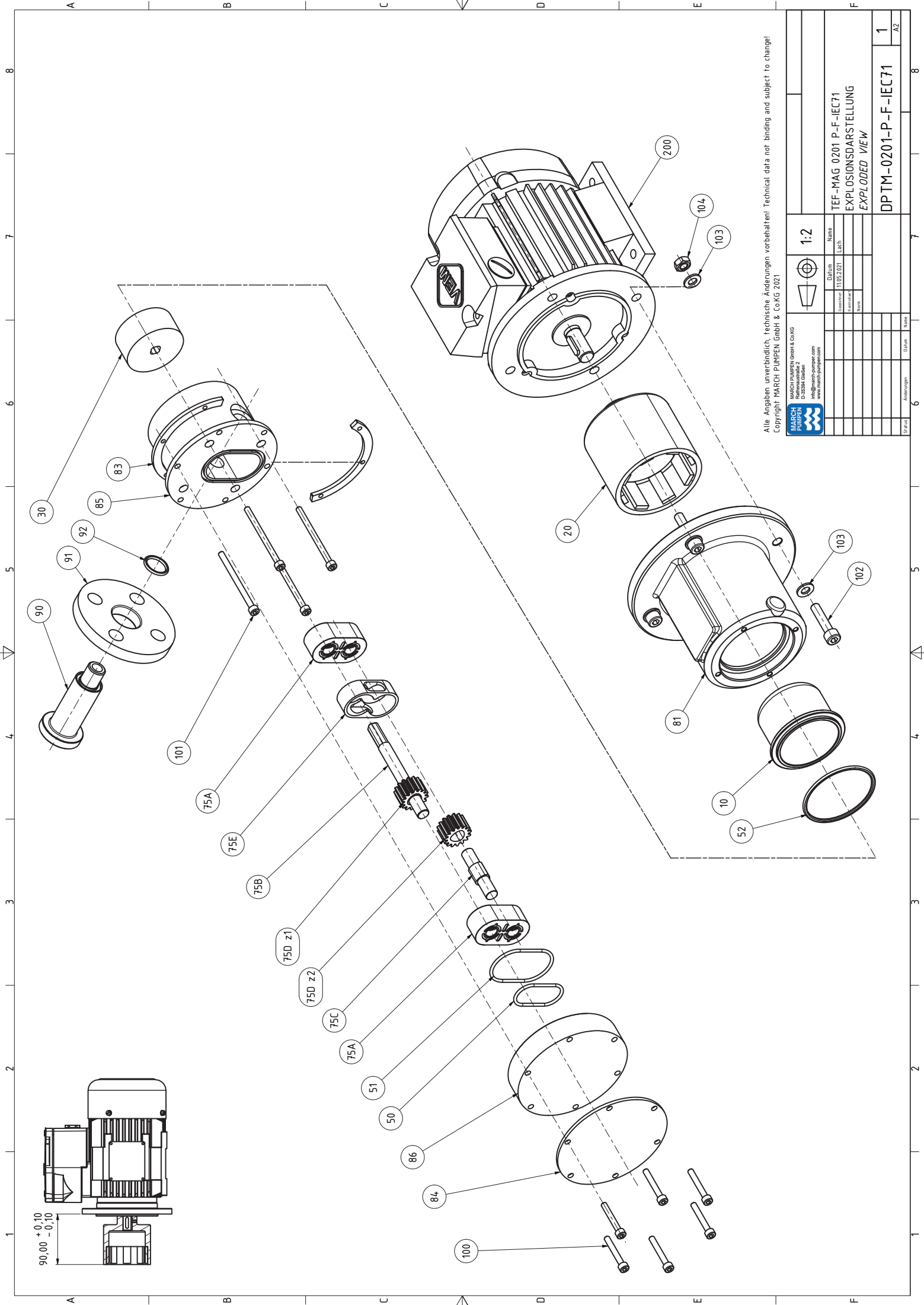
WEG TEFC W56
 FOOT, C FLANGE



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Weg			
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Änderungen		Datum	
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ABMESSUNGEN			
DIMENSIONS			
TM-0201-P-FA-N56C			



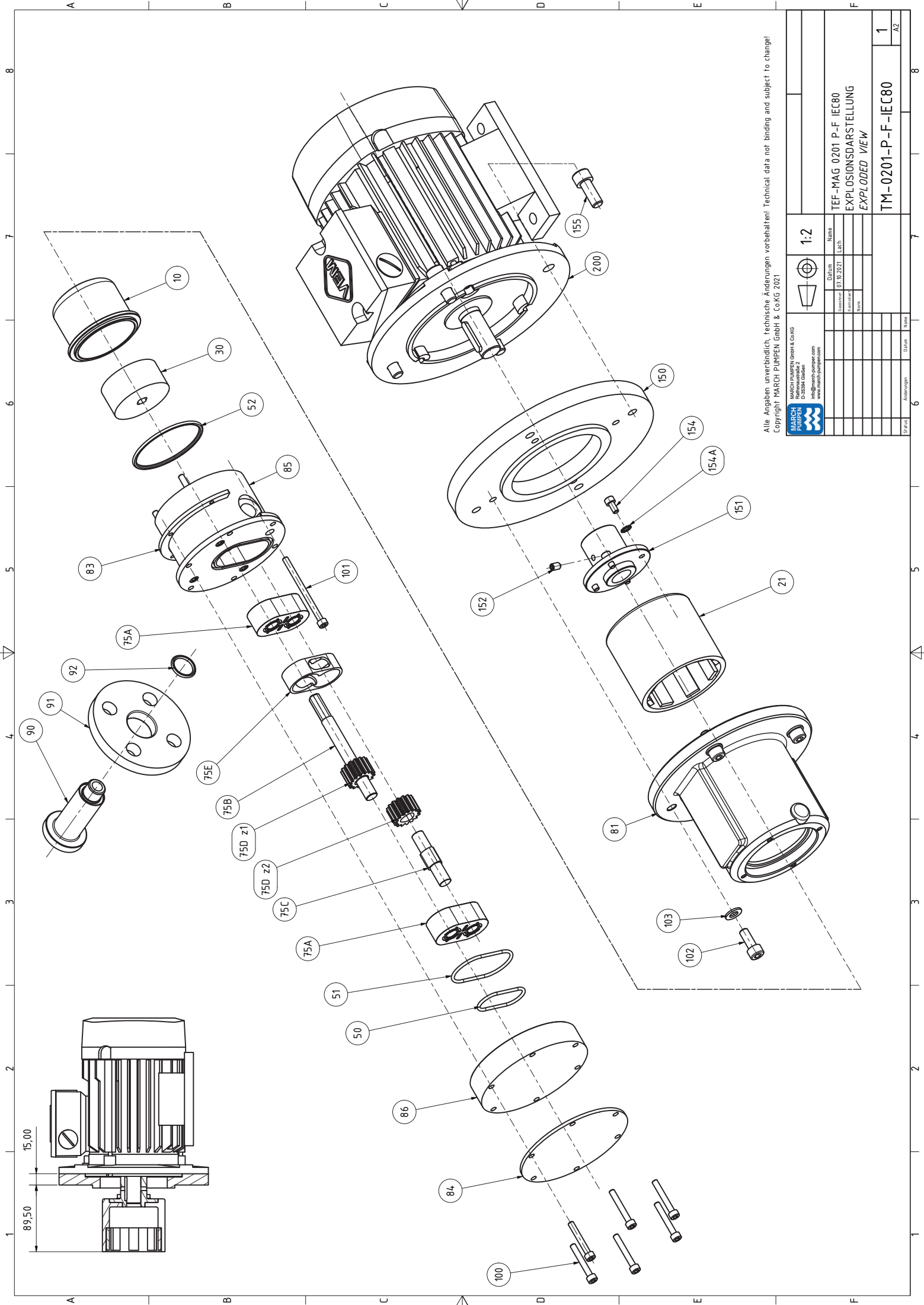
90,00 +0.10
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Druck		Zeichnung	11.05.2021
Änderungen		Gezeichnet	
Datum		Geprüft	
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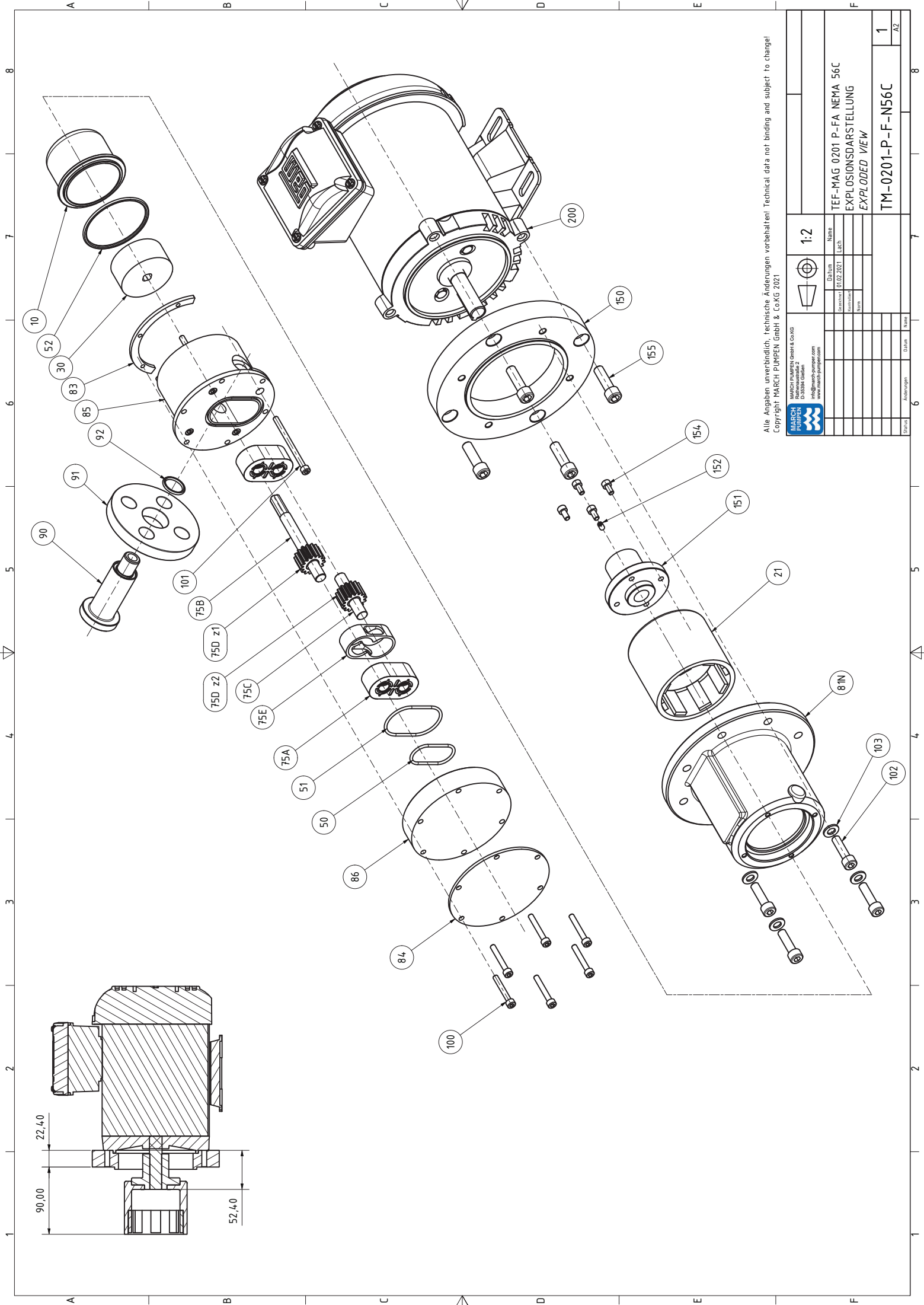
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Prüfer			
TEF-MAG 0201 P-F IEC80 EXPLOSIONSDARSTELLUNG EXPLODED VIEW			
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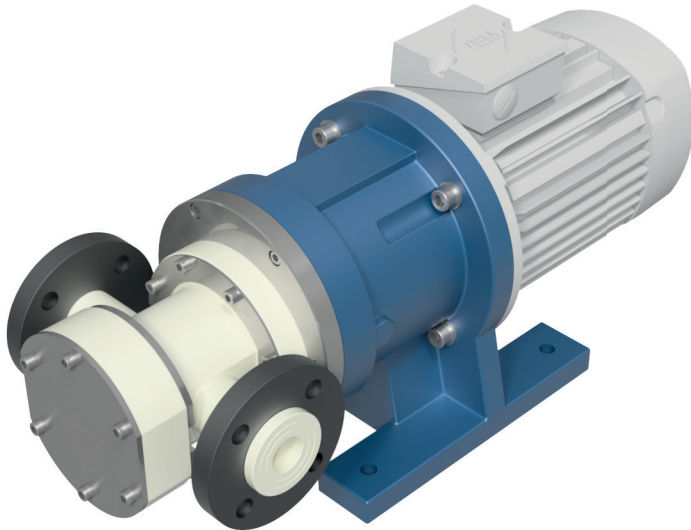
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 www.march-pumpen.com

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TEF-MAG 0201 P-FA NEMA 56C			
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EXPLODED VIEW			
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			A2

MAGNETICALLY COUPLED, NON-METALLIC GEAR PUMPS

Series TEF-MAG®

TEF-MAG 1501



TECHNICAL DATA

Nominal speed:	1450 1/min (50Hz) 1750 1/min (60Hz)
Nominal flow:	1375 l/h (363 us gph) 1675 l/h (442 us gph)
Differential pressure, max.:	10 bar (145 psi)
Design pressure, max.:	PN 25 bar (362,59 psi)
Temperature, max.:	120°C (248°F)
Density, max.:	1,9 kg/dm ³
Viscosity, max.:	5000 cP
NPSHR:	0,5 m
Drive power:	1,5 kW

APPLICATIONS

The pumps have proven their performance in every application that requires lower flow rates and high discharge pressures in combination with corrosive liquids and pulsation-free supplies.

Typical Applications:

- Metering corrosive catalysts in Biodiesel Plants
- Waste Water Treatment, neutralisation, flocculation
- Battery recycling plants
- Alkaline water electrolysis
- Metering Applications
- Pharmaceutical-, Medical-, Bio- Engineering

CONNECTIONS

Threaded:	G1"
Flanged:	DN25 ANSI 1"

MATERIALS

Housings: PP, PE, PVC, PVDF, PEEK
O-Rings: EPDM, Viton, Kalrez
Shafts: Al₂O₃ >99%, SSiC
Gears: PTFEC, PVDF, PEEK, PPS
Bearings: PTFEC, Graphite, PEEK, SSiC, PPS

FDA compliant materials are available upon request.

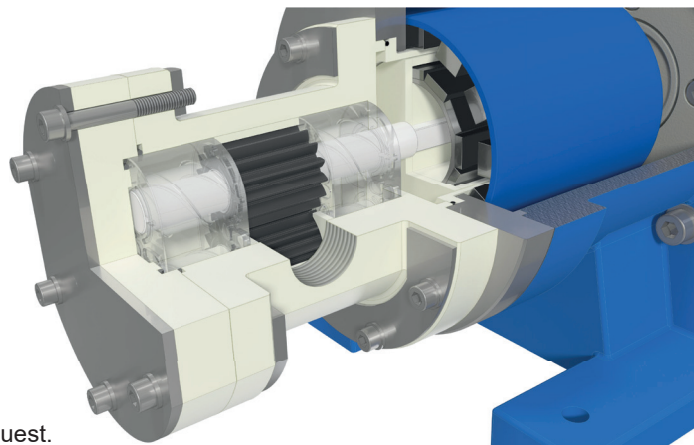
FEATURES AND BENEFITS

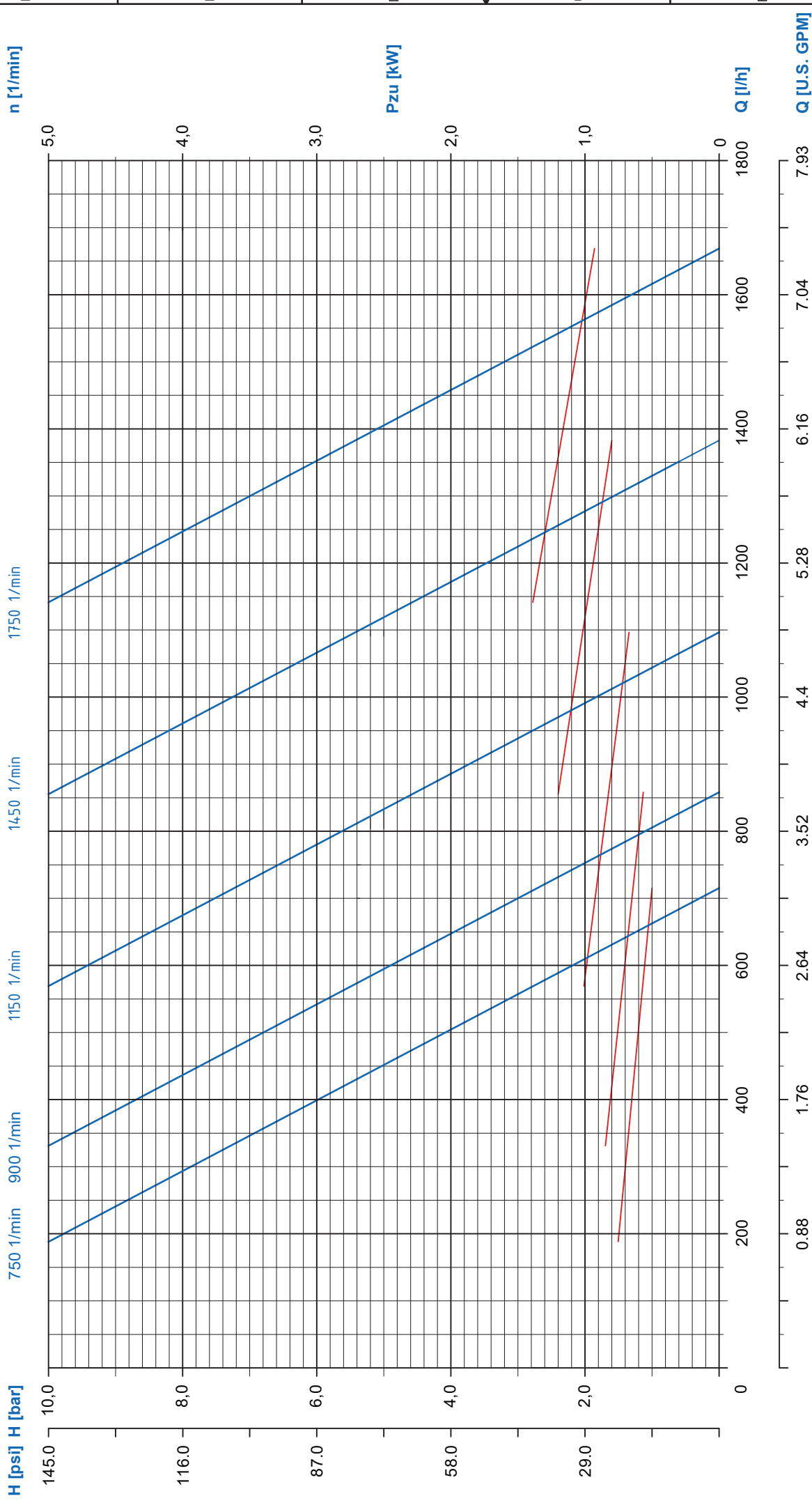
- European Patent No. 3786416
- USA Patent No. US 10,189,005 B2
- No need in expensive high alloys like Duplex, Hastelloy C or Titanium
- Rotary positive displacement pump
- External gear pump
- Nearby pulsation free
- Leak-free
- Magnetically coupled
- Low NPSHR value
- Designed for Industrial Heavy Duty
- Corrosion resistant
- Wetted parts complete non-metallic
- Self-priming (wet)
- Dry-run capable
- High discharge pressures
- Low flow rates
- Integrated Variable Frequency Drive (available on request)
- Pump acc. to ATEX 2014/34/EU

PRODUCT DESCRIPTION

MARCH Series TEF-MAG® gear pumps are chemical resistant, non-metallic, rotating positive displacement pumps, external gear type and magnetically coupled. TEF-MAG® gear pumps generate low volumetric flows with middle to high differential pressures and approximately no pulsation. The pump housings are machined from chemical resistant solid block polymers like PP, PE, PVC, PVDF or PEEK. The internal hydraulic parts like gears and shafts are also made of highly corrosion resistant non-metallic materials. The power transmission of drive and pump happens in a contactless way with strong NdFeB permanent magnets. So the pump is able to work without any mechanical shaft seals, which guarantees save supplies without any leakage of corrosive, toxic and explosive fluids.

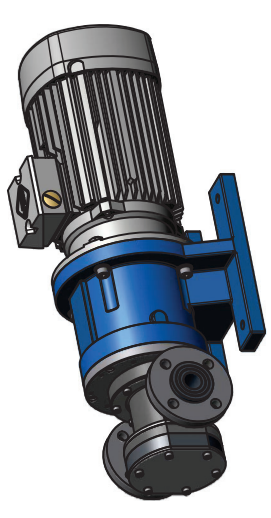
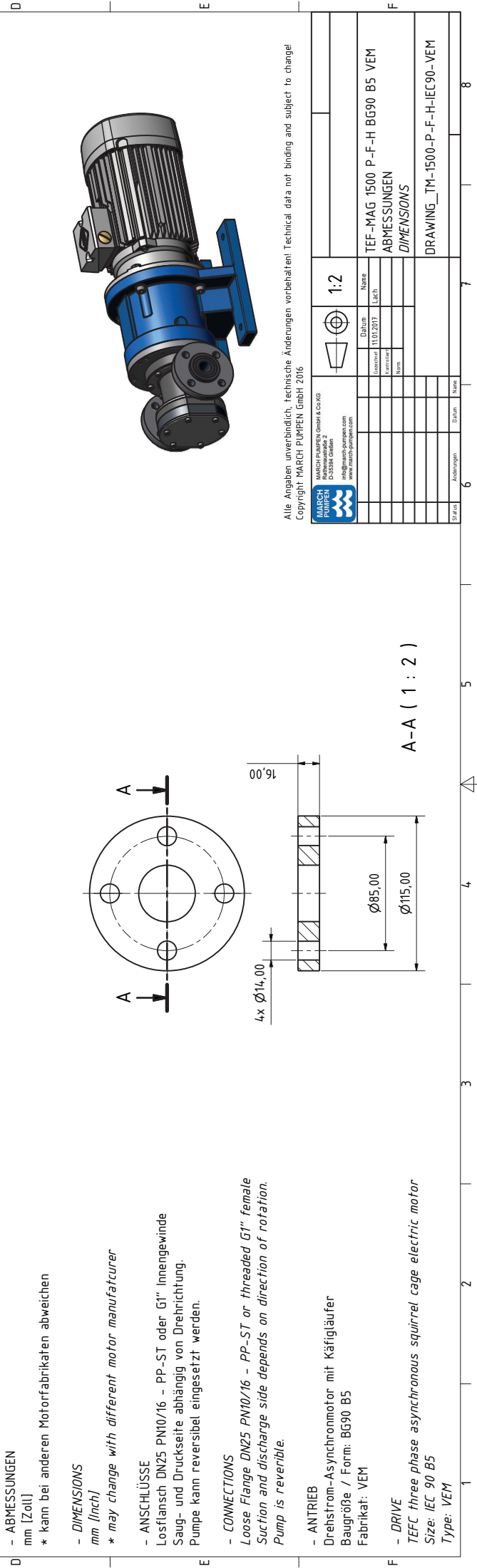
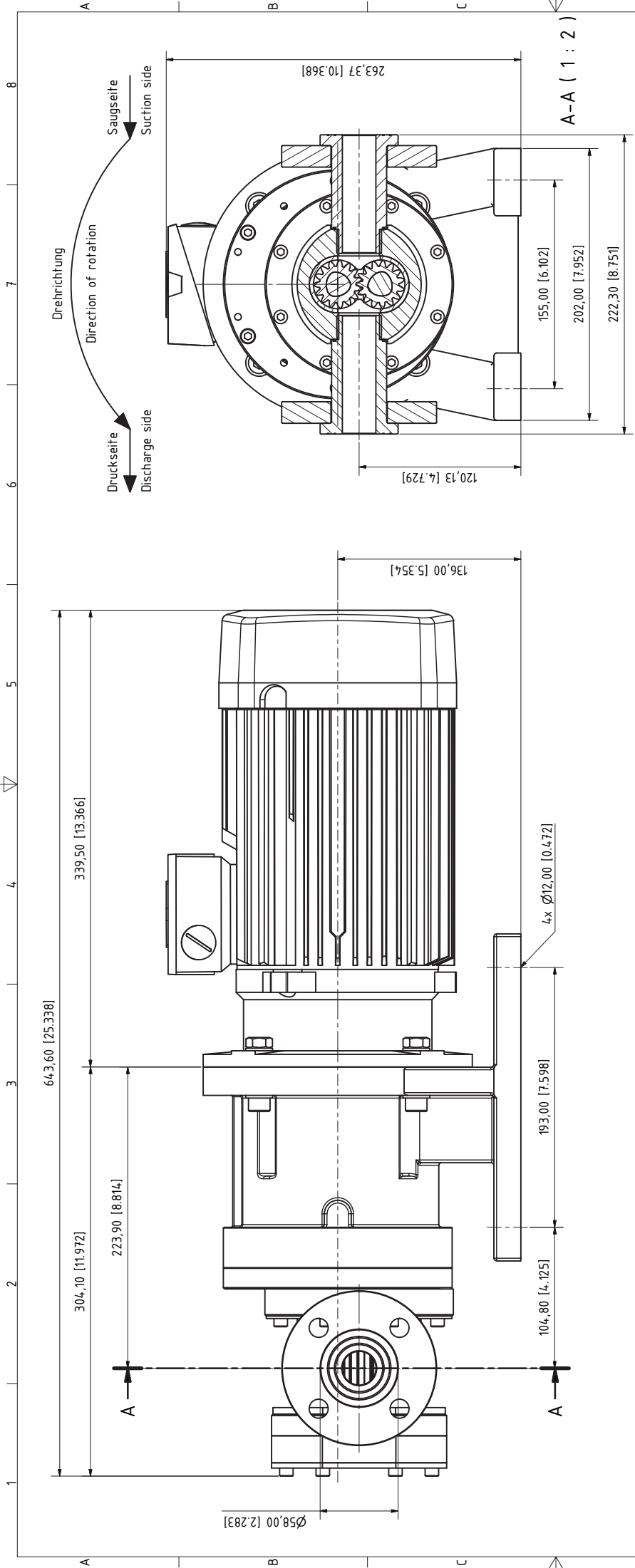
Pumps for potentially explosive ATEX Zones 1 or 2, are available in non-metallic materials





KENNLINIEN / PERFORMANCE CURVES

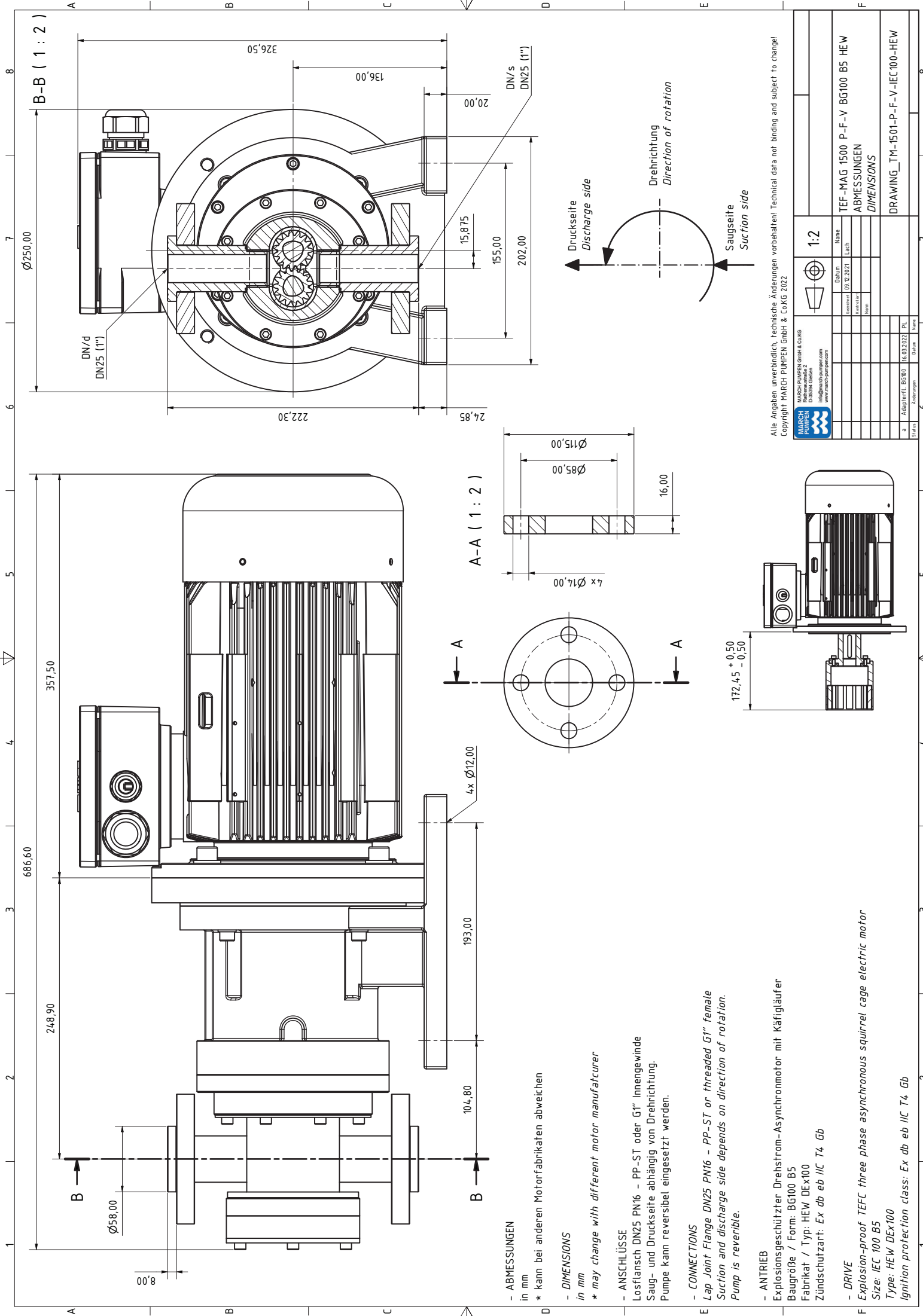
Series	TEF-MAG	
Pump Size	TEF-MAG 1500	
Fluid Viscosity	1 mm ² /s	Fluid Density
		1 kg/dm ³



- ABMESSUNGEN
mm [Zoll]
- * kann bei anderen Motorfabrikaten abweichen
- DIMENSIONS
mm [Inch]
- * may change with different motor manufacturer
- ANSCHLÜSSE
Losflansch DN25 PN10/16 - PP-ST oder GI" Innengewinde
Saug- und Druckseite abhängig von Drehrichtung.
Pumpe kann reversibel eingesetzt werden.
- CONNECTIONS
Loose Flange DN25 PN10/16 - PP-ST or threaded GI" female
Suction and discharge side depends on direction of rotation.
Pump is reversible.
- ANTRIEB
Drehstrom-Asynchronmotor mit Käfigläufer
Baugröße / Form: BG90 B5
Fabrikat: VEM
- DRIVE
TEFC three phase asynchronous squirrel cage electric motor
Size: IEC 90 B5
Type: VEM

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 MARCH PUMPEN GmbH & Co. KG Rehrhausstraße 2 D-33848 Cadden www.march-pumpen.com		Name: _____ Datum: _____ Version: _____ Blatt: _____
1:2		Name: _____ Datum: _____ Version: _____ Blatt: _____
TEF-MAG 1500 P-F-H BG90 B5 VEM ABMESSUNGEN DIMENSIONS		Name: _____ Datum: _____ Version: _____ Blatt: _____
DRAWING_TM-1500-P-F-H-IEC90-VEM		Name: _____ Datum: _____ Version: _____ Blatt: _____



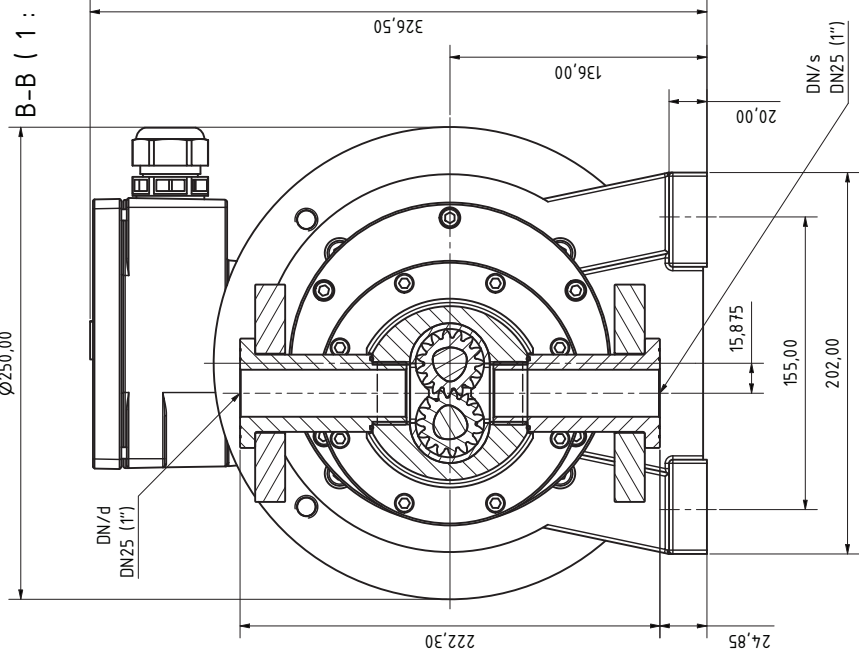
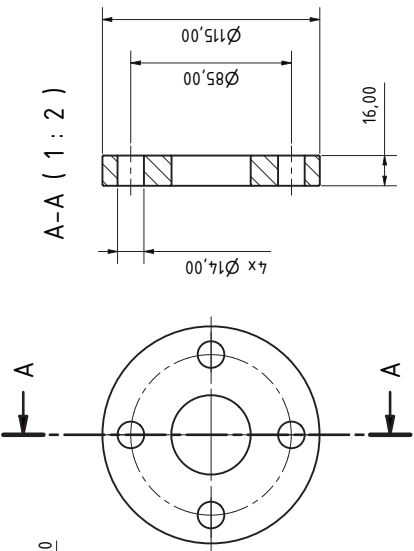
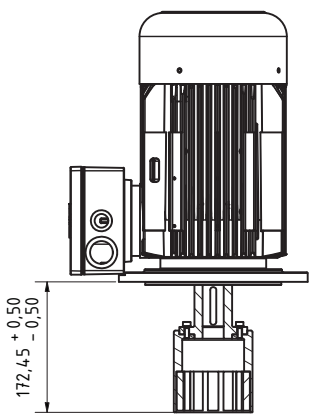
- ABMESSUNGEN
in mm
- * kann bei anderen Motorfabrikaten abweichen
- DIMENSIONS
in mm
- * may change with different motor manufacturer
- ANSCHLÜSSE
Losflansch DN25 PN16 - PP-ST oder G1" Innengewinde
Saug- und Druckseite abhängig von Drehrichtung
Pumpe kann reversibel eingesetzt werden.
- CONNECTIONS
Lap Joint Flange DN25 PN16 - PP-ST or threaded G1" female
Suction and discharge side depends on direction of rotation.
Pump is reversible.
- ANTRIEB
Explosiongeschützter Drehstrom-Asynchronmotor mit Käfigläufer
Baugröße / Form: BG100 B5
Fabrikat / Typ: HEW DEX100
Zündschutzart: Ex db eb IIC T4 Gb
- DRIVE
Explosion-proof TEFC three phase asynchronous squirrel cage electric motor
Size: IEC 100 B5
Type: HEW DEX100
Ignition protection class: Ex db eb IIC T4 Gb

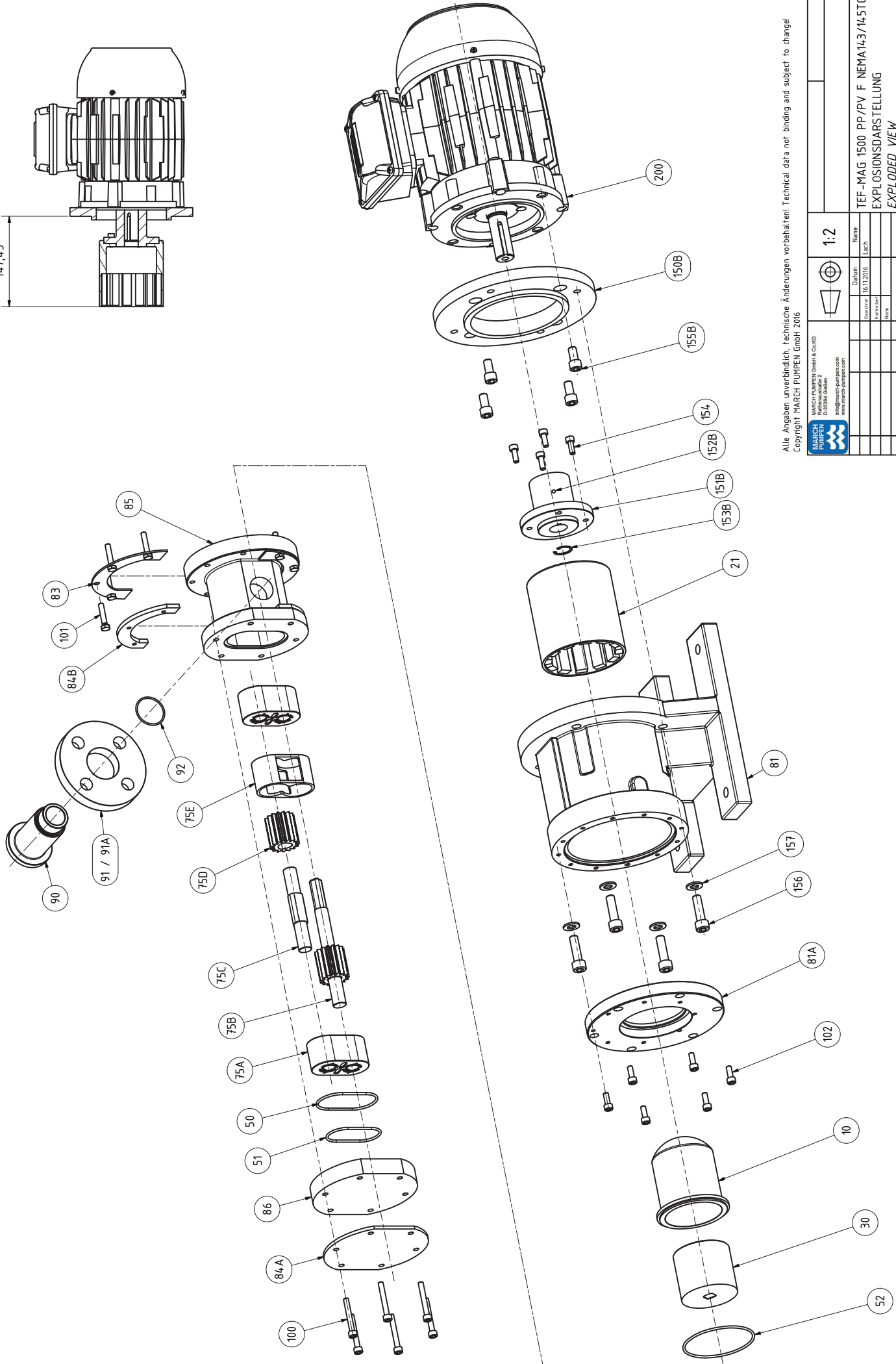
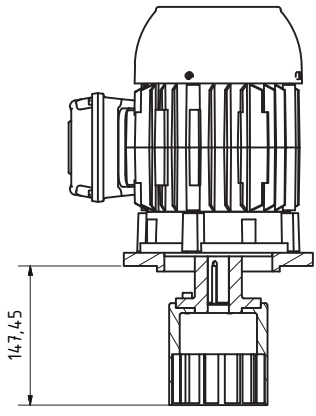
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Abgefragt		Name	
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Geprüft		Name	
Abgefragt		Name	
Zustimmend		Name	

TEF-MAG 1500 P-F-V BG100 B5 HEW
ABMESSUNGEN
DIMENSIONS
DRAWING_TM-1501-P-F-V-IEC100-HEW





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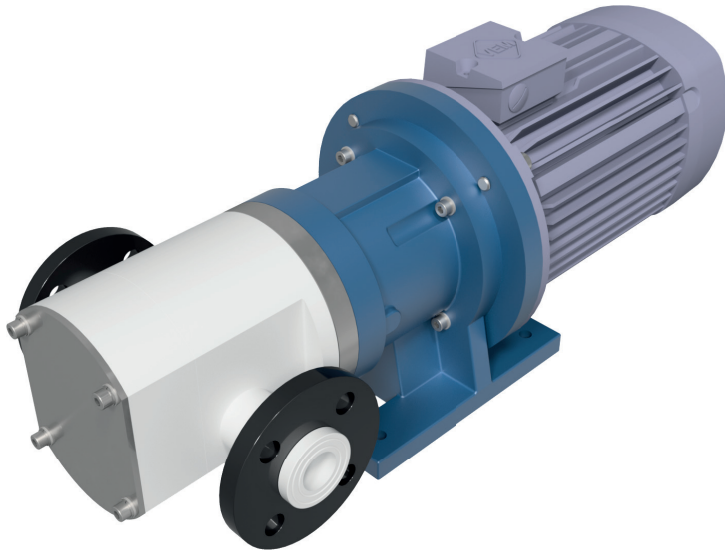


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Prüfer			
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Datum			
Name			
TEF-MAG 1500 PP/PV F NEMA143/145TC			
EXPLOSIONSDARSTELLUNG			
EXPLODED VIEW			
EXP-TM1500-P-F-NEMA143_145TC			

MAGNETICALLY COUPLED, NON-METALLIC GEAR PUMPS

Series TEF-MAG®

TEF-MAG 3501



TECHNICAL DATA

Nominal speed:	1450 1/min (50Hz) 1750 1/min (60Hz)
Nominal flow:	3750 l/h (990 us gph) 4650 l/h (1228 us gph)
Differential pressure, max.:	10 bar (145 psi)
Design pressure, max.:	PN 25 bar (362,59 psi)
Temperature, max.:	120°C (248°F)
Density, max.:	1,9 kg/dm ³
Viscosity, max.:	5000 cP
NPSHR:	0,5 m
Drive power:	2,2 ... 4,0 kW

APPLICATIONS

The pumps have proven their performance in every application that requires lower flow rates and high discharge pressures in combination with corrosive liquids and pulsation-free supplies.

Typical Applications:

- Metering corrosive catalysts in Biodiesel Plants
- Waste Water Treatment, neutralisation, flocculation
- Battery recycling plants
- Alkaline water electrolysis
- Metering Applications
- Pharmaceutical-, Medical-, Bio- Engineering

CONNECTIONS

Threaded:	G1 1/4"
Flanged:	DN32 ANSI 1 1/4"

MATERIALS

Housings: PP, PE, PVC, PVDF, PEEK
O-Rings: EPDM, Viton, Kalrez
Shafts: Al₂O₃ >99%, SSiC
Gears: PTFEC, PVDF, PEEK, PPS
Bearings: PTFEC, Graphite, PEEK, SSiC, PPS

FDA compliant materials are available upon request.

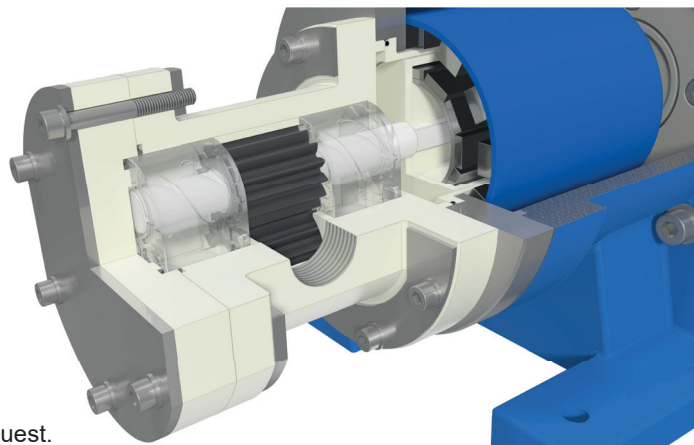
FEATURES AND BENEFITS

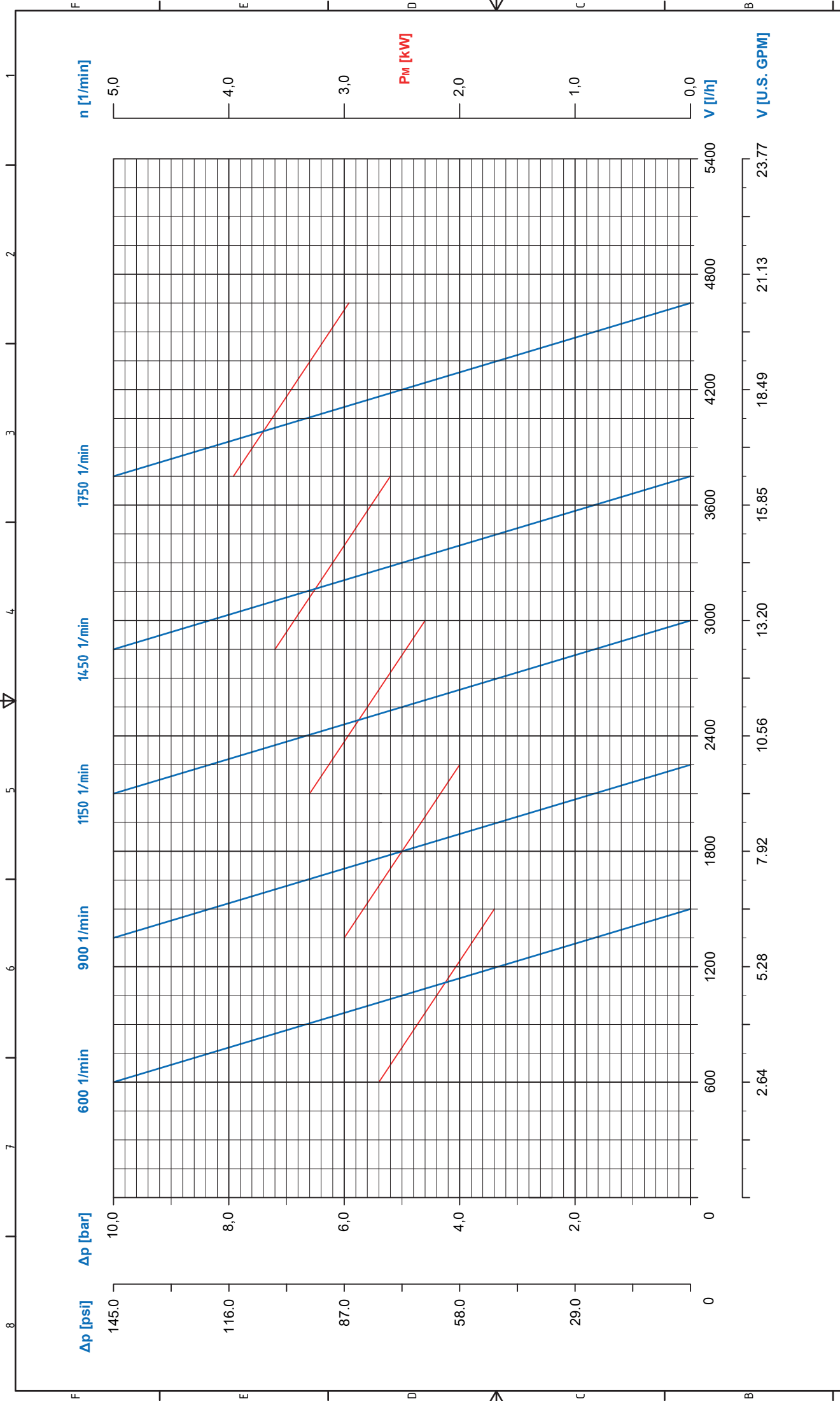
- European Patent No. 3786416
- USA Patent No. US 10,189,005 B2
- No need in expensive high alloys like Duplex, Hastelloy C or Titanium
- Rotary positive displacement pump
- External gear pump
- Nearby pulsation free
- Leak-free
- Magnetically coupled
- Low NPSHR value
- Designed for Industrial Heavy Duty
- Corrosion resistant
- Wetted parts complete non-metallic
- Self-priming (wet)
- Dry-run capable
- High discharge pressures
- Low flow rates
- Integrated Variable Frequency Drive (available on request)
- Pump acc. to ATEX 2014/34/EU

PRODUCT DESCRIPTION

MARCH Series TEF-MAG® gear pumps are chemical resistant, non-metallic, rotating positive displacement pumps, external gear type and magnetically coupled. TEF-MAG® gear pumps generate low volumetric flows with middle to high differential pressures and approximately no pulsation. The pump housings are machined from chemical resistant solid block polymers like PP, PE, PVC, PVDF or PEEK. The internal hydraulic parts like gears and shafts are also made of highly corrosion resistant non-metallic materials. The power transmission of drive and pump happens in a contactless way with strong NdFeB permanent magnets. So the pump is able to work without any mechanical shaft seals, which guarantees save supplies without any leakage of corrosive, toxic and explosive fluids.

Pumps for potentially explosive ATEX Zones 1 or 2, are available in non-metallic materials

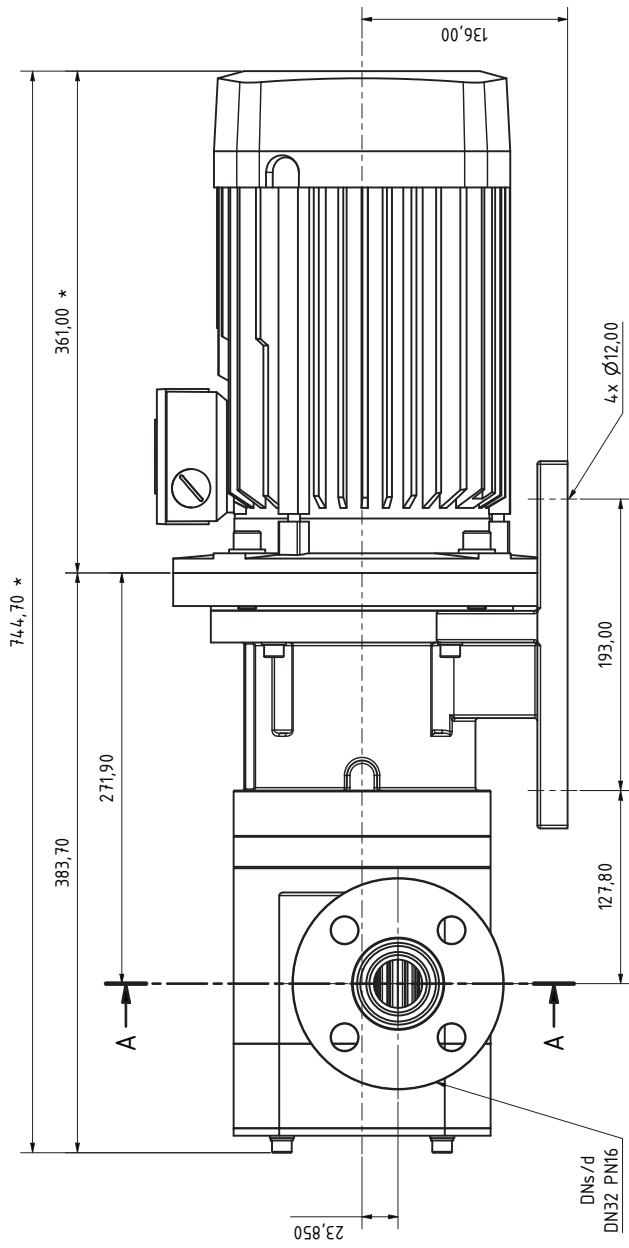
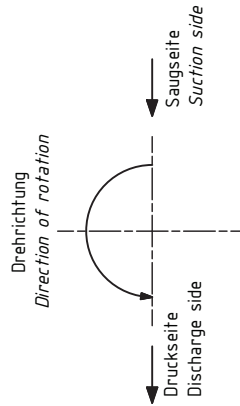
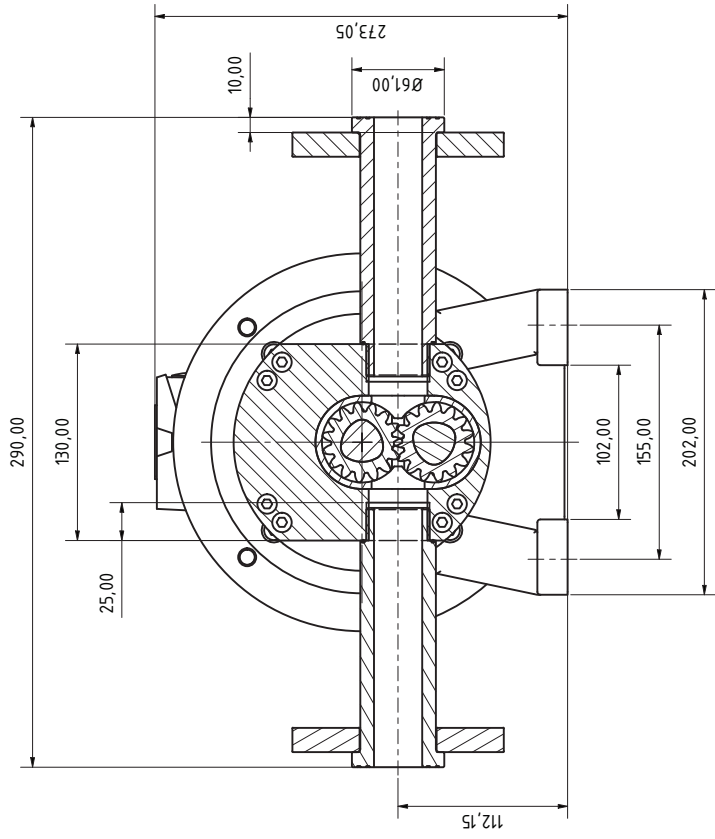




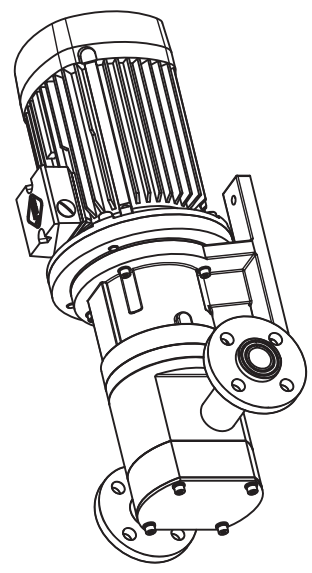
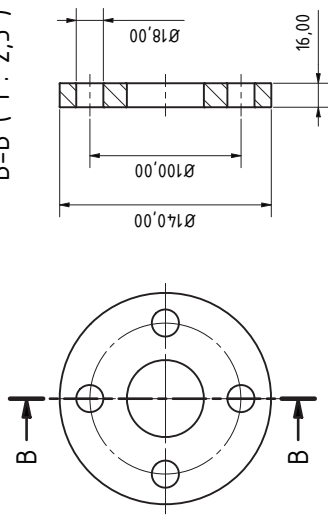
KENNLINIEN / PERFORMANCE CURVES

Series	TEF-MAG	
Pump Size	TEF-MAG 3501	
Motor Power	3,0kW / 3,0kW	3,0kW / 4,0kW
Speed	750 / 900 1/min	900 / 1150 1/min
Fluid Viscosity	1 mm ² /s	Fluid Density
		14,50 / 1750 1/min
		1 kg/dm ³

A-A (1 : 2,5)



B-B (1 : 2,5)



D ANSCHLÜSSE
 Losflansch DN32 PN10/16
 Alternativ - Gewinde G1 1/4" BSP Innengewinde
 Saug- und Druckseite abhängig von Drehrichtung.
 Pumpe kann reversibel eingesetzt werden.
 Beispiel unter Schnitt A-A.

CONNECTIONS
 Lap Joint Flanges DN32 PN10/16
 Alternative - Threaded G1 1/4" (f)
 Suction and discharge side depends on direction of rotation.
 Pump is reversible.
 See example under section view A-A.

E ANTRIEB
 Drehstrom-Asynchronmotor mit Käfigläufer
 Fabrikat: VEM
 Typ: IE3-W4/R 112 MV6

DRIVE
 TEFC three phase asynchronous squirrel cage electric motor
 Manufacturer: VEM
 Type: IE3-W4/R 112 MV6

ABMESSUNGEN
 * kann bei anderen Motorfabrikaten abweichen
 Abmessungen in mm (Zoll)

DIMENSIONS
 * may change with different motor manufacturer
 Dimensions in mm (inch)

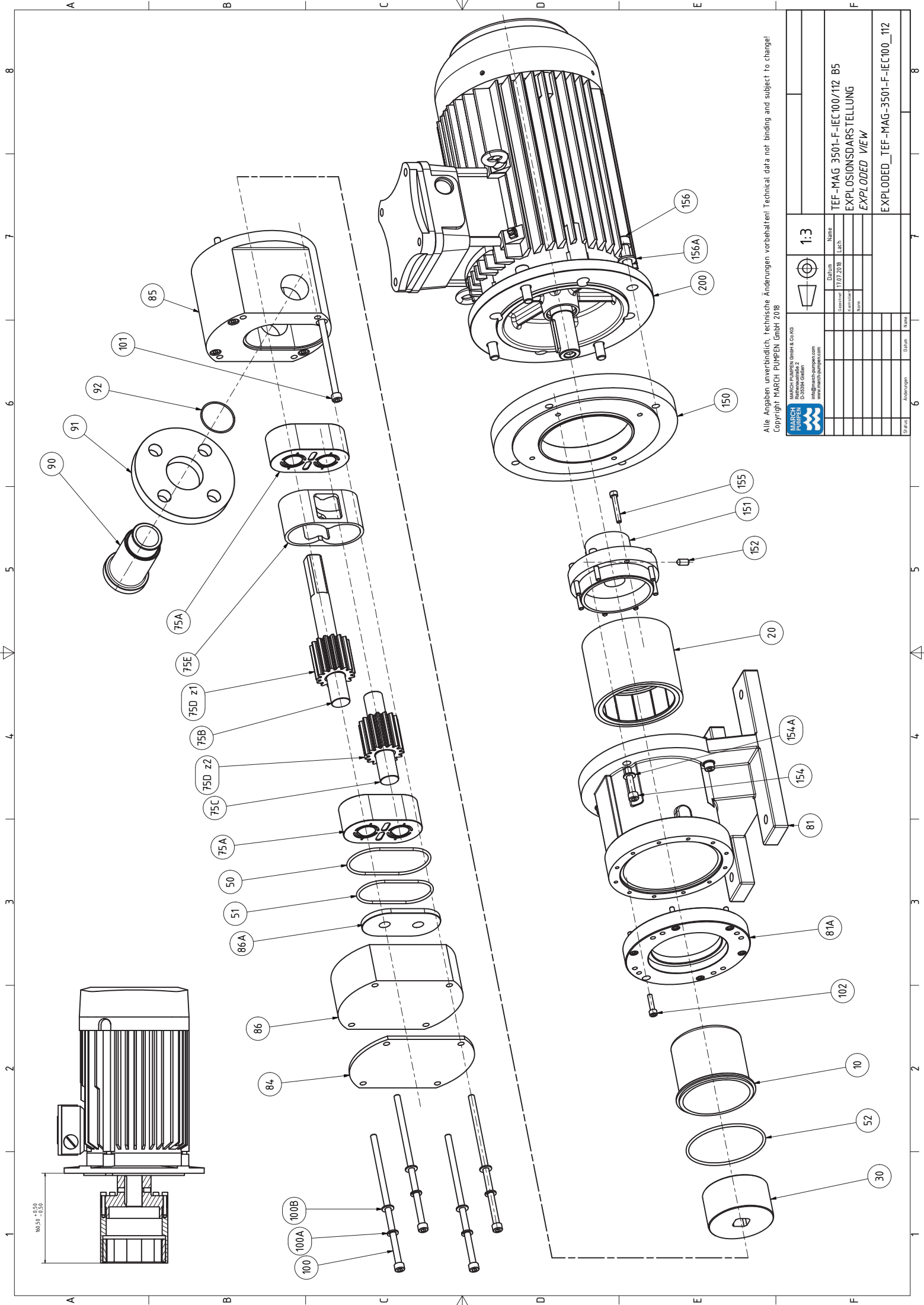
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1:2,5	Daßmaß	Name	
	Zeichnung	Licht	
	Version	Name	
	Änderungen	Name	
	Datum	Name	

TEF-MAG 3501 P-F-H IEC112
 ABMESSUNGEN
 DIMENSIONS

DPTM-3501-P-F-H-112-VEM



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 D-35041 Gießen
marchpumpen.com
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1:3		Name	
Datum		Licht	
Zeichenersteller		Zeichner	
Gezeichnet		Gezeichnet	
Überprüft		Überprüft	
Freigegeben		Freigegeben	
Bilddat.		Datei	
Änderungen		Name	
8		7	
8		8	

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 EXPLOSIONSDARSTELLUNG
 EXPLODED VIEW

EXPLODED_TEF-MAG-3501-F-IEC100_112