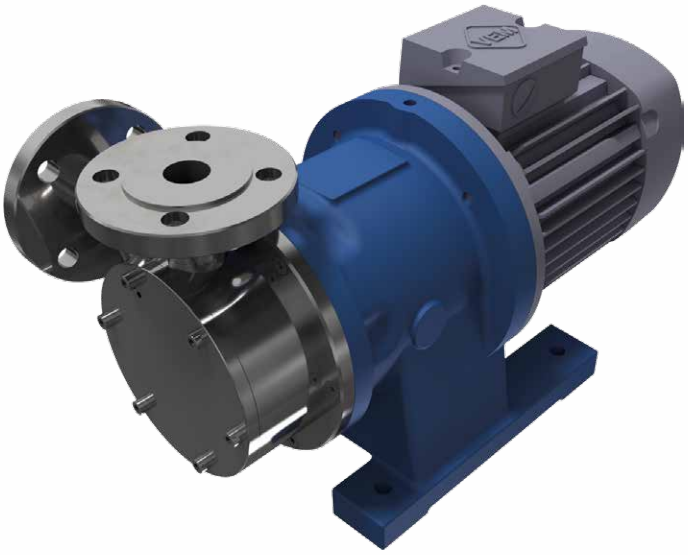
MAGNETGEKUPPELTE PERIPHERALRADPUMPEN

Baureihe MTA

MTA 25, 37, 49, 78, 1011, 2020



TECHNISCHE DATEN

Nenndrehzahl:	2900 1/min
Fördermenge / Förderhöhe, max.:	
MTA 25:	1,8 m³/h / 35 mWs
MTA 37:	3,5 m³/h / 45 mWs
MTA 49:	4,7 m³/h / 62 mWs
MTA 78:	7,0 m³/h / 73 mWs
MTA 1011:	9,8 m³/h / 90 mWs
MTA 2020:	17,0 m³/h / 174 mWs
Systemdruck:	PN16 ... 240 bar
Temperaturen:	-150 bis zu 320 °C
Dichte max.:	1,8 kg/dm³
Viskosität max.:	200 cP

ANSCHLÜSSE

	Rohr-Innengewinde / Flansch
MTA 25:	G 1/2“ / DN15
MTA 37:	G 3/4“ / DN20
MTA 49:	G 1“ / DN25
MTA 78:	G 1“ / DN25
MTA 1011:	G 1“ / DN25
MTA 2020:	G 1 1/2“ / DN40

WERKSTOFFE

Gehäuse: AISI316, HC276, Duplex, Titan
O-Ringe: EPDM, FKM, FFKM, FEP
Gleitlager: Kohle-Graphit, PTFEC, SiC
Axiallager: Kohle-Graphit, PTFEC

ANWENDUNGEN

Hauptanwendungen der Pumpen dieser Baureihen sind:

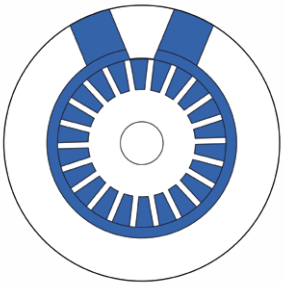
- Tieftemperaturanwendungen
- Kältemittel
- Hochtemperatur / Hochdruckanwendungen
- Flüssiggase
- Pharmazie- und Biotechnik
- Druckerhöhungspumpen
- Abwasseraufbereitung
- Umkehrosmose

KONSTRUKTIONSMERKMALE

- Seitenkanal Peripheralradpumpe
- Turbinenrad
- Leckagefrei
- Magnetgekuppelt
- Gas-mitfördernd
- Selbstansaugend (nass)
- NdFeB / CoSm Permanentmagnete
- Blockbauweise
- Wartungsfrei
- Wenige Verschleißteile
- Pumpe auch nach ATEX 2014/34/EU

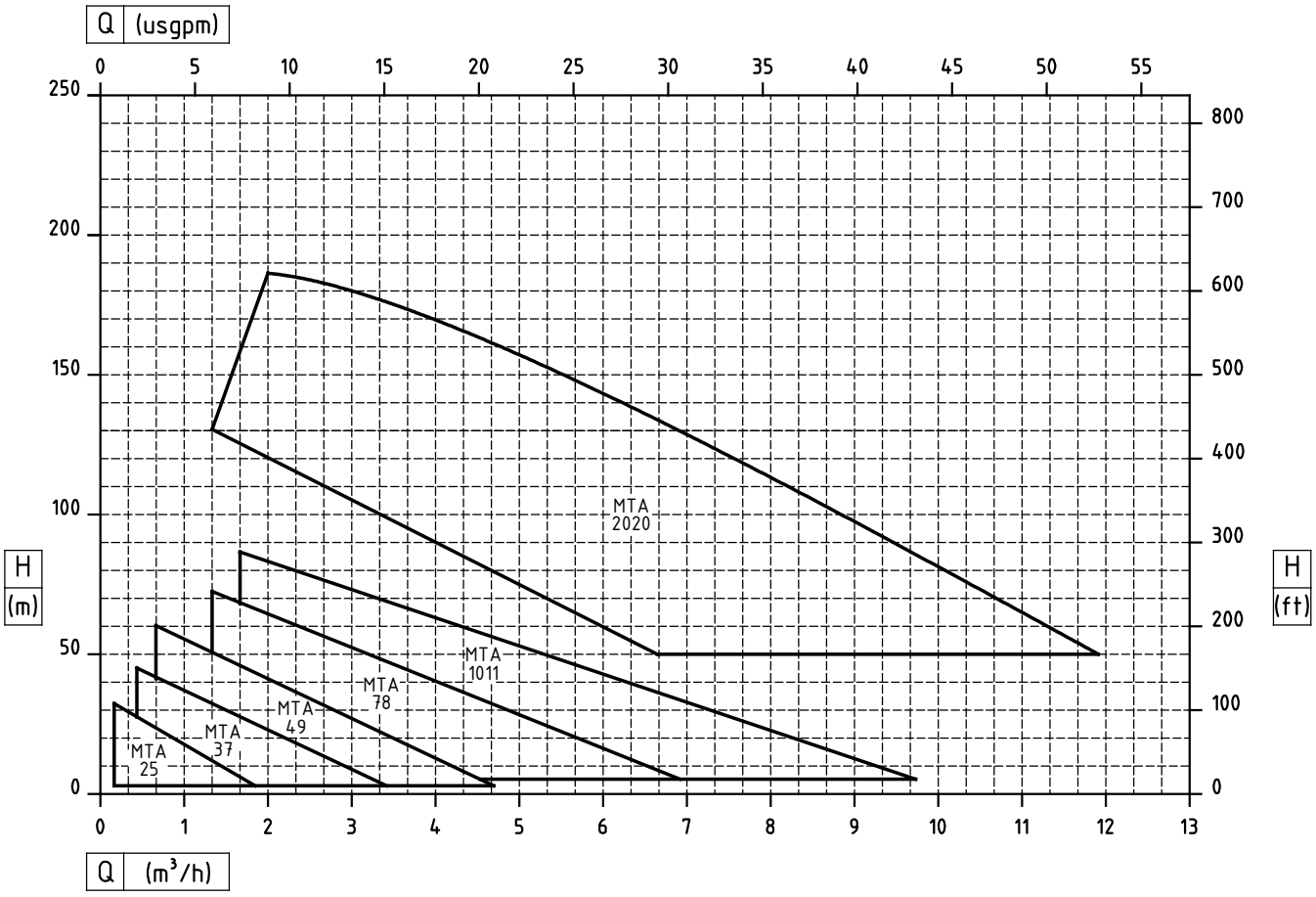
PRODUKTBESCHREIBUNG

MARCH Magnetgekuppelte Peripheralradpumpen der Baureihe MTA sind in verschiedenen Metallausführungen erhältlich. Eine Vielzahl turbinenförmiger Leitschaufeln erzeugen einen vergleichsweise hohen Förderdruck, bei geringen Fördermengen. Die Pumpen der Baureihe MTA sind in Seitenkanalausführung gefertigt, so dass Gasanteile im Medium von max. 20 Vol-% problemlos mitgefördert werden können, ohne Trockenlaufschäden zu verursachen. Magnetgekuppelte Pumpen arbeiten völlig ohne mechanische Wellenabdichtung. Die Kraftübertragung erfolgt berührungslos und kraftschlüssig durch starke Permanentmagneten auf das Hydraulikteil.

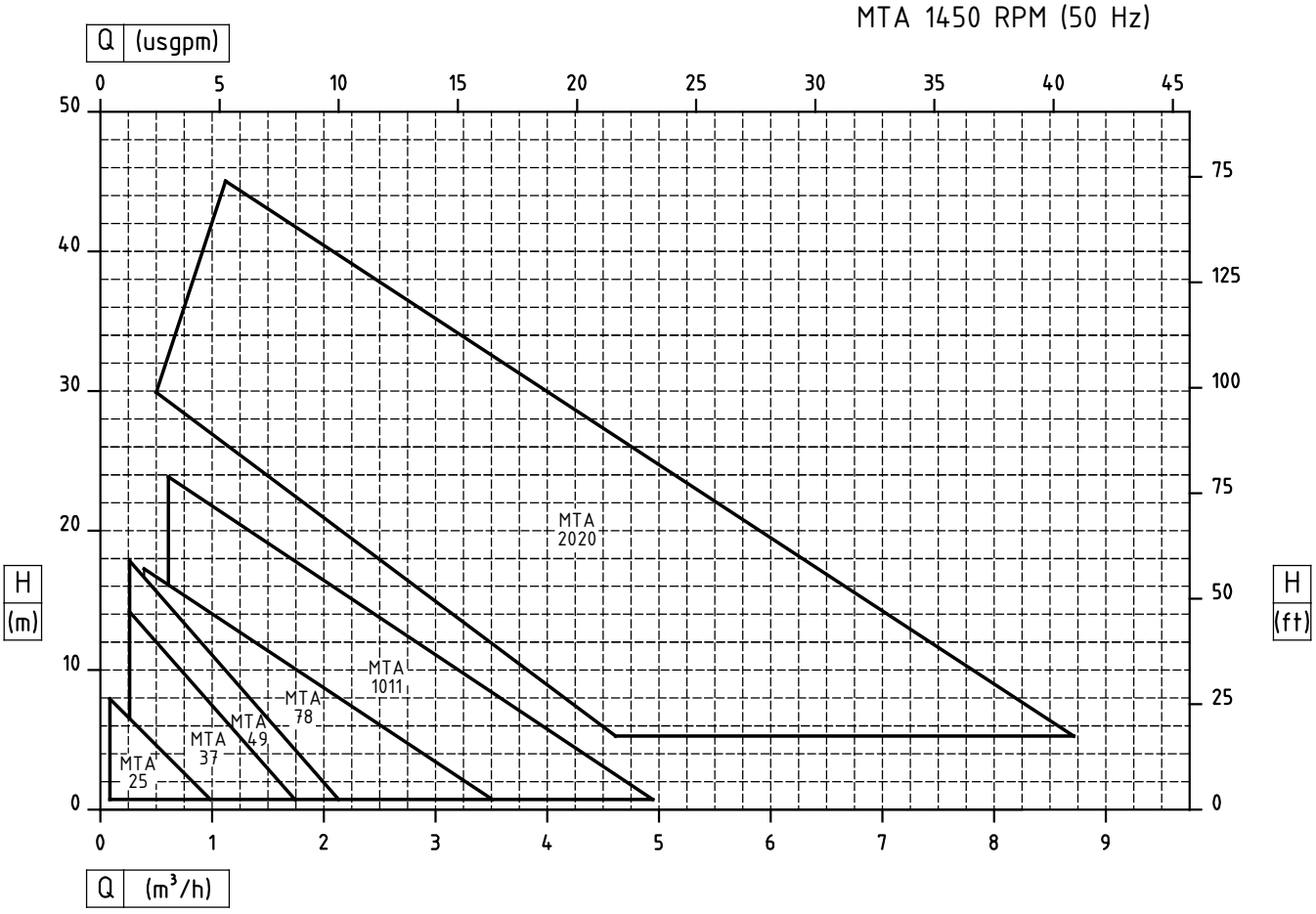


MARCH Magnetgekuppelte Peripheralradpumpen eignen sich zur leckagefreien Förderung aggressiver, umweltgefährdender und toxischer Medien, insbesondere dann, wenn kleine Fördermengen bei großen geodätischen Förderhöhen gepumpt werden müssen.
Die Magnetkupplung gewährleistet eine absolute hermetische Dichtheit der Pumpe.
Die Pumpen werden standardmäßig in kompakter Blockbauweise angefertigt. Das modulare Baukastensystem ermöglicht die schnelle Austauschbarkeit der Einzelteile ohne besondere Werkzeuge.
Als Antriebe werden ausschließlich europäische IEC-Normmotoren nach DIN/EN 60034 und VDE 0530 adaptiert.
Für einen störungsfreien Pumpenbetrieb sind die Einsatzgrenzen, insbesondere aber die Mindestfördermenge und die erforderliche Zulaufhöhe (NPSH, erf.) zu beachten.

MTA 2900 RPM (50 Hz)



MTA 1450 RPM (50 Hz)



MARCH PUMPEN GmbH & Co.KG
Rathenaustraße 2
D-35394 Gießen

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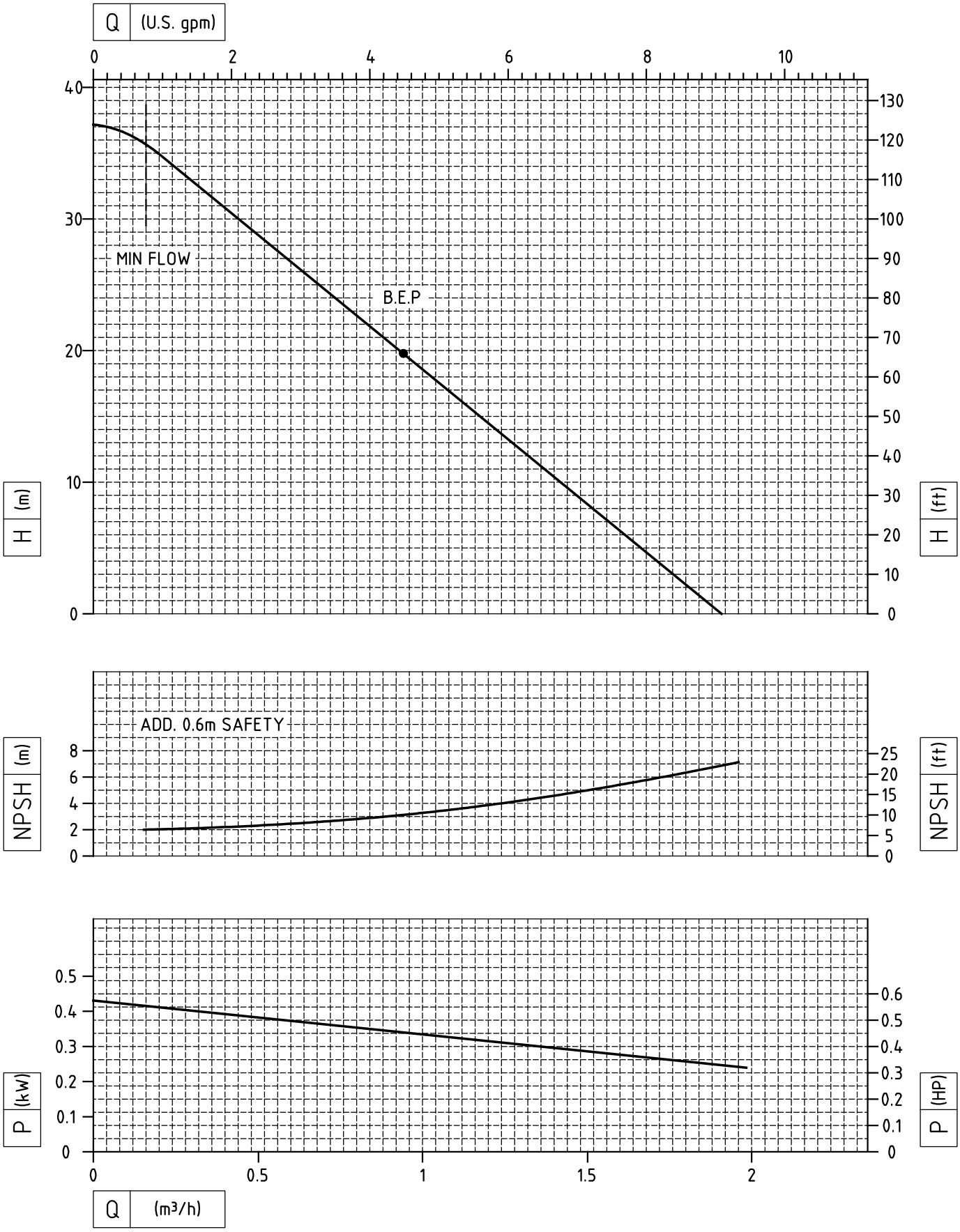
info@march-pumpen.com

Baureihe / Series:	MTA
Typ / Type:	Family Curves
Motor Speed:	2900 / 1450 RPM (50 hz)



Motor power depends on specific gravity of pumped liquid.

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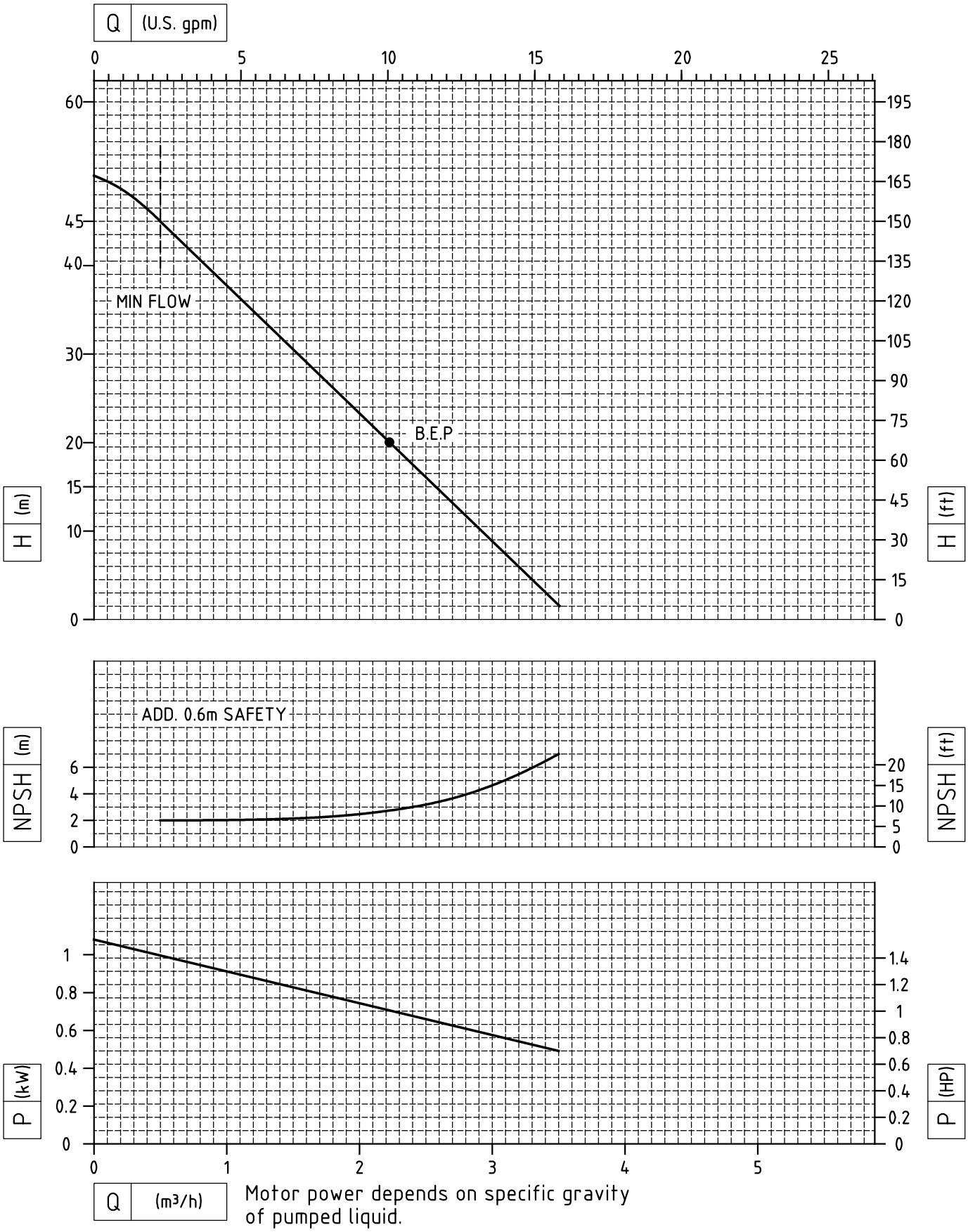
Baureihe / Series:	MTA
Typ / Type:	MTA 25
Motor:	2900 1/min



Motor power depends on specific gravity of pumped liquid.

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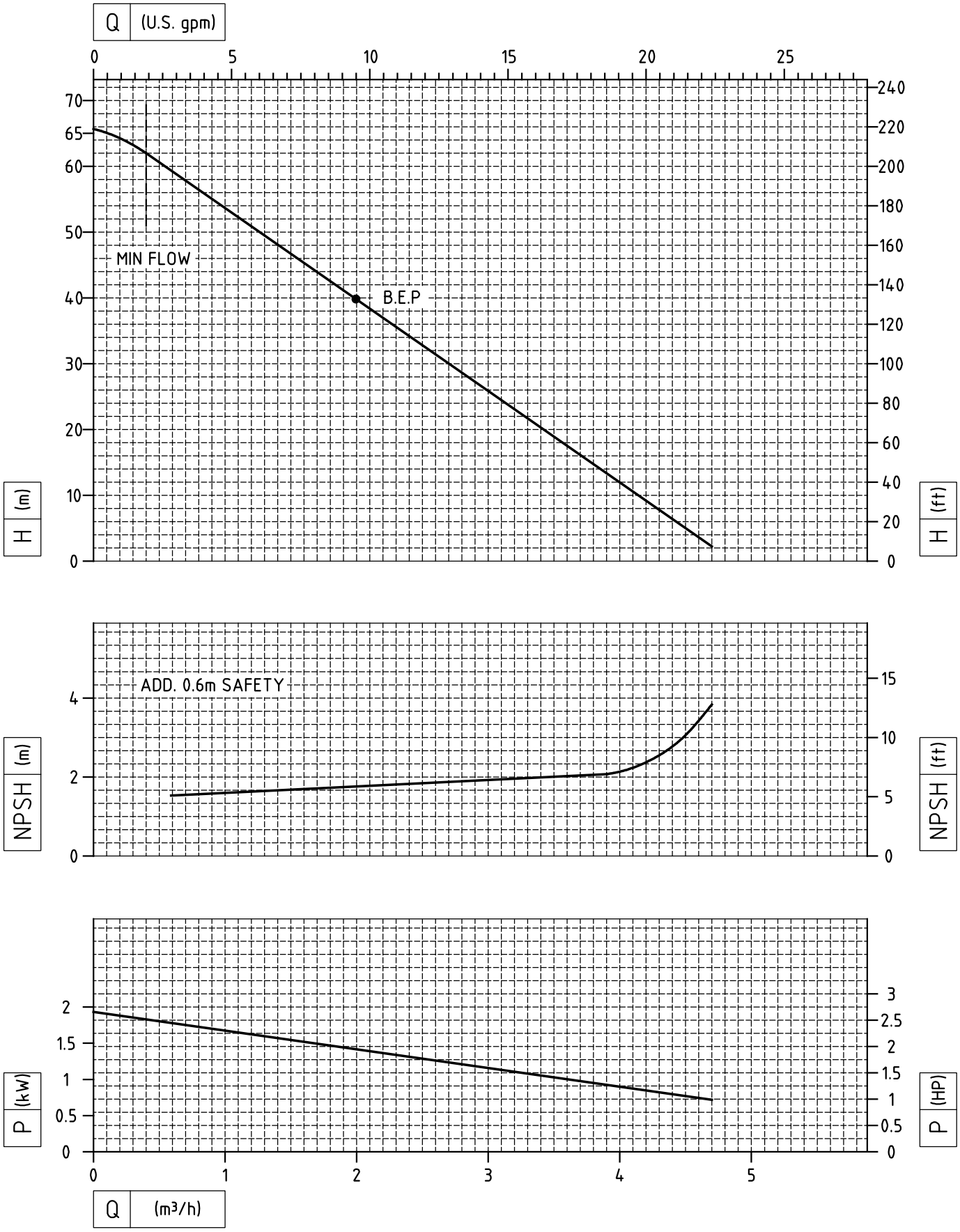
Baureihe / Series:	MTA
Typ / Type:	MTA37
Motor:	IEC 80 / 90 B35



Motor power depends on specific gravity of pumped liquid.

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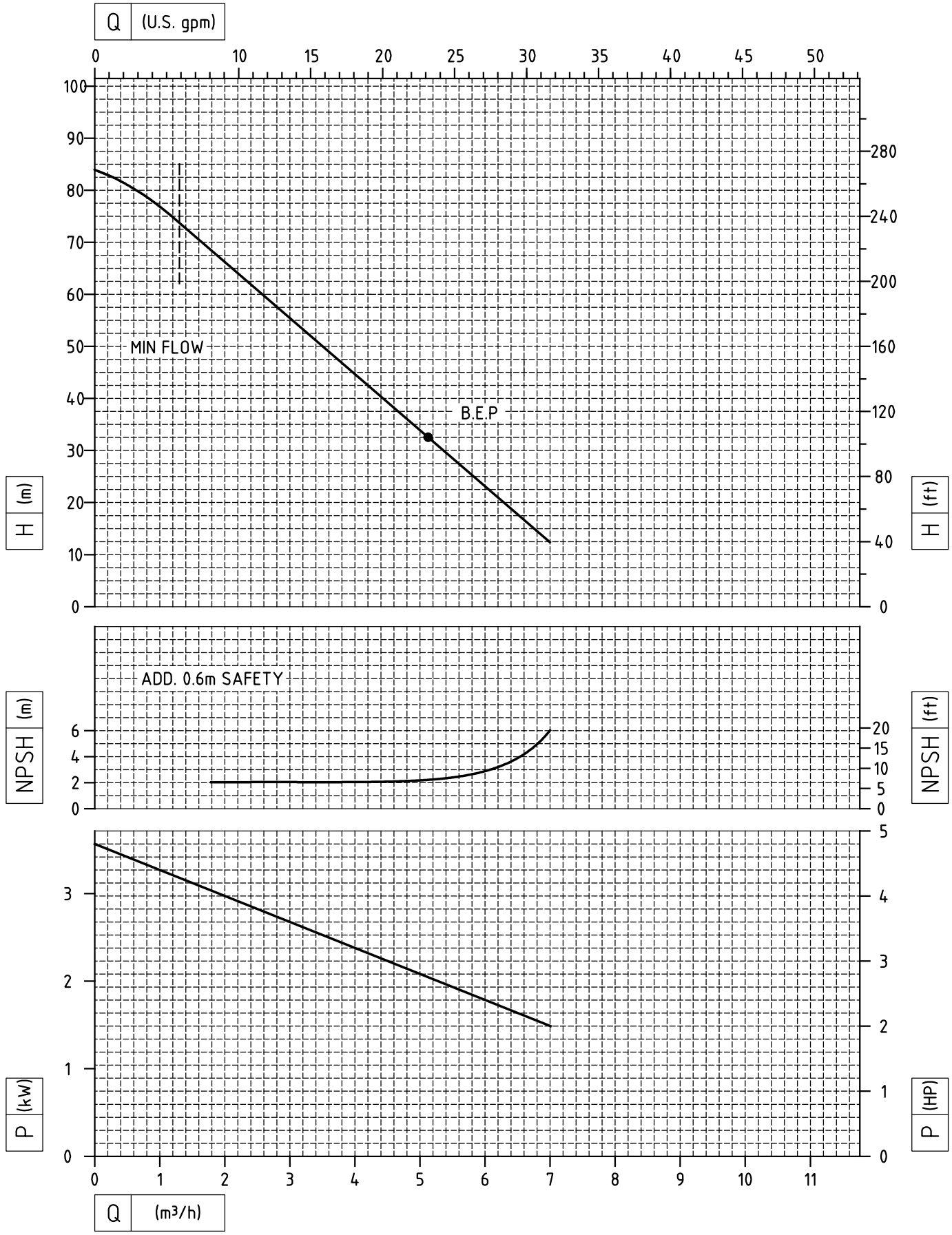
Baureihe / Series:	MTA
Typ / Type:	MTA 49
Motor:	2900 1/min



Motor power depends on specific gravity of pumped liquid.

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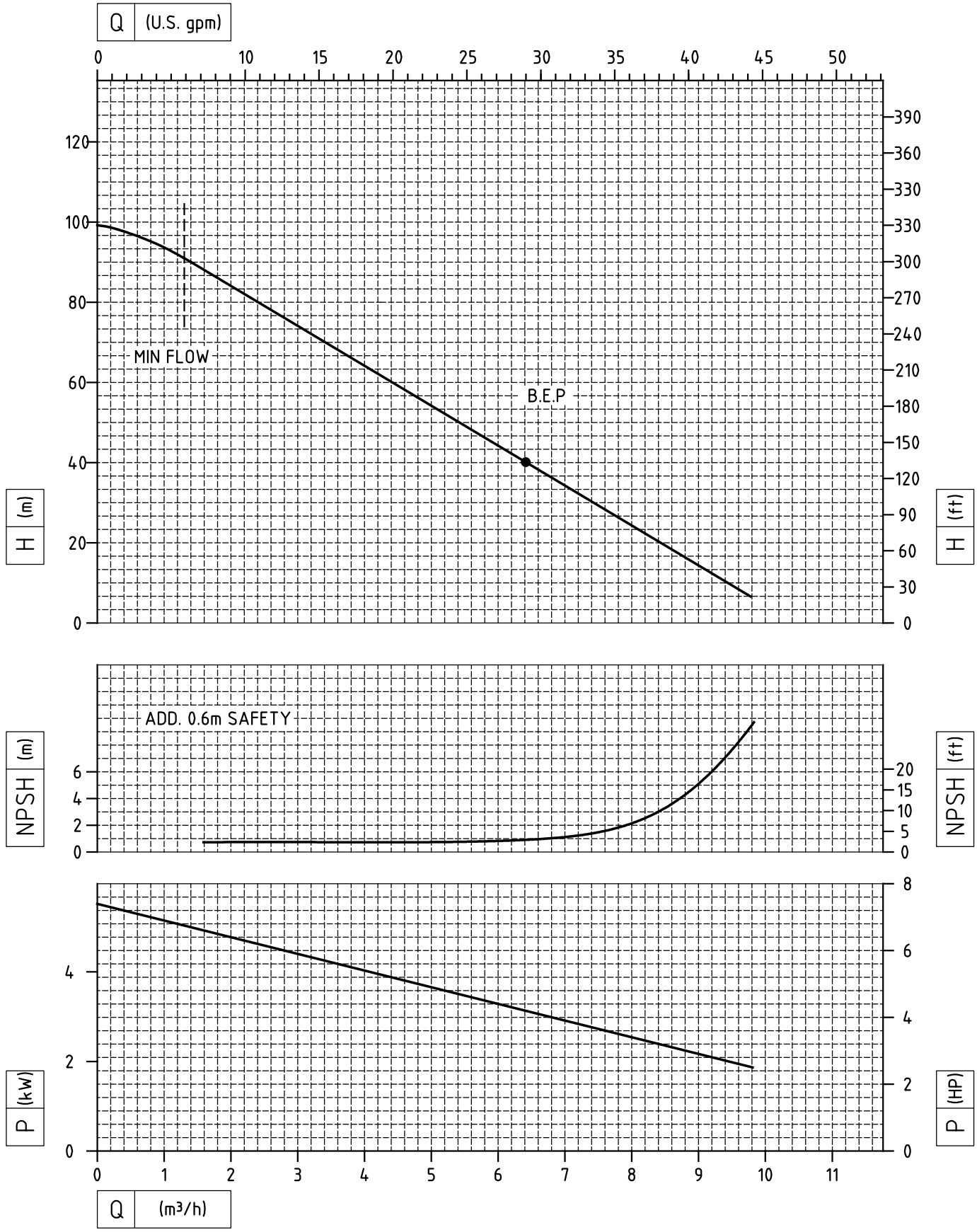
Baureihe / Series:	MTA
Typ / Type:	MTA 78
Motor:	2900 1/min



Motor power depends on specific gravity of pumped liquid.

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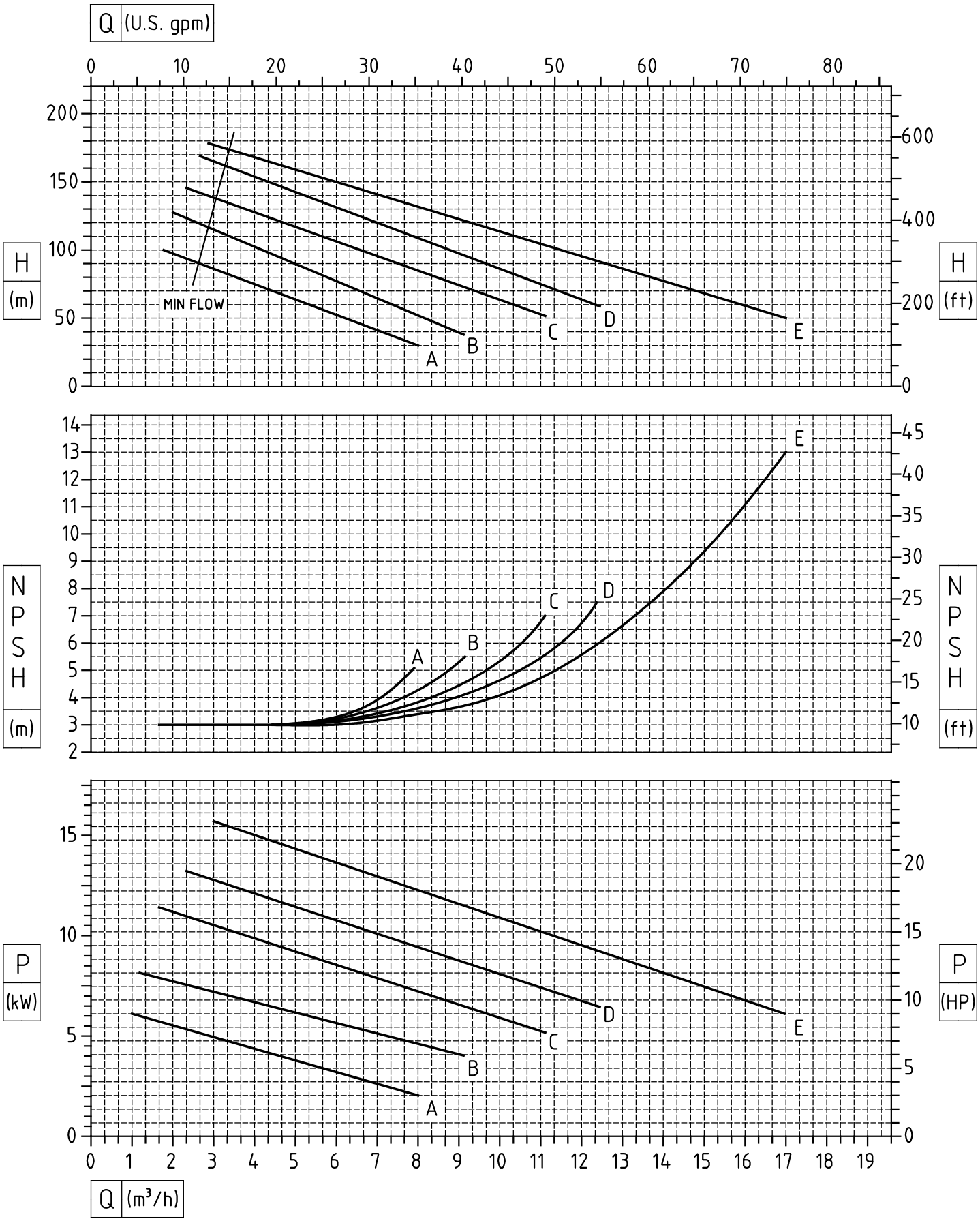
Baureihe / Series:	MTA
Typ / Type:	MTA 1011
Motor:	2900 1/min



Motor power depends on specific gravity of pumped liquid.

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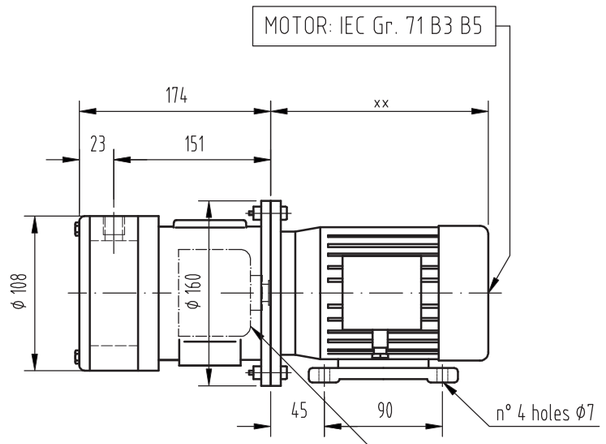
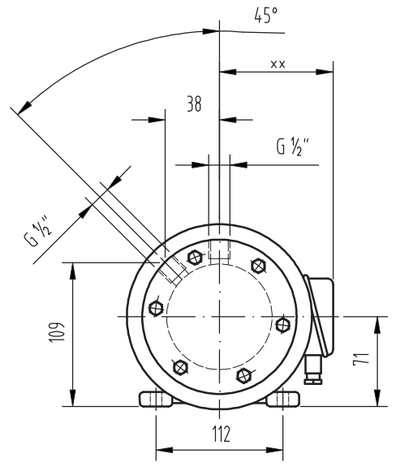
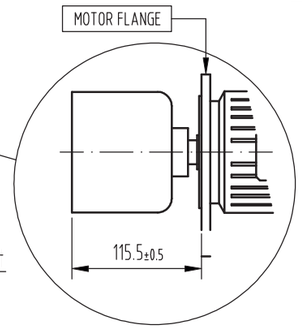
Baureihe / Series:	MTA
Typ / Type:	MTA 2020
Motor:	2900 1/min

dimensions in mm





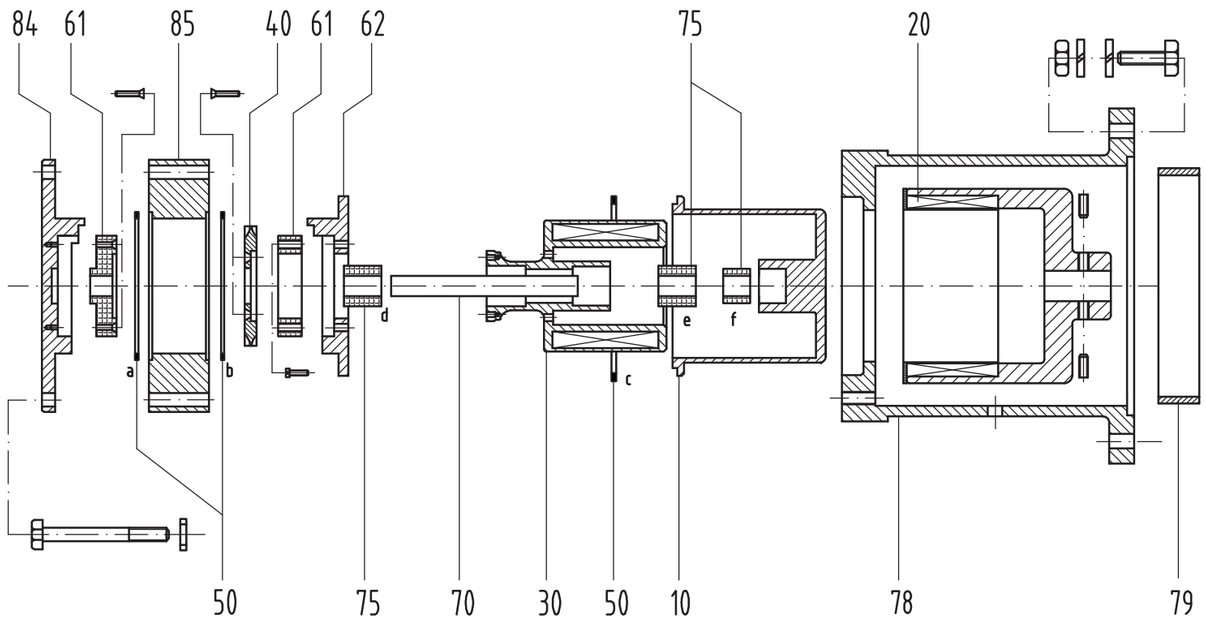


external magnet

(xx) DIFFERENT FROM MOTOR MANUFACTURER
- DIRECTION AND PORTS LOCATION ARE REVERSIBLE

THREAD UNI ISO 228/1

REF	DESCRIPTION	MATERIAL	CODE
10	Containment shell	SS 316L	
20	Ext. Magnet	CoSm/ Carbon Steel	
30	Int. Magnet	SS 316L/CoSm	
40	Impeller	SS 316L	
50	Set O-Rings (a+b+c) a + b = O-Ring 4250 (230) c = O-Ring 4312 (235)	Viton	
61	Thrust Bearings	Pcarbon	
62	Rear Ring	SS316L	
70	Shaft	SIC	
75	Sleeve Bearings Bearings (d+e) Bearing (f)	 SIC SS316	
78	Bracket (160-110-14)	Alluminium	
79	Rub Ring	Bronze	
84	End Cover	SS 316L	
85	Pump Casing	SS 316L	
88	Rear Wet End (10+30+40+50+61+62+70+75)	/	



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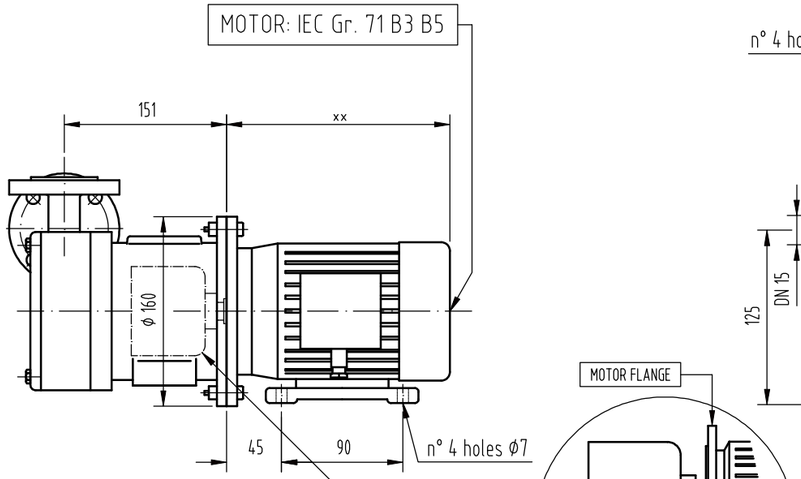
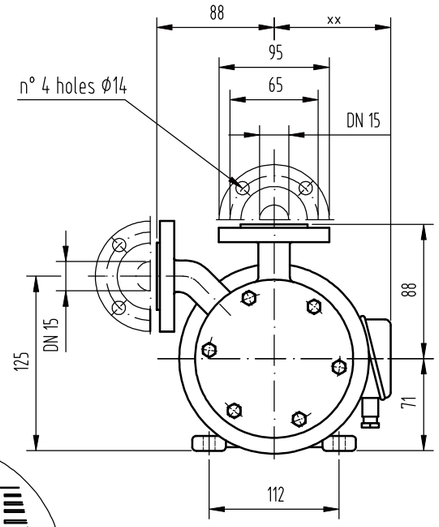
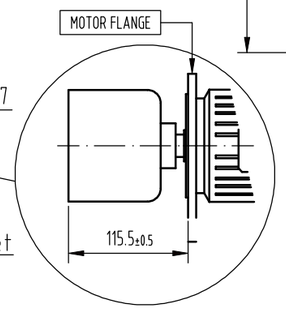
...ADVANCED SOLUTIONS...

Baureihe / Series:	MTA
Typ / Type:	MTA 25 SSR
Motor:	IEC 71 B35

dimensions in mm







external magnet

(xx) DIFFERENT FROM MOTOR MANUFACTURER
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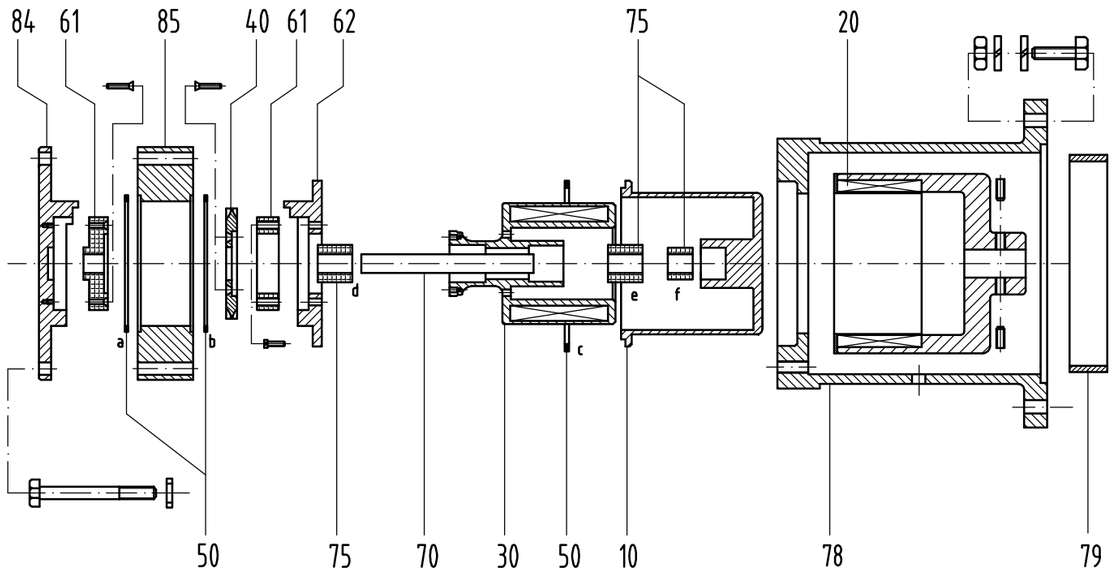
FLANGED DIN 2633 PN 16

REF	DESCRIPTION	MATERIAL	CODE
10	Containment shell	SS 316L	
20	Ext. Magnet	CoSm/ Carbon Steel	
30	Int. Magnet	SS 316L/CoSm	
40	Impeller	SS 316L	
50	Set O-Rings (a+b+c) a + b = O-Ring 4250 (230) c = O-Ring 4312 (235)	Viton	
61	Thrust Bearings	Pcarbon	
62	Rear Ring	SS316L	
70	Shaft	SS316L	
75	Sleeve Bearings Bearings (d+e) Bearing (f)	 Pcarbon SS316	
78	Bracket (160-110-14)	CAST IRON	
79	Rub Ring	Bronze	
84	End Cover	SS 316L	
85	Pump Casing	SS 316L	
88	Rear Wet End (10+30+40+50+61+62+70+75)	/	



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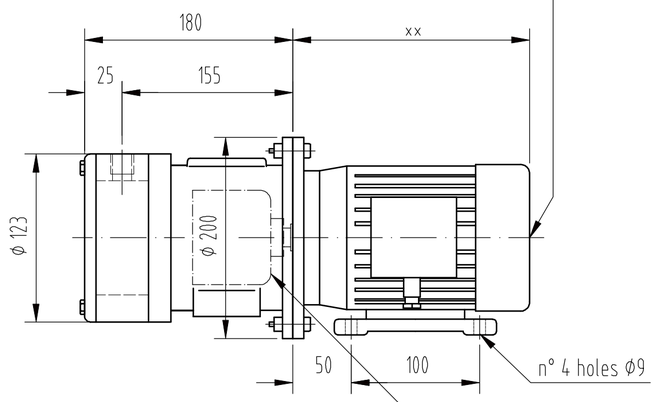
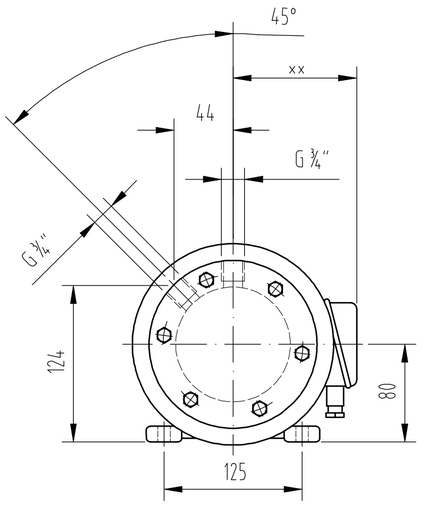
...ADVANCED SOLUTIONS...

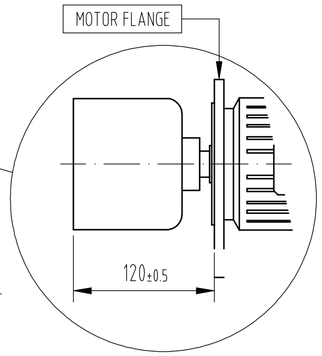
Baureihe / Series:	MTA
Typ / Type:	MTA 25 SSF
Motor:	IEC 71 B35

dimensions in mm

MOTOR: IEC Gr. 80 B3 B5





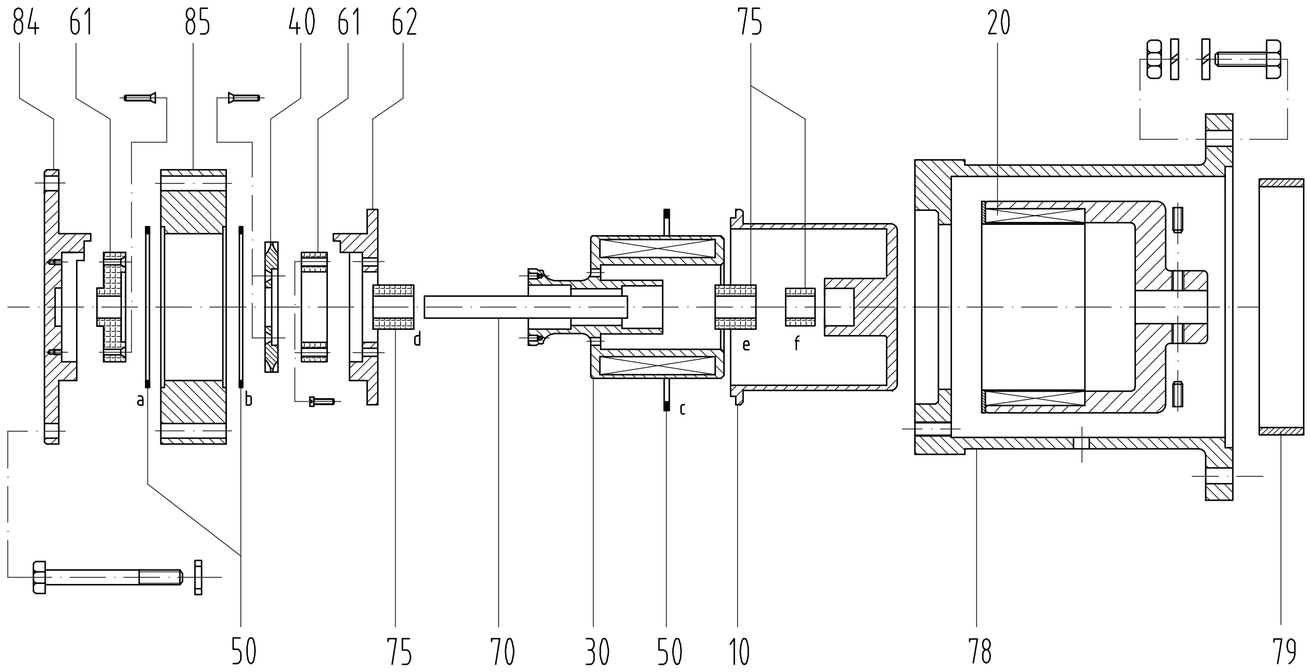


external magnet

(xx) DIFFERENT FROM MOTOR MANUFACTURER
- DIRECTION AND PORTS LOCATION ARE REVERSIBLE

THREAD UNI ISO 228/1

REF	DESCRIPTION	MATERIAL	CODE
10	Containment shell	SS 316L	
20	Ext. Magnet	CoSm/ Carbon Steel	
30	Int. Magnet	SS 316L/CoSm	
40	Impeller	SS 316L	
50	Set O-Rings (a+b+c) a + b = O-Ring 4300 (234) c = O-Ring 4362 (239)	Viton	
61	Thrust Bearings	Pcarbon	
62	Rear Ring	SS316L	
70	Shaft	SS316L	
75	Sleeve Bearings Bearings (d+e) Bearing (f)	Pcarbon SS316	
78	Bracket (200-130-19)	Alluminium	
79	Rub Ring	Bronze	
84	End Cover	SS 316L	
85	Pump Casing	SS 316L	
88	Rear Wet End (10+30+40+50+61+62+70+75)	/	



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Allgemeintoleranzen nach DIN ISO 2768-m
Alle Kanten gratfrei

	Datum	Name
Gezeichnet	02.07.2019	Lach
Kontrolliert		
Norm		

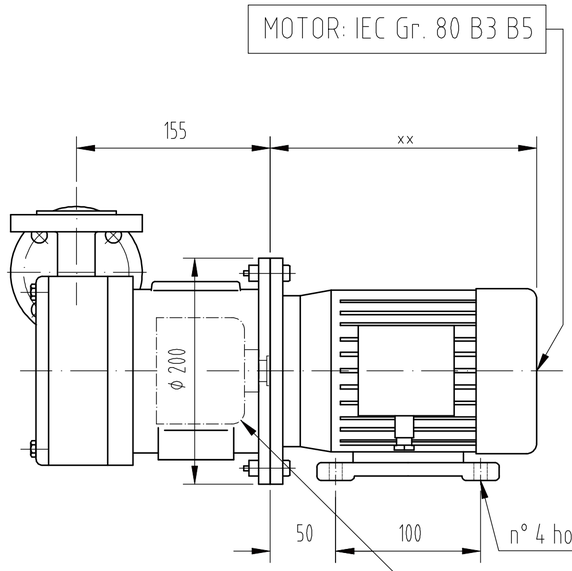
Series MTA
MTA 37 SSR

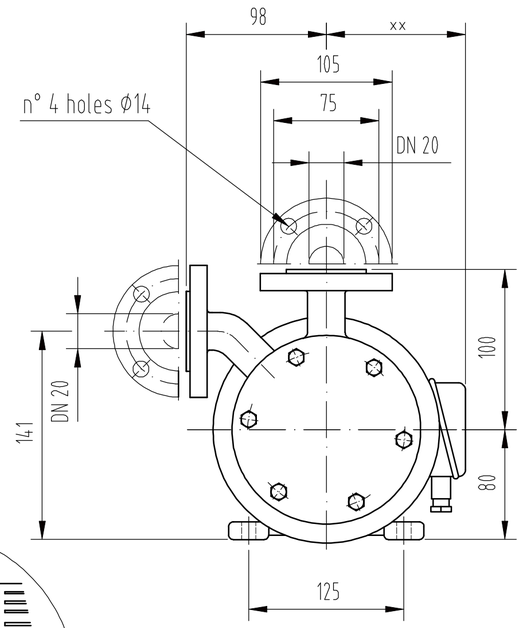
DPCA-0037-R

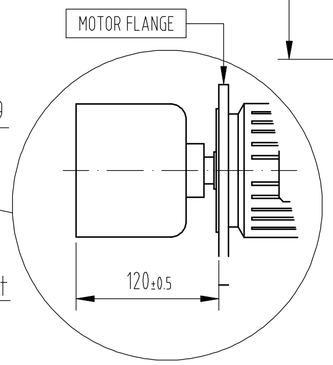
1
A2

Status | Änderungen | Datum | Name

dimensions in mm





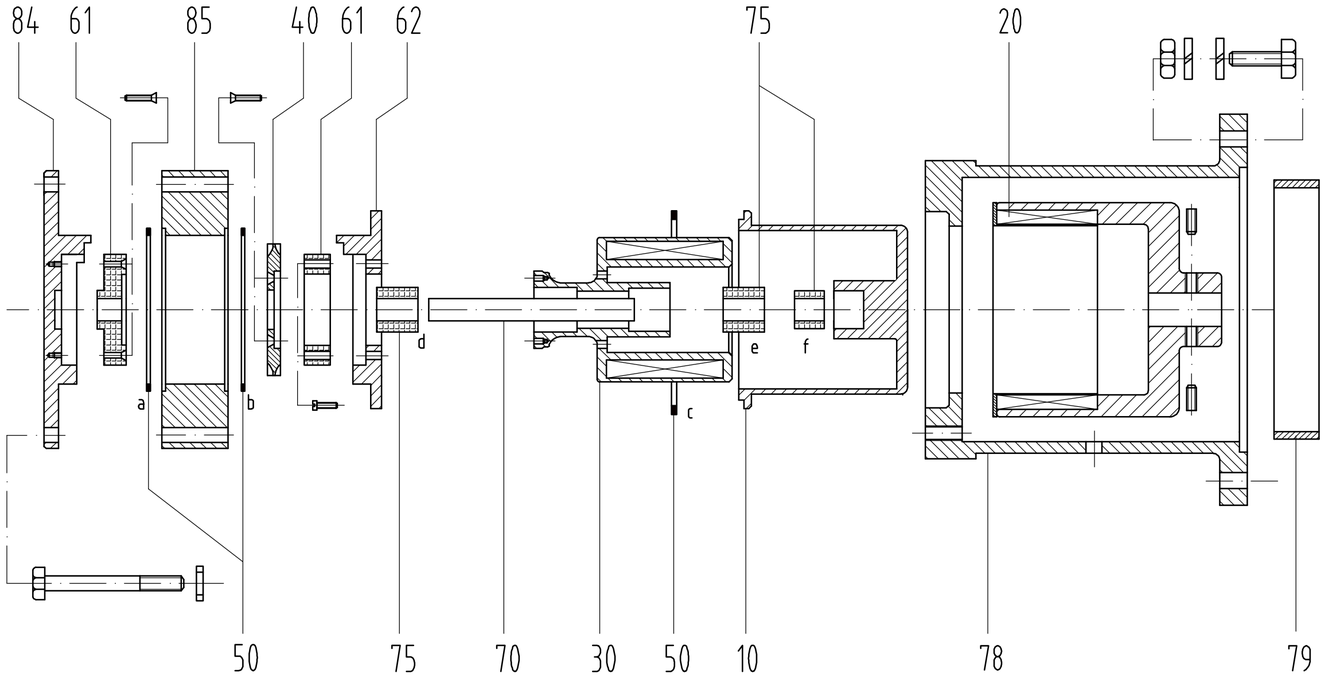


external magnet

(xx) DIFFERENT FROM MOTOR MANUFACTURER
- DIRECTION AND PORTS LOCATION ARE REVERSIBLE

FLANGES DIN 2633 PN 16

REF	DESCRIPTION	MATERIAL	CODE
10	Containment shell	SS 316L	
20	Ext. Magnet	CoSm/ Carbon Steel	
30	Int. Magnet	SS 316L/CoSm	
40	Impeller	SS 316L	
50	Set O-Rings (a+b+c) a + b = O-Ring 4300 (234) c = O-Ring 4362 (239)	Viton	
61	Thrust Bearings	Pcarbon	
62	Rear Ring	SS316L	
70	Shaft	SS316L	
75	Sleeve Bearings Bearings (d+e) Bearing (f)	 Pcarbon SS316	
78	Bracket (200-130-19)	CAST IRON	
79	Rub Ring	Bronze	
84	End Cover	SS 316L	
85	Pump Casing	SS 316L	
88	Rear Wet End (10+30+40+50+61+62+70+75)	/	



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Allgemeintoleranzen nach DIN ISO 2768-m
Alle Kanten gratfrei

	Datum	Name
Gezeichnet	05.04.2019	Lach
Kontrolliert		
Norm		

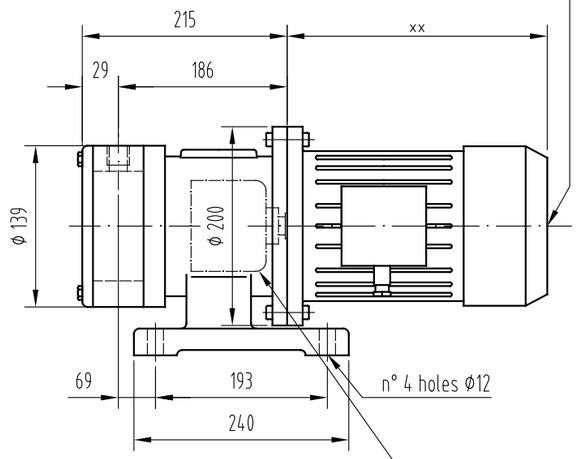
MAG DRIVE TURBINE PUMPS
MTA 37 SSF IEC80

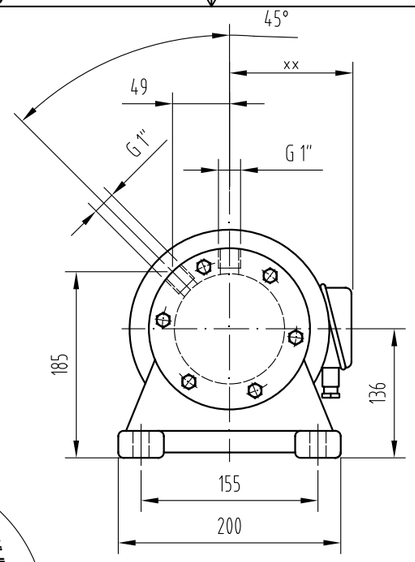
DPCA-0037-SSF-IEC80 | 1 | A2

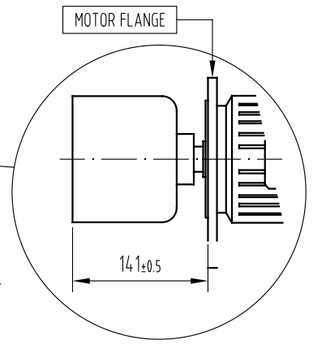
Status	Änderungen	Datum	Name

dimensions in mm

MOTOR: IEC Gr. 90 B5





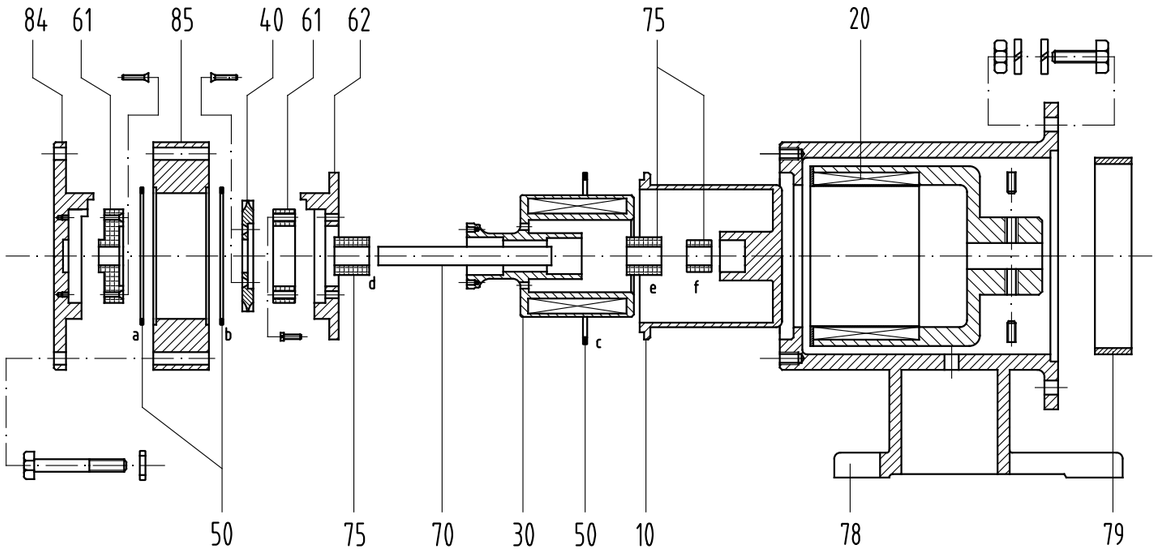


external magnet

(xx) DIFFERENT FROM MOTOR MANUFACTURER
- DIRECTION AND PORTS LOCATION ARE REVERSIBLE

THREAD UNI ISO 228/1

REF	DESCRIPTION	MATERIAL	CODE
10	Containment shell	SS 316L	
20	Ext. Magnet	CoSm/ Carbon Steel	
30	Int. Magnet	SS 316L/CoSm	
40	Impeller	SS 316L	
50	Set O-Rings (a+b+c) a + b = O-Ring 4337 (237) c = O-Ring 4400 (242)	Viton	
61	Thrust Bearings	Pcarbon	
62	Rear Ring	SS316L	
70	Shaft	SIC	
75	Sleeve Bearings Bearings (d+e) Bearing (f)	SIC SS316	
78	Bracket (200-130-24)	Cast Iron	
79	Rub Ring	Bronze	
84	End Cover	SS 316L	
85	Pump Casing	SS 316L	
88	Rear Wet End (10+30+40+50+61+62+70+75)	/	



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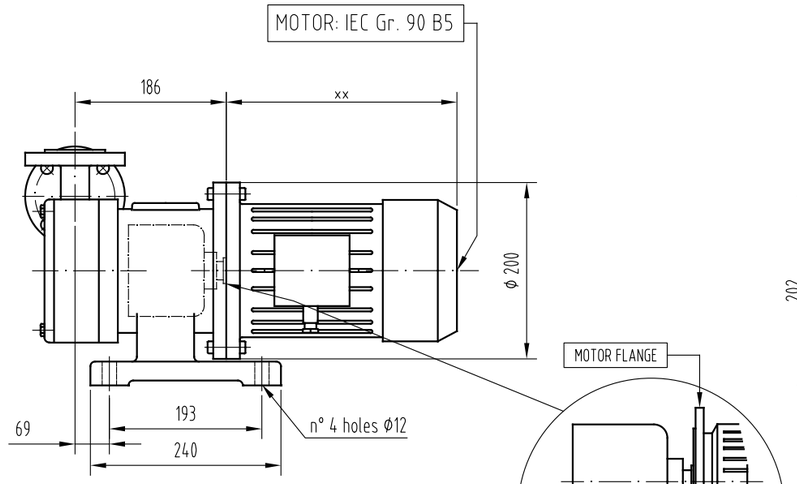
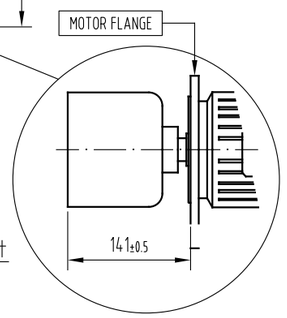
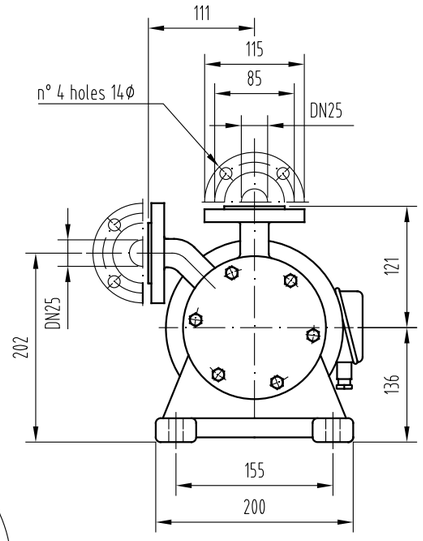
...ADVANCED SOLUTIONS...

Baureihe / Series:	MTA
Typ / Type:	MTA 49 SSR
Motor:	IEC 90 B5

dimensions in mm



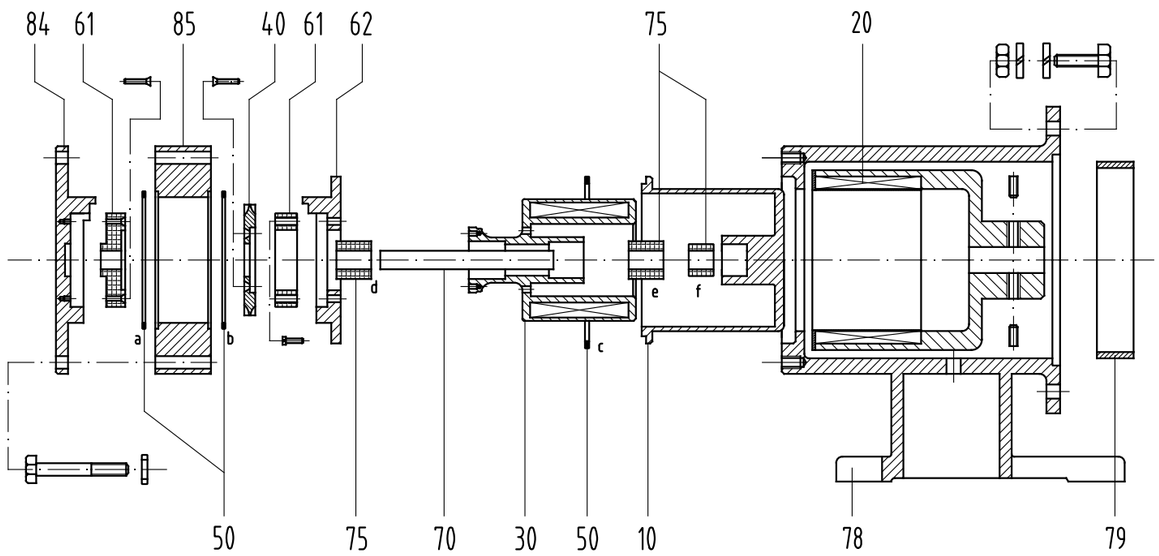




(xx) DIFFERENT FROM MOTOR MANUFACTURER
- DIRECTION AND PORTS LOCATION ARE REVERSIBLE

FLANGES DIN 2633 PN 16

REF	DESCRIPTION	MATERIAL	CODE
10	Containment shell		
20	Ext. Magnet		
30	Int. Magnet		
40	Impeller		
50	Set O-Rings (a+b+c) a + b = O-Ring 4337 (237) c = O-Ring 4400 (242)		
61	Thrust Bearings		
62	Rear Ring		
70	Shaft		
75	Sleeve Bearings Bearings (d+e) Bearing (f)		
78	Bracket (200-130-24)		
79	Rub Ring		
84	End Cover		
85	Pump Casing		
88	Rear Wet End (10+30+40+50+61+62+70+75)		



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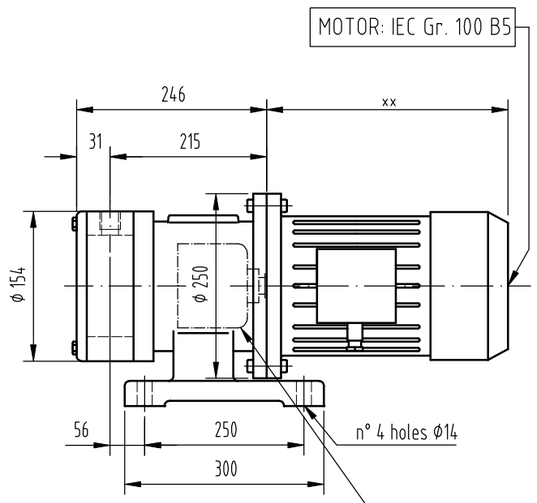
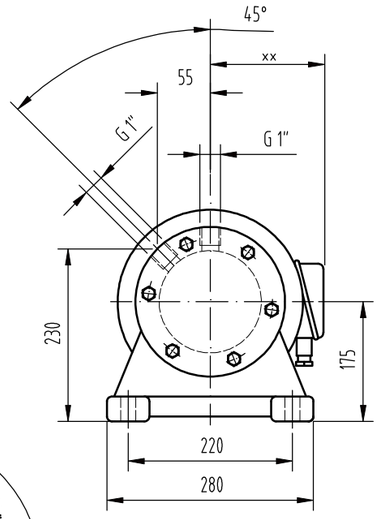
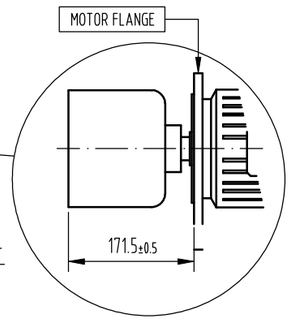
...ADVANCED SOLUTIONS...

Baureihe / Series:	MTA
Typ / Type:	MTA 49 SSF
Motor:	IEC 90 B5

dimensions in mm





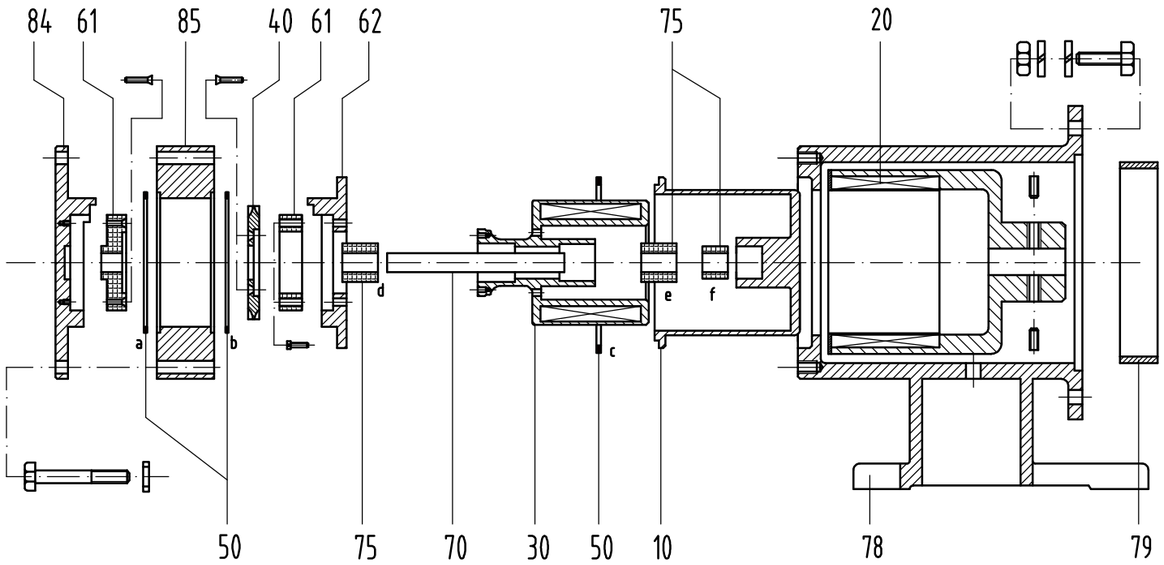


external magnet

(x x) DIFFERENT FROM MOTOR MANUFACTURER
- DIRECTION AND PORTS LOCATION ARE REVERSIBLE

THREAD UNI ISO 228/1

REF	DESCRIPTION	MATERIAL	CODE
10	Containment shell	SS 316L	
20	Ext. Magnet	CoSm/ Carbon Steel	
30	Int. Magnet	SS 316L/CoSm	
40	Impeller	SS 316L	
50	Set O-Rings (a+b+c) a + b = O-Ring 4375 (240) c = O-Ring 4437 (245)	Viton	
61	Thrust Bearings	Pcarbon	
62	Rear Ring	SS316L	
70	Shaft	SIC	
75	Sleeve Bearings Bearings (d+e) Bearing (f)	SIC SS316	
78	Bracket (250-180-28)	Cast Iron	
79	Rub Ring	Bronze	
84	End Cover	SS 316L	
85	Pump Casing	SS 316L	
88	Rear Wet End (10+30+40+50+61+62+70+75)	/	



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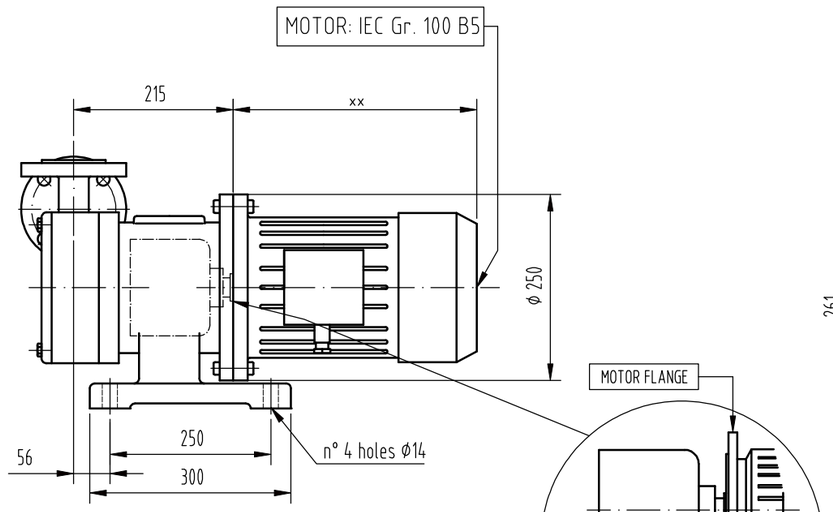
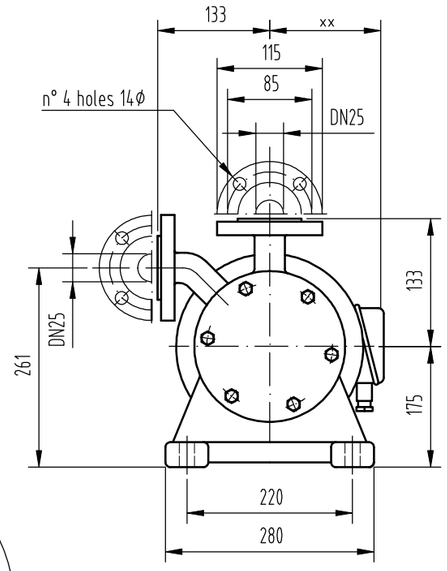
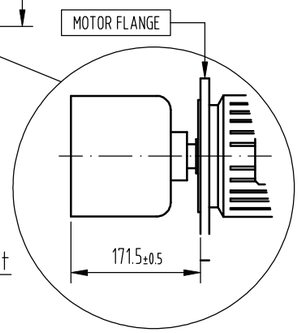
...ADVANCED SOLUTIONS...

Baureihe / Series:	MTA
Typ / Type:	MTA 78 SSR
Motor:	IEC 100 B5

dimensions in mm

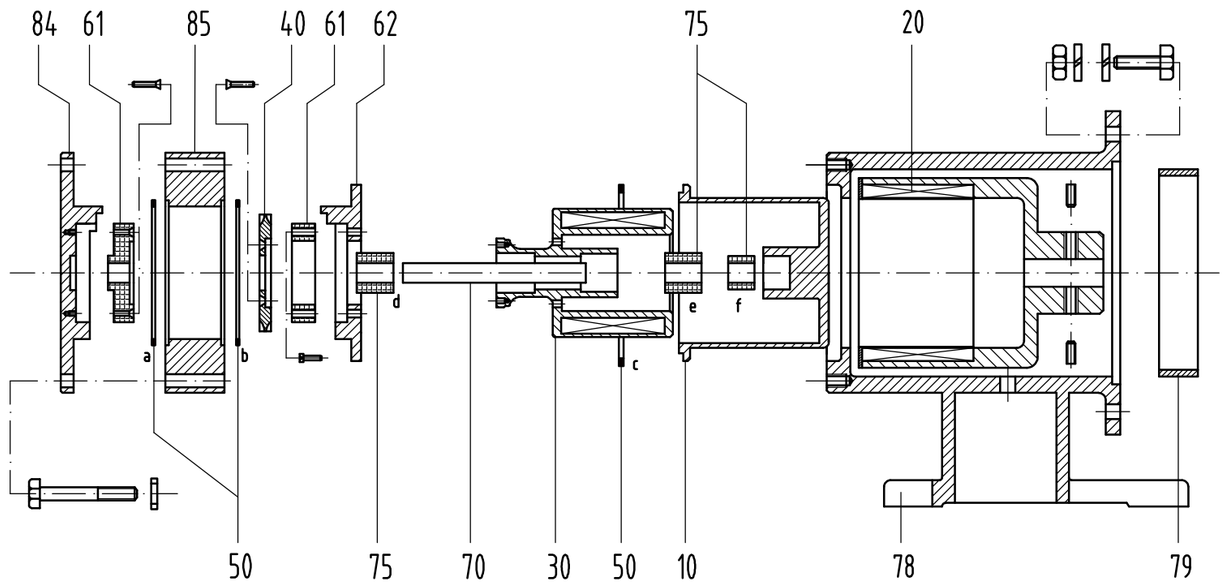






(xx) DIFFERENT FROM MOTOR MANUFACTURER
- DIRECTION AND PORTS LOCATION ARE REVERSIBLE

FLANGES DIN 2633 PN 16



REF	DESCRIPTION	MATERIAL	CODE
10	Containment shell		
20	Ext. Magnet		
30	Int. Magnet		
40	Impeller		
50	Set O-Rings (a+b+c) a + b = O-Ring 4375 (240) c = O-Ring 4437 (245)		
61	Thrust Bearings		
62	Rear Ring		
70	Shaft		
75	Sleeve Bearings Bearings (d+e) Bearing (f)		
78	Bracket (250-180-28)		
79	Rub Ring		
84	End Cover		
85	Pump Casing		
88	Rear Wet End (10+30+40+50+61+62+70+75)		

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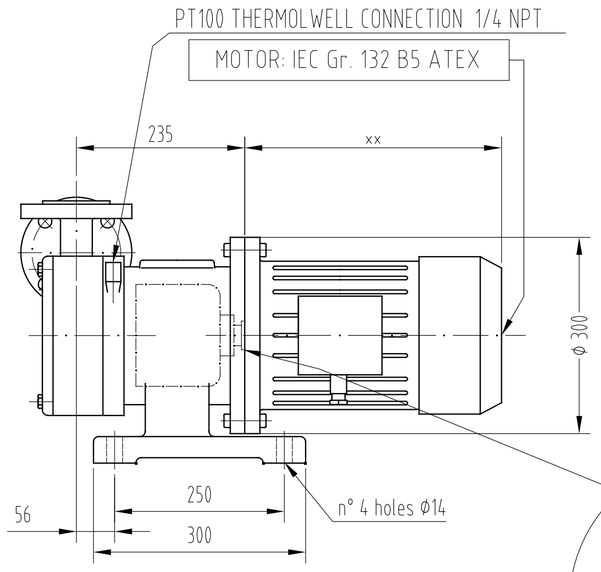
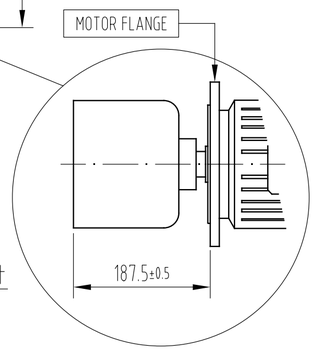
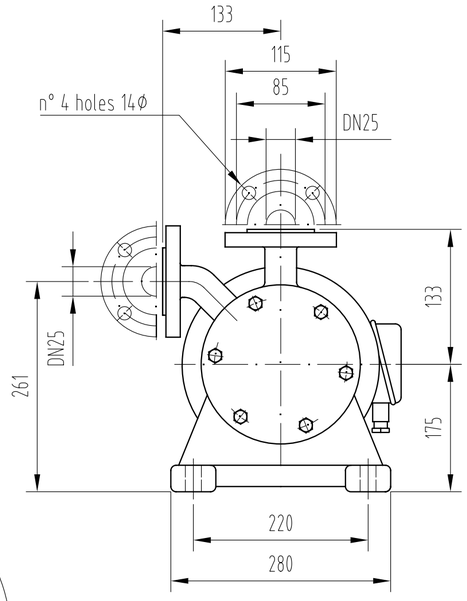
Baureihe / Series:	MTA
Typ / Type:	MTA 78 SSF
Motor:	IEC 100/112 B5

dimensions in mm





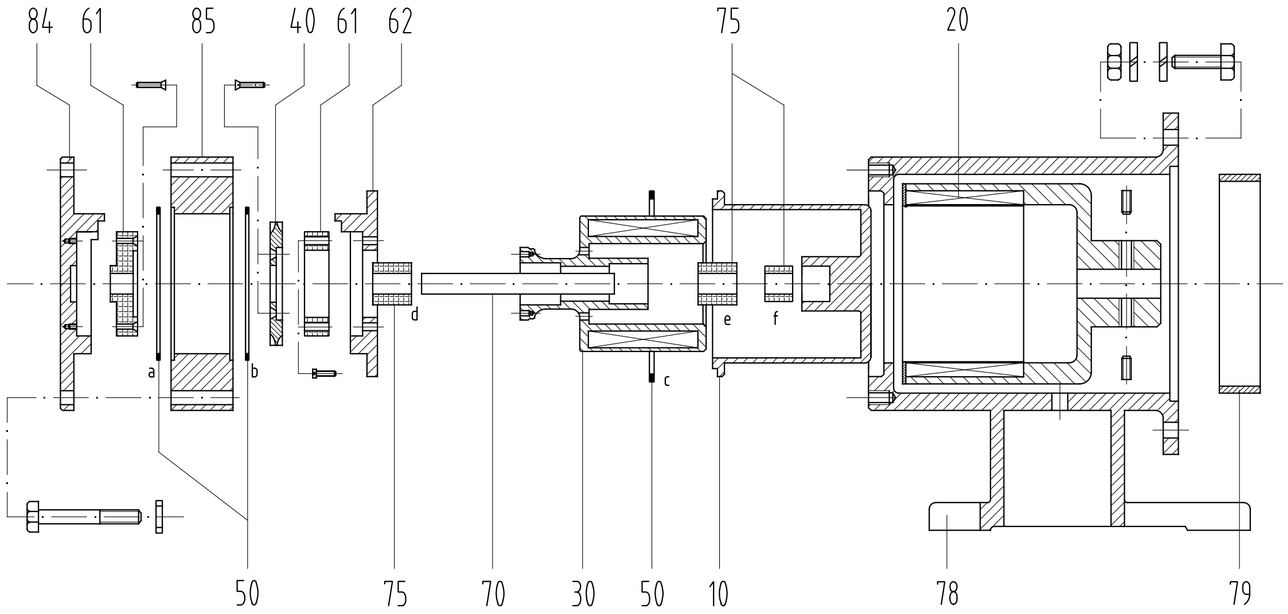
external magnet



(xx) DIFFERENT FROM MOTOR MANUFACTURER
- DIRECTION AND PORTS LOCATION ARE REVERSIBLE

FLANGES DIN 2633 PN 16

REF	DESCRIPTION	MATERIAL	CODE
10	Containment shell	SS 316L	
20	Ext. Magnet	CoSm/ Carbon Steel	
30	Int. Magnet	SS 316L/CoSm	
40	Impeller	SS 316L	
50	Set O-Rings (a+b+c) a + b = O-Ring 4387 (241) c = O-Ring 4437 (245)	FEP	
61	Thrust Bearings	Pcarbon	
62	Rear Ring	SS316L	
70	Shaft	SIC	
75	Sleeve Bearings Bearings (d+e) Bearing (f)	 SIC SS316	
78	Bracket (300-250-38)	Cast Iron	
79	Rub Ring	Bronze	
84	End Cover	SS 316L	
85	Pump Casing	SS 316L	
88	Rear Wet End (10+30+40+50+61+62+70+75)	/	



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Allgemeintoleranzen nach DIN ISO 2768-m
Alle Kanten gratfrei

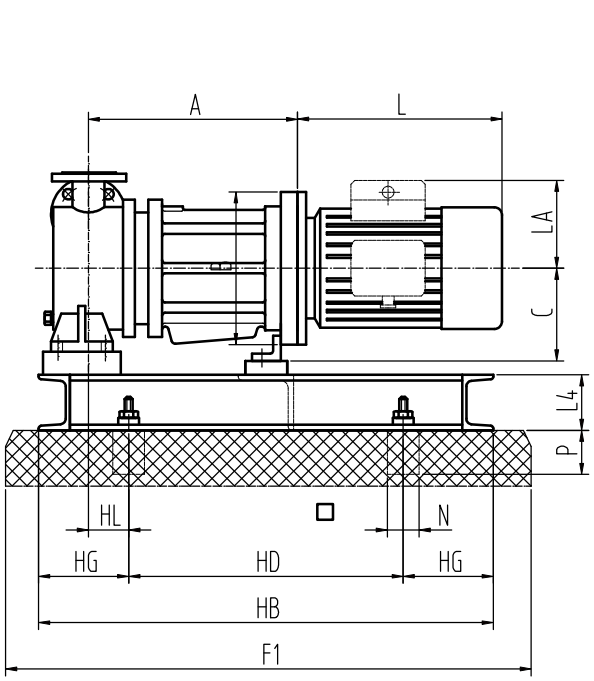
	Datum	Name
Gezeichnet	05.04.2019	Lach
Kontrolliert		
Norm		

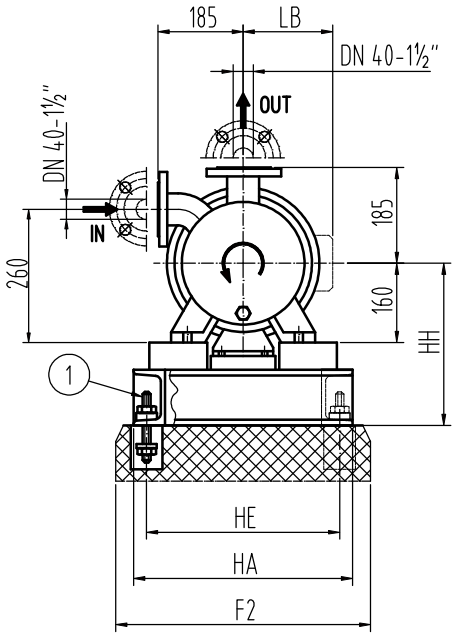
MAG DRIVE TURBINE PUMPS
MTA 1011 SSF IEC132

DPCA-1011-SSF-IEC132 | 1 | A2

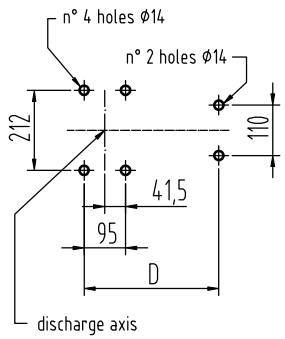
Status	Änderungen	Datum	Name

all dimensions in mm.

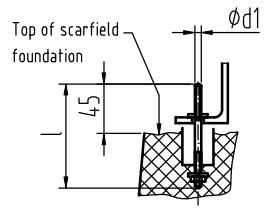




FOOT PRINT SKETCH



PART. 1



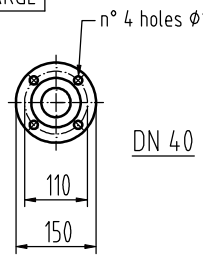
PUMP

MOTOR SIZE	A	B (ϕ)	C	D	WEIGHT (kg) (without motor)
132	292	300	180	280	85
160/180	322	350			
256C	12.67	11.03	7.08	11.02	

NEMA motor dimensions are in inches

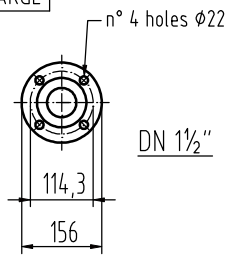
FLANGES DIN 2634 - PN 25

SUCTION - DISCHARGE



FLANGES ANSI B 16.5 - 300 Lb RF

SUCTION - DISCHARGE



MOTOR		OUTPUT MAX. (kW) 2P	OUTPUT MAX. (kW) 4P	SHAFT ϕd	H	L	LA	LB	WEIGHT (kg)
	132 S	5,5 7,5	5,5	38	-				
	132 M	9,2	7,5 9,2	38	-				
	160 M	11,0 15,0	11,0	42	-				
	160 L	18,5	15,0	42	-				
	180 M	22,0	18,5	48	-				
	180 L	-	22,0	48	-				
	256C	20HP	-	1.406	-				

BASEPLATE												FOUNDATION				BOLTS
	BASEPLATE N°	HB	HD	HG	HL	HE	HA	L4	N° BOLTS	HH	WEIGHT (kg)	F1	F2	□ N	P	ϕd1 x l
	07	700	480	110	29	360	400	80	4	280	27	850	550	120	250	M16 x 270
		27.55	18.89	4.33	1.14	14.17	15.74	3.14		11.02		33.46	21.65	4.72	9.84	

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Baureihe / Series:	MTA
Typ / Type:	MTA 2020
Motor:	2900 1/min