

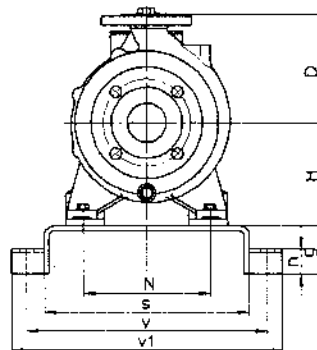
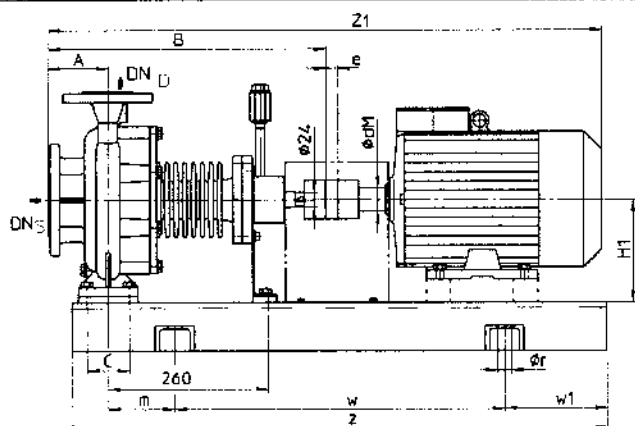
# Wärmeträgerölpumpen

Typenreihe TOE 32-200 GRD – TOE 65-200 GRD

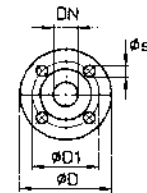


# Thermal oil pumps

Type range TOE 32-200 GRD – TOE 65-200 GRD



Flanschschlussmaße  
flange connection dimensions  
DIN 2501 PN16



DN	Ø D	Ø D1	Ø s
32	140	100	4 x Ø 18
40	150	110	
50	165	125	
65	185	145	
80	200	160	8 x Ø 18

### Pumpe / pump

Baugröße pump size	Gewicht/weight [kg] [lbs]	DN <sub>s</sub>	DN <sub>D</sub>	A	B	C	D	H	N
TOE 32-200	37 / 81	DN 50	DN 32	80	440	70	180	190	190
TOE 40-200	42 / 92	DN 65	DN 40	100	460		200	212	
TOE 50-200	45 / 99	DN 65	DN 50			95	225	180	250
TOE 65-200	54 / 119	DN 80	DN 65						

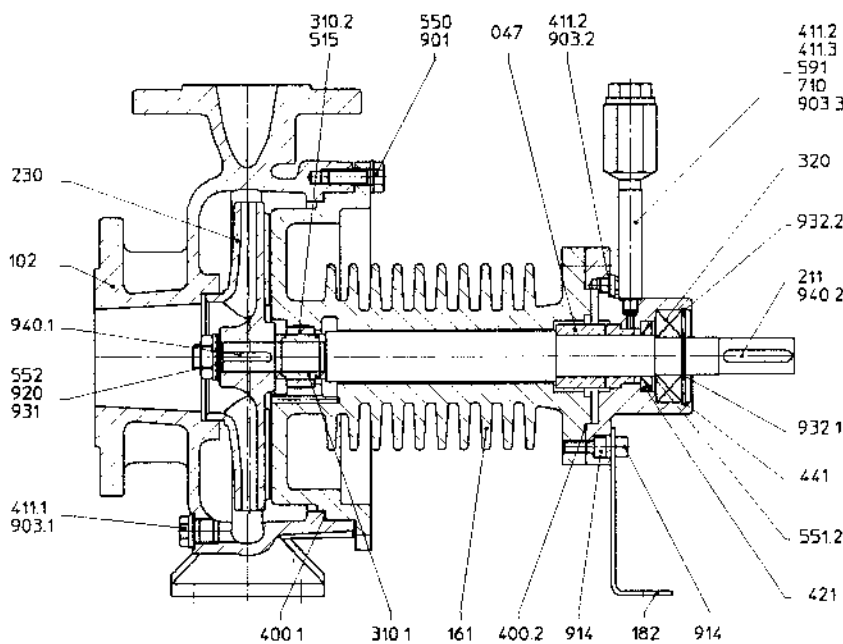
### Grundplatte/base plate

Größe size	kg/lbs	Z	w1	w	S	v1	v	Ør	g	m
3	43/64.6	900	150	600	300	390	350	19	65	36
4	57/125.4	1000	170	660	340	450	400	24	80	42
5	70/154	1120	190	740	380	490	440			
6	85/187	1250	205	840	430	540	490	28	100	
7	112/246.4	1400	230	940	480	610	550			

### Zuordnung: Pumpe/ Grundplatte

### assignment: pump/base plate

Baugröße pump size	Baugröße / frame size	90L		100L		112M		132S		160M		160L		180M		200L	
	kW / HP	2,2	3,0	3	4,00	4	5,4	5,5/7,5	7,5/10	11/15	15/20	18,5	25	22	30	30/37	40/50
	ØdM	24		28		28		38		42		42		48		55	
	e	16		18		20		24		26		28					
	H1	160															
TOE 32-200	Z1	775		794		838		945		1091							
	Grundplatte / base plate	3/300		4/340		5/380											
TOE 40-200	H1	160															
	Z1	795		814		858		965		1111							
TOE 50-200	H1	160															
	Z1	795		814		858		965		1111		1174					
TOE 65-200	H1	180															
	Z1	795		814		858		965		1111		1174		1226		200	
	Grundplatte / base plate	4/340		5/380		6/430		7/480									



411.2	47	Gleitringdichtung	mechanical seal
411.3	102	Spiralgehäuse	valute casing
591	161	Gehäusedeckel	casing cover
710	182	Fuß	pump foot
903.3	211	Welle	shaft
	230	Laufrad	impeller
	310.1	Gleitlager	sleeve bearing
	310.2	Gleitlager	sleeve bearing
	320	Kugellager	ball bearing
	400.1/2	Dichtung	gasket
	411.1-3	Dichtring	joint ring
	421	Radialdichtung	radial seal ring
	441	GRD-Gehäuse	shaft seal housing
	504	Abstandring	distance ring
	515	Toleranzring	tolerance ring
	550	Scheibe	disk
	551.1/2	Passscheibe	distance disk
	552	Tellerfeder	disk spring
	591	Behälter	container
	710	Rohr	pipe
	901	6-kt. Schraube	hexagon head cap screw
	903.1-3	Verschlusschraube	screwed plug
	914	Innen-6-kt. Schraube	socket head cap screw
	920	6-kt. Mutter	hexagon nut
	931	Sicherungsscheibe	locking disk
	932.1/2	Sicherungsring	locking ring
	940.1/2	Passfeder	feather key

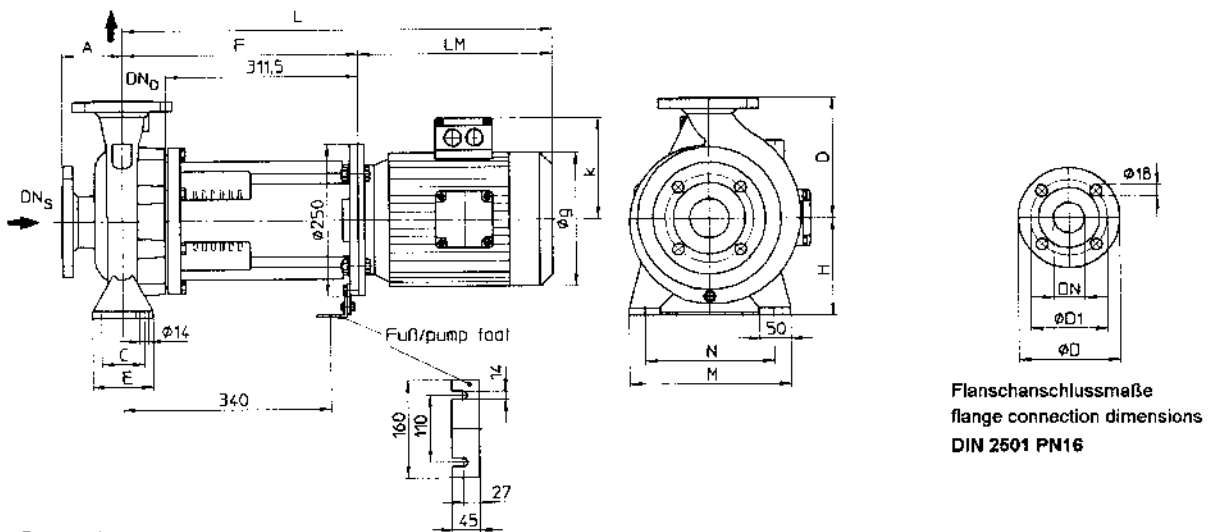
# Wärmeträgerölpumpen

Typenreihe TOE 32-200 MK – TOE 65-200 MK



# Thermal oil pumps

Type range TOE 32-200 MK – TOE 65-200 MK



Flanschschlussmaße  
flange connection dimensions  
DIN 2501 PN16

### Pumpe / pump

Baugröße pump size	Gewicht/weight [kg] [lbs]	$DN_S$	$DN_D$	A	B	C	E	D	H	N	M
TOE 32-200	39 / 86	DN 50	DN 32	80	440			180		190	240
TOE 40-200	44 / 97	DN 65	DN 40			70	100		160	212	265
TOE 50-200	47 / 103	DN 65	DN 50	100	460			200			
TOE 65-200	57 / 125	DN 80	DN 65			95	125	225	180	250	320

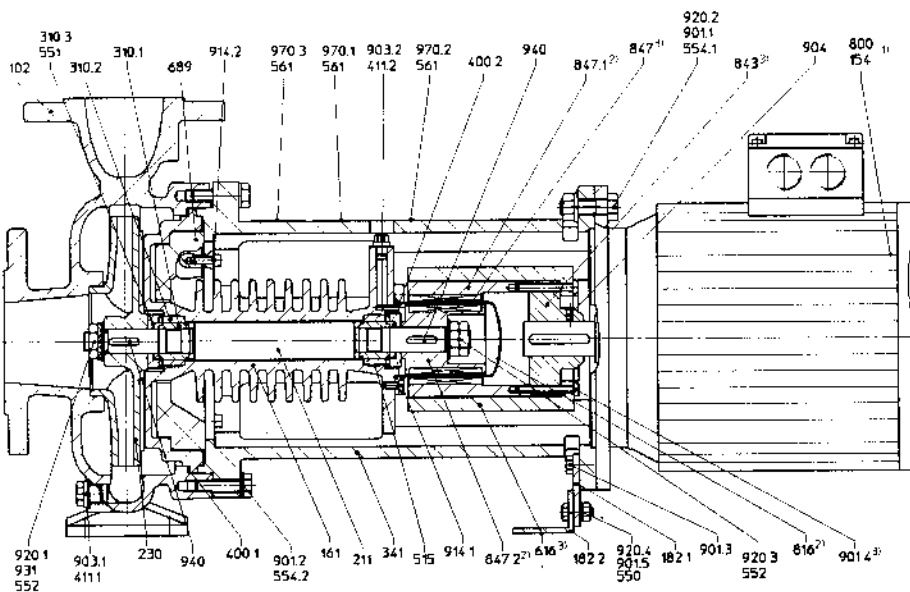
DN	$\phi D$	$\phi D1$	$\phi s$
32	140	100	
40	150	110	4 x $\phi 18$
50	165	125	
65	185	145	
80	200	160	8 x $\phi 18$

### Zuordnung: Pumpe/ Motor

### assignment: pump/motor

Motor BG frame size	kW	HP	$\phi g$	K	Wellenende shaft-end	LM	MK	L			
								TOE 32-200	TOE 40-200	TOE 50-200	TOE 65-200
90S	1,5	2	176	147	$\phi 24 \times 50$	244	22Nm	628	628	630,5	628
90L	2,8	3,8				275		659	659	661,5	659
100L	3	4	196	154	$\phi 28 \times 60$	303	30Nm	687	687	689,5	687
112M	4/5,5	5,4/7,5				324		708	708	710,5	708
112M/L *	7,5	10	224	176	$\phi 38 \times 80$	360	40/52Nm	744	744	746,5	744
132M *	9,5	12,8	260	198		428	52Nm	812	812	814,5	812
160M *	11	15	220	220	$\phi 42 \times 80$	537	80Nm	921	921	923,5	921
160M *	15	20									

\*) mit Zwischenflansch  $\phi 250 \times 20$  \*) with intermediate flange  $\phi 250 \times 20$



- |         |                      |                        |
|---------|----------------------|------------------------|
| 102     | Spiralgehäuse        | valute casing          |
| 154     | Zwischenflansch      | intermediate flange    |
| 161     | Gehäusedeckel        | casing cover           |
| 182 1/2 | Fuß                  | pump foot              |
| 211     | Welle                | shaft                  |
| 230     | Lauftrad             | impeller               |
| 310.1-3 | Gleitlager           | sleeve bearing         |
| 341     | Laternen             | bracket                |
| 400.1/2 | Dichtung             | gasket                 |
| 411.1/2 | Dichtring            | joint ring             |
| 515     | Toleranzring         | tolerance ring         |
| 550     | Scheibe              | disk                   |
| 551     | Passscheibe          | distance disk          |
| 552     | Tellerfeder          | disk spring            |
| 554.1/2 | Unterlegscheibe      | washer                 |
| 616     | Schwungrad           | flywheel element       |
| 689     | Isolierung           | insulation             |
| 800     | Motor                | motor                  |
| 816     | Spalttopf            | can                    |
| 843     | Kupplung             | coupling               |
| 847     | Magnetkupplung       | magnetic coupling      |
| 847.1   | Außenmagnet          | outer magnet           |
| 847.2   | Innenmagnet          | inner magnet           |
| 901.1-5 | 6-kt. Schraube       | hexagon head cap screw |
| 903.1/2 | Verschlusschraube    | screwed plug           |
| 904     | Gewindestift         | set screw              |
| 914.1/2 | Innen-6-kt. Schraube | socket head cap screw  |
| 920.1-4 | 6-kt. Mutter         | hexagon nut            |
| 931     | Sicherungsscheibe    | locking disk           |
| 940     | Passfeder            | feather key            |
| 970.1   | Typenschild          | name plate             |
| 970.2/3 | Hinweisschild        | reference plate        |

- 1) mit Zwischenflansch ab BG 112M/L
- 2) nur bei 22 Nm Magnetkupplung
- 3) entfällt bei 22 Nm Magnetkupplung

- 1) with intermediate flange from frame size 112M/L
- 2) only for magnetic coupling 22 Nm
- 3) inapplicable for magnetic coupling 22 Nm

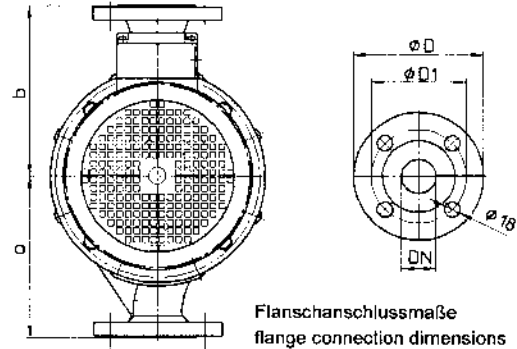
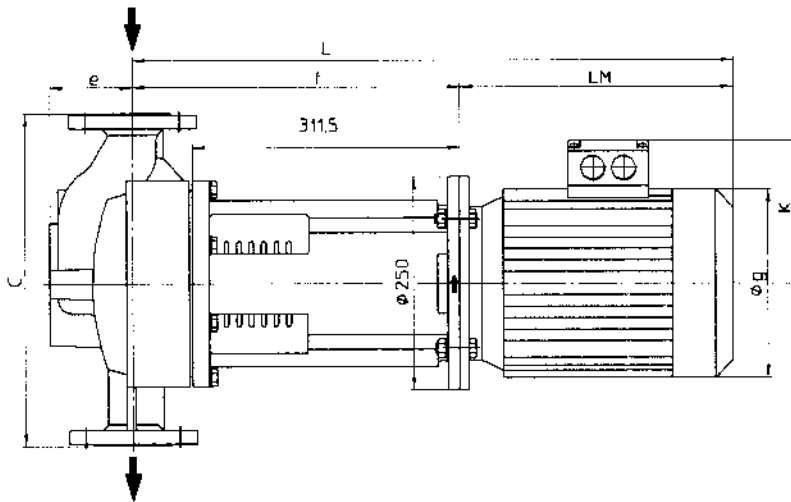
# Wärmeträgerölpumpen

Typenreihe IN 40-180 MK / IN 50-200 MK / IN 65-200 MK



# Thermal oil pumps

Type range IN 40-180 MK / IN 50-200 MK / IN 65-200 MK



Flanschanschlussmaße  
flange connection dimensions  
DIN 2501 PN16

### Pumpe / pump

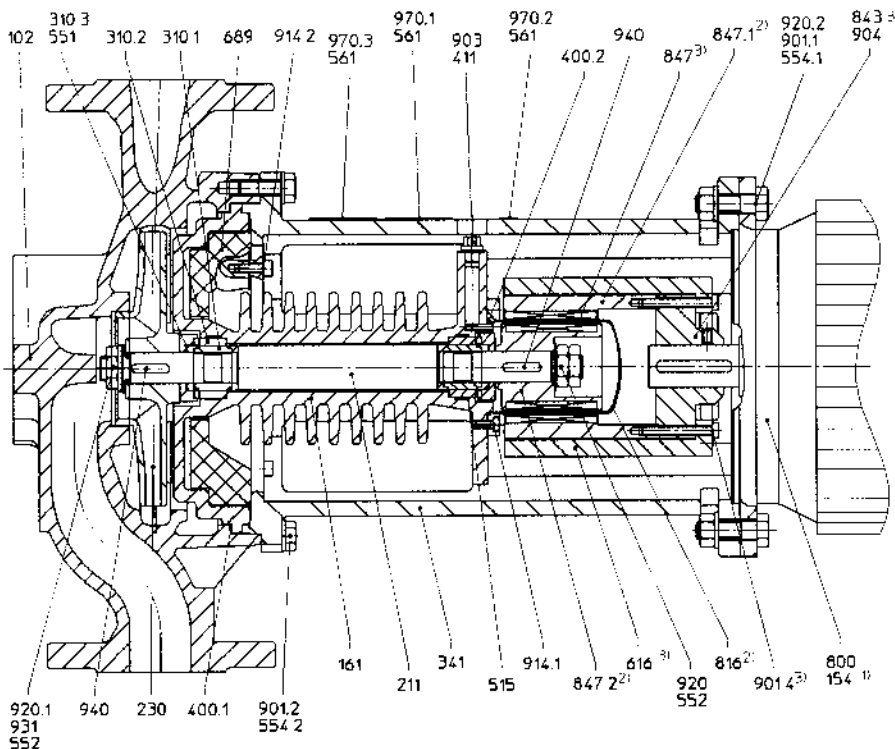
Baugröße pump size	Gewicht/weight		DN	a	b	c	e	f
	[kg]	[lbs]						
IN 40-180 MK	47	103	DN 40	190	200	390	97	381
IN 50-200 MK	50	110	DN 50	205	220	425	102	384
IN 65-200 MK	54	119	DN 65	225	240	465	112	387

DN	Ø D	Ø D1	Ø s
40	150	110	4 x Ø 18
50	165	125	
65	185	145	

### Zuordnung: Pumpe/ Motor

### assignment: pump/motor

Motor BG frame size	kW	HP	Øg	K	Wellenende shaft-end	LM	MK	L		
								IN 40-180	IN 50-200	IN 65-200
90S	1,5	2	176	147	Ø 24 x 50	244	22Nm	625	628	631
90L	2,8	3,8						656	659	662
100L	3	4	196	154	Ø 28 x 60	303	30Nm	684	687	690
112M	4/5,5	5,4/7,5						705	708	711
112M/L*	7,5	10	224	176	Ø 38 x 80	340	40/52Nm	721	724	727
132M*	9,5	12,8						789	792	795



- |         |                      |                        |
|---------|----------------------|------------------------|
| 102     | Spiralgehäuse        | valute casing          |
| 154     | Zwischenflansch      | intermediate flange    |
| 161     | Gehäusedeckel        | casing cover           |
| 211     | Welle                | shaft                  |
| 230     | Lauftrad             | impeller               |
| 310.1-3 | Gleitlager           | sleeve bearing         |
| 341     | Laterne              | bracket                |
| 400.1/2 | Dichtung             | gasket                 |
| 515     | Toleranzring         | tolerance ring         |
| 551     | Passscheibe          | distance disk          |
| 552     | Tellerfeder          | disk spring            |
| 554.1/2 | Unterlegscheibe      | washer                 |
| 561     | Kerbstift            | grooved pin            |
| 616     | Schwungrad           | flywheel element       |
| 689     | Isolierung           | insulation             |
| 800     | Motor                | motor                  |
| 816     | Spalttopf            | can                    |
| 843     | Kupplung             | coupling               |
| 847     | Magnetkupplung       | magnetic coupling      |
| 847.1   | Außenmagnet          | outer magnet           |
| 847.2   | Innenmagnet          | inner magnet           |
| 901.1-4 | 6-kt. Schraube       | hexagon head cap screw |
| 903     | Verschlusschraube    | screwed plug           |
| 904     | Gewindestift         | set screw              |
| 914.1/2 | Innen-6-kt. Schraube | socket head cap screw  |
| 920.1-3 | 6-kt. Mutter         | hexagon nut            |
| 931     | Sicherungsscheibe    | locking disk           |
| 940     | Passfeder            | feather key            |
| 970.1   | Typenschild          | name plate             |
| 970.2/3 | Hinweisschild        | reference plate        |

- 1) mit Zwischenflansch ab BG 112M/L
- 2) nur bei 22 Nm Magnetkupplung
- 3) entfällt bei 22 Nm Magnetkupplung

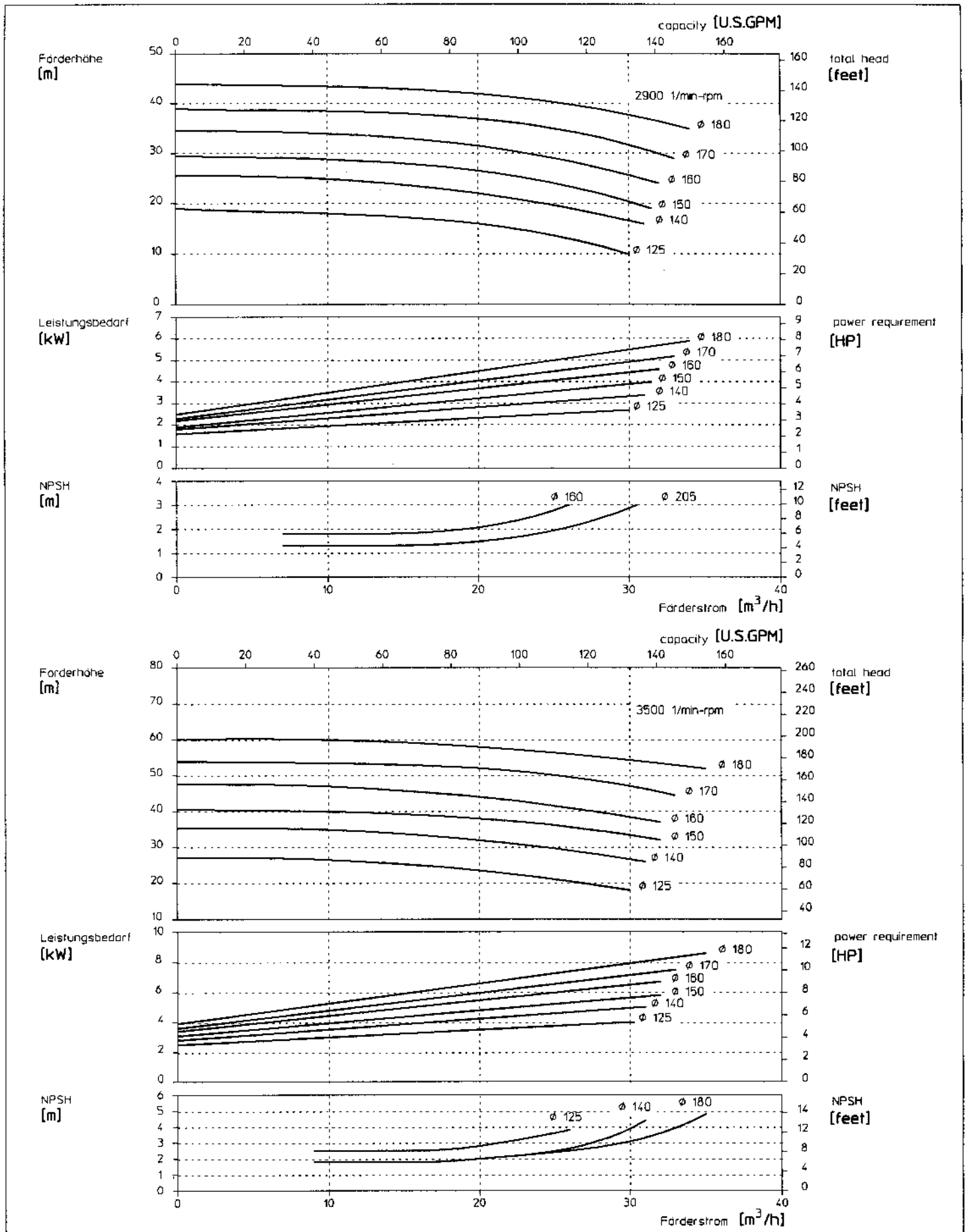
- 1) with intermediate flange from frame size 112M/L
- 2) only for magnetic coupling 22 Nm
- 3) inapplicable for magnetic coupling 22 Nm

# Wärmeträgerölpumpen

Typenreihe IN 40-180.MK

## Thermal oil pumps

Type range IN 40-180.MK



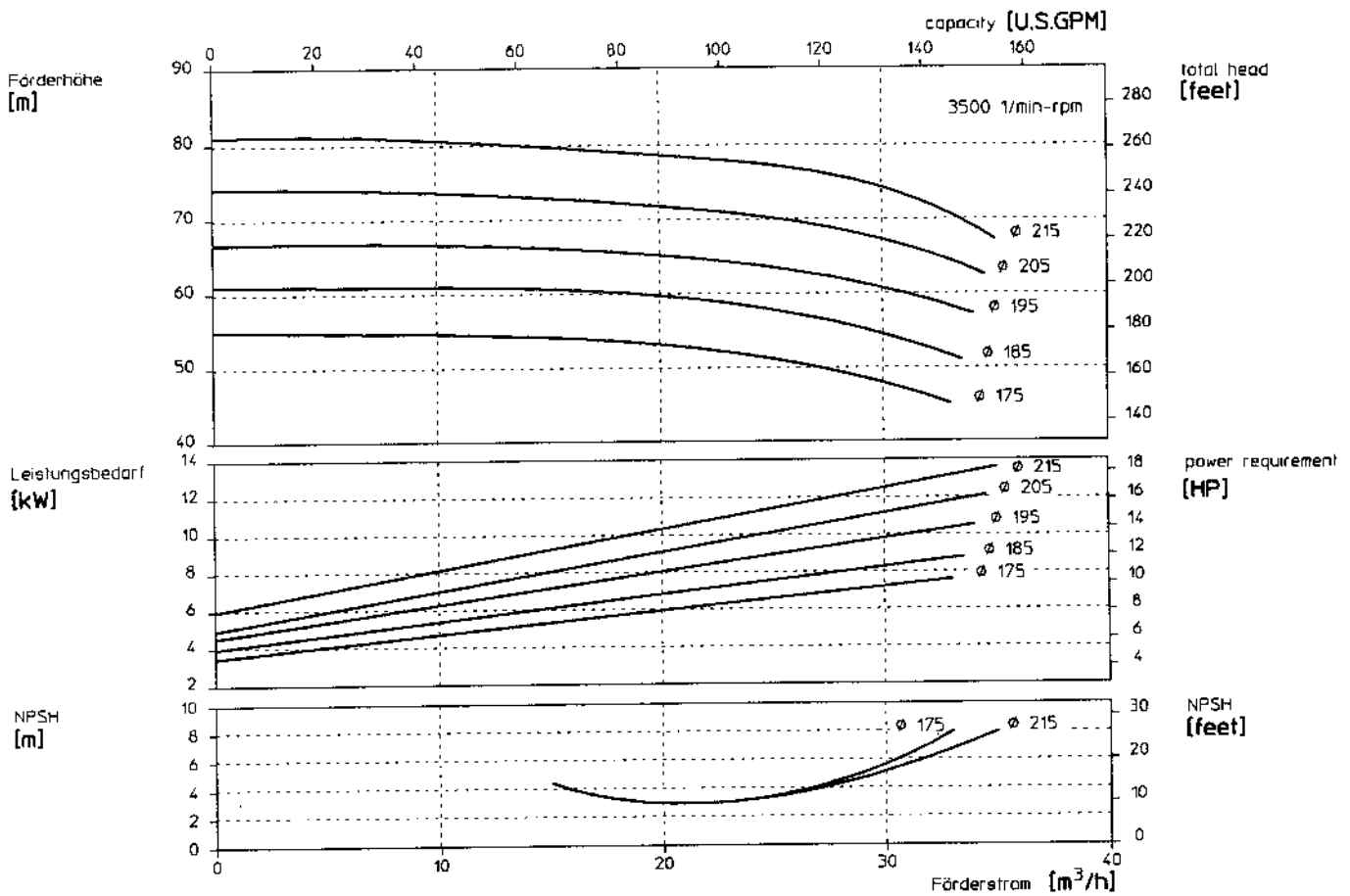
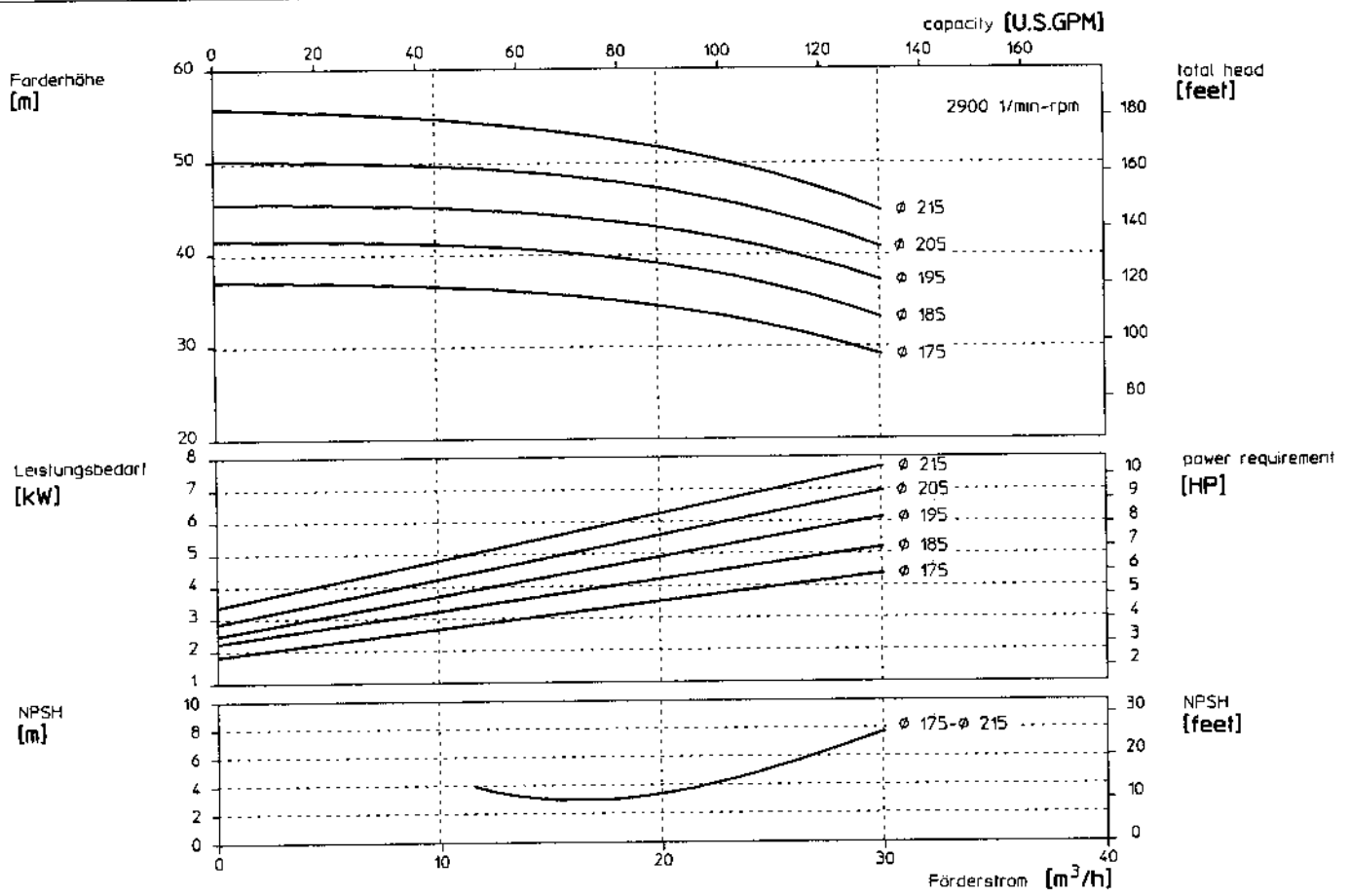
# Wärmeträgerölpumpen

Typenreihe TOE 32-200.MK

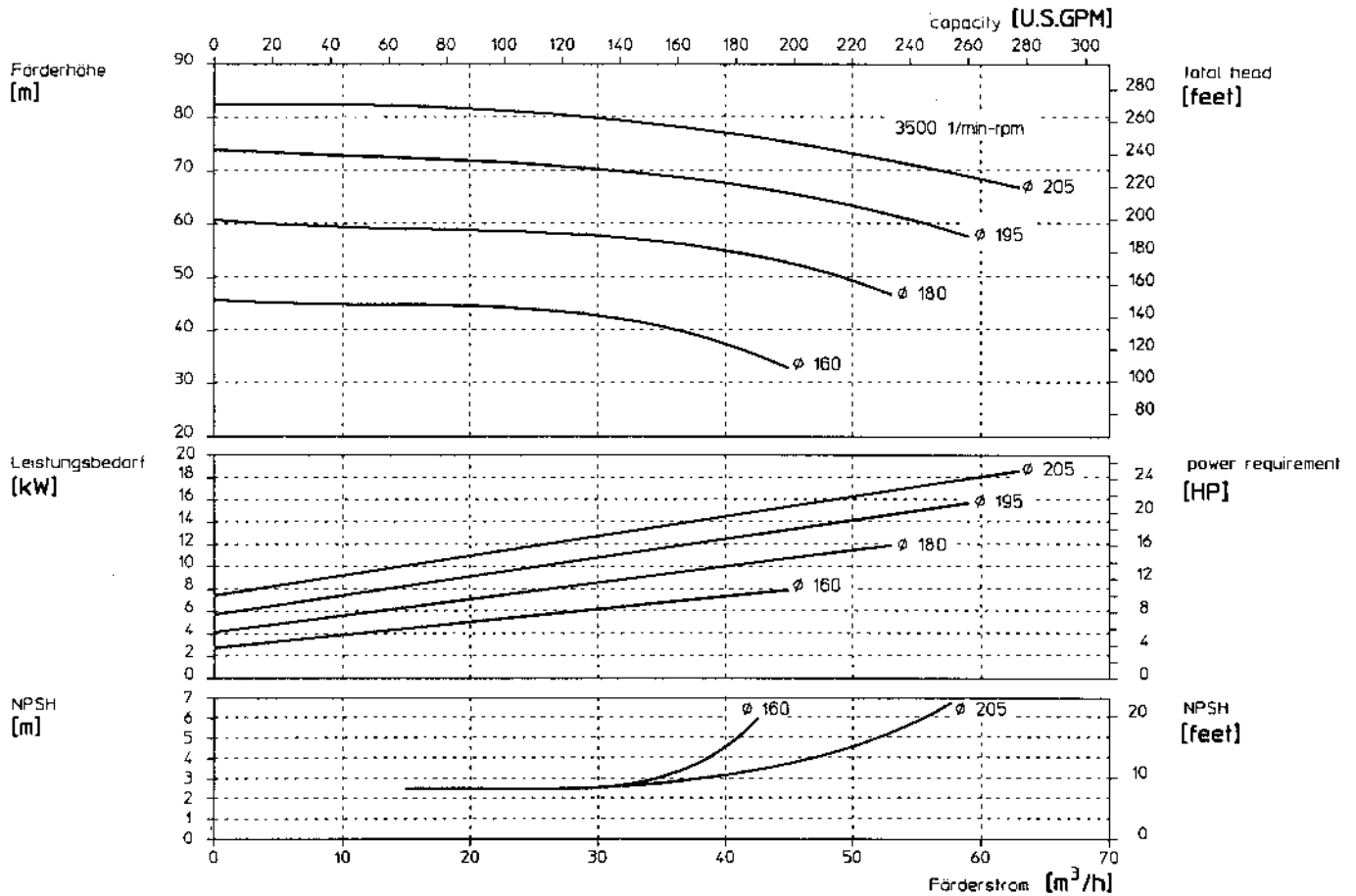
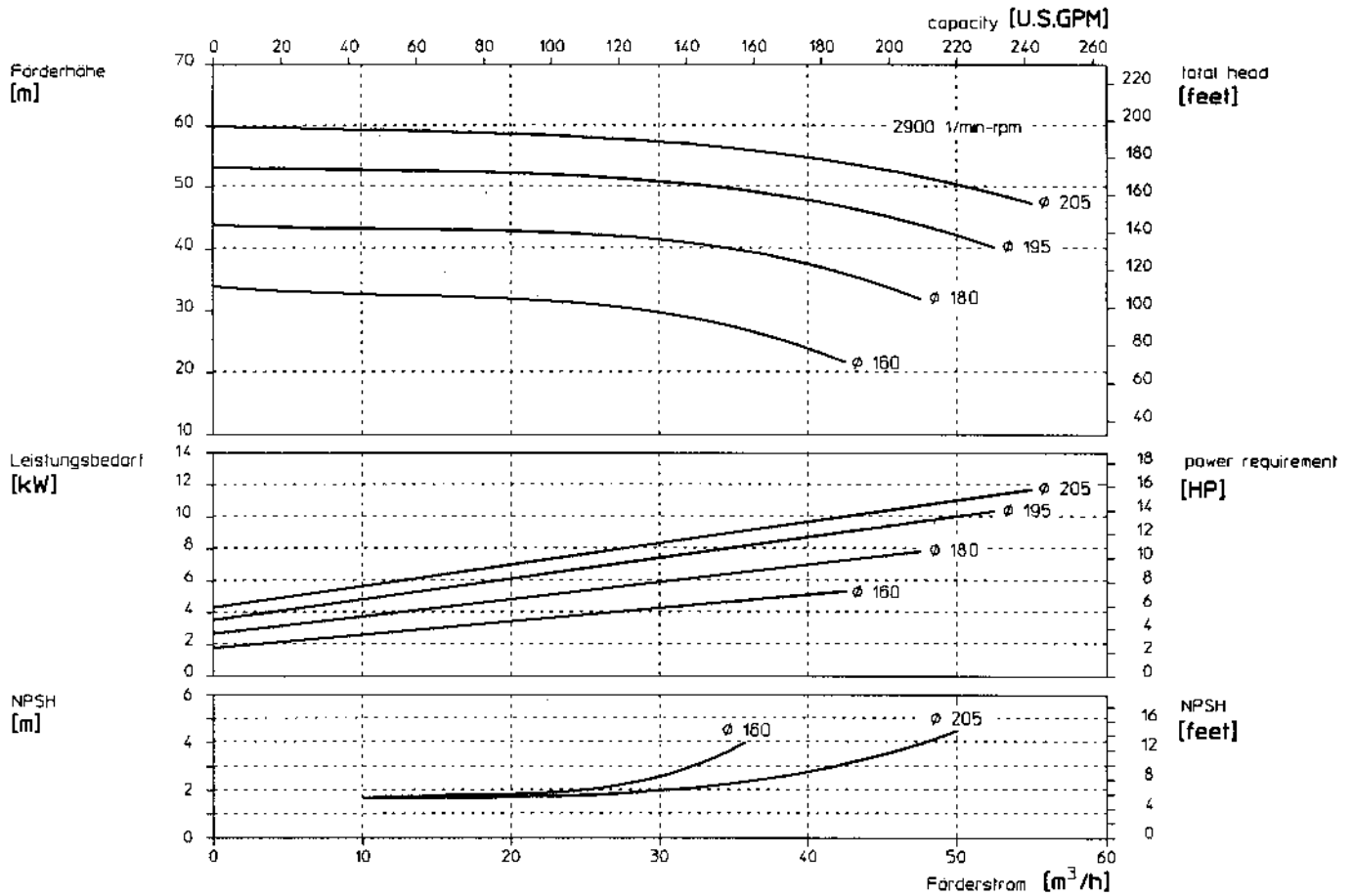


## Thermal oil pumps

Type range TOE32-200.MK



**Thermal oil pumps**  
 Type range TOE 40-200.MK / IN 50-200.MK



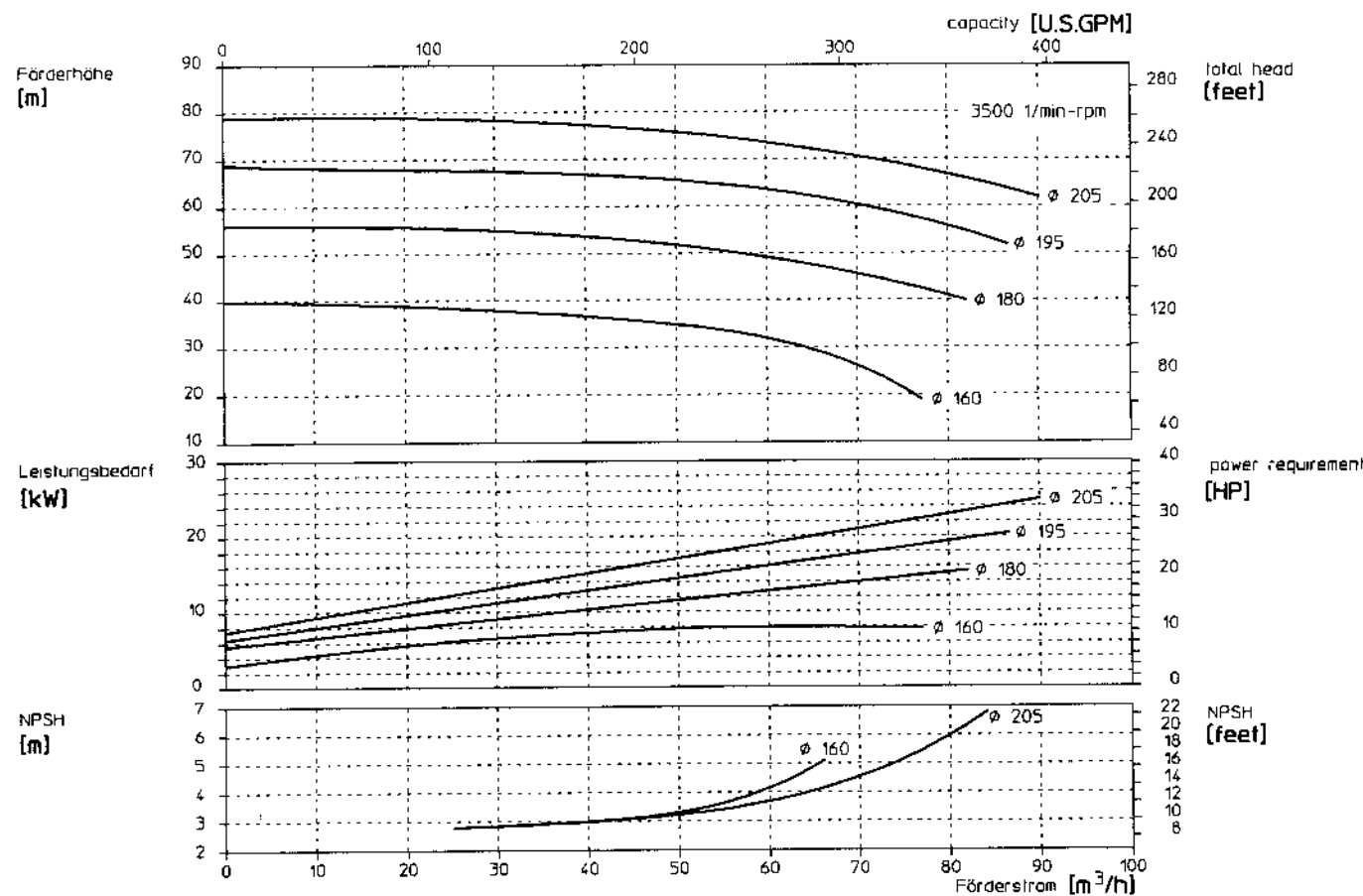
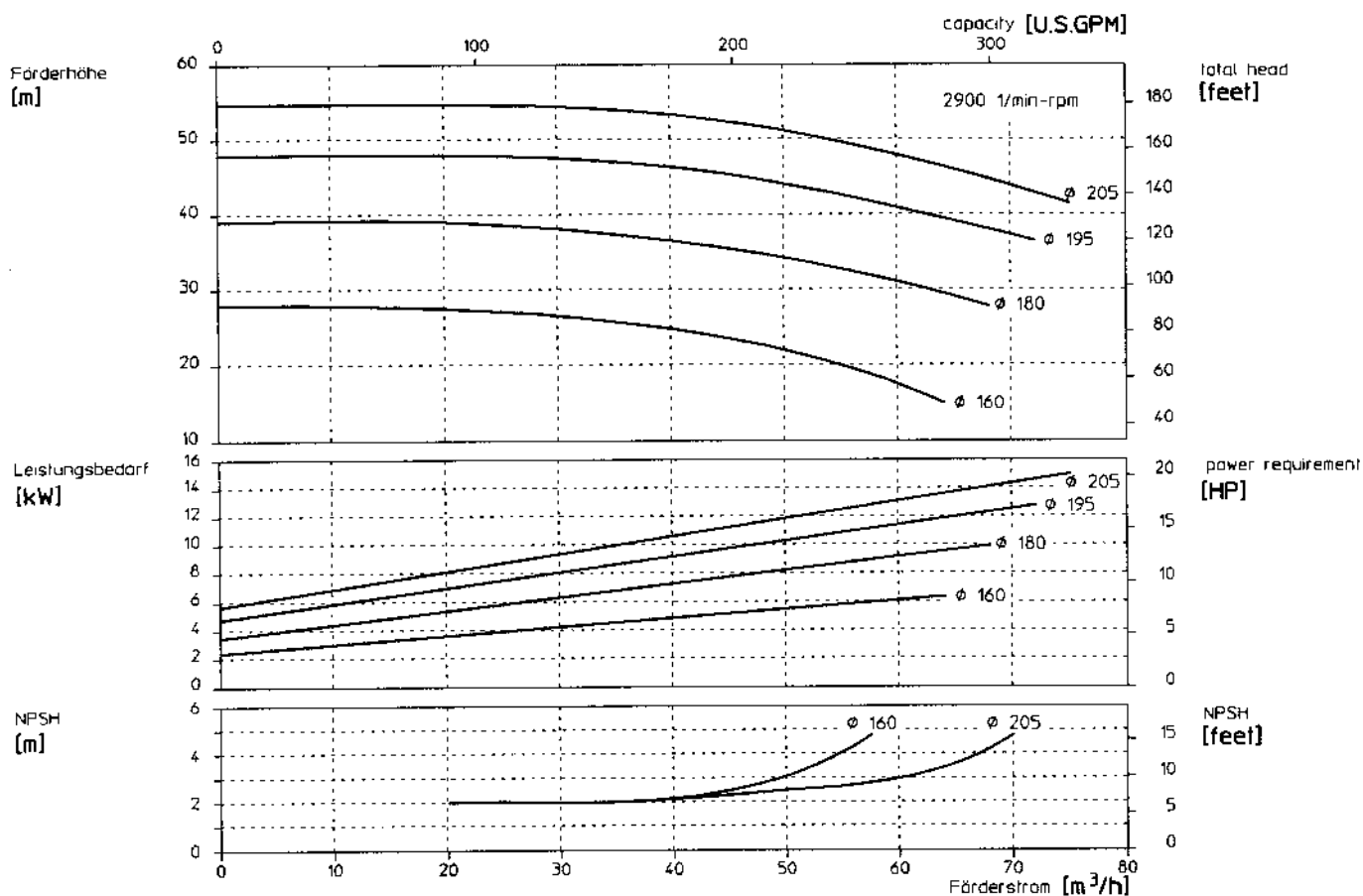
# Wärmeträgerölpumpen

Typenreihe TOE 50-200.MK / IN 65-200.MK



# Thermal oil pumps

Type range TOE 50-200.MK / IN 65-200.MK

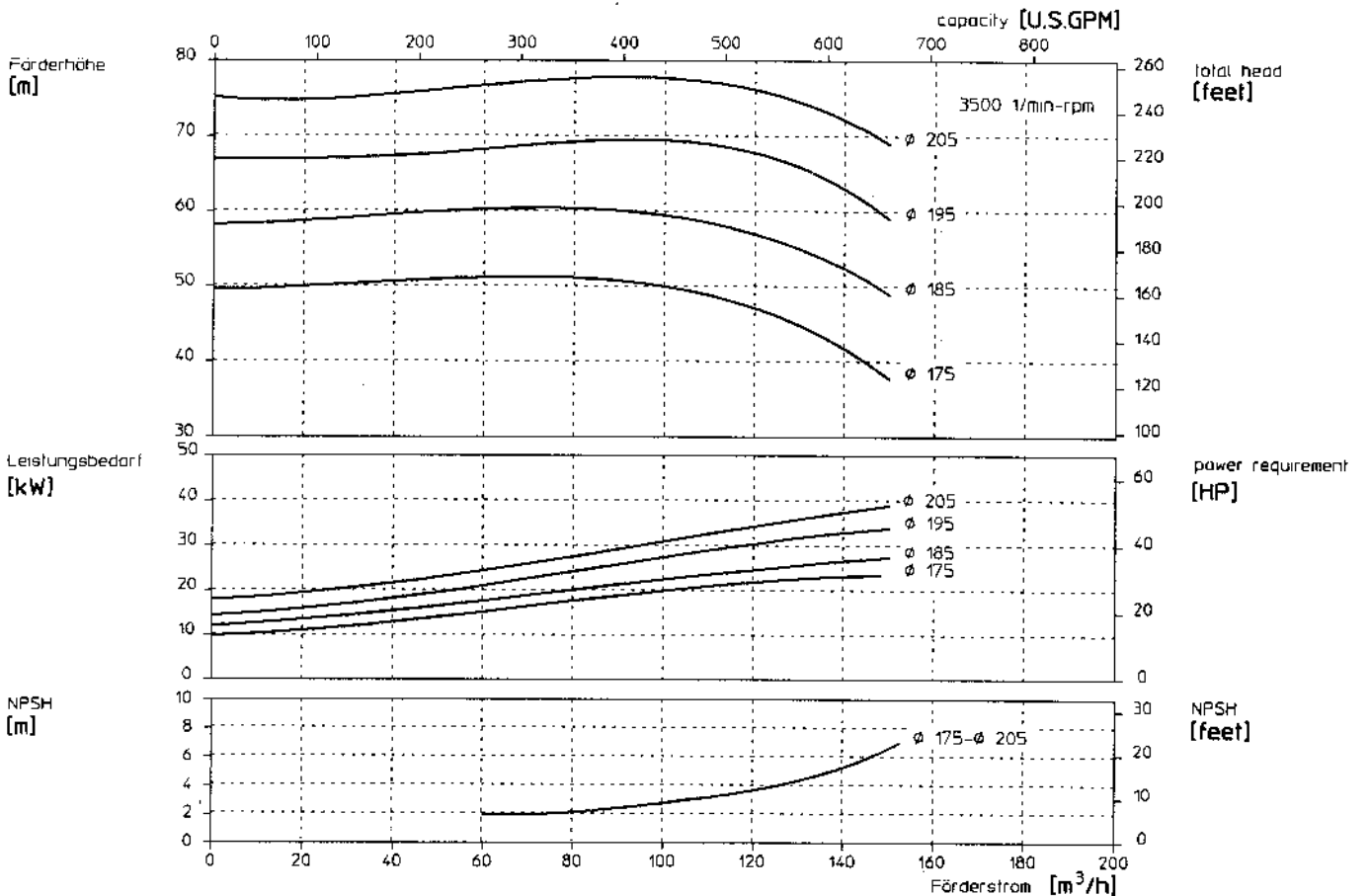
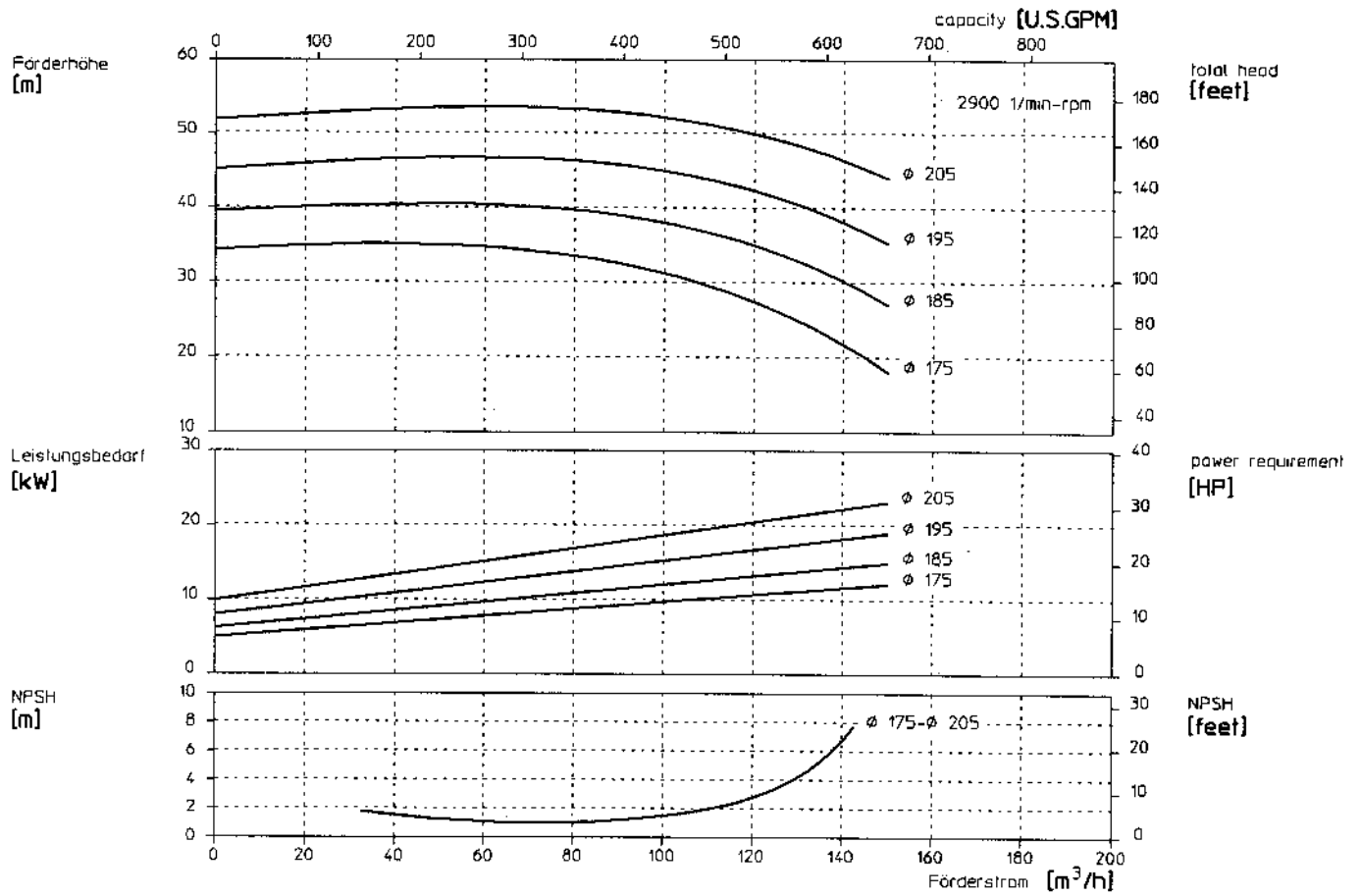


# Wärmeträgerölpumpen

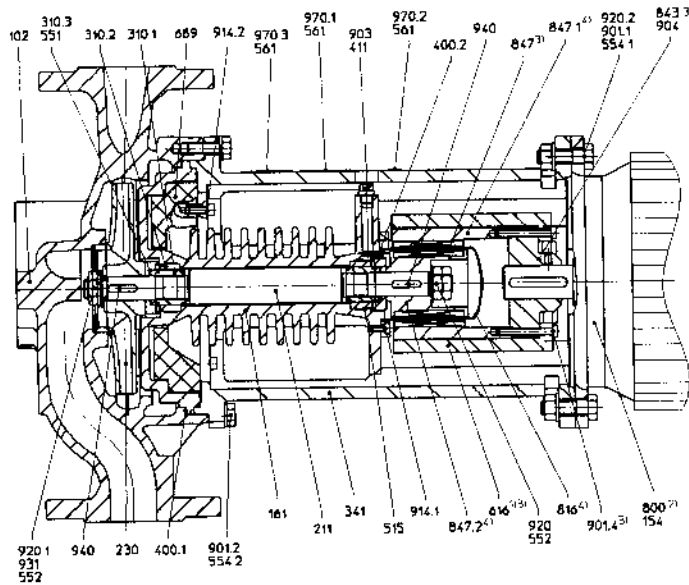
Typenreihe TOE 65-200.MK

## Thermal oil pumps

Type range TOE 65-200.MK



## Wärmeträgeröl- / Heißwasserpumpen Thermal oil- / Hot water pumps



	NPY-2251.MIK	TOENPY-2251.MIK	CY-4281.MIK	TOEICY-4281.MIK	CY-6091.MIK	TOEICY-6091.MIK	TOE/MZ-35/40-2.MIK	TOE 32-160.GLRD	TOE 32-160.MIK	TOE 32-200.GRD	TOE 32-200.MIK	TOE 40-200.GRD	TOE 40-200.MIK	TOE 50-200.GRD	TOE 50-200.MIK	TOE 65-200.GRD	TOE 65-200.MIK	IN 40-180MK	IN 50-200.MIK	IN 65-200.MIK	
<b>Bauteile</b>																				<b>components</b>	
<b>Temperatur-Einsatzgrenzen</b>																				<b>limit of operating temperature</b>	
Wasser 160°C	x	x	x																		water 160°C
Öl 180°C	x	x					x	x	x	x	x	x	x	x	x	x	x	x	x	x	oil 180°C
Öl 350°C	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	oil 350°C
<b>Laufrad</b>																				<b>impeller</b>	
Peek	x	x																			Peek
1.4408 plasmanitriert	x	x																			1.4408 plasma-nitrated
1.4408 - AL <sub>2</sub> O <sub>3</sub>			x																		1.4408 - AL <sub>2</sub> O <sub>3</sub>
GG 25							x	x	x	x	x	x	x	x	x	x	x	x	x	x	cast iron
GGG 40																					spheroidal graphite cast iron
GGG 50					x																spheroidal graphite cast iron
<b>Gehäuse- / deckel</b>																				<b>casing / casing cover</b>	
GGG 40							x	x	x	x	x	x	x	x	x	x	x	x	x	x	spheroidal graphite cast iron
GGG 50 plasmanitriert						x															spheroidal graphite cast iron plasma-nitrated
1.4581	x	x	x	x	x																1.4581
<b>Welle</b>																				<b>shaft</b>	
Keramik (AL <sub>2</sub> O <sub>3</sub> )	x	x	x	x	x	x															ceramic
1.4122							x	x	x	x	x	x	x	x	x	x	x	x	x	x	1.4122
<b>Wellendichtung</b>																				<b>shaft sealing</b>	
Gleitringdichtung							x	x	x	x	x	x	x	x	x	x	x	x	x	x	mechanical seal
über Spalttopf 1.4571	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	by separating can 1.4571
<b>Lagerung</b>																				<b>bearings</b>	
Gleitlager SiC/SiC	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	sleeve bearings
Rillenkugellager																					deep groove ball bearing
<b>Magnet</b>																				<b>magnet</b>	
Samarium-Kobalt (SmCo217)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Samarium-Kobalt (SmCo217)
<b>Gewicht [kg/lbs]</b>																				<b>weight [kg/lbs]</b>	
ohne Motor					19,1/42	16,6/36,5	40/88	31/68	33/73	37/81	39/86	42/92	44/97	45/99	47/103	54/119	57/125	47/103	50/110	54/119	without motor
mit Motor	9,5/21	9,6/21	14,2/31	14,3/31,5																	with motor

Andere Werkstoffe auf Anfrage

other material executions upon request