

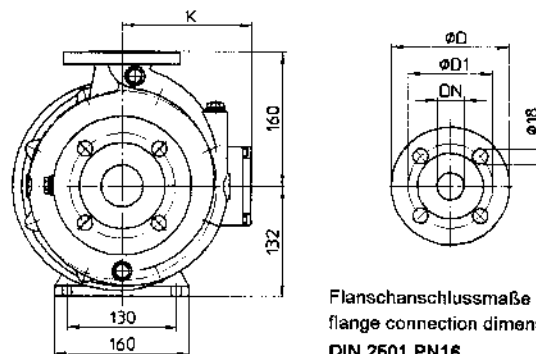
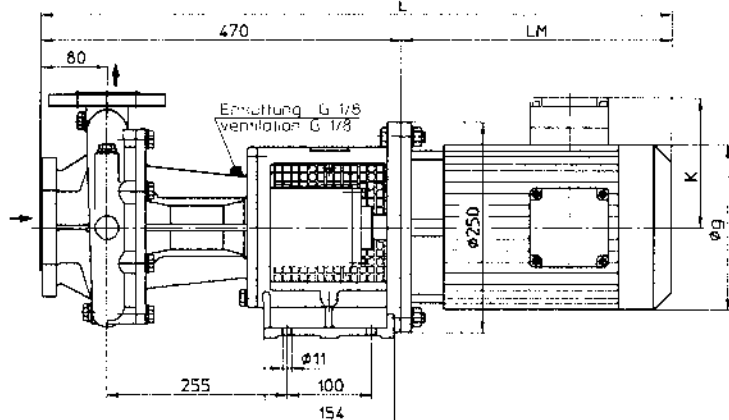
# Wärmeträgeröl- / Heißwasserpumpen

Typenreihe TOE 32-160.MK / TOE 32-160.GRD



# Thermal oil- / Hot water pumps

Type range TOE 32-160.MK / TOE 32-160.GRD



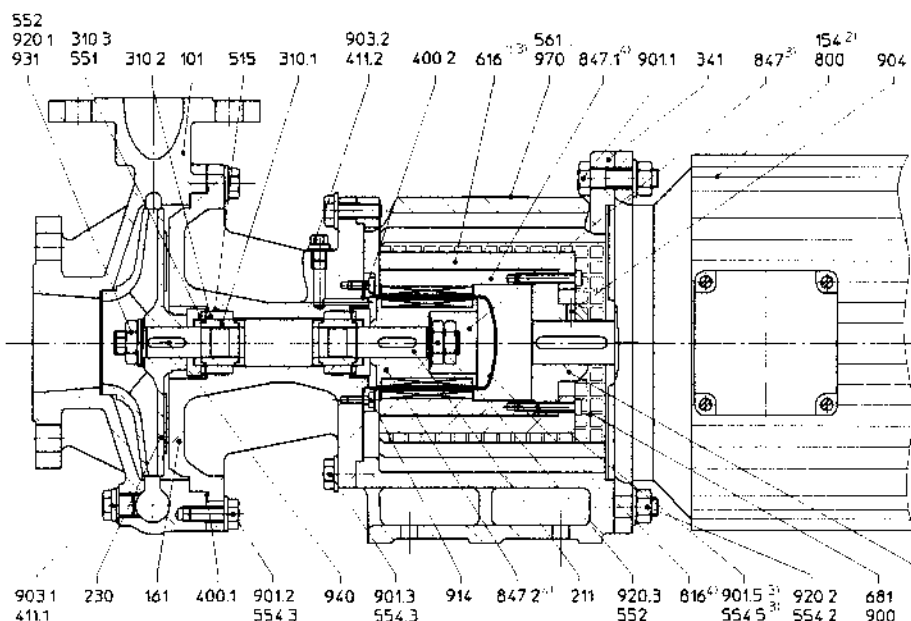
Flanschanschlussmaße  
flange connection dimensions  
DIN 2501 PN16

Zuordnung: Pumpe/ Motor assignment: pump/motor

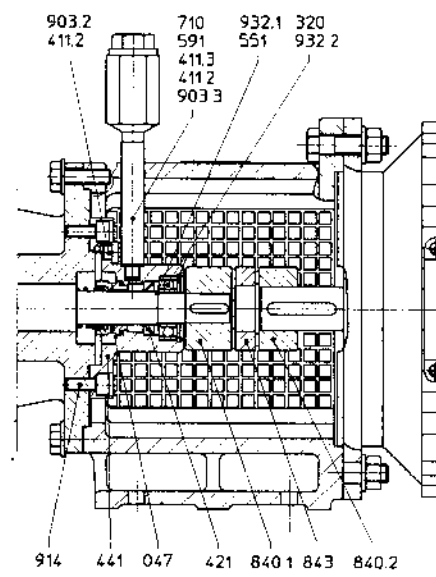
Motor BG frame size	kW	HP	Øg	K	Wellenende shaft-end	LM	L	MK
90S	1,5	2	176	147	Ø 24 x 50	244	714	22Nm
90L	2,8	3,8			275	745		
100L	3	4	196	154	Ø 28 x 60	303	773	30Nm
112M	4/5,5	5,4/7,5			324	794		
112M/L *	7,5	10	224	176	Ø 38 x 80	360	830	40Nm

Baugröße pump size	Anschluss / connection	DN	Ø D	Ø D1	Ø s
TOE 32-160	Druckseite / discharge side	32	140	100	4 x Ø 18
	Saugseite / suction side	50	165	125	

\*) mit Zwischenflansch Ø250x20 \*) with intermediate flange Ø250x20



TOE 32-160.MK



TOE 32-160.GRD

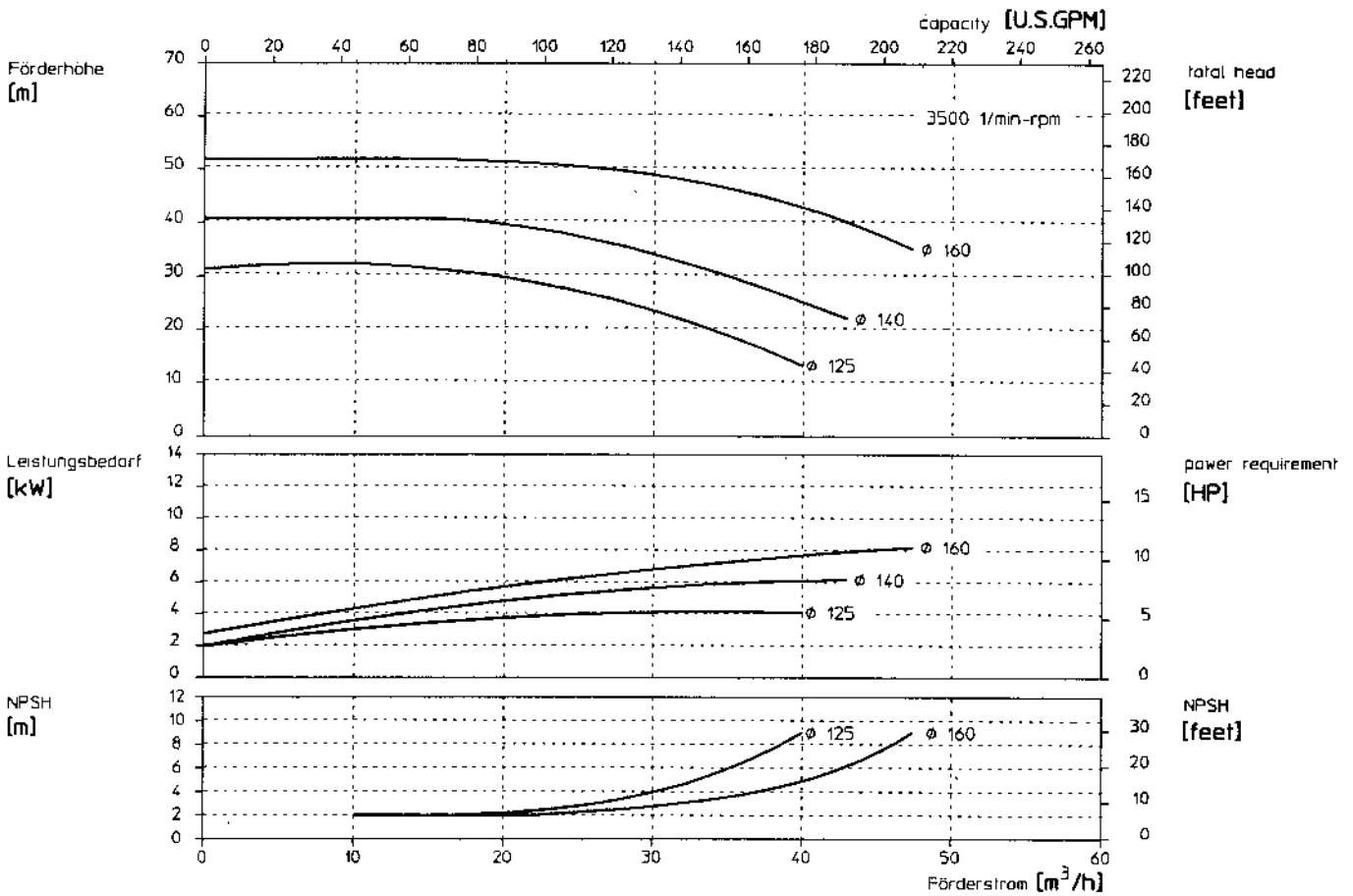
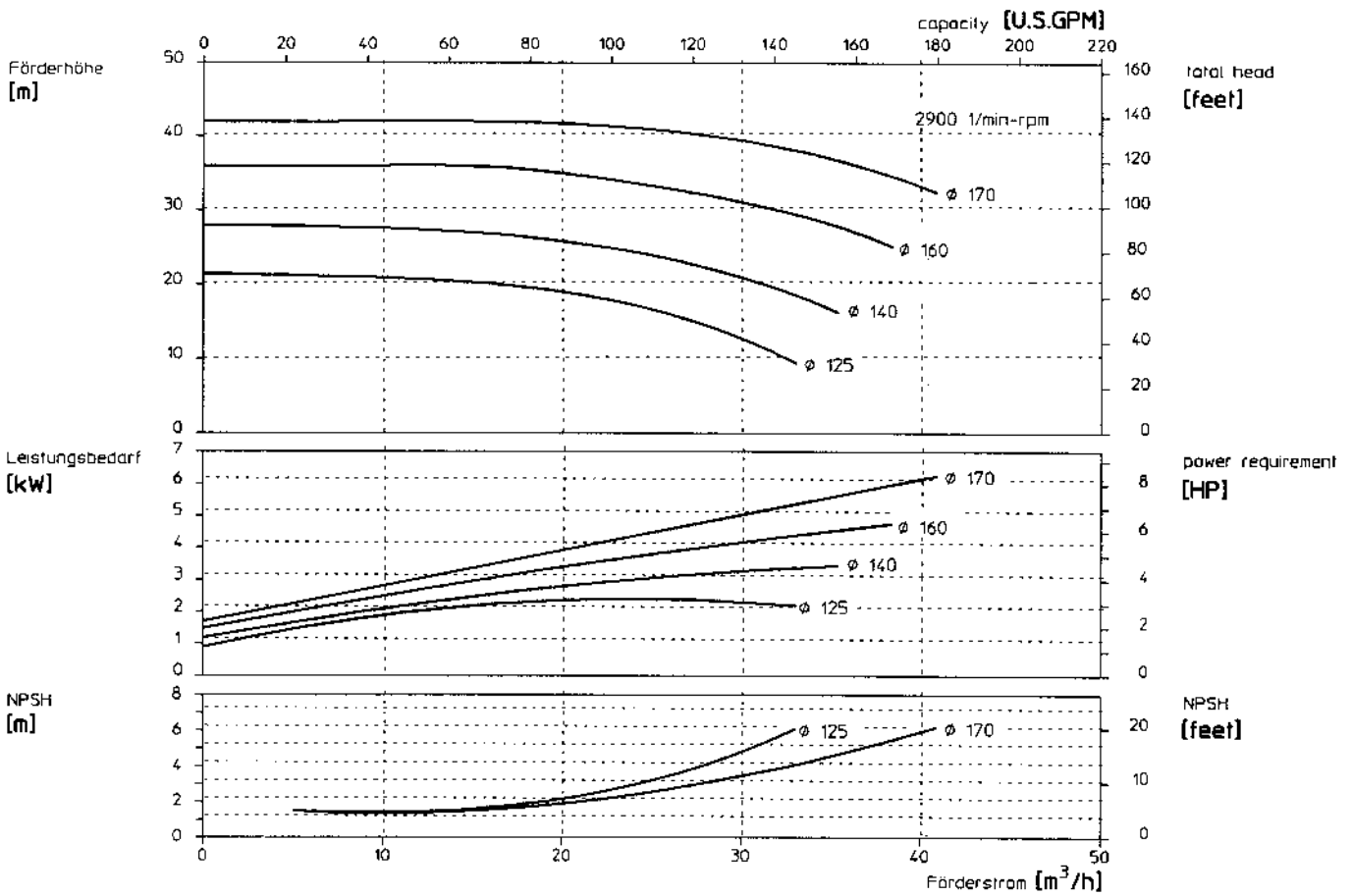
47	Gleitringdichtung	mechanical seal	616	Schwungradkörper	flywheel element
101	Gehäuse	casing	681	Kupplungsschutz	coupling protection
154	Zwischenflansch	intermediate flange	710	Rohr	pipe
161	Gehäusedeckel	casing cover	800	Motor	motor
211	Welle	shaft	816	Spalttopf	can
230	Laufrolle	impeller	840	Kupplung komplett	coupling complete
310 -3	Gleitlager	sleeve bearing	843	Kupplung	coupling
320	Kugellager	ball bearing	847	Magnetkupplung	magnetic drive
341	Laterne	bracket	847.1	Außenmagnet	outer magnet
400.1/2	Dichtung	gasket	847.2	Innenmagnet	inner magnet
411.1-3	Dichtring	joint ring	900	Schraube	screw
421	Radialdichtung	radial seal ring	901.1-3/5	6-kt.Schraube	hexagon head cap screw
441	GRD-Gehäuse	shaft seal housing	903.1-3	Verschlusschraube	screwed plug
504	Abstandsring	distance ring	904	Gewindestift	set screw
515	Toleranzring	tolerance ring	914	Innen-6-kt Schraube	socket head cap screw
551	Passscheibe	distance disk	920.1-3	6-kt Mutter	hexagon nut
552	Tellerfeder	disk spring	931	Sicherungsscheibe	locking disk
554 2/ 3/ 5	Unterlegscheibe	washer	932 1/2	Sicherungsring	locking ring
561	Kerbstift	grooved pin	940	Passfeder	feather key
591	Behälter	container	970 1/2	Schild	plate

- 1) ab 2,2 kW Motor
- 2) nur bei BG132
- 3) entfällt bei 22 Nm Magnetkupplung
- 4) nur bei 22 Nm Magnetkupplung

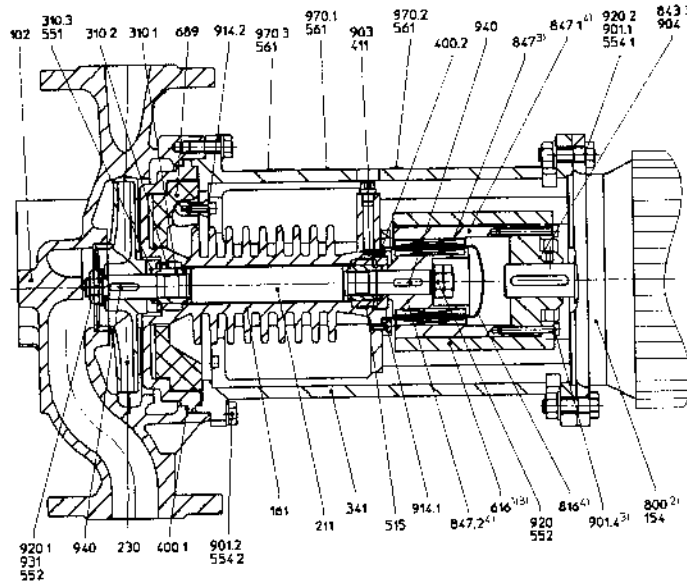
- 1) from 2,2 kW motor up
- 2) only for frame size 132
- 3) inapplicable for 22 Nm magnetic coupling
- 4) only for 22 Nm magnetic coupling

## Thermal oil pumps

Type range TOE 32-160



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



	NPY-2251.MK	TOENPY-2251.MK	CY-4281.MK	TOE/CY-4281.MK	CY-6081.MK	TOE/CY-6091.MK	TOE/MZ-35/40-2.MK	TOE 32-160.GLRD	TOE 32-160.MK	TOE 32-200.GRD	TOE 32-200.MK	TOE 40-200.GRD	TOE 40-200.MK	TOE 50-200.GRD	TOE 50-200.MK	TOE 65-200.GRD	TOE 65-200.MK	IN 40-180MK	IN 50-200.MK	IN 65-200.MK	
<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	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	cast iron
GGG 40								x													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	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	1.4122
<b>Wellendichtung</b>																				<b>shaft sealing</b>	
Gleitringdichtung								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	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										x		x		x							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