

# Planetary gearboxes for mobile applications

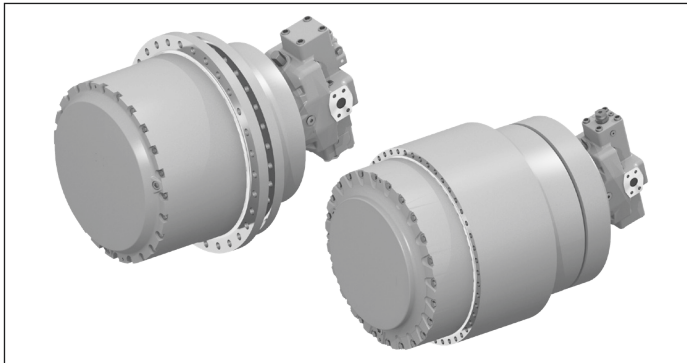
## HYDROTRAC GFT

### Series 20

**RE 77110**

Edition: 11.2019

Replaces: 08.2018



- ▶ Sizes 160 to 620
- ▶ Output torques from 160000 to 620000 Nm

#### Features

- ▶ Compact, space-saving three- or four-stage planetary gearbox
- ▶ Robust design
- ▶ Integrated static multiple-disk parking brake
- ▶ Assembly of variable plug-in and fixed plug-in motors of different series possible
- ▶ Easy assembly
- ▶ Easy oil change
- ▶ Disconnect mechanism (optional, only possible with sizes GFT 220/260/330)

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Additional information at:  
[www.boschrexroth.com/gears](http://www.boschrexroth.com/gears)



## Description

The hydrostatic drive series 20 consists of a three- or four-stage planetary gearbox, which build, in combination with a hydraulic axial piston motor, a compact drive unit. The complete unit is used as a drive component for chain driven vehicles and cranes as well as other mobile applications.

## Application conditions

The planetary gearboxes are designed for use in environmental temperatures between -25°C and +40°C. Environmental factors such as salt water, salt air, sand, dust, pressure, severe shocks, extreme shock loads and environmental temperatures, aggressive media, etc. affect the function. Such influences must be pre-announced in order for a secure gearbox design.

## Technical data

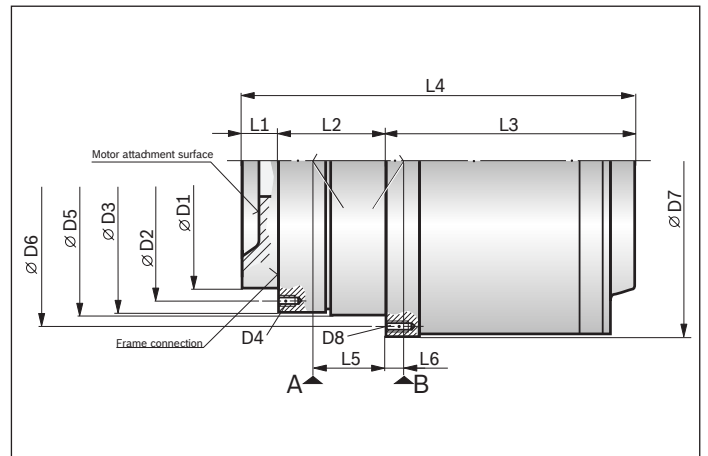
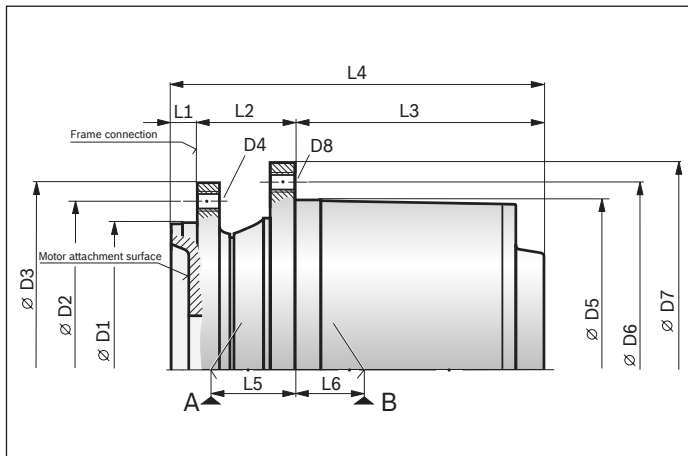
Size GFT	Version	Design	Output torque $T_{2 \max}$ Nm	Ratio $i$	Static holding torque brake $T_{Br \max}$ Nm	Compatible hydraulic motors
<b>160 T3</b>	1000	T/K	160000	78.0 • 210.8 • 251.0	<sup>1)</sup>	A2FE 107 • 125 • 160 • 180 / A6VE 107 • 160 / A6VM 280 <sup>2)</sup>
<b>220 T3</b>	2000/9000	T	220000	97.7 <sup>3)</sup> • 145.4 <sup>4)</sup> • 188.9 • 246.0 • 293.0 • 365.0	<sup>1)</sup>	A2FE 160 • 180 / A6VE 160 • 250 /
<b>220 R3</b>	9000	T	220000	145.4 <sup>4)</sup>	<sup>1)</sup>	A6VM 160 • 200 • 355
<b>220 T3</b>	9000	K	220000	365.0	<sup>1)</sup>	A6VM 200 • 215 A2FE 160 • 180 / A6VE 160
<b>260 T3</b>	9000	T	260000	188.9	<sup>1)</sup>	A2FE 250
<b>330 T3</b>	2000	T	330000	168.9 • 209.8 • 252.0	<sup>1)</sup>	A2FE 355 / A6VE 250
<b>330 T3</b>	3000	T	330000	168.9 • 302.4	<sup>1)</sup>	A6VE 250
<b>330 T3</b>	9000	K	330000	302.4	<sup>1)</sup>	A6VE 250
<b>450 T4</b>	1000	T/K	450000	347.1 • 421.7	<sup>1)</sup>	A2FE 250 / A6VE 250 / AL A6VE 250
<b>620 T4</b>	1000	K	620000	763,2	<sup>1)</sup>	A6VE 160

1) Device-specific

2) Only in combination with  $i=78.0$

3)  $i=97.7$  only in combination with A6VM 355

4)  $i=145.4$  only in combination with A6VM 200 • 215 and A6VE 250

**Dimensions**


Design T

Design K

Size GFT	Version	Design	D1	D2	D3	D4 mm	D5	D6	D7	D8
<b>160 T3</b>	1000	T	450	510	560	30x M24x2	535	600	650	30x M24x2 / 30x $\varnothing$ 30 <sup>1)</sup>
<b>160 T3</b>	1000	K	340	400	444	24x M33x1.5	445	495	535	30x M27x2
<b>220 T3/R3</b> <sup>2)</sup>	2000/9000	T	460	600	650	30x M30	610	680	735	24x M30
<b>220 T3</b>	9000 <sup>3)</sup>	T	460	520	570	24x M30	610	680	735	24x $\varnothing$ 33
<b>220 T3</b>	9000	T	460	520	570	24x M30	610	656	712	34x M24
<b>220 T3</b>	9000 <sup>4)</sup>	K	450	515	568	29x M36x3	570	620	670	42x M30x2
<b>260 T3</b>	9000	T	560	630	685	28x M30	688	750	810	28x M30
<b>330 T3</b>	2000/3000	T	580	680	735	30x M30	660	730	785	30x M30
<b>330 T3</b>	9000	K	450	515	568	32x M30x2	570	620	670	44x M24x2
<b>450 T4</b>	1000	T	580	680	735	36x M30x2	680	750	810	36x M30x2
<b>450 T4</b>	1000	K	450	515	568	29x M36x1.5	570	620	670	42x M30x1.5
<b>620 T4</b>	1000	K	450	515	568	29x M36x1,5	570	620	670	42x M30x1,5

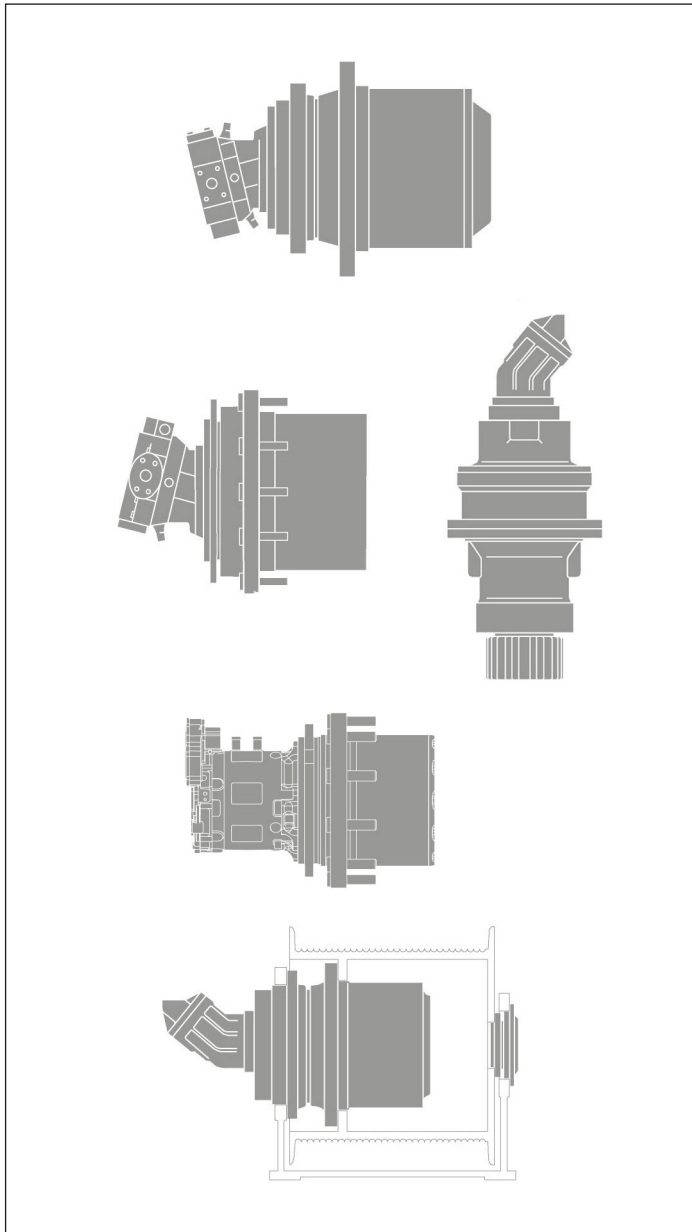
Size GFT	Version	Design	L1	L2	L3	L4	L5	L6	C	A + B (kN)	Appr. weight without motor kg
<b>160 T3</b>	1000	T	30	168	340	538	138	26	783	1557	680
<b>160 T3</b>	1000	K	30	171	341.5	542.5	97	44	783	1557	700
<b>220 T3/R3</b> <sup>2)</sup>	2000/9000	T	45	170	350	565	155	35	710	1560	850
<b>220 T3</b>	9000	K	43	255	305	603	190	17	710	1560	880
<b>260 T3</b>	9000	T	55	175	415	688	114	74	710	1560	1052
<b>330 T3</b>	2000	T	150	125	400	675	190	25	1040	2450	1250
<b>330 T3</b>	3000	T	95	188	400	675	190	25	1040	2450	1230
<b>330 T3</b>	9000	K	45	253	442	740	178	37	1040	2450	1210
<b>450 T4</b>	1000	T	87	156	532	775	155	39	1040	2450	1340
<b>450 T4</b>	1000	K	43	255	512	810	175	19	1040	2450	1240
<b>620 T4</b>	1000	K	51	255	531	837	186	19	1040	2450	1490

 1) Only in combination with  $i=78.0$ 

2) R3 only in version 9000 possible

 3) Dimensions preferred in combination with  $i=97.7$ 

 4) Design K only in combination with  $i=365.0$

**Overview data sheets Gearbox Technology**

**Hydrostatic travel drives**

- HYDROTRAC GFT, series 20, RE 77110  
Output torques from 160 to 620 kNm
- HYDROTRAC GFT 2160, series 20, RE 77125  
Output torques to 42,5 kNm
- HYDROTRAC GFT 8000, series 30, RE 77128  
Output torques from 20 to 30 kNm
- HYDROTRAC GFT 8000, series 40, RE 77117  
Output torques from 10 to 130 kNm
- HYDROTRAC GFT 8150 with TIS, RE 79093  
Output torques to 42 kNm
- HYDROTRAC GFT 45 T2/T3, RE 77115  
Output torques max. 45 kNm
- HYDROTRAC GFT 34, series 20, RE 79062  
Output torques to 34 kNm

**Electromechanical travel drives**

- ROTATRAC eGFT 8000, series 40, RE 79082  
Output torques from 15 to 42 kNm

**Hydrostatic swing drives**

- MOBILEX GFB, RE 77201  
Output torques from 4 to 68,3 kNm
- MOBILEX GFB 2160, series 20, RE 77208  
Output torques to 14,5 kNm
- MOBILEX GFB 8000, series 40, RE 79058  
Output torques from 8,5 to 30 kNm

**Hydrostatic winch gears**

- MOBILEX GFT-W, RE 77502  
Output torques from 140 to 325 kNm
- MOBILEX GFW 5000, series 40, RE 77506  
Output torques from 7,5 to 105 kNm

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