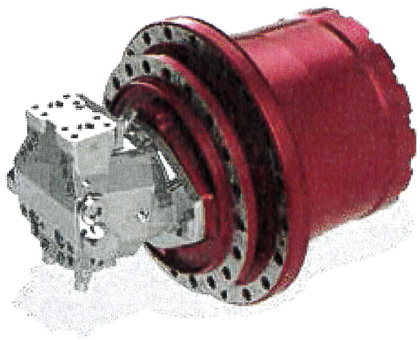
Travel Drives
Wheel Drives

Max output torque
20 ... 60 kNm

Nominal output torque
16 ... 30 kNm

Gear Ratios
28 ... 34 i



Standard features
- Compact structure
- High performance
- 3-7 Planetary wheels per stage
- Notchless ground tooth root
- Different ratios
- Integrated disc-brake
- High availability by highest teeth and production quality

Type	Max output torque * (kNm)
FR20	20
FR40	40
FR60	60

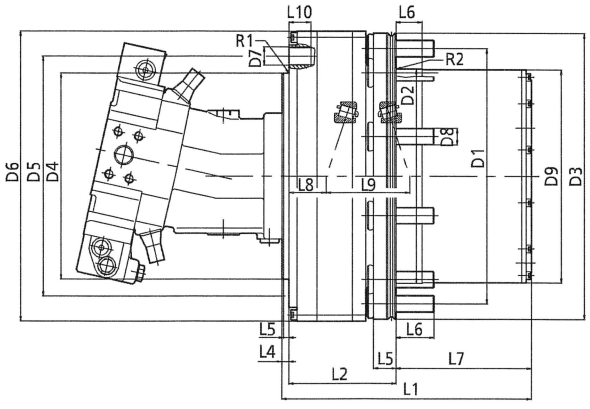
Type	Nominal output torque (kNm)
FR20	16
FR40	23
FR60	30

* Stated torques are peak values for short duration

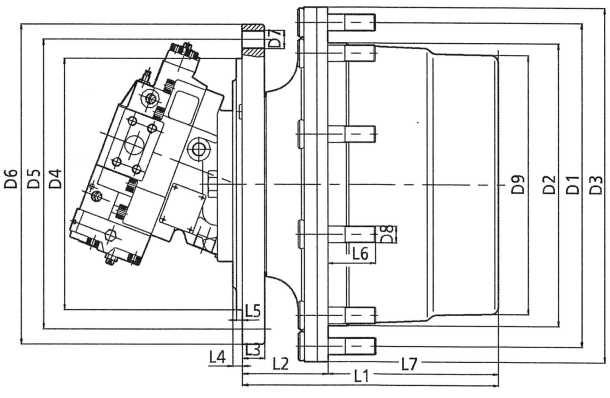
Proven applications
- Towbarless aircraft tractor
- Straddle carriers
- Agricultural machines
- Logging machines
- Forklifts

Special executions on request
- Mechanical disconnect device

VERSION **A**



VERSION **B**



Overall dimensions and technical data

		FR20	FR40	FR60
Ratio[1]	i	28-34	30-32	29-34
Version		A	B	A
CAPACITY OF BEARING				
C-dynamic	kN	194	300	352
Co-static	kN	325	560	735
INPUT TORQUE MAX.	Nm	560	715	1066
Weight[3]	kg	129	173	500
HYDRAULIC MOTOR[2]	ccm	80	107	160
Variable		105	–	–
Pperating pressure max. p	bar	420	420	420
SERVICE BRAKE		Multi-disk brake	Multi-disk brake	Multi-disk brake
Pressure max.	bar	100	110	90
Locking torque dyn.	Nm	9500	13000	28000
PARK BRAKE		Multi-disk brake	Multi-disk brake	Multi-disk brake
Release pressure max.	bar	80	80	60
Release pressure max.	bar	40	40	25
Locking torque max. stat.	Nm	24480	23000	30000
DIMENSIONS				
L1	mm	318	441	520
L2	mm	141	135.7	270
L3	mm	–	52.7	–
L4	mm	9	80	10
L5	mm	7	43	7
L6	mm	50	63	60
L7	mm	177.5	225	240
L8	mm	58	80	156
L9	mm	110	105	173
L10	mm	29	32	37
R1	mm	–	5	–
R2	mm	–	1	1.6
D1	mm	335	425	425
D2	mm	280.8 f7	371-0.2	375f8
D3	mm	375	465	559
D4	mm	270 f8	290f8	290f8
D5	mm	315	367	330
D6	mm	380	405	554
D7	mm	10xM 24x2	M24(6x) M20(4x)	10xM24x2
D8	mm	10xM 22x1.5	18xM22x1.5	24 M22x1.5
D9	mm	279.5	340	356

1) Other ratios on demand

2) Other hydraulic motors on request

3) Without hydraulic motor