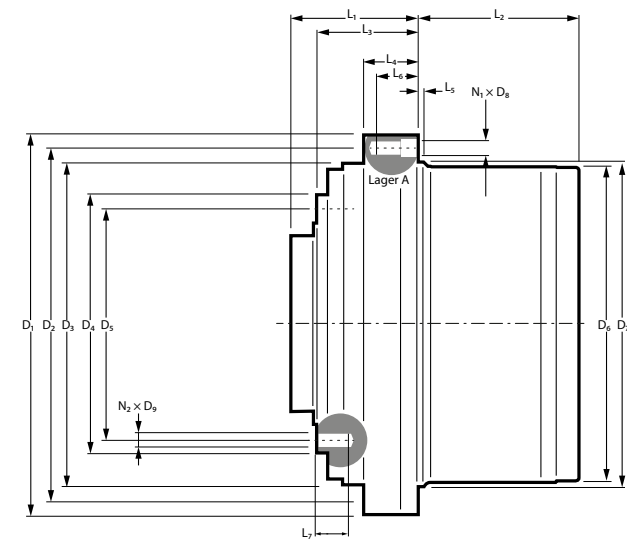
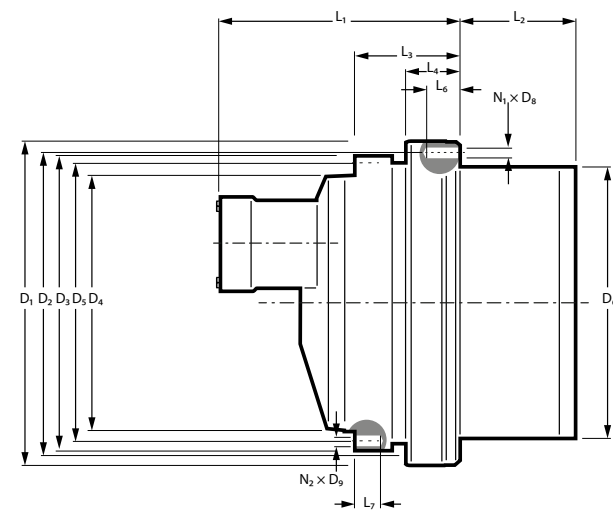


Smaller and lighter Technical data



LPI



FAT

Flexible equipment

Multiple equipment possibilities give LPI series planetary gearboxes the highest degree of flexibility

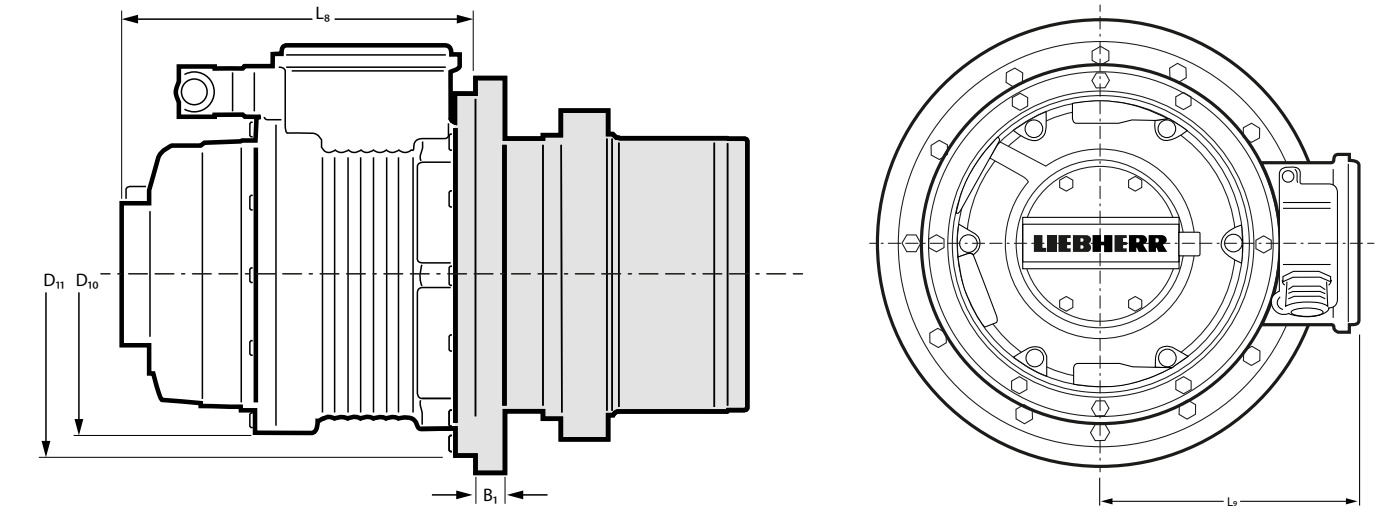
Interfaces: The interfaces to the motor are designed to allow for the effortless assembly of any conventional electric and hydraulic motor. This ensures the best possible gearbox / motor drive combination.

Braking: According to purpose, various brake types are available as options. Examples include electromagnetic brakes and multi-disc brakes. Furthermore, customers can choose between two different brake sizes.

Seals: With mechanical or labyrinth seals, radial shaft seals and V-rings, various gearbox seals are available, to be deployed according to the application.

Sensor technology: To monitor the oil quality and status, the planetary gearboxes can optionally be fitted with sensors.

LPI with an electric motor



Heavy-duty experience in series: technical data of the LPI gearbox series

Size	Torque density	Weight	Connection dimensions for the Tura wheel												
			D ₃	D ₆	D ₇	L ₂ ¹⁾	D ₁	D ₂	N ₁ × D ₉	L ₄	L ₅	L ₆			
	[kNm]	[kg]	∅ [mm]	[mm]	[mm]	[mm]	∅ [mm]	[mm]	Centering diameter-∅ [mm]	1 × [mm]	[mm]	[mm]	[mm]	[mm]	[mm]
LPI0600	45	149	337	306	330	234	390	360	24 × M16	25	20	25			
LPI0700	65	163	377	326	350	239	435	400	24 × M20	30	25	30			
LPI0800	85	230	435	370	420	268	500	460	24 × M20	35	25	35			
LPI0900	115	320	500	450	460	205	540	500	24 × M20	63	23	35			
LPI1000	190	480	570	520	535	266	625	580	24 × M24	63	10	40			
LPI1100	250	610	585	546	550	283	640	600	32 × M24	114	25	90			
LPI1200	350	865	660	610	610	339	760	705	30 × M30	116	-	86			

Connecting dimensions for caterpillar tracks					
D ₄	D ₅	N ₂ × D ₉ ²⁾	L ₁	L ₃	L ₇
Centering diameter-∅ [mm]	∅ [mm]	1 × [mm]	[mm]	[mm]	[mm]
250	285	24 × M16	125	110	24
250	285	27 × M16	107	91	46
280	330	24 × M20	115	103	38
308	355	24 × M24	192	172	53
425	385	24 × M24	171	166	81
360	430	28 × M24	227	200	78
590	500	24 × M30	250	220	85

Basics for heavy, individual requirements: technical data of the special gearboxes FAT

Size	Torque density	Weight	Connection dimensions for the Tura wheel												
			D ₃	D ₆	L ₂ ¹⁾	D ₁	D ₂	N ₁ × D ₉	L ₄	L ₅	L ₆				
	[kNm]	[kg]	∅ [mm]	[mm]	[mm]	[mm]	∅ [mm]	[mm]	Centering diameter-∅ [mm]	1 × [mm]	[mm]	[mm]	[mm]	[mm]	[mm]
FAT800	645	1,820	-	740	424	930	835	30 × M30 × 2	125	125					
FAT1000	898	3,070	1,000	860	415	1,032	995	45 × M30 × 2	114	90					
FAT1100	1,264	4,560	1,150	960	412	1,150	1,060	40 × M36 × 3	185	117					
FAT1300	2,476	9,750	1,390	1,160	590	1,450	1,360	36 × M48	300	186					
FAT1600	3,397	15,100	1,620	1,415	673	1,700	1,590	40 × M48	320	191					

Connecting dimensions for caterpillar tracks					
D ₄	D ₅	N ₂ × D ₉ ²⁾	L ₁	L ₃	L ₇
Centering diameter-∅ [mm]	∅ [mm]	1 × [mm]	[mm]	[mm]	[mm]
760	650	24 × M36 × 3	295	295	86,5
880	940	45 × M30 × 2	620	260	60
1,005	1,080	40 × M36 × 3	684	368	66
1,205	1,315	36 × M48	834	544	75
1,200	1,380	40 × M48	882	582	76

¹⁾ Length L₂ for a 3-stage gearbox.

²⁾ Threaded hole N₂ × D₉ can be on face L₁ or face L₃ depending on diameter D₅.

Technical data of the LPI gearbox series with electric motor

Size	Electric motor type	Motor power S2 (45 min) at 900 rpm	Braking torque	Motor length L ₈	Motor diameter D ₁₀	Motor flange diameter D ₁₁	Structural steel width B ₁	Distance terminal box L ₉
LPI0600	PGK18/10	18,5	250/450	415	370	423	upon request	272
	PGK18/22	41,5	450/800	550	370	423		272
LPI0700	PGK18/10	18,5	250	415	370	423	upon request	272
	PGK18/22	41,5	450/800	550	370	423		272
LPI0800	PGK18/10	18,5	250/450	415	370	423	upon request	272
	PGK18/22	41,5	450/800	550	370	423		272
LPI0900	PGK18/10	18,5	450	415	370	469	upon request	272
	PGK18/22	41,5	800	550	370	469		272
LPI1000	PGK18/10	18,5	250/800	415	370	469	upon request	272
LPI1100	PGK22/10	41,5	800	550	370	469	upon request	272
LPI1200	upon request							
FAT	upon request							

Torque density

The be-all and end-all for efficient driving!

LPI – a new efficiency for your tracked vehicles

By using new materials and reduced component complexity, Liebherr LPI gearboxes create a new dimension in power density. Due to their compact design, they achieve up to 20 % higher torque density and up to 20 % more output torque.

Size	Maximum output torque [kNm]	Weight [kg] 3 planetary steps without brake, without motor	Dimensions [mm] Length / diameter
FAT1600	3,397 kNm	15,100	1,551/1,200
FAT1300	2,476 kNm	9,750	1,424/1,205
FAT1100	1,264 kNm	4,560	1,096/1,005
FAT1000	898 kNm	3,070	1,035/880
FAT800	645 kNm	1,820	719/760
LPI1200	350 kNm	865	589/590
LPI1100	250 kNm	610	510/360
LPI1000	190 kNm	480	437/425
LPI0900	115 kNm	320	397/308
LPI0800	85 kNm	230	383/280
LPI0700	65 kNm	163	346/250
LPI0600	45 kNm	149	359/250