

Travel drives



F Series

Small final drives

The F Series is perfectly suited to any crawler and milling machine. Thanks to compact, rugged design, high torque and load capabilities, these solutions are the best possible option for these machines. All units are available with a fail-safe parking brake and for most cartridge type fixed or variable systems. Different disengagement systems are available on demand for all the sizes.



HYDRAULIC SOLUTIONS

Gear ratios

- 19 ... 305

Standard features

- Compact structure
- High performance
- 3-7 Planetary wheels per stage
- Notchless ground tooth root
- Different ratios
- Integrated disc-brake

Special executions on request

- Mechanical disconnect device
- Low and high temperature version

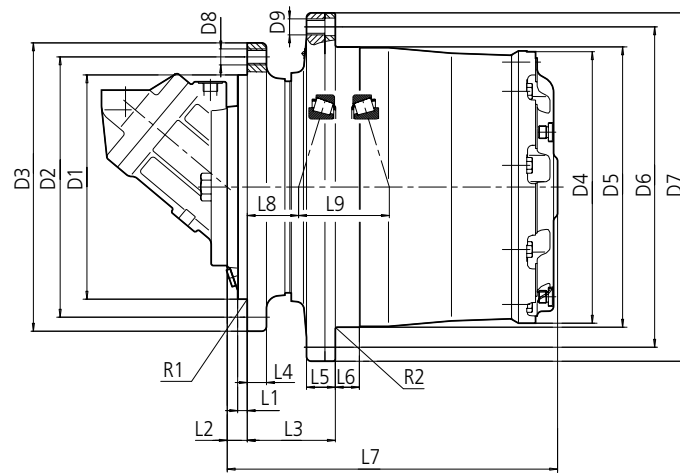
Torque (kNm)



Stated torques are peak values for short duration.

Overall dimensions and technical data

Type	Ratio ²	Capacity of Bearing		Weight ⁴	Locking torque	Multi-disk brake		
		C-dynamic	Co-static			Release pressure min.	Hydraulic motor plug in fixed	Plug-in variable
	i	kN	kN	kg	Nm	bar	ccm	ccm
F13A	93 (41) ¹ -108-122-140-178-229	132	255	50	200	17	28-30-32	28-45
FD20	81-90-101-137-171-228	194/194	325/315	72	300	16	28-30-32	28-45
F30	61 (19) ¹ -66 (32) ¹ -81-90-101-114-121-137-171-228-305	132/194	255/325	94	300 (255; 400) ³	16 (16; 22) ³	28-30-32-40-45-56-60-63	28-45-55-60



Type	L1	L2	L3	L4	L5	L6	L7	L8	L9	R1	R2	D1	D2	D3	D4	D5	D6	D7	D8	D9	Qty. D8/D9
F13A	10	30	72	13.5	15	16	255	28	79	0.6	0.6	190	230	256	216	220	260	290	M16x2	M16x2	12/8
FD20	10	41	75	15	28	25	300	15.3	86.3	2.5	2.5	240	275	304	250	270	305	335	M16x2	M16x2	18/18
F30	13	25/22	75	15	29	25	323/320	28.5	89	2.5	2.5	240	275	304	269	270	305	335	M16x2	M16x2	18/18

1) 2-stage

2) Other ratios on demand

3) Optional brake torques

4) Without Hydraulic motor

Travel drives



F Series

Medium final drives

The F Series is perfectly suited to any crawler and milling machine. Thanks to compact, rugged design, high torque and load capabilities, these solutions are the best possible option for these machines. All units are available with a fail-safe parking brake and for most cartridge type fixed or variable systems. Different disengagement systems are available on demand for all the sizes.



HYDRAULIC SOLUTIONS

Gear ratios

- 14 ... 409

Standard features

- Compact structure
- High performance
- 3-7 Planetary wheels per stage
- Notchless ground tooth root
- Different ratios
- Integrated disc-brake

Special executions on request

- Mechanical disconnect device
- Low and high temperature version

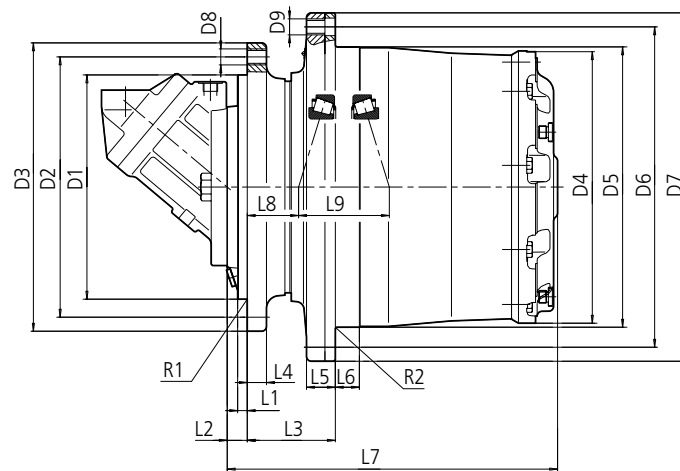
Torque (kNm)

F40	40
F40A	40
F55	55
F55A	55
F55B	55
F80	80
F80XR	80
F100	100
F100XR	100

Stated torques are peak values for short duration.

Overall dimensions and technical data

Type	Ratio ²	Capacity of Bearing		Weight ⁴	Park Brake		Hydraulic Motor	
		C-dynamic	Co-static		Locking torque	Release pressure min.	Plug-in fixed	Plug-in variable
	i	kN	kN	kg	Nm	bar	ccm	ccm
F40	61 (19) ¹ -66 (22) ¹ -81 (32) ¹ -85-101-110-117-124-142-181-222-266-409	224	405	115	420	18	40-45-56-60-63	55-60
F40A		224	405	123	420	18	80-90	80
F55	63 (16) ¹ -68 (19) ¹ -87 (22) ¹ -94 (32) ¹ -103-117-124-137-148-185	224	405	165	420 (390; 500) ³	15 (15; 21) ³	80-90	80
F55A		224	405	177	420 (390; 500) ³	15 (15; 21) ³	40-45-56-60-63	55-60
F55B		224	405	181	420 (390; 500) ³	15 (15; 21) ³	-	107-110
F80	61 (19) ¹ -81 (32) ¹ -101-114-121-137-147-171-187-206-228	300	570	230	600 (375; 550; 1000) ³	18 (18; 19; 28) ³	80-90-107-110-125-160-180	80-107-110-160
F80XR		300	570	240	600	18	80-90-107-110-160-180	
F100	14-26-77 (21) ¹ -84 (22) ¹ -95 (32) ¹ -121-142-175-192-226	498	1,010	330	600 (900) ³	15 (13) ³	107-125-160-180	107-110-160
F100XR		498	1,010	341	600	15		



Type	L1	L2	L3	L4	L5	L6	L7	L8	L9	R1	R2	D1	D2	D3	D4	D5	D6	D7	D8	D9	Qty. D8/D9
F40	16	16	91	21	34	26	338	38	100	2.5	2.5	240	285	320	294	295	335	370	M20x1.5	M20x1.5	20/20
F40A	13	35	91	21	34	26	357	38	100	2.5	2.5	270	310	345	294	295	335	370	M20x1.5	M20x1.5	16/20
F55	12	25	110	24	36	30	413	64	113	1	2.5	280	325	360	340	350	400	435	M20x1.5	M20x1.5	24/20
F55A	20	30	91	24	36	30	399	45	113	4	2.5	240	285	320	340	350	40	435	M20x1.5	M20x1.5	20/20
F55B	12	37	110	24	36	30	425	64	113	1	2.5	290	335	370	340	350	400	435	M20x1.5	M20x1.5	20/20
F80	20	35	90	22	37	24	415	34	123	4	2.5	330	370	410	374	400	450	490	M24x2	M24x2	20/20
F80XR	20	35	90	22	37	23	414.5	68.5	123	4	2.5	330	370	410	374	400	450	490	M20x1.5	M20x1.5	20/20
F100	35/37	35/37	165	28	53	43	461/463	32	139	10 (12)/60	5	390	460	500	407	408	460	500	M24x2	M24x2	30/24
F100XR	22	35	148	29	53	30	463	32	139	2.5	2.5	380	430	480	407	430	480	500	M24x3	M24x3	20/20

1) 2-stage

2) Other ratios on demand

3) Optional brake torques

4) Without Hydraulic motor

Travel drives



F Series

Large final drives

The F Series is perfectly suited to any crawler and milling machine. Thanks to compact, rugged design, high torque and load capabilities, these solutions are the best possible option for these machines. All units are available with a fail-safe parking brake and for most cartridge type fixed or variable systems. Different disengagement systems are available on demand for all the sizes.



HYDRAULIC SOLUTIONS

Gear ratios

- 14 ... 1784

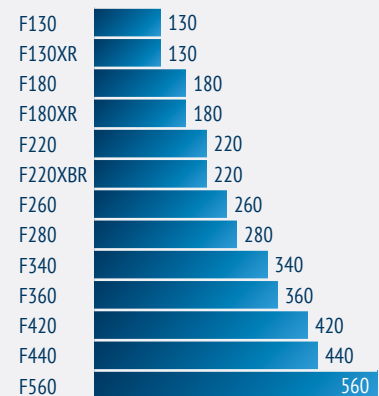
Standard features

- Compact structure
- High performance
- 3-7 Planetary wheels per stage
- Notchless ground tooth root
- Different ratios
- Integrated disc-brake
- Different hydraulic motors

Special executions on request

- Mechanical disconnect device
- Low and high temperature version

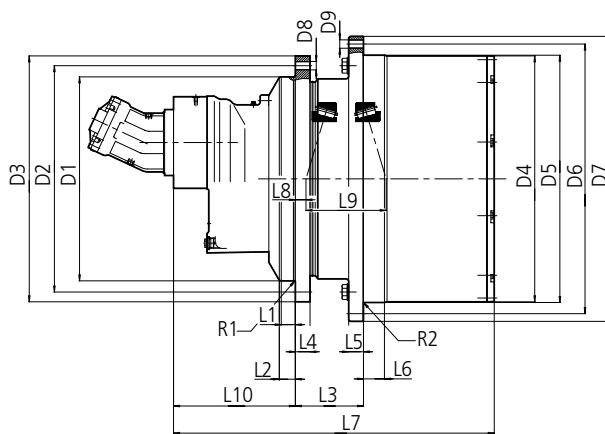
Torque (kNm)



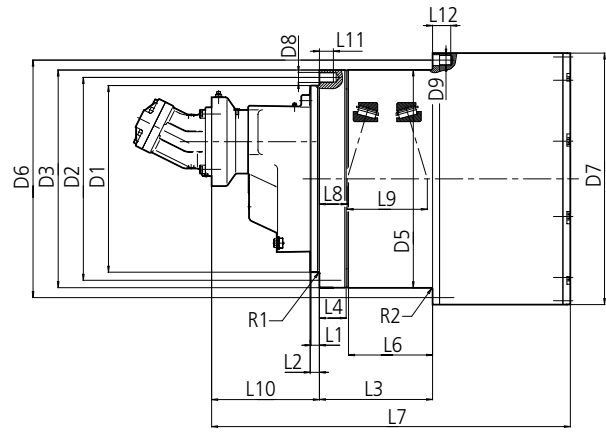
Stated torques are peak values for short duration.

Overall dimensions and technical data | F130 ... F180XR

Type	Ratio ²	Version ⁴	Capacity of Bearing		Weight ⁵	Park Brake		Hydraulic Motor	
			C-dynamic	Co-static		Locking torque	Release pressure min.	Plug-in fixed	Plug-in variable
	i		kN	kN	kg	Nm	bar	ccm	ccm
F130	16-22-43-55-69 (14) ¹ -81 (18) ¹ -85 (21) ¹ -95 (26) ¹ -115-123-141-159-167-180-206	ST	523	980	452	750	19	107-125-160-180	107-160
F130XR	81-85-115-159-167-180-206	ST	-	-	465	750	19		
F180	23-206-221-255-281-(412) ⁶ -(618) ⁶ -(824) ⁶	ST	787	1,650	636	1375 (800) ³	35 (35) ³	160-180	160
		CC	787	1,650	636	1375 (800) ³	35 (35) ³	180	-
F180XR		ST	787	1,650	636	1375 (800) ³	35 (35) ³	160-180	-



Standard input version - ST



Crawler crane version - CC

Type		L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	R1	R2	D1	D2	D3	D4	D5	D6	D7	D8	D9	Qty. D8/D9
F130	ST	45	45	190	35	58	45	530	50.5	147	-	-	-	25	4	390	500	550	449	450	500	550	M24x2	M24x2	32/32
F130XR	ST	20	70	165	35	58	45	532	25	147	-	-	-	1.2	1.2	420	460	500	449	460	500	540	M24x3	M18x1.5	24/36
F180	ST	30	30	168	40	56	21.5	534.5	50.3	141.4	-	-	-	4	3	450	510	560	528	535	600	650	M24x2	M27x2	30/30
	CC	25	30	171	80	-	86	564.5	80.3	141.4	-	35	81.5	4	5	340	400	444	-	445	495	528	M33x1.5	M27x2	24/30
F180XR	ST	30	30	168	40	56	21.5	534.5	50.3	141.4	-	-	-	4	3	450	510	560	528	535	600	650	M24x2	M24x2	30/30

1) 2-stage on demand
2) Other ratios on demand

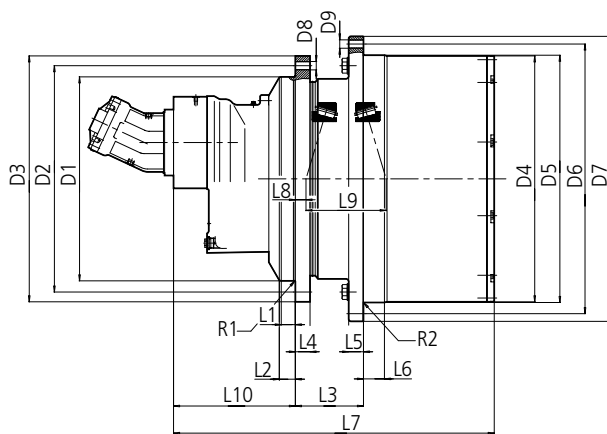
3) Optional brake torques
4) ST= Standard CC= Crawler Crane

5) Without hydraulic motor
6) In combination with input bevel drive

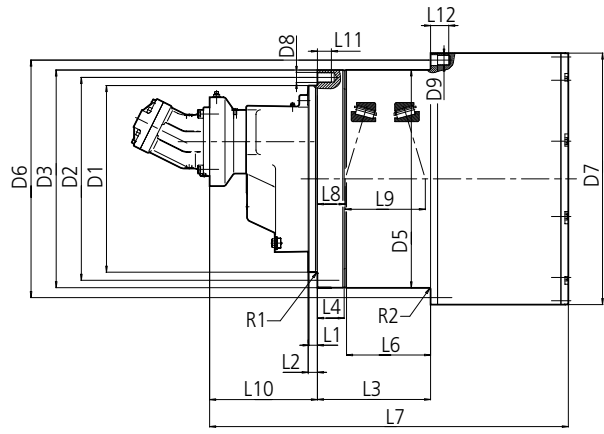
Travel drives

Overall dimensions and technical data | F220 ... F280

Type	Ratio ²	Version ⁴	Capacity of Bearing		Weight ⁵	Park Brake		Hydraulic Motor	
			C-dynamic	Co-static		Locking torque	Release pressure min.	Plug-in fixed	Plug-in variable
	i		kN	kN	kg	Nm	bar	ccm	ccm
F220	69-97 (298) ⁶ -119 (372) ⁶ -120 (572) ⁶ -190 (744) ⁶ -248 (805) ⁶ -290-344-345	ST	765	1,660	740	1,200	15	107-180	160-200-215-250-280
		CC	750	1,560	895	1,000	15	107-180	160
F220XBR	97-119-190-248-290-345	ST	-	-	800	1,200	15	107-180	160-200-215-250-280
F260	69-97-147-168-245-251-344-345-(670) ⁶ -(1115) ⁶ -(1784) ⁶	ST	750	1,560	865	1,000	15	-	355-250
		CC	750	1,560	895	1,000	15	-	160
F280	19-201	ST	1,180	2,600	1,037	1,650	15	-	250



Standard input version - ST



Crawler crane version - CC

Type		L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	R1	R2	D1	D2	D3	D4	D5	D6	D7	D8	D9	Qty. D8/D9
F220	ST	18	52	166.5	40	61	35	580.5	16	187.5	-	-	-	35°/16/16	4	460	600	650	540	542	600	650	M24x2	M24x2	38/38
	CC	21	25	165.5	54	-	106.5	631.5	42	189.5	-	54	75	-	4	428	474	521	-	523	570	608	M30x2	M24x1.5	30/36
F220XBR	ST	52	52	170	40	40	50	580.5	16	187.5	-	-	-	2.5	-	460	600	650	538	610	680	735	M30x3.5	M30x3.5	30/24
F260	ST	21	45	170	40	48	60	579	18.5	189.5	-	-	-	2	-	460	520	570	608	610	680	735	M30x2	33	24/24
	CC	21	25	165.5	54	-	106.5	631.5	42	189.5	-	54	75	-	4	428	474	521	-	523	570	608	M30x2	M24x1.5	30/36
F280	ST	52	125	125	40	65	45	627	89.3	180.4	-	-	-	18°/50/5	4	530	630	685	608	610	685	740	M30x3.5	M30x3.5	28/28

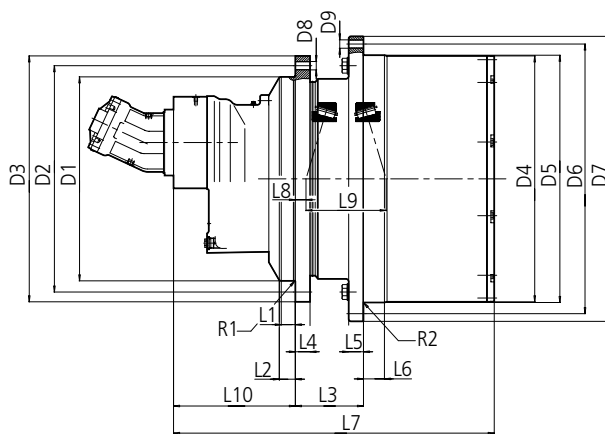
1) 2-stage on demand
2) Other ratios on demand

3) Optional brake torques
4) ST= Standard CC= Crawler Crane

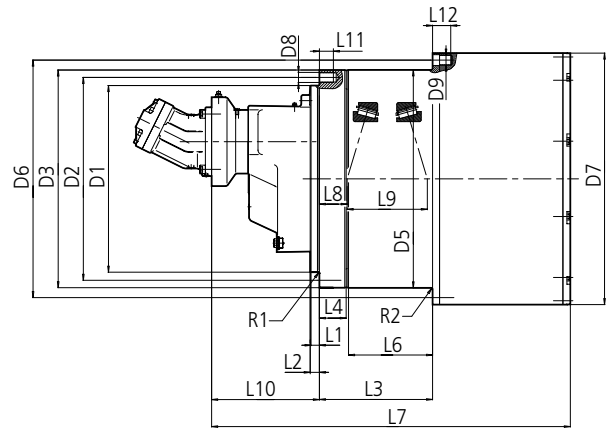
5) Without hydraulic motor
6) In combination with input bevel drive

Overall dimensions and technical data | F340 ... F560

Type	Ratio ²	Version ⁴	Capacity of Bearing		Weight ⁵	Park Brake		Hydraulic Motor	
			C-dynamic	Co-static		Locking torque	Release pressure min.	Plug-in fixed	Plug-in variable
	i		kN	kN	kg	Nm	bar	ccm	ccm
F340	257	ST	1,040	2,450	976	1,700	12	-	-
F360	25-94 (385) ⁶ -128 (446) ⁶ -161 (670) ⁶ -168 (848) ⁶ -186 (1115) ⁶ -223 (1784) ⁶ -242-257-283-339-343-490	ST	1,040	2,450	1,080	1,700	12	355	355
F420	259	ST	1,120	2,555	1,500	1,000	18	-	(2x) 160
F440	310-352-414-555-637-(445) ⁶ -(528) ⁶ -(705) ⁶	CC	1,040	2,450	1,300	1700 (1000)*	15 (7.8)*	-	250-160
F560	250-357-388-739-(887) ⁶	CC	1,040	2,450	2,000	900	13	-	160



Standard input version - ST



Crawler crane version - CC

Type	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	R1	R2	D1	D2	D3	D4	D5	D6	D7	D8	D9	Qty. D8/D9
F340	100	100	130	40	60	80	697,5	75	214,8	-	-	-	18°/100/16	10	580	680	735	649,5	650	720	775	M30x3,5	M30x3,5	30/30
F360	100	100	130	40	60	80	658	25	215	-	-	-	18°/100/16	10	580	680	735	649	650	720	775	M30x3.5	M30x3.5	30/30
F420	60	132	130	40	60	80	1026	43.5	210.7	-	-	-	10	10	660	744	795	670	674	744	795	M30x2	M30x2	42/42
F440	40	43	255	40	25	25	820	80	213	-	40	70	4	4	450	515	569	669	570	620	670	M36x3	M30x3	30/30
F560	40	43	255	45	45	120	831.5	80	213	-	45	70	4	4	450	515	569	763	570	620	670	M36x1.5	M30x1.5	29/42

* Park brake integrated in hydraulic motor

1) 2-stage on demand

2) Other ratios on demand

3) Optional brake torques

4) ST= Standard CC= Crawler Crane

5) Without hydraulic motor

6) In combination with input bevel drive

Travel drives



F Series

XLarge final drives

The F Series is perfectly suited to any crawler and milling machine. Thanks to compact, rugged design, high torque and load capabilities, these solutions are the best possible option for these machines. All units are available with a fail-safe parking brake and for most cartridge type fixed or variable systems. Different disengagement systems are available on demand for all the sizes.



HYDRAULIC SOLUTIONS

Gear ratios

• 23 ... 989

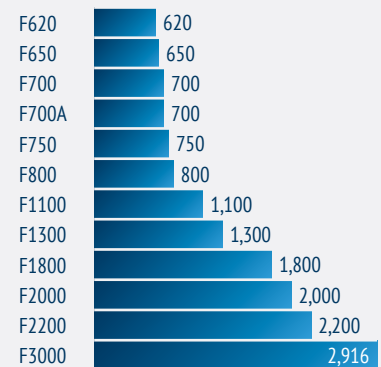
Standard features

- Compact structure
- High performance
- 3-7 Planetary wheels per stage
- Notchless ground tooth root
- Different ratios
- Integrated disc-brake
- Suitable for various hydraulic motors

Special executions on request

- Mechanical disconnect device
- Low and high temperature version

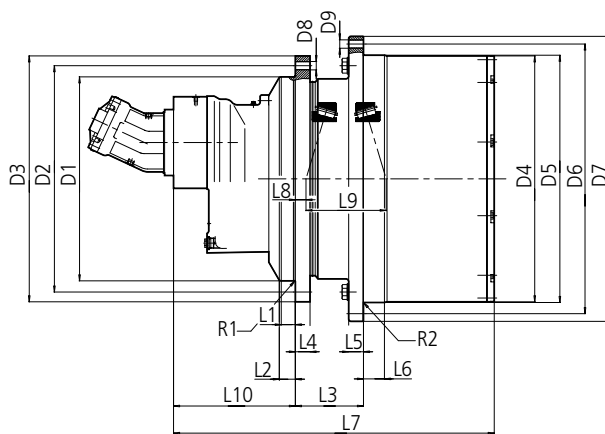
Torque (kNm)



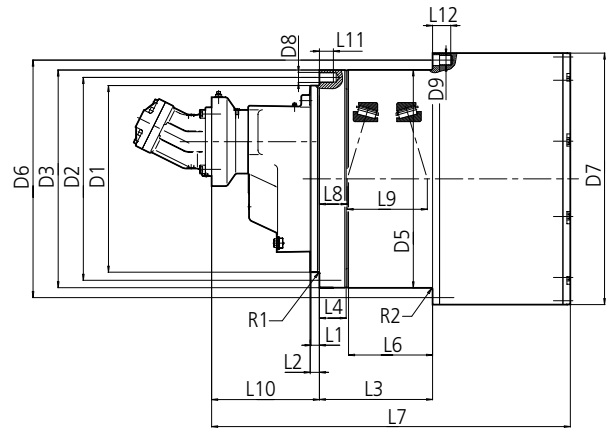
Stated torques are peak values for short duration.

Overall dimensions and technical data | F620 ... F700A

Type	Ratio ¹	Version ²	Capacity of Bearing		Weight ³	Park Brake		Hydraulic Motor	
			C-dynamic	Co-static		Locking torque	Release pressure min.	Plug-in fixed	Plug-in variable
	i		kN	kN	kg	Nm	bar	ccm	ccm
F620	30-249-293-328-462	ST	1,320	3,150	2,897	1,200	28	(2x) 250-(1x) 500	(2x) 250-(2x) 280-(1x) 500
		CC	1,320	3,150	2,897	1,200	28	(2x) 200-(2x) 160	(2x) 160
F650	380-682	CC	1,040	2,450	1,660	1,150	17	-	(2x) 215
F700	377	CC	1,320	3,150	3,350	1,200	28	(2x) 250	(2x) 250-(2x) 280
F700A	648	CC	1,320	3,150	3,350	1,200	28	-	(2x) 160



Standard input version - ST



Crawler crane version - CC

Type		L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	R1	R2	D1	D2	D3	D4	D5	D6	D7	D8	D9	Qty. D8/D9
F620	ST	50	57.5	245	52.5	53	75	1232	38	287	341	-	-	4	-	730	810	880	880	885	965	1020	M30x2	M30x2	41/48
	CC	30	33	405	96	-	306	1159	99	287	352.8	50	65	4	5	668	726	779	-	782	830	880	M36x1.5	M30x1.5	30/45
F650	CC	40	43	255	89	-	117	846.5	133	213	-	45	70	4	4	450	515	563	-	570	620	763	M36x1.5	M30x1.5	29/42
F700	CC	30	33	405	96	-	306	1283.5	99	287	352.8	50	65	4	5	668	726	779	-	780	850	900	M36x1.5	M36x1.5	30/45
F700A	CC	30	33	405	96	-	306	1372.5	99	287	474.8	50	65	4	5	668	726	779	-	780	850	900	M36x1.5	M36x1.5	30/45

*Park brake integrated in hydraulic motor

1) Other ratios on demand

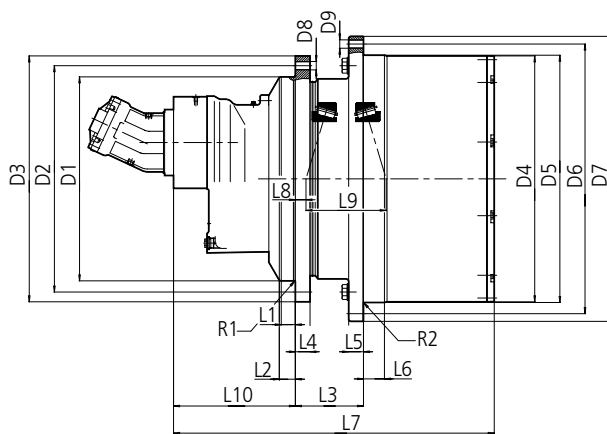
2) ST= Standard CC= Crawler Crane

3) Without hydraulic motor

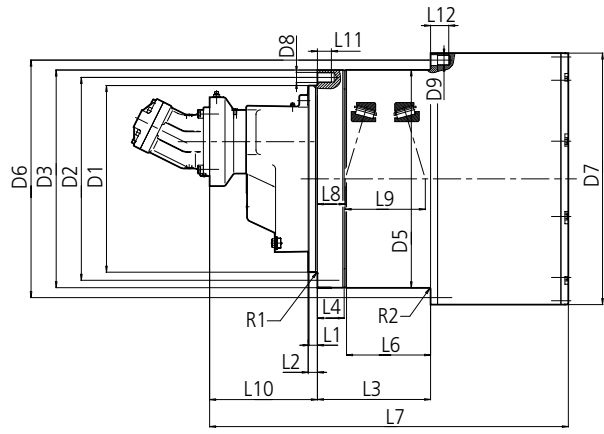
Travel drives

Overall dimensions and technical data | F750 ... F1800

Type	Ratio ¹	Version ²	Capacity of Bearing		Weight ³	Park Brake		Hydraulic Motor	
			C-dynamic	Co-static		Locking torque	Release pressure min.	Plug-in fixed	Plug-in variable
	i		kN	kN	kg	Nm	bar	ccm	ccm
F750	377	CC	2,800	6,390	3,450	1,200	28	(2x) 250	(2x) 250
F800	23-283-298	ST	2,485	5,941	3,764	1,000*	7.8*	(2x) 250	(2x) 250-(2x) 280
F1100	406	ST	3,900	7,650	7,220	1,750	20	(2x) 250	(2x) 250-(2x) 280
F1300	461	ST	3,900	7,650	7,400	1,750	20	(2x) 250	-



Standard input version - ST



Crawler crane version - CC

Type		L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	R1	R2	D1	D2	D3	D4	D5	D6	D7	D8	D9	Qty. D8/D9
F750	CC	30	33	405	96	-	306	1318	129	258,5	353	50	68	4	5	668	726	779	-	780	850	900	M36x1,5	M36x1,5	30/45
F800	ST	20	25	229	60	58	170	1315	161/163	257/253	713	-	-	6	8	830	980	1050	916	920	976	1055	M30x2	M30x2	48/48
F1100	ST	57	60	503	74	-	-	1483	176	368	713	-	-	10	6	1110	1230	1310	1116	-	1170	1226	M36x4	M30x3.5	48/52
F1300	ST	57	60	503	74	-	-	1623	176	368	395.5	-	-	10	6	1110	1230	1310	1116	1100	1170	1226	M36x4	M30x3.5	48/52

* Park brake integrated in hydraulic motor

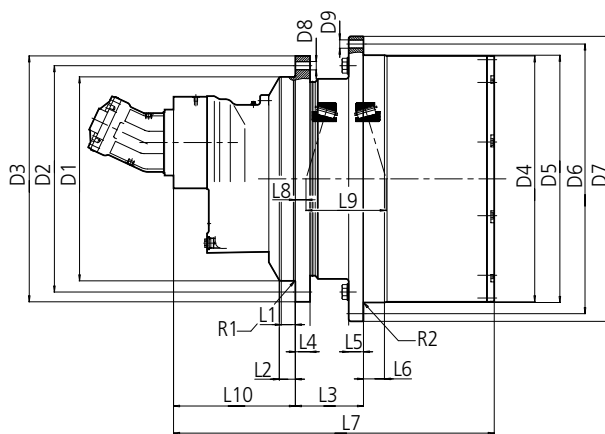
1) Other ratios on demand

2) ST= Standard CC= Crawler Crane

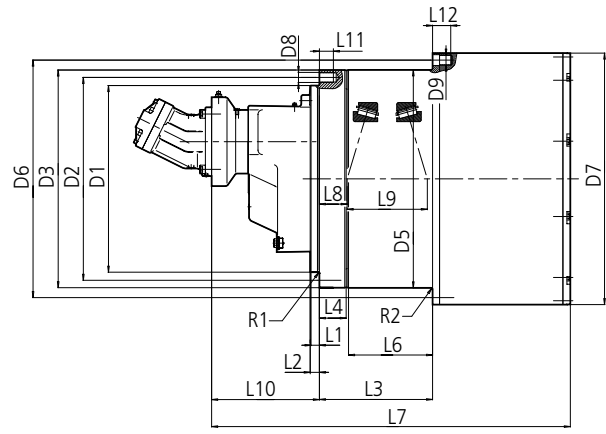
3) Without hydraulic motor

Overall dimensions and technical data | F1800 ... F3000

Type	Ratio ¹	Version ²	Capacity of Bearing		Weight ³	Park Brake		Hydraulic Motor	
			C-dynamic	Co-static		Locking torque	Release pressure min.	Plug-in fixed	Plug-in variable
	i		kN	kN	kg	Nm	bar	ccm	ccm
F1800	656-744	ST	3,900	7,650	7,500	1,200	28	-	(2x) 250-(2x) 280
		CC	3,900	7,650	9,000	1,200	28	(2x) 250	(2x) 250-(2x) 280
F2000	516 - 989	ST	5,100	11,600	10,700	2,300	22	-	(2x) 250 - (2x) 355
		CC	3,900	7,650	9,000	1,200	28	-	(2x) 355
F2200	552-989	ST	5,100	11,600	10,736	2,300	22	(2x) 355	(2x) 355
		CC	3,900	7,650	9,000	1,200	28	(2x) 250	(2x) 250-(2x) 280
F3000	699	ST	6,110	11,900	11,500	1,700	12	-	(2x) 250-(2x) 280



Standard input version - ST



Crawler crane version - CC

Type		L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	R1	R2	D1	D2	D3	D4	D5	D6	D7	D8	D9	Qty. D8/D9
F1800	ST	54	60	310	74	107	191.5	1839.5	176	368	615.5	-	-	10	10	1110	1230	1310	1224	1250	1350	1430	M36x1.5	M42x2	48/40
	CC	55	60	478	158	-	239	1785.5	171	375	602.5	50	90	4	6	785	851	923	-	935	1016	1224	M42x2	M42x2	40/40
F2000	ST	70	70	343	80	100	80	1846	217	376	591	-	-	10	10	1288	1400	1500	1224	1230	1320	1400	M42x3	M42x3	50/48
	CC	60	60	478	159	-	239	1956.5	171	375	626	-	-	4	6	785	858	930	1224	935	1016	1224	M48x2	M48x2	36/36
F2200	ST	60	70	343	80	100	80	1846	217	376	591	-	-	10	10	1288	1400	1500	1224	1230	1320	1400	M42x3	M42x3	50/48
	CC	55	60	478	158	-	239	1956.5	171	375	626	55	93	4	6	785	858	930	-	935	1016	1224	M48x2	M48x2	36/36
F3000	ST	60	70	343	80	100	80	2000	217	376	606	-	-	10	10	1288	1400	1500	1224	1230	1320	1400	M42x3	M42x3	50/48

* Park brake integrated in hydraulic motor

1) Other ratios on demand

2) ST= Standard CC= Crawler Crane

3) Without hydraulic motor