

radial piston motors

fixed displacement, high torque, low speed

model		R 200L	R 450L	R 740L	R 1000L	R 1350L	R 1650L	R 2050L	R 2500L	R 3100L	R 4350L	R 5350L	R 6800L (4")	R 6800L (4 1/2")	R 11600L
displacement	cm ³	188	442	740	983	1.344	1.639	2.050	2.470	3.080	4.310	5.310	6.800	6.800	11.600
rated pressure	bar	207	207	250	250	250	250	250	250	250	250	250	250	250	210
intermittent pressure	bar	240	290	290	290	290	290	290	290	290	290	290	290	290	250
continuous speed	n/min	500	450	400	300	300	250	220	220	175	125	100	120	120	100
continuous power	kW	25	42	60	80	100	110	100	115	130	140	140	190	190	240
approximate weight	kg	40	73	120	144	144	144	217	265	265	420	429	481	510	1.050



single and dual displacement, high speed

model		R 20H	R 27H	R 34H	R 50H	R 75H	R 90H	R 100H	R 100HD
displacement	cm ³	20,5	27,3	34,2	50,9	76,3	89,0	102	102/31*
rated pressure	bar	210	210	210	210	210	210	210	210
peak pressure	bar	320	320	320	320	320	320	320	320
continuous speed	n/min	1.800	1.800	1.800	1.700	1.700	1.700	1.700	1.700
peak power	kW	12	17	21	31	44	52	60	60
approximate weight	kg	19	19	19	25	25	25	25	30

* intermediate displacements available



track drives

**rotating housing, high torque and high load capacity,
for cartridge and flanged axial piston motors and orbit motors**

model		C001	C002	C004	C010	C018	C026	C030	C036	C045	C060	C085	C100	C130	C180	C220
max. torque	kNm	1,0	2,2	4,0	10,0	18,0	26,0	30,0	36,0	45,0	60,0	85,0	100,0	130,0	180,0	220,0
range of ratios	1 :	5,25	6,2	19-40	22-53	68-173	55-120	55-147	55-123	89-173	81-142	108-156	83-175	148-210	207	287
maximum input speed	rpm	1.000	1.000	3.500	3.500	3.500	3.500	3.500	3.500	3.500	3.500	3.000	3.000	3.000	3.000	3.000
hydraulic motor speed		low	low	high	high	high	high	high	high	high	high	high	high	high	high	high
braking torque	Nm	140-250	250-350	210	220-310	250-500	250-500	250-600	250-600	400-800	600-1.000	800-1.200	800-1.200	800-1.200	800-1.200	800-1.200
minimum opening pressure	bar	15-25	20-30	18	10-20	10-20	10-20	10-20	10-20	10-20	10-20	10-20	10-20	10-20	10-20	10-20
weight	kg	20	25	42	60	95	135	180	200	270	310	350	400	630	750	820



wheel drives

**rotating housing flange with studs, high torque and high load capacity
for cartridge and flanged axial piston motors and orbit motors**

model		R02	R04A	R04B	R07	R12	R17	R23	R30	R36	R45	R60
max. torque	kNm	1,75	4,0	4,0	7,0	12,0	17,0	23,0	30,0	36,0	45,0	60,0
range of ratios	1 :	5,77	19-23-32-40	19-23-32-40	22-27-30-42-53	30-35-43-68-79	55-120	55-147	55-123	41-47	108	108
maximum input speed	rpm	500	3.000	3.000	3.000	3.000	3.000	3.000	3.000	3.000	3.000	3.000
hydraulic motor speed		low	high	high	high	high	high	high	high	high	high	high
braking torque	Nm	450-600	210	210	220-310	300-800	300-600	300-600	300-800	300-800	300-800	300-1000
minimum opening pressure	bar	15-20	18	18	10-20	15-20	15-20	15-20	15-20	15-20	15-20	15-20
weight	kg	35	45	45	70	110	140	170	200	250	250	350



bent-axis piston units

fixed displacement pumps and motors

model		A2F M/O10	A2F M/O12	A2F M/O16	A2F M/O23	A2F M/O28	A2F M/O32	A2F M/O45	A2F M/O56	A2F M/O63	A2F M/O80	A2F M/O90	A2FM /O107	A2FM /O125
displacement	cm ³	10,3	12,0	16,0	22,9	28,1	32,0	45,6	56,1	63,0	80,4	90,0	106,7	125,0
speed	rpm	8.000	8.000	8.000	6.300	6.300	6.300	5.600	5.000	5.000	4.500	4.500	4.000	4.000
flow	l/min	82	96	128	144	176	201	255	280	315	360	405	427	500
torque ($\Delta p = 400 \text{ bar}$)	Nm	65	76	100	144	178	204	290	356	400	508	572	680	796
approximate weight	kg	5,4	5,4	5,4	9,5	9,5	9,5	13,5	18	18	23	23	32	32

fixed displacement motors, plug-in flange

model		A2FE 56	A2FE 63	A2FE 80	A2FE 90	A2FE 107
displacement	cm ³	56,1	63,0	80,4	90,0	106,7
speed	rpm	5.000	5.000	4.500	4.500	4.000
flow	l/min	280	315	360	405	427
torque ($\Delta p = 400 \text{ bar}$)	Nm	356	400	508	572	680
approximate weight	kg	18	18	23	23	32

preferably for installation in mechanical gearboxes

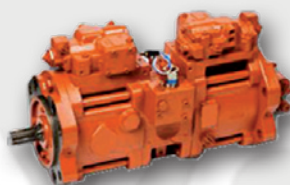


axial piston pumps

medium pressure, swash plate design, open loop

model		K3VL 45	K3VL 80	K3VL 112	K3VL 140	K3VL 200
displacement	cm ³	45	80	112	140	200
rated pressure	bar	320	320	320	320	320
max. pressure	bar	350	350	350	350	350
max. self priming speed	rpm	2.700	2.400	2.200	2.200	1.900
max. boosted speed	rpm	3.250	3.000	2.700	2.500	2.200
weight	kg	25	35	35	65	100

high pressure, swash plate design, open loop



model		K3VG 63	K3VG 112	K3VG 180	K3VG 280	K3VG 180 DT	K3VG 280 DT
displacement	cm ³	63	112	180	280	180+180	280+280
rated pressure	bar	350	350	350	350	350	350
max. pressure	bar	400	400	400	400	400	400
max. input torque	Nm	314	559	902	1.400	1.804	2.800
max. self priming speed	rpm	2.600	2.200	1.850	1.600	1.850	1.600
max. boosted speed	rpm	3.250	2.700	2.300	2.000	2.300	2.000
weight	kg	48	68	86	160	160	300

gear pumps

group 1

model		G1P 07	G1P 11	G1P 16	G1P 20	G1P 25	G1P 31	G1P 38	G1P 47	G1P 56	G1P 63	G1P 76
displacement	cm ³	0,73	1,05	1,55	1,90	2,50	3,10	3,80	4,70	5,55	6,25	7,60
max. working pressure	bar	200	240	260	240	240	240	220	200	180	160	140
peak pressure	bar	240	280	300	300	280	280	260	240	220	200	180
max. speed	rpm	5.000	5.000	5.000	5.000	5.000	5.000	4.500	4.500	4.000	3.750	3.500



group 2

model		G2P 04	G2P 06	G2P 08	G2P 11	G2P 14	G2P 16	G2P 20	G2P 22	G2P 25	G2P 28	G2P 30
displacement	cm ³	4,10	6,20	8,20	11,20	14,00	16,00	20,00	22,50	25,10	28,00	30,00
max. working pressure	bar	250	250	250	250	240	240	200	170	170	140	130
peak pressure	bar	300	300	300	300	300	300	240	210	210	180	170
max. speed	rpm	4.000	3.500	3.500	3.500	3.000	3.000	3.000	2.500	2.500	2.500	2.000

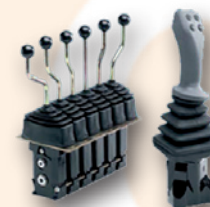
group 3

model		G3P 20	G3P 22	G3P 25	G3P 28	G3P 32	G3P 36	G3P 42	G3P 46	G3P 50	G3P 55	G3P 60
displacement	cm ³	20	22	25	28	32	36	42	46	50	55	60
max. working pressure	bar	220	220	220	220	220	220	200	200	170	170	150
peak pressure	bar	250	250	250	250	250	250	230	230	200	200	180
max. speed	rpm	2.500	2.500	2.500	2.500	2.500	2.300	2.300	2.100	2.100	1.800	1.800

remote controls

joystick

model		PV48K	PV48M	PV6P
max. input pressure	bar	70	70	70
output pressure	bar	0-30	0-30	0-30
max. flow	L/min	20	15	10
lever angle				
- single operating	°	±19	±19	±15
- double operating		±25	±25	
actuation torque range	Nm	1 - 4	1 - 4	2 - 9
fluid temperature range	°C	-20 - +90	-20 - +90	-20 - +90
weight without handle	kg	1,9	1,6	0,95



pedal



model		RCV8C1	RCV8C2	RCV8C4	PV6P
max. input pressure	bar	98	98	98	70
output pressure	bar	0-44	0-44	0-44	0-30
max. flow	L/min	10	10	10	10
lever angle (single operating)	°	±12,4	±12,4	±12,4	±15
actuation torque range	Nm	5 - 16	5 - 16	5 - 16	2 - 9
fluid temperature range	°C	-20 - +70	-20 - +70	-20 - +70	-20 - +90
weight	kg	3,2	7,7	7,8	0,95
damping feature		N/A	N/A	STD	N/A

homokinetic joints

model	J1	J2	JS
application	directly to the driver unit and to the axis	between driver and driven unit with rotation axis > 5°	special
maximum tilt	5	39	87
axial sliding	on request	spherical on request	
torque	Nm	100	150



rotary manifolds



from 2 to 24 passages
available for hydraulic, electric and hydraulic-electric service
up to 2" port size
suitable for oil, water, air
chromed cylinder
6000 psi rated

power steerings

open center and closed center, load reaction and non-load reaction, load sensing

model		S2	S9	S3	S3 LS
displacement	cm ³	50-100	70-315	40-500	40-400
recommended oil flow	l/min	5-80	7-32	4-50	4-40
maximum pressure	bar	210	175	210	210



orbit motors

spool valve and disc valve, gerotor and roll-gerotor type



model		M0	M1	M4	M5	M6	M7	M8	M9
displacement	cm ³	8-32	8-50	25-400	50-375	200-500	80-500	160-500	315-800
continuous pressure	bar	70	100	140	175	175	210	200	200
intermittent pressure	bar	125	140	175	200	200	275	240	240
peak pressure	bar	140	200	225	225	225	295	280	280
continuous flow	l/min	16	20	60	60	75	75	125	200
max. intermittent power	kW	2	3,2	13	15	18,5	22,5	40	64

the above data gives an overview of standard components, please contact us for other features.

drum brakes

model		DB 25	DB 75	DB 100	DB 125
torque range at 0 bar (0 psi) back pressure	Nm	20-60	70-350	160-700	160-700
release pressure range	bar	7-18	5-24	9-31	9-31
max. operating pressure	bar	250	250	350	350
max. speed	rpm	3.300	1.800	3.000	3.000
volume of oil to the release brake (min.-max.)	cm ³	3,0-4,2	7,0-12,5	4,0-8,0	4,0-8,0
max. operating temperature	°C	110	110	110	110
weight	kg	3,5	9,5	15,0	15,0



mini power packs



model		P1	P1B	P5
rotation			bidirectional	
pump displacements	cm ³	0,60 – 1,5	0,60 – 1,5	0,8 – 6,4
voltage range	V	12-24	12-24	12-48 DC 115, 230, 460 AC
maximum pressure	bar	180	180	255
reservoirs	L	0,5 – 1,0 (cylindrical plastic) 1,0 – 3,8 (rectangular plastic)	0,5 – 1,0 (cylindrical plastic) 1,0 – 3,8 (rectangular plastic)	1 – 15,2 (steel) 1 – 1,9 (plastic)

winches

compact

model		W04C	W07C	W09C	W14C	W18C	W22C	W30C	W42C	W51C
1st layer pull	kN	4,5	7,2	9,0	13,5	18,0	22,5	30,6	42,3	51,3
last layer pull	kN	3,6	5,5	7,1	10,7	14,0	17,6	24,1	30,7	39,7

fast



model		W1 F28	W1 F56	W2 F56	W2 60	W3 F56	W3 F80	W4 F80	W4 F107	W5 F107	W6 F107	W7 F107
1st layer pull	kN	40,5	31,5	49,5	41,4	58,5	54,0	76,5	67,5	85,5	121,5	144,0
last layer pull	kN	31,4	24,5	38,5	32,2	45,6	42,1	59,6	52,7	65,8	93,4	111,3
motor displacement	cm ³	28	56	56	60	56	80	80	107	107	107	107

heavy

model		W18H*	W19H*	W20H*	W24H*	W40X	W45X	W54X	W63X	W76X
1st layer pull	kN	18,0	18,0	21,6	27,0	40,5	45,0	54,0	63,0	76,5
last layer pull	kN	14,0	13,9	16,8	20,6	31,4	35,1	42,1	49,1	60,0

* open support frame

power take offs

model		T1203	T1005	T0229	T1257	T1085	T1201	T1253	T1238	T1059	T1011	T1007	T1001	T1009	T1010
gearbox		EATON 4106, 5206	EATON FULLER SE/R	EATON FULLER 2802	MERCEDES G-100	MERCEDES ENGINE MB	MERCEDES G210, G260	MERCEDES G210, G260	MERCEDES G3/36, G3/61	MITSUBISHI M035S5, M035S6	RENAULT B9_-150, B18-150	SCANIA GR 801	SCANIA GR 870, GR 871	SCANIA GR_ 900, GRH 900	SCANIA GRS 890, GRS 900
continuous torque	Nm	250	350	300	250	390	300	500	250	150	450	400	350	400	400
intermittent torque	Nm	350	490		350	470	420	700	350	210	600	560	490	560	560
power @ 1000 rpm	kW	27	37		27	41	32	53	27	16	49	43	37	43	43
mounting position		Rear	Bottom	Rear	Rear	Rear	Rear	Rear	Rear	Right	Right	Right	Right	Right	Right
pump rotation		Right	Left	Right	Right	Right	Right	Right	Right	Left	Left	Left	Left	Left	Left
weight	kg	9,9	16.5	6,1	14,1	2,7	14	8,5	11,3	6,2	18	18,6	17,9	18,7	18,3

model		T0233	T0054	T1232	T0247	T1237	T0110	T0251	T1020	T1048	T1210
gearbox		SCANIA GRS(H) 890, GRS(H) 900	SCANIA GR50 900	VOLVO R 70, SR 70	VOLVO R/SR/VT	VOLVO R1000-VT2514	ZF 81Z1	ZF 86Z2	ZF S5-42/4.65	ZF S5-42/5.72	ZF S5-50/S6-90
continuous torque	Nm	490; 600 *	530	300	345, 345 *	300	1000	400	300	300	250
intermittent torque	Nm			420		420			420	420	350
power @ 1000 rpm	kW			32		32			32	32	27
mounting position		Right	Right	Rear	Rear	Rear	Rear	Rear / Right	Right	Left	Rear
pump rotation		Left	Left	Right	Right	Right	Left		Left	Left	Right
weight	kg	18,6	14,3	13,8	16,3	11,5	1,6	8,7	8,4	8,5	9,3

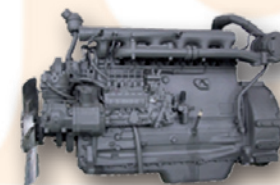
* double output



diesel engines

**air-cooled 3, 4, 5, 6 cylinder naturally aspirated in-line-engines;
3, 4, 6-cylinder turbocharged; 6-cylinder also charge air cooled**

model		F3L914	F4L914	F5L914	F6L914	BF3L914	BF4L914	BF6L914	BF6L914C
number of cylinders		3	4	5	6	3	4	6	6
bore/stroke	mm	102/132	102/132	102/132	102/132	102/132	102/132	102/132	102/132
displacement	cm ³	3.200	4.300	5.400	6.500	3.200	4.300	6.500	6.500
compression ratio		20	20	20	20	18	18	18	18
maximum rated speed	rpm	2.500	2.500	2.500	2.500	2.500	2.500	2.500	2.500
mean piston speed	m/s	11	11	11	11	11	11	11	11
power ratings, @ speed	rpm	2.500	2.500	2.500	2.500	2.300	2.500	2.500	2.500
normal operation (net/gross)	kW	44,0/46,2	59,0/61,5	71,7/74,9	89,0/92,2	51,0/53,4	71,7/74,9	110,0/114,9	141,0/148,5
mean effective pressure	bar	6,53	6,56	6,41	6,60	8,01	8,01	5,16	10,46
interm. operation (net/gross)	kW	42,0/44,2	56,0/58,5	70,0/73,2	85,0/88,2	–	71,7/74,9	109,0/113,9	138,5/185,7
mean effective pressure	bar	6,23	6,33	6,23	6,30	–	8,01	8,08	9,71
maximum torque	Nm	202	270	333	400	257	355	550	700
@ speed	rpm	1.500	1.500	1.500	1.500	1.600	1.600	1.600	1.600
minimum idle speed	rpm	650	650	650	650	650	650	650	650
fuel specific consumption	g/kWh	215	215	215	220	220	220	220	210
weight	kg	277	307	380	430	312	350	485	510



electric motors

three phase

model		E56B	E63B	E71B	E80B	E90SB	E90LB	E100LB	E112MB	E132SB	E56D	E63D	E71D	E80D	E90SD	E90LD	E100LD
power	kW	0,09 0,12	0,18 0,25	0,37 0,55	0,75 1,1	1,5	2,2	3	4	5,5 7,5	0,06 0,09	0,12 0,18	0,25 0,37	0,55 0,75	1,1	1,5	2,2 3
voltage	V	220/380	220/380	220/380	220/380	220/380	220/380	220/380	380/660	380/660	220/380	220/380	220/380	220/380	220/380	220/380	220/380
current	A	0,57/0,33 0,67/0,38	0,91/0,53 1,17/1,68	1,65/0,95 2,33/1,35	3,03/1,75 4,42/2,55	6,01/3,48	8,61/4,98	11,1/6,4	8,2/4,7	11/6,3 1,5/8,6	0,49/0,28 0,67/0,39	0,84/0,48 1,12/0,65	1,44/0,83 1,94/1,12	2,69/1,56 3,48/2,01	4,74/2,75	6,31/3,65	806/5,0 11,7/6,8
speed	rpm	2.800	2.800	2.800	2.800	2.800	2.800	2.870	2.890	2.900	1400	1400	1400	1400	1400	1400	1430
efficiency	%	62 67	69 72	73,5 75,5	76,5 77	77	78	82	85,5	85,5 86,2	56 58	60 64	67 69,5	73,5 75,5	78	79	81 82,5
power factor		0,68 0,71	0,75 0,78	0,8 0,82	0,85	0,85	0,86	0,87	0,87	0,88	0,58 0,61	0,63 0,66	0,68 0,72	0,73 0,75	0,78	0,79	0,82 0,81
weight	kg	4,7	5,1	6,7	10,2	14,5	17	24,5	30	46	4,7	4,9	6,6	10,2	14,5	16	25

model		E112MD	E132SD	E132MD	E90SF	E90LF	E100LF	E112MF	E132SF	E132MF	E132SH	E132MH
power	kW	4	5,5	7,5	0,75	1,1	1,5	2,2	3	4 5,5	2,2	3
voltage	V	380/660	380/660	380/660	220/380	220/380	220/380	220/380	220/380	380/660	220/380	220/380
current	A	8,8/5,1	12/6,9	15/8,6	4,0/2,3	5,5/3,2	6,9/4,0	9,7/5,6	12,4/7,2	9,4/5,4 13/7,5	10/5,8	13,3/7,7
speed	rpm	1440	1440	1440	910	910	940	940	960	960	710	710
efficiency	%	84,5	85,5	87	72,5	73,5	77,5	80,5	83	84 85,3	85,5	82
power factor		0,82	0,84	0,85	0,7	0,72	0,74	0,74	0,76	0,77 0,78	0,71	0,72
weight	kg	33,5	49,5	57,5	14,5	17	22,5	29	48	53,2	39	45

