

Technical data axial piston pumps and motors for transit mixer Series TMP/TMM

	Dimension	Frame Sizes	
		070	089
Displacement	cm ³ [in ³]	69.8 [4.26]	89.0 [5.43]
Minimum speed (variable pump)	min ⁻¹ (rpm)	400	400
Rated speed (maximum angle)	min ⁻¹ (rpm)	2900	2900
Theoretical torque	N·m/bar [lbf·in/1000 psi]	1.11 [677]	1.42 [866]
Maximum flow	l/min [US gal/min]	223 [58.9]	258 [68.2]
Maximum corner power (fixed motor)	kW [hp]	156 [209]	181 [243]

Technical data K and L frame axial piston 2-position motors

	Dimension	L Frame Sizes			K Frames Sizes	
		25	30	35	38	45
Maximum displacement	cm ³ [in ³]	25 [1.5]	30 [1.8]	35 [2.1]	38 [2.32]	45 [2.5]
Maximum speed - max. angle	min ⁻¹ (rpm)	3950	4150	4300	4000	3900
Maximum speed - min. angle	min ⁻¹ (rpm)	5000	5150	5300	5200	5050
Maximum pressure	bar [psi]	415 [6019.1]	350 [5076.3]	280 [4061.1]	415 [6020]	350 [5075]
Continuous pressure	bar [psi]	210 [3045.8]	175 [2538.2]	140 [2030.5]	210 [3045]	175 [2540]
Theoretical torque	N·m/bar [lbf·in/1000psi]	0.40 [244]	0.48 [293]	0.56 [342]	0.60 [366]	0.72 [439]

Technical data Series 90 axial piston fixed and variable displacement motors

	Dimension	Frame sizes				
		042	055	075	100	130
Displacement	cm ³ [in ³]	42 [2.6]	55 [3.4]	75 [4.6]	100 [6.1]	130 [7.9]
Rated speed	Max. angle	4200	3900	3600	3300	3100
	Min. angle	—	4600	—	—	—
Maximum speed	Max. angle	4600	4250	3950	3650	3400
	Min. angle	—	5100	—	—	—
Max. flow at rated speed	l/min	193	234	296	365	442
	[US gal/min]	[51]	[62]	[78]	[96]	[117]
Max. corner power	kW [hp]	155 [207]	187 [251]	237 [318]	292 [393]	354 [475]

Technical data Series 51 and 51-1 bent axis variable displacement motors

	Dimension	Frame sizes				
		060	080	110	160	250
Displacement	Max. angle	60 [3.7]	80.7 [4.9]	109.9 [6.7]	160.9 [9.8]	250 [15.3]
	Min. angle	12 [0.7]	16.1 [1.0]	22 [1.3]	23.2 [2.0]	50 [3.1]
Rated speed	Max. angle	3600	3100	2800	2500	2200
	Min. angle	5600	5000	4500	4000	3400
Maximum speed	Max. angle	4400	4000	3600	3200	2700
	Min. angle	7000	6250	5600	5000	4250
Max. flow at rated speed	l/min	216	250	308	402	550
	[US gal/min]	[57]	[66]	[81]	[106]	[145]
Max. corner power	kW [hp]	330 [443]	403 [540]	492 [660]	644 [864]	850 [1140]

Technical data Series 40 axial piston fixed and variable displacement motors

	Dimension	Frame sizes			
		025	035	044	046
Displacement	cm ³ [in ³]	25 [1.5]	35 [2.1]	44 [2.7]	46 [2.8]
Rated speed	Max. disp.	4000	3600	3300	4000
	Min. disp.	—	5300	4850	5000
Maximum speed	Max. disp.	5000	4500	4100	4100
Max. flow at rated speed	Fixed motor	100.3	126.1	143.5	—
	[US gal/min]	[26.5]	[33.3]	[37.9]	—
Max. flow at rated speed	Variable motor	—	126.1	143.5	183.6
	US gal/min	—	33.3	37.9	48.5
Max. corner power	kW [hp]	71 [95.2]	92 [123.4]	105 [140.8]	110 [147.5]

TECHNICAL SPECIFICATION

PUMP SERIES I

Nominal Sizes	NG		12	23	28	55	80	107	160	
Displacement	V	cc / rev	12	22.9	28.1	55.1	80.4	106.7	160.4	
Maximum Speed (Close)	n		6000	4750	4750	3750	3350	3000	2650	
Maximum Φ	0.09 Mpa	n	rev/min	2980	2370	2370	1890	1705	1515	1475
	0.1 Mpa	n	rev/min	3150	2500	2500	2000	1800	1600	1450
	0.15 Mpa	n	rev/min	3760	2985	2985	2390	2150	1910	1730
Close	q	l / min	72	109	133	210	269	320	425	
Flow	0.09 Mpa	q	l / min	35	53	65	104	134	158	215
	0.1 Mpa	q	l / min	37	56	69	110	141	167	228
	0.15 Mpa	q	l / min	44	67	82	131	169	199	272
Close	P	KW	42	63	76	123	157	187	248	
Power at P	0.09 Mpa	P	KW	21	32	39	62	80	94	129
	0.1 Mpa	P	KW	22	33	41	65	84	100	136
	0.15 Mpa	P	KW	26	40	49	78	101	119	162
Rated Motor	P = 10 Mpa	q	l / min	17	33	41	81	116	155	233
	P = 35 Mpa	q	l / min	17	32	40	80	114	162	228
	Power at P = 35 Mpa	P	KW	10	19	24	47	68	90	136
Torque	P = 10 Mpa	M	NM	19	36	45	89	128	170	255
Torque	P = 35 Mpa	M	NM	67	127	156	312	447	594	894
Moment of Inertia on ϕ	J	kgm ²	0.0004	0.0012	0.0012	0.0042	0.0072	0.0116	0.0022	
Wight	m	Kg	6	9.5	9.5	18	23	32	45	

PUMP SERIES II

TECHNICAL SPECIFICATION

Nominal Sizes	NG		16	32	45	63	90	125	180	
Displacement	V	cc / rev	16	32	45.6	63	90	125	180	
Maximum Speed (Close)	n		6000	4750	4250	3750	3350	3000	2650	
Maximum Φ	0.09 Mpa	n	rev/min	2980	2370	2120	1890	1705	1515	1375
	0.1 Mpa	n	rev/min	3150	2500	2240	2000	1800	1600	1450
	0.15 Mpa	n	rev/min	3760	2985	2670	2390	2150	1910	1730
Close	q	l / min	96	152	194	236	301	375	477	
Flow	0.09 Mpa	q	l / min	46	74	95	116	150	185	242
	0.1 Mpa	q	l / min	49	78	100	123	158	196	255
	0.15 Mpa	q	l / min	59	93	119	147	189	234	305
Close	P	KW	56	88	113	137	176	219	278	
Power at P	0.09 Mpa	P	KW	28	45	56	69	89	110	144
	0.1 Mpa	P	KW	30	46	59	74	95	116	152
	0.15 Mpa	P	KW	35	56	71	88	113	139	182
Rated Motor	P = 10 Mpa	q	l / min	23	46	66	91	130	181	261
	P = 35 Mpa	q	l / min	22.5	45	65	89	128	177	255
	Power at P = 35 Mpa	P	KW	13	26	38	53	76	106	152
Torque	P = 10 Mpa	M	NM	25.4	50.9	72.5	100	143	199	286
Torque	P = 35 Mpa	M	NM	89	178	254	350	500	696	1001
Moment of Inertia on ϕ	J	kgm ²	0.0004	0.0012	0.0024	0.0042	0.0072	0.0116	0.0022	
Wight	m	Kg	6	9.5	13.54	18	23	32	45	