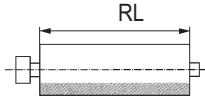




# Technical Precautions for Design, Installation and Maintenance

## 32) Oil Quantities in Quarts for Standard Motorized Pulleys in Horizontal Applications



Quarts

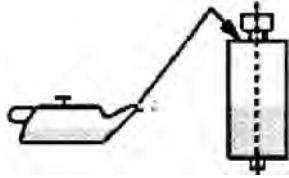
RL (in.)	138E	165E	220M & 220H		320L	320M & 320H			400L	400M & 400H		500L & 500M all	500H	630M	630H	800M	800H & 800HD all	1000HD
	all	all	0.5 HP to 2.0 HP	3.0 HP to 7.5 HP		1 HP to 4 HP	5.5 HP to 7.5 HP	10 HP to 15 HP		3 HP to 15 HP	20 HP							
11.81	0.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13.78	1.0	1.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15.75	1.2	1.5	3	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-
17.72	1.4	1.7	4	7	7	-	-	-	-	-	-	-	-	-	-	-	-	-
19.69	1.6	1.9	4	7	8	4	8	13	17	-	-	-	-	-	-	-	-	-
21.65	1.9	2.1	5	8	8	4	9	14	18	-	-	-	-	-	-	-	-	-
23.62	2.1	2.4	5	8	9	4	9	15	19	14	22	-	11	-	-	-	-	-
25.59	2.3	2.6	6	9	10	4	10	16	21	16	23	22	11	-	-	-	-	-
27.56	2.5	2.8	6	9	10	5	10	17	22	17	25	23	12	-	-	-	-	-
29.53	2.7	3.1	7	10	11	5	11	17	23	18	26	24	12	29	-	-	-	-
31.50	3.0	3.3	7	10	11	6	11	18	25	19	27	25	13	30	-	-	-	-
33.46	3.2	3.5	7	10	12	6	12	20	26	20	29	26	13	31	-	-	-	-
35.43	3.4	3.7	7	10	13	6	13	21	27	21	30	27	14	32	-	-	-	-
37.40	3.6	3.9	8	11	14	7	14	22	29	22	31	30	15	34	54	65	-	-
39.37	3.8	4.1	8	11	15	7	15	23	31	24	35	32	16	36	56	68	-	-
41.34	3.8	4.3	8	11	15	7	16	24	33	25	36	33	16	38	57	70	-	-
43.31	4.0	4.6	8	11	16	7	17	25	34	26	39	34	17	40	60	73	-	-
45.28	4.2	4.9	9	12	17	8	18	27	36	27	40	36	18	42	62	75	-	-
47.24	4.4	5.1	9	12	19	8	19	29	38	29	42	38	19	44	64	77	-	-
49.21	4.6	5.3	9	12	20	9	20	30	39	30	43	39	19	46	66	79	-	-
51.18	4.9	5.5	9	12	21	9	21	31	40	31	44	40	20	48	68	80	137	-
53.15	5.1	5.7	10	13	22	10	22	33	42	32	47	42	21	49	70	82	141	-
55.12	5.3	5.9	10	13	23	10	23	35	44	34	49	44	22	51	72	84	143	254
57.09	5.4	6.1	10	13	24	11	24	36	46	35	51	45	23	52	74	86	145	257
59.06	5.6	6.3	11	14	25	12	25	38	47	36	52	47	23	53	76	88	148	259
61.02	5.1	6.1	11	14	26	13	26	40	48	37	54	49	24	54	78	90	150	262
62.99	5.3	6.3	11	14	27	14	27	42	49	38	55	51	25	56	80	93	153	266
64.96	5.4	6.6	12	15	28	15	28	43	51	39	57	53	26	57	83	95	156	269
66.93	5.6	6.8	12	15	29	16	29	44	52	40	59	55	27	58	85	97	159	273
68.90	5.8	7.0	13	16	30	17	30	45	53	41	61	57	28	60	87	99	161	277
70.87	5.9	7.2	14	17	31	18	31	47	56	43	64	59	30	61	89	101	164	280
72.83	-	7.4	14	17	32	19	32	49	59	45	65	63	31	63	91	104	166	283
74.80	-	7.6	15	18	33	20	33	52	61	47	68	68	33	64	93	106	169	287
76.77	-	7.8	16	19	34	21	34	54	62	48	69	72	36	65	95	108	171	291
78.74	-	8.0	17	20	35	22	35	56	64	49	70	76	38	66	97	110	173	294

Note: The oil quantities shown above are valid for standard lagged Motorized Pulleys. For special options (e.g. certain types of special lagging, high duty cycle applications, etc) oil quantities may vary. Therefore, always refer to oil quantity listed on motor data plate or contact Rulmecca.



# Technical Precautions for Design, Installation and Maintenance

## 32) Oil Quantities in Quarts for Motorized Pulleys in “Special Vertical Shaft” Applications



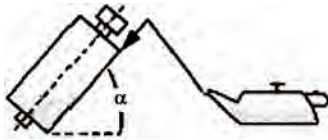
Note: Motorized Pulley shaft is perpendicular to horizontal plane.

Model	Oil Quantity Quarts	Specifications
138E	1.5	Electrical connection to be located at the top
165E	3.2	
220M	10.6	
220H	10.6	
320L	26.4	
320M	26.4	
320H	26.4	
400L	42.3	

Note:

The oil quantities shown are valid for standard vertical Motorized Pulleys. For special options (e.g. certain types of lagging, high duty cycle applications, etc) oil quantities may vary. Therefore, always refer to oil quantity listed on motor data plate.

## 32) Oil Quantities for “Special Inclined Shaft” Motorized Pulleys - Contact Rulmecca



Note: Motorized Pulley shaft is inclined more than 5 degrees above horizontal plane.

Model	Inclination Angle ( $\alpha$ )	Typical applications	Precautions
138E & 165E 220M & 220H 320L, 320M & 320H 400L	5 to 90	Magnetic Separators and Induction Conveyors	Special design & special oil quantity. Contact Rulmecca before placing order.

## 33) Oil Specifications



Motorized Pulley Model and Type of Oil	Motor Insulation	Allowable Ambient Class	ISO 3498 Viscosity Temperature <sup>1</sup>	DIN 51517-3 Performance Grade <sup>4</sup>	Castrol Requirements	BP	ESSO	Mobiloil	Shell	Texaco
Ø138-1000 Standard Oil	F	-13 F to +104 F	150	CLP	ALPHA SP 150	ENERGOL GR-XP 150	SPARTAN EP 150	MOBILGEAR 629	OMALA 150	MEROPA 150
Ø138-1000 Synthetic Oil <sup>2</sup>	F	-13 F to +104 F	220	CLP	ALPHA-SYNTH 220	-	SPARTAN Syn. EP 220	SHC 630	-	-
Ø138-1000 Synthetic Oil <sup>2</sup>	H	-13 F to +120 F	220	CLP	ALPHA-SYNTH 220	-	SPARTAN Syn. EP 220	SHC 630	-	-
Ø138-1000 Food Grade Oil <sup>3</sup>	F & H	-22 F to +104 F	220	-	-	-	-	-	Shell Cassida GL220	-

1 Allowable ambient temperature refers to temperature in the vicinity of Motorized Pulley. See Technical Precautions page 79.

2 Synthetic oil is supplied with all Class H motors. It is also available with Class F motors to reduce oil change frequency (see page 86,) reduce gear wear, and reduce noise.

3 This oil complies with food additive regulation 12 CPR.

4 ISO Viscosity Grades are shown in centistokes at +104 F. See also ISO 3498 and DIN 31519 for more information.