

**Title: ACTUATOR – DISPLACED VOLUMES, DEAD VOLUMES  
AND AIR CONSUMPTION**

Actuator Size	*Displaced Volume	*Dead Volume	Total Volume	Free Air Consumption per Stroke @ 4 Bar	Free Air Consumption per Stroke @ 5.5 Bar	Free Air Consumption per Stroke @ 7 Bar
	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>3</sup>	litres	litres	litres
OMO	2.4	0.25	2.65	0.013	0.017	0.021
014/014P	16	1.8	17.8	0.087	0.114	0.141
024	31	4	35	0.171	0.224	0.276
034	60	10	70	0.340	0.445	0.550
054	113	13	126	0.617	0.806	0.995
074	300	42	342	1.67	2.18	2.69
084	485	40	525	2.59	3.37	4.16
094	644	79	723	3.54	4.62	5.71
104	1025	135	1160	5.67	7.41	9.15
124	1410	155	1565	7.67	10.0	12.4
144	3294	227	3521	17.38	22.7	27.9
154	5920	680	6600	32.32	42.2	52.1
164	7630	2459	10089	47.99	63.1	78.3
184	17170	2196	19366	94.6	123.7	152.7
204	33350	11500	44850	212.8	280.0	347.3
214	31396	11323	42719	202.3	266.4	330.4
304	50025	15225	65250	311.0	408.9	506.8
404	64526	21374	85900	408.1	537.0	665.8
604	94500	31026	125526	596.6	784.9	973.2
	in <sup>3</sup>	in <sup>3</sup>	in <sup>3</sup>	cu ft	cu ft	cu ft
OMO	0.15	0.02	0.16	0.0005	0.0006	0.0007
017/017P	0.98	0.11	1.09	0.0031	0.0040	0.0050
027	1.89	0.24	2.13	0.0060	0.0079	0.0097
037	3.66	0.61	4.27	0.0120	0.0157	0.0194
057	6.89	0.79	7.68	0.0218	0.0284	0.0351
077	18.3	2.6	20.9	0.059	0.077	0.095
087	29.6	2.4	32.0	0.091	0.119	0.147
097	39.3	4.8	44.1	0.125	0.163	0.201
107	62.5	8.2	70.7	0.200	0.261	0.323
127	86.0	9.5	95.4	0.271	0.353	0.436
147	201	14	215	0.61	0.80	0.99
157	361	41	402	1.14	1.49	1.84
167	465	150	615	1.69	2.23	2.76
187	1047	134	1181	3.34	4.36	5.39
207	2034	701	2735	7.51	9.88	12.26
214	1914	690	2605	7.14	9.40	11.66
307	3050	928	3978	10.97	14.43	17.88
407	3935	1303	5238	14.40	18.95	23.49
607	5762	1892	7654	21.05	27.70	34.34

\*These values for 90° movement

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