Table 2. Characteristic sizes of linear and rotary molecular motors. (Abb, abbreviation; m, motor mass (in kDa), $m_{pg} = \alpha m_{kDa}$, with $\alpha = 10^{15}/N_A$ pg kDa^{-1}, N_A, Avogadro's number; V, motor volume (in nm^3), $V = \alpha m_{kDa}/\rho$, with $\rho = 10^{-9}$ pg nm^{-3}; A, motor cross-section (in nm^2), $A = V^{2/3}$; L, lever arm (in nm).)

type	motor	Abb	m (kDa)	V (nm^3)	A (nm^2)	L (nm)	reference
linear	RNA polymerase	RN	590	980	99	—	Mooney and Landick [20]
	dynein (motor part)	DA/DC	331	550	67	—	Reck-Peterson *et al.* [21], Carter *et al.* [22]
	kinesin	KI	120	199	34	—	Block [23]
	myosin	MY	130	216	36	—	Rayment *et al.* [24], Rayment & Holden [25], Goldman [26], Billington *et al.* [27]
rotary	bacterial F_0 ATP synthase	FA	180	299	45	3.5	Yoshida *et al.* [28], Hoffmann *et al.* [29]
	bacterial F_1 ATP synthase	FA	380	631	74	4.5	Yoshida *et al.* [28], Hoffmann *et al.* [29]
	bacterial flagellum	FL	10^4	1.67×10^4	650	20	Berg [9], Reid *et al.* [30], Minamino *et al.* [31]

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Table 1. List of abbreviations

A	cross-sectional area of motors
F	force exerted by motors
V	volume of molecular motors
Al	algae
Am	amphibian
Ar	arachnids
Ba	bacteria
Bi	birds
Cr	crustaceans
DA	axonemal dynein
DC	cytoplasmic dynein
Ec	echinoderms
f	specific tension of motors
FA	F_0/F_1 ATPase
Fl	muscular fibre
Fi	fishes
FL	flagellum
Fly	fly locomotors
Fu	fungi
In	insects
IQR	interquartile range
KI	kinesin
m	mass of molecular motors
M	mass of organisms
M1	single molecule
M2	molecular assembly
Ma	mammals
MF	myofibril
Mo	molluscs
MU	muscle *in vitro*
MV	muscle *in vivo*
MY	myosin
non-loc	non-locomotory
PI	pili
Pr	protozoa
Re	reptiles
RN	RNA polymerase
SP	spasmoneme
Swim	swim locomotors
Terr	terrestrial locomotors