

6.6. Nomenclature for Power Screws

Symbol	Description	Unit
D_{mc}	Mean diameter of the collar	m
D_{ms}	Mean diameter of the screw	m
D_c	Core (root) diameter of the screw	m
D_o	Nominal (outside) diameter of the screw	m
l	Lead distance (axial movement for one rotation)	m
L	Length of lever arm	m
n	Number of threads	-
p	Screw pitch	m
P	Lever arm load	N
T	Screw torque	Nm
T_0	Ideal screw torque (no friction)	Nm
W	Load to be lifted	N
η	Efficiency	-
ϕ	Screw thread friction angle	degrees
μ_c	Coefficient of friction of collar bearing	-
μ_s	Coefficient of friction of screw thread	-
θ	Angle of thread/helix angle	degrees