

Eq. 1 Triangular Clamping Toggle Calculator		
Input cells shown as blue		
clamping force $P =$	20.000	lbf ▼
length as indicated $l =$	2.000	in
length as indicated $l_1 =$	4.000	in
radius of pivot hole $r =$	0.250	in
vertical distance $h =$	1.500	in
vertical distance $h_1 =$	3.500	in
coefficient of friction $f =$	0.100	-
coefficient of friction $f_o =$	0.100	-
coefficient of friction $f_l =$	0.100	-
Eq. 1, Calculated Results		
is $l_1 \geq l$ ?	Yes	-
force applied $Q =$	12.000	lbf
is $P \geq Q =$	Yes	-

Eq. 2, Triangular Clamping Toggle Calculator		
Input cells shown as blue		
force applied $Q =$	12.000	lbf ▼
length as indicated $l =$	2.000	in
length as indicated $l_1 =$	4.000	in
radius of pivot hole $r =$	0.250	in
vertical distance $h =$	1.500	in
vertical distance $h_1 =$	3.500	in
coefficient of friction $f =$	0.100	-
coefficient of friction $f_o =$	0.100	-
coefficient of friction $f_l =$	0.100	-
Eq. 2, Calculated Results		
is $l_1 \geq l$ ?	Yes	-
clamping force $P =$	20.000	lbf
is $P \geq Q =$	Yes	-