

GOM's Torque Calculation for 90 Degree Angle Dumper Control

S : GOM's Stroke

L : Dumper Hinge Length

$$L = S/\sqrt{2}$$

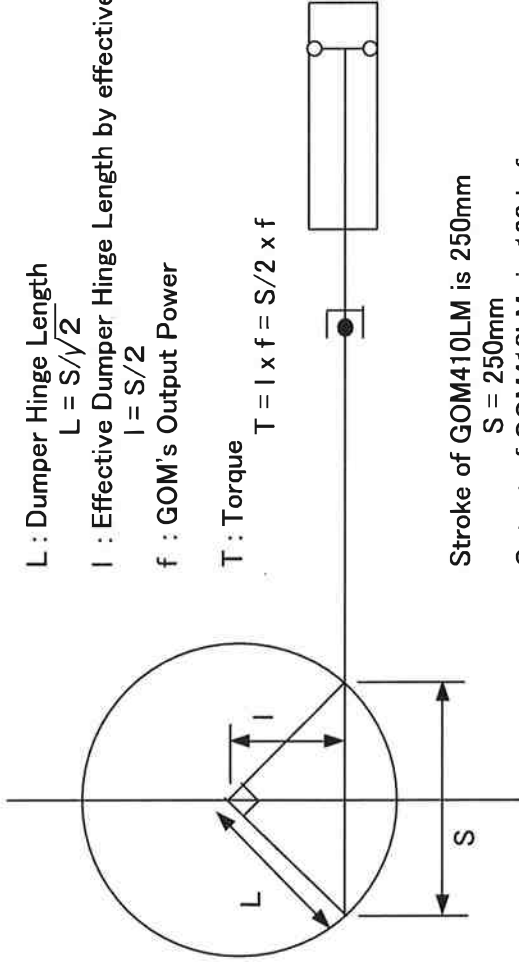
I : Effective Dumper Hinge Length by effective torque

$$I = S/2$$

f : GOM's Output Power

T : Torque

$$T = I \times f = S/2 \times f$$



Stroke of GOM410LM is 250mm

$$S = 250\text{mm}$$

Output of GOM410LM is 120 kgf

Torque of GOM410LM is as below

$$T = S/2 \times f = (250/2) \times 120 = 15000 \text{ kgfmm} = 15.000 \text{ kgfm}$$

If the torque of the GOM is smaller than required dumer torque, the GOM can not be used for the required dumper.

GOM Output Power (Spring Type)

Model	Cylinder Dia. & Stoloke(mm)	Output Power kgf (N)	
		Lower to Upper	Upper to Lower
GOM83S	200 mm 75 mm	280 – 95.0 kgf (2740–930N)	45.0–235 kgf (440–2300N)
GOM84S	200 mm 100 mm	280–95.0 kgf (2740–930 N)	45.0–235 kgf (440–2300 N)
GOM103S	250 mm 75 mm	440–145 kgf (4310–1420 N)	75.0–370 kgf (740–3630 N)
GOM124S	300 mm 100 mm	640–210 kgf (6280–2060 N)	105–530 kgf (1030–5200 N)

(Spring Less Type)

Model	Cylinder Dia. & Stoloke(mm)	Output Power kgf (N)	
		Lower to Upper	Upper to Lower
GOM44L	100 mm 100 mm		120 kgf (1180 N)
GOM410L & GOM410LM	100 mm 250 mm		120 kgf (1180 N)
GOM64L & GOM64LM	150 mm 100 mm		270 kgf (2650 N)
GOM66L	150 mm 150 mm		270 kgf (2650 N)
GOM610L	150 mm 250 mm		270 kgf (2650 N)
GOM84L & GOM84LM	200 mm 100 mm		470 kgf (4610 N)
GOM86L	200 mm 150 mm		470 kgf (4610 N)
GOM810L	200 mm 250 mm		470 kgf (4610 N)
GOM124LM	300 mm 100 mm		1100 kgf (10800 N)
GOM1210L	300 mm 250 mm		1100 kgf (10800 N)
GOM154LM	380 mm 100 mm		1700 kgf (16700 N)
GOM1510L	380 mm 250 mm		1700 kgf (16700 N)