Title: ACTUATOR OPERATING TIMES WITH NAMUR SOLENOID VALVE

ACTUATOR MODEL	TIME (T)
03	0.12
05	0.19
07	0.32
08	0.48
09	0.66
10	0.89
12	1.3
14	3.0
15	5.4

NOTES:
1. T = Stroke time in seconds for 90° travel (No load condition)
2. Supply pressure = 80 psi
3. Cv of 0.7 or greater will achieve times stated above.
4. Solenoid Valve tested is Pneumatrol / RGS C1518.
5. Times stated correct from 30-03-15. Prior to this times will be slower.

METHOD:
Given required Load torque Nm (L) and max actuator torque (A).
Refer to Kinetrol catalogue for max actuator torque (A).

Load % max torque = L / A
Refer to graph on page 2 for Actuator operating time factor (F)

Stroke Time with load $(T_L) = T \times F$
(T from table above)

EXAMPLE:
Torque required is 90 Nm,
094-100 actuator used, from catalogue max torque = 199Nm

Load % max torque = L / A = 90/199 = 45% max torque
Using graph on sheet 2, load factor is 1.6.

Stroke Time with load $(T_L) = T \times F = 0.66 \times 1.6 = 1.056$ seconds

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Actuator Operating Time Factor
Against % Load Max Torque

y-axis: Actuator Operating Time Factor (F)

x-axis: Load % Max Torque

ISSUE F

D.G.W.

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