

Technical Data 高壓管技術資料

Safety Guide 高壓管選用方法

高壓膠管在自動化與省力化過程中，擔負著輸送動力的重要角色，是油壓設備的血管動脈！因此，高手如何發揮油壓設備特徵，取決於正確的選用高壓膠管。

1. Selecting hose size by flow capacity

This chart is designed as an aid in selecting the correct hose size. The hydraulic fluid velocity must be maintained within the range recommended on the right column below. Higher velocities in pressure lines will result in excessive heating, turbulence and a loss in pressure. Maintaining intake line velocity within the recommended limits is necessary for efficient pump operation.

Formula:

$$\text{Area (Sq.in.)} = \frac{0.321 \times \text{flow (GPM)}}{\text{Velocity (ft./sce.)}}$$

$$\left(\text{Area (Sq.cm.)} = \frac{\text{flow (L/min.)}}{\text{Velocity (m/sce.)} \times 60} \times 10 \right)$$

Recommendations are for oils having a max. Viscosity of 68 CST at 100°F (38°C) operating of temperatures between 65°F (20°C) and 155°F (70°C).

1. 配合流量需求選擇膠管口（內）徑

流量大小取決於膠管的內徑。如選用口徑過小時，則會因流速變快，增加了流體磨擦機會，造成壓力下降或流體過熱等不良狀況，應避免之。因此在設計時，其最快流速應以不超過6m/sec為限。從附表中，我們可以很方便的得知所需要的膠管口徑。例：當壓力管線的流速為3m/sec，而必要的流量為50L/min時，在對照可得3/4" (19mm)的膠管尺寸口徑。

