Hydraulic Hose Sizing Nomogram

Use the nomogram below to determine Hose ID Size based on Flow (Q) and Velocity.

Conversely, it can be used to determine Velocity, based on Flow (Q) and Hose ID, or Flow (Q) based on Velocity and Hose ID.

To use the nomogram, draw a straight line across the entire nomogram, intersecting the scale for the two known quantities.

In the example shown by the red line below, the desired Velocity of 25 feet per second and the desired Flow of 10 Gallons per minute were known. The straight line intersecting the two known quantities intersects the Hose ID scale at 1/2". Therefore, a hose with 1/2" ID (-08) would be selected.

* Gallons shown are Imperial (British) Gallons. To convert to US Liquid Gallons, multiply by 1.2009.

Other Conversions:
- Gal/min (Brit) x 4.546 = l/min
- feet/s x 0.3048 = m/s

* Recommended Velocities shown are based on hydraulic fluids with maximum viscosity of 315 SSU at 100° F (38° C) working at room temperatures within the range 65° F (18° C) and 155° F (68° C).