



Design Information

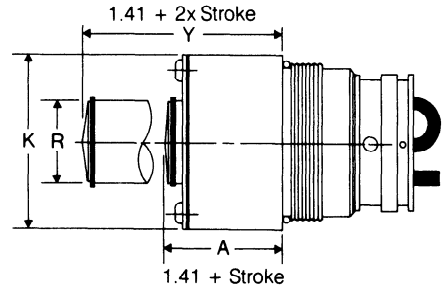
Basic DL Cylinder

DYNE-A-LUBE, SUPER NITRO-DYNE MODEL DL 1...DL 2.5...DL 4...DL 6

Basic Cylinders are those most often used in manifold mounted systems. "O" ring seals provide for quick and easy mounting. A range of standard sizes is available to suit individual design requirements.

Teledyne Hyson's normal tolerance on the "Y" dimension is $\pm .010"$. In applications which require tighter dimension between pressure points a "Qualified Y dimension" should be called out. The tolerance can then be held to $\pm .001"$ with all steel construction.

When ordering, specify model and length of stroke.



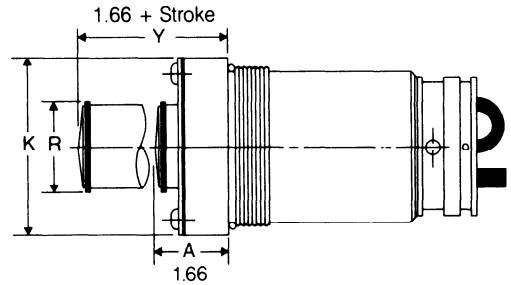
Note: Shaded area indicates pump body tubes required for cylinders installed in upper (or ram mounted) manifolds only.

Deep Cavity DLD Cylinder

DYNE-A-LUBE, SUPER NITRO-DYNE DEEP CAVITY MODEL DLD 1...DLD 2.5...DLD 4...DLD 6

Where press shut height presents a space problem, vertical die height can often be saved by using Models DLD or DLSB. Installed in thick manifold places, the piston can travel into the plate as the cylinder sleeve extends deeper than standard DL Cylinders.

The deep cavity model is often recessed in the manifold. Installation is easy with the use of face spanner wrenches. When ordering, specify model and stroke.



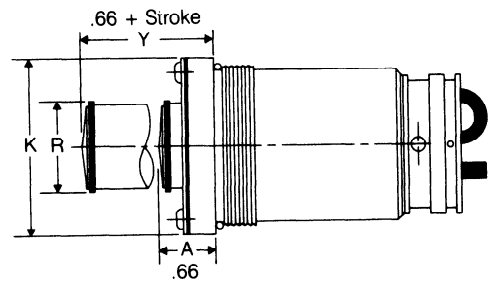
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Short Body DLSB Cylinder

DYNE-A-LUBE, SUPER NITRO-DYNE SHORT BODY MODEL DLSB 1...DLSB 2.5...DLSB 4 ALLOW MORE NITROGEN VOLUME

Teledyne Hyson offers a special deep cavity DYNE-A-LUBE cylinder, the Model DLSB. This allows larger diameter cross holes through the plate, therefore more nitrogen volume and/or a lower pressure rise in a given plate thickness.

The low body profile requires less die shoe machining for cylinder body clearance or shallower pockets if the cylinder is recessed in the manifold.



Note: Shaded area indicates pump body tubes required for cylinders installed in upper (or ram mounted) manifolds only.

Standard Manifold Minimum 'C' Dimensions

Standard Cylinder Dimensions

TON	K	R
1 Ton	2.12	1.08
2.5 Ton	2.75	1.37
4 Ton	3.56	1.87
6 Ton	4.31	2.51

TON	Lower Manifold			Upper Manifold		
	DL	DLD	DLSB	DLU	DLDU	DLSBU
1 Ton	1.75	1.43 + stroke	2.43 + stroke	2.61	2.36 + stroke	3.36 + stroke
2.5 Ton	2.25	2 + stroke	3.0 + stroke	3.11	2.86 + stroke	3.86 + stroke
4 Ton	2.75	2.5 + stroke	3.5 + stroke	3.61	3.36 + stroke	4.36 + stroke
6 Ton	2.75	2.5 + stroke	NA	3.61	3.36 + stroke	NA