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# **DRAG-FLEX**

When you need to move the tough stuff like sludge, slurries and liquid manure, Drag-Flex is the neat solution to a dirty job. Key Drag-Flex has a new inner jacket that allows for increased through-the-weave extrusion. This results in greater cover and liner adhesion in addition to increasing the tensile strength of the hose. The measured adhesion is a cover release of "zero" when tested with a 35-pound weight. Drag-Flex serves as a conduit to provide safe, effective and reliable transport to the discharge site. Drag-Flex is engineered to withstand abrasion and the rigors associated with dragging through rough terrain. The chemical resistant polyurethane construction also stands tough against hydrocarbons, alkalis and acids. Drag-Flex is available in diameters from 5" to 7" and in lengths up to 660' for the dirtiest of jobs (optional 6" × 990' length available).

## DRAG-FLEX POLYURETHANE DRAG HOSE

Diameter	Weight Uncoupled	Wall Thickness	Burst Pressure	Max Service	Tensile Strength
5"	1.25 lbs/ft	0.15"	450 psi	150 psi	45,000 lbs
51/2"	1.35 lbs/ft	0.15"	450 psi	150 psi	51,000 lbs
6"	1.50 lbs/ft	0.15"	450 psi	150 psi	64,000 lbs
7"	1.90 lbs/ft	0.16"	450 psi	150 psi	80,000 lbs

Maximum working pressure = 3x safety margin Standard length is 660'; 6" also available in 990' length.

### **Hose Construction**

Drag-Flex is made from 100% high tenacity synthetic polyester yarn, circularly woven and totally encased in an extruded through-the-weave polyurethane cover and lining. This rugged one-piece construction will be manufactured without glues and/or adhesives of any type and engineered not to delaminate and to be resistant to fuels, chemicals, heat, weather, ultraviolet light and abrasion. Hose should feature a smooth polyurethane outer cover for easy drag and rapid deployment. Hose shall also carry a 2-year written warranty against defects in materials and workmanship.

### **Lining Properties**

Tensile Strength - The lining shall not be less than 1200 psi.

**Elongation** - In accordance to UL-19 using certified tensile test apparatus, a small dumbbell sample of lining shall elongate a minimum of 400%.

Accelerated Aging Test - The tensile strength and ultimate elongation of the vulcanized rubber compound, which has been subjected to the action of oxygen at a pressure of 300 psi ( $\pm$ 10 psi) and a temperature of 158 °F ( $\pm$ 18 °F) for a period of 96 hours, shall retain 60% of its originally stated properties.

### **Physical Properties**

Abrasion Resistance - Hose shall withstand 10,000 cycles on the Taber Abrasion Machine (H-22 Wheel: 0.5 kg). On request, Key Hose will supply written warranties that Drag-Flex meets a minimum 10,000 cycles. Other abrasion test results (UL, DIN, etc.) can be supplied on request of purchaser.

**Cold Resistance** - Hose shall have a capability of use down to -35 °F. Hose shall have no apparent damage to cover, reinforcement or lining when subjected to the following cold bending test: a 50' length of dry hose is to be firmly coiled and placed in a cold box at -35 °F for a duration of 24 hours. Immediately after removal of the hose from the box, hose should be uncoiled and laid out by one operator. Following this procedure, the hose shall not leak nor show any damage to the reinforcement when subjected to the hydrostatic acceptance test.

**Ozone Resistance** - Hose shall show no visible signs of cracking to the lining or cover when tested in accordance to ASTM D518 Procedure B (100 pphm / 118 °F / 70 hours).

**Chemical Resistance** - Exposure to sea water and contamination by most chemical substances, hydrocarbons, oils, alkalis, acids and greases must have no effect on the short or long term performance of the hose. A chemical resistance chart is available and Key Hose will supply specific chemical resistance data on request of purchaser for unique applications.

### Couplings

As required and supplied by customer.





Key Hose reserves the right to modify any specification without prior notice to meet or exceed changing standards. For more information please contact a Key Hose authorized distributor. 07/23

"The Hose Company"

P.O. Box 7107, Dothan, Alabama 36302 | 800.447.5666 | Fax: 800.447.5664 | keyhose.com