

Smart Hose



A HOSE
BREAKS LOOSE.
YOU HAVE EXACTLY
.005 SECONDS TO
CONTAIN IT . . .

GO.

INDEX

Smart Hose

- Hydrogen **5D-2**
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WHAT IS SMART-HOSE™

A flexible “Safety System” for use in the transfer of high pressure gases and liquids. Protect against the hazardous effects of hose rupture, pull-apart and failure.

All Smart-Hose™ designs, Smart-Hose™ I, Smart-Hose™ I with breakaway, Smart-Hose™ II and Smart-Hose™ III all utilize the unique, patented and patent pending design eliminates the potential for disaster through the use of an internal cable connected to specially designed, normally unseated valve “wedges or plungers” located on each end of the cable. In the event of hose separation, stretching to the point of an unsafe condition or coupling-to-hose separation, the valve “wedges or plungers” are released and instantly seat stopping the flow in both directions.

HIGH PRESSURE HOSES

SMART-HOSE FLUID SYSTEMS

Engineering Data for the World's Safest Hose Assemblies!!

Open Flow

(Valves Kept Open by Internal Cable)



Coupling Failure

(Valves are Closed by Separation and/or Back Pressure)



A Flexible "Safety System" for use in the transfer of high pressure gases and liquids!

Protect against the hazardous effects due to hose rupture and tank pull away.

- Hose Whipping • Loss of Product • Personal Injury • Property Damage

Smart-Hose shuts off the flow of product in both directions upon hose and coupling separation, hose separation and hose stretching.

Failure of flexible pigtails may be caused by fatigue, poor coupling attachment, abuse or age. This potential for hose failure creates an unsafe working environment. Foremost among these failures is hose whipping as the pressurized gas or liquid is discharged at high velocity. In the case of high pressure cylinders, this rapid discharge is sufficient to cause the cylinder to fall over or be propelled about. Not only can equipment be damaged, but severe injury or death can result from being struck by the whipping pigtail.

Finally, the continuous discharge of toxic, flammable or otherwise hazardous gas or liquid may lead to major consequences. Smart-Hose with its Lifeline ends is designed to significantly reduce the unsafe potential of this type of accident!

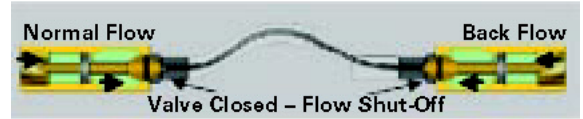
Note: All hoses come oxygen cleaned.



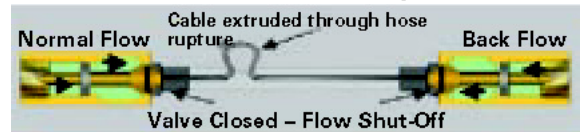
Hose Failure – Coupling Ejection



Hose Failure – Hose Separation



Hose Failure – Hose Rupture*



* Subject to certain conditions

HOSES FOR FILL RACK MANIFOLDS



Part #	Description
SHP-24F14-1	24" x 1/4" NPT, SS braided with teflon, 3000 PSI
SHP-36F14-1	36" x 1/4" NPT, SS braided with teflon, 3000 PSI
SHP-48F14-1	48" x 1/4" NPT, SS braided with teflon, 3000 PSI
SHP-60F14-1	60" x 1/4" NPT, SS braided with teflon, 3000 PSI
SHP-72F14-1	72" x 1/4" NPT, SS braided with teflon, 3000 PSI
SHP-10F12-1	10' x 1/2" NPT, SS braided with teflon, 3000 PSI

Contact us for additional lengths available.

HYDROGEN & HELIUM HOSES

Designed specifically for the ultra hazardous applications of high pressure hydrogen and helium gas transfer in tube trailers, facilities and cylinders. Whether you prefer metallic or Tefzel®, the Smart-Hose hydrogen hose is the Smart-Choice™. The inner hose, braid, armor casing cuffs, weld ring, and ends are all stainless steel. Each finished assembly is pneumatically tested to ensure it will withstand the application requirements.



Smart-Hose Tefzel® ETFE Lined Stainless Steel Braided Hoses
Smart-Hose's Tefzel® ETFE inner core has a permeation rate that is approximately 77% lower than PTFE inner core pigtails. This makes it an ideal choice for helium and hydrogen.

Smart-Hose Metallic Lined Stainless Steel Braided Hoses
Smart-Hose's metallic high pressure hose assemblies are specifically designed to transfer gaseous hydrogen to and from a bulk transport truck to the customer facility.

Part #	Description
SHB-HY-T-BH	1/2" Hydrogen Hose, Tefzel lined
SHB-HY-M-BH	1/2" Hydrogen Hose, Metal lined
SHB-HL-T-BH	1/2" Helium Hose, Tefzel lined
SHB-HL-M-BH	1/2" Helium Hose, Metal lined

Call for available connections.
Specify length when ordering.