

REFINERY SOLUTIONS

HOSE LINES FOR INDUSTRY



Capabilities

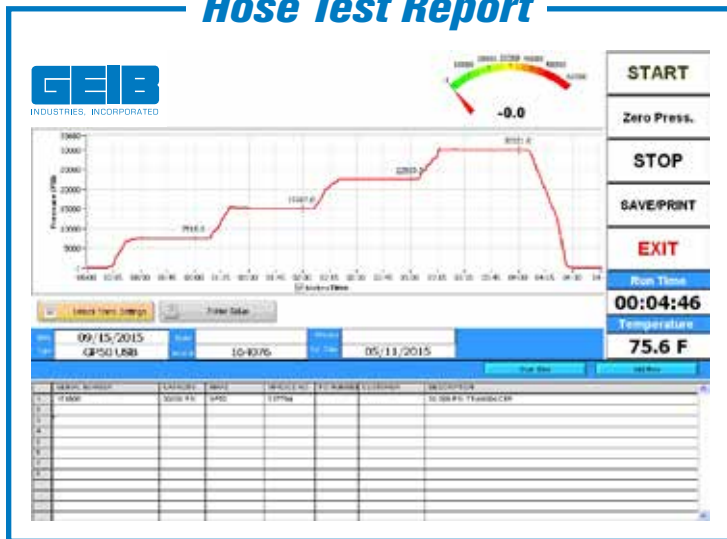
EXPERIENCE THAT GIVES YOU THE EDGE

Geib Industries has been in the business of helping our customers solve their toughest hose requirements for over 70 years. We are the leader in critical hose and fitting products to keep your business flowing. We are committed to working with our customers to fabricate the right product for their applications, producing products that meet their quality expectations and servicing them throughout the process.

QUALITY, SERVICE AND FLEXIBILITY ARE #1

Geib Industries' flexibility enables us to facilitate the change required to do business in the fast paced oil refinery marketplace. We are a service-oriented fabricator focused on quality assemblies for all our customer's hose assembly and component needs. This has been and always will be our focus and commitment to our customers. We pride ourselves in the ability to create and adjust new and innovative programs for our customers, helping them succeed while others fail!

Hose Test Report



FULL SERVICE HOSE ASSEMBLY

CUSTOM METAL HOSE FABRICATION

HOSE TESTING & CERTIFICATION

HOSE SAFETY PROGRAM

DEDICATED INVENTORY FOR TURN AROUNDS

FIELD ENGINEERING & EVALUATION SERVICE

TECHNICAL SUPPORT

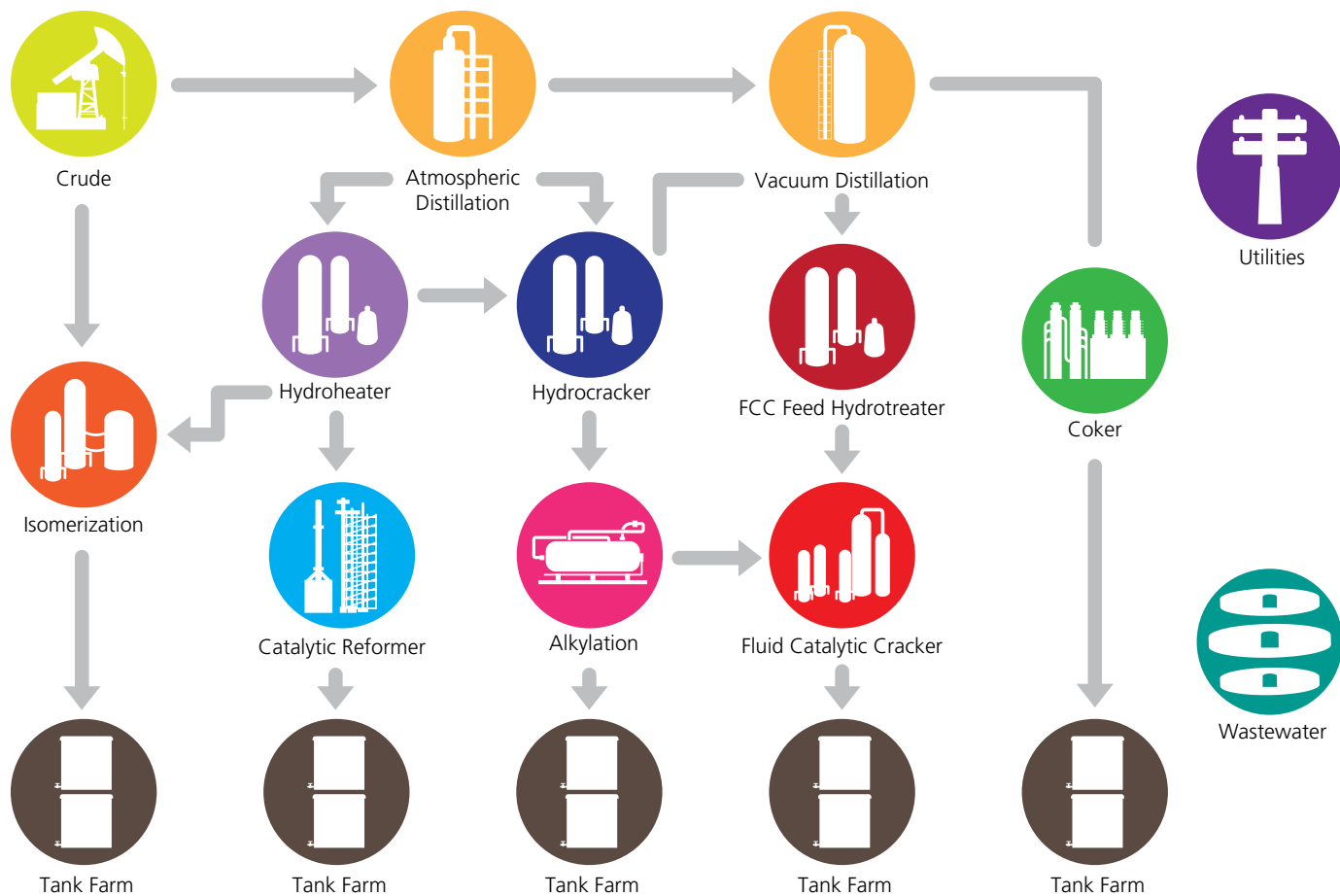
CUSTOM TAGGING, KITTING, & BARCODING

BIN STOCK SOLUTIONS

Our Mission is Simple: To be a leader in the hose and fittings industry.

We will achieve this by providing quality products, exceptional service and a dedicated team serving you, our valued customer. We pledge to continue to take on the challenges of preserving this philosophy, by being a unique and creative company, dedicated to quality, service and the betterment of our customers!

Refinery Overview



Hose Selection

Refinery Unit	Steam Hose	Hydrocarbon Drain Hose	Nitrogen Hose	Chemical Hose	Air Hose	Water Hose	Decoking/Rotary
Atmospheric Distillation							
Vacuum Distillation							
Hydrocracker							
Hydrotreater							
Coker							
Alkylation							
Isomerization							
FCC Feed Hydrotreater							
Fluid Catalytic Cracker							
Catalytic Reformer							
Tank Farm							
Wastewater							
Utilities							

Metal Hose

Penflex Corrugated Metal Hose

Penflex is a leading manufacturer of corrugated metal hose and braid products. Founded in 1902, Penflex Corporation has been a pioneer from the very beginning and continues today to be a leader in the design, and manufacture of flexible metal hose. Penflex hoses are known for their durability and superior resistance to corrosion. Used in more than 15 vertical markets, by hundreds of companies world-wide.

Their product offering includes:

- Corrugated Metal Hose
- Series: P3, P4, 700, 800, 900, 1400, 400
- Interlocked Metal Hose
- M100 - Unique pressure capable robust interlocked hose
- Conveyor Hose
- Exhaust Hose
- Wire & Synthetic Braids
- Metal Bellows Expansion Joints

Construction:

Annular / Standard Pitch / Compressed Pitch

Available Materials:

304SS, 321SS, 316SS, Monel, Hastelloy, Inconel, Bronze

Geib understands that unique applications require unique solutions. By partnering with Penflex we are able to maintain our commitment to manufacturing the highest quality products that meet the demands of the petrochemical & refinery markets.



High Pressure Decoking Hose



Coke is an important by-product in oil refining. It is often stored in silos until it can be loaded into railroad cars. The coke hardens after being placed in the silos. Decoking hose attached to a drill stem is specially designed to unload coke from the silo using warm, high-pressure water. Flanges are butt-welded to built-in steel couplings which are permanently bonded to the hose. Swivel flange allows for easier installation of the hose without disengaging the flange bolting.

Construction:

Tube: Black Type C3 Modified Nitrile synthetic rubber. Specially compounded for rugged conditions, handling abrasion and oil corrosion.

Reinforcement: Multiple layers of polyester cord over tube. Multiple layers of "close wound", high tensile steel cables, with one layer of adhesion fabric placed between cable layers. Multiple layers of reinforcement under cover.

Cover: Type C4 (Modified Nitrile). Black. Specially compounded cover is resistant to abrasion, corrosion, cutting, gouging, oil and weather.

Design Factor:

Working Pressure: 5,000 psi

Test Pressure: 10,000 psi

Burst Pressure: 12,500 psi

Operating Temperature:

-4°F to +180°F (-20°C to +82°C) continuous service.

Certification/Standards:

API (American Petroleum Institute) Spec 7K.

Coupling/Material Traceability ISO 14693

Letter of Conformance and Test Certificates available upon request

3rd Party Witness Test - ABS/CDS Type Approval

Optional:

Accessories such as SAFETY CLAMPS, HOSE LIFT EYE & COLLAR CLAMP and STAINLESS STEEL ARMOR are available.

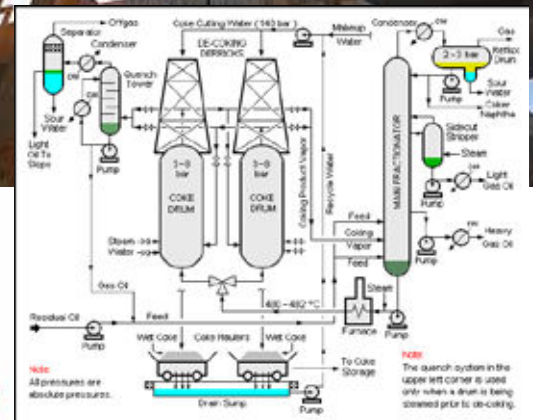
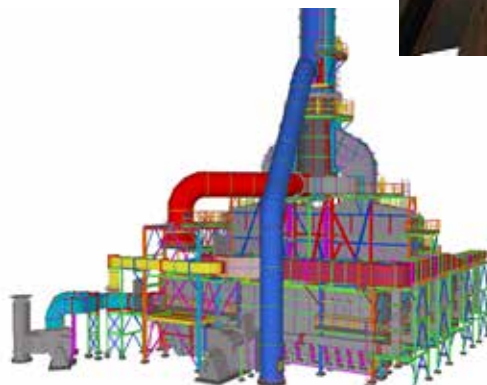
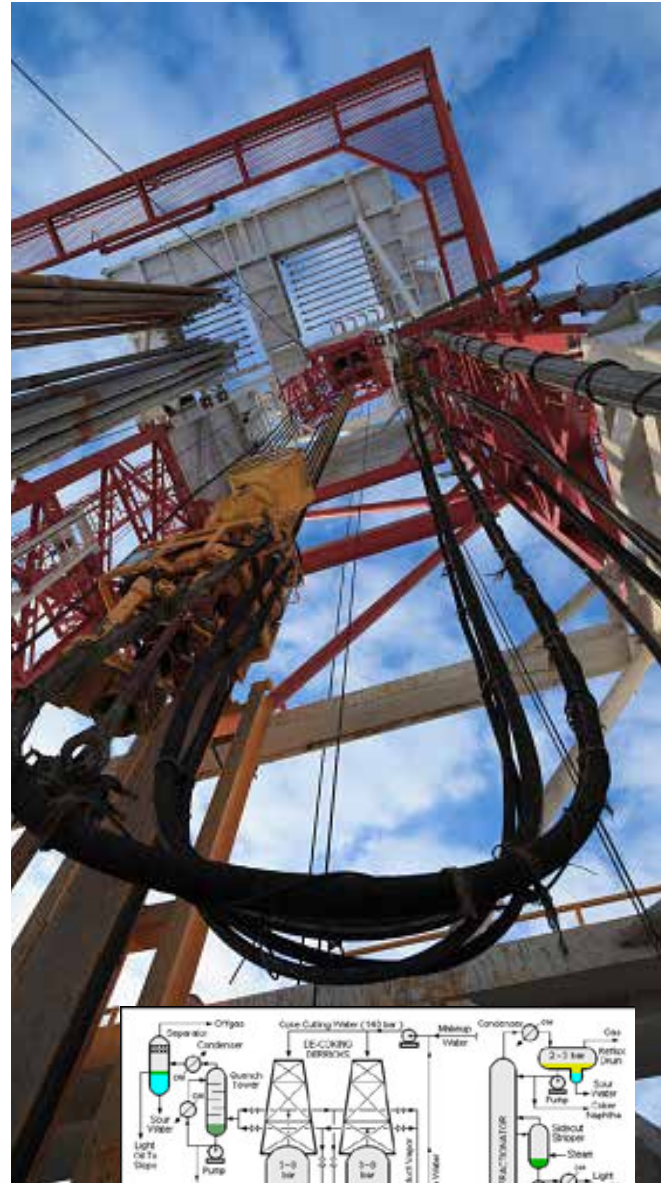
Type of Couplings:

Swaged - API male line pipe threads standard. Manufacturer recommends Butt-welded couplings. Couplings can be supplied with your choice of end fittings.

NOTE: FIELD WELDING OF FITTINGS TO COUPLING IS NOT RECOMMENDED.

Size Range:

2.5", 3", 3.5", 4", 5"



Chemical Hose

Eaton® CHEMCAT™ Petrochemical H0523



Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
H052312XX-100	19	19,0	0.75	30,6	1.2	20,7	300	83	1200	101,6	4	94,8	28	0,46	0.31	30,5	100
H052316XX-100	25	25,4	1	38,9	1.53	20,7	300	83	1200	139,7	5.5	94,8	28	0,82	0.55	30,5	100
H052320XX-100	31	31,8	1.25	47,8	1.88	20,7	300	83	1200	152,4	6	94,8	28	1,00	0.67	30,5	100
H052324XX-100	38	38,1	1.5	54,1	2.13	20,7	300	83	1200	190,5	7.5	94,8	28	1,33	0.89	30,5	100
H052332XX-100	51	50,8	2	66,8	2.63	20,7	300	83	1200	203,2	8	94,8	28	1,74	1.16	30,5	100
H052340XX-100	60	63,5	2.5	79,5	3.13	20,7	300	83	1200	203,2	8	94,8	28	2,13	1.42	30,5	100
H052348XX-100	80	76,2	3	92,2	3.63	17,2	250	70	1000	228,6	9	94,8	28	2,52	1.68	30,5	100
H052364XX-100	102	101,6	4	118,6	4.67	12,1	175	48	700	381,0	15	94,8	28	3,39	2.26	30,5	100

* Additional lengths available on select items ** XX notes color; GN for green, PR for purple

Construction:

Tube: UHMW-PE, FDA-approved material

Reinforcement: 2-ply fiber and dual helical wires

Cover: EPDM

Operating Temperature:

-40°C to +121°C (-40°F to +250°F)

WARNING: Intermittent

Application:

- For transfer of acids, chemicals, solvents, and petroleum products
- Food transfer

Markets:

- Chemical petroleum industry
- In-plant transfers
- Tank truck
- Paper/pulp industry
- Bulk hauling
- Ship building
- Forest products

Type of Couplings:

- Cam and groove
- Combination nipple
- Male NPT

Contact coupling manufacturer for other coupling recommendations including proper metal selection (stainless, aluminum, brass etc.) and attachment procedure with crimp specifications.

Eaton® ARMORCAT™ Petrochemical H0554



Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
H055416	25	25,4	1	38,7	1.52	35,0	500	138	2000	152,4	6	94,8	28	0,82	0.55	15,2	50
H055416-150	25	25,4	1	38,7	1.52	35,0	500	138	2000	152,4	6	94,8	28	0,82	0.55	45,7	150
H055424-150	38	38,1	1.5	50,0	1.97	35,0	500	138	2000	203,2	8	94,8	28	1,44	0.97	45,7	150
H055432	51	50,8	2	65,9	2.59	35,0	500	138	2000	254,0	14	94,8	28	2,31	1.55	15,2	50
H055432-100	51	50,8	2	65,9	2.59	35,0	500	138	2000	254,0	14	94,8	28	2,31	1.55	30,5	100
H055448	80	76,2	3	95,3	3.75	35,0	500	138	2000	558,8	22	94,8	28	3,44	2.31	15,2	50
H055448-150	80	76,2	3	95,3	3.75	35,0	500	138	2000	558,8	22	94,8	28	3,44	2.31	45,7	150
H055464-150	102	101,6	4	121,2	4.77	35,0	500	138	2000	558,8	22	94,8	28	6,28	4.22	45,7	150

Construction:

Tube: UHMW-PE, FDA-approved material

Reinforcement: 2-wire braid, dual stainless steel anti-static wire, 3" and 4" helical wire

Cover: EPDM

Operating Temperature:

-40°C to +121°C (-40°F to +250°F)

WARNING: Intermittent

Application:

- For transfer of acids, chemicals, solvents, and petroleum products
- Loading and unloading, pumping, suction, or gravity flow discharge

Markets:

- Chemical petroleum industry
- In-plant transfers
- Tank truck
- Paper/pulp industry
- Bulk hauling
- Oil and gas exploration

Type of Couplings:

- Cam and groove
- Combination nipple
- Male NPT

Contact coupling manufacturer for other coupling recommendations including proper metal selection (stainless, aluminum, brass etc.) and attachment procedure with crimp specifications.

Novaflex 4700



Part No.	Hose I.D.		Hose O.D.		Max Operating Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	mm	in	mm	in	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
4700CU-07500-00	19,1	0.75	30,5	1.2	17,0	250	88,9	3.5	98,2	29	0,86	0.58	30,5	100
4700CU-01000-00	25,4	1	39,4	1.55	17,0	250	101,6	4	98,2	29	0,94	0.63	30,5	100
4700CU-01250-00	31,8	1.25	45,7	1.8	17,0	250	114,3	4.5	98,2	29	1,19	0.8	30,5	100
4700CU-01500-00	38,1	1.5	52,1	2.05	17,0	250	127,0	5	98,2	29	1,58	1.06	30,5	100
4700CU-02000-00	50,8	2	65,0	2.56	17,0	250	203,2	8	98,2	29	1,98	1.33	30,5	100
4700CU-02500-00	63,5	2.5	78,2	3.08	13,0	200	254,0	10	98,2	29	2,65	1.78	30,5	100
4700CU-03000-00	76,2	3	91,7	3.61	13,0	200	406,4	16	98,2	29	3,15	2.12	30,5	100
4700CU-04000-00	101,6	4	118,1	4.65	13,0	200	609,6	24	98,2	29	4,21	2.83	30,5	100
4700CU-06000-00	152,4	6	179,6	7.07	13,0	200	762,0	30	98,2	29	7,37	4.95	30,5	100

Non-stock orders - (other color hose covers: blue, black, purple, yellow, white, gray) are available and require a 400ft minimum order per I.D.

Construction:

Tube: Clear Ultra High Molecular Weight polyethylene.

Reinforcement: Multiple plies of high tensile textile with dual helix

Cover: Green abrasion resistant green EPDM (Available in blue, yellow black and grey, white - with 400ft order)

Operating Temperature:

up to -40°F (-40°C) to +250°F (+121°C). Consult chemical resistant chart. Not for steam service. Can be open end steam cleaned

UHMW Chemical Suction & Discharge Hose

A lightweight flexible chemical transfer hose designed for almost every common industrial chemical used in industry today. Non-staining UHMW tube.

***WARNING!** Elevated temperatures can change the chemical resistance rating of 4700. Check the chemical resistance charts published by Novaflex to verify that the chemical to be transferred is rated for use with the UHMWP tube at the temperature & concentrations listed. Most chemicals become more aggressive the higher the temperature, reducing the ability of the tube material to withstand them. Compatibility information is available from Novaflex. If no data exists, it is the users responsibility to determine if the hose is compatible with the chemical to be transferred. **Never use Novaflex 4700 above the ratings listed by Novaflex.**

Eaton® Corrugated Green CROSS-LINKED™ H0615



Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
H061532-150	51	50,8	2	66,7	2.63	17,2	250	70	1000	152,4	7	94,8	28	1,68	1.13	45,7	150
H061548-150	80	76,2	3	92,1	3.63	12,1	175	48	700	304,8	12	94,8	28	2,44	1.64	45,7	150

Construction:

Tube: XLPE

Reinforcement: 2-ply fiber with helical wire

Cover: Corrugated EPDM

Operating Temperature:

-43°C to +66°C (-45°F to +150°F)

Application:

- For transfer of acids, chemicals, solvents, and petroleum products
- Loading and unloading, pumping, suction, or gravity flow discharge

Markets:

- Chemical petroleum industry
- In-plant transfers
- Tank truck
- Paper/pulp industry
- Bulk hauling
- Oil and gas exploration

Type of Couplings:

- Cam and groove
- Combination nipple
- Male NPT

Contact coupling manufacturer for other coupling recommendations including proper metal selection (stainless, aluminum, brass etc.) and attachment procedure with crimp specifications.

Steam Hose

Eaton® STEAM SLAYER™ EH084



Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
EH08408	12	12,7	0.5	27,7	1.09	17,2	250	172	2500	0,73	0.49	15,2	50
EH08412	19	19,0	0.75	33,5	1.32	17,2	250	172	2500	0,94	0.63	15,2	50
EH08416	25	25,4	1	40,4	1.59	17,2	250	172	2500	1,28	0.86	15,2	50

Construction:

Tube: Special chlorobutyl blend

Reinforcement: 2-wire braid

Cover: Pin-pricked EPDM

Operating Temperature:

-40°C to +208°C (-40°F to +407°F)

For superheated steam +232°C (+450°F)

Application:

- Transfer of steam for processing products and cleaning equipment

Markets:

- Refining and petrochemical
- Paper industry
- Industrial cleaning markets
- Oil and gas exploration
- Steel
- Ship building

Type of Couplings:

- Eaton EJ series

Contact coupling manufacturer for attachment procedure and other coupling recommendations

Eaton® Concord 250 Steam H9568



Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H956808BK	12	12,7	0.5	26,2	1.03	17,2	250	172	2500	0,68	0.46	15,2	50
H956808BK-100*	12	12,7	0.5	26,2	1.03	17,2	250	172	2500	0,68	0.46	30,5	100
H956812BK	19	19,0	0.75	34,0	1.34	17,2	250	172	2500	1,04	0.7	15,2	50
H956812BK-100*	19	19,0	0.75	34,0	1.34	17,2	250	172	2500	1,04	0.7	30,5	100
H956816BK	25	25,4	1	39,6	1.56	17,2	250	172	2500	1,43	0.96	15,2	50
H956816BK-100*	25	25,4	1	39,6	1.56	17,2	250	172	2500	1,43	0.96	30,5	100

**Also product available in RD-Red for select items

Construction:

Tube: EPDM

Reinforcement: 2-wire braid

Cover: Pin-pricked EPDM

Operating Temperature:

Maximum Operating

+232°C (+450°F)

Application:

- Transfer of steam for processing products and cleaning equipment

Markets:

- Refining and petrochemical
- Paper industry
- Industrial cleaning markets
- Oil and gas exploration
- Steel
- Ship building

Type of Couplings:

- Ground joint female
- Boss male

Contact coupling manufacturer for attachment procedure and other coupling recommendations

Nitrogen & Hydrocarbon Drain Hose

Eaton® Hydrocarbon Drain H9690



Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H969012	19	19,0	0.75	34,1	1.34	21,0	300	207	3000	0,89	0.6	15,2	50

Construction:

Tube: Nitrile (RMA Class A)

Reinforcement: 2-wire braid

Cover: Pin-pricked chlorinated polyethylene

Operating Temperature:

+177°C (+350°F)

Application:

- For hydrocarbon drain service

Markets:

- Petroleum
- Refineries

Type of Couplings:

- Boss Male
- Ground joint female
- Eaton EJ series

Contact coupling manufacturer for attachment procedure and other coupling recommendations

Eaton® Nitrogen H8811



Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H88112YW-250	19	19,0	0.75	30,2	1.19	21,0	300	83,0	1200	0,57	0.38	76,2	250

Construction:

Tube: Nitrile

Reinforcement: 4-spiral fiber

Cover: Pin-pricked neoprene

Operating Temperature:

-40°C to 82°C (-40°F to 180°F)

Application:

- For transfer of nitrogen at ambient temperatures

Markets:

- Refineries
- Petroleum industry

Type of Couplings:

- "U" series
- Barbed inserts
- Boss male
- Ground joint female

Contact coupling manufacturer for attachment procedure and other coupling recommendations

Fittings & Air/Water Hose



Instrumentation Fittings & Valves



IL 847-455-4550 / WI 920-455-4550
www.geibind.com



PRODUCTS

- Hydraulic Hose, Fittings, Assemblies
- Corrugated Metal Hose Assemblies
- Industrial Hose, Fittings, Assemblies
- Teflon (PTFE) Hose, Fittings, Assemblies
- Thermoplastic Hose, Fittings, Assemblies
- Composite Hose Assemblies
- Hydraulic Quick Disconnect Couplers
- Pneumatic Quick Disconnect Couplers
- Expansion Joints
- Instrumentation Tube, Fittings, & Valves
- Hydraulic Adapters & Tube Fittings
- Pneumatic Tubing & Fittings
- Brass Fittings, & Valves
- Hose Reels
- Ducting
- Tubing & Pipe
- Industrial & Hydraulic Swivel Joints
- Filters, Regulators, Lubricators
- Gauges, Thermometers, Ball Valves

SERVICES

- Full Service Hose Assembly
- Custom Metal Hose Fabrication
- Technical Support
- Custom Tube Bending
- Field Engineering and Evaluation Service
- Bin Stocking Assistance (VMI)
- Custom Tagging, Kitting, & Barcoding
- Hose Testing & Certification
- Hose Repair & Refurbishing
- Geib Truck Deliveries

INDUSTRIES SERVED

- Power Generation/Alternative Energy
- Primary Metals
- Oil & Gas Processing
- OEM
- Waste Services
- Truck, Bus & Rail
- Tank Truck
- Food Processing
- Chemical
- Agriculture
- Mining
- Pulp, Paper/Wood
- Rental & Construction
- Pharmaceutical
- Turf
- Car Wash
- Material Handling



Our Mission is Simple: To be a leader in the hose and fittings industry.

We will achieve this by providing quality products, exceptional service
and a dedicated team serving you, our valued customers!



INDUSTRIES, INCORPORATED

901 East Jefferson Street
Bensenville, IL 60106
Phone: 847-455-4550
Fax: 847-455-4559

5800 Technology Circle
Appleton, WI 54914
Phone: 920-455-4550
Fax: 920-733-7756

Our Mission is Simple: To be a leader in the hose and fittings industry. We will achieve this by providing quality products, exceptional service and a dedicated team serving you, our valued customers!



IL 847-455-4550 / WI 920-455-4550
www.geibind.com

