Multi-Ship General Purpose Products

Industrial Hose Solutions

EATON
Powering Business Worldwide

NAHAD
Industrial Hose
Listed Manufacturer

Regardless of your application...

We have the solution

With the addition of the Arrow® PVC hose and tubing product offering to our existing product line, Eaton has firmly established itself as a leader for general purpose, air, water and low pressure fuel hose. Decades of experience has put us at the forefront of material development, new product design and best-cost solutions. We offer a wide range of products and can provide the right solution for any application utilizing our standard product line or a customized solution.

Our low pressure general purpose hose and tubing products are available thru all Eaton Industrial, Aeroquip® and Weatherhead® distributors and are ideal for:

- Air and Water Transfer
- Pneumatic tools and service center air lines
- Robotics
- Lubricated Air
- Low Pressure fuel lines
- Spraying and conveying water based fertilizers and pesticides
- Washdown applications
- Food and Beverage dispensing
- Air conditioning, refrigeration and furnace drainage

Application Data

Hose and Tubing Quick Reference Chart

Tube Name	Product #	Page	Tube	Cover	WP (psi)	Size	Color	Features
Clearforce-NR	H160	4	PVC	PVC	20-65	1/8" - 2"	Clear	FDA approved materials. NSF-51 certified. Light weight. Flexible.
Clearforce-R	H285	5	PVC	PVC	75-250	3/16" - 2"	Clear	Flow or blockage readily visible.
Ultraforce	H265	6	Modified Vinyl	Thermoplastic	350	1/4" - 2"	Blue	Nonconductive. Abrasion Resistant. Non-marking pinpricked cover.
Polyforce II	H275	6	PVC	PVC Pinpricked	125-250	3/16" - 2"	Red	Light weight. Abrasion, age, and ozone resistant. Flexible.
Bosflex A/W	H0105 & H0106	7	EPDM	EPDM	200-300	1/4" - 1"	Black, Red	Pinpricked cover. Abrasion, age and heat resistant.
Industrial A/W	H1812	8	EPDM	EPDM	250-275	1/4" - 1 1/2"	Red	Abrasion, age and heat resistant. Excellent coupling retention for impulse applications.
Contractors Water	H1987	8	EPDM	EPDM / Pinpricked	150	5/8" & 3/4"	Black	Abrasion, age, heat and weather resistant.
Boston Marathoner	H1981 H1982	9	Blended Nitrile	Neoprene/ Pinpricked	200-300	1/4" - 1"	Red, Green Yellow, Black	Longer lengths. Abrasion and oil resistant. Variety of colors.
Performer II	H115 & H116	10	Nitrile	Vinyl Nitrile	225-300	1/4" - 1 1/2"	Red	Abrasion, oil and weather resistant.
Perfection 300	H1776 & H1777	11	Nitrile RMA Class A	Vinyl Nitrile	325	1/4" - 1 1/2"	Red	Abrasion, oil and weather resistant.
Easy Couple	H201	12	Nitrile RMA Class A	Neoprene / Vinyl Nitrile	300	1/4" - 3/4"	Black, Blue, Gray, Red, Green, Yellow	Push-on hose ends, black color, MSHA approved.
Shock Safe	H9949	13	Nitrile	Vinyl Nitrile	275	1/4" - 1"	Red	Nonconductive. Abrasion, oil and weather resistant.
Pressure Washer	H345	14	Nitrile RMA Class A	Vinyl Nitrile	3,000	1/4" - 1/2"	Blue	High pressure. Non-marking MSHA approved.
Chemforce	H1561	15	PVC / Polyurethane Blend	PVC	600	3/8" - 3/4"	Yellow	Compatible with hydrocarbon-based aromatic chemicals. Excellent for pest control and lawn service.
Nyall	H1941 & H1942	15	Nylon	Neoprene (Black) / Vinyl Nitrile Colors	500-750	1/4" - 1"	Black, Red	Excellent chemical compatibility, easy to clean, low coefficient of friction. Paint & adhesive transfer.
ESP Tubing and Hose	EH049 EH089	16	PVDF	PVC	50 or 250	1/4" - 3/4"	Black	Specially designed for use between the fuel tank and engine.

Clearforce – NR

Eaton's line of clear PVC tubing products are manufactured with materials which comply with FDA Regulation 21 CFR 177.1520 and are NSF-51 listed. These products are lightweight, non-marking and flexible. These are excellent products for food and beverage transfer lines, air lines, drain lines, sight gauges, potable water transfer, and pneumatic applications.

Tube: Clear PVC, FDA approved material, NSF-51 Certified

Cover: Clear

Temperature Range: +9°C to +66°C (+15°F to +150°F)

Working Pressure: 20-65 psi

Hose End Reference

Barbed inserts with outer sleeve, ferrule or clamps

Clearforce – NR

Part Number	Hose I.D.		Hose O.D.		Max. Working Pressure		Standard Length	Weight / 100 ft.	Min. Bend Radius	
	mm	in	mm	in	bar	psi	ft	lbs	mm	in
H160204-100	3,2	0.13	6,4	0.25	4,5	65	100*	2.0	9.5	.375
H160305-100	4,7	0.19	7,9	0.31	3,8	55	100*	2.6	15.9	.625
H160406-100	6,4	0.25	9,5	0.38	3,8	55	100*	3.2	25.4	1.000
H160408-100	6,4	0.25	12,7	0.50	4,1	60	100*	7.6	15.9	.625
H160507-100	7,9	0.31	11,1	0.44	3,4	50	100*	3.8	34.9	1.375
H160608-100	9,5	0.38	12,7	0.50	3,1	45	100*	4.5	44.5	1.750
H160610-100	9,5	0.38	15,9	0.63	3,8	55	100*	10.5	28.6	1.125
H160810-100	12,7	0.50	15,9	0.63	2,1	30	100*	5.7	73.0	2.875
H160811-100	12,7	0.50	17,3	0.69	2,8	40	100*	9.0	54.0	2.125
H160812-100	12,7	0.50	19,1	0.75	3,1	45	100*	13.0	44.5	1.750
H161013-100	15,9	0.63	20,6	0.81	2,4	35	100*	11.0	60.3	2.375
H161014-100	15,9	0.63	22,2	0.88	2,8	40	100*	13.0	60.3	2.375
H161216-100	19,1	0.75	25,4	1.00	2,4	35	100*	18.0	86.8	3.250
H161418-100	22,2	0.88	28,6	1.13	2,1	30	100**	21.0	104.8	4.125
H161620-100	25,4	1.00	31,8	1.25	1,7	25	100**	23.0	130.2	5.125
H162024-100	31,8	1.25	38,1	1.50	1,4	20	100**	28.0	187.3	7.375
H162432-100	38,1	1.50	50,1	2.00	2,4	35	100**	72.0	149.2	5.875
H163240-100	50,1	2.00	63,5	2.50	2,4	35	100**	92.0	238.1	9.375

Stated working pressures are tested at 68°F. Working pressure decreases as temperature increases.
Contact Eaton for further information.
* Standard length pattern in boxes.
** Standard length pattern in coils.

Clearforce – R

Eaton's line of clear PVC hose products are manufactured with materials which comply with FDA Regulation 21 CFR 177.1520 and are NSF-51 listed. These products are lightweight, non-marking and flexible. These are excellent products for food and beverage transfer lines, air lines, drain lines, sight gauges, potable water transfer, and pneumatic applications which require higher pressure than our standard Clearforce products can handle.

Tube: Clear PVC, FDA approved materials, NSF-51 Certified

Cover: Clear PVC, FDA approved materials, NSF-51 Certified

Reinforcement: Fiber, 2 Spiral

Temperature Range: +9°C to +66°C (+15°F to +150°F)

Working Pressure: 75-250 psi

Hose End Reference
'E' Series
265 'P' Series
Barbed inserts with outer sleeve, ferrule or clamps

Clearforce – R

Part Number	Hose I.D.		Hose O.D.		Max. Working Pressure		Standard Length	Weight / 100 ft.	Min Bend Radius	
	mm	in	mm	in	bar	psi	ft*	lbs	mm	in
H28503-300R	4,7	0.19	9,5	0.38	17,2	250	300	4.5	19.1	.750
H28504-300R	6,4	0.25	11,5	0.45	17,2	250	300	6.5	88.1	1.500
H28505-300R	7,9	0.31	13,5	0.53	17,2	250	300	7.5	44.5	1.750
H28506-300R	9,5	0.38	15,1	0.59	15,5	225	300	9.0	50.8	2.000
H28508-300R	12,7	0.50	19,1	0.75	13,7	200	300	14.5	54.0	2.125
H28510-300R	15,9	0.63	22,2	0.88	13,7	200	300	16.5	60.3	2.375
H28512-300R	19,1	0.75	26,2	1.03	10,3	150	300	23.0	82.6	3.250
H28516-200R	25,4	1.00	33,3	1.93	8,6	125	200	32.0	95.3	3.750
H28520-100	31,8	1.25	42,9	1.68	6,9	100	100	58.0	139.7	5.500
H28524-100	38,1	1.50	49,2	1.93	6,9	100	100	69.0	149.5	5.875
H28532-100	50,1	2.00	63,5	2.50	5,2	75	100	100.0	174.6	6.875

Stated working pressures are tested at 68°F. Working pressure decreases as temperature increases.
See chart on page 19 showing the relationship between working pressure and temperature for reinforced PVC hose.
* 95% one piece coils.

Ultraforce & Polyforce II

Our "force" line of reinforced PVC hoses are manufactured with modified vinyl tubes and covers. The covers are non-marking and offer good abrasion, age, and ozone resistance. They are easy to handle and route and are available with working pressures up to 350 psi. They are also factory tested to exceed minimum electrical resistivity of one megaohm per inch at 1000 volts D.C. They are ideal for the transfer of air and water for various markets including: Light chemical processing, metal working, mining, oil industry, ship building and paper/pulp processing.

H265 Ultraforce

Inner Tube: Modified Vinyl

Reinforcement: Fiber, 2 Spiral

Cover: Rubber modified, non-marking thermoplastic / pinpricked

Temperature Range:
-29°C to +65°C
(-20°F to +150°F)

Part Number	Hose I.D.		Hose O.D.		Max. Working Pressure		Min. Bend Radius		Weight / 100 ft.	Standard Lengths
	mm	in	mm	in	bar	psi	mm	in	lbs	ft
H26504BU-600R	6,4	0.25	12,7	0.50	24,1	350	19,1	.75	9	600
H26506BU-600R	9,5	0.38	16,3	0.64	24,1	350	31,8	1.25	12	600
H26508BU-500R	12,7	0.50	19,8	0.78	34,5	300	50,8	2.00	17	500
H26510BU-500R	15,9	0.63	22,2	0.88	17,2	250	–	–	20	500
H26512BU-500R	19,1	0.75	26,9	1.06	17,2	250	63,5	2.50	26	500
H26516BU-200R	25,4	1.00	33,3	1.31	13,8	200	88.9	3.50	35	200
H26520BU-100	31,8	1.25	42,9	1.69	10,3	150	–	–	61	100
H26524BU-100	38,1	1.50	49,2	1.94	10,3	150	–	–	73	100
H26532BU-100	50,8	2.00	63,5	2.50	8,6	125	–	–	105	100

Hose End Reference

'E' Series (-04 thru -12)
265 'P' Series (-04 thru -16)
'Z' Series
TTC Series

H275 Polyforce II Hose

Inner Tube: PVC

Reinforcement: Fiber, 2 Spiral

Cover: PVC/Pinpricked

Temperature Range:
-23°C to +65°C
(-10°F to +150°F)

Part Number	Hose I.D.		Hose O.D.		Max Working Pressure		Min. Bend Radius		Weight / 100 ft.	Standard Lengths
	mm	in	mm	in	bar	psi	mm	in	lbs	ft
H27504RD-600R	6,4	0.25	12,7	0.50	17,2	250	25,4	1.00	7	600
H27506RD-600R	9,5	0.38	15,9	0.63	17,2	250	38,1	1.50	12	600
H27508RD-500R	12,7	0.50	19,1	0.75	17,2	250	54,0	2.13	15	500
H27510RD-500R	15,9	0.63	22,6	0.89	17,2	250	63,5	2.50	21	500
H27512RD-500R	19,1	0.75	26,2	1.03	17,2	250	63,5	2.50	23	500
H27516RD-200R	25,4	1.00	33,3	1.31	13,8	200	88,9	3.50	34	200
H27520RD-100	31,8	1.25	42,9	1.69	13,8	200	88,9	3.50	52	100
H27524RD-100	38,1	1.50	49,2	1.94	13,8	200	88,9	3.50	61	100
H27532RD-100	50,9	2.00	63,5	2.50	8,6	125	88,9	3.50	61	100

Other colors and length patterns of Ultraforce & Polyforce available on a made-to-order basis.

Hose End Reference

'E' Series (-04 thru -12)
265 'P' Series (-04 thru -16)
'Z' Series
TTC Series

H0105 & H0106 Bosflex A / W

An economical air and water hose, BosFlex's EPDM construction offers excellent heat and ozone resistance and can be utilized in a wide range of industrial, mining, construction, agricultural, and in-plant operations. It is also suitable for spraying and conveying water based liquid fertilizers and pesticides.

H0105 Bosflex A / W

Inner Tube: EPDM

Reinforcement: Multi-Fiber Spiral

Cover: EPDM

Temperature Range:
-40°C to +82°C
(-40°F to +180°F)

Hose End Reference
'U' Series (-6 to -20) (Except -05)
'Z' Series (-06 to -20)
'TTC' Series (-06 to -20)
057 'B' Series (except -8 & -16)
105 'B' Series (-4 to -12)

Part Number	Hose I.D.		Hose O.D.		Max. Working Pressure		Min. Bend Radius		Weight / 100 ft.	Standard Lengths
	mm	in	mm	in	bar	psi	mm	in	lbs	ft
H010504RD H010504RD-600R	6,4	0.25	15,9	0.63	20,1	300	76,2	3.00	13	50 600
H010506RD H010506RD-600R	9,5	0.38	19,1	0.75	20,1	300	88,9	3.50	18	50 600
H010508RD H010508RD-600R	12,7	0.50	22,2	0.88	20,1	300	114,3	4.50	23	50 600
H010510RD-600R	15,9	0.63	26,2	1.03	20,1	300	127	5.00	30	600
H010512RD H010512RD-600R H010512BK H010512BK-600R	19,1	0.75	31,2	1.19	15,3	225	146,1	5.75	37	50 600 50 600
H010516RD H010516BK H010516RD-400R H010516BK-400R	25,4	1.00	36,5	1.44	13,8	200	184,2	7.25	60	50 50 400 400
H010520BK-300R	31,8	1.25	44,5	1.75	13,8	200	222.3	8.75	65	300
H010524BK-300R	38,1	1.50	50,8	2.00	13,8	200	254.0	10.00	82	300

H0106 Bosflex A / W

Inner Tube: EPDM

Reinforcement: 2 Spiral

Cover: EPDM

Temperature Range:
-40°C to +82°C
(-40°F to +180°F)

Hose End Reference
'U' Series (-6 to -16)
'Z' Series (-06 to -20)
'TTC' Series (-06 to -20)
057 'B' Series (except -8 & -16)
105 'B' Series (-4 to -12)

Part Number	Hose I.D.		Hose O.D.		Max. Working Pressure		Min. Bend Radius		Weight / 100 ft.	Avail. Lengths
	mm	in	mm	in	bar	psi	mm	in	lbs	ft
H010604RD H010604RD-600R H010604BK-600R	6,4	0.25	12,7	0.63	20,1	200	76,2	3.00	13	50 600 600
H010606RD H010606RD-600R H010606BK-600R	9,5	0.38	17,5	0.75	20,1	200	88,9	3.50	18	50 600 600
H010608RD H010608RD-600R H010608BK-600R	12,7	0.50	20,6	0.88	20,1	200	114,3	4.50	23	50 600 600
H010610RD-600R H010610BK-600R	9,5	0.38	24,6	0.75	20,1	200	88,9	3.50	18	600 600
H010612RD-250R H010612RD-600R	19,1	0.75	30,2	1.19	20,1	300	146,1	5.75	37	50 600

Industrial A / W & Contractors Water®

In order to complement our Bosflex EPDM product Eaton also offers a premium braid reinforced EPDM hose line. The H1812 Industrial Air and Water Hose offers the same age, heat, and ozone resistance that our standard EPDM products offer but the excellent coupling retention required for impulse applications that can only be obtained with a braided reinforced product.

Eaton also offers a 3:1 safety factor EPDM hose when a commodity type water hose is needed for water transfer and washdown applications. The H1987 Contractors Water hose is available in both -10 and -12 sizes and can be purchased in bulk or already coupled in 50 ft. lengths utilizing a machined brass hex head garden hose thread.

H1812 Industrial A / W

Inner Tube: EPDM
Reinforcement: 2 Fiber Braids
Cover: Red EPDM
Temperature Range:
-40°C to +82°C
(-40°F to +180°F)

Part Number	Hose I.D.		Hose O.D.		Max. Working Pressure		Min. Bend Radius		Weight / 100 ft.	Standard Lengths
	mm	in	mm	in	bar	psi	mm	in	lbs	ft
H181204-500R	6,4	0.25	15,1	0.59	19,0	275	63.5	2.50	16	500
H181206-500R	9,5	0.38	18,3	0.72	19,0	275	826	3.25	19	500
H181208-500R	12,7	0.50	22,2	0.88	17,2	250	111	4.38	27	500
H181210-500R	15,9	0.63	25,4	1.00	17,2	250	127	5.00	36	500
H181212-500R	19,1	0.75	29,4	1.16	17,2	250	146	5.75	41	500
H181216-300R	25,4	1.00	36,5	1.44	17,2	250	181	7.13	46	300
H181220-300R	31,8	1.25	44,5	1.75	17,2	250	228.6	9.00	65	300
H181224-300R	38,1	1.50	50,8	2.00	17,2	250	271	10.70	82	300

Hose End Reference

'U' Series (-4 to -20)
430 'U' Series (-24 only)
'Z' Series (-4 to -20)
'TTC' Series (-4 to -20)
105 'B' Series

H1987 Contractors Water®

Inner Tube: EPDM
Reinforcement: 2 Fiber Spirals
Cover: EPDM/Perforated
Temperature Range:
-34°C to +71°C
(-30°F to +160°F)

Part Number	Hose I.D.		Hose O.D.		Working Pressure		Weight / 100 ft.	Avail. Lengths
	mm	in	mm	in	bar	psi	lbs	ft
H198710 H198710-50C H198710-600R	15,9	0.63	23,8	0.94	10,3	150*	23	50 50-50's coupled 600
H198712 H198712-50C H198712-600R	19,1	0.75	27,8	1.09	10,3	150*	30	50 50-50's coupled 600

* 3:1 Safety Factor

Hose End Reference

Machined brass hex head GHT

Boston Marathoner

Our Marathoner line offers better oil resistance (Class B) than our standard EPDM products. Our spiral reinforced Marathoner hose is an excellent product for the transfer of air, water and for use with pneumatic tools in areas where the hose might come in contact with oils including petrochemical plants and metal working. It is available in various colors and is approved with a full line of Eaton crimped fittings.

Inner Tube: Blended Nitrile

Reinforcement: 2 or 4 Spiral

Cover: Neoprene/pinpricked

Temperature Range:
-40°C to +82°C
(-40°F to +180°F)

Hose End Reference
'U' Series (except -05)
'Z' Series (except -05)
'TTC' Series (except -05)

H1981 / H1982 Boston Marathoner

Part Number	Hose I.D.		Hose O.D.		Max. Working Pressure		Weight / 100 ft.	Standard Lengths
	mm	in	mm	in	bar	psi	lbs	ft
H198104RD-600R	6,4	0.25	12,7	0.50	13,8	200	10	600
H198204RD-600R	6,4	0.25	15,9	0.63	20,1	300	13	600
H198105RD-600R	7,9	0.31	15,9	0.63	13,8	200	12	600
H198205RD-600R	7,9	0.31	17,5	0.69	20,1	300	13	600
H198106RD-600R	9,5	0.38	17,5	0.69	13,8	200	15	600
H198206RD-600R H198206GN-600R H198206BK-600R	9,5	0.38	19,1	0.75	20,1	300	18	600 600 600
H198108RD-600R	12,7	0.50	20,6	0.81	13,8	200	19	600
H198208RD-600R H198208GN-600R H198208BK-600R H198208YW-600R	12,7	0.50	22,2	0.88	20,1	300	23	600 600 600 600
H198210RD-600R	15,9	0.63	26,2	1.03	20,1	300	25	600
H198210GN-600R	15,9	0.63	26,2	1.03	20,1	300	25	600
H198112RD-250 H198112RD-600R	19,1	0.75	31,2	1.19	15,5	225	37	5-50's 600
H198212RD-250 H198212RD-600R H198212BK-600R H198212GN-600R H198212YW-600R	19,1	0.75	31,2	1.19	20,1	300	37	5-50's 600 600 600 600
H198216RD-400R H198216GN-400R	25,4	1.00	36,5	1.44	20,1	300	64	400 400

Performer II

Our Performer II product line offers better oil resistance (Class B) than our standard EPDM products. Similar to our Marathoner product line, it's braid construction allows for better coupling retention in impulse applications and elongates less when pressurized vs. a spiral reinforced product.

Inner Tube: Nitrile

Reinforcement: Multi-Fiber Braids

Cover: Vinyl Nitrile

Temperature Range:
-40°C to +82°C
(-40°F to +180°F)

Hose End Reference
'U' Series (except size -05 & -24)
430 'U' Series (-24)
'Z' Series
'TTC' Series
057 'B' Series (except size -8, -16, -20 & -24)
105 'B' Series (-4 to -12)

H115/H116 Performer II

Part Number	Hose I.D.		Hose O.D.		Working Pressure		Min. Bend Radius		Weight / 100 ft.	Avail. Lengths
	mm	in	mm	in	bar	psi	mm	in	lbs	ft
H11504 H11504-550R	6,4	0.25	15,1	0.59	20,1	300	76,2	3.00	15	50 550
H11505 H11505-550R	7,9	0.31	16,7	0.66	20,1	300	88,9	3.50	17	50 550
H11506 H11506-550R	9,5	0.38	18,3	0.72	20,1	300	88,9	3.50	19	50 550
H11508 H11508-550R	12,7	0.50	22,2	0.88	20,1	300	114,3	4.50	27	50 550
H11512 H11512-550R	19,1	0.75	29,4	1.16	20,1	300	146,1	5.75	41	50 550
H11516 H11516-300R	25,4	1.00	36,5	1.44	15,5	225	184,2	7.25	62	50 300
H11520 H11520-300R	31,8	1.25	44,5	1.75	15,5	225	222,3	8.75	101	50 300
H11524 H11524-300R	38,1	1.50	50,8	2.00	15,5	225	254,0	10.00	106	50 300

Part Number	Hose I.D.		Hose O.D.		Working Pressure		Min. Bend Radius		Weight / 100 ft.	Avail. Lengths
	mm	in	mm	in	bar	psi	mm	in	lbs	ft
H11604-550R	6,4	0.25	12,7	0.50	15,5	225	76,2	3.00	15	550
H11605-550R	7,9	0.31	15,9	0.63	15,5	225	88,9	3.50	17	550
H11606-550R	9,5	0.38	16,7	0.66	15,5	225	88,9	3.50	19	550
H11608-550R	12,7	0.50	20,1	0.82	15,5	225	114,3	4.50	27	550

Perfection 300®

Our Perfection 300 products are designed with RMA Class A tubes which provide excellent oil resistance. It works great at the transfer of lubricated air to valves and cylinders and even as low pressure hydraulic lines. Its braid construction allows for a very flexible product with excellent bend radius.

Inner Tube: Nitrile (RMA Class A)

Reinforcement:
H1776 – 2 Fiber Braids
H1777 – 1 Fiber Braid

Cover: Red Vinyl Nitrile

Temperature Range:
-40°C to +82°C
(-40°F to +180°F)

Hose End Reference
'U' Series
430 'U' Series
'Z' Series
'TTC' Series

H1776 / H1777 Perfection 300®

Part Number	Hose I.D.		Hose O.D.		Working Pressure		Weight / 100 ft.	Avail. Lengths
	mm	in	mm	in	bar	psi	lbs	ft
H177704-500R	6,4	0.25	12,7	0.50	22,4	325	9	500
H177604-500R	6,4	0.25	15,1	0.59	22,4	325	13	500
H177705-500R	7,9	0.31	15,9	0.63	22,4	325	13	500
H177706-500R	9,5	0.38	16,7	0.66	22,4	325	13	500
H177606-500R	9,5	0.38	18,3	0.72	22,4	325	17	500
H177708-500R	12,7	0.50	20,6	0.82	22,4	325	17	500
H177608-500R	12,7	0.50	22,2	0.88	22,4	325	22	500
H177610-500R	15,9	0.63	25,4	1.00	22,4	325	26	500
H177612-500R	19,1	0.75	29,4	1.16	22,4	325	35	500
H177616-300R	25,4	1.00	36,5	1.44	22,4	325	46	300
H177620-300R	31,8	1.25	44,5	1.75	22,4	325	63	300
H177624-300R	38,1	1.50	50,8	2.00	15,5	325	75	300

Easy Couple

Our Easy Couple products are designed with RMA Class A tubes which provide excellent oil resistance. They work great at the transfer of lubricated air to valves and cylinders and even as low pressure hydraulic return lines. The Easy Couple is also qualified with a full line of push-on fittings eliminating the need for clamps even at pressure up to 300 psi. The black hose cover only has been accepted by MSHA(2G-13C) for underground use in lube oil lines, pneumatic and low pressure hydraulic return lines.

Inner Tube: Nitrile

Reinforcement: 1 Fiber Braid

Cover: Neoprene (Black), Vinyl Nitrile (Colored Hoses)

Temperature Range:
-40°C to +100°C
(-40°F to +200°F)

Hose End Reference

Field Attachable

100 'B' Series

Eaton Socketless

H201 Easy Couple General Purpose Hose

Part Number	Hose I.D.		Hose O.D.		Working Pressure		Min. Bend Radius		Weight / 100 ft.	Avail. Lengths
	mm	in	mm	in	bar	psi	mm	in	lbs	ft
H20104BK H20104BK-250R H20104BK-500R	6,4	0.25	12,7	0.50	20,7	300	76,2	3.00	8	50 250 500
H20106BK H20106BK-250R H20106BK-500R	9,5	0.38	16,7	0.65	20,7	300	76,2	3.00	13	50 250 500
H20108BK H20108BK-250R H20108BK-500R	12,7	0.50	19,1	0.75	20,7	300	127,0	5.00	15	50 250 500
H20110BK H20110BK-250R	15,9	0.63	23,8	0.93	20,7	300	152,4	6.00	20	50 250
H20112BK H20112BK-250R	19,1	0.75	26,2	1.03	20,7	300	177,8	7.00	26	50 250

Note: For colors change BK to: Gray (GY), Red (RD), Green (GN) & Yellow (YW), Blue (BU)

Shock-Safe®

The Eaton Shock Safe hose is manufactured utilizing both a non-conductive tube and cover compound and is designed for a general purpose air/water hose where the hose must be non-conductive. The hose is suitable for use around electrical equipment and each reel is factory tested to exceed minimum electrical resistivity of one megaohm per inch at 1000 volts D.C.

Inner Tube: Nitrile (non-conductive)

Reinforcement: 2 Fiber Braids

Cover: Vinyl Nitrile (non-conductive)

Temperature Range:
-40°C to +82°C
(-40°F to +180°F)

Hose End Reference
'U' Series
'Z' Series
'TTC' Series

H9949 Shock-Safe®

Part Number	Hose I.D.		Hose O.D.		Working Pressure		Weight / 100 ft	Avail. Lengths
	mm	in	mm	in	bar	psi	lbs	ft
H994904-500R	6,4	0.25	15,1	0.59	19,0	275	15	500
H994906-500R	9,5	0.38	18,3	0.72	19,0	275	19	500
H994908-500R	12,7	0.50	22,2	0.88	19,0	275	27	500
H994912-500R	19,1	0.75	29,4	1.16	19,0	275	41	500
H994916-300R	25,4	1.00	36,5	1.44	19,0	275	64	300

Each reel factory tested to exceed minimum electrical resistivity of one megaohm per inch at 1,000 volts D.C.

Pressure Washer

Eaton's Pressure Washer 3000 hose is a non-marking, abrasion, heat, ozone and weather resistant hose capable of handling 3,000 psi applications. It's tube is manufactured with an oil resistance RMA Class A Nitrile and it's cover is an MSHA approved bule vinyl nitrile. It is an excellent hose for high pressure cleaning and degreasing of engines, tanks, boats, farm equipment and buildings and an excellent hose for the washdown of food processing facilities and equipment.

Tube: Nitrile RMA Class A Oil Resistance

Reinforcement: Wire, 1 Braid

Cover: Vinyl Nitrile MSHA Approved

Color: Blue

Temperature Range:
-40°C to +121°C
(-40°F To +250°F)

Hose End Reference
'Z' Series
'TTC' Series

Pressure Washer

Part Number	Hose I.D.		Hose O.D.		Working Pressure		Weight / 100 ft.	Standard Reel	Min. Bend Radius	
	mm	in	mm	in	bar	psi	lbs	ft	mm	in
H34504	16.3	1/4	12.7	1/2	207	3,000	13	50	50.8	20.0
H34504-100								100		
H34504-250R								250		
H34504-500R								500		
H34506	9.5	3/8	15.9	5/8	207	3,000	21	50	63.5	2.50
H34506-100								100		
H34506-250R								250		
H34506-500R								500		
H34508	12.7	1/2	19.8	25/32	207	3,000	31	50	88.9	3.50
H34508-100								100		
H34508-250R								250		
H34508-500R								500		

Chemforce & Nyall

Whether it is our PVC/Polyurethane Blend Chemforce or our Nylon lined Nyall hose we have the product for your light chemical applications. The Chemforce is compatible with hydrocarbon based aromatic chemicals and is specifically designed for weed and pest control spraying. The Nyall hose is excellent for the conveyance of air, water, oil, fuels and paint spray applications.

Chemforce

Tube: PVC/Polyurethane Blend

Reinforcement: Fiber, 2 or 4 Spiral

Cover: PVC

Color: Yellow (YW)

Temperature Range: +9°C to +71°C (+15°F to +160°F)

Hose End Reference

Barbed inserts with clamps or brass collar

Do not use internal expanded couplings.

Product Number	Hose I.D.		Hose O.D.		Max. Working Pressure		Weight / 100 ft.	Standard Coils
	mm	in	mm	in	bar	psi	lbs	ft
H156106-300R	9,5	3/8	16,5	13/20	41,4	600	13	300 (YW)
H156108-300R	12,7	1/2	21,3	21/25	41,4	600	17	300 (YW)

Other sizes and pressures available on a MTO basis. See full line Industrial Hose catalog for full product offering.

Nyall

Tube: Nylon

Reinforcement: Fiber, 1 or 2 Braid

Cover: Neoprene (BK), Vinyl Nitrile (RD), Red – RMA Class B Oil Resistance

Temperature Range: +34°C to +71°C (-30°F to +160°F)

Hose End Reference

'U' Series

Product Number	Hose I.D.		Hose O.D.		Max. Working Pressure		Weight / 100 ft.	Standard Reels
	mm	in	mm	in	bar	psi	lbs	ft
H194104RD-500R	6,3	1/4	12,7	1/2	34,5	500	8	500
H194104BK-500R								
H194106RD-500R	9,5	3/8	17,5	11/16	34,5	500	15	500
H194106BK-500R								
H194108RD-500R	12,7	1/2	19,8	25/32	34,5	500	15	500
H194208RD-500R	12,7	1/2	22,2	7/8	51,2	750	26	500
H194208BK-500R								
H194212RD-500R	19,1	3/4	30,2	1-3/16	51,2	750	40	500
H194216RD-300R	25,4	1	38,1	1-1/2	34,5	500	56	300

ESP Tubing and Hose

Our EH049 ESP tubing and EH089 ESP hose products are specially designed for use between the fuel tank and engine and meet evaporative emissions regulations for marine outboard fuel systems and small gasoline-powered lawn, garden, and turf equipment. They also meet the requirements of the International Marine Certifications Institute's Recreational Craft Directive 94/25/EC.

Inner Tube: PVDF

Reinforcement: 1 Fiber Braid (Hose only)

Cover: Modified PVC

Temperature Range:
-32°C to +66°C
(-25°F to +150°F)

Hose End Reference
EH089 - 265 'P' Series
Barbed inserts with clamps or brass collar

EH049 ESP Tubing and EH089 Hose

Part Number	Hose I.D.		Hose O.D.		Max. Working Pressure		Weight / 100 ft.	Package	Standard Lengths
	mm	in	mm	in	bar	psi	lbs		ft
EH04904-100	6,35	.250	9,53	.375	0,35	50	30	Coil/Box	100
EH04905-100	7,92	.312	11,13	.438	0,35	50	36	Coil/Box	100
EH04906-100	9,53	.375	12,70	.500	0,35	50	43	Coil/Box	100
EH08904-100	6,35	.250	12,45	.490	1,72	250	83	Coil/Box	100
EH08905-100	7,92	.312	14,10	.555	1,72	250	96	Coil/Box	100
EH08906-100	9,53	.375	15,88	.625	1,72	250	105	Coil/Box	100

Custom Capabilities

Eaton specializes in rubber and thermoplastic hose and tubing products that are sold into the industrial, recreation, beverage, and irrigation markets. These products are manufactured out of materials such as PVC, polyethylene, nylon, EVA, urethane, EPDM, Nitrile, Vinyl Nitrile and specialized thermoplastic rubber materials including Santoprene.

Applications for these products include (but are not exclusive to) air, water, chemical, food and pesticide conveyance. Specialized products, configurations and packaging to meet our customers' unique requirements are our core compentencies.

Our products can be constructed to meet FDA, NSF, UL, SAE, Mil-Spec., and various other industry specifications in custom lengths, colors and individualized branding. We offer the lowest minimum run quantities in the business.

This page shows a range of customized products we have created to address the demanding needs of our customers. Read through them and then call us to find out what Eaton's Industrial Hose and Tubing Solutions Team can do for you.

Co-Extruded Drain Line
PVC inner tube and outer cover, suitable for water, light chemicals and light vacuum. With temperature capability between -5°C (25°F) to + 65°C (150°F).

Water Hose with Communication Wire
NSF 51 style hose with a signal wire to operate valve.

Welded Hose Assembly
Custom configurations for equipment manufacturers. Hoses are colored for specific uses such as water, air, gas and chemicals.

Welded Hose with Communication Wire
Customer configuration combining water hose, chemical hose and communication wire to activate mixing of two components.

Custom Assembly for Low Pressure Hoses
Small or large orders of assemblies can be accommodated for low pressure hose.

Custom Slurry Hose
Suitable for use with abrasive slurries, waste water and construction sites.

Custom Water Hose
Custom color, lay lines, lengths and packaging.

Fiber Optic Bundle
Various configurations have been made for custom lighting of pools, patios and entertainment centers.

Insulated Cooling Tube
Used to transport cool liquids at 0°C (-32°F) to +65°C (150°F).

Insulated Drain Tube
Extruded insulation prevents condensation build-up in cold drain lines.

Twin Low Temperature Air Lines
Custom colored air lines enclosed with PVC sheaths that can operate at -32°C (-25°F) to +65°C (150°F).

NSF 51 Hose with Communication Wires
Custom manufactured for seeding applications.

Application Data

Important Safety Information

This brochure was designed to give the user an overview of our various products and applications. For supplemental information and more detailed information on application data refer to our full line Industrial Hose Catalog.

Selection of the proper Eaton Industrial Hose for an application is essential to the proper operation and safe use of the hose and related equipment. Inappropriate hose selection may result in hose leakage, bursting, or other failure which may cause serious bodily injury or property damage from spraying fluids or flying objects. Some of the factors to consider in proper hose selection are known as STAMPED:

S-Size (I.D., O.D. and length)

T-Temperature of material conveyed and environment

A-Application the conditions of use

M-Material being conveyed, type and concentration

P-Pressure to which the assembly will be exposed

E-Ends; style, type, orientation, attachment methods, etc.

D-Delivery testing, quality, packaging, and delivery requirements.

If you have any questions regarding the proper hose for your application please contact Eaton at 1-888-258-0222.

Application Data

Important Safety Information

Temperature vs. Pressure Table for Reinforced PVC Hose

The table at right has been prepared to demonstrate the effects of temperature vs. working pressure on reinforced PVC hose products. Working pressures for PVC hoses are tested at 69°F (20°C).

Example:

2-Spiral hose has stated working pressure of 250 psi at 69°F (20°C)

At 104°F (40°C) working pressure – 250 psi x 56% – 140 psi.

Example:

4-Spiral hose has stated working pressure of 400 psi at 69°F (20°C)

At 140°F (60°C) working pressure – 400 psi x 43% – 172 psi.

Note: Working pressure decreases as temperature increases. Hose must be properly coupled to obtain the specified pressure rating.

Temperature		Allowable Percent of Original Working Pressure	
°C	°F	2-Spiral (%)	4-Spiral (%)
20	69	100	100
25	77	86	90
30	96	75	81
35	95	65	73
40	104	56	66
45	113	47	59
50	120	40	53
55	131	33	47
60	140	27	43
65	149	23	40
70	159	20	38
75	167	17	37
80	176	15	35

RMA Class Oil Resistance

Rubber hose is used to convey petroleum products both in the crude and refined stages. The aromatic content of refined gasoline is often adjusted to control the octane rating. The presence of aromatic hydrocarbons in this fuel generally has a greater effect on rubber components than to allphatic hydrocarbons. Aromatic materials in contact with rubber tend to soften it and reduce its physical properties. For long lasting service, the buyer of gasoline hose should inform the hose manufacturer of the aromatic content of the fuel to be handled so that the proper tube compound can be recommended for the specific application.

The effects of oil on rubber depend on a number of factors that include the type of rubber compound, the composition of the oil, the temperature and time of exposure. Rubber compounds can be classified as to their degreee of oil resistance based on their physical properties after exposure to a standard test fluid. In this RMA classification, the rubber samples are immersed in IRM 903 oil at 100°C for 70 hours. (See ASTM Method D-471 for detailed description of the oil and the testing prodcedure.) As a guide to the user of the hose in contact with oil, the oil resistance classes and a corresponding description are listed.

Physical Properties After Exposure to Oil

	Volume Change Maximum	Tensile Strength Retained
Class A (High oil resistance)	+25%	80%
Class B (Medium-High oil resistance)	+65%	50%
Class C (Medium oil resistance)	+100%	40%

Eaton
Hydraulics Group USA
14615 Lone Oak Road
Eden Prairie, MN 55344
USA
Tel: 952-937-9800
Fax: 952-294-7722
www.eaton.com/hydraulics

Eaton
Hydraulics Group USA
1750 Hardeman Lane
Cleveland, TN 37312
USA
Tel: 800-833-3837
Fax: 952-974-7513

Eaton
Hydraulics Group Canada
49 Cutten Place
Guelph, Ontario NIG 4Z7
Canada
Tel: 877-662-8823
Fax: 519-836-5412

Powering Business Worldwide

© 2010 Eaton Corporation
All Rights Reserved
Printed in USA
Document No. E-HOLP-MR001-E
August 2010