

EATON

Aeroquip

APQ Hose
Technical Manual



 **Aeroquip**[®]

Introduction to AQP Hose

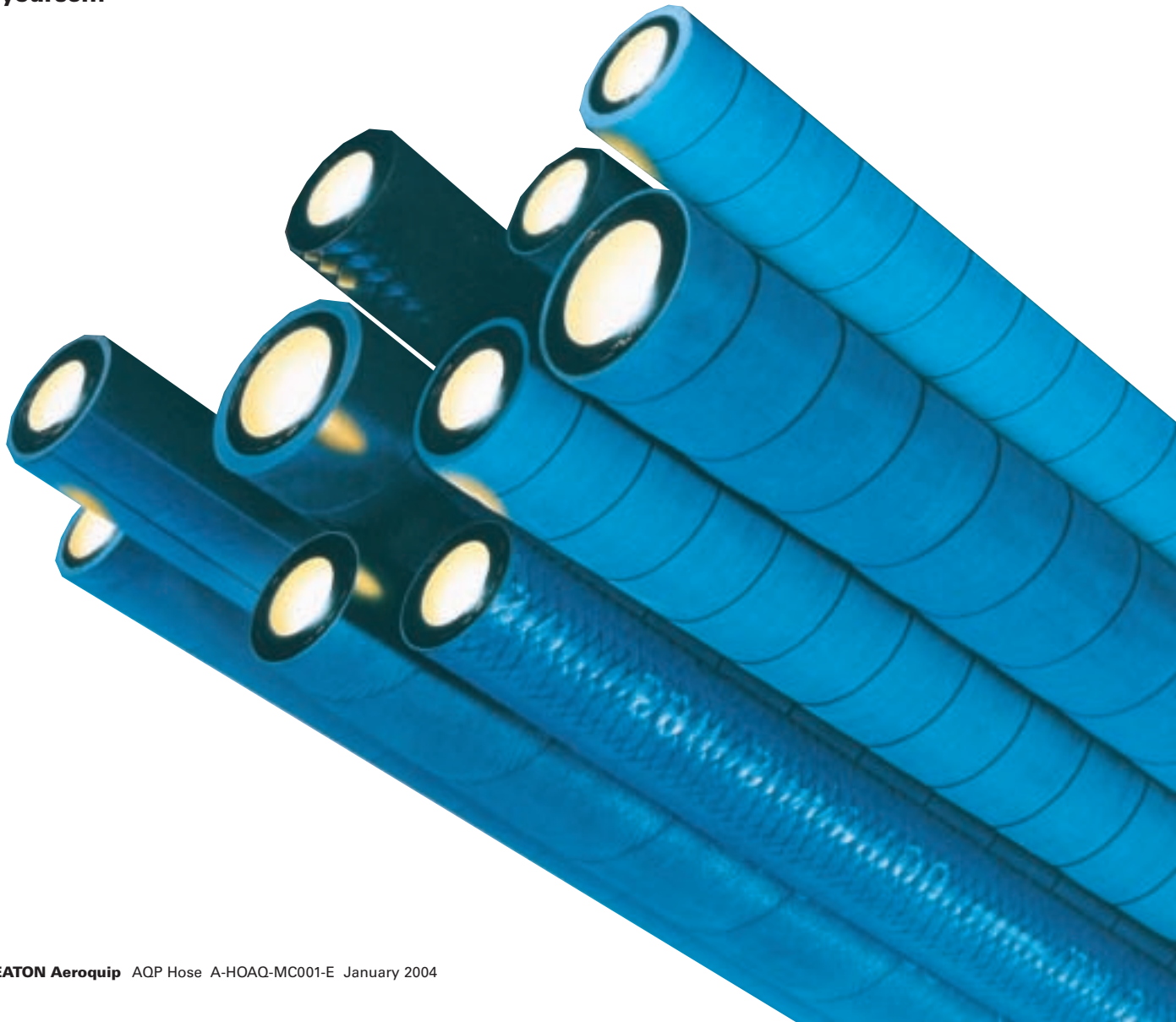
Eaton's AQP® family of hose is scientifically superior to any hose on the market today.

Materially different, AQP hose is constructed with elastomeric materials that carry the U.S. Patent No. 4,366,746. There's nothing quite like it!

An Aeroquip team of chemists and engineers made a major breakthrough with the development of AQP hose. Thousands of compounds were developed and discarded to reach the discovery of the patented, scientifically superior AQP elastomeric material.

Years of laboratory testing and in-the-field performance verification have proven its unique superiority.

Prove it for yourself.



Introduction to AQP Hose



Long Lasting Service

AQP superiority is reflected in its durability and long lasting service life under the most challenging conditions. AQP hose outlasts conventional hose up to 5 times longer.

Extreme Temperature Range

It's superior in its operating temperature range of up to +300 degrees F. with straight petroleum base oils.

NOTE: While they have also shown compatibility up to +300 degrees F. with certain synthetic fluid types, the fluid manufacturer's recommended maximum operating

temperature for any specific name brand fluid should be scrupulously observed by the user. These recommended temperatures can vary widely between name brands because of different fluid compositions, even though they fall into the same generic "family" of fluids.

Exceeding the manufacturer's recommended maximum temperature can result in fluid breakdown, producing by-products that are harmful to elastomeric products, as well as other materials in the systems. This also holds true with petroleum base fluids.

Specific high temperatures are shown next to each general fluid type listed below. The AQP elastomer is resistant to many fluids not shown. For more information, contact Aeroquip with details of your intended application.

The following are Aeroquip's recommended maximum fluid operating temperatures for AQP hose, by general fluid classification.

Fluid Compatibility

AQP hose superiority is reflected in its compatibility with virtually every type of hydraulic fluid, lubricating oil or fuel at both high and low temperature extremes.*

Versatility

The AQP compound is used in a variety of hose constructions including MatchMate BLUE,TM HI-IMPULSE[®] and HI-PAC[®] designs to provide excellent temperature resistance, extended fluid compatibility and performance well above SAE standards. MatchMate BLUE, HI-IMPULSE and HI-PAC AQP hose meet SAE dimensional specifications and exceed performance ratings to meet the most demanding requirements.

Reduce Inventory

You can reduce inventory by stocking Aeroquip's AQP hose because of its great diversity of fluid compatibility. It's no longer necessary to inventory an assortment of hose for use with petroleum and industrial phosphate

ester based fluids. Stock the scientifically superior AQP blue line and save your inventory dollars.

Shelf Aging Practically Nonexistent

AQP hose resists oxidation, effects of ozone and other agents in the air at industrial locations.

The Bottom Line

Your operating efficiency can be improved by AQP hoses. Longer service life, less equipment maintenance, less downtime, less inventory...and the prompt, dependable service you have come to expect from Aeroquip and its distributors.

*Not recommended for use with the following phosphate ester type fluids typically used in aerospace applications: Stauffer Aero-Safe 2300W, Chevron Hy-Jet IV, and Monsanto Skydrol 500B, LD4.



Fluid	Operating Temperatures
Straight petroleum base oils	up to +300°F.
Petroleum base fuels	up to +200°F.
Industrial fire resistant synthetics	up to +180°F.
Water/oil emulsions and water/glycol solutions	up to +250°F.
Other industrial fluids	up to +250°F.
Air	up to +250°F.

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FC300 AQP Hose.....# 4

Exceeds SAE100R5. The superior high temperature and abrasion resistant hose. Features extensive fluid compatibility.



GH194 AQP Hose.....#

Exceeds SAE100R1AT. MatchMate BLUE GH194 hose is a thin cover version of FC194 which now allows use of Aeroquip's popular Matchmate Plus™ Through-The-Cover (TTC) Fittings. GH194 is available in all sizes up to -20 and performs at SAE and DIN pressure levels.



GH195 AQP Hose.....#

Exceeds SAE100R2AT. MatchMate BLUE GH195 hose is a thin cover version of FC195 which now allows use of Aeroquip's popular Matchmate Plus™ Through-The-Cover (TTC) Fittings. GH195 is available in all sizes up to -32 and performs at SAE and DIN pressure levels.



FC194 AQP HI-IMPULSE® Hose.....#

Exceeds SAE100R1. Combines superior high temperature resistance and extensive fluid compatibility plus operating pressures up to 40% greater than SAE100R1 hose. Aeroquip HI-IMPULSE hose construction is patented.



FC195 AQP HI-IMPULSE® Hose.....#

Exceeds SAE100R2. The superior high pressure (up to 40% greater than SAE100R2), high temperature hose. Aeroquip HI-IMPULSE hose construction is patented.



FC510 AQP HI-PAC Hose.....#

Exceeds SAE100R2 performance requirements. Combines the flexibility and economy of HI-PAC hose with the temperature and fluid compatibility of AQP hose. Aeroquip HI-PAC hose construction is patented.



FC323 AQP Spiral Hose.....#

3,000 psi maximum operating pressure in all sizes. The features of AQP construction and spiral wire reinforcement are combined in this quality hose style. Exceeds performance requirements of comparable SAE hose.



FC324 AQP Spiral Hose.....#

4,000 psi maximum operating pressure in all sizes. When tested under demanding impulse conditions at 300 degrees F, FC324 AQP spiral hose lasted twice as long as the leading SAE100R12 spiral hose.



Index To Specifications

FC325 AQP Spiral Hose#

5,000 psi maximum operating pressure in all sizes. Exclusive internal skive/wire trap crimp fittings assure long service life for 5,000 psi pressure applications. In the plant or in the field, AQP spiral hose is the toughest, longest lasting hose available.



FC350 AQP Hose#

FMVSS-106 Type All. The revolutionary truck hose with superior abrasion resistance and high temperature resistance.



FC355 AQP Hose#

FMVSS-106 Type All. The superior hose ideal for truck maintenance and piping conditions where external fluid compatibility and chemical resistance are required. Hose has blue AQP elastomer cover.



FC234 AQP Hose#

Fire resistant fuel hose meets USCG A1 requirements. Offers positive fire resistance in critical applications without using a fire-sleeve.



FC332 AQP SOCKETLESS Hose#

Offers extended fluid compatibility and operating temperature range for low pressure applications. Used with Aeroquip SOCKETLESS fittings for quick and easy assembly.



FC498 AQP Hose\$

Exceeds SAE100R6 temperature requirements. The patented AQP elastomer permits continuous operating temperatures to +300 degrees F. and greatly exceeds the intermittent temperature capabilities of other SAE100R6 hose.



2661 AQP Hose#

Exceeds SAE100R4. The dual-purpose hose with extensive fluid compatibility is ideal for either suction or chemical transfer applications.



FC300 APQ Hose



FC300 AQP Hose

Exceeds SAE100R5.

Construction

AQP elastomer tube, polyester inner braid, single wire braid reinforcement and blue polyester braid cover.

Application

For hydraulics handling petroleum based fluids and fire resistant types, air, gasoline, crude, fuel, lubricating oils and other industrial fluids.

Operating Temperature Range

-55°F. to +300°F.
(-49°C. to +150°C.).*

Fittings

Standard Aeroquip Reusable SAE100R5 Type.

Exceeds SAE100R5 requirements.

Meets AAMVA requirements.

Meets The Maintenance Council (TMC), American Trucking Association (ATA), Recommended Practice RP305b.

Meets DOT FMVSS 106 Type All requirements.

*See Temperature range notes on page 3.

Polyester and Wire Braided Reinforcement and Polyester Braided Cover – SAE100R5 with Standard Reusable Fittings.

FC300 AQP hose, with its exclusive high temperature tube material, provides resistance to high ambient and fluid temperatures plus superior abrasion and chemical resistance.

Having withstood over 1,000,000 impulse cycles at a continuous +300 degrees F. fluid temperature, it out-

lasted standard SAE100R5 hoses under the same impulse test conditions by factors up to 40 to 1. (The SAE100R5 specification only requires 150,000 cycles at +200 degrees F.).

FC300 AQP hose is compatible with standard reusable fittings used with other Aeroquip SAE100R5 dimensioned hoses.

Under long-term test conditions of +300 degrees F., circulating engine oil, combined with flexing and high ambi-

ent temperatures FC300 AQP hose outlasted competitive SAE100R5 and SAEJ1402 constructions by a minimum of 2 to 1, and in some cases as high as 5 to 1.

After 1000 hours exposure to +300 degrees F. ambient air, the polyester cover was virtually unaffected, providing superior resistance to high ambient temperature conditions.

Part Number	Hose I.D. (inches)	Hose O.D. (inches)	Max. Operating Pressure (psi)	Min. Burst Pressure (psi)	Min. Bend Radius (inches)	Vacuum Service (in./Hg)	Weight Per Ft. (lbs.)
FC300-04	.19	.52	3000	12000	3.00	28	.13
FC300-05	.25	.58	3000	12000	3.38	28	.16
FC300-06	.31	.68	2250	9000	4.00	28	.23
FC300-08	.41	.77	2000	8000	4.62	28	.26
FC300-10	.50	.92	1750	7000	5.50	28	.37
FC300-12	.62	1.08	1500	6000	6.50	28	.46
FC300-16	.88	1.27	800	3200	7.38	20	.44
FC300-20	1.12	1.50	625	2500	9.00	20	.52
FC300-24	1.38	1.75	500	2000	10.50	15	.67
FC300-32†	1.81	2.22	300	1200	13.25	11	.94
FC300-40	2.38	2.86	300	1200	24.00	8	1.50

†Does not comply with SAE100R5 operating pressure of 350 psi or minimum burst of 1400 psi.

GH194

AQP Hose



GH194 AQP Hose

Exceeds SAE 100R1AT performance.

Construction

AQP elastomer tube, single wire braid reinforcement and blue AQP cover with silver layline.

Application

Hydraulic system service with petroleum, fire-resistant and water-base fluids, fuel and lubricating systems.

Operating Temperature Range

-40°F. to +300°F.
(-40°C. to +150°C.).*

Fittings

MatchMate Plus Through-The-Cover (TTC) and skive-type crimp fittings.

Meets SAE and DIN pressure levels which are the highest 1-wire industry standards, globally.

*See Temperature range notes on page 3.

MatchMate BLUE (GH194) hose is a thin cover version of FC194 which allows use of Aeroquip's popular MatchMate Plus™ Through-The-Cover (TTC) Fittings. GH194 is available in all sizes up to -20 and performs at SAE and DIN pressure levels.

Part Number	Hose I.D. (inches)	Hose O.D. (inches)	Maximum Operating Pressure (psi)	Minimum Burst Pressure (psi)	Minimum Bend Radius (inches)	Weight Per Ft. (lbs.)
GH194-4	.25	.53	3250	13000	4.00	.17
GH194-6	.38	.69	3000	12000	5.00	.25
GH194-8	.50	.81	2500	10000	7.00	.30
GH194-10	.63	.94	2000	8000	8.00	.36
GH194-12	.75	1.09	1800	7200	9.50	.46
GH194-16	1.00	1.41	1300	5200	12.00	.66
GH194-20	1.25	1.73	900	3600	16.50	.85

GH195 AQP Hose



GH195 AQP Hose

Exceeds SAE 100R2AT performance.

Construction

AQP elastomer tube, double wire braid reinforcement and blue AQP cover.

Application

Hydraulic system service with petroleum, fire-resistant and water-base fluids, fuel and lubricating systems.

Operating Temperature Range

-40°F. to +300°F.
(-40°C. to +150°C.).*

Fittings

MatchMate Plus Through-The-Cover (TTC) and skive-type crimp fittings.

Meets SAE and DIN pressure levels.

*See Temperature range notes on page 3.

MatchMate BLUE (GH195) hose is a thin cover version of FC195 which now allows use of Aeroquip's popular MatchMate Plus™ Through-The-Cover (TTC) Fittings. GH195 is available in all sizes up to -32 and performs at SAE and DIN pressure levels.

Part Number	Hose I.D. (inches)	Hose O.D. (inches)	Maximum Operating Pressure (psi)	Minimum Burst Pressure (psi)	Minimum Bend Radius (inches)	Weight Per Ft. (lbs.)
GH195-4	.25	.60	5750	23000	4.00	.27
GH195-6	.38	.75	5000	20000	5.00	.39
GH195-8	.50	.87	4250	17000	7.00	.46
GH195-12	.75	1.16	3000	12000	9.50	.67
GH195-16	1.00	1.49	2500	10000	12.00	.97
GH195-20	1.25	1.92	2250	9000	16.50	1.60
GH195-24	1.50	2.15	1750	7000	20.00	1.74
GH195-32	2.00	2.67	1500	6000	25.00	2.27

FC194 AQP HI-IMPULSE Hose



FC194 AQP HI-IMPULSE Hose

Exceeds SAE100R1 Performance.

Construction

AQP elastomer tube, single wire braid reinforcement and blue AQP elastomer cover.

Application

Hydraulics handling petroleum based fluids and industrial fire resistant types, crude, fuel, and lubricating oils, gasoline, water and other industrial fluids.

Operating Temperature Range

- 40°F. to +300°F.
(-40°C. to +150°C).*

Fittings

Crimped.

Exceeds SAE100R1 performance.

*See temperature range notes on page 3.

Patented HI-IMPULSE Single Wire Braid Reinforcement, SAE100R1 Type with Crimp Fittings.

Incorporating an AQP tube and cover, this hose construction has important bonus features not found in standard SAE100R1 hose.

The maximum operating pressures for FC194 AQP hose have been upgraded to pressures in excess of standard SAE100R1 hose by as much as 40%.

FC194 AQP hose is tested at a continuous +300 degrees F. fluid temperature. Test findings indicate this hose has an extended service life, outlasting standard SAE100R1 hose.

Part Number	Hose I.D. (inches)	Hose O.D. (inches)	Maximum Operating Pressure (psi)	Minimum Burst Pressure (psi)	Minimum Bend Radius (inches)	Weight Per Ft. (lbs.)
FC194-04	.25	.62	3250	11000	4.00	.19
FC194-06	.38	.78	3000	9000	5.00	.30
FC194-08	.50	.91	2500	8000	7.00	.39
FC194-10	.62	1.03	2000	6000	8.00	.46
FC194-12	.75	1.19	1750	5000	9.50	.53
FC194-16	1.00	1.50	1250	4000	12.00	.80
FC194-20	1.25	1.81	900	2500	16.50	.98

FC195 AQP HI-IMPULSE Hose



FC195 AQP HI-IMPULSE Hose

Exceeds SAE100R2A Performance.

Construction

AQP elastomer tube, two-wire braid reinforcement and blue AQP elastomer cover.

Application

For high pressure hydraulics handling petroleum based fluids and industrial fire resistant types.

Operating Temperature Range

-40°F. to +300°F.
(-40°C. to + 150°C.).*

Fittings

Screw Together Reusable, Crimped.

Exceeds SAE100R2A performance.

*See temperature range notes on page 3.

Patented HI-IMPULSE Double Wire Braid Reinforcement – Exceeds SAE100R2A Requirements with Reusable or Crimped Fittings.

FC195 AQP HI-IMPULSE hose is constructed to conform dimensionally to the SAE100R2A specification. The similarity to other two-wire braid hoses on the market ends here.

The maximum operating pressures for FC195 AQP hose have been upgraded to as much as 40% greater than conventional SAE100R2 hose.

In laboratory impulse tests, at +300 degrees F, the tubes of ordinary hose hardened into a brittle material, subject to cracking. After identical testing, FC195 AQP hose only gained a few points in durometer hardness.

Part Number	Hose I.D. (inches)	Hose O.D. (inches)	Maximum Operating Pressure (psi)	Minimum Burst Pressure (psi)	Minimum Bend Radius (inches)	Weight Per Ft. (lbs.)
FC195-04	.25	.69	5750	20000	4.00	.31
FC195-06	.38	.84	5000	16000	5.00	.42
FC195-08	.50	.97	4250	14000	7.00	.51
FC195-10	.62	1.09	3250	11000	8.00	.59
FC195-12	.75	1.25	3000	9000	9.50	.75
FC195-16	1.00	1.56	2500	8000	12.00	1.04
FC195-20	1.25	2.00	2250	6500	16.50	1.68
FC195-24	1.50	2.25	1750	5000	20.00	1.91
FC195-32	2.00	2.75	1250	4500	25.00	2.39

FC510

APQ HI-PAC Hose



FC510 AQP HI-PAC Hose

Exceeds SAE100R2 Performance.

Construction: AQP elastomer tube, patented HI-PAC wire braided reinforcement and blue AQP elastomer cover.

Application

Hydraulics system service with petroleum based fluid and industrial fire resistant types, for general industrial service.

Operating Temperature Range

-40°F. to +300°F.
(-40°C. to +150°C.).*

Fittings

Screw Together Reusable, Crimped.

Exceeds SAE100R2 performance.

*See Temperature range notes on page 3.

Patented HI-PAC Wire Reinforcement – Performs to SAE100R2 Specifications.

Bearing no resemblance to ordinary SAE100R2 hose, our FC510 AQP HI-PAC, like other Aeroquip HI-PAC hoses, is lighter, more flexible, takes less space and costs less than conventional hose meeting SAE100R2 requirements. The patented HI-PAC wire braid reinforcement permits a tighter bend radius and can be used for a variety of applications.

FC510 AQP HI-PAC hose also has the same high temperature resistance as FC195 AQP hose, as well as its compatibility with a wide variety of fluids.

Part Number	Hose I.D. (inches)	Hose O.D. (inches)	Maximum Operating Pressure (psi)	Minimum Burst Pressure (psi)	Minimum Bend Radius (inches)	Weight Per Ft. (lbs.)
FC510-04	.25	.57	5000	20000	3.00	.23
FC510-06	.38	.68	4000	16000	3.50	.29
FC510-08	.50	.79	3500	14000	5.00	.34
FC510-10	.62	.93	2750	11000	6.00	.44
FC510-12	.75	1.08	2250	9000	7.00	.52
FC510-16	1.00	1.36	2000	8000	9.00	.71

AQP Spiral Hose



FC323 AQP Hose

3000 psi Maximum Operating Pressure in all sizes.

Construction

AQP elastomer tube, 4-spiral wire reinforcement, blue AQP elastomer cover.

Application

High pressure hydraulics, crude, fuel and lubricating oils, gasoline, water and industrial phosphate-ester base hydraulic fluids.

Operating Temperature Range

40°F. to +300°F.
(-40°C. to +150°C.)*

Fittings

Standard Crimped and Internal Skive/Wire Trap Crimped Fittings.

*See temperature range notes on page 3.

Spiral Wire Reinforcement, Exceeds SAE100R9, SAE100R11 and SAE100R12. Performance (depending on size).

Years of development were required to perfect AQP spiral wire reinforced hydraulic hose. FC323, FC324 and FC325 AQP hoses combine the best of spiral wire reinforcement techniques with superior AQP elastomer tubes and abrasion resistant blue covers. All AQP spiral hose styles have broad fluid compatibility and provide superior performance over a wide range of temperatures. In the plant or in the field, AQP spiral hose is our top performer for tough, demanding applications. FC323 AQP hose is designed for use with either standard crimped fittings or internal skive/wire trap

crimped fittings. Standard crimp fittings (available in sizes -12 through -24) provide simple assembly and a minimum of special assembly tooling.

The internal skive/wire trap crimped fittings designed for use with FC323 and FC325 AQP hose are available in sixteen different styles. The exclusive wire trap design enables the fittings to grip the reinforcing wire between two pieces of solid steel resulting in proven superior holding strength. FC324 hose uses screw-together reusable fittings in the 1/2-inch (-08) size and standard crimp fittings in the remaining sizes.

Part Number	Hose I.D. (inches)	Hose O.D. (inches)	Maximum Operating Pressure (psi)	Minimum Burst Pressure (psi)	Minimum Bend Radius (inches)	Weight Per Ft. (lbs.)
FC323-12	.75	1.23	3000	12000	9.50	.94
FC323-16	1.00	1.50	3000	12000	12.00	1.22
FC323-20	1.25	1.86	3000	12000	16.50	1.70
FC323-24	1.50	2.11	3000	12000	20.00	2.20
FC323-32	2.00	2.63	3000	12000	25.00	3.21

AQP Spiral Hose



FC324 AQP Hose

4000 psi maximum operating pressure in all sizes.

Construction

AQP elastomer tube, 4-spiral wire reinforcement, blue AQP elastomer cover.

Application

High pressure hydraulics, crude, fuel and lubricating oils, gasoline, water and phosphate-ester base hydraulic fluids.

Operating Temperature Range

-40°F. to +300°F.
(-40°C. to +150°C.).*

Fittings

Internal Skive/Wire Trap
Crimped Fittings for all sizes.

*See temperature range notes on page 3.

Part Number	Hose I.D. (inches)	Hose O.D. (inches)	Maximum Operating Pressure (psi)	Minimum Burst Pressure (psi)	Minimum Bend Radius (inches)	Weight Per Ft. (lbs.)
FC324-08	.50	.97	4000	16000	7.00	.61
FC324-12	.75	1.23	4000	16000	9.50	.99
FC324-16	1.00	1.50	4000	16000	12.00	1.29



FC325 AQP Hose

5000 psi maximum operating pressure in all sizes.

Construction

AQP elastomer tube, 4-spiral wire reinforcement, blue AQP elastomer cover.

Application

High pressure hydraulics, crude, fuel and lubricating oils, gasoline, water and phosphate-ester base hydraulic fluids.

Fittings

Internal Skive/Wire Trap
Crimped Fittings for all sizes.

*See temperature range notes on page 3.

Part Number	Hose I.D. (inches)	Hose O.D. (inches)	Maximum Operating Pressure (psi)	Minimum Burst Pressure (psi)	Minimum Bend Radius (inches)	Weight Per Ft. (lbs.)
FC325-12	.75	1.27	5000	20000	9.50	1.09
FC325-16	1.00	1.52	5000	20000	12.00	1.42

Operating Temperature Range

-40°F. to +300°F.(-40°C. to +150°C.).*

FC350

AQP Truck Hose



Meets DOT FMVSS 106 Type All.

Construction

AQP elastomer tube, polyester inner braid, single wire braid reinforcement, polyester textile braid cover.

Application

Air, gasoline, fuel, lubricating oils and coolants.

Operating Temperature Range

-55°F. to +300°F.
(-49°C to +150°C.).*

Fittings

Standard Aeroquip Reusable SAE100R5 Type.

Meets DOT FMVSS 106 Type All requirements.

Meets AAMVA requirements.

Meets The Maintenance Council (TMC), American Trucking Association (ATA), Recommended Practice RP305b.

*See temperature range notes on page 3.

Polyester and Single Wire Braided Reinforcement and Polyester Braided Cover – SAE100R5 Type Reusable Fittings.

FC350 AQP hose is designed for low-pressure uses, including truck air brake and engine applications. It incorporates a construction like that used in

FC300 AQP hose, but contains less reinforcement. It is more flexible and lighter in weight for easy handling and routing.

It has been subjected to extensive testing for abrasion resistance, hot oil life, low temperature flexibility, fluid compatibility and corrosion resistance.

Part Number	Hose I.D. (inches)	Hose O.D. (inches)	Maximum Operating Pressure (psi)	Minimum Burst Pressure (psi)	Minimum Bend Radius (inches)	Vacuum Service (in./Hg)	Weight Per Ft. (lbs.)
FC350-04	.19	.52	2000	8000	.75	28	.12
FC350-05	.25	.58	1500	6000	1.00	28	.15
FC350-06	.31	.68	1500	6000	1.25	28	.20
FC350-08	.41	.77	1250	5000	1.75	28	.22
FC350-10	.50	.92	1250	5000	2.25	28	.32
FC350-12	.62	1.08	750	3000	2.75	20	.39
FC350-16	.88	1.23	400	1600	3.50	15	.38
FC350-20	1.12	1.50	300	1250	4.50	15	.45
FC350-24	1.38	1.75	250	1000	5.50	11	.54

FC355 APQ Hose



FC355 AQP Hose

Construction

AQP elastomer tube, polyester inner braid, single wire braid reinforcement, blue AQP elastomer cover.

Application

Air, gasoline, fuel, lubricating oils and coolants.

Operating Temperature Range

-55°F. to +300°F.
(-49°C. to + 150°C).*

Fittings

Standard Aeroquip Reusable SAE100R5 Type.

*See temperature range notes on page 3.

Single Wire Braided Reinforcement with Reusable SAE100R5 Type Fittings.

FC355 AQP hose is designed for demanding truck applications. It is ideal for truck maintenance and piping conditions where external fluid compatibility and chemical resistance are required.

It provides outstanding resistance against heat, abrasion and has an extended shelf life.

FC355 AQP hose meets or exceeds these requirements:

1. U.S. Department of Transportation-Federal Motor Vehicle Safety Standard, 106 Type All (size -4 through -12).
2. The Maintenance Council (TMC), American Trucking Association (ATA), Recommended Practice RP305b.

FC355 AQP hose has a minimum bend radius that is ideal for easy routing in the following areas: air, transmission, brake retarder, coolant, fuel and lubricating oil piping systems.

Part Number	Hose I.D. (inches)	Hose O.D. (inches)	Maximum Operating Pressure (psi)	Minimum Burst Pressure (psi)	Minimum Bend Radius (inches)	Vacuum Service (in./Hg)	Weight Per Ft. (lbs.)
FC355-04	.19	.52	1500	6000	.75	28	.17
FC355-05	.25	.58	1500	6000	1.00	28	.20
FC355-06	.31	.68	1500	6000	1.25	28	.24
FC355-08	.41	.77	1250	5000	1.75	28	.29
FC355-10	.50	.93	1250	5000	2.25	28	.40
FC355-12	.62	1.08	750	3000	2.75	20	.46
FC355-16	.88	1.24	400	1600	3.50	15	.50
FC355-20	1.13	1.50	300	1250	4.50	15	.59
FC355-24	1.38	1.75	250	1000	5.50	11	.69
FC355-32	1.81	2.22	200	800	8.50	11	.93

FC234 AQP Hose



FC234 AQP Hose

Meets USCG AI Requirements.

Construction

AQP elastomer tube, brass plated steel wire reinforcement, braided refractory insulation as needed by size and blue AQP elastomer cover.

Application

Hydrocarbon fuels, including all gasolines, alcohols, gasohols, kerosenes, gas turbine and diesel fuels. Also engine coolants, hydraulic fluids, synthetic and petroleum lubricants and other industrial fluids.

Operating Temperature Range

40°F. to +300°F.
(-40°C. to +150°C.).*

Fittings

Standard Aeroquip Reusable SAE100R5 Type.

*See temperature range notes on page 3.

Fire Resistant Hose Meets USCG AI Requirements.

FC234 AQP hose offers positive fire resistance in critical applications, including marine diesel and gasoline fuel systems. FC234 hose offers flame-resistant performance without using firesleeve-covered hose.

Filled with gasoline, FC234 hose can survive exposure for 2-1/2 minutes in a gasoline-fed fire with peak ambient temperatures exceeding 1200 degrees F. While in the flame, the hose assembly remains leakproof and capable of conducting fuel safely.

FC234 AQP hose meets these standards:

1. Underwriters Laboratories – UL 1114 Standard Hose Fire Tests.
2. U.S. Coast Guard – USCG COMDTINST M16752.2 (Old CG-497) Type AI Hose Fire Test (Recreational Marine). Meets Class I permeation schedule.
3. U.S. Coast Guard – USCG/MMT CG-115 Hose Fire Test per 46CFR56.60-25(c) and Cover Flammability Test per 30CFR18.65 MSHA (Commercial Marine).
4. American Boat and Yacht Council – ABYC Fuel Systems Standard H-24, part 9C, per Aeroquip ACES testing, and Underwriters Laboratory testing to UL-1114 fire resistant requirements.
5. BIA Type Accepted – meets requirements for permanent fuel systems in recreational boats. Ref: 1982 BIA Certification Handbook, BIA-144-79, based on ABYC Fuel System Standard H-24, 9C(1), and USCG M16752-2, Sub-part J.

Part Number	Hose I.D. (inches)	Hose O.D. (inches)	Maximum Operating Pressure (psi)	Minimum Burst Pressure (psi)	Minimum Bend Radius (inches)	Vacuum Service (in./Hg)	Weight Per Ft. (lbs.)
FC234-05	.25	.58	1500	6000	1.00	28	.21
FC234-06	.31	.68	1500	6000	1.25	28	.28
FC234-08	.41	.76	1250	5000	1.75	28	.30
FC234-10	.50	.94	1250	5000	2.25	28	.42
FC234-12	.62	1.08	750	3000	2.75	20	.47
FC234-16	.88	1.24	400	1600	3.50	16	.51

FC332

AQP

SOCKET-LESS

Hose

FC332 AQP SOCKET-LESS Hose

Construction

AQP elastomer tube, textile braid reinforcement, AQP elastomer cover.

Application

For gasoline, fuel and lubricating oils, air and water.

Operating Temperature Range

-40°F. to +300°F.
(-40°C. to +150°C.).*

Fittings

SOCKETLESS Reusable Fittings.

*See temperature range notes on page 3.

You can easily replace hose yourself in a matter of minutes. With Aeroquip FC332 AQP hose and matching SOCKETLESS reusable fittings, replacement of a failed low pressure hose line is as simple as "1-2-connect."

Like all AQP hose styles, FC332 resists temperature extremes, oxidation, ozone and the effects of shelf aging. Whenever low or continuous high temperatures or fluid compatibility is a problem, FC332 provides the ideal solution for low pressure applications.

The SOCKETLESS reusable fittings are designed for quick and easy assembly. No clamps, bands, wires, bolts or sockets are needed to retain the fitting to the hose. The design of the fitting and the special construction of the hose assures a tight connection with maximum operating pressures up to 250 psi.

Fittings can be used in a variety of industrial and automotive applications, but are not recommended for hydraulic impulse applications and are not approved for air brake applications.

Part Number	Hose I.D. (inches)	Hose O.D. (inches)	Maximum Operating Pressure (psi)	Minimum Burst Pressure (psi)	Minimum Bend Radius (inches)	Vacuum Service (in./Hg)	Weight Per Ft. (lbs.)
FC332-04	.25	.49	250	1000	3.00	28	.07
FC332-06	.38	.62	250	1000	3.00	28	.13
FC332-08	.50	.75	250	1000	5.00	28	.15
FC332-10	.63	.91	250	1000	6.00	18	.20
FC332-12	.75	1.03	250	1000	7.00	18	.24

FC498 APQ Hose



FC498 AQP Hose

Construction

AQP elastomer tube, textile braid reinforcement, AQP elastomer cover.

Application

Low pressure valve and cylinder return lines in hydraulic systems. Not approved for air brake applications.

Operating Temperature Range

-40°F. to +300°F.
(-40°C. to +150°C.).

Fittings

Crimped.

*See temperature range notes on page 3.

Exceeds 100R6 intermittent temperature requirements.

Aeroquip FC498 AQP hose is specifically designed for low pressure valve and cylinder return line applications. The superior performance of the AQP elastomer permits continuous operating temperatures to 300 degrees F. and greatly exceeds the intermittent temperature capabilities of other SAE100R6 hose.

The AQP elastomer tube in FC498 hose withstands long exposure to an extensive array of industrial fluids and is compatible with water, air, gasoline, fuel, petroleum-based and fire resistant hydraulic fluids and lubricating oils. FC498 hose resists temperature extremes (-40 degrees F. to +300 degrees F.), oxidation, ozone and the effects of shelf aging. W

Whenever low or continuous high temperatures or fluid compatibility is a problem, FC498 hose provides the ideal solution for low pressure applications. FC498 hose and fittings are not approved for air brake applications.

Part Number	Hose I.D. (inches)	Hose O.D. (inches)	Maximum Operating Pressure (psi)	Minimum Burst Pressure (psi)	Minimum Bend Radius (inches)	Vacuum Service (in./Hg)	Weight Per Ft. (lbs.)
FC498-04	.25	.50	400	1600	2.50	28	.08
FC498-06	.38	.62	400	1600	3.00	28	.12
FC498-08	.50	.78	400	1600	4.00	28	.15
FC498-10	.62	.91	350	1400	5.00	18	.20
FC498-12†	.75	1.03	350	1400	7.00	18	.24

†Does not comply with SAE100R6.

2661 APQ Hose



2661 AQP Hose

Exceeds SAE100R4 Performance.

Construction

AQP elastomer tube, reinforcement consisting of a helical wire between an inner and outer textile braid and blue AQP cover.

Application

Suction and transfer applications for petroleum and industrial phosphate-ester hydraulic fluids, fuel and lubricating oils, gasoline, water and many other industrial fluids.

Operating Temperature Range

-40°F. to +300°F.
(-40°C. to +150°C.).*

Reusable Fittings

Nipple and Clamp.

Crimped Fittings

Sizes -12 through -48 only.

*See temperature range notes on page 3.

Hydraulic Suction and Chemical Transfer Hose.

Because of its AQP tube, Aeroquip 2661 AQP hose has versatility beyond normal SAE100R4 hydraulic suction applications. Its flexibility, light weight, smaller envelope dimensions and almost universal fluid compatibility permit extensive use in chemical plants and tank truck applications.

Unlike common rubber compounds, the AQP tube has proved resistant to many concentrated acids, solvents, petroleum products, as well as petroleum-base and industrial fire resistant hydraulic fluids, extending user service life. All this at a lower cost than most competitive chemical transfer hoses.

Part Number	Hose I.D. (inches)	Hose O.D. (inches)	Maximum Operating Pressure (psi)	Minimum Burst Pressure (psi)	Minimum Bend Radius (inches)	Vacuum Service (in./Hg)	Weight Per Ft. (lbs.)
2661-12	.75	1.25	300†	1200	5.00	28	.42
2661-16	1.00	1.50	250†	1000	6.00	28	.50
2661-20	1.25	1.80	200†	800	8.00	28	.90
2661-24	1.50	2.08	150†	600	10.00	28	1.13
2661-32	2.00	2.50	100†	400	12.00	28	1.30
2661-40	2.50	3.06	62†	250	14.00	28	1.72
2661-48	3.00	3.57	56†	225	18.00	28	1.96
2661-64	4.00	4.69	50†	200	24.00	28	3.08

†Maximum operating pressure with band clamp type fitting is 50 psi.

Hose Assembly Made Easy

AQP Hoses

MatchMate BLUE™ Hose Styles GH194 and GH195 join four other steel braided hydraulic hose offerings now used with the MatchMate Plus™ Crimp Hose Assembly System.

All six hoses are available in popular sizes and can be quickly selected and assembled with factory quality results using either the Aeroquip ProCrimp™ 1380 or 1390 hose crimp machine below.



Hose Assembly Made Easy

ProCrimp 1380

Featuring an electronic control pad with 10 programmable pre-set buttons for your most popular hose styles, the ProCrimp 1380 crimp machine crimps hydraulic hose including four spiral varieties, through 1 1/4" I.D.



ProCrimp 1390

Able to crimp hydraulic hose assemblies in sizes through 2 inch I.D., the ProCrimp 1390 crimp machine has the capacity and force to accommodate all crimp fitting styles produced by Aeroquip in the Americas. Like the ProCrimp 1380, the ProCrimp 1390 is designed to deliver accurate, repeatable and dependable performance through use of programmable electronic controls.



Notes

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Aeroquip

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