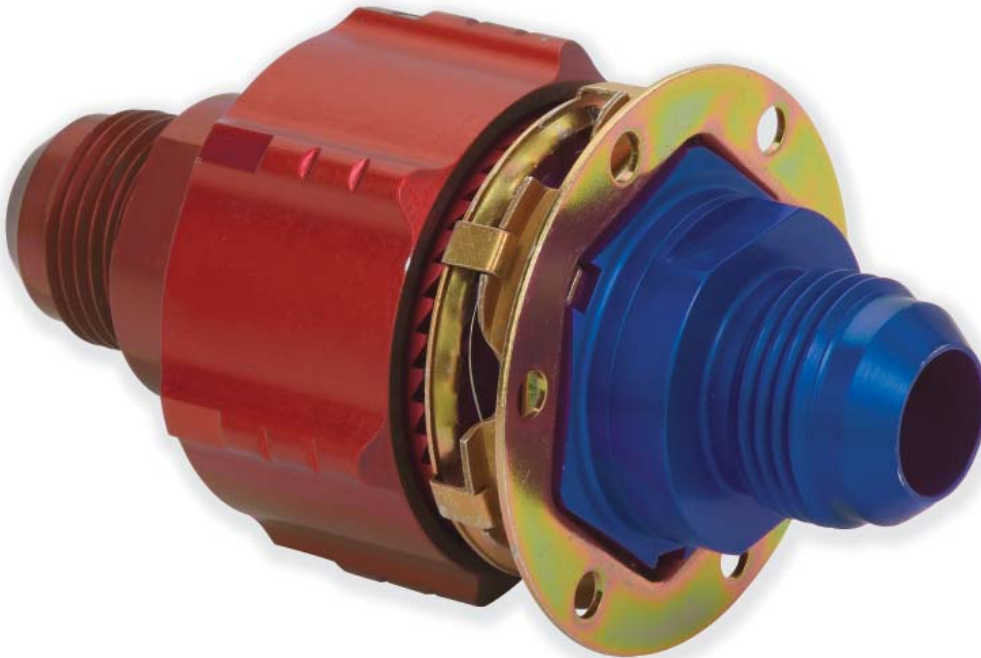


Aeroquip® Brand
145/155 Series Hydraulic Self Sealing Coupling

Fully interchangeable with all fielded Eaton's Aeroquip brand 145/155 Series Couplings and is the only approved coupling to SAE AS5440



Powering Business Worldwide

Table of Contents

Introduction	3
Table on Dimensions for Red Oil and Phosphate-Ester (Skydrol) Applications	4
Dust Cap and Plug Assemblies for Red Oil and Skydrol Applications	5
Pressure Loss vs. Flow	5
Principles of Operation	5
145/155 Series Couplings – Style I & II	6
145/155 Series Couplings – Style III & IV	7

FAILURE OR IMPROPER SELECTION, USE, OR ASSEMBLY OF THE PRODUCTS AND COMPONENTS FOR APPLICATIONS DESCRIBED HEREIN CAN RESULT IN POSSIBLE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

This document and any other related information from Eaton's Aeroquip brands or its affiliates and authorized distributors, provide product options for consideration by

Users having technical expertise with these products. Due to the wide variety of applications and operating conditions for these products and components, the User is solely responsible for making the final selection of the products and ensuring that all performance, safety and warning requirements for the User's intended application are met. Eaton's Aeroquip recommends that Eaton's Aeroquip brand

hose, fittings or assembly equipment must be used only with other Eaton's Aeroquip brand hose, fittings or assembly equipment, and Eaton Aeroquip and/or its affiliates disclaim any obligation or liability (including all incidental and consequential damages) to the extent Eaton's Aeroquip brand hose, fittings or assembly equipment is used with any other manufacturer's hose, fittings or assembly equipment or in the event that

Eaton's Aeroquip brand recommended processes and product instructions for hose assemblies are not followed. The products described herein, including product features, specifications, designs, and availability are subject to change at any time without notice.

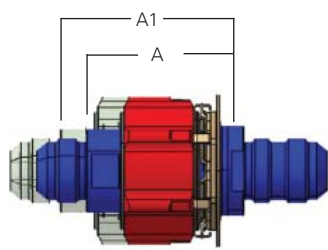
Aircraft and Ground Service Quick Disconnects . . . in accordance with MIL-C-5502 and the only Quick Disconnect approved to SAE AS5440 for Type II (-65°F to + 275°F) Hydraulic System use.

Eaton's Aeroquip brand 145-155 Series Coupling has long been the standard for ground service quick disconnects for virtually all U.S. Military aircraft. Its dependability has been proven with over 60 years of excellent service history. During this time of service, Eaton has continuously improved the design to increase its reliability, safety and ease of operation.

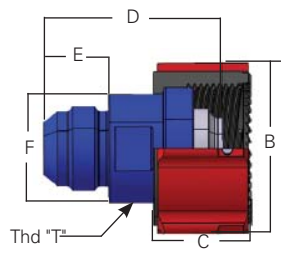
All coupling quick disconnects meet the performance requirements of **MIL-DTL-25427B** for the pressure ratings listed in this bulletin.



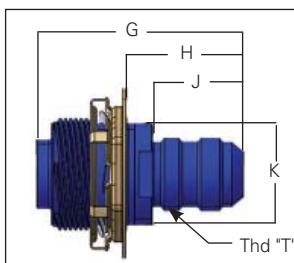
145/155 Series Self Sealing Coupling



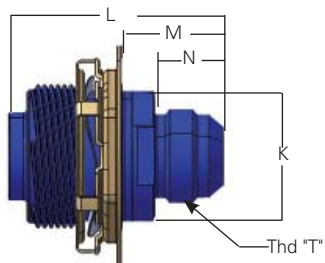
Coupling Dimensions
(Style I shown)



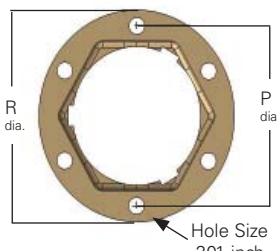
Female/Hose Attaching Half
(Style I&II shown)



Male/Bulkhead Mounting Half
(Style I shown)



Male/Bulkhead Mounting Half
(Style II shown)



Male/Bulkhead Mounting Flange

End Fitting by Style

		Female	Male
Flared	Style I	AS4395	AS4396
	Style II	AS4395	AS4395
Flareless	Style III	AS33514	AS33515
	Style IV	AS33514	AS33514

Dimensions shown are the same for MIL-H-83282 and Skydrol applications.
Dimensions shown in inches/mm.

Tube End Size	-4	-5	-6	-8	-10	-12	-16	-20	-24
Operating Pressure (psig)	3000	3000	3000	3000	3000	3000	3000	1000	1000
A	2.03/52	1.90/48	2.09/53	2.09/53	2.93/74	2.76/70	3.61/92	3.00/76	2.83/72
A1	3.02/77	2.89/73	3.21/82	3.21/82	3.94/100	3.77/96	4.26/108	3.90/99	4.01/102
B	1.57/40	1.57/40	1.78/45	1.78/45	2.43/62	2.43/62	2.71/69	3.13/80	3.42/87
C	0.93/24	0.93/24	1.07/27	1.07/27	1.31/33	1.31/33	1.55/39	1.12/28	1.24/31
D, STYLE I & II	1.61/41	1.48/38	1.79/45	1.90/48	2.47/63	2.40/61	2.60/66	2.49/63	2.70/69
D, STYLE III & IV	1.61/41	1.48/36	1.79/45	1.90/48	2.33/59	2.23/57	2.55/65	2.51/64	2.70/69
E, STYLE I & II	0.55/14	0.55/14	0.56/14	0.66/17	0.76/19	0.86/22	0.91/23	0.96/24	1.08/27
E, STYLE III & IV	0.55/14	0.55/14	0.55/14	0.65/17	0.62/16	0.69/18	0.69/18	0.69/18	0.69/18
F	0.74/19	0.74/19	0.95/24	0.95/24	1.37/35	1.37/35	1.62/41	1.87/47	2.13/54
G, STYLE I	2.16/55	2.16/55	2.54/65	2.72/69	3.10/79	3.29/84	3.49/88	3.33/85	3.45/88
G, STYLE III	2.19/56	2.19/56	2.53/64	2.67/68	3.11/79	3.22/82	3.41/87	3.21/82	3.31/84
H, STYLE I	1.10/28	1.10/28	1.30/33	1.48/38	1.67/42	1.86/47	1.79/45	1.83/46	1.82/46
H, STYLE III	1.13/29	1.13/29	1.29/33	1.43/36	1.68/43	1.79/45	1.71/43	1.71/43	1.68/43
J, STYLE I	0.91/23	0.91/23	0.99/25	1.17/30	1.26/32	1.45/37	1.45/37	1.50/38	1.52/39
J, STYLE III	0.94/24	0.94/24	0.98/25	1.12/28	1.27/32	1.38/35	1.37/35	1.38/35	1.38/35
K	0.80/20	0.80/20	1.03/26	1.03/26	1.47/37	1.47/37	1.74/44	1.99/51	2.25/57
L, STYLE II	1.80/46	1.80/46	2.10/53	2.20/56	2.60/66	2.70/69	2.95/75	2.79/71	3.01/76
L, STYLE IV	1.71/43	1.71/43	2.02/51	2.11/54	2.47/63	2.53/64	2.73/69	3.04/77	3.09/78
M, STYLE II	0.74/19	0.74/19	0.85/22	0.96/24	1.17/30	1.28/33	1.25/32	1.29/33	1.11/28
M, STYLE IV	0.67/17	0.67/17	0.79/20	0.87/22	1.04/26	1.03/26	1.03/26	1.19/30	1.45/37
N, STYLE II	0.55/14	0.55/14	0.55/14	0.65/17	0.76/19	0.86/22	0.91/23	0.96/24	1.08/27
N, STYLE IV	0.45/12	0.45/12	0.47/12	0.56/14	0.63/16	0.69/18	0.69/18	0.69/18	0.68/17
P	1.44/37	1.44/37	1.69/43	1.69/43	2.13/54	2.13/54	2.38/60	2.63/69	2.88/73
R	1.81/46	1.81/46	2.01/51	2.01/51	2.50/64	2.50/64	2.75/70	3.00/76	3.25/83
Thread T	.4375-20	.500-20	.0625-18	.750-16	.875-14	1.0625-12	1.3125-12	1.625-12	1.875-12
Wt (lbs/kg) Style I	0.261/.118	0.259/.117	0.399/.181	0.409/.185	0.894/.405	0.922/.418	1.278/.579	1.418/.643	1.659/.752
Wt (lbs/kg) Style II	0.258/.117	0.255/.115	0.393/.178	0.386/.175	0.882/.400	0.889/.403	1.241/.562	1.362/.617	1.578/.715
Wt (lbs/kg) Style III	0.261/.118	0.259/.117	0.399/.181	0.404/.183	0.894/.405	0.909/.412	1.246/.565	1.449/.657	1.592/.722
Wt (lbs/kg) Style IV	0.257/.116	0.253/.114	0.390/.176	0.389/.176	0.876/.397	0.878/.398	1.200/.544	1.375/.623	1.517/.688

Example For Ordering

TB155-S4-4D

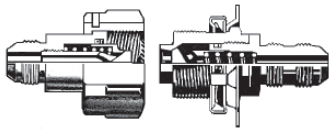
Size & Material
(Tube O.D. in 1/16's)

Bulkhead Half
(Includes Flange & Lockspring Assembly)

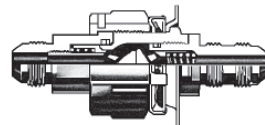
Basic Number - designates end style

Principles of Operation

The 145/155 series couplings incorporating quick-lead blunt start threads are connected/disconnected by hand with a simple turning motion. During connection, ratchet teeth on the inner sleeve of the union nut engage a unique lock spring assembly assuring positive locking event under extreme vibration. The lock is automatically released during disconnection.



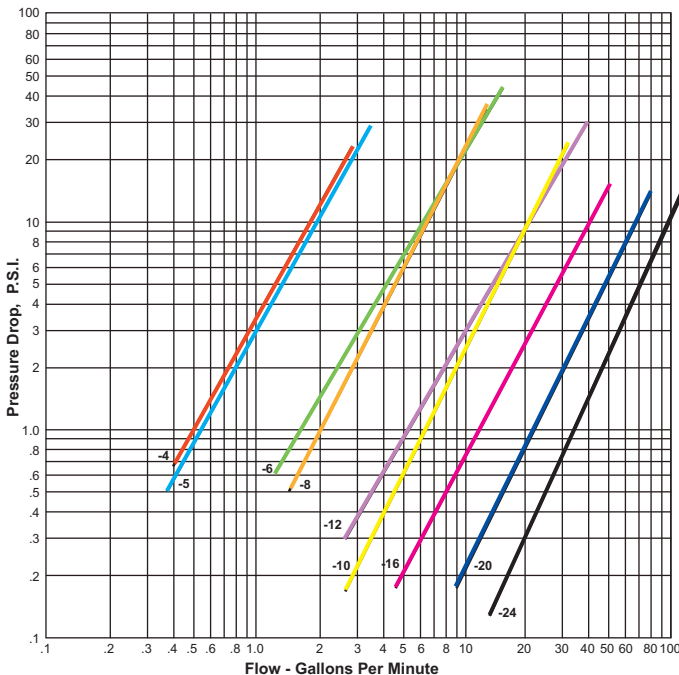
Uncoupled



Coupled

Pressure Loss vs. Flow (MIL-PRF-5606)

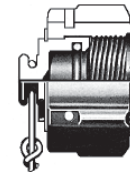
To find the pressure loss for a given coupling size at a given flow rate, 1) find flow rate at the bottom of the chart and read up until the line intersects the curve for the coupling size in questions, or 2) read across to find the pressure loss.



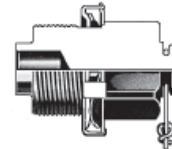
Dust Cap and Plug Assemblies for Red Oil and Skydrol Applications

Union nut, lock springs, flange, dust plug and dust cap size 5 is used on coupling half sizes 4 and 5; size 8 on coupling half sizes 6 and 8; and size 12 on coupling half sizes 10 and 12.

Chain size 5 is used on dust cap size 5 only; Chain size 8 is used on plug sizes 5, 8 and 12 and cap sizes 8 and 12; Chain size 12 is used on cap and plug sizes 16, 20, and 24.



Chain Assembly:
5100-S10-size



Dust Caps

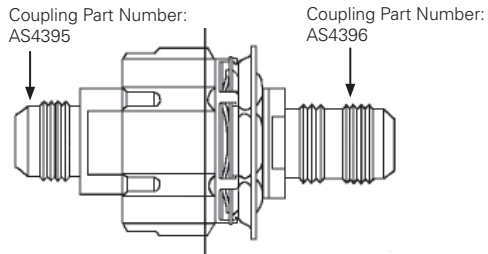
Size	Hydraulic	Skydrol
-4-5	155S7-5D	015567S7-5D
-6-8	155S7-8D	015567S7-8D
-10-12	155S7-12D	015567S7-12D
-16	155S7-16D	015567S7-16D
-20	145S7-20D	015567S7-20D
-24	145S7-24D	015567S7-24D

Dust Plugs

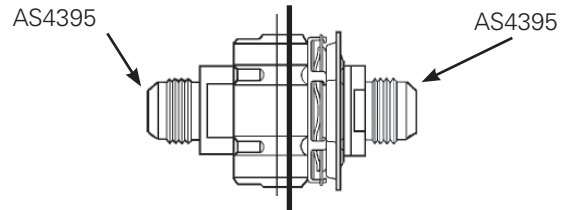
Size	Hydraulic	Skydrol
-4-5	155S9-5D	015567S9-5D
-6-8	155S9-8D	015567S9-8D
-10-12	155S9-12D	015567S9-12D
-16	155S9-16D	015567S9-16D
-20	145S9-20D	014567S9-20D
-24	145S9-24D	014567S9-24D

145/155 Series Self Sealing Coupling — Styles I & II

STYLE I



Style II



STYLE I — MIL-H-5606/MIL-H-83282

Size	Hose Attaching Half	Bulkhead Mounting Half
-4	155S5-4D	TB155S4-4D
-5	155S5-5D	TB155S4-5D
-6	155S5-6D	TB155S4-6D
-8	155S5-8D	TB155S4-8D
-10	155S5-10D	TA155S4-10D
-12	155S5-12D	TA155S4-12D
-16	155S5-16D	TA155S4-16D
-20	145S5-20D	B145S4-20D
-24	145S5-24D	B145S4-24D

STYLE II MIL-H-5606/MIL-H-83282

Size	Hose Attaching Half	Bulkhead Mounting Half
-4	155S5-4D	TB015519S4-4D
-5	155S5-5D	TB015519S4-5D
-6	155S5-6D	TB015519S4-6D
-8	155S5-8D	TB015519S4-8D
-10	155S5-10D	T015519S4-10D
-12	155S5-12D	T015519S4-12D
-16	155S5-16D	015519S4-16D
-20	145S5-20D	014519S4-20D
-24	145S5-24D	014519S4-24D

STYLE I PHOSPHATE ESTER

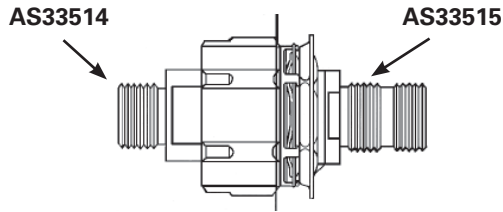
Size	Hose Attaching Half	Bulkhead Mounting Half
-4	015567S5-4D	015567S4-4D
-5	015567S5-5D	015567S4-5D
-6	015567S5-6D	015567S4-6D
-8	015567S5-8D	015567S4-8D
-10	015567S5-10D	015567S4-10D
-12	015567S5-12D	015567S4-12D
-16	015567S5-16D	015567S4-16D
-20	014567S5-20D	014503S4-20D
-24	014567S5-24D	014503S4-24D

STYLE II PHOSPHATE ESTER

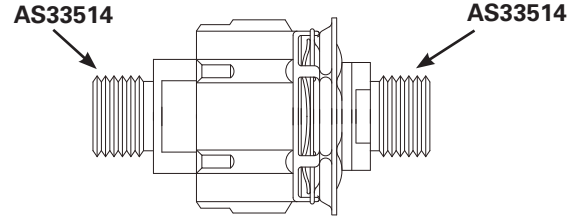
Size	Hose Attaching Half	Bulkhead Mounting Half
-4	015567S5-4D	015614S4-4D
-5	015567S5-5D	015614S4-5D
-6	015567S5-6D	015614S4-6D
-8	015567S5-8D	015614S4-8D
-10	015567S5-10D	015614S4-10D
-12	015567S5-12D	015614S4-12D
-16	015567S5-16D	015614S4-16D
-20	014567S5-20D	014614S4-20D
-24	014567S5-24D	014614S4-24D

145/155 Series Self Sealing Coupling — Style III & IV

Style III



Style IV



STYLE III MIL-H-5606/MIL-H-83282

Size	Hose Attaching Half	Bulkhead Mounting Half
-4	3065S5-4D	TB3005S4-4D
-5	3065S5-5D	TB3005S4-5D
-6	3065S5-6D	TB3005S4-6D
-8	3065S5-8D	TB3005S4-8D
-10	3065S5-10D	B3005S4-10D
-12	3065S5-12D	B3005S4-12D
-16	3065S5-16D	3070S4-16D
-20	3065S5-20D	A3005S4-20D
-24	3065-S5-24D	B3005S4-24D

STYLE IV MIL-H-5606/MIL-H-83282

Size	Hose Attaching Half	Bulkhead Mounting Half
-4	3065S5-4D	3018S4-4D
-5	3065S5-5D	3018S4-5D
-6	3065S5-6D	3018S4-6D
-8	3065S5-8D	3018S4-8D
-10	3065S5-10D	3018S4-10D
-12	3065S5-12D	3018S4-12D
-16	3065S5-16D	3018S4-16D
-20	3065S5-20D	3018S4-20D
-24	3065S5-24D	3018S4-24D

STYLE III SKYDROL

Size	Hose Attaching Half	Bulkhead Mounting Half
-4	306503S5-4D	300503S4-4D
-5	306503S5-5D	300503S4-5D
-6	306503S5-6D	300503S4-6D
-8	306503S5-8D	300503S4-8D
-10	306503S5-10D	300503S4-10D
-12	306503S5-12D	300503S4-12D
-16	306503S5-16D	300503S4-16D
-20	306503S5-20D	300503S4-20D
-24	306503S5-24D	300503S4-24D

STYLE IV SKYDROL

Size	Hose Attaching Half	Bulkhead Mounting Half
-4	306503S5-4D	AE98104E
-5	306503S5-5D	AE98104F
-6	306503S5-6D	AE98104G
-8	306503S5-8D	AE98104H
-10	306503S5-10D	AE98104J
-12	306503S5-12D	AE98104K
-16	306503S5-16D	AE98104M
-20	306503S5-20D	AE97028N
-24	306503S5-24D	AE97028P

Eaton
Aerospace Group
9650 Jeronimo Road
Irvine, California 92618
Phone: (949) 452 9500
Fax: (949) 452 9555
www.eaton.com/aerospace

Eaton
Aerospace Group
Conveyance Systems Division
300 South East Avenue
Jackson, Michigan 49203
Phone: (517) 787 8121
Fax: (517) 787 5758

Eaton
Aerospace Group
Conveyance Systems Division
90 Cleary Connector
Eastanollee, Georgia 30538
Phone: (706) 779 3351
Fax: (706) 779 2638

Eaton
Aerospace Group
Conveyance Systems Division
11642 Old Baltimore Pike
Beltsville, Maryland 20705
Phone: (301) 937 4010
Fax: (301) 937 0134

Eaton
Aerospace Group
Conveyance Systems Division
15 Pioneer Ave.
Warwick, Rhode Island 02888
Phone: (401) 781 4700
Fax: (401) 785 4614

Eaton
Aerospace Group
Conveyance Systems Division
9650 Jeronimo Road
Irvine, California 92618
Phone: (949) 452 9500
Fax: (949) 452 9992

Eaton
Aerospace Group
Conveyance Systems Division
Broad Ground Road
Lakeside, Redditch
Worcestershire B98 8YS
United Kingdom
Phone: (44) 152 751 7555
Fax: (44) 152 751 7556

Eaton S.A.
Aerospace Group
Conveyance Systems Division
2 Rue Lavoisier BP 54 78310
Coignieres, France
Phone: (33) 130 69 30 00
Fax: (33) 130 69 30 56

Eaton LTD
Aerospace Group
Conveyance Systems Division
Chemin De Pau
64121 Serres-Castet
France
Phone: (33) 559 333 864
Fax: (33) 559 333 865

Eaton GmbH
Aerospace Group
Conveyance Systems Division
Rudolf-Diesel-Strasse 8
82205 Gilching
Germany
Phone: 49 (0) 8105 7530
Fax: 49 (0) 8105 7555

Vickers Systems Pte Ltd
Aerospace Group
Conveyance Systems Division
Lot 512, Jalan Delima, Batamindo
Industrial Park
Batam 29433, Indonesia
Phone: (62) 770 611823
Fax: (62) 770 611821