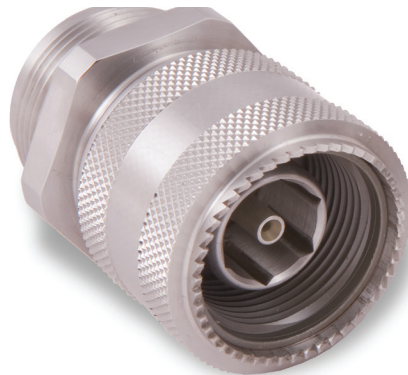
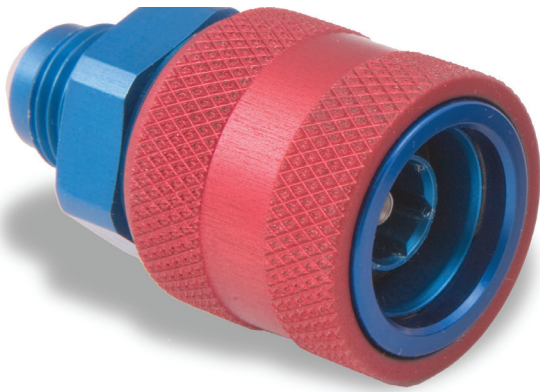




Low Profile Self Sealing Couplings

2000 and 2001 Opposed Poppet Series

Qualified to MIL-C-7413B Type I, Class A and Type II, Class B

Eaton's Aeroquip Low Profile 2000 and 2001 Series Couplings are used wherever a fast, safe connection is required for fuel and lube oil systems. These couplings provide lighter weight and smaller envelope size when compared to couplings which meet MIL-C-7413A.

The 2000 Series coupling easily connects by rotating the union mechanism and engaging the ratchet teeth. This positive thread action

permits connection against line pressures to 60 psi (413.68 kPa). The opposed poppet valve design provides a smooth, straight through fluid flow and low pressure drop.

The 2001 Series coupling shares the same design characteristics as the 2000 Series coupling. The difference is the connecting mechanism. The 2001 Series is quickly connected and disconnected with a simple push-pull motion. Both low-profile coupling series feature electrical continuity.

2000 Series Couplings

Low profile ratchet lock couplings for fuel and oil applications are available with various end fitting combinations. Select the base part number for coupling halves from the table on page 3. Complete the part number by adding the letter code (for size) to the base number, e.g. AE80827E.

Couplings for other fluids and end fitting styles are available. Dust caps and plugs are available for all sizes. Contact Eaton for further information or to order.



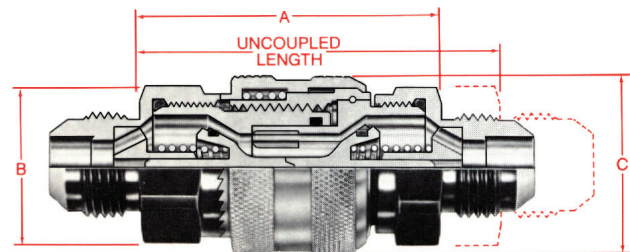
Series 2000 Coupling Assembly

Design Data

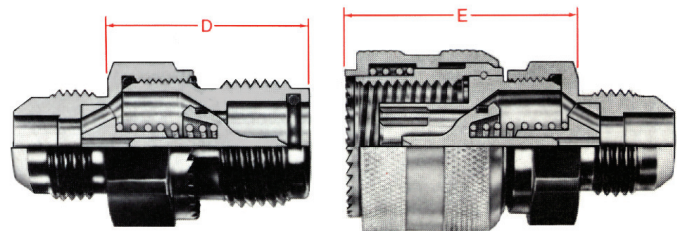
Application:	MIL-C-7413B Type I, Class A - Fuel MIL-C-7413B Type II, Class B - Lube Oil
Temperature Range:	-65°F to +160°F (-54°C to +71°C) — Type I, Class A -65°F to +350°F (-54°C to +177°C) — Type II, Class B
Electrical Resistance:	1 ohm - connected
Pressure:	Operating — 600 psig (41,38 Bar) Proof — 900 psig (62,06 Bar) Minimum Burst — 1800 psig (123,13 Bar)
Basic Material:	Aluminum
Packings:	Fluorocarbon and fluorosilicone

Dimensional Data

See chart on page 3.



Coupling Assembly



Coupling Half
Bulkhead Mounting

Coupling Half
Hose Attaching

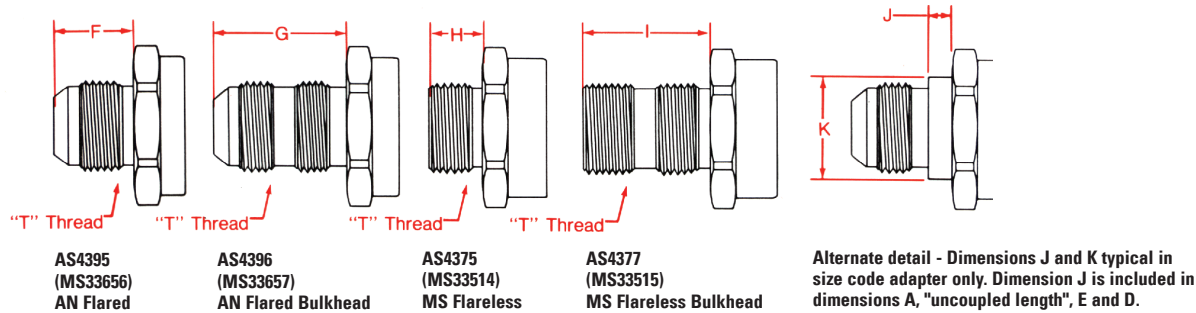
Styles and Part Numbers

Coupling Half		Style I AS4395		Style II AS4396 AS4395		Style III AS4375 AS4375		Style IV AS4377 AS4375	
Application		Fuel	Lube Oil	Fuel	Lube Oil	Fuel	Lube Oil	Fuel	Lube Oil
Specification		MIL-C-7413B Type I, Class A	MIL-C-7413B Type II, Class B	MIL-C-7413B Type I, Class A	MIL-C-7413B Type II, Class B	MIL-C-7413B Type I, Class A	MIL-C-7413B Type II, Class B	MIL-C-7413B Type I, Class A	MIL-C-7413B Type II, Class B
Part Number	Coupling Half P/N Bulkhead Mounting	AE80825	AE80831	AE80824	AE80830	AE80828	AE80834	AE80827	AE80833
	Coupling Half P/N Hose Attaching	AE80826	AE80832	AE80826	AE80832	AE80829	AE80835	AE80829	AE80835

Select the base part number for coupling halves from the table above. Complete the part number by adding the letter code (for size) to the base number (e.g. AE80827E).

To determine overall length, add the end fitting dimension for each end (dimension F, G, H or I from below) to the base assembly length (A or "uncoupled" dimension) for the desired coupling style. For coupling half length, add end fitting dimensions to the basic length (dimension D or E).

End Fitting Dimensions



Dimensions shown in inches (mm). Weights shown in pounds (kg).

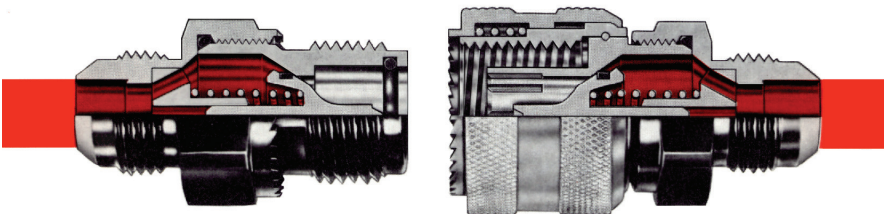
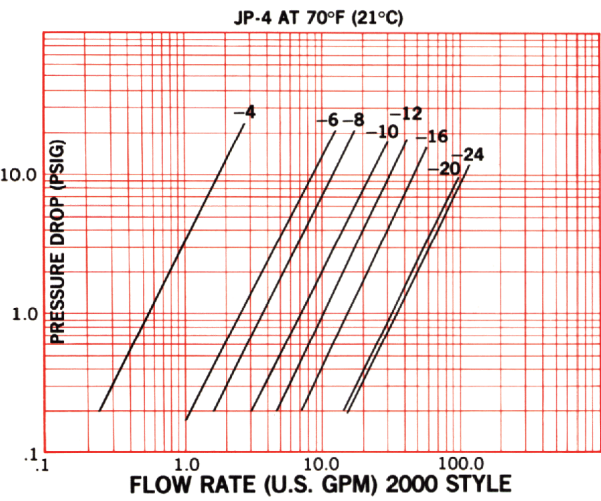
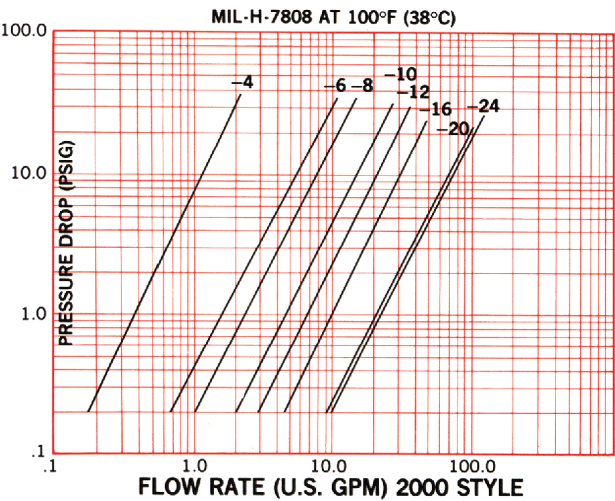
Letter Code		E	G	H	J	K	M	N	P
Tube Size		1/4	3/8	1/2	5/8	3/4	1	1-1/4	1-1/2
Dimensions	A	1.60 (40,640)	1.80 (45,720)	1.91 (48,514)	2.275 (57,785)	2.39 (60,706)	2.569 (65,253)	4.070 (103,378)	3.388 (86,055)
	Uncoupled Length	2.168 (55,067)	2.48 (62,992)	2.637 (66,980)	3.242 (82,347)	3.353 (85,166)	3.856 (97,942)	5.73 (145,542)	5.04 (128,016)
	B	.820 (20,828)	.970 (24,638)	1.170 (29,718)	1.450 (36,830)	1.520 (38,608)	1.790 (45,466)	2.400 (60,960)	2.400 (60,960)
	C	.920 (23,368)	1.000 (25,400)	1.190 (30,226)	1.480 (37,592)	1.640 (41,656)	1.910 (48,514)	2.400 (60,960)	2.400 (60,960)
	D (Max.)	.985 (25,019)	1.135 (28,829)	1.163 (29,540)	1.468 (37,287)	1.561 (39,649)	1.890 (48,006)	2.663 (67,640)	2.208 (56,083)
Weight	Style I	.082 (0,037)	.114 (0,052)	.173 (0,079)	.312 (0,142)	.414 (0,188)	.618 (0,281)	1.195 (0,543)	1.127 (0,512)
	Style II	.087 (0,039)	.122 (0,055)	.190 (0,086)	.336 (0,153)	.450 (0,204)	.664 (0,302)	1.234 (0,560)	1.181 (0,536)
	Style III	.080 (0,036)	.110 (0,050)	.169 (0,077)	.298 (0,135)	.394 (0,179)	.580 (0,263)	1.146 (0,520)	1.034 (0,469)
	Style IV	.085 (0,037)	.118 (0,054)	.183 (0,083)	.318 (0,144)	.430 (0,195)	.626 (0,284)	1.200 (0,545)	1.120 (0,509)
	E (Max.)	1.229 (31,217)	1.397 (35,484)	1.518 (38,557)	1.817 (46,152)	1.835 (46,609)	2.013 (51,130)	3.064 (77,826)	2.609 (66,269)
Dimensions	Hex 1	.750 (19,050)	.875 (22,225)	1.062 (26,975)	1.312 (33,325)	1.375 (34,925)	1.625 (41,275)	2.125 (53,975)	2.125 (53,975)
	Hex 2	.750 (19,050)	.875 (22,225)	1.000 (25,400)	1.250 (31,750)	1.375 (34,925)	1.625 (41,275)	2.125 (53,975)	2.125 (53,975)
	F	.550 (13,970)	.556 (14,122)	.657 (16,688)	.758 (19,253)	.864 (21,946)	.911 (23,139)	.958 (24,333)	1.083 (27,508)
	G	1.047 (26,594)	1.125 (28,575)	1.281 (32,537)	1.422 (36,119)	1.593 (40,462)	1.593 (40,462)	1.640 (41,656)	1.656 (42,062)
	H	.453 (11,506)	.469 (11,913)	.562 (14,275)	.625 (15,875)	.688 (17,475)	.688 (17,475)	.688 (17,475)	.688 (17,475)
	I	.969 (24,613)	1.015 (25,781)	1.156 (29,362)	1.297 (32,944)	1.406 (35,712)	1.406 (35,712)	1.406 (35,712)	1.406 (35,712)
	J (Max.)							.465 (11,811)	.238* (6,045)
	K (Max.)							1.880 (47,752)	2.125* (53,975)
	"T" Thread	.4375-20 UNJF-3A	.5625-18 UNJF-3A	.7500-16 UNJF-3A	.8750-14 UNJF-3A	1.0625-12 UNJF-3A	1.3125-12 UNJF-3A	1.6250-12 UNJ-3A	1.8750-12 UNJ-3A

* with AS4375-24 fitting ends only

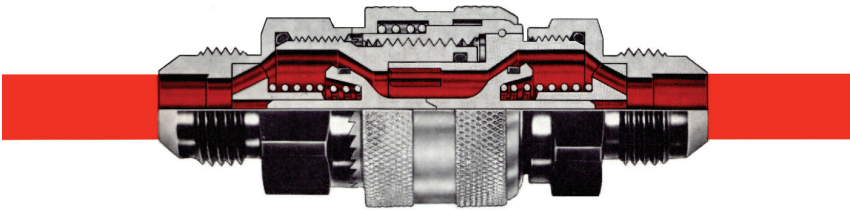
2000 Series Couplings

Pressure/Flow Charts

To find the pressure loss (difference between inlet and outlet pressures) for a given coupling size at a given flow rate: 1) find the flow rate at the bottom of the chart and read up until the line intersects the pressure curve for the coupling size in question, 2) read across to find the pressure loss.



Uncoupled



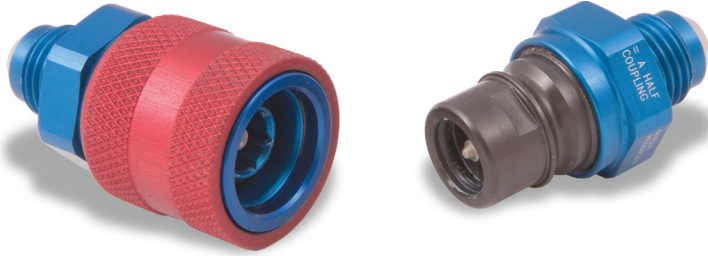
Coupled

2001 Series Couplings

Low profile quick disconnect couplings for fuel and oil applications are available with various end fitting combinations. Select the base part number for coupling halves from the table on page 6. Complete the part number by adding the

letter code (for size) to the base number, e.g. AE84027E.

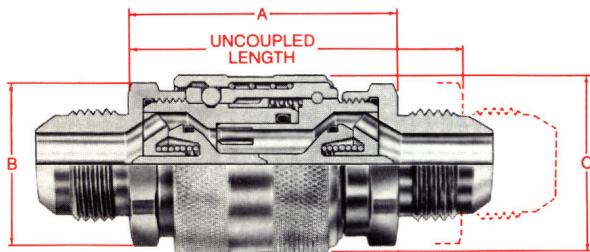
Couplings for other fluids and end fitting styles are available. Dust caps and plugs are available for all sizes. Contact Eaton for further information or to order.



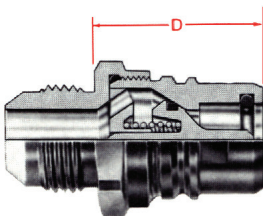
Series 2001 Coupling Assembly

Dimensional Data

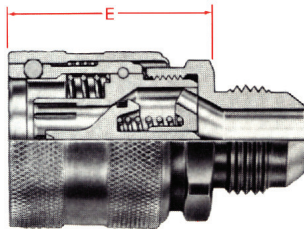
See chart on page 6.



Coupling Assembly



**Coupling Half
Bulkhead Mounting**



**Coupling Half
Hose Attaching**

2001 Series Couplings

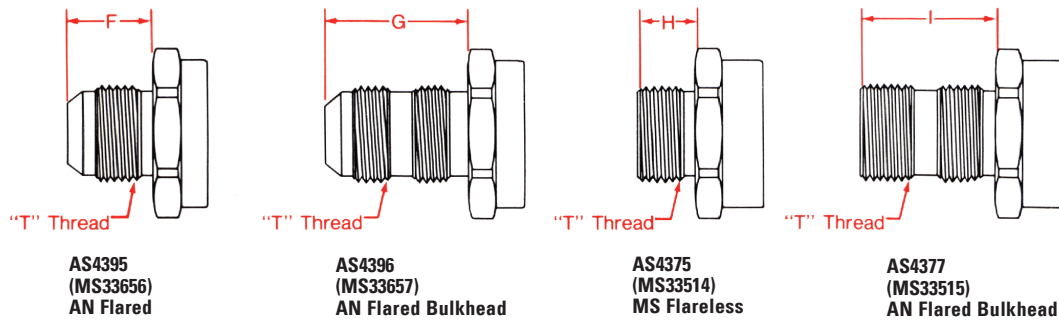
Styles and Part Numbers

Coupling Half		Style I AS4395 AS4395		Style II AS4396 AS4395		Style III AS4375 AS4375		Style IV AS4377 AS4375	
Application		Fuel	Lube Oil	Fuel	Lube Oil	Fuel	Lube Oil	Fuel	Lube Oil
Specification		MIL-C-7413B Type I, Class A	MIL-C-7413B Type II, Class B	MIL-C-7413B Type I, Class A	MIL-C-7413B Type II, Class B	MIL-C-7413B Type I, Class A	MIL-C-7413B Type II, Class B	MIL-C-7413B Type I, Class A	MIL-C-7413B Type II, Class B
Part Number	Coupling Half P/N	AE84022	AE84023	AE84024	AE84025	AE84026	AE84027	AE84028	AE84029
	Bulkhead Mounting	AE84030	AE80831	AE84030	AE84031	AE84032	AE84033	AE84032	AE84033

Select the base part number for coupling halves from the table, above. Complete part number by adding the letter code (for size) to the base number (e.g. AE84022E).

To determine overall length, add the end fitting dimension for each end (dimension F, G, H or I from below) to the base assembly length (A or "uncoupled" dimension) for the desired coupling style. For coupling half length, add end fitting dimensions to the basic length (dimension D or E).

End Fitting Dimensions

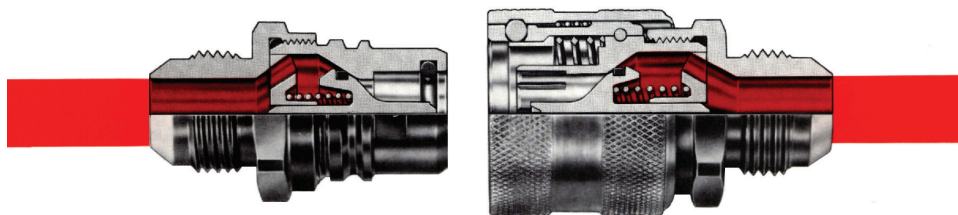
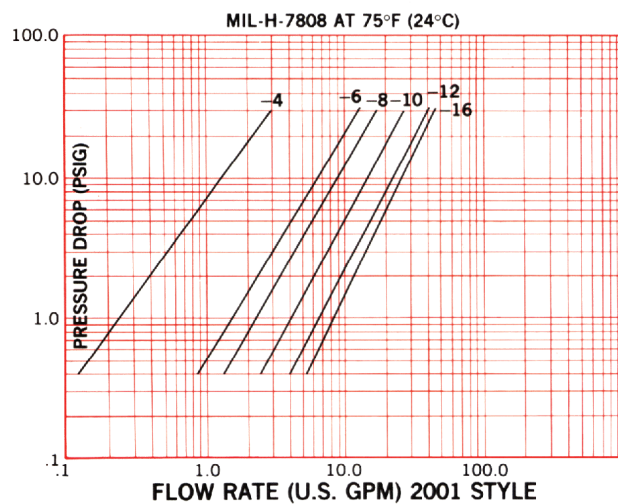
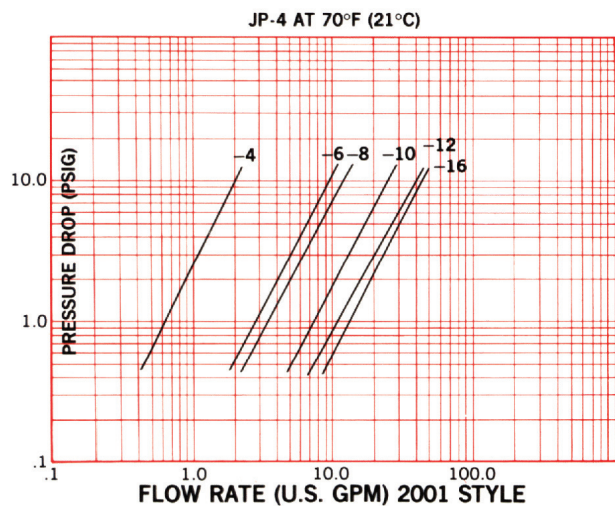


Dimensions shown in inches (mm). Weights shown in pounds (kg).

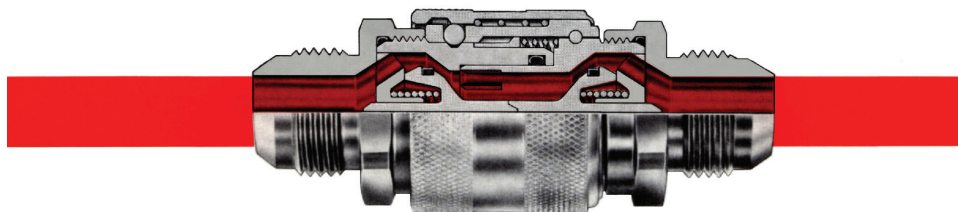
Letter Code		E	G	H	J	K	M
Tube Size		1/4	3/8	1/2	5/8	3/4	1
Dimensions	A	1.626 (41,300)	1.828 (46,431)	1.936 (49,174)	2.300 (58,420)	2.416 (61,366)	2.592 (65,837)
	Uncoupled Length	2.26 (57,40)	2.47 (62,74)	2.66 (67,56)	3.30 (83,82)	3.46 (87,88)	3.73 (94,74)
	B (Max.)	.820 (20,828)	.970 (24,638)	1.105 (28,067)	1.380 (35,052)	1.517 (38,532)	1.825 (46,355)
	C (Max.)	1.000 (25,4)	1.100 (27,94)	1.320 (33,528)	1.575 (40,005)	1.690 (42,926)	2.000 (50,8)
	D (Max.)	.983 (24,968)	1.133 (28,778)	1.163 (29,540)	1.468 (37,287)	1.560 (39,624)	1.689 (42,900)
Weight	Style I	.119 (0,054)	.132 (0,060)	.210 (0,095)	.353 (0,160)	.376 (0,170)	.814 (0,369)
	Style II	.130 (0,059)	.147 (0,066)	.238 (0,108)	.394 (0,178)	.431 (0,195)	.899 (0,408)
	Style III	.123 (0,055)	.136 (0,061)	.216 (0,098)	.356 (0,161)	.375 (0,170)	.817 (0,370)
	Style IV	.128 (0,058)	.144 (0,065)	.231 (0,105)	.378 (0,172)	.413 (0,188)	.866 (0,393)
Dimensions	E (Max.)	1.271 (32,283)	1.334 (33,884)	1.493 (37,922)	1.823 (46,304)	1.895 (48,133)	2.040 (51,816)
	Hex 1	.750 (19,050)	.875 (22,225)	1.000 (25,400)	1.250 (31,750)	1.375 (34,925)	1.625 (41,275)
	Hex 2	.750 (19,050)	.875 (22,225)	1.000 (25,400)	1.250 (31,750)	1.375 (34,925)	1.625 (41,275)
	F	.550 (13,970)	.657 (16,688)	.758 (19,253)	.864 (21,946)	.911 (23,139)	.911 (23,139)
	G	1.047 (26,594)	1.125 (28,575)	1.281 (32,537)	1.422 (36,119)	1.593 (40,462)	1.593 (40,462)
	H	.453 (11,506)	.469 (11,913)	.562 (14,275)	.625 (15,875)	.688 (17,475)	.688 (17,475)
	I	.969 (24,613)	1.015 (25,781)	1.156 (29,362)	1.297 (32,944)	1.406 (35,712)	1.406 (35,712)
	"T" Thread	.4375-20 UNJF-3A	.5625-18 UNJF-3A	.7500-16 UNJF-3A	.8750-14 UNJF-3A	1.0625-12 UNJF-3A	1.3125-12 UNJF-3A

Pressure/Flow Charts

To find the pressure loss (difference between inlet and outlet pressures) for a given coupling size at a given flow rate: 1) find the flow rate at the bottom of the chart and read up until the line intersects the pressure curve for the coupling size in question, 2) read across to find the pressure loss.



Uncoupled



Coupled

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