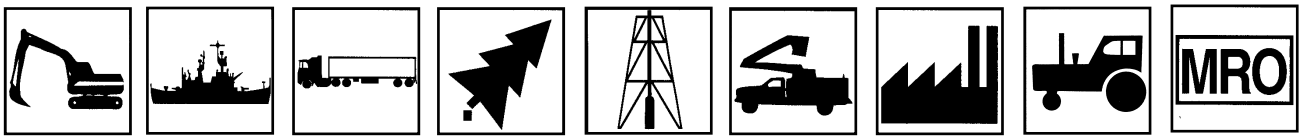
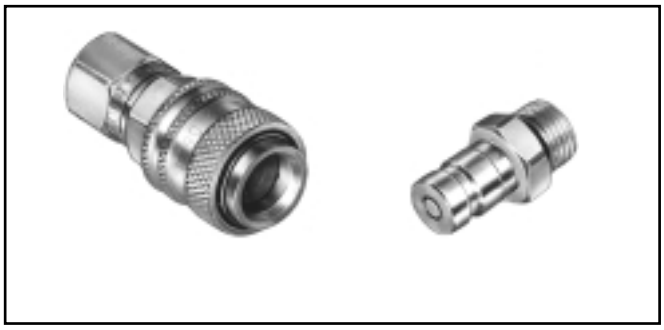
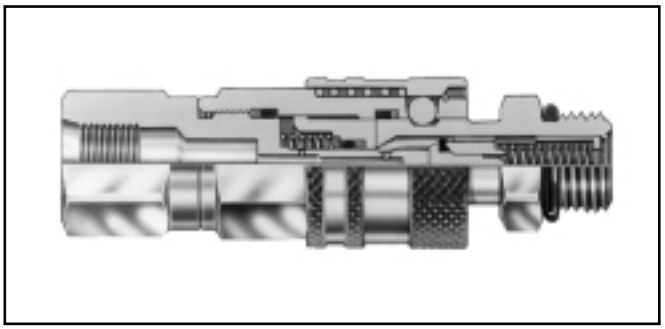
FD90 Series/SAE J1502 Interchange







The FD90 Series diagnostic coupling is designed to connect and disconnect pressure gauges to hydraulic systems, eliminating the need for permanent gauges. The maximum operating pressure is 7,000 psi.

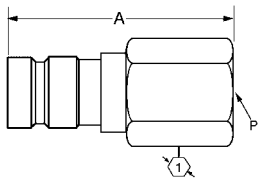
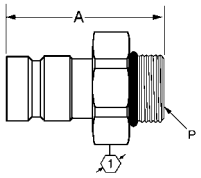
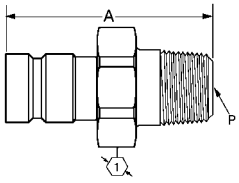
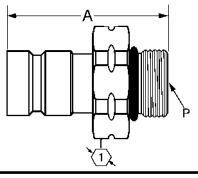
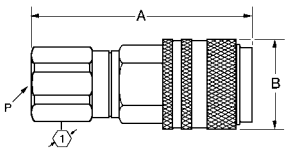
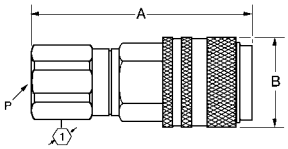
- Automatic sleeve for one hand push-to-connect operation.
- Flush face valving provides minimal fluid loss and low air inclusion.
- Self-sealing valve design allows connection and disconnection at 500 psi.
- Broad range of end configurations for system accessibility.
- Standard seal material – Buna-N.
- Standard body material – Zinc plated steel.

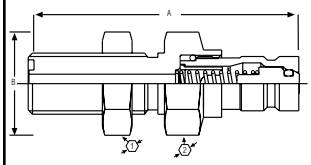
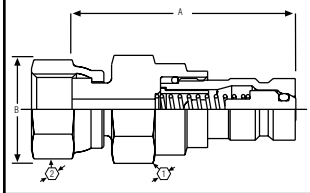
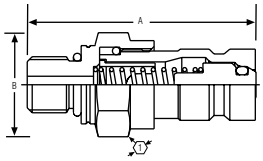
Diagnostic Kit* – FF10000-02

**Contact Eaton Aeroquip for additional information.*

Physical Characteristics

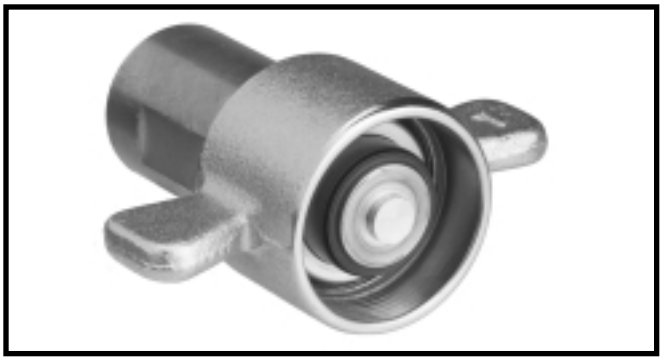
Coupling Size	Maximum Operating Pressure (psi)	Minimum Burst Pressure (psi)	Vacuum (in./Hg.)	Rated Flow (gpm)	Air Inclusion (cc. max.)	Fluid Loss (cc. max.)
-04	7,000	28,000	28	.50	0.02	0.10

FD90 Series	Coupling Size	Thread Size (P)	Dimensional Data A	B	(1)	Part Number Buna-N	Part Number with Dust Cap Buna-N	Line Ref.
Male Half Female Pipe/Valved 	–04	1/8-27	1.70		.62	FD90–1034–02–04	FD90–1035–02–04	1
	–04	1/4-18	1.90		.75	FD90–1034–04–04	FD90–1035–04–04	2
								3
								4
								5
								6
								7
								8
Male Half Male SAE O-Ring/Valved 	–04	3/8-24	1.52		.62	FD90–1044–03–04	FD90–1004–03–04	9
	–04	7/16-20	1.58		.62	FD90–1044–04–04	FD90–1004–04–04	10
	–04	1/2-20	1.32		.62	FD90–1044–05–04	FD90–1004–05–04	11
	–04	9/16-18	1.32		.69	FD90–1044–06–04	FD90–1004–06–04	12
								13
								14
								15
								16
Male Half Male Pipe/Valved 	–04	1/8-27	1.60		.62	FD90–1012–02–04	FD90–1045–02–04	17
	–04	1/4-18	1.49		.69	FD90–1012–04–04	FD90–1045–04–04	18
								19
								20
								21
								22
								23
								24
Male Half Metric Male O-Ring/Valved 	–04	M14x1.5	1.38		.75	FD90–1046–06–04	FD90–1047–06–04	25
								26
								27
								28
								29
								30
								31
Female Half Female Pipe/Valved 	–04	1/8-27	1.95	1.00	.75	FD90–1021–02–04	Dust Cap for Male Halves FD90–1040–04 	32
	–04	1/4-18	2.25	1.00	.75	FD90–1021–04–04		33
								34
								35
								36
								37
								38
								39
								40
Female Half Female SAE O-Ring/Valved 	–04	7/16-20	2.20	1.00	.75	FD90–1041–04–04		41
								42
								43
								44
								45
								46
								47
								48

FD90 Series	Coupling Size	Thread Size (P)	Dimensional Data A	B	1	2	Part Number Buna-N	Part Number with Dust Cap Buna-N	Line Ref.
Male Half Male ORS Bulkhead, Valved 	-04	9/16-18	2.46	.94	.81	.81	FD90-1206-04-04		1
									2
									3
									4
									5
									6
									7
									8
Male Half, Female ORS Swivel Valved 	-04	9/16-18	1.79	.87	.75	.69	FD90-1061-04-04		9
									10
									11
									12
									13
									14
									15
									16
Male Half Male Metric O-Ring ISO6149-2 Valved 	-04	M10x1	1.58	.72	.62		FD90-1090-10-04		17
									18
									19
									20
									21
									22
									23
									24

A Brief History of "Dry Break" Couplings

Quick Disconnect Couplings were first introduced with an opposed poppet-type valve. This economical valve type reduces spillage drastically, yet it remains measurable in whole cc's.*



As the number of applications for couplings grew, so did the demand for reduced spillage. Aeroquip responded with the patented tubular valve design which became standard in critical industrial and aerospace applications. Typically, fluid loss is measured in fractions of cc's per disconnection.

State-of-the-art valving was introduced with flush-face style couplings that provide fluid loss rates that are nearly unmeasurable. These couplings also provide one-hand push-to-connect and connect under limited pressure features, but require complete changeover fom poppet-style couplings.

Aeroquip now introduces patented DryBreak female coupling halves that mate with any ISO poppet-style male coupling half. This upgrade ensures virtually no-spill performance without the necessity of changing out any of the male halves.

*cc = cubic centimeters (28.4 cc = 1 oz.)