

FD48 Series Parker Bruning SM-250 Interchange



Eaton's FD48 Series coupling is poppet style quick disconnect coupling designed to interchange with Parker Bruning SM-250 couplings where excellent high and low pressure sealing is required. The FD48 operates with pressures up to 3,000 psi.

Product Features

- Self-sealing poppet valves provide excellent high and low pressure sealing
- PUSH-PULL™ ball latch design allows quick and easy connection and disconnection of fluid lines
- Heat-treated and plated steel for wear and corrosion resistance
- Standard seal material: Buna-N
- Standard seal material: High resistance carbon steel with zinc trivalent plating

Applications & Markets

- Hydraulic and fluid transfer
- Agricultural equipment

Physical Characteristics

Body Size (in)	Max. Operating Pressure		Min. Burst Pressure Connected		Vacuum Connected Only	Rated Flow		Air Inclusion	Fluid Loss
	(bar)	(psi)	(bar)	(psi)	(in./Hg)	(lpm)	(gpm)	cc. max.	cc.max.
1/4	210	3,000	840	12,000	28	11	3	.50	1.10

Dimensions (Female NPT, Valved)

Part Number Buna-N	Coupling Type	Body Size	Port Size	Thread	Type	Fig.	Dimensions					
							A		B		Hex Ⓛ	
							mm	(in)	mm	(in)	mm	(in)
FD48-1002-04-04	Plug/Male	1/4	1/4	1/4-18	Female NPT	1	36.8	(1.45)	-	-	19.0	(.75)
FD48-1001-04-04	Socket/Female	1/4	1/4	1/4-18	Female NPT	2	51.1	(2.01)	26.9	(1.06)	20.6	(.81)

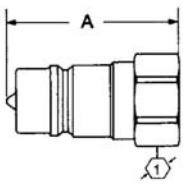


Figure 1

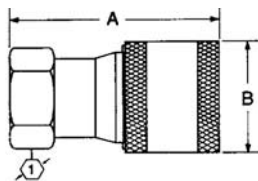
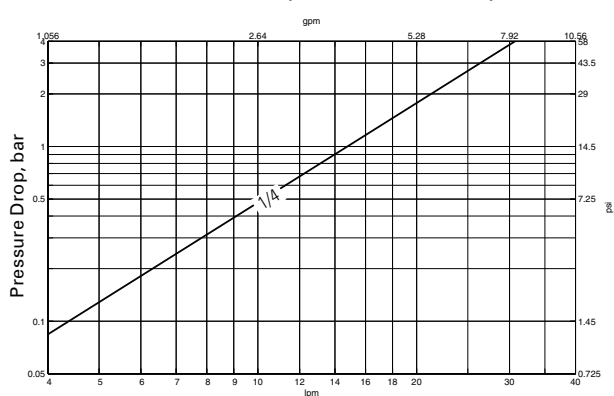


Figure 2

Flow Data

Pressure Drop Versus Flow Graph



Gallons Per Minute Flow
Test Fluid: MIL-H-5606 Oil at 100°F

Dust Cap/Plug

Part Number (Buna-N)	Body Size
FD48-1042-04*	1/4



Dust Cap/Plug

*Fits both plug/male and socket/female halves

FLUID TRANSFER
AND HYDRAULIC

PNEUMATIC

SPECIAL APPLICATIONS

DIAGNOSTIC

AGRICULTURE

REFRIGERANT

FD72/FD76 Series

Connect Under Pressure — Farm ISO 5675 Interchange



Eaton's FD72 Series coupling incorporates special valving allowing connection to a FD76 Series male half under pressure. The maximum operating pressure is 3,000 psi. Contains an over travel, self-sealing poppet valve construction for connecting to a pressurized male tip. Applications require that the tractor control valve be actuated to open the flow path and to equalize the pressure.

Product Features

- Push-to-connect for one-hand operation when sleeve is mounted
- Interchanges with ISO 5675 plug/male tips
- Retaining ring groove on socket/female half for bulkhead and breakaway frame mounting

Applications & Markets

- Standard seal material: Buna-N
- Standard body material: High resistance carbon steel with zinc trivalent plating
- Hydraulic fluid transfer
- Agricultural equipment

Physical Characteristics

Body Size	Max. Operating Pressure		Min. Burst Pressure Connected		Vacuum Connected Only	Rated Flow		Air Inclusion	Fluid Loss
(in)	(bar)	(psi)	(bar)	(psi)	(in./Hg)	(lpm)	(gpm)	cc. max.	cc.max.
5/8	207	3,000	827	12,000	28	61	16	2.8	2.8

Dimensions (Female NPT, Valved)

Part Number	Coupling Type	Body Port Size	Port Size	Thread	Type	Fig. A	Dimensions					Hex ^①						
							B	C	D	E	Hex ^①							
							mm	(in)	mm	(in)	mm	(in)	mm	(in)	mm	(in)		
FD76-1002-08-10	Plug/Male	5/8	1/2	1/2-14	Female Pipe	1	52.1	(2.05)	—	—	—	—	—	—	—	—	26.9	(1.06)
FD72-1001-08-10	Socket/Female	5/8	1/2	1/2-14	Female Pipe	2	80.5	(3.17)	38.6	(1.52)	38.1	(1.50)	35.8	(1.41)	5.1	(.20)	25.4	(1.00)
FD76-1010-08-10	Plug/Male	5/8	1/2	3/4-16	Female SAE O-Ring	3	52.1	(2.05)	—	—	—	—	—	—	—	—	27.0	(1.06)

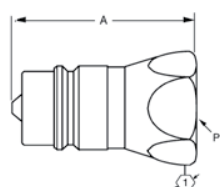


Figure 1

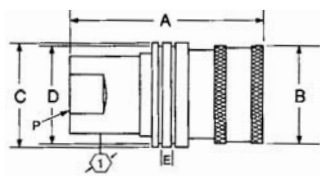


Figure 2

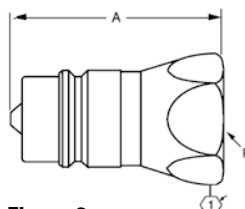


Figure 3

Dust Cap

Part Number	Body Size
5657-10	5/8



Dust Cap

Dust Plug

Part Number	Body Size
5659-10	5/8



Dust Plug

Break Away Frame

Part Number	Body Size
5603	5/8



Break Away Frame

Flow Data

Pressure Drop Versus Flow Graph

