

FD45 Series (Steel)

ISO 7241/1
Series B Interchange



The FD45 Series steel is an industrial interchange popular in North America. Features a rugged ball latch mechanism with automatic self-sealing poppet valves in a wide array of port configurations and multiple valved and non-valved configurations.

Product Features

- Meets dimensional requirements to ISO standard 7241/1 Series B
- PUSH-PULL™ ball latch design allows quick and easy connection and disconnection of hose lines
- Self-sealing poppet valve design provides excellent high and low pressure sealing
- Standard seal material – Buna-N, EPR and Viton
- Standard body material – High resistance carbon steel with zinc trivalent chromate plating (Brass poppet guide in –02 size)

Physical Characteristics

Body Size	Max. Operating Pressure		Min. Burst Pressure		Vacuum	Rated Flow		Air Inclusion	Fluid Loss
	bar	(psi)	bar	(psi)		(in./Hg)	L/min		
1/8	315	(4,500)	945	(13,500)	28	4	(1)	0.50	0.50
1/4	350	(5,000)	1,050	(15,000)	28	11	(3)	0.50	0.50
3/8	280	(4,000)	840	(12,000)	28	23	(6)	2.5	1.3
5/8	280	(4,000)	840	(12,000)	28	45	(12)	4.0	2.8
3/4	280	(4,000)	840	(12,000)	28	106	(28)	11.0	8.2
1	280	(4,000)	840	(12,000)	28	189	(50)	18.0	16.0



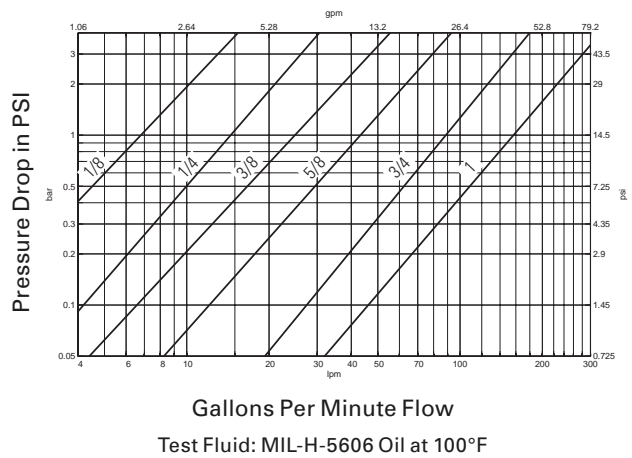
Applications

- Hydraulic and fluid transfer



Flow Data

Pressure Drop Versus Flow Graph



FD45 Series (Steel)

ISO 7241/1
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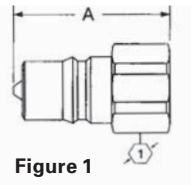


Figure 1

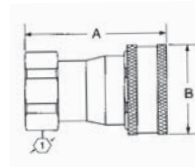


Figure 2

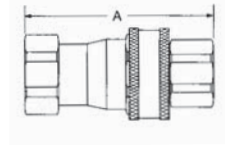


Figure 3

Dimensions (Female NPT, Valved)

Part Number Buna-N	Viton	EPR	Coupling Type	Body Size	Port Size	Thread	Type	Fig.	Dimensions					
									A	B	Hex Ⓢ			
									mm	(in)	mm	(in)	mm	(in)
FD45-1002-02-02	FD45-1071-02-02	FD45-1064-02-02	Male	1/8	1/8	1/8-27	Female NPT	1	32.5	(1.28)	-	-	14.2	(.56)
FD45-1003-02-02	FD45-1070-02-02	FD45-1065-02-02	Female	1/8	1/8	1/8-27	Female NPT	2	46.0	(1.81)	24.4	(0.96)	19.0	(.75)
FD45-1000-02-02	FD45-1072-02-02	FD45-1063-02-02	Complete	1/8	1/8	1/8-27	Female NPT	3	58.7	(2.31)	-	-	-	-
FD45-1002-04-04	FD45-1071-04-04	FD45-1064-04-04	Male	1/4	1/4	1/4-18	Female NPT	1	38.9	(1.53)	-	-	19.0	(.75)
FD45-1003-04-04	FD45-1070-04-04	FD45-1065-04-04	Female	1/4	1/4	1/4-18	Female NPT	2	56.4	(2.22)	28.7	(1.13)	20.6	(.81)
FD45-1000-04-04	FD45-1072-04-04	FD45-1063-04-04	Complete	1/4	1/4	1/4-18	Female NPT	3	69.3	(2.73)	-	-	-	-
FD45-1002-06-06	FD45-1071-06-06	FD45-1064-06-06	Male	3/8	3/8	3/8-18	Female NPT	1	42.9	(1.69)	-	-	22.4	(.88)
FD45-1003-06-06	FD45-1070-06-06	FD45-1065-06-06	Female	3/8	3/8	3/8-18	Female NPT	2	62.2	(2.45)	35.1	(1.38)	26.9	(1.06)
FD45-1000-06-06	FD45-1072-06-06	FD45-1063-06-06	Complete	3/8	3/8	3/8-18	Female NPT	3	75.7	(2.98)	-	-	-	-
FD45-1002-08-10	FD45-1071-08-10	FD45-1064-08-10	Male	5/8	1/2	1/2-14	Female NPT	1	49.8	(1.96)	-	-	26.9	(1.06)
FD45-1003-08-10	FD45-1070-08-10	FD45-1065-08-10	Female	5/8	1/2	1/2-14	Female NPT	2	72.6	(2.86)	42.9	(1.69)	33.3	(1.31)
FD45-1000-08-10	FD45-1072-08-10	FD45-1063-08-10	Complete	5/8	1/2	1/2-14	Female NPT	3	89.4	(3.52)	-	-	-	-
FD45-1002-12-12	FD45-1071-12-12	FD45-1064-12-12	Male	3/4	3/4	3/4-14	Female NPT	1	61.2	(2.41)	-	-	33.3	(1.31)
FD45-1003-12-12	FD45-1070-12-12	FD45-1065-12-12	Female	3/4	3/4	3/4-14	Female NPT	2	86.4	(3.40)	52.3	(2.06)	41.1	(1.62)
FD45-1000-12-12	FD45-1072-12-12	FD45-1063-12-12	Complete	3/4	3/4	3/4-14	Female NPT	3	101.6	(4.00)	-	-	-	-
FD45-1002-16-16	FD45-1071-16-16	FD45-1064-16-16	Male	1	1	1-11 1/2	Female NPT	1	70.4	(2.77)	-	-	41.1	(1.62)
FD45-1003-16-16	FD45-1070-16-16	FD45-1065-16-16	Female	1	1	1-11 1/2	Female NPT	2	102.1	(4.02)	62.0	(2.44)	50.8	(2.00)
FD45-1000-16-16	FD45-1072-16-16	FD45-1063-16-16	Complete	1	1	1-11 1/2	Female NPT	3	123.4	(4.86)	-	-	-	-

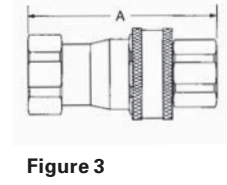
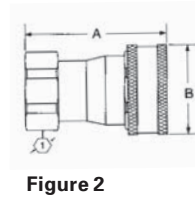
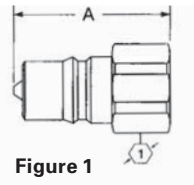
Dimensions (Female NPT, Non-Valved)

Part Number Buna-N	Viton	EPR	Coupling Type	Body Size	Port Size	Thread	Type	Fig.	Dimensions					
									A	B	Hex Ⓢ			
									mm	(in)	mm	(in)	mm	(in)
FD45-1061-04-04	FD45-1061-04-04	FD45-1061-04-04	Male	1/4	1/4	1/4-18	Female NPT	1	34.8	(1.37)	-	-	19.0	(.75)
FD45-1047-04-04	FD45-1172-04-04	FD45-1207-04-04	Female	1/4	1/4	1/4-18	Female NPT	2	56.4	(2.22)	28.7	(1.13)	20.6	(.81)
FD45-1044-04-04	FD45-1173-04-04	FD45-1206-04-04	Complete	1/4	1/4	1/4-18	Female NPT	3	69.3	(2.73)	-	-	-	-
FD45-1061-06-06	FD45-1061-06-06	FD45-1061-06-06	Male	3/8	3/8	3/8-18	Female NPT	1	38.1	(1.50)	-	-	22.4	(.88)
FD45-1047-06-06	FD45-1172-06-06	FD45-1207-06-06	Female	3/8	3/8	3/8-18	Female NPT	2	62.2	(2.45)	35.1	(1.38)	26.9	(1.06)
FD45-1044-06-06	FD45-1173-06-06	FD45-1206-06-06	Complete	3/8	3/8	3/8-18	Female NPT	3	75.7	(2.98)	-	-	-	-
FD45-1061-08-10	FD45-1061-08-10	FD45-1061-08-10	Male	5/8	1/2	1/2-14	Female NPT	1	44.7	(1.76)	-	-	26.9	(1.06)
FD45-1047-08-10	FD45-1172-08-10	FD45-1207-08-10	Female	5/8	1/2	1/2-14	Female NPT	2	72.6	(2.86)	42.9	(1.69)	33.3	(1.31)
FD45-1044-08-10	FD45-1173-08-10	FD45-1206-08-10	Complete	5/8	1/2	1/2-14	Female NPT	3	89.4	(3.52)	-	-	-	-
FD45-1061-12-12	FD45-1061-12-12	FD45-1061-12-12	Male	3/4	3/4	3/4-14	Female NPT	1	50.8	(2.00)	-	-	33.3	(1.31)
FD45-1047-12-12	FD45-1172-12-12	FD45-1207-12-12	Female	3/4	3/4	3/4-14	Female NPT	2	86.4	(3.40)	52.3	(2.06)	41.1	(1.62)
FD45-1044-12-12	FD45-1173-12-12	FD45-1206-12-12	Complete	3/4	3/4	3/4-14	Female NPT	3	101.6	(4.00)	-	-	-	-
FD45-1061-16-16	FD45-1061-16-16	FD45-1061-16-16	Male	1	1	1-11 1/2	Female NPT	1	61.7	(2.43)	-	-	41.1	(1.62)
FD45-1047-16-16	FD45-1172-16-16	FD45-1207-16-16	Female	1	1	1-11 1/2	Female NPT	2	102.1	(4.02)	62.0	(2.44)	50.8	(2.00)
FD45-1044-16-16	FD45-1173-16-16	FD45-1206-16-16	Complete	1	1	1-11 1/2	Female NPT	3	123.4	(4.86)	-	-	-	-

Note: Will not operate with valved coupling halves; no valve actuator.

FD45 Series (Steel)

ISO 7241/1
Series B Interchange



Dimensions (Female NPT, Pusher-Style Valving)

Part Number Buna-N	Viton	EPR	Coupling Type	Body Size	Port Size	Thread	Type	Fig.	Dimensions		Hex ①			
									A	B	mm	(in)	mm	(in)
FD45-1046-04-04	FD45-1046-04-04	FD45-1046-04-04	Male	1/4	1/4	1/4-18	Female NPT	1	38.1	(1.50)	-	-	19.0	(.75)
FD45-1045-04-04	FD45-1228-04-04	FD45-1229-04-04	Female	1/4	1/4	1/4-18	Female NPT	2	56.4	(2.22)	28.7	(1.13)	20.6	(.81)
FD45-1046-06-06	FD45-1046-06-06	FD45-1046-06-06	Male	3/8	3/8	3/8-18	Female NPT	1	42.2	(1.66)	-	-	22.4	(.88)
FD45-1045-06-06	FD45-1228-06-06	FD45-1229-06-06	Female	3/8	3/8	3/8-18	Female NPT	2	62.2	(2.45)	35.1	(1.38)	26.9	(1.06)
FD45-1046-08-10	FD45-1046-08-10	FD45-1046-08-10	Male	5/8	1/2	1/2-14	Female NPT	1	49.0	(1.93)	-	-	26.9	(1.06)
FD45-1045-08-10	FD45-1228-08-10	FD45-1229-08-10	Female	5/8	1/2	1/2-14	Female NPT	2	72.6	(2.86)	42.9	(1.69)	33.3	(1.31)
FD45-1046-12-12	FD45-1046-12-12	FD45-1046-12-12	Male	3/4	3/4	3/4-14	Female NPT	1	57.4	(2.26)	-	-	33.3	(1.31)
FD45-1045-12-12	FD45-1228-12-12	FD45-1229-12-12	Female	3/4	3/4	3/4-14	Female NPT	2	86.4	(3.40)	52.3	(2.06)	41.1	(1.62)
FD45-1046-16-16	FD45-1046-16-16	FD45-1046-16-16	Male	1	1	1-11 1/2	Female NPT	1	69.1	(2.72)	-	-	41.1	(1.62)
FD45-1045-16-16	FD45-1228-16-16	FD45-1229-16-16	Female	1	1	1-11 1/2	Female NPT	2	102.1	(4.02)	62.0	(2.44)	50.8	(2.00)

Note: Incorporates a pusher device to open mating valved coupling halves.

Dimensions (Female SAE O-ring, Valved)

Part Number Buna-N	EPR	Coupling Type	Body Size	Port Size	Thread	Type	Fig.	Dimensions		Hex ①			
								A	B	mm	(in)	mm	(in)
FD45-1415-06-04	FD45-1238-06-04	Male	1/4	9/16	9/16-18	Female SAE O-ring	1	42.7	(1.68)	-	-	20.6	(.81)
FD45-1414-06-04*	FD45-1237-06-04*	Female	1/4	9/16	9/16-18	Female SAE O-ring	2	58.7	(2.31)	28.7	(1.13)	23.9	(.94)
FD45-1168-08-06	-	Male	3/8	1/2	3/4-16	Female SAE O-ring	1	50.0	(1.97)	-	-	25.4	(1.00)
FD45-1169-08-06	-	Female	3/8	1/2	3/4-16	Female SAE O-ring	2	69.3	(2.73)	34.5	(1.36)	26.9	(1.06)
FD45-1168-16-16	-	Male	1	1 5/16	1 5/16-12	Female SAE O-ring	1	69.1	(2.72)	-	-	41.1	(1.62)
FD45-1169-16-16	-	Female	1	1 5/16	1 5/16-12	Female SAE O-ring	2	102.1	(4.02)	61.5	(2.42)	50.8	(2.00)

*With sleeve lock.

Repair Kits

Part Number Buna-N	Viton	EPR	Body Size
FF013-02 [†]	FF014-02 [†]	FF015-02	1/8
FF013-04	FF014-04	FF015-04	1/4
FF013-06	FF014-06	FF015-06	3/8
FF013-10	FF014-10	FF015-10	5/8
FF013-12	FF014-12	FF015-12	3/4
FF013-16	FF014-16	FF015-16	1

Note: Each kit will repair one male or female half.

[†]The -02 coupling size valving is not repairable. This size repair kit contains an interface seal and back-up ring.

Dust Caps

Part Number (Viton)	Body Size
FD45-1040-02	1/8
FD45-1040-04	1/4
FD45-1040-06	3/8
FD45-1040-10	5/8
FD45-1040-12	3/4
FD45-1040-16	1

Dust Plugs

Part Number (Viton)	Body Size
FD45-1041-02	1/8
FD45-1041-04	1/4
FD45-1041-06	3/8
FD45-1041-10	5/8
FD45-1041-12	3/4
FD45-1041-16	1



Dust Cap



Dust Plug

FD45 Series (Brass)

ISO 7241/1
Series B Interchange



The FD45 brass is a general purpose industrial interchange coupling available in valved or non-valved designs, offered in brass for excellent corrosion resistance in rugged applications where stainless steel is unacceptable. Features a ball latch mechanism with automatic self-sealing poppet valves.

Product Features

- Meets dimensional requirements to ISO standard 7241/1 Series B
- Dual interface O-rings in the female half provide redundant sealing while connected
- Brass construction with stainless steel springs for greater corrosion resistance and fluid compatibility
- PUSH-PULL™ ball latch design allows quick and easy connection and disconnection of hose lines
- Self-sealing poppet valves provide excellent high and low pressure sealing
- Standard seal material – Buna-N, EPR and Viton
- Standard body material – Brass with stainless steel springs and balls

Physical Characteristics

Body Size	Max. Operating Pressure		Min. Burst Pressure Connected		Min. Burst Pressure Disconnected		Rated Vacuum (in./Hg)	Flow		Air Inclusion cc. max.	Fluid Loss cc.max.
	bar	(psi)	bar	(psi)	bar	(psi)		L/min	(gpm)		
1/8	70	(1,000)	770	(11,000)	840	(12,000)	28	4	(1)	0.50	0.006
1/4	70	(1,000)	1,260	(18,000)	980	(14,000)	28	11	(3)	0.50	0.012
3/8	70	(1,000)	840	(12,000)	630	(9,000)	28	23	(6)	2.5	0.020
5/8	70	(1,000)	840	(12,000)	455	(6,500)	28	45	(12)	4.0	0.026
3/4	70	(1,000)	700	(10,000)	700	(10,000)	28	106	(28)	11.0	0.032
1	70	(1,000)	595	(8,500)	770	(11,000)	28	189	(50)	18.0	0.010
1 1/4	70	(1,000)	420	(6,000)	420	(6,000)	28	284	(75)	30.0	0.050



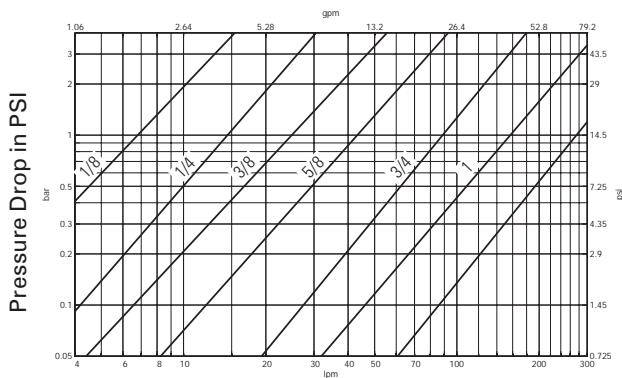
Applications

- Hydraulics and fluid transfer
- Water/coolant
- Electronics (cooling)



Flow Data

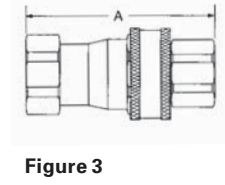
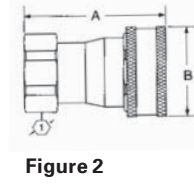
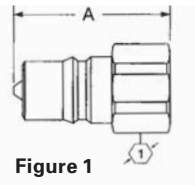
Pressure Drop Versus Flow Graph



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

FD45 Series (Brass)

ISO 7241/1
Series B Interchange



Dimensions (Female NPT, Valved)

Part Number Buna-N	Viton	EPR	Coupling Type	Body Size	Port Size	Thread	Type	Dimensions Fig. A B Hex ①						
								mm	(in)	mm	(in)	mm	(in)	
FD45-1086-02-02	FD45-1092-02-02	FD45-1153-02-02	Male	1/8	1/8	1/8-27	Female NPT	1	32.5	(1.28)	-	-	14.2	(.56)
FD45-1101-02-02	FD45-1091-02-02	FD45-1156-02-02	Female	1/8	1/8	1/8-27	Female NPT	2	46.0	(1.81)	23.9	(.94)	19	(.75)
FD45-1100-02-02	FD45-1090-02-02	FD45-1157-02-02	Complete	1/8	1/8	1/8-27	Female NPT	3	58.7	(2.31)	-	-	-	-
FD45-1086-04-04	FD45-1092-04-04	FD45-1153-04-04	Male	1/4	1/4	1/4-18	Female NPT	1	38.9	(1.53)	-	-	17.5	(.69)
FD45-1101-04-04	FD45-1091-04-04	FD45-1156-04-04	Female	1/4	1/4	1/4-18	Female NPT	2	56.4	(2.22)	28.7	(1.13)	20.6	(.81)
FD45-1100-04-04	FD45-1090-04-04	FD45-1157-04-04	Complete	1/4	1/4	1/4-18	Female NPT	3	69.6	(2.74)	-	-	-	-
FD45-1086-06-06	FD45-1092-06-06	FD45-1153-06-06	Male	3/8	3/8	3/8-18	Female NPT	1	42.9	(1.69)	-	-	22.4	(.88)
FD45-1101-06-06	FD45-1091-06-06	FD45-1156-06-06	Female	3/8	3/8	3/8-18	Female NPT	2	62.2	(2.45)	35.1	(1.38)	26.9	(1.06)
FD45-1100-06-06	FD45-1090-06-06	FD45-1157-06-06	Complete	3/8	3/8	3/8-18	Female NPT	3	75.9	(2.99)	-	-	-	-
FD45-1086-08-10	FD45-1092-08-10	FD45-1153-08-10	Male	5/8	1/2	1/2-14	Female NPT	1	49.8	(1.96)	-	-	26.9	(1.06)
FD45-1101-08-10	FD45-1091-08-10	FD45-1156-08-10	Female	5/8	1/2	1/2-14	Female NPT	2	72.6	(2.86)	42.9	(1.69)	33.3	(1.31)
FD45-1100-08-10	FD45-1090-08-10	FD45-1157-08-10	Complete	5/8	1/2	1/2-14	Female NPT	3	89.9	(3.54)	-	-	-	-
FD45-1086-12-12	FD45-1092-12-12	FD45-1153-12-12	Male	3/4	3/4	3/4-14	Female NPT	1	61.2	(2.41)	-	-	33.3	(1.31)
FD45-1101-12-12	FD45-1091-12-12	FD45-1156-12-12	Female	3/4	3/4	3/4-14	Female NPT	2	86.4	(3.40)	51.1	(2.01)	41.1	(1.62)
FD45-1100-12-12	FD45-1090-12-12	FD45-1157-12-12	Complete	3/4	3/4	3/4-14	Female NPT	3	102.1	(4.02)	-	-	-	-
FD45-1086-16-16	FD45-1092-16-16	FD45-1153-16-16	Male	1	1	1-11 1/2	Female NPT	1	70.4	(2.77)	-	-	41.1	(1.62)
FD45-1101-16-16	FD45-1091-16-16	FD45-1156-16-16	Female	1	1	1-11 1/2	Female NPT	2	102.1	(4.02)	60.5	(2.38)	50.8	(2.00)
FD45-1100-16-16	FD45-1090-16-16	FD45-1157-16-16	Complete	1	1	1-11 1/2	Female NPT	3	123.4	(4.86)	-	-	-	-
FD45-1086-20-20	FD45-1092-20-20	FD45-1153-20-20	Male	5/4	1 1/4	1 1/4-11 1/2	Female NPT	1	108.0	(4.25)	-	-	60.5	(2.38)
FD45-1101-20-20	FD45-1091-20-20	FD45-1156-20-20	Female	5/4	1 1/4	1 1/4-11 1/2	Female NPT	2	114.0	(4.49)	66.5	(2.62)	60.5	(2.38)
FD45-1100-20-20	FD45-1090-20-20	FD45-1157-20-20	Complete	5/4	1 1/4	1 1/4-11 1/2	Female NPT	3	172.7	(6.80)	-	-	-	-

Dimensions (Female NPT, Non-Valved*)

Part Number Buna-N	Viton	EPR	Coupling Type	Body Size	Port Size	Thread	Type	Dimensions Fig. A B Hex ①						
								mm	(in)	mm	(in)	mm	(in)	
FD45-1175-02-02	FD45-1175-02-02	FD45-1175-02-02	Male	1/8	1/8	1/8-27	Female NPT	1	30.5	(1.20)	-	-	14.2	(.56)
FD45-1176-02-02	FD45-1180-02-02	FD45-1178-02-02	Female	1/8	1/8	1/8-27	Female NPT	2	46.0	(1.81)	24.4	(.96)	19.1	(.75)
FD45-1174-02-02	FD45-1179-02-02	FD45-1177-02-02	Complete	1/8	1/8	1/8-27	Female NPT	3	58.7	(2.31)	-	-	-	-
FD45-1175-04-04	FD45-1175-04-04	FD45-1175-04-04	Male	1/4	1/4	1/4-18	Female NPT	1	34.8	(1.37)	-	-	17.5	(.69)
FD45-1176-04-04	FD45-1180-04-04	FD45-1178-04-04	Female	1/4	1/4	1/4-18	Female NPT	2	56.4	(2.22)	28.7	(1.13)	20.6	(.81)
FD45-1174-04-04	FD45-1179-04-04	FD45-1177-04-04	Complete	1/4	1/4	1/4-18	Female NPT	3	69.6	(2.74)	-	-	-	-
FD45-1175-06-06	FD45-1175-06-06	FD45-1175-06-06	Male	3/8	3/8	3/8-18	Female NPT	1	20.6	(1.50)	-	-	22.4	(.88)
FD45-1176-06-06	FD45-1180-06-06	FD45-1178-06-06	Female	3/8	3/8	3/8-18	Female NPT	2	62.2	(2.45)	35.1	(1.38)	26.9	(1.06)
FD45-1174-06-06	FD45-1179-06-06	FD45-1177-06-06	Complete	3/8	3/8	3/8-18	Female NPT	3	77.2	(3.04)	-	-	-	-
FD45-1175-08-10	FD45-1175-08-10	FD45-1175-08-10	Male	5/8	1/2	1/2-14	Female NPT	1	44.7	(1.76)	-	-	26.9	(1.06)
FD45-1176-08-10	FD45-1180-08-10	FD45-1178-08-10	Female	5/8	1/2	1/2-14	Female NPT	2	72.6	(2.86)	42.9	(1.69)	33.3	(1.31)
FD45-1174-08-10	FD45-1179-08-10	FD45-1177-08-10	Complete	5/8	1/2	1/2-14	Female NPT	3	89.9	(3.54)	-	-	-	-
FD45-1175-12-12	FD45-1175-12-12	FD45-1175-12-12	Male	3/4	3/4	3/4-14	Female NPT	1	50.8	(2.00)	-	-	33.3	(1.31)
FD45-1176-12-12	FD45-1180-12-12	FD45-1178-12-12	Female	3/4	3/4	3/4-14	Female NPT	2	86.4	(3.40)	51.1	(2.01)	41.1	(1.62)
FD45-1174-12-12	FD45-1179-12-12	FD45-1177-12-12	Complete	3/4	3/4	3/4-14	Female NPT	3	102.1	(4.02)	-	-	-	-
FD45-1175-16-16	FD45-1175-16-16	FD45-1175-16-16	Male	1	1	1-11 1/2	Female NPT	1	61.7	(2.43)	-	-	41.1	(1.62)
FD45-1176-16-16	FD45-1180-16-16	FD45-1178-16-16	Female	1	1	1-11 1/2	Female NPT	2	102.1	(4.02)	60.5	(2.38)	50.8	(2.00)
FD45-1174-16-16	FD45-1179-16-16	FD45-1177-16-16	Complete	1	1	1-11 1/2	Female NPT	3	124.0	(4.88)	-	-	-	-
FD45-1175-20-20	FD45-1399-20-20	FD45-1400-20-20	Male	5/4	1 1/4	1 1/4-11 1/2	Female NPT	1	108.0	(4.25)	-	-	60.5	(2.38)
FD45-1176-20-20	FD45-1180-20-20	FD45-1178-20-20	Female	5/4	1 1/4	1 1/4-11 1/2	Female NPT	2	114.0	(4.49)	66.5	(2.62)	60.5	(2.38)
FD45-1174-20-20	FD45-1179-20-20	FD45-1177-20-20	Complete	5/4	1 1/4	1 1/4-11 1/2	Female NPT	3	172.7	(6.80)	-	-	-	-


*Will not operate with valved coupling halves; no valve actuator.

FD45 Series (Brass)

ISO 7241/1

Series B Interchange

Dimensions (Female NPT, Pusher-Style Valving)

Part Number Buna-N	Viton	EPR	Coupling Type	Body Size	Port Size	Thread	Type	Fig.	Dimensions					
									A	B	Hex 			
									mm	(in)	mm	(in)	mm	(in)
FD45-1201-04-04	FD45-1201-04-04	FD45-1201-04-04	Male	1/4	1/4	1/4-18	Female NPT	1	38.1	(1.50)	-	-	17.5	(.69)
FD45-1203-04-04	FD45-1199-04-04	FD45-1211-04-04	Female	1/4	1/4	1/4-18	Female NPT	2	56.4	(2.22)	27.9	(1.10)	20.6	(.81)
FD45-1201-06-06	FD45-1201-06-06	FD45-1201-06-06	Male	3/8	3/8	3/8-18	Female NPT	1	42.2	(1.66)	-	-	22.4	(.88)
FD45-1203-06-06	FD45-1199-06-06	FD45-1211-06-06	Female	3/8	3/8	3/8-18	Female NPT	2	62.2	(2.45)	34.5	(1.36)	26.9	(1.06)
FD45-1201-12-12	FD45-1201-12-12	FD45-1201-12-12	Male	3/4	3/4	3/4-14	Female NPT	1	57.9	(2.28)	-	-	33.3	(1.31)
FD45-1203-12-12	FD45-1199-12-12	FD45-1211-12-12	Female	3/4	3/4	3/4-14	Female NPT	2	86.4	(3.40)	50.5	(1.99)	41.1	(1.62)

Note: Incorporates a pusher device to open mating valved coupling halves.

Repair Kits

Part Number Buna-N	Viton	EPR	Body Size
FF016-02†	FF017-02†	FF018-02†	1/8
FF016-04	FF017-04	FF018-04	1/4
FF016-06	FF017-06	FF018-06	3/8
FF016-10	FF017-10	FF018-10	5/8
FF016-12	FF017-12	FF018-12	3/4
FF016-16	FF017-16	FF018-16	1
FF016-20	FF017-20	FF018-20	1 1/4

Note: Each kit will repair one male or female half.

†The -02 coupling size valving is not repairable. This size repair kit contains an interface seal and back-up ring.

Dust Caps

Part Number (Viton)	Body Size
FD45-1040-02	1/8
FD45-1040-04	1/4
FD45-1040-06	3/8
FD45-1040-10	5/8
FD45-1040-12	3/4
FD45-1040-16	1



Dust Cap

Dust Plugs

Part Number (Viton)	Body Size
FD45-1041-02	1/8
FD45-1041-04	1/4
FD45-1041-06	3/8
FD45-1041-10	5/8
FD45-1041-12	3/4
FD45-1041-16	1



Dust Plug

FD45 Series (Stainless Steel)

ISO 7241/1

Series B Interchange



The FD45 stainless steel is a general purpose industrial interchange coupling available in valved or non-valved designs, offered in 303/304 grades of stainless steel for excellent corrosion resistance in rugged applications. Features a ball latch mechanism with automatic self-sealing poppet valves.

Product Features

- Meets dimensional requirements to ISO standard 7241/1 Series B
- 303/304 Stainless steel construction for greater corrosion resistance and fluid compatibility
- PUSH-PULL™ ball latch design allows quick and easy connection and disconnection of hose lines
- Self-sealing poppet valve design provides excellent high and low pressure sealing
- Standard seal material – Buna-N, EPR and Viton
- Standard body material – 303/304 Stainless Steel

Physical Characteristics

Body Size	Max. Operating Hydraulic Pressure		Pressure Static		Min. Burst Pressure		Vacuum		Rated Flow		Air Inclusion	Fluid Loss
	bar	(psi)	bar	(psi)	bar	(psi)	(in./Hg)	L/min	(gpm)	cc. max.	cc.max.	
1/4	207	(3,000)	207	(3,000)	827	(12,000)	28	11	(3)	0.50	0.5	
3/8	103	(1,500)	207	(3,000)	827	(12,000)	28	23	(6)	2.5	1.3	
5/8	103	(1,500)	207	(3,000)	827	(12,000)	28	45	(12)	4.0	2.8	
3/4	103	(1,500)	207	(3,000)	827	(12,000)	28	106	(28)	11.0	8.2	
1	86	(1,250)	207	(3,000)	827	(12,000)	28	189	(50)	18.0	16.0	



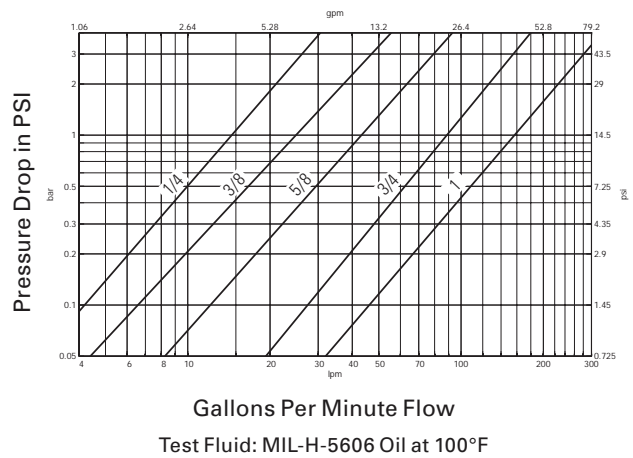
Applications

- Off-shore and marine hydraulics and fluid transfer
- Chemical processing
- Steam
- Electronics cooling



Flow Data

Pressure Drop Versus Flow Graph



FD45 Series (Stainless Steel)

ISO 7241/1
Series B Interchange

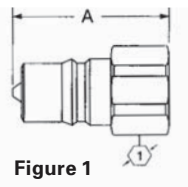


Figure 1

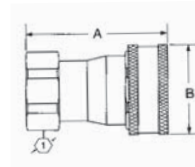


Figure 2

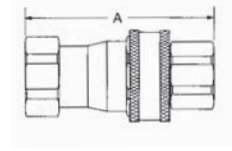


Figure 3

Dimensions (Female NPT, Valved)

Part Number Buna-N	Viton	EPR	Coupling Type	Body Size	Port Size	Thread	Type	Fig.	Dimensions					
									A	B		Hex ①		
									mm	(in)	mm	(in)	mm	(in)
FD45-1004-04-04	FD45-1078-04-04	FD45-1121-04-04	Male	1/4	1/4	1/4-18	Female NPT	1	37.8	(1.49)	-	-	17.5	(.69)
FD45-1005-04-04	FD45-1076-04-04	FD45-1122-04-04	Female	1/4	1/4	1/4-18	Female NPT	2	56.4	(2.22)	28.7	(1.13)	20.6	(.81)
FD45-1001-04-04	FD45-1075-04-04	FD45-1120-04-04	Complete	1/4	1/4	1/4-18	Female NPT	3	68.6	(2.70)	-	-	-	-
FD45-1004-06-06	FD45-1078-06-06	FD45-1121-06-06	Male	3/8	3/8	3/8-18	Female NPT	1	42.9	(1.69)	-	-	22.4	(.88)
FD45-1005-06-06	FD45-1076-06-06	FD45-1122-06-06	Female	3/8	3/8	3/8-18	Female NPT	2	62.2	(2.45)	35.1	(1.38)	26.9	(1.06)
FD45-1001-06-06	FD45-1075-06-06	FD45-1120-06-06	Complete	3/8	3/8	3/8-18	Female NPT	3	75.7	(2.98)	-	-	-	-
FD45-1004-08-10	FD45-1078-08-10	FD45-1121-08-10	Male	5/8	1/2	1/2-14	Female NPT	1	48.8	(1.92)	-	-	26.9	(1.06)
FD45-1005-08-10	FD45-1076-08-10	FD45-1122-08-10	Female	5/8	1/2	1/2-14	Female NPT	2	72.6	(2.86)	42.9	(1.69)	33.3	(1.31)
FD45-1001-08-10	FD45-1075-08-10	FD45-1120-08-10	Complete	5/8	1/2	1/2-14	Female NPT	3	88.4	(3.48)	-	-	-	-
FD45-1004-12-12	FD45-1078-12-12	FD45-1121-12-12	Male	3/4	3/4	3/4-14	Female NPT	1	58.2	(2.29)	-	-	33.3	(1.31)
FD45-1005-12-12	FD45-1076-12-12	FD45-1122-12-12	Female	3/4	3/4	3/4-14	Female NPT	2	86.4	(3.40)	51.1	(2.01)	41.1	(1.62)
FD45-1001-12-12	FD45-1075-12-12	FD45-1120-12-12	Complete	3/4	3/4	3/4-14	Female NPT	3	101.6	(4.00)	-	-	-	-
FD45-1004-16-16	FD45-1078-16-16	FD45-1121-16-16	Male	1	1	1-11 1/2	Female NPT	1	70.4	(2.77)	-	-	41.1	(1.62)
FD45-1005-16-16	FD45-1076-16-16	FD45-1122-16-16	Female	1	1	1-11 1/2	Female NPT	2	102.1	(4.02)	60.5	(2.38)	50.8	(2.00)
FD45-1001-16-16	FD45-1075-16-16	FD45-1120-16-16	Complete	1	1	1-11 1/2	Female NPT	3	123.4	(4.86)	-	-	-	-

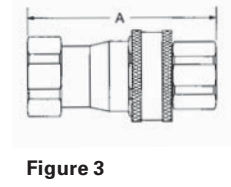
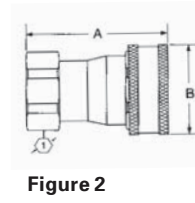
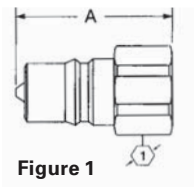
Dimensions (Female NPT, Non-Valved)

Part Number Buna-N	Viton	EPR	Coupling Type	Body Size	Port Size	Thread	Type	Fig.	Dimensions					
									A	B		Hex ①		
									mm	(in)	mm	(in)	mm	(in)
FD45-1062-04-04	FD45-1062-04-04	FD45-1062-04-04	Male	1/4	1/4	1/4-18	Female NPT	1	33.8	(1.33)	-	-	17.5	(.69)
FD45-1053-04-04	FD45-1195-04-04	FD45-1142-04-04	Female	1/4	1/4	1/4-18	Female NPT	2	56.4	(2.22)	28.7	(1.13)	20.6	(.81)
FD45-1052-04-04	FD45-1194-04-04	FD45-1143-04-04	Complete	1/4	1/4	1/4-18	Female NPT	3	68.6	(2.70)	-	-	-	-
FD45-1062-06-06	FD45-1062-06-06	FD45-1062-06-06	Male	3/8	3/8	3/8-18	Female NPT	1	38.1	(1.50)	-	-	22.4	(.88)
FD45-1053-06-06	FD45-1195-06-06	FD45-1142-06-06	Female	3/8	3/8	3/8-18	Female NPT	2	62.2	(2.45)	35.1	(1.38)	26.9	(1.06)
FD45-1052-06-06	FD45-1194-06-06	FD45-1143-06-06	Complete	3/8	3/8	3/8-18	Female NPT	3	75.7	(2.98)	-	-	-	-
FD45-1062-08-10	FD45-1062-08-10	FD45-1062-08-10	Male	5/8	1/2	1/2-14	Female NPT	1	43.7	(1.72)	-	-	26.9	(1.06)
FD45-1053-08-10	FD45-1195-08-10	FD45-1142-08-10	Female	5/8	1/2	1/2-14	Female NPT	2	72.6	(2.86)	42.9	(1.69)	33.3	(1.31)
FD45-1052-08-10	FD45-1194-08-10	FD45-1143-08-10	Complete	5/8	1/2	1/2-14	Female NPT	3	88.4	(3.48)	-	-	-	-
FD45-1062-12-12	FD45-1062-12-12	FD45-1062-12-12	Male	3/4	3/4	3/4-14	Female NPT	1	50.8	(2.00)	-	-	33.3	(1.31)
FD45-1053-12-12	FD45-1195-12-12	FD45-1142-12-12	Female	3/4	3/4	3/4-14	Female NPT	2	89.4	(3.52)	51.1	(2.01)	41.1	(1.62)
FD45-1052-12-12	FD45-1194-12-12	FD45-1143-12-12	Complete	3/4	3/4	3/4-14	Female NPT	3	101.6	(4.00)	-	-	-	-
FD45-1062-16-16	FD45-1062-16-16	FD45-1062-16-16	Male	1	1	1-11 1/2	Female NPT	1	61.7	(2.43)	-	-	41.1	(1.62)
FD45-1053-16-16	FD45-1195-16-16	FD45-1142-16-16	Female	1	1	1-11 1/2	Female NPT	2	102.1	(4.02)	60.5	(2.38)	50.8	(2.00)
FD45-1052-16-16	FD45-1194-16-16	FD45-1143-16-16	Complete	1	1	1-11 1/2	Female NPT	3	123.4	(4.86)	-	-	-	-

Note: Will not operate with valved coupling halves; no valve actuator.

FD45 Series (Stainless Steel)

ISO 7241/1
Series B Interchange



Dimensions (Female NPT, Pusher-Style Valving)

Part Number Buna-N	Viton	EPR	Coupling Type	Body Size	Port Size	Thread	Type	Fig.	Dimensions Fig. A		B		Hex ①	
									mm	(in)	mm	(in)	mm	(in)
FD45-1059-04-04	FD45-1059-04-04	FD45-1059-04-04	Male	1/4	1/4	1/4-18	Female NPT	1	33.8	(1.33)	-	-	17.5	(.69)
FD45-1056-04-04	FD45-1197-04-04	FD45-1209-04-04	Female	1/4	1/4	1/4-18	Female NPT	2	56.4	(2.22)	28.7	(1.13)	20.6	(.81)
FD45-1059-06-06	FD45-1059-06-06	FD45-1059-06-06	Male	3/8	3/8	3/8-18	Female NPT	1	38.1	(1.50)	-	-	22.4	(.88)
FD45-1056-06-06	FD45-1197-06-06	FD45-1209-06-06	Female	3/8	3/8	3/8-18	Female NPT	2	62.2	(2.45)	35.1	(1.38)	26.9	(1.06)
FD45-1059-08-10	FD45-1059-08-10	FD45-1059-08-10	Male	5/8	1/2	1/2-14	Female NPT	1	43.7	(1.72)	-	-	26.9	(1.06)
FD45-1056-08-10	FD45-1197-08-10	FD45-1209-08-10	Female	5/8	1/2	1/2-14	Female NPT	2	72.6	(2.86)	42.9	(1.69)	33.3	(1.31)
FD45-1059-12-12	FD45-1059-12-12	FD45-1059-12-12	Male	3/4	3/4	3/4-14	Female NPT	1	50.8	(2.00)	-	-	33.3	(1.31)
FD45-1056-12-12	FD45-1197-12-12	FD45-1209-12-12	Female	3/4	3/4	3/4-14	Female NPT	2	89.4	(3.52)	51.1	(2.01)	41.1	(1.62)
FD45-1059-16-16	FD45-1059-16-16	FD45-1059-16-16	Male	1	1	1-11 1/2	Female NPT	1	61.7	(2.43)	-	-	41.1	(1.62)
FD45-1056-16-16	FD45-1197-16-16	FD45-1209-16-16	Female	1	1	1-11 1/2	Female NPT	2	102.1	(4.02)	60.5	(2.38)	50.8	(2.00)

Note: Incorporates a pusher device to open mating valved coupling halves.

Fryer Coupling/Male Half
Female Pipe/Valved

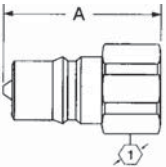


Figure 4

Fryer Coupling/Female Half Female Pipe/Valved
Silicone Collar on Ball Release Sleeve

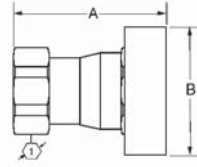


Figure 5

Dimensions (Fryer Coupling*)

Part Number Buna-N	Coupling Type	Body Size	Port Size	Thread	Type	Fig.	Dimensions Fig. A		B		Hex ①	
							mm	(in)	mm	(in)	mm	(in)
FD45-1270-08-10	Male	5/8	1/2	1/2-14	Female NPT	4	48.8	(1.92)	-	-	26.9	(1.06)

Dimensions (Female, Valved Silicone Collar on Ball Release Sleeve*)

Part Number Buna-N	Coupling Type	Body Size	Port Size	Thread	Type	Fig.	Dimensions Fig. A		B		Hex ①	
							mm	(in)	mm	(in)	mm	(in)
FD45-1267-08-10	Female	5/8	1/2	1/2-14	Female NPT	4	72.6	(2.86)	58.4	(2.38)	33.3	(1.31)

*Special internal Viton seal material approved for use by the National Sanitation Foundation. The fryer coupling uses a silicone collar.

Repair Kits

Part Number Buna-N	Viton	EPR	Body Size
FF054-04	FF055-04	FF056-04	1/4
FF054-06	FF055-06	FF056-06	3/8
FF054-10	FF055-10	FF056-10	5/8
FF054-12	FF055-12	FF056-12	3/4
FF054-16	FF055-16	FF056-16	1

Dust Caps

Part Number Viton	Body Size
FD45-1040-02	1/8
FD45-1040-04	1/4
FD45-1040-06	3/8
FD45-1040-10	5/8
FD45-1040-12	3/4
FD45-1040-16	1

Dust Plugs

Part Number Viton	Body Size
FD45-1041-02	1/8
FD45-1041-04	1/4
FD45-1041-06	3/8
FD45-1041-10	4/8
FD45-1041-12	3/4
FD45-1041-16	1

联系方式

信德迈科技(北京)有限公司 CNMEC Technology
地址：北京朝阳区望京SOHO-T1-C座2115室
邮编：100102
电话：010 - 8428 2935 , 8428 3983
手机：13910962635
传真：010 - 8428 8762
Email：sales@cnmec.biz
Http://www.cnmec.biz



Dust Cap



Dust Plug

