

FD86 Series

Thread to Connect

5,000 psi Dry Break – High Impulse



Eaton's FD86 Series is a thread together steel quick coupling offering dry break and high impulse technology and capabilities. The maximum operating pressure is 5,000 psi. The FD86 Series is available in either wing nut or hex nut configurations for ease of assembly and disassembly. (For higher pressure applications and additional size requirements, refer to FD96 on page 43.)

Product Features

- Tubular valve and sleeve construction for low fluid loss and air inclusion
- Thread together design using wing or hex nut allows connection and disconnection against pressures up to 750 psi
- Teflon* back-up rings along with secondary metal-to-metal sealing contact provides high impulse capability up to 5,000 psi operating pressure
- Acme threads prevent galling and provide ease of connection
- Steel flange available for bulkhead mounting
- Standard seal material: Buna-N
- Standard body material: High resistance carbon steel with zinc trivalent plating

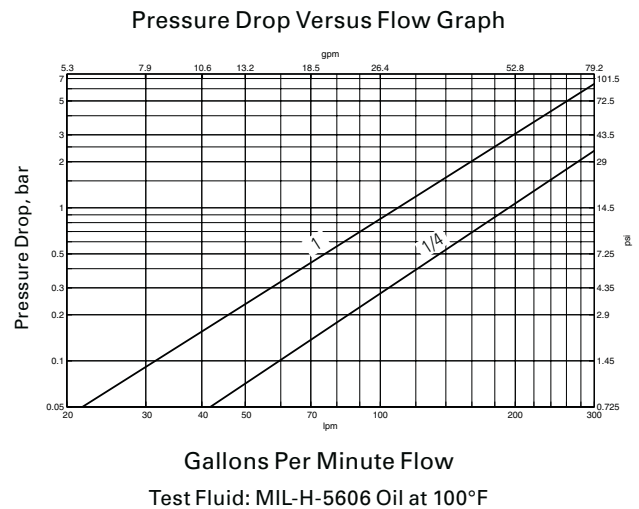
Physical Characteristics

Body Size (in)	Max. Operating Pressure		Min. Burst Pressure		Vacuum Connected Only (in./Hg)	Rated Flow		Air Inclusion cc. max.	Fluid Loss cc.max.
	(bar)	(psi)	(bar)	(psi)		(lpm)	(gpm)		
1	345	5,000	1,034	15,000	28	189	50	2.90	0.72
1 1/4	345	5,000	1,034	15,000	28	284	75	4.61	1.00

Applications & Markets

- Hydraulic and fluid transfer
- Mining equipment

Flow Data



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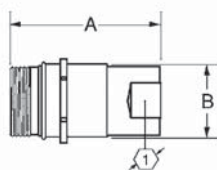


Figure 1

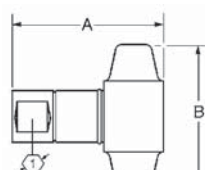


Figure 2

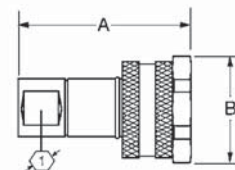


Figure 3

Dimensions (Female SAE O-Ring)

Part Number Buna-N	FKM	EPDM	Type	Body Size	Port Size	Thread	Type	Fig.	Dimensions			Hex ①		
									A	B				
									mm	(in)	mm	(in)	mm	(in)
FD86-1008-16-16	FD86-1043-16-16	FD86-1053-16-16	Plug/Male	1	1 5/16	1 5/16 - 12	Female SAE O-Ring	1	102.4	(4.03)	53.6	(2.11)	44.5	(1.75)
FD86-1010-16-16	FD86-1044-16-16	FD86-1054-16-16	Socket/Female	1	1 5/16	1 5/16 - 12	Female SAE O-Ring	2	117.3	(4.62)	114.3	(4.50)	-	-
FD86-1006-16-16	FD86-1042-16-16	FD86-1052-16-16	Socket/Female	1	1 5/16	1 5/16 - 12	Female SAE O-Ring	3	117.3	(4.62)	71.4	(2.81)	15.8	(1.62)
FD86-1008-20-20	FD86-1043-20-20	FD86-1053-20-20	Plug/Male	1 1/4	1 5/8	1 5/8 - 12	Female SAE O-Ring	1	105.7	(4.16)	63.0	(2.48)	57.2	(2.25)
FD86-1010-20-20	FD86-1044-20-20	FD86-1054-20-20	Socket/Female	1 1/4	1 5/8	1 5/8 - 12	Female SAE O-Ring	2	132.6	(5.22)	133.4	(5.25)	-	-
FD86-1006-20-20	FD86-1042-20-20	FD86-1052-20-20	Socket/Female	1 1/4	1 5/8	1 5/8 - 12	Female SAE O-Ring	3	132.6	(5.22)	86.4	(3.40)	50.8	(2.00)

Dimensions (Female NPT)

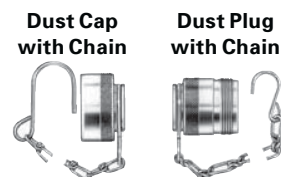
Part Number Buna-N	FKM	EPDM	Type	Body Size	Port Size	Thread	Type	Fig.	Dimensions			Hex ①		
									A	B				
									mm	(in)	mm	(in)	mm	(in)
FD86-1002-16-16	FD86-1040-16-16	FD86-1050-16-16	Plug/Male	1	1 - 11 1/2	1 - 11 1/2	Female NPT	1	111.8	(4.40)	53.6	(2.11)	44.5	(1.75)
FD86-1001-16-16	FD86-1039-16-16	FD86-1049-16-16	Socket/Female	1	1 - 11 1/2	1 - 11 1/2	Female NPT	2	126.5	(4.98)	114.3	(4.50)	-	-
FD86-1004-16-16	FD86-1041-16-16	FD86-1051-16-16	Socket/Female	1	1 - 11 1/2	1 - 11 1/2	Female NPT	3	126.5	(4.98)	71.4	(2.81)	15.8	(1.62)
FD86-1002-20-20	FD86-1040-20-20	FD86-1050-20-20	Plug/Male	1 1/4	1 1/4 - 11 1/2	1 1/4 - 11 1/2	Female NPT	1	112.5	(4.43)	63.0	(2.48)	57.2	(2.25)
FD86-1001-20-20	FD86-1039-20-20	FD86-1049-20-20	Socket/Female	1 1/4	1 1/4 - 11 1/2	1 1/4 - 11 1/2	Female NPT	2	142.8	(5.62)	133.4	(5.25)	-	-
FD86-1004-20-20	FD86-1041-20-20	FD86-1051-20-20	Socket/Female	1 1/4	1 1/4 - 11 1/2	1 1/4 - 11 1/2	Female NPT	3	142.8	(5.62)	86.4	(3.40)	50.8	(2.00)

Repair Kits

Part Number Buna-N	FKM	EPDM	Body Size	Coupling Type
FF10596-16	FF10597-16	FF10598-16	1	Male
FF10593-16	FF10594-16	FF10595-16	1	Female
FF10596-20	FF10597-20	FF10598-20	1 1/4	Male
FF10593-20	FF10594-20	FF10595-20	1 1/4	Female

Dust Caps and Dust Plugs

Part Number Dust Cap with Chain	Dust Plug with Chain	Body Size
FD86-1018-16	FD86-1016-16	1
FD86-1018-20	FD86-1016-20	1 1/4



Powering Business Worldwide

EatonQuick Disconnect Couplings快速接头代理商：

信德迈科技(北京)有限公司_CNMEC Technology Company

北京朝阳区望京街10号望京SOHO-T1-C座2115室

邮编：100102

Tel: 010-8428 2935 , 8428 3983

Fax: 010-8428 8762 , 139 1096 2635

Http://www.cnmec.biz

Email: sales@cnmec.biz