

FD85 Series

Thread to Connect

Fluid transfer & Hydraulic application



The Danfoss Hansen FD85 Series is a thread to connect coupling most commonly used in Oil and Gas applications, but can also be found on demanding applications on both mobile and stationary equipment where operating pressures of 5,000 psi are present.

Product Features

- Thread to connect feature allows for use in high vibration and impulse applications
- Standard body material: Zinc trivalent plated carbon steel. Stainless steel construction available upon request
- Connect under pressure capability up to 5,000 psi (345 bar)
- Standard seal material: Nitrile (NBR), FKM seals are available upon request
- Wing nut and hex flat design allows for easy connection and disconnection
- 3/4" design is offered in a hex nut design
- Female NPTF and BSPP ends available

Physical Characteristics

Body Size (in)	Maximum Operating Pressure						Minimum Burst Pressure						Rated Flow		Fluid Loss ml-cc.	Air Inclusion ml-cc.
	Connected		Plug/ Male Half		Socket/ Female Half		Connected		Plug/ Male Half		Socket/ Female Half					
	bar	(psi)	bar	(psi)	bar	(psi)	bar	(psi)	bar	(psi)	bar	(psi)	L/min	(gpm)		
3/4"	345	5,000	345	5,000	345	5,000	1,380	20,000	1,380	20,000	1,380	20,000	100	26.4	10	10
1"	345	5,000	345	5,000	345	5,000	1,380	20,000	1,380	20,000	1,380	20,000	189	50	20	26
1 1/4"	345	5,000	345	5,000	345	5,000	1,035	15,000	1,035	15,000	1,035	15,000	288	76	20	40
1 1/2"	345	5,000	345	5,000	345	5,000	1,035	15,000	1,035	15,000	1,035	15,000	379	100	83	85
2"	345	5,000	345	5,000	345	5,000	1,035	15,000	1,035	15,000	1,035	15,000	757	200	181	240

Applications & Markets

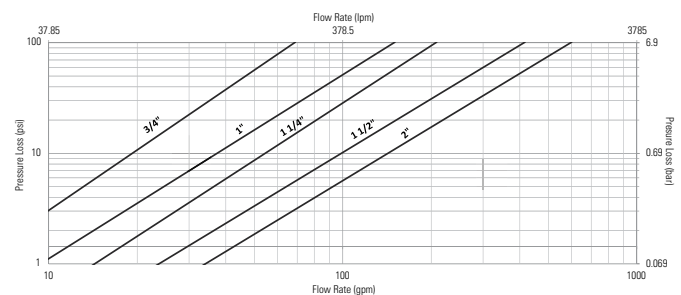
- Oilfields
- Offshore Drilling
- Construction
- Oil and Gas

Lloyd's Register Certification

The FD85 Series carries a Lloyd's Registry Certificate for fire conditions outlined in API 16D and EUB Directive 36. These parts meet the requirements that couplings shall be capable of maintaining pressure when exposed to a 700°C (1,300°F) temperature for a five-minute period in connected state.

Certification only applies to those assemblies where both mating parts socket/female and plug/male are Danfoss FD85 Series thread to connect couplings.

Flow Data



FD85 Series

Thread to Connect

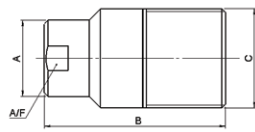


Figure 1

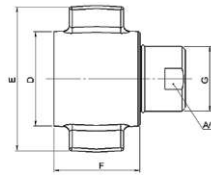


Figure 2

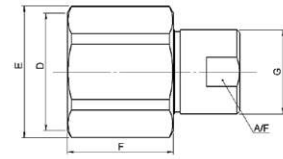


Figure 3

Plugs (Male)

Part Number	Body Size		Thread Size (Female)		Fig.	Dimensions						Weight		
	(in)	NPT	BSPP	A (in)		B (in)	C (in)	A (mm)	B (mm)	C (mm)	A/F (in)	A/F (mm)	Lbs	grams
FD85-1001-12-12	¾	¾-14	–	1	1.39	3.27	1.74	35.2	83.1	44.3	1 1/3	33	1.162	480
FD85-1017-12-12	¾	–	G ¾-14	1	1.39	3.27	1.74	35.2	83.1	44.3	1 1/3	33	1.162	480
FD85-1001-16-16	1	1-11 1/2	–	1	1.77	4.17	2.25	45	106	57.1	1 5/8	41	2.921	1120
FD85-1017-16-16	1	–	G 1 - 11	1	1.77	4.17	2.25	45	106	57.1	1 5/8	41	2.974	1120
FD85-1001-20-20	1 ¼	1 ¼ - 11	–	1	2.15	5.37	2.62	54.5	136.4	66.6	2	50	5.633	1875
FD85-1017-20-20	1 ¼	–	G 1 ¼ - 11	1	2.15	5.37	2.62	54.5	136.4	66.6	2	50	5.633	1875
FD85-1001-24-24	1 ½	1 ½ - 11 ½	–	1	2.5	5.99	3.25	63.5	152.2	82.55	2 3/8	60	7.721	3150
FD85-1017-24-24	1 ½	–	G 1 ½ - 11	1	2.5	5.99	3.25	63.5	152.2	82.55	2 3/8	60	7.721	3150
FD85-1001-32-32	2	2 - 11 ½	–	1	3.25	7	4	82.5	179.2	101.6	3	76	15.046	5635
FD85-1017-32-32	2	–	G 2" - 11	1	3.25	7	4	82.5	179.2	101.6	3	76	15.046	5635

Sockets (Female)

Part Number	Body Size		Thread Size (Female)		Fig.	Dimensions								Weight		
	(in)	NPT	BSPP	D (in)		E (in)	F (in)	G (in)	D (mm)	E (mm)	F (mm)	G (mm)	A/F (in)	A/F (mm)	Lbs	grams
FD85-1003-12-12	¾	¾-14	–	3	1.94	2.17	1.74	1.39	49.2	55	44.3	35.2	1 1/3	33	1.162	527
FD85-1019-12-12	¾	–	G ¾-14	3	1.94	2.17	1.74	1.39	49.2	55	44.3	35.2	1 1/3	33	1.162	527
FD85-1003-16-16	1	1-11 ½	–	2	2.68	4.25	2.2	1.77	68	108	56	45	1 5/8	41	2.921	1325
FD85-1019-16-16	1	–	G 1 - 11	2	2.68	4.25	2.2	1.77	68	108	56	45	1 5/8	41	2.974	1349
FD85-1003-20-20	1 ¼	1 ¼ - 11	–	2	3.15	4.72	2.8	2.15	80	120	71	54.5	2	50	5.633	2555
FD85-1019-20-20	1 ¼	–	G 1 ¼ - 11	2	3.15	4.72	2.8	2.15	80	120	71	54.5	2	50	5.633	2555
FD85-1003-24-24	1 ½	1 ½ - 11 ½	–	2	3.66	5.67	3.31	2.5	93	144	84	63.5	2 3/8	60	7.721	3502
FD85-1019-24-24	1 ½	–	G 1 ½ - 11	2	3.66	5.67	3.31	2.5	93	144	84	63.5	2 3/8	60	7.721	3502
FD85-1003-32-32	2	2 - 11 ½	–	2	4.67	6.67	4.35	3.25	118.6	169.4	110.5	82.5	3	76	15.046	6825
FD85-1019-32-32	2	–	G 2 - 11	2	4.67	6.67	4.35	3.25	118.6	169.4	110.5	82.5	3	76	15.046	6825