

Full-Bore Series

Pneumatic application

Danfoss' Full-Bore Series is a premium automatic one-way shutoff quick disconnect coupling. Two sleeves must be actuated in sequence to bleed off back pressure and release the connector, preventing accidental uncoupling.



Product Features

- Pressure relieving feature fully vents downstream air, making connection/disconnection fast and easy, and eliminating hose whip
- Unique straight through design
- eliminates restrictive springs and poppet valves, allowing unimpeded air flow
- Two sleeve activation prevents accidental disconnect
- Standard body material: Zinc trivalent plated carbon steel
- Standard seal material: Buna-N

Physical Characteristics

Body Size (in)	Max. Operating Pressure			Min. Burst Pressure Rated Flow			
	(bar)	(psi)	(psi)	(bar)	(psi)	(lpm)	scfm
3/8	15	250	250	60	1,000	1,784	63
1/2	15	250	250	60	1,000	2,860	101

Applications & Markets

- Construction
- Maintenance and Repair
- In-Plant/Industrial
- Railyards
- General Pneumatics

Flow Data

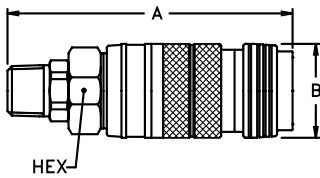
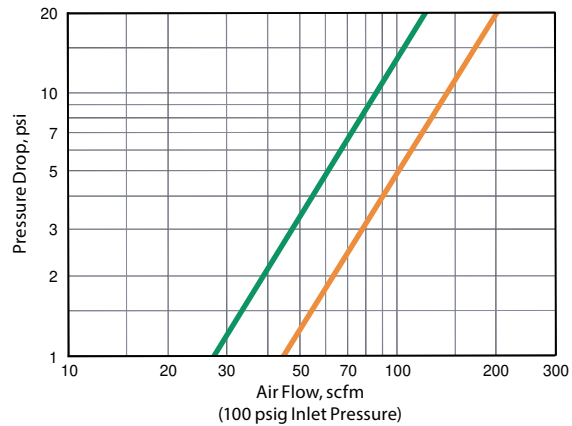


Figure 1

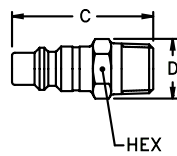


Figure 2

Male End Connections

Part Number	Coupling Type	Body Size	Port Size	Thread	Type	Fig.	Dimensions			A	B	Hex
							A	B	Hex			
							(in)	(in)	(in)	(mm)	(mm)	(mm)
23203013	Socket/Female	3/8	3/8	3/8-18	NPTF	1	3.80	1.25	1.00	96.5	31.8	25.4
23203014	Socket/Female	3/8	1/2	1/2-14	NPTF	1	4.10	1.25	1.00	71.1	31.8	25.4
23204014	Socket/Female	1/2	1/2	1/2-14	NPTF	1	4.43	1.38	1.13	112.5	35.1	28.7
23204015	Socket/Female	1/2	3/4	3/4-14	NPTF	1	4.67	1.38	1.13	118.6	35.1	28.7
Part Number	Coupling Type	Body Size	Port Size	Thread	Type	Fig.	Dimensions			C	D	Hex
							C	D	Hex			
							(in)	(in)	(in)	(mm)	(mm)	(mm)
40	Plug/Male	3/8	1/4	1/4-18	NPTF	2	1.88	0.72	0.63	47.8	18.3	16.0
42	Plug/Male	3/8	3/8	3/8-18	NPTF	2	1.88	0.79	0.69	47.8	20.1	17.5
44	Plug/Male	3/8	1/2	1/2-14	NPTF	2	2.09	1.01	0.88	53.1	25.7	22.4
52	Plug/Male	1/2	3/8	3/8-18	NPTF	2	2.25	0.87	0.75	57.2	22.1	19.1
54E	Plug/Male	1/2	1/2	1/2-14	NPTF	2	2.44	1.01	0.88	62.0	25.7	22.4
56	Plug/Male	1/2	3/4	3/4-14	NPTF	2	2.50	1.23	1.06	63.5	31.2	26.9

Full-Bore Series

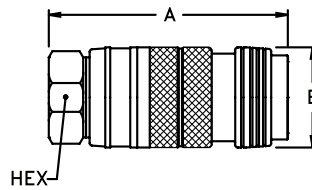


Figure 1

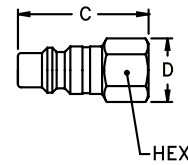


Figure 2

Female End Connections

Part Number	Coupling Type	Body Size	Port Size	Thread	Type	Fig.	Dimensions			A	B	Hex
							A	B	Hex			
							(in)	(in)	(in)	(mm)	(mm)	(mm)
23203300	Socket/Female	3/8	3/8	3/8-18	NPTF	1	3.17	1.25	1.00	80.5	31.8	25.4
23203004	Socket/Female	3/8	1/2	1/2-14	NPTF	1	3.92	1.25	1.00	99.6	31.8	25.4
23204400	Socket/Female	1/2	1/2	1/2-14	NPTF	1	3.31	1.38	1.13	84.1	35.1	28.7
23204005	Socket/Female	1/2	3/4	3/4-14	NPTF	1	4.30	1.38	1.13	109.2	35.1	28.7

Part Number	Coupling Type	Body Size	Port Size	Thread	Type	Fig.	Dimensions			C	D	Hex
							C	D	Hex			
							(in)	(in)	(in)	(mm)	(mm)	(mm)
41	Plug/Male	3/8	1/4	1/4-18	NPTF	2	1.63	0.79	0.69	41.4	20.1	17.5
43	Plug/Male	3/8	3/8	3/8-18	NPTF	2	1.81	0.94	0.81	46.0	23.9	20.6
45E	Plug/Male	3/8	1/2	1/2-14	NPTF	2	2.06	1.15	1.00	52.3	29.2	25.4
53	Plug/Male	1/2	3/8	3/8-18	NPTF	2	2.06	0.94	0.81	52.3	23.9	20.6
55	Plug/Male	1/2	1/2	1/2-14	NPTF	2	2.34	1.15	1.00	59.4	29.2	25.4
57	Plug/Male	1/2	3/4	3/4-14	NPTF	2	2.44	1.37	1.19	62.0	34.8	30.2

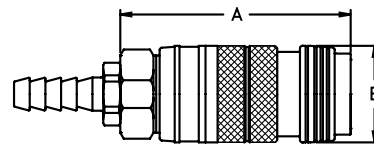


Figure 1

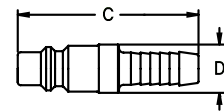


Figure 2

Hose Stem End Connections

Part Number	Coupling Type	Body Size	Hose I.D.	Fig.	Dimensions			
					A	B	A	B
					(in)	(in)	(mm)	(mm)
23203024	Socket/Female	3/8	1/4	1	4.36	1.25	110.7	31.8
23203025	Socket/Female	3/8	3/8	1	4.48	1.25	113.8	31.8
23204025	Socket/Female	1/2	1/2	1	4.80	1.38	121.9	35.1
23204026	Socket/Female	1/2	3/4	1	4.80	1.38	121.9	35.1

Part Number	Coupling Type	Body Size	Hose I.D.	Fig.	Dimensions			
					C	D	C	D
					(in)	(in)	(mm)	(mm)
404	Plug/Male	3/8	1/4	2	2.34	0.63	59.4	16.0
406	Plug/Male	3/8	3/8	2	2.34	0.63	59.4	16.0
408	Plug/Male	3/8	1/2	2	2.34	0.81	59.4	20.6
59	Plug/Male	1/2	3/8	2	2.66	0.69	67.6	17.5
60	Plug/Male	1/2	1/2	2	2.66	0.75	67.6	19.1
61E	Plug/Male	1/2	3/4	2	3.50	1.00	88.9	25.4

Gas-Mate Series

Pneumatic application

Danfoss' Gas-Mate™ Series quick disconnect couplings are a one-way shut-off safety couplings designed for the connection of gas fired devices or applications.



Product Features

- Connect and disconnect without the need for wrenches
- Automatic shut off when plug is removed from socket
- In case of fire, heat sensitive plug allows socket valve to close, stopping gas flow
- Tested to meet operating temperatures -40°F to 200°F (-40°C to 93°C) in sizes 3/8", 1/2", 3/4", and 1" when used in accordance with the CSA standard ANSI Z21.41b-2010/CSA 6.9b-2010 in both indoor and outdoor applications. Please note that the 1 1/4" size coupling is rated for indoor use only.
- Standard body material: Brass

Physical Characteristics

Sizes	Max. Operating Pressure		Min. Burst Pressure	
	(bar)	(psi)	(bar)	(psi)
All sizes	0.03	0.5	68	1,000

Applications & Markets

- Industrial
- Fuel Gas Systems
- Food & Beverage



*CSA design certified, in both the United States and Canada, for natural gas, manufactured gas, liquified petroleum and LP gas-air mixtures at pressures not in excess of 1/2 psig (3.5 kPa).

Capacities

Body Size (in)	Socket/Female P/N	Plug/Male P/N	Capacity (btu/hr)
3/8	100006E	100506	60,000
1/2	100008	100508	90,000
3/4	100010	100510	245,000
1	100012E	100512	310,000
1 1/4	GMS1250FH	GMP1250F	500,000

*Capacity is based on natural gas having a specific gravity of 0.64 and heat capacity of 1,000 BTU per cubic foot. Inlet pressure is 12 inches water column and the pressure drop is 0.3 inch water column.

Gas-Mate Series

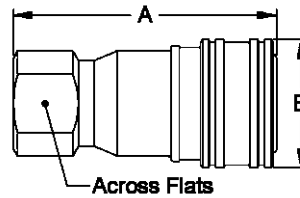


Figure 1

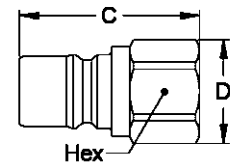


Figure 2

Sockets/Females

Part Number	Coupling Type	Body Size	Port Size	Thread	Type	Fig.	Dimensions			A	B	Across Flats
							A	B	Across Flats			
							(in)	(in)	(in)	(mm)	(mm)	(mm)
100006E	Socket/Female	3/8	3/8	3/8-18	NPTF	1	2.44	1.13	0.87	62.0	28.7	22.1
100008	Socket/Female	1/2	1/2	1/2-14	NPTF	1	2.84	1.38	1.00	72.1	35.1	25.4
100010	Socket/Female	3/4	3/4	3/4-14	NPTF	1	3.17	1.75	1.31	80.5	44.5	33.3
100012E	Socket/Female	1	1	1-11 1/2	NPTF	1	3.94	2.13	1.50	100.1	54.1	38.1

Part Number	Coupling Type	Body Size	Port Size	Thread	Type	Fig.	Dimensions			A	B	Hex
							A	B	Hex			
							(in)	(in)	(in)	(mm)	(mm)	(mm)
GMS1250FH*	Socket/Female	1 1/4	1 1/4	1 1/4-11 1/2	NPTF	3	4.15	2.28	2.00	105.4	57.9	50.8

*For indoor use only

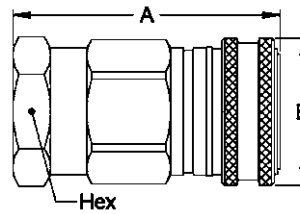


Figure 3

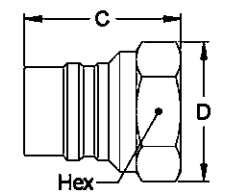


Figure 4

Plugs/Males

Part Number	Coupling Type	Body Size	Port Size	Thread	Type	Fig.	Dimensions			C	D	Hex
							C	D	Hex			
							(in)	(in)	(in)	(mm)	(mm)	(mm)
100506	Plug/Male	3/8	3/8	3/8-18	NPTF	2	1.59	0.94	0.81	40.4	23.9	20.6
100508	Plug/Male	1/2	1/2	1/2-14	NPTF	2	1.94	1.15	1.00	49.3	29.2	25.4
100510	Plug/Male	3/4	3/4	3/4-14	NPTF	2	2.06	1.51	1.31	52.3	38.4	33.3
100512	Plug/Male	1	1	1-11 1/2	NPTF	2	2.47	1.73	1.50	62.7	43.9	38.1
GMP1250F*	Plug/Male	1 1/4	1 1/4	1 1/4-11 1/2	NPTF	4	2.44	2.17	1.88	62.0	55.1	47.8

*For indoor use only

Dust Caps and Dust Plugs

Series	Dust Cap		Dust Plug	
	Metal	Vinyl	Metal	Vinyl
3/8	XPDC2HK*	XPPDC2HK	XPDC2HK*	XPPDC2HK
1/2	XPDC3HK*	XPPDC3HK	XPDC3HK*	XPPDC3HK
3/4	XPDC4HK**	XPPDC4HK	XPDC4HK**	XPPDC4HK
1	XPDC6HK**	XPPDC6HK	XPDC6HK**	XPPDC6HK

*Brass
**Aluminum



CANADIAN STANDARDS ASSOCIATION*

Complies with the requirements of ANSI Z21.41B-2010/CSA 6.96-2010.

*CSA design certified, in both the United States and Canada, for natural gas, manufactured gas, propane gas and LP gas-air mixtures at pressures not in excess of 1/2 psig (3.5 kPa).