

MLDB Series (Stainless Steel)

Flat Face/Dry Break

Fluid transfer & Hydraulic application



Danfoss Hansen MLDB Series stainless steel coupling is a flat face/dry break coupling used for fluid transfer applications. The MLDB Series offers the ability to connect with less force, higher sealing performance and are available in multiple configurable end connections.

Product Features

- Designed and manufactured in accordance with Article 4.3 of the European Pressure Equipment Directive PED 2014/68/EU
- Safety sleeve lock prevents accidental disconnections
- Push to connect with double shut-off valving
- Capable of working under high temperature applications
- Shock-resistant color coding ring option available in 1/2" size
- Serviceable design allows for easy cleaning and seal replacement
- Designed with higher flow capacity and resistance to aggressive fluids and corrosion
- Standard body material: $316L$ Stainless steel corrosion resistant
- Standard seal material: FKM, EPDM, Kalrez[®] and generic FFKM

Physical Characteristics

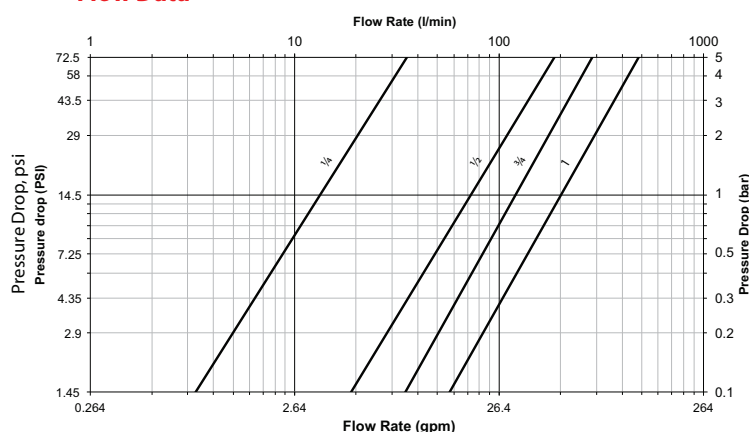
Body Size (in)	Nominal Flow Diameter (mm)	Max. Operating Pressure (bar)	(psi)	Rated* Flow (lpm)	(gpm)	Air Inclusion ml-cc.	Fluid Loss ml-cc.	Force to Connect N	lbf
1/4	5.9	25	360	15	4	0.002	0.001	85	19
1/2	11.5	25	360	73	19	0.012	0.025	150	34
3/4	15.0	25	360	120	32	0.030	0.050	170	38
1	18.5	25	360	200	53	0.150	0.130	180	41

* Indicated values refer to a 1 bar/14.5 psi pressure drop.

Applications & Markets

- Process/Fluid Transfer
- Cooling
- Corrosive Environments
- Chemicals/Petrochemicals
- Pharmaceuticals
- Food Processing
- Electrical

Flow Data



Test Fluid: Oil viscosity 30 cSt at 40°C/104°F

Seal Elastomer Data*

Seal Elastomer	Max. Operation Temperature Range
FKM	-20°C +200°C/-4°F +392°F
EPDM (Ethylene-Propylene)	-40°C +150°C/-40°F +302°F
Kalrez [®] 6375	-20°C +275°C/-4°F +527°F
Generic FFKM (Perfluorocarbon)	-15°C +275°C/+5°F +527°F

* For reference only, based on Danfoss recommended temperatures.

Contact Danfoss technical support for further information on fluid compatibility

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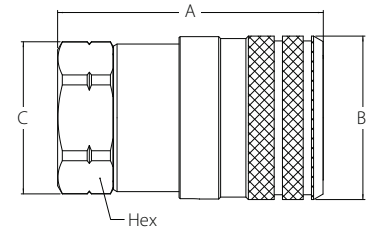


Figure 1

Sockets (Female)

Part Number		Thread Size*(Female)			Dimensions							Weight					
FKM	EPDM	Kalrez 6375	Generic FFKM	Body Size	NPT	BSP	Fig.	A (in)	B (in)	C (in)	Hex (in)	A (mm)	B (mm)	C (mm)	Hex (mm)	lbs	grams
ML2DBS25FBS	ML2DBS25FBS292	ML2DBS25FBS242	ML2DBS25FBS503	1/4	—	1/4-19	1	1.79	1.06	0.96	0.87	45.4	26.8	24.5	22	0.25	116
ML2DBS25F	ML2DBS25F292	ML2DBS25F242	ML2DBS25F503	1/4	—	1/4-18	1	1.73	1.06	0.96	0.87	43.9	26.8	24.5	22	0.27	127
ML4DBS50FBS	ML4DBS50FBS292	ML4DBS50FBS242	ML4DBS50FBS503	1/2	—	1/2-14	1	2.44	1.5	1.4	1.26	61.9	38.2	35.5	32	0.71	325
ML4DBS50F	ML4DBS50F292	ML4DBS50F242	ML4DBS50F503	1/2	—	1/2-14	1	2.44	1.5	1.4	1.26	61.9	38.2	35.5	32	0.70	318
ML6DBS75FBS	ML6DBS75FBS292	ML6DBS75FBS242	ML6DBS75FBS503	3/4	—	3/4-14	1	3.02	1.89	1.83	1.61	76.8	47.9	46.5	41	1.36	617
ML6DBS75F	ML6DBS75F292	ML6DBS75F242	ML6DBS75F503	3/4	—	3/4-14	1	3.02	1.89	1.83	1.61	76.8	47.9	46.5	41	1.37	622
ML8DBS100FBS	ML8DBS100FBS292	ML8DBS100FBS242	ML8DBS100FBS503	1	—	1-11	1	3.54	2.26	2.16	1.97	89.9	57.4	54.9	50	2.21	1005
ML8DBS100F	ML8DBS100F292	ML8DBS100F242	ML8DBS100F503	1	—	1-11	1	3.42	2.26	2.16	1.97	86.9	57.4	54.9	50	2.24	1020

*Alternative end connections available upon request.

To obtain connected length of coupling, add dimensions A (Fig. 1) and G (Fig. 2) together.

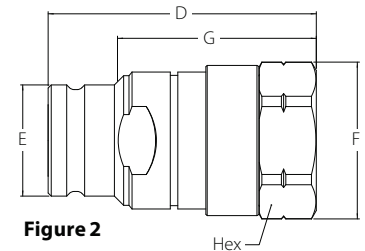


Figure 2

Plugs (Male)

Part Number				Thread Size*(Female)			Dimensions											Weight	
FKM	EPDM	Kalrez® 6375	Generic FFKM	Body Size	NPT	BSPP	Fig.	D (in)	E (in)	F (in)	G (in)	Hex (in)	D (mm)	E (mm)	F (mm)	G (mm)	Hex (mm)	lbs	grams
ML2DBP25FBS	ML2DBP25FBS292	ML2DBP25FBS242	ML2DBP25FBS503	¼	–	¼-19	2	1.72	0.65	0.96	1.31	0.87	43.6	16.5	24.5	33.2	22	0.17	80
ML2DBP25F	ML2DBP25F292	ML2DBP25F242	ML2DBP25F503	¼		¼-18	2	1.66	0.65	0.96	1.25	0.87	42.1	16.5	24.5	31.7	22	0.18	82
ML4DBP50FBS	ML4DBP50FBS292	ML4DBP50FBS242	ML4DBP50FBS503	½	–	½-14	2	2.39	0.99	1.4	1.8	1.26	60.7	25.2	35.5	45.7	32	0.44	204
ML4DBP50F	ML4DBP50F292	ML4DBP50F242	ML4DBP50F503	½	½-14		2	2.39	0.99	1.4	1.8	1.26	60.7	25.2	35.5	45.7	32	0.47	214
ML6DBP75FBS	ML6DBP75FBS292	ML6DBP75FBS242	ML6DBP75FBS503	¾	–	¾-14	2	2.97	1.29	1.83	2.11	1.61	75.5	32.8	46.5	53.6	41	0.92	418
ML6DBP75F	ML6DBP75F292	ML6DBP75F242	ML6DBP75F503	¾	¾-14		2	2.97	1.29	1.83	2.11	1.61	75.5	32.8	46.5	53.6	41	0.90	409
ML8DBP100FBS	ML8DBP100FBS292	ML8DBP100FBS242	ML8DBP100FBS503	1	–	1-11	2	3.52	1.59	2.16	2.60	1.97	89.4	40.4	54.9	66.1	50	1.61	733
ML8DBP100F	ML8DBP100F292	ML8DBP100F242	ML8DBP100F503	1	1-11		2	3.4	1.59	2.16	2.48	1.97	86.4	40.4	54.9	63.1	50	1.54	700

Seal Kit and Tool for Servicing Sockets (Female)

Body Size	Tool Part Number	Seal Kit Part Number (includes 5 sets)		Seal Kit Part Number (includes 1 set)	
		FKM	EPDM	Kalrez 6375	Generic FFKM
1/4	ML2DBS93	2DBSG143	2DBSG292	2DBSG242	2DBSG503
1/2	ML4DBS93	4DBSG143	4DBSG292	4DBSG242	4DBSG503
3/4	ML6DBS93	6DBSG143	6DBSG292	6DBSG242	6DBSG503
1	ML8DBS93	8DBSG143	8DBSG292	8DBSG242	8DBSG503

For installation instructions, please refer to the user guide on "Danfoss.com".

Seal Kit for Servicing Plugs (Male)

Body Size	Seal Kit Part Number (includes 5 sets)		Seal Kit Part Number (includes 1 set)	
	FKM	EPDM	Kalrez 6375	Generic FFKM
1/4	2DBPG143	2DBPG292	2DBPG242	2DBPG503
1/2	4DBPG143	4DBPG292	4DBPG242	4DBPG503
3/4	6DBPG143	6DBPG292	6DBPG242	6DBPG503
1	8DBPG143	8DBPG292	8DBPG242	8DBPG503



Color Coding Ring Option*

Body Size (in)	ISO Size (mm)	Size	Socket/Female Ring Part Number**				Plug/Male Ring Part Number**				Tool Part Number	Tool & Rings Kit Part Number***
			Blue	Red	Yellow	Green	Blue	Red	Yellow	Green		
1/2	12.5	12FF	CR12FFSLB	CR12FFSRD	CR12FFSYL	CR12FFSDG	CR12FFPLB	CR12FFPRD	CR12FFPYL	CR12FFPDG	CR12FFSP93	CRKIT12FF

For color coded rings TPE material is used that offers excellent flexibility which allows a very good shock resistance in demanding applications. Good thermal, chemical and weather resistance provides a great fit on the coupling and a extended life time in toughest conditions. The color coded rings are easy to install by using the referenced tools. Please refer to the user guide on "Danfoss.com"

* For requests on alternative colors or installation instructions, please contact your Danfoss sales representative.

** Orders must be in multiples of 10 pcs.

*** The kit consists of a tool plus 10 socket rings and 10 plug rings of each color.