

Solenoid Valve

MDF series solenoid valves are direct operated or pilot operated solenoid valves, mainly used in refrigerant control of various devices such as refrigerating and freezing systems, air conditioners and heat pumps.



FEATURES

- COILS: LOW ENERGY CONSUMPTION, RELIABLE
- GREAT VALVE OPENING PERFORMANCE, HIGH MOPD
- COILS ARE DOUBLE SEALED, WATER TIGHT AND SAFE

GENERAL SPECIFICATIONS

- Applicable for all common HFC, HFO refrigerants such as: R134a, R404A, R407A/F, R407C, R410A, R448A, R449A, R450A, R452A, R513A, R507A¹⁾
- Medium temperature TS min./max.:
 - MDF 2H...22H and MDF 2L...15L: -30°C/105°C
 - MDF 25H...40H: -40°C/140°C
- Ambient temperature min./max.: -30°C / +55°C
- Relative humidity: 0 to 95% RH
- Installation position:
 - Liquid, suction and discharge line
 - Preferably coil upwards and flow direction corresponds to the arrow
- Declaration according to LVD or PED

Note: 1) Flammable refrigerants like R32, R290, R1234ze(E), R1234yf on request



TECHNICAL PARAMETERS OF VALVE BODY

Valve Body		Usable Coils	Normal position	Actuation	Kv [m ³ /h]	MOP [Mpa]	Max. OPD [Mpa]		Min. OPD ⁷⁾ [Mpa]
Solder	Flare						AC ⁴⁾ coil	DC ⁵⁾⁶⁾ coil	
MDF-A03-2H	MDF-A03-2L	AC + DC		Direct	0,16		3,1	3,1	0,00
MDF-A03-3H	MDF-A03-3L				0,23				
MDF-A03-6H	MDF-A03-6L	AC			0,8		NP	NR	
MDF-D03-6H	MDF-D03-6H	DC			NP		2,8		
MDF-A03-10H	MDF-A03-10L	AC	NC ¹⁾	Pilot ²⁾	1,9	4,5	3,1	NR	0,005
MDF-D03-10H	MDF-D03-10H	DC			NP		2,8		
MDF-A03-15H	MDF-A03-15L	AC			2,3		3,1	NR	
MDF-D03-15H	MDF-D03-15L	DC			NP		2,8		
MDF-A03-20H					5,0				0,007
MDF-A03-22H					5,9				
MDF-B03-25H	-	AC + DC		Pilot (P) ³⁾	10,0		3,1	3,1	0,02
MDF-B03-32H					15,0				
MDF-B03-40H					25,0				

- Note:**
- 1) NC means: Normally closed valve
 - 2) Membrane operated
 - 3) Piston operated
 - 4) NP means: not permitted to use, select MDF-A03 model
 - 5) NR means: not recommended to use, Only possible with R134a and min. evaporation temp. / max. condensing temp. -15°C/+58°C, select MDF-D03 model
 - 6) Pressure values valid for 24V DC coil. Values for 12V DC coils on request
 - 7) Min. OPD: values referred to 60% of nominal flow

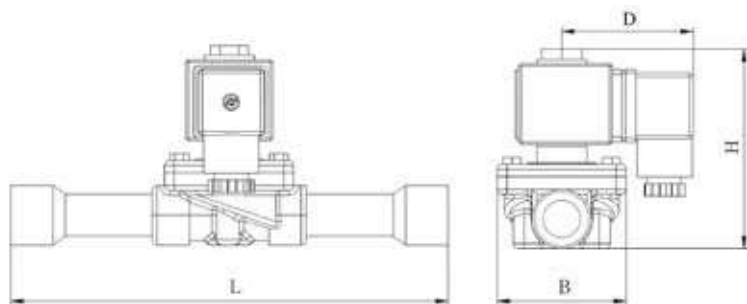
MDF SERIES

Solenoid Valve



DIMENSIONS

Valve Body - Inch Solder Connection



Model Valve Body	Part Number*1)	Solder Connection ODF	Kv	PED Category Group 2	Dimensions [mm]			
		[inch]	[m ³ /h]		L	B	D	H
MDF-A03-2H 001	10125011202	1/4	0,16	4,3	102	30	53	82
MDF-A03-3H 001	10125011302	1/4	0,23	4,3	102	30	53	82
MDF-A03-3H 003	10125003602	3/8	0,23	4,3	102	30	53	82
MDF-A03-6H 001	10125011402	3/8	0,8	4,3	111	36	53	88
MDF-D03-6H 001	10125017402	3/8	0,8	4,3	111	36	53	88
MDF-A03-6H 003	10125004202	1/2	0,8	4,3	127	36	53	88
MDF-D03-6H 003	10125017502	1/2	0,8	4,3	127	36	53	88
MDF-A03-10H 001	10125011502	1/2	1,9	4,3	127	42	53	95
MDF-D03-10H 001	10125017202	1/2	1,9	4,3	127	42	53	95
MDF-A03-10H 003	10125006302	5/8	1,9	4,3	160	42	53	95
MDF-D03-10H 003	10125018402	5/8	1,9	4,3	160	42	53	95
MDF-A03-15H 005	10125003702	5/8	2,3	4,3	176	52	53	100
MDF-D03-15H 005	10125017102	5/8	2,3	4,3	176	52	53	100
MDF-A03-15H 003	10125005002	7/8	2,3	4,3	176	52	53	100
MDF-D03-15H 003	10125019002	7/8	2,3	4,3	176	52	53	100
MDF-A03-20H 001	10125011702	7/8	5	4,3	191	52	53	117
MDF-A03-22H 001	10125011802	7/8	5,9	4,3	281	60	53	117
MDF-A03-20H 003	10125005602	1-1/8	5	4,3	214	52	53	117
MDF-A03-22H 009	10125006202	1-1/8	5,9	4,3	281	60	53	117
MDF-B03-25H 003	10125006902	1-1/8	10	4,3	256	76	53	144
MDF-A03-22H 003	10125005102	1-3/8	5,9	I	281	60	53	117
MDF-B03-25H 004	10125006802	1-3/8	10	I	280	76	53	144
MDF-B03-32H 001	10125009102	1-3/8	15	I	281	76	53	144
MDF-B03-32H 002	10125007502	1-5/8	15	I	281	76	53	144
MDF-B03-40H 002	10125004302	1-5/8	25	I	281	84	53	152
MDF-B03-40H 004	10125007702	2-1/8	25	I	281	84	53	152

Note: 1) Extent of delivery: valve body without coil
 2) Available also as industrial package. Contact Sanhua for more details.