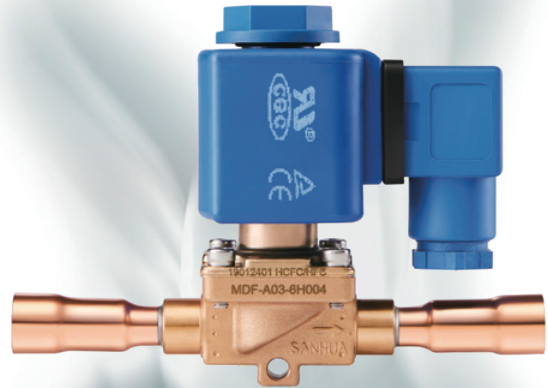


MDF SERIES

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

- NORMALLY CLOSED(NC) AND NORMALLY OPEN(NO) TYPE ARE AVAILABLE
- COILS: LOW ENERGY CONSUMPTION, RELIABLE
- GREAT VALVE OPENING PERFORMANCE, HIGH MOPD
- COILS ARE DOUBLE SEALED, WATER TIGHT AND SAFE
- DETACHABLE STRUCTURE, EASY MAINTENANCE

GENERAL SPECIFICATIONS

- Applicable for all common HCFC and HFC refrigerants such as: R22, R134a, R404A, R407C, R410A, R507 (For oil system requirements, please contact SANHUA)
- 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
- Certification: TUV and CQC, declaration according to LVD or PED (For UL certification requirements, please contact Sanhua)

TECHNICAL PARAMETERS

Technical parameters of Coil

Rated Voltage	Voltage Tolerance	Wiring type	Power (50/60Hz)	Insulation Class	Protection Class (w/plug)	Model Coil*
[V]			[W]			
AC24	-15%+10%	DIN Plug	10.5/8.5	F	IP67	MQ-A03024-000001
AC110 ~ 120			12/10			MQ-A0311A-000001
AC220 ~ 240			12/10			MQ-A0322G-000001

Note: Used for MDF NC series

MDF SERIES
Solenoid Valve



Rated Voltage	Voltage Tolerance	Wiring type	Power (50/60Hz)	Insulation Class	Protection Class (w/plug)	Model Coil*
[V]			[W]			
AC24	-15%+10%	DIN Plug	12.5/10.5	F	IP67	MQ-A02024-000001
AC110 ~ 120			12.5/10.5			MQ-A0211A-000001
AC220 ~ 240			12.5/10.5			MQ-A0222G-000001

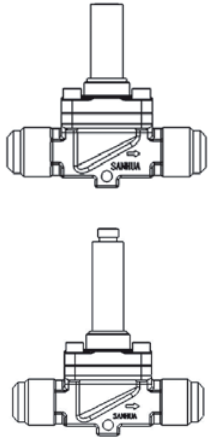
Note: Used for MDF NO series

Technical Parameters of Valve Body

Valve Body		Normal position	Actuation	Kv	MOP	Max. OPD	Min. OPD	Coil
Solder	Flare			[m ³ /h]	[MPa]	[MPa]	[MPa]	
MDF-A03-2H	MDF-A03-2L	NC	Direct	0.16	4.5	3.1	0	MQ-A03
MDF-A03-3H	MDF-A03-3L			0.23	4.5	3.1	0	
MDF-A03-6H	MDF-A03-6L		pilot Membrane	0.8	4.5	3.1	0.005	
MDF-A03-10H	MDF-A03-10L			1.9	4.5	3.1	0.005	
MDF-A03-15H	MDF-A03-15L			2.3	4.5	3.1	0.005	
MDF-A03-20H	-			5.0	4.5	3.1	0.02	
MDF-A03-22H	-			6.0	4.5	3.1	0.02	
MDF-B03-25H	-			10	4.5	3.1	0.02	
MDF-B03-32H	-		pilot Piston	15.4	4.5	3.1	0.02	
MDF-B03-40H	-			25	4.5	3.1	0.02	
MDF-A02-6H	MDF-A02-6L	NO	pilot Membrane	0.8	4.5	2.8	0.005	MQ-A02
MDF-A02-10H	MDF-A02-10L			1.9	4.5	2.8	0.005	
MDF-A02-15H	MDF-A02-15L			2.3	4.5	2.8	0.005	
MDF-A02-20H	-			5.0	4.5	2.8	0.02	
MDF-A02-22H	-			6.0	4.5	2.8	0.02	

*Max. OPD tested by using AC coil MQ-A0322G under air condition

MDF SERIES
Solenoid Valve



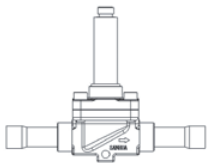
Thread connection, NC valve body

Series	Connections ODF	Model Valve body
	[Inch]	
MDF 2	1/4	MDF-A03-2L002
MDF 3	1/4	MDF-A03-3L002
MDF 3	3/8	MDF-A03-3L004
MDF 6	3/8	MDF-A03-6L002
MDF 6	1/2	MDF-A03-6L004
MDF 10	1/2	MDF-A03-10L004
MDF 10	5/8	MDF-A03-10L002
MDF 15	5/8	MDF-A03-15L002
MDF 15	7/8	MDF-A03-15L004

Thread connection, NO valve body

Series	Connections ODF	Model Valve body
	[Inch]	
MDF 6	3/8	MDF-A02-6L002
MDF 6	1/2	MDF-A02-6L004
MDF 10	5/8	MDF-A02-10L002
MDF 10	1/2	MDF-A02-10L004
MDF 15	5/8	MDF-A02-15L002
MDF 15	7/8	MDF-A02-15L004

Solder connection, NO valve body

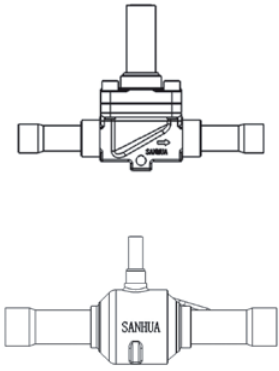


Series	Connections ODF	Imperial	Connections ODF	Metric
	[inch]	Model	[mm]	Model
MDF 6	3/8	MDF-A02-6H002	10	MDF-A02-6H006
MDF 6	1/2	MDF-A02-6H004	12	MDF-A02-6H008
MDF 10	1/2	MDF-A02-10H002	12	MDF-A02-10H006
MDF 10	5/8	MDF-A02-10H004	16	MDF-A02-10H004
MDF 15	5/8	MDF-A02-15H006	16	MDF-A02-15H006
MDF 15	7/8	MDF-A02-15H004	22	MDF-A02-15H004
MDF 20	7/8	MDF-A02-20H002	22	MDF-A02-20H002
MDF 20	1-1/8	MDF-A02-20H004	28	MDF-A02-20H008
MDF 22	7/8	MDF-A02-22H002	22	MDF-A02-22H002
MDF 22	1-1/8	MDF-A02-22H008	28	MDF-A02-22H012
MDF 22	1-3/8	MDF-A02-22H004	35	MDF-A02-22H004

MDF SERIES
Solenoid Valve

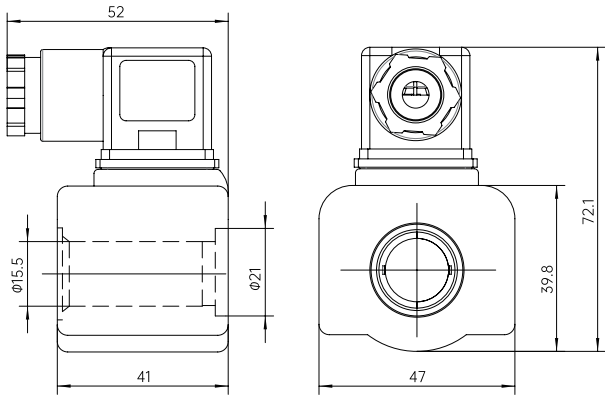


Solder connection, NC valve body

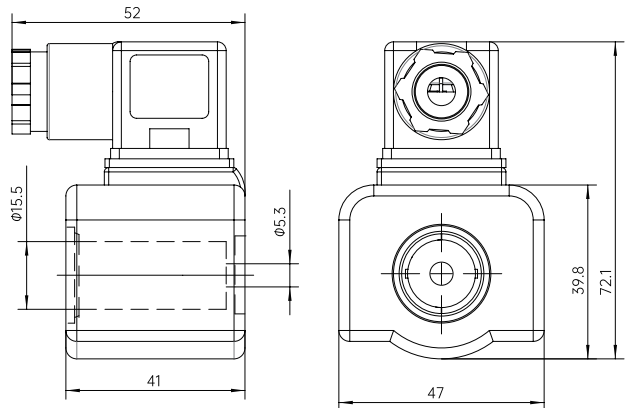


Series	Connections ODF	Imperial	Connections ODF	Metric
	[inch]	Model	[mm]	Model
MDF 2	1/4	MDF-A03-2H002	6	MDF-A03-2H004
MDF 3	1/4	MDF-A03-3H002	6	MDF-A03-3H006
MDF 3	3/8	MDF-A03-3H004	10	MDF-A03-3H008
MDF 6	3/8	MDF-A03-6H002	10	MDF-A03-6H006
MDF 6	1/2	MDF-A03-6H004	12	MDF-A03-6H008
MDF 10	1/2	MDF-A03-10H002	12	MDF-A03-10H006
MDF 10	5/8	MDF-A03-10H004	16	Same as Imperial
MDF 15	5/8	MDF-A03-15H006	16	Same as Imperial
MDF 15	7/8	MDF-A03-15H004	22	Same as Imperial
MDF 20	7/8	MDF-A03-20H002	22	Same as Imperial
MDF 20	1-1/8	MDF-A03-20H004	28	MDF-A03-20H008
MDF 22	7/8	MDF-A03-22H002	22	Same as Imperial
MDF 22	1-1/8	MDF-A03-22H008	28	MDF-A03-22H012
MDF 22	1-3/8	MDF-A03-22H004	35	Same as Imperial
MDF 25	1-1/8	MDF-B03-25H003	28	MDF-B03-25H005
MDF 25	1-3/8	MDF-B03-25H004	35	Same as Imperial
MDF 32	1-3/8	MDF-B03-32H001	35	Same as Imperial
MDF 32	1-5/8	MDF-B03-32H002	42	MDF-B03-32H003
MDF 40	1-5/8	MDF-B03-40H002	42	MDF-B03-40H003
MDF 40	2-1/8	MDF-B03-40H004	54	Same as Imperial

DIMENSIONS OF THE COIL



MQ-A02



MQ-A03