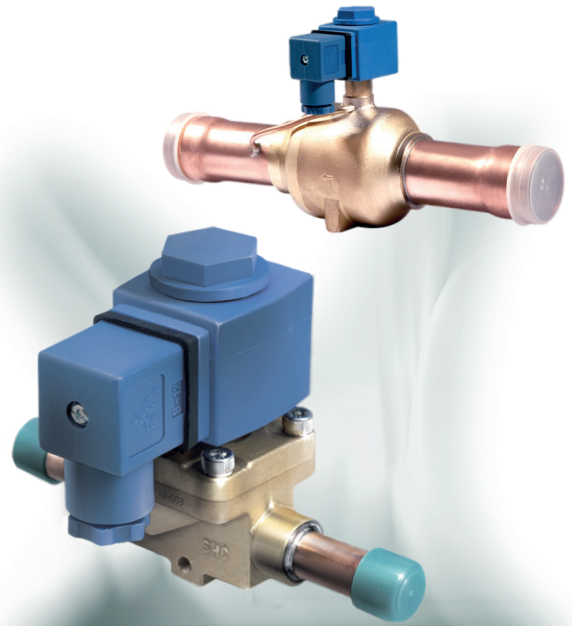




Solenoid Valve

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.



CARATTERISTICHE

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

GENERAL SPECIFICATION

- Applicable for all common HCFC and HFC refrigerants such as: R22, R134a, R407C, R404A, R410A, 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
- Certifications: UL/CSA²⁾ and declaration according to LVD or PED

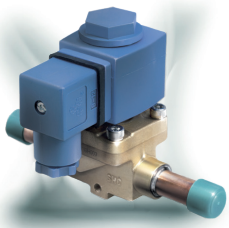
1) Other refrigerants on request
2) MDF-B03 solenoid valves on request

TECHNICAL PARAMETERS OF VALVE BODY

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

- Note:**
- 1) Membrane operated
 - 2) Piston operated
 - 3) Min. OPD: values referred to 60% of nominal flow

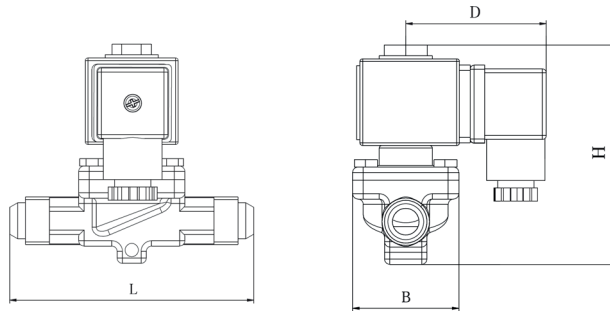




SANHUA SERIES MDF Solenoid Valve

DIMENSIONS

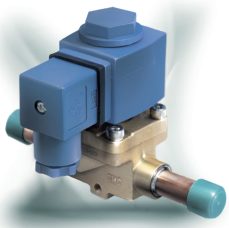
Valve Body Thread Connection



Model Valve Body	SAE Flare Connection [inch]	Kv [m ³ /h]	Part Number ¹⁾	PED Category Group 2	Dimensions [mm]			
					L	B	D	H
MDF-A03-2L 001	1/4	0,16	MDF-08039	3.3	59	30	53	82
MDF-A03-3L 001	1/4	0,23	MDF-08040	3.3	59	30	53	82
MDF-A03-3L 003	3/8	0,23	MDF-08041	3.3	59	30	53	82
MDF-A03-6L 001	3/8	0,8	MDF-08042	3.3	69	36	53	88
MDF-A03-6L 003	1/2	0,8	MDF-08043	3.3	69	36	53	88
MDF-A03-10L 003	1/2	1,9	MDF-08044	3.3	92	42	53	96
MDF-A03-10L 001	5/8	1,9	MDF-08045	3.3	92	42	53	96
MDF-A03-15L 001	5/8	2,3	MDF-08046	3.3	104	52	53	100
MDF-A03-15L 003	7/8	2,3	MDF-08047	3.3	104	52	53	100

Note: 1) Extent of delivery: valve body without coil

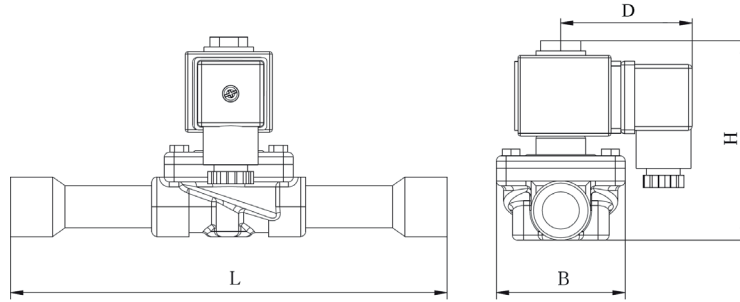




SANHUA SERIES MDF Solenoid Valve

DIMENSIONS

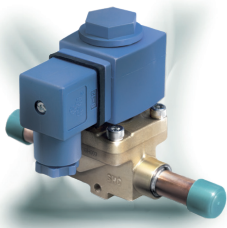
Valve Body Solder Connection



Model Valve Body	Solder Connection ODF		Kv [m ³ /h]	Part Number ¹⁾	PED Category Group 2	Dimensions [mm]			
	[inch]	[mm]				L	B	D	H
MDF-A03-2H 003	-	6	0,16	MDF-08020	3.3	102	30	53	82
MDF-A03-3H 005	-	6	0,23	MDF-08021	3.3	102	30	53	82
MDF-A03-2H 001	1/4	-	0,16	MDF-08001	3.3	102	30	53	82
MDF-A03-3H 001	1/4	-	0,23	MDF-08002	3.3	102	30	53	82
MDF-A03-3H 003	3/8	-	0,23	MDF-08003	3.3	102	30	53	82
MDF-A03-6H 001	3/8	-	0,8	MDF-08004	3.3	111	36	53	88
MDF-A03-3H 007	-	10	0,23	MDF-08022	3.3	102	30	53	82
MDF-A03-6H 005	-	10	0,8	MDF-08023	3.3	111	36	53	88
MDF-A03-6H 007	-	12	0,8	MDF-08024	3.3	111	36	53	88
MDF-A03-10H 005	-	12	1,9	MDF-08025	3.3	127	42	53	95
MDF-A03-6H 003	1/2	-	0,8	MDF-08005	3.3	111	36	53	88
MDF-A03-10H 001	1/2	-	1,9	MDF-08006	3.3	127	42	53	95
MDF-A03-10H 003	5/8	16	1,9	MDF-08007	3.3	127	42	53	95
MDF-A03-15H 005	5/8	16	2,3	MDF-08027	3.3	176	52	53	100
MDF-A03-15H 003	7/8	22	2,3	MDF-08009	3.3	176	52	53	100
MDF-A03-20H 001	7/8	22	5,0	MDF-08010	3.3	191	52	53	117
MDF-A03-22H 001	7/8	22	5,9	MDF-08012	3.3	191	60	53	117
MDF-A03-20H 007	-	28	5,0	MDF-08030	3.3	191	52	53	117
MDF-A03-22H 011	-	28	5,9	MDF-08031	3.3	191	60	53	117
MDF-B03-25H 005	-	28	10,0	MDF-08033	3.3	280	76	53	144

Note: 1) Extent of delivery: valve body without coil





SANHUA SERIES MDF Solenoid Valve

DIMENSIONS

Valve Body Solder Connection

Model Valve Body	Solder Connection ODF		Kv [m ³ /h]	Part Number ¹⁾	PED Category Group 2	Dimensions [mm]			
	[inch]	[mm]				L	B	D	H
MDF-A03-20H 003	1-1/8	-	5,0	MDF-08011	3.3	191	52	53	117
MDF-A03-22H 009	1-1/8	-	5,9	MDF-08082	3.3	191	60	53	117
MDF-B03-25H 003	1-1/8	-	10,0	MDF-08014	3.3	280	76	53	144
MDF-A03-22H 003	1-3/8	35	5,9	MDF-08013	I	191	60	53	117
MDF-B03-25H 004	1-3/8	35	10,0	MDF-08015	I	280	76	53	144
MDF-B03-32H 001	1-3/8	35	15	MDF-08016	I	281	76	53	144
MDF-B03-32H 002	1-5/8	-	15	MDF-08017	I	281	76	53	144
MDF-B03-40H 002	1-5/8	-	25	MDF-08018	I	281	84	53	152
MDF-B03-32H 003	-	42	15	MDF-08036	I	281	76	53	144
MDF-B03-40H 003	-	42	25	MDF-08037	I	281	84	53	152
MDF-B03-40H 004	2-1/8	54	25	MDF-08019	I	281	84	53	152

Note: 1) Extent of delivery: valve body without coil

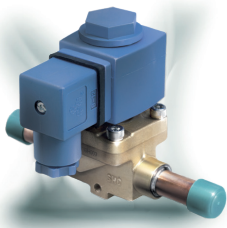
Technical parameters of Coil

Model Coil ¹⁾	Part Number ²⁾	Rated Voltage	Supply	Power [W]	Frequency [Hz]	Voltage Tolerance	Insulation Class	Protection Class (w/plug)	Wiring type
MQ-A03 024-000001	MDF-60001	24	AC	10,5 (50Hz) 8,5 (60Hz)			F	IP65	DIN Plug
MQ-A03 11A-000001	MDF-60002	110 to 120		12 (50Hz) 10 (60Hz)					
MQ-A03 22G-000001	MDF-60003	220 to 240		12 (50Hz) 10 (60Hz)					
MQ-D03 024-000002	MDF-60004	24	DC	15	-	±10%			

Note: 1) Applicable to MDF-A03 and MDF-B03 valve bodies

2) Extent of delivery: coil body, fastening screw for the coil body, DIN plug for electrical connection incl. gaskets

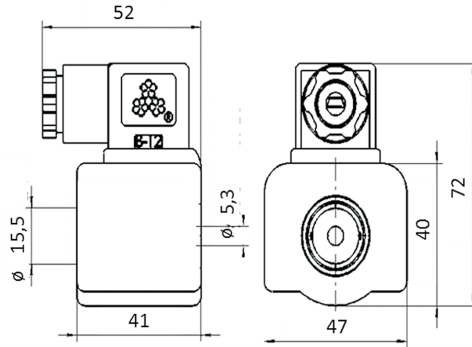




SANHUA SERIES MDF Solenoid Valve

DIMENSIONS - COILS

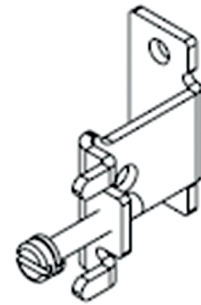
Coils with DIN Plug (MQ-A03 and MQ-D03 Series)



ACCESSORIES

Bracket

Model ¹⁾	Part Number	Applicable Valve Models	
		Solder	Flare
MDF-A03-033001	MDF-08085	MDF-A03-2H	MDF-A03-2L
		MDF-A03-3H	MDF-A03-3L
		MDF-A03-6H	MDF-A03-6L
		MDF-A03-10H	MDF-A03-10L
		MDF-A03-15H	MDF-A03-15L



Note: 1) Extent of delivery: bracket and screw

