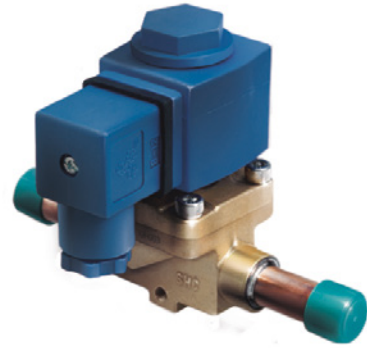


MDF-R SERIES

SOLENOID VALVE



MDF-R 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 working with R32 refrigerant.

FEATURES

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

GENERAL SPECIFICATION

- Applicable for R32
- Maximum Operating Pressure:
MDF-A03-2RH...22RH: 4,9 MPA (49 bar)
- Medium temperature TS min./max.: -30°C/105°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

MDF-R SERIES

SOLENOID VALVE



TECHNICAL PARAMETERS OF VALVE BODY

Valve Body	Normal position	Actuation	Kv [m ³ /h]	MOP [Mpa]	Max. OPD [MPa]	Min. OPD ⁴⁾ [Mpa]
Solder						
MDF-A03-2RH	NC ¹⁾	Direct	0,16	4,9	3,1 ³⁾	0,00
MDF-A03-3RH			0,23			
MDF-A03-6RH			0,8			
MDF-A03-10RH		Pilot ²⁾	1,9			0,005
MDF-A03-15RH			2,3			
MDF-A03-20RH			5,0			
MDF-A03-22RH			5,9			

- Note:**
- 1) NC means: Normally closed valve
 - 2) Membrane operated
 - 3) Max. OPD at 85% Ue. Other coils on request

DIMENSIONS

Valve Body - Inch Solder Connection, Models with MOP 49 bar

Model Valve Body	Part Number ¹⁾²⁾	Solder Connection ODF	Kv	PED Category Fluid Group I	Dimensions [mm]			
		[inch]	[m ³ /h]		L	B	D	H
MDF-A03-2RH01	10125023002	1/4	0,16	4.3	102	30	53	82
MDF-A03-3RH01	10125023202	1/4	0,23	4.3	102	30	53	82
MDF-A03-3RH03	10125023302	3/8	0,23	4.3	117	30	53	82
MDF-A03-6RH01	10125021402	3/8	0,8	4.3	111	36	53	88
MDF-A03-6RH03	10125021502	1/2	0,8	4.3	127	36	53	88
MDF-A03-10RH01	10125021802	1/2	1,9	4.3	127	42	53	95
MDF-A03-10RH03	10125021902	5/8	1,9	4.3	160	42	53	95
MDF-A03-15RH05	10125022202	5/8	2,3	4.3	176	52	53	100
MDF-A03-15RH03	10125022102	7/8	2,3	4.3	176	52	53	100
MDF-A03-20RH01	10125022302	7/8	5	4.3	191	60	53	117
MDF-A03-22RH01	10125022602	7/8	5,9	4.3	281	60	53	117
MDF-A03-20RH03	10125022402	1-1/8	5	4.3	214	60	53	117
MDF-A03-22RH09	10125022802	1-1/8	5,9	4.3	281	60	53	117
MDF-A03-22RH03	10125022702	1-3/8	5,9	Cat. II	281	60	53	117

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

MDF-R SERIES SOLENOID VALVE

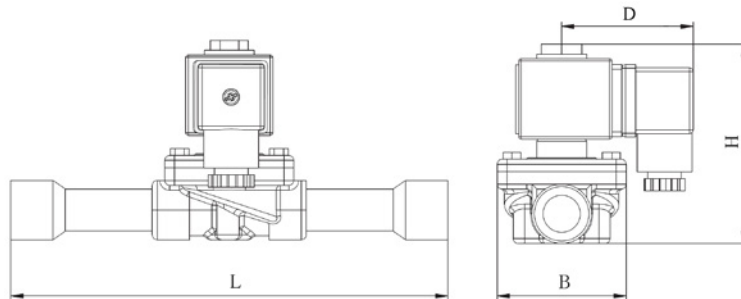


DIMENSIONS

Valve Body – Metrical Solder Connection, Models with MOP 49 bar

Model Valve Body	Part Number ¹⁾²⁾	Solder Connection ODF	Kv	PED Category Fluid Group I	Dimensions [mm]			
		[mm]	[m ³ /h]		L	B	D	H
MDF-A03-2RH03	10125023102	6	0,16	4.3	102	30	53	82
MDF-A03-3RH05	10125021202	6	0,23	4.3	102	30	53	82
MDF-A03-3RH07	10125021302	10	0,23	4.3	117	30	53	82
MDF-A03-6RH05	10125021602	10	0,8	4.3	111	36	53	88
MDF-A03-6RH07	10125021702	12	0,8	4.3	127	36	53	88
MDF-A03-10RH05	10125022002	12	1,9	4.3	127	42	53	95
MDF-A03-10RH03	10125021902	16	1,9	4.3	160	42	53	95
MDF-A03-15RH05	10125022202	16	2,3	4.3	176	52	53	100
MDF-A03-15RH03	10125022102	22	2,3	4.3	176	52	53	100
MDF-A03-20RH01	10125022302	22	5	4.3	191	60	53	117
MDF-A03-22RH01	10125022602	22	5,9	4.3	281	60	53	117
MDF-A03-20RH07	10125022502	28	5	4.3	214	60	53	117
MDF-A03-22RH11	10125022902	28	5,9	4.3	281	60	53	117
MDF-A03-22RH03	10125022702	35	5,9	Cat. II	281	60	53	117

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



MDF-R SERIES SOLENOID VALVE



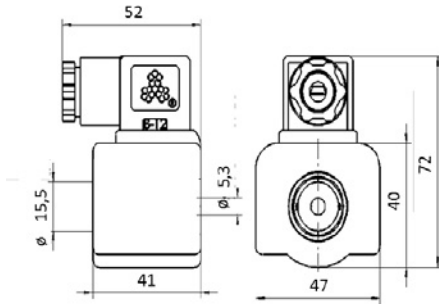
TECHNICAL PARAMETERS OF COIL

Model Coil	Part Number ¹⁾	Plug type	Supply	Rated Voltage [V]	Power [W]	Voltage Tolerance	Insulation Class	Protection Class (w/plug)	UL Approval
MQ-A0322G-000001 ²⁾	10820010002	DIN	AC	220 to 240	12 (50Hz) 10 (60Hz)	-15% +10%	F	IP67	NO

- Note:** 1) Extent of delivery: coil body, fastening screw for the coil body, plug for electrical connection incl. Gaskets and fastening screws
 2) Coil MQ-A0322G-000001 is third party certified for usage with flammable refrigerants (A2L, A3). Usage of the other coils with flammable refrigerants – please contact Sanhua.

DIMENSIONS - COILS

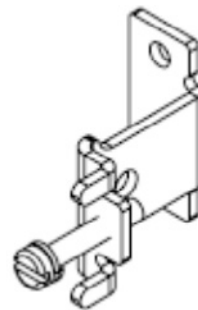
MQ-A03 (Coil with DIN Plug):



ACCESSORIES

Bracket

Model ¹⁾	Part Number	Applicable Valve Models
		Solder
MDF-A03-033001	20125000902	MDF-A03-2RH
		MDF-A03-3RH
		MDF-A03-6RH
		MDF-A03-10RH
		MDF-A03-15RH



- Note:** 1) Extent of delivery: bracket and screw