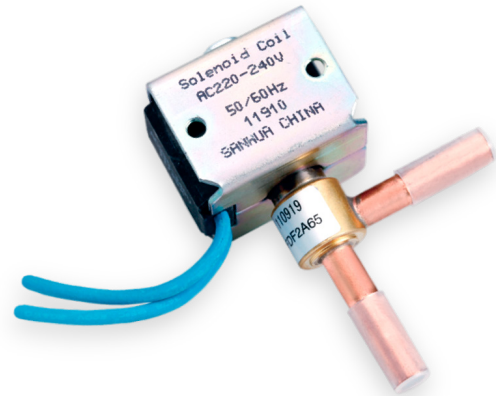


FDF (NC) SERIES

SOLENOID VALVE



(Standard range: for fluids GROUP 2 according to Directive 2014/68/EU or GROUP A1 according to ANSI-ASHRAE 34-2016)

FDF 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

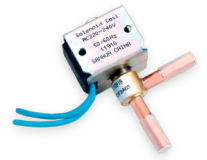
GENERAL SPECIFICATIONS

- Applicable for all common HCFC, HFC refrigerants such as: R22, R134a, R404A, R407C, R410A, R507, R407A/F, R448A/R449A, R452A, R450A/R513A
- Medium temperature TS min./max.: -30°C / 120°C
- Ambient temperature min./max.: -30°C / +50°C
- Relative humidity: 0 to 95% RH
- Installation position: - Liquid, suction and discharge line
 - Coil upwards, coil axis $\pm 15^\circ$ tolerance versus vertical axis
 - Flow direction corresponds to the arrow
- Certifications: UL/CSA* and declaration according to LVD or PED

TECHNICAL PARAMETERS OF VALVE BODY

Model Valve Body	Product Number	Normal Position	Actuation	\varnothing Seat	Kv	MOP	Max. OPD	Min. OPD	\varnothing d OD	\varnothing d OD	Measurement [mm]		
				[mm]							[m ³ /h]	[MPa]	[MPa]
FDF 2A G01 ¹⁾	10119001002	NC	Direct	1,9	0,08	4,5	3,4	0	6,35	1/4	66,6	33,3	33
FDF 2A 94	10120019802			7,94	5/16				66,5	32	34		
FDF 2.5A 08	10120021102		Pilot	2,5	0,21		2,1	0,01	6,35	1/4	84,6	37,5	38
FDF 3A 08	10120019302			2,7	0,26		3,4		7,94	5/16	81,4	34,5	35,7
FDF 4A 10	10120025302			4,0	0,30		2,8	0	6,35	1/4	81,2	35,3	37,8
FDF 6A 58	10120018702			5,8	0,56		3,4	0,01	7,94	5/16	81,6	34,5	35,7
FDF 11A 14	10120020402			11	2,40		2,8	0,02	12,7	1/2	117,5	62	62
FDF 13A 08	10120026402			13	3,50		15,88	5/8	117,5	62	62		

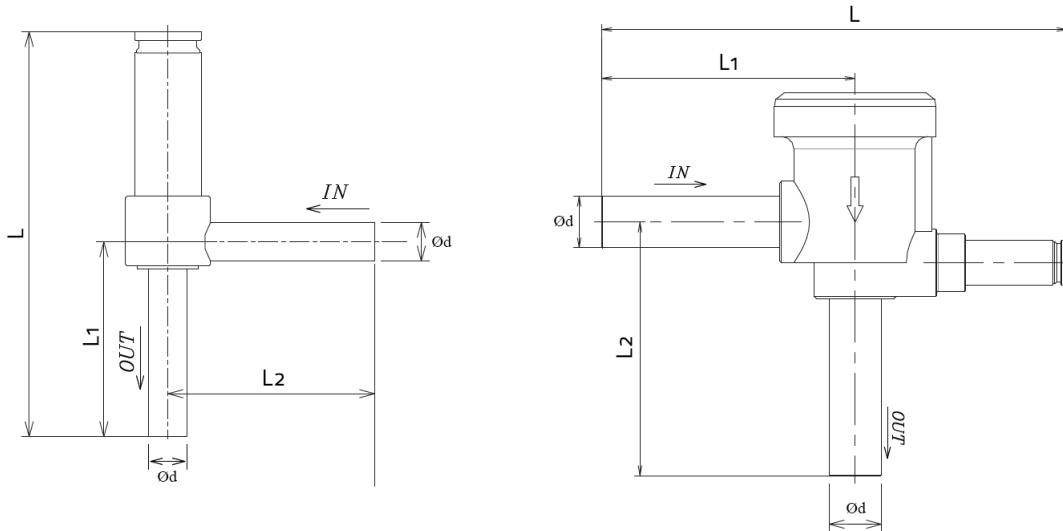
Note: 1) New model with stainless steel body (lead free)



DIMENSIONS - VALVE BODY

FDf 2A ... FDf 6A

FDf 8A ... FDf 13A



TECNHICAL PARAMETERS OF COIL

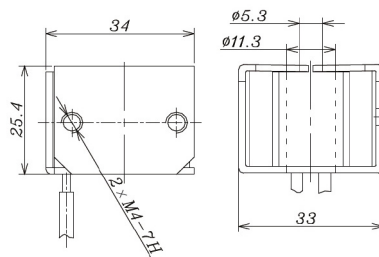
Model Coil	Product Number*	Rated Voltage [V]	Supply	Power ¹⁾ [W]	Freq. [Hz]	Voltage Tolerance	Insulation Class	Wiring type: flying leads [mm]
FQ-A05 024-000709	10800072302	24	AC	5 (50Hz) 4,5 (60Hz)	50/60	-15% +10%	B	1800±50
FQ-A05 120-001098	10800062002	110 to 120		5 (50Hz) 4,5 (60Hz)				800±30
FQ-A05 22G-001022	10800057302	220 to 240		5 (50Hz) 4,5 (60Hz)				600±20

Note: * Available also as industrial package. Contact Sanhua for more details.

1) FQ-A0522G power consumption based on 240V; FQ-A05120 power consumption based on 120V

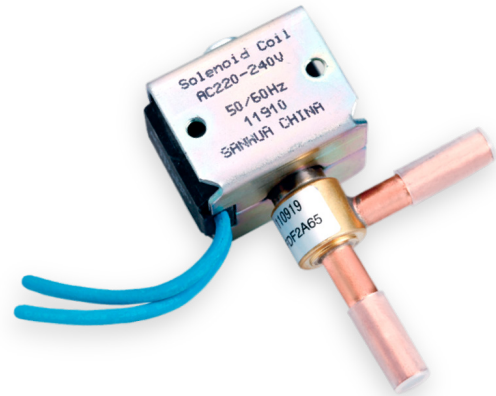
DIMENSIONS - COIL

FQA-55001 ... FQA-55003



FDF (NC) SERIES

SOLENOID VALVE



(**GreenTech range:** for fluids GROUP 1 according to Directive 2014/68/EU or GROUP A3/A2L according to ANSI-ASHRAE 34-2016)

FDF 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

GENERAL SPECIFICATIONS

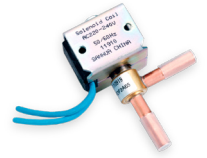
- Applicable for all common HFC/HFO/HC refrigerants such as: R290, R1234yf, R1234ze(E), R32¹⁾, R447A, R452B, R454B, R454C, R600a
- Medium temperature TS min./max.: -30°C / 120°C
- Ambient temperature min./max.: -30°C / +50°C
- Relative humidity: 0 to 95% RH
- Installation position: - Liquid, suction and discharge line
- Coil upwards, coil axis $\pm 15^\circ$ tolerance versus vertical axis
- Flow direction corresponds to the arrow
- Certifications: UL/CSA* and declaration according to LVD or PED

Note: 1) With R32 only respecting MOP 45 bar

TECHNICAL PARAMETERS OF VALVE BODY

Model Valve Body	Product Number*	Normal Position	Actuation	\emptyset Seat	Kv	MOP	Max. OPD	Min. OPD	$\emptyset d$ OD	$\emptyset d$ OD	Measurement [mm]		
				[mm]	[m ³ /h]	[MPa]	[MPa]	[MPa]	[mm]	[inch]	L	L1	L2
FDF2A G01 ¹⁾	10119001002	NC	Direct	1,9	0,08	4,5	3,4	0	6,35	1/4	66,6	33,3	33
FDF 2A 94	10120019802			6,35	1/4		66,5	32	34				
FDF 2.5A 08	10120021102		Pilot	2,5	0,21		2,1	0,01	6,35	1/4	84,6	37,5	38
FDF 3A 08	10120019302			2,7	0,26		3,4		7,94	5/16	81,4	34,5	35,7
FDF 4A 10	10120025302			4,0	0,30		2,8	0	6,35	1/4	81,2	35,3	37,8
FDF 6A 58	10120018702			5,8	0,56		3,4	0,01	7,94	5/16	81,6	34,5	35,7
FDF 11A 14	10120020402			11	2,40		2,8	0,02	12,7	1/2	117,5	62	62
FDF 13A 08	10120026402			13	3,50		15,88	5/8	117,5	62	62		

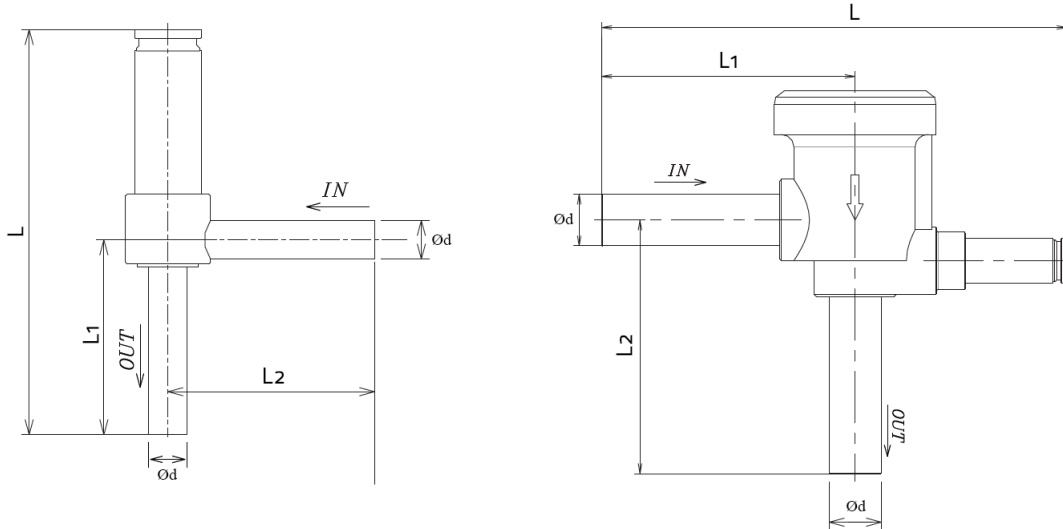
Note: 1) New model with stainless steel body (lead free)



DIMENSIONS - VALVE BODY

FDF 2A ... FDF 6A

FDF 8A ... FDF 13A



TECNICAL PARAMETERS OF COIL

Model Coil	Product Number ¹⁾	Rated Voltage [V]	Supply	Power ²⁾ [W]	Freq. [Hz]	Voltage Tolerance	Insulation Class	Wiring type: flying leads [mm]
FQ-A05 22G-001022	10800057302	220 to 240	AC	5 (50Hz) 4,5 (60Hz)	50/60	-15% +10%	B	600±20

Note: 1) FDF2AG01 is certified also with coils 24 V AC and 120 V AC for flammable refrigerants

2) Power consumption based on 240V

DIMENSIONS - COIL

FQA-55001 ... FQA-55003

