FDF2AK (NO) *SERIES*

SOLENOID VALVE

FDF2AK series solenoid valves are direct operated, normally open solenoid valves, mainly used in refrigerant control of various devices such as refrigerating and freezing systems, air conditioners and heat pumps.

FEATURES

- COMPACT DESIGN
- LOW ENERGY CONSUMPTION
- EXCELLENT OPERATION PERFORMANCE

GENERAL SPECIFICATIONS

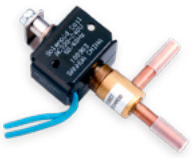
- Applicable for all common HCFC, HFC, HFO, HC refrigerants:
  - fluids GROUP 2 (according to Directive 2014/68/EU) or GROUP A1 (according to ANSI-ASHRAE 34-2016): R134a, R404A, R410A, R507, R407C, R407A/F, R448A/R449A, R452A, R450A/R513A
  - fluids GROUP 1 (according to Directive 2014/68/EU) or GROUP A3/A2L (according to ANSI-ASHRAE 34-2016): R290, R1234yf, R1234ze(E), R32, R447A, R452B, R454B, R454C, R600a
- Medium temperature TS min./max.: -30°C / 120°C
- Ambient temperature: -30°C / +50°C
- Relative humidity: 0 to 95% RH
- Installation position:
  - Liquid, suction and discharge line
  - Coil upwards, coil axis ±15° tolerance versus vertical axis
  - Flow direction corresponds to the arrow
- Declarations/Certification/Approvals:
  DoC acc. PED (2014/68/EU), LVD (2014/35/EU), RoHS (2011/65/EU), REACH
  DoC acc. EN60335-2-24/40/89 for flammable refrigerants

TECHNICAL PARAMETERS OF VALVE BODY

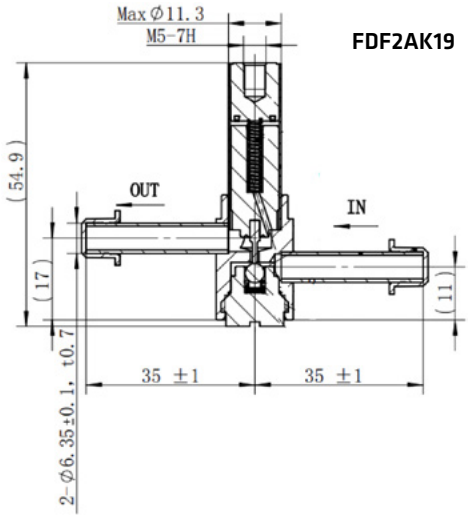
Valve Body Model	Part Number*	Normal Position	Actuation	Ø Seat [mm]	Kv [m³/h]	MOP [MPa]	Max. OPD [MPa]	Min. OPD [MPa]	Connection OD Ød	
									[mm]	[inch]
FDF2AK19	10120047402	NO	Direct	1,8	0,05	4,5	2,1	0	6,35 ±0,1	1/4
FDF2AK22	10120055502			1,9	0,08	4,5	1,5			

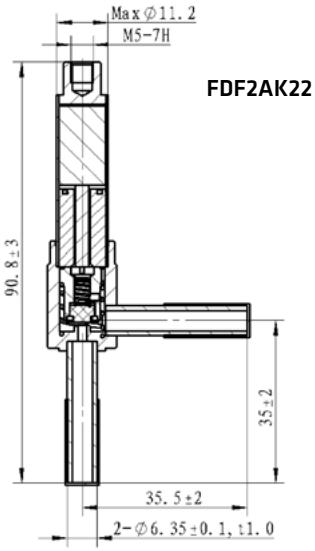
* Available also as industrial package. Contact Sanhua for more details.

SOLENOID VALVE



DIMENSIONS - VALVE BODY





TECNHICAL PARAMETERS OF COIL

Coil Model	Part Number*	Rated Voltage [V]	Supply	Power[3] [W]	Used for	Freq. [Hz]	Voltage Tolerance	Insulation Class	Wiring type
FQ-A05024-000709	10800072302	24	AC	5 (50Hz) 4,5 (60Hz)	FDF2AK01[1]	50/60	-15% +10%	B	1800±50
FQ-A05120-001098	10800062002	110 to 120		5 (50Hz) 4,5 (60Hz)					800±30
FQ-A0522G-001022	10800057302	220 to 240		5 (50Hz) 4,5 (60Hz)					600±20
FQ-A0522G-002955	FQAC0003402	220 to 240		5 (50Hz) 4,5 (60Hz)	FDF2AK22[2]				2000±50

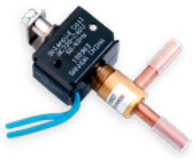
Note: * Available also as industrial package. Contact Sanhua for more details.

1) Dimensions: drawing 1

2) Dimensions: drawing 2

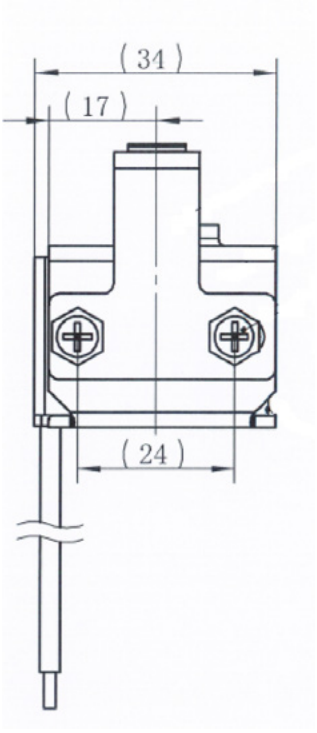
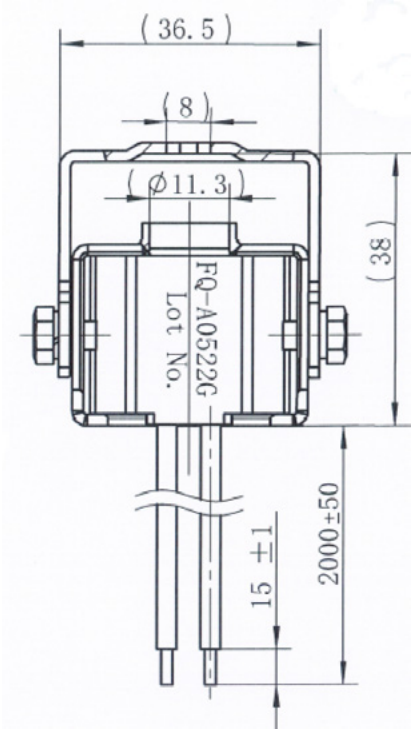
3) Power consumption based on 220V

SOLENOID VALVE



DIMENSIONS - COIL

Drawing 1: FQ-A05024-000709, FQ-A05120-001098, FQ-A0522G-001022



Drawing 2: FQ-A0522G-002955