



FDF (NC) SERIES

SOLENOID VALVE



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/R513A¹⁾
- 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) Flammable refrigerants like R32, R290 on request
*For FDF 3A 08 on request

TECHNICAL PARAMETERS OF VALVE BODY

Model Valve Body	Part Number*	Normal Position	Actuation	Ø Seat	Kv	MOP	Max. OPD	Min. OPD	Ød OD	Ød OD	Measurement [mm]		
				[mm]	[m ³ /h]	[MPa]	[MPa]	[MPa]	[mm]	[inch]	L	L1	L2
FDF 2A 94	10120019802	NC	Direct	1,9	0,08	4,5	3,4	0	6,35	1/4	66,5	32	34
FDF 2.5A 08	10120021102			2,5	0,21		2,1	0,01	6,35	1/4	85	37,5	38
FDF 3A 08	10120019302		2,7	0,26	3,4		7,94		5/16	81	34,5	35,5	
FDF 4A 10	10120006502		4,0	0,30	3,4		6,35		1/4	81	35	38	
FDF 6A 58	10120018702		5,8	0,56	3,0		7,94		5/16	81	34,5	35,5	
FDF 8A 21	10120020902		8,0	1,29	2,8		12,7		1/2	114	61	61	
FDF 11A 16	10120020302		11	2,40			12,7		1/2	114	61	61	
FDF 13A 12	10120020502		13	3,44			15,88	5/8	114	61	61		

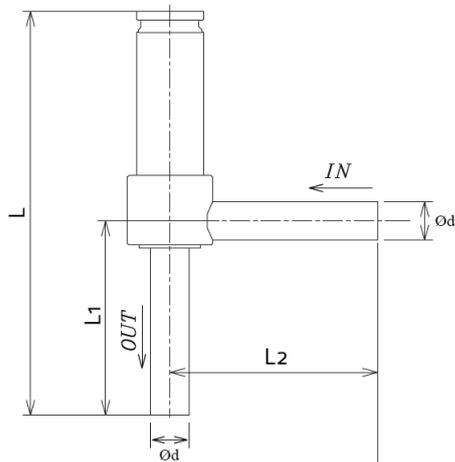
* Available also as industrial package. Contact Sanhua for more details.

SOLENOID VALVE

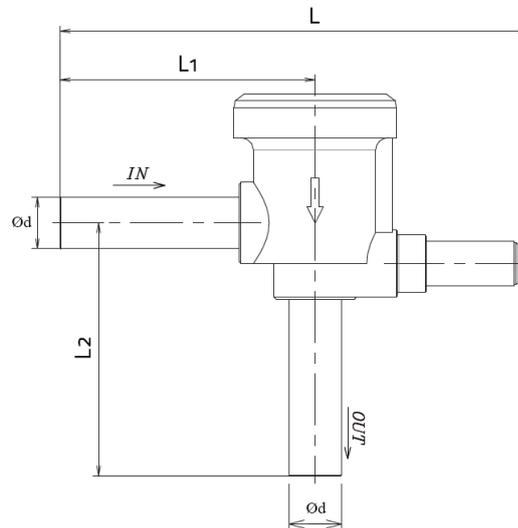


DIMENSIONS - VALVE BODY

FDF 2A ... FDF 6A



FDF 8A ... FDF 13A



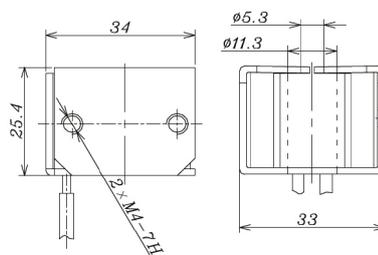
TECNHICAL PARAMETERS OF COIL

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

Note: * Available also as industrial package. Contact Sanhua for more details.
1) Power consumption based on 220V

DIMENSIONS - COIL

FQA-55001 ... FQA-55003



For complete product family information please visit us at www.sanhuaeurope.com and download the full range of datasheet at TECHNICAL INFORMATION LINK.