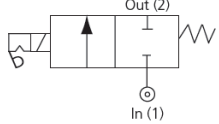


FACHL Series – 2/2 Normally Closed (Manual Reset)

Specifications	
Function	Normally closed, energise to open 
Maximum Viscosity	115 SSU
1/2" - 1" Body Material (Std)	Brass CZ122
1 1/4" - 2 1/2" Body Material (Std)	Bronze DIN 1705
3" +	Cast Iron Coated
Flange Tube	Stainless Steel 303
Plunger and top stop	Stainless Steel 430FR
Springs	Stainless Steel 302
Seal Material (Std)	NBR
Connection Type (Std)	BS21
Shading Ring	Copper
Electrical Characteristics	
Coil Voltage DC (=)	12 V, 24 V, 110 V
Coil Voltage AC 50 Hz (-)	24 V, 110 V, 120 V, 230 V
Coil Voltage AC 60 Hz (-)	24 V, 110 V, 120V, 220 V
Voltage Tolerance	+10% or -10%
Duty Cycle	100% ED
Protection Class (Std)	IP65 (BS EN 60529) (plug supplied as standard)
Electrical Connection (Std)	G9 Din Connector DIN 43650/ISO 4400 (EN 175301-803) Form 'A'
Coil Insulation	Class H (BS EN 60085) 180 °C (E5/S50 Type)
Power Rating	14.5 Watts, 22 Watts, 19 VA

Options Available

Solenoid Enclosure	
Protection Class	Consult Rotork Midland for product codes
EExd T6 (IP67) up to 3"	
EExd T4 (IP67) up to 3"	
Exm T5 (IP65) up to 3" (24 VDC only)	

Seal Material ¹ and Media Temp. Range	Ambient Temperature Range °C	
	Min	Max
NBR (-10 °C to +80 °C)	-10	50
EPDM (-50 °C to +120 °C)	-10	50
FKM (-20 °C to +150 °C)	-10	50

Main Valve Assembly Options
Oxygen Cleaning (Consult Rotork Midland for product code)
NPT Threads
Stainless steel tagging

¹ See corrosion reference guide and sealing solutions for material compatibility.

Features and Benefits

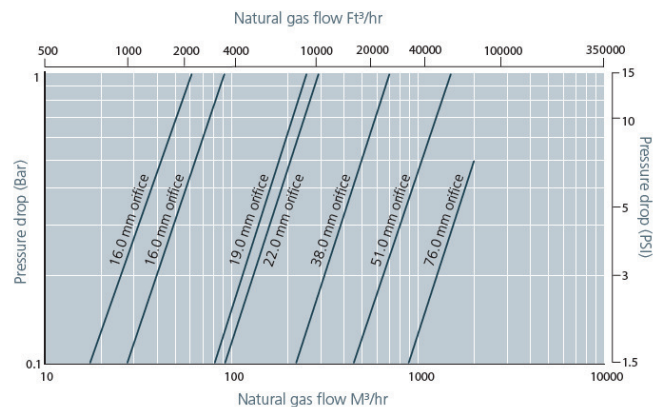
- Heavy Duty Valve design
- For use with fire protection systems
- Manual Lever reset operation
- No voltage release safety feature
- AC version fitted with DC internal Rectifier
- Designed for Gas, Oil and Liquids
- Suitable for 1st, 2nd and 3rd gas families



Pipe Size	Cv (gpm)	Kv (m ³ /h)	OPD (Bar)	P. Max Bar	Power (Watts)	Orifice (mm)	Weight (kg)
1/2"	3	3	0-2.0	16	14.5	16	1.40
3/4"	9	8	0-2.0		14.5	19	1.90
1"	11	9.5	0-2.0		14.5	22	1.90
1 1/4"	27	23	0-0.35		14.5	38	3.10
1 1/2"	27	23	0-0.35		14.5	38	3.10
2"	55	47	0-0.35		14.5	51	3.70
2 1/2"	74	64	0-0.2		14.5	76	7.80
3"	89	77	0-0.2		14.5	76	7.80
4" ²	194	167	0-0.8		22	102	40.50
6" ²	384	331	0-0.3		22	152	70.50

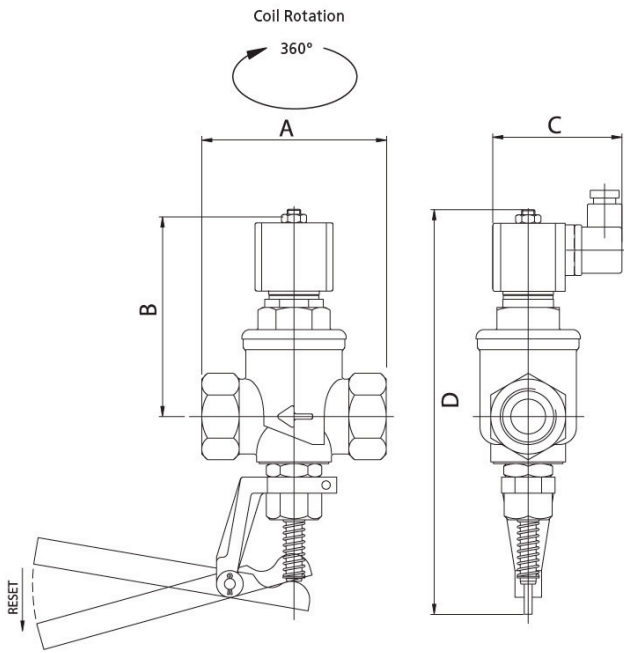
How to use the flow chart

1. Select the required flow.
2. Note the corresponding pressure drop.
3. Based on where the two points intersect select the most appropriate model.

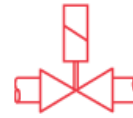


Notes

- If the inlet pressure on the seat area exceeds 18kg the inlet pressure must be exhausted to open the valve.
- Consult factory for flow figures for valves above 2 1/2".



Preferred Valve Mounting Options



Dimensions

Pipe Size	A	B	C	D
½"	70	100	75 inc plug	184
¾"-1"	109	116	75 inc plug	246
1½"	122	122	75 inc plug	258
2"	140	132	75 inc plug	233
2½"	260	137	75 inc plug	273
3"	197	137	75 inc plug	273
4"	292	285	190	577
6"	356	330	260	686

Dimensions given in mm

Solenoid enclosures

E5 Type enclosure protection class IP65

- External material: Glass reinforced nylon
- Electrical connection: DIN Plug to ISO 4400
- Winding insulation: Class H
- Enclosure: Conforms to IP65 when correct plug gasket is fitted as supplied
- Used on FACHL valves up to and including 3"



S50 enclosure protection class IP65

- External material: Pressed steel
- Electrical connection: DIN Plug to ISO 4400
- Winding insulation: Class H
- Enclosure: Conforms to IP65 when correct plug gasket is fitted
- Used on FACHL valves 4" and above



Coding chart

Main Valve Assembly

Model	Valve Body Conn. Size	Connection Type	Operation
41 FACHL	D ½"	2 BSP G	3 MANUAL RESET
	E ¾"	3 NPT	
	F 1"	4 FLANGED (PN16 STD)	
	G 1½"		
	H 1½"		
	J 2"		
	K 2½"		
	L 3"		
	M 4"		
	N 6"		

Body Material	Seals	Style
2 Bronze	A NBR	1 Standard
4 Cast Iron (4" and above)	B EPDM	
	C FKM	

Coil options

Enclosure	Voltage / Frequency	Electrical Connection
1 Weather proof IP65	B1 230 V / 50 Hz	1 Din plug 9 mm (For DC only)
	B4 110 V / 50 Hz	
	B2 24 VDC	3 Din plug 9 mm PR1 220/240 110/120
	L1 230 V / 50 Hz (4" and above)	
	L9 110 V / 50 Hz (4" and above)	
	L6 24 VDC (4" and above)	

41	•	•	3	Z	•	•	1	-	1	**	•
----	---	---	---	---	---	---	---	---	---	----	---

Product coding example:

41H23Z2A1-1B21 - FACHL Series
 1½" BSPG, manual reset, bronze body, NBR seals, 24 VDC DIN Plug 9 mm.