

Solenoid Poppet Valves

directly actuated
 Series EV-M5 (G1/8)
 Series V9-G1/8

Contents

Version	Actuation	Page		
		Characteristics	Dimensions	Order Instructions Overview
3/2 Way Valves Series EV-M5 (G1/8)	electrical	82	83	83
3/2 Way Valves Series V9-G1/8	electrical	84	85	86



3/2 Way Screw-In Valve Series EV

G1/8-M5

Actuation:
– Electrical, directly actuated

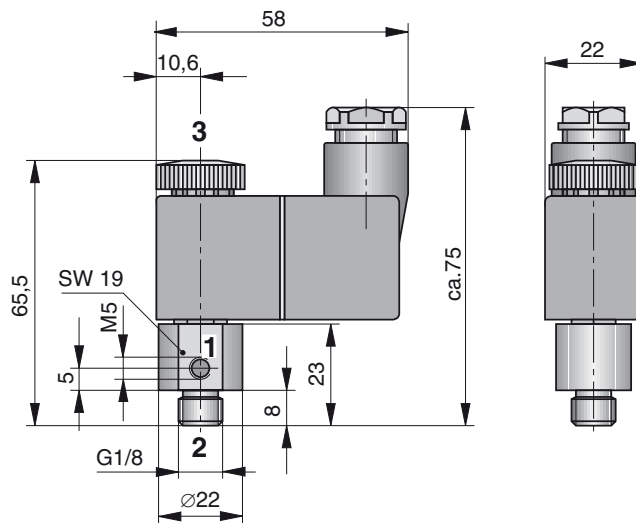
Characteristics – Series EV

Characteristics	Symbol	Unit	Description	
General Features				
Actuation			Electrical directly operated	
Type			Poppet valve, normally closed	
Mounting			Screws into thread G1/8	
Tube connection			Thread	
Port size			Port 1: M5, port 2: G1/8	
Weight		kg	0.1	
Nominal diameter		mm	1	
Installation			in any position	
Ambient temperature range	$T_{min. / max.}$	°C	-10 to +60	Note : Please consult us for operating temperatures below 0° C
Medium temperature range	$T_{min. / max.}$	°C	-10 to +60	
Medium			Filtered compressed air (30µ)	
Lubrication			With or without oil mist lubrication (We recommend the use of mineral oil type VG 32 to ISO 3448)	
Pneumatic Characteristics				
Nominal pressure	$p_{min. / max.}$	bar	6	
Operating pressure range	$p_{min. / max.}$	bar	0 – 10	
Nominal flow	Q_N	l/min	30	
Actuation				
Electrical			Direct	
Voltage type			Alternating current (50/60Hz)	Direct current
Nominal voltage ⁽¹⁾				
– Standard version	U_n	V	230 ±10%	24 ±10% other voltages on request
– Low wattage version	U_n	V	230 ±10%	24 ±10%
Initial power consumption				
– Standard version		VA (W)	11	4.8
– Low wattage version		VA (W)	7.8	2.7
Continuous consumption				
– Standard version		VA (W)	8.5	4.8
– Low wattage version		VA (W)	4.9	2.7
Duty cycle	ED	%	100	
Electrical protection			IP 65 to DIN 40050 (applies only to solenoid with plug)	
Connection			Plug to DIN EN 175301-803 form B – industrial standard, Low wattage version form A	

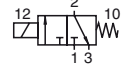
⁽¹⁾ see Order Instructions



3/2 Way Valve – Type: EV 381RF-M5



Order Instructions – 3/2 Way Screw-In Valve – Series EV

Actuation	Symbol	Order Instructions	
		Type	Order No.
Electrical, by permanent signal		EV 381RF-M5-..	PD25076-...33

Solenoid version	Nominal voltage	Key code
Cast encapsulated housing	24V =	02
	230V 50/60Hz	61
	Other voltages on request	

Dimensions in mm

3/2 Way Valves Series V9

NW 1.3 and 2.5

Actuation:
– Electrically actuated,
directly actuated

Versions:
Threaded version
– Normally closed
– Normally open
– With manual override

P-moulding mounting:
– See Order Instructions

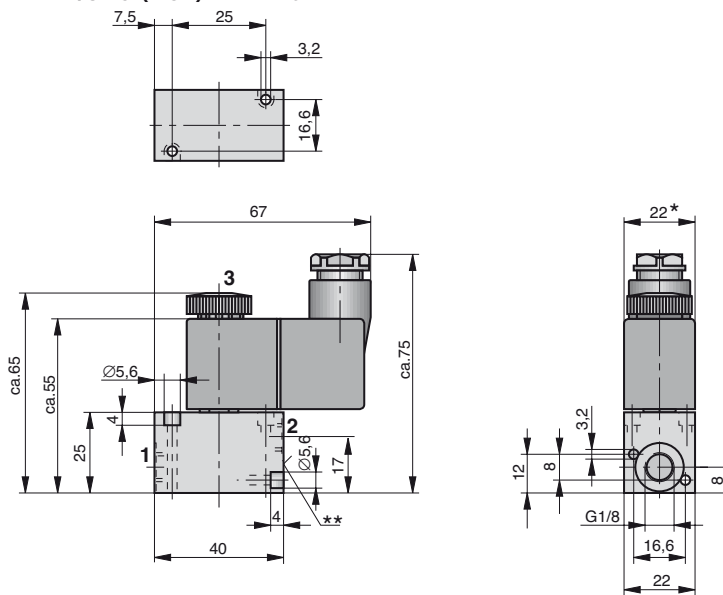


Characteristics – Series V9-G1/8

Characteristics	Symbol	Unit	Description		
General Features					
Type			Poppet valve		
Mounting			2 Screws M3 (NW 2.5: 2 x M4)		
Tube connection			Thread		
Thread			G1/8 – 8 deep		
Weight		kg	NW 1.3: 0.140 NW 2.5: 0.320		
Installation			In any position		
Ambient temperature range (1)	T _{min. / max.}	°C	-10 +60	Note : Please consult us for operating temperatures below 0° C	
Medium temperature range (1)	T _{min. / max.}	°C	-10 +70		
Medium			Filtered compressed air		
Lubrication			With or without oil mist lubrication (We recommend the use of mineral oil type VG 32 to ISO 3448)		
Pneumatic Characteristics					
Nominal pressure	p _{min. / max.}	bar	6		
Operating pressure range	p _{min. / max.}	bar	NW 1.3: 0–10 NW 2.5: 0-7		
Nominal flow	Q _N	l/min	NW 1.3: 37 NW 2.5: 150		
Actuation					
Electrical			Direct		
Voltage type			Alternating current (50/60Hz)	Direct current	
Nominal voltage					
– Standard version	U _n	V	230 ±10%	24 ±10%	other voltages on request
– Low wattage version	U _n	V	230 ±10% (not for V9-NW 2.5)	24 ±10% (not for V9-NW 2.5)	
Initial power consumption					
– Standard version		VA (W)	NW 1.3: 11 NW 2.5: 11.5	NW 1.3: 4.8 NW 2.5: 10	
– Low wattage version		VA (W)	7.8	2.7	
Continuous consumption					
– Standard version		VA (W)	NW 1.3: 8.5 NW 2.5: 7.5	NW 1.3: 4.8 NW 2.5: 7.5	
– Low wattage version		VA (W)	4.9	2.7	
Duty cycle	ED	%	100		
Electrical protection		IP	IP 65 to DIN 40050 (applies only to solenoid with connector)		
Connection			NW 1.3: connector to DIN EN 175301-803 form B – industrial standard NW 2.5: connector to DIN EN 175301-803 form A – industrial standard		

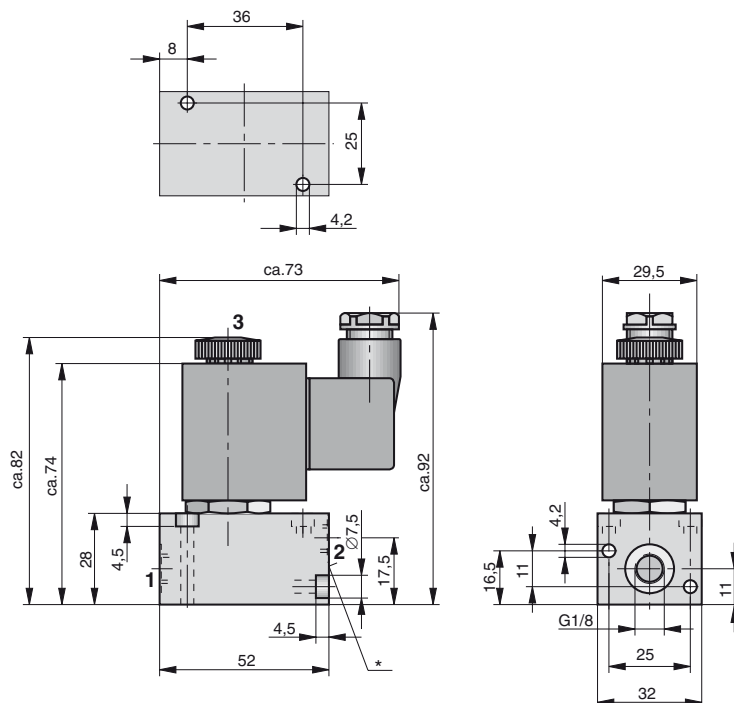
Type: V9 381RF-1/8NG (NO¹)- NW 1.3
 Type: V9 381H-RF-1/8NG (NO¹)- NW 1.3

¹ not suitable for P-supply manifold mounting



* Low wattage version is 30 mm wide:
 – therefore to mount these on a P-Supply Manifold, special measures are needed.
 ** Manual override

Type: V9 381RF-1/8NG – NW 2.5
 Type: V9 381H-RF-1/8NG – NW 2.5

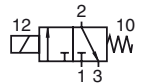
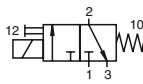
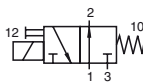


* Manual override

For order instructions see page 86

Dimensions in mm

Order Instructions – 3/2 Way Valves – Series V9

Actuation	Symbol	Nominal Size	Order Instructions		Page
			Type	Order No.	
Electrical, by permanent signal		NW 1.3	V9 381RF-1/8-NC-..	PA 10362-..33	84, 85
		NW 2.5	V9 381RF-1/8-NC-..	PA 10369-..33	84, 85
		NW 1.3	V9 381H-RF-1/8-NC-..	PA 10363-..33	84, 85
		NW 2.5	V9 381H-RF-1/8-NC-..	PA 10370-..33	84, 85
		NW 1.3	V9 381H-RF-1/8-NO-..	PA 10367-..33	84, 85

Solenoid version	Nominal voltage	Applicable for	Key code
Standard version	230V 50/60Hz	110 V =	61
	24V =	60V 50/60Hz	02
Low wattage version	24V =		13
	230V 50/60Hz		69
Other voltages on request			

Order Instructions – Accessories for P-Supply Manifold Mounting

Description	for NW	Order No.
P-Manifold PL-1/8-..	1.3	PD32763-....*
P-Manifold PLK-1/8-..	1.3	PD37174-....*
P-Manifold PL-1/4-..	2.5	PD32765-....*
P-Manifold PLK-1/4-..	2.5	PD32175-....*

* Complete order no. with no. of valve

The delivery includes:

P-Manifold complete incl. mounting kit