





# <sup>2.1</sup> Solenoid Valves VMDB

The VMDB solenoid valve is a universal directional control valve with a comprehensive valve function.



#### Summary

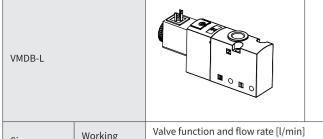
The VMDB solenoid valve is a universal directional control valve with a comprehensive valve function.

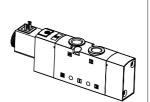
#### **Product features**

- Piston spool with sealing ring, reliable, robust valve with a long service life
  It has a variety of valve functions, can meet a variety of application needs
  Operating voltage can be easily altered by changing the solenoid coil
  Flow rate up to 2300 l/min

## Product range overview

VMDB-L- which can be used without pneumatic coupling. All gas interfaces are located on the valve and can be connector / filled with gas pipe.







	Size	Working	Valve function and flow rate [l/min]								
	Size	port	23R	23U	25M	25B	35C	35P	35E		
	20	G1/8	700	700	700	700	700	600	600		
	25	G1/4	1000	1000	1300	1300	1200	1000	1000		
	30	G3/8	2300	2300	2300	2300	2000	1600	1600		

#### **Overview of valve functions**

	Order		VMDB-L				
Valve	code for valves	Description	Size				
Valves		20	25	30			
3/2-way valve, normally closed	d, pneumatic s	pring	1				
	- 23R-A	Internal pilot air supply,not reversible	•	•	•		
	238-4	External pilot air supply, reversible					
3/2-way valve, normally closed, pneumatic/mechanical spring							
	- 23R-M	<ul> <li>Internal pilot air supply, not reversible</li> <li>Reset via: mechanical spring, supported internally by pneumatic spring</li> </ul>	•	-	-		
	2314-101	<ul> <li>External pilot air supply, reversible</li> <li>Reset via: mechanical spring, supported internally by pneumatic spring</li> </ul>	•	-	-		
3/2-way valve, normally closed	d,mechanical s	pring					
	- 23R-M	Internal pilot air supply,not reversible	-				
		External pilot air supply, reversible	-				

# -Overview of valve functions

			VMDB-L			
Valve	Order code for	Description	Size			
	valves		20	25	30	
3/2-way valve, normally open,	pneumatic/me	echanical spring	1	1		
	- 23U-A	Internal pilot air supply,not reversible				
	230 A	External pilot air supply, reversible				
3/2-way valve, normally open,	pneumatic/me	chanical spring		1		
	- 23U-M	<ul> <li>External pilot air supply, reversible</li> <li>Reset via: mechanical</li> <li>spring, supported internally by</li> <li>pneumatic spring</li> </ul>	•	-	-	
$10 \qquad 2 \qquad W$ $12 \qquad 7 \qquad $	230-14	<ul> <li>External pilot air supply, reversible</li> <li>Reset via: mechanical</li> <li>spring,supported internally by</li> <li>pneumatic spring</li> </ul>	•	-	-	
3/2-way valve, normally open,	mechanical sp	ring				
	- 23U-M	Internal pilot air supply,not reversible	-	-	-	
	230-14	External pilot air supply, reversible	-	•	•	
5/2-way valve,pneumatic sprin	g					
		Internal pilot air supply,not reversible	-	•	•	
	- 25M-A	External pilot air supply, reversible	•	•	•	
5/2-way valve,mechanical spri	ng	I	1	1	1	
	JEM M	<ul> <li>External pilot air supply, reversible</li> <li>Reset via: mechanical spring,supported internally by pneumatic spring</li> </ul>			•	
	- 25M-M	External pilot air supply, reversible				
5/2-way valve						
	250	Internal pilot air supply,not reversible			•	
14     4     2     12       14     1     1     1       14     1     1     1       14     1     1     1       14     1     1     1	- 25B	External pilot air supply, reversible		•	•	

### -Overview of valve functions

	Order		VMDB-L				
Valve	Order code for	Description	Size				
	valves		20	25	30		
5/3-way valve, mechanical spi	ring, closed			1			
$\begin{array}{c c} 14 \\ \hline 14 \\ \hline 12 \\ \hline 12 \\ \hline 13 \\ \hline 14 \\ \hline 14 \\ \hline 12 \\ \hline 11 \\ \hline 13 \\ \hline 11 \\ \hline 13 \\ \hline 13 \\ \hline 11 \\ \hline 13 \\ \hline 13 \\ \hline 11 \\ \hline 13 \\ \hline 12 \\ \hline 11 \\ \hline 13 \\ \hline 12 \\ 12 \\$	- 35C	Internal pilot air supply,not reversible	•	•			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	350	External pilot air supply, reversible	•	•	•		
5/3-way valve, mechanical spri	ng, pressured	-		- -			
	- 35P	Internal pilot air supply,not reversible	-	•	•		
	337	External pilot air supply, reversible	•	•			
5/3-way valve, mechanical spri	ng, exhausted						
	255	Internal pilot air supply,not reversible	•	•	•		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	- 35E	External pilot air supply, reversible	•				

## Type codes

VMDB	-L	20		-23R	-A			Z				G18			Q6		U			5
Valve	1	2		3	(4)			5				6 7			8			9		
1	-valve type: L=	In-line va	lve																	
2	Size: 20;25;30																			
				3/2-way valve,	norma	ally	closec	ł	14	25M	Singl	e soler	noid			35C	Mid-pos	ition	close	d
3	-Valve function		23U	3/2-way valve,	norma	ally	open		25B Double solenoid 35P				35P	Mid-position pressured						
										35E Mid-position exhauste				usted						
4	-Reset method		А	Pneumatic spr	ing						М	Mech	anic	cal spri	al spring					
5	Pilot type		None	Internal pilot							Z	Exter	nal p	l pilot						
6	Pneumatic con	nection	G18	G1/8				G	514	G1/	4					G38 (	63/8			
1	Push-in connec	ctor	Q4	4mm	Q6	6m	m	Q8 8mm		n	Q	10	10mm	ı	Q12 ]	2mm		None	Without	
8	Exhaust		U	Muffler			No fittin					J With fitting								
9	Nominal operati	on voltage	3	AC110V			4	AC220	OV			5		DC24V 6 DC12V						

# Solenoid valves VMDB-L, size 20

General technical data						
Valve function		3/2-way valve		5		
Order code for valves		23R	23U	2		
Valve width [mm]		21				
Diameter [mm]		5.7				
Design		Piston spool				
Flow direction		Non-reversible				
Pilot air supply		Internal or Exte	ernal			
Type of control		Piloted				
Manual override		Button type				
Overlap		Positive overlap				
Sealing principle		Soft				
Type of mounting		Optionally via through-hole				
Standard nominal flow rate qnN [L/min]		700	700 7			
Actuation type		Electric				
Mounting position		Any				
Exhaust air function		Can be throttle	d			
Pneumatic connection	1, 2, 3	G1/8	G1/8	Ģ		
Pheumatic connection	4, 5	-	-	6		
Pilot air Air mouth 12/14		M5				
Pilot exhaust port 82/84		M5				
		-				

Technical parameters code for valves	-3/2 valve Order	23R		23U		
Normal position		Closed		Open		
Stable position		Monostable		Monostable		
Reset method		Pneumatic spring	Mechanical spring	Pneumatic spring	Mechanical spring	
	On	14	14	14	15	
Switching times in [ms]	Off	21	32	21	28	
	Change over	-	-	-	-	

Technical date -5/2-w code for valves	ay valves Order	25 M		25B
Normal position		-		-
Stable position		Monostable		Bistable
Reset method	Reset method		Mechanical spring	
	On	20	12	-
Switching times in [ms]	Off	29	44	-
[]	Change over	-	-	10
Taskainal data 5/2		1		

Technical data – 5/3-way valves Order code for valves		35C	35P	35E	
Normal position		Closed	Pressured	Exhausted	
Stable position		Monostable			
Reset method		Mechanical spring			
	On	13	13	13	
Switching times in [ms]	Off	42	42	44	
	Change over	24	21	24	

5/2-way valve		5/3-way valve		
25M	25B	35C	35P	35E
		5	4.8	4.5
700	700	700	600	
			L	
G1/8	G1/8	G1/8	G1/8	G1/8
G1/8	G1/8	G1/8	G1/8	G1/8

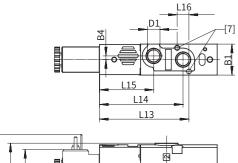
Safety data					
Max. positive test pulse with logic 0 [is]	1900 (valves with coil)				
Max. negative test pulse with logic 1 [is]	2700 (valves with coil)				
Shock resistance	Shock test with severity level 2 to FN 942017-5 and EN 60068-2-27				
Vibration resistance	Transport application test with severity level 2 to FN 942017-4 and EN 60068-2-6				

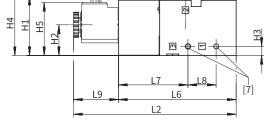
Operating and er	Operating and environmental conditions							
Order code for va	alves	23R/U	23R/U 25M		35/C/P/E			
Operating mediu	ım	Compressed air to ISO 8573-1:2010 [7:4:4]						
Operating	Internal pilot	2.5 10		1.5 10	2.5 10			
pressure bar	External pilot	-0.9 +10						
Pilot pressure ba	r	2.510 1.510 2.510						
Ambient tempera	ature°C	- 10 +60						
Temperature of r	nedium°C	-10+60						

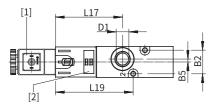
Electrical data	Electrical data							
Electrical connec	tion	Through the interface plug-in		Hous				
Operating	[V DC]	12,24 ±10%		Seals				
voltage	[V AC]	110,220±10%		Pisto				
Power	[W]	2.6		Screv				
Duty cycle	[%]	100	'					
Degree of protect	ion to EN 60529	IP65 with plug socket						

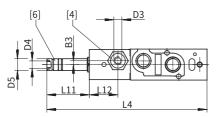
Materials	
Housing	Wrought aluminium alloy
Seals	HNBR, NBR
Piston spool	Wrought aluminium alloy
Screws	Galvanised steel

#### Dimensions-3/2-way valves







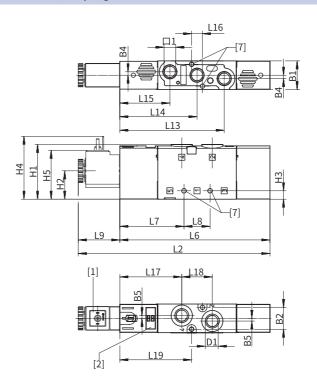


[1]Solenoid coil interface type C
[2] Space for inscription label
[4] Port 10/12 for pilot air supply
[6] Port 82 for pilot exhaust air
[7] For screw M3

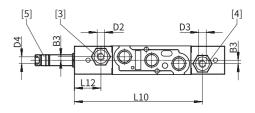
#### -Solenoid valves VMDB-L, size 20

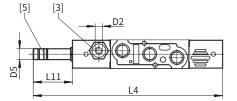
-Dimensions-3/2-way valves														
			1	1	1	1	1				1	1	1	1
Туре	B1	B2	B3	B4	B5	D1	D3	D4	D5φ	H1	H2	H3	H4	H5
VMDB-L20-23G18	DB-L20-23G18		-	2.5	2	G1/8	-	M5	8	40	20.9	6.2	46.7	36.4
VMDB-L20-23Z-G18	21.1	21.1 16.1		2.6		01/0	M5		0	0	20.5	0.2	+0.1	50.4
				1	1	1					1	1	1	
Туре	L2	L4	L6	L7	L8	L9	L11	L12	L13	L14	L15	L16	L17	L19
VMDB-L20-23G18	110.7	109.1	80.1	47.3	19.2	30.6	29	-	60.9	56.9	36.9	8	45.6	52.9
VMDB-L20-23Z-G18	110.1	105.1	00.1	11.5	13.2	50.0		19.5	00.5	50.5	50.5		-15.0	52.5

#### Dimensions-5/2-way single solenoid valves



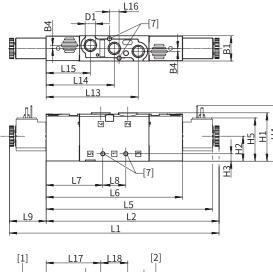
Туре	B1	B2	B3	B4	B5	D1	D2	D3	D4	D5 ¢	H1	.	H2	H3	H4	H5
VMDB-L20-25MG18	21.1	16.1	-	2.5	2	G1/8	-	-	M5	8	40	, ,	20.9	6.2	46.7	36.4
VMDB-L20-25MZ-G18	-G18 21.1 16.1 2.6 2.5		2 01/0		M5	M5		0	40	.4	20.5	0.2	40.7	50.4		
Туре	L2	L4	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15	L16	L17	L18	L19
VMDB-L20-25MG18	141.2	139.6	110.6	47.3	19.2	30.6	-	29	-	76.9	56.9	36.9	8	45.6	22.5	52.9
VMDB-L20-25MZ-G18	141.2	135.0	110.0	+1.5	19.2	50.0	94.3	25	19.5	10.5	50.5	50.9		+5.0	22.5	52.5

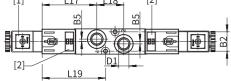


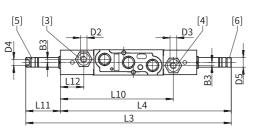


- [1]Solenoid coil interface type C
  [2] Space for inscription label
  [3] Port 14 for pilot air supply
  [4] Port 12 for pilot air supply
  [5] Port 84 for pilot exhaust air
  [7] For screw M3

#### Dimensions-5/3-way and 5/2-way double solenoid valves







Solenoid coil interface type C
 Space for inscription label
 Port 14 for pilot air supply
 Port 12 for pilot air supply
 Port 84 for pilot exhaust air
 Port 82 for pilot exhaust air
 For screw M3

Туре	B1	B2	B3	B4	B5	D1	D2	D3		D4	D5¢	H1	H2	H3		H4	H5	
VMDB-L20-35M-G18			-				-	-										
VMDB-L20-35MZ-G18	21.1	16.1	2.6	2.5	2	G1/8	M5	M5	5	М5	8	40.4	20.9	6.2		46.7	36.4	
VMDB-L20-25BG18	21.1	10.1	-		2	01/0	-	-		U	0	40.4	20.5	0.2		40.1	50.4	
VMDB-L20-25B-Z-G18			2.6				M5	M5	5									
_																		
Туре	L1	L2		L3	L4	L	_5	L6		L7		L8	L9	L	.10		L11	
VMDB-L20-35M-G18														-	-			
VMDB-L20-35MZ-G18	174.9	144	4.3 171.7		142.7	7 130	139.1	113.	7	47.3		19.2	30.6	9	94.3	29		
VMDB-L20-25BG18	114.5	14	1.5	1/1./	112.1		133.1	110.1		+1.5		15.2	50.0	-	-			
VMDB-L20-25B-Z-G18														9	94.3			
Туре	L12		L13		L14		L15		L16	5		17	L18	8		L19		
VMDB-L20-35M-G18	-		76.9		56.9		36.9		8		4	5.6	22.	5		52.	Э	
VMDB-L20-35MZ-G18	19.5																	
VMDB-L20-25BG18	-																	
VMDB-L20-25B-Z-G18	19.5																	

#### Solenoid valves VMDB-L, size 25

General technical data							
Valve function		3/2-way valve		5			
Order code for valves		23R	23U	2			
Valve width [mm]		26.5					
Nominal width Diameter [	mm]	6.3		6			
Design		Piston spool					
Flow direction		Non-reversible					
Pilot air supply		Internal or Exte	rnal				
Type of control		Piloted					
Manual override		Button type					
Overlap		Positive overla	0				
Sealing principle		Soft					
Type of mounting		Optionally via through-hole					
Standard nominal flow rate qnN [L/min]		1000					
Actuation type		Electric					
Mounting position		Any					
Exhaust air function		Can be throttled					
Pneumatic connection	1, 2, 3	G1/4 G1/4					
Preumatic connection	4,5	-	-	G			
Pilot air Air mouth 12/14		M5	×				
Pilot exhaust port 82/84		M5					

Technical data – 3/2-v Order code for valves		23R	23U				
Normal position		Closed		Open			
Stable position		Monostable		Monostable			
Reset method		Pneumatic spring	neumatic spring Mechanical spring		Mechanical spring		
	On	13	11	12	11		
Switching times in [ms]	Off	26	40	26	39		
	Change over	-	-	-	-		

Technical data – 5/2-w Order code for valves	vay valves	25 M		25B
Normal position		-		-
Stable position		Monostable		Bistable
Reset method		Pneumatic spring	Mechanical spring	-
	On	19	12	-
Switching times in [ms]	Off	35	47	-
[]	Change over	-	-	11
			·	
Technical data – 5/3-w Order code for valves	vay valves	35C	35P	35E
Normal position		Closed	Pressured	Exhausted
Stable position		Monostable		
Reset method		Mechanical spring		
	On	13	14	14
Switching times in [ms]	Off	42	48	48
L	Change over	26	25	25

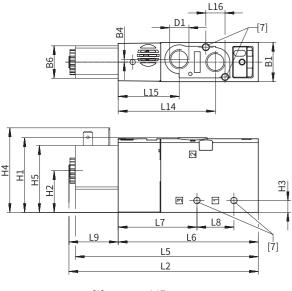
5/2-way valve		5/3-way valve		
25M	25B	35C	35P	35E
6.9		6.5	6.3	
1300	1300	1200	1000	
G1/4	G1/4	G1/4	G1/4	G1/4
G1/4	G1/4	G1/4	G1/4	G1/4

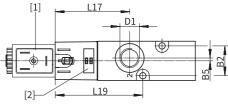
Safety data					
Max. positive test pulse with logic 0 [is]	2000 (valves with coil)				
Max. negative test pulse with logic 1 [is]	3600 (valves with coil)				
Shock resistance	Shock test with severity level 2 to FN 942017-5 and EN 60068-2-27				
Vibration resistance	Transport application test with severity level 2 to FN 942017-4 and EN 60068-2-6				

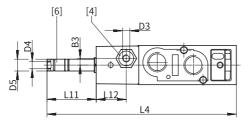
Operating and er	Operating and environmental conditions								
Order code for va	alves	23R/U	25M	25B	35/C/P/E				
Operating mediu	m	Compressed air to ISO 8573-1:2010 [7:4:4]							
Operating	Internal pilot	2.5 10		1.5 10	2.5 10				
pressure bar	External pilot	-0.9 +10							
Pilot pressure ba	r	2.5 10		1.5 10	2.5 10				
Ambient tempera	ature°C	- 10 +60							
Temperature of n	nedium°C	-10 +60							

Electric	cal data				Materials				
Electric	Electrical connection		Through the interface plug-in		Housing	Die-cast aluminium			
Operat	ting	[V DC]	12,24 ±10% 110,220±10%		Seals	HNBR, NBR			
voltage	voltage	[V AC]			Piston spool	Wrought aluminium alloy			
Power		[W]	3.3		Screws	Galvanised steel			
Duty cy	ycle	[%]	100						
Degree	e of protect	ion to EN 60529	IP65 with plug socket						

#### Dimensions-3/2-way valves





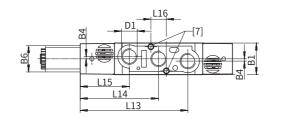


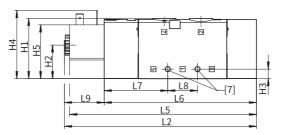
[1]Solenoid coil interface type C
[2] Space for inscription label
[4] Port 10/12 for pilot air supply
[6] Port 82 for pilot exhaust air
[7] For screw M4

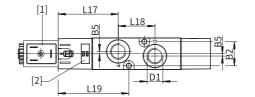
#### -Solenoid valves VMDB-L, size 25

-Dimensions-3/2-way valves																
							1									
Туре	B1	B2	B3	B4	B5	B6	D1	D3		D4	D5φ	H1	H2	H3	H4	H5
VMDB-L25-23G14	26.5	20.2	-	1.9	1.9	22	G1/4	-		M5	8	50.5	28.2	8	57.2	45.2
VMDB-L25-23Z-G14	20.5	20.2	4.5	1.5	1.5		01/1	M5		1415		50.5	20.2		51.2	10.2
														1		
Туре	L2	L4	L5	L6	L7	L8	LS	9	L11	LI	12	L14	L15	L16	L17	L19
VMDB-L25-23G14	129.2	128.1	123.8	94.8	53.3	25	3	4.4	33.3	_		65.8	41.3	13	50.4	59.3
VMDB-L25-23Z-G14	125.2	120.1	125.0	51.0	55.5	25			55.5		0.3	00.0	11.5	15	50.1	55.5

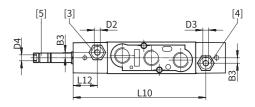
#### Dimensions-5/2-way single solenoid valves

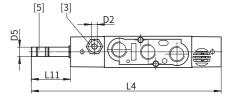






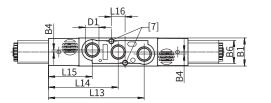
Туре	B1	B2	B3	B4	B5	B6		D1	D2	D3	D4	D5φ	H1	H2	H3	H4	H5
VMDB-L25-25MG14	26.5	20.2	-	1.9	1.9	22		G1/4	-	-	M5	8	50.5	28.2	8	57.2	45.2
VMDB-L25-25MZ-G14	20.5	20.2	4.5	1.5	1.5	22		01/4	M5	M5		0	50.5	20.2	0	51.2	43.2
Туре	L2	L4	L5	L6	L7		L8	L	9	L10	L11	L12	L13	L1	.4	L15	L16
VMDB-L25-25MG14	162.2	161.1	156.8	127.8	53.3		25	2	4.4	-	33.3	-	90.3	65	: 0	41.3	13
VMDB-L25-25MZ-G14	102.2	101.1	130.0	127.0	55.5		25		+.4	111.3	33.3	20.3				41.5	10
				-													
Туре	L17	L18	L19														
VMDB-L25-25MG14	50.4	30.8	59.3														
VMDB-L25-25MZ-G14	] 50.4	50.0	55.5														

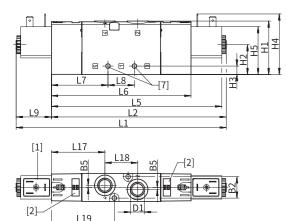


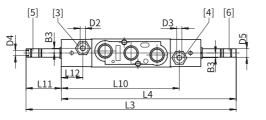


[1]Solenoid coil interface type C
[2] Space for inscription label
[3] Port 14 for pilot air supply
[4] Port 12 for pilot air supply
[5] Port 84 for pilot exhaust air
[7] For screw M4

#### Dimensions-5/3-way and 5/2-way double solenoid valves







Solenoid coil interface type C
 Space for inscription label
 Port 14 for pilot air supply
 Port 12 for pilot air supply
 Port 84 for pilot exhaust air
 Port 82 for pilot exhaust air
 For screw M4

Туре	B1	B2	B3	B4	B	5	B6		D1		D2	[	D3	D4	D5φ	H1
VMDB-L25-35M-G14			-								-	-	-			
VMDB-L25-35MZ-G14	26.5	20.2	4.5	1.9	1.	٥	22		G1/4	,	M5	ſ	M5	M5	8	50.5
VMDB-L25-25BG14	20.5	20.2	-	1.5	1.	5	22		01/4	•	-	-	-		0	50.5
VMDB-L25-25B-Z-G14		-	4.5								M5	١	M5			
[																
Туре	H2	H3	H4	H5	LI	L	L2		L3		L4	l	L5	L6	L7	L8
VMDB-L25-35M-G14																
VMDB-L25-35MZ-G14	28.2	8	57.2	45.2	20	00.3	166		198.	2	164.9	.	160.6	131.6	53.3	25
VMDB-L25-25BG14	20.2	0	51.2	43.2		.5	100	, 	150.	2	104.5		100.0	151.0	55.5	25
VMDB-L25-25B-Z-G14																
[																
Туре	L9	L10	L11	L12		L13		L14		L15	5	L16		L17	L18	L19
VMDB-L25-35M-G14		-		-												
VMDB-L25-35MZ-G14	33.3	111.3	33.3	20.3	5	90.3		65.8		41.3	2	13		50.4	30.8	59.3
VMDB-L25-25BG14	55.5	-		-		] 50.5		0.0.0		+1		10		50.7	50.0	55.5
VMDB-L25-25B-Z-G14		111.3		20.3												

#### Solenoid valves VMDB-L, size 30

General technical data				
Valve function		3/2-way valve		5,
Order code for valves		23R	23U	2
Valve width [mm]		31		
Nominal width Diameter [m	ım]	9.4		9
Design		Piston spool		
Flow direction		Non-reversible		
Pilot air supply		Internal or Exte	rnal	
Type of control		Piloted		
Manual override		Button type		
Overlap		Positive overla	p	
Sealing principle		Soft		
Type of mounting		Optionally via t	hrough-hole or o	on m
Standard nominal flow rate qnN [L/min]		2300		2
Actuation type		Electric		
Mounting position		Any		
Exhaust air function		Can be throttle	d	
Pneumatic connection	1, 2, 3	G3/8	G3/8	G
Pheumatic connection	4,5	-	-	G
Pilot air Air mouth 12/14		G1/8	·	
Pilot exhaust port 82/84		M5		

Technical data – 3/2-v Order code for valves		23R		23U			
Normal position		Closed		Open			
Stable position		Monostable		Monostable			
Reset method		Pneumatic spring	Mechanical spring	Pneumatic spring	Mechanical spring		
	On	19	16	19	15		
Switching times in [ms]	Off	36	58	37	57		
[]	Change over	-	-	-	-		
	•						
Technical data – 5/2-v		M25		B25			

Technical data – 5/2-v Order code for valves		M25		B25
Normal position		-		-
Stable position		Monostable		Bistable
Reset method		Pneumatic spring	Mechanical spring	-
	On	24	17	-
Switching times in [ms]	Off	49	62	-
	Change over	-	-	13
Table 1 days 5/2	·			

Technical data – 5/3-wa Order code for valves	ay valves	35C	35P	35E						
Normal position		Closed	losed Pressured Exhausted							
Stable position		Ionostable								
Reset method	hod Mechanical spri									
	On	17	18	20						
Switching times in [ms]	Off	76	75	74						
	Change over	39	31	36						

5/2-way valve		5/3-way valve		
25M	25B	35C	35P	35E
1				
9.4		8.9	8.1	
manifold rail				
2300	2300	2000	1600	
G3/8	G3/8	G3/8	G3/8	G3/8
G3/8	G3/8	G3/8	G3/8	G3/8

-Dimensions-3/2-way valves

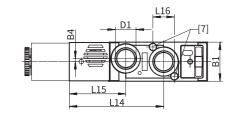
#### -Solenoid valves VMDB-L, size 30

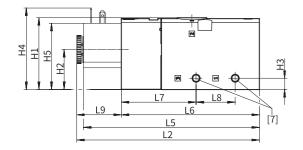
Safety data	
Max. positive test pulse with logic 0 [îs]	2000 (valves with coil)
Max. negative test pulse with logic 1 [is]	3600 (valves with coil)
Shock resistance	Shock test with severity level 2 to FN 942017-5 and EN 60068-2-27
Vibration resistance	Transport application test with severity level 2 to FN 942017-4 and EN 60068-2-6

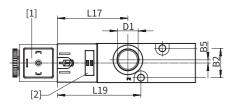
Operating and e	nvironmental condit	tions			
Order code for va	alves	23R/U	25M	25B	35/C/P/E
Operating mediu	um	Compressed air to ISO 8573-1	1:2010 [7:4:4]		
Operating	Internal pilot	2.5 10		1.5 10	2.5 10
pressure bar	External pilot	-0.9 +10			
Pilot pressure ba	ar	2.5 10		1.5 10	2.5 10
Ambient temper	rature°C	- 10 +60			
Temperature of	medium°C	-10 +60			

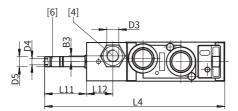
Electrical data			Materials	
Electrical connec	tion	Through the interface plug-in	Housing	
Operating	[V DC]	12,24 ±10%	Seals	
voltage	[V AC]	110,220±10%	Piston spool	
Power	[W]	3.3	Screws	
Duty cycle	[%]	100		
Degree of protect	tion to EN 60529	IP65 with plug socket		

#### Dimensions-3/2-way valves









Die-cast aluminium

Galvanised steel

Wrought aluminium alloy

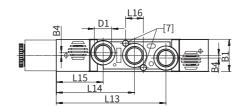
HNBR, NBR

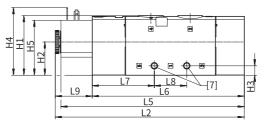
[1]Solenoid coil interface type C [2] Space for inscription label [4] Port 10/12 for pilot air supply [6] Port 82 for pilot exhaust air [7] For screw M5

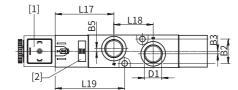
#### -Solenoid valves VMDB-L, size 30

Туре	B1	B2	B3	B4	B5	D1	D3	D4	D5φ	H1	H2	H3	H4	H5
VMDB-L30-23G38	31	23.3	-	- 2.5 2.5		-	M5	8	57	31.8	9	63.7	51.6	
VMDB-L30-23Z-G38	51		4.6		2.0	05/0	G1/8	1415	0	51	51.0	5	03.1	51.0
Туре	L2	L4	L5	L6	L7	L8	L9	L11	L12	L14	L15	L16	L17	L19
VMDB-L30-23G38	144.9	142.8	139.5	109.5	59.3	31	35.4	33.3	-	74.8	44.8	17	56	66.3
VMDB-L30-23Z-G38	144.5	142.0	155.5	105.5	55.5	51	55.4	55.5	20.8	14.0		11	50	00.5

#### Dimensions-5/2-way single solenoid valves



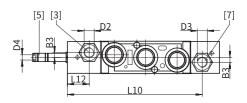


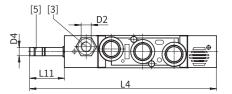


Туре	B1	B2	B3	B4	B5	D1	D2	D3	D4	D5	⊅ Н	1	H2	H3	H4	H5
VMDB-L30-25MG38	31	23.3	-	2.5	2.5	G3/8	-	-	M5	8	5	7	31.8	9	63.7	51.6
VMDB-L30-25MZ-G38	51	23.5	4.6	2.5		03/0	G1/8	G1/8		0		1	51.0		05.7	51.0
Туре	L2	L4	L5	L6	L7	L8	L9	L	.10	L11	L12		L13	L14	L15	L16
VMDB-L30-25MG38	180.7 178.6	179.6	145.3	59.3	31	35.	-	-	33.3	-		104.8	74.8	44.8	17	
VMDB-L30-25MZ-G38	100.1	110.0	119.0	, 145.5	59.5	51	35.4		L28.8	55.5	20.8		107.0	14.0	44.0	17

Туре	B1	B2	B3	B4	B5	D1	D2	D3	D4	D	)5φ	H1	H2	H3	H4	H5
VMDB-L30-25MG38	31	23.3	-	2.5	2.5	G3/8	-	-	M5	8		57	31.8	9	63.7	51.6
VMDB-L30-25MZ-G38	51	23.5	4.6	2.5	2.5 6	03/0	G1/8	G1/8				51	51.0			
Туре	L2	L4	L5	L6	L7	L8	L9	l	_10	L11	L	12	L13	L14	L15	L16
VMDB-L30-25MG38	180.7	178.6	178.6 179.6		3 59.3	3 31	25	-	-	33.3	-		104.8	74.8	44.8	17
VMDB-L30-25MZ-G38	100.7	110.0	119.0	145.3	, 59.5	55.5 51	35.4		L28.8	55.5	2	0.8	104.0	14.0	44.0	17

Туре	L17	L18	L19	
VMDB-L30-25MG38	56	37.6	66.3	
VMDB-L30-25MZ-G38	50	51.0	00.5	



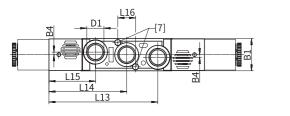


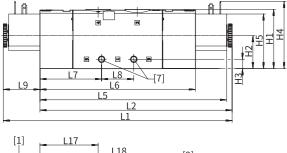
- [1]Solenoid coil interface type C
  [2] Space for inscription label
  [3] Port 14 for pilot air supply
  [4] Port 12 for pilot air supply
  [5] Port 84 for pilot exhaust air
  [7] For screw M5

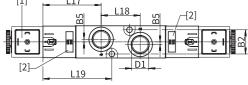
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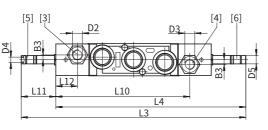
#### Solenoid valves VMDB-L, size 30

#### Dimensions-5/3-way and 5/2-way double solenoid valves









Solenoid coil interface type C
 Space for inscription label
 Port 14 for pilot air supply
 Port 12 for pilot air supply
 Port 84 for pilot exhaust air
 Port 82 for pilot exhaust air
 For screw M5

Туре	B1	B2	B3	B4	B5	D1	D2	D3	D4	D5φ	H1	H2	H3	H4	H5
VMDB-L30-35M-G38			-				-	-							
VMDB-L30-35MZ-G38	31	23.3	4.6	2.5 2	2.5	G3/8	G1/8	G1/8	M5	8 5	57	31.8	9	63.7	51.6
VMDB-L30-25BG38	51	25.5	-	2.5	2.5	0070	-	-	115		51	51.0		05.1	51.0
VMDB-L30-25B-Z-G38			4.6				G1/8	G1/8							
													_		
Туре	L1	L2		L3	L	4	L5	L	6	L7	L	8	L9	L1	.0
VMDB-L30-35M-G38														-	
VMDB-L30-35MZ-G38	220.3	18	5	216.2	1	82.9	179.6	1	49.6	59.3	3	1	35.4	12	.8.8
VMDB-L30-25BG38	220.5			210.2		02.5	115.0		15.0	55.5		±	55.4	-	

Туре	L11	L12	L13	L14	L15	L16	L17	L18	L19
VMDB-L30-35M-G38	- 33.3	-		74.8	44.8	17	56	37.6	66.3
VMDB-L30-35MZ-G38		20.8	- 104.8						
VMDB-L30-25BG38		-							00.5
VMDB-L30-25B-Z-G38		20.8							

#### Accessories

	Code	Valve function	Size	Туре					
3/2-way valve with solenoid co	il (24 V DC)	1	L.						
	Single soler	oid, normally closed, type C							
		Reset via pneumatic spring,	20	VMDB-L20-23R-A-G18					
	23R-A	Internal pilot air supply, Flow direction not reversible	25	VMDB-L25-23R-A-G14					
R R		Flow direction not reversible	30	VMDB-L30-23R-A-G38					
		Reset via mechanical spring,	20	VMDB-L20-23R-M-G18					
	23R-M	Internal pilot air supply, Flow direction not reversible	25	VMDB-L25-23R-M-G14					
		Flow direction not reversible	30	VMDB-L30-23R-M-G38					
5/2-way valve with solenoid co	il (24 V DC)								
	Single soler	oid, normally closed, type C							
A s		Reset via pneumatic spring,	20	VMDB-L20-25M-A-G18					
	25M-A	Internal pilot air supply, Flow direction not reversible	25	VMDB-L25-25M-A-G14					
		Flow direction not reversible	30	VMDB-L30-25M-A-G38					
		Reset via mechanical spring,	20	VMDB-L20-25M-M-G18					
	25M-M	Internal pilot air supply, Flow direction not reversible	25	VMDB-L25-25M-M-G14					
		Flow direction not reversible	30	VMDB-L30-25M-M-G38					
A	Double sole	Double solenoid, type C							
			20	VMDB-L20-25B-G18					
	25B	Internal pilot air supply, Flow direction not reversible	25	VMDB-L25-25B-G14					
			30	VMDB-L30-25B-G38					
5/3-way valve with solenoid co	il (24 V DC)								
	Mid-positio	n closed, type C							
			20	VMDB-L20-35C-M-G18					
	1 35C	Reset via mechanical spring, Internal pilot air supply, Flow direction not reversible	25	VMDB-L25-35C-M-G14					
			30	VMDB-L30-35C-M-G38					

VMDB-L30-25B-Z-G38-...

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