Solenoid valves, ISO 5599-1

Product range overview

FESTO

Function	Version	Type	ISO size	Nominal flow rate [l/min]	Pneumatic working port on sub-base	Operating voltage	
						[V DC]	[V AC]
5/2-way valves, single solenoid	Solenoid valve						
		MN1H	1	1,200	G¼	24	110, 230
			2	2,300	G⅜		
			3	4,500	G½		
		MFH	1	1,200	G¼	12, 24, 42, 48	24, 42, 48, 110, 230, 240
			2	2,300	G⅜		
			3	4,500	G½		
		MDH	4	6,000	G¾	24	42, 110, 230
	Solenoid valve with central plug M12x1						
		MEBH-...-ZSR	1	1,200	G¼	24	–
			2	2,300	G⅜		
			3	4,500	G½		
	Solenoid valve with single plug M12x1, connector pin allocation to VDMA or Desina						
		MDH	1	1,200	G¼	24	–
			2	2,300	G⅜		
			3	4,500	G½		
5/2-way valves, double solenoid	Double solenoid valve						
		JMN1H	1	1,200	G¼	24	110, 230
			2	2,300	G⅜		
			3	4,500	G½		
	Double solenoid valve with dominant signal at 14						
		JMN1DH	1	1,200	G¼	24	110, 230
			2	2,300	G⅜		
			3	4,500	G½		
	Double solenoid valve						
		JMFH	1	1,200	G¼	12, 24, 42, 48	24, 42, 48, 110, 230, 240
			2	2,300	G⅜		
			3	4,500	G½		
	Double solenoid valve with dominant signal						
		JMFDH	1	1,200	G¼	12, 24, 42, 48	24, 42, 48, 110, 230, 240
			2	2,300	G⅜		
			3	4,500	G½		
	Double solenoid valve						
		JMDH	4	6,000	G¾	24	42, 110, 230

Solenoid valves, ISO 5599-1

Product range overview

FESTO

Type	Pilot air supply		Type of reset		→ Page
	internal	external	pneumatic spring	mechanical spring	
Solenoid valve					
MN1H	■	■	■	■	2 / 1.2-18
	■	■	■	■	
	■	■	■	■	
MFH	■	■	■	■	2 / 1.2-30
	■	■	■	■	
	■	■	■	■	
MDH	■	–	■	–	2 / 1.2-65
Solenoid valve with central plug M12x1					
MEBH-...-ZSR	■	–	■	■	2 / 1.2-41
	■	–	■	■	
	■	–	■	■	
Solenoid valve with single plug M12x1, connector pin allocation to VDMA or Desina					
MDH	■	■	■	■	2 / 1.2-30
	■	–	■	■	
	■	–	■	■	
Double solenoid valve					
JMN1H	■	■	–	–	2 / 1.2-22
	■	■	–	–	
	■	■	–	–	
Double solenoid valve with dominant signal at 14					
JMN1DH	■	■	–	–	2 / 1.2-22
	■	■	–	–	
	■	■	–	–	
Double solenoid valve					
JMFH	■	■	–	–	2 / 1.2-34
	■	■	–	–	
	■	■	–	–	
Double solenoid valve with dominant signal at 14					
JMFDH	■	–	–	–	2 / 1.2-34
	■	–	–	–	
	■	–	–	–	
Double solenoid valve					
JMDH	■	–	–	–	2 / 1.2-68
	■	–	–	–	
	■	–	–	–	

Solenoid valves, ISO 5599-1

Product range overview

FESTO

Function	Version	Type	ISO size	Nominal flow rate [l/min]	Pneumatic working port on sub-base	Operating voltage	
						[V DC]	[V AC]
5/2-way valves, double solenoid	Double solenoid valve with central plug M12x1						
		JMEBH	1	1,200	G¼	24 V DC	–
			2	2,300	G⅜		
			3	4,500	G½		
	Double solenoid valve with central plug M12x1, dominant signal at 14						
		JMEBDH	1	1,200	G¼	24 V DC	–
			2	2,300	G⅜		
			3	4,500	G½		
	Double solenoid valve with single plug M12x1, connector pin allocation to VDMA or Desina						
		JMDH	1	1,200	G¼	24 V DC	–
			2	2,300	G⅜		
			3	4,500	G½		
	Double solenoid valve with single plug M12x1, connector pin allocation to VDMA or Desina, dominant signal at 14						
		JMDDH	1	1,200	G¼	24 V DC	–
			2	2,300	G⅜		
			3	4,000	G½		

Function	Version	Type	ISO size	Nominal flow rate [l/min]	Pneumatic working port on sub-base	Operating voltage	
						[V DC]	[V AC]
5/3-way valves	Solenoid valve						
		MN1H-5/3...	1	1,200	G¼	24	110, 230
			2	2,300	G⅜		
			3	4,100	G½		
		MFH-5/3...	1	1,200	G¼	12, 24, 42, 48	24, 42, 48, 110, 230, 240
			2	2,300	G⅜		
			3	4,100	G½		
		MDH-5/3...	4	6,000	G¾	24	110, 230
	Solenoid valve with central plug M12x1						
		MEBH-5/3-...-...-ZSR	1	1,200	G¼	24	–
			2	2,300	G⅜		
			3	4,100	G½		
	Solenoid valve with single plug M12x1, connector pin allocation to VDMA or Desina						
		MDH-5/3...	1	1,200	G¼	24	–
			2	2,300	G⅜		
			3	4,000 ...4,600	G½		

Solenoid valves, ISO 5599-1

Product range overview

Type	Pilot air supply		Type of reset		→ Page
	internal	external	pneumatic spring	mechanical spring	
Double solenoid valve with central plug M12x1					
JMEBH	■	–	–	–	2 / 1.2-45
	■	–	–	–	
	■	–	–	–	
Double solenoid valve with central plug M12x1, with dominant signal					
JMEBDH	■	–	–	–	2 / 1.2-45
	■	–	–	–	
	■	–	–	–	
Double solenoid valve with single plug M12x1, connector pin allocation to VDMA or Desina					
JMDH	■	–	–	–	2 / 1.2-34
	■	–	–	–	
	■	–	–	–	
Double solenoid valve with single plug M12x1, connector pin allocation to VDMA or Desina, dominant signal at 14					
JMDDH	■	–	–	–	2 / 1.2-34
	■	–	–	–	
	■	–	–	–	

Type	Pilot air supply		Mid position			→ Page
	internal	external	closed	exhausting	pressurised	
Solenoid valve						
MN1H-5/3...	■	■	■	■	■	2 / 1.2-26
	■	■	■	■	■	
	■	■	■	■	■	
MFH-5/3...	■	■	■	■	■	2 / 1.2-37
	■	■	■	■	■	
	■	■	■	■	■	
MDH-5/3...	■	–	■	■	–	2 / 1.2-71
Solenoid valve with central plug M12x1						
MEBH-5/3-...-...-ZSR	■	–	■	■	■	2 / 1.2-49
	■	–	■	■	■	
	■	–	■	■	■	
Solenoid valve with single plug M12x1, connector pin allocation to VDMA or Desina						
MDH-5/3...	■	–	■	■	■	2 / 1.2-37
	■	–	■	■	■	
	■	–	■	■	■	

Pneumatic valves, ISO 5599-1

Product range overview

Function	Version	Type	ISO size	Nominal flow rate [l/min]	Pneumatic working port on sub-base	Type of reset		→ Page
						pneumatic spring	mechanical spring	
5/2-way valves	Pneumatic valve, single pilot							
		VL	1	1,200	G1/4	■	■	2 / 1.2-78
			2	2,300	G3/8	■	■	
			3	4,500	G1/2	■	■	
			4	6,000	G3/4	■	■	
	Pneumatic double pilot valve							
		J	1	1,200	G1/4	–	–	2 / 1.2-82
			2	2,300	G3/8	–	–	
			3	4,500	G1/2	–	–	
			4	6,000	G3/4	–	–	
	Pneumatic double pilot valve with dominant signal at 14							
		JD	1	1,200	G1/4	–	–	2 / 1.2-82
			2	2,300	G3/8	–	–	
			3	4,500	G1/2	–	–	

Function	Version	Type	ISO size	Nominal flow rate [l/min]	Pneumatic working port on sub-base	Mid position			→ Page
						closed	exhausted	pressurised	
5/3-way valves	Pneumatic valve								
		VL5/3...	1	1,200	G1/4	■	■	■	2 / 1.2-85
			2	2,300	G3/8	■	■	■	
			3	4,100	G1/2	■	■	■	
			4	4,800	G3/4	■	■	■	

Solenoid valves, ISO 5599-1

Type codes for valves with square plug

MN1H	–	5/3	G	–	D-1	–		–		–		–	C	–	

Type	
MN1H	Single pilot, for N1 solenoid coil
MFH	Single solenoid, for F solenoid coil
MDH	Single solenoid, with D solenoid coil
MEBH	Single solenoid, with EB solenoid coil
JMN1H	Double solenoid, for N1 solenoid coil
JMN1DH	Double solenoid, for N1 solenoid coil, with dominant signal at 14
JMFH	Double solenoid, for F solenoid coil
JMFDH	Double solenoid, for F solenoid coil, with dominant signal at 14
JMDH	Double solenoid, with D solenoid coil

Valve function	
5/2	5/2-way valve
5/3	5/3-way valve

Mid position	
G	closed
E	exhausted
B	pressurised

Size	
D-1	ISO size 1
D-2	ISO size 2
D-3	ISO size 3
¾-D-4	ISO size 4

Electrical connection, operating voltage	
Plug, square design to DIN EN 175301-803, type A	
24DC	24 V DC

Pilot air supply	
	internal
S	external

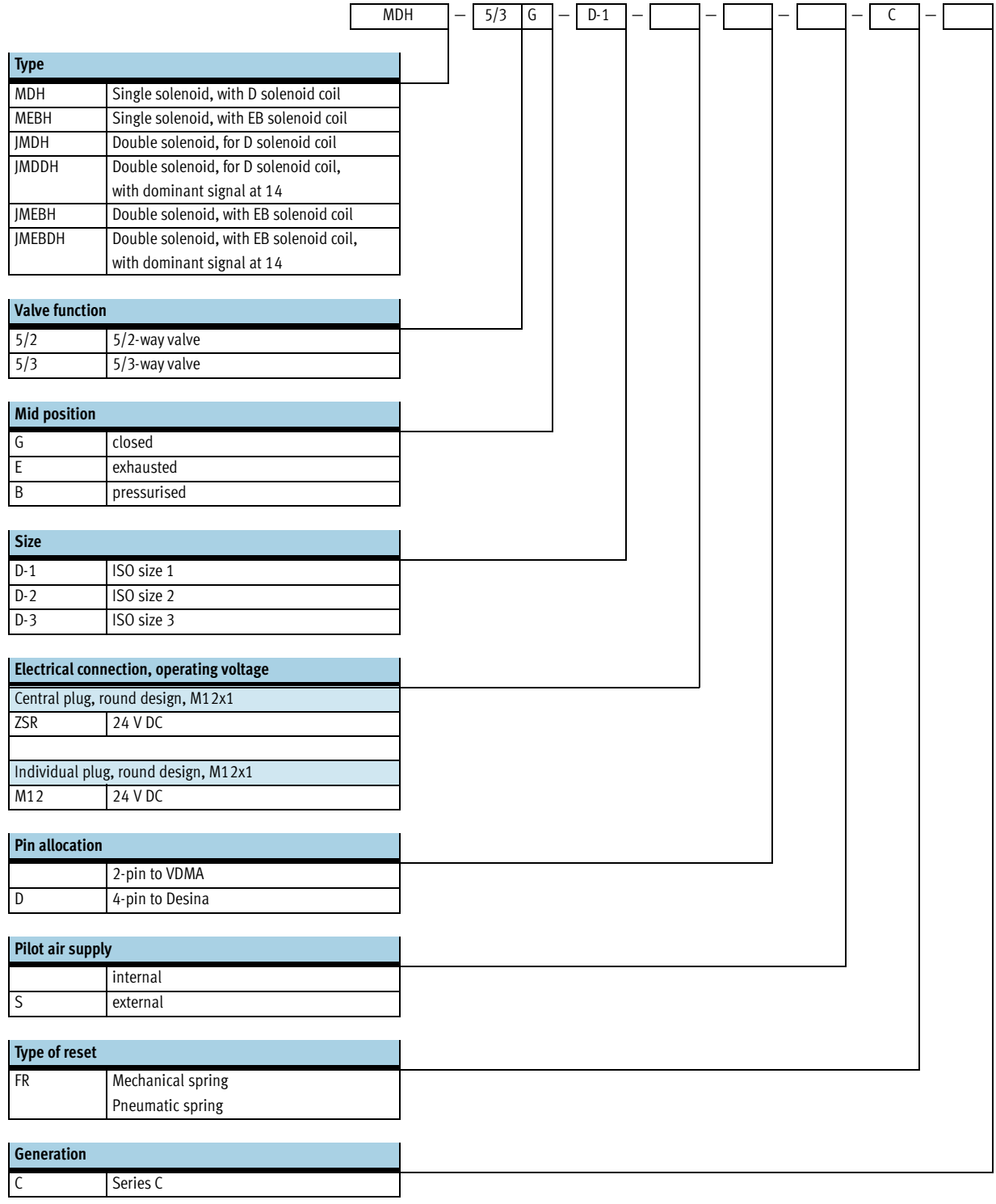
Type of reset	
FR	Mechanical spring
	Pneumatic spring

Generation	
C	Series C

CT	Free of copper and PTFE

Solenoid valves, ISO 5599-1

Type codes for valves with round plug



Type	
MDH	Single solenoid, with D solenoid coil
MEBH	Single solenoid, with EB solenoid coil
JMDH	Double solenoid, for D solenoid coil
JMDDH	Double solenoid, for D solenoid coil, with dominant signal at 14
JMEBH	Double solenoid, with EB solenoid coil
JMEBDH	Double solenoid, with EB solenoid coil, with dominant signal at 14

Valve function	
5/2	5/2-way valve
5/3	5/3-way valve

Mid position	
G	closed
E	exhausted
B	pressurised

Size	
D-1	ISO size 1
D-2	ISO size 2
D-3	ISO size 3

Electrical connection, operating voltage	
Central plug, round design, M12x1	
ZSR	24 V DC
Individual plug, round design, M12x1	
M12	24 V DC

Pin allocation	
	2-pin to VDMA
D	4-pin to Desina

Pilot air supply	
	internal
S	external

Type of reset	
FR	Mechanical spring Pneumatic spring

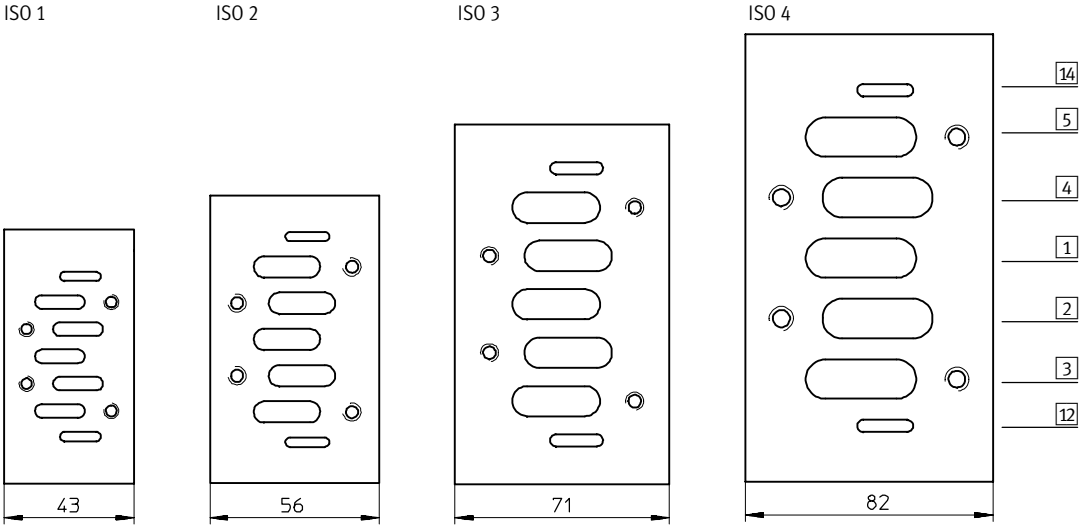
Generation	
C	Series C

Solenoid valves, ISO 5599-1

Peripherals overview

Port pattern on sub-base to ISO 5599-1

Defined interfaces between valve and sub-base



Sub-base port designations

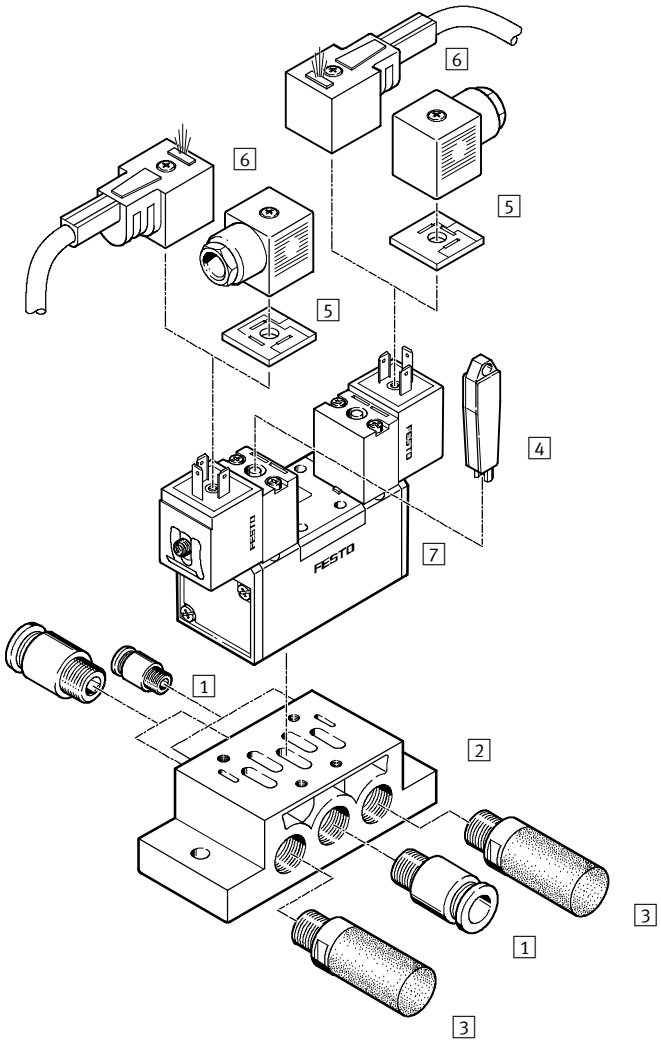
	Solenoid valves	Pneumatic valves
14 Control section	External pilot air supply for pilot valve 14	Signal input 14
5 Power section	Valve exhaust port 5	
4 Power section	Working port 4	
1 Power section	Working air supply port 1	
2 Power section	Working port 2	
3 Power section	Valve exhaust port 3	
12 Control section	External pilot air supply for pilot valve 12	Signal input 12

Solenoid valves, ISO 5599-1

Peripherals overview

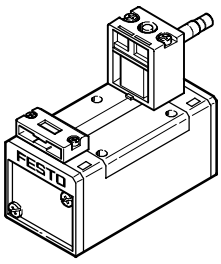
FESTO

Individual mounting with square plug

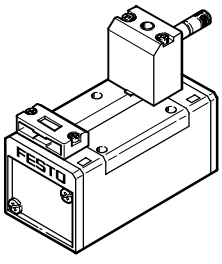


Variants

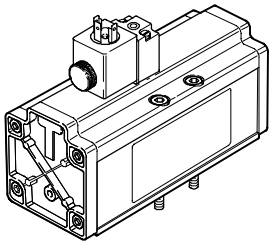
MN1H-5/2



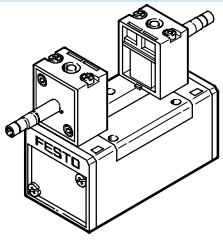
MFH-5/2



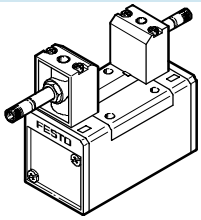
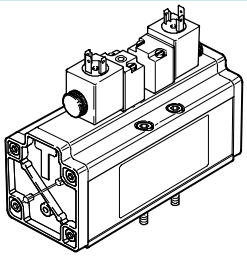
MDH-5/2-D-4



JMN1H-5/2, MN1H-5/3



JMFH-5/2, MFH-5/3



JMDH-5/2-D-4, MDH-5/3-D-4