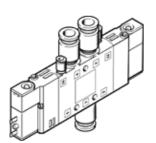
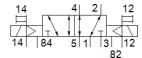
Solenoid valve CPE14-M1BH-5JS-QS-6 Part number: 196909 Classic - do not use for new projects

High component density

This type is suitable for vacuum.

Modern alternatives can be found by entering the first four characters of the type code in the search field.





FESTO

Data sheet

Valve function 5/2 bistable Type of actuation electrical Width 14 mm Standard nominal flow rate 400 l/min Operating pressure MPa -0.09 1 MPa Working pressure Design structure Piston slide Authorization c UL us - Recognized (OL) Maritime classification see certificate Protection class IP65 With plug socket to IEC 60529 Nominal size 6 mm Exhaust-air function throttleable Sealing principle soft Assembly position Any Manual override with accessories, detenting Pilot air supply external Flow direction Valve position identification Lap Positive overlap Pilot pressure MPa 0.2 0.8 MPa Pilot pressure MPa 10.0% with holding current reduction Max. positive test pulse with logic 0 1,200 µs Max. negative test pulse with logic 1 Characterists and Any Max. positive test pulse with logic 1 Characterists and Any Max. positive test pulse with logic 1 Characterists and Any Max. Positive test pulse with logic 1 Characterists and Any Characterists and Any Max. Positive test pulse with logic 1 Characterists and Any	Feature	Value
Width Standard nominal flow rate 400 l/min Operating pressure MPa -0.09 1 MPa Working pressure -0.9 10 bar Design structure Piston slide Authorization c UL us - Recognized (OL) Maritime classification see certificate Protection class IP65 with plug socket to IEC 60529 Nominal size 6 mm Exhaust-air function soft Sealing principle soft Assembly position Any Manual override with accessories, detenting Pushing Type of piloting Piloted Pilot air supply external Flow direction reversible Valve position identification Label holder Lap Positive overlap Pilot pressure MPa 0.2 0.8 MPa Pilot pressure Duty cycle 100% with holding current reduction Max. positive lest pulse with logic 0 1,200 µs Max. negative test pulse with logic 0 1,200 µs Max. negative test pulse with logic 0 1,200 µs	Valve function	5/2 bistable
Standard nominal flow rate Operating pressure MPa -0.09 1 MPa Working pressure Openating principle And push accessories, detenting pushing Type of piloting Pilot air supply Extendard nominal flow rate Openating principle And Prostition Openating principle And Any Manual override With accessories, detenting pushing Pushing Piloted Pilot air supply External Flow direction Valve position identification Lap Positive overlap Pilot pressure MPa Openating principle Openatin	Type of actuation	electrical
Operating pressure MPa Working pressure Design structure Piston slide Authorization C UL us - Recognized (OL) Maritime classification Protection class IP65 with plug socket to IEC 60529 Nominal size Exhaust-air function Sealing principle Assembly position Manual override Pushing Type of piloting Pilot air supply Flow direction Valve position identification Label holder Lap Positive overlap Pilot pressure MPa Duty cycle Max. negative test pulse with logic 0 ILU us - Recognized (OL) With accessories (OL) with plug socket to IEC 60529 With accessories, detenting Pushing Pushing Pushing Pushing Positive overlap Positive overlap Pilot pressure 13 ms Duty cycle Max. positive test pulse with logic 0 1,200 µs Max. negative test pulse with logic 0 1,200 µs Max. negative test pulse with logic 0 Max. positive test pulse with logic 0 Max. positive test pulse with logic 0 Max. negative test pulse with logic 0 Max. negative test pulse with logic 1	Width	14 mm
Working pressure Design structure Piston slide Authorization CUL us - Recognized (OL) Maritime classification Protection class IP65 with plug socket to IEC 60529 Nominal size Exhaust-air function Sealing principle Assembly position Any Manual override With accessories, detenting Pushing Type of piloting Pilot air supply Flow direction Valve position identification Lape Positive overlap Pilot pressure MPa Duty cycle Max. positive test pulse with logic 0 I_200 μs Max. negative test pulse with logic 0 I_200 μs Max. negative test pulse with logic 0 I_200 μs I Us - Recognized (OL) With a Recognized (OL) With plus socket to IEC 60529 With plug socke	Standard nominal flow rate	400 l/min
Design structure Piston slide Authorization c UL us - Recognized (OL) Maritime classification see certificate Protection class IP65 with plug socket to IEC 60529 Nominal size 6 mm Exhaust-air function throttleable Sealing principle soft Assembly position Any Manual override with accessories, detenting Pushing Type of piloting Piloted Pilot air supply external Flow direction reversible Valve position identification Label holder Lap Positive overlap Pilot pressure 2 8 bar Switching time reversal 13 ms Duty cycle 100% with holding current reduction Max. positive test pulse with logic 0 1,200 μs Max. negative test pulse with logic 1 900 μs	Operating pressure MPa	-0.09 1 MPa
Authorization c UL us - Recognized (OL) Maritime classification see certificate Protection class IP65 with plug socket to IEC 60529 Nominal size 6 mm Exhaust-air function throttleable Sealing principle soft Assembly position Any Manual override with accessories, detenting Pushing Type of piloting Piloted Pilot air supply external Flow direction reversible Valve position identification Label holder Lap Positive overlap Pilot pressure MPa Pilot pressure MPa Pilot pressure MPa Duty cycle Max. positive test pulse with logic 0 Max. negative test pulse with logic 1 O mm C UL us - Recognized (OL) see certificate with plug socket to IEC 60529 6 mm ploted estenting Pushing Pushing Pushing Positive overlang 0.2 0.8 MPa 13 ms Duty cycle 100% with holding current reduction Max. negative test pulse with logic 0 1,200 μs	Working pressure	-0.9 10 bar
Maritime classification see certificate Protection class IP65 with plug socket to IEC 60529 Nominal size 6 mm Exhaust-air function throttleable Sealing principle soft Assembly position Any Manual override with accessories, detenting Pushing Pulot air supply external Flow direction reversible Valve position identification Label holder Lap Positive overlap Pilot pressure MPa 0.2 0.8 MPa Pilot pressure 2 8 bar Switching time reversal 13 ms Duty cycle 100% with holding current reduction Max. positive test pulse with logic 0 1,200 μs Max. negative test pulse with logic 1 900 μs	Design structure	Piston slide
Protection class IP65 with plug socket to IEC 60529 Nominal size 6 mm Exhaust-air function Sealing principle Soft Assembly position Any Manual override with accessories, detenting Pushing Type of piloting Pilot air supply external Flow direction Valve position identification Label holder Lap Positive overlap Pilot pressure MPa Pilot pressure Switching time reversal Duty cycle Max. positive test pulse with logic 0 Max. negative test pulse with logic 1 6 mm throttleable with plug socket to IEC 60529 with plug sock to IEC 60529 with	Authorization	c UL us - Recognized (OL)
with plug socket to IEC 60529 Nominal size 6 mm Exhaust-air function throttleable Sealing principle soft Assembly position Any Manual override with accessories, detenting Pushing Type of piloting Piloted Pilot air supply external Flow direction reversible Valve position identification Label holder Lap Positive overlap Pilot pressure MPa 0.2 0.8 MPa Pilot pressure 2 8 bar Switching time reversal 13 ms Duty cycle 100% with holding current reduction Max. positive test pulse with logic 0 Max. negative test pulse with logic 1 Momentum Medication 1 Max. positive test pulse with logic 1 Momentum Medication 1 Label holder	Maritime classification	see certificate
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Nominal size 6 mm Exhaust-air function throttleable Sealing principle soft Assembly position Any Manual override with accessories, detenting Pushing Type of piloting Piloted Pilot air supply external Flow direction reversible Valve position identification Label holder Lap Positive overlap Pilot pressure MPa 0.2 0.8 MPa Pilot pressure 2 8 bar Switching time reversal 13 ms Duty cycle 100% with holding current reduction Max. positive test pulse with logic 0 1,200 μs Max. negative test pulse with logic 1 900 μs		with plug socket
Exhaust-air function Sealing principle Assembly position Manual override With accessories, detenting Pushing Type of piloting Piloted Pilot air supply Flow direction Valve position identification Lap Positive overlap Pilot pressure MPa Pilot pressure Switching time reversal Duty cycle Max. positive test pulse with logic 0 Max. negative test pulse with logic 1 Any With accessories, detenting Pushing Piloted external reversible Label holder Label holder 2 8 bar 13 ms Duty cycle 100% with holding current reduction 1,200 μs Max. negative test pulse with logic 1		to IEC 60529
Sealing principle soft Assembly position Any Manual override with accessories, detenting Pushing Type of piloting Piloted Pilot air supply external Flow direction reversible Valve position identification Label holder Lap Positive overlap Pilot pressure MPa 0.2 0.8 MPa Pilot pressure 2 8 bar Switching time reversal 13 ms Duty cycle 100% with holding current reduction Max. positive test pulse with logic 0 1,200 μs Max. negative test pulse with logic 1 900 μs	Nominal size	6 mm
Any Manual override with accessories, detenting Pushing Type of piloting Piloted Pilot air supply Flow direction Valve position identification Label holder Lap Positive overlap Pilot pressure MPa Pilot pressure 2 8 bar Switching time reversal Duty cycle Max. positive test pulse with logic 0 Max. negative test pulse with logic 1 with accessories, detenting pushing Filot pressure 1 abel holder 2 abel holder 1 abel holder 1 abel holder 2 abel holder 3 abel holder 4 abel holder 2 abel holder 4 abel holder 2 abel holder 4 abel holder 2 abel holder 4 abel holder 4 abel holder 5 abel holder 5 abel holde	Exhaust-air function	throttleable
Manual overridewith accessories, detenting PushingType of pilotingPilotedPilot air supplyexternalFlow directionreversibleValve position identificationLabel holderLapPositive overlapPilot pressure MPa0.2 0.8 MPaPilot pressure2 8 barSwitching time reversal13 msDuty cycle100% with holding current reductionMax. positive test pulse with logic 01,200 μsMax. negative test pulse with logic 1900 μs	Sealing principle	soft
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Type of piloting Pilot air supply external Flow direction reversible Valve position identification Lap Positive overlap Pilot pressure MPa Pilot pressure 2 8 bar Switching time reversal Duty cycle 100% with holding current reduction Max. positive test pulse with logic 0 Max. negative test pulse with logic 1 Piloted Pilot previble Positive overlap	Manual override	with accessories, detenting
Pilot air supply external Flow direction reversible Valve position identification Label holder Lap Positive overlap Pilot pressure MPa 0.2 0.8 MPa Pilot pressure 2 8 bar Switching time reversal 13 ms Duty cycle 100% with holding current reduction Max. positive test pulse with logic 0 1,200 μs Max. negative test pulse with logic 1 900 μs		Pushing
Flow direction reversible Valve position identification Label holder Lap Positive overlap Pilot pressure MPa 0.2 0.8 MPa Pilot pressure 2 8 bar Switching time reversal 13 ms Duty cycle 100% with holding current reduction Max. positive test pulse with logic 0 1,200 µs Max. negative test pulse with logic 1 900 µs	Type of piloting	Piloted
Valve position identification Label holder Lap Positive overlap Pilot pressure MPa 0.2 0.8 MPa Pilot pressure 2 8 bar Switching time reversal 13 ms Duty cycle 100% with holding current reduction Max. positive test pulse with logic 0 1,200 μs Max. negative test pulse with logic 1 900 μs	Pilot air supply	external
LapPositive overlapPilot pressure MPa0.2 0.8 MPaPilot pressure2 8 barSwitching time reversal13 msDuty cycle100% with holding current reductionMax. positive test pulse with logic 01,200 μsMax. negative test pulse with logic 1900 μs	Flow direction	reversible
Pilot pressure MPa 0.2 0.8 MPa Pilot pressure 2 8 bar Switching time reversal 13 ms Duty cycle 100% with holding current reduction Max. positive test pulse with logic 0 1,200 μs Max. negative test pulse with logic 1 900 μs	Valve position identification	Label holder
Pilot pressure 2 8 bar Switching time reversal 13 ms Duty cycle 100% with holding current reduction Max. positive test pulse with logic 0 1,200 μs Max. negative test pulse with logic 1 900 μs	Lap	Positive overlap
Switching time reversal Duty cycle 100% with holding current reduction Max. positive test pulse with logic 0 1,200 µs Max. negative test pulse with logic 1 900 µs	Pilot pressure MPa	0.2 0.8 MPa
Duty cycle 100% with holding current reduction Max. positive test pulse with logic 0 1,200 μs Max. negative test pulse with logic 1 900 μs	Pilot pressure	2 8 bar
Max. positive test pulse with logic 01,200 μsMax. negative test pulse with logic 1900 μs	Switching time reversal	13 ms
Max. negative test pulse with logic 1 900 μs	Duty cycle	100% with holding current reduction
	Max. positive test pulse with logic 0	1,200 μs
Characteristic coil data	Max. negative test pulse with logic 1	900 μs
Characteristic contrada 24 V DC: 1.28 W	Characteristic coil data	24 V DC: 1.28 W
Permissible voltage fluctuation -15 % / +10 %	Permissible voltage fluctuation	-15 % / +10 %
Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4]	Operating medium	Compressed air in accordance with ISO8573-1:2010 [7:4:4]
Note on operating and pilot medium Lubricated operation possible (subsequently required for further operation)	Note on operating and pilot medium	
Vibration resistance Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6	Vibration resistance	
Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and E 60068-2-27	Shock resistance	Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27
Corrosion resistance classification CRC 2 - Moderate corrosion stress	Corrosion resistance classification CRC	2 - Moderate corrosion stress
PWIS conformity VDMA24364-B1/B2-L		
Medium temperature -5 50 °C		·



Feature	Value
Pilot medium	Compressed air in accordance with ISO8573-1:2010 [7:4:4]
Ambient temperature	-5 50 °C
Electrical connection	2-pin
Mounting type	with through hole
Pilot exhaust port 82	M3
Pilot exhaust port 84	M3
Pilot air port 12	M3
Pilot air port 14	M3
Pneumatic connection, port 1	QS-6
Pneumatic connection, port 2	QS-6
Pneumatic connection, port 3	G1/8
Pneumatic connection, port 4	QS-6
Pneumatic connection, port 5	G1/8
Materials note	Conforms to RoHS
Material seals	NBR
Material housing	Aluminum die cast