Solenoid valve
MFH-5/3B-D-1-S-C-EX

Part number: 535984



Data sheet

Feature	Value
Valve function	5/3-way, pressurised
Type of actuation	Electrical
Construction width	42 mm
Standard nominal flow rate (standardised to DIN 1343)	1200 l/min
pneumatic working port	Sub-base size 1 to ISO 5599-1 G1/4
Operating voltage	Via solenoid coil, must be ordered separately
Operating pressure	-0.09 MPa...1.6 MPa -0.9 bar...16 bar
Design	Piston gate valve
Type of reset	Mechanical spring
CE mark (see declaration of conformity)	To EU Explosion Protection Directive (ATEX)
UKCA marking (see declaration of conformity)	To UK EX instructions
ATEX category gas	II 2G
ATEX category dust	II 2D
Explosion ignition protection type for gas	Ex h IIC T4 Gb
Explosion ignition protection type for dust	Ex h IIIC T105°C Db
Explosion ambient temperature	-5°C <= Ta <= +40°C
Explosion protection certification outside the EU	EPL Db (GB) EPL Gb (GB)
Degree of protection	IP65
Nominal size	8 mm
Grid dimension	43 mm
Exhaust-air function	Can be throttled
Sealing principle	Soft
Mounting position	Any
Conforms to standard	ISO 5599-1
Manual override	Detenting via accessory Non-detenting
ISO code	169
Type of piloting	Piloted
Pilot air supply	External

Feature	Value
Flow direction	Reversible
lap	Overlap
Pilot pressure	0.3 MPa...1 MPa 3 bar...10 bar
Suitability for vacuum	Yes
Switching time off	36 ms
Switching time on	18 ms
Max. positive test pulse with 0 signal	2200 µs
Max. negative test pulse with 1 signal	3700 µs
Explosion protection	Zone 1 (ATEX) Zone 1 (UKEX) Zone 2 (ATEX) Zone 21 (ATEX) Zone 21 (UKEX) Zone 22 (ATEX)
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)
Vibration resistance	Transport application test with severity level 1 to FN 942017-4 and EN 60068-2-6
Shock resistance	Shock test with severity level 2 to FN 942017-5 and EN 60068-2-27
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Media temperature	-5 °C...40 °C
Sound pressure level	85 dB(A)
Pilot medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Ambient temperature	-5 °C...40 °C
Product weight	520 g
Electrical connection	Via F coil, to be ordered separately
Type of mounting	On sub-base With through-hole
Pilot exhaust port 82	M5
Pilot exhaust port 84	M5
Pilot air port 12	Sub-base size 1 to ISO 5599-1
Pilot air port 14	Sub-base size 1 to ISO 5599-1
Pneumatic connection, port 1	Sub-base size 1 to ISO 5599-1
Pneumatic connection, port 2	Sub-base size 1 to ISO 5599-1
Pneumatic connection, port 3	Sub-base size 1 to ISO 5599-1
Pneumatic connection, port 4	Sub-base size 1 to ISO 5599-1
Pneumatic connection, port 5	Sub-base size 1 to ISO 5599-1
Note on materials	RoHS compliant
Material seals	HNBR NBR
Material housing	Die-cast aluminium