Linear actuator DFPI-200- -Part number: 5092508



Data sheet

Feature	Value
Size of valve actuator	200
Stroke	40 mm990 mm
Piston diameter	200 mm
Based on norm	ISO 15552
Cushioning	No cushioning
Mounting position	Any
Mode of operation	Double-acting
Structural design	Piston Piston rod Tie rod Cylinder barrel
Position sensing	With integrated linear potentiometer
Measuring principle of linear potentiometer	Potentiometer
Reverse polarity protection	yes
Operating pressure	0.3 MPa0.8 MPa 3 bar8 bar 43.5 psi116 psi
Nominal operating pressure	0.6 MPa 6 bar
Analog output	4 - 20 mA
DC operating voltage range	9 V30 V
Recommended contact current	0.1 μΑ
Max. short-time slider current	10 mA
Power supply	2-wire
Certification	RCM compliance mark
KC characters	KC EMC
CE marking (see declaration of conformity)	As per EU EMC directive as per EU explosion protection directive (ATEX) As per EU RoHS directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC acc. to UK EX instructions To UK RoHS instructions

Feature	Value
Explosion prevention and protection	Zone 1 (ATEX)
	Zone 2 (ATEX) Zone 21 (ATEX)
	Zone 22 (ATEX)
ATEX category gas	II 2G
ATEX category for dust	II 2D
Type of ignition protection for gas	Ex h IIC T4 Gb
Type of (ignition) protection for dust	Ex h IIIC T120°C Db
Explosive ambient temperature	-20°C <= Ta <= +60°C
Operating medium	Compressed air as per ISO 8573-1:2010 [7:4:4]
Information on operating and pilot media	Operation with oil lubrication possible (required for further use)
Continuous shock resistance to DIN/IEC 68 Part 2-82	Tested as per severity level 2
LABS (PWIS) conformity	VDMA24364 zone III
Storage temperature	-20 °C80 °C
Relative air humidity	5 - 100 %
	Condensing
	Non-condensing
Degree of protection	IP65 IP67
	IP69K
	NEMA 4
Vibration resistance to DIN/IEC 68 Part 2-6	Tested as per severity level 2
Ambient temperature	-20 °C80 °C
Impact energy in the end positions	1)
Theoretical force at 6 bar, retracting	18080 N
Theoretical force at 6 bar, advancing	18850 N
Air consumption, retracting, per 10 mm stroke	2.111
Air consumption advancing per 10 mm stroke	2.199 l
Moving mass at 0 mm stroke	4800 g
Additional moving mass per 10 mm stroke	89 g
Basic weight with 0 mm stroke	18100 g19800 g
Additional weight per 10 mm stroke	238 g
Hysteresis	0.4 mm
Independent linearity	±0.05 %
Repetition accuracy in ± %FS	1 %FS
Repetition accuracy in ± mm	0.7 mm
Electrical connection	2-pin
	3-pin 4-pin
	5-pin
	A-coded
	Cable fitting M16x1.5 M12x1
	Straight plug/screw terminal
	Plug, straight
Draumatic connection	with specific accessories
Pneumatic connection	G3/8 G1/2
	For pneumatic tubing outside diameter 8 mm
	with specific accessories
Note on materials	RoHS-compliant
Material of end caps	Wrought aluminum alloy, coated
Lower cover material	Coated die-cast aluminum
Electrical connection material	Brass, nickel-plated High-alloy stainless steel
Piston rod material	High-alloy stainless steel
Piston rod wiper material	NBR
Piping material	High-alloy stainless steel
Material of pneumatic tubing	PE

Feature	Value
Material of screws	Steel, coated High-alloy stainless steel
Static seal material	NBR
Material of pneumatic fitting	Brass, nickel-plated High-alloy stainless steel
Tie rod material	High-alloy stainless steel
Material of cylinder barrel	Wrought aluminum alloy, smooth-anodized