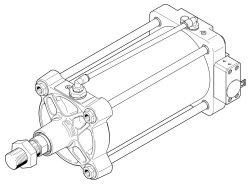
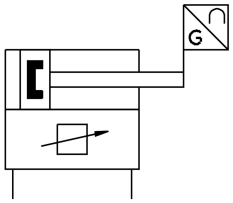
Linear drive DFPI-160- -ND2P-C1V-NB3P-A

Part number: 2201101





Data sheet

Feature	Value
Size of valve actuator	160
Stroke	40 mm...990 mm
Piston diameter	160 mm
Based on standard	ISO 15552
Cushioning	No cushioning
Mounting position	optional
Mode of operation	Double-acting
Design	Piston Piston rod Tie rod Cylinder barrel
Position detection	With integrated displacement encoder
Functional principle of measuring system	Potentiometer
Reverse polarity protection	Initialisation connection For operating voltage For setpoint value
Operating pressure	0.3 MPa...0.8 MPa 3 bar...8 bar 43.5 psi...116 psi
Nominal operating pressure	0.6 MPa 6 bar 87 psi
Analogue output	4 - 20 mA
Operational voltage range DC	21.6 V...26.4 V
Max. current consumption	220 mA
Nominal operating voltage DC	24 V
Setpoint value input	4 mA...20 mA
Approval	RCM trademark
KC mark	KC-EMV
CE mark (see declaration of conformity)	To EU EMC Directive To EU Explosion Protection Directive (ATEX) In accordance with EU RoHS Directive

Feature	Value
CE marking (see declaration of conformity)	To UK instructions for EMC To UK EX instructions To UK RoHS instructions
Explosion protection certification outside the EU	EPL Dc (GB) EPL Gc (GB)
Explosion protection	Zone 2 (ATEX) Zone 2 (UKEX) Zone 22 (ATEX) Zone 22 (UKEX)
ATEX category gas	II 3G
ATEX category dust	II 3D
Explosion ignition protection type for gas	Ex ec IIC T4 X Gc
Explosion ignition protection type for dust	Ex tc IIIC T120°C X Dc
Explosion ambient temperature	-5°C <= Ta <= +50°C
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)
Continuous shock resistance to DIN/IEC 68 Part 2-82	Tested to severity level 2
LABS (PWIS) conformity	VDMA24364 zone III
Storage temperature	-5 °C...50 °C
Media temperature	-5 °C...40 °C
Relative air humidity	5 - 100% Condensing
Degree of protection	IP65 IP67 IP69K NEMA 4
Vibration resistance to DIN/IEC 68 Part 2-6	Tested to severity level 2
Ambient temperature	-5 °C...50 °C
Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke	11581 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke	12064 N
Air consumption on return stroke per 10 mm	1.351 l
Air consumption on advance stroke per 10 mm	1.407 l
Moving mass for 0 mm stroke	3700 g
Additional moving mass per 10 mm stroke	89 g
Basic weight for 0 mm stroke	14330 g
Additional weight per 10 mm stroke	200 g
Analogue output accuracy	1 %FS
Dead zone size	1 %FS
Hysteresis in ± %FS	1 %FS
Positioning accuracy	1.0 %FS
Repetition accuracy in ± %FS	1 %FS
Electrical connection	5-pin Straight plug connector/screw terminal With specific accessories
Pneumatic connection	For tubing O.D. 8 mm For tubing outside diameter of 10 mm With specific accessories
Note on materials	RoHS-compliant
Material end cap	Coated wrought aluminium alloy
Material underneath cover	Die-cast aluminium, coated
Material piston rod	High-alloy stainless steel
Material piston rod wiper	NBR
Material screws	Coated steel High-alloy stainless steel
Material static seals	NBR
Material tie rod	High-alloy stainless steel

Feature	Value
Material cylinder barrel	Smooth-anodised wrought aluminium alloy