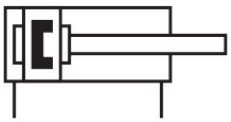
Linear drive
DFPC-250-500-D-V4EX4-3E-45S-M24P-W2

Part number: 8172158





Data sheet

Feature	Value
Size of valve actuator	250
Flange hole pattern	F10 F14
Stroke	500 mm
Piston diameter	250 mm
Fitting connection conforms to standard	ISO 5210
Cushioning	Elastic cushioning rings/plates at both ends
Mounting position	Any
Mode of operation	Double-acting
Design	Piston Piston rod Tie rod 1 Cylinder barrel
Position detection	Via proximity switch
Variants	EX protection approval (ATEX) Custom thread on the piston rod Piston rod with male thread shortened at one end Extended piston rod
Operating pressure	0.25 MPa...0.8 MPa 2.5 bar...8 bar 36.25 psi...116 psi
Nominal operating pressure	0.6 MPa 6 bar 87 psi
CE mark (see declaration of conformity)	To EU Explosion Protection Directive (ATEX)
UKCA marking (see declaration of conformity)	To UK EX instructions
Explosion protection certification outside the EU	EPL Db (GB) EPL Gb (GB)
Explosion protection	Zone 1 (ATEX) Zone 1 (UKEX) Zone 2 (ATEX) Zone 21 (ATEX) Zone 21 (UKEX) Zone 22 (ATEX)
ATEX category gas	II 2G
ATEX category dust	II 2D

Feature	Value
Explosion ignition protection type for gas	Ex h IIC T4 Gb
Explosion ignition protection type for dust	Ex h IIIC T120°C Db
Explosion ambient temperature	-20°C <= Ta <= +80°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)
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 1 to FN 942017-5 and EN 60068-2-27
Corrosion resistance class CRC	2 - Moderate corrosion stress
LABS (PWIS) conformity	VDMA24364 zone III
Ambient temperature	-20 °C...80 °C
Impact energy in end positions	6 J
Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke	28698 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke	29452 N
Air consumption on return stroke per 10 mm	3.348 l
Air consumption on advance stroke per 10 mm	3.436 l
Moving mass for 0 mm stroke	5600.4 g
Additional moving mass per 10 mm stroke	105.31 g
Product weight	36070 g
Basic weight for 0 mm stroke	19296.54 g
Additional weight per 10 mm stroke	335.51 g
Type of mounting	Either: on flange according to ISO 5210 With spacer bolt
Pneumatic connection	G1/4
Note on materials	RoHS compliant
Material cover	Gravity die-cast aluminium Aluminium
Material piston rod	High-alloy stainless steel
Material piston rod wiper	TPE-U(PU)
Material nut	High-alloy stainless steel
Material static seals	NBR
Material tie rod	High-alloy stainless steel
Material cylinder barrel	Smooth-anodised wrought aluminium alloy