

Linear actuator

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

Part number: 8172158

FESTO



Data sheet

Feature	Value
Size of valve actuator	250
Flange hole pattern	F10 F14
Stroke	500 mm
Piston diameter	250 mm
Standard connection for valve	ISO 5210
Cushioning	Elastic cushioning rings/pads at both ends
Mounting position	Any
Mode of operation	Double-acting
Structural design	Piston Piston rod Tie rod Cylinder barrel
Position sensing	For proximity sensor
Variants	EX protection approval (ATEX) Special thread on piston rod Piston rod with external 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 marking (see declaration of conformity)	as per EU explosion protection directive (ATEX)
UKCA marking (see declaration of conformity)	acc. to UK EX instructions
Explosion protection certification outside the EU	EPL Db (GB) EPL Gb (GB)
Explosion prevention and 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 for dust	II 2D

Feature	Value
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 ≤ +80°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)
Vibration resistance	Transport application test with severity level 1 as per FN 942017-4 and EN 60068-2-6
Shock resistance	Shock test with severity level 1 as per FN 942017-5 and EN 60068-2-27
LABS (PWIS) conformity	VDMA24364 zone III
Ambient temperature	-20 °C...80 °C
Impact energy in the end positions	6 J
Theoretical force at 6 bar, retracting	28698 N
Theoretical force at 6 bar, advancing	29452 N
Air consumption, retracting, per 10 mm stroke	3.348 l
Air consumption advancing per 10 mm stroke	3.436 l
Moving mass at 0 mm stroke	5600.4 g
Additional moving mass per 10 mm stroke	105.31 g
Product weight	36070 g
Basic weight with 0 mm stroke	19296.54 g
Additional weight per 10 mm stroke	335.51 g
Type of mounting	Optionally: On flange as per ISO 5210 With spacer bolt
Pneumatic connection	G1/4
Note on materials	RoHS-compliant
Cover material	Gravity die-cast aluminum Aluminum
Piston rod material	High-alloy stainless steel
Piston rod wiper material	TPE-U(PU)
Nut material	High-alloy stainless steel
Static seal material	NBR
Tie rod material	High-alloy stainless steel
Material of cylinder barrel	Wrought aluminum alloy, smooth-anodized