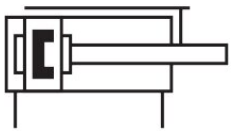
Guided drive
DGRC-GF-12-20-PA

Part number: 8218183





Data sheet

Feature	Value
Distance from centre of gravity of load to yoke plate xs	50 mm
Stroke	20 mm
Piston diameter	12 mm
Operating mode, drive unit	Yoke
Cushioning	Elastic cushioning rings/plates at both ends
Mounting position	Any
Guide	Plain-bearing guide
Design	Guidance
Position detection	Via proximity switch
Protection against torque/guide	Guide rod with yoke
Operating pressure	0.2 MPa...1 MPa 2 bar...10 bar
Max. speed	0.8 m/s
Mode of operation	Double-acting
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)
Corrosion resistance class CRC	0 - No corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Suitability for the production of Li-ion batteries	Suitable for battery production with reduced Cu/Zn/Ni values (F1a)
Ambient temperature	-10 °C...60 °C
Impact energy in end positions	0.07 Nm
Max. force Fy	187 N
Max. force Fy static	187 N
Max. force Fz	187 N
Max. force Fz static	187 N
Max. moment Mx	3.55 Nm
Max. torque Mx static	3.55 Nm
Max. moment My	2.2 Nm
Max. torque My static	2.2 Nm
Max. moment Mz	2.2 Nm
Max. torque Mz static	2.2 Nm

Feature	Value
Max. permissible torque load Mx as a function of stroke	0.74 Nm
Max. effective load dependent upon stroke at defined distance xs	20.5 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke	51 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke	68 N
Torsional backlash	0.065 deg
Moving mass	99.5 g
Product weight	208.3 g
Basic weight for 0 mm stroke	108.8 g
Centre of gravity of moving mass as a function of stroke	23.1 mm
Pneumatic connection	M5
Note on materials	RoHS compliant
Material cover	Wrought aluminium alloy
Material seals	NBR
Material dynamic seals	TPE-U(PU)
Material end plate	Anodised wrought aluminium alloy
Material guide rod	High-alloy steel
Material housing	Anodised wrought aluminium alloy
Material piston rod	High-alloy steel