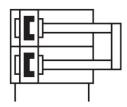
## Mini slide **DGST-12-20-E1A**Part number: 8078847







General operating condition

## **Data sheet**

Stroke   20 mm   Piston diameter   12 mm   Drive unit operating mode   Yoke   Cushioning   Elastomer cushioning, at both ends, stroke not adjustable   Mounting position   Any   Recirculating ball bearing guide   Structural design   Twin piston Yoke   Piston rod   Slide   Position sensing   For proximity sensor   Suide   Position sensing   For proximity sensor   O0991249   Operating pressure   0.1 MPa 0.8 MPa   Operating pressure   1 bar 8 bar   Operating pressure   1 bar 8 bar   Operating pressure   1.6.5 psi 116 psi   Max. speed   O.5 m/s   Repetition accuracy   4 -0.3 mm   Mode of operation   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   Corrosion resistance class (CRC)   1 - Low corrosion stress   Class 6 according to ISO 14644-1   Ambient temperature   -1.0 °C 60 °C   In max. force Fy   520 N   Max. force Fy   Ma	Feature	Value
Drive unit operating mode  Cushioning  Elastomer cushioning, at both ends, stroke not adjustable  Mounting position  Any  Guide  Recirculating ball bearing guide  Structural design  Twin piston Yoke Piston rod Slide  Position sensing  For proximity sensor  Symbol  Operating pressure  Operating pressure  Operating pressure  1 bar 8 bar  Operating pressure  1 4.5 psi 116 psi  Max. speed  Repetition accuracy  Gerating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Operating on operating and pilot media  Operation on operating and pilot media  Corrosion resistance class (CRC)  LABS (PWIS) conformity  VDMA24364-81/B2-L  Cleanoom class  Class 6 according to ISO 14644-1  Ambient temperature  1-10 °C 60 °C  Impact energy in the end positions  Cushioning length  1.1 mm  Max. force Fy  520 N  Max. torque Mx  4.2 Nm  Max. torque Mx  4.2 Nm  Theoretical force at 6 bar, retracting  102 N  Theoretical force at 6 bar, advancing  136 N	Stroke	20 mm
Cushioning Elastomer cushioning, at both ends, stroke not adjustable Mounting position Any Recirculating ball bearing guide  Structural design Twin piston Yoke Piston rod Slide  Position sensing For proximity sensor  Symbol 00991249  Operating pressure 0.1 MPa 0.8 MPa  Operating pressure 1 bar 8 Mar  Operating pressure 1.4.5 psi 116 psi  Max. speed 0.5 m/s  Repetition accuracy (= 0.3 mm  Mode of operation Double-acting  Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media Operation with oil tubrication possible (required for further use)  Corrosion resistance class (CRC) 1 - Low corrosion stress  LABS (PWIS) conformity VDMA24364-B1/B2-L  Cleantom class Class 6 according to ISO 14644-1  Ambient temperature - 10 °C 60 °C  Impact energy in the end positions 0.07 J  Cushioning length 1.1 mm  Max. force Fy 520 N  Max. torque Mx 4.2 Nm  Max. torque Mx 4.2 Nm  Theoretical force at 6 bar, retracting 102 N  Theoretical force at 6 bar, advancing 136 N	Piston diameter	12 mm
Mounting position  Guide  Structural design  Twin piston Yoke Piston rod Slide  Position sensing For proximity sensor  Symbol  Operating pressure  Operating pressure  Operating pressure  1 bar 8 bar  Operating pressure  1 to s.m 116 psi  Max. speed  Repetition accuracy  Mode of operation  Operating medium  Compressed air as per ISO 8573-1:2010[7:4:4]  Information on operating and pilot media  Operating with oil lubrication possible (required for further use)  Corrosion resistance class (CRC)  1 - Low corrosion stress  LABS (PWIS) conformity  VDMA24364-B1/B2-L  Cleanroom class  Class 6 according to ISO 14644-1  Ambient temperature  -10 °C 60 °C  Impact energy in the end positions  O.07 J  Cushioning length  1.1 mm  Max. force Fy  520 N  Max. force Fy  520 N  Max. torque Mx  4.2 Nm  Max. torque My  4.2 Nm  Max. torque My  Theoretical force at 6 bar, advancing  136 N	Drive unit operating mode	Yoke
Guide  Structural design  Twin piston Yoke Piston rod Slide  Position sensing  For proximity sensor  Symbol  Operating pressure  Operating pressure  Operating pressure  1 bar 8 bar  Operating pressure  0.5 m/s  Repetition accuracy  Acceptating medium  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)  Corrosion resistance class (CRC)  Labs (PWIS) conformity  VDMA24364-B1/B2-L  Cleanroom class  Class 6 according to ISO 14644-1  Ambient temperature  -10 °C 60 °C  Impact energy in the end positions  O.07 J  Cushioning length  1.1 mm  Max. force Fy  520 N  Max. torque My  4.2 Nm  Max. torque My  Max. torque My  4.2 Nm  Max. torque My  Max. torque My  4.2 Nm  Max. torque Mz  4.2 Nm	Cushioning	Elastomer cushioning, at both ends, stroke not adjustable
Structural design  Twin piston Yoke Piston rod Slide  Position sensing  For proximity sensor  Symbol  Operating pressure  O1. MPa 0.8 MPa  Operating pressure  1 bar 8 bar  Operating pressure  1.4.5 psi 116 psi  Max. speed  0.5 m/s  Repetition accuracy  6 = 0.3 mm  Mode of operation  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Operating with oil lubrication possible (required for further use)  Corrosion resistance class (CRC)  1. Low corrosion stress  Class 6 according to ISO 14644-1  Ambient temperature  -10 °C 60 °C  Impact energy in the end positions  O.07 J  Cushioning length  1.1 mm  Max. force Fy  520 N  Max. torque My  Hororetical force at 6 bar, retracting  102 N  Theoretical force at 6 bar, advancing	Mounting position	Any
Yoke Piston rod Slide  Position sensing For proximity sensor  Symbol 00991249 Operating pressure 0.1 MPa 0.8 MPa Operating pressure 1 bar 8 bar Operating pressure 1.5 psi 116 psi Max. speed 0.5 m/s Max. speed 0.5 m/s  Mode of operation Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4] Information on operating and pilot media Operating medium Corrosion resistance class (CRC) 1 - Low corrosion stress  LABS (PWIS) conformity VDMA24364-B1/B2-L Cleanroom class Class 6 according to ISO 14644-1 Ambient temperature -10 °C 60 °C Impact energy in the end positions 0.07 J Cushioning length 1.1 mm Max. force Fy Max. force Fz 520 N Max. torque Mx 4.2 Nm Max. torque Mx Max. torque Mx Max. torque My 4.2 Nm Max. torque Mz Theoretical force at 6 bar, retracting 102 N Theoretical force at 6 bar, advancing	Guide	Recirculating ball bearing guide
Symbol 00991249 Operating pressure 0.1 MPa 0.8 MPa Operating pressure 1 bar 8 bar Operating pressure 14.5 psi 116 psi Max. speed 0.5 m/s Repetition accuracy = 0.3 mm Mode of 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 Corrosion resistance class (CRC) 1 - Low corrosion stress LABS (PWIS) conformity VDMA24364-B1/B2-L Cleanroom class Class 6 according to ISO 14644-1 Ambient temperature -10 °C 60 °C Impact energy in the end positions 0.07 J Cushioning length 1.1 mm Max. force Fy 520 N Max. force Fz 520 N Max. torque Mx 4.2 Nm Max. torque Mx 4.2 Nm Max. torque My 4.2 Nm Max. torque MZ Theoretical force at 6 bar, retracting 102 N Theoretical force at 6 bar, advancing 136 N	Structural design	Yoke Piston rod
Operating pressure Operating pressure Operating pressure  1 bar 8 bar Operating pressure 14.5 psi 116 psi  Max. speed Operating pressure  14.5 psi 116 psi  Max. speed Operating medium 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) Corrosion resistance class (CRC) 1 - Low corrosion stress  LABS (PWIS) conformity VDMA24364-B1/B2-L Cleanroom class Class 6 according to ISO 14644-1 Ambient temperature -10 °C 60 °C Impact energy in the end positions O.07 J Cushioning length 1.1 mm Max. force Fy 520 N Max. force Fz 520 N Max. torque Mx 4.2 Nm Max. torque My 4.2 Nm Max. torque Mz Theoretical force at 6 bar, retracting 102 N Theoretical force at 6 bar, advancing	Position sensing	For proximity sensor
Operating pressure  Operating pressure  1 bar 8 bar  Operating pressure  14.5 psi 116 psi  Max. speed  0.5 m/s  Repetition accuracy  4 = 0.3 mm  Mode of operation  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)  Corrosion resistance class (CRC)  1 - Low corrosion stress  LABS (PWIS) conformity  VDMA24364-B1/B2-L  Cleanroom class  Class 6 according to ISO 14644-1  Ambient temperature  -10 °C 60 °C  Impact energy in the end positions  0.07 J  Cushioning length  1.1 mm  Max. force Fy  520 N  Max. torque Mx  4.2 Nm  Max. torque Mx  4.2 Nm  Max. torque My  4.2 Nm  Max. torque Mz  Theoretical force at 6 bar, retracting  102 N  Theoretical force at 6 bar, advancing	Symbol	00991249
Operating pressure       14.5 psi 116 psi         Max. speed       0.5 m/s         Repetition accuracy       <= 0.3 mm	Operating pressure	0.1 MPa 0.8 MPa
Max. speed 0.5 m/s  Repetition accuracy (= 0.3 mm)  Mode of operation Double-acting  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)  Corrosion resistance class (CRC) 1 - Low corrosion stress  LABS (PWIS) conformity VDMA24364-B1/B2-L  Cleanroom class Class 6 according to ISO 14644-1  Ambient temperature -10 °C 60 °C  Impact energy in the end positions 0.07 J  Cushioning length 1.1 mm  Max. force Fy 520 N  Max. force Fz 520 N  Max. torque Mx 4.2 Nm  Max. torque My 4.2 Nm  Max. torque MZ  Theoretical force at 6 bar, retracting 102 N  Theoretical force at 6 bar, advancing 136 N	Operating pressure	1 bar 8 bar
Repetition accuracy  (= 0.3 mm  Double-acting  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)  Corrosion resistance class (CRC)  1 - Low corrosion stress  LABS (PWIS) conformity  VDMA24364-B1/B2-L  Cleanroom class  Class 6 according to ISO 14644-1  Ambient temperature  -10 °C 60 °C  Impact energy in the end positions  O.07 J  Cushioning length  1.1 mm  Max. force Fy  520 N  Max. torque Mx  4.2 Nm  Max. torque Mx  4.2 Nm  Max. torque My  4.2 Nm  Max. torque My  4.2 Nm  Theoretical force at 6 bar, retracting  Theoretical force at 6 bar, advancing  136 N	Operating pressure	14.5 psi 116 psi
Mode of operation  Double-acting  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Corrosion resistance class (CRC)  1 - Low corrosion stress  LABS (PWIS) conformity  VDMA24364-B1/B2-L  Cleanroom class  Class 6 according to ISO 14644-1  Ambient temperature  -10 °C 60 °C  Impact energy in the end positions  Cushioning length  1.1 mm  Max. force Fy  520 N  Max. torque Mx  4.2 Nm  Max. torque My  Max. torque My  Max. torque My  Max. torque My  Max. torque Mz  Theoretical force at 6 bar, retracting  136 N  Theoretical force at 6 bar, advancing	Max. speed	0.5 m/s
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)  Corrosion resistance class (CRC)  1 - Low corrosion stress  LABS (PWIS) conformity  VDMA24364-B1/B2-L  Cleanroom class  Class 6 according to ISO 14644-1  Ambient temperature  -10 °C 60 °C  Impact energy in the end positions  Cushioning length  1.1 mm  Max. force Fy  520 N  Max. torque Mx  4.2 Nm  Max. torque Mx  4.2 Nm  Max. torque My  4.2 Nm  Theoretical force at 6 bar, retracting  Theoretical force at 6 bar, advancing  136 N	Repetition accuracy	<= 0.3 mm
Information on operating and pilot media  Corrosion resistance class (CRC)  LABS (PWIS) conformity  VDMA24364-B1/B2-L  Cleanroom class  Class 6 according to ISO 14644-1  Ambient temperature  -10 °C 60 °C  Impact energy in the end positions  Cushioning length  Max. force Fy  520 N  Max. torque Mx  4.2 Nm  Max. torque My  Max. torque Mz  Theoretical force at 6 bar, retracting  Theoretical force at 6 bar, advancing  Operation with oil lubrication possible (required for further use)  1 - Low corrosion stress  1 - Low corrosion stress  1 - Low corrosion stress  1 - Low corrosion possible (required for further use)  1 - Low corrosion possible (required for further use)  1 - Low corrosion stress  2 - Low corrosion stress  3 - Low corrosion stress  4 - Low corrosion stress  4 - Low corrosion stress  4 - Low corrosion	Mode of operation	Double-acting
Corrosion resistance class (CRC)  LABS (PWIS) conformity  VDMA24364-B1/B2-L  Cleanroom class  Class 6 according to ISO 14644-1  Ambient temperature  -10 °C 60 °C  Impact energy in the end positions  Cushioning length  1.1 mm  Max. force Fy  520 N  Max. force Fz  520 N  Max. torque Mx  4.2 Nm  Max. torque My  4.2 Nm  Max. torque My  4.2 Nm  Theoretical force at 6 bar, retracting  Theoretical force at 6 bar, advancing  136 N	Operating medium	Compressed air as per ISO 8573-1:2010 [7:4:4]
LABS (PWIS) conformity  VDMA24364-B1/B2-L  Cleanroom class  Class 6 according to ISO 14644-1  Ambient temperature  -10 °C 60 °C  Impact energy in the end positions  Cushioning length  1.1 mm  Max. force Fy  520 N  Max. force Fz  520 N  Max. torque Mx  4.2 Nm  Max. torque My  4.2 Nm  Max. torque My  Theoretical force at 6 bar, retracting  Theoretical force at 6 bar, advancing  136 N	Information on operating and pilot media	Operation with oil lubrication possible (required for further use)
Cleanroom class  Class 6 according to ISO 14644-1  Ambient temperature  -10 °C 60 °C  Impact energy in the end positions  Cushioning length  1.1 mm  Max. force Fy  520 N  Max. force Fz  520 N  Max. torque Mx  4.2 Nm  Max. torque My  4.2 Nm  Max. torque My  4.2 Nm  Theoretical force at 6 bar, retracting  Theoretical force at 6 bar, advancing  Class 6 according to ISO 14644-1  -10 °C 60 °C  0.07 J  1.1 mm  4.2 Nm  4.2 Nm  Theoretical force at 6 bar, retracting  102 N  Theoretical force at 6 bar, advancing	Corrosion resistance class (CRC)	1 - Low corrosion stress
Ambient temperature -10 °C 60 °C Impact energy in the end positions 0.07 J Cushioning length 1.1 mm Max. force Fy 520 N Max. force Fz 520 N Max. torque Mx 4.2 Nm Max. torque My 4.2 Nm Max. torque Mz Theoretical force at 6 bar, retracting Theoretical force at 6 bar, advancing 136 N	LABS (PWIS) conformity	VDMA24364-B1/B2-L
Impact energy in the end positions  O.07 J  Cushioning length  1.1 mm  Max. force Fy  520 N  Max. force Fz  520 N  Max. torque Mx  4.2 Nm  Max. torque My  4.2 Nm  Max. torque Mz  Theoretical force at 6 bar, retracting  Theoretical force at 6 bar, advancing  136 N	Cleanroom class	Class 6 according to ISO 14644-1
Cushioning length 1.1 mm  Max. force Fy 520 N  Max. force Fz 520 N  Max. torque Mx 4.2 Nm  Max. torque My 4.2 Nm  Max. torque Mz 4.2 Nm  Theoretical force at 6 bar, retracting 102 N  Theoretical force at 6 bar, advancing 136 N	Ambient temperature	-10 °C 60 °C
Max. force Fy  520 N  Max. force Fz  520 N  Max. torque Mx  4.2 Nm  Max. torque My  4.2 Nm  Max. torque Mz  Theoretical force at 6 bar, retracting  Theoretical force at 6 bar, advancing  136 N	Impact energy in the end positions	0.07 J
Max. force Fz 520 N  Max. torque Mx 4.2 Nm  Max. torque My 4.2 Nm  Max. torque Mz 4.2 Nm  Theoretical force at 6 bar, retracting 102 N  Theoretical force at 6 bar, advancing 136 N	Cushioning length	1.1 mm
Max. torque Mx  4.2 Nm  Max. torque My  4.2 Nm  Max. torque Mz  4.2 Nm  Theoretical force at 6 bar, retracting  Theoretical force at 6 bar, advancing  136 N	Max. force Fy	520 N
Max. torque My  4.2 Nm  Max. torque Mz  4.2 Nm  Theoretical force at 6 bar, retracting  102 N  Theoretical force at 6 bar, advancing  136 N	Max. force Fz	520 N
Max. torque Mz  Theoretical force at 6 bar, retracting  Theoretical force at 6 bar, advancing  102 N  Theoretical force at 6 bar, advancing	Max. torque Mx	4.2 Nm
Theoretical force at 6 bar, retracting 102 N Theoretical force at 6 bar, advancing 136 N	Max. torque My	4.2 Nm
Theoretical force at 6 bar, advancing 136 N	Max. torque Mz	4.2 Nm
	Theoretical force at 6 bar, retracting	102 N
Moving mass 238 g	Theoretical force at 6 bar, advancing	136 N
	Moving mass	238 g
Product weight 456 g	Product weight	456 g

Feature	Value
Type of mounting	With through-hole
Pneumatic connection	M5
Note on materials	RoHS-compliant
Cover material	Wrought aluminum alloy
Seals material	HNBR
Guide material	POM TPE-E High-alloy steel
Housing material	Wrought aluminum alloy
Piston rod material	High-alloy stainless steel