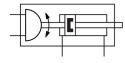
## Swivel/linear unit DSL-16-80-270-P-A-S2-B

Part number: 556408





## **Data sheet**

Stroke80 mmPiston diameter16 mmSwivel angle0 deg272 degCushioningElastic cushioning rings/plates at both endsMounting positionoptionalFine adjustment6 degMode of operationDouble-actingDesignVanePosition detectionVia proximity switchVariantsThrough piston rodProtection against torque/guideWith plain-bearing guideOperating pressure2.5 bar8 barMax. swivel frequency at 0.6 MPa (6 bar, 87 psi)2 HzRapetition accuracy1 degOperating mediumCompressed air to ISO 8573-1:2010[7:4:4]Note on operating and pilot mediumLubricated operation possible (in which case lubricated operation will always be required)Carrosion resistance class CRC1 - Low corrosion stressLABS (PWIS) conformityVDMA24364-82-LaAmbient temperature0.1 NmTheoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke73.5 NTheoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke10.2 S NTheoretical force at 0.6 MPa (6 bar, 87 psi), return stroke73.5 NTheoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke10.2 S NTheoretical torque at 0.6 MPa (6 bar, 87 psi)1.25 NmPermissible mass moment of inertia3.5E-05 S gm²Product weight650 gBasic weight for 0 mm stroke650 g	Feature	Value
Plston diameter     16 mm       Swivel angle     0 deg272 deg       Cushioning     Elastic cushioning rings/plates at both ends       Mounting position     optional       Fine adjustment     -6 deg       Mode of operation     Double-acting       Design     Vane       Position detection     Via proximity switch       Variants     Through piston rod       Protection against torque/guide     With plain-bearing guide       Operating pressure     2.5 bar8 bar       Max. impact speed     500 mm/s       Max. swivel frequency at 0.6 MPa (6 bar, 87 psi)     2 Hz       Porating 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     1 - tow corrosion stress       LABS (PWIS) conformity     VDMA24364-82-L       Ambient temperature     -10 °C60 °C       Dynamic load torque     0.1 Nm       Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke     73.5 N       Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke     10.25 N	Rotation angle adjustment range	0 deg270 deg
Swivel angle0 deg272 degCushioningElastic cushioning rings/plates at both endsMounting positionoptionalFine adjustment-6 degMode of operationDouble-actingDesignVanePosition detectionVia proximity switchVariantsThrough piston rodProtection against torque/guideWith plain-bearing guideOperating pressure2.5 bar8 barMax. swivel frequency at 0.6 MPa (6 bar, 87 psi)2 HzRotary angle backlash2 degRepetition accuracy1 degOperating and pilot mediumLubricated operation possible (in which case lubricated operation will always be required)Note on operating and pilot mediumLubricated operation stressLASS (PWIS) conformityVDM242364-B2-LAmbient temperature-10 °C60 °CDynamic load torque0.1 NmTheoretical force at 0.6 MPa (6 bar, 87 psi), neturn stroke73.5 NTheoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke10.25 NTheoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke10.25 NPremissible meas moment of inertia3.5E-05 kgm²Product weight650 g	Stroke	80 mm
CushioningElastic cushioning rings/plates at both endsMounting positionoptionalFine adjustment-6 degMode of operationDouble-actingDesignVanePosition detectionVia proximity switchVariantsThrough piston rodProtection against torque/guideWith plain-bearing guideOperating pressure2.5 bar8 barMax. impact speed500 mm/sMax. swivel frequency at 0.6 MPa (6 bar, 87 psi)2 HzRotary angle backlash2 degRepetition accuracy1 degOperating and pilot mediumLubricated operation possible (in which case lubricated operation will always be required)Corrosion resistance class CRC1 - Low corrosion stressLABS (PWIS) conformityVDM24364-B2-LAmbient temperature-10 °C60 °CDynamic load torque0.1 NmTheoretical force at 0.6 MPa (6 bar, 87 psi), return stroke73.5 NTheoretical torce at 0.6 MPa (6 bar, 87 psi), advance stroke10.25 NTheoretical torce at 0.6 MPa (6 bar, 87 psi), advance stroke10.25 NPreviduet weight650 g	Piston diameter	16 mm
Mounting positionoptionalFine adjustment-6 degMode of operationDouble-actingDesignVanePosition detectionVia proximity switchVariantsThrough piston rodProtection against torque/guideWith plain-bearing guideOperating pressure2.5 bar8 barMax. inpact speed500 mm/sMax. swivel frequency at 0.6 MPa (6 bar, 87 psi)2 HzRepetition accuracy1 degOperating mediumCompressed air to ISO 8573-1:2010 [7:4:4]Note on operating and pilot mediumLubricated operation possible (in which case lubricated operation will always be required)Corrosion resistance class CRC1 - Low corrosion stressLABS (PWIS) conformityVDMA24364-B2-LAmbient temperature-10 °C60 °CDynamic load torque0.1 NmTheoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke73.5 NTheoretical torque at 0.6 MPa (6 bar, 87 psi)1.25 NmPermissible mass moment of inertia3.5E-05 kgm²Product weight650 g	Swivel angle	0 deg272 deg
Fine adjustment-6 degMode of operationDouble-actingDesignVanePosition detectionVia proximity switchVariantsThrough piston rodProtection against torque/guideWith plain-bearing guideOperating pressure2.5 bar8 barMax. impact speed500 mm/sMax. swivel frequency at 0.6 MPa (6 bar, 87 psi)2 HzRotary angle backlash2 degRepetition accuracy1 degOperating mediumCompressed air to ISO 8573-1:2010 [7:4:4]Note on operating and pilot mediumLubricated operation possible (in which case lubricated operation will always be required)Corrosion resistance class CRC1 - Low corrosion stressLABS (PWIS) conformityVDMA24364-B2-LAmbient temperature-10 °C60 °CDynamic load torque0.1 NmTheoretical force at 0.6 MPa (6 bar, 87 psi), return stroke73.5 NTheoretical force at 0.6 MPa (6 bar, 87 psi)1.25 NmPermissible mass moment of inertia3.5E-05 kgm²Product weight650 gBasic weight for 0 mm stroke650 g	Cushioning	Elastic cushioning rings/plates at both ends
Mode of operationDouble-actingDesignVarePosition detectionVia proximity switchVariantsThrough piston rodProtection against torque/guideWith plain-bearing guideOperating pressure2.5 bar8 barMax. impact speed500 mm/sMax. swivel frequency at 0.6 MPa (6 bar, 87 psi)2 HzRotary angle backlash2 degRepetition accuracy1 degOperating mediumCompressed air to ISO 8573-1:2010[7:4:4]Note on operating and pilot mediumLubricated operation possible (in which case lubricated operation will always be required)Corrosion resistance class CRC1 - Low corrosion stressLABS (PWIS) conformityVDMA24364-B2-LAmbient temperature-10 °C60 °CDynamic load torque0.1 NmTheoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke102.5 NTheoretical torque at 0.6 MPa (6 bar, 87 psi)1.25 NmPermissible mass moment of inertia3.5E-05 kgm²Product weight650 gBasic weight for 0 mm stroke650 g	Mounting position	optional
DesignVanePosition detectionVia proximity switchVariantsThrough piston rodProtection against torque/guideWith plain-bearing guideOperating pressure2.5 bar8 barMax. impact speed500 mm/sMax. swivel frequency at 0.6 MPa (6 bar, 87 psi)2 HzRotary angle backlash2 degRepetition accuracy1 degOperating mediumCompressed air to ISO 8573-1:2010 [7:4:4]Note on operating and pilot mediumLubricated operation possible (in which case lubricated operation will always be required)Corrosion resistance class CRC1 - Low corrosion stressLABS (PWIS) conformityVDM224364-B2-LAmbient temperature-10 °C60 °CDynamic load torque0.1 NmTheoretical force at 0.6 MPa (6 bar, 87 psi)1.25 NmPremissible mass moment of inertia3.5E-05 kgm²Product weight650 gBasic weight for 0 mm stroke650 g	Fine adjustment	-6 deg
DescriptionVia proximity switchVariantsThrough piston rodProtection against torque/guideWith plain-bearing guideOperating pressure2.5 bar8 barMax. impact speed500 mm/sMax. swivel frequency at 0.6 MPa (6 bar, 87 psi)2 HzRotary angle backlash2 degRepetition accuracy1 degOperating mediumCompressed air to ISO 8573-1:2010 [7:4:4]Note on operating and pilot mediumLubricated operation possible (in which case lubricated operation will always be required)Corrosion resistance class CRC1 - Low corrosion stressLABS (PWIS) conformityVDMA24364-B2-LAmbient temperature-0.0 °C60 °CDynamic load torque0.1 NmTheoretical force at 0.6 MPa (6 bar, 87 psi), return stroke73.5 NTheoretical force at 0.6 MPa (6 bar, 87 psi)1.25 NmPermissible mass moment of inertia3.5E-05 kgm²Product weight650 gBasic weight for 0 mm stroke650 g	Mode of operation	Double-acting
VariantsThe performanceVariantsThrough piston rodProtection against torque/guideWith plain-bearing guideOperating pressure2.5 bar8 barMax. impact speed500 mm/sMax. swivel frequency at 0.6 MPa (6 bar, 87 psi)2 HzRotary angle backlash2 degRepetition accuracy1 degOperating mediumCompressed air to ISO 8573-1:2010[7:4:4]Note on operating and pilot mediumLubricated operation possible (in which case lubricated operation will always be required)Corrosion resistance class CRC1 - Low corrosion stressLABS (PWIS) conformityVDMA24364-B2-LAmbient temperature-10 °C60 °CDynamic load torque0.1 NmTheoretical force at 0.6 MPa (6 bar, 87 psi), return stroke73.5 NTheoretical force at 0.6 MPa (6 bar, 87 psi)1.25 NmPermissible mass moment of inertia3.5E-05 kgm²Product weight650 gBasic weight for 0 mm stroke650 g	Design	Vane
Protection against torque/guideWith plain-bearing guideOperating pressure2.5 bar8 barMax. impact speed500 mm/sMax. swivel frequency at 0.6 MPa (6 bar, 87 psi)2 HzRotary angle backlash2 degRepetition accuracy1 degOperating mediumCompressed air to ISO 8573-1:2010 [7:4:4]Note on operating and pilot mediumLubricated operation possible (in which case lubricated operation will always be required)Corrosion resistance class CRC1 - Low corrosion stressLABS (PWIS) conformityVDMA24364-B2-LAmbient temperature-10 °C60 °CDynamic load torque0.1 NmTheoretical force at 0.6 MPa (6 bar, 87 psi), return stroke73.5 NTheoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke102.5 NTheoretical torque at 0.6 MPa (6 bar, 87 psi)1.25 NmPermissible mass moment of inertia3.5E-05 kgm²Product weight650 gBasic weight for 0 mm stroke650 g	Position detection	Via proximity switch
Operating pressure2.5 bar8 barMax. impact speed500 mm/sMax. swivel frequency at 0.6 MPa (6 bar, 87 psi)2 HzRotary angle backlash2 degRepetition accuracy1 degOperating mediumCompressed air to ISO 8573-1:2010 [7:4:4]Note on operating and pilot mediumLubricated operation possible (in which case lubricated operation will always be required)Corrosion resistance class CRC1 - Low corrosion stressLABS (PWIS) conformityVDMA24364-B2-LAmbient temperature-10 °C60 °CDynamic load torque0.1 NmTheoretical force at 0.6 MPa (6 bar, 87 psi), return stroke73.5 NTheoretical torque at 0.6 MPa (6 bar, 87 psi)1.25 NmPermissible mass moment of inertia3.5E-05 kgm²Product weight650 gBasic weight for 0 mm stroke650 g	Variants	Through piston rod
Max. impact speed500 mm/sMax. impact speed500 mm/sMax. swivel frequency at 0.6 MPa (6 bar, 87 psi)2 HzRotary angle backlash2 degRepetition accuracy1 degOperating mediumCompressed air to ISO 8573-1:2010 [7:4:4]Note on operating and pilot mediumLubricated operation possible (in which case lubricated operation will always be required)Corrosion resistance class CRC1 - Low corrosion stressLABS (PWIS) conformityVDMA24364-B2-LAmbient temperature-10 °C60 °CDynamic load torque0.1 NmTheoretical force at 0.6 MPa (6 bar, 87 psi), return stroke73.5 NTheoretical force at 0.6 MPa (6 bar, 87 psi)1.25 NmPermissible mass moment of inertia3.5E-05 kgm²Product weight650 gBasic weight for 0 mm stroke650 g	Protection against torque/guide	With plain-bearing guide
Max. swivel frequency at 0.6 MPa (6 bar, 87 psi)2 HzRotary angle backlash2 degRepetition accuracy1 degOperating mediumCompressed air to ISO 8573-1:2010 [7:4:4]Note on operating and pilot mediumLubricated operation possible (in which case lubricated operation will always be required)Corrosion resistance class CRC1 - Low corrosion stressLABS (PWIS) conformityVDMA24364-B2-LAmbient temperature-10 °C60 °CDynamic load torque0.1 NmTheoretical force at 0.6 MPa (6 bar, 87 psi), return stroke73.5 NTheoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke102.5 NPremissible mass moment of inertia3.5E-05 kgm²Product weight650 gBasic weight for 0 mm stroke650 g	Operating pressure	2.5 bar8 bar
Rotary angle backlash2 degRepetition accuracy1 degOperating mediumCompressed air to ISO 8573-1:2010[7:4:4]Note on operating and pilot mediumLubricated operation possible (in which case lubricated operation will always be required)Corrosion resistance class CRC1 - Low corrosion stressLABS (PWIS) conformityVDMA24364-B2-LAmbient temperature-10 °C60 °CDynamic load torque0.1 NmTheoretical force at 0.6 MPa (6 bar, 87 psi), return stroke73.5 NTheoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke102.5 NTheoretical torque at 0.6 MPa (6 bar, 87 psi)1.25 NmPermissible mass moment of inertia3.5E-05 kgm²Product weight650 gBasic weight for 0 mm stroke650 g	Max. impact speed	500 mm/s
Repetition accuracy1 degOperating mediumCompressed air to ISO 8573-1:2010 [7:4:4]Note on operating and pilot mediumLubricated operation possible (in which case lubricated operation will always be required)Corrosion resistance class CRC1 - Low corrosion stressLABS (PWIS) conformityVDMA24364-B2-LAmbient temperature-10 °C60 °CDynamic load torque0.1 NmTheoretical force at 0.6 MPa (6 bar, 87 psi), return stroke73.5 NTheoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke102.5 NTheoretical torque at 0.6 MPa (6 bar, 87 psi)1.25 NmPermissible mass moment of inertia3.5E-05 kgm²Product weight650 gBasic weight for 0 mm stroke650 g	Max. swivel frequency at 0.6 MPa (6 bar, 87 psi)	2 Hz
Operating mediumCompressed air to ISO 8573-1:2010 [7:4:4]Note on operating and pilot mediumLubricated operation possible (in which case lubricated operation will always be required)Corrosion resistance class CRC1 - Low corrosion stressLABS (PWIS) conformityVDMA24364-B2-LAmbient temperature-10 °C60 °CDynamic load torque0.1 NmTheoretical force at 0.6 MPa (6 bar, 87 psi), return stroke73.5 NTheoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke102.5 NTheoretical torque at 0.6 MPa (6 bar, 87 psi)1.25 NmPermissible mass moment of inertia3.5E-05 kgm²Product weight650 gBasic weight for 0 mm stroke650 g	Rotary angle backlash	2 deg
Note on operating and pilot mediumLubricated operation possible (in which case lubricated operation will always be required)Corrosion resistance class CRC1 - Low corrosion stressLABS (PWIS) conformityVDMA24364-B2-LAmbient temperature-10 °C60 °CDynamic load torque0.1 NmTheoretical force at 0.6 MPa (6 bar, 87 psi), return stroke73.5 NTheoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke102.5 NTheoretical torque at 0.6 MPa (6 bar, 87 psi)1.25 NmPermissible mass moment of inertia3.5E-05 kgm²Product weight650 gBasic weight for 0 mm stroke650 g	Repetition accuracy	1 deg
always be required)Corrosion resistance class CRC1 - Low corrosion stressLABS (PWIS) conformityVDMA24364-B2-LAmbient temperature-10 °C60 °CDynamic load torque0.1 NmTheoretical force at 0.6 MPa (6 bar, 87 psi), return stroke73.5 NTheoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke102.5 NTheoretical torque at 0.6 MPa (6 bar, 87 psi)1.25 NmPermissible mass moment of inertia3.5E-05 kgm²Product weight650 gBasic weight for 0 mm stroke650 g	Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]
LABS (PWIS) conformityVDMA24364-B2-LAmbient temperature-10 °C60 °CDynamic load torque0.1 NmTheoretical force at 0.6 MPa (6 bar, 87 psi), return stroke73.5 NTheoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke102.5 NTheoretical torque at 0.6 MPa (6 bar, 87 psi)1.25 NmPermissible mass moment of inertia3.5E-05 kgm²Product weight650 gBasic weight for 0 mm stroke650 g	Note on operating and pilot medium	
Ambient temperature-10 °C60 °CDynamic load torque0.1 NmTheoretical force at 0.6 MPa (6 bar, 87 psi), return stroke73.5 NTheoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke102.5 NTheoretical torque at 0.6 MPa (6 bar, 87 psi)1.25 NmPermissible mass moment of inertia3.5E-05 kgm²Product weight650 gBasic weight for 0 mm stroke650 g	Corrosion resistance class CRC	1 - Low corrosion stress
Dynamic load torque0.1 NmTheoretical force at 0.6 MPa (6 bar, 87 psi), return stroke73.5 NTheoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke102.5 NTheoretical torque at 0.6 MPa (6 bar, 87 psi)1.25 NmPermissible mass moment of inertia3.5E-05 kgm²Product weight650 gBasic weight for 0 mm stroke650 g	LABS (PWIS) conformity	VDMA24364-B2-L
Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke73.5 NTheoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke102.5 NTheoretical torque at 0.6 MPa (6 bar, 87 psi)1.25 NmPermissible mass moment of inertia3.5E-05 kgm²Product weight650 gBasic weight for 0 mm stroke650 g	Ambient temperature	-10 °C60 °C
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke102.5 NTheoretical torque at 0.6 MPa (6 bar, 87 psi)1.25 NmPermissible mass moment of inertia3.5E-05 kgm²Product weight650 gBasic weight for 0 mm stroke650 g	Dynamic load torque	0.1 Nm
Theoretical torque at 0.6 MPa (6 bar, 87 psi)   1.25 Nm     Permissible mass moment of inertia   3.5E-05 kgm²     Product weight   650 g     Basic weight for 0 mm stroke   650 g	Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke	73.5 N
Permissible mass moment of inertia3.5E-05 kgm²Product weight650 gBasic weight for 0 mm stroke650 g	Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke	102.5 N
Product weight 650 g   Basic weight for 0 mm stroke 650 g	Theoretical torque at 0.6 MPa (6 bar, 87 psi)	1.25 Nm
Basic weight for 0 mm stroke 650 g	Permissible mass moment of inertia	3.5E-05 kgm <sup>2</sup>
	Product weight	650 g
	Basic weight for 0 mm stroke	650 g
Additional weight per 10 mm stroke 33 g	Additional weight per 10 mm stroke	33 g

## FESTO

Feature	Value
Type of mounting	Clamped in T-slot Via male thread Either:
Pneumatic connection	M5
Material cover	Wrought aluminium alloy Anodised
Material seals	TPE-U(PU)
Material housing	Wrought aluminium alloy Smooth anodised
Material piston rod	Tempered steel