

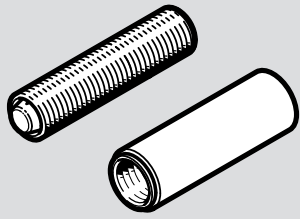
DYEF-G8

Shock absorber

FESTO

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Operating instructions

8164946
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Translation of the original instructions

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1 Applicable documents

All available documents for the product → www.festo.com/sp

Documents	Product	Contents
Operating instructions	Mini slide DGST	-
Assembly instructions	Shock absorber DYEF-...-Y1F	-

Tab. 1: Applicable documents

2 Safety

2.1 Safety instructions

- Only use the product in its original condition without unauthorised modifications.
- Observe the identifications on the product.
- Store the product in a cool, dry environment protected from UV and corrosion. Keep storage times short.
- Repair of the product is not permitted.
- Before working on the product, switch off the compressed air supply and lock it to prevent it from being switched on again.

2.2 Intended use

The product is intended for use with the mini slide DGST for cushioning and adjustment of the slide end positions.

2.3 Training of qualified personnel

Work on the product may only be carried out by qualified personnel who can evaluate the work and detect dangers. Personnel must have the relevant mechanical training.

3 Additional information

- Contact the regional Festo contact if you have technical problems → www.festo.com.
- Accessories and spare parts → www.festo.com/catalogue.

4 Function

The mechanical shock absorber has an elastic rubber buffer to absorb the cushioning energy.

5 Product design

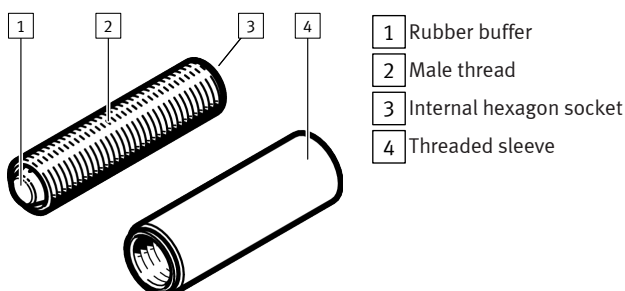


Fig. 1: Product design

6 Assembly

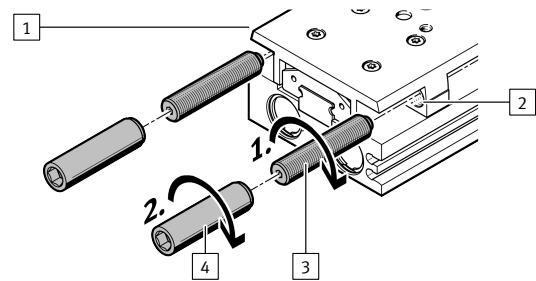


Fig. 2: Mounting on mini slide DGST

- 1 Thread on housing: cushioning for retracted end position
- 2 Thread on slide: cushioning for extended end position
- 3 Shock absorber
- 4 Threaded sleeve

1. Screw the shock absorbers into the thread on the housing [1] and into the thread on the slide [2].
2. Screw the threaded sleeves [4] onto the shock absorbers [3].

7 Commissioning

7.1 Adjustment of slide end positions

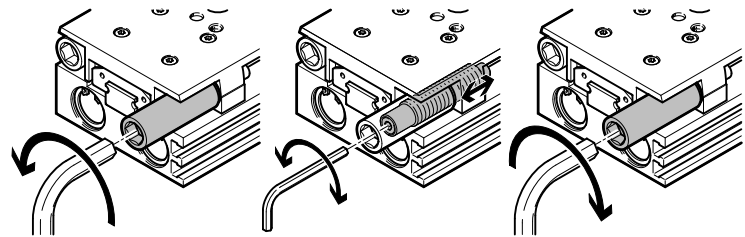


Fig. 3: Adjustment of the slide end positions

1. Loosen the threaded sleeves.
2. Position the slides one after the other at the retracted and advanced end positions.
3. At the end position: screw in the shock absorbers to the end position. Do not exceed the maximum torque when screwing the internal hexagon socket/slot. Maintain the minimum distance L. If the minimum distance L is not long enough, the shock absorbers will not be completely effective and the product will impact internally. This can lead to the destruction of the product. Minimum distance L with retracted end position → 1 Applicable documents.
4. At the end position: pressurise the slide as a counterhold to the shock absorber. Tighten the threaded sleeve to the specified tightening torque.

DGST	-6	-8	-10	-12	-16	-20	-25
Shock absorber							
DYEF-G8-M...-Y1	4	5	6	8	10	12	14
DYEF-G8-M...-Y1F	5	5	6	8	10	-	-
DYEF-G8-S-M...	4	5	6	8	10	12	14
DYSS-G8-...	2	3	4	5	7	8	10
Internal hexagon/slot on the shock absorber							
Max. torque [Nm]	0.1	0.5	0.6	1	3	5	10
Threaded sleeve							
Tightening torque [Nm]	0.4	0.64	0.8	1.6	2.4	4	6.4
Tolerance ± 20%							

NOTICE

The exact slide position must be checked during a test run with compressed air applied and, if necessary, corrected.

1. When operating the DGST-...-E1: restrict the speed.
2. Observe the permissible impact energies.
3. Suitable shock absorbers can be retrofitted to the product → www.festo.com/catalogue.

7.2 Executing test run

1. Observe the operating instructions for the mini slide DGST → 1 Applicable documents.
2. Observe the assembly instructions for the shock absorber DYEF-...-Y1F → 1 Applicable documents. The cushioning for the shock absorber DYEF-...-Y1F can be adjusted.

8 Maintenance

Maintenance interval	Maintenance work
Every 5 million load changes	Check cushioning for soft stop. In case of hard stop: replace shock absorber.

Tab. 2: Maintenance schedule

9 Fault clearance

Malfunction	Possible cause	Remedy
Hard stop in the end position	Shock absorber overloaded	Reduce impact velocity or check the layout of the shock absorber.
	Rubber buffer defective	Replace shock absorber.

Tab. 3: Fault clearance

10 Technical data

DYEF-G8(-S)-M-Y1	4	5	6	8
Stroke/cushioning distance [mm]	0.9	1.5	1.5	1.3
Male thread	M4x0.5	M5x0.5	M6x0.5	M8x1
Mode of operation	Elastomer cushioning without metal fixed stop			
Cushioning	not adjustable			
Mounting position	any			
Max. mass [kg]	0.15	0.35	0.7	1.0
Max. mass [kg]	0.38	0.6	0.95	1.28
Max. energy absorption per stroke [J]	0.015	0.05	0.08	0.12
Max. energy absorption per stroke [J]	0.018	0.05	0.08	0.12
Max. impact velocity [m/s]	0.8			
Recommended drive force at max. cushioning [N]	17	30	47	68
Ambient temperature [°C]	0 ... +60			

Tab. 4: Technical data DYEF-G8(-S)-M4 ... M8-Y1

DYEF-G8(-S)-M-Y1	10	12	14
Stroke/cushioning distance [mm]	1.0	1.2	1.2
Male thread	M10x1	M12x1	M14x1
Mode of operation	Elastomer cushioning without metal fixed stop		
Cushioning	not adjustable		
Mounting position	any		
Max. mass [kg]	2.5	4	6
		At 3 ... 4 kg: If necessary, reduce the energy absorption per stroke.	
Max. energy absorption per stroke [J]	0.25	0.35	0.45
Max. impact velocity [m/s]	0.8		
Recommended drive force at max. cushioning [N]	121	188	294
Ambient temperature [°C]	0 ... +60		

Tab. 5: Technical data DYEF-G8(-S)-M10 ... M14-Y1

DYEF-G8-M-Y1F	4	5	6	8	10
Stroke/cushioning distance [mm]	1.7	2.8	3.1	3.4	3.7
Male thread	M4x0.5	M5x0.5	M6x0.5	M8x1	M10x1
Mode of operation	Elastomer cushioning with metal fixed stop				
Cushioning	adjustable				
Mounting position	any				
Max. mass [kg]	0.15	0.25	0.4	0.6	1.2
Max. energy absorption per stroke [Nm]	0.005	0.02	0.03	0.04	0.06
Max. impact velocity [m/s]	0.8				
Recommended drive force at max. cushioning [N]	17	30	47	68	121
Reset force at max. stroke ¹⁾ [N]	15	30	40	60	70
Ambient temperature [°C]	0 ... +60				

1) Corresponds to the force required for the retracted end position.

Tab. 6: Technical data DYEF-G8-M4 ... M10-Y1F