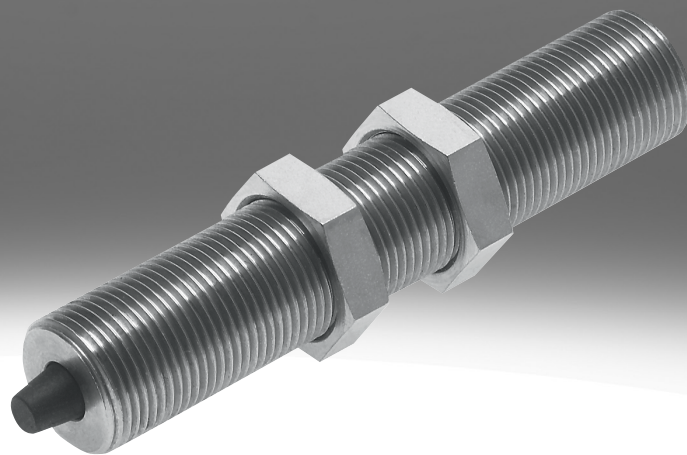


Shock absorber DYEF

FESTO



Characteristics

At a glance

[Further information → dyef](#)

- Mechanical shock absorber with flexible rubber buffer
- Either with adjustable or non-adjustable cushioning stroke
- Optionally with or without fixed stop
- Continuous mounting thread with internal hex

Product segmentation



Festo Core Range

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With the Festo Core Range, we have selected the most important products and functions from our broad product catalogue, and added the quickest delivery. The Core Range offers you the best value with the expected high Festo quality.

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- Expected high Festo quality
- Easy and fast to select

Diagrams

[Further information → dyef](#)



The diagrams shown in this document are also available online. These can be used to display precise values.

Allocation

[G8] Version G8

For mini slides DGST

Design type

[S] Short

Particularly suitable for applications where space is critical

Geometric characteristics

[Y1] Internal hex

The shock absorber can be adjusted using the hexagon socket

Stop

[F] With fixed stop

Metal end position on the shock absorber housing

Special material properties

[F1A] Recommended for production plants for manufacturing lithium-ion batteries, F1A

Metals with more than 1% copper, zinc or nickel by mass are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, circuit boards, cables, electrical plug connectors and coils

Type code

001	Series	
DYEF	Shock absorber	

002	Allocation	
	None	
G8	Version G8	

003	Design type	
	Standard	
S	Short	

004	Size	
M4	M4x0.5	
M5	M5x0.5	
M6	M6x0.5	
M8	M8x1	
M10	M10x1	
M12	M12x1	
M14	M14x1	
M16	M16x1	
M22	M22x1.5	

005	Geometric characteristics	
Y1	Internal hex	

006	Stop	
	None	
F	With fixed stop	

007	Special material properties	
	None	
F1A	Recommended for production plants for manufacturing lithium-ion batteries, F1A	

Datasheet

General technical data for DYE-...-Y1

Size	M10	M12	M14	M16	M4	M5	M6	M8
Stroke	1 mm	1.2 mm		1.3 mm	0.9 mm	1.5 mm		1.3 mm
Cushioning	Elastic cushioning rings/pads at both ends without metal fixed stop							
Cushioning length	1 mm	1.2 mm		1.3 mm	0.9 mm	1.5 mm		1.3 mm
Type of mounting	Via threaded sleeve Via lock nut			Via lock nut	Via threaded sleeve Via lock nut			
Max. impact speed	0.8 m/s							
Mounting position	optional							
Ambient temperature	-10 ... 60°C			0 ... 60°C	-10 ... 60°C			
Corrosion resistance class CRC ¹⁾	2 - Moderate corrosion stress							

1) More information www.festo.com/x/topic/crc

General technical data for DYE-...-Y1F

Size	M10	M12	M14	M16	M22	M4	M5	M6	M8
Stroke	3.7 mm	4.2 mm	5 mm	4.8 mm	7 mm	1.7 mm	2.8 mm	3.1 mm	3.4 mm
Cushioning	Elastic cushioning rings/pads at both ends with metal fixed stop								
Cushioning length	3.7 mm	4.2 mm	5 mm	4.8 mm	7 mm	1.7 mm	2.8 mm	3.1 mm	3.4 mm
Type of mounting	Via threaded sleeve Via lock nut	Via lock nut				Via threaded sleeve Via lock nut			
Max. impact speed	0.8 m/s								
Mounting position	optional								
Ambient temperature	0 ... 60°C								
Corrosion resistance class CRC ¹⁾	2 - Moderate corrosion stress								

1) More information www.festo.com/x/topic/crc

Energy sources for DYE-...-Y1

Size	M10	M12	M14	M16	M4	M5	M6	M8
Max. energy consumption per stroke	0.25 J	0.35 J	0.45 J	0.55 J	0.015 J	0.05 J	0.08 J	0.12 J

Energy sources for DYE-G8-...-Y1

Size	M10	M12	M14	M4	M5	M6	M8
Max. energy consumption per stroke	0.25 J	0.35 J	0.45 J	0.018 J	0.05 J	0.08 J	0.12 J

Energy sources for DYE-...-Y1F

Size	M10	M12	M14	M16	M22	M4	M5	M6	M8
Max. energy consumption per stroke	0.06 J	0.12 J	0.2 J	0.25 J	1.2 J	0.005 J	0.02 J	0.03 J	0.04 J

Weight for DYE-...-Y1

Size	M10	M12	M14	M16	M4	M5	M6	M8
Product weight	23 g	45.5 g	82.5 g	106 g	2.1 g	3.6 g	6 g	14 g

Weights for DYE-G8-...-Y1

Size	M10	M12	M14	M4	M5	M6	M8
Product weight	41 g	72.5 g	136.5 g	5 g	8.4 g	11.7 g	23 g

Weight for DYE-...-S-...-Y1

Size	M10	M12	M14	M16	M4	M5	M6	M8
Product weight	12 g	15 g	31 g	40 g	1.1 g	2 g	3 g	8.6 g

Datasheet

Weight for DYEF-G8-S-...-Y1

Size	M10	M12	M14	M4	M5	M6	M8
Product weight	26 g	41 g	67 g	3.5 g	4.8 g	6.9 g	14.6 g

Weight for DYEF-...-Y1F

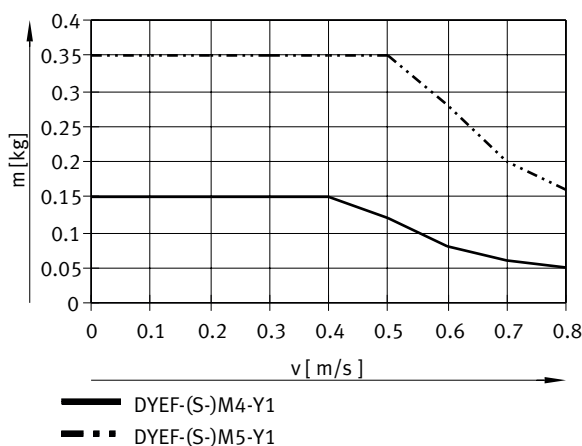
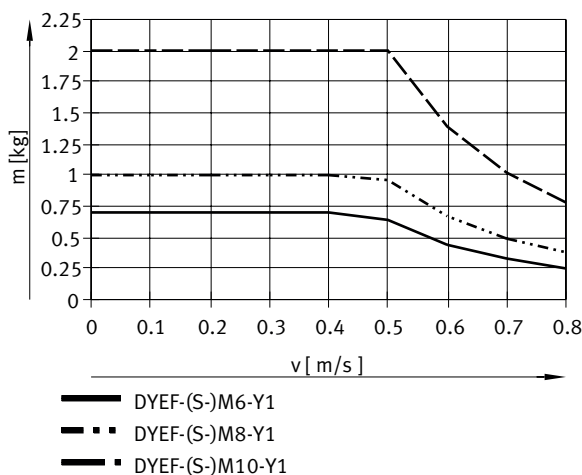
Size	M10	M12	M14	M16	M22	M4	M5	M6	M8
Product weight	19.7 g	39.6 g	77.3 g	104 g	200 g	1.6 g	2.9 g	5.1 g	11.9 g

Weight for DYEF-G8-...-Y1F

Size	M10	M4	M5	M6	M8
Product weight	37.6 g	4.5 g	7.6 g	10.8 g	20.9 g

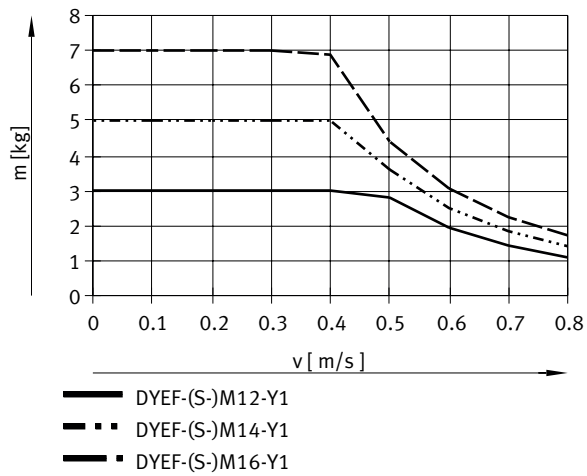
Materials

Size	M10	M12	M14	M16	M22	M4	M5	M6	M8
Material housing	High-alloy steel								
Material seals	NBR								
Note on materials	RoHS-compliant								
LABS (PWIS) conformity	VDMA24364-B2-L VDMA24364-B1/B2-L			VDMA24364-B1/B2-L		VDMA24364-B2-L VDMA24364-B1/B2-L			

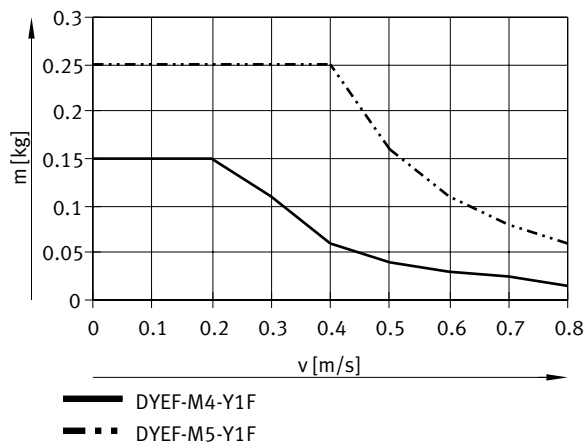
Impact velocity v as a function of mass m – DYEF-(S-)M4/M5-Y1Impact velocity v as a function of mass m – DYEF-(S-)M6/M8/M10-Y1

Datasheet

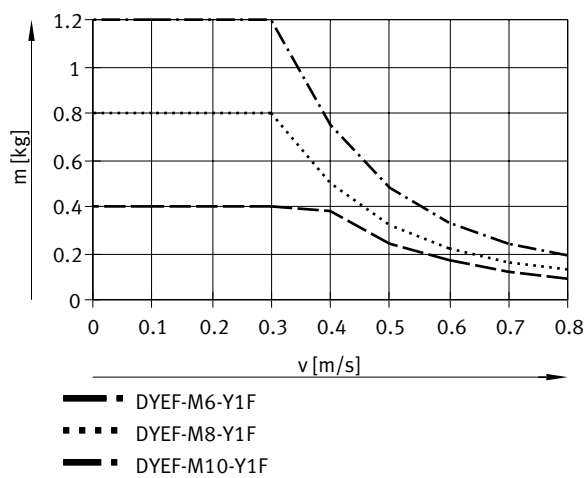
Impact velocity v as a function of mass m – DYEF-(S)-M12/M14/M16-Y1



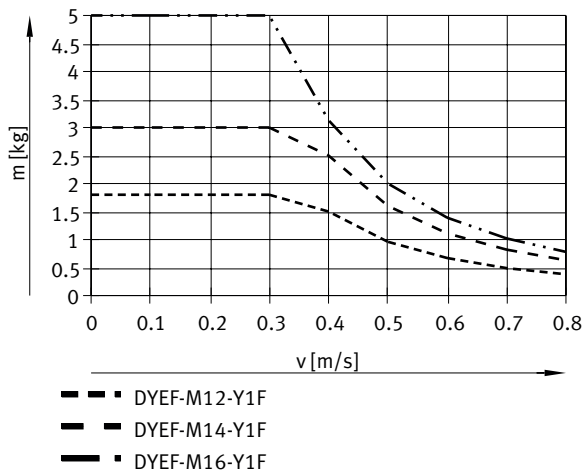
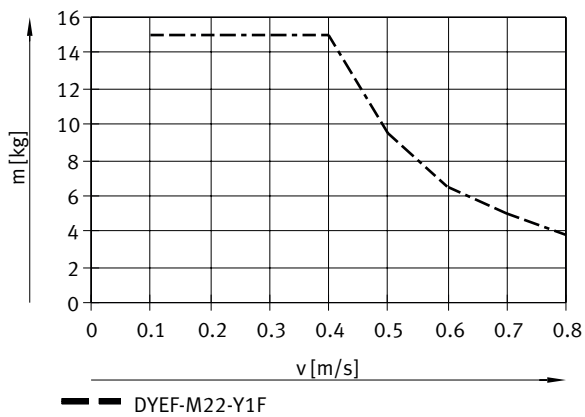
Impact velocity v as a function of mass m – DYEF-M4/M5-Y1F



Impact velocity v as a function of mass m – DYEF-M6/M8/M10-Y1F

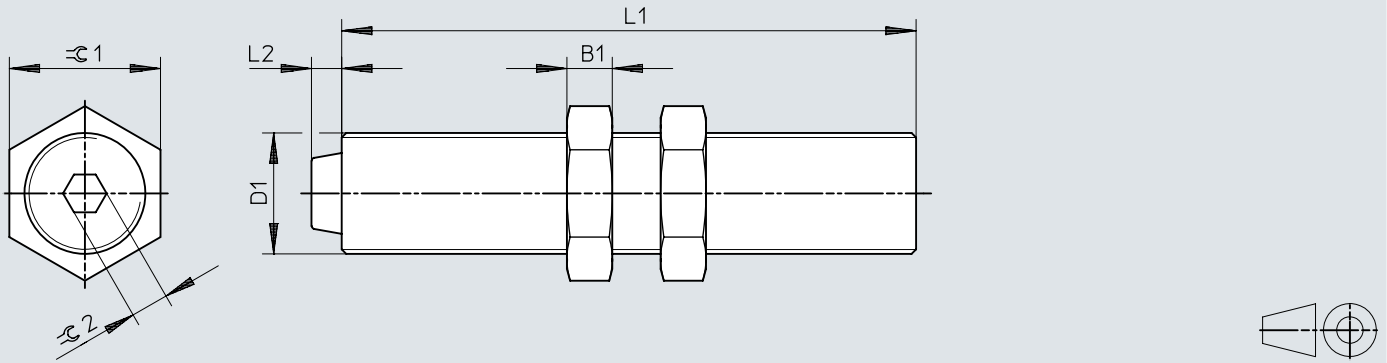


Datasheet

Impact velocity v as a function of mass m – DYEF-M12/M14/M16-Y1FImpact velocity v as a function of mass m – DYEF-M22-Y1F

Dimensions

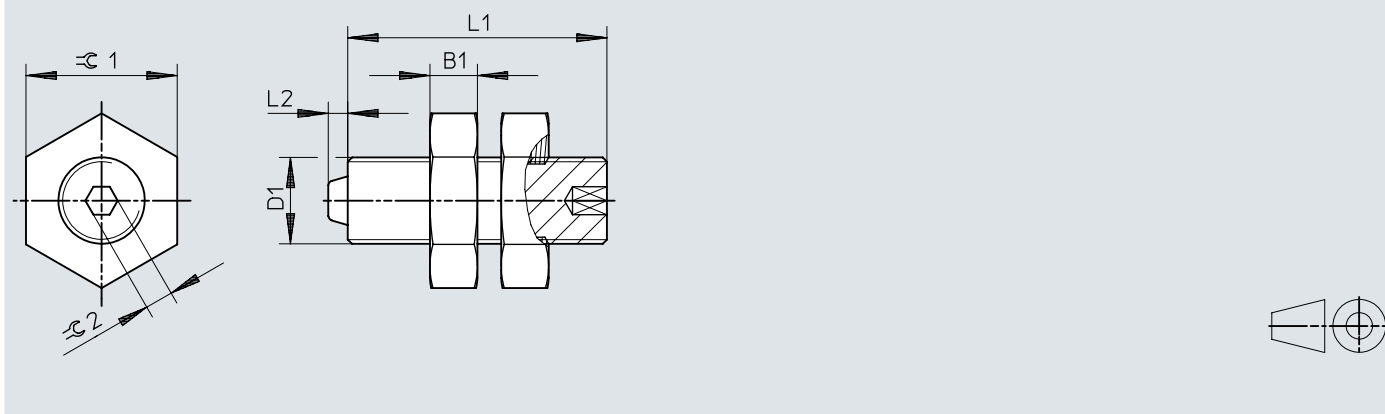
Dimensions – DYEF-...-Y1 – long version

Download CAD data → www.festo.com

	B1	D1	L1	L2 +0,3	$\varnothing 1$	$\varnothing 2$
DYEF-M4-Y1	2,2	M4x0,5	22	0,9	7	1,5
DYEF-M5-Y1	2,7	M5x0,5	26	1,8	8	1,5
DYEF-M6-Y1	2,5	M6x0,5	30	1,8	8	2
DYEF-M8-Y1	3	M8x1	38	2	10	2,5
DYEF-M10-Y1	3,5	M10x1	41	1,8	13	3
DYEF-M12-Y1	4	M12x1	54	2	15	4
DYEF-M14-Y1	5	M14x1	72	2	17	4
DYEF-M16-Y1	5	M16x1	75	2	19	5

Dimensions

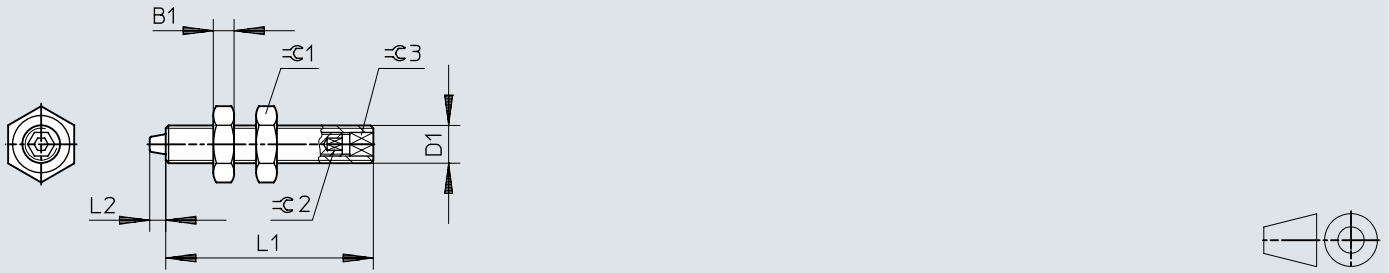
Dimensions – DYEF-...-S-...-Y1 – short version

Download CAD data → www.festo.com

	B1	D1	L1	L2	≈ 1	≈ 2
				+0,3		
DYEF-S-M4-Y1	2,2	M4x0,5	12	0,9	7	1,5
DYEF-S-M5-Y1	2,7	M5x0,5	14,5	1,8	8	1,5
DYEF-S-M6-Y1	2,5	M6x0,5	15	1,8	8	2
DYEF-S-M8-Y1	3	M8x1	23,5	2	10	2,5
DYEF-S-M10-Y1	3,5	M10x1	21	1,8	13	3
DYEF-S-M12-Y1	4	M12x1	20	2	15	4
DYEF-S-M14-Y1	5	M14x1	28	2	17	4
DYEF-S-M16-Y1	5	M16x1	31,5	2	19	5


Dimensions


Dimensions – DYEF-...-Y1F – long version

Download CAD data → www.festo.com


	B1	D1	L1	L2 +0,3	$\varnothing 1$	$\varnothing 2$	$\varnothing 3$
DYEF-M4-Y1F ¹⁾	2,2	M4x0,5	22	1,7	7	1,3	2,5
DYEF-M5-Y1F	2,7	M5x0,5	26	2,8	8	1,5	3
DYEF-M6-Y1F	2,5	M6x0,5	30	3,1	8	2	4
DYEF-M8-Y1F	3	M8x1	38	3,4	10	2,5	5
DYEF-M10-Y1F	3,5	M10x1	41	3,7	13	3	6
DYEF-M12-Y1F	4	M12x1	54	4,2	15	4	8
DYEF-M14-Y1F	5	M14x1	72	5	17	4	8
DYEF-M16-Y1F	5	M16x1	75	4,8	19	5	10
DYEF-M22-Y1F	5	M22x1,5	78	7	27	5	10

Accessories


DYEF-...-Y1 – Long version						
	Size	Stroke	Cushioning	Allocation	Part no.	Type
	M10	1 mm	Elastic cushioning rings/pads at both ends without metal fixed stop	None	1179837	DYEF-M10-Y1
	M12	1.2 mm			1179840	DYEF-M12-Y1
	M14				1179863	DYEF-M14-Y1
	M16	1.3 mm			1179879	DYEF-M16-Y1
	M4	0.9 mm			1179810	DYEF-M4-Y1
	M5	1.5 mm			1179818	DYEF-M5-Y1
	M6				1179831	DYEF-M6-Y1
	M8	1.3 mm			1179834	DYEF-M8-Y1


DYEF-G8-...-Y1 – Long version						
	Size	Stroke	Cushioning	Allocation ¹⁾	Part no.	Type
	M10	1 mm	Elastic cushioning rings/pads at both ends without metal fixed stop	Version G8	★ 8073906	DYEF-G8-M10-Y1
	M12	1.2 mm			★ 8073907	DYEF-G8-M12-Y1
	M14				★ 8073908	DYEF-G8-M14-Y1
	M4	0.9 mm			★ 8073902	DYEF-G8-M4-Y1
	M5	1.5 mm			★ 8073903	DYEF-G8-M5-Y1
	M6				★ 8073904	DYEF-G8-M6-Y1
	M8	1.3 mm			★ 8073905	DYEF-G8-M8-Y1

1) Version G8 = for mini slide DGST

DYEF-G8-...-Y1 – Long version, for manufacturing Li-ion batteries						
	Size	Stroke	Cushioning	Allocation ¹⁾	Part no.	Type
	M10	1 mm	Elastic cushioning rings/pads at both ends without metal fixed stop	Version G8	8131074	DYEF-G8-M10-Y1-F1A
	M12	1.2 mm			8132355	DYEF-G8-M12-Y1-F1A
	M14				8132356	DYEF-G8-M14-Y1-F1A
	M4	0.9 mm			8131070	DYEF-G8-M4-Y1-F1A
	M5	1.5 mm			8131071	DYEF-G8-M5-Y1-F1A
	M6				8131072	DYEF-G8-M6-Y1-F1A
	M8	1.3 mm			8131073	DYEF-G8-M8-Y1-F1A


1) Version G8 = for mini slide DGST


DYEF-S-...-Y1 – Short version						
	Size	Stroke	Cushioning	Allocation	Part no.	Type
	M10	1 mm	Elastic cushioning rings/pads at both ends without metal fixed stop	None	1152959	DYEF-S-M10-Y1
	M12	1.2 mm			1153004	DYEF-S-M12-Y1
	M14				1153017	DYEF-S-M14-Y1
	M16	1.3 mm			1153023	DYEF-S-M16-Y1
	M4	0.9 mm			1152500	DYEF-S-M4-Y1
	M5	1.5 mm			1152507	DYEF-S-M5-Y1
	M6				1152524	DYEF-S-M6-Y1
	M8	1.3 mm			1152536	DYEF-S-M8-Y1

DYEF-G8-S-...-Y1 – Short version						
	Size	Stroke	Cushioning	Allocation ¹⁾	Part no.	Type
	M10	1 mm	Elastic cushioning rings/pads at both ends without metal fixed stop	Version G8	8159474	DYEF-G8-S-M10-Y1
	M12	1.2 mm			8159475	DYEF-G8-S-M12-Y1
	M14				8159476	DYEF-G8-S-M14-Y1
	M4	0.9 mm			8159470	DYEF-G8-S-M4-Y1
	M5	1.5 mm			8159471	DYEF-G8-S-M5-Y1
	M6				8159472	DYEF-G8-S-M6-Y1
	M8	1.3 mm			8159473	DYEF-G8-S-M8-Y1

1) Version G8 = for mini slide DGST

Accessories

DYEF-...-Y1F – Long version						
	Size	Stroke	Cushioning	Allocation	Part no.	Type
	M10	3.7 mm	Elastic cushioning rings/pads at both ends with metal fixed stop	None	548374	DYEF-M10-Y1F
	M12	4.2 mm			548375	DYEF-M12-Y1F
	M14	5 mm			548376	DYEF-M14-Y1F
	M16	4.8 mm			548377	DYEF-M16-Y1F
	M22	7 mm			1113706	DYEF-M22-Y1F
	M4	1.7 mm			548370	DYEF-M4-Y1F
	M5	2.8 mm			548371	DYEF-M5-Y1F
	M6	3.1 mm			548372	DYEF-M6-Y1F
M8	3.4 mm	548373	DYEF-M8-Y1F			

DYEF-G8-...-Y1F – Long version						
	Size	Stroke	Cushioning	Allocation ¹⁾	Part no.	Type
	M10	3.7 mm	Elastic cushioning rings/pads at both ends with metal fixed stop	Version G8	8160238	DYEF-G8-M10-Y1F
	M4	1.7 mm			8160234	DYEF-G8-M4-Y1F
	M5	2.8 mm			8160235	DYEF-G8-M5-Y1F
	M6	3.1 mm			8160236	DYEF-G8-M6-Y1F
	M8	3.4 mm			8160237	DYEF-G8-M8-Y1F

1) Version G8 = for mini slide DGST