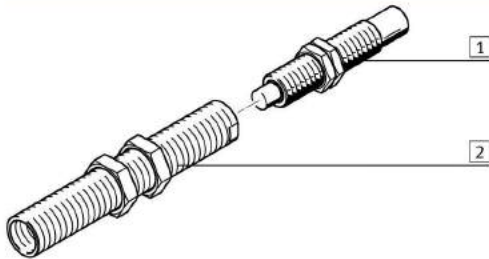


Shock absorbers DYSC

Peripherals overview and type codes

Peripherals overview



Accessories			
	Type	Brief description	→ Page/Internet
1	Shock absorber DYSC	Hydraulic shock absorber with rapidly increasing cushioning force curve	23
2	Reducing sleeve DAYH	To improve the cushioning performance in the case of underload, the built-in shock absorber can be replaced by the next smallest shock absorber with the help of the reducing sleeve	45

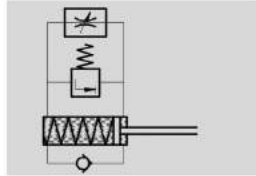
Type codes

		DYSC	-	8	-	8	-	Y1		F
Type										
DYSC	Shock absorber									
Size										
Stroke [mm]										
Geometric characteristic										
Y1	Internal hex									
Stop										
F	With fixed stop									

Shock absorbers DYSC

Technical data

Function



- \varnothing - Size
4 ... 25
- | - Stroke length
4 ... 25 mm



General technical data									
Size		4	5	7	8	12	16	20	25
Stroke	[mm]	4	5	5	8	12	18	18	25
Mode of operation	Hydraulic shock absorber with spring return Single acting, pushing								
Cushioning	Self-adjusting, hard characteristic curve								
Cushioning length	[mm]	4	5	5	8	12	18	16	25
Type of mounting	With lock nut								
Impact velocity	[m/s]	0.05 ... 2		0.05 ... 3					
Mounting position	Any								
Product weight	[g]	5	9	17	36	81	210	370	575
Ambient temperature	[°C]	-10 ... +80							
Corrosion resistance class CRC ¹⁾	2								

1) Corrosion resistance class 2 to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents

Reset time [s]									
Size		4	5	7	8	12	16	20	25
Reset time ¹⁾		≤ 0.2					≤ 0.3		

1) The specified technical data refers to ambient temperature. At higher temperatures in the 80 °C range, the max. mass and the cushioning work must be reduced by 50% approx. At -10 °C, the reset time may be up to 1 second

Forces [N]									
Size		4	5	7	8	12	16	20	25
Min. insertion force ¹⁾		6.5	7.5	10	18	35	60	100	140
Max. stop force ²⁾ in end positions		100	200	300	500	1,000	2,000	3,000	4,000
Min. resetting force ³⁾		0.7	0.9	1.2	2.5	5	6	10	14

1) This is the minimum force that must be applied so that the shock absorber is pushed exactly into the retracted end position. This value is reduced correspondingly in the event of an extended external end position
2) If the max. stop force is exceeded, a fixed stop (e.g. YSRA) 0.5 mm must be fitted before the end of stroke
3) This is the maximum force which may act upon the piston rod, allowing for full extension of the shock absorber (e.g. protruding stem)

Energies [J]									
Size		4	5	7	8	12	16	20	25
Max. energy absorption per stroke		0.6	1	2	3	10	25	38	100
Max. energy absorption per hour		5,600	8,000	12,000	18,000	36,000	50,000	80,000	140,000
Max. residual energy		0.006	0.01		0.02	0.05	0.16	0.32	0.8

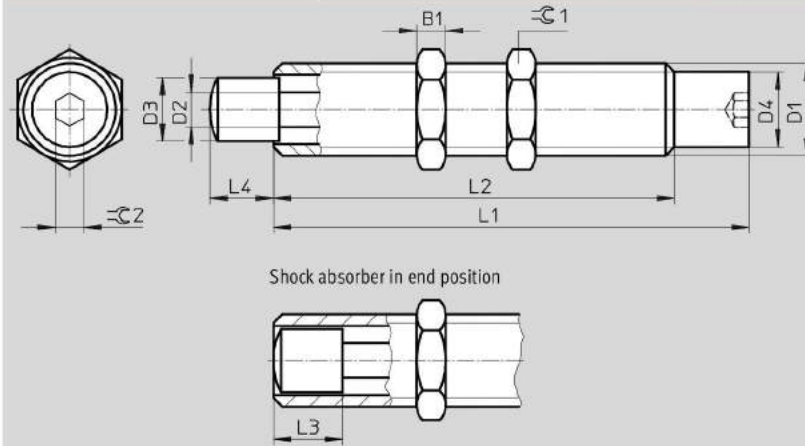
Mass range [kg]									
Size		4	5	7	8	12	16	20	25
Mass range up to		1.2	1.5	5	15	45	70	100	160

Shock absorbers DYSC

Technical data



Dimensions



Note
To increase the service life:
Avoid the ingress of dirt or fluids
into the piston chamber via the
piston rod by, for example, using
a cover.

Size	B1	D1	D2	D3	D4	L1	L2
[mm]			∅	∅	∅	±0.1	+0.3/-0.2
4	2.5	M6x0.5	2	3.5 ±0.05	5.4 ±0.05	35.5	25.5
5	3	M8x1	2.5	4.7 ±0.05	6.7 ±0.05	38.6	28.6
7	3.5	M10x1	3	6 ±0.1	8.6 ±0.05	45.15	34.15
8	4	M12x1	4	7 ±0.1	10.4 ±0.1	59.05	46.05
12	5	M16x1	6	11 ±0.1	14.5 ±0.1	82.5	69.5
16	6	M22x1.5	8	15 ±0.1	19.6 ±0.1	110	93
20	8	M26x1.5	10	18.8 ±0.1	23.8 ±0.1	122	105
25	10	M30x1.5	12	22.8 ±0.1	27.8 ±0.1	165	137

Size	L3 ¹⁾	L4	∅1	∅2	Max. tightening torque ∅1
[mm]					[Nm]
4	4	4 +0.30/-0.24	8	2	1
5	5.5	5 +0.32/-0.28	10	2.5	2
7	7	5 +0.37/-0.28	13	3	3
8	8	8 +0.42/-0.33	15	4	5
12	12	12 +0.50/-0.35	19	5	20
16	17	18 +0.50/-0.35	27	5	35
20	20	18 +0.50/-0.35	32	6	60
25	22	25 +0.50/-0.35	36	8	80

1) Buffer length

Ordering data

Size	Part No.	Type
[mm]		
4	570506	DYSC-4-4-Y1F
5	548011	DYSC-5-5-Y1F
7	548012	DYSC-7-5-Y1F
8	548013	DYSC-8-8-Y1F
12	548014	DYSC-12-12-Y1F
16	553593	DYSC-16-18-Y1F
20	2479149	DYSC-20-18-Y1F
25	2480234	DYSC-25-25-Y1F