Shock absorbers DYSW

Peripherals overview and type codes

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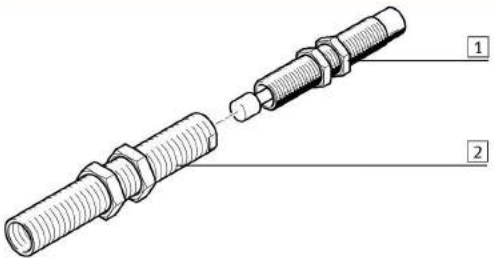
Peripherals overview



Accessories

	Type	Brief description	→ Page/Internet
1	Shock absorber DYSW	Hydraulic shock absorber with rapidly increasing cushioning force curve	31
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

DYSW	–	8	–	14	–	Y1		F

Type

DYSW	Shock absorber

Size

Stroke [mm]

Additional feature

Y1	Internal hex

Stop

F	With fixed stop

Shock absorbers DYSW

Technical data

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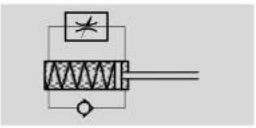
Function



Size
4 ... 12

Stroke length
6 ... 20 mm

General technical data							
Size		4	5	7	8	10	12
Stroke	[mm]	6	8	10	14	17	20
Mode of operation		Hydraulic shock absorber with spring return					
		Single acting, pushing					
Cushioning		Self-adjusting, soft characteristic curve					
Cushioning length	[mm]	6	8	10	14	17	20
Type of mounting		With lock nut					
Impact velocity	[m/s]	0.1 ... 2		0.1 ... 3			
Assembly position		Any					
Product weight	[g]	6	11	21	42	67	91
Ambient temperature	[°C]	–10 ... +80					

Reset time [s]							
Size		4	5	7	8	10	12
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	10	12
Min. insertion force[1)]	6.5	7.5	10	18	25	35
Max. stop force [2)] in end positions (housing)	100	200	300	500	700	1,000
Min. resetting force[3)]	0.7	0.9	1.2	2.5	3.5	5

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	10	12
Max. energy absorption per stroke	0.8	1.3	2.5	4	8	12
Max. energy absorption per hour	7,000	10,000	15,000	21,000	30,000	41,000
Max. residual energy	0.006	0.01	0.01	0.02	0.03	0.05

Mass range [kg]						
Size	4	5	7	8	10	12
Mass range up to	1.2	2	5	10	20	30

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Technical data

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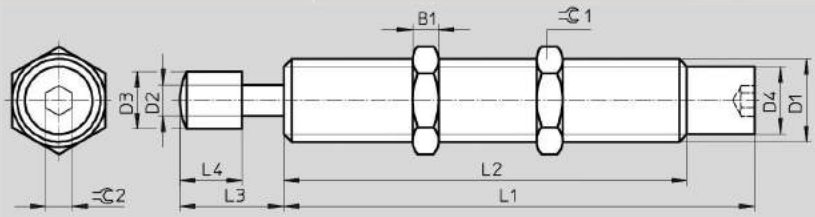
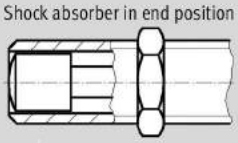
Dimensions



Shock absorber in end position



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 [mm]	B1	D1	D2 Ø	D3 Ø	D4 Ø	L1 +0.1
4	2.5	M6x0.5	2	3.5±0.05	5.35±0.05	35.5
5	3	M8x1	2.5	4.7±0.05	6.7±0.05	43.1
7	3.5	M10x1	3	6±0.1	8.6±0.05	52.05
8	4	M12x1	4	7±0.1	10.4±0.1	66.05
10	5	M14x1	5	9±0.1	12.4±0.1	77.55
12	5	M16x1	6	11±0.1	14.4±0.1	90.75

Size [mm]	L2 +0.3 −0.2	L3	L4	⌀C1	⌀C2	Max. tightening torque ⌀C1 [Nm]
4	25.5	6+0.30/−0.24	4±0.05	8	2	1
5	33.1	8+0.32/−0.28	5.5±0.1	10	2.5	2
7	41.05	10+0.37/−0.28	7±0.2	13	3	3
8	53.05	14+0.37/−0.28	8±0.2	15	4	5
10	64.55	17+0.37/−0.28	10±0.2	17	4	8
12	77.75	20+0.45/−0.30	12±0.2	19	5	20

Ordering data

Size [mm]	Part No.	Type
4	**548070**	**DYSW-4-6-Y1F**
5	**548071**	**DYSW-5-8-Y1F**
7	**548072**	**DYSW-7-10-Y1F**
8	**548073**	**DYSW-8-14-Y1F**
10	**548074**	**DYSW-10-17-Y1F**
12	**548075**	**DYSW-12-20-Y1F**