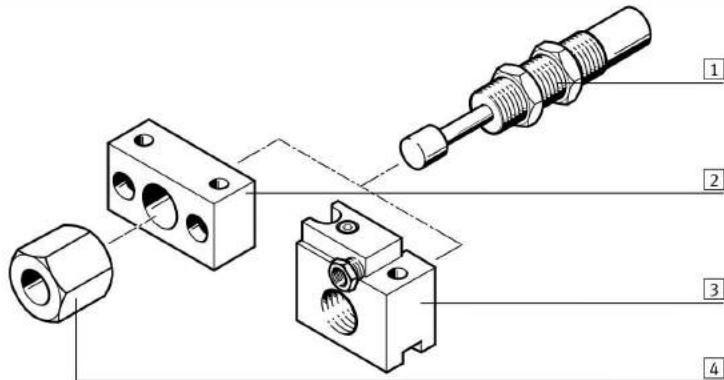


# Shock absorbers YSRW

Peripherals overview and type codes

## Peripherals overview



Accessories			
	Type	Brief description	→ Page/Internet
1	Shock absorber YSRW	Hydraulic shock absorber with progressive cushioning characteristic	27
2	Mounting flange YSRF	Mounting option for shock absorber	42
3	Mounting flange YSRF-S	Mounting option for shock absorber with attached stop sleeve and position sensing	43
4	Stop limiters YSRA	Stroke limiter for shock absorber	44
-	Inductive proximity sensor SIEN	For mounting flange YSRF-S	45

## Type codes

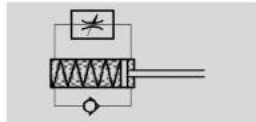
	YSRW	-	10	-	20
<b>Type</b>					
YSRW	Shock absorber				
<b>Size</b>					
<b>Stroke [mm]</b>					

# Shock absorbers YSRW

FESTO

Technical data

Function



- $\varnothing$  - Size  
5 ... 20 mm
- | - Stroke length  
8 ... 34 mm



General technical data								
Size		5	7	8	10	12	16	20
Stroke	[mm]	8	10	14	17	20	26	34
Mode of operation		Hydraulic shock absorbers with return spring						
		Single acting, pushing						
Cushioning		Self-adjustable						
Cushioning length	[mm]	8	10	14	17	20	26	34
Type of mounting		With locknut						
Impact velocity	[m/s]	0.1 ... 2		0.1 ... 3				
Mounting position		Any						
Product weight	[g]	8	18	34	54	78	190	330
Ambient temperature	[°C]	-10 ... +80						
Corrosion resistance class CRC <sup>1)</sup>		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		5	7	8	10	12	16	20
Reset time <sup>1)</sup>		≤ 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		5	7	8	10	12	16	20
Min. insertion force <sup>1)</sup>		7.5	10	18	25	35	60	100
Max. stop force <sup>2)</sup> in end positions		200	300	500	700	1,000	2,000	3,000
Min. resetting force <sup>3)</sup>		0.9	1.2	2.5	3.5	5	6	10

- 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		5	7	8	10	12	16	20
Max. energy absorption per stroke		1.3	2.5	4	8	12	35	70
Max. energy absorption per hour		10,000	15,000	21,000	30,000	41,000	68,000	100,000
Max. residual energy		0.01		0.02	0.03	0.05	0.16	0.32

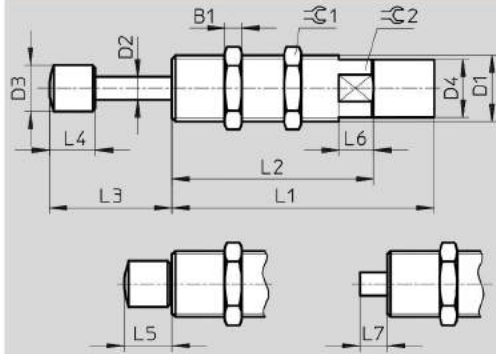
Mass range [kg]								
Size		5	7	8	10	12	16	20
Permissible mass range up to		2	5	10	20	30	50	80

# Shock absorbers YSRW

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	L3
[mm]			∅	∅	∅	±0.1	±0.3	
5	3	M8x1	2.5	4.7 ±0.05	6.7 ±0.05	33.5	22.5	13.8 +0.6/-0.25
7	3.5	M10x1	3	6 ±0.1	8.6 ±0.05	41	30	17.3 +0.7/-0.25
8	4	M12x1	4	8 ±0.2	10.4 ±0.1	53	40	22.3 +0.7/-0.25
10	5	M14x1	5	10 ±0.2	12.4 ±0.1	62	49	27.5 +0.7/-0.25
12	5	M16x1	6	12 ±0.2	14.5 ±0.1	72.5	59.5	32.5 +0.7/-0.25
16	6	M22x1.5	8	16 ±0.2	20 ±0.1	91	70	42.5 +0.7/-0.35
20	8	M26x1.5	10	18.8 ±0.2	24 ±0.1	112	91	54.5 +0.7/-0.35

Size	L4	L5	L6	L7	∅1	∅2	Max. tightening torque ∅1
[mm]			+0.5				[Nm]
5	5.5 ±0.1	5.8 +0.35/-0.25	5	3.5 ±0.25	10	7	2
7	7 ±0.2	7.3 +0.35/-0.25	6	4.3 ±0.25	13	9	3
8	8 ±0.2	8.3 +0.4/-0.25	8	5.3 +0.3/-0.25	15	11	5
10	10 ±0.2	10.5 +0.4/-0.25	10	6.5 +0.3/-0.25	17	13	8
12	12 ±0.2	12.5 +0.4/-0.25	12	7.5 +0.3/-0.25	19	15	20
16	16 ±0.2	16.5 +0.4/-0.25	12	9.5 +0.3/-0.25	27	20	35
20	20 ±0.2	20.5 +0.4/-0.25	12	11.5 +0.3/-0.25	32	24	60

## Ordering data

Size	Part No.	Type
[mm]		
5	191192	YSRW-5-8
7	191193	YSRW-7-10
8	191194	YSRW-8-14
10	191195	YSRW-10-17
12	191196	YSRW-12-20
16	191197	YSRW-16-26
20	191198	YSRW-20-34