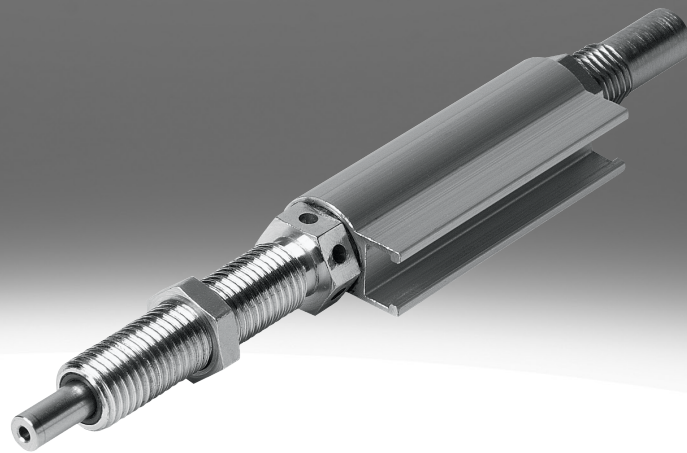


Shock absorber YSRWJ

FESTO



Characteristics

At a glance

Further information → [ysrwj](#)

- Self-adjusting, progressive, hydraulic shock absorbers
- Slowly increasing cushioning force curve
- Adjustable cushioning stroke
- End-position sensing with proximity switch
- Precision end-position adjustment
- Can be flexibly used in handling and assembly technology

Diagrams

Further information → [ysrwj](#)

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

Type code

| 001 | Series |
|-------|----------------|
| YSRWJ | Shock absorber |

| 002 | Size |
|-----|------|
| 5 | 5 mm |
| 7 | 7 mm |
| 8 | 8 mm |

| 003 | Stroke [mm] |
|-----|-------------|
| 8 | 8 |
| 10 | 10 |
| 14 | 14 |

| 004 | Position sensing |
|-----|----------------------|
| A | For proximity sensor |

Datasheet

General technical data

| | | | |
|---|---|-------|-------|
| Size | 5 | 7 | 8 |
| Stroke | 8 mm | 10 mm | 14 mm |
| Mode of operation | Single-acting, Pushing | | |
| Cushioning | Self-adjusting, Soft characteristic curve | | |
| Cushioning length | 8 mm | 10 mm | 14 mm |
| Type of mounting | Via lock nut | | |
| Position detection | Via proximity switch | | |
| Max. impact speed | 2 m/s | 3 m/s | |
| Mounting position | optional | | |
| Ambient temperature | 0 ... 60°C | | |
| Corrosion resistance class CRC ¹⁾ | 2 - Moderate corrosion stress | | |

1) Corrosion resistance class CRC 2 according to Festo standard FN 940070. Moderate corrosion stress. Indoor application where condensation may occur. External visible parts with primarily decorative surface requirements that are in direct contact with a normal industrial environment.

Reset time

| | | | |
|--|-------|---|---|
| Size | 5 | 7 | 8 |
| Reset time at room temperature ¹⁾ | 0.2 s | | |

1) The technical data provided refer to room temperature. At higher temperatures of around 80 °C, the max. mass and the cushioning energy must be reduced by approx. 50%. At 0 °C, the reset time may be up to 1 second.

Forces

| | | | |
|-------------------------------|-------|-------|-------|
| Size | 5 | 7 | 8 |
| Max. stop force ¹⁾ | 200 N | 300 N | 500 N |
| Reset force ²⁾ | 1 N | 1.7 N | 3.5 N |

1) The max. stop force must not be exceeded.

2) This is the maximum force that can act on the piston rod so that the shock absorber still extends completely.

Energy

| | | | |
|------------------------------------|----------|----------|----------|
| Size | 5 | 7 | 8 |
| Max. energy consumption per stroke | 1 J | 2 J | 3 J |
| Max. energy consumption per hour | 10,000 J | 15,000 J | 21,000 J |
| Max. residual energy | 0.01 J | 0.02 J | |

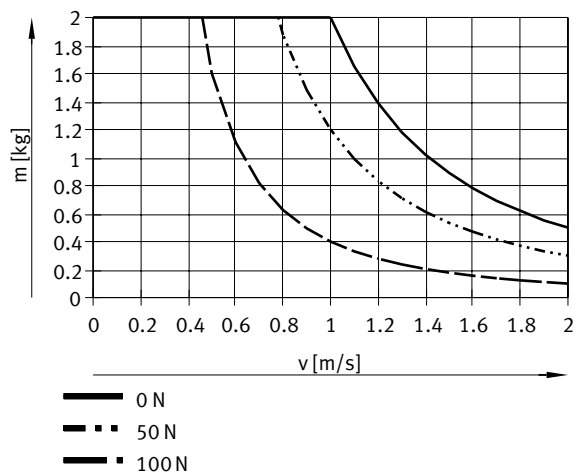
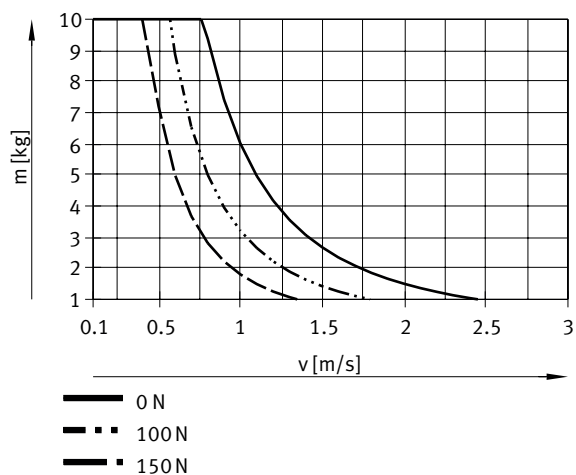
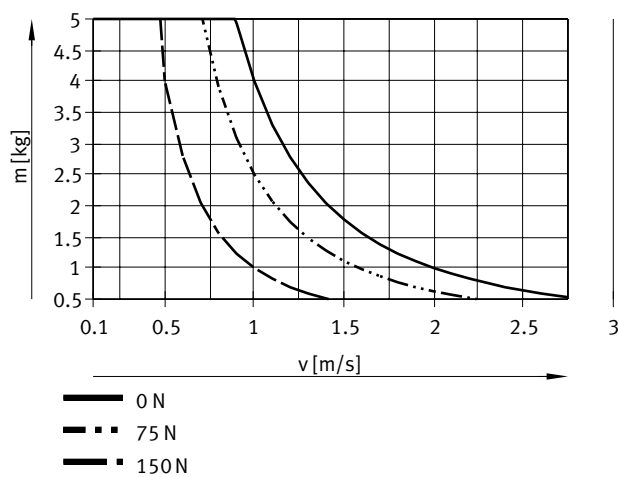
Weight

| | | | |
|----------------|------|------|-------|
| Size | 5 | 7 | 8 |
| Product weight | 45 g | 75 g | 110 g |

Materials

| | | | |
|------------------------|----------------------|---|---|
| Size | 5 | 7 | 8 |
| Material housing | Brass, Nickel-plated | | |
| Material piston rod | High-alloy steel | | |
| Material seals | NBR | | |
| LABS (PWIS) conformity | VDMA24364-B2-L | | |

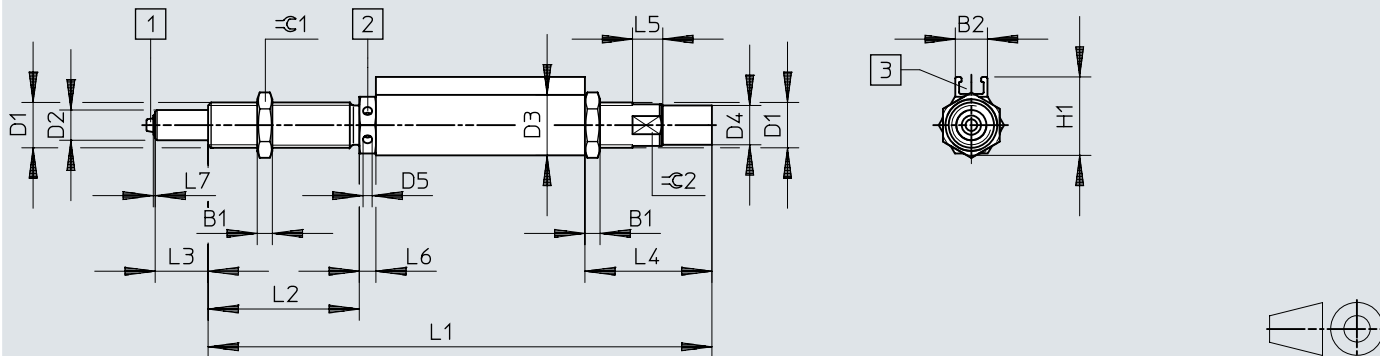
Datasheet

Impact velocity v as a function of mass m – YSRWJ-5Impact velocity v as a function of mass m – YSRWJ-8Impact velocity v as a function of mass m – YSRWJ-7

Dimensions

Dimensions – YSRWJ

Download CAD data → www.festo.com




- [1] Rubber buffer, only for sizes: YSRWJ-7-10-A and YSRWJ-8-14-A
- [2] Precision end position adjustment
- [3] Slot for proximity switch SME/SMT-8

| | B1 | B2 | D1 | D2 | D3 | D4 | D5 | H1 |
|--------------|-----|------|-------|----|------|-----------|------|-------|
| | | +0,4 | | | +0,1 | | +0,1 | +0,3 |
| YSRWJ-5-8-A | 3 | 8,1 | M8x1 | 4 | 12 | 6,7 ±0,05 | 2 | 16,5 |
| YSRWJ-7-10-A | 3,5 | 8,5 | M10x1 | 6 | 14 | 8,6 ±0,05 | 2,4 | 18,3 |
| YSRWJ-8-14-A | 4 | 8,5 | M12x1 | 8 | 16 | 10,4 ±0,1 | 2,4 | 20,75 |

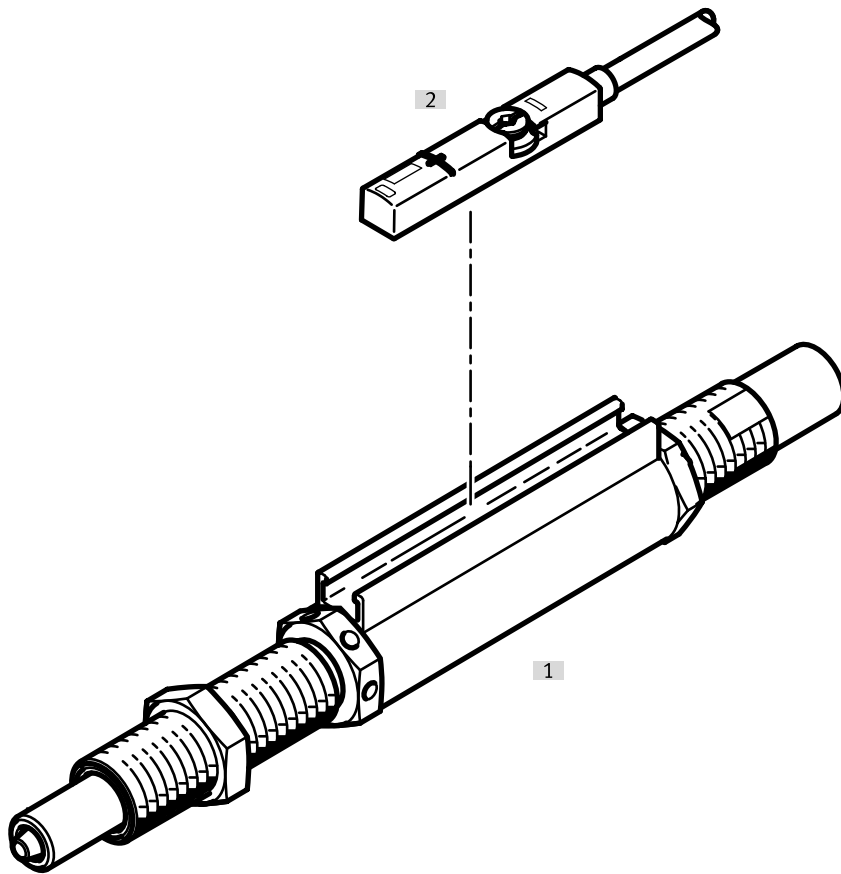
| | L1 | L2 | L3 | L4 | L5 | L6 | L7 | ≅C1 | ≅C2 |
|--------------|-----------|------|---------------|------------|------|------------|------|-----|-----|
| | +0,3/-0,1 | +0,4 | | +0,45/-0,1 | +0,5 | +0,1/-0,55 | +0,3 | | |
| YSRWJ-5-8-A | 97,4 | 32,5 | 8 +0,7/-0,55 | 21,6 | 5 | 4,4 | 0,5 | 10 | 7 |
| YSRWJ-7-10-A | 144,8 | 40 | 10 +0,8/-0,55 | 21,1 | 6 | 4 | 0,5 | 13 | 9 |
| YSRWJ-8-14-A | 133,3 | 40 | 14 +0,8/-0,55 | 33,6 | 8 | 4,4 | 0,5 | 15 | 11 |

Ordering data

| Ordering data | | | | | |
|---|------|--------|--|---------------|---------------------|
| | Size | Stroke | Cushioning | Part no. | Type |
|  | 5 | 8 mm | Self-adjusting, Soft characteristic curve | 192968 | YSRWJ-5-8-A |
| | 7 | 10 mm | | 192967 | YSRWJ-7-10-A |
| | 8 | 14 mm | | 192966 | YSRWJ-8-14-A |

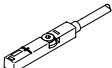
Peripherals

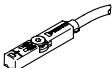
Peripherals overview YSRWJ





| Accessories | | → Page/Internet |
|------------------------------|--|-----------------|
| Type/order code | Description | |
| [1] Shock absorber YSRWJ | Hydraulic shock absorber with progressive cushioning characteristic. Cushioning length is adjustable | ysrwj |
| [2] Proximity switch SME/SMT | Sensing option for end positions | 9 |

Accessories

| Proximity switch SME for T-slot, magnetic reed | | | | | | | |
|---|--|--------------------|-----------------------|------------------|----------|-------------------------|------------------|
| | Type of mounting | Switching output | Electrical connection | Cable length | Part no. | Type | |
|  | Screw-clamped, Insertable in the slot from above | 3-wire N/O contact | Open end | 2.5 m | 543862 | SME-8M-DS-24V-K-2,5-OE | |
| | | | Plug M8, A-coded | 0.3 m | 543861 | SME-8M-DS-24V-K-0,3-M8D | |
| | Clamped in T-slot, Insertable in the slot lengthwise | None | Open end | 2.5 m | 150855 | SME-8-K-LED-24 | |
| | | | | Plug M8, A-coded | 0.3 m | 150857 | SME-8-S-LED-24 |
| | | | N/C contact, 3-wire | Open end | 7.5 m | 160251 | SME-8-O-K-LED-24 |
| | | | | | | | |

| Proximity switch SMT for T-slot, magneto-resistive | | | | | | | |
|---|--|------------------------|-----------------------|--------------|-------------------|---------------------------|---------------------------|
| | Type of mounting | Switching output | Electrical connection | Cable length | Part no. | Type | |
|  | Screw-clamped, Insertable in the slot from above | 3-wire NPN N/O contact | Open end | 2.5 m | ★ 574338 | SMT-8M-A-NS-24V-E-2,5-OE | |
| | | | Plug M8, A-coded | 0.3 m | ★ 574339 | SMT-8M-A-NS-24V-E-0,3-M8D | |
| | | 3-wire PNP N/C contact | Open end | 7.5 m | ★ 574340 | SMT-8M-A-PO-24V-E-7,5-OE | |
| | | | | 2.5 m | ★ 574335 | SMT-8M-A-PS-24V-E-2,5-OE | |
| | | 3-wire PNP N/O contact | Plug M8, A-coded | Open end | 0.3 m | ★ 574334 | SMT-8M-A-PS-24V-E-0,3-M8D |
| | | | | | Plug M12, A-coded | | ★ 574337 |

| Connecting cables NEBU, straight | | | | | | |
|---|---|---|--|--------------|----------|---------------------|
| | Electrical connection 1, connector system | Electrical connection 2, connector system | Electrical connection 2, number of connections/cores | Cable length | Part no. | Type |
|  | M8x1, A-coded, to EN 61076-2-104 | Open end | 3 | 2.5 m | 541333 | NEBU-M8G3-K-2.5-LE3 |
| | | | | 5 m | 541334 | NEBU-M8G3-K-5-LE3 |

| Connecting cables NEBU, angled | | | | | | |
|---|---|---|--|--------------|----------|---------------------|
| | Electrical connection 1, connector system | Electrical connection 2, connector system | Electrical connection 2, number of connections/cores | Cable length | Part no. | Type |
|  | M8x1, A-coded, to EN 61076-2-104 | Open end | 3 | 2.5 m | 541338 | NEBU-M8W3-K-2.5-LE3 |
| | | | | 5 m | 541341 | NEBU-M8W3-K-5-LE3 |