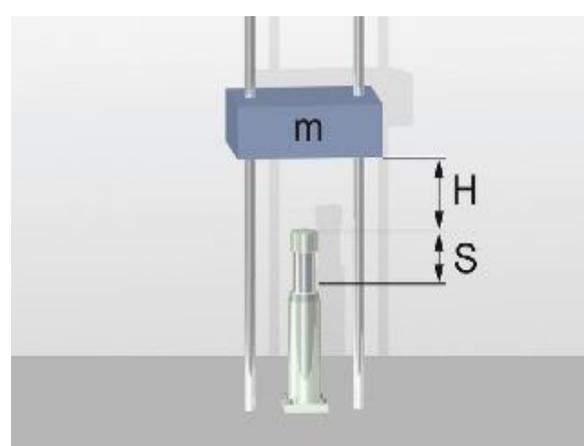


## A. Free falling mass



### Characteristics

#### Energy absorption

max. 800.000 Nm

#### Extended Life Time

Piston rod: hardened / hard chrome-plated  
Special seals + oils

#### Surface protection

Housing zinc plated / painted

#### Deceleration

Customer specific

#### Temperature range

-20°C - +80°C / opt.: -40°C - +100°C

#### RoHS compliant

Directive 2002/95/EC

#### Applications

Automated warehouses, Stacker cranes,  
Cranes

## Special Calculation

### Customer Data

|  |    |         |     |
|--|----|---------|-----|
| <b>Mass</b>                            | m: | 3500.00 | kg  |
| <b>Height</b>                          | H: | 5.55    | m   |
| <b>Strokes per hour</b>                | X: | 1       | 1/h |
| <b>No. of parallel shock absorbers</b> | n: | 2       |     |
| <b>Stroke</b>                          | S: | 800     | mm  |

### Selection

#### Heavy-duty shock absorber

|                              |                          |                  |  |
|------------------------------|--------------------------|------------------|--|
| Model                        | LDS-80-800-V-FH-N-M-xxxx |                  |  |
| Company                      | Impexron                 |                  |  |
| Project                      | 401463                   |                  |  |
| Article number               | LDS80800                 |                  |  |
| Rate of utilization/stroke   | 55.1                     | %                |  |
| Rate of utilization/h        | 1.8                      | %                |  |
| Stroke                       | 800                      | mm               |  |
| Total length hor.            | 2043.00                  | mm               |  |
| Total length vert.           | 2043.00                  | mm               |  |
| Kinetic energy per stroke    | 95279.62                 | Nm               |  |
| Propelling energy p. stroke: | 13734.00                 | Nm               |  |
| Total energy per stroke      | 109013.62                | Nm               |  |
| Total energy per hour        | 109013.62                | Nm               |  |
| Effective mass               | 2002.25                  | kg               |  |
| Counterforce                 | 163520.44                | N                |  |
| Deceleration time            | 0.18                     | sec              |  |
| Deceleration rate            | 81.67                    | m/s <sup>2</sup> |  |
| Impact speed                 | 10.44                    | m/s              |  |
| Return spring force min      | 0.00                     | N                |  |
| Return spring force max      | 0.00                     | N                |  |

Indoor application (no humidity)

- Piston rod: chrome plated, hardened
- Housing: zinc plated
- Seal bushing from high strength aluminium

Standard seal

#### Technical data per shock absorber (+ 20° C ambient temperature)

### Accessories

Article number

|                |   |
|----------------|---|
| <b>L80-11</b>  | Stop cap - PU                                     |
| <b>L8017AV</b> | Enlarged stop cap                                 |
| <b>L8014</b>   | FV- Square flange, front; FH- Square flange, rear |
| <b>L8015</b>   | FB - Foot mounting                                |
| <b>L8016</b>   | SB - Clevis mounting                              |
| <b>L80SA</b>   | Metal Wiper                                       |
| <b>L8026</b>   | N - Proximity switch with cable                   |

|                  |                                       |
|------------------|---------------------------------------|
| <b>L8027</b>     | N2 - Proximity switch with plug       |
| <b>L80-B1000</b> | Protection bellows                    |
| <b>L80M</b>      | M - Outdoor version                   |
| <b>L80-XXXSC</b> | SC - Security chain (XXX = stroke)    |
| <b>LD80HT</b>    | HT - High temperature seals incl. oil |
| <b>LD80LT</b>    | NT - Low temperature seals incl. oil  |

Warranty claims for calculated and selected products are only accepted after written confirmation of the selection.