

# INDUSTRIAL SHOCK ABSORBERS POWERSTOP

## THREAD M33X1.5

### ► SERIES

**PowerStop**



- |  |                     |                                  |                        |
|--|---------------------|----------------------------------|------------------------|
| ► Standard Energy pressure max. (abs.)   | 1 [bar]             | ► Locknut tightening torque max. | 80 [Nm]                |
| ► High Energy pressure max. (abs.)       | 10 [bar]            | ► Force in end position max.     | 30 [kN]                |
| ► Adjustable Energy pressure max. (abs.) | 10 [bar]            | ► Material                       | Stainless steel        |
| ► Angle of Impact max.                   | 2 [°]               | ► Material fixed stop            | Aluminum nickel plated |
| ► Max. piston return time                | N: 0.5 / L: 0.8 [s] | ► PWIS-free                      | Yes                    |
| ► Permitted temperature range            | -10 ... +70 [°C]    | ► RoHS compliant                 | Yes                    |
| ► Organic oil (biodegradable)            | H1-certified        | ► REACH compliant                | Yes                    |

### ► TECHNICAL DATA

	Design	Series	Thread	Stroke variant	Stroke [mm]	Hardness degree	Impact velocity			Energy absorption max.			Protection	Return force		Head	Version
							min. max.		per stroke	per stroke		per stroke		min.	max.		
							[m/s]			[J]	[J/h]						
STANDARD ENERGY	P	SE	33X15	N	30	H	0,1	1,2	185	140.000	185	D	15	35	D	-A	
							M	0,8	2,2	185	140.000	185	A	15	35		S
							S	1,8	3,5	185	140.000	185	F	15	35		K
							W	3	5	185	140.000	185	B	15	230		K
HIGH ENERGY	P	HE	33X15	N	30	H	0,1	1,2	400	140.000	800	D	40	65	D	-A	
							M	0,8	2,2	360	140.000	650	A	40	65		S
				L	50	H	S	1,8	3,5	320	140.000	500	F	40	65		K
							W	3	5	280	140.000	350	B	40	260		K
ADJUSTABLE ENERGY	P	AE	33X15	N	30	H	0,1	5	400	140.000	400	D	40	65	D	-A	
												A	40	65	S		
				L	50							F	40	65	K		
												B	40	260	K		

### ► HOW TO ORDER CORRECTLY

P HE 33X15 L H A K -A



#### Product finder

- Calculate shock absorbers quicker
- Clearly arranged selection guide
- Smart solution – available on mobile devices

[www.zimmer-group.de/en/pdti](http://www.zimmer-group.de/en/pdti)

#### Example order no.

PowerStop High Energy 33X15

- Stroke variant: long (L)
- Hardness degree: Hard (H)
- Protection: wiper (A)
- Head: plastic head (K)

## PROTECTION

no protection D -A	Felt ring F -A	Wiper (NBR) A -A	Bellow (TPE) B -A
in a clean environment	against dust, chips, ...	against liquid, oil, ...	on request sealed

## TECHNICAL DRAWINGS – STANDARD STROKE

N -A

	no head D -A	with steel head S -A	with plastic head K -A	with bellow and steel head B S -A	with bellow and plastic head B K -A
STANDARD ENERGY	 155, 24, 41, 10, 4.5, 12, 30, 125, 570g	 170, 30, 22, 31, 15, 125, 640g	 170, 30, 22, 31, 15, 125, 640g	 179, 30, 22, 39, 24, 110.5, 690g	 179, 30, 22, 39, 24, 110.5, 690g
HIGH ENERGY	 156, 24, 41, 10, 4.5, 12, 30, 126, 590g	 171, 30, 22, 31, 15, 126, 660g	 171, 30, 22, 31, 15, 126, 660g	 180, 30, 22, 39, 24, 111.5, 710g	 180, 30, 22, 39, 24, 111.5, 710g
ADJUSTABLE ENERGY	 173, 24, 41, 10, 4.5, 12, 30, 17, 126, 640g	 188, 30, 22, 31, 15, 126, 710g	 188, 30, 22, 31, 15, 126, 710g	 197, 30, 22, 39, 24, 111.5, 760g	 197, 30, 22, 39, 24, 111.5, 760g

## TECHNICAL DRAWINGS – LONG STROKE

L -A

	no head D -A	with steel head S -A	with plastic head K -A
HIGH ENERGY	 221, 24, 41, 10, 4.5, 12, 50, 171, 790g	 236, 50, 22, 31, 15, 171, 860g	 236, 50, 22, 31, 15, 171, 860g
ADJUSTABLE ENERGY	 238, 24, 41, 10, 4.5, 12, 50, 17, 171, 850g	 253, 50, 22, 31, 15, 171, 920g	 253, 50, 22, 31, 15, 171, 920g



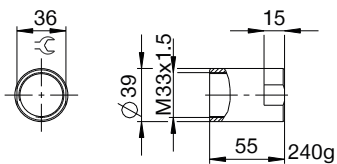
# INDUSTRIAL SHOCK ABSORBERS POWERSTOP

## THREAD M33X1.5

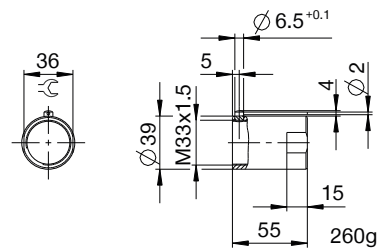
### ACCESSORIES

Pos.	Order no.	Accessories	Remarks
①	<b>PAH33X15-A</b>	Stop sleeve	Including 1x PVM33X15-A
②	<b>PSH33X15-A</b>	Sensor stop sleeve	Query only possible via damper with steel or plastic head (except for bellows). Inductive sensor, PNP closer (NO), PUR cable 2 m, degree of protection IP65. For further information see separate data sheet.
③	<b>PBV33X15NA-A</b>	Side load adapter standard stroke Protection: wiper (NBR)	Impact angle max. 30°. Can only be used in combination with industrial shock absorbers without head. Locknut PVM42X15-A suitable for external thread of the side load adapter.
④	<b>PBV33X15NF-A</b>	Side load adapter standard stroke Protection: felt ring (felt)	Impact angle max. 30°. Can only be used in combination with industrial shock absorbers without head. Locknut PVM42X15-A suitable for external thread of the side load adapter.
⑤	<b>PBV33X15LA-A</b>	Side load adapter long stroke Protection: wiper (NBR)	Impact angle max. 30°. Can only be used in combination with industrial shock absorbers without head. Locknut PVM42X15-A suitable for external thread of the side load adapter.
⑥	<b>PBV33X15LF-A</b>	Side load adapter long stroke Protection: felt ring (felt)	Impact angle max. 30°. Can only be used in combination with industrial shock absorbers without head. Locknut PVM42X15-A suitable for external thread of the side load adapter.
⑦	<b>PKS33X15-A</b>	Clamping flange orthogonal screwed	Tightening torque of the screws max. 9 Nm.
⑧	<b>PKP33X15-A</b>	Clamping flange screwed in parallel	Tightening torque of the screws max. 9 Nm.
⑨	<b>PVM33X15-A</b>	Stainless steel locknut	Included with the industrial shock absorber.
⑩	<b>PDD33X15-A</b>	Pressure chamber seal	Recommended fixation with PVM33X15-A. Seal must be in full contact on both sides.

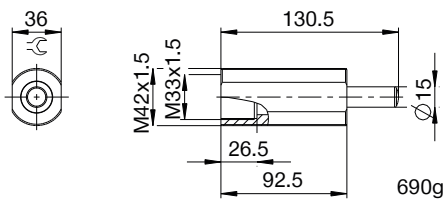
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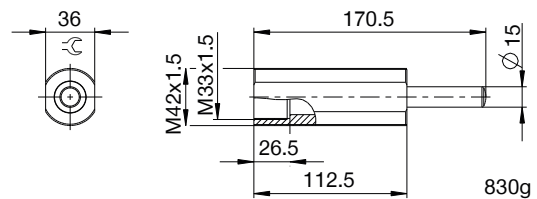
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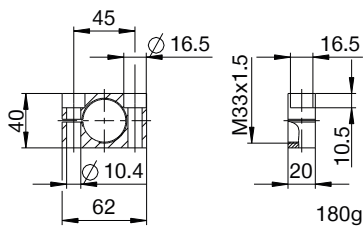
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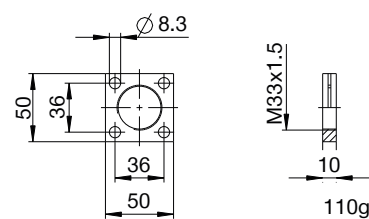
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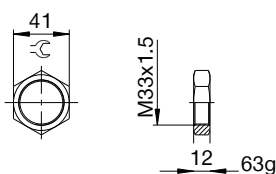
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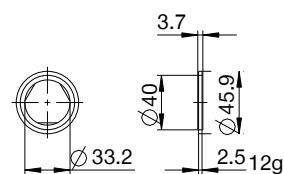
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⑩



## ▶ CLASSIFICATION

**P** **HE** **33X15** **L** **H** **A** **K** **-A**

### Design

**P** Industrial shock absorbers PowerStop

### Series

**ME** Mini Energy

**SE** Standard Energy

**HE** High Energy

**AE** Adjustable Energy

### Thread

**33** Thread nominal diameter

**X**

**15** Thread pitch (factor 10)

### Stroke variant

**N** Standard stroke

**L** Long stroke

**V** Extra long stroke

### Hardness degree

**H** Hard (0.1 - 1.2 m/s; Adjustable Energy: 0.1 - 5 m/s)

**M** Medium (0.8 - 2.2 m/s)

**S** Soft (1.8 - 3.5 m/s)

**W** Supersoft (3 - 5 m/s)

### Protection

**D** no protection

**F** Felt ring

**A** Wiper (NBR)

**B** Bellow (TPE)

### Head

**D** no head

**S** with steel head

**K** with plastic head

### Version

**-A** Versioning from a to z