

# INDUSTRIAL SHOCK ABSORBERS POWERSTOP

## THREAD M20X1.5

### ► SERIES

PowerStop®



► <b>Material</b>	Stainless steel	► <b>Organic oil (biodegradable)</b>	HEES
► <b>Permitted temperature range</b>	-10 ... +70 [°C]	- <b>H1-certified</b>	Yes
► <b>Angle of Impact max.</b>	2 [°]	- <b>PWIS-free</b>	Yes
► <b>Max. force at fixed stop</b>	10 [kN]	► <b>RoHS compliant</b> - <b>REACH compliant</b>	Yes
► <b>Lock nut tightening torque</b>		► <b>Max. absolute pressure</b>	
- <b>Standard energy</b>	20 [Nm]	- <b>Standard energy</b>	1 [bar]
- <b>High Energy</b>	40 [Nm]	- <b>High Energy</b>	10 [bar]
- <b>Adjustable Energy</b>	40 [Nm]	- <b>Adjustable Energy</b>	10 [bar]

### ► TECHNICAL DATA

	Design	Series	Thread	Stroke variant	Stroke max. [mm]	Hardness degree	Impact velocity		Energy absorption max.			Protection	Reset			Head Integrated Fix stop	Version	
							min.	max.	Continuous operation		Emergency stop operation		Force min. [N]	Time max. [s]				
									per stroke [J]	per hour [J/h]					per stroke [J]			
STANDARD ENERGY	P	SE	20X15	N	15	H	0,1	1,2	41	90.000	41	D	7	15	0,3	D	x	
							M	0,8	2,2	41	90.000	41	F	7	15	0,3	E	-
							S	1,8	3,5	41	90.000	41	A	7	15	0,3	S	x
							W	3,0	5,0	41	90.000	41	B	7	52	0,3	K	x
HIGH ENERGY	P	HE	20X15	N	15	H	0,1	1,2	80	90.000	150	D	16	26	0,3	D	x	
							M	0,8	2,2	75	90.000	125	F	16	26	0,3	E	-
							S	1,8	3,5	70	90.000	100	A	16	26	0,3	S	x
							W	3,0	5,0	65	90.000	75	B	16	62	0,3	K	x
ADJUSTABLE ENERGY	P	AE	20X15	N	15	H	0,1	5,0	80	90.000	80	D	16	26	0,3	D	x	
							F	16	26	0,3	E	-						
							A	16	26	0,3	S	x						
							B	16	62	0,3	K	x						
HIGH ENERGY	P	HE	20X15	L	25	H	0,1	1,2	80	90.000	150	D	16	26	0,5	D	x	
							M	0,8	2,2	75	90.000	125	-	16	26	0,5	E	-
							S	1,8	3,5	70	90.000	100	F	16	26	0,5	S	x
							W	3,0	5,0	65	90.000	75	A	16	26	0,5	K	x
ADJUSTABLE ENERGY	P	AE	20X15	L	25	H	0,1	5,0	80	90.000	80	D	16	26	0,5	D	x	
							F	16	26	0,5	E	-						
							-	16	26	0,5	S	x						
							A	16	26	0,5	K	x						

## PROTECTION

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

## TECHNICAL DRAWINGS

	Short piston rod no head	Long piston rod no head	with steel head	with plastic head	with bellow and steel head	with bellow and plastic head
	N D -A	N E -A	N S -A	N K -A	N B S -A	N B K -A
STANDARD ENERGY						
HIGH ENERGY						
ADJUSTABLE ENERGY						

	Short piston rod no head	Long piston rod no head	with steel head	with plastic head
	L D -A	L E -A	L S -A	L K -A
HIGH ENERGY				
ADJUSTABLE ENERGY				



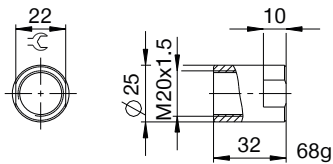
# INDUSTRIAL SHOCK ABSORBERS POWERSTOP

## THREAD M20X1.5

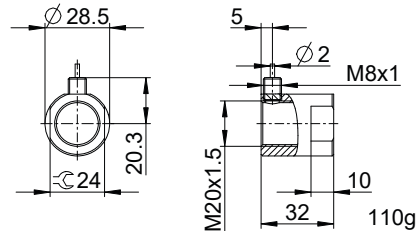
### ▶ ACCESSORIES

Pos.	Order no.	Accessories	Remarks
①	<b>PAH20X15-A</b>	Stop sleeve	Including 1x PVM20X15-A. Industrial shock absorber with bellow excluded.
②	<b>PSH20X15-B</b>	Sensor stop sleeve	Including 1x PVM20x15-A. Sensing only possible via industrial shock absorbers with steel or plastic head. Industrial shock absorber with bellow excluded. Inductive sensor, PNP (NC), 2 m PUR cable, IP67 degree of protection. See separate data sheet for additional information.
③	<b>PBV20X15ND-A</b>	Side load adapter standard stroke Protection: no protection	Impact angle max. 30°. Can only be used in combination with industrial shock absorber without protection and without the Short piston rod no head variant. Lock nut PVM25X15-A suitable for external thread of the side load adapter.
④	<b>PBV20X15NF-A</b>	Side load adapter standard stroke Protection: felt ring (felt)	Impact angle max. 30°. Can only be used in combination with industrial shock absorber without protection and without the Short piston rod no head variant. Lock nut PVM25X15-A suitable for external thread of the side load adapter.
⑤	<b>PBV20X15NA-A</b>	Side load adapter standard stroke Protection: wiper (NBR)	Impact angle max. 30°. Can only be used in combination with industrial shock absorber without protection and without the Short piston rod no head variant. Lock nut PVM25X15-A suitable for external thread of the side load adapter.
⑥	<b>PBV20X15LD-A</b>	Side load adapter long stroke Protection: no protection	Impact angle max. 30°. Can only be used in combination with industrial shock absorber without protection and without the Short piston rod no head variant. Lock nut PVM25X15-A suitable for external thread of the side load adapter.
⑦	<b>PBV20X15LF-A</b>	Side load adapter long stroke Protection: felt ring (felt)	Impact angle max. 30°. Can only be used in combination with industrial shock absorber without protection and without the Short piston rod no head variant. Lock nut PVM25X15-A suitable for external thread of the side load adapter.
⑧	<b>PBV20X15LA-A</b>	Side load adapter long stroke Protection: wiper (NBR)	Impact angle max. 30°. Can only be used in combination with industrial shock absorber without protection and without the Short piston rod no head variant. Lock nut PVM25X15-A suitable for external thread of the side load adapter.
⑨	<b>PKS20X15-A</b>	Clamping flange orthogonal screwed	Tightening torque of the screws max. 10 Nm.
⑩	<b>PKP20X15-A</b>	Clamping flange screwed in parallel	Tightening torque of the screws max. 5 Nm.
⑪	<b>PVM20X15-A</b>	Stainless steel locknut	Included with the industrial shock absorber.
⑫	<b>PDD20X15-A</b>	Pressure chamber seal	Recommended fixation with PVM20X15-A. Seal must be in full contact on both sides.

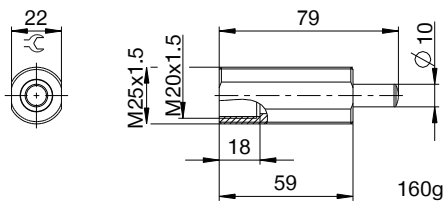
①



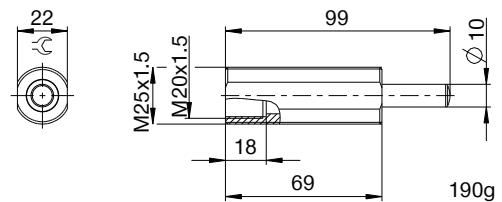
②



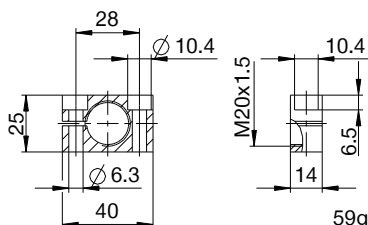
③ ④ ⑤



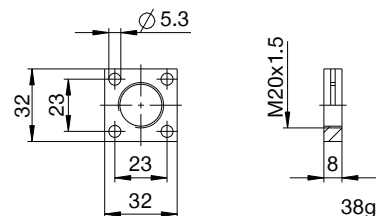
⑥ ⑦ ⑧



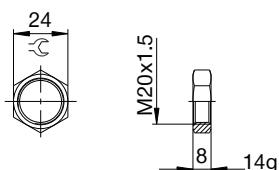
⑨



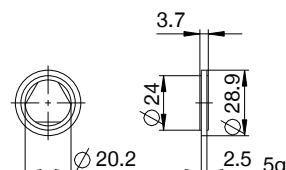
⑩



⑪



⑫



## ▶ CLASSIFICATION

**P** **HE** **20X15** **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

**20** Thread nominal diameter

**X**

**15** Thread pitch (factor 10)

### Stroke variant

**N** Standard stroke

**L** 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** Short piston rod no head

**E** Long piston rod no head

**S** with steel head

**K** with plastic head

### Version

**-A** Versioning from a to z