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**pneumatics**  
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# Stopper Cylinders

Series STVSR / STVDR / STVD

PDE2740TCUK

10/2021



ENGINEERING YOUR SUCCESS.

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**Important**

Before attempting any external or internal work on the cylinder or any connected components, make sure the cylinder is vented and disconnect the air supply in order to ensure isolation of the air supply.



**Note**

All technical data in this catalogue are typical data only.  
Air quality is essential for maximum cylinder service life (see ISO 8573).



**WARNING**

**FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.**

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# Pneumatic Stop Cylinders

Pneumatic stop cylinders with hydraulic industrial shock absorbers for soft, rebound-free stopping of a conveyed load.

## Pneumatic Stop Cylinders

- Soft, rebound-free stopping of a conveyed load.
- Flexible: for vertical or horizontal installation
- Types with shock absorber/roller lever combination, lone roller or roller with a piston rod that ensures direct stoppage
- Shock absorbers are easy to replace, even when fitted
- Rotating stop head for adjustment in line with the direction of travel of the conveyed load
- Rocker can be deactivated for alternate travel function
- Single and double acting cylinder variants
- Operating pressure up to 10 bar
- Different shock absorbers for conveyed load weights of up to 1700 kg and speeds of up to 45 m/min

### Rocker locking

After the conveyed load is stopped, the rocker is lowered and unlocked by applying compressed air. After the conveyed load has been moved, the return spring brings the rocker into its upper end position so that it is back in its start position for the next stopping procedure.

### Integrated shock absorbers

The shock absorbers, aligned to the weight and speed of the load, ensure gentle and precise stopping of the conveyed load

### Guide rod

Thanks to the easy-to-replace guide rod, the rocker can be quickly rotated so that the conveyor can move in a different direction.

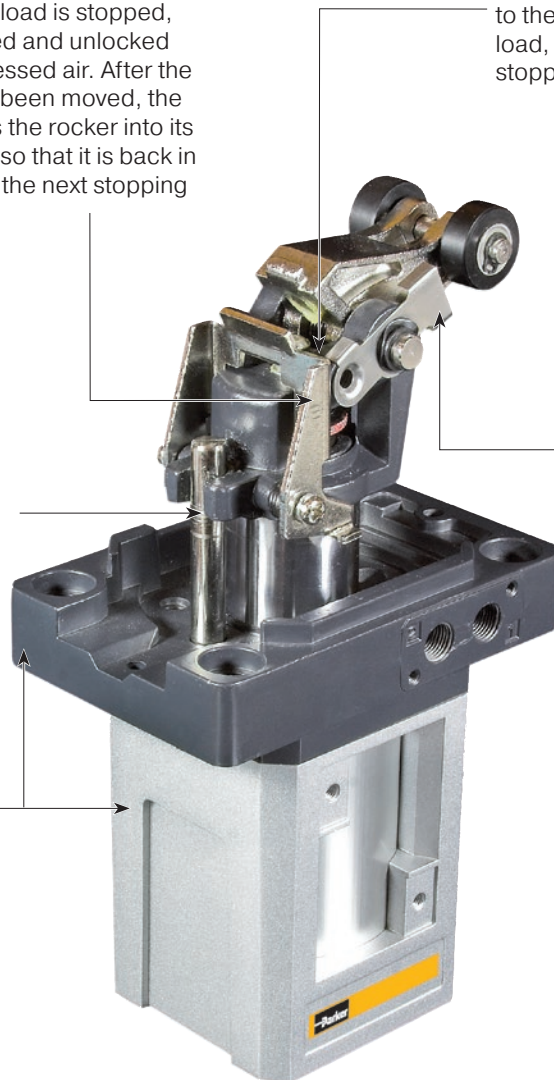
### Diecast Aluminum

The design of the robust, lightweight diecast aluminum and its compact size enables it to be installed in many different conveyor systems.



### Unrestricted conveyor movement

The rocker is held in the OFF position (deactivated) by simply clipping a spring steel sheet onto it. The conveyed load can pass through the stop cylinder unobstructed while the rocker is in this position.



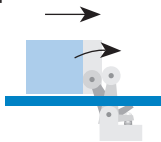
**Stopper Cylinder – Vertical Version**

**STVSR series**

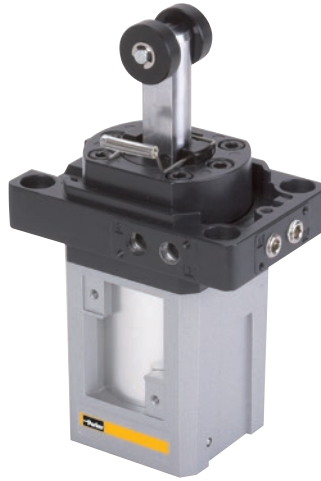


**Integrated shock absorber for heavy conveyed loads**

The built-in shock absorber stops the conveyed load in a gentle and precise manner without disturbing the load. Various shock absorbers are available depending on the weight of the conveyed load and the desired transport speed.

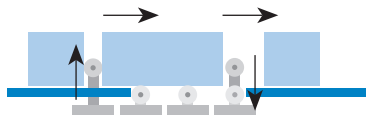


**STVDR series**



**Roller for lower conveyed load weights**

The piston rod with upward facing roller is lowered by applying compressed air once the conveyed load is on the ground. Afterwards, it is brought back into the upper end position by a return spring.

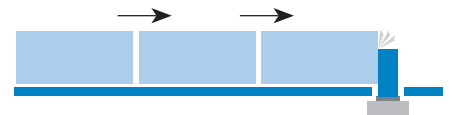


**STVD series**



**Direct stopping piston rod for heavy conveyed loads**

Reliably stops heavy conveyed loads at low transport speeds. Can also be used as a locking cylinder due to its solid piston rod.

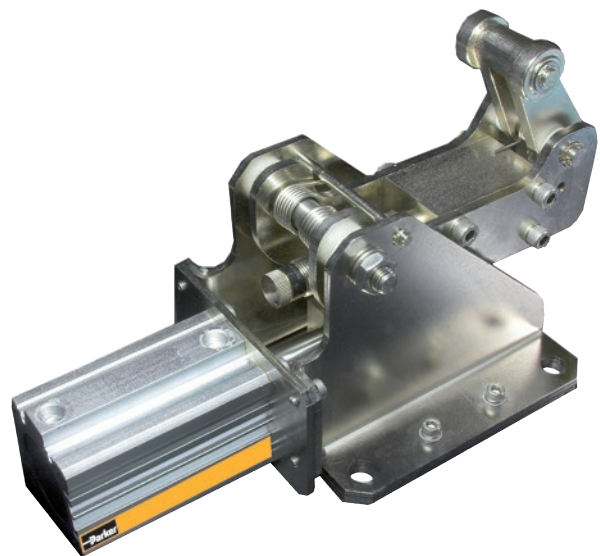


**Stopper Cylinder – Horizontal Version**

**STHSR series**

**Horizontal Stopper Cylinder with shock absorber**

Reliably stops heavy conveyed loads at high transport speeds. Well-suited for buffer areas.



**Pneumatic Stopper Cylinder**

**Vertical versions**

**Vertical stop cylinder with shock absorber and roller lever**



Cylinder Ø (mm)	Stroke (mm)	Order code
50	30	<b>STVSR-50-30-... </b>

**Vertical stop cylinder with roller**



Cylinder Ø (mm)	Stroke (mm)	Order code
50	30	<b>STVDR-50-30-... </b>

**Vertical stop cylinder with direct stopping piston rod**



Cylinder Ø (mm)	Stroke (mm)	Order code
50	30	<b>STVD-50-30-... </b>

**Horizontal versions**

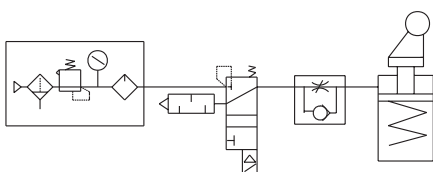
**Horizontal stop cylinder with shock absorber and roller lever**



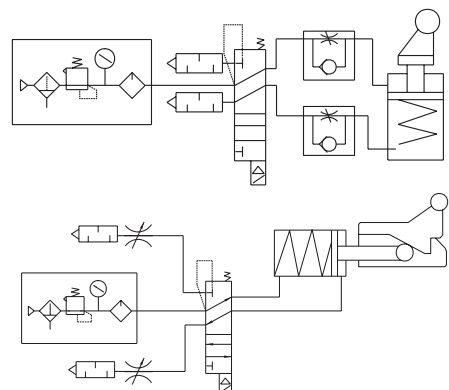
Cylinder Ø (mm)	Stroke (mm)	Order code
50	50	<b>STHSR-50-50-... </b>

**Pneumatic circuit diagrams**

**Single acting**



**Double acting**



**Pneumatic Stopper Cylinder**

**Vertical Version:**

- STVSR series
- STVDR series
- STVD series

**Horizontal Version:**

- STHSR series



Specifications	Description
<b>Medium</b>	Filtered, unlubricated compressed air (if oil is used then it must be continued)
<b>Operating pressure range</b>	2 to 10 bar
<b>Test pressure</b>	15 bar
<b>Ambient temperature range</b>	0 °C to +65 °C (If intended for use below 0 °C consult Technical Sales)
<b>Lubrication</b>	Unlubricated
<b>Cushioning</b>	Cushioning mat made from oil-resistant rubber
<b>Weight</b>	
<b>Type STVSR-50-30</b>	1.800 kg
<b>Type STVDR-50-30</b>	1.800 kg
<b>Type STVD-50-30</b>	1.800 kg
<b>Type STHSR-50-50</b>	8.750 kg

**STVSR Series - Stopper cylinder Ø50mm - Vertical version**

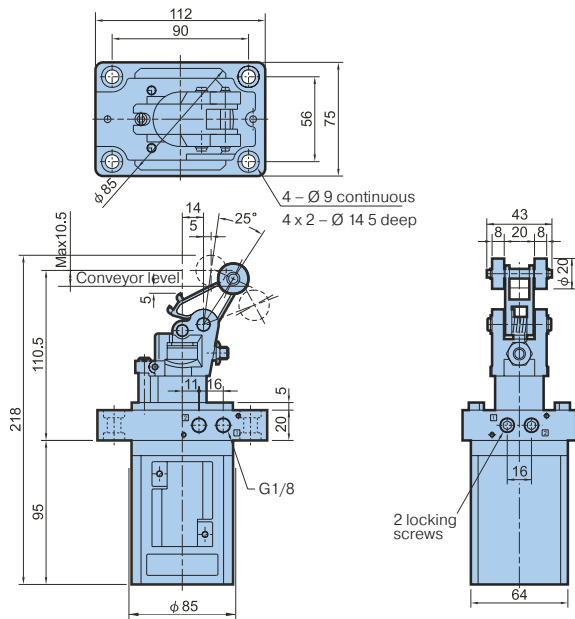
with hydraulic industrial shock absorbers



**Order key**

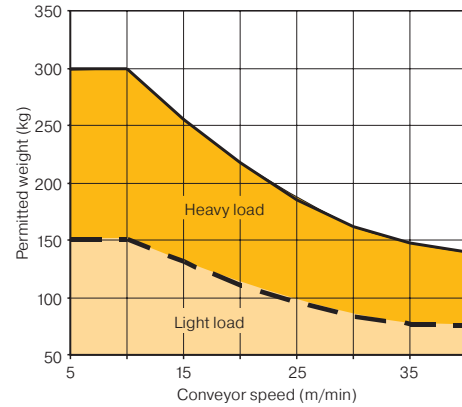
<b>STVSR</b>	-	<b>50</b>	-	<b>30</b>	-	<b>L</b>	-	<b>STD</b>		
						<b>Shock absorber strength</b>		<b>Connecting thread</b>		
						<b>L</b>	Light 50 - 150 kg			
						<b>H</b>	High 150 - 300 kg			
								<b>STD</b>	Standard G1/8	

**Dimensions (mm)**

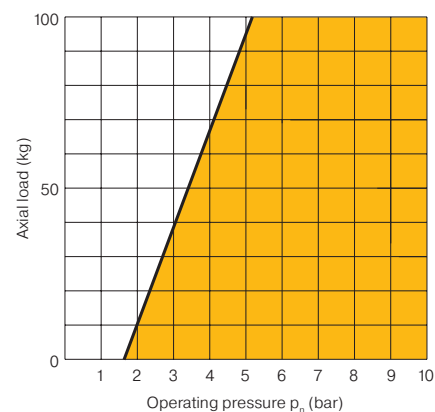


**Loads**

**Moving mass subject to speed – Type STVSR-50-30**

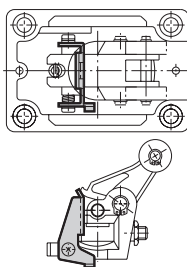


**Axial load subject to operating pressure – Type STVSR-50-30**

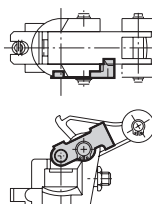


**Option**

- Rocker locking



- Free travel of conveyed load



See pages 6 for specifications

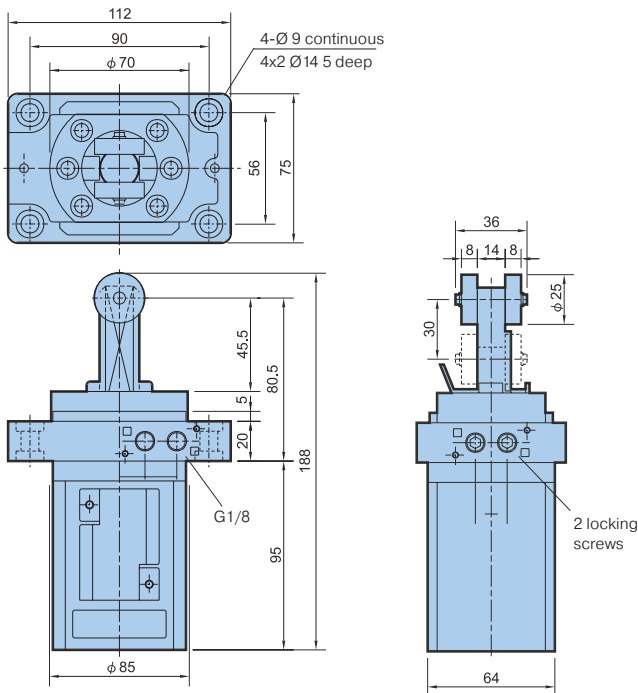
**STVDR Series - Stopper cylinder Ø50mm - Vertical version**



**Order key**

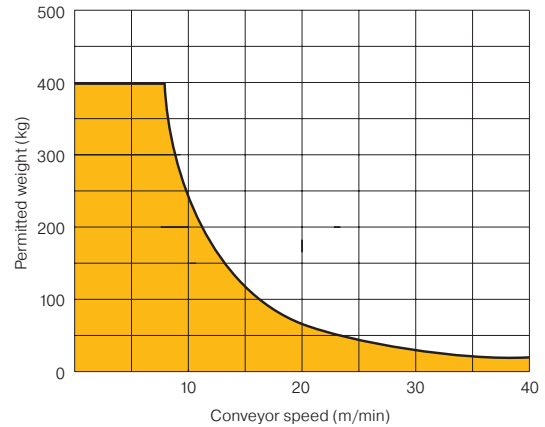
<b>STVDR</b>	-	<b>50</b>	-	<b>30</b>	-	<b>STD</b>		
						<b>Connecting thread</b>		
						<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 2px;"><b>STD</b></td> <td style="padding: 2px;">Standard G1/8</td> </tr> </table>	<b>STD</b>	Standard G1/8
<b>STD</b>	Standard G1/8							

**Dimensions (mm)**

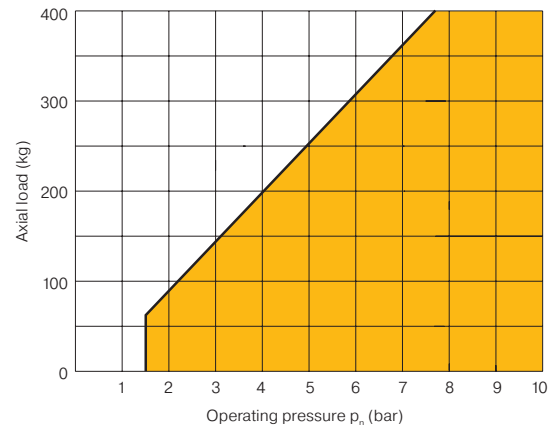


**Loads**

**Moving mass subject to speed — Type STVDR-50-30**



**Axial load subject to operating pressure — Type STVDR-50-30**



See pages 6 for specifications

**STVD Series - Stopper cylinder Ø50mm - Vertical version**

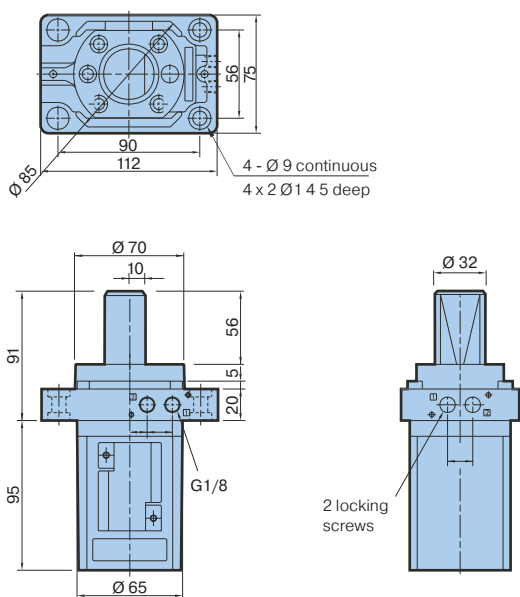
Single acting spring extend



**Order key**

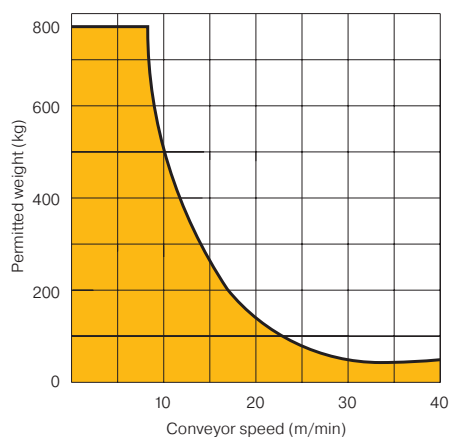
<b>STVD</b>	-	<b>50</b>	-	<b>30</b>	-	<b>STD</b>
						<b>Connecting thread</b>
						<b>STD</b> Standard G1/8

**Dimensions (mm)**

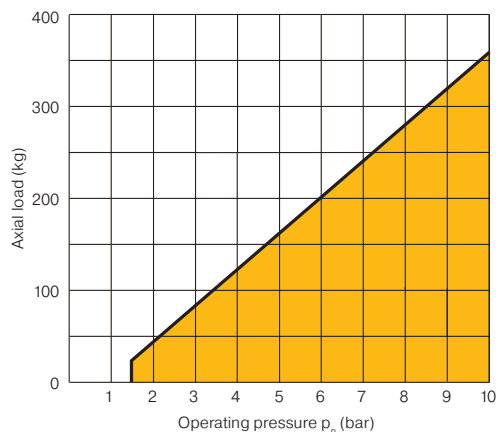


**Loads**

**Moving mass subject to speed – Type STVD-50-30**



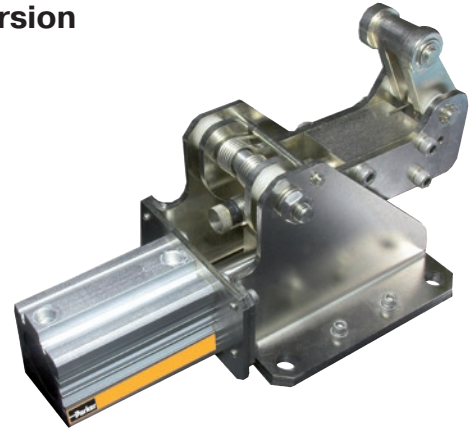
**Axial load subject to operating pressure – Type STVD-50-30**



See pages 6 for specifications

**STHSR Series - Stopper cylinder Ø50mm - Horizontal version**

with hydraulic industrial shock absorbers

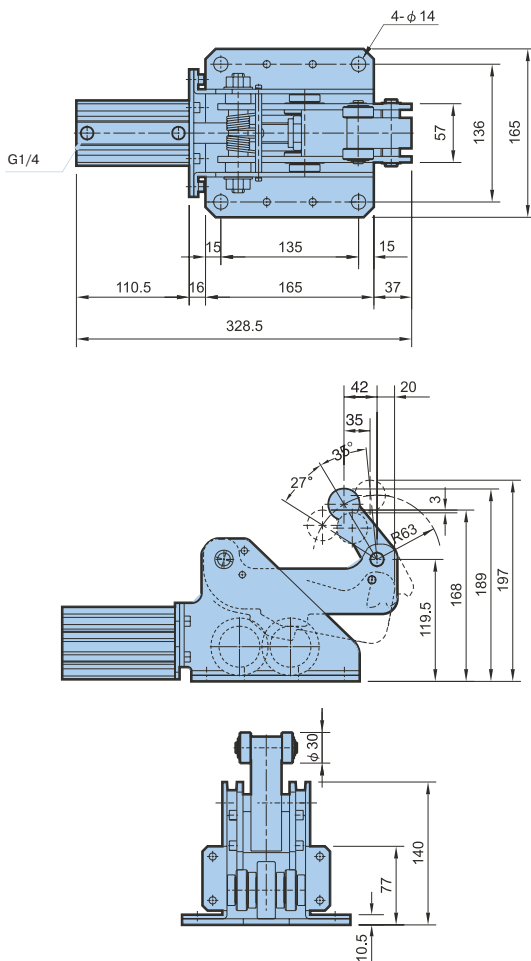


**Order key**

<b>STHSR</b>	-	<b>50</b>	-	<b>50</b>	-	<b>STD</b>		
						<b>Connecting thread</b>		
						<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 2px;"><b>STD</b></td> <td style="padding: 2px;">Standard G1/4</td> </tr> </table>	<b>STD</b>	Standard G1/4
<b>STD</b>	Standard G1/4							

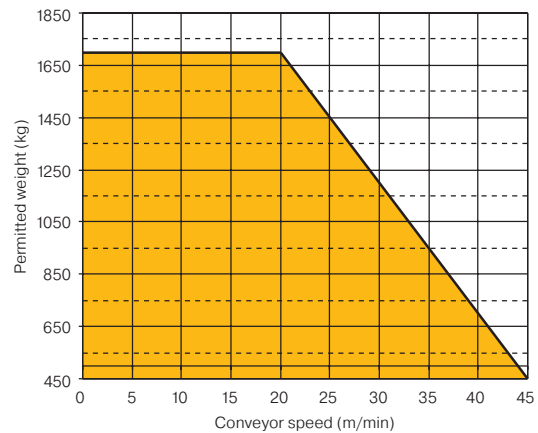
**Note:** Shock absorbers can set at 450 - 1700kg

**Dimensions (mm)**

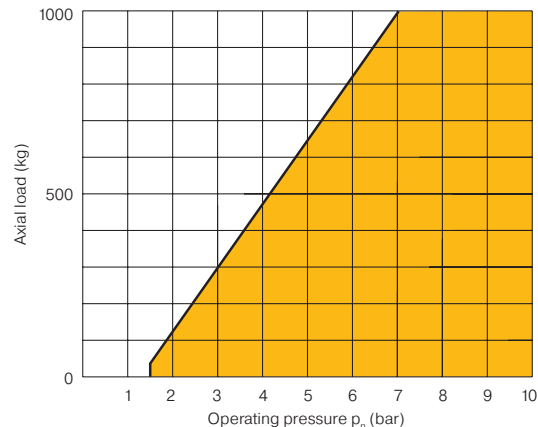


**Loads**

**Moving mass subject to speed — Type STHSR-50-50**



**Axial load subject to operating pressure — Type STHSR-50-50**



See pages 6 for specifications



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