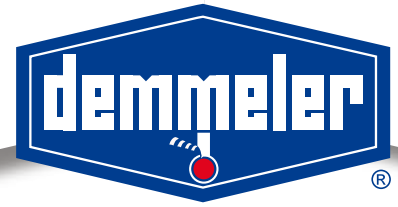


Award winning design



Innovative technology improved



**NEW!**



Englisch - English Version 1.0

THE ORIGINAL   
Made in Germany

**Positioning clamping tube  
- A simple solution,  
for complex applications.**

PSR clamping  
system

Examples  
of use

Magnetic clamp-  
ing technology

# An exciting improvement for your clamping needs.

Thanks to the new **PSR innovation**, every grid bore of the original Demmeler 3D clamping system can now be made about **30 to 50% more effective** and even more flexible. Each clamping tube is easy to use and highly efficient thanks to the innovative and clever design.  
A real highlight in action!

## Adjusting:

An axial scale allows the **PSR components** to be finely adjusted and positioned..

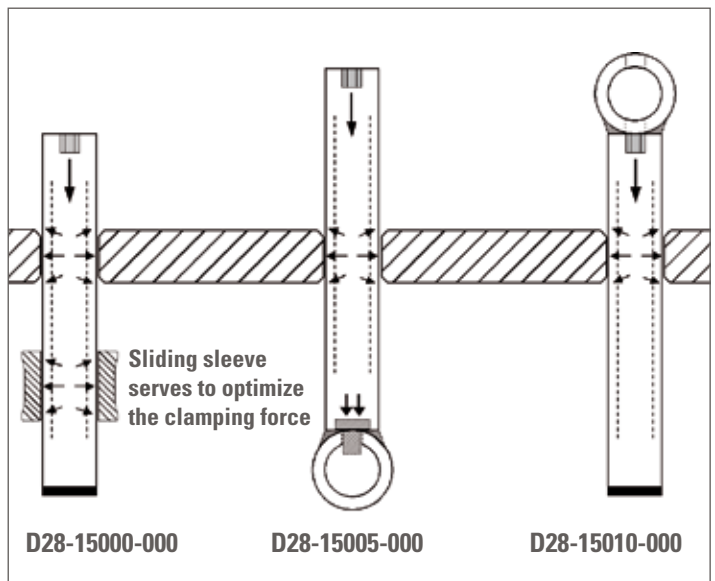
## Clamping:

When using the **PSR**, the axial force is evenly converted to radial spread with high scaling (5:1). Multiple radial spreading in itself causes very high tube bracing, thus significantly increasing the clamping tube's stability.

## Releasing:

By opening the clamping screw, the positioning clamping tube (**PSR**) system is evenly unclamped in a controlled manner.

- Very high service life thanks to the optimal cutting contour of the clamping elements



- No overtensioning or undertensioning possible within the clamping range when used normally (tensile limit)
- 100% insensitive to dirt thanks to the minimal clearance!
- Functional reliability guaranteed under tough everyday conditions!
- Holding force approx. 2,000 N

## Positioning clamping tube PSR-XA



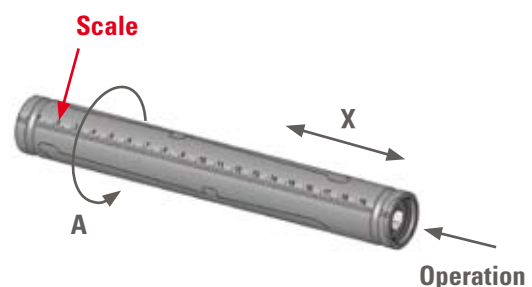
Part number D28-15000-000

Infinitely adjustable two-axis clamping in the "X" and "A" directions with scaling (1mm grid). Long service life guaranteed by tempering.

An ideal component as an infinitely adjustable stop position, directly and indirectly with V-block cap, universal stop etc. Compatible with all original D-28 Demmeler system bores.

### Key data for the PSR-XA:

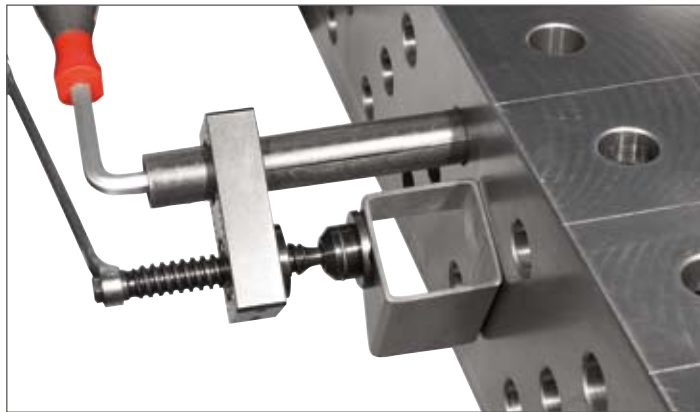
- Length: 214 mm
- Diameter: 28 mm
- Weight: approx. 850 g
- Scale: 1 mm



### Clamping example: Square tube



This new clamping technology makes it possible to clamp directly next to the system bore. Frictional clamping with **PSR** on the 3D table means that the clamp stays in position when released.



### Positioning clamping tube PSR-XA-K



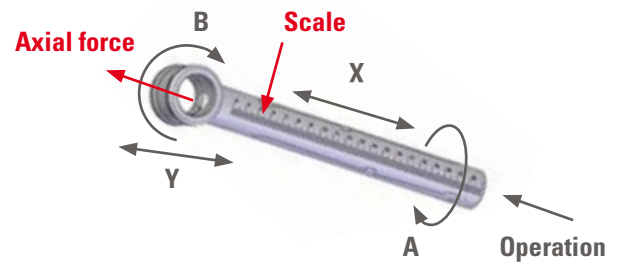
Infinitely adjustable four-axis clamping in the "X" and "A" directions, and in the "Y" and "B" directions by means of a brass piston (K in the product name stands for Kolben, the German word for piston). This part has a D-28 system bore in its boss.

The great advantage of the **PSR-XA-K** is its ability to be easily positioned in all four axes as it retains its position even when under light clamping force. This makes it very easy to position and adjust. Only axial rotation is required in order to firmly tighten all four axis directions simultaneously.

Part number D28-15005-000

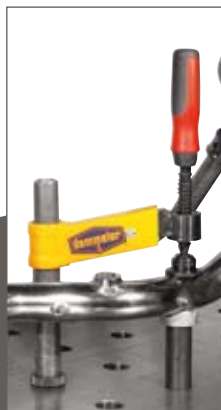
#### Key data for the PSR-XA-K:

- Length: 247 mm
- Diameter: 28 mm
- Weight: approx. 1,100 g
- Scaling: 1 mm



### Clamping example: Bicycle frame

With **PSR** it is possible with a minimum of effort to optimally position, tighten and attach individual parts of the frame with only a light amount of clamping force. Individual tubes are quickly arranged to allow the entire process to run in an optimised manner.



# A whole range of application options thanks to optional configuration levels!

## Positioning clamping tube PSR-XA-D

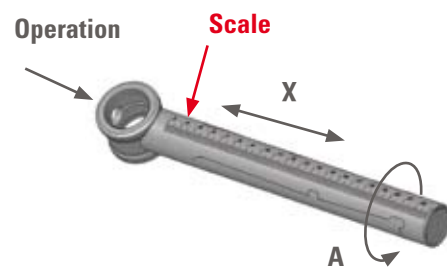


Part number D28-15010-000

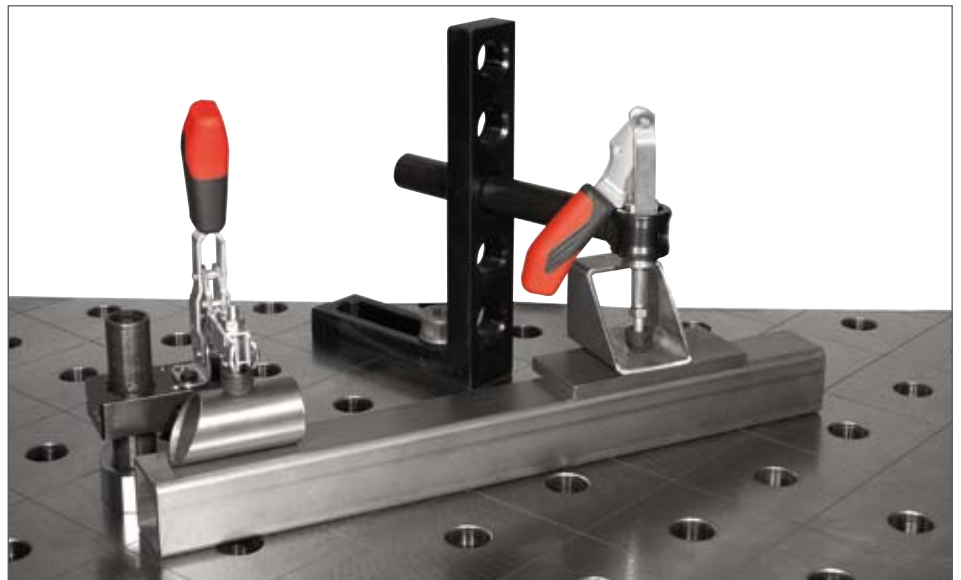
Infinitely adjustable two-axis clamping in the "X" and "A" directions, positive adjustment and tightening options thanks to the D-28 system bore: As part of the Demmeler 3D clamping system, the **PSR-XA-D** guarantees top user-friendliness in any position.

### Key data for the PSR-XA-D:

- Length: 247 mm
- Diameter: 28 mm
- Weight: approx. 1,000 g
- Scale: 1 mm



## Clamping example: Cross-beam



The **PSR system** is the right solution due to its highly flexible positioning and clamping options. A universal tool that is also economical and efficient.

**Developed from real-life scenarios for real-life scenarios!**

Patent pending!

## V-block



The V-block offers a wide range of applications: Flat or planar contact area, stop, round and asymmetrical parts, can be universally positioned with the **PSR system** – can be used with a clamping pad.

**Part number D28-09012-000**  
(steel black oxide finish)

**Part number D28-09012-001**  
(polyamide)

**Part number D28-09012-002**  
(stainless steel)

**Part number D28-09012-003**  
(aluminium)

### Key data for the V-block:

- 2 supporting surfaces: 90°; 120°
- Overall height: 18 mm
- Diameter: 40 mm



## Pivoting arm



**Part number D28-15000-100**

Ideal connecting piece for the **PSR-XA**. Compatible with all D-28 components. Pivoting the arm provides a range of options. Maximum clamping force of about 2,000 N both forwards and backwards! Easy to use when in the 0° position in parallel to the **PSR** and at 18° to the central point of clamping.

### Key data for the pivoting arm:

- Length: 85 mm
- Width: 40 mm
- Height: 22 mm
- D28 system bore
- Weight: approx. 500 g



# Safely and swiftly master tricky jobs

## Ball clamp



Part number D28-07017-000

This ball clamp with knurled stop, suitable for every D-28 system bore, ensures highly-effective clamping with minimal clamping force. It is also used as a clamp lock for V-blocks.

## Ball clamp with chamfered head



Part number D28-07017-010

This ball clamp is flush with the universal stop and can be used together with other system parts. It enables you to **work without interference** and thus clamp and attach in no time at all.

### Key data for the ball clamping plug:

- High-quality stainless steel pistons
- Self-locking in every position thanks to the O-ring
- 4 mm stroke
- 120 N tensile force

## Clamping example: Ball clamping plug with PSR-XA-D



Swift clamping and securing of light parts coupled with maximum flexibility – whether with **PSR** or permanent stop, the end result is always perfect!



**Lightning fast.**

Clamp – tack – finished!

### Magnetic clamp D28-short



Part number D28-13001-002

### Magnetic clamp D28-long



Part number D28-13001-003

Can be used universally in all system bores. Optimized handling thanks to the ergonomic handle.

#### Key data for the magnetic clamp D28:

- Length: approx. 60 cm / approx. 85 mm
- Diameter: 28 mm
- Holding force: approx. 70 N

### Angle-setting template



Part number D28-05013-010

The angle-setting template is highly flexible as it has scales on both sides. Highly suitable for measuring and testing purposes.

#### Key data for the angle-setting template:

- Infinitely adjustable from 0° to 90°
- Quick to mark out 0 - 60° (15° increments)
- Diameter: 250 mm (radius: 125 mm)
- Scale in 1° increments



# Versatile multi-talent with a keen eye for detail.

## Triflex universal stop



Part number D28-05013-008

Thanks to its wide range of configuration levels such as the Triflex universal stop, **PSR** always has the right solution for every kind of clamping scenario. And it's always a even better when the solution is blindingly simple. Highly variable and combinable with all system parts!

### Key data for the Triflex universal stop:

- Diameter: 100 mm
- Weight: approx. 1,000 g



## Clamping example: Truck fender



You will happily take on special clamping challenges when you have our system. The new options offered by the **PSR system** mean that you will quickly, safely and precisely have everything under control.

### Clamping sleeve 90°



Part number D28-07034-000

### Clamping sleeve 45°



Part number D28-07035-000

#### Key data clamping sleeve 45° and 90°:

- Length: 90 mm
- Width: 55 mm
- Diameter: 28 mm bore

#### Key data clamping sleeve 90°:

- Can be used as a corner stop
- Centre distance: 50 mm

Used to establish system bores for clamping components or tubes 45° or 90° to the base. The sleeves can be fastened with PC bolts or connection bolts to any system bore.

### Crossover sleeve 90°



Part number D28-07034-010

### Crossover sleeve 45°



Part number D28-07035-010

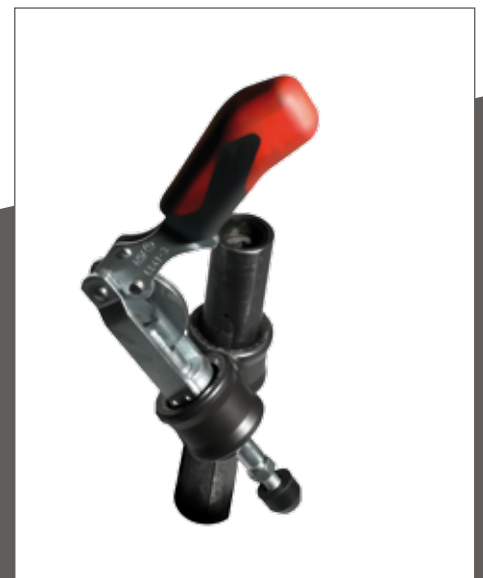
They have user-friendly, 360° scales, and are compatible with all **PSR** variants. Highly practical in combination with toggle clamps. The crossover sleeves can also be coupled with short or long spindles with a threaded sleeve.

#### Key data changeover sleeve 90° and 45°:

- Diameter: 28 mm

### Clamping example: Pipe

With **PSR components** this demanding clamping task can be turned into child's play. The points of contact can be individually adjusted without limit in no time at all. Even the trickiest of angles can be overcome.



# Universal and quick

## Universal stop with thread

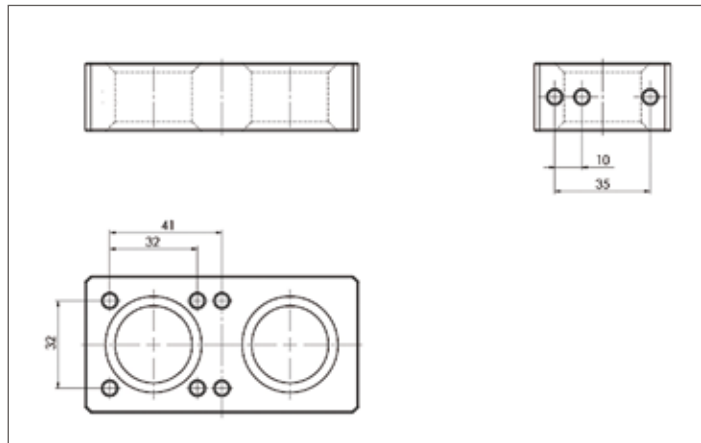


Part number D28-05010-050

### Key data for the universal multi-stop

- Dimensions: 100 x 50 x 25
- 2 x system bore
- M6 thread

Compatible with various types of clamps such as the AMF quick clamp, a clamping screw (short/long) or the capped clamping screw. And now also the **PRS system**. The key benefit for users is that adjustments, fitting, positioning, attaching, clamping, assembly, welding etc. can take place directly alongside the system bore.



## Universal toggle clamp



Part number D28-08001-010

## Horizontal toggle clamp



Part number D28-08002-010

## Vertical toggle clamp



Part number D28-08003-010

### Toggle clamp with cap



Part number D28-08000-000

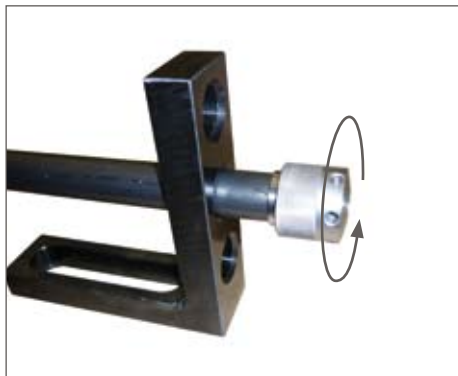


The perfect tool for every system bore  
D28-toggle clamp: can be rotated through 360°.

### Threaded saddle



Part number D28-15000-101



Can be used in combination with the **PSR-XA**. The simple thread makes it easy to make fine adjustments. The knurl and hole system on the outer ring makes it particularly easy to use.

#### Key data for the threaded saddle:

- Length: 50 mm
- Clamping stroke: 10 mm
- Diameter: 40 mm
- Weight: 200 g
- Tempered

### Hexagonal wrench

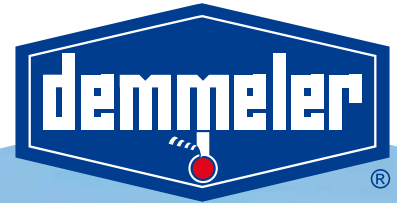


#### Key data for the wrench:

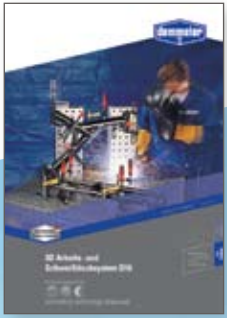
- Length: approx. 220 mm
- Ergonomic handle
- Width across flats: SW 10 / SW 8

Part number D28-10008-003 (SW 10)

Part number D28-10008-004 (SW 8)



## Request more information:



3D Work and Welding  
Table System D16

Demmeler Maschinenbau  
GmbH & Co. KG



3D Work and Welding  
Table System D28

Demmeler Maschinenbau  
GmbH & Co. KG



Tool change systems  
Toolarena

Demmeler Automatisierungs  
& Roboter GmbH



Rotary tables

Demmeler Automatisierungs  
& Roboter GmbH

Demmeler offers you more!



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