

Zero-point clamping system ZPS-LA

Mechanical and pneumatic clamping solutions for
3-axis and 5-axis machining, palletized production and automation



Clamp raw parts and finished parts
Powerful. Versatile. Reliable.

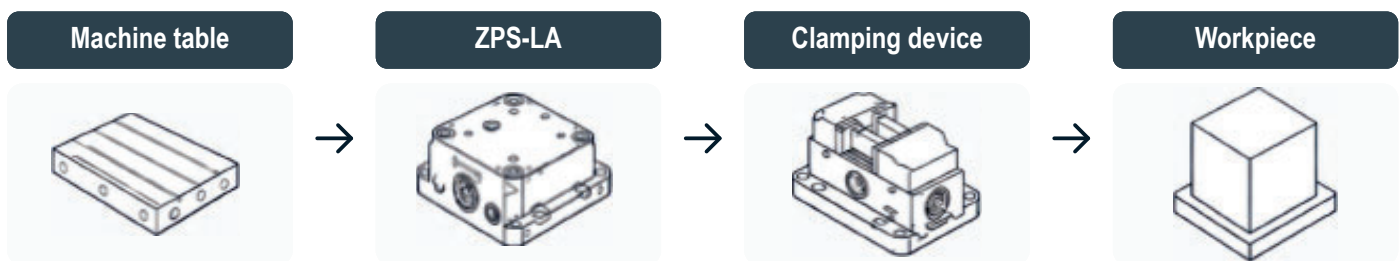
-  Reduce setup times and setup costs by up to 90 %
-  Positioning and clamping in a single operation
-  Setup in parallel with machining

System advantages and application logic

Zero-point clamping system ZPS-LA

The ZPS-LA zero-point clamping system creates a defined interface between the machine table, clamping device and workpiece. This allows setup to be carried out completely outside the machine.

ZPS-LA supports 3-axis and 5-axis machining, palletized production and automation - for maximum flexibility and productivity.



YOUR BENEFITS AT A GLANCE



Reduce setup times and setup costs by up to 90 %



Positioning and clamping in a single operation



Setup in parallel with machining outside the machine



Increase productive machine runtime



Continue using existing LANG infrastructure.

Complement it flexibly with SPREITZER clamping technology.

TECHNICAL OVERVIEW ZPS-LA



LANG-compatible interface in 52 × 52 mm and 96 × 96 mm



Repeat accuracy < 0.005 mm



Overall height 27 mm



4 × 90° indexable



Mechanical and pneumatic versions

Single plates

For reproducible single clamping operations and modular clamping setups.

Single plates



Order No.	System	Version	Dimensions / Special feature
B900501836	ZPS 52 - LA	Single plate with clamping edge	150 × 116 × 27 mm • with mounting holes
B900501837	ZPS 96 - LA	Single plate with clamping edge	192 × 156 × 27 mm • with mounting holes
B900501853	ZPS 52 - LA	Single plate	125 × 100 × 27 mm • with mounting holes
B900501854	ZPS 96 - LA	Single plate	192 × 192 × 27 mm • with mounting holes

Round single plates



Order No.	System	Version	Dimensions / Special feature
B900501855	ZPS 52 - LA	Round plate	Ø125 mm × 27 mm
B900501857	ZPS 52 - LA	Round plate	Ø160 mm × 27 mm
B900501856	ZPS 96 - LA	Round plate	Ø176 mm × 27 mm
B900501858	ZPS 96 - LA	Round plate	Ø246 mm × 27 mm



LANG-compatible interface · Repeat accuracy < 0.005 mm · Overall height 27 mm · Hardened stainless steel · Manual actuation · 4 × 90° indexable

Combination plates and risers

Combination plates

One plate for two grid systems.



Order No.	System	Version	Dimensions / Special feature
B900501859	ZPS 52/96 - LA	Combination single plate with clamping edge	universal for 52 and 96
B900501860	ZPS 52/96 - LA	Round combination plate	Ø246 mm

Risers

Optimized accessibility and defined build-up heights.



Order No.	System	Version	Dimensions / Special feature
B900501861	ZPS 52 - LA	Single plate on base	Ø290 mm × 150 mm
B900501862	ZPS 96 - LA	Single plate on base	Ø315 mm × 150 mm
B900501863	ZPS 52 - LA	Riser	150 × 116 × 60 mm
B900501864	ZPS 52 - LA	Riser	150 × 116 × 100 mm
B900501865	ZPS 96 - LA	Riser	192 × 156 × 60 mm
B900501866	ZPS 96 - LA	Riser	192 × 156 × 100 mm

Clamping studs / locating studs

Order No.	System	Stud diameter	Thread
B900501840	ZPS 52 - LA	Ø16 mm	M8
B900501873	ZPS 96 - LA	Ø20 mm	M10



Combination of 52 mm and 96 mm grids in one plate



Defined build-up heights for optimized accessibility



Precise fit and repeat accuracy for maximum process reliability

Multiple plates

More clamping devices per machine setup. Less retooling.
More productive machine time.



More parts in one clamping operation

Multiple plates provide several zero-point clamping positions on one machine setup. Clamping devices, fixtures or workpieces can be positioned quickly and repeatably – reducing retooling and increasing productive machine time.

2-position

4-position



ZPS 52 - LA

2-position multiple plate

ZPS 96 - LA

2-position multiple plate

ZPS 52 - LA

4-position multiple plate

ZPS 96 - LA

4-position multiple plate

Order No.	System	Version	Dimensions
B900501867	ZPS 52 - LA	2-position multiple plate	213 × 108 × 27 mm
B900501868	ZPS 52 - LA	4-position multiple plate	208 × 208 × 27 mm
B900501869	ZPS 96 - LA	2-position multiple plate	330 × 156 × 27 mm
B900501870	ZPS 96 - LA	4-position multiple plate	330 × 330 × 27 mm



LANG-compatible interface · Repeat accuracy < 0.005 mm · Overall height 27 mm · Manual actuation · Hardened stainless steel · 4 × 90° indexable

3-sided pyramids and additional clamping solutions.

3-sided pyramids

More clamping area on a small machine footprint.
Optimized accessibility for multi-side machining.



Order No.	System	Dimensions	Special feature
B900501871	ZPS 52 - LA	Ø290 × 100 mm	15 kg, base side for locating studs 52 × 52 mm or universal 120° mounting hole pattern
B900501872	ZPS 96 - LA	Ø390 × 145 mm	37 kg, base side for locating studs 96 × 96 mm or universal 120° mounting hole pattern

Additional clamping solutions on ZPS-LA



Order No.	Interface	Clamping range / dovetail	Dimensions	Special feature
B900501874	ZPS 52-LA	50 mm dovetail · 45°	approx. 85 mm base H ≈ 88 mm	Raw part vise RS 50
B900501875	ZPS 52-LA	50 mm dovetail · 45°	Ø172 mm	3 clamping stations Raw part vise RS 50
B900501876	ZPS 96-LA	75 mm dovetail · 45°	approx. 150 × 150 mm	Raw part vise RS 75
B900501877	ZPS 52 - LA	-	-	Collet holder ER32
B900501878	ZPS 52 - LA	-	Ø100 mm*	Three-jaw chuck

Pneumatic ZPS-LA

For automated processes, pallet concepts and short setup times.



Continue using existing LANG infrastructure. Complement it flexibly with SPREITZER clamping technology.



Unlocking pressure 0.5-0.8 MPa



Repeat accuracy < 0.005 mm



Datum cleaning & airtightness monitoring



Hardened stainless steel

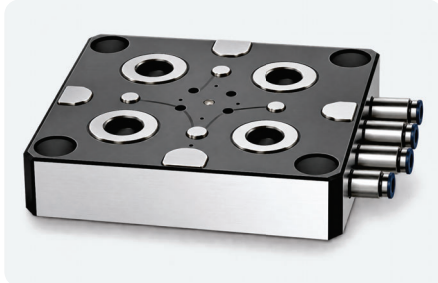


4 × 90° indexable

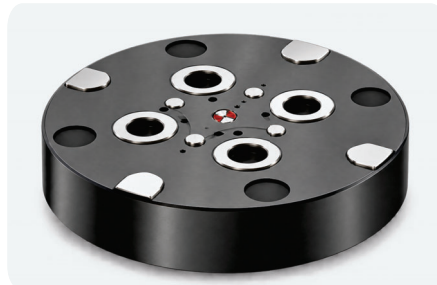
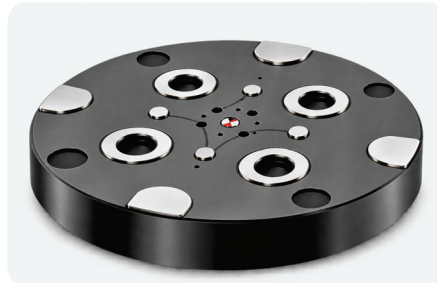


Designed for automated processes

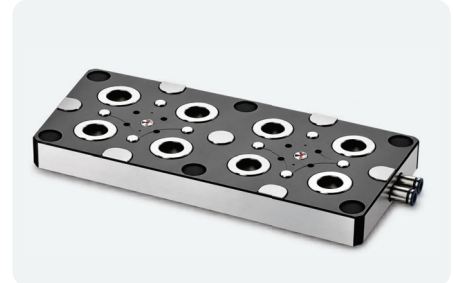
SINGLE PLATES (SQUARE)



ROUND PLATES



MULTIPLE PLATES (2-POSITION)



Order No.	System	Version	Kraft/Lifting load	Dimensions / Special feature
B900501879	ZPS 52 - LA	pneumatic single plate	9 kN / 100 kg	125 × 100 × 35 mm
B900501880	ZPS 96 - LA	pneumatic single plate	20 kN / 330 kg	200 × 176 × 35 mm
B900501881	ZPS 52 - LA	pneumatic round plate	9 kN / 100 kg	Ø168 × 35 mm
B900501882	ZPS 96 - LA	pneumatic round plate	20 kN / 330 kg	Ø250 × 35 mm
B900501883	ZPS 52 - LA	pneumatic multiple plate	18 kN / 200 kg	229 × 125 × 35 mm
B900501884	ZPS 96 - LA	pneumatic multiple plate	40 kN / 660 kg	392 × 200 × 35 mm

SPREITZER GmbH & Co. KG
www.spreitzer.de
Zero-point clamping system ZPS-LA



Quality.
Precision.
Reliability.