



Original size  
Section of high-pressure spindle

### Applications:

- ▶ in ledges and blocks
- ▶ for workpiece and die clamping and locking
- ▶ when the available space is limited
- ▶ in presses, punching machines and machine tools

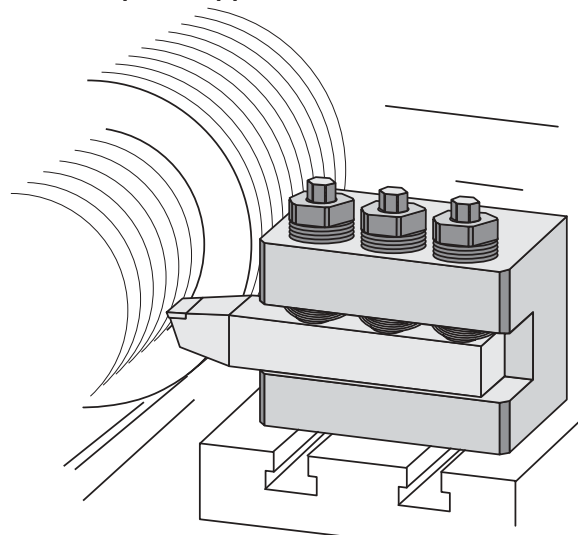
### Function:

Following manual positioning of the high-pressure spindle against the clamping edge, the wedge system is brought into action by turning the hexagon nut (SW1), and the clamping force is transmitted axially to the clamping point. The required clamping force is achieved by selecting the appropriate torque on the torque wrench (see force - torque diagram). For unclamping, proceed in the reverse order.

### Special features:

- ▶ Suitable for retrofit
- ▶ Compact design allows for multiple clamping
- ▶ Clamping force of between 40 and 120 kN
- ▶ High clamping force with low torque
- ▶ Self-locking by patented wedge system
- ▶ Individually usable

### Example of application

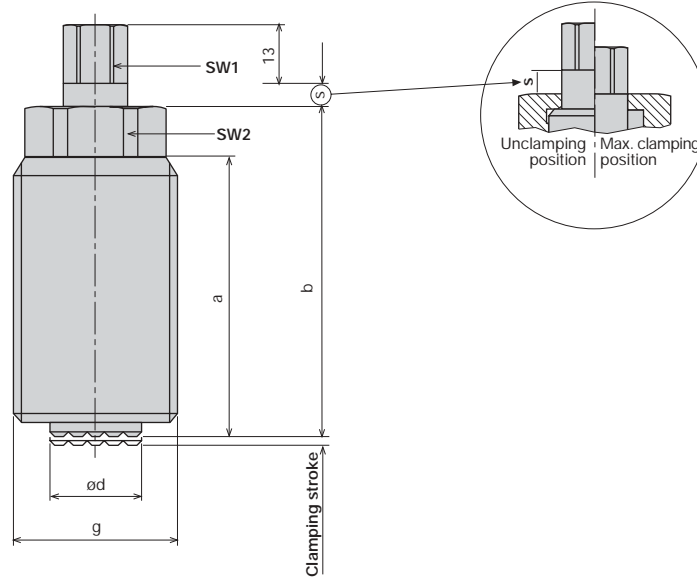


# High-pressure spindle, mechanical with integral wedge system



**HILMA**

Max. clamping position (s)



Part no.	Clamping force (kN)	Clamping stroke (mm)	Max. tightening torque (Nm)	Static load max. (kN)	Dimensions in mm				Monitoring of clamping stroke			Weight (kg)
					a	b	Ød	g	s	SW1	SW2	
2272-210	40	1,5	45	80	62	73	19	M 36 x 3	5	13	30	0,5
2273-210	80	2,2	90	160	75	90	28	M 48 x 3	7,5	17	41	1,0
2274-210	120	2,5	140	240	90	110	39	M 64 x 4	8,5	19	55	1,5

Other sizes and threads (e.g. inch) are available on request.

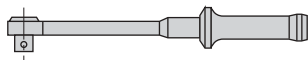
## Accessories:

Torque wrench 20 - 100 Nm

Part no. 9.3792.6610

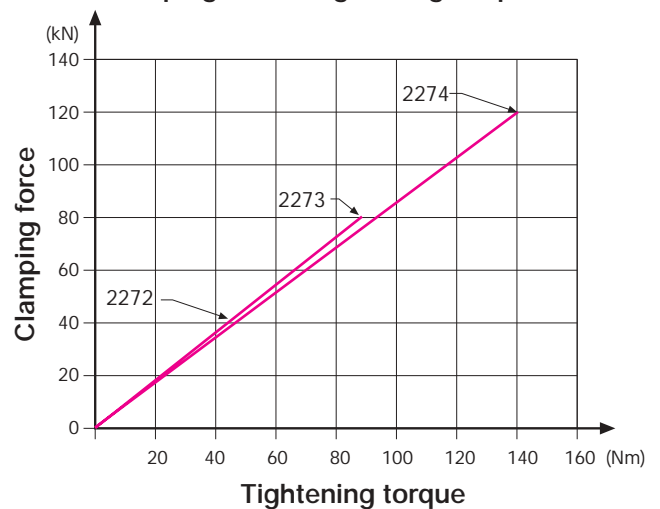
Torque wrench 40 - 200 Nm

Part no. 9.3792.6620



## Diagram:

### Clamping force - tightening torque



## Note:

Before applying the tightening torque, the high-pressure spindle must be screwed against the clamping edge so that there is no play. If the parts are not rigid, tighten the high-pressure spindle using the hexagon nut (SW 2) until there is no play.

High-pressure spindles are permanently lubricated and are maintenance-free under normal conditions of use.