

## Cam point screws

### SPECIFICATION

#### Type

Type **R**: Clamping by clockwise rotation  
(d2 = right-hand thread)

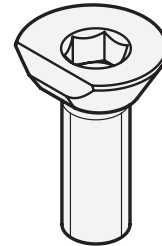
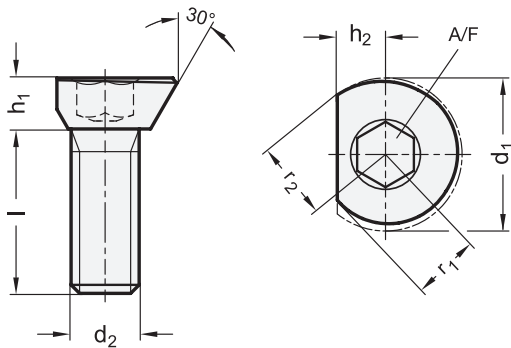
Steel

- case hardened HRC 56 ±1
- Tensile strength class 8.8
- zinc plated, blue passivated

### INFORMATION

Cam point screws GN 418.2 are sturdy and compact elements, requiring a minimum of installation space and offering ultimate convenience and ease in handling.

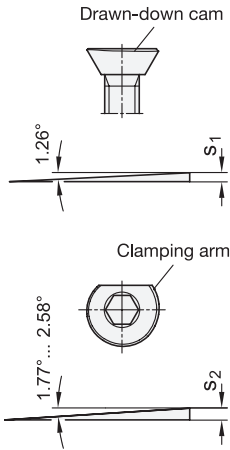
The clamping forces *F* given in the table refer to the maximum permitted tightening torque and the specified screw-in depth *t*.



### GN 418.2

Description	d1 Nominal dimension	d1	d2	l	h1	h2	r1	r2	s1	s2	A/F	x ±0.2	z ±0.2	Max. tightening torque in Nm	Max. clamping force <i>F</i> in kN	⚖
GN 418.2-9-M4-8-R	9	9.2	M4	8	3	3	4	4.6	1	0.6	2.5	3.5	4.2	1.5	0.09	2
GN 418.2-12-M5-10-R	12	11.7	M5	10	4	3.5	5	5.7	1.16	0.7	3	4.2	5.2	2	0.1	3
GN 418.2-14-M6-12-R	14	14.2	M6	12	5	4.5	6.1	7.1	1.44	1	4	5.4	6.4	5	0.3	4
GN 418.2-18-M8-16-R	18	18	M8	16	6	5.5	7.7	9	1.84	1.2	5	6.6	8	22	2.7	8
GN 418.2-22-M10-20-R	22	22.2	M10	20	7	6.5	9.4	11.1	2.16	1.7	6	8.3	9.8	35	4	12
GN 418.2-26-M12-24-R	26	25.8	M12	24	9	8	11.6	13.6	2.53	1.9	8	10.1	12	45	5.4	35

TECHNICAL INFORMATION

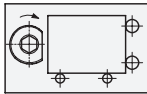


Function

The head of the cam point screw has two cams: a radial clamping cam (with additional 30° taper) and an axial draw-down cam. The cam ensures that the clamping force is the same in any angular position. The cam is also self-locking.

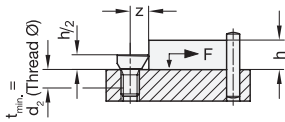
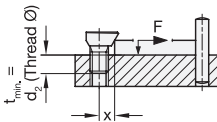
Force components act on the clamping point which generate a draw-down effect and which, in addition to the friction, cause the workpiece to be pressed against a fixed stop. An additional draw-down effect is created by the thread and the 30° taper.

To ensure safe and secure clamping in every application, a right-hand version (with right-hand thread) and a left-hand version (with left-hand thread) is available.

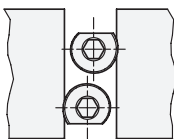


Assembly instructions

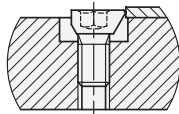
- Position the thread bore(s) as specified
- Screw the cam point screw in to the desired height and place it with its flat side facing the workpiece (note the minimum screw-in depth t)
- For clamping effect above the head taper, the minimum clamping height should be h2
- A turn of approx. 135° is required for clamping



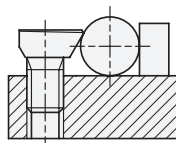
APPLICATION EXAMPLES



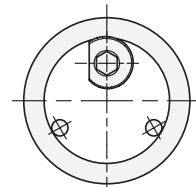
Multiple clamps in the narrowest of space



Clamping flat workpieces (sheet metal)



Clamping round workpieces



Centric clamping in a bore hole

