

2 Type
K With clamping balls
S With clamping segments

Specification

- Clamp body
Steel
- Hardened
- Blackened finish
- Clamping balls / segments
- Hardened
- Plain finish, ground
- RoHS compliant

On request

- Centering bore clamps GN 411.3 operable from the opposite side respectively for hydraulic or pneumatic operation
- Centering bore clamps with 2 clamping elements for clamping tubes

Information

With GN 411.2 centering bore clamps, workpieces can be centrally positioned and clamped from the inside of the bore.

They offer the following advantages:

- Precise self centering
- Repetitive accuracy: ± 0.025 mm
- Accuracy of concentricity: ± 0.05 mm
- Solid and stable clamping through either 3 or 6 contact points on the workpiece
- Clamping of workpieces with uneven or irregular surface (such as castings)
- Distortion free clamping
- Reduced height
- Can be mounted in any position
- Large adjustable range
- Draw-down clamping

<p>How to order</p> <p>GN 411.2-30.5-K</p>	1 Diameter d_1
	2 Type

Metric table

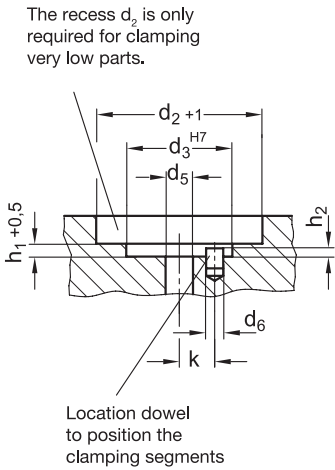


Dimensions in: millimeters - inches

d ₁	d ₂ Clamping Ø	d ₃	d ₄	d ₅	d ₆	h ₁	h ₂	k ±0.1	l ₁	l ₂	l ₃	t min.	w ₁	w ₂	Number of clamping elements	Max. clamping force F
11.7* .46	14.2 .56	-	M 4	4.3 .17	1.5 .06	-	2.5 .10	3.5 .14	3.9 .15	8.6 .34	6.3 .25	-	.7 .03	1.3 .05	3 .12	.5 kN 112 lbf
14.5 .57	18.5 .73	12 .47	M 4	4.3 .17	2 .08	5.5 .22	3.5 .14	4.5 .18	9.8 .39	14.2 .56	5 .20	6 .24	1.2 .05	2.3 .09	3 .12	3.5 kN 787 lbf
18.5 .73	22.5 .89	15 .59	M 5	5.3 .21	2.5 .10	7.5 .30	3 .12	5.5 .22	11.5 .45	16.5 .65	6.2 .24	7 .28	1.2 .05	2.3 .09	3 .12	4 kN 899 lbf
22.5 .89	26.5 1.04	20 .79	M 6	6.4 .25	3 .12	6 .24	4 .16	7 .28	14.1 .56	19.6 .77	9 .35	8 .31	1.2 .05	2.3 .09	3 .12	4.5 kN 1012 lbf
26.5 1.04	30.5 1.20	20 .79	M 6	6.4 .25	3 .12	6 .24	4.5 .18	7 .28	14.1 .56	19.8 .78	9 .35	8 .31	1.2 .05	2.3 .09	3 .12	4.5 kN 1012 lbf
30.5 1.20	38.5 1.52	25 .98	M 6	6.4 .25	4 .16	7 .28	4.5 .18	9 .35	14.1 .56	23.2 .91	9 .35	8 .31	2.3 .09	4.6 .18	3 .12	4.5 kN 1012 lbf
38.5 1.52	46.5 1.83	30 1.18	M 8	8.4 .33	4 .16	7.5 .30	4.5 .18	11 .43	18 .71	27.2 1.07	12 .47	10 .39	2.3 .09	4.6 .18	6 .24	6.5 kN 1461 lbf
46.5 1.83	54.5 2.15	30 1.18	M 8	8.4 .33	4 .16	7.5 .30	4.5 .18	11 .43	18 .71	27.1 1.07	12 .47	10 .39	2.3 .09	4.6 .18	6 .24	6.5 kN 1461 lbf
54.5 2.15	70.5 2.78	45 1.77	M 10	10.5 .41	5 .20	9 .35	5.5 .22	15 .59	23.7 .93	40.6 1.60	14 .55	12 .47	4.7 .19	9.2 .36	6 .24	8 kN 1798 lbf
70.5 2.78	86.5 3.41	60 2.36	M 12	13 .51	5 .20	10 .39	5.5 .22	17 .67	28.3 1.11	46.1 1.81	17 .67	15 .59	4.7 .19	9.2 .36	6 .24	10 kN 2248 lbf
86.5 3.41	102.5 4.04	60 2.36	M 16	17 .67	5 .20	10 .39	5.5 .22	25 .98	30.3 1.19	51.2 2.02	21 .83	15 .59	4.7 .19	9.2 .36	6 .24	12.5 kN 2810 lbf

*This size is only available as type K

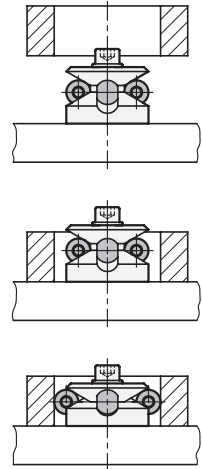
Dimensions



Operating principle

A circular ball cage containing 3 or 6 balls is forced outwards over an accurately guided cone by means of a screw which, through the exerted thrust, will enlarge the outside diameter of the circular ball cage. This in turn will lead to a firm contact between the centring clamp and bore of the workpiece.

Type K (with balls) is used for clamping applications where minor ball marks at the contact points with the workpiece are acceptable. Type S (with clamping segments) is used in such cases where marks at the clamping points on the workpiece would be acceptable.



1.1
1.2
1.3
1.4
2.1
2.2
2.3
2.4
3.10