



Metric



Metric table

1 	2 	d ₁ p6	d ₂	d ₃ Ball Ø of ball plunger	l ₁ ± 0.05	l ₂	s ≈ Indentation depth of the ball into the recess at d ₀	GN 615 GN 615.2 GN 615.3 GN 615.5 GN 815 GN 815.1	GN 615.8 GN 615.9	GN 614 GN 614.2 GN 614.5	GN 614.3	GN 614.8	GN 615.1 GN 615.4	GN 616 GN 616.1	w Compression
4 0.16	1.8 0.07	*		5 0.20	1.5 0.06	M 4 = 0.4	M 6 = 0.4	Ø 3 = 0.4	Ø 3.5 = 0.4	Ø 5 = 0.4	M 5 = 0.4	M 5 = 0.4	M 5 = 0.4	*	
6 0.24	2.5 0.10	*		8 0.31	1.5 0.06	M 5 = 0.7	M 8 = 0.5	Ø 4 = 0.7 Ø 5 = 0.4	Ø 4 = 0.7 Ø 5 = 0.5	Ø 6 = 0.5	M 6 = 0.8 M 8 = 0.5	M 6 = 0.8 M 8 = 0.5	M 6 = 0.8 M 8 = 0.5	*	
8 0.31	3.5 0.14	*		10 0.39	2 0.08	M 8 = 0.8	M 10 = 0.8	Ø 6 = 0.7	Ø 6 = 0.8	Ø 8 = 1.5	M 10 = 0.8	M 10 = 1	M 10 = 1	*	
10 0.39	4.5 0.18	*		12 0.47	2 0.08	M 10 = 1	M 12 = 0.9	Ø 8 = 0.9	Ø 8 = 1	Ø 10 = 0.9	M 12 = 1	M 12 = 1	M 12 = 1	*	
12 0.47	6 0.24	*		14 0.55	2.5 0.10	M 12 = 1.4	M 16 = 1.2	Ø 10 = 1.4	Ø 10 = 1.4	Ø 12 = 1.2	M 16 = 1.2	M 16 = 1.2	M 16 = 1.5	*	
16 0.63	7.5 0.30	*		18 0.71	2.5 0.10	M 16 = 1.7	-	Ø 12 = 1.7	Ø 12 = 1.7	-	M 20 = 1.7	M 20 = 1.7	M 20 = 1.7	*	
20 0.79	8.5 0.33	*		22 0.87	3 0.12	M 20 = 1.8	-	-	-	-	M 24 = 1.6	-	-	*	

* See corresponding ball plunger table

Specification

- Steel, hardened and ground
- ISO Fundamental Tolerances → page 2129
- RoHS compliant

Information

GN 249.1 ball buttons are mainly used with ball plungers / spring plungers when low wear and exact positioning are needed.

To achieve optimal locking of the ball plungers, the maximum distance **a** between the ball button and the ball plunger should not be exceeded. The maximum distance **a** is calculated from the difference between the compression **w** of the selected plunger and the indentation depth **s** of the ball in the recess.

These ball buttons are especially recommended for use with ball plungers or spring plungers with high spring loads.

How to order

GN 249.1-10-4.5
1 Diameter d₁2 Diameter d₂