

Enhanced Hexalobular External Driving Feature for Bolts and Screws

1 Scope

This Ford Motor Company standard specifies the shape and basic dimensions of enhanced hexalobular external driving feature for bolts and screws including the gauging method.

The curvature of the contour of the enhanced hexalobular external driving feature is defined by the gauges specified in Tables 3 and 4. Additional information which may be used when drawing the contour is given in the informative annex A.

2 Basic dimensions

2.1 Stem Drive Feature

See Figure 1 and Table 1

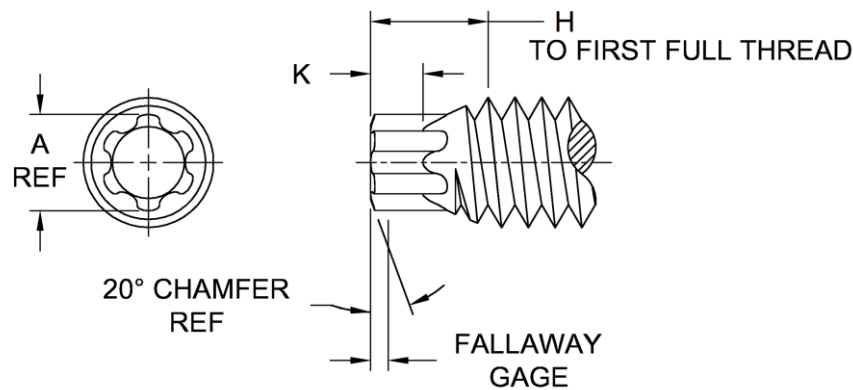


Figure 1 – Stem Drive Feature Basic Dimensions

Table 1 – Stem Drive Feature Basic Dimensions

Dimensions in millimeters

Drive Size	Nominal Size	A ¹⁾ Reference	K ²⁾ Minimum	H ²⁾ Maximum	Fallaway ¹⁾ Allowance
1EP	M4	2.29	1.20	4.99	0.79
4EP	M5	3.70	1.60	5.42	1.19
5EP	M6	4.58	2.40	6.41	1.59
7EP	M8	5.99	3.20	8.63	1.98
8EP	M10	7.29	3.60	10.34	2.39
10EP	M12	9.19	4.35	13.38	2.39
12EP	M14	10.95	5.15	14.75	2.77
14EP	M16	12.67	5.95	16.30	3.18
16EP	M20	14.50	6.75	21.23	3.58

1) Controlled by gauging

2) Measured



Appendix G

2.2 Head Drive Feature

See Figure 2 and Table 2

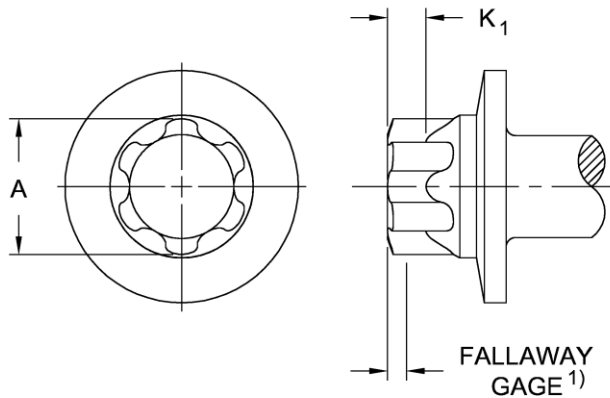


Figure 2a – **Standard** Head Drive Feature
Basic Dimensions

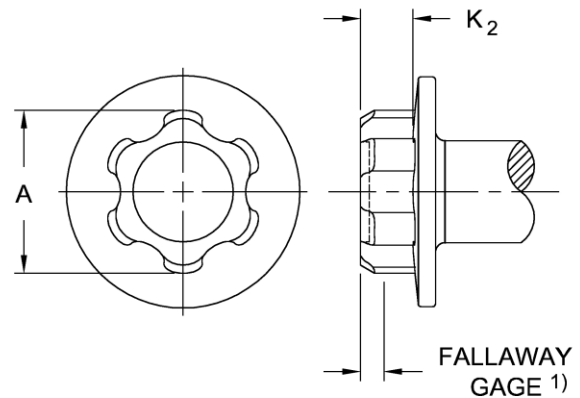


Figure 2b – **Low Profile** Head Drive Feature
Basic Dimensions

Table 2 – Head Drive Feature Basic Dimensions

Dimensions in millimeters

Drive Size	A ¹⁾ Reference	K ₁ ¹⁾ Reference	K ₂ ¹⁾ Reference	Drive Size Selection	
				Standard	Low Profile
5EP	4.58	1.19	1.38		M3
6EP	5.54	1.24	1.67		
7EP	5.99	1.37	1.81		M4
8EP	7.29	1.70	2.20	M5	M5
10EP	9.19	2.08	2.78	M6	M6
11EP	9.86	2.26	2.98		
12EP	10.95	2.54	3.30	M8	
14EP	12.67	3.28	3.83	M10	M8
16EP	14.50	3.64	4.38		M10
18EP	16.38	3.99	4.95	M12	
20EP	18.16	4.34	5.48	M14	M12
22EP	19.99	5.08	6.04		
24EP	21.84	5.89	6.60	M16	M14
26EP	23.60	6.52	7.13		M16
28EP	25.40	7.19	7.67	M18	
30EP	27.13	7.72	8.19		M18
32EP	28.91	8.28	8.73	M20	M20

1) Controlled by gauging

3 Gauging

3.1 Principle

The enhanced hexalobular external driving feature shall enter freely into the relevant product standard Configuration GO Gauge as illustrated in Figure 3a.

The enhanced hexalobular external driving feature fallaway, diameter (A) and drive height (K) shall be gauged using the relevant product standard Final Inspection/Fallaway/Go Gauge as illustrated in Figure 4.

3.2 Configuration GO gauge

The Configuration GO gauge dimensions per Figure 3 are specified in Table 3. Gauge use is illustrated in Figure 3a.

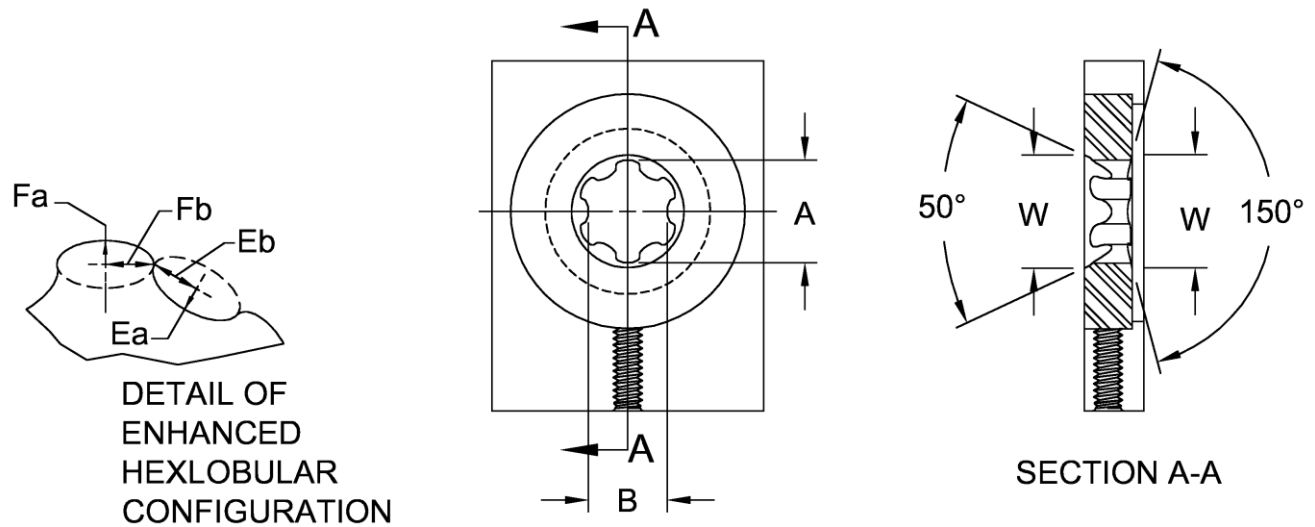


Figure 3 — Dimensions of Configuration GO gauge