



Pilot Point with Truncated Cone - Metric Thread, Coarse Pitch

1 Introduction

Note: Nothing in this standard supercedes applicable laws and regulations.

Note: In the event of conflict between the English and domestic language, the English language shall take precedence.

1.1 Purpose. This standard specifies the characteristics of pilot points with truncated cone for external ISO metric threaded fasteners with coarse pitch M5, M6, M8, M10, M12, M14, and M16. The points are added to the specified nominal length of the fastener. This standard is based on ISO 4753, Type PC. Tolerance requirement is based on ISO 286.

1.2 Applicability. This fastener point is an alternative to the M-point standard. The truncated point style is available for use where an M-point fastener may not have sufficient diametrical clearance at the point end. i.e., drilled and tapped holes.

1.3 Remarks. This standard is an alternative point construction which is, not preferred, but an alternative to General Motors preferred point configuration as described in GMW3362, M-Point for External Metric Thread, Course Pitch Fasteners. Seek GM Fastening Engineering Approval prior to use.

2 References

Note: Only the latest approved standards are applicable unless otherwise specified.

2.1 External Standards/Specifications.

ISO 286 ISO 4753

2.2 GM Standards/Specifications.

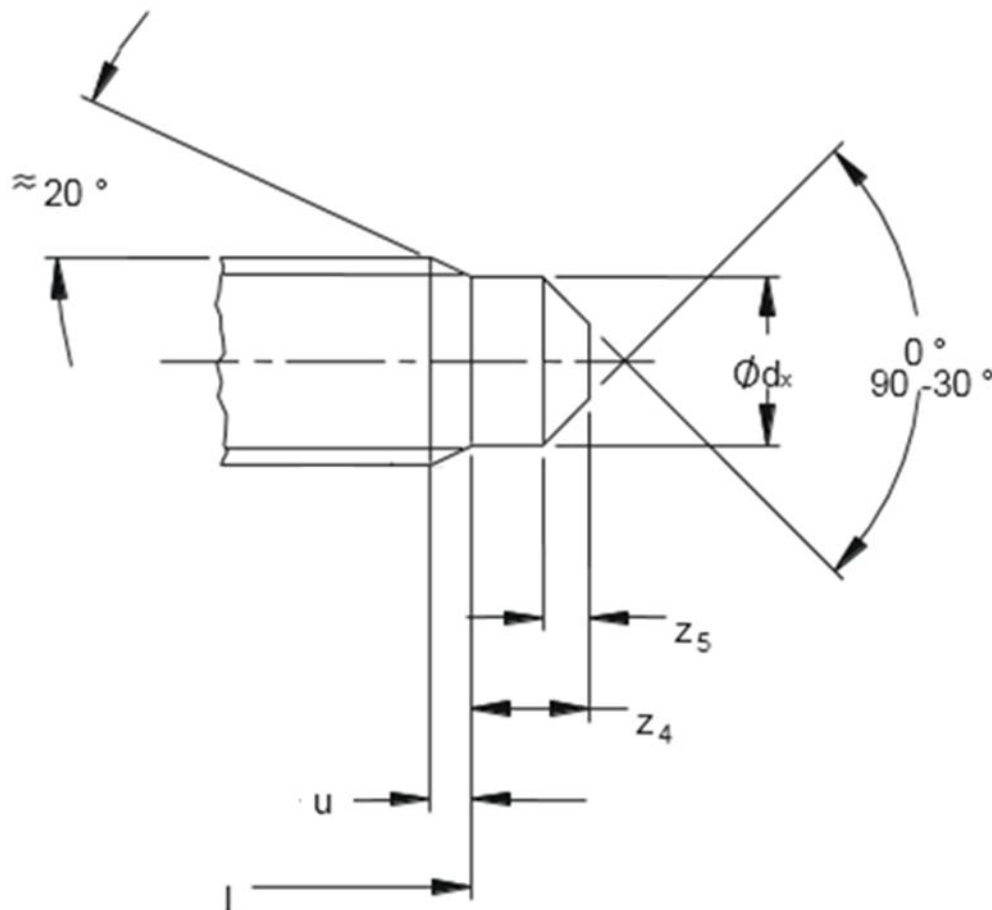
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2.3 Additional References. None.

3 Requirements

3.1 Dimensions. See Figure 1, Table 1 and Table 2.

Figure 1: Pilot Point with Truncated Cone



Note: ϕ = Diameter. See Table 1 for d_x , z_4 and z_5 definitions.

Note: “ l ” is the nominal length of the fastener. Incomplete thread $u \leq 2P$ ($2P$ is two (2) times the thread pitch). The 20 degree angle applies only to the portion of the point below the root diameter of the thread.

Table 1: Dimensional Requirements: Pilot Point with Truncated Cone ^{Note 1}

Thread		M5	M6	M8	M10	M12	M14	M16
d_x	maximum	3.8	4.5	6.1	7.8	9.4	11.1	13.1
	minimum	3.6	4.3	5.9	7.6	9.1	10.8	12.8
z_4	+IT17 ^{Note 2} 0	2.5	3	4	5	6	7	8
z_5	maximum	1.5	2	2.5	3	3.5	4	4.5
	minimum	0.75	1	1.5	1.5	2	2	2.5

Note 1: All dimensions are in millimeters.

Note 2: See Table 2 for tolerance requirements.

Note: IT = ISO code system for tolerances on linear sizes, the standard tolerance grade identifier consists of IT followed by a number (e.g. IT 7).