

## On the minimum distance of ternary cyclic codes

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# On the Minimum Distance of Ternary Cyclic Codes

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Known techniques for finding a lowerbound for the minimum distance of a cyclic code are sometimes not powerful enough to find the real minimum distance. So new techniques are discussed that improve on those bounds in the case of ternary cyclic codes. Much improvement is based on orthogonality or 'almost orthogonality' of certain codes. For even length  $n$  also knowledge about the codes of length  $n/2$  can sometimes be used.