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Two Classes of New Exact Solutions to (2+1)-Dimensional Breaking Soliton Equation PENG Yan-Ze¹ and E.V. Krishnan²

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Abstract: The singular manifold method is used to obtain two general solutions to a (2+1)dimensional breaking soliton equation, each of which contains two arbitrary functions. Then the new periodic wave solutions in terms of the Jacobi elliptic functions are generated from the general solutions. The long wave limit yields the new types of dromion and solitary structures.

PACS: 02.30.Jr Key words: (2+1)-dimensional breaking soliton equation, exact solutions, singular manifold method

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