Here we compare the functional biology of the sympatric krill species, Meganyctiphanes norvegica and Thysanoessa inermis. For M. norvegica, we investigated functional responses on diatoms and copepods, together with prey size spectra on plankton ,400 mm and copepods in the size range 500–3220 mm. For T. inermis, only prey size spectrum on plankton ,400 mm were investigated. The prey size ranges of both species include organisms ,400 mm, and they consequently graze on several trophic levels. However, T. inermis feed on cells ,10 mm equivalent spherical diameter (ESD), whereas M. norvegica only feed on cells ,10 mm. Meganyctiphanes norvegica show maximum predation on 800–1600 mm sized copepods, corresponding to a predator:prey size ratio of 17.0+2.2. Functional response experiments with M. norvegica follow a Holling type III functional response, both when feeding on diatoms and copepods, but with an order of magnitude higher ingestion rate on the copepod prey. The two functional groups, M. norvegica and Thysanoessa spp., overlap in prey size spectra. However, there are differences in their ability to exploit different prey classes. Here, we present clearance rates of both krill species on natural plankton illustrating the two species' wide particle range spectra.