The present work aims to study the weight vs. size relationship and the condition factor of a commercially important crab (*Portunus segnis*) from an inshore area located at the Persian Gulf, Hormozgan province, Iran. After sampled, the specimens were measured on their carapace width (CW) and weighted on their wet weight (WW). A total of 302 individuals of *P. segnis* were analyzed, being 148 males (49%) and 154 females (51%). Males were significantly larger and heavier than females (P<0.05), the expected pattern to many crabs. The relationship WW vs. CW, described through the power function, was allometric positive for males (b=3.45) and isometric for females (b=3.03), a result also observed in some other swimming crabs. The mean condition factor of males (0.09 $10^{-2} \pm 0.001 \, 10^{-2}$) was reduced when compared with mean value obtained to females (0.61 $10^{-2} \pm 0.005 \, 10^{-2}$) (P<0.05), due to female’s gonads are heavier than that of males. The condition factor of this species oscillated throughout the sampling year, with a more prominent fluctuation in females, and lower winter values regardless sex, due to reproductive cycle.

Keywords: carapace, condition factor, *Portunus segnis*, weight-width relationship.