The ϕ-η and ϕ-f0(980) transition form factors have been analyzed by means of a dispersive procedure. The low-energy phi-eta transition form factor is well reproduced under the hypothesis of a quark-antiquark pseudoscalar meson. In the case of the f0(980), the low energy behaviour is regained, in agreement with data, only with a 4-quark f0. In addition, by using the quark-hadron duality, the 4-quark structure of the f0 is unraveled also in the non-asymptotic regime.