```
ea::Solver base< Solver
< PSOI, T, F, C >, PSOI,
         T. F. C >
# solver struct
# f
# c
# individuals
# min cost
# last_iter
# solved flag
# timer
# distribution
+ solver bench()
# Solver base()
# randomise individual()
# init individuals()
# find min cost()
# display results()
# write results to file()
 ea::Solver< PSOI, T,
          F. C >
 - pso
 - W
 vmax

    personal best

    personal best cost

    local best

    velocity

    nneigh

    neighbours

 + Solver()
 set neighbourhoods()
 position update()
 best update()
 find min local best()
 - check pso criteria()
 - run algo()
 euclid_distance()
 display parameters()
```