

Id Tag	Full Name	Bounds	Gradient -Based	Stochastic	Constraints		Sub- Opt
					Equality	Inequality	
DIRECT	Dividing rectangles	●					
DIRECTL	Locally biased dividing rectangles	●					
DIRECTLRand	Randomized locally biased dividing rectangles	●					
DIRECTNoScal	Dividing rectangles - no scaling	●					
DIRECTLNoScal	Locally biased dividing rectangles - no scaling	●					
DIRECTLRandNoScal	Randomized locally biased dividing rectangles - no scaling	●					
OrigDIRECT	Original Glabonsky's dividing rectangles	●				✓	
OrigDIRECTL	Original Glabonsky's locally biased dividing rectangles	●				✓	
StoGO	Stochastic(?) Global Optimization	●	●				
StoGORand	Randomized Stochastic(?) Global Optimization	●	●				
LBFGS	Low-storage BFGS		●				
PRAXIS	Principal AXIS	✓					
Var1	Rank-1 shifted limited-memory variable-metric		●				
Var2	Rank-2 shifted limited-memory variable-metric		●				
TNewton	Truncated Newton		●				
TNewtonRestart	Steepest descent restarting truncated Newton		●				
TNewtonPrecond	BFGS preconditionned truncated Newton		●				
TNewtonRestartPrecond	BFGS preconditionned truncated Newton with steepest descent restarting		●				
CRS2	Controlled random search with local mutation	✓		●			
MMA	Method of moving asymptots	✓	●			✓	
COBYLA	Constrained optimization by linear approximations	✓			✓	✓	
NEWUOA	NEWUOA						
NEWUOABound	NEWUOA for bounded optimization	✓					
NelderMead	Nelder-Mead simplex	✓					
Sbplx	Subplex	✓					
BOBYQA	BOBYQA	✓					
ISRES	Improved stochastic ranking evolution strategy	✓		●	✓	✓	
SLSQP	Sequential least-square quadratic programming	✓	●		✓	✓	
MLSL	Multi-level single-linkage	✓	●	●			●
MLSLLDS	Low discrepancy multi-level single-linkage	✓	●	●			●
AUGLAG	Constraints augmented lagrangian	✓	●		✓	✓	●
AUGLAGEQ	Equality constraints augmented lagrangian	✓	●		✓	✓	●

Legend :

- ✓ Supported and optional
- ✓ Should be supported and optional, may lead to weird behaviour though.
- Intrinsic characteristic of the algorithm which then need one or more unavoidable parameter to work (for stochastic algorithm, the population size always have a default value, they will then work if it is ommited)
- For routines with subsidiary algorithms only, indicates that the corresponding feature will depend on the chosen sub-optimizer.