In table 1-2 we report the description of the instances; for each of them we specify the membership group, the name, the dimension and the optimal value.

group	name	N	A	K	$f_*$
1	p33	20	226	40	511953.98753
1	p34	20	226	40	681197.11916
1	p35	20	226	40	484015.33505
1	p36	20	226	40	588216.34652
2	p37	20	230	200	106143.35470
2	p38	20	230	200	141275.52680
2	p39	20	230	200	99174.40056
2	p40	20	230	200	128984.68680
3	p41	20	292	40	417387.00000
3	p42	20	292	40	537169.07331
3	p43	20	292	40	394872.39507
3	p44	20	292	40	486407.21566
4	p45	20	292	200	85354.58222
4	p46	20	292	200	114035.74625
4	p47	20	292	200	82668.01241
4	p48	20	292	200	110550.66549
5	p49	30	519	100	59531.34765
5	p50	30	519	100	105551.71719
5	p51	30	519	100	53608.15507
5	p52	30	519	100	92783.63036
6	p53	30	519	400	135696.01870
6	p54	30	519	400	171998.47288
6	p55	30	519	400	127483.02975
6	p56	30	519	400	161738.65874
7	p57	30	684	100	52719.18996
7	p58	30	684	100	66955.43823
7	p59	30	684	100	46463.86113
7	p60	30	684	100	58529.54569
8	p61	30	692	400	125921.71231
8	p62	30	692	400	160576.20060
8	p63	30	692	400	112077.48150
8	p64	30	692	400	150376.49394

Table 1: Description of the instances - I

group	name	N	A	K	$f_*$
9	pN1	20	300	100	2079230.90738
9	pN2	$\frac{20}{20}$	300	100	1651285.33574
9	pN3	$\frac{20}{20}$	300	100	2113652.13308
9	pN4	$\frac{20}{20}$	300	100	2753661.44590
10	pN5	20	300	200	119224.21054
10	pN6	20	300	200	77581.18801
10	pN7	20	300	200	112974.02691
10	pN8	$\frac{20}{20}$	300	200	79512.56733
11	pN9	20	300	400	354064.55782
11	pN10	$\frac{20}{20}$	300	400	572315.61200
11	pN10 pN11	$\frac{20}{20}$	300	400	460452.04332
11	pN11 pN12	$\frac{20}{20}$	300	400	796275.93538
12	-	$\frac{20}{20}$	300	800	342150.02824
12	pN13	$\frac{20}{20}$			
1	pN14	I	300	800	403159.70360
12 12	pN15	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\frac{300}{300}$	800	368171.03927
13	pN16	30	600	800	575733.02383 382161.31454
1	pN17	l			
13	pN18	30	600	100	151874.54494
13	pN19	30	600	100	332958.26082
13	pN20	30	600	100	144411.24089
14	pN21	30	600	200	286317.86960
14	pN22	30	600	200	503650.00880
14	pN23	30	600	200	401435.20941
14	pN24	30	600	200	740939.19515
15	pN25	30	600	400	1625827.80473
15	pN26	30	600	400	2425057.35751
15	pN27	30	600	400	1501141.98211
15	pN28	30	600	400	2179033.89136
16	pN29	30	600	800	924338.02260
16	pN30	30	600	800	826673.16056
16	pN31	30	600	800	549252.33747
16	pN32	30	600	800	889032.39166
17	pN33	50	1200	100	1922619.48306
17	pN34	50	1200	100	964793.20029
17	pN35	50	1200	100	2296931.40877
17	pN36	50	1200	100	1117302.52611
18	pN37	50	1200	200	1066485.44305
18	pN38	50	1200	200	167544.14265
18	pN39	50	1200	200	858612.28559
18	pN40	50	1200	200	92767.05798
19	pN41	50	1200	400	259050.09935
19	pN42	50	1200	400	1442415.28570
19	pN43	50	1200	400	849448.24204
19	pN44	50	1200	400	1799978.12010
20	pN45	50	1200	800	1002550.54488
20	pN46	50	1200	800	556932.74146
20	pN47	50	1290	800	1237327.43405
20	pN48	50	1260	800	2121817.59757

Table 2: Description of the instances -  ${\rm II}$