

Integrative Structure Validation Report ?

October 09, 2025 - 04:37 PM PDT

The following software was used in the production of this report:

IHMValidation Version 3.0

Python-IHM Version 2.5

PDB ID	8ZZ8 pdb_00008zz8
PDB-Dev ID	PDBDEV_00000008
Structure Title	Fly Genome Structure: Chromosome 2L
Structure Authors	David C
Deposited on	2017-08-10

This is a PDB-IHM Structure Validation Report.

We welcome your comments at helpdesk@pdb-ihm.org

A user guide is available at https://pdb-ihm.org/validation_help.html with specific help available everywhere you see the ? symbol.

List of references used to build this report is available [here](#).

1. Overview ?

1.1. Summary ?

This entry consists of 1012 model(s). A total of 1 dataset(s) were used to build this entry.

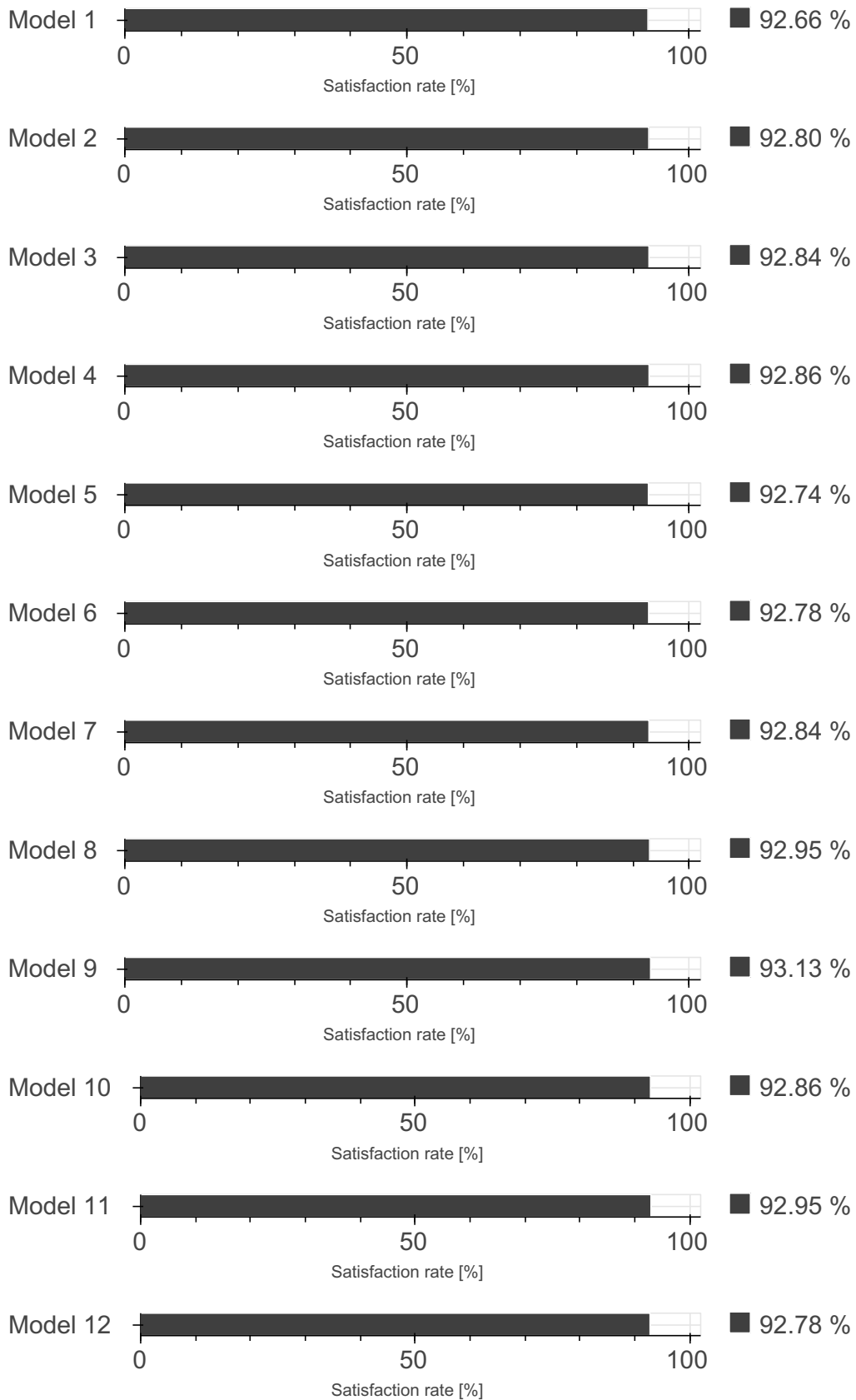
Name	Type	Count
Integrative model	Starting model	1

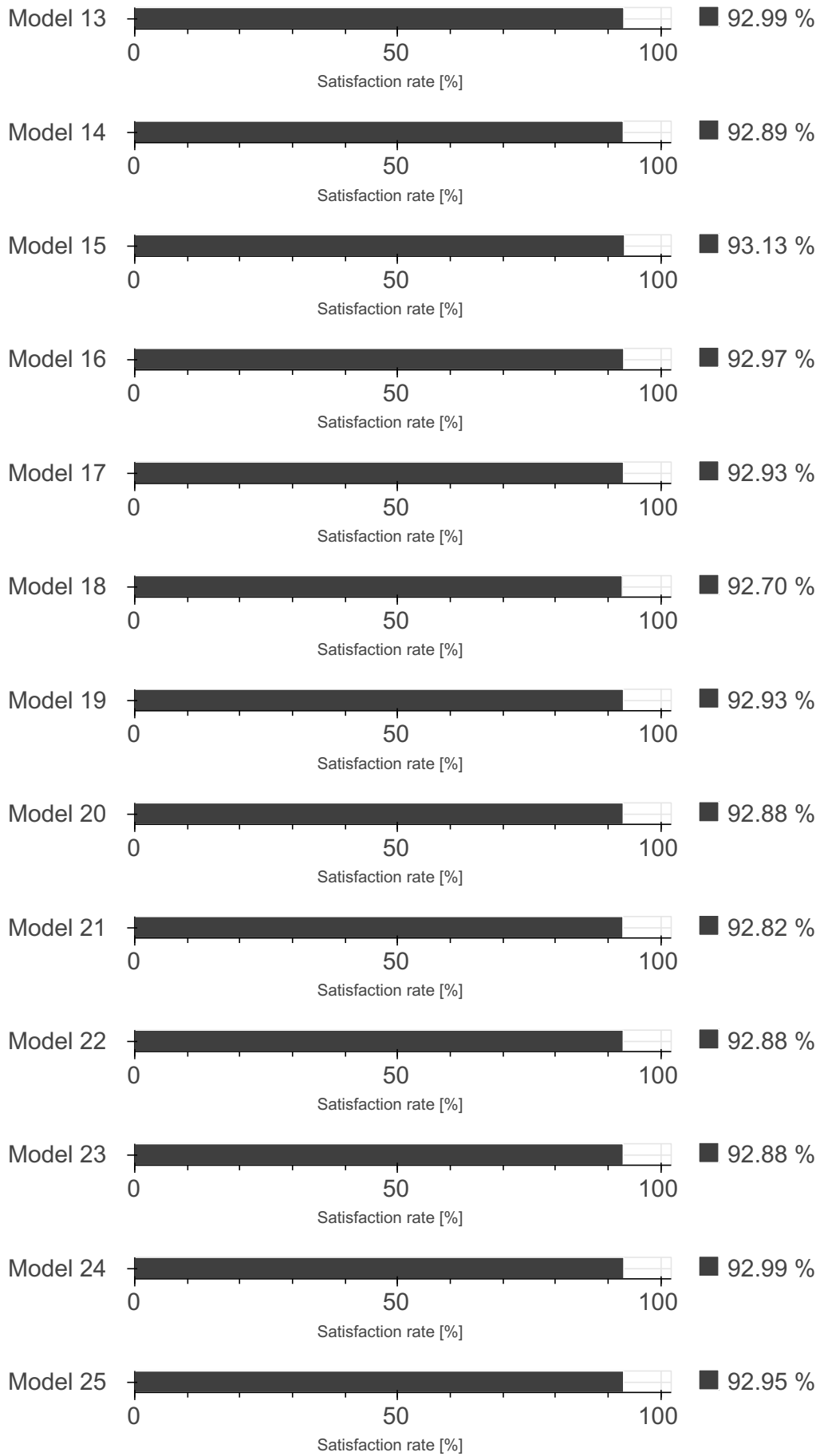
1.2. Overall quality ?

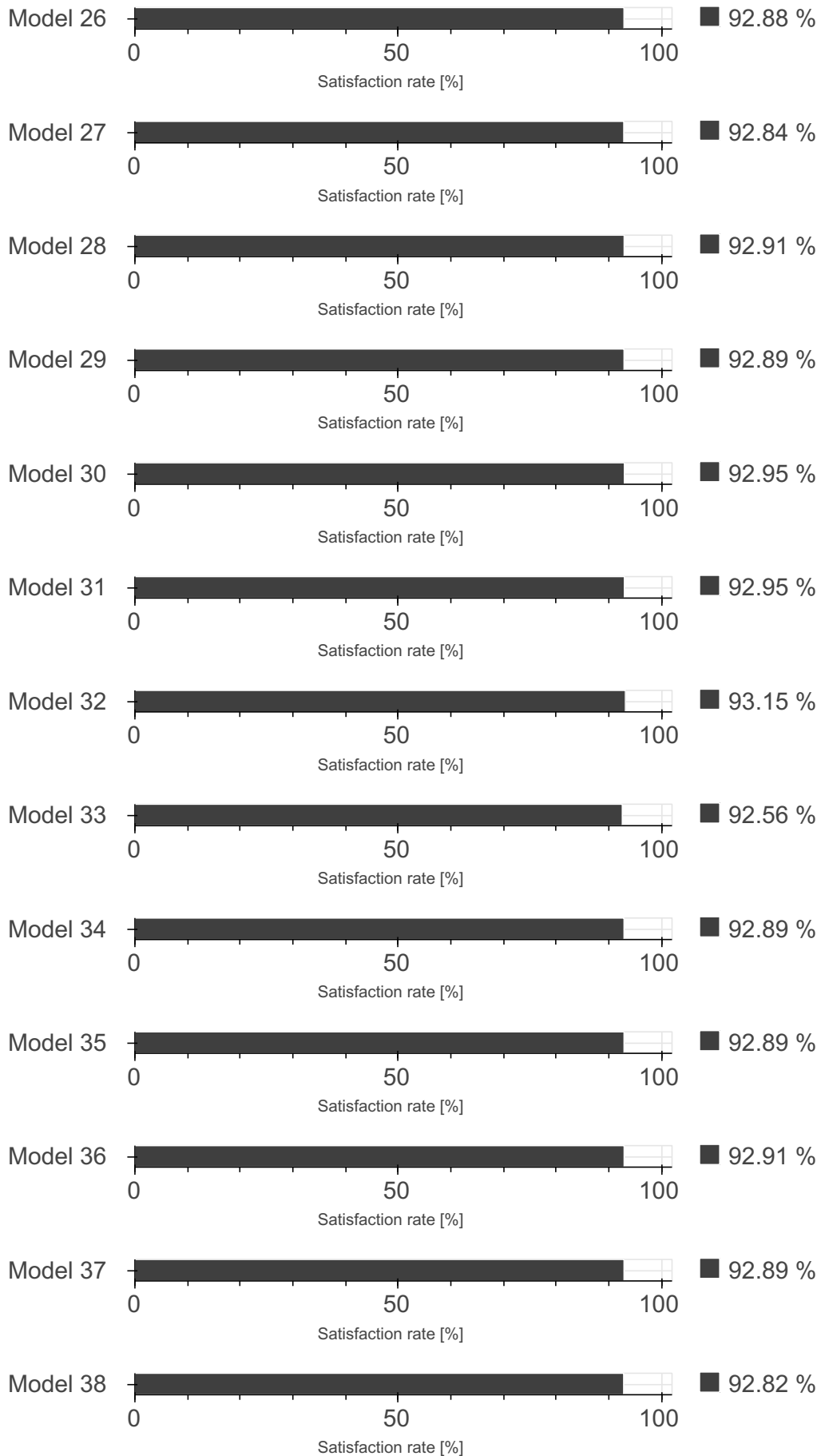
This validation report contains model quality assessments for all structures, data quality and fit to model assessments for SAS and

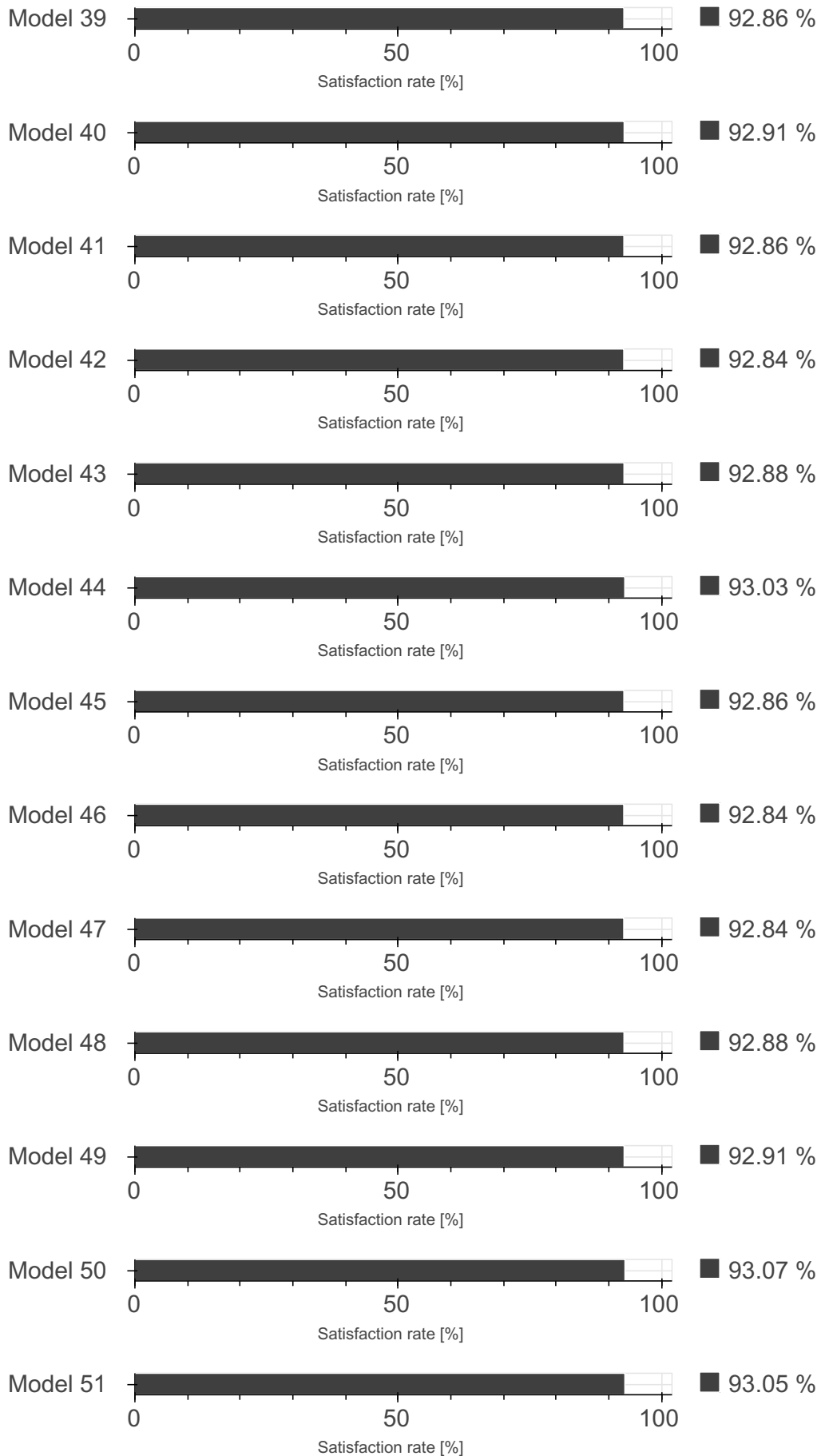
crosslinking-MS datasets. Data quality and fit to model assessments for other datasets and model uncertainty are under development. Number of plots is limited to 256.

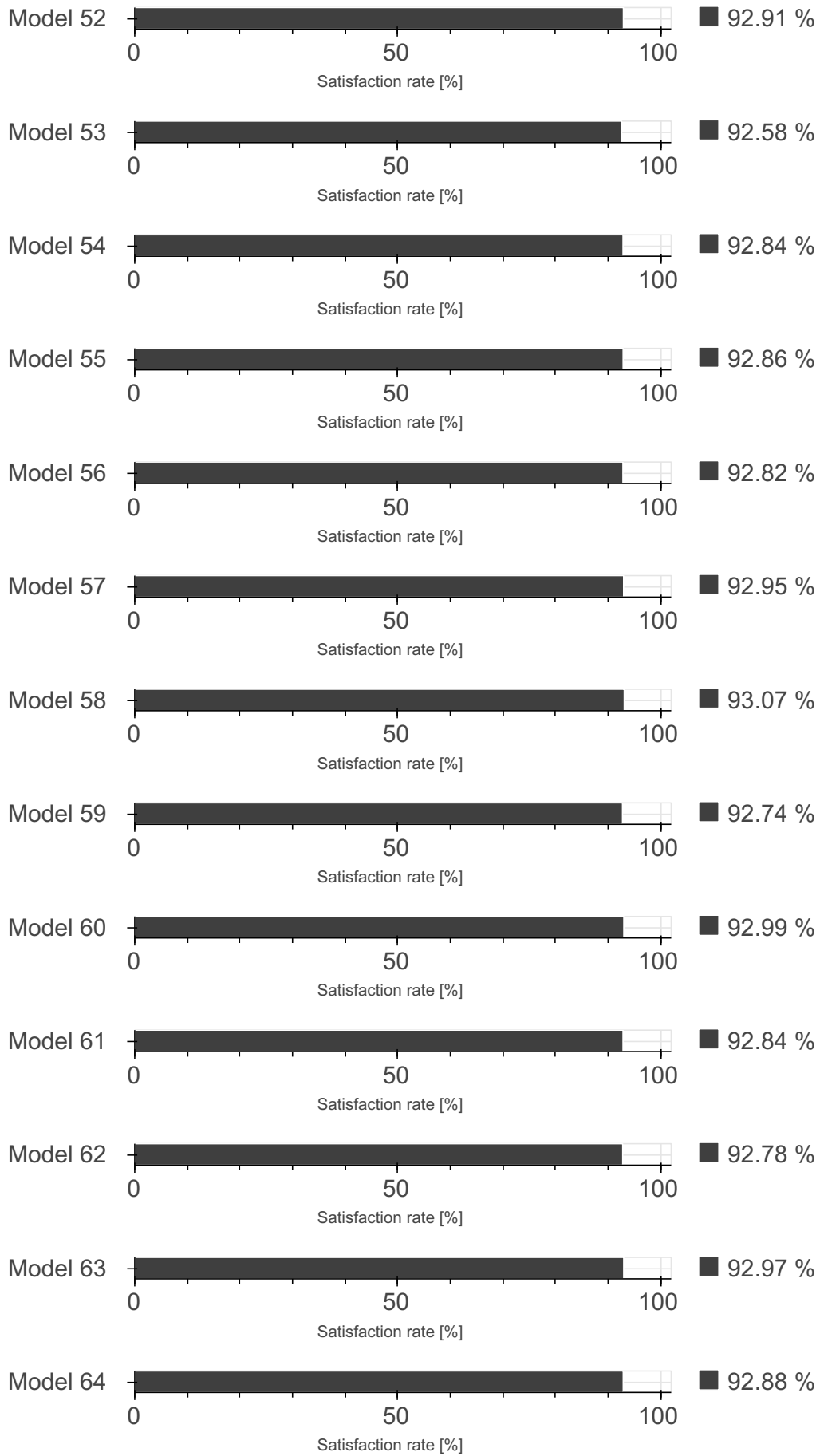
Model Quality: Excluded Volume Analysis ?

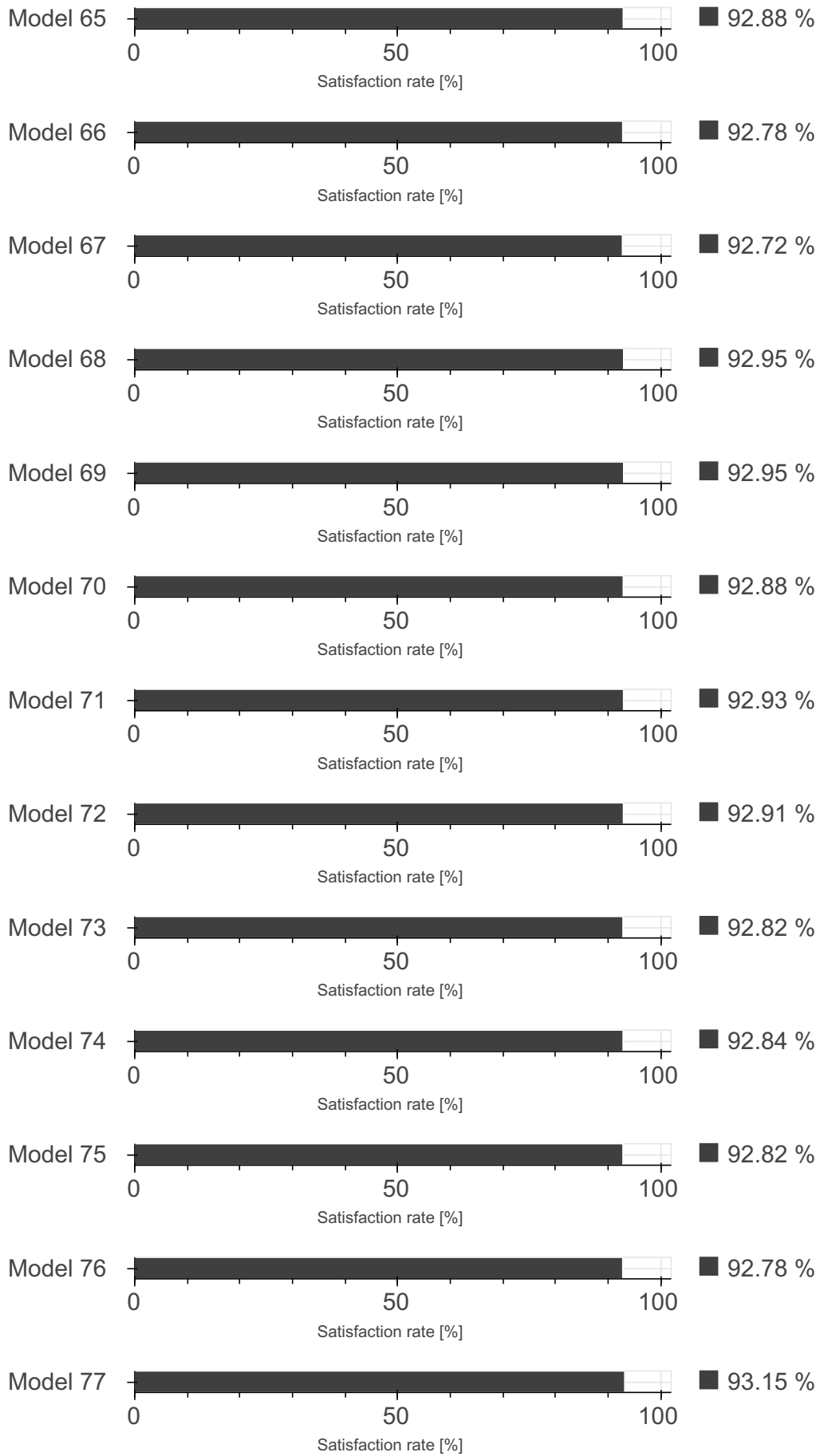


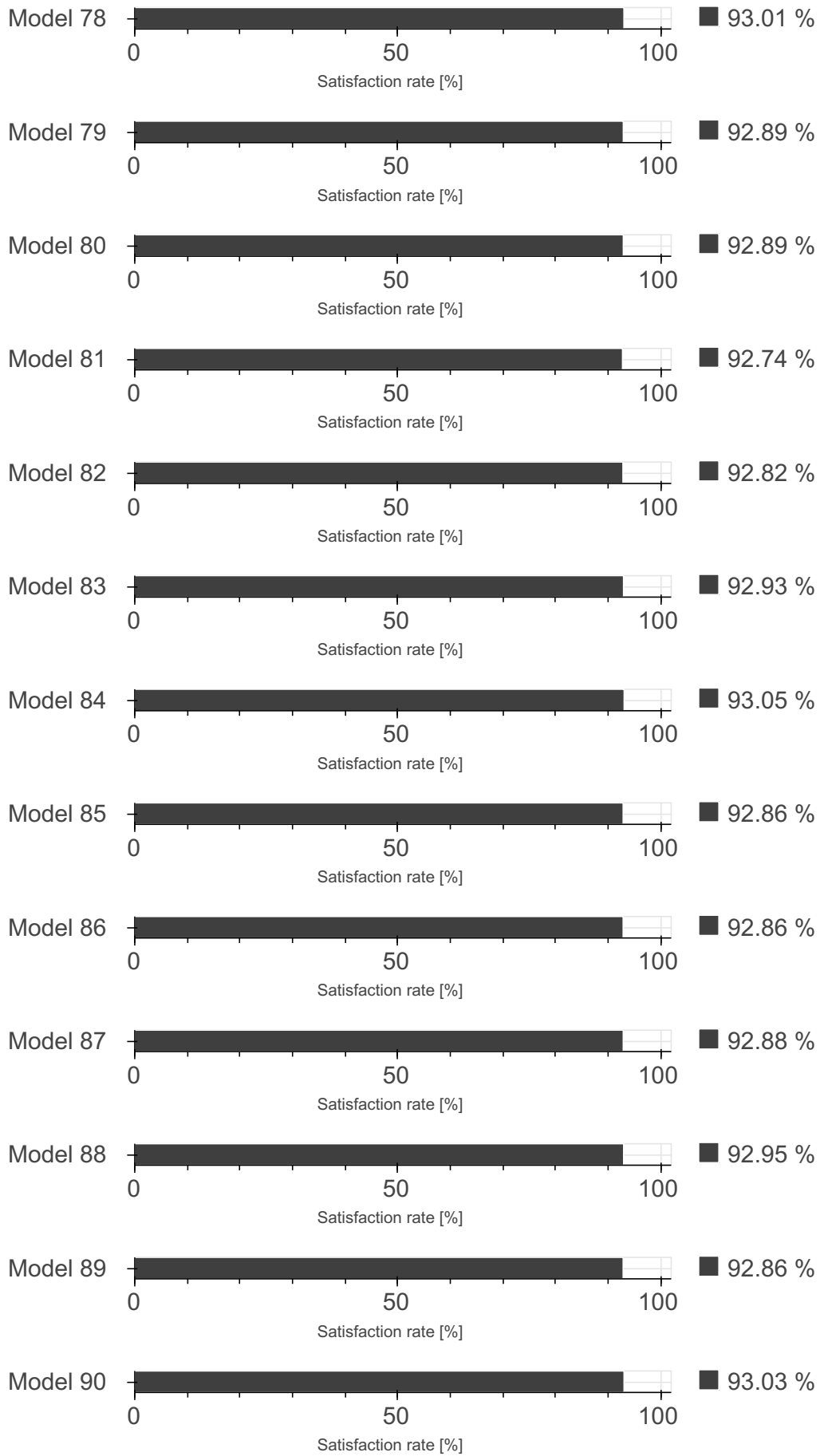


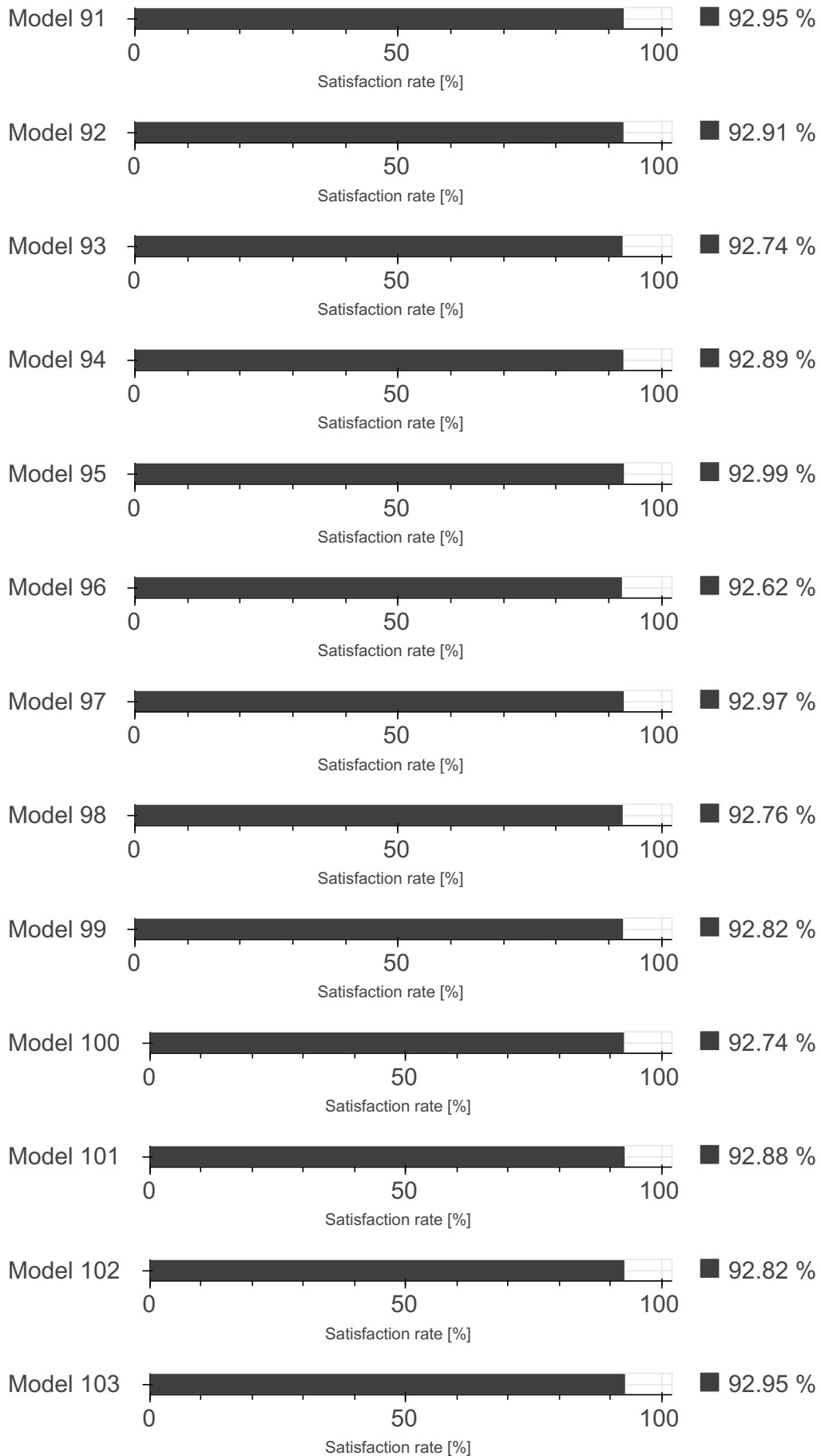


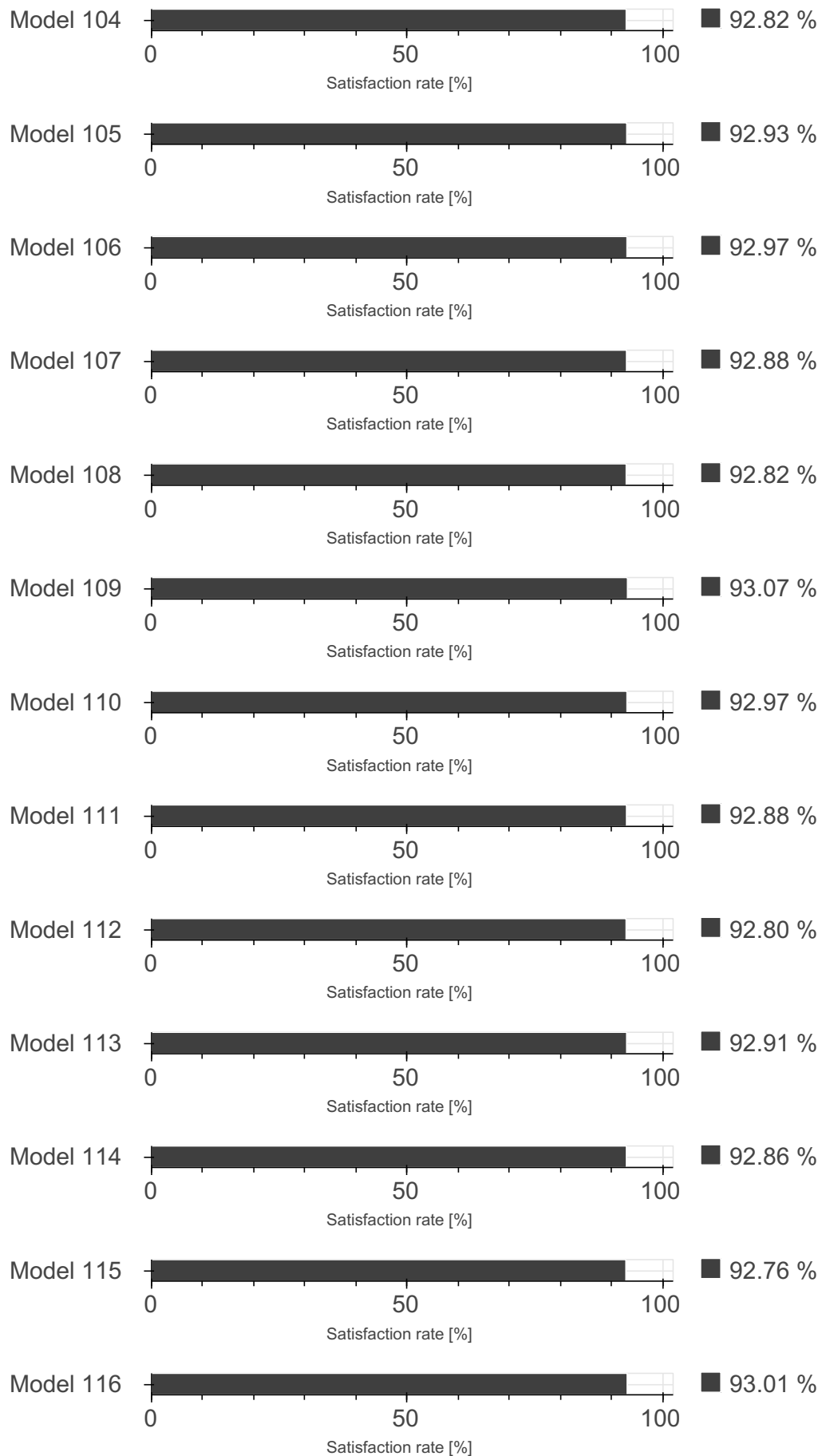


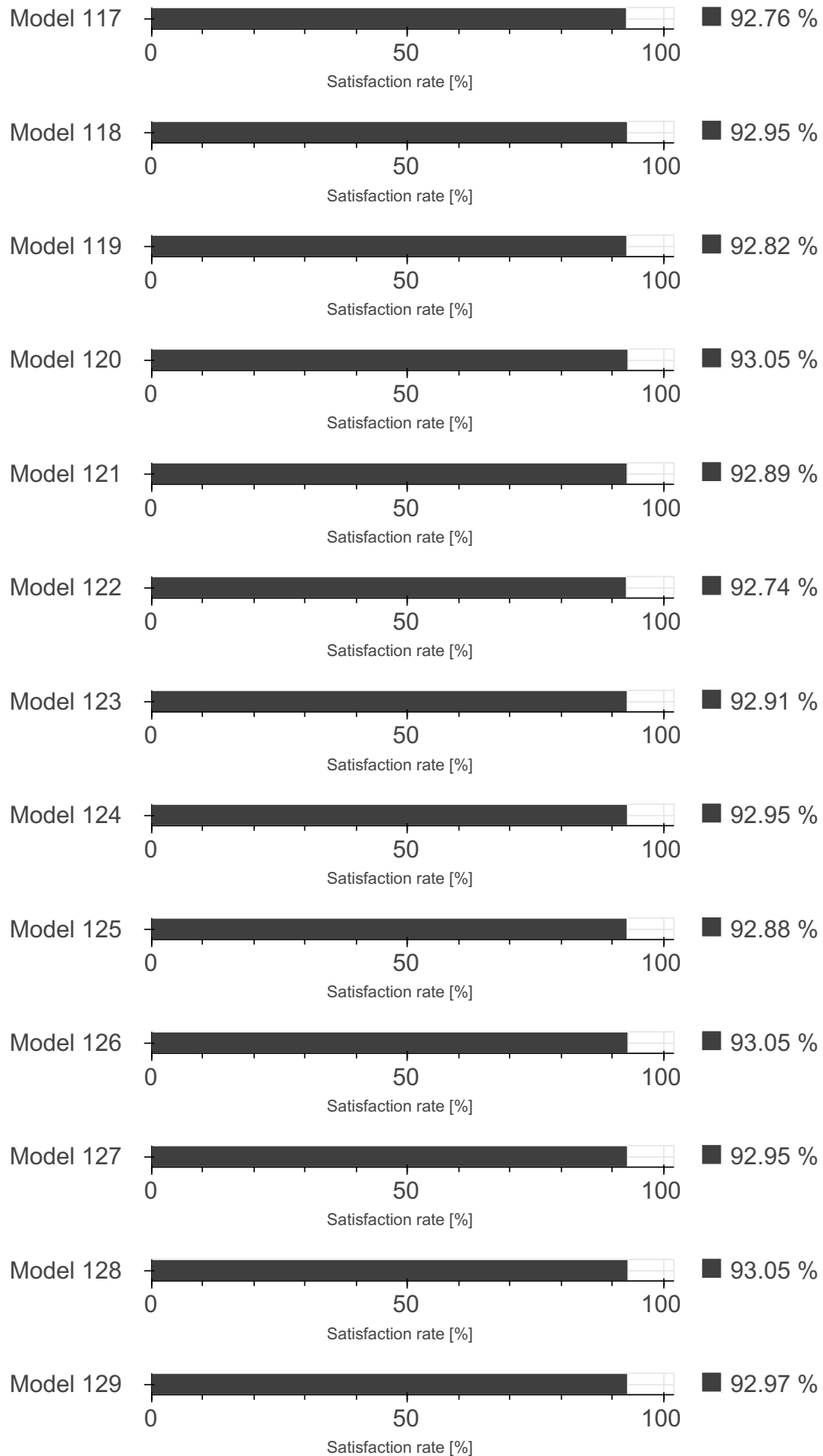


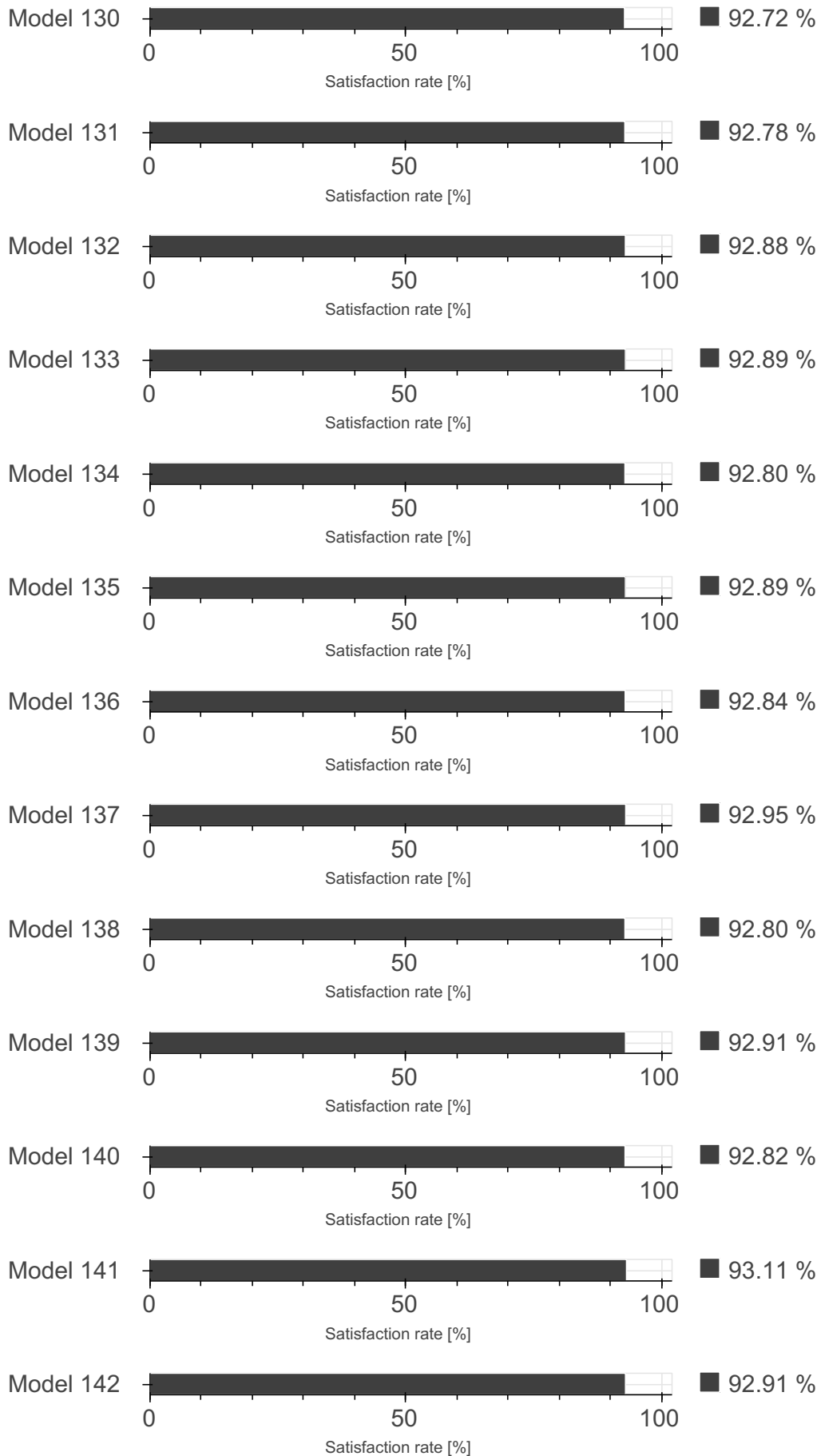


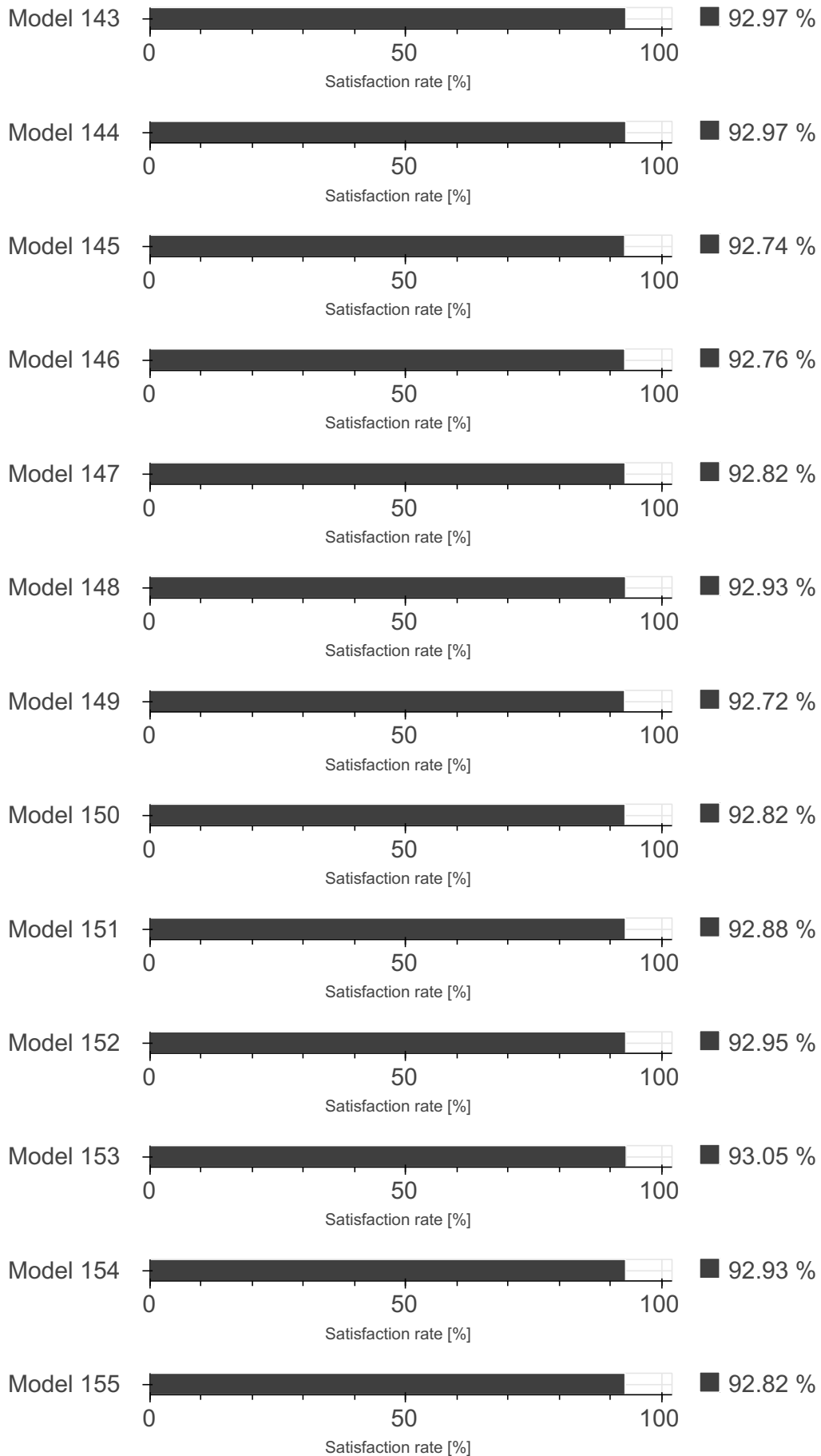


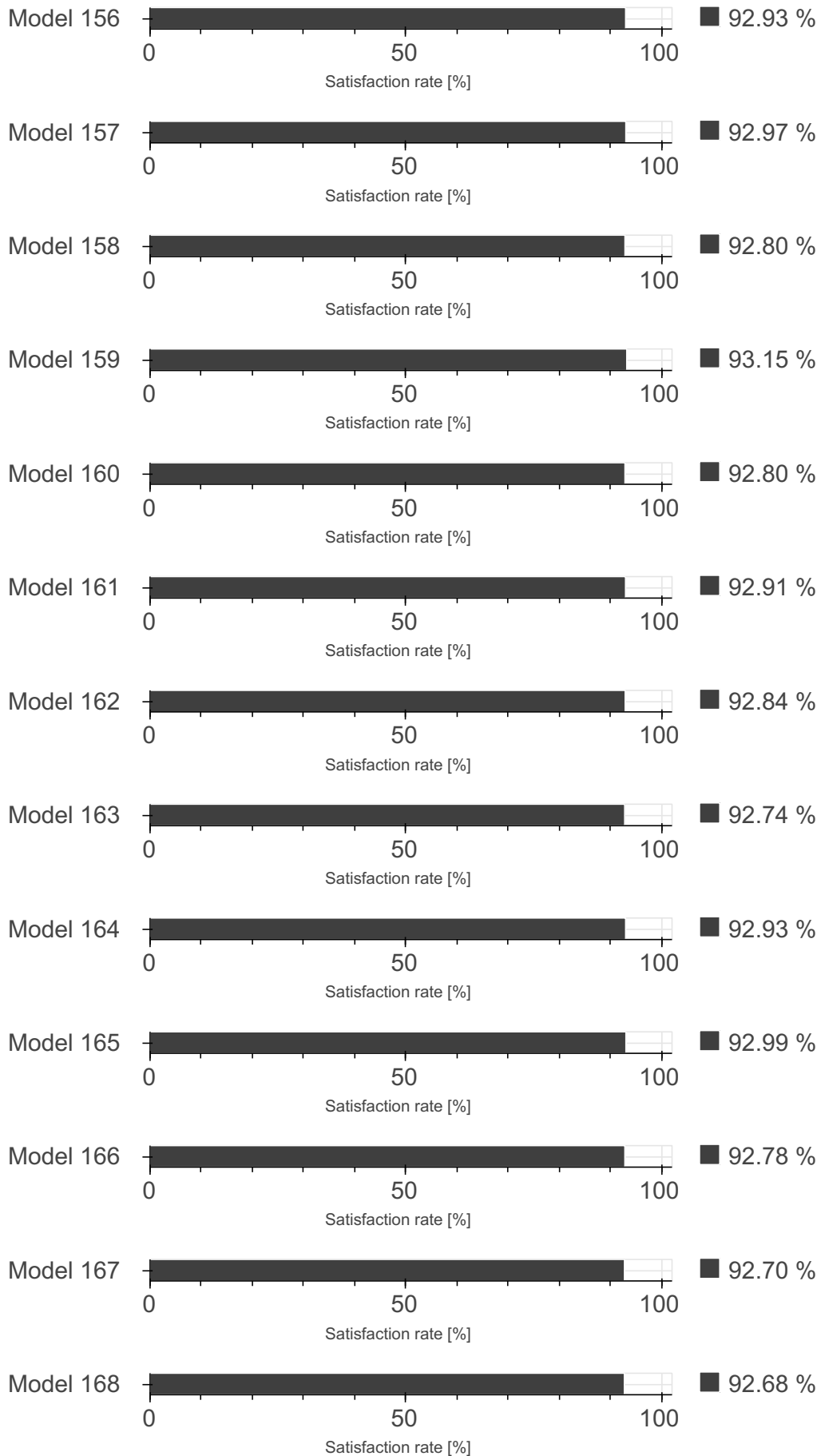


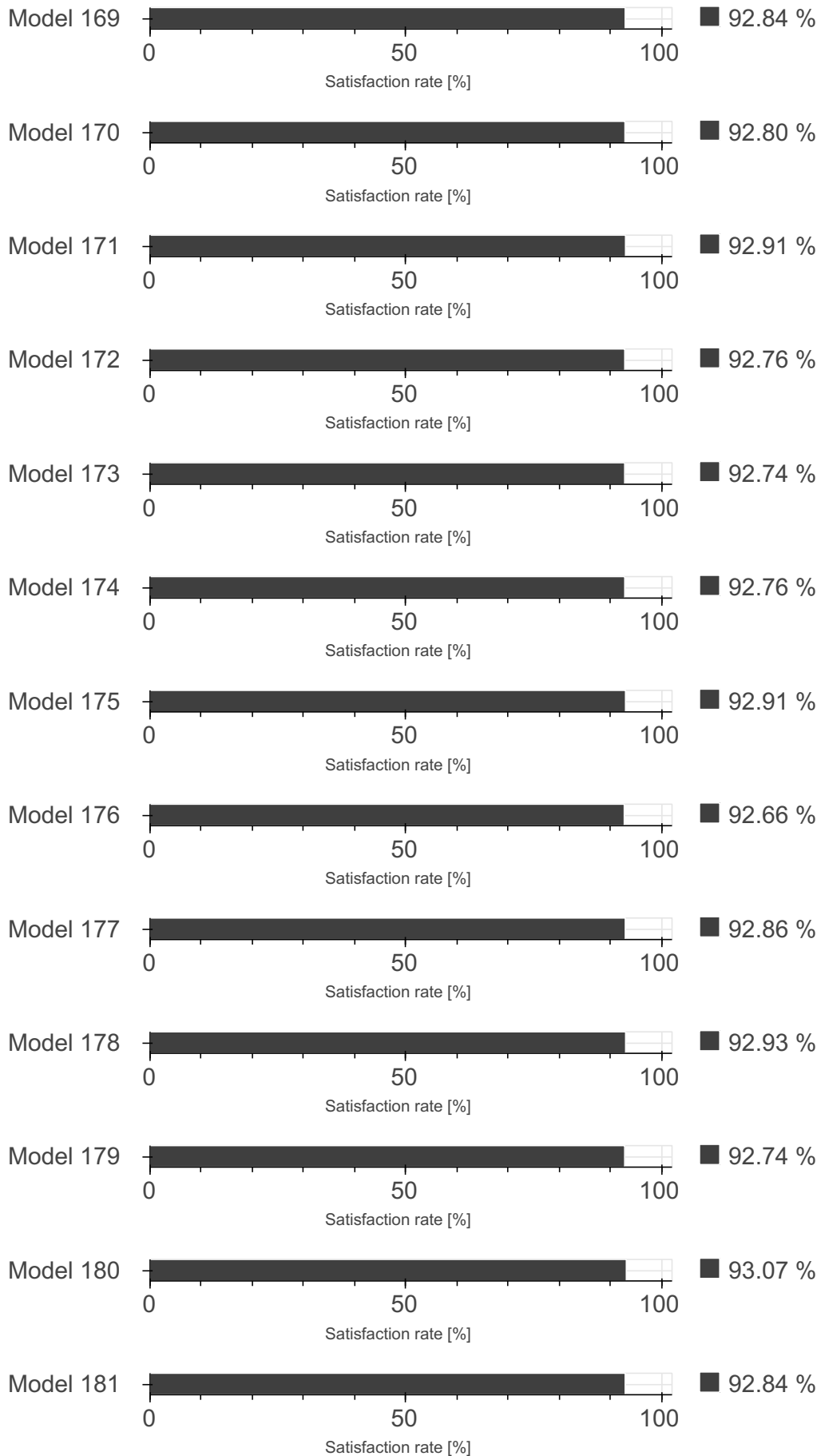


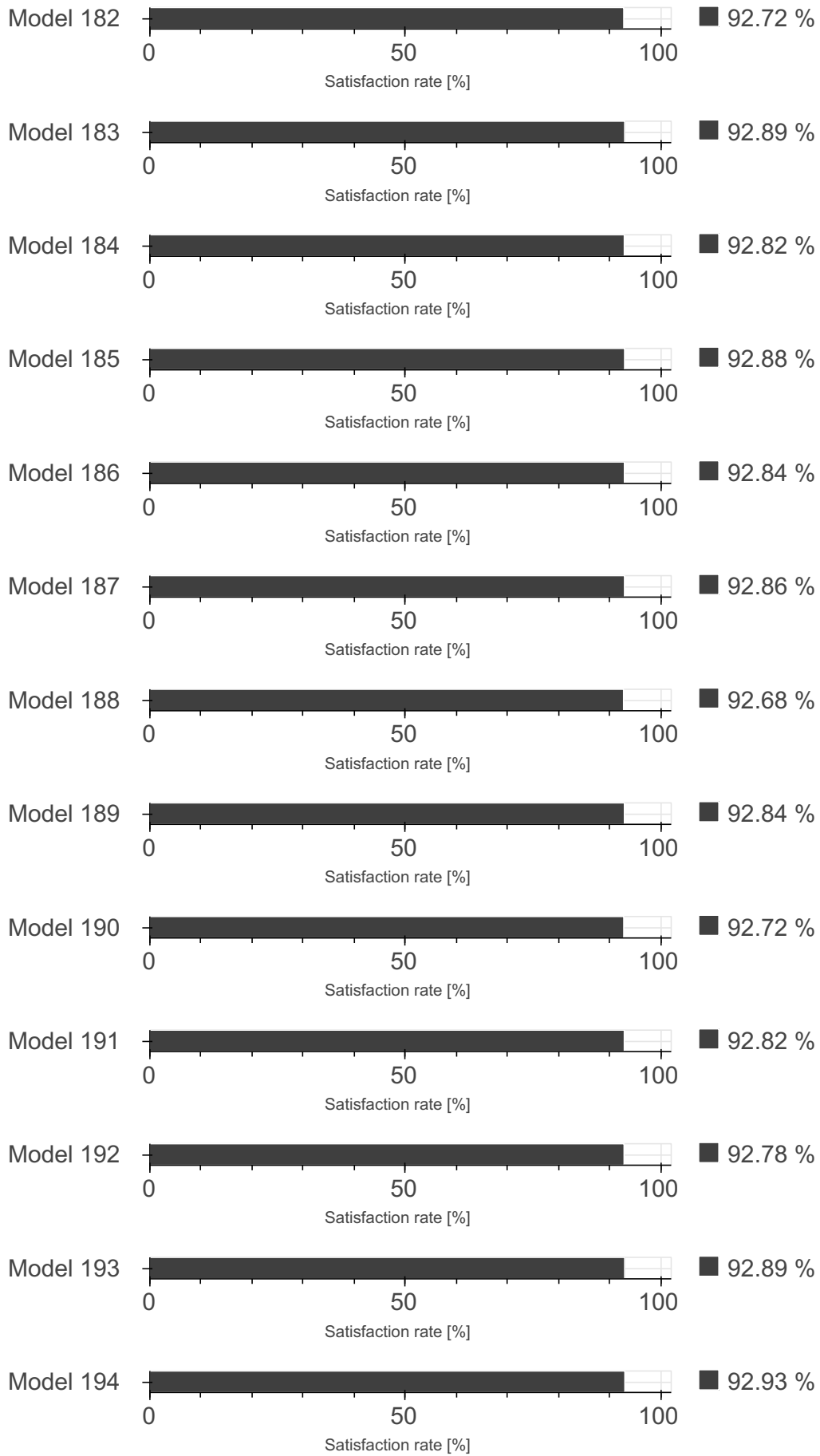


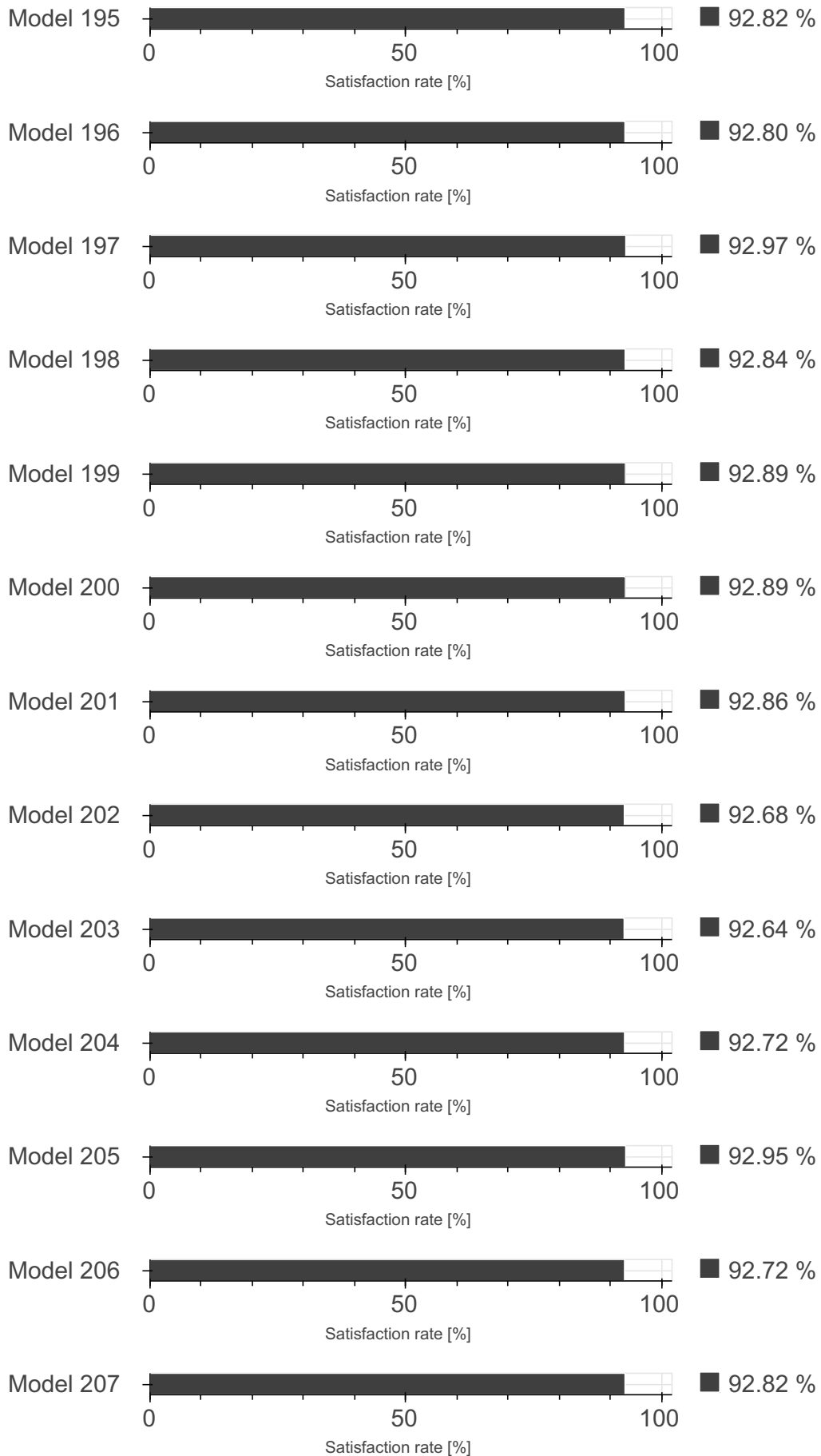


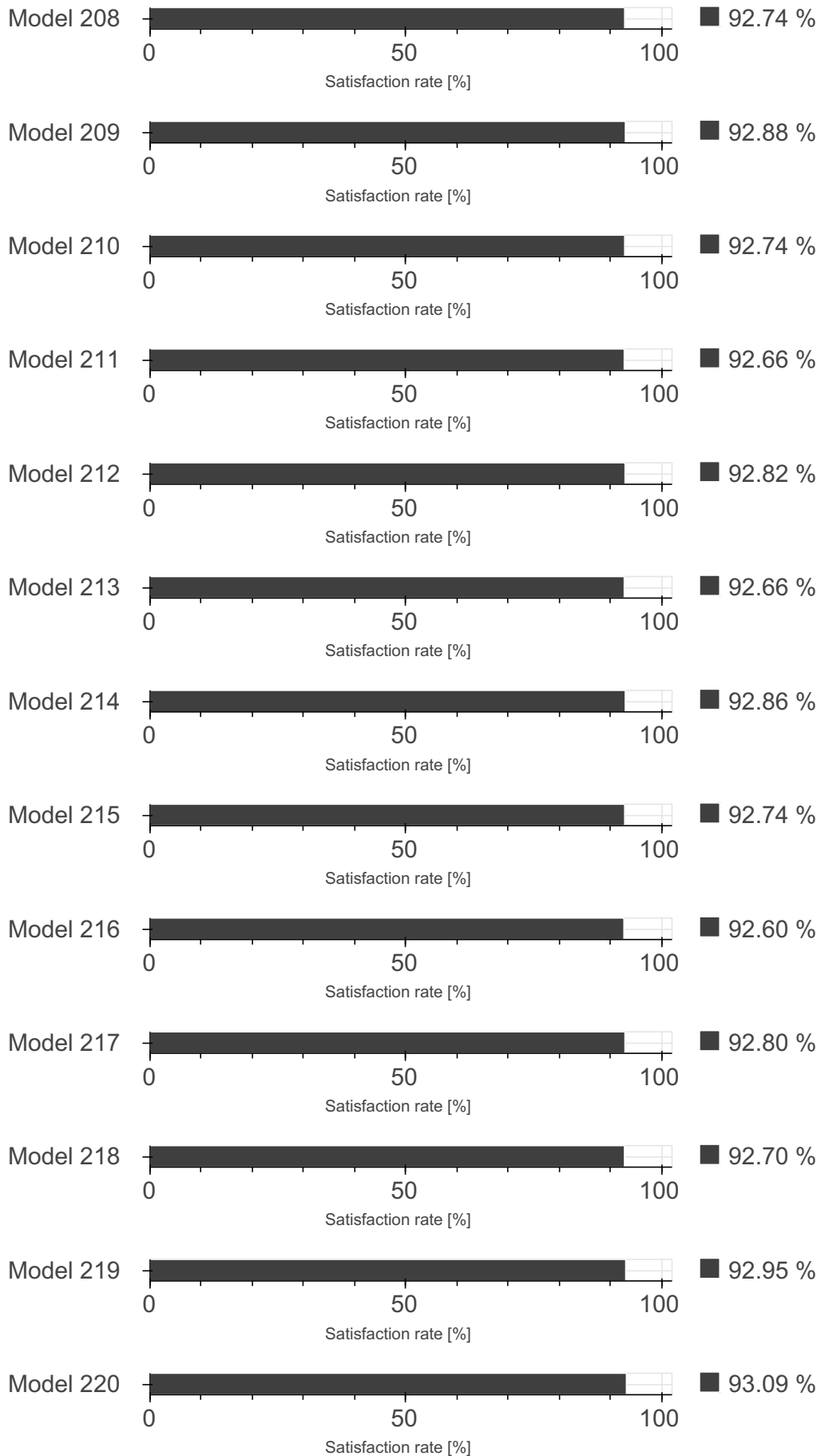


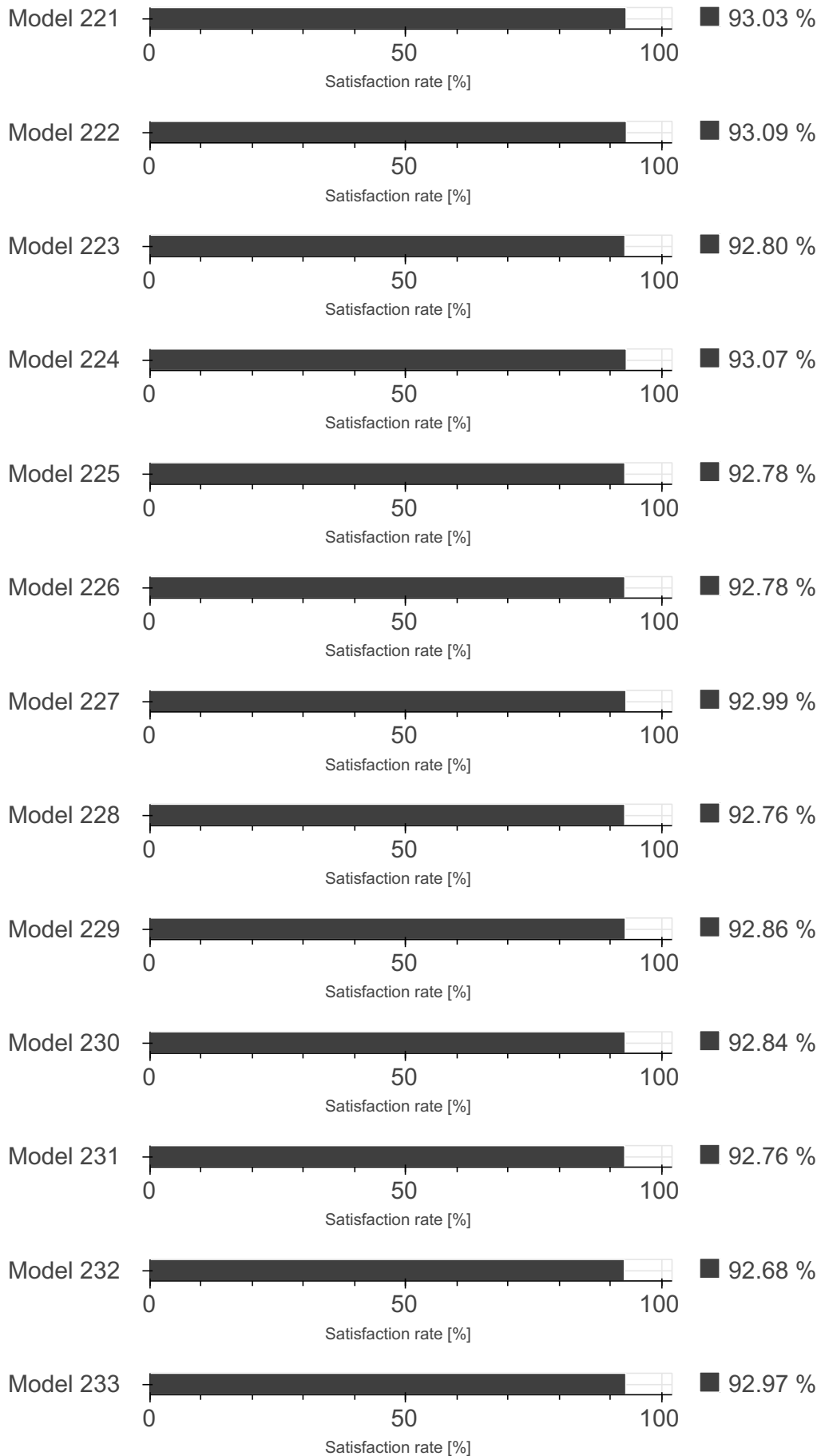


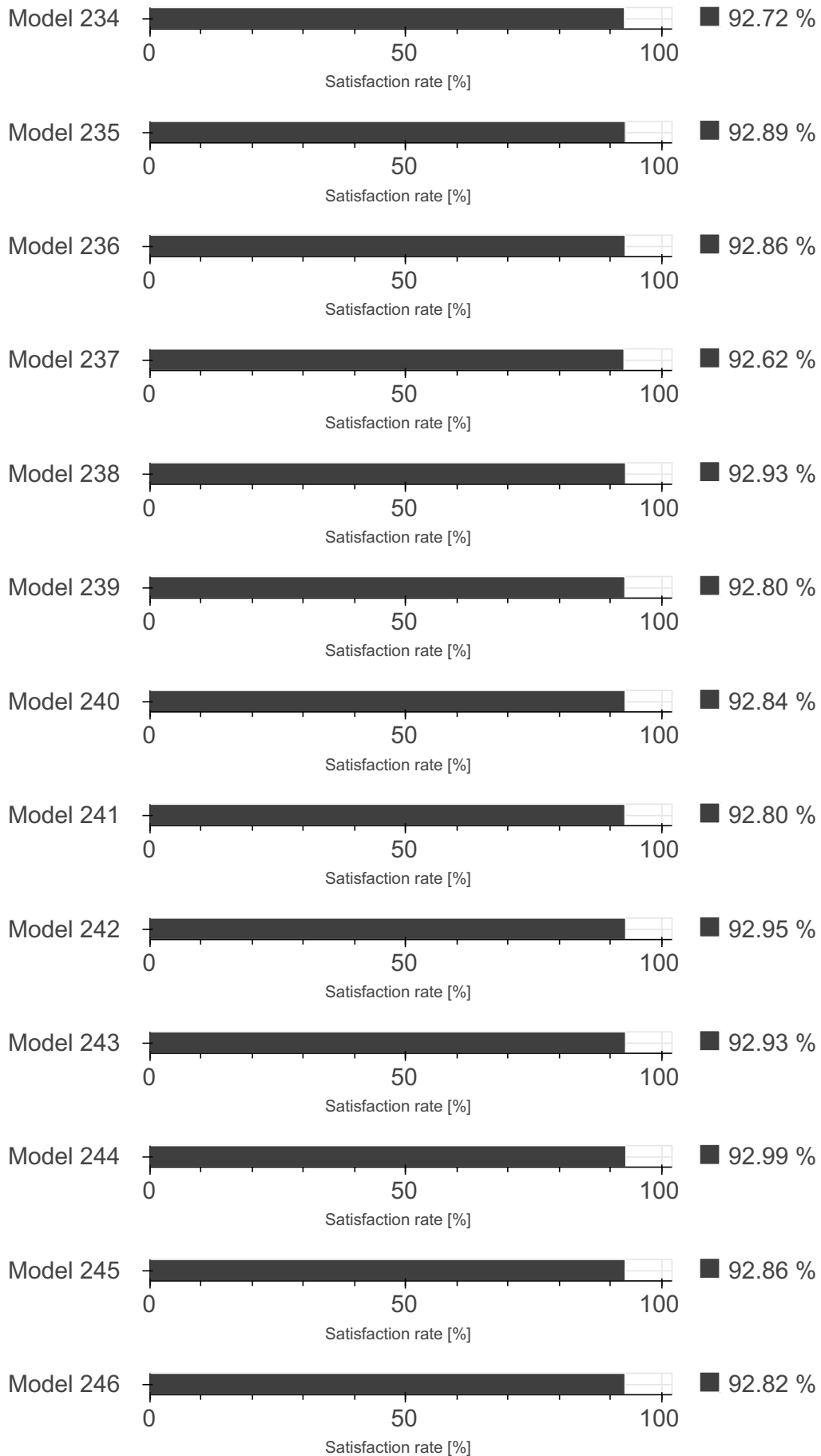


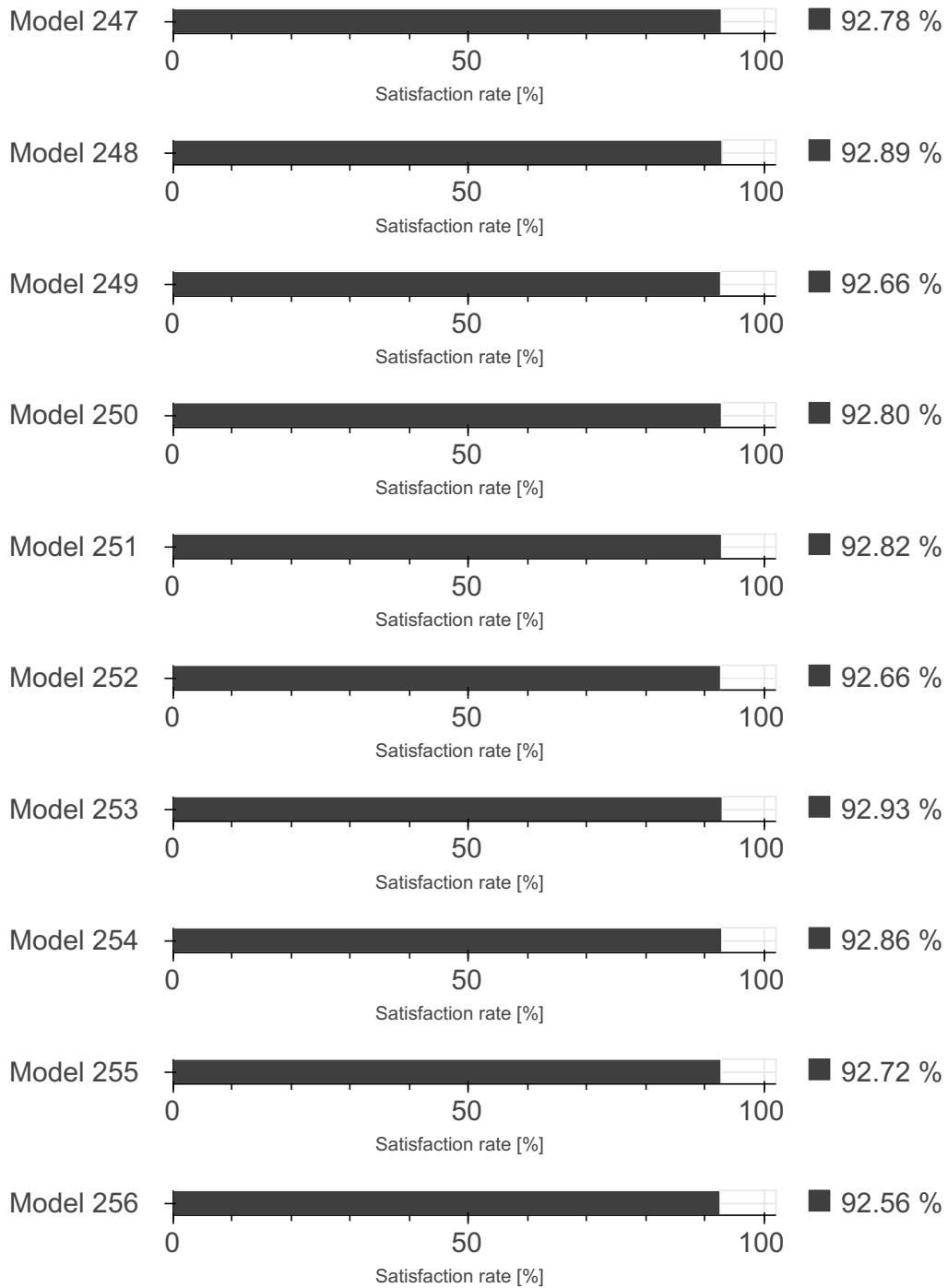












2. Model Details ?

2.1. Ensemble information ?

This entry consists of 0 distinct ensemble(s).

2.2. Representation ?

This entry has 1 representation(s).

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
1	1-1012	1	chr2L_60-161	A	103	-	1-103	100.00 / 0.00	Coarse-grained: 1 residue(s) per bead

2.3. Datasets used for modeling ?

There is 1 unique dataset used to build the models in this entry.

ID	Dataset type	Database name	Data access code
1	Integrative model	Not available	Not available

2.4. Methodology and software ?

This entry is a result of 1 distinct protocol(s).

Step number	Protocol ID	Method name	Method type	Method description	Number of computed models	Multi state modeling	Multi scale modeling
1	1	Sampling	Monte carlo annealing	Not available	5000	False	True

There are 2 software packages reported in this entry.

ID	Software name	Software version	Software classification	Software location
1	TADbit	3DAROC_2016.64	analysis of 3C-based experiments	http://sgt.cnag.cat/3dg/tadbit/
2	Integrative Modeling Platform (IMP)	2.6.1	integrative model building	https://integrativemodeling.org

3. Data quality ?

4. Model quality ?

For models with atomic structures, MolProbity analysis is performed. For models with coarse-grained or multi-scale structures, excluded volume analysis is performed.

4.1a. Excluded Volume Analysis ?

Excluded volume satisfaction for the models in the entry are listed below. The Analysed column shows the number of particle-particle or particle-atom pairs for which excluded volume was analysed.

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
1	5151	378	92.66
2	5151	371	92.80
3	5151	369	92.84
4	5151	368	92.86

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
5	5151	374	92.74
6	5151	372	92.78
7	5151	369	92.84
8	5151	363	92.95
9	5151	354	93.13
10	5151	368	92.86
11	5151	363	92.95
12	5151	372	92.78
13	5151	361	92.99
14	5151	366	92.89
15	5151	354	93.13
16	5151	362	92.97
17	5151	364	92.93
18	5151	376	92.70
19	5151	364	92.93
20	5151	367	92.88
21	5151	370	92.82
22	5151	367	92.88
23	5151	367	92.88
24	5151	361	92.99
25	5151	363	92.95
26	5151	367	92.88
27	5151	369	92.84
28	5151	365	92.91
29	5151	366	92.89
30	5151	363	92.95
31	5151	363	92.95
32	5151	353	93.15
33	5151	383	92.56
34	5151	366	92.89
35	5151	366	92.89
36	5151	365	92.91
37	5151	366	92.89
38	5151	370	92.82
39	5151	368	92.86

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
40	5151	365	92.91
41	5151	368	92.86
42	5151	369	92.84
43	5151	367	92.88
44	5151	359	93.03
45	5151	368	92.86
46	5151	369	92.84
47	5151	369	92.84
48	5151	367	92.88
49	5151	365	92.91
50	5151	357	93.07
51	5151	358	93.05
52	5151	365	92.91
53	5151	382	92.58
54	5151	369	92.84
55	5151	368	92.86
56	5151	370	92.82
57	5151	363	92.95
58	5151	357	93.07
59	5151	374	92.74
60	5151	361	92.99
61	5151	369	92.84
62	5151	372	92.78
63	5151	362	92.97
64	5151	367	92.88
65	5151	367	92.88
66	5151	372	92.78
67	5151	375	92.72
68	5151	363	92.95
69	5151	363	92.95
70	5151	367	92.88
71	5151	364	92.93
72	5151	365	92.91
73	5151	370	92.82
74	5151	369	92.84

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
75	5151	370	92.82
76	5151	372	92.78
77	5151	353	93.15
78	5151	360	93.01
79	5151	366	92.89
80	5151	366	92.89
81	5151	374	92.74
82	5151	370	92.82
83	5151	364	92.93
84	5151	358	93.05
85	5151	368	92.86
86	5151	368	92.86
87	5151	367	92.88
88	5151	363	92.95
89	5151	368	92.86
90	5151	359	93.03
91	5151	363	92.95
92	5151	365	92.91
93	5151	374	92.74
94	5151	366	92.89
95	5151	361	92.99
96	5151	380	92.62
97	5151	362	92.97
98	5151	373	92.76
99	5151	370	92.82
100	5151	374	92.74
101	5151	367	92.88
102	5151	370	92.82
103	5151	363	92.95
104	5151	370	92.82
105	5151	364	92.93
106	5151	362	92.97
107	5151	367	92.88
108	5151	370	92.82
109	5151	357	93.07

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
110	5151	362	92.97
111	5151	367	92.88
112	5151	371	92.80
113	5151	365	92.91
114	5151	368	92.86
115	5151	373	92.76
116	5151	360	93.01
117	5151	373	92.76
118	5151	363	92.95
119	5151	370	92.82
120	5151	358	93.05
121	5151	366	92.89
122	5151	374	92.74
123	5151	365	92.91
124	5151	363	92.95
125	5151	367	92.88
126	5151	358	93.05
127	5151	363	92.95
128	5151	358	93.05
129	5151	362	92.97
130	5151	375	92.72
131	5151	372	92.78
132	5151	367	92.88
133	5151	366	92.89
134	5151	371	92.80
135	5151	366	92.89
136	5151	369	92.84
137	5151	363	92.95
138	5151	371	92.80
139	5151	365	92.91
140	5151	370	92.82
141	5151	355	93.11
142	5151	365	92.91
143	5151	362	92.97
144	5151	362	92.97

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
145	5151	374	92.74
146	5151	373	92.76
147	5151	370	92.82
148	5151	364	92.93
149	5151	375	92.72
150	5151	370	92.82
151	5151	367	92.88
152	5151	363	92.95
153	5151	358	93.05
154	5151	364	92.93
155	5151	370	92.82
156	5151	364	92.93
157	5151	362	92.97
158	5151	371	92.80
159	5151	353	93.15
160	5151	371	92.80
161	5151	365	92.91
162	5151	369	92.84
163	5151	374	92.74
164	5151	364	92.93
165	5151	361	92.99
166	5151	372	92.78
167	5151	376	92.70
168	5151	377	92.68
169	5151	369	92.84
170	5151	371	92.80
171	5151	365	92.91
172	5151	373	92.76
173	5151	374	92.74
174	5151	373	92.76
175	5151	365	92.91
176	5151	378	92.66
177	5151	368	92.86
178	5151	364	92.93
179	5151	374	92.74

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
180	5151	357	93.07
181	5151	369	92.84
182	5151	375	92.72
183	5151	366	92.89
184	5151	370	92.82
185	5151	367	92.88
186	5151	369	92.84
187	5151	368	92.86
188	5151	377	92.68
189	5151	369	92.84
190	5151	375	92.72
191	5151	370	92.82
192	5151	372	92.78
193	5151	366	92.89
194	5151	364	92.93
195	5151	370	92.82
196	5151	371	92.80
197	5151	362	92.97
198	5151	369	92.84
199	5151	366	92.89
200	5151	366	92.89
201	5151	368	92.86
202	5151	377	92.68
203	5151	379	92.64
204	5151	375	92.72
205	5151	363	92.95
206	5151	375	92.72
207	5151	370	92.82
208	5151	374	92.74
209	5151	367	92.88
210	5151	374	92.74
211	5151	378	92.66
212	5151	370	92.82
213	5151	378	92.66
214	5151	368	92.86

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
215	5151	374	92.74
216	5151	381	92.60
217	5151	371	92.80
218	5151	376	92.70
219	5151	363	92.95
220	5151	356	93.09
221	5151	359	93.03
222	5151	356	93.09
223	5151	371	92.80
224	5151	357	93.07
225	5151	372	92.78
226	5151	372	92.78
227	5151	361	92.99
228	5151	373	92.76
229	5151	368	92.86
230	5151	369	92.84
231	5151	373	92.76
232	5151	377	92.68
233	5151	362	92.97
234	5151	375	92.72
235	5151	366	92.89
236	5151	368	92.86
237	5151	380	92.62
238	5151	364	92.93
239	5151	371	92.80
240	5151	369	92.84
241	5151	371	92.80
242	5151	363	92.95
243	5151	364	92.93
244	5151	361	92.99
245	5151	368	92.86
246	5151	370	92.82
247	5151	372	92.78
248	5151	366	92.89
249	5151	378	92.66

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
250	5151	371	92.80
251	5151	370	92.82
252	5151	378	92.66
253	5151	364	92.93
254	5151	368	92.86
255	5151	375	92.72
256	5151	383	92.56
257	5151	364	92.93
258	5151	366	92.89
259	5151	360	93.01
260	5151	366	92.89
261	5151	362	92.97
262	5151	382	92.58
263	5151	376	92.70
264	5151	379	92.64
265	5151	363	92.95
266	5151	361	92.99
267	5151	360	93.01
268	5151	383	92.56
269	5151	369	92.84
270	5151	384	92.55
271	5151	368	92.86
272	5151	362	92.97
273	5151	360	93.01
274	5151	371	92.80
275	5151	365	92.91
276	5151	370	92.82
277	5151	364	92.93
278	5151	368	92.86
279	5151	366	92.89
280	5151	378	92.66
281	5151	368	92.86
282	5151	369	92.84
283	5151	366	92.89
284	5151	359	93.03

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
285	5151	375	92.72
286	5151	377	92.68
287	5151	371	92.80
288	5151	377	92.68
289	5151	369	92.84
290	5151	373	92.76
291	5151	367	92.88
292	5151	365	92.91
293	5151	381	92.60
294	5151	373	92.76
295	5151	368	92.86
296	5151	370	92.82
297	5151	370	92.82
298	5151	379	92.64
299	5151	368	92.86
300	5151	366	92.89
301	5151	368	92.86
302	5151	360	93.01
303	5151	369	92.84
304	5151	371	92.80
305	5151	364	92.93
306	5151	366	92.89
307	5151	373	92.76
308	5151	374	92.74
309	5151	373	92.76
310	5151	378	92.66
311	5151	369	92.84
312	5151	384	92.55
313	5151	387	92.49
314	5151	377	92.68
315	5151	376	92.70
316	5151	369	92.84
317	5151	379	92.64
318	5151	377	92.68
319	5151	365	92.91

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
320	5151	365	92.91
321	5151	373	92.76
322	5151	372	92.78
323	5151	364	92.93
324	5151	364	92.93
325	5151	367	92.88
326	5151	370	92.82
327	5151	376	92.70
328	5151	363	92.95
329	5151	365	92.91
330	5151	381	92.60
331	5151	374	92.74
332	5151	385	92.53
333	5151	372	92.78
334	5151	366	92.89
335	5151	367	92.88
336	5151	380	92.62
337	5151	370	92.82
338	5151	373	92.76
339	5151	366	92.89
340	5151	376	92.70
341	5151	373	92.76
342	5151	373	92.76
343	5151	372	92.78
344	5151	367	92.88
345	5151	369	92.84
346	5151	369	92.84
347	5151	373	92.76
348	5151	371	92.80
349	5151	378	92.66
350	5151	372	92.78
351	5151	367	92.88
352	5151	356	93.09
353	5151	373	92.76
354	5151	362	92.97

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
355	5151	370	92.82
356	5151	370	92.82
357	5151	359	93.03
358	5151	379	92.64
359	5151	367	92.88
360	5151	367	92.88
361	5151	368	92.86
362	5151	378	92.66
363	5151	360	93.01
364	5151	374	92.74
365	5151	378	92.66
366	5151	360	93.01
367	5151	371	92.80
368	5151	376	92.70
369	5151	368	92.86
370	5151	365	92.91
371	5151	365	92.91
372	5151	358	93.05
373	5151	368	92.86
374	5151	382	92.58
375	5151	366	92.89
376	5151	358	93.05
377	5151	369	92.84
378	5151	366	92.89
379	5151	374	92.74
380	5151	365	92.91
381	5151	369	92.84
382	5151	378	92.66
383	5151	367	92.88
384	5151	371	92.80
385	5151	375	92.72
386	5151	372	92.78
387	5151	367	92.88
388	5151	373	92.76
389	5151	379	92.64

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
390	5151	361	92.99
391	5151	374	92.74
392	5151	362	92.97
393	5151	383	92.56
394	5151	374	92.74
395	5151	380	92.62
396	5151	367	92.88
397	5151	378	92.66
398	5151	366	92.89
399	5151	365	92.91
400	5151	371	92.80
401	5151	373	92.76
402	5151	359	93.03
403	5151	373	92.76
404	5151	368	92.86
405	5151	357	93.07
406	5151	374	92.74
407	5151	366	92.89
408	5151	374	92.74
409	5151	376	92.70
410	5151	365	92.91
411	5151	376	92.70
412	5151	374	92.74
413	5151	362	92.97
414	5151	362	92.97
415	5151	367	92.88
416	5151	368	92.86
417	5151	376	92.70
418	5151	374	92.74
419	5151	373	92.76
420	5151	370	92.82
421	5151	386	92.51
422	5151	378	92.66
423	5151	379	92.64
424	5151	360	93.01

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
425	5151	358	93.05
426	5151	373	92.76
427	5151	373	92.76
428	5151	382	92.58
429	5151	370	92.82
430	5151	368	92.86
431	5151	368	92.86
432	5151	373	92.76
433	5151	364	92.93
434	5151	366	92.89
435	5151	379	92.64
436	5151	374	92.74
437	5151	378	92.66
438	5151	368	92.86
439	5151	371	92.80
440	5151	359	93.03
441	5151	379	92.64
442	5151	369	92.84
443	5151	377	92.68
444	5151	360	93.01
445	5151	377	92.68
446	5151	374	92.74
447	5151	371	92.80
448	5151	363	92.95
449	5151	367	92.88
450	5151	360	93.01
451	5151	366	92.89
452	5151	368	92.86
453	5151	367	92.88
454	5151	367	92.88
455	5151	376	92.70
456	5151	361	92.99
457	5151	373	92.76
458	5151	377	92.68
459	5151	368	92.86

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
460	5151	375	92.72
461	5151	375	92.72
462	5151	363	92.95
463	5151	372	92.78
464	5151	370	92.82
465	5151	370	92.82
466	5151	370	92.82
467	5151	379	92.64
468	5151	368	92.86
469	5151	368	92.86
470	5151	380	92.62
471	5151	376	92.70
472	5151	376	92.70
473	5151	373	92.76
474	5151	372	92.78
475	5151	368	92.86
476	5151	366	92.89
477	5151	381	92.60
478	5151	363	92.95
479	5151	360	93.01
480	5151	369	92.84
481	5151	362	92.97
482	5151	370	92.82
483	5151	361	92.99
484	5151	379	92.64
485	5151	368	92.86
486	5151	364	92.93
487	5151	360	93.01
488	5151	370	92.82
489	5151	364	92.93
490	5151	369	92.84
491	5151	373	92.76
492	5151	368	92.86
493	5151	362	92.97
494	5151	372	92.78

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
495	5151	366	92.89
496	5151	360	93.01
497	5151	375	92.72
498	5151	374	92.74
499	5151	362	92.97
500	5151	366	92.89
501	5151	376	92.70
502	5151	354	93.13
503	5151	378	92.66
504	5151	363	92.95
505	5151	372	92.78
506	5151	376	92.70
507	5151	360	93.01
508	5151	371	92.80
509	5151	369	92.84
510	5151	368	92.86
511	5151	374	92.74
512	5151	372	92.78
513	5151	369	92.84
514	5151	363	92.95
515	5151	354	93.13
516	5151	368	92.86
517	5151	363	92.95
518	5151	372	92.78
519	5151	361	92.99
520	5151	366	92.89
521	5151	354	93.13
522	5151	362	92.97
523	5151	364	92.93
524	5151	376	92.70
525	5151	364	92.93
526	5151	367	92.88
527	5151	370	92.82
528	5151	367	92.88
529	5151	367	92.88

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
530	5151	361	92.99
531	5151	363	92.95
532	5151	367	92.88
533	5151	369	92.84
534	5151	365	92.91
535	5151	366	92.89
536	5151	363	92.95
537	5151	363	92.95
538	5151	353	93.15
539	5151	383	92.56
540	5151	366	92.89
541	5151	366	92.89
542	5151	365	92.91
543	5151	366	92.89
544	5151	370	92.82
545	5151	368	92.86
546	5151	365	92.91
547	5151	368	92.86
548	5151	369	92.84
549	5151	367	92.88
550	5151	359	93.03
551	5151	368	92.86
552	5151	369	92.84
553	5151	369	92.84
554	5151	367	92.88
555	5151	365	92.91
556	5151	357	93.07
557	5151	358	93.05
558	5151	365	92.91
559	5151	382	92.58
560	5151	369	92.84
561	5151	368	92.86
562	5151	370	92.82
563	5151	363	92.95
564	5151	357	93.07

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
565	5151	374	92.74
566	5151	361	92.99
567	5151	369	92.84
568	5151	372	92.78
569	5151	362	92.97
570	5151	367	92.88
571	5151	367	92.88
572	5151	372	92.78
573	5151	375	92.72
574	5151	363	92.95
575	5151	363	92.95
576	5151	367	92.88
577	5151	364	92.93
578	5151	365	92.91
579	5151	370	92.82
580	5151	369	92.84
581	5151	370	92.82
582	5151	372	92.78
583	5151	353	93.15
584	5151	360	93.01
585	5151	366	92.89
586	5151	366	92.89
587	5151	374	92.74
588	5151	370	92.82
589	5151	364	92.93
590	5151	358	93.05
591	5151	368	92.86
592	5151	368	92.86
593	5151	367	92.88
594	5151	363	92.95
595	5151	368	92.86
596	5151	359	93.03
597	5151	363	92.95
598	5151	365	92.91
599	5151	374	92.74

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
600	5151	366	92.89
601	5151	361	92.99
602	5151	380	92.62
603	5151	362	92.97
604	5151	373	92.76
605	5151	370	92.82
606	5151	374	92.74
607	5151	367	92.88
608	5151	370	92.82
609	5151	363	92.95
610	5151	370	92.82
611	5151	364	92.93
612	5151	362	92.97
613	5151	367	92.88
614	5151	370	92.82
615	5151	357	93.07
616	5151	362	92.97
617	5151	367	92.88
618	5151	371	92.80
619	5151	365	92.91
620	5151	368	92.86
621	5151	373	92.76
622	5151	360	93.01
623	5151	373	92.76
624	5151	363	92.95
625	5151	370	92.82
626	5151	358	93.05
627	5151	366	92.89
628	5151	374	92.74
629	5151	365	92.91
630	5151	363	92.95
631	5151	367	92.88
632	5151	358	93.05
633	5151	363	92.95
634	5151	358	93.05

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
635	5151	362	92.97
636	5151	375	92.72
637	5151	372	92.78
638	5151	367	92.88
639	5151	366	92.89
640	5151	371	92.80
641	5151	366	92.89
642	5151	369	92.84
643	5151	363	92.95
644	5151	371	92.80
645	5151	365	92.91
646	5151	370	92.82
647	5151	355	93.11
648	5151	365	92.91
649	5151	362	92.97
650	5151	362	92.97
651	5151	374	92.74
652	5151	373	92.76
653	5151	370	92.82
654	5151	364	92.93
655	5151	375	92.72
656	5151	370	92.82
657	5151	367	92.88
658	5151	363	92.95
659	5151	358	93.05
660	5151	364	92.93
661	5151	370	92.82
662	5151	364	92.93
663	5151	362	92.97
664	5151	371	92.80
665	5151	353	93.15
666	5151	371	92.80
667	5151	365	92.91
668	5151	369	92.84
669	5151	374	92.74

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
670	5151	364	92.93
671	5151	361	92.99
672	5151	372	92.78
673	5151	376	92.70
674	5151	377	92.68
675	5151	369	92.84
676	5151	371	92.80
677	5151	365	92.91
678	5151	373	92.76
679	5151	374	92.74
680	5151	373	92.76
681	5151	365	92.91
682	5151	378	92.66
683	5151	368	92.86
684	5151	364	92.93
685	5151	374	92.74
686	5151	357	93.07
687	5151	369	92.84
688	5151	375	92.72
689	5151	366	92.89
690	5151	370	92.82
691	5151	367	92.88
692	5151	369	92.84
693	5151	368	92.86
694	5151	377	92.68
695	5151	369	92.84
696	5151	375	92.72
697	5151	370	92.82
698	5151	372	92.78
699	5151	366	92.89
700	5151	364	92.93
701	5151	370	92.82
702	5151	371	92.80
703	5151	362	92.97
704	5151	369	92.84

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
705	5151	366	92.89
706	5151	366	92.89
707	5151	368	92.86
708	5151	377	92.68
709	5151	379	92.64
710	5151	375	92.72
711	5151	363	92.95
712	5151	375	92.72
713	5151	370	92.82
714	5151	374	92.74
715	5151	367	92.88
716	5151	374	92.74
717	5151	378	92.66
718	5151	370	92.82
719	5151	378	92.66
720	5151	368	92.86
721	5151	374	92.74
722	5151	381	92.60
723	5151	371	92.80
724	5151	376	92.70
725	5151	363	92.95
726	5151	356	93.09
727	5151	359	93.03
728	5151	356	93.09
729	5151	371	92.80
730	5151	357	93.07
731	5151	372	92.78
732	5151	372	92.78
733	5151	361	92.99
734	5151	373	92.76
735	5151	368	92.86
736	5151	369	92.84
737	5151	373	92.76
738	5151	377	92.68
739	5151	362	92.97

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
740	5151	375	92.72
741	5151	366	92.89
742	5151	368	92.86
743	5151	380	92.62
744	5151	364	92.93
745	5151	371	92.80
746	5151	369	92.84
747	5151	371	92.80
748	5151	363	92.95
749	5151	364	92.93
750	5151	361	92.99
751	5151	368	92.86
752	5151	370	92.82
753	5151	372	92.78
754	5151	366	92.89
755	5151	378	92.66
756	5151	371	92.80
757	5151	370	92.82
758	5151	378	92.66
759	5151	364	92.93
760	5151	368	92.86
761	5151	375	92.72
762	5151	383	92.56
763	5151	364	92.93
764	5151	366	92.89
765	5151	360	93.01
766	5151	366	92.89
767	5151	362	92.97
768	5151	382	92.58
769	5151	376	92.70
770	5151	379	92.64
771	5151	363	92.95
772	5151	361	92.99
773	5151	360	93.01
774	5151	383	92.56

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
775	5151	369	92.84
776	5151	384	92.55
777	5151	368	92.86
778	5151	362	92.97
779	5151	360	93.01
780	5151	371	92.80
781	5151	365	92.91
782	5151	370	92.82
783	5151	364	92.93
784	5151	368	92.86
785	5151	366	92.89
786	5151	378	92.66
787	5151	368	92.86
788	5151	369	92.84
789	5151	366	92.89
790	5151	359	93.03
791	5151	375	92.72
792	5151	377	92.68
793	5151	371	92.80
794	5151	377	92.68
795	5151	369	92.84
796	5151	373	92.76
797	5151	367	92.88
798	5151	365	92.91
799	5151	381	92.60
800	5151	373	92.76
801	5151	368	92.86
802	5151	370	92.82
803	5151	370	92.82
804	5151	379	92.64
805	5151	368	92.86
806	5151	366	92.89
807	5151	368	92.86
808	5151	360	93.01
809	5151	369	92.84

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
810	5151	371	92.80
811	5151	364	92.93
812	5151	366	92.89
813	5151	373	92.76
814	5151	374	92.74
815	5151	373	92.76
816	5151	378	92.66
817	5151	369	92.84
818	5151	384	92.55
819	5151	387	92.49
820	5151	377	92.68
821	5151	376	92.70
822	5151	369	92.84
823	5151	379	92.64
824	5151	377	92.68
825	5151	365	92.91
826	5151	365	92.91
827	5151	373	92.76
828	5151	372	92.78
829	5151	364	92.93
830	5151	364	92.93
831	5151	367	92.88
832	5151	370	92.82
833	5151	376	92.70
834	5151	363	92.95
835	5151	365	92.91
836	5151	381	92.60
837	5151	374	92.74
838	5151	385	92.53
839	5151	372	92.78
840	5151	366	92.89
841	5151	367	92.88
842	5151	380	92.62
843	5151	370	92.82
844	5151	373	92.76

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
845	5151	366	92.89
846	5151	376	92.70
847	5151	373	92.76
848	5151	373	92.76
849	5151	372	92.78
850	5151	367	92.88
851	5151	369	92.84
852	5151	369	92.84
853	5151	373	92.76
854	5151	371	92.80
855	5151	378	92.66
856	5151	372	92.78
857	5151	367	92.88
858	5151	356	93.09
859	5151	373	92.76
860	5151	362	92.97
861	5151	370	92.82
862	5151	370	92.82
863	5151	359	93.03
864	5151	379	92.64
865	5151	367	92.88
866	5151	367	92.88
867	5151	368	92.86
868	5151	378	92.66
869	5151	360	93.01
870	5151	374	92.74
871	5151	378	92.66
872	5151	360	93.01
873	5151	371	92.80
874	5151	376	92.70
875	5151	368	92.86
876	5151	365	92.91
877	5151	365	92.91
878	5151	358	93.05
879	5151	368	92.86

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
880	5151	382	92.58
881	5151	366	92.89
882	5151	358	93.05
883	5151	369	92.84
884	5151	366	92.89
885	5151	374	92.74
886	5151	365	92.91
887	5151	369	92.84
888	5151	378	92.66
889	5151	367	92.88
890	5151	371	92.80
891	5151	375	92.72
892	5151	372	92.78
893	5151	367	92.88
894	5151	373	92.76
895	5151	379	92.64
896	5151	361	92.99
897	5151	374	92.74
898	5151	362	92.97
899	5151	383	92.56
900	5151	374	92.74
901	5151	380	92.62
902	5151	367	92.88
903	5151	378	92.66
904	5151	366	92.89
905	5151	365	92.91
906	5151	371	92.80
907	5151	373	92.76
908	5151	359	93.03
909	5151	373	92.76
910	5151	368	92.86
911	5151	357	93.07
912	5151	374	92.74
913	5151	366	92.89
914	5151	374	92.74

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
915	5151	376	92.70
916	5151	365	92.91
917	5151	376	92.70
918	5151	374	92.74
919	5151	362	92.97
920	5151	362	92.97
921	5151	367	92.88
922	5151	368	92.86
923	5151	376	92.70
924	5151	374	92.74
925	5151	373	92.76
926	5151	370	92.82
927	5151	386	92.51
928	5151	378	92.66
929	5151	379	92.64
930	5151	360	93.01
931	5151	358	93.05
932	5151	373	92.76
933	5151	373	92.76
934	5151	382	92.58
935	5151	370	92.82
936	5151	368	92.86
937	5151	368	92.86
938	5151	373	92.76
939	5151	364	92.93
940	5151	366	92.89
941	5151	379	92.64
942	5151	374	92.74
943	5151	378	92.66
944	5151	368	92.86
945	5151	371	92.80
946	5151	359	93.03
947	5151	379	92.64
948	5151	369	92.84
949	5151	377	92.68

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
950	5151	360	93.01
951	5151	377	92.68
952	5151	374	92.74
953	5151	371	92.80
954	5151	363	92.95
955	5151	367	92.88
956	5151	360	93.01
957	5151	366	92.89
958	5151	368	92.86
959	5151	367	92.88
960	5151	367	92.88
961	5151	376	92.70
962	5151	361	92.99
963	5151	373	92.76
964	5151	377	92.68
965	5151	368	92.86
966	5151	375	92.72
967	5151	375	92.72
968	5151	363	92.95
969	5151	372	92.78
970	5151	370	92.82
971	5151	370	92.82
972	5151	370	92.82
973	5151	379	92.64
974	5151	368	92.86
975	5151	368	92.86
976	5151	380	92.62
977	5151	376	92.70
978	5151	376	92.70
979	5151	373	92.76
980	5151	372	92.78
981	5151	368	92.86
982	5151	366	92.89
983	5151	381	92.60
984	5151	363	92.95

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
985	5151	360	93.01
986	5151	369	92.84
987	5151	362	92.97
988	5151	370	92.82
989	5151	361	92.99
990	5151	379	92.64
991	5151	368	92.86
992	5151	364	92.93
993	5151	360	93.01
994	5151	370	92.82
995	5151	364	92.93
996	5151	369	92.84
997	5151	373	92.76
998	5151	368	92.86
999	5151	362	92.97
1000	5151	372	92.78
1001	5151	366	92.89
1002	5151	360	93.01
1003	5151	375	92.72
1004	5151	374	92.74
1005	5151	362	92.97
1006	5151	366	92.89
1007	5151	376	92.70
1008	5151	354	93.13
1009	5151	378	92.66
1010	5151	363	92.95
1011	5151	372	92.78
1012	5151	376	92.70

5. Fit to Data Used for Modeling Assessment

6. Fit to Data Used for Validation Assessment

Validation for this section is under development.

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