

Lampiran 1 Tabel Konversi Nilai DPMO ke Nilai *Sigma*

Nilai Sigma	DPMO	Nilai Sigma	DPMO	Nilai Sigma	DPMO	Nilai Sigma	DPMO
0,00	933.193	0,51	838.913	1,02	684.386	1,53	488.033
0,01	931.888	0,52	836.457	1,03	680.822	1,54	484.047
0,02	930.563	0,53	833.977	1,04	677.242	1,55	480.061
0,03	929.219	0,54	831.472	1,05	673.645	1,56	476.078
0,04	927.855	0,55	828.944	1,06	670.031	1,57	472.097
0,05	926.471	0,56	826.391	1,07	666.402	1,58	468.119
0,06	925.066	0,57	823.814	1,08	662.757	1,59	464.144
0,07	923.641	0,58	821.214	1,09	659.097	1,60	460.172
0,08	922.196	0,59	818.589	1,10	655.422	1,61	456.205
0,09	920.730	0,60	815.940	1,11	651.732	1,62	452.242
0,10	919.243	0,61	813.267	1,12	648.027	1,63	448.283
0,11	917.736	0,62	810.570	1,13	644.309	1,64	444.330
0,12	916.207	0,63	807.850	1,14	640.576	1,65	440.382
0,13	914.656	0,64	805.106	1,15	636.831	1,66	436.441
0,14	913.085	0,65	802.338	1,16	633.072	1,67	432.505
0,15	911.492	0,66	799.546	1,17	629.300	1,68	428.576
0,16	909.877	0,67	796.731	1,18	625.516	1,69	424.655
0,17	908.241	0,68	793.892	1,19	621.719	1,70	420.740
0,18	906.582	0,69	791.030	1,20	617.911	1,71	416.834
0,19	904.902	0,70	788.145	1,21	614.092	1,72	412.936
0,20	903.199	0,71	785.236	1,22	610.261	1,73	409.046
0,21	901.475	0,72	782.305	1,23	606.420	1,74	405.165
0,22	899.727	0,73	779.350	1,24	602.568	1,75	401.294
0,23	897.958	0,74	776.373	1,25	598.706	1,76	397.432
0,24	896.165	0,75	773.373	1,26	594.835	1,77	393.580
0,25	894.350	0,76	770.350	1,27	590.954	1,78	389.739
0,26	892.512	0,77	767.305	1,28	587.064	1,79	385.908
0,27	890.651	0,78	764.238	1,29	583.166	1,80	382.089
0,28	888.767	0,79	761.148	1,30	579.260	1,81	378.281
0,29	886.860	0,80	758.036	1,31	575.345	1,82	374.484
0,30	884.930	0,81	754.903	1,32	571.424	1,83	370.700
0,31	882.977	0,82	751.748	1,33	567.495	1,84	366.928
0,32	881.000	0,83	748.571	1,34	563.559	1,85	363.169
0,33	878.999	0,84	745.373	1,35	559.618	1,86	359.424
0,34	876.976	0,85	742.154	1,36	555.670	1,87	355.691
0,35	874.928	0,86	738.914	1,37	551.717	1,88	351.973
0,36	872.857	0,87	735.653	1,38	547.758	1,89	348.268
0,37	870.762	0,88	732.371	1,39	543.795	1,90	344.578
0,38	868.643	0,89	729.069	1,40	539.828	1,91	340.903
0,39	866.500	0,90	725.747	1,41	535.856	1,92	337.243
0,40	864.334	0,91	722.405	1,42	531.881	1,93	333.598
0,41	862.143	0,92	719.043	1,43	527.903	1,94	329.969
0,42	859.929	0,93	715.661	1,44	523.922	1,95	326.355
0,43	857.690	0,94	712.260	1,45	519.939	1,96	322.758
0,44	855.428	0,95	708.840	1,46	515.953	1,97	319.178
0,45	853.141	0,96	705.402	1,47	511.967	1,98	315.614
0,46	850.830	0,97	701.944	1,48	507.978	1,99	312.067
0,47	848.495	0,98	698.468	1,49	503.989	2,00	308.538
0,48	846.136	0,99	694.974	1,50	500.000	2,01	305.026
0,49	843.752	1,00	691.462	1,51	496.011	2,02	301.532
0,50	841.345	1,01	687.933	1,52	492.022	2,03	298.056

Sumber: Vincent Gaspersz (2002)

Lampiran 2 Tabel Konversi Nilai DPMO ke Nilai *Sigma* (Lanjutan)

Nilai Sigma	DPMO	Nilai Sigma	DPMO	Nilai Sigma	DPMO	Nilai Sigma	DPMO
2,04	294.598	2,55	146.859	3,06	59.380	3,57	19.226
2,05	291.160	2,56	144.572	3,07	58.208	3,58	18.763
2,06	287.740	2,57	142.310	3,08	57.053	3,59	18.309
2,07	284.339	2,58	140.071	3,09	55.917	3,60	17.864
2,08	280.957	2,59	137.857	3,10	54.799	3,61	17.429
2,09	277.595	2,60	135.666	3,11	53.699	3,62	17.003
2,10	274.253	2,61	133.500	3,12	52.616	3,63	16.586
2,11	270.931	2,62	131.357	3,13	51.551	3,64	16.177
2,12	267.629	2,63	129.238	3,14	50.503	3,65	15.778
2,13	264.347	2,64	127.143	3,15	49.471	3,66	15.386
2,14	261.086	2,65	125.072	3,16	48.457	3,67	15.003
2,15	257.846	2,66	123.024	3,17	47.460	3,68	14.629
2,16	254.627	2,67	121.001	3,18	46.479	3,69	14.262
2,17	251.429	2,68	119.000	3,19	45.514	3,70	13.903
2,18	248.252	2,69	117.023	3,20	44.565	3,71	13.553
2,19	245.097	2,70	115.070	3,21	43.633	3,72	13.209
2,20	241.964	2,71	113.140	3,22	42.716	3,73	12.874
2,21	238.852	2,72	111.233	3,23	41.815	3,74	12.545
2,22	235.762	2,73	109.349	3,24	40.929	3,75	12.224
2,23	232.695	2,74	107.488	3,25	40.059	3,76	11.911
2,24	229.650	2,75	105.650	3,26	39.204	3,77	11.604
2,25	226.627	2,76	103.835	3,27	38.364	3,78	11.304
2,26	223.627	2,77	102.042	3,28	37.538	3,79	11.011
2,27	220.650	2,78	100.273	3,29	36.727	3,80	10.724
2,28	217.695	2,79	98.525	3,30	35.930	3,81	10.444
2,29	214.764	2,80	96.801	3,31	35.148	3,82	10.170
2,30	211.855	2,81	95.098	3,32	34.379	3,83	9.903
2,31	208.970	2,82	93.418	3,33	33.625	3,84	9.642
2,32	206.108	2,83	91.759	3,34	32.884	3,85	9.387
2,33	203.269	2,84	90.123	3,35	32.157	3,86	9.137
2,34	200.454	2,85	88.508	3,36	31.443	3,87	8.894
2,35	197.662	2,86	86.915	3,37	30.742	3,88	8.656
2,36	194.894	2,87	85.344	3,38	30.054	3,89	8.424
2,37	192.150	2,88	83.793	3,39	29.379	3,90	8.198
2,38	189.430	2,89	82.264	3,40	28.716	3,91	7.976
2,39	186.733	2,90	80.757	3,41	28.067	3,92	7.760
2,40	184.060	2,91	79.270	3,42	27.429	3,93	7.549
2,41	181.411	2,92	77.804	3,43	26.803	3,94	7.344
2,42	178.786	2,93	76.359	3,44	26.190	3,95	7.143
2,43	176.186	2,94	74.934	3,45	25.588	3,96	6.947
2,44	173.609	2,95	73.529	3,46	24.998	3,97	6.756
2,45	171.056	2,96	72.145	3,47	24.419	3,98	6.569
2,46	168.528	2,97	70.781	3,48	23.852	3,99	6.387
2,47	166.023	2,98	69.437	3,49	23.295	4,00	6.210
2,48	163.543	2,99	68.112	3,50	22.750	4,01	6.037
2,49	161.087	3,00	66.807	3,51	22.215	4,02	5.868
2,50	158.655	3,01	65.522	3,52	21.692	4,03	5.703
2,51	156.248	3,02	64.256	3,53	21.178	4,04	5.543
2,52	153.864	3,03	63.008	3,54	20.675	4,05	5.386
2,53	151.505	3,04	61.780	3,55	20.182	4,06	5.234
2,54	149.170	3,05	60.571	3,56	19.699	4,07	5.085

Sumber: Vincent Gaspersz (2002)

Lampiran 3 Tabel Konversi Nilai DPMO ke Nilai *Sigma* (Lanjutan)

Nilai Sigma	DPMO	Nilai Sigma	DPMO	Nilai Sigma	DPMO	Nilai Sigma	DPMO
4,08	4.940	4,59	1.001	5,10	159	5,61	20
4,09	4.799	4,60	968	5,11	153	5,62	19
4,10	4.661	4,61	936	5,12	147	5,63	18
4,11	4.527	4,62	904	5,13	142	5,64	17
4,12	4.397	4,63	874	5,14	136	5,65	17
4,13	4.269	4,64	845	5,15	131	5,66	16
4,14	4.145	4,65	816	5,16	126	5,67	15
4,15	4.025	4,66	789	5,17	121	5,68	15
4,16	3.907	4,67	762	5,18	117	5,69	14
4,17	3.793	4,68	736	5,19	112	5,70	13
4,18	3.681	4,69	711	5,20	108	5,71	13
4,19	3.573	4,70	687	5,21	104	5,72	12
4,20	3.467	4,71	664	5,22	100	5,73	12
4,21	3.364	4,72	641	5,23	96	5,74	11
4,22	3.264	4,73	619	5,24	92	5,75	11
4,23	3.167	4,74	598	5,25	88	5,76	10
4,24	3.072	4,75	577	5,26	85	5,77	10
4,25	2.980	4,76	557	5,27	82	5,78	9
4,26	2.890	4,77	538	5,28	78	5,79	9
4,27	2.803	4,78	519	5,29	75	5,80	9
4,28	2.718	4,79	501	5,30	72	5,81	8
4,29	2.635	4,80	483	5,31	70	5,82	8
4,30	2.555	4,81	467	5,32	67	5,83	7
4,31	2.477	4,82	450	5,33	64	5,84	7
4,32	2.401	4,83	434	5,34	62	5,85	7
4,33	2.327	4,84	419	5,35	59	5,86	7
4,34	2.256	4,85	404	5,36	57	5,87	6
4,35	2.186	4,86	390	5,37	54	5,88	6
4,36	2.118	4,87	376	5,38	52	5,89	6
4,37	2.052	4,88	362	5,39	50	5,90	5
4,38	1.988	4,89	350	5,40	48	5,91	5
4,39	1.926	4,90	337	5,41	46	5,92	5
4,40	1.866	4,91	325	5,42	44	5,93	5
4,41	1.807	4,92	313	5,43	42	5,94	5
4,42	1.750	4,93	302	5,44	41	5,95	4
4,43	1.695	4,94	291	5,45	39	5,96	4
4,44	1.641	4,95	280	5,46	37	5,97	4
4,45	1.589	4,96	270	5,47	36	5,98	4
4,46	1.538	4,97	260	5,48	34	5,99	4
4,47	1.489	4,98	251	5,49	33	6,00	3
4,48	1.441	4,99	242	5,50	32		
4,49	1.395	5,00	233	5,51	30		
4,50	1.350	5,01	224	5,52	29		
4,51	1.306	5,02	216	5,53	28		
4,52	1.264	5,03	208	5,54	27		
4,53	1.223	5,04	200	5,55	26		
4,54	1.183	5,05	193	5,56	25		
4,55	1.144	5,06	185	5,57	24		
4,56	1.107	5,07	179	5,58	23		
4,57	1.070	5,08	172	5,59	22		
4,58	1.035	5,09	165	5,60	21		

Catatan: Tabel konversi ini mencakup pengeseran 1,5-sigma untuk semua nilai Z

Sumber: Vincent Gaspersz (2002)

Lampiran 2. Perhitungan nilai DPMO dan nilai *Sigma*

1. Nilai DPU, DPMO, *Sigma* bulan Desember 2022

$$DPU = \frac{\text{Total kerusakan}}{\text{Total Produksi}}$$

$$DPU = \frac{16}{45} = 0,3556 \approx 0,36$$

$$DPMO = \frac{DPU \times 1.000.000}{\text{Probability Kerusakan}}$$

$$DPMO = \frac{0,36 \times 1.000.000}{4} = 90.000$$

$$\text{Nilai Sigma} = \text{Normsinv} \left(\frac{1.000.000 - DPMO}{1.000.000} \right) + 1.5$$

$$\text{Nilai Sigma} = \text{Normsinv} \left(\frac{1.000.000 - 90.000}{1.000.000} \right) + 1.5$$

$$\text{Nilai Sigma} = 2.85$$

2. Nilai DPU, DPMO, *Sigma* bulan Januari 2023

$$DPU = \frac{\text{Total kerusakan}}{\text{Total Produksi}}$$

$$DPU = \frac{15}{30} = 0,5$$

$$DPMO = \frac{DPU \times 1.000.000}{\text{Probability Kerusakan}}$$

$$DPMO = \frac{0,5 \times 1.000.000}{4} = 125.000$$

$$\text{Nilai Sigma} = \text{Normsinv} \left(\frac{1.000.000 - DPMO}{1.000.000} \right) + 1.5$$

Lampiran 2. Perhitungan nilai DPMO dan nilai *Sigma* (Lanjutan)

$$\text{Nilai Sigma} = \text{Normsinv} \left(\frac{1.000.000 - 125.000}{1.000.000} \right) + 1.5$$

$$\text{Nilai Sigma} = 2.65$$

3. Nilai DPU, DPMO, *Sigma* bulan Februari 2023

$$DPU = \frac{\text{Total kerusakan}}{\text{Total Produksi}}$$

$$DPU = \frac{9}{34} = 0,26470 \approx 0,26$$

$$DPMO = \frac{DPU \times 1.000.000}{\text{Probability Kerusakan}}$$

$$DPMO = \frac{0,26 \times 1.000.000}{4} = 66.176,47$$

$$\text{Nilai Sigma} = \text{Normsinv} \left(\frac{1.000.000 - DPMO}{1.000.000} \right) + 1.5$$

$$\text{Nilai Sigma} = \text{Normsinv} \left(\frac{1.000.000 - 66.176,47}{1.000.000} \right) + 1.5$$

$$\text{Nilai Sigma} = 3.00$$

4. Nilai DPU, DPMO, *Sigma* bulan Maret 2023

$$DPU = \frac{\text{Total kerusakan}}{\text{Total Produksi}}$$

$$DPU = \frac{11}{38} = 0,2894 \approx 0,29$$

$$DPMO = \frac{DPU \times 1.000.000}{\text{Probability Kerusakan}}$$

$$DPMO = \frac{0,29 \times 1.000.000}{4} = 72.368,42$$

$$\text{Nilai Sigma} = \text{Normsinv} \left(\frac{1.000.000 - DPMO}{1.000.000} \right) + 1.5$$

Lampiran 2. Perhitungan nilai DPMO dan nilai *Sigma* (Lanjutan)

$$\text{Nilai Sigma} = \text{Normsinv} \left(\frac{1.000.000 - 72.368,42}{1.000.000} \right) + 1.5$$

$$\text{Nilai Sigma} = 2.96$$

5. Nilai DPU, DPMO, *Sigma* bulan April 2023

$$DPU = \frac{\text{Total kerusakan}}{\text{Total Produksi}}$$

$$DPU = \frac{9}{31} = 0,290$$

$$DPMO = \frac{DPU \times 1.000.000}{\text{Probability Kerusakan}}$$

$$DPMO = \frac{0,29 \times 1.000.000}{4} = 72.580,65$$

$$\text{Nilai Sigma} = \text{Normsinv} \left(\frac{1.000.000 - DPMO}{1.000.000} \right) + 1.5$$

$$\text{Nilai Sigma} = \text{Normsinv} \left(\frac{1.000.000 - 72.580,65}{1.000.000} \right) + 1.5$$

$$\text{Nilai Sigma} = 2.96$$

6. Nilai DPU, DPMO, *Sigma* bulan Mei 2023

$$DPU = \frac{\text{Total kerusakan}}{\text{Total Produksi}}$$

$$DPU = \frac{7}{29} = 0,2413 \approx 0,24$$

$$DPMO = \frac{DPU \times 1.000.000}{\text{Probability Kerusakan}}$$

$$DPMO = \frac{0,24 \times 1.000.000}{4} = 60.344,82$$

$$\text{Nilai Sigma} = \text{Normsinv} \left(\frac{1.000.000 - DPMO}{1.000.000} \right) + 1.5$$

Lampiran 2. Perhitungan nilai DPMO dan nilai *Sigma* (Lanjutan)

$$\text{Nilai Sigma} = \text{Normsinv} \left(\frac{1.000.000 - 60.344,82}{1.000.000} \right) + 1.5$$

$$\text{Nilai Sigma} = 3.05$$

7. Nilai DPU, DPMO, *Sigma* bulan Juni 2023

$$DPU = \frac{\text{Total kerusakan}}{\text{Total Produksi}}$$

$$DPU = \frac{6}{33} = 0,1818 \approx 0,18$$

$$DPMO = \frac{DPU \times 1.000.000}{\text{Probability Kerusakan}}$$

$$DPMO = \frac{0,18 \times 1.000.000}{4} = 45.454,54$$

$$\text{Nilai Sigma} = \text{Normsinv} \left(\frac{1.000.000 - DPMO}{1.000.000} \right) + 1.5$$

$$\text{Nilai Sigma} = \text{Normsinv} \left(\frac{1.000.000 - 45.454,54}{1.000.000} \right) + 1.5$$

$$\text{Nilai Sigma} = 3.19$$