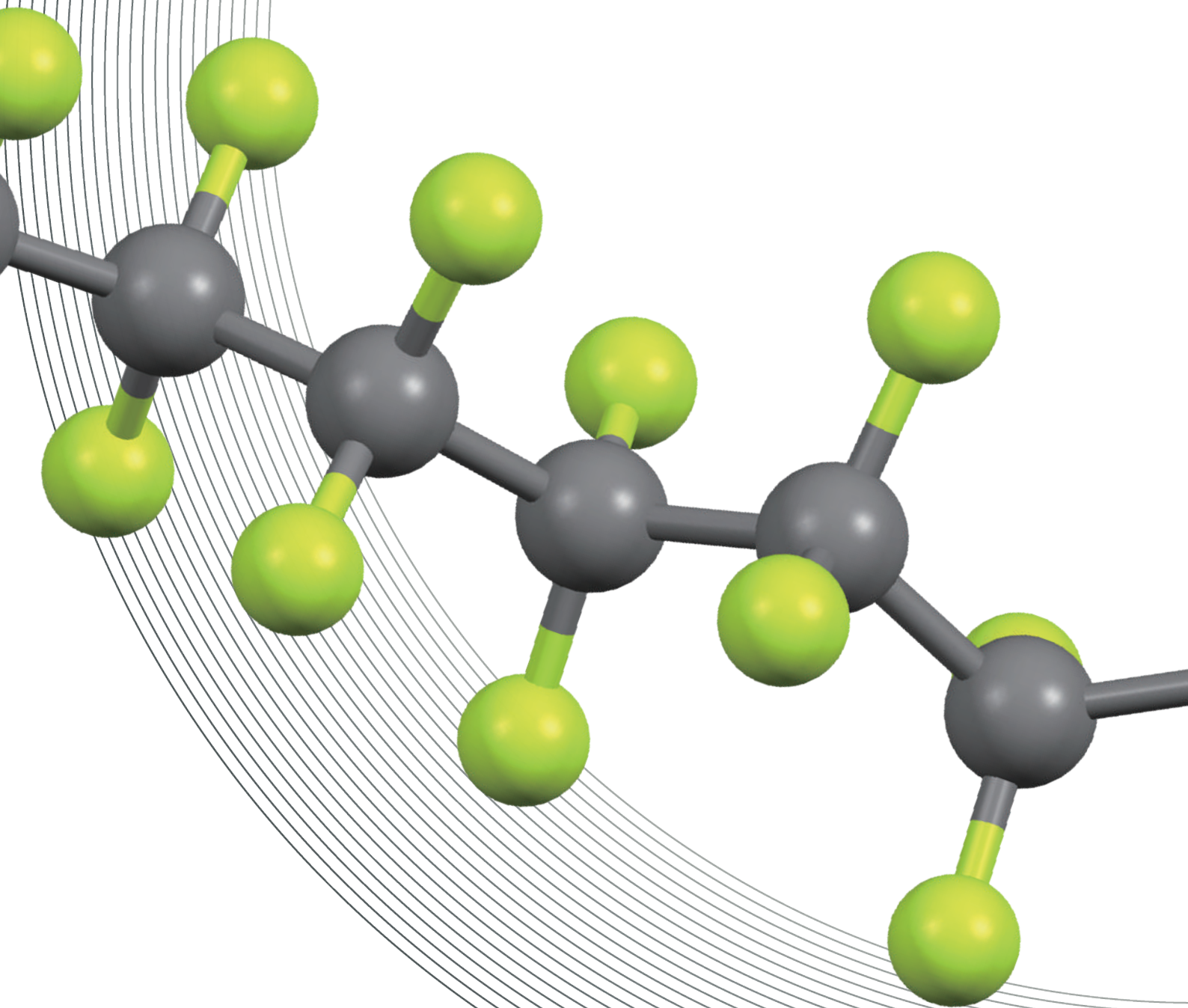
Dynarez

Perfluoroelastomer O-ring



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Made In Taiwan

Dynarez Perfluoroelastomer O-ring

HD-B/HD-W

HD-B/HD-W FFKM series have 230°C heat resistance and superior chemical resistance. They can be used in the petrochemical industry/semiconductor wafer manufacturing/pharmaceutical industry, and can show excellent and stable characteristics for strong acids/strong alkalis, organic solvent chemicals and high-temperature steam. The packaging and cleaning of this product are completed in classified clean-room.

Features and Benefits

- Upper continuous service temperature of 230 °C
- Long, stable and excellent sealing performance in high temperature
- Excellent physical properties
- Excellent chemical resistance

Suggested Applications

- Chamber, Lid Seals
- Fitting Seals
- Gas Inlet, Outlet Seals
- Valve Seals

Suggested Process Applications

- Reaction vessel
- Chemical liquid and vapor delivery
- Wet Etch
- Control valve

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Dynarez HD-B / HD-W Series

Material Safety Data Sheet

The high-performance rubber materials launched by Dynarez® are mostly interchangeable, but some products are specially designed with unique properties for specific applications. When using them as equivalent products, please be sure to carefully verify your usage conditions and other relevant details.

Test Types	Items	HD-B	HD-W
Max. Temperature		230°C	230°C
Physical Properties Test	Hardness, Shore A	77	82
	Tensile Strengthb at Break	21	22.4
	Elongation at Break, %	195	183
	100% Modulus, Mpa	77	9.5
Heat Resistance Test	Test conditions	200°C×70hr	200°C×70hr
	Hardness	0	+2
	Tensile Strength rate, %	+2	+5
	Stretch conversion rate, %	+6	+8
Compression Set Test	Test conditions	200°C×70hr	200°C×70hr
	Compression Set, %	14	17

Temperature Range

It is recommended to use at maximum service temperature 230°C. However, continuous use at the highest temperature range may cause damage due to thermal curing, which will also shorten the lifespan. Additionally, at the lowest temperature range, the rubber's elasticity deteriorates, reducing its sealing performance.

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Dynarez Perfluoroelastomer O-ring

KN-B/KN-W

KN-B/KN-W FFKM series have a heat resistance of 330°C and superior chemical resistance. They are resistant to high-temperature saturated vapor and high-temperature amine fluids that cannot be used by traditional heat-resistant FKM. They can be used at high temperatures for a long time, reduce the frequency of O-ring replacement, and effectively saving cost and waste. The packaging and cleaning of this product are completed in classified clean-room.

Features and Benefits

- Upper continuous service temperature of 330 °C
- Excellent sealing performance at elevated temperature
- Excellent physical properties
- Excellent plasma resistance
- Excellent chemical resistance
- Ideal for dry etch process
- Excellent compression set

Suggested Applications

- Chamber Seals / Lid Seals
- Fitting Seals
- Pipe Seals
- Valve Seals

Suggested Process Applications

- Diffusion
- Implant Annealing
- RTP
- Dry Etch

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Dynarez KN-B/KN-W Series

Material Safety Data Sheet

The high-performance rubber materials launched by Dynarez® are mostly interchangeable, but some products are specially designed with unique properties for specific applications. When using them as equivalent products, please be sure to carefully verify your usage conditions and other relevant details.

Test Types	Items	KN-B	KN-W
Max. Temperature		330°C	330°C
Physical Properties Test	Hardness, Shore A	75	83
	Tensile Strengthb at Break	20.8	19.5
	Elongation at Break, %	163	139
	100% Modulus, Mpa	9.9	12.9
Heat Resistance Test	Test conditions	200°C×70hr	200°C×70hr
	Hardness	0	0
	Tensile Strength rate, %	+7	+17
	Stretch conversion rate, %	+3	-1
Compression Set Test	Test conditions	200°C×70hr	200°C×70hr
	Compression Set, %	4	13

Temperature Range

It is recommended to use at maximum service temperature 330°C. However, continuous use at the maximum temperature range increases the risk of damage due to thermal hardening and shortens the service life. Additionally, at the minimum temperature range, rubber elasticity deteriorates, reducing sealing performance. Please take note. Furthermore, in environments above 250°C, thermal expansion increases significantly. Therefore, we recommend setting the compression allowance smaller and the groove size larger than in standard groove designs.

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Dynarez Perfluoroelastomer O-ring

HM

HM high-purity FFKM series are designed for semiconductor processing and have excellent sealing properties in a wide range of chemicals. It is used in wet processing processes, suitable for acid/alkali/amine/steam/ethylene oxide cleaning liquid and many other corrosive chemicals. HD series, these high-purity materials, have extremely low particle formation, low permeability, low weight loss and excellent sealing retention force. The packaging and cleaning of this product are completed in classified clean-room.

Features and Benefits

- Excellent chemical resistance
- Ultra purity and inert material
- Low permeation rate
- Excellent sealing resilience
- Available in standard and custom size oring and gaskets

Typical applications

- Drain seals
- Door and lid seals
- Filter/connector seals
- Flow meter seals
- Seals for chemical container
- Chemical pump seals
- Fittings seals

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Dynarez HM Series

Material Safety Data Sheet

The high-performance rubber materials launched by Dynarez® are mostly interchangeable, but some products are specially designed with unique properties for specific applications. When using them as equivalent products, please be sure to carefully verify your usage conditions and other relevant details.

Test Types	Items	HM
Physical Properties Test	Hardness, Shore A	75
	Elongation at Break, %	14.4
	100% Modulus, Mpa	154
Compression Set Test	Test conditions	200°C×70hr
	Compression Set, %	23

Excellent resistance for plasma and dry process

- METAL CVD
- PECVD
- HDPCVD
- PVD
- SACVD
- Plasma etching
- Plasma ashing
- diffusion

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O-Ring Size Table AS 568A 系列

型號	ID	W
AS-001	0.74	1.02
AS-002	1.07	1.27
AS-003	1.42	1.52
AS-004	1.78	1.78
AS-005	2.57	1.78
AS-006	2.9	1.78
AS-007	3.68	1.78
AS-008	4.47	1.78
AS-009	5.28	1.78
AS-010	6.07	1.78
AS-011	7.65	1.78
AS-012	9.25	1.78
AS-013	10.82	1.78
AS-014	12.42	1.78
AS-015	14	1.78
AS-016	15.6	1.78
AS-017	17.17	1.78
AS-018	18.77	1.78
AS-019	20.35	1.78
AS-020	21.95	1.78
AS-021	23.52	1.78
AS-022	25.12	1.78
AS-023	26.7	1.78
AS-024	28.3	1.78
AS-025	29.87	1.78
AS-026	31.47	1.78
AS-027	33.05	1.78
AS-028	34.65	1.78
AS-029	37.82	1.78
AS-030	41	1.78
AS-031	44.17	1.78
AS-032	47.35	1.78
AS-033	50.52	1.78
AS-034	53.7	1.78
AS-035	56.87	1.78
AS-036	60.05	1.78
AS-037	63.22	1.78
AS-038	66.4	1.78
AS-039	69.57	1.78
AS-040	72.75	1.78
AS-041	75.92	1.78
AS-042	82.27	1.78
AS-043	88.62	1.78
AS-044	94.97	1.78
AS-045	101.32	1.78
AS-046	107.67	1.78
AS-047	114.02	1.78
AS-048	120.37	1.78
AS-049	126.72	1.78
AS-050	133.07	1.78
AS-102	1.24	2.62
AS-103	2.06	2.62
AS-104	2.84	2.62
AS-105	3.63	2.62
AS-106	4.42	2.62
AS-107	5.23	2.62
AS-108	6.02	2.62
AS-109	7.59	2.62
AS-110	9.19	2.62
AS-111	10.77	2.62
AS-112	12.37	2.62
AS-113	13.94	2.62
AS-114	15.54	2.62
AS-115	17.12	2.62
AS-116	18.72	2.62
AS-117	20.3	2.62
AS-118	21.89	2.62
AS-119	23.47	2.62
AS-120	25.07	2.62
AS-121	26.64	2.62
AS-122	28.24	2.62
AS-123	29.82	2.62
AS-124	31.42	2.62
AS-125	32.99	2.62
AS-126	34.59	2.62
AS-127	36.17	2.62
AS-128	37.77	2.62
AS-129	39.34	2.62
AS-130	40.94	2.62
AS-131	42.52	2.62
AS-132	44.12	2.62
AS-133	45.69	2.62
AS-134	47.3	2.62
AS-135	48.9	2.62
AS-136	50.47	2.62
AS-137	52.07	2.62
AS-138	53.64	2.62
AS-139	55.25	2.62
AS-140	56.82	2.62
AS-141	58.42	2.62
AS-142	59.99	2.62
AS-143	61.6	2.62
AS-144	63.17	2.62
AS-145	64.77	2.62
AS-146	66.34	2.62
AS-147	67.95	2.62
AS-148	69.52	2.62
AS-149	71.12	2.62
AS-150	72.69	2.62
AS-151	75.87	2.62
AS-152	82.22	2.62
AS-153	88.57	2.62
AS-154	94.92	2.62
AS-155	101.27	2.62
AS-156	107.62	2.62
AS-157	113.97	2.62
AS-158	120.32	2.62
AS-159	126.67	2.62
AS-160	133.02	2.62
AS-161	139.37	2.62
AS-162	145.72	2.62
AS-163	152.07	2.62
AS-164	158.42	2.62
AS-165	164.77	2.62
AS-166	171.12	2.62
AS-167	177.47	2.62
AS-168	183.82	2.62
AS-169	190.17	2.62
AS-170	196.52	2.62
AS-171	202.87	2.62
AS-172	209.22	2.62
AS-173	215.57	2.62
AS-174	221.92	2.62
AS 175	228.27	2.62
AS-176	234.62	2.62
AS-177	240.97	2.62
AS-178	247.32	2.62
AS-201	4.34	3.53
AS-202	5.94	3.53
AS-203	7.52	3.53
AS-204	9.12	3.53
AS-205	10.69	3.53
AS-206	12.29	3.53
AS-207	13.87	3.53
AS-208	15.47	3.53

型號	ID	W
AS-209	17.04	3.53
AS-210	18.64	3.53
AS-211	20.22	3.53
AS-212	21.82	3.53
AS-213	23.39	3.53
AS-214	25	3.53
AS-215	26.57	3.53
AS-216	28.17	3.53
AS-217	29.74	3.53
AS-218	31.34	3.53
AS-219	32.92	3.53
AS-220	34.52	3.53
AS-221	36.09	3.53
AS-222	37.69	3.53
AS-223	40.87	3.53
AS-224	44.04	3.53
AS-225	47.22	3.53
AS-226	50.39	3.53
AS-227	53.57	3.53
AS-228	56.74	3.53
AS-229	59.92	3.53
AS-230	63.09	3.53
AS-231	66.27	3.53
AS-232	69.44	3.53
AS-233	72.62	3.53
AS-234	75.79	3.53
AS-235	78.97	3.53
AS-236	82.14	3.53
AS-237	85.32	3.53
AS-238	88.49	3.53
AS-239	91.67	3.53
AS-240	94.84	3.53
AS-241	98.02	3.53
AS-242	101.19	3.53
AS-243	104.37	3.53
AS-244	107.54	3.53
AS-245	110.72	3.53
AS-246	113.89	3.53
AS-247	117.07	3.53
AS-248	120.24	3.53
AS-249	123.42	3.53
AS-250	126.59	3.53
AS-251	129.77	3.53
AS-252	132.94	3.53
AS-253	136.12	3.53

型號	ID	W
AS-323	32.69	5.33
AS-324	34.29	5.33
AS-325	37.47	5.33
AS-326	40.64	5.33
AS-327	43.82	5.33
AS-328	46.99	5.33
AS-329	50.17	5.33
AS-330	53.34	5.33
AS-331	56.52	5.33
AS-332	59.69	5.33
AS-333	62.87	5.33
AS-334	66.04	5.33
AS-335	69.22	5.33
AS-336	72.39	5.33
AS-337	75.57	5.33
AS-338	78.74	5.33
AS-339	81.92	5.33
AS-340	85.09	5.33
AS-341	88.27	5.33
AS-342	91.44	5.33
AS-343	94.62	5.33
AS-344	97.79	5.33
AS-345	100.97	5.33
AS-346	104.14	5.33
AS-347	107.32	5.33
AS-348	110.49	5.33
AS-349	113.67	5.33
AS-350	116.84	5.33
AS-351	120.02	5.33
AS-352	123.19	5.33
AS-353	126.37	5.33
AS-354	129.54	5.33
AS-355	132.72	5.33
AS-356	135.89	5.33
AS-357	139.07	5.33
AS-358	142.24	5.33
AS-359	145.42	5.33
AS-360	148.59	5.33
AS-361	151.77	5.33
AS-362	158.12	5.33
AS-363	164.47	5.33
AS-364	170.82	5.33
AS-365	177.17	5.33
AS-366	183.52	5.33
AS-367	189.87	5.33

型號	ID	W
AS-254	139.29	3.53
AS-255	142.47	3.53
AS-256	145.65	3.53
AS-257	148.82	3.53
AS-258	151.99	3.53
AS-259	158.34	3.53
AS-260	164.69	3.53
AS-261	171.04	3.53
AS-262	177.39	3.53
AS-263	183.74	3.53
AS-264	190.09	3.53
AS-265	196.44	3.53
AS-266	202.79	3.53
AS-267	209.14	3.53
AS-268	215.49	3.53
AS-269	221.84	3.53
AS-270	228.19	3.53
AS-271	234.54	3.53
AS-272	240.89	3.53
AS-273	247.24	3.53
AS-274	253.59	3.53
AS-275	266.29	3.53
AS-276	278.99	3.53
AS-277	291.69	3.53
AS-278	304.39	3.53
AS-279	329.79	3.53
AS-280	355.19	3.53
AS-281	380.59	3.53
AS-282	405.26	3.53
AS-283	430.66	3.53
AS-284	456.06	3.53
AS-309	10.46	5.33
AS-310	12.07	5.33
AS-311	13.64	5.33
AS-312	15.24	5.33
AS-313	16.81	5.33
AS-314	18.42	5.33
AS-315	19.99	5.33
AS-316	21.59	5.33
AS-317	23.16	5.33
AS-318	24.77	5.33
AS-319	26.34	5.33
AS-320	27.94	5.33
AS-321	29.51	5.33
AS-322	31.12	5.33

型號	ID	W
AS-368	196.22	5.33
AS-369	202.57	5.33
AS-370	208.92	5.33
AS-371	215.27	5.33
AS-372	221.62	5.33
AS-373	227.97	5.33
AS-374	234.32	5.33
AS-375	240.67	5.33
AS-376	247.02	5.33
AS-377	253.37	5.33
AS-378	266.07	5.33
AS-379	278.77	5.33
AS-380	291.47	5.33
AS-381	304.17	5.33
AS-382	329.57	5.33
AS-383	354.97	5.33
AS-384	380.37	5.33
AS-385	405.26	5.33
AS-386	430.66	5.33
AS-387	456.06	5.33
AS-388	481.41	5.33
AS-389	506.81	5.33
AS-390	532.21	5.33
AS-391	557.61	5.33
AS-392	582.68	5.33
AS-393	608.08	5.33
AS-394	633.48	5.33
AS-395	658.88	5.33
AS-425	113.67	6.99
AS-426	116.84	6.99
AS-427	120.02	6.99
AS-428	123.19	6.99
AS-429	126.37	6.99
AS-430	129.54	6.99
AS-431	132.72	6.99
AS-432	135.89	6.99
AS-433	139.07	6.99
AS-434	142.24	6.99
AS-435	145.42	6.99
AS-436	148.59	6.99
AS-437	151.77	6.99
AS-438	158.12	6.99
AS-439	164.47	6.99
AS-440	170.82	6.99
AS-441	177.17	6.99

型號	ID	W
AS-442	183.52	6.99
AS-443	189.87	6.99
AS-444	196.22	6.99
AS-445	202.57	6.99
AS-446	215.27	6.99
AS-447	227.97	6.99
AS-448	240.67	6.99
AS-449	253.37	6.99
AS-450	266.07	6.99
AS-451	278.77	6.99
AS-452	291.47	6.99
AS-453	304.17	6.99
AS-454	316.87	6.99
AS-455	329.57	6.99
AS-456	342.27	6.99
AS-457	354.97	6.99
AS-458	367.67	6.99
AS-459	380.37	6.99
AS-460	393.07	6.99
AS-461	405.26	6.99
AS-462	417.96	6.99
AS-463	430.66	6.99
AS-464	443.36	6.99
AS-465	456.06	6.99
AS-466	468.76	6.99
AS-467	481.46	6.99
AS-468	494.16	6.99
AS-469	506.86	6.99
AS-470	532.26	6.99
AS-471	557.66	6.99
AS-472	582.68	6.99
AS-473	608.08	6.99
AS-474	633.48	6.99
AS-475	658.88	6.99
AS-901	4.7	1.42
AS-902	6.07	1.63
AS-903	7.65	1.63
AS-904	8.92	1.83
AS-905	10.52	1.83
AS-906	11.89	1.98
AS-907	13.46	2.08
AS-908	16.36	2.21
AS-909	17.93	2.46
AS-910	19.18	2.46
AS 911	21.92	2.95

型號	ID	W
AS-912	23.47	2.95
AS-913	25.04	2.95
AS-914	26.59	2.95
AS-916	29.74	2.95
AS-918	34.42	2.95
AS-920	37.47	3
AS-924	43.69	3
AS-928	53.09	3
AS-932	59.36	3

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