

STATIC METALLIC SEALS

Metallic Seals

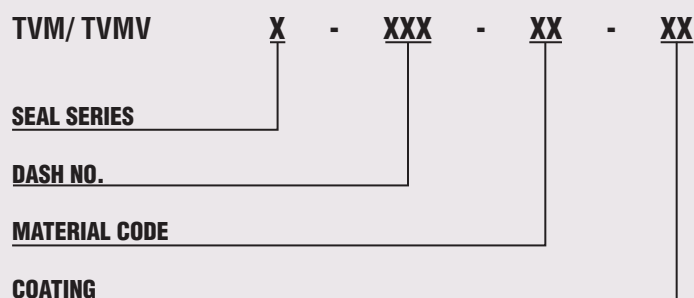
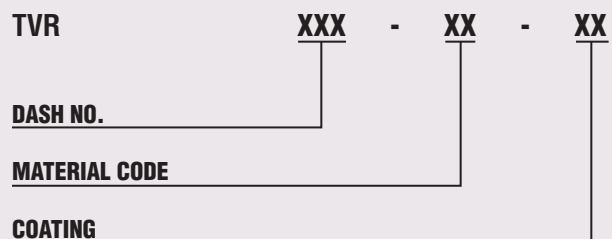
General Information

A Word About Metallic Static Seals

The TV Metallic Static Seal is a V-type spring seal with many years of successful performance in handling difficult sealing problems in fluid and vacuum systems equipment. The TV Seal was developed with the user in mind – no special cavities, finishes, or complex flange arrangements are required. CoorsTek makes the TV Metallic Static Seal in 3 series: one for use in standard rubber O-ring cavities (TVR), one for use in pressurized metal O-ring cavities (TVM), and one for vacuum installations (TVMV).

Depending on the material of construction, TV Seals are suitable for operation from cryogenic temperatures to 1000 °F and higher. The TV Seal consists of a relatively soft plating or coating backed up by a spring material. The spring material provides the resiliency to achieve continuous mating of the sealing surfaces while the coating conforms to surface irregularities. The type of soft coating used is determined by the temperature environment and chemical compatibility. In general, fluoroplastic coatings are used up to 500 °F. Soft metals such as silver are used for applications above 500 °F.

Ordering Information



Materials

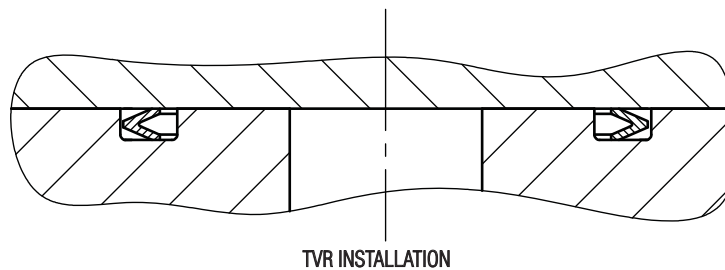
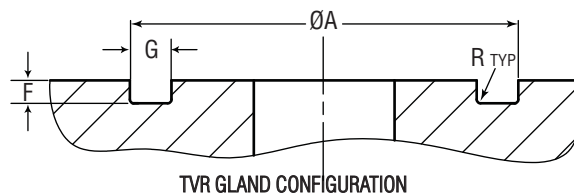
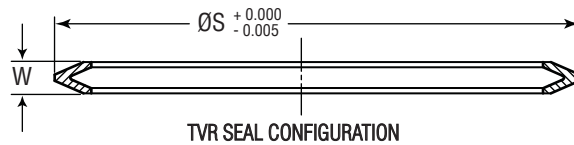
01	Aluminum 7075-T6	06	(Discontinued)
02	300 Series CRES	07	A286
03	KR Monel	08	Inconel X
04	17-4 PH Stainless	09	Inconel 718
05	17-7 PH Stainless	10	Hastelloy X

Coatings

01	PTFE	06	Tin
02	KEL-F	07	Indium
03	Teflon-FEP	08	Nickel
04	Silver	09	(Discontinued)
05	Gold		

TVR-Series:

The TVR series seals are interchangeable with all rubber O-Rings conforming to AS-S68A uniform numbering system.



TVR-Series Design Chart

Seal No.	W Free Height		F	G	R
	Nominal	Actual	Groove Depth	Groove Width	Radius Max.
TVR-008 thru TVR-045	1/16	0.060 - 0.062	0.050 - 0.054	0.101 - 0.107	0.020
TVR-110 thru TVR-163	3/32	0.088 - 0.091	0.074 - 0.080	0.136 - 0.142	0.020
TVR-210 thru TVR-281	1/8	0.121 - 0.125	0.101 - 0.107	0.177 - 0.187	0.030

Metallic Seals

TVR Series

TVR SERIES	AS-568A		Ø S	TVR SERIES	AS-568A		Ø S	TVR SERIES	AS-568A		Ø S
	Ø A				Ø A				Ø A		
	MIN	MAX			MIN	MAX			MIN	MAX	
-008	0.313	0.316	0.309	-042	3.345	3.379	3.341	-139	2.357	2.381	2.353
-009	0.345	0.348	0.341	-043	3.593	3.629	3.589	-140	2.419	2.443	2.415
-010	0.375	0.379	0.371	-044	3.840	3.879	3.836	-141	2.481	2.506	2.477
-011	0.437	0.441	0.433	-045	4.088	4.129	4.084	-142	2.542	2.568	2.538
-012	0.499	0.504	0.495					-143	2.605	2.631	2.601
-013	0.560	0.566	0.556	-110	0.562	0.568	0.558	-144	2.666	2.693	2.662
-014	0.623	0.629	0.619	-111	0.624	0.630	0.620	-145	2.728	2.756	2.724
-015	0.684	0.691	0.680	-112	0.686	0.693	0.682	-146	2.790	2.818	2.786
-016	0.796	0.804	0.792	-113	0.747	0.755	0.743	-147	2.852	2.881	2.848
-017	0.808	0.816	0.804	-114	0.810	0.818	0.806	-148	2.914	2.943	2.910
-018	0.870	0.879	0.866	-115	0.871	0.880	0.867	-149	2.976	3.006	2.972
-019	0.933	0.941	0.929	-116	0.934	0.943	0.930	-150	3.037	3.068	3.033
-020	0.994	1.004	0.990	-117	0.995	1.005	0.991	-151	3.161	3.193	3.157
-021	1.055	1.066	1.051	-118	1.057	1.068	1.053	-152	3.409	3.443	3.405
-022	1.118	1.129	1.114	-119	1.119	1.130	1.115	-153	3.656	3.693	3.652
-023	1.189	1.191	1.185	-120	1.181	1.193	1.177	-154	3.904	3.943	3.900
-024	1.241	1.254	1.237	-121	1.242	1.255	1.238	-155	4.151	4.193	4.147
-025	1.303	1.316	1.299	-122	1.305	1.318	1.301	-156	4.339	4.383	4.335
-026	1.365	1.379	1.361	-123	1.366	1.380	1.362	-157	4.646	4.693	4.642
-027	1.427	1.441	1.423	-124	1.429	1.443	1.425	-158	4.894	4.943	4.890
-028	1.489	1.504	1.485	-125	1.490	1.505	1.486	-159	5.141	5.193	5.137
-029	1.613	1.629	1.609	-126	1.552	1.568	1.548	-160	5.389	5.443	5.385
-030	1.736	1.754	1.732	-127	1.614	1.630	1.610	-161	5.636	5.693	5.632
-031	1.860	1.879	1.856	-128	1.676	1.693	1.672	-162	5.883	5.943	5.879
-032	1.984	2.004	1.980	-129	1.738	1.755	1.734	-163	6.133	6.193	6.129
-033	2.108	2.129	2.104	-130	1.800	1.818	1.796				
-034	2.231	2.254	2.227	-131	1.861	1.880	1.857	-210	1.002	1.012	0.998
-035	2.355	2.375	2.351	-132	1.924	1.943	1.920	-211	1.063	1.074	1.059
-036	2.479	2.504	2.475	-133	1.985	2.005	1.981	-212	1.126	1.137	1.122
-037	2.627	2.629	2.623	-134	2.047	2.068	2.043	-213	1.187	1.199	1.183
-038	2.726	2.754	2.722	-135	2.110	2.131	2.106	-214	1.249	1.262	1.245
-039	2.850	2.879	2.846	-136	2.171	2.193	2.167	-215	1.311	1.324	1.307
-040	2.974	3.004	2.970	-137	2.233	2.256	2.229	-216	1.373	1.387	1.369
-041	3.098	3.129	3.094	-138	2.295	2.318	2.291	-217	1.435	1.449	1.431

Metallic Seals

TVR-Series

TVR SERIES DASH SIZE	AS-568A		Ø S	TVR SERIES DASH SIZE	AS-568A		Ø S	TVR SERIES DASH SIZE	AS-568A		Ø S
	Ø A				Ø A				Ø A		
	MIN	MAX			MIN	MAX			MIN	MAX	
-218	1.497	1.512	1.493	-240	3.972	4.012	3.968	-262	7.202	7.262	7.198
-219	1.559	1.574	1.555	-241	4.096	4.137	4.092	-263	7.452	7.512	7.448
-220	1.621	1.637	1.617	-242	4.219	4.262	4.215	-264	7.702	7.762	7.698
-221	1.682	1.699	1.678	-243	4.343	4.387	4.339	-265	7.952	8.012	7.948
-222	1.744	1.762	1.740	-244	4.467	4.512	4.463	-266	8.202	8.262	8.198
-223	1.868	1.887	1.864	-245	4.591	4.637	4.587	-267	8.452	8.512	8.448
-224	1.992	2.012	1.988	-246	4.714	4.762	4.710	-268	8.702	8.762	8.698
-225	2.117	2.137	2.112	-247	4.847	4.897	4.843	-269	8.952	9.012	8.948
-226	2.239	2.262	2.235	-248	4.962	5.012	4.958	-270	9.202	9.262	9.198
-227	2.363	2.387	2.359	-249	5.086	5.137	5.082	-271	9.452	9.512	9.448
-228	2.487	2.512	2.483	-250	5.209	5.262	5.205	-272	9.702	9.762	9.698
-229	2.611	2.637	2.607	-251	5.323	5.387	5.319	-273	9.952	10.012	9.948
-230	2.734	2.762	2.730	-252	5.451	5.512	5.447	-274	10.202	10.262	10.198
-231	2.858	2.887	2.854	-253	5.581	5.637	5.577	-275	10.702	10.762	10.698
-232	2.982	3.012	2.978	-254	5.705	5.762	5.701	-276	11.202	11.262	11.198
-233	3.106	3.137	3.102	-255	5.828	5.887	5.824	-277	11.702	11.762	11.698
-234	3.229	3.262	3.225	-256	5.952	6.012	5.948	-278	12.202	12.262	12.198
-235	3.353	3.387	3.349	-257	6.077	6.137	6.073	-279	13.202	13.262	13.198
-236	3.477	3.512	3.473	-258	6.202	6.262	6.198	-280	14.202	14.262	14.198
-237	3.601	3.637	3.597	-259	6.452	6.512	6.448	-281	15.202	15.262	15.198
-238	3.724	3.762	3.720	-260	6.702	6.762	6.698				
-239	3.848	3.887	3.844	-261	6.952	7.012	6.948				

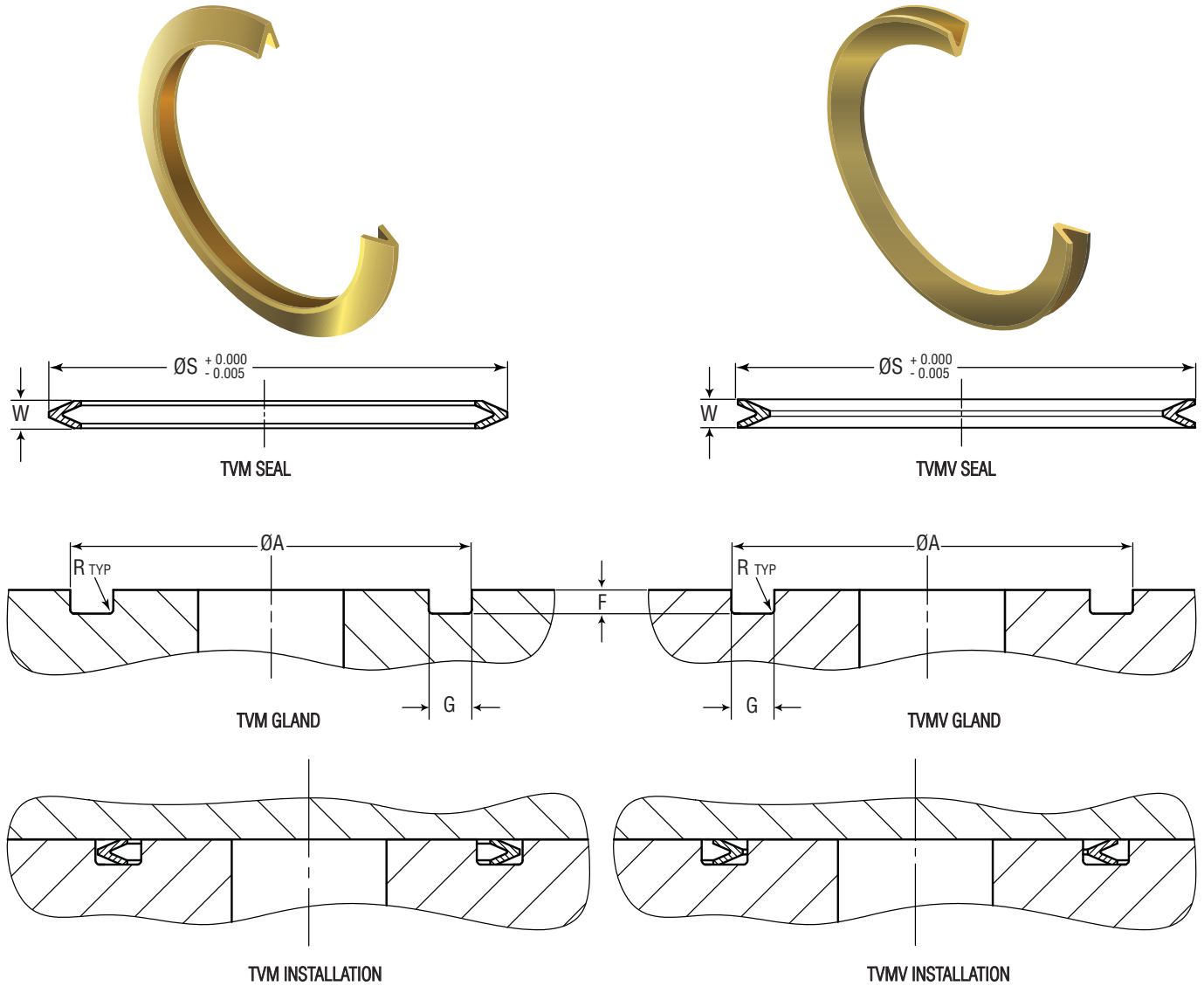
- 1 tetralon materials
- 2 pack-up rings
- 3 metaplast II spring seals
- 4 tetracap & unilock seals
- 5 tetrallex piston seals
- 6 o-rings
- 7 metallic seals
- 8 tetralon bearings

Metallic Seals

TVM and TVMV Series

TVM and TVMV Series:

The TVM and TVMV series seals are interchangeable with all metal O-rings



TVM and TVMV Series Design Chart

TVM or TVMV Seal Series	W Free Height		F Groove Depth	G Groove Width	R Radius Max.
	Nominal	Actual			
TVM1 or TVMV1	1/32	0.032 - 0.035	0.025 - 0.030	0.047 ± 0.002	0.010
TVM2 or TVMV2	1/16	0.060 - 0.062	0.051 - 0.053	0.075 ± 0.002	0.015
TVM3 or TVMV3	3/32	0.088 - 0.091	0.076 - 0.078	0.116 ± 0.002	0.020
TVM4 or TVMV4	1/8	0.121 - 0.125	0.106 - 0.110	0.150 ± 0.002	0.030

Metallic Seals

TVM1 and TVMV1 Series / TVM2 and TVMV2 Series

TVM1 and TVMV1 SERIES				
SIZE NO.	ØA	ØS		Seal ID
		Nominal	Actual	Nominal
-008	0.255 - 0.259	¼	0.250 - 0.255	¾ ₁₆
-010	0.317 - 0.321	⅕ ₁₆	0.312 - 0.317	¼
-012	0.380 - 0.384	⅜	0.375 - 0.380	⅕ ₁₆
-014	0.442 - 0.447	⅞ ₁₆	0.437 - 0.442	⅜
-016	0.505 - 0.509	½	0.500 - 0.505	⅞ ₁₆
-018	0.567 - 0.571	⅙ ₁₆	0.562 - 0.567	½
-020	0.629 - 0.634	⅝	0.624 - 0.629	⅙ ₁₆
-022	0.693 - 0.697	⅞ ₁₆	0.688 - 0.693	⅝
-024	0.754 - 0.759	¾	0.749 - 0.754	⅞ ₁₆
-026	0.817 - 0.821	⅞ ₁₆	0.812 - 0.817	¾
-028	0.879 - 0.884	⅞	0.874 - 0.879	⅞ ₁₆
-030	0.942 - 0.947	⅞ ₁₆	0.937 - 0.942	⅞
-032	1.004 - 1.009	1	0.999 - 1.004	⅞ ₁₆
-034	1.067 - 1.071	1 ⅞ ₁₆	1.062 - 1.067	1
-036	1.129 - 1.134	1 ⅞	1.124 - 1.129	1 ⅞ ₁₆
-038	1.192 - 1.196	1 ⅞ ₁₆	1.187 - 1.192	1 ⅞
-040	1.255 - 1.259	1 ¼	1.250 - 1.255	1 ⅞ ₁₆
-042	1.317 - 1.321	1 ⅞ ₁₆	1.312 - 1.317	1 ¼
-044	1.380 - 1.384	1 ⅜	1.375 - 1.380	1 ⅞ ₁₆
-046	1.442 - 1.447	1 ⅞ ₁₆	1.437 - 1.442	1 ⅜
-048	1.505 - 1.509	1 ½	1.500 - 1.505	1 ⅞ ₁₆

TVM2 and TVMV2 SERIES				
SIZE NO.	ØA	ØS		Seal ID
		Nominal	Actual	Nominal
-034	1.067 - 1.072	1 ⅞ ₁₆	1.062 - 1.067	⅞ ₁₆
-036	1.130 - 1.135	1 ⅞	1.125 - 1.130	1
-038	1.192 - 1.197	1 ⅞ ₁₆	1.187 - 1.192	1 ⅞ ₁₆
-040	1.254 - 1.260	1 ¼	1.249 - 1.254	1 ⅞
-042	1.317 - 1.322	1 ⅞ ₁₆	1.312 - 1.317	1 ⅞ ₁₆
-044	1.379 - 1.385	1 ⅞	1.374 - 1.379	1 ¼
-046	1.442 - 1.447	1 ⅞ ₁₆	1.437 - 1.442	1 ⅞ ₁₆
-048	1.504 - 1.510	1 ½	1.499 - 1.504	1 ⅞
-050	1.567 - 1.572	1 ⅞ ₁₆	1.562 - 1.567	1 ⅞ ₁₆
-052	1.629 - 1.635	1 ⅞	1.624 - 1.629	1 ½
-054	1.692 - 1.697	1 ⅞ ₁₆	1.687 - 1.692	1 ⅞ ₁₆
-056	1.754 - 1.760	1 ¼	1.749 - 1.754	1 ⅞
-058	1.817 - 1.822	1 ⅞ ₁₆	1.812 - 1.817	1 ⅞ ₁₆
-060	1.879 - 1.885	1 ⅞	1.874 - 1.879	1 ¼
-062	1.942 - 1.947	1 ⅞ ₁₆	1.937 - 1.942	1 ⅞ ₁₆
-064	2.004 - 2.010	2	1.999 - 2.004	1 ⅞
-068	2.130 - 2.135	2 ⅞	2.125 - 2.130	2
-072	2.254 - 2.260	2 ¼	2.249 - 2.254	2 ⅞
-076	2.379 - 2.385	2 ⅞	2.374 - 2.379	2 ¼
-080	2.504 - 2.510	2 ½	2.499 - 2.504	2 ⅞
-084	2.629 - 2.635	2 ⅞	2.624 - 2.629	2 ½
-088	2.754 - 2.760	2 ¾	2.749 - 2.754	2 ⅞
-092	2.879 - 2.885	2 ⅞	2.874 - 2.879	2 ¾
-096	3.004 - 3.010	3	2.999 - 3.004	2 ⅞
-100	3.130 - 3.135	3 ⅞	3.125 - 3.130	3
-104	3.254 - 3.260	3 ¼	3.249 - 3.254	3 ⅞
-108	3.379 - 3.385	3 ⅞	3.374 - 3.379	3 ¼
-112	3.504 - 3.510	3 ½	3.499 - 3.504	3 ⅞
-116	3.629 - 3.635	3 ⅞	3.624 - 3.629	3 ½
-120	3.754 - 3.760	3 ¾	3.749 - 3.754	3 ⅞
-124	3.879 - 3.885	3 ⅞	3.874 - 3.879	3 ¾
-128	4.004 - 4.010	4	3.999 - 4.004	3 ⅞

TVM2 and TVMV2 SERIES				
SIZE NO.	ØA	ØS		Seal ID
		Nominal	Actual	Nominal
-020	0.629 - 0.635	⅝	0.624 - 0.629	½
-022	0.692 - 0.698	⅞ ₁₆	0.687 - 0.692	⅙ ₁₆
-024	0.754 - 0.760	¾	0.749 - 0.754	⅝
-026	0.817 - 0.822	⅞ ₁₆	0.812 - 0.817	⅞ ₁₆
-028	0.879 - 0.885	⅞	0.874 - 0.879	¾
-030	0.942 - 0.947	⅞ ₁₆	0.937 - 0.942	⅞ ₁₆
-032	1.004 - 1.010	1	0.999 - 1.004	⅞

- 1 tetralon materials
- 2 back-up rings
- 3 metaplast II spring seals
- 4 tetracap & unilock seals
- 5 tetrallex piston seals
- 6 o-rings
- 7 metallic seals
- 8 tetralon bearings

Metallic Seals

TVM3 and TVMV3 Series

TVM3 and TVMV3 SERIES				
SIZE NO.	ØA	ØS		Seal ID
		Nominal	Actual	Nominal
-032	1.005 - 1.010	1	1.000 - 1.005	1 ³ / ₁₆
-034	1.067 - 1.072	1 ¹ / ₁₆	1.062 - 1.067	7 ⁸ / ₁₆
-036	1.130 - 1.135	1 ¹ / ₈	1.125 - 1.130	1 ⁵ / ₁₆
-038	1.192 - 1.197	1 ³ / ₁₆	1.187 - 1.192	1
-040	1.255 - 1.260	1 ¹ / ₄	1.250 - 1.255	1 ¹ / ₁₆
-042	1.317 - 1.322	1 ⁵ / ₁₆	1.312 - 1.317	1 ¹ / ₈
-044	1.380 - 1.385	1 ³ / ₈	1.375 - 1.380	1 ³ / ₁₆
-046	1.442 - 1.447	1 ⁷ / ₁₆	1.437 - 1.442	1 ¹ / ₄
-048	1.505 - 1.510	1 ¹ / ₂	1.500 - 1.505	1 ⁵ / ₁₆
-050	1.567 - 1.572	1 ⁹ / ₁₆	1.562 - 1.567	1 ³ / ₈
-052	1.630 - 1.635	1 ⁵ / ₈	1.625 - 1.630	1 ⁷ / ₁₆
-054	1.692 - 1.697	1 ¹¹ / ₁₆	1.687 - 1.692	1 ¹ / ₂
-056	1.755 - 1.760	1 ³ / ₄	1.750 - 1.755	1 ⁹ / ₁₆
-058	1.817 - 1.822	1 ¹³ / ₁₆	1.812 - 1.817	1 ⁵ / ₈
-060	1.880 - 1.885	1 ⁷ / ₈	1.875 - 1.880	1 ¹¹ / ₁₆
-062	1.942 - 1.947	1 ¹⁵ / ₁₆	1.937 - 1.942	1 ³ / ₄
-064	2.005 - 2.010	2	2.000 - 2.005	1 ¹³ / ₁₆
-066	2.067 - 2.072	2 ¹ / ₁₆	2.062 - 2.067	1 ⁷ / ₈
-068	2.130 - 2.135	2 ¹ / ₈	2.125 - 2.130	1 ¹⁵ / ₁₆
-070	2.192 - 2.197	2 ³ / ₁₆	2.187 - 2.192	2
-072	2.255 - 2.260	2 ¹ / ₄	2.250 - 2.255	2 ¹ / ₁₆
-074	2.317 - 2.322	2 ⁵ / ₁₆	2.312 - 2.317	2 ¹ / ₈
-076	2.380 - 2.385	2 ³ / ₈	2.375 - 2.380	2 ³ / ₁₆
-078	2.442 - 2.447	2 ⁷ / ₁₆	2.437 - 2.442	2 ¹ / ₄
-080	2.505 - 2.510	2 ¹ / ₂	2.500 - 2.505	2 ⁵ / ₁₆
-082	2.567 - 2.572	2 ⁹ / ₁₆	2.562 - 2.567	2 ³ / ₈
-084	2.630 - 2.635	2 ⁵ / ₈	2.625 - 2.630	2 ⁷ / ₁₆
-086	2.692 - 2.697	2 ¹¹ / ₁₆	2.687 - 2.692	2 ¹ / ₂
-088	2.755 - 2.760	2 ³ / ₄	2.750 - 2.755	2 ⁹ / ₁₆
-090	2.817 - 2.822	2 ¹³ / ₁₆	2.812 - 2.817	2 ⁵ / ₈
-092	2.880 - 2.885	2 ⁷ / ₈	2.875 - 2.880	2 ¹¹ / ₁₆
-094	2.942 - 2.947	2 ¹⁵ / ₁₆	2.937 - 2.942	2 ³ / ₄
-096	3.005 - 3.010	3	3.000 - 3.005	2 ¹³ / ₁₆
-098	3.067 - 3.072	3 ¹ / ₁₆	3.062 - 3.067	2 ⁷ / ₈

TVM3 and TVMV3 SERIES				
SIZE NO.	ØA	ØS		Seal ID
		Nominal	Actual	Nominal
-100	3.130 - 3.135	3 ¹ / ₈	3.125 - 3.130	2 ¹⁵ / ₁₆
-102	3.192 - 3.197	3 ³ / ₁₆	3.187 - 3.192	3
-104	3.255 - 3.260	3 ¹ / ₄	3.250 - 3.255	3 ¹ / ₁₆
-106	3.317 - 3.322	3 ⁵ / ₁₆	3.312 - 3.317	3 ¹ / ₈
-108	3.380 - 3.385	3 ³ / ₈	3.375 - 3.380	3 ³ / ₁₆
-110	3.442 - 3.447	3 ⁷ / ₁₆	3.437 - 3.442	3 ¹ / ₄
-112	3.505 - 3.510	3 ¹ / ₂	3.500 - 3.505	3 ⁵ / ₁₆
-114	3.567 - 3.572	3 ⁹ / ₁₆	3.562 - 3.567	3 ³ / ₈
-116	3.630 - 3.635	3 ⁵ / ₈	3.625 - 3.630	3 ⁷ / ₁₆
-118	3.692 - 3.697	3 ¹¹ / ₁₆	3.687 - 3.692	3 ¹ / ₂
-120	3.755 - 3.760	3 ³ / ₄	3.750 - 3.755	3 ⁹ / ₁₆
-122	3.817 - 3.822	3 ¹³ / ₁₆	3.812 - 3.817	3 ⁵ / ₈
-124	3.880 - 3.885	3 ⁷ / ₈	3.875 - 3.880	3 ¹¹ / ₁₆
-126	3.942 - 3.947	3 ¹⁵ / ₁₆	3.937 - 3.942	3 ³ / ₄
-128	4.005 - 4.010	4	4.000 - 4.005	3 ¹³ / ₁₆
-130	4.067 - 4.072	4 ¹ / ₁₆	4.062 - 4.067	3 ⁷ / ₈
-132	4.130 - 4.135	4 ¹ / ₈	4.125 - 4.130	3 ¹⁵ / ₁₆
-134	4.192 - 4.197	4 ³ / ₁₆	4.187 - 4.192	4
-136	4.255 - 4.260	4 ¹ / ₄	4.250 - 4.255	4 ¹ / ₁₆
-138	4.317 - 4.322	4 ⁵ / ₁₆	4.312 - 4.317	4 ¹ / ₈
-140	4.380 - 4.385	4 ³ / ₈	4.375 - 4.380	4 ³ / ₁₆
-142	4.442 - 4.447	4 ⁷ / ₁₆	4.437 - 4.442	4 ¹ / ₄
-144	4.505 - 4.510	4 ¹ / ₂	4.500 - 4.505	4 ⁵ / ₁₆
-146	4.567 - 4.572	4 ⁹ / ₁₆	4.562 - 4.567	4 ³ / ₈
-148	4.630 - 4.635	4 ⁵ / ₈	4.625 - 4.630	4 ⁷ / ₁₆
-150	4.692 - 4.697	4 ¹¹ / ₁₆	4.687 - 4.692	4 ¹ / ₂
-152	4.755 - 4.760	4 ³ / ₄	4.750 - 4.755	4 ⁹ / ₁₆
-154	4.817 - 4.822	4 ¹³ / ₁₆	4.812 - 4.817	4 ⁵ / ₈
-156	4.880 - 4.885	4 ⁷ / ₈	4.875 - 4.880	4 ¹¹ / ₁₆
-158	4.942 - 4.947	4 ¹⁵ / ₁₆	4.937 - 4.942	4 ³ / ₄
-160	5.005 - 5.010	5	5.000 - 5.005	4 ¹³ / ₁₆
-164	5.130 - 5.135	5 ¹ / ₈	5.125 - 5.130	4 ¹⁵ / ₁₆
-168	5.255 - 5.260	5 ¹ / ₄	5.250 - 5.255	5 ¹ / ₁₆
-172	5.380 - 5.385	5 ³ / ₈	5.375 - 5.380	5 ³ / ₁₆

Metallic Seals

TVM3 and TVMV3 Series / TVM4 and TVMV4 Series

TVM3 and TVMV3 SERIES				
SIZE NO.	ØA	ØS		Seal ID
		Nominal	Actual	Nominal
-176	5.505 - 5.510	5 ½	5.500 - 5.505	5 ⅝
-180	5.630 - 5.635	5 ⅝	5.625 - 5.630	5 ⅝
-184	5.755 - 5.760	5 ¾	5.750 - 5.755	5 ⅝
-188	5.880 - 5.885	5 ⅞	5.875 - 5.880	5 ⅞
-192	6.005 - 6.010	6	6.000 - 6.005	5 ⅞
-196	6.130 - 6.135	6 ⅛	6.125 - 6.130	5 ⅞
-200	6.255 - 6.260	6 ¼	6.250 - 6.255	6 ⅞
-204	6.380 - 6.385	6 ⅜	6.375 - 6.380	6 ⅞
-208	6.505 - 6.510	6 ½	6.500 - 6.505	6 ⅞
-212	6.630 - 6.635	6 ⅝	6.625 - 6.630	6 ⅞
-216	6.755 - 6.760	6 ¾	6.750 - 6.755	6 ⅞
-220	6.880 - 6.885	6 ⅞	6.875 - 6.880	6 ⅞
-224	7.005 - 7.010	7	7.000 - 7.005	6 ⅞
-228	7.130 - 7.135	7 ⅛	7.125 - 7.130	6 ⅞
-232	7.255 - 7.260	7 ¼	7.250 - 7.255	7 ⅞
-236	7.380 - 7.385	7 ⅜	7.375 - 7.380	7 ⅞
-240	7.505 - 7.510	7 ½	7.500 - 7.505	7 ⅞
-244	7.630 - 7.635	7 ⅝	7.625 - 7.630	7 ⅞
-248	7.755 - 7.760	7 ¾	7.750 - 7.755	7 ⅞
-252	7.880 - 7.885	7 ⅞	7.875 - 7.880	7 ⅞
-256	8.005 - 8.010	8	8.000 - 8.005	7 ⅞
-260	8.130 - 8.135	8 ⅛	8.125 - 8.130	7 ⅞
-264	8.255 - 8.260	8 ¼	8.250 - 8.255	8 ⅞
-268	8.380 - 8.385	8 ⅜	8.375 - 8.380	8 ⅞
-272	8.505 - 8.510	8 ½	8.500 - 8.505	8 ⅞
-276	8.630 - 8.635	8 ⅝	8.625 - 8.630	8 ⅞
-280	8.755 - 8.760	8 ¾	8.750 - 8.755	8 ⅞
-284	8.880 - 8.885	8 ⅞	8.875 - 8.880	8 ⅞
-288	9.005 - 9.010	9	9.000 - 9.005	8 ⅞
-292	9.130 - 9.135	9 ⅛	9.125 - 9.130	8 ⅞
-296	9.255 - 9.260	9 ¼	9.250 - 9.255	9 ⅞
-300	9.380 - 9.385	9 ⅜	9.375 - 9.380	9 ⅞
-304	9.505 - 9.510	9 ½	9.500 - 9.505	9 ⅞
-308	9.630 - 9.635	9 ⅝	9.625 - 9.630	9 ⅞

TVM3 and TVMV3 SERIES				
SIZE NO.	ØA	ØS		Seal ID
		Nominal	Actual	Nominal
-312	9.755 - 9.760	9 ¾	9.750 - 9.755	9 ⅞
-316	9.880 - 9.885	9 ⅞	9.875 - 9.880	9 ⅞
-320	10.005 - 10.010	10	10.000 - 10.005	9 ⅞
-324	10.130 - 10.135	10 ⅛	10.125 - 10.130	9 ⅞
-328	10.255 - 10.260	10 ¼	10.250 - 10.255	10 ⅞
-332	10.380 - 10.385	10 ⅜	10.375 - 10.380	10 ⅞
-336	10.505 - 10.510	10 ½	10.500 - 10.505	10 ⅞
-340	10.630 - 10.635	10 ⅝	10.625 - 10.630	10 ⅞
-344	10.755 - 10.760	10 ¾	10.750 - 10.755	10 ⅞
-348	10.880 - 10.885	10 ⅞	10.875 - 10.880	10 ⅞
-352	11.005 - 11.010	11	11.000 - 11.005	10 ⅞
-356	11.130 - 11.135	11 ⅛	11.125 - 11.130	10 ⅞
-360	11.255 - 11.260	11 ¼	11.250 - 11.255	11 ⅞
-364	11.380 - 11.385	11 ⅜	11.375 - 11.380	11 ⅞
-368	11.505 - 11.510	11 ½	11.500 - 11.505	11 ⅞
-372	11.630 - 11.635	11 ⅝	11.625 - 11.630	11 ⅞
-376	11.755 - 11.760	11 ¾	11.750 - 11.755	11 ⅞
-380	11.880 - 11.885	11 ⅞	11.875 - 11.880	11 ⅞
-384	12.005 - 12.010	12	12.000 - 12.005	11 ⅞

TVM4 and TVMV4 SERIES				
SIZE NO.	ØA	ØS		Seal ID
		Nominal	Actual	Nominal
-064	2.005 - 2.010	2	2.000 - 2.005	1 ¾
-066	2.067 - 2.075	2 ⅛	2.062 - 2.067	1 ⅞
-068	2.130 - 2.137	2 ⅜	2.125 - 2.130	1 ⅞
-070	2.192 - 2.200	2 ⅝	2.187 - 2.192	1 ⅞
-072	2.255 - 2.262	2 ¾	2.250 - 2.255	2
-074	2.317 - 2.325	2 ⅞	2.312 - 2.317	2 ⅞
-076	2.380 - 2.387	2 ⅞	2.375 - 2.380	2 ⅞
-078	2.442 - 2.450	2 ⅞	2.437 - 2.442	2 ⅞
-080	2.505 - 2.512	2 ½	2.500 - 2.505	2 ¼
-082	2.567 - 2.575	2 ⅞	2.562 - 2.567	2 ⅞



Metallic Seals

TVM4 and TVMV4 Series

TVM4 and TVMV4 SERIES				
SIZE NO.	ØA	ØS		Seal ID
		Nominal	Actual	Nominal
-084	2.630 - 2.637	2 5/8	2.625 - 2.630	2 3/8
-086	2.692 - 2.700	2 11/16	2.687 - 2.692	2 7/16
-088	2.755 - 2.762	2 3/4	2.750 - 2.755	2 1/2
-090	2.817 - 2.825	2 13/16	2.812 - 2.817	2 9/16
-092	2.880 - 2.887	2 7/8	2.875 - 2.880	2 5/8
-094	2.942 - 2.950	2 15/16	2.937 - 2.942	2 11/16
-096	3.005 - 3.012	3	3.000 - 3.005	2 3/4
-098	3.068 - 3.073	3 1/16	3.063 - 3.068	2 13/16
-100	3.130 - 3.135	3 1/8	3.125 - 3.130	2 7/8
-102	3.193 - 3.198	3 3/16	3.188 - 3.193	2 15/16
-104	3.255 - 3.260	3 1/4	3.250 - 3.255	3
-106	3.317 - 3.322	3 5/16	3.312 - 3.317	3 1/16
-108	3.380 - 3.385	3 3/8	3.375 - 3.380	3 1/8
-110	3.443 - 3.448	3 7/16	3.438 - 3.443	3 3/16
-112	3.505 - 3.510	3 1/2	3.500 - 3.505	3 1/4
-114	3.568 - 3.573	3 9/16	3.563 - 3.568	3 5/16
-116	3.630 - 3.635	3 5/8	3.625 - 3.630	3 3/8
-118	3.693 - 3.698	3 11/16	3.688 - 3.693	3 7/16
-120	3.755 - 3.760	3 3/4	3.750 - 3.755	3 1/2
-122	3.818 - 3.823	3 13/16	3.813 - 3.818	3 9/16
-124	3.880 - 3.885	3 7/8	3.875 - 3.880	3 5/8
-126	3.943 - 3.948	3 15/16	3.938 - 3.943	3 11/16
-128	4.005 - 4.010	4	4.000 - 4.005	3 3/4
-130	4.068 - 4.073	4 1/16	4.063 - 4.068	3 13/16
-132	4.130 - 4.135	4 1/8	4.125 - 4.130	3 7/8
-134	4.193 - 4.198	4 3/16	4.188 - 4.193	3 15/16
-136	4.255 - 4.260	4 1/4	4.250 - 4.255	4
-138	4.318 - 4.323	4 5/16	4.313 - 4.318	4 1/16
-140	4.380 - 4.385	4 3/8	4.375 - 4.380	4 1/8
-142	4.443 - 4.448	4 7/16	4.438 - 4.443	4 3/16
-144	4.505 - 4.510	4 1/2	4.500 - 4.505	4 1/4
-146	4.568 - 4.573	4 9/16	4.563 - 4.568	4 5/16
-148	4.630 - 4.635	4 5/8	4.625 - 4.630	4 3/8
-150	4.693 - 4.698	4 11/16	4.688 - 4.693	4 7/16

TVM4 and TVMV4 SERIES				
SIZE NO.	ØA	ØS		Seal ID
		Nominal	Actual	Nominal
-152	4.755 - 4.760	4 3/4	4.750 - 4.755	4 1/2
-154	4.818 - 4.823	4 13/16	4.813 - 4.818	4 9/16
-156	4.880 - 4.885	4 7/8	4.875 - 4.880	4 5/8
-158	4.943 - 4.948	4 15/16	4.938 - 4.943	4 11/16
-160	5.005 - 5.010	5	5.000 - 5.005	4 3/4
-164	5.130 - 5.135	5 1/8	5.125 - 5.130	4 7/8
-168	5.255 - 5.260	5 1/4	5.250 - 5.255	5
-172	5.380 - 5.385	5 3/8	5.375 - 5.380	5 1/8
-176	5.505 - 5.510	5 1/2	5.500 - 5.505	5 1/4
-180	5.630 - 5.635	5 5/8	5.625 - 5.630	5 3/8
-184	5.755 - 5.760	5 3/4	5.750 - 5.755	5 1/2
-188	5.880 - 5.885	5 7/8	5.875 - 5.880	5 5/8
-192	6.005 - 6.010	6	6.000 - 6.005	5 3/4
-196	6.130 - 6.135	6 1/8	6.125 - 6.130	5 7/8
-200	6.255 - 6.260	6 1/4	6.250 - 6.255	6
-204	6.380 - 6.385	6 3/8	6.375 - 6.380	6 1/8
-208	6.505 - 6.510	6 1/2	6.500 - 6.505	6 1/4
-212	6.630 - 6.635	6 5/8	6.625 - 6.630	6 3/8
-216	6.755 - 6.760	6 3/4	6.750 - 6.755	6 1/2
-220	6.880 - 6.885	6 7/8	6.875 - 6.880	6 5/8
-224	7.005 - 7.010	7	7.000 - 7.005	6 3/4
-228	7.130 - 7.135	7 1/8	7.125 - 7.130	6 7/8
-232	7.255 - 7.260	7 1/4	7.250 - 7.255	7
-236	7.380 - 7.385	7 3/8	7.375 - 7.380	7 1/8
-240	7.505 - 7.510	7 1/2	7.500 - 7.505	7 1/4
-244	7.630 - 7.635	7 5/8	7.625 - 7.630	7 3/8
-248	7.755 - 7.760	7 3/4	7.750 - 7.755	7 1/2
-252	7.880 - 7.885	7 7/8	7.875 - 7.880	7 5/8
-256	8.005 - 8.010	8	8.000 - 8.005	7 3/4
-260	8.130 - 8.135	8 1/8	8.125 - 8.130	7 7/8
-264	8.255 - 8.260	8 1/4	8.250 - 8.255	8
-268	8.380 - 8.385	8 3/8	8.375 - 8.380	8 1/8
-272	8.505 - 8.510	8 1/2	8.500 - 8.505	8 1/4
-276	8.630 - 8.635	8 5/8	8.625 - 8.630	8 3/8

Metallic Seals

TVM4 and TVMV4 Series

TVM4 and TVMV4 SERIES				
SIZE NO.	ØA	ØS		Seal ID
		Nominal	Actual	Nominal
-280	8.755 - 8.760	8 ¾	8.750 - 8.755	8 ½
-284	8.880 - 8.885	8 ⅞	8.875 - 8.880	8 ⅝
-288	9.005 - 9.010	9	9.000 - 9.005	8 ¾
-292	9.130 - 9.135	9 ⅛	9.125 - 9.130	8 ⅞
-296	9.255 - 9.260	9 ¼	9.250 - 9.255	9
-300	9.380 - 9.385	9 ⅝	9.375 - 9.380	9 ⅞
-304	9.505 - 9.510	9 ½	9.500 - 9.505	9 ¼
-308	9.630 - 9.635	9 ⅝	9.625 - 9.630	9 ⅞
-312	9.755 - 9.760	9 ¾	9.750 - 9.755	9 ½
-316	9.880 - 9.885	9 ⅞	9.875 - 9.880	9 ⅝
-320	10.005 - 10.010	10	10.000 - 10.005	9 ¾
-324	10.130 - 10.135	10 ⅛	10.125 - 10.130	9 ⅞
-328	10.255 - 10.260	10 ¼	10.250 - 10.255	10
-332	10.380 - 10.385	10 ⅜	10.375 - 10.380	10 ⅛
-336	10.505 - 10.510	10 ½	10.500 - 10.505	10 ¼
-340	10.630 - 10.635	10 ⅝	10.625 - 10.630	10 ⅜
-344	10.755 - 10.760	10 ¾	10.750 - 10.755	10 ½
-348	10.880 - 10.885	10 ⅞	10.875 - 10.880	10 ⅝
-352	11.005 - 11.010	11	11.000 - 11.005	10 ¾
-356	11.130 - 11.135	11 ⅛	11.125 - 11.130	10 ⅞
-360	11.255 - 11.260	11 ¼	11.250 - 11.255	11
-364	11.380 - 11.385	11 ⅜	11.375 - 11.380	11 ⅛
-368	11.505 - 11.510	11 ½	11.500 - 11.505	11 ¼
-372	11.630 - 11.635	11 ⅝	11.625 - 11.630	11 ⅜
-376	11.755 - 11.760	11 ¾	11.750 - 11.755	11 ½
-380	11.880 - 11.885	11 ⅞	11.875 - 11.880	11 ⅝
-384	12.005 - 12.010	12	12.000 - 12.005	11 ¾
-388	12.130 - 12.135	12 ⅛	12.125 - 12.130	11 ⅞
-392	12.255 - 12.260	12 ¼	12.250 - 12.255	12
-396	12.380 - 12.385	12 ⅜	12.375 - 12.380	12 ⅛
-400	12.505 - 12.510	12 ½	12.500 - 12.505	12 ¼
-404	12.630 - 12.635	12 ⅝	12.625 - 12.630	12 ⅜
-408	12.755 - 12.760	12 ¾	12.750 - 12.755	12 ½
-412	12.880 - 12.885	12 ⅞	12.875 - 12.880	12 ⅝

TVM4 and TVMV4 SERIES				
SIZE NO.	ØA	ØS		Seal ID
		Nominal	Actual	Nominal
-416	13.005 - 13.010	13	13.000 - 13.005	12 ¾
-420	13.130 - 13.135	13 ⅛	13.125 - 13.130	12 ⅞
-424	13.255 - 13.260	13 ¼	13.250 - 13.255	13
-428	13.380 - 13.385	13 ⅜	13.375 - 13.380	13 ⅛
-432	13.505 - 13.510	13 ½	13.500 - 13.505	13 ¼
-436	13.630 - 13.635	13 ⅝	13.625 - 13.630	13 ⅜
-440	13.755 - 13.760	13 ¾	13.750 - 13.755	13 ½
-444	13.880 - 13.885	13 ⅞	13.875 - 13.880	13 ⅝
-448	14.005 - 14.010	14	14.000 - 14.005	13 ¾
-452	14.130 - 14.135	14 ⅛	14.125 - 14.130	13 ⅞
-456	14.255 - 14.260	14 ¼	14.250 - 14.255	14
-460	14.380 - 14.385	14 ⅜	14.375 - 14.380	14 ⅛
-464	14.505 - 14.510	14 ½	14.500 - 14.505	14 ¼
-468	14.630 - 14.635	14 ⅝	14.625 - 14.630	14 ⅜
-472	14.755 - 14.760	14 ¾	14.750 - 14.755	14 ½
-476	14.880 - 14.885	14 ⅞	14.875 - 14.880	14 ⅝
-480	15.005 - 15.010	15	15.000 - 15.005	14 ¾
-484	15.130 - 15.135	15 ⅛	15.125 - 15.130	14 ⅞
-488	15.255 - 15.260	15 ¼	15.250 - 15.255	15
-492	15.380 - 15.385	15 ⅜	15.375 - 15.380	15 ⅛
-496	15.505 - 15.510	15 ½	15.500 - 15.505	15 ¼
-500	15.630 - 15.635	15 ⅝	15.625 - 15.630	15 ⅜
-504	15.755 - 15.760	15 ¾	15.750 - 15.755	15 ½
-508	15.880 - 15.885	15 ⅞	15.875 - 15.880	15 ⅝
-512	16.005 - 16.010	16	16.000 - 16.005	15 ¾
-516	16.130 - 16.135	16 ⅛	16.125 - 16.130	15 ⅞
-520	16.255 - 16.260	16 ¼	16.250 - 16.255	16
-524	16.380 - 16.385	16 ⅜	16.375 - 16.380	16 ⅛
-528	16.505 - 16.510	16 ½	16.500 - 16.505	16 ¼
-532	16.630 - 16.635	16 ⅝	16.625 - 16.630	16 ⅜
-536	16.755 - 16.760	16 ¾	16.750 - 16.755	16 ½
-540	16.880 - 16.885	16 ⅞	16.875 - 16.880	16 ⅝
-544	17.005 - 17.010	17	17.000 - 17.005	16 ¾
-548	17.130 - 17.135	17 ⅛	17.125 - 17.130	16 ⅞

Metallic Seals

TVM4 and TVMV4 Series

TVM4 and TVMV4 SERIES				
SIZE NO.	ØA	ØS		Seal ID
		Nominal	Actual	Nominal
-552	17.255 - 17.260	17 ¼	17.250 - 17.255	17
-556	17.380 - 17.385	17 ⅜	17.375 - 17.380	17 ⅜
-560	17.505 - 17.510	17 ½	17.500 - 17.505	17 ½
-564	17.630 - 17.635	17 ⅝	17.625 - 17.630	17 ⅝
-568	17.755 - 17.760	17 ¾	17.750 - 17.755	17 ¾
-572	17.880 - 17.885	17 ⅞	17.875 - 17.880	17 ⅞
-576	18.005 - 18.010	18	18.000 - 18.005	17 ¾
-580	18.130 - 18.135	18 ⅛	18.125 - 18.130	17 ⅞
-584	18.255 - 18.260	18 ¼	18.250 - 18.255	18
-588	18.380 - 18.385	18 ⅜	18.375 - 18.380	18 ⅛
-592	18.505 - 18.510	18 ½	18.500 - 18.505	18 ¼
-596	18.630 - 18.635	18 ⅝	18.625 - 18.630	18 ⅜
-600	18.755 - 18.760	18 ¾	18.750 - 18.755	18 ½
-604	18.880 - 18.885	18 ⅞	18.875 - 18.880	18 ⅝
-608	19.005 - 19.010	19	19.000 - 19.005	18 ¾
-612	19.130 - 19.135	19 ⅛	19.125 - 19.130	18 ⅞
-616	19.255 - 19.260	19 ¼	19.250 - 19.255	19
-620	19.380 - 19.385	19 ⅜	19.375 - 19.380	19 ⅛
-624	19.505 - 19.510	19 ½	19.500 - 19.505	19 ¼
-628	19.630 - 19.635	19 ⅝	19.625 - 19.630	19 ⅜
-632	19.755 - 19.760	19 ¾	19.750 - 19.755	19 ½
-636	19.880 - 19.885	19 ⅞	19.875 - 19.880	19 ⅝
-640	20.005 - 20.010	20	20.000 - 20.005	19 ¾
-644	20.130 - 20.135	20 ⅛	20.125 - 20.130	19 ⅞
-648	20.255 - 20.260	20 ¼	20.250 - 20.255	20
-652	20.380 - 20.385	20 ⅜	20.375 - 20.380	20 ⅛
-656	20.505 - 20.510	20 ½	20.500 - 20.505	20 ¼
-660	20.630 - 20.635	20 ⅝	20.625 - 20.630	20 ⅜

TVM4 and TVMV4 SERIES				
SIZE NO.	ØA	ØS		Seal ID
		Nominal	Actual	Nominal
-664	20.755 - 20.760	20 ¾	20.750 - 20.755	20 ⅝
-668	20.880 - 20.885	20 ⅞	20.875 - 20.880	20 ⅝
-672	21.005 - 21.010	21	21.000 - 21.005	20 ¾
-676	21.130 - 21.135	21 ⅛	21.125 - 21.130	20 ⅞
-680	21.255 - 21.260	21 ¼	21.250 - 21.255	21
-684	21.380 - 21.385	21 ⅜	21.375 - 21.380	21 ⅛
-688	21.505 - 21.510	21 ½	21.500 - 21.505	21 ¼
-692	21.630 - 21.635	21 ⅝	21.625 - 21.630	21 ⅜
-696	21.755 - 21.760	21 ¾	21.750 - 21.755	21 ½
-700	21.880 - 21.885	21 ⅞	21.875 - 21.880	21 ⅝
-704	22.005 - 22.010	22	22.000 - 22.005	21 ¾
-708	22.130 - 22.135	22 ⅛	22.125 - 22.130	21 ⅞
-712	22.255 - 22.260	22 ¼	22.250 - 22.255	22
-716	22.380 - 22.385	22 ⅜	22.375 - 22.380	22 ⅛
-720	22.505 - 22.510	22 ½	22.500 - 22.505	22 ¼
-724	22.630 - 22.635	22 ⅝	22.625 - 22.630	22 ⅜
-728	22.755 - 22.760	22 ¾	22.750 - 22.755	22 ½
-732	22.880 - 22.885	22 ⅞	22.875 - 22.880	22 ⅝
-736	23.005 - 23.010	23	23.000 - 23.005	22 ¾
-740	23.130 - 23.135	23 ⅛	23.125 - 23.130	22 ⅞
-744	23.255 - 23.260	23 ¼	23.250 - 23.255	23
-748	23.380 - 23.385	23 ⅜	23.375 - 23.380	23 ⅛
-752	23.505 - 23.510	23 ½	23.500 - 23.505	23 ¼
-756	23.630 - 23.635	23 ⅝	23.625 - 23.630	23 ⅜
-760	23.755 - 23.760	23 ¾	23.750 - 23.755	23 ½
-764	23.880 - 23.885	23 ⅞	23.875 - 23.880	23 ⅝
-768	24.005 - 24.010	24	24.000 - 24.005	23 ¾

FAQ'S ABOUT METALLIC SEALS

1. What are some of the typical applications for your seals?

Most applications involve high pressures and/or temperatures such as in: steam systems, vacuum applications, cryogenics, engine fuel and exhaust systems, cylinders, valves, and plastic and chemical processing.

2. What maximum pressure can I expect to seal?

It is quite common to operate at pressures in excess of 10,000 psi. Much depends on the design of the mating parts, breathing, and subsequent deflection of the cavity and mating surfaces under load are the common limiting factors – not the seal design.

3. What are some of the temperature ranges for seal coatings or platings (temperatures in °F)?

Silver - 325 to + 1300
TFE - 420 to + 500
Gold -450 to + 1500

4. Can a metallic seal be reused?

Reusability is dependent on the method of installation. For example, re-use is not recommended in "screw-down" installation. In "bolt-down" installation, re-use of the seal may be possible providing there is no damage to the surfaces of the mating parts or to the seal. TVM seals are generally used in permanent installations and replaced when the system is torn down.

5. What is the seating load of the metallic seal?

The seating load of the TVM1 and TVM2 is approximately 200 lbs/in of circumference. Seating load also depends on seal cross-section, material of construction, and type of plating used. Low modulus material (Titanium), larger seal cross-section, and PTFE coating permit use of lower seating loads.

6. Can I increase or decrease seal loading?

Yes, our seals can be modified for specific applications.

7. Can I obtain a seal with a free height greater than 1/8"?

Yes, even free heights in excess of 1/4" are common. Seals are often custom designed to fit specific needs.

8. Which is the most common plating?

Silver, due to wide temperature range and its compliant nature.

9. What coatings would you recommend for a hard vacuum?

Gold, where hi-temp is involved, or Indium where temperatures are below 250° F.

10. If I have a silver-plated seal and another application which requires the same part but a different coating, can the seal be re-worked?

The Silver plating can be stripped off and any of the other available coatings can be applied to the base metal.

11. Several base materials are available. What are some of their temperature ranges (temperatures in °F)?

Inconel X-750	-423 to + 1300
Inconel X-718	-423 to + 1300
A-286	-423 to + 1200
17-4 PH Stainless	-100 to + 800
303 CRES	-320 to + 600
Hastelloy X	-450 to + 1800

12. As Inconel X-750 is becoming more and more scarce, what material have you been recommending?

A-286, its temperature range is within 100° of Inconel X-750 and the cost is comparable. Another choice would be Inconel 625.

13. What can I do if my sealing surface is in a circular lay, but greater than a 32 finish?

Apply a plating or coating (PTFE) to the seal. The coating will flow into small voids or imperfections in the sealing surface. Side advantage: salvage of otherwise rejectable flanges.

14. What causes the circular scratches and marks on the sealing surface that sometimes appear on new, unused plated seals?

TV seals are thoroughly inspected before leaving our plant. We have found in almost all cases these marks are from careless inspection with micrometers. The platings are very soft and must be inspected with extreme care. Nicks or scratches across the sealing surface can cause flow paths and possible leakage.

Engineering Action Request – Seals Division

CUSTOMER DATA

Company Name _____ Date Submitted _____
 Address _____ Date Required _____
 City, State, Zip, Country _____
 Telephone _____ Fax _____
 Contact Person _____ Title _____
 E-Mail _____
 Products Mfgd/Sold/Service _____

OEM INTERNAL USE
 Distributor EAR # _____
 Rebuilder Territory # _____
 Consultant Territory Mgr _____

HARDWARE DATA

- Is this applicator: New Design Retrofit
- Pressure Direction: In Out
- Temperature: Min. _____ Normal _____ Max. _____ °C °F
- Pressure: Min. _____ Normal _____ Max. _____ Bar PSI Proof _____
- Media being sealed: _____
- If retrofit, please describe why customer wants to consider a new seal _____
- If this is a change, is there a source spec control drawing? Dwg # _____
- Disposition of existing parts: _____

APPLICATION DATA

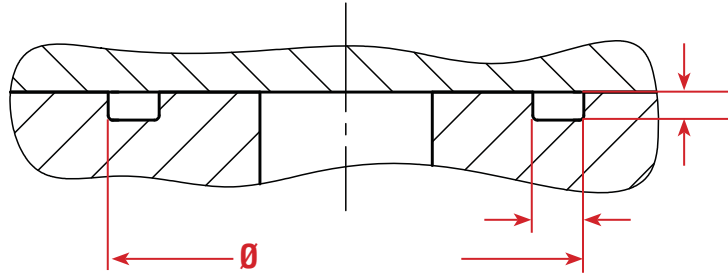
All Dimensions are in: Millimeters Inches

Groove: Dia _____ + _____ - _____ Finish _____ Groove Height _____

Groove: Width _____ + _____ - _____ Groove Sidewall Finish _____

Maximum Extrusion Gap: Radial _____ Diametral _____

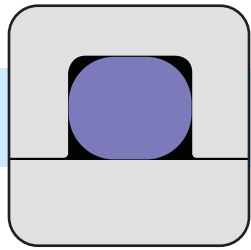
- Is hardware plated/coated? No Yes Specify _____
- Is seal installation tooling required? No Yes Not Sure
- Can hardware design be changed? No Yes How? _____
- Reference design specifications: _____
- Indicate applicable hardware design requirements in sketch below while showing pressure magnitude and directions (with arrows)



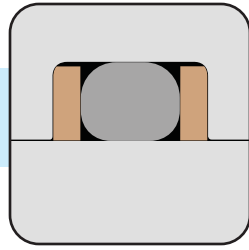
PERFORMANCE DATA

- Allowable leakage (units): _____ Per _____
- Desired service life: _____
- Any special requirements? _____
- Type of evaluation: Bench Field Both Start Date _____ Duration _____
- Comments: _____

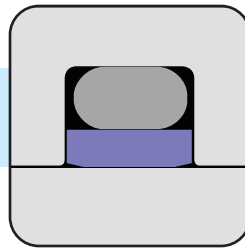
We also offer amazing sealing solutions.



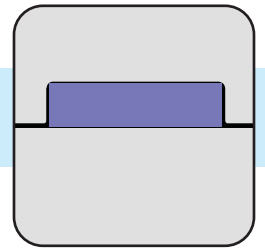
O-RING



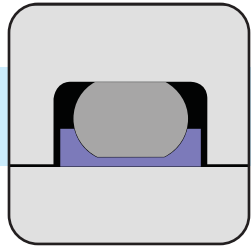
O-RING + BACK UP



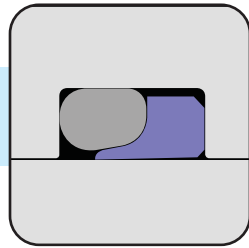
DUORING



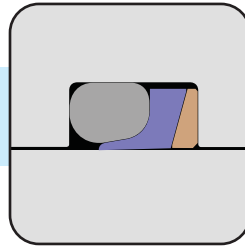
WEARRING



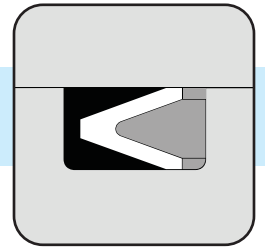
TETRACAP



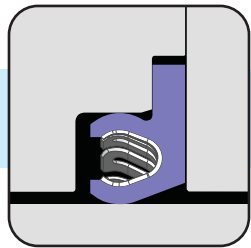
UNILOCK



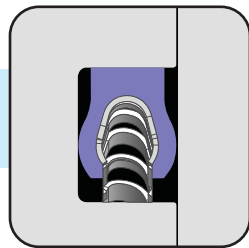
UNILOCK + BACK UP



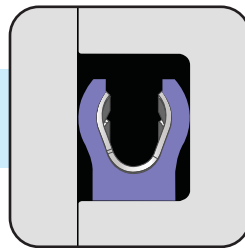
METALLIC SEALS



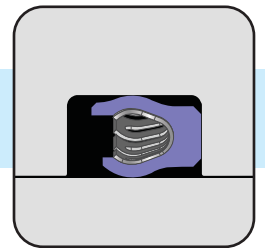
METAPLAST II
ROTARY



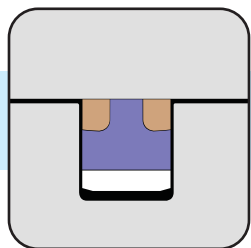
METAPLAST II
FACE



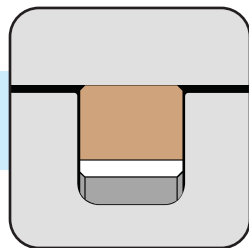
METAPLAST II
OUTSIDE FACE



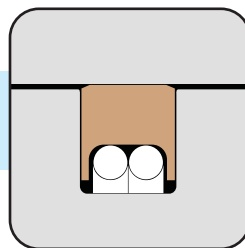
METAPLAST II
RADIAL



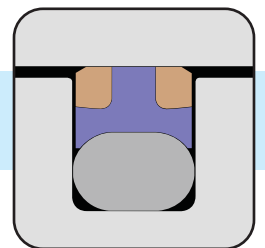
REINFORCED
TETRAFLEX I



TETRAFLEX I



TETRAFLEX II



REINFORCED PISTON

1 tetralon materials

2 back-up rings

3 metaplast II spring seals

4 tetracap & unilock seals

5 tetrallex piston seals

6 o-rings

7 metallic seals

8 tetralon bearings



El Segundo, California Facility

Serving Customers Where They Need Us Most!

CoorsTek has over 300,000 square meters (3 million square feet) of manufacturing floor space in over 40 facilities worldwide.



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