

Bearing

Technical Details

Metric

708



Operating Conditions

Temperature Range	-40°C to +100°C
Maximum Speed	5.0m/sec

Typical Physical Properties

Specific Gravity	(Temp 23°C)	
	1.42	
Tensile Strength	57 MN/m ²	
Coefficient of Dynamic Friction	Dry	Lubricated
(steel surface, 0.2 µm Ra/ 8 µin CLA)	0.22	0.05

Surface Roughness

	µmRa	µmRt
Dynamic Sealing Face $\varnothing d_1$	0.4	4 max
Static Sealing Face $\varnothing D_1$ L_1	3.2 max	16 max

Bearing Tolerance

	L_1	S
	-0.1 to -0.6	-0.02 to -0.1

Bearing Gap Installed - W

$\varnothing d_1 / \varnothing D_1$	W
≤ 50	3.00 - 1.50
≤ 120	5.00 - 3.50
≤ 550	7.00 - 5.50

Housing Details & Tolerances

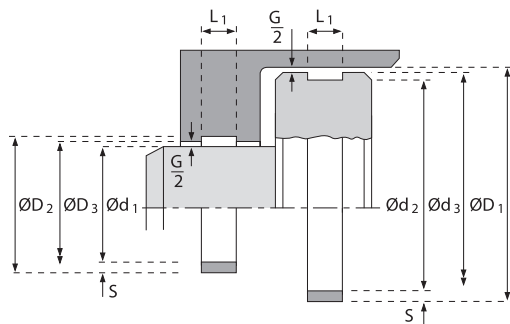
Rod	$\varnothing d_1$	f9
	$\varnothing D_2 = \varnothing d_1 + 2S$	$\leq \varnothing 80$ H10 $> \varnothing 80$ H9
	$\varnothing D_3 = \varnothing d_1 + G$	G min / max
	L_1	+ 0.2 - 0 mm
Piston	$\varnothing D_1$	H11
	$\varnothing d_2 = \varnothing D_1 - 2S$	f9
	$\varnothing d_3 = \varnothing D_1 - G$	G min / max
	L_1	+ 0.2 - 0 mm

Design

Hallite 708 bearings are manufactured from advanced proprietary material developed for use in heavy duty cylinder applications, such as mining roof supports and forestry equipment. The material has exceptional load bearing and wear resistant capabilities. The 708 is ideal for extreme applications where fiber filled bearings are not suitable.

For better alignment and lower risk for metal-to-metal contact between moving parts, all Hallite 708 bearings are fully machined to tight tolerance on thickness.

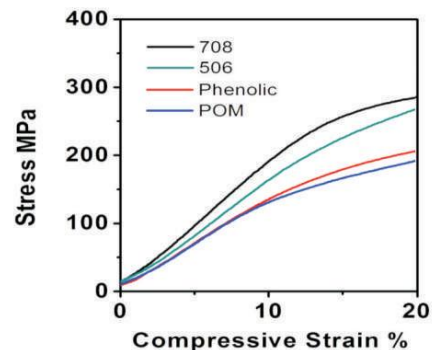
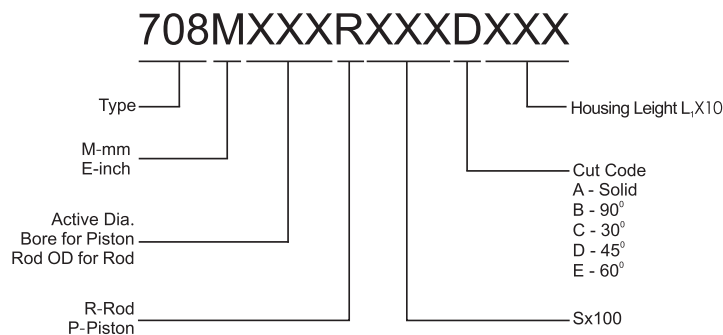
The Hallite 708 is the most advanced bearing for heavy-duty applications. It is simple to install and will extend equipment service life.



Features

- Zero Water Absorption
- High Compressive Strength
- Good Wear Resistant
- Low Friction
- Easy Installation
 - Piston (overlap)
 - Rod (open gap)
- For MRO, bearing can be machined to modified groove
 - 500mm OD machine up to 500mm
 - 60mm L_1 machine up to 60mm
 - 3.5mm S machine up to 3.5mm

Part Number Example

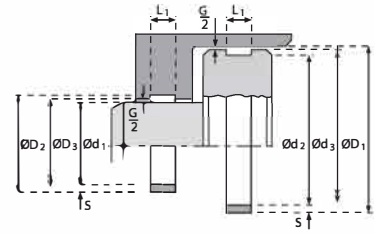




Hallite

Bearing (Rod)

708



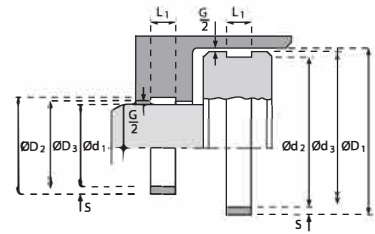
Ød ₁ Tol f9	ØD ₂ Tol H10	L ₁ +0.2-0	s	PART No.
45	50	9.7	2.5	708M045R250D097
45	50	15	2.5	708M045R250D150
50	55	5.6	2.5	708M050R250D056
50	55	15	2.5	708M050R250D150
55	60	20	2.5	708M055R250D200
60	65	15	2.5	708M060R250D150
60	65	20	2.5	708M060R250D200
63	68	15	2.5	708M063R250D150
63	68	20	2.5	708M063R250D200
70	75	15	2.5	708M070R250D150
70	75	20	2.5	708M070R250D200
80	85	15	2.5	708M080R250D150
85	90	13	2.5	708M085R250D130
85	90	15	2.5	708M085R250D150
85	90	20	2.5	708M085R250D200
85	90	25	2.5	708M085R250D250
90	95	15	2.5	708M090R250D150
90	95	20	2.5	708M090R250D200
100	105	20	2.5	708M100R250D200
100	105	25	2.5	708M100R250D250
105	110	15	2.5	708M105R250D150
105	110	20	2.5	708M105R250D200
105	110	25	2.5	708M105R250D250
115	120	20	2.5	708M115R250D200
115	120	25	2.5	708M115R250D250
120	125	15	2.5	708M120R250D150
120	125	20	2.5	708M120R250D200
120	125	25	2.5	708M120R250D250
130	135	15	2.5	708M130R250D150
130	135	20	2.5	708M130R250D200
140	145	20	2.5	708M140R250D200
160	165	20	2.5	708M160R250D200
160	165	25	2.5	708M160R250D250
170	175	20	2.5	708M170R250D200
185	190	20	2.5	708M185R250D200
185	190	25	2.5	708M185R250D250

Ød ₁ Tol f9	ØD ₂ Tol H10	L ₁ +0.2-0	s	PART No.
190	195	20	2.5	708M190R250D200
210	215	15	2.5	708M210R250D150
210	215	25	2.5	708M210R250D250
210	215	30	2.5	708M210R250D300
220	225	20	2.5	708M220R250D200
230	235	20	2.5	708M230R250D200
230	235	25	2.5	708M230R250D250
230	235	30	2.5	708M230R250D300
235	240	20	2.5	708M235R250D200
235	240	25	2.5	708M235R250D250
235	240	30	2.5	708M235R250D300
240	245	30	2.5	708M240R250D300
250	255	25	2.5	708M250R250D250
250	255	30	2.5	708M250R250D300
260	265	20	2.5	708M260R250D200
260	265	25	2.5	708M260R250D250
260	265	30	2.5	708M260R250D300
275	280	30	2.5	708M275R250D300
280	285	25	2.5	708M280R250D250
280	285	30	2.5	708M280R250D300
290	295	25	2.5	708M290R250D250
290	295	30	2.5	708M290R250D300
295	300	25	2.5	708M295R250D250
295	300	30	2.5	708M295R250D300
320	325	30	2.5	708M320R250D300
340	345	20	2.5	708M340R250D200
340	345	30	2.5	708M340R250D300
355	360	30	2.5	708M355R250D300
360	365	25	2.5	708M360R250D250
360	365	30	2.5	708M360R250D300
380	385	20	2.5	708M380R250D200
380	385	30	2.5	708M380R250D300
395	400	30	2.5	708M395R250D300
400	405	30	2.5	708M400R250D300
430	435	30	2.5	708M430R250D300
470	475	30	2.5	708M470R250D300



Bearing (Piston)

708



ØD ₁ Tol H11	Ød ₂ Tol f9	L ₁ +0.2-0	S	PART No.	ØD ₁ Tol H11	Ød ₂ Tol f9	L ₁ +0.2-0	S	PART No.
63	58	5.6	2.5	708M063P250D056	230	225	15	2.5	708M230P250D150
63	58	9.7	2.5	708M063P250D097	230	225	20	2.5	708M230P250D200
80	75	9.7	2.5	708M080P250D097	230	225	25	2.5	708M230P250D250
80	75	15	2.5	708M080P250D150	230	225	30	2.5	708M230P250D300
80	75	20	2.5	708M080P250D200	250	245	20	2.5	708M250P250D200
100	95	15	2.5	708M100P250D150	250	245	25	2.5	708M250P250D250
100	95	20	2.5	708M100P250D200	250	245	30	2.5	708M250P250D300
110	105	15	2.5	708M110P250D150	260	255	30	2.5	708M260P250D300
110	105	20	2.5	708M110P250D200	270	265	30	2.5	708M270P250D300
125	120	20	2.5	708M125P250D200	280	275	20	2.5	708M280P250D200
125	121	22	2	708M125P200D220	280	275	25	2.5	708M280P250D250
140	134	12.8	3	708M140P300D128	280	275	30	2.5	708M280P250D300
140	135	20	2.5	708M140P250D200	290	285	30	2.5	708M290P250D300
140	135	25	2.5	708M140P250D250	300	295	25	2.5	708M300P250D250
160	155	15	2.5	708M160P250D150	300	295	30	2.5	708M300P250D300
160	155	20	2.5	708M160P250D200	305	300	30	2.5	708M305P250D300
160	155	25	2.5	708M160P250D250	320	315	20	2.5	708M320P250D200
165	159	25	3	708M165P300D250	320	315	25	2.5	708M320P250D250
180	174	12.8	3	708M180P300D128	320	315	30	2.5	708M320P250D300
180	175	15	2.5	708M180P250D150	345	340	30	2.5	708M345P250D300
180	175	20	2.5	708M180P250D200	360	355	30	2.5	708M360P250D300
180	175	25	2.5	708M180P250D250	380	375	30	2.5	708M380P250D300
200	195	15	2.5	708M200P250D150	400	395	30	2.5	708M400P250D300
200	195	20	2.5	708M200P250D200	420	414	30	3	708M420P300D300
200	195	25	2.5	708M200P250D250	420	415	30	2.5	708M420P250D300
200	195	40	2.5	708M200P250D400	450	445	30	2.5	708M450P250D300
210	205	20	2.5	708M210P250D200	500	495	30	2.5	708M500P250D300