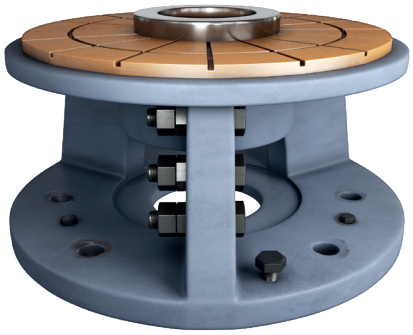
CERAN XM 220



Description

Extreme pressure water resistant high temperature calcium sulfonate complex grease.

Applications

+ CERAN XM 220 has enhanced properties in terms of water resistance, load capacity, thermal resistance and anticorrosion properties while keeping a very high level of pumpability and ability to lubricate well in case of high speeds.
+ CERAN XM 220 is suitable for the lubrication of all kinds of components subject to high loads, shocks, working in conditions where the grease is in frequent contact with water (even sea water due to enhanced antirust performances).
+ CERAN XM 220 is suitable for use in centralized greasing systems.
+ Always avoid contamination of the grease by dust and/or dirt when applying. Preferably use a pneumatic pump system.

Greases

Specifications

ISO 6743-9: L-XBFIB 1/2
DIN 51 502: KP1/2R -30

Features and Benefits

+ CERAN XM 220 works well in bearings even if rotation speeds are high. CERAN XM 220 presents outstanding performances even at high nDm where it keeps all benefits in terms of corrosion protection, bearings lifetime, high loads and thermal resistance.
+ Extraordinary water resistance, no significant loss of consistency is observed even with high amounts of water entering the grease.
+ Excellent anti-oxidation and anti-corrosion properties thanks to the excellent behaviour of the calcium sulfonates, also in the presence of sea water.
+ CERAN XM 220 has outstanding performances even in case of high speed applications where normally polyurea or lithium complex greases are requested.
+ CERAN XM 220 does not contain lead, or other heavy metals considered harmful to human health and the environment.

TOTAL Lubmarine

CERAN XM 220

Typical Characteristics

	Methods	Units	220
Soap/thickener		-	Calcium sulfonate complex
NLGI Grade	ASTM D217/DIN 51818	-	1-2
Color	Visual	-	Brown
Appearance	Visual	-	Smooth
Operating temperature range		°C	-30 to 180
Kinematic viscosity of the base oil at 40°C	ASTM D445/DIN 51562-1 /ISO 3104/IP71	mm^2/s (cSt)	220
Mechanical stability			
Penetration at 25°C	ASTM D217/DIN51818	0.1mm	280-310
Penetration after 100,000 strokes	ISO 2137	0.1mm	+ 11
Shell Roller 100 hours at 80°C	ASTM D 1831 mod	0.1mm	- 8
Steel Roller 100 hours at 80°C + 10% water	ASTM D 1831 mod	0.1mm	- 12
Thermal stability			
Dropping Point	IP 396	°C	> 300
Oil release 50 hours, 100°C	ASTM D 6184	%	1.4
Oil release 168 hours, 40°C	NF T 60-191	%	0.9
Oxidation stability at 99°C +-0.5°C			
Pressure drop after 100 hours	ASTM D 942	Psi	4
Pressure drop after 500 hours		Psi	13.5
Anti-rust properties			
EMCOR, distilled water	ISO 11007	Rating	0/0
EMCOR, synthetic sea water	ISO 11007	Rating	0/0
Copper corrosion, 24 hours at 100°C	ASTM D 4048	Rating	1b
Anti-wear and EP properties			
Four ball wear (scar diameter)	ASTM D 2266	mm	0.37
Four ball weld load	ASTM D 2596	kgf	500
Cold properties			
Penetration at -20°C	ISO 13737	0.1mm	160
Flow pressure at -20°C	DIN 51 805	mbar	560
Flow pressure at 1400 mbar	DIN 51 805	°C	-30
Torque at -20°C			
Starting torque	ASTM D 1478	g.cm	2600
After 1 hour		g.cm	460

Characteristics of this chart are indicative typical values.

Handling, Health & Safety

In normal conditions of use, this grease presents no particular toxic hazard. All lubricants, of any kind, should always be handled with great care, particularly avoiding any contact with the skin. Prevent any risk of splashing, and keep away from combustible materials. Store under cover and away from any risk of contamination.

A safety data sheet complying with current legislation is available at: www.quickfds.com and www.totallubmarine.com