

perma MULTI LX 220-1 (SF101)

perma MULTI LX 220-2 (SF111)

Multipurpose EP grease

perma MULTI LX 220-1 & -2 greases are based on mineral base oils and lithium complex soap thickeners. The greases contain extreme-pressure, anti-wear, anti-oxidation and anti-corrosion additives. perma MULTI LX 220-1 & -2 greases are suitable for general rolling bearing applications including conveyors, slurry and process pumps.

Advantages



GOOD MECHANICAL STABILITY

Mechanical stability is the grease thickener resistance to softening and leaking under stress. Good mechanical stability is essential for long grease service life, retention in bearing contact zones and preventing contaminant entry.



EXCELLENT ADHESION ON METAL SURFACES

Good adhesion aids retention in bearing contact zones and preventing contaminant entry, contributing to good lubrication conditions.



GOOD PUMPABILITY

Good pumpability assists in predicting grease dispensing outcomes for perma lubrication systems installed and operated within recommended guidelines.



SUPERIOR PROTECTION AGAINST EXTREME PRESSURES AND SHOCK LOADING

Good mechanical stability and adhesion aid grease retention under high and shock loads. EP & AW additives reduce friction and provide wear protection where metal-to-metal contact occurs.



GOOD WATER WASH-OUT RESISTANCE

Good mechanical stability and good adhesion contribute to water wash-out resistance. Thickener type and anti-corrosion additives provide additional performance benefits in wet environments.



GOOD PROTECTION AGAINST OXIDATION

Oxidation is the primary way a lubricant degrades in normal service. Antioxidant additives prolong the service life of base oils and contribute to good oxidation resistance.

Application

perma MULTI LX 220-1 & -2 greases are multipurpose EP lubricants suited for the lubrication of rolling bearing, plain bearing, linear bearing, slide and radial shaft seal applications.

These greases are suited to general bearing and other demanding applications in mining & minerals processing, steel mills, cement & aggregate, pulp and paper and other heavy industries.

TYPICAL APPLICATIONS INCLUDE:

- Conveyor pulley bearings and seals
- Slurry and process pump bearings and seals (at normal operating temperatures and speeds)
- Blower and fan bearings (large fans or fans under moderate load at lower speeds)
- Large-frame, low speed electric motors
- Vibrating screen bearings (MULTI LX 220-2)
- Gearbox seals

Product information

perma MULTI LX 220-1 & -2 greases have been tested in perma lubrication systems to assess grease pumpability and oil bleed performance. This process assists in predicting the dispensing behavior from perma lubrication systems when installed and used within normal operating guidelines.

perma MULTI LX 220 is available in NLGI 2 [-2] AND NLGI 1 [-1] grades. The NLGI 1 grade grease offers enhanced pumpability in perma lubrication systems exposed to cold ambient temperatures down to 0 °F / -18 °C.

Product data

perma Product Name	MULTI LX 220-1	MULTI LX 220-2
perma Grease Code	SF101	SF111
NLGI Grade	1	2
Color	Bluish Green	Bluish Green
Thickener	Lithium Complex	Lithium Complex
Base oil	Mineral Oil	Mineral Oil
Base oil viscosity, DIN 51562, at 40 °C, mm ² /s at 100 °C, mm ² /s	230 14.9	230 14.9
Dropping Point (ASTM D 2265)	482 °F / 250 °C	482 °F / 250 °C
Min working temperature	0 °F / -18 °C	0 °F / -18 °C
Max working temperature	284 °F / 140 °C	284 °F / 140 °C
Worked Penetration – 0.1mm (ASTM D 217)	310 - 340	265 - 295
Mechanical Stability - 100,000 strokes, % Change (ASTM D 217)	< 10 %	< 10 %
Water Spray-off, % loss (ASTM D 4049)	40 %	20 %
Oil Separation, % loss (ASTM D 1742)	< 5 %	< 3 %
Timken OK Load, Lbs. (ASTM D 2509)	70 lbs / 31.75 kg	70 lbs / 31.75 kg
4 Ball Weld (ASTM D 2596)	1760 lbs / 800 kg	1760 lbs / 800 kg



Conveyors



Pumps



Blowers | Fans

H-T-L perma USA LP
10333 Westlake Drive
Charlotte, NC 28273
USA

Tel.: +1 704 377 3100
800 997 3762 FREE
info@permausa.com
www.permausa.com