

# TIMKEN

Where You Turn



## Lubrication Solutions

*Friction Management Solutions<sup>SM</sup>. Keeping systems running smoothly.*

Less Friction.  
More **Solutions**

THE TIMKEN COMPANY

## Timken Lubrication

Timken application- and environment-specific lubricants have been developed by leveraging our knowledge of tribology and anti-friction bearings and how these two elements affect overall system performance. Timken lubricants help bearings and related components operate effectively in demanding industrial operations. High-temperature, anti-wear and water-resistant additives offer superior protection in challenging environments.



### Timken Premium All Purpose Industrial Grease

- Part # GR217xx
- NLGI No. 2 extreme-pressure grease
- Solid protection against rust and corrosion
- Excellent protection against wear
- Operating temperature range of -40° C to 149° C
- Applications: Ideal for industrial bearings operating at higher-than-average temperatures and/or subjected to shock loading; heavy-duty on- and off-road applications, wheel bearings, axles, ball joints, U joints, power takeoffs, king pins, bushings, trucks, buses and automobiles



### Timken Ball Bearing Electric Motor Grease

- Part # GR218xx
- NLGI No. 2 polyurea-thickened grease
- Protects against rust and corrosion and maintains excellent oxidation stability
- Operating temperature range of -40° C to 163° C
- Applications: Ball bearings (10,000 rpm maximum), pumps, fans, electric motor bearings and idler pulleys



## Timken Construction and Off-Highway Grease

- Part # GR219xx
- NLGI No. 2 grease
- Provides resistance to extreme pressure caused by shock loading
- Protects against rust and corrosion
- Offers excellent high-temperature properties
- Operating temperature range of -40° C to 204° C
- Applications: High-load, low-speed applications



## Timken Food Safe Grease

- Part # GR231xx
- NLGI No. 2 aluminum-complex thickened lubricating grease
- Provides for improved low- and high-temperature performance
- Contains extra-pressure, anti-wear additives and corrosion and oxidation inhibitors
- Operating temperatures from -4° C to 149° C
- Applications: Food processing applications



## Timken Ball Bearing Pillow Block Grease

- Part # GR220xx
- NLGI No. 2 polyurea-thickened grease
- Outstanding long life, moderately high temperature lubrication of ball bearings
- Maintains mechanical shear ability
- Provides corrosion resistance, even in the presence of salt water
- Features low-noise characteristics and excellent pumpability
- Does not contain extreme-pressure additives but is inhibited against rust and oxidation
- Operating temperatures from -40° C to 163° C
- Applications: Lightly loaded ball bearings in housed units



## Timken Synthetic Industrial Grease

- Part # GR232xx
- NLGI No. 1.5 multi-purpose, lithium-complex lubricating grease
- Contains extreme-pressure and anti-wear additives
- Inhibits corrosion
- Operating temperatures from -46° C to 180° C
- Applications: Wide variety of applications



## Timken Mill Grease (TMG)

- Part # GR180xx-NLGI No. 1
- Part # GR181xx-NLGI No. 1,5
- Part # GR182xx-NLGI No. 2
- Unsurpassed resistance to water washout
- Superior protection against rust and corrosion, including salt spray
- Excellent high-temperature properties
- TMG is formulated with high VI paraffinic mineral oil, resulting in better oxidation stability than Black Magic™ formulated with low VI naphthenic base oil
- Operating temperatures from -40° C to 204° C
- Applications: Metal mills, cement and power plants and marine applications



## Timken Ultra-High Speed Spindle Grease

- Part # GR233xx
- NLGI No. 2 polyurea-thickened grease
- Inhibits rust and oxidation
- Operating temperatures from -54° C to 149° C
- Specifically designed for ball bearings
- Applications: Ball bearing applications



## Timken Multi-Use Lithium Grease

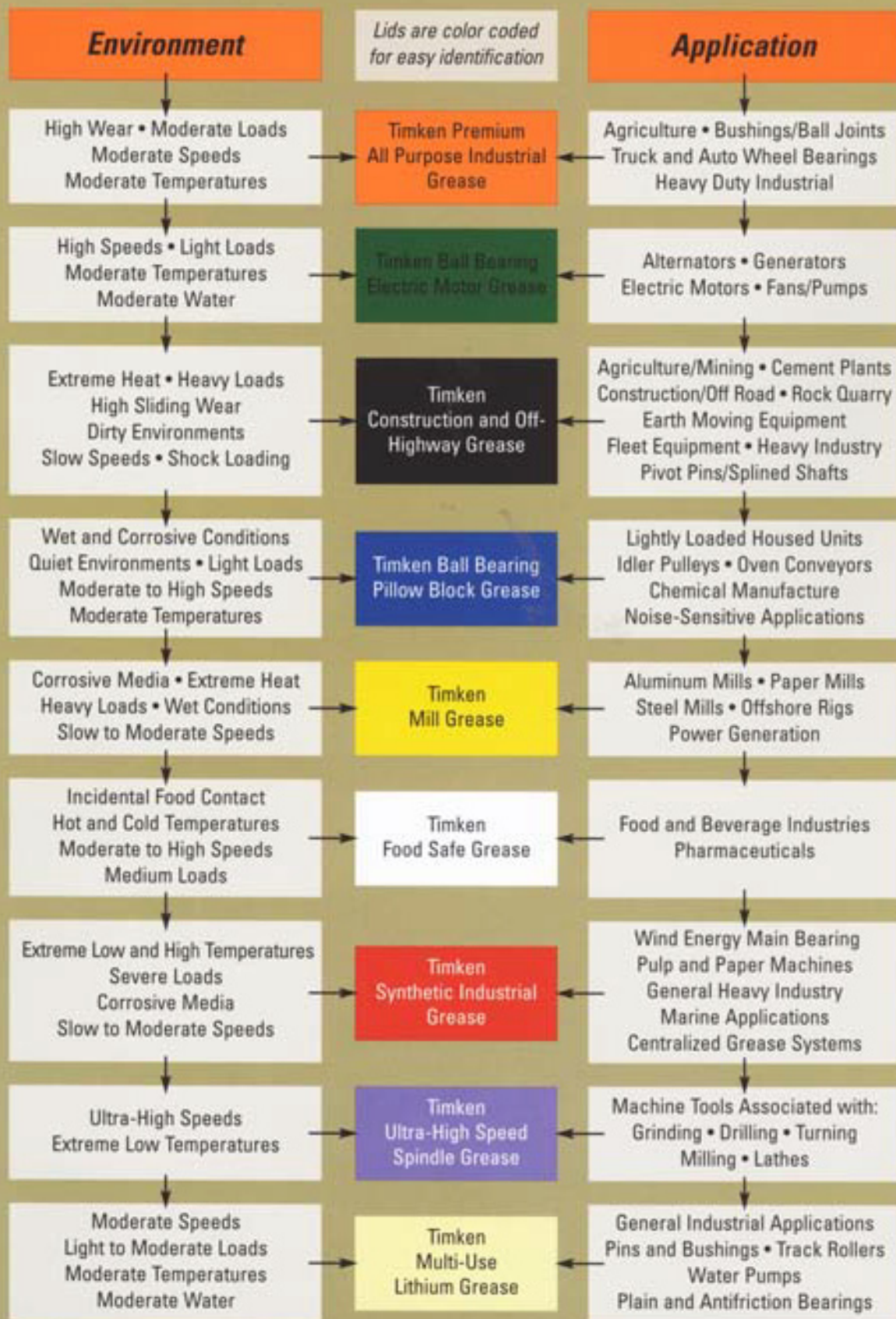
- Part # GR236xx-NLGI No. 1
- Part # GR237xx-NLGI No. 2
- Fortified with rust and oxidation inhibitors
- Applications: Used in a variety of applications where extreme pressure is not required



Suffix	Description	
GA	Squeeze tube	(0.2 kg)
GE	Cartridge	(0.4 kg)
GU	Tub	(0.5 kg)
GF	Tub	(1 kg)
GG	Tub	(5 kg)
GW	Pail	(10 kg)
GH	Pail	(16 kg)
GM	Keg	(54 kg)
GN	Drum	(180 kg)

xx in Part Numbers define different packing sizes

## Lubrication Selection Guide

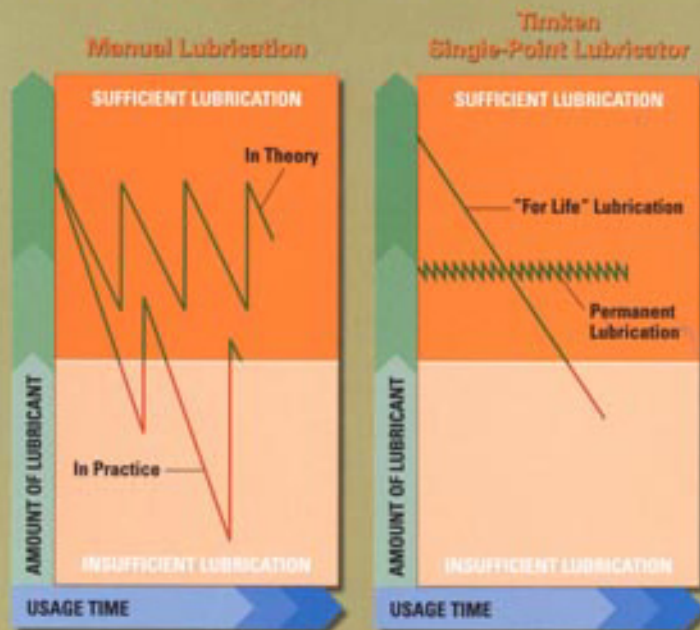


*This selection guide is not intended to replace specific recommendations by the equipment builder who is responsible for its performance.*

Lubricant	Description	Application/ Environment	Temp. Range	Base Oil cSt @ 40° C	Thickener	Color	NLGI	Load	Speed	Corrosion and Rust Protection	Extreme Pressure	Pumpability	Timken Load OK (N)	Package Sizes Available
GR217	Timken Premium All Purpose Industrial Grease	Industrial bearings operating at high temperatures	-40° C to 149° C	ISO 220 Mineral	Li-Complex	Amber	2	M	M	H	H	M	245	200 g tube, 400 g cartridge, 1, 5, 16, 54, 180 kg
GR218	Timken Ball Bearing Electric Motor Grease	Ball bearings (10,000 rpm max), pumps, fans, electric motor bearings and idler pulleys	-40° C to 163° C	ISO 100 Mineral	Polyurea	Blue-Green	2	L	H	H	M	H	NA	400 g cartridge, 1, 16, 180 kg
GR219	Timken Construction and Off-Highway Grease	High-load, low-speed applications	-40° C to 204° C	ISO 460 Mineral	Calcium Sulfonate	Gray	2	H	L	VH	VH	M	289	400 g cartridge, 1, 16, 54, 180 kg
GR220	Timken Ball Bearing Pillow Block Grease	Lightly loaded ball bearings in housed units	-40° C to 163° C	ISO 100 Mineral	Polyurea	Dark Blue	2	L	L	VH	M	H	NA	400 g cartridge, 1, 5, 16, 54, 180 kg
GR180	Timken Mill Grease (Grade 1)	Metal mills, cement and power plants, marine applications	-40° C to 204° C	ISO 460 Mineral	Calcium Sulfonate	Tan	1	H	M	VH	H	VH	267	400 g cartridge, 5, 16, 54, 180 kg
GR181	Timken Mill Grease (Grade 1,5)	Metal mills, cement and power plants, marine applications	-40° C to 204° C	ISO 460 Mineral	Calcium Sulfonate	Tan	1,5	H	M	VH	H	H	267	400 g cartridge, 5, 16, 54, 180 kg
GR182	Timken Mill Grease (Grade 2)	Metal mills, cement and power plants, marine applications	-40° C to 204° C	ISO 460 Mineral	Calcium Sulfonate	Tan	2	H	M	VH	H	M	267	400 g cartridge, 5, 16, 54, 180 kg
GR231	Timken Food Safe Grease	Food processing applications	-4° C to 149° C	Semi-Synthetic	Al-Complex	White	2	M	M	M	H	H	178	400 g cartridge, 1, 16, 180 kg
GR232	Timken Synthetic Industrial Grease	Wide variety of applications	-46° C to 180° C	ISO 460 Synthetic	Li-Complex	Red	1,5	H	M	H	H	H	245	400 g cartridge, 16, 54, 180 kg
GR233	Timken Ultra-High Speed Spindle Grease	Ball bearing applications	-54° C to 149° C	ISO 22 Synthetic/ Ester	Polyurea	Yellow/ Amber	2	L	VH	H	L	VH	NA	200 g tube, 400 g cartridge, 1 kg
GR236	Timken Multi-Use Grease (Grade 1)	Wide variety of applications where EP additives are not required	-40° C to 120° C	ISO 150 Mineral	Lithium	Light Brown	1	L	L	M	M	M	NA	200 g tube, 400 g cartridge, 1, 5, 16, 54, 180 kg
GR237	Timken Multi-Use Grease (Grade 2)	Wide variety of applications where EP additives are not required	-40° C to 120° C	ISO 150 Mineral	Lithium	Light Brown	2	L	L	M	M	M	NA	200 g tube, 400 g cartridge, 1, 5, 16, 54, 180 kg

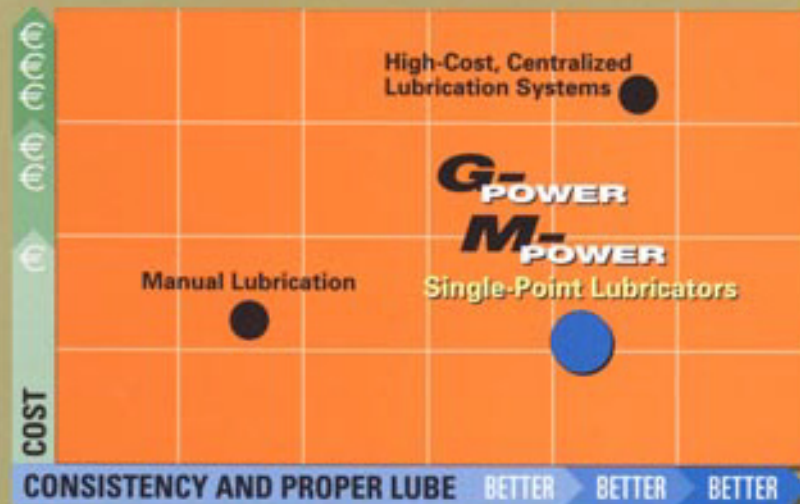
L - Low M - Medium High H - High VH - Very High NA - Not applicable, grease is non-EP

Proper lubrication is critical to bearing and machine performance. In fact, poor lubrication is one of the leading causes of bearing failure. To help reduce this, Timken offers the G-Power and M-Power series of single-point lubricators. These gas and motorised units lubricate bearings, chains, guideways, and other equipment, ultimately improving productivity and reducing maintenance costs.



### Features and Benefits

- The G-Power and M-Power lubricators distribute precise amounts of grease or oil into your application, simplifying maintenance activities and reducing associated costs.
- Self-operating units provide continuous lubrication over a set time period resulting in reliable performance.
- Timken offers a range of accessories to ease installation even in difficult access areas.
- A wide selection of lubricants is available to suit virtually any application.
- Timken G-Power and M-Power units operate over a broad temperature range to enhance versatility.



### Lubricants available for Timken G-Power and M-Power Lubricators

Lubricant	Lub. Ref.	Application/Environment	Temp. Range	Base	Thickener	NLGI
<b>Timken Performance Greases</b>						
Timken Premium All Purpose Industrial Grease	217	Industrial bearings operating at high temperatures	-40° C to 149° C	Mineral	Li-Complex	2
Timken Ball Bearing Pillow Block Grease	220	Lightly loaded ball bearings in housed units	-40° C to 163° C	Mineral	Polyurea	2
Timken Mill Grease	182	Metal mills, cement and power plants, marine applications	-40° C to 204° C	Mineral	Calcium Sulfonate	1
<b>Standard Greases</b>						
Multipurpose Grease	601	Roller bearings, sliding bearings, guide ways	-25° C to 130° C	Mineral	Lithium	2
Extreme-Pressure Grease	602	High loads	-30° C to 120° C	Mineral	Li+MoS2	2
High-Temperature Grease 160	604	High operating temperatures	-20° C to 160° C	Mineral	PHS	0/1
Fluid Grease	606	Narrow tubes	-20° C to 130° C	Mineral	Al-Complex	0
Low-Temperature Grease 50	607	Low operating temperatures	-50° C to 150° C	Synthetic	Lithium	2
High-Performance Oil	610	Open gears and lubrication with brushes	-20° C to 250° C	Synthetic	-	-

The lubricant reference is either stamped on top of the unit (101 and 103 models), or printed on the label (102, 300 and 400 models).

Many other lubricants are also available. Please contact your Timken representative for more information.

### Value-Added Maintenance Programs

With more than 100 years of experience in bearings and related technology, Timken understands the importance of the relationship between proper maintenance practices and maximizing bearing life. High-quality Timken maintenance products, such as, single-point lubricators, lubricants, induction heaters, impact fitting tools and pullers, help decrease downtime and lower operating costs.

More than 50 percent of all bearing failures caused by lubrication issues can be avoided, increasing productivity and efficiency of equipment. By using Timken single-point lubricators, production breakdowns caused by insufficient or incorrect lubrication can be easily eliminated. Timken's wide variety of reliable, precise and fully automatic lubrication solutions can be matched to the requirements of the individual lubrication points, helping to reduce maintenance costs and increase the service life of equipment.

# G-POWER

(GAS POWER)

																																										
<b>Model Number</b>	101	102	103																																							
<b>Name</b>	Gas Lubricator	Gas Lubricator	Gas Lubricator – Low Temperature																																							
<b>Description</b>	General-purpose lubricator with a metal casing	Transparent, plastic casing designed for high-humidity, high-corrosion or hygienically clean environments	Lubricator with a metal casing designed for operation in very low ambient temperature environments																																							
<b>Part Number</b> <small>(XXX is the lubricant reference)</small>	PG101XXX <small>One activator required per unit (sold separately)</small>	PG102XXX <small>One activator required per unit (sold separately)</small>	PG103XXX <small>One activator required per unit (sold separately)</small>																																							
<b>Activators: (Lubrication Period)</b> <small>One activator required per unit</small>	<p><b>Activator screws with black seals:</b></p> <table border="1"> <thead> <tr> <th>Color</th> <th>Discharge</th> <th>Part Number</th> </tr> </thead> <tbody> <tr> <td>Yellow</td> <td>= 1 month</td> <td>PG111000</td> </tr> <tr> <td>Green</td> <td>= 3 months</td> <td>PG112000</td> </tr> <tr> <td>Red</td> <td>= 6 months</td> <td>PG113000</td> </tr> <tr> <td>Gray</td> <td>= 12 months</td> <td>PG114000</td> </tr> </tbody> </table> <p>(standard grease at ambient temperature of 20° C)</p>	Color	Discharge	Part Number	Yellow	= 1 month	PG111000	Green	= 3 months	PG112000	Red	= 6 months	PG113000	Gray	= 12 months	PG114000	<p><b>Activator screws with pink seals:</b></p> <table border="1"> <thead> <tr> <th>Color</th> <th>Discharge</th> <th>Part Number</th> </tr> </thead> <tbody> <tr> <td>Yellow</td> <td>= 1 month</td> <td>PG115000</td> </tr> <tr> <td>Green</td> <td>= 3 months</td> <td>PG116000</td> </tr> <tr> <td>Red</td> <td>= 6 months</td> <td>PG117000</td> </tr> </tbody> </table> <p>(standard grease at ambient temperature of 20° C)</p>	Color	Discharge	Part Number	Yellow	= 1 month	PG115000	Green	= 3 months	PG116000	Red	= 6 months	PG117000	<p><b>Black activator screw with black seal:</b> PG118000</p> <table border="1"> <thead> <tr> <th>Temp.</th> <th>Discharge Period</th> </tr> </thead> <tbody> <tr> <td>+10° C</td> <td>1 week</td> </tr> <tr> <td>+0° C</td> <td>2 weeks</td> </tr> <tr> <td>-10° C</td> <td>6 weeks</td> </tr> <tr> <td>-20° C</td> <td>14 weeks</td> </tr> <tr> <td>-25° C</td> <td>26 weeks</td> </tr> </tbody> </table>	Temp.	Discharge Period	+10° C	1 week	+0° C	2 weeks	-10° C	6 weeks	-20° C	14 weeks	-25° C	26 weeks
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<b>Volume</b>	120 cm <sup>3</sup>	100 cm <sup>3</sup>	120 cm <sup>3</sup>																																							
<b>Max. Pressure</b>	65 psi/4 bar	65 psi/4 bar	65 psi/4 bar																																							
<b>Ambient Temperature</b>	0° C to 40° C	0° C to 40° C	-25° C to +10° C																																							
<b>Approx. Weight</b>	260 g	230 g	260 g																																							
<b>Dimensions</b>	Height = 99 mm Diameter = 59 mm Max. Diameter = 70 mm	Height = 104 mm Diameter = 63 mm Max. Diameter = 74 mm	Height = 99 mm Diameter = 59 mm Max. Diameter = 70 mm																																							

## Timken G-Power Single-Point Lubricators

**Mode of operation:** By screwing a color-coded activator screw into the top of the unit, a gas-generating pellet falls into a reservoir of liquid electrolyte. The resulting chemical reaction builds up pressure inside the unit, which forces a piston forward, and consequently, discharges the lubricant.



The rate of discharge is determined by the selection of the activator screw. The range of standard lubricants can be found on page 7.

All units have a G $\frac{1}{4}$  thread.



# M-POWER

(MOTORISED LUBRICATOR)

		
<b>Model Number</b>	300	400
<b>Name</b>	Variable Drive	Controlled Drive
<b>Description</b>	General purpose lubricator with a plastic case and replaceable lubricant cartridge (either 120 or 250 cm <sup>3</sup> ). The battery-powered electromechanical drive is reusable.	Programmable lubricator with a plastic case and replaceable lubricant cartridge (either 120 or 250 cm <sup>3</sup> ). The electromechanical drive is connected to your machine and is reusable.
<b>Part Number</b> <small>(XXX is the lubricant reference)</small>	PM242XXX (with 120 cm <sup>3</sup> cartridge) PM282XXX (with 250 cm <sup>3</sup> cartridge)	PM243XXX (with 120 cm <sup>3</sup> cartridge) PM283XXX (with 250 cm <sup>3</sup> cartridge)
<b>Replacement Set Part Number</b> <small>(XXX is the lubricant reference)</small>	PM241XXX - 120 cm <sup>3</sup> unit PM281XXX - 250 cm <sup>3</sup> unit <small>(The replacement part number includes both the lubricant cartridge and the battery)</small>	PM240XXX - 120 cm <sup>3</sup> unit PM280XXX - 250 cm <sup>3</sup> unit <small>(The replacement part number is just the cartridge only)</small>
<b>Lubrication Period</b>	Can be set to 1, 3, 6 or 12 months	Variable according to set-up
<b>Max. Pressure</b>	75 psi/5 bar	75 psi/5 bar
<b>Ambient Temperature</b>	-10° C to +50° C	-10° C to +50° C
<b>Approx. Weight</b>	With 120 cm <sup>3</sup> unit = 498 g With 250 cm <sup>3</sup> unit = 652 g	With 120 cm <sup>3</sup> unit = 430 g With 250 cm <sup>3</sup> unit = 590 g
<b>Dimensions</b>	Height: 120 cm <sup>3</sup> unit = 165 mm 250 cm <sup>3</sup> unit = 215 mm Max diameter = 71 mm	Height: 120 cm <sup>3</sup> unit = 165 mm 250 cm <sup>3</sup> unit = 215 mm Max diameter = 71 mm


## Timken M-Power Single-Point Lubricators


The M-Power consists of a drive unit (with battery for the variable drive unit) and a replaceable lubricant cartridge. The battery should be replaced whenever the lubricant cartridge is changed.


**Mode of operation:** The intermittent drive slowly winds the piston down a thread, which forces out the lubricant. The unit can


be turned on and off at any time. The operating mode of the unit can be seen from the LED display (the modes of operating, discharging, empty lubricant cartridge and malfunctioning are indicated).


All self-supporting units should be used with the support adapter (PA800150) which has a G $\frac{1}{4}$  thread.

G-Power Activators	Description	Part Number
	G-Power activator – 1 m, yellow + black seal	PG111000
	G-Power activator – 3 m, green + black seal	PG112000
	G-Power activator – 6 m, red + black seal	PG113000
	G-Power activator – 12 m, gray + black seal	PG114000
	G-Power clear activator – 1 m, yellow + pink seal	PG115000
	G-Power clear activator – 3 m, green + pink seal	PG116000
	G-Power clear activator – 6 m, red + pink seal	PG117000
	G-Power low temp activator – 1 m, black	PG118000


M-Power	Description	Part Number
	M-Power support adapter	PA800150
	M-Power plastic wet cap	PA800248
	M-Power control motor drive cable	PM205000
	M-Power battery pack	PM207000

Mounting	Description	Part Number
	Mounting clip	PA800101
	Mounting bracket	PA800102
	Insert for bracket	PA800103
	Oil throttle	PA800131
	Mounting angle 50 x 50 x 70 x 2,5 mm	PA800120
	Mounting angle 50 x 70 x 70 x 2,5 mm	PA800121
	Mounting angle 50 x 100 x 70 x 2,5 mm	PA800122
	Mounting plate 110 x 70 x 2,5 mm	PA800123


Tubing and Connectors	Description	Part Number
	8 mm nylon tube (per m)	PA800107
	Tube connection to lubricator	PA800104
	Tube connector G 1/4	PA800105
	Tube connector G 1/8	PA800106

Pipe Fittings	Description	Part Number
	Angle 45° G 1/4	PA800207
	Angle 90° G 1/4	PA800237
	Extension G 1/4: 30 mm	PA800244
	Extension G 1/4: 45 mm	PA800245
	Extension G 1/4: 75 mm	PA800246
	Extension G 1/4: 115 mm	PA800247
	Hexagon nipple G 1/4	PA800147
	T-adapter	PA800222

Reducers	Description	Part Number
	Reducer G 1/8	PA800201
	Reducer G 1/2	PA800241
	Reducer G 3/4	PA800242
	Reducer M6	PA800119
	Reducer M8 x 1	PA800238
	Reducer M10	PA800240
	Reducer M10 x 1	PA800239
	Reducer M12	PA800243
	Reducer M12 x 1	PA800140
	Reducer M12 x 1,5	PA800141
	Reducer M14	PA800143
	Reducer M14 x 1,5	PA800142
	Reducer M16	PA800144
	Reducer M16 x 1,5	PA800145

Brushes	Description	Part Number
	Oil brush 20 mm round G 1/4	PA800108
	Oil brush 40 x 30 mm G 1/4	PA800109
	Oil brush 60 x 30 mm G 1/4	PA800110
	Oil brush 100 x 30 mm G 1/4	PA800111
	High temp brush (180°C) 40 x 30 mm	PA800113
	High temp brush (180°C) 60 x 30 mm	PA800114
	High temp brush (180°C) 100 x 30 mm	PA800115
	High temp brush (350°C) 40 x 30 mm	PA800116
	High temp brush (350°C) 60 x 30 mm	PA800117
	High temp brush (350°C) 100 x 30 mm	PA800118

Special Equipment	Description	Part Number
	Rail oiler + oil throttle (5 mm felt)	PA800161
	Rail oiler + oil throttle (9 mm felt)	PA800162
	Rail oiler + oil throttle (16 mm felt)	PA800163
	Rail oiler felt insert 16 mm	PA800135
	Rail oiler felt insert 5 mm	PA800133
	Rail oiler felt insert 9 mm	PA800134
	Chain lubrication box	PA800136
	Rotating brush for chain lubrication box	PA800137

Pre-Lub Cartridges	Description	Part Number
	Pre-lube cartridge 1 kg	PA801xxx
	Pre-lube cartridge 400 g	PA802xxx
	Pre-lube cartridge 1 l	PA803xxx
	Timken grease cartridge 400g	GRxxxGE
	Timken grease tub 1kg	GRxxxGF

**WARNING**

Proper maintenance and handling practices are critical. Failure to follow installation instructions and to maintain proper lubrication can result in equipment failure, creating a risk of serious bodily harm.

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