

**IIoT TECHNOLOGIES** 

# **OPTIFY™ Intelli-Lube™**

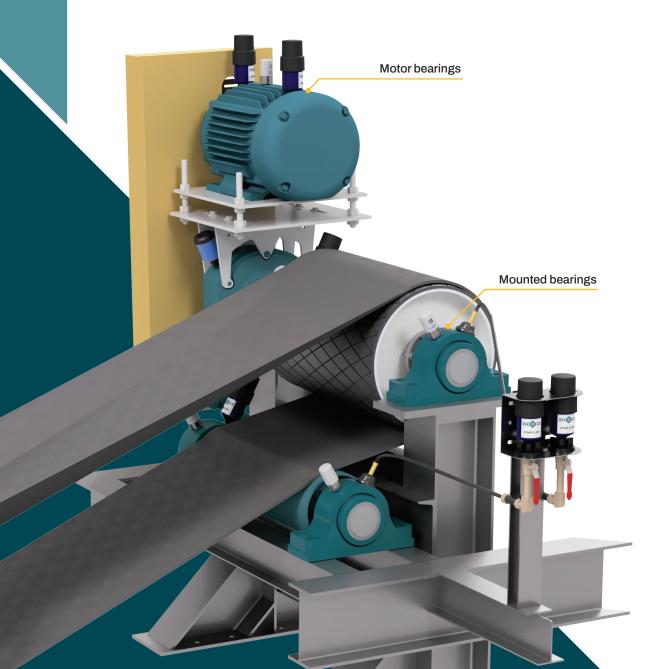
The intelligent, automatic lubricator to optimize your operation



#### Your trusted partner

Dodge® has a strong tradition of innovation, deeply ingrained in our DNA. In combination with our world-class manufacturing processes, lubrication quality is the most significant factor in optimizing bearing operation for long-lasting, reliable performance. Our engineering team comprehensively tests the lubricants used in our bearings against critical operating parameters and conditions—from wear resistance to compatibility to temperature tolerance—to ensure our bearings can endure the most demanding applications.

The pairing of our engineering expertise with OPTIFY, our portfolio of solutions for complete powertrain condition monitoring, empowers you with the right tools to streamline maintenance and gain powerful insight into your operation to make better-informed decisions in real time.



#### Take the guesswork out of greasing

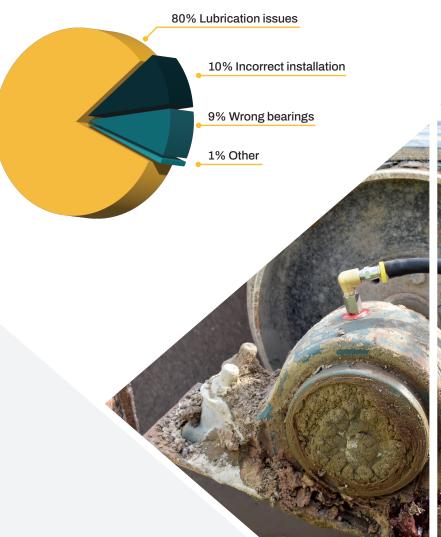
Bearings are critical components that keep product moving in a variety of industries across the globe. With over a century of leadership in mounted bearings, Dodge recognizes the critical role of lubrication. Analysis of multiple engineering studies revealed that up to 80 percent of bearing failures are linked to lubrication issues.

With over 70 percent of bearings in the USA being manually lubricated\*, the challenge of a reduced and inexperienced workforce exacerbates the risk of premature failures due to inconsistent maintenance practices and human error.

For years, operations have looked to automatic, single-point lubricators to improve maintenance efficiency but found them to be unreliable—providing insufficient lubrication leading to unwarranted downtime and expenses.

Dodge only does things that work, which is why we have not introduced a lubricator solution until now. With OPTIFY Intelli-Lube, unreliable automatic lubrication is now a thing of the past—providing your bearings with the right grease, volume, and interval every single time.

#### Reasons for bearing failures









#### Not your average automatic lubricator

Intelli-Lube is the premier automatic, single-point lubricator that seamlessly connects with the OPTIFY platform to replace the process of manual bearing lubrication—providing you with a remotely monitored system that streamlines maintenance and lowers operating costs.

#### Enhance site safety

Automatic, hands-off lubrication reduces technician touch points and prevents over-greasing that can create dangerous conditions, mitigating the risk of on-site injury while keeping equipment running smoothly

#### Consistent grease delivery

The system provides consistent, reliable lubrication independent of environmental temperature to effortlessly extend bearing life and minimize unplanned downtime

#### Easy selection and ordering

Simplify your product selection and ordering using the user-friendly PT Wizard tool that covers grease cartridge sizing, dispense settings, and installation components tailored to your application's unique needs

#### Unlock intelligent lubrication

Wireless technology enables effortless pairing with the OPTIFY platform to remotely check lubricator grease fill levels, system health, and blockages—ensuring you stay informed from anywhere, anytime

#### Optimize plant-wide inventory

Easily manage cartridges throughout your facility with our engineering approved standard factory-fill grease options and OPTIFY push notifications for cartridge replacements—eliminating the need for manual inspections and allowing for the reallocation of time and labor resources

#### **Product features overview**

#### Drive unit

- Electro-mechanical functionality provides consistent, automatic grease delivery independent of environmental temperature changes for predictable and reliable operation, unlike gasdriven units
- Reusable design with replaceable battery enables the drive to fit all cartridge sizes to lower total cost of ownership

#### Lubrication cartridge

- Replaceable cartridges are available in multiple sizes to accommodate application requirements: 60 cc, 120 cc, 250 cc, and 500 cc
- Offered with Dodge
   Engineering tested and approved standard grease fills—synthetic, high-temperature, low-temperature, food-grade, and more—to optimize compatibility
- In-stock inventory provides expedited lead times to keep your operations up and running



Intelli-Lube

120 cm3 / 4.06 fl.oz. (US)

#### Bluetooth® wireless connectivity

 Allows for harnessing the power of the OPTIFY platform for real-time remote condition monitoring and grease cartridge inventory management enhancing operational safety and maintenance efficiency

#### **Dust cover**

Clear dust cover protects against contamination while maintaining visibility of the LED indicators for the current operating state



 Scanning the QR code on the grease cartridge streamlines initial setup and exchanges in the OPTIFY mobile app



#### Support flange

 Universal support flange with multiple thread dimension options allows for quick and easy lubricator installation on equipment

#### **Application versatility**

#### Direct mounting

The lubricator can be easily attached directly to a lubrication point with its support flange to streamline on-site installation and save valuable time

#### Remote mounting

Lubricators can be installed with mounting kits to allow for operation in high-vibration applications, optimized connectivity line of sight, and maintenance accessibility outside of guarding while equipment is running—minimizing technician touch points and enhancing site safety





#### Wide operating temperature range

Multiple battery and grease options are offered for operation in a wide range of temperatures to keep your equipment running smoothly in the harshest environments

- Standard options with alkaline battery:
   -4 °F to 140 °F (-20 °C to 60 °C)
- Arctic options with lithium battery:
   -40 °F to 140 °F (-40 °C to 60 °C)





#### Product selection made easy, like magic

PT Wizard is the simple-to-use Dodge platform that features a built-in Intelli-Lube selection tool to help guide you step-by-step to find the best solution and grease dispense settings based on your exact bearings and application requirements.

#### 1 Lubrication schedule

When starting a selection, you can choose your system's lubrication schedule based on application conditions or your established schedule



#### 3 Lubricator selection

Based on the lubrication schedule and application condition parameters, our engineering-recommended product selections are populated to help you choose the appropriate grease, cartridge size, dispense setting, and installation components for your specific application requirements



#### 2 Bearing application conditions

To determine your application's grease requirements, you can easily select your Dodge bearing by part number or description, input the operating conditions, and rate the environmental factors



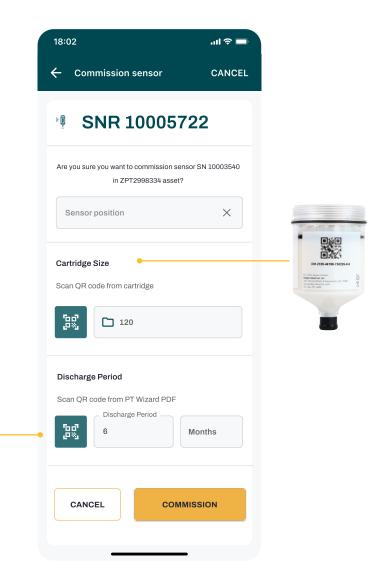
#### 4 Summary and output document

A selection output document is generated with a QR code to streamline setup in the OPTIFY platform and Intelli-Lube product information to simplify the quoting and ordering through PT Place



## Simplified commissioning for cartridge setup and exchanges

When prompted in the OPTIFY platform, simply scan the provided QR codes on the lubrication cartridge label and PT Wizard output document.



#### Continuous data flow

With OPTIFY, your lubricators connect seamlessly with our condition monitoring ecosystem. The platform paired with an on-site gateway provides you with a continuous flow of data to gather asset measurements quickly and safely, not requiring constant human interaction to monitor your operations.



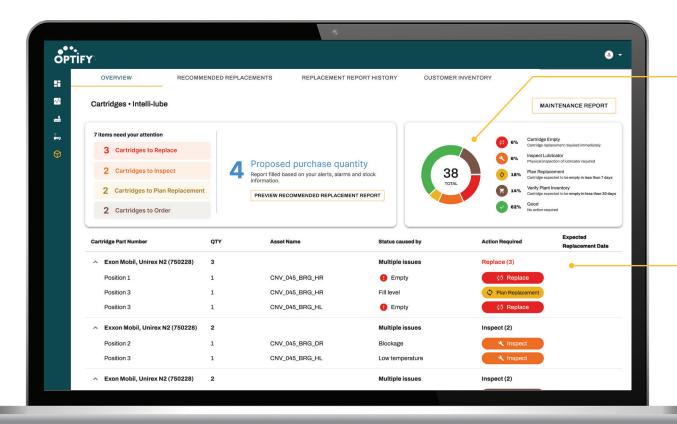
Start your Intelli-Lube selection at ptwizard.com





## Real-time insight for effortless maintenance management

Intelli-Lube utilizes a Bluetooth-enabled drive for seamless connection with the OPTIFY platform out of the box. Engineered to help you maximize your productivity with remote condition monitoring, our platform empowers you with real-time data so you can gain critical insight for making better-informed operational decisions to save valuable time and money.



#### Plant-wide inventory management

View all your operation's lubricator assets with grease quantity, volume, part number, and grease type information displayed for seamless inventory management

#### Recommended replacements

Simplify your cartridge replacement ordering process with data-driven recommendations based on your operation's cartridge grease fill levels and stock information



#### Replacement history

On-demand reports enable you to view past grease cartridge replacements with current status and required actions for better maintenance planning

#### Fill-level measurements

Review current cartridge grease fill levels based on historical data, known cartridge size, and selected dispense rate. In the event of unexpected signal loss, projected fill levels are provided to mitigate risks and ensure your operations continue running smoothly



# 38 TOTAL

#### Lubricator health status

At a glance, view grease volume, detected blockages, and other key performance indicators to efficiently monitor plant-wide lubricator system health

#### **Automated notifications**

System-generated push notifications alert you when it's time to exchange a grease cartridge, a blockage is detected, or other actions to take on your site



#### Remote accessibility

Unlock the full potential of Intelli-Lube in the platform with access anytime, anywhere through our web portal or mobile app





Scan to access the platform or visit dodgeoptify.com

The OPTIFY app is available at:





#### **Expert service and technical support**

As industrial operations face shortages with personnel and skill sets in their workforce, external support can help overcome the labor challenges. Dodge expert service technicians with proven experience in the field are available for on-site assistance to ensure your Intelli-Lube systems are properly installed, commissioned, and maintained.

Backed by over 145 years of industry leadership, our field services are the ideal solution to help you increase reliability and keep your operations running smoothly—maximizing uptime and minimizing ongoing maintenance costs.

#### Pre-installation

Our team is your partner to set your operations up for success, even before our expert technicians step foot on-site.

- Outline project scope and personnel requirements
- · Customer site analysis and identification of lubricator and gateway installation locations
- Determine product solutions and calculate grease requirements for applications
- Establish OPTIFY platform plant, personnel, and asset data

#### Installation and commissioning

Ensuring your Intelli-Lube systems are installed and set up properly is a critical phase where our expertise is necessary to ensure long-term, trouble-free operations.

- Commissioning assistance for mechanical and digital solutions
- · Guided on-site or Virtual Support maintenance training
- · Hands-on OPTIFY platform training for asset condition monitoring
- Complete product installation services

#### Post-installation

Once your Intelli-Lube systems are installed, our technicians can establish ongoing support to empower your team with the tools and resources to avoid costly unplanned downtime, minimize maintenance costs, and maximize operation output.

- · OPTIFY platform user training
- Verification of product performance
- Adjustment of asset alerts and alarms in the OPTIFY platform
- · Detailed installation reports
- Ongoing service agreements for maintenance of OPTIFY solutions fieldservices@dodgeindustrial.com
- +1 864 297 4800

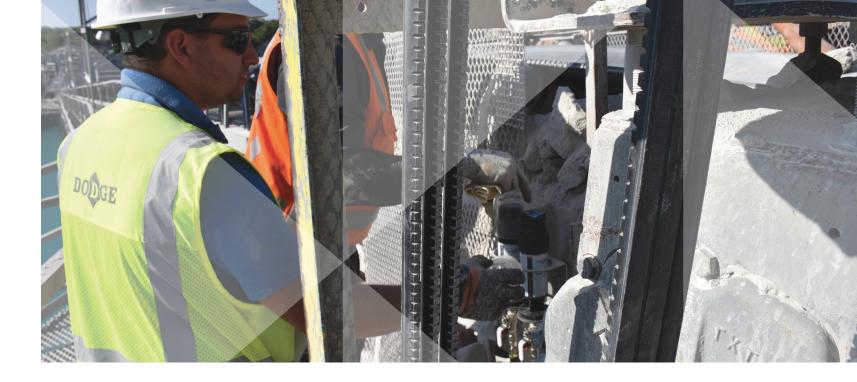
#### Dedicated engineering support

Access to award-winning customer service is available at your fingertips when you need it most. The industry-leading team of experts at Dodge is based in the United States and is committed to providing premier support to help you succeed.

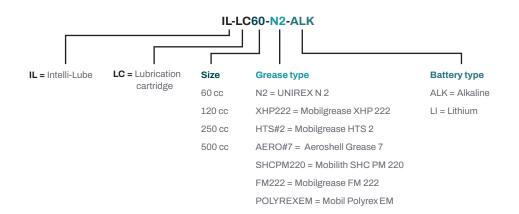
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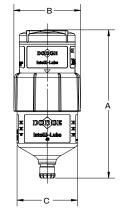
#### **Drive and cartridge nomenclature**



#### **Technical specifications**

Certifications					
IP (ingress protection) class - EN 60529	IP65, IP67				
Environmental					
Storage temperature range	Maximum 68 °F (20 °C)				
Storage humidity range	20-50 percent				
On another day and another and a	Alkaline battery pack: -4 °F to 140 °F (-20 °C to 60 °C)				
Operating temperature range	Lithium battery pack: -40 °F to 140 °F (-40 °C to 60 °C)				
Pressure					
Dispense pressure limit	109 psi (7.5 bar)				
Wireless communication					
Network standard	Bluetooth low energy 5.0				
Radio standard	IEEE 802.15.1C				
Frequency	2402-2480 MHz				
Power					
	3x AA alkaline manganese batteries 4.5 V, 2.7 Ah				
Battery pack (not re-usable)	3x AA lithium batteries 4.5 V, 3.0 Ah				

#### **Dimensions / Selection**







#### Assembly dimensions

Cartridge size	Α	A (dust cover attached)	В	B (dust cover attached)	С	D
60 cc	6.73 (171)	6.95 (174)				3.42 (87)
120 cc	7.64 (194)	7.76 (197)	2.74 (70)	0.00 (7/)	0 (00)	4.33 (110)
250 cc	9.60 (244)	9.82 (249)		2.92 (74)	2.48 (63)	6.29 (160)
500 cc	13.40 (340)	13.62 (346)				10.09 (256)

NOTE: All dimensions are in inches (millimeters)

#### Drive package

Part number	Description
750212	INTELLI-LUBE DRIVE UNIT
750312*	ILA - DRIVE DUST COVER
750300*	ILA - SUPPORT FLANGE 1/8 NPT

\* Included with the single drive unit part number (750212)







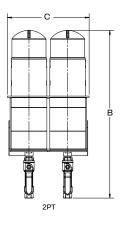


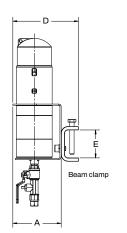
#### **Lubrication cartridges**

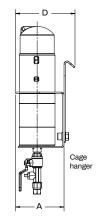
		60 cc		120 cc		250 cc		500 cc	
Grease	Dodge standard factory-fill	Standard	Arctic	Standard	Arctic	Standard	Arctic	Standard	Arctic
UNIREX N 2	Mounted ball bearings	750218	750258	750228	750268	750238	750278	_	-
Mobilgrease XHP 222	Mounted roller bearings	750214	750254	750224	750264	750234	750274	750244	750284
Mobilith SHC PM 220	Extreme Duty	750219	750259	750229	750269	750239	750279	750249	750289
Mobilgrease HTS 2	High-temperature	750215	-	750225	_	750235	-	750245	_
AeroShell Grease 7	Low-temperature	_	750257	_	750267	_	750277	_	_
Mobilgrease FM 222	Food-grade	750216	750256	750226	750266	750236	750276	-	-
Mobil Polyrex EM	Motor grease	750220	750260	750230	750270	750240	-	-	-

NOTE: Standard lubrication cartridges are stocked with alkaline battery packs. Arctic lubrication cartridges include lithium battery packs and are only available via drop-shipping. Additional options may be available. Refer to dodge.ptplace.com for the most up-to-date information.











Part number Description

SPLIT-HOUSED TAPERED ROLLER BEARING ADAPTER KIT

\* Requires remote mounting kit for installation NOTE: this is applicable for Dodge Type EXL, TAF, Double Interlock (DI), Type K, Special Duty (SD), and Type C mounted bearings

#### **Mounting kits**

Part number	Description	Hose length	Α	В	С	D	E
750395	IL HD MOUNT KIT - 1PT BEAM CLAMP	10 ft (3 m)			3.94 (100)	0.01 (150)	0.50 (05)
750396	IL HD MOUNT KIT - 2PT BEAM CLAMP	20 ft (6 m)		15 (0 (001)	7.48 (190)	<del></del> 6.01 (153)	2.56 (65)
750397	IL HD MOUNT KIT - 1PT CAGE HANGER	10 ft (3 m)	(, to (dd o)	15.40 (391)	3.94 (100)	E (1/200)	-
750398	IL HD MOUNT KIT - 2PT CAGE HANGER	20 ft (6 m)	— 4.43 (113)	4.43 (113)		5.44 (136)	-
750399	IL HD MOUNT KIT - 1PT BEAM CLAMP 500	10 ft (3 m)		10.00 ((.00)	0.04 (100)	6.01 (153)	2.56 (65)
750400	IL HD MOUNT KIT - 1PT CAGE HANGER 500	10 ft (3 m)		19.20 (488)	3.94 (100)	5.44 (136)	-

NOTE: All mounting kits come with the necessary components required for installation: hose line, hose spiral guard, and hardware fittings NOTE: All dimensions are in inches (millimeters) unless noted otherwise.

#### Grease cases to prefill lube lines

Part number	Description
750056	UNIREX N2 - CASE (10 TUBES)
750057	MOBIL XHP222 - CASE (10 TUBES)
750058	MOBIL SHC220 PM - CASE (10 TUBES)
750059	MOBIL HTS#2 - CASE (10 TUBES)
750060	SHELL AEROSHELL #7 - CASE (10 TUBES)
750061	MOBIL FM222 - CASE (10 TUBES)
750062	MOBIL POLYREX EM - CASE (10 TUBES)

NOTE: A single tube fills approximately 18.5 ft (5.6 m) feet of hose

#### Mounting kit replacement components

Part number	Description
750301	ILA - SUPPORT FLANGE 1/4 NPT
750310	ILA - HD PROTECTION CAP
750311	ILA - HD PROTECTION CAP 500
750317	ILA - HD MOUNTING BRACKET - 2 POINT
750318	ILA - HD MOUNTING BRACKET - 1 POINT
750323	ILA - BEAM CLAMP (REQUIRES MOUNTING BRACKET)
750324	ILA - CAGE HANGER (REQUIRES MOUNTING BRACKET)
750334	ILA - HOSE SPIRAL GUARD
750335	ILA - HOSE HEAVY DUTY UP TO 260 °F ID 3/8 BLACK (10 ft)
750294	ILA - BATTERY PACK - ALKALINE
750295	ILA - BATTERY PACK - LITHIUM

Part number	Description
750345	ILA - REDUCER M6 (M) X G1/4 (F)
750346	ILA - REDUCER M8X1 (M) X G1/4 (F)
750347	ILA - REDUCER M8 (M) X G1/4 (F)
750348	ILA - REDUCER M10X1 (M) X G1/4 (F)
750354	ILA - BUSHING 5/8-18 UNF (M) X 1/8-27 NPT (F)
750355	ILA - BUSHING 3/4-16 (M) X 1/8-27 NPT (F)
750356	ILA - REDUCER 1/4-28 UNF (M) X 1/8-27 NPT (F)
750357	ILA - REDUCER G1/4 (M) X 1/4 NPT (F)
750358	ILA - REDUCER 1/8 NPT (M) X 1/4 NPT (F)
750359	ILA - REDUCER 1/4-28 (M) X 1/4 NPT (F)
750360	ILA - REDUCER 1/4 NPT (M) X 1/4 NPT (F)
750365	ILA - FITTING 45° G1/4 (M/F)
750366	ILA - FITTING 90° G1/4 (M/F)
750368	ILA - FITTING 45° 1/4 NPT (M/F)
750369	ILA - FITTING 90° 1/4 NPT (M/F)
750376	ILA - HOSE CONNECTOR 1/4 NPT
750385	ILA - EXTENSION 2 INCH 1/4 NPT
750386	ILA - EXTENSION 4 INCH 1/4 NPT
750387	ILA - EXTENSION 6 INCH 1/4 NPT
750388	ILA - EXTENSION 2 INCH 1/8 NPT
750389	ILA - EXTENSION 4 INCH 1/8 NPT

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