

Automatic lubrication

Series progressive systems selection guide

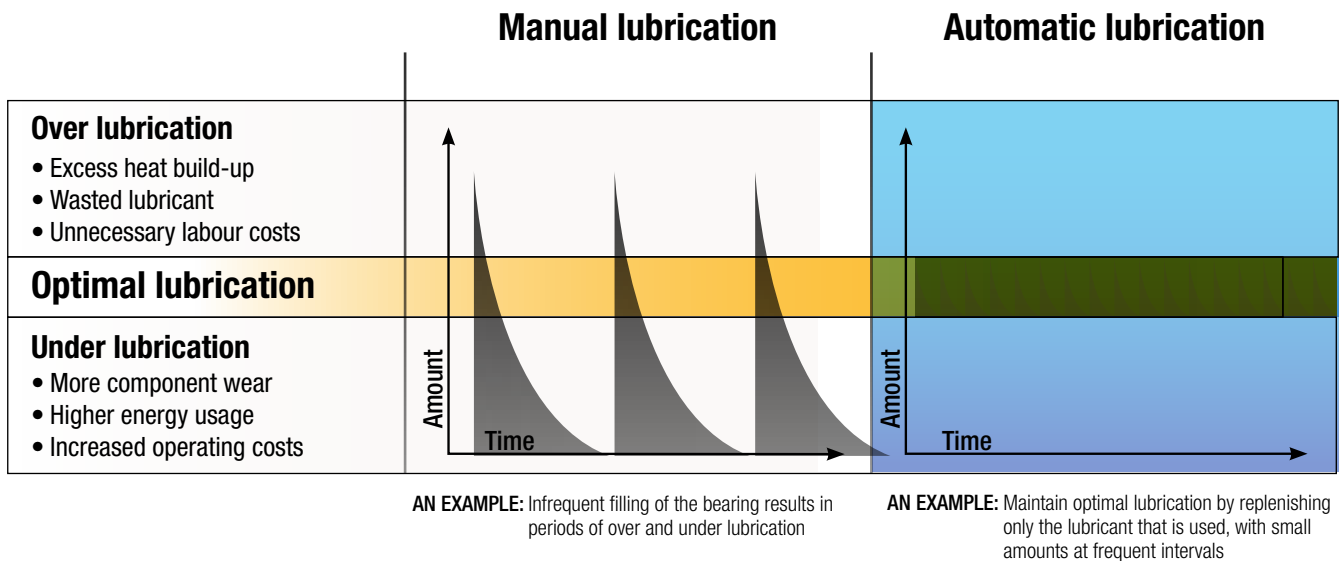


- Select and configure pumps, divider valves, fittings and accessories for centralised lubrication
- Dependable solution for versatile industrial applications or mobile equipment
- G-series pumps
- Compact Series Progressive (CSP) divider valves
- Modular Series Progressive (MSP) divider valves

Centralised lubrication

Graco's automatic lubrication solutions ensure that your machinery is lubricated when it's needed most – while it is working. In order to avoid friction that cause severe wear and tear to your machine tool, production and press equipment, our line of centralised lubrication systems is delivering precise amounts of lubricants at frequent intervals to every lube point – even if they are hard to reach.

Choose automatic lubrication and bid farewell to risks and other challenges related to manual lubrication:

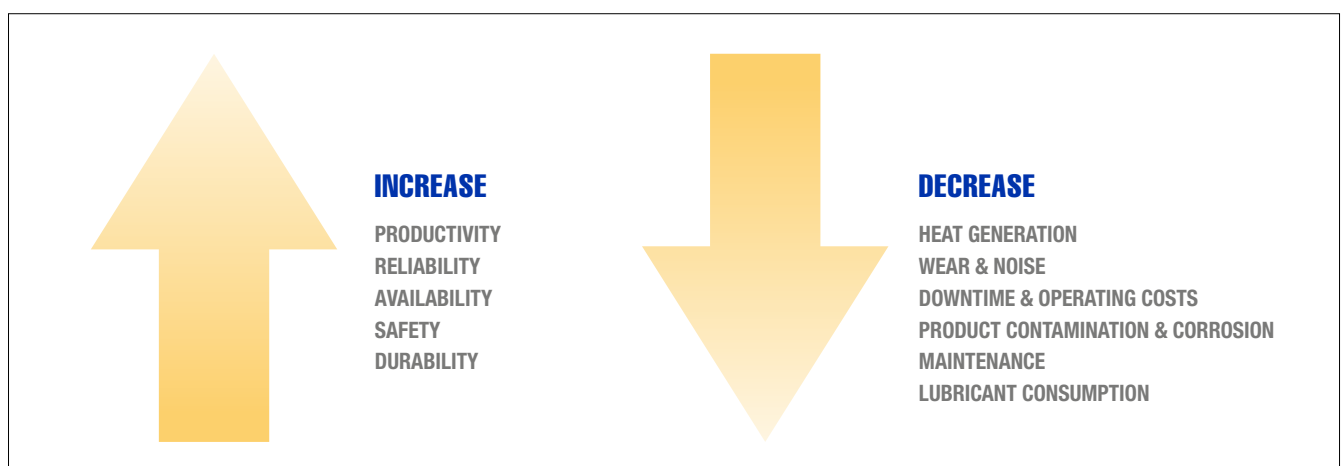


Series progressive automatic lubrication

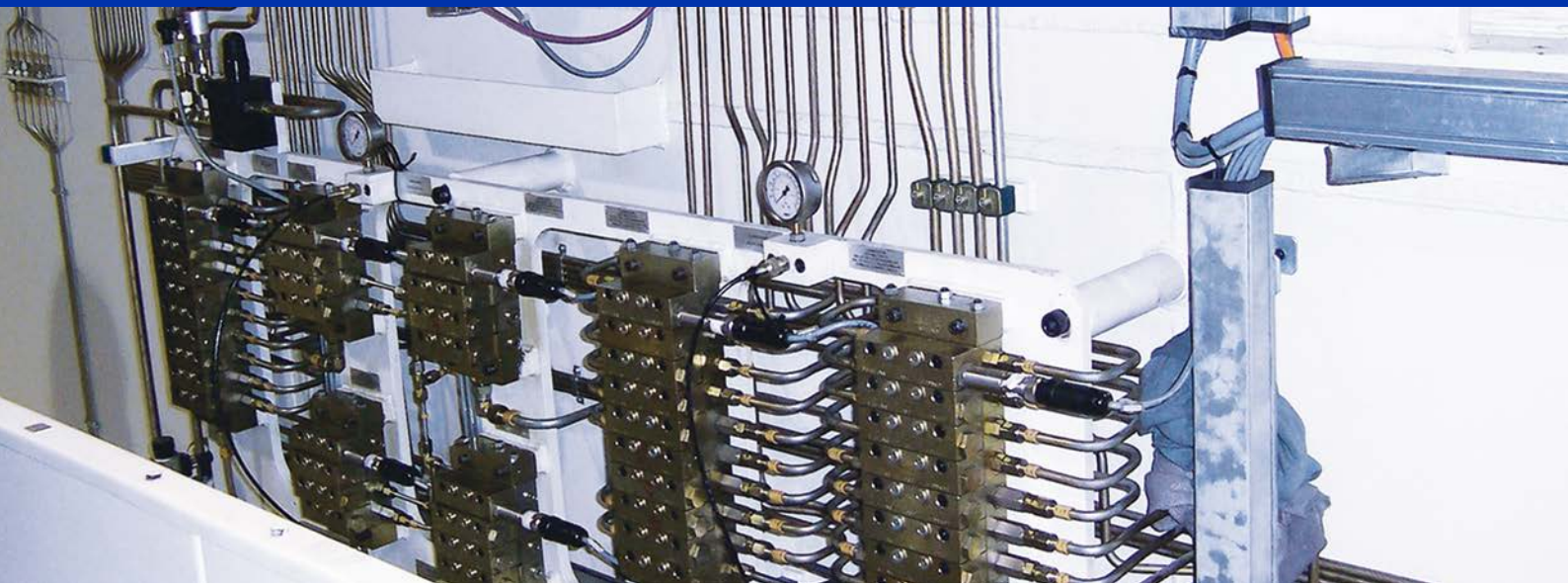
Automatic lubrication systems lubricate multiple points from a single centralised system. There are many possible configurations, such as single line parallel, series progressive, dual line, multi-line, etc.

In a **series progressive system**, a pump supplies the lubricant through a master metering valve and optional secondary metering valves to the lubrication points. The metering valves are custom sized for each lubrication point to deliver the required amount of lube.

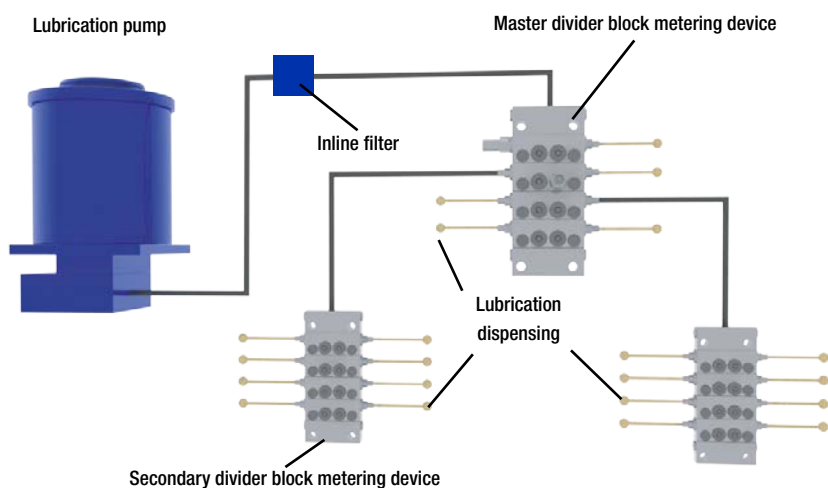
Benefits



Series progressive automatic lubrication systems



Components of a series progressive automatic lubrication system



PUMPS & RESERVOIRS:

store and provide the lubricant to the system

CONTROLLER:

activates the system

DIVIDERS:

dispenses the right amount of lubricant to the lubrication point.

How it works

As the lubricant flows from the pump through the passages of each divider block, the metering pistons move to one side in sequence from inlet to end, each time “dosing” the precise amount of oil or grease required at the lube point.

Applications

There are many applications and industries where Graco’s series progressive automatic lubrication systems have proven to be the dependable choice, like;

- ▶ In-plant manufacturing
- ▶ Wind energy
- ▶ Mobile equipment used on or off-road

You can also consult our complimentary brochure: **Automatic lubrication solutions - single line parallel system selector guide (300763ENEU)** for more heavy-duty applications.

Dependable equipment for multiple applications



G-series pumps

- UV protected and shutter resistant reservoir
- Multiple reservoir sizes
- Power choices: 12, 24 or 230 volt
- Up to three pump elements
- Multiple controller options

G-mini compact pump

- Multiple reservoir options
- Follower plate and stir paddle
- Patent-pending heater
- Proximity switch input
- 5-wire CPC power cable
- Multiple controller options

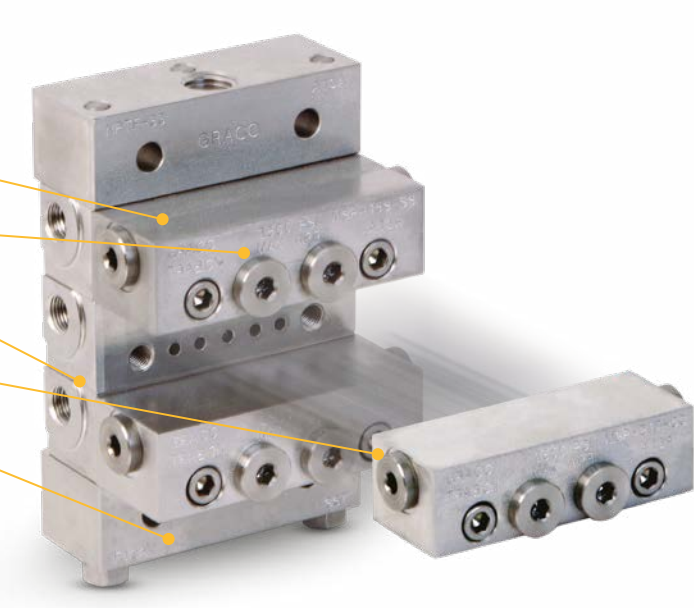


Compact Series Progressive (CSP) divider valves



- 1/8" NPT or BSPP inlet
- Built-in durability
- Variety of configurations
- High output pressure
- Output to meet your needs

Modular Series Progressive (MSP) divider valves



- Intelligent feedback
- Alternate outlet/monitoring
- Quick change valve sections
- Built-in check valve
- Precision performance

System design selector for G-series & dividers



Reliable G-series pump

Select the Graco G-series pump which suits your power, feedback, and fluid capacity requirements.



Select the pressure relief valve & relief valve outlet fittings



Select the CSP divider valve



Select the divider valve INLET fittings



1

Select the G-series pump model

For a complete list of available pump models, please refer to the Industrial Lubrication Buyer's guide on www.graco.com

2

Select the pressure relief valve & relief valve outlet fittings

		THREAD SIZE		THREAD SIZE	
G-mini	1/4" BSP	115122 571070 556402	+	Compression	17R571 6 mm, straight OR 17R572 6 mm, elbow
	1/8" NPT	26A910		G-Lock push-to-connect	17R569 6 mm, straight
G1 and G3	1/4" BSP	26C176		Compression	17T780 6 mm, straight OR 17T781 6 mm, elbow
	1/8" NPT	26C030			

3

Select the CSP divider valve

# of outlets	Indicator pin?	THREAD SIZE		# of outlets	Indicator pin?	THREAD SIZE	
		1/8" NPT	1/8" BSPP			1/8" NPT	1/8" BSPP
6	NO	24Z486	24Z477	16	NO	24Z491	24Z482
	YES	24Z504	24Z495		YES	24Z509	24Z500
8	NO	24Z487	24Z478	18	NO	24Z492	24Z483
	YES	24Z505	24Z496		YES	24Z510	24Z501
10	NO	24Z488	24Z479	20	NO	24Z493	24Z484
	YES	24Z506	24Z497		YES	24Z511	24Z502
12	NO	24Z489	24Z480	22	NO	24Z494	24Z485
	YES	24Z507	24Z498		YES	24Z512	24Z503
14	NO	24Z490	24Z481				
	YES	24Z508	24Z499				

4

Select the divider valve INLET fittings

1/8" BSPP Valve	Compression	17R548 6 mm, straight OR 17R546 6 mm, elbow
1/8" NPT valve	G-lock Push-to-connect	17R545 6 mm, straight OR 17R449 6 mm, elbow
	Compression	17T780 6 mm, straight OR 17T781 6 mm, elbow

SYSTEM DESIGN SELECTOR FOR CSP



Select the main line HP hose



Select the divider valve OUTLET fittings



Select the secondary line HP hose or nylon tube



Select the LUBE POINT fitting

5

6

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5

Select the main line (from pump to CSP divider valve)

Hose studs (compression OR PTC)		Hose sleeve	HP hose (8.6mm OD)		Hose wrap	Hose sleeve	Hose studs	
Compression	17R565 6 mm, straight OR 17R566 6 mm, elbow		17L648	17S552 25 m OR 17S553 50 m OR 17S554 100 m OR 17S555 200 m OR 130938 50 m pre-filled			123147 10 m	17L648
G-lock Push-to-connect	17R649 6 mm, straight OR 17L650 6 mm, elbow	G-lock Push-to-connect		17R649 6 mm, straight OR 17L650 6 mm, elbow				

6

Select the divider valve OUTLET fittings

Compression	17L550 6 mm X M10
G-lock Push-to-connect	17L458 6 mm X M10
Nylon tube only	17L543 6 mm X M10

7

Select the secondary line (from CSP divider valve to lube point)

HIGH PRESSURE HOSE							
Hose studs		Hose sleeve	HP hose (8.6mm OD)		Hose sleeve	Hose studs	
Compression	17R565 6 mm, straight OR 17R566 6 mm, elbow		17L648	17S552 25 m OR 17S553 50 m OR 17S554 100 m OR 17S555 200 m OR 130938 50 m pre-filled		17L648	Compression
G-lock Push-to-connect	17R649 6 mm, straight OR 17L650 6 mm, elbow	G-lock Push-to-connect		17R649 6 mm, straight OR 17L650 6 mm, elbow			

NYLON TUBE (6 mm)								
17S556 6 mm x 25m	OR	17S557 6 mm x 50m	OR	17S558 6 mm x 100m	OR	17S559 6 mm x 200m	OR	25N013 6 mm x 50m pre-filled

8

Select the LUBE POINT fittings

Thread size	COMPRESSION		G-LOCK PUSH-TO-CONNECT	
	Straight	Elbow	Straight	Elbow
6 mm X M6	17R573	17R574	17L457	17L448
6 mm X M8	17R575	17R576	17L456	17L447
6 mm X M10	17R577	17R578	17L455	17L446
6 mm X 1/4" BSP	17R571	17R572	17R569	-
6 mm X 1/8" BSP	17L548	17L546	17L545	17L449

System design selector for G-series & dividers



Reliable G-series pump

Select the Graco G-series pump which suits your power, feedback, and fluid capacity requirements.



Select the pressure relief valve & relief valve outlet fittings



Select the MSP divider valve



1

Select the G-series pump model

For a complete list of available pump models, please refer to the Industrial Lubrication Buyer's guide on www.graco.com

2

Select the pressure relief valve & relief valve outlet fittings

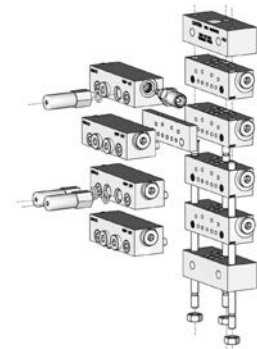
	PRESSURE RELIEF VALVES	RELIEF VALVE OUTLET FITTINGS
1/4" BSP	26C176	Compression 17R571 6 mm, straight OR 17R572 6 mm, elbow
		G-lock push-to-connect 17R569 6 mm, straight
1/8" NPT	26C030	Compression 17T780 6 mm, straight OR 17T781 6 mm, elbow

3

Select the MSP divider valve

A. Select the MSP base plates

PRE-CONFIGURED & TESTED	Max. Number of outlets	Number of valve sections	Model number	
			NPSF	BSPP
Includes: inlets, intermediate base plate sections, end section, tie rods and nuts.	6	3	24G485	24N915
	8	4	24G486	24N916
	10	5	24G487	24N917
	12	6	24G488	24N918
	14	7	24G489	24N919
	16	8	24G490	24N920



BUILD YOUR OWN	Component	Description	Model number			Note
			NPSF	BSPP	SAE	
	Intermediate base plate	Single section	563425	563447	563451	Must be ordered in multiples of 5
	Inlet options - <i>Additional speciality inlets available</i>	Standard	560919	560936	560943	
		With bleed ports	563421		563422	
	End section options	Standard		563424		3 tie rods and tie rod nuts required for assembly
		With alternate inlet port plug		563279		
	Tie rods (3 required)	3-section		557731		
		4-section		557732		
		5-section		557733		
		6-section		557734		
		7-section		557735		
		8-section		557736		
		9-section		557738		
	10-section		557739			
	11-section		557740			
Tie rod nuts (3 required)	Tie rod nuts		556371			

SYSTEM DESIGN SELECTOR FOR MSP



Select the MSP divider valve



Select the divider valve INLET fittings

3

4

B. Select the MSP working sections (must be ordered in multiples of 5)

Outlet	Description	Output per outlet in ³ (cm ³)	Model number		
			Standard section	With cycle pin - right	With cycle pin - left
Single	MSP-5S	0.010 (0.16)	562711	N/A	
	MSP-10S	0.020 (0.33)	562712	N/A	
	MSP-15S	0.030 (0.49)	562713	N/A	
	MSP-20S	0.040 (0.66)	562714	562729	562734
	MSP-25S	0.050 (0.82)	562715	562730	562735
	MSP-30S	0.060 (0.98)	562716	562731	562736
	MSP-35S	0.070 (1.15)	562717	562732	562737
	MSP-40S	0.080 (1.31)	562718	562733	562738
Twin	MSP-5T	0.005 (0.08)	562720	N/A	
	MSP-10T	0.010 (0.16)	562721	N/A	
	MSP-15T	0.015 (0.26)	562722	N/A	
	MSP-20T	0.020 (0.33)	562723	562739	562744
	MSP-25T	0.025 (0.41)	562724	562740	562745
	MSP-30T	0.030 (0.49)	562725	562741	562746
	MSP-35T	0.035 (0.57)	562726	562742	562747
	MSP-40T	0.040 (0.66)	562727	562743	562748

C. Select optional components

Component	Description	Model number	Note
Crossport bar	Right	563469	1 outlet port plug is required for each crossport bar
	Left	563470	
	Right + Left	563471	2 outlet port plugs are required for each double crossport bar
Bypass block	MSP bypass section	562660	
Outlet port plugs	For 1/8" BSP	558799	
	For 1/8" NPT	557349	

Please refer to the ILE Buyer's guide (P/N 340821, page 68) to check all of the optional Performance Indicators.

4

Select the divider valve INLET fittings

1/4" BSP
Base plate

1/4" NPSF base
plate

Compression

17R571 6 mm, straight

OR

17R572 6 mm, elbow

G-lock push-to-connect

17R569 6 mm, straight

Compression

17T782 6 mm, straight

OR

17T783 6 mm, elbow

5

See next page

System design selector for G-series & dividers



Select the main line
HP hose



Select the divider valve
OUTLET fittings

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5

Select the main line (from pump to MSP divider valve)

Hose studs (compression OR PTC)		Hose sleeve 17L648	HP hose (8.6mm OD)		Hose wrap 123147 10 m	Hose sleeve 17L648	Hose studs	
Compression	17R565 6 mm, straight		OR	17S552 25 m			OR	17S553 50 m
	17R566 6 mm, elbow	17S554 100 m		17S555 200 m	17R566 6 mm, elbow			
G-lock Push-to-connect	17R649 6 mm, straight	OR	130938 50 m pre-filled	OR		OR	17R649 6 mm, straight	OR
	17L650 6 mm, elbow		17L650 6 mm, elbow					

6

Select the divider valve OUTLET fittings

1/8" BSP base plate	Compression	17L548 6 mm, straight	
		OR	17L546 6 mm, elbow
1/8" NPSF base plate	G-lock push-to-connect	17L545 6 mm, straight	
		OR	17L449 6 mm, elbow
	Compression	17T780 6 mm, straight	
		OR	17T781 6 mm, elbow

7

Select the secondary line (from CSP divider valve to lube point)

HIGH PRESSURE HOSE									
Hose studs		Hose sleeve 17L648	HP hose (8.6mm OD)		Hose sleeve 17L648	Hose studs			
Compression	17R565 6 mm, straight		OR	17S552 25 m		OR	17S553 50 m	OR	17R565 6 mm, straight
	17R566 6 mm, elbow	17S554 100 m		17S555 200 m	17R566 6 mm, elbow				
G-lock Push-to-connect	17R649 6 mm, straight	OR		OR		OR	17R649 6 mm, straight	OR	
	17L650 6 mm, elbow		17L650 6 mm, elbow						

NYLON TUBE (6 mm)									
17S556 6 mm x 25m	OR	17S557 6 mm x 50m	OR	17S558 6 mm x 100m	OR	17S559 6 mm x 200m	OR	25N013 6 mm x 50m pre-filled	

SYSTEM DESIGN SELECTOR FOR MSP



Select the secondary line
HP hose or nylon tube



Select the
LUBE POINT fitting

7

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8

Select the LUBE POINT fittings

Thread size	COMPRESSION		G-LOCK PUSH-TO-CONNECT	
	Straight	Elbow	Straight	Elbow
6 mm X M6	17R573	17R574	17L457	17L448
6 mm X M8	17R575	17R576	17L456	17L447
6 mm X M10	17R577	17R578	17L455	17L446
6 mm X 1/4" BSP	17R571	17R572	17R569	–
6 mm X 1/8" BSP	17L548	17L546	17L545	17L449



Technical specifications

Pumps

G-mini pumps do not come with power cables. See Accessories below for power cable options.

CONTROLLER OPTION	VOLTAGE	RESERVOIR SIZE	HEATER	PART NUMBER	PART DESCRIPTION
No controller	12V	0.5L	No	25R809	0.5 Litre, 12 volt G-mini pump
		1L	No	25R802	1 litre, 12 volt G-mini pump
	24V	0.5L	No	25R807	0.5 Litre, 24 volt G-mini pump
		1L	No	25R800	1 litre, 24 volt G-mini pump
Controller	12V	0.5L	No	25R810	0.5 litre, 12 volt G-mini pump with controller
			No	25R803	1 litre, 12 volt G-mini pump with controller
		1L	No	25R806	1 litre, 12 volt G-mini pump with controller and heater
			Yes	25R808	0.5 litre, 24 volt G-mini pump with controller
	24V	0.5L	No	25R808	0.5 litre, 24 volt G-mini pump with controller
			No	25R801	1 litre, 24 volt G-mini pump with controller
		1L	No	25R801	1 litre, 24 volt G-mini pump with controller
			Yes	25R804	1 litre, 24 volt G-mini pump with controller and heater

Pump re-fill options:

OPTION 1 Re-fill via grease zerk



562857

Standard option on all G-series pumps

Use standard grease gun (Item #**562857**) to fill the reservoir

OPTION 2a Re-fill via high capacity fill zerk (#24M644)



24M644

* Order Item #**24M644** (1/4" NPT), and use instead of grease zerk or the 2 alternative ports

121474

* Use together with female coupler Item #**121474**, **OR** with any other coupler that conforms to ISO 7241-1 series B

OPTION 2b Re-fill via high capacity fill zerk (#247886)



247886

* Order the manual fill pump (Item #**247886**)

* Female coupler #**121474** already included in the manual fill pump package

OPTION 2c Re-fill via manual hand pump



571162

* Order Item #**571162**

* Screws directly into the pump element port:
 - remove the unused G3 pump element plug
 - insert the grease fill pump into the port

Accessories

Fittings and accessories overview

For a complete list of pumps, pressure reliefs, valves, hoses, tubes, fittings, adapters, and accessories, go to the Graco Industrial Lubrication Equipment buyer's guide at www.graco.com.

PART NUMBER	DESCRIPTION
127783*	3-Wire CPC power cable 4.6 mm
127780*	5-Wire CPC power cable 4.6 mm
25C981	12V manual run button (5-wire CPC power cable required)
25C982	24V manual run button (5-wire CPC power cable required)
26C825	Direct mount CSP bracket
26C826	Universal mounting bracket (allows for drop-in replacement of competition)
17L879	Graco CSP solid state proximity switch (DC PNP)
17R703	1 ft proximity switch cable, M12 female straight to M12 male straight cable
124333	16.5 ft proximity cable, M12 female straight to M12 male straight
26A910	4,000 PSI pressure relief kit (1/4 NPT to 1/8 NPT reducer bushing, 1/8 NPT branch T-fitting, 4,000 PSI pressure relief valve)
25N827	Pump element kit (add a second pump element or replace existing element)
24M644	High capacity fill stud quick disconnect and dust cover
247886	Manual fill pump – fits 5 gallon or 35 lb pail (requires 24M644)

Additional accessories can be found in the Graco Industrial Lubrication Equipment (ILE) buyer's guide (p/n 340821).
*G-mini pumps do not come with power cables. Power cables needed for installation.

Pressure relief valve & relief valve outlet fittings

PART NUMBER	DESCRIPTION
26C176	Kit, relief valve and fittings, BSP, 345 bar
26C030	Kit, relief valve and fittings, NPT, 345 bar
17R569	Fitting, PTC, straight, 6 mm X 1/4", BSP
17R571	Fitting, compression, straight, 6 mm X 1/4", BSP
17R572	Fitting, compression, elbow, 6 mm X 1/4", BSP
17T780	Fitting, compression, straight, 6 mm X 1/8" NPT
17T781	Fitting, compression, elbow, 6 mm X 1/8" NPT
17T782	Fitting, compression, straight, 6 mm X 1/4" NPT
17T783	Fitting, compression, elbow, 6 mm X 1/4" NPT



HP hose, nylon tube & mounting accessories

PART NUMBER	DESCRIPTION
17S552	HP hose, 8.6 mm OD, 25 m
17S553	HP hose, 8.6 mm OD, 50 m
17S554	HP hose, 8.6 mm OD, 100 m
17S555	HP hose, 8.6 mm OD, 200 m
17S556	Nylon tube, 6 mm X 25 m
17S557	Nylon tube, 6 mm X 50 m
17S558	Nylon tube, 6 mm X 100 m
17S559	Nylon tube, 6 mm X 200 m
17L648	Sleeve, hose
17L649	Stud, straight, 6 mm, G-lock push-to-connect
17L650	Stud, elbow, 6 mm, G-lock push-to-connect
17R565	Stud, straight, 6 mm, compression
17R566	Stud, elbow, 6 mm, compression
130938	HP hose, 8.6 mm OD, 50 m pre-filled
25N013	Nylon tube, 6 mm X 50 m pre-filled



Accessories

CSP outlet fittings

PART NUMBER	DESCRIPTION
17L550	Fitting, compression, 6 mm X M10
17L458	Fitting, PTC, 6 mm X M10
17L543	Fitting, PTC, CSP outlet, 6 mm X M10 - nylon tube only
17L651	Plug, doubling, M10 X 1 - FOR CSP

MSP outlet fittings

PART NUMBER	DESCRIPTION
17L548	Fitting, compression, straight, 6 mm X 1/8", BSP
17L546	Fitting, compression, elbow, 6 mm X 1/8", BSP
17L545	Fitting, G-lock push-to-connect, straight, 6 mm X 1/8" BSP
17L449	Fitting, G-lock push-to-connect, elbow, 6 mm X 1/8" BSP
17T780	Fitting, compression, straight, 6 mm X 1/8" NPT
17T781	Fitting, compression, elbow, 6 mm X 1/8" NPT

Optional accessories

PART NUMBER	DESCRIPTION
Power cables	
124333	M12 cable, male & female, 4.88 m
126331	Harness, wiring, M12(F) to bare wire, 5 m (requires 124594)
124594	M12 4-pin male connector for 6-8 mm cable
24Z719	Cable, M12 to 4 pin, PNP
24Z720	Kit, M12 cable with LED & flying leads, PNP (requires 124594)
25M604	Cable, M12 with LED to flying leads, PNP, straight - for PLC
25M602	Cable, M12 with LED to flying leads, PNP, straight - for G3
25M603	Cable, M12 with LED to M12, PNP, straight - for G3

Proximity switches & indicators

17L879	Switch, proximity, M11 - FOR CSP
17L983	Switch, proximity, 7/16-20 - FOR MSP
563251	Magnetic visual cycle indicator - FOR MSP

Weld stud accessories

26A478	Kit, stud, weld - FOR CSP
26A479	Kit, plate, weld - FOR CSP
563465	Weld bar kit - FOR MSP



More information

Additional automatic lubrication solutions tools and brochures to compliment your activities:

Selector tool

Online tool to easily find out which automatic lubrication set is compatible with different heavy-duty equipment. Select equipment specifications in the menu and the tool will return an all-inclusive kit with a pump and a valve package part number along with a downloadable manual.



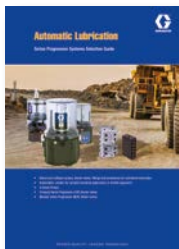
www.graco.com/gb/en/products/ad/yellow-iron-kit-selector.html

Literature



Lubrication solutions

▶ 300742ENEU



Automatic lubrication

Single line parallel systems selection guide

▶ 300763ENEU



ILE buyers guide

▶ 340821ENEU



ABOUT GRACO

Founded in 1926, Graco is a world leader in fluid handling systems and components. Graco products move, measure, control, dispense and apply a wide range of fluids and viscous materials used in vehicle lubrication, commercial and industrial settings.

The company's success is based on its unwavering commitment to technical excellence, world-class manufacturing and unparalleled customer service. Working closely with qualified distributors, Graco offers systems, products and technology that set the quality standard in a wide range of fluid handling solutions. Graco provides equipment for spray finishing, protective coating, paint circulation, lubrication, and dispensing sealants and adhesives, along with power application equipment for the contractor industry. Graco's ongoing investment in fluid management and control will continue to provide innovative solutions to a diverse global market.

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