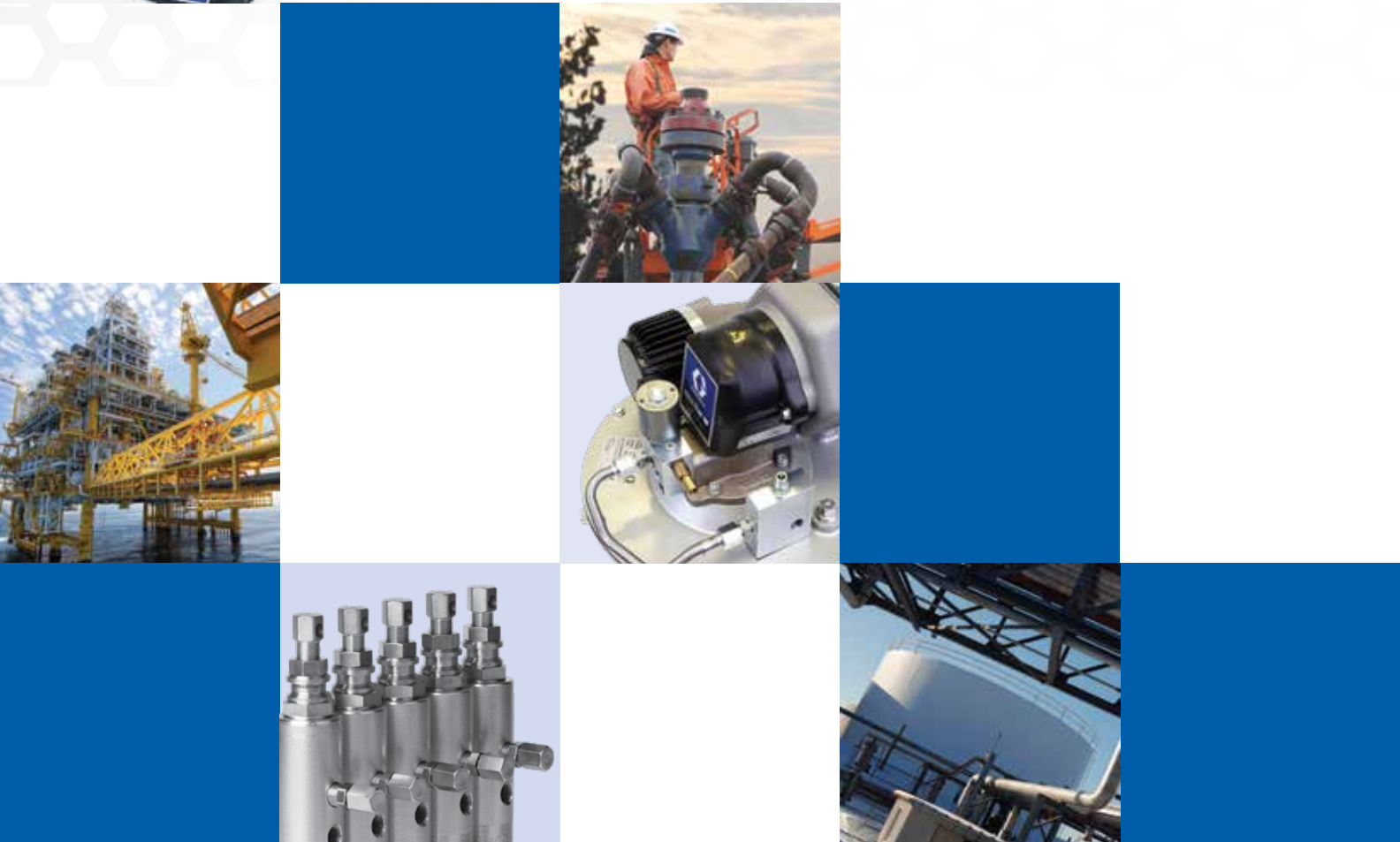




# Fracturing Equipment Lubrication Kits



## Get the Graco Advantage

Because not all oil and gas applications require just one solution, Graco offers multiple levels of advanced control and monitoring and accessories tailored to your specific budget, conditions and needs.

PROVEN QUALITY. LEADING TECHNOLOGY.

# Fracturing Equipment Lubrication Kits

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## Peace of Mind for Your Bottom Line

Graco automatic lubrication systems deliver benefit-driven solutions that save you time and money. Perfect for challenging, hazardous and harsh operating conditions of well services. Whether you need electric, hydraulic, or pneumatic powered solutions, we've got you covered with multiple levels of control and monitoring.

*Because not all well sites require the same equipment, Graco offers multiple solutions to keep your equipment working.*



**G3™ Pro**  
Simple ON/OFF time control with low-level sensing and manual run operation.



**G3™ Max**  
Full control that monitors lube flow via cycle counts and time. Monitors machine counts to match lube flow to machine use. And monitors low fluid level. Manual run and DMS are high value options.



**Hydraulic Dyna-Star®**  
Optional Graco controller, level indicator, pressure switch, follower plates and drum covers put you in control of your system – no more second guessing. Convenient pressure and flow control built-in.

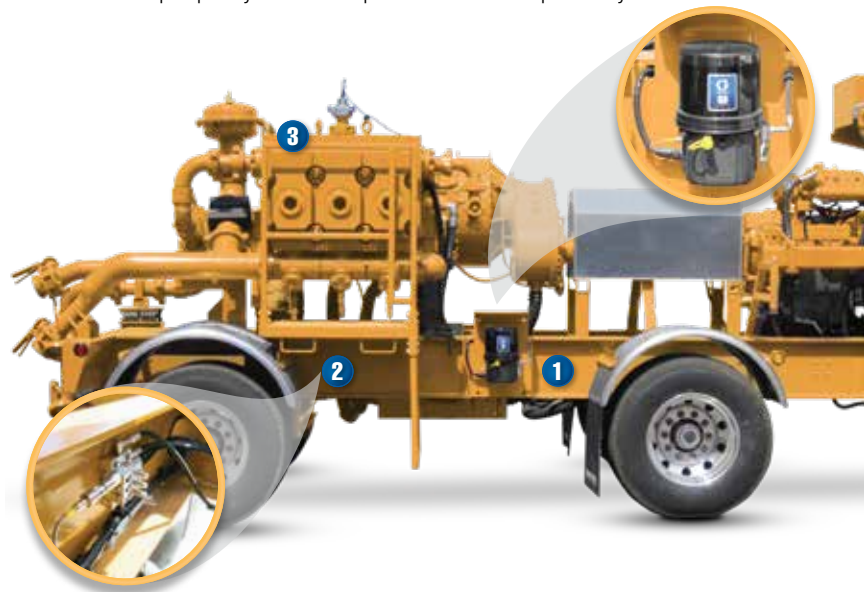


**Electric Dyna-Star®**  
Includes Auto-Fill Shutoff – mechanical shut off of fill pump for clean and efficient refills. Features the Graco Advantage Drive™ heavy duty gear drive which is lubed for life.

## Take Control of How You Monitor

You choose the level of control you require – G3™ Pro or G3™ Max. Plus Graco offers our proprietary Data Management System™ (DMS) as an option on Max control models. You gain a distinct advantage from information that offers accurate time-stamped operation, fault data, and downloadable on/off time programming. Preferred lube cycle program can be stored and transferred to other G3 pumps in your fleet for quick and accurate repeatability.

- 1 G3™ Pump and Control**  
An advanced pump design offers multiple levels of control and monitoring. Use feedback from MSP blocks and from your equipment to tailor and monitor the lubrication supply to critical components. Pumps are IP69K rated so no enclosure is necessary. Refilling is clean and easy with the quick connect stud.
- 2 MSP Series Progressive Lubrication Blocks**  
Offers time-tested, field proven dependability in the harshest environments. Flow can be monitored using a proximity switch and performance indicators so problems can be pinpointed.
- 3 Double Ball Check Valve**  
Ensures lubrication goes into the lube point and doesn't get pushed back out. Stops any fluid back pressure from damaging the lubrication system.



# Triplex Frac Kit Selection Guide

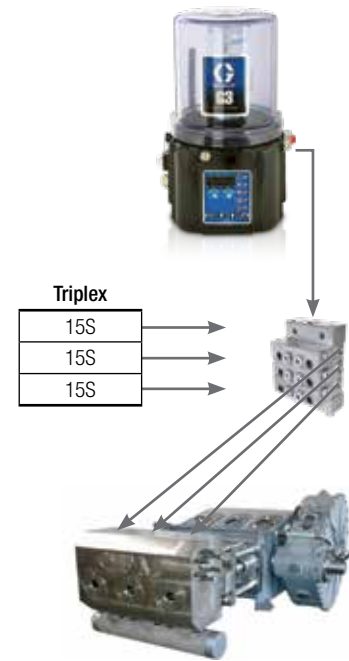
## G3 Pro Grease and MSP Series Progressive

Time-based

### Ordering Information

#### G3 Pro Grease / MSP Series Progressive 12 V Triplex Kit

Part Number	Quantity	Description
96G147	1	G3 Pro pump 12 V, 4 liter reservoir, low level and 5 pin CPC
24Z962	1	Protective G3 cover with manual run and reset holes
556419	1	1/4 NPT service tee
563160	1	2,500 psi relief
557874	1	Quick fill stud – 1/4 in NPT
557875	1	Dust cap
563061	3	Check valve, double ball
555453	3	1/4 NPT street elbow
156971	3	1/4 NPT hex nipple
24G485	1	3 section MSP base plate assembly
562713	3	MSP 15S valve assembly
563174	3	2,000 psi relief indicator
563251	1	Visual cycle indicator



#### G3 Pro Grease / MSP Series Progressive 24 V Triplex Kit

Part Number	Quantity	Description
96G149	1	G3 Pro pump 24 V, 4 liter reservoir, low level and 5 pin CPC
24Z962	1	Protective G3 cover with manual run and reset holes
556419	1	1/4 NPT service tee
563160	1	2500 psi relief
557874	1	Quick fill stud – 1/4 in NPT
557875	1	Dust cap
563061	3	Check valve, double ball
555453	3	1/4 NPT street elbow
156971	3	1/4 NPT hex nipple
24G485	1	3 section MSP base plate assembly
562713	3	MSP 15S valve assembly
563174	3	2,000 psi relief indicator
563251	1	Visual cycle indicator

### Technical Specifications

Triplex Pump (three pistons) MSP					Reservoir hours of operation		
Piston Diameter	Lube rate (in <sup>3</sup> ) per hour each piston	Feeder cycles per hour	G3 Pump off time setting in minutes	G3 Pro Pump on time	2 liter	4 liter	8 liter
2.75	0.340	11.3	5	23 seconds	120	239	479
3	0.371	12.4	5	23 seconds	110	219	439
3.5	0.433	14.4	4	23 seconds	94	188	376
4	0.494	16.5	4	23 seconds	82	165	329
4.5	0.556	18.5	3	23 seconds	73	146	292
5	0.618	20.6	3	23 seconds	66	132	263
5.5	0.680	22.7	3	23 seconds	60	120	239
6	0.742	24.7	2	23 seconds	55	110	219

Notes: 1). Lube rates based on a service factor of 12. 2). G3 pump with one pump element. 3). Please note these are recommended lube rates. Each application should be reviewed to determine optimal rate.

# Quintuplex Frac Kit Selection Guide

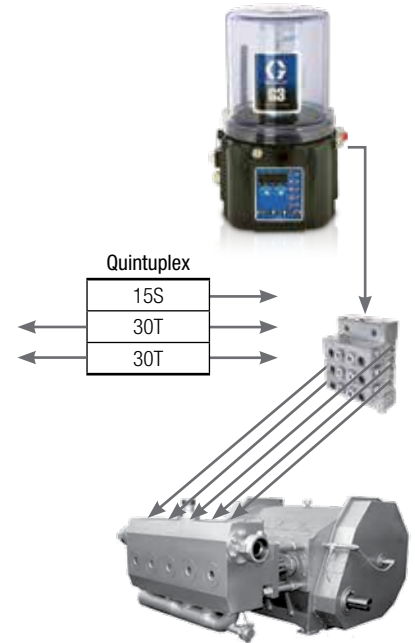
## G3 Pro Grease and MSP Series Progressive

Time-based

### Ordering Information

#### G3 Pro Grease / MSP Series Progressive 12 V Quintuplex Kit

Part Number	Quantity	Description
96G147	1	G3 Pro pump 12 V, 4 liter reservoir, low level and 5 pin CPC
24Z962	1	Protective G3 cover with manual run and reset holes
556419	1	1/4 NPT service tee
563160	1	2,500 psi relief
557874	1	Quick fill stud – 1/4 in NPT
557875	1	Dust cap
563061	5	Check valve, double ball
555453	5	1/4 NPT street elbow
156971	5	1/4 NPT hex nipple
24G485	1	3 section MSP base plate assembly
562713	1	MSP 15S valve assembly
562725	2	MSP 30T valve assembly
563174	5	2,000 psi relief indicator
563251	1	Visual cycle indicator



#### G3 Pro Grease / MSP Series Progressive 24 V Quintuplex Kit

96G149	1	G3 Pro pump 24 V, 4 liter reservoir, low level and 5 pin CPC
24Z962	1	Protective G3 cover with manual run and reset holes
556419	1	1/4 NPT service tee
563160	1	2,500 psi relief
557874	1	Quick fill stud – 1/4 in NPT
557875	1	Dust cap
563061	5	Check valve, double ball
555453	5	1/4 NPT street elbow
156971	5	1/4 NPT hex nipple
24G485	1	3 section MSP base plate assembly
562713	1	MSP 15S valve assembly
562725	2	MSP 30T valve assembly
563174	5	2,000 psi relief indicator
563251	1	Visual cycle indicator

### Technical Specifications

Quintuplex Pump (five pistons) MSP					Reservoir hours of operation		
Piston Diameter	Lube rate (in <sup>3</sup> ) per hour each piston	Feeder cycles per hour	G3 Pump off time setting in minutes	G3 Pro Pump on time	2 liter	4 liter	8 liter
2.75	0.340	11.3	5	38 seconds	72	144	287
3	0.371	12.4	5	38 seconds	66	132	263
3.5	0.433	14.4	4	38 seconds	56	113	226
4	0.494	16.5	4	38 seconds	49	99	197
4.5	0.556	18.5	3	38 seconds	44	88	175
5	0.618	20.6	3	38 seconds	39	79	158
5.5	0.680	22.7	3	38 seconds	36	72	144
6	0.742	24.7	2	38 seconds	33	66	132

Notes: 1). Lube rates based on a service factor of 12. 2). G3 pump with one pump element. 3). Please note these are recommended lube rates. Each application should be reviewed to determine optimal rate.

# Triplex Frac Kit Selection Guide

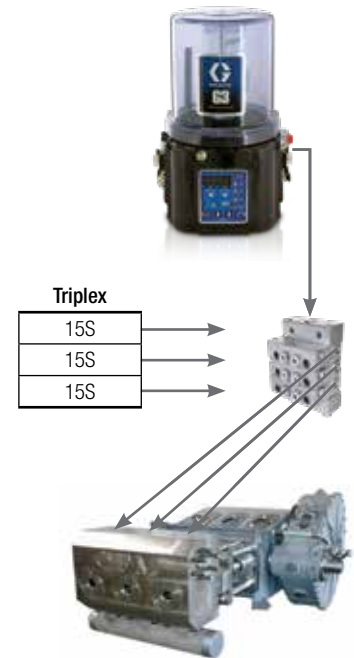
## G3 Max DMS Grease and MSP Series Progressive

Time-based with monitoring, optional RPM input count, and downloadable system monitoring.

### Ordering Information

#### G3 Max DMS Grease / MSP Series Progressive 12 VDC Triplex Kit

Part Number	Quantity	Description
96G161	1	G3 Max DMS pump 12 V, 4 liter reservoir, low level and 5 pin CPC
24Z962	1	Protective G3 cover with manual run and reset holes
556419	1	1/4 NPT service tee
563160	1	2,500 psi relief
557874	1	Quick fill stud – 1/4 in NPT
557875	1	Dust cap
563061	3	Check valve, double ball
555453	3	1/4 NPT street elbow
156971	3	1/4 NPT hex nipple
24G485	1	3 section MSP base plate assembly
562713	3	MSP 15S valve assembly
563257	3	2,000 psi reset performance indicator
17L983	1	Proximity switch, cycle indicator
124300	1	Cable 16 ft for proximity switch
124301	1	Connector for proximity switch cable



#### G3 Max DMS Grease / MSP Series Progressive 24 VDC Triplex Kit

Part Number	Quantity	Description
96G162	1	G3 Max DMS pump 24 V, 4 liter reservoir, low level and 5 pin CPC
24Z962	1	Protective G3 cover with manual run and reset holes
556419	1	1/4 NPT Service tee
563160	1	2,500 psi relief
557874	1	Quick fill stud – 1/4 in NPT
557875	1	Dust cap
563061	3	Check valve, double ball
555453	3	1/4 NPT street elbow
156971	3	1/4 NPT hex nipple
24G485	1	3 section MSP base plate assembly
562713	3	MSP 15S valve assembly
563257	3	2,000 psi reset performance indicator
17L983	1	Proximity switch, cycle indicator
124300	1	Cable 16 ft for proximity switch
124301	1	Connector for proximity switch cable

### Technical Specifications

Triplex Pump (three pistons) MSP					Reservoir hours of operation			
Piston Diameter	Lube rate (in <sup>3</sup> ) per hour each piston	Feeder cycles per hour	G3 Pump off time setting in minutes	G3 Max cycle monitor time	Rotations of Frac pump set point for lube cycle	2 liter	4 liter	8 liter
2.75	0.340	11.3	5	1 minute	736	120	239	479
3	0.371	12.4	5	1 minute	670	110	219	439
3.5	0.433	14.4	4	1 minute	566	94	188	376
4	0.494	16.5	4	1 minute	488	82	165	329
4.5	0.556	18.5	3	1 minute	427	73	146	292
5	0.618	20.6	3	1 minute	379	66	132	263
5.5	0.680	22.7	3	1 minute	339	60	120	239
6	0.742	24.7	2	1 minute	306	55	110	219

Notes: 1). Lube rates based on a service factor of 12. 2). G3 pump with one pump element. 3). Please note these are recommended lube rates. Each application should be reviewed to determine optimal rate.

# Quintuplex Frac Kit Selection Guide

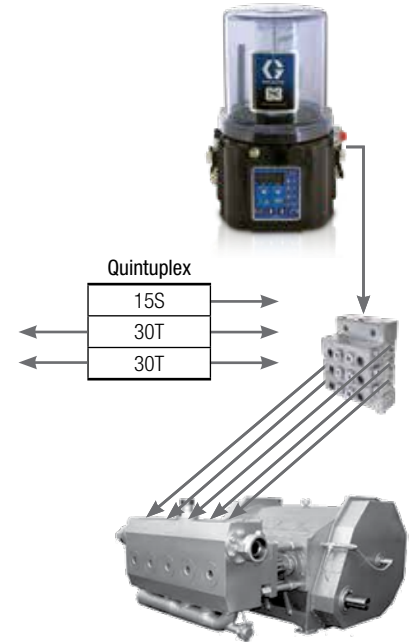
## G3 Max DMS Grease and MSP Series Progressive

Time-based with monitoring, optional RPM input count, and downloadable system monitoring.

### Ordering Information

#### G3 Max DMS Grease / MSP Series Progressive 12 VDC Quintuplex Kit

Part Number	Quantity	Description
96G161	1	G3 Max DMS pump 12 V, 4 liter reservoir, low level and 5 pin CPC
24Z962	1	Protective G3 cover with manual run and reset holes
556419	1	1/4 NPT service tee
563160	1	2,500 psi relief
557874	1	Quick fill stud – 1/4 in NPT
557875	1	Dust cap
563061	5	Check valve, double ball
555453	5	1/4 NPT street elbow
156971	5	1/4 NPT hex nipple
24G485	1	3 section MSP base plate assembly
562713	1	MSP 15S valve assembly
562725	2	MSP 30T valve assembly
563257	5	2,000 psi reset performance indicator
17L983	1	Proximity switch, cycle indicator
124300	1	Cable 16 ft for proximity switch
124301	1	Connector for proximity switch cable



#### G3 Max DMS Grease / MSP Series Progressive 24 VDC Quintuplex Kit

96G162	1	G3 Max DMS pump 24 V, 4 liter reservoir, low level and 5 pin CPC
24Z962	1	Protective G3 cover with manual run and reset holes
556419	1	1/4 NPT service tee
563160	1	2,500 psi relief
557874	1	Quick fill stud – 1/4 in NPT
557875	1	Dust cap
563061	5	Check valve, double ball
555453	5	1/4 NPT street elbow
156971	5	1/4 NPT hex nipple
24G485	1	3 section MSP base plate assembly
562713	1	MSP 15S valve assembly
562725	2	MSP 30T valve assembly
563257	5	2,000 psi reset performance indicator
17L983	1	Proximity switch, cycle indicator
124300	1	Cable 16 ft for proximity switch
124301	1	Connector for proximity switch cable

### Technical Specifications

Quintuplex Pump (five pistons) MSP					Reservoir hours of operation			
Piston Diameter	Lube rate (in <sup>3</sup> ) per hour each piston	Feeder cycles per hour	G3 Pump off time setting in minutes	G3 Max cycle monitor time	Rotations of Frac pump set point for lube cycle	2 liter	4 liter	8 liter
2.75	0.340	11.3	5	1 minute 15 seconds	699	72	144	287
3	0.371	12.4	5	1 minute 15 seconds	633	66	132	263
3.5	0.433	14.4	4	1 minute 15 seconds	529	56	113	226
4	0.494	16.5	4	1 minute 15 seconds	451	49	99	197
4.5	0.556	18.5	3	1 minute 15 seconds	390	44	88	175
5	0.618	20.6	3	1 minute 15 seconds	342	39	79	158
5.5	0.680	22.7	3	1 minute 15 seconds	302	36	72	144
6	0.742	24.7	2	1 minute 15 seconds	269	33	66	132

Notes: 1). Lube rates based on a service factor of 12. 2). G3 pump with one pump element. 3). Please note these are recommended lube rates. Each application should be reviewed to determine optimal rate.

# Triplex Frac Kit Selection Guide

## G3 Max DMS Grease and GL-1 Injectors

Time-based with monitoring, optional RPM input count, and downloadable system monitoring.

### Ordering Information

#### G3 Max DMS Grease / GL-1 Injectors 12 VDC Triplex Kit

Part Number	Quantity	Description
96G099	1	G3 Max DMS pump 12 V, 4 liter reservoir, low level and DIN
24Z962	1	Protective G3 cover with manual run and reset holes
571169	1	Vent valve
571041	1	G3 pump element
557874	1	Quick fill stud – 1/4 in NPT
557875	1	Dust cap
563061	3	Check valve, double ball
555453	3	1/4 NPT street elbow
156971	3	1/4 NPT hex nipple
24P296	1	Two pump union kit
24K414	1	Pressure switch
114903	1	GL-1 injector 3 manifold
17L754	3	Clear, polycarbonate dust cap, GL-1
124300	1	Cable 16 ft for pressure switch
124301	1	Connector for pressure switch cable



#### G3 Max DMS Grease / GL-1 Injectors 24 VDC Triplex Kit

96G111	1	G3 Max DMS pump 24 V, 4 liter reservoir, low level and DIN
24Z962	1	Protective G3 cover with manual run and reset holes
571170	1	Vent valve
571041	1	G3 pump element
557874	1	Quick fill stud – 1/4 in NPT
557875	1	Dust cap
563061	3	Check valve, double ball
555453	3	1/4 NPT street elbow
156971	3	1/4 NPT hex nipple
24P296	1	Two pump union kit
24K414	1	Pressure switch
114903	1	GL-1 injector 3 manifold
17L754	3	Clear, polycarbonate dust cap, GL-1
124300	1	Cable 16 ft for pressure switch
124301	1	Connector for pressure switch cable

### Technical Specifications

Triplex Pump (three pistons) G3 2 pumps and GL-1 injectors set at half .040 cubic inch						Reservoir hours of operation			
Piston Diameter	Lube rate (in <sup>3</sup> ) per hour each piston	Feeder cycles per hour	G3 Pump off time setting in minutes	G3 Pump cycle monitor time (Max)	Rotations of Frac pump set point for lube cycle	2 liter	4 liter	8 liter	12 liter
2.75	0.340	8.5	7	2 Minutes	889	60	120	239	235
3	0.371	9.3	6	2 Minutes	801	55	110	219	216
3.5	0.433	10.8	6	2 Minutes	662	47	94	188	185
4	0.494	12.4	5	2 Minutes	558	41	82	165	162
4.5	0.556	13.9	4	2 Minutes	477	37	73	146	144
5	0.618	15.4	4	2 Minutes	413	33	66	132	130
5.5	0.680	17.0	4	2 Minutes	360	30	60	120	118
6	0.742	18.5	3	2 Minutes	315	27	55	110	108

Notes: 1). Lube rates based on a service factor of 12. 2). Please note these are recommended lube rates. Each application should be reviewed to determine optimal rate.



# Quintuplex Frac Kit Selection Guide

## G3 Max DMS Grease and GL-1 Injectors

Time-based with monitoring, optional RPM input count, and downloadable system monitoring.

### Ordering Information

#### G3 Max DMS Grease / GL-1 Injectors 12 VDC Quintuplex Kit

Part Number	Quantity	Description
96G099	1	G3 Max DMS pump 12 V, 4 liter reservoir, low level and DIN
24Z962	1	Protective G3 cover with manual run and reset holes
571169	1	Vent valve
571041	2	G3 pump element
557874	1	Quick fill stud – 1/4 in NPT
557875	1	Dust cap
563061	5	Check valve, double ball
555453	5	1/4 NPT street elbow
156971	5	1/4 NPT hex nipple
24P295	1	Three pump union kit
24K414	1	Pressure switch
114905	1	GL-1 injector 5 manifold
17L754	5	Clear, polycarbonate dust cap, GL-1
124300	1	Cable 16 ft for pressure switch
124301	1	Connector for pressure switch cable



#### G3 Max DMS Grease / GL-1 Injectors 24 VDC Quintuplex Kit

96G111	1	G3 Max DMS pump 24 V, 4 liter reservoir, low level and DIN
24Z962	1	Protective G3 cover with manual run and reset holes
571170	1	Vent valve
571041	2	G3 pump element
557874	1	Quick fill stud – 1/4 in NPT
557875	1	Dust cap
563061	5	Check valve, double ball
555453	5	1/4 NPT street elbow
156971	5	1/4 NPT hex nipple
24P295	1	Three pump union kit
24K414	1	Pressure switch
114905	1	GL-1 injector 5 manifold
17L754	5	Clear, polycarbonate dust cap, GL-1
124300	1	Cable 16 ft for pressure switch
124301	1	Connector for pressure switch cable

### Technical Specifications

Quintuplex Pump (five pistons) G3 3 pumps and GL-1 injectors set at half .040 cubic inch						Reservoir hours of operation			
Piston Diameter	Lube rate (in <sup>3</sup> ) per hour each piston	Feeder cycles per hour	G3 Pump off time setting	G3 Pump on time (Pro)/cycle monitor time (Max)	Rotations of Frac pump set point for lube cycle	2 liter	4 liter	8 liter	12 liter
2.75	0.340	8.5	7	2 Minutes	871	36	72	144	235
3	0.371	9.3	6	2 Minutes	783	33	66	132	216
3.5	0.433	10.8	6	2 Minutes	644	28	56	113	185
4	0.494	12.4	5	2 Minutes	540	25	49	99	162
4.5	0.556	13.9	4	2 Minutes	459	22	44	88	144
5	0.618	15.4	4	2 Minutes	395	20	39	79	130
5.5	0.680	17.0	4	2 Minutes	342	18	36	72	118
6	0.742	18.5	3	2 Minutes	297	16	33	66	108

Notes: 1). Lube rates based on a service factor of 12. 2). Please note these are recommended lube rates. Each application should be reviewed to determine optimal rate.

# Triplex Frac Kit Selection Guide

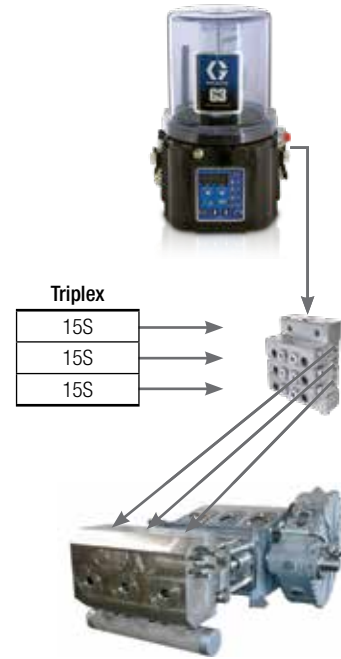
## G3 Max DMS Oil and MSP Series Progressive

Time-based with monitoring, optional RPM input count, and downloadable system monitoring.

### Ordering Information

### G3 Max DMS Oil / MSP Series Progressive 24 VDC Triplex Kit

Part Number	Quantity	Description
96G188	1	G3 Max DMS pump 24 V, 4 liter reservoir, low level and 5 pin CPC
24Z962	1	Protective G3 cover with manual run and reset holes
556419	1	1/4 NPT service tee
563160	1	2,500 psi relief
557874	1	Quick fill stud – 1/4 in NPT
557875	1	Dust cap
563061	3	Check valve, double ball
555453	3	1/4 NPT street elbow
156971	3	1/4 NPT hex nipple
24G485	1	3 section MSP base plate assembly
562713	3	MSP 15S valve assembly
563257	3	2,000 psi reset performance indicator
17L983	1	Proximity switch, cycle indicator
124300	1	Cable 16 ft for proximity switch
124301	1	Connector for proximity switch cable



### Technical Specifications

Triplex Pump (three pistons) MSP					Reservoir hours of operation			
Piston Diameter	Lube rate (in <sup>3</sup> ) per hour each piston	Feeder cycles per hour	G3 Pump off time setting in minutes	G3 Pump on time (Pro)/cycle monitor time (Max)	RPM of Frac pump set point for lube cycle	2 liter	4 liter	8 liter
2.75	0.622	20.7	3	23 seconds/ 1 minute	376	65	131	262
3	0.678	22.6	3	23 seconds/ 1 minute	340	60	120	240
3.5	0.791	26.4	2	23 seconds/ 1 minute	283	51	103	206
4	0.904	30.1	2	23 seconds/ 1 minute	241	45	90	180
4.5	1.017	33.9	2	23 seconds/ 1 minute	207	40	80	160
5	1.130	37.7	2	23 seconds/ 1 minute	181	36	72	144
5.5	1.243	41.4	1	23 seconds/ 1 minute	159	33	65	131
6	1.356	45.2	1	23 seconds/ 1 minute	141	30	60	120

Notes: 1). Lube rates based on a service factor of 12. 2). G3 pump with one pump element. 3). Please note these are recommended lube rates. Each application should be reviewed to determine optimal rate.

# Quintuplex Frac Kit Selection Guide

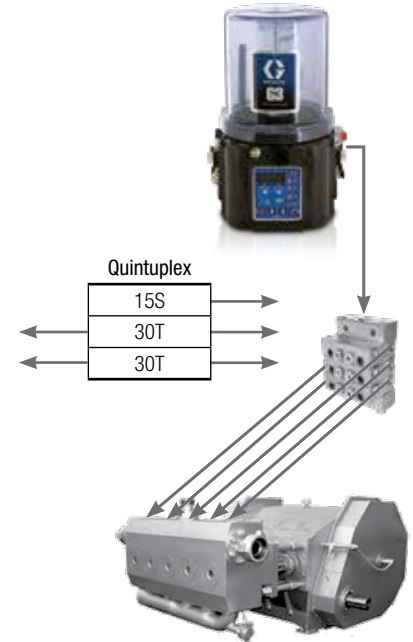
## G3 Max DMS Oil and MSP Series Progressive

Time-based with monitoring, optional RPM input count, and downloadable system monitoring.

### Ordering Information

#### G3 Max DMS Oil / MSP Series Progressive 24 VDC Quintuplex Kit

Part Number	Quantity	Description
96G188	1	G3 Max DMS pump 24 V, 4 liter reservoir, low level and 5 pin CPC
24Z962	1	Protective G3 cover with manual run and reset holes
556419	1	1/4 NPT Service tee
563160	1	2,500 psi relief
557874	1	Quick Fill Stud - 1/4 in NPT
557875	1	Dust Cap
563061	5	Check valve, double ball
555453	5	1/4 NPT street elbow
156971	5	1/4 NPT hex nipple
24G485	1	3 section MSP base plate assembly
562713	1	MSP 15S valve assembly
562725	2	MSP 30T valve assembly
563257	5	2,000 psi reset performance indicator
17L983	1	Proximity switch, cycle indicator
124300	1	Cable 16 ft for proximity switch
124301	1	Connector for proximity switch cable



### Technical Specifications

Quintuplex Pump (five pistons)						Reservoir hours of operation			
Piston Diameter	Lube rate (in <sup>3</sup> ) per hour each piston	Feeder cycles per hour	G3 Pump off time setting	G3 Pump on time (Pro)/cycle monitor time (Max)	RPM of Frac pump set point for lube cycle	2 liter	4 liter	8 liter	12 liter
2.75	0.622	20.7	3	38 seconds/1 minute	339	39	78	157	235
3	0.678	22.6	3	38 seconds/1 minute	303	36	72	144	216
3.5	0.791	26.4	2	38 seconds/1 minute	246	31	62	123	185
4	0.904	30.1	2	38 seconds/1 minute	204	27	54	108	162
4.5	1.017	33.9	2	38 seconds/1 minute	170	24	48	96	144
5	1.130	37.7	2	38 seconds/1 minute	144	22	43	86	130
5.5	1.243	41.4	1	38 seconds/1 minute	122	20	39	78	118
6	1.356	45.2	1	38 seconds/1 minute	104	18	36	72	108

Notes: 1). Lube rates based on a service factor of 12. 2). G3 pump with one pump element. 3). Please note these are recommended lube rates. Each application should be reviewed to determine optimal rate.

# Triplex Frac Kit Selection Guide

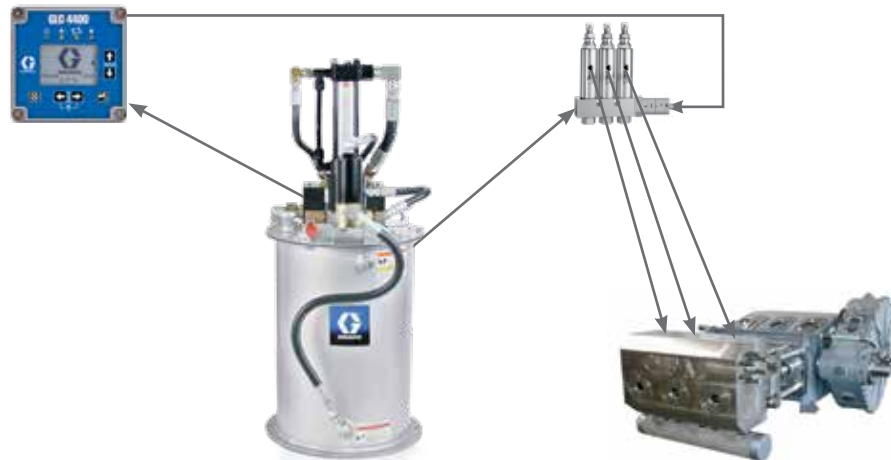
## Dyna-Star Hydraulic Grease and GL-1 Injector

Time-based with monitoring and optional RPM input count.

### Ordering Information

#### Dyna-Star Hydraulic Grease / GL-1 Injectors Triplex Kit

Part Number	Quantity	Description
247574	1	Dyna-Star hydraulic pump, 60 lb reservoir with vent valve
24B591	1	GLC-4400 Controller DC
563061	3	Check valve, double ball
555453	3	1/4 NPT street elbow
156971	3	1/4 NPT hex nipple
24K414	1	Pressure switch
114903	1	GL-1 injector 3 manifold
17L754	3	Dust cap, GL-1
124300	1	Cable 16 ft for pressure switch
124301	1	Connector for pressure switch cable
24K414	1	Pressure switch
114903	1	GL-1 injector 3 manifold
17L754	3	Clear, polycarbonate dust cap, GL-1
124300	1	Cable 16 ft for pressure switch
124301	1	Connector for pressure switch cable



### Technical Specifications

Triplex Pump (three pistons) Dyna-Star and GL-1 injectors set at half .040 cubic inch

Piston Diameter	Lube rate (in <sup>3</sup> ) per hour each piston	Feeder cycles per hour	GLC-4400 Pump off time setting in minutes	GLC-4400 Pump cycle monitor time	RPM of Frac pump set point for lube cycle	Reservoir hours of operation 60 lb (27 kg)
2.75	0.340	8.5	7	2 Minutes	889	971
3	0.371	9.3	6	2 Minutes	801	890
3.5	0.433	10.8	6	2 Minutes	662	763
4	0.494	12.4	5	2 Minutes	558	668
4.5	0.556	13.9	4	2 Minutes	477	593
5	0.618	15.4	4	2 Minutes	413	534
5.5	0.680	17.0	4	2 Minutes	360	485
6	0.742	18.5	3	2 Minutes	315	445

Notes: 1). Lube rates based on a service factor of 12. 2). Please note these are recommended lube rates. Each application should be reviewed to determine optimal rate.



# Quintuplex Frac Kit Selection Guide

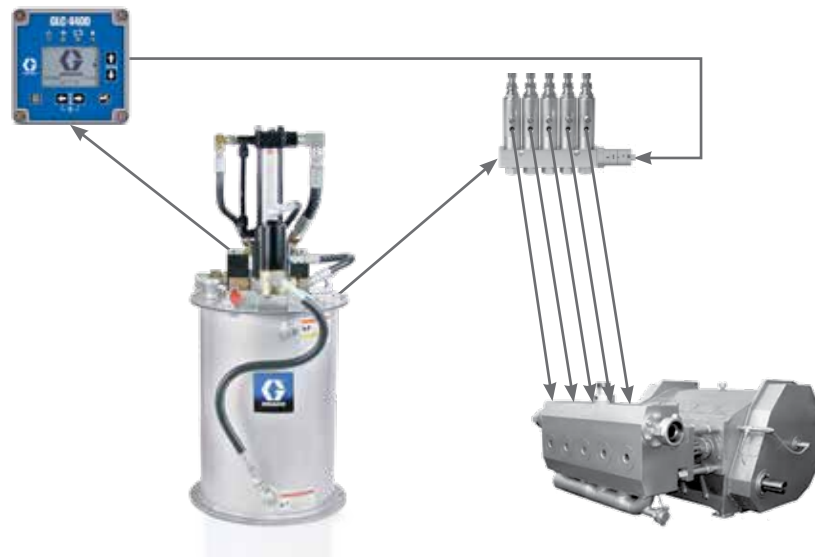
## Dyna-Star Hydraulic Grease and GL-1 Injector

Time-based with monitoring and optional RPM input count.

### Ordering Information

#### Dyna-Star Hydraulic Grease / GL-1 Injectors Quintuplex Kit

Part Number	Quantity	Description
247574	1	Dyna-Star hydraulic pump, 60 lb reservoir with vent valve
24B591	1	GLC-4400 Controller DC
563061	5	Check valve, double ball
555453	5	1/4 NPT street elbow
156971	5	1/4 NPT hex nipple
24K414	1	Pressure switch
114905	1	GL-1 injector 5 manifold
17L754	5	Clear, polycarbonate dust cap, GL-1
124300	1	Cable 16 ft for pressure switch
124301	1	Connector for pressure switch cable



### Technical Specifications

Quintuplex Pump (five pistons) Dyna-Star and GL-1 injectors set at half .040 cubic inch

Piston Diameter	Lube rate (in <sup>3</sup> ) per hour each piston	Feeder cycles per hour	GLC-4400 Pump off time setting in minutes	GLC-4400 Pump cycle monitor time	RPM of Frac pump set point for lube cycle	Reservoir hours of operation 60 lb (27 kg)
2.75	0.340	8.5	7	2 Minutes	871	971
3	0.371	9.3	6	2 Minutes	783	890
3.55	0.439	11.0	5	2 Minutes	633	752
4	0.494	12.4	5	2 Minutes	540	668
4.5	0.556	13.9	4	2 Minutes	459	593
5	0.618	15.4	4	2 Minutes	395	534
5.5	0.680	17.0	4	2 Minutes	342	485
6	0.742	18.5	3	2 Minutes	297	445

Notes: 1). Lube rates based on a service factor of 12. 2). Please note these are recommended lube rates. Each application should be reviewed to determine optimal rate.

# Triplex Frac Kit Selection Guide

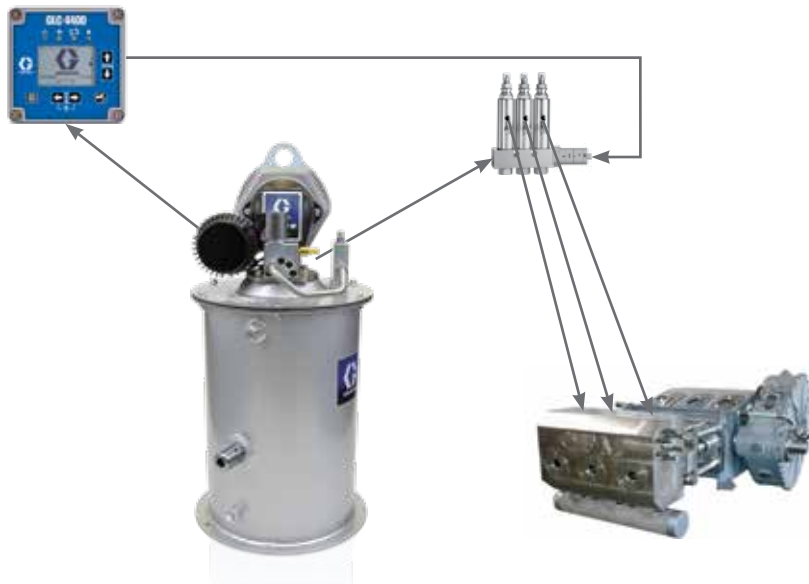
## 24 VDC Electric Dyna-Star Grease and GL-1 Injector

Time-based with monitoring and optional RPM input count.

### Ordering Information

### Electric Dyna-Star Grease / GL-1 Injectors Triplex Kit

Part Number	Quantity	Description
77X202	1	HP EDS pump, 60 lb reservoir, vent valve, tube-in-tube, auto-fill shutoff, low level signal
77X546	1	EDS pump power cable
77X542	1	Remote fill manifold
24B591	1	GLC-4400 controller DC
563061	3	Check valve, double ball
555453	3	1/4 NPT street elbow
156971	3	1/4 NPT hex nipple
24K414	1	Pressure switch
114903	1	GL-1 injector 3 manifold
17L754	3	Clear, polycarbonate dust cap, GL-1
124300	1	Cable 16 ft for pressure switch
124301	1	Connector for pressure switch cable



### Technical Specifications

Triplex Pump (three pistons) Dyna-Star and GL-1 injectors set at half .040 cubic inch

Piston Diameter	Lube rate (in <sup>3</sup> ) per hour each piston	Feeder cycles per hour	GLC-4400 Pump off time setting in minutes	GLC-4400 Pump cycle monitor time	RPM of Frac pump set point for lube cycle	Reservoir hours of operation 60 lb (27 kg)
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5.5	0.680	17.0	4	2 Minutes	360	485
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Notes: 1). Lube rates based on a service factor of 12. 2). Please note these are recommended lube rates. Each application should be reviewed to determine optimal rate.

# Quintuplex Frac Kit Selection Guide

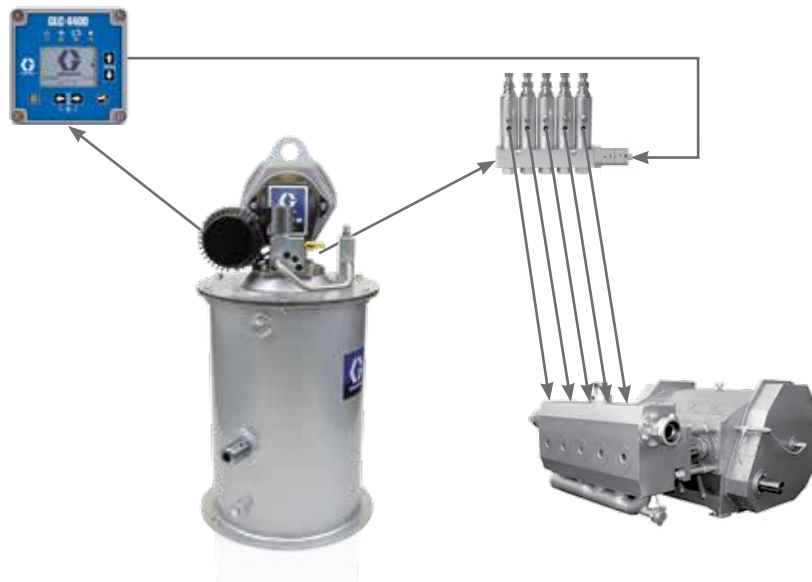
## 24 VDC Electric Dyna-Star Grease and GL-1 Injector

Time-based with monitoring and optional RPM input count.

### Ordering Information

#### Electric Dyna-Star Grease / GL-1 Injectors Quintuplex Kit

Part Number	Quantity	Description
77X202	1	HP EDS pump, 60 lb reservoir, vent valve, tube-in-tube, auto-fill shutoff, low level signal
77X546	1	EDS pump power cable
77X542	1	Remote fill manifold
24B591	1	GLC-4400 controller DC
563061	3	Check valve, double ball
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156971	3	1/4 NPT hex nipple
24K414	1	Pressure switch
114905	1	GL-1 injector 5 manifold
17L754	5	Clear, polycarbonate dust cap, GL-1
124300	1	Cable 16 ft for pressure switch
124301	1	Connector for pressure switch cable



### Technical Specifications

Quintuplex Pump (five pistons) Dyna-Star and GL-1 injectors set at half .040 cubic inch

Piston Diameter	Lube rate (in <sup>3</sup> ) per hour each piston	Feeder cycles per hour	GLC-4400 Pump off time setting in minutes	GLC-4400 Pump cycle monitor time	RPM of Frac pump set point for lube cycle	Reservoir hours of operation 60 lb (27 kg)
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Notes: 1). Lube rates based on a service factor of 12. 2). Please note these are recommended lube rates. Each application should be reviewed to determine optimal rate.

# Frac Kit Selection Guide

## Accessories / Frac Pump Hose and Fitting Kits

### Ordering Information

#### Accessories

Part Number	Description	Note	Order Quantity	
			Triplex	Quintuplex
563176	Performance indicator – standard relief to atmosphere	Use with the Pro or Max Pump Kit	3	5
563261	Performance indicator – premium resettable	Use with the Max Pump Kit	3	5
563061	Double ball soft seat check valve	Used on all pump packages	3	5
563251	LED cycle indicator	Used on all pump packages	1	1
125910	L-shaped pump mounting bracket	Used on all pump packages	1	1
571162	Manual hand pump used with grease cartridges	Used on all pump packages	1	1
247886	Heavy duty hand pump – 35 pound / 5 gallon pail	Fits the quick fill stud included in the pump package	1	1
77X542	Remote fill port manifold with vent	Used on all pump packages	1	1
121474	Female coupler	Used on all pump packages	1	1
571286	4 liter auto-fill shutoff conversion kit	Used on all pump packages	1	1
571287	8 liter auto-fill shutoff conversion kit	Used on all pump packages	1	1
563507	Filter, in-line 149 micron, grease	Used on all grease pump packages	1	1
563508	Filter, in-line 40 micron, oil	Used on all oil pump packages	1	1
17J939	Proximity switch for RPM count	Use with the Max Pump Kit	1	1
124333	Cable for RPM count	Use with the Max Pump Kit	2	2
557352	5,000 psi pressure gauge	Used on all pump packages	1	1



563176



563251



77X542



121474

#### Frac Pump Hose and Fitting Kits

Includes Lube Point Check Valves

Part Number	Description	Order Quantity	
		Triplex	Quintuplex
556762	#4 JIC, SAE 7/16-20 male x 1/4 in NPT male, straight fitting	4	6
556764	#4 JIC SAE 7/16-20 male x 1/4 in NPT male, elbow fitting	4	6
555749	#4 JIC SAE 7/16-20 male x 1/8 in NPT male, straight fitting	3	5
556773	#4 female JIC 37° swivel, 1/4 in ID hose, field-attachable	8	12
556284	1/4 in ID hose SAE 100R7 construction, 2,750 psi working pressure	1	1
560530	1/8 NPT male x 1/4 NPT female adapter	3	5
555453	1/4 NPT male x 1/4 NPT male adapter	3	5
563061	Double-ball check valve	3	5

571287



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