

Air Oil

Air Oil Series Valves

Features and Benefits

A Graco exclusive design! The Air Oil solution that detects air line or oil line faults in your system. Series progressive monitoring ensures your critical bearings are lubricated properly.

- Convenient manifold design mounts directly to the face of standard Graco series progressive divider valve assembly
- Check valve design prevents oil from being forced into the air system if lube lines get crushed or bearings get blocked
- Air combines with the oil after the fluid outlet check, preventing air from backing up into your source oil system
- Complete kits include manifold, air sensor, and check valves for easy installation

Typical Applications

- Steel mills, pulp and paper processing, high temperature and dirty environments

Typical Fluids Handled

- Oil

Technical Specifications

Material..... Aluminum
 Minimum Air Pressure..... 45 psi (3.1 bar)
 Maximum Air Pressure 250 psi (17 bar)
 Output..... 3, 4, 5 or 6 Section Divider Valve Assemblies

Ordering Information

A0 Series Divider Valves	
24B237	Air/oil manifold assembly, 3-section
24B239	Air/oil manifold assembly, 4-section
24B240	Air/oil manifold assembly, 5-section
24B241	Air/oil manifold assembly, 6-section
24J814	Air/oil manifold assembly, 3-section without air sensor
24J815	Air/oil manifold assembly, 4-section without air sensor
24J816	Air/oil manifold assembly, 5-section without air sensor
24J817	Air/oil manifold assembly, 6-section without air sensor



24B240

Shown installed on MSP divider valve assembly

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High Speed Spindl-Gard® Systems

Features and Benefits

The High-Speed Spindl-Gard® System is a highly efficient, cost-effective method for lubricating spindle bearings, using air/oil technology. Components include an electric motor driven pump, with 3 liter (0.8 gallon) plastic reservoir, air/oil dispensing module, and an optional programmable timer/controller (AC models only).

- Advanced air/oil concept provides highly effective lubrication, reduces oil consumption, lowers operating temperature and protects spindle bearings from coolant ingress and minimizes thermal distortion resulting in improved production accuracy
- Thin oil film dramatically reduces viscous shear and hydrodynamic drag on the bearing, resulting in reduced friction and lower energy consumption
- Airflow adjustment for each bearing point provides better control
- Oil output selectable for each bearing point helps to customize the system
- Eliminates the clean up and environmental problems that result from mist systems



Typical Applications

- Spindle Bearings

Typical Fluids Handled

- Oils up to ISO 460 (2,500 SUS)

Technical Specifications

Pump Output	8.5 in ³ /min (140 cm ³ /min)
Motor Power	1/8 HP
Motor Voltage and Current Consumption	115 ± 10% VAC, 50/60 Hz, 1 phase, 3.8 A in-rush, 1.8 A running, 230 ± 10% VAC, 50/60 Hz, 1 phase, 1.9A in-rush, 0.94A running, 24VDC, 60 w
Pressure Relief Setting	350 psi (34 bar)
Output Block Regulator	30 to 60 psi (2.07 to 4.14 bar)
Output Block Regulator	30 to 60 psi (2.07 to 4.14 bar)
Seals.....	Buna-N O-Rings
Plastic Reservoir	0.8 gal (3 liters)
Low-Level.....	N.C. (held open), 115/230 VAC, 10 watt
Controls Options Remote (External Control or Customer PLC)	115/230 VAC, 1 ph, 50/60 Hz, 24 VDC
*AC Timer.....	115/230 VAC, 1 ph, 50/60 Hz
Work (On) Time.....	5 to 20 seconds
Pause (Off) Time	2.5 to 30 minute
Fault Output.....	(Dry Contacts), 5 amp max up to 230 VAC
Air Cleanliness.....	5 micron, 40°F (4°C) dew point
Operating Temperature	40°F to 120°F (4°C to 49°C)
Lube Output	0.0015, 0.0030 and 0.005 cu in/cycle (0.025, 0.049 and 0.082 cm ³ /cycle)
Pressure Switch Set Points	
Air (N.C.)	25 psi (1.7 bar), nonadjustable
Oil (N.O.)	320 psi (22 bar), nonadjustable
Nozzles	Tube ID/Orifice Ratio (See Figure 2)
Delivery Tube Length.....	24 in to 50 ft (0.6 m to 15.24 m)
Lubricant Filtration: It is recommended that the lubricant in any lubrication system be filtered to the minimum level recommended by the Society of Automotive Engineers (SAE) which corresponds to the ISO Standard 4460 ratings/ specifications of ISO 18/14	

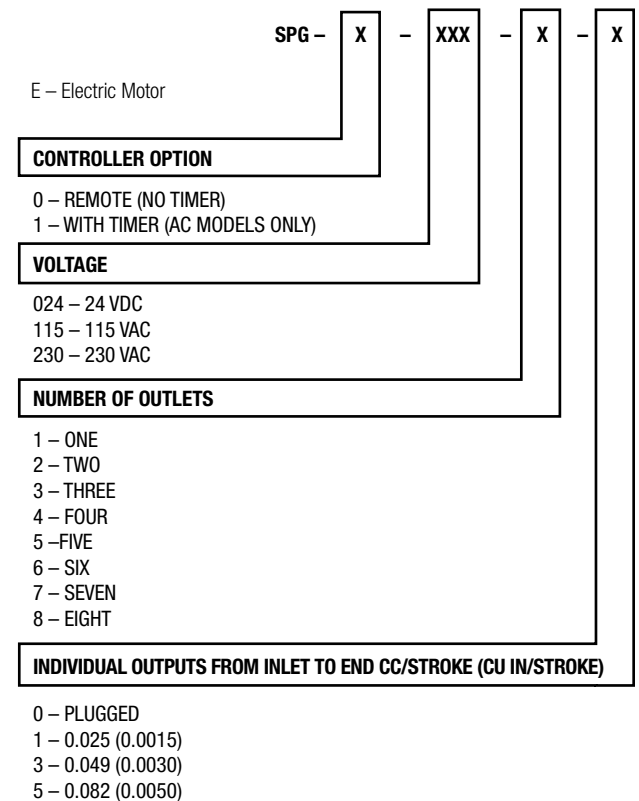
Air Oil

High Speed Spindl-Gard® Systems

Ordering Information

High Speed Spindl-Gard Systems	
24B219	SPG-E-1-115-2-1-1
24R127	SPG-E-1-115-2-3-3
24V204	SPG-E-1-115-2-5-5
25C264	SPG-E-1-115-3-1-1-1
24V531	SPG-E-1-230-5-5-5-5-5-5
258301	SPG-E-1-115-6-3-3-3-3-3-3
258347	SPG-E-1-115-6-3-3-3-1-1-3
26C261	SPG-E-1-230-8-1-1-1-1-1-1-1
564445	SPG-E-0-024-3-3-3-3
26C419	SPG-E-0-024-2-3-3
High Speed Spindl-Gard (HSSG) Blocks	
563130	0.0015 in ³ displacement
563131	0.0030 in ³ displacement
563132	0.0050 in ³ displacement
High Speed Spindl-Gard (HSSG) Components	
563489	10 micron oil filter element
561031	Inlet block
561032	Outlet block
Spindl-Gard Nozzles	
563127	Nozzle tube adapter
560478	10 in nozzle tube - 2 outlet, 180°
560477	10 in nozzle tube - 1 outlet, 90°
562994	End outlet nozzle
563128	Spray nozzle assembly for headwalls over 1 in thick
Spindl-Gard Accessories	
563048	Injection point check valve, 1/8 in NPTF
563049	Discharge point check valve, 1/8 in NPTF
564337	Relief valve, 2 psi
563091	In-line lube filter, 2 micron, 1/4 in NPSF (FM) to 1/4 in NPTF (M)
557134	Replacement filter element - in-line lube filter
564348	Air flow switch with lights
563129	SG air/oil mixing tee
High Speed Spindl-Gard (HSSG) Tie Rod Kits - Nuts and Washers included	
564443	Tie rod kit - 1 air/oil lube point
563940	Tie rod kit - 2 air/oil lube point
564444	Tie rod kit - 3 air/oil lube point
15U854	Tie rod kit - 4 air/oil lube point
15U855	Tie rod kit - 5 air/oil lube point
563941	Tie rod kit - 6 air/oil lube point
563942	Tie rod kit - 7 air/oil lube point
15U856	Tie rod kit - 8 air/oil lube point

Spindl-Gard Ordering Menu Code



General Accessories

Trabon® Spra-Control™ Valve

Features and Benefits

- Conserves air—air required only during spray interval
- Versatile—can be used with any centralized lube system or mechanical oiler and will handle grease or oil
- External mix nozzle purges itself and prevents clogging
- Saves lubricant by spraying smaller amounts at frequent intervals, provides better film, with no waste

Typical Fluids Handled

- Oil - minimum of 100 SUS at 100°F
- Grease - NLGI #1 at any temperature, NLGI #2 at 32°F or above

Technical Specifications

Minimum Air Pressure	20 psi (1.4 bar)
Maximum Air Pressure	150 psi 10.3 bar)
Spray Patterns	4 in or 8 in (10.2 cm or 20.3 cm)

Ordering Information

Gear Spray Valves	
563275	Air-lube control valve and nozzle assembly – 4 in spray diameter, normal
563276	Air-lube control valve and nozzle assembly – 8 in spray diameter, wide



Ball mills run at peak performance with Graco's Air-Lube Spra-Control Valve

General Accessories

Filters and Brushes

Ordering Information

Inlet and In-Line Oil Filters – Non-Replaceable Elements	
563091	MSP Standard Inlet 10 micron Oil Filter, NPT
563094	MSP Standard Zero Leak Shunt Valve Inlet 90 micron Oil Filter, NPT
563074	MSP Standard Zero Leak Inlet 90 micron Oil Filter/Restrictor, NPT
563073	MSP Zero Leak Shunt Valve Inlet 90 micron Oil Filter, SAE
563480	MSP Modular Zero Leak Valve 25 micron Oil Filter
Single and Dual Cartridge Filter and Replacement Filter Spare Parts	
557803	10 micron Replacement Filter Element – 564004, 183-000-141
557806	10 micron Replacement Filter Element – 183-000-071, 183-000-201
557804	25 micron Replacement Filter Element – 562883, 183-000-051, 183-000-151
557807	25 micron Replacement Filter Element – 183-000-081, 183-000-121, 183-000-211
557811	1-2 micron Extra-Long Replacement Filter Cartridge
Spin-On Oil Filters	
563092	10 micron Spin-On Filter Assembly, NPT, Internal 25 psi (1.7 bar) Bypass
563095	10 micron Spin-On Filter Assembly, NPT, External 150 psi (10.3 bar) Relief
564343	10 micron Remote Mount Spin-On Filter Assembly, NPT, Fill Stud
563096	25 micron Spin-On Filter Assembly, NPT, External 150 psi (10.3 bar) Relief
563100	25 micron Spin-On Filter Assembly, ISO 6149, External 150 psi (10.3 bar) Relief
563093	10 micron Replacement Filter Element - 563092, 563095, 564343
563097	25 micron Replacement Filter Element - 563096, 563100
In-Line Oil Filters – High-Pressure	
563511	10 micron In-Line Oil Filter, NPT
563512	25 micron In-Line Oil Filter, NPT
563513	10 micron In-Line Oil Filter, SAE
563514	25 micron In-Line Oil Filter, SAE
563516	10 micron In-Line Oil Filter, BSPP (ISO 1179)
563515	25 micron In-Line Oil Filter, BSPP (ISO 1179)
563509	10 micron Replacement Filter Element – 563511, 563513, 563516
563510	25 micron Replacement Filter Element – 563512, 563514, 563515
In-Line Oil/Grease Filters – High-Pressure	
563508	44 micron, 325 Mesh In-Line Block Strainer (NPT)
563507	149 micron, 100 Mesh In-Line Block Strainer (NPT)
564406	149 micron, 100 Mesh In-Line Block Strainer, BSPP (ISO 1179)
557701	44 micron Replacement Filter Element – 563508
557700	149 micron Replacement Filter Element – 563507, 564406
In-Line Oil Filters – Low-Pressure, Thrif-T Luber Orifice System	
564053	Thrif-T Luber (TLLF-00) 25 micron In-Line Oil Filter, NPT
557132	Replacement Filter Element – 564053

Oil/Grease Strainers	
563103	44 micron, 325 Mesh Fill-Point Strainer
563102	149 micron, 100 Mesh Fill-Point Strainer
563145	350 micron, 40 Mesh Fill-Point Strainer
557154	44 micron Replacement Filter Element - 563103
557153	149 micron Replacement Filter Element - 563102
557779	350 micron Replacement Filter Element - 563145
Single Cartridge Type Filters w/Electrical and Visual Indicator	
564003	10 micron Filter, BSPP Thread
564004	20 micron Filter, BSPP Thread
564005	10 micron Filter, ISO 6149 Thread
564006	20 micron Filter, ISO 6149 Thread
562880	10 micron Filter, SAE ISO 11026 Thread
564007	20 micron Filter, SAE ISO 11926 Thread F865
Single Cartridge Type Filters w/Visual Indicator	
562881	10 micron Filter, BSPP Thread
564008	20 micron Filter, BSPP Thread
564009	10 micron Filter, ISO 6149 Thread
564010	20 micron Filter, ISO 6149 Thread
562882	10 micron Filter, SAE ISO 11026 Thread
562883	20 micron Filter, SAE ISO 11926 Thread F865
Brushes/Applicators	
124089	Brush, pighair, 1/4 FNPT x 3/4
124090	Brush, Oil, 1 x 1.5
124091	Brush, Oil, 1 x 2.4
124092	Brush, Oil, 1 x 4
124114	Brush, Nylon, 1/8 MNPT x 5/8
124115	Brush, Nylon, 1/8 MNPT x 2



124089



124090