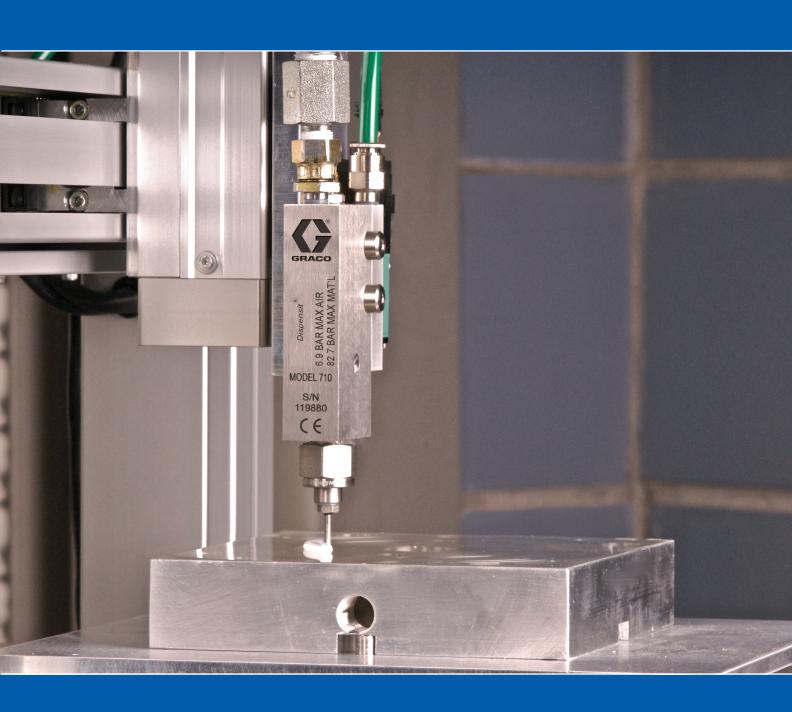
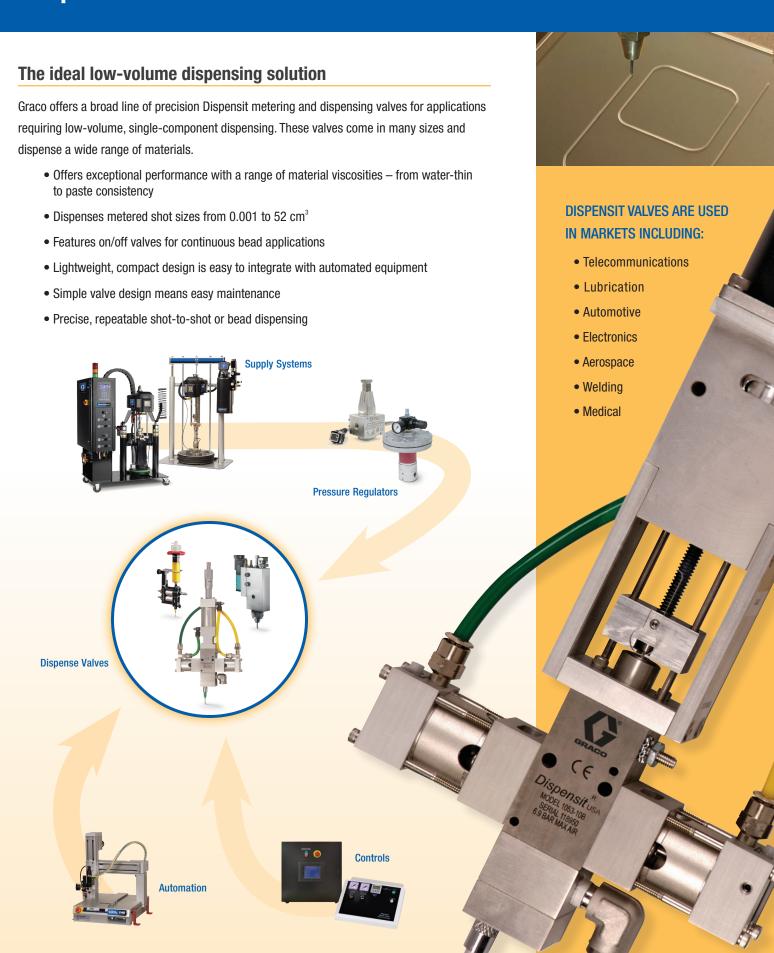


Dispensit®

Single-Component Metering and Dispensing Valves



Dispensit Valves. Precise. Accurate. Reliable.

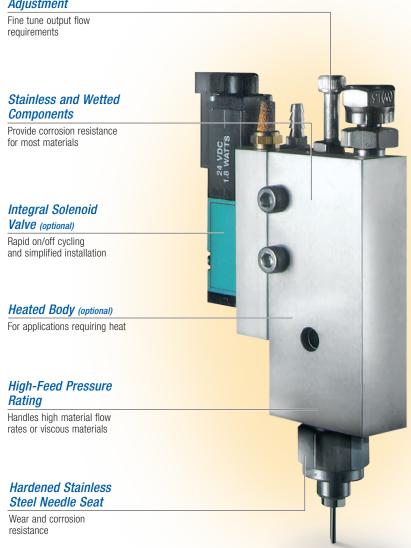


2

On/Off Valves

- Dispenses a range of material viscosities and flow rates
- Offers continuous bead dispensing or rapid on/off cycling without reload time
- High-feed pressure-rated needle valve design provides higher flow rates even for narrow bead profiles 1
- Snuff-back versions for precise, consistent dispensing₂
- Simple on/off control via PLC for integrated solenoid versions or versions for external pneumatic control

Needle Backstroke Adjustment

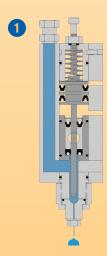


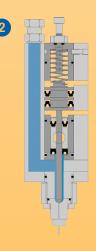
On/Off Valve Models:

710 and 715 (710 shown)

HOW IT WORKS

Material flow starts • when the needle retracts from its seat and stops • when the needle re-seats.





1. 710 only 2. 715 only

Note: 710 shown

Pinch Tube Valves

- For low to medium viscosity materials that are abrasive, corrosive or cure quickly
- Ideal for applications requiring precise, high-speed, dot-to-dot dispensing
- Wetted parts of pinch tubes and syringes are replaceable providing fast clean-up to minimize need for solvent purging or disposal
- Various pinch tube material configurations are available for material compatibility and varying dispense volumes
- Remote or syringe feed configurations provide positive feed pressure using regulated air supply

Syringe or Remote Material Supply

Configurations minimize material waste and simplify set-up and operation

Compact Size

Easy integration into automation equipment

Micrometer Adjustment

Accurate and adjustable shot size

Disposable Wetted **Components**

Easy maintenance with no solvents required

Positive Displacement Pinch Tube

Technology provides precise dot-to-dot accuracy as well as varied material compatibility

Dispenses

Water-thin to paste consistency materials

Pinch Tube Valve Models:

702-20, 792-20, 802-20, 802-30, 902-20 (802-20 shown)

HOW IT WORKS

Fill Mode 1



The resilient dispense tube is pinched by the bottom piston, closing the material path to the dispense needle.

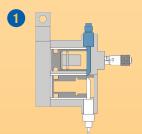
Dispense Ready 2

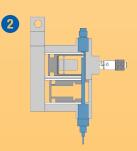
The top piston moves forward to stop the material supply from the reservoir and the bottom piston releases the dispense tube.

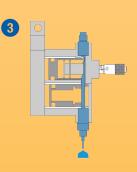
Dispense Mode 3



The top dispense piston moves forward until stopped by the micrometer stroke adjustment, squeezing a precise amount of material out of the dispense tube.



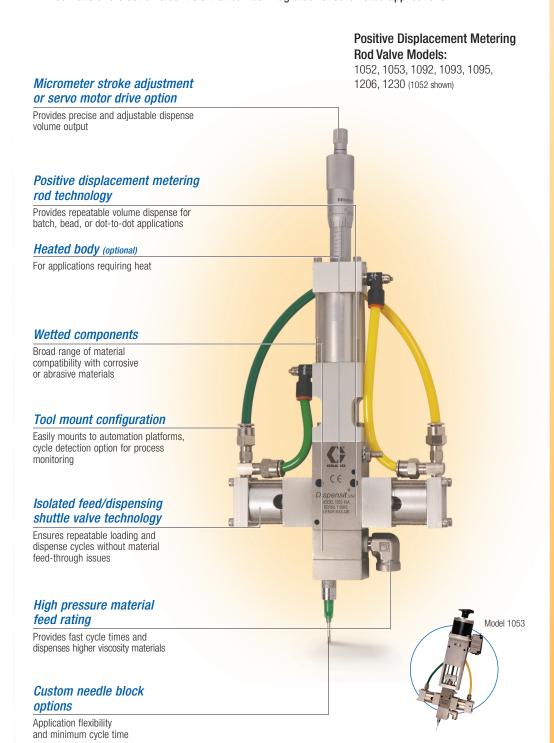




Note: 802-20 shown

Positive Displacement Metering Rod Valves

- For low to high viscosity materials with various wetted component configurations for abrasive filled, or corrosive materials
- Pneumatically-controlled valves with micrometer adjustable dispense volumes for accurate, repeatable shot dispensing 3
- Servo-driven valves for programmable, precise shot or bead dispensing
- High-feed pressure ratings for minimal reload times and fast cycle rates
- Pneumatic and electronic controls that can be integrated for automated applications



HOW IT WORKS

Fill Mode 1



The shuttle spool is positioned to open the inlet port while isolating the outlet port. Material enters the metering chamber as the metering rod retracts.

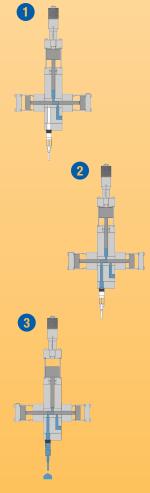
Dispense Ready 2

The spool is positioned to connect the metering chamber to the outlet port providing a material flow path to the dispense needle(s). The shuttle valve also obstructs the material flow path from the inlet port.

Dispense Mode 3



The metering rod is extended into the metering chamber, to displace the material. Total volume dispensed is a function of rod size and shot size setting from micrometer stroke adjustment.



Note: 1052 shown

Select a Valve and Material Feed System

Compatible material feed systems are available for all valve configurations. The following charts will assist you in the valve and feed system selection process, and help you determine the best dispense valve for your application. Custom solutions are also available.

CHOOSE THE RIGHT VALVE FOR YOUR MATERIAL

Valve Type	Valve Model	Acrylics	Anaerobics	Brazing Paste	Conductive Epoxies	Cyano- Acrylates	Epoxies	Flux	Lubricants	Potting Compounds	Sealants	Silicones	Solder Cream	Solder Mask	Solvents (Mild)	Medical Reagents	Circuitry Inks	RTVs	UV Curable	Urethanes	Hot Melt
On/Off Valves	710				•		•		•	•	•	•			•			•			
	715				•		•		•	•	•	•			•			•			
Pinch Tube Valves	702-20*		•	•	•		•		•	•			•	•							
	792-20*			•	•	•	•		•	•	•	•									
	802-20		•	•	•	•	•		•		•	•	•	•		•		•	•		
	802-30			•	•		•		•				•	•					•		
	902-20		•	•	•		•	•	•				•	•							
Positive Displacement	1052	•			•		•		•	•	•	•			•	•		•	•	•	
Metering Rod Valves	1053	•			•		•		•	•	•	•			•	•		•	•	•	*
	1092	•			•		•		•	•	•	•			•	•		•	•	•	
	1093	•			•		•		•	•	•	•			•	•		•	•	•	
	1095	•			•		•		•	•	•	•						•		•	
	1206				•		•		•	•	•	•			•	•			•		
	1230		•		•		•	•		•			•		•	•			•		

[★] Micro-Melt version of 1053 Valve is available. Contact Graco Application Engineering for details.

CHOOSE THE RIGHT FEED SYSTEM FOR YOUR VALVE

Valve Type	Valve Model	Cartridge Feed (CF 200)	Pressure Tank Feed	Dynamite	Bulk Supply System	Syringe Feed	Maximum Feed Pressure
On/Off Valves	710/710S/710SH	•	•	•	•		1200 (82.7 bar)
	715	•	•	•	•		2000 (137.9 bar)
Pinch Tube Valves	702-20*	•	•	•		•	60 (4.1 bar)
	792-20*	•	•	•		•	60 (4.1 bar)
	802-20	•	•	•		•	60 (4.1 bar)
	802-30	•	•	•		•	60 (4.1 bar)
	902-20	•	•	•		•	60 (4.1 bar)
Positive Displacement	1052	•	•	•	•		1,200 (82.7 bar), 400 (27.6 bar) plastic spool versions
Metering Rod Valves	1053	•	•	•	•		1,200 (82.7 bar), 400 (27.6 bar) plastic spool versions
	1092	•	•	•	•		1,200 (82.7 bar), 400 (27.6 bar) plastic spool versions
	1093	•	•	•	•		1,200 (82.7 bar), 400 (27.6 bar) plastic spool versions
	1095	•	•	•	•		1,200 (82.7 bar), 400 (27.6 bar) plastic spool versions
	1206	•	•	•		•	100 (6.9 bar)
	1230	•	•	•			60 (4.1 bar)

*Note: 702-20 and 792-20 are on/off pinch tube valves

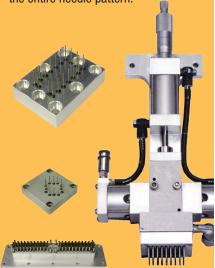
Accessories, Controllers and Automation



ACCESSORIES

CUSTOM NEEDLE BLOCKS

The Dispensit custom needle block configurations are balanced to provide a consistent volume of material over the entire needle pattern.



OTHER ACCESSORIES:

- Disposable and reusable needles
- Luer lock needles
- Syringe and receiver caps
- Material hoses
- Dispense tubes
- Seal kits
- Mounting bases

Valve Controllers

Dispensit's intuitive valve controllers, complete with a Dispensit valve, are the ideal solution to optimizing your dispensing process.

4104A DISPENSE VALVE CONTROLLER



- Controls dispense time, cycle speed, cycle sequencing, system pressure and reservoir pressure
- Works with complete line of pneumatically-operated dispensing valves
- · Electronic dispense cycle timer for optimization and repeatability
- · Panel-mounted gauges and cycle timer for simple operation
- Foot switch, automation controller, or mounted control panel initiates dispense sequence
- Automatic and purge modes for repeatable shot dispensing
- Independent regulated air supply controls for valve and material supply
- Color-coded air line connections for easy installation

SERVO/STEPPER VALVE CONTROLLER



- Provides purge timer, level control, shot size, and flow rate
- · Foot switch or automation signal input initiates the dispense cycle
- Electronically controlled touch screen for simplified operations and monitoring
- Up to seven programmable shot sizes and flow rate settings for multiple applications
- · Material level sensor notifies operator when material is low
- Programmable alarms and maintenance monitor decrease downtime

Automation and Feed Systems

Customized automation solutions with integral dispensing systems are available using Graco's experienced application engineering capabilities.

AUTOMATION SYSTEMS

C-402/C-404

Bench-top automated system



Dispensing system fully integrated with a motion platform

C-500

Contour dispensing motion platform

FEED SYSTEMS

Pressure Reservoir

0.75 gallon aluminum, 1 and 5 gallon capacity stainless steel versions for feed pressures up to 100 psi (6.9 bar)







Dynamite 190

Cartridge Retainers

and 0.10 gallon cartridges

Recommended for materials in 1 quart (1 I) or 1 gallon (3.8 l) containers with viscosities up to 600,000 centipoise and desired feed pressures up to 850 psi (60 bar)

For materials packaged in 2.5, 6, 12, 20, 32 ounce,

CF 200 or CF 200 with Dual Crossover

materials in pre-packaged 20-ounce cartridges

Recommended for abrasive or high viscosity

for feed pressures up to 200 psi (13.8 bar)







Technical Specifications

	Valve Model	Tube Material	Tube Or Rod Diameter in	Shot Range cm²	Dot Diameter in (Approximate)	Needle Gauge	Power Factor	Maximum Feed Pressure psi (bar, MPa)	Material Inlet	Material Outlet	Weight (Valve Only) lo (kg)	Dot Dispense	Continuous Bead Dispense	Metered Dispense
	Time Pressu	re Val	ves											
hill	710			Continuous		22-12		1200 (83, 8.3)	1/8 NPTF	10-32 F	1 (.45)	•	•	
3.	710S			Continuous		22-12		1200 (83, 8.3)	1/8 NPTF	10-32 F	1.25 (0.6)	•	•	
7	710SH			Continuous		22-12		1200 (83, 8.3)	1/8 NPTF	10-32 F	1.5 (.68)	•	•	
M	715/SNUFFER Standard			Continuous		AD		2000 (138, 13.8)	1/4 NPTF	1/4 NPTF	1.5 (.68)	•	•	
T T	715/SNUFFER High Flow			Continuous		AD		2000 (138, 13.8)	3/8 NPTF	1/4 NPTF	1.5 (.68)	•	•	
	Pinch Tube V	alves												
	702-20*	HU	.037	Continuous		14-23		60 (4, 0.4)	LL	LL	0.5 (.23)	•	•	
	702-20*	HU	.043	Continuous		14-23		60 (4, 0.4)	LL	LL	0.5 (.23)	•	•	
	702-20*	HU	.050	Continuous		14-23		60 (4, 0.4)	LL	LL	0.5 (.23)	•	•	
	702-20*	HU	.060	Continuous		14-23		60 (4, 0.4)	LL	LL	0.5 (.23)	•	•	
•	702-20*	HU	.066	Continuous		14-23		60 (4, 0.4)	LL	LL	0.5 (.23)	•	•	
	702-20*	HU	.080	Continuous		14-23		60 (4, 0.4)	LL	LL	0.5 (.23)	•	•	
	702-20*	HU	.100	Continuous		14-23		60 (4, 0.4)	LL	LL	0.5 (.23)	•	•	
	702-20*	PP	.068	Continuous		14-23		60 (4, 0.4)	LL	LL	0.5 (.23)	•	•	
	702-20*	GP	.100	Continuous		14-23		60 (4, 0.4)	LL	LL	0.5 (.23)	•	•	
	702-20*	Р	.100	Continuous		14-23		60 (4, 0.4)	LL	LL	0.5 (.23)	•	•	
	792-20*	HP	.170	Continuous		8		60 (4, 0.4)		NB	1.5 (.68)	•	•	
	792-20*	HP	.250	Continuous		.25 in OD		60 (4, 0.4)	1/8 or 1/4	NB	1.5 (.68)	•	•	
	792-20*	PE	.188	Continuous		8		60 (4, 0.4)	1/8 or 1/4 NPTM	NB	1.5 (.68)	•	•	
11-	792-20*	PE	.250	Continuous		.25 in OD		60 (4, 0.4)		NB	1.5 (.68)	•	•	

^{*} On/Off Pinch Tube Valves

	Valve Model	Tube Material	Tube Or Rod Diameter in	Shot Range cm²	Dot Diameter in (Approximate)	Needle Gauge	Power Factor	Maximum Feed Pressure psi (bar, MPa)	Material Inlet	Material Outlet	Weight (Valve Only) (lb. kg)	Dot Dispense	Continuous Bead Dispense	Metered Dispense
	Pinch Tube V	alves	(Continued))										
	802-20	HU	.037	.00130053	.090	23,22,20		60 (4, 0.4)	LL	LL	0.62 (.28)	•		•
	802-20	HU	.043	.00170071	.100	19		60 (4, 0.4)	LL	LL	0.62 (.28)	•		•
<u>-</u>	802-20	HU	.050	.00290117	.119	18		60 (4, 0.4)	LL	LL	0.62 (.28)	•		•
T	802-20	HU	.060	.00340139	.129	16		60 (4, 0.4)	LL	LL	0.62 (.28)	•		•
	802-20	HU	.066	.00410169	.135	16		60 (4, 0.4)	LL	LL	0.62 (.28)	•		•
	802-20	HU	.080	.00620249	.153	16,14		60 (4, 0.4)	LL	LL	0.62 (.28)	•		•
	802-20	HU	.100	.00940388	.177	14,12		60 (4, 0.4)	LL	LL	0.62 (.28)	•		•
1	802-20	PP	.068	.00430173	.136	16		60 (4, 0.4)	LL	LL	0.62 (.28)	•		•
	802-20	GP	.100	.00940388	.177	14,12		60 (4, 0.4)	LL	LL	0.62 (.28)	•		•
	802-20	U	.062	.00350141	.127	16		60 (4, 0.4)	LL	LL	0.62 (.28)	•		•
	802-30	HU	.015	.00020005		27		60 (4, 0.4)	LL	Flange Hub	0.5 (.23)	•		•
	802-30	HU	.022	.00030012		24		60 (4, 0.4)	LL	Flange Hub	0.5 (.23)	•		•
4	802-30	HU	.028	.00050020		22		60 (4, 0.4)	LL	Flange Hub	0.5 (.23)	•		•
	802-30	HU	.037	.00090035		20		60 (4, 0.4)	LL	Flange Hub	0.5 (.23)	•		•
	802-30	HU	.043	.00110048		19		60 (4, 0.4)	LL	Flange Hub	0.5 (.23)	•		•
	802-30	HU	.050	.00190078		18		60 (4, 0.4)	LL	Flange Hub	0.5 (.23)	•		•
	802-30	HU	.060	.00230093		17		60 (4, 0.4)	LL	Flange Hub	0.5 (.23)	•		•
	802-30	HU	.066	.00270113		16		60 (4, 0.4)	LL	Flange Hub	0.5 (.23)	•		•
	902-20	HU	.100	.01880776	.177	14-12		60 (4, 0.4)	LL	LL	1.5 (.68)	•		•
	902-20	HU	.125	.02941213	.205	14-10		60 (4, 0.4)	LL	LL	1.5 (.68)	•		•
100005	902-20	НР	.170	.05452244	.252	8		60 (4, 0.4)		NB	1.5 (.68)	•		•
	902-20	HP	.250	.11174854	.326	.25 in OD		60 (4, 0.4)	1/8 or 1/4 NPTM	NB	1.5 (.68)	•		•
	902-20	U	.250	.11174854	.326	.25 in OD		60 (4, 0.4)		NB	1.5 (.68)	•		•

SPECI	FICAT	ION LEGEND			
Α	=	Application Dependent	NB	=	Needle Block
GP	=	Green Polyethelene	PE	=	Polyethelene
HP	=	Hytrel PVC	PP	=	Pink Polyethelene
HU	=	Hytrel Urethane	U	=	Urethane
LL	=	Luer Lock	P	=	Braided Polyethelene
OD	=	Outside Diameter			

Technical Specifications

	Valve Model	Tube Material	Tube Or Rod Diameter in	Shot Range cm³	Dot Diameter in (Approximate)	Needle Gauge	Power Factor	Maximum Feed Pressure	Material Inlet	Material Outlet	Weight (Valve Only) Ib (kg)	Dot Dispense	Continuous Bead Dispense	Metered Dispense
	Positive Displ	lacem	ent Met	ering Rod Valv	ves									
1	1052-10A-2		.062	.002050	.078228	25-22	260:1	400 (28, 2.8) 1200* (83, 8.3)	1/8 NPTF	LL&NB	2.5 (1.1)	•		•
	1052-10A-2		.125	.006200	.112362	24-18	65:1	400 (28, 2.8) 1200* (83, 8.3)	1/8 NPTF	LL&NB	2.5 (1.1)	•		•
	1052-10A-2		.188	.013452	.145476	20-18	28:1	400 (28, 2.8) 1200* (83, 8.3)	1/8 NPTF	LL&NB	2.5 (1.1)	•		•
h	1052-10A-2		.250	.024804	.178576	18-14	16:1	400 (28, 2.8) 1200* (83, 8.3)	1/8 NPTF	LL&NB	2.5 (1.1)	•		•
	1052-10A-2		.375	.054-1.800	.234754	14-12	7:1	400 (28, 2.8) 1200* (83, 8.3)	1/8 NPTF	LL&NB	2.5 (1.1)	•		•
	1053-10B-2		.062	.002050		25-22		400 (28, 2.8) 1200* (83, 8.3)	1/8 NPTF	LL&NB	3.0 (1.6)**	•	•	•
	1053-10B-2		.125	.006200		24-18		400 (28, 2.8) 1200* (83, 8.3)	1/8 NPTF	LL&NB	3.0 (1.6)**	•	•	•
	1053-10B-2		.188	.013452		20-18		400 (28, 2.8) 1200* (83, 8.3)	1/8 NPTF	LL&NB	3.0 (1.6)**	•	•	•
	1053-10B-2		.250	.024804		18-14		400 (28, 2.8) 1200* (83, 8.3)	1/8 NPTF	LL&NB	3.0 (1.6)**	•	•	•
	1053-10B-2		.375	.054-1.800		14-12		400 (28, 2.8) 1200* (83, 8.3)	1/8 NPTF	LL&NB	3.0 (1.6)**	•	•	•
	1053-10B-4		.375	.054-3.600		14-12		400 (28, 2.8) 1200* (83, 8.3)	1/8 NPTF	LL&NB	4.8 (2.2)**	•	•	•
	1053-10C-4		.062	.002100		25-22		400 (28, 2.8) 1200* (83, 8.3)	1/4 NPTF	#10-32 F	4.8 (2.2)**	•	•	•
	1053-10C-4		.125	.006400		24-18		400 (28, 2.8) 1200* (83, 8.3)	1/4 NPTF	#10-32 F	4.8 (2.2)**	•	•	•
	1053-10C-4		.188	.013904		20-18		400 (28, 2.8) 1200* (83, 8.3)	1/4 NPTF	#10-32 F	4.8 (2.2)**	•	•	•
	1053-10C-4		.250	.024-1.608		18-14		400 (28, 2.8) 1200* (83, 8.3)	1/4 NPTF	#10-32 F	4.8 (2.2)**	•	•	•
	1053-10C-4		.375	.054-3.600		14-12		400 (28, 2.8) 1200* (83, 8.3)	1/4 NPTF	#10-32 F	4.8 (2.2)**	•	•	•
	1092-10A-2		.250	.024804			36:1	400 (28, 2.8) 1200* (83, 8.3)	1/4 NPTF	LL&NB	7.5 (3.4)	•		•
	1092-10A-2		.375	.054-1.800			16:1	400 (28, 2.8) 1200* (83, 8.3)	1/4 NPTF	LL&NB	7.5 (3.4)	•		•
	1092-10A-2		.500	.090-3.200			9:1	400 (28, 2.8) 1200* (83, 8.3)	1/4 NPTF	LL&NB	7.5 (3.4)	•		•
	1092-10A-4		.375	.054-3.600			16:1	400 (28, 2.8) 1200* (83, 8.3)	1/4 NPTF	LL&NB	8.5 (3.9)	•		•
	1092-10A-4		.500	.090-6.400			9:1	400 (28, 2.8) 1200* (83, 8.3)	1/4 NPTF	LL&NB	8.5 (3.9)	•		•
	1092-10A-4		.625	.151-10.055			5.76:1	400 (28, 2.8) 1200* (83, 8.3)	1/4 NPTF	LL&NB	8.5 (3.9)	•		•
	1092-10A-4		.750	.217-14.479			4:1	400 (28, 2.8) 1200* (83, 8.3)	1/4 NPTF	LL&NB	8.5 (3.9)	•		•
	1092-10A-6		.500	.090-9.6			9:1	400 (28, 2.8) 1200* (83, 8.3)	1/4 NPTF	LL&NB	9.5 (4.3)	•		٠

^{*10}xx Series valves' maximum pressure material inlet pressure is 400 psi; ** Excludes motor; Note: 1053-10C is suitable for highly compressible materials; single needle only

	Valve Model	Tube Material	Tube Or Rod Diameter in	Shot Range om³	Dot Diameter in (Approximate)	Needle Gauge	Power Factor	Maximum Feed Pressure psi (bar MPa)	Material Inlet	Material Outlet	Weight (Valve Only) lb (kg)	Dot Dispense	Continuous Bead Dispense	Metered Dispense
	Positive Disp	lacen	nent Me	tering Rod Val	ves (Continued)									
	1093-10A-4		.500	.090-6.400				400 (28, 2.8) 1200* (83, 8.3)	1/4 NPTF	LL&NB	9.5 (4.3)**	•	•	•
	1093-10A-4		.625	.151-10.055				400 (28, 2.8) 1200* (83, 8.3)	1/4 NPTF	LL&NB	9.5 (4.3)**	•	•	•
	1093-10A-4		.750	.217-14.479				400 (28, 2.8) 1200* (83, 8.3)	1/4 NPTF	LL&NB	9.5 (4.3)**	•	•	•
	1095-10A-8		.188	.4-1.8			298:1	400 (28, 2.8) 1200* (83, 8.3)	1/4 NPTF	1/4 NPTF	52 (23.6)	•	•	•
LL.	1095-10A-8		.250	.6-3.2			169:1	400 (28, 2.8) 1200* (83, 8.3)	1/4 NPTF	1/4 NPTF	52 (23.6)	•	•	•
	1095-10A-8		.375	1.4-7.2			75:1	400 (28, 2.8) 1200* (83, 8.3)	1/4 NPTF	1/4 NPTF	52 (23.6)	•	•	•
	1095-10A-8		.500	2.6-12.8			42:1	400 (28, 2.8) 1200* (83, 8.3)	1/4 NPTF	1/4 NPTF	52 (23.6)	•	•	•
	1095-10A-8		.625	4.0-20.0			64:1	400 (28, 2.8) 1200* (83, 8.3)	1/4 NPTF	1/4 NPTF	52 (23.6)	•	•	•
	1095-10A-8		.875	9.0-45.0			32:1	400 (28, 2.8) 1200* (83, 8.3)	1/4 NPTF	1/4 NPTF	52 (23.6)	•	•	•
	1095-10A-8		1	10.4-52.0			25:1	400 (28, 2.8) 1200* (83, 8.3)	1/4 NPTF	1/4 NPTF	52 (23.6)	•	•	•
1	1206		.062	.001031		23-14	146:1	100 (7, 0.7)	1/8 NPTF	LL&NB	1.0 (0.5)	•		•
Victoria de la company de la c	1206		.125	.010125		23-14	36:1	100 (7, 0.7)	1/8 NPTF	LL&NB	1.0 (0.5)	•		•
	1206		.188	.020254		23-14	15.9:1	100 (7, 0.7)	1/8 NPTF	LL&NB	1.0 (0.5)	•		•
	1230		.125	.010126		23-14	34:1	60 (4, 0.4)	1/8 NPTF	LL	1.0 (0.5)	•		•
31:8 32:8 30:4	1230		.188	.022283		23-14	15:1	60 (4, 0.4)	1/8 NPTF	LL	1.0 (0.5)	•		•
6	1230		.250	.040503		23-14	8.4:1	60 (4, 0.4)	1/8 NPTF	LL	1.0 (0.5)	•		•

^{*10}xx Series valves' maximum material inlet pressure is 400 psi for plastic spools and 1200 psi for steel spools; ** Excludes motor

SPECI	FICAT	ION LEGEND			
Α	=	Application Dependent	NB	=	Needle Block
GP	=	Green Polyethelene	PE	=	Polyethelene
HP	=	Hytrel PVC	PP	=	Pink Polyethelene
HU	=	Hytrel Urethane	U	=	Urethane
LL	=	Luer Lock	P	=	Braided Polyethelene
OD	=	Outside Diameter			



AMERICAS

MINNESOTA

Worldwide Headquarters Graco Inc. 88-11th Avenue N.E. Minneapolis, MN 55413

MAILING ADDRESS

P.O. Box 1441 Minneapolis, MN 55440-1441

OHIO

8400 Port Jackson Ave NW, North Canton, OH 44720

EUROPE

BELGIUM

Graco BVBA Industrieterrein-Oude Bunders Slakweidestraat 31 B-3630 Maasmechelen, Belgium

Tel: 32 89 770 700 Fax: 32 89 770 777

ASIA PACIFIC

AUSTRALIA

Graco Australia Pty Ltd.
Suite 17, 2 Enterprise Drive
Bundoora, Victoria 3083
Australia
Tal. 61 2 0468 8500 Fee: 61 2 6

Tel: 61 3 9468 8500 Fax: 61 3 9468 8599

CHINA

Graco Hong Kong Ltd.
Shanghai Representative Office
Building 7
1029 Zhongshan Road South,
Huangpu District
Shanghai, 200011
The People's Republic of China
Tel: 86 21 649 50088 Fax: 86 21 649 50077

INDIA

Graco Hong Kong Ltd. India Liaison Office Room 443, Level 4 Augusta Point, Golf Course Road Gurgaon, Haryana, India 122001 Tel: 91 124 435 4208 Fax: 91 124 435 4001

JAPAN

Graco K.K. 1-27-12 Hayabuchi Tsuzuki-ku Yokohama City, Japan 2240025 Tel: 81 45 593 7300 Fax: 81 45 593 7301

KOREA

Graco Korea Inc. Shinhan Bank Building 4th Floor #1599 Gwanyang-Dong, Dongan-Ku, Anyang-si, Korea 431-060 Tel: 82 31 476 9400 Fax: 82 31 476 9801

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