

TD Series

Chemical Metering Pump

DATA SHEET

Accurate, Efficient, Reliable

Introducing the TD Series from LMI Pumps, the most versatile chemical metering pump on the market. This new generation of pumps boasts the most advanced control features from manual speed adjustment, to full SCADA integration and remote control, and available MODBUS, PROFIBUS and Bluetooth connected units. All TD Series Liquid Ends are new from LMI with improved materials, double ball check valves, and newly designed over-molded diaphragms proven to operate at continuous duty for over 40 million strokes. All Liquid Ends are designed with proven FASTPRIME™ technology for quick and easy commissioning and priming of the units. Available in 4 models, Manual, Advanced, COMMs Control Modbus TCP/RTU and COMMs Control Profibus, the TD Series pump fits seamlessly into your process control application. The Manual model offers simple speed control while maintaining the accuracy, precision, and durability of the enhanced drive system. The Advanced model offers numerous internal and external controls and a large TFT display to provide intuitive access to advanced features such as calibration assist, multiple digital IOs and speed input and output controls, batch and dose mode, slow mode, system and user totalizers, Bluetooth, and more. The COMMs model offers all the same functions as the Advanced model with the addition of industrial protocol communications.



Performance Specifications

	PSI	GPH	BAR	LPH
TDX2	250	2.5	17.2	9.5
TDX3	150	4	10.3	15.1
TDX4	100	10	6.9	37.9
TDX5	75	16	5.2	60.6

Output Range	.003 – 16.0 GPH (.01 – 60.6 LPH)
Pressure Range	25-250 PSI (1.7-17.2 BAR)
Max Stroke	187 SPM
Installation	Indoor/Outdoor
Supply Voltage	100-230V / 50-60 Hz
Steady State Accuracy	+/- 1.5%
Repeatable Accuracy	+/- 3%
Turndown	1,000:1

Features and Benefits

- Revolutionary FluxDrive™ technology with fractional turndown capability, reduced weight, increased efficiency, and universal 115-230V, 50/60 Hz power supply
- 4 available sizes with flows up to 16 GPH (60.6 LPH) and up to 250 PSI (17.2 BAR)
- Best-in-class electronic components and enhanced control for full SCADA integration and advanced system process control features
- Standard FastPrime™ liquid ends that allow fast and easy priming with integrated bleed valve
- Field upgradable firmware via USB-C drive interface for always current feature set and firmware upgrades
- Rugged construction with NEMA 4X / IP 66 housing for the harshest environments and outdoor use
- Compact footprint for efficient use of space in process applications or OEM configuration with removable mounting baseplate
- Standardized M12 cable connection for easy commissioning and setup of all inputs and outputs
- Agency certifications - NSF 61, ETL, CE, and UKCA
- 4.3" Color TFT display with Intuitive navigation, enabling easy configuration, full digital manual control of advanced pumps and visibility to running status, alarms, logs, and system configurations
- External Control Inputs - Automate your process with pulse batch modes, 4 analog 4-20mA inputs, remote start/stop, and multiple sensor inputs including tank level indication, auto degassing technology, pressure sensors, leak detection and more
- Calibration Assist - Simply draw from a column and adjust the estimated value on-screen to the measured volume
- System & User Totalizers - An odometer for your pump that logs pump strokes, estimated volume, and power cycles – confirm pump operation between visits
- AccuPrime™ degassing technology for automatic degassing of the discharge line for stay-prime functionality
- Leak detection sensor integrated into the liquid ends for reliable detection of leaks and shutoff alarms and output relays for full safety and system control

TDx2
OUTPUT CODE 2 _____ 0.0 - 2.5 GPH (0.0 - 9.5 LPH); 250 psi (17.2 bar)

Drive End	Note: Cordsets from the accessories table may be required for the customer to connect to desired input/output.								151 SPM Max.
Control	Description								
TD092	Manual Control								
TD102	Advanced Pulse Input, Digital Inputs, Output Relays, Remote Start Stop, Tank Level Full Analog								
TD112	COMMs MODBUS TCP, RTU, Full Advanced								
TD122	COMMs PROFIBUS, Full Advanced								
	Power Code	Voltage	Frequency		Plug				
	1	Universal	50-60 HZ		110 - 120V US Plug				
	2	Universal	50-60 HZ		220 - 240V US Plug				
	3	Universal	50-60 HZ		220 - 240V DIN Plug				
	5	Universal	50-60 HZ		220 - 240V UK Plug				
	6	Universal	50-60 HZ		220-240V Aus/NZ Plug				
	7	Universal	50-60 HZ		220-240V Swiss Plug				
		Liquid End	Head	Fittings	Balls	Valve	Connections Suction/Discharge	Cartridge Valve or Seal Ring	RPM Kit
	FastPrime™ Machined								
	599SI	Acrylic		PVDF	PTFE	MFV	PE 1/4" O.D.	Polyprel®	RPM-599
	599NI	Acrylic		PVDF	PTFE	-	PE 1/4" OD	Polyprel®	RPM-599
	599AI	Acrylic		PVDF	PTFE	-	PE 1/4" O.D.	Polyprel®	RPM-599
	599HI	Acrylic		PVDF	PTFE	MFV	PE 1/4" OD	Polyprel®	RPM-599
	597NP	316 SS	316 SS		316 SS	-	1/4" NPT	316 SS/PTFE	RPM-597
	595SI	PP		PP	Ceramic	MFV	PE 1/4" OD	PTFE	RPM-593
	595NI	PP		PP	Ceramic		PE 1/4" O.D.	PTFE	RPM-593
	595AI	PP		PP	Ceramic		PE 1/4" OD	PTFE	RPM-593
	595HI	PP		PP	Ceramic	MFV	PE 1/4" O.D.	PTFE	RPM-593
	596VI	PP		PP	316 SS		PE .5" Vinyl .938"	PTFE	RPM-596
	596PI*	PP		PP	316 SS		PE .5" Vinyl .938"	PTFE	RPM-596
	FastPrime™ Molded								
	592SI	PVDF		PVDF	Ceramic	MFV	PE 1/4" O.D.	Polyprel®	RPM-592
	592NI	PVDF		PVDF	Ceramic		PE 1/4" OD	Polyprel®	RPM-592
	592AI	PVDF		PVDF	Ceramic	-	PE 1/4" O.D.	Polyprel®	RPM-592
	592HI	PVDF		PVDF	Ceramic	MFV	PE 1/4" OD	Polyprel®	RPM-592
	594SI	PVDF		PVDF	Ceramic	MFV	PE 1/4" O.D.	PTFE/Polyprel®	RPM-594
	594NI	PVDF		PVDF	Ceramic	-	PE 1/4" OD	PTFE/Polyprel®	RPM-594
	594AI	PVDF		PVDF	Ceramic	-	PE 1/4" O.D.	PTFE/Polyprel®	RPM-594
594HI	PVDF		PVDF	Ceramic	MFV	PE 1/4" OD	PTFE/Polyprel®	RPM-594	
593SI	PVDF		PVDF	Ceramic	MFV	PE 1/4" O.D.	PTFE	RPM-593	
593NI	PVDF		PVDF	Ceramic	-	PE 1/4" OD	PTFE	RPM-593	
593AI	PVDF		PVDF	Ceramic	-	PE 1/4" O.D.	PTFE	RPM-593	
593HI	PVDF		PVDF	Ceramic	MFV	PE 1/4" OD	PTFE	RPM-593	
TD092	1	- 599SI							

RPM Kit	Contents	
FastPrime™		
RPM-599	*O-Rings	*Hardware kit
RPM-593	*Shaft Seal	*Liquifram
RPM-592	*Check Valve Cartridges	*Injection Valve Cartridge
RPM-594		
RPM-596	*Shaft Seal	*Hardware kit
	*Seal Ring Seats	*Liquifram
		*Clamp Rings
RPM-597	*Shaft Seal	*Hardware kit
	*Check Valve	*Liquifram

Accessories	
Part Number	Description
TNA40100	Degas Solenoid
TNA40200	Flow Verification
TNA40300	Leak Detection
TNP20200	Accessory Cable
*PI 316 SS LE includes bleeder port	

TDx3

OUTPUT CODE 3 ————— 0.0 - 4.0 GPH (0.0 - 15.1 LPH); 150 psi (10.3 bar)

Drive End										
Control	Description									
TD093	Manual Control									
TD103	Advanced Pulse Input, Digital Inputs, Output Relays, Remote Start Stop, Tank Level Full Analog									
TD113	COMMs MODBUS TCP, RTU, Full Advanced									
TD123	COMMs PROFIBUS, Full Advanced									
		Power Code		Voltage		Frequency		Plug		
		1		Universal		50-60 HZ		110 - 120V US Plug		
			2		Universal		50-60 HZ		220 - 240V US Plug	
			3		Universal		50-60 HZ		220 - 240V DIN Plug	
			5		Universal		50-60 HZ		220 - 240V UK Plug	
			6		Universal		50-60 HZ		220-240V Aus/NZ Plug	
			7		Universal		50-60 HZ		220-240V Swiss Plug	
			Liquid End	Head	Fittings	Balls	Valve	Connections Suction/Discharge	Cartridge Valve or Seal Ring	RPM Kit
			FastPrime™ Machined							
			589SI	Acrylic	PVDF	PTFE	MFV	PE 3/8" O.D.	Polyprel®	RPM-589
			589NI	Acrylic	PVDF	PTFE	-	PE 3/8" OD	Polyprel®	RPM-589
			589AI	Acrylic	PVDF	PTFE	-	PE 3/8" O.D.	Polyprel®	RPM-589
			589HI	Acrylic	PVDF	PTFE	MFV	PE 3/8" OD	Polyprel®	RPM-589
			587NP	316 SS	316 SS	316 SS	-	1/4" NPT	316 SS/PTFE	RPM-587
			585SI	PP	PP	Ceramic	MFV	PE 3/8" OD	PTFE	RPM-583
			585NI	PP	PP	Ceramic		PE 3/8" O.D.	PTFE	RPM-583
			585AI	PP	PP	Ceramic		PE 3/8" OD	PTFE	RPM-583
			585HI	PP	PP	Ceramic	MFV	PE 3/8" O.D.	PTFE	RPM-583
			586VI	PP	PP	316 SS		PE .5" Vinyl .938"	PTFE	RPM-586
			586PI	PP	PP	316 SS		PE .5" Vinyl .938"	PTFE	RPM-586
			FastPrime™ Molded							
			582SI	PVDF	PVDF	Ceramic	MFV	PE 1/4" O.D.	Polyprel®	RPM-582
			582NI	PVDF	PVDF	Ceramic	-	PE 1/4" OD	Polyprel®	RPM-582
			582AI	PVDF	PVDF	Ceramic	-	PE 1/4" O.D.	Polyprel®	RPM-582
			582HI	PVDF	PVDF	Ceramic	MFV	PE 1/4" OD	Polyprel®	RPM-582
			584SI	PVDF	PVDF	Ceramic	MFV	PE 1/4" O.D.	PTFE/Polyprel®	RPM-584
			584NI	PVDF	PVDF	Ceramic	-	PE 1/4" OD	PTFE/Polyprel®	RPM-584
			584AI	PVDF	PVDF	Ceramic	-	PE 1/4" O.D.	PTFE/Polyprel®	RPM-584
		584HI	PVDF	PVDF	Ceramic	MFV	PE 1/4" OD	PTFE/Polyprel®	RPM-584	
		583SI	PVDF	PVDF	Ceramic	MFV	PE 1/4" O.D.	PTFE	RPM-583	
		583NI	PVDF	PVDF	Ceramic	-	PE 1/4" OD	PTFE	RPM-583	
		583AI	PVDF	PVDF	Ceramic	-	PE 1/4" O.D.	PTFE	RPM-583	
		583HI	PVDF	PVDF	Ceramic	MFV	PE 1/4" OD	PTFE	RPM-583	
TD092	1	- 599SI								

RPM Kit	Contents	
FastPrime™		
RPM-589	*O-Rings	*Hardware kit
RPM-582	*Shaft Seal	*Liquifram
RPM-583	*Check Valve Cartridges	*Injection Valve Cartridge
RPM-584		
RPM-586	*Shaft Seal	*Hardware kit
	*Seal Ring Seats	*Liquifram
		*Clamp Rings
RPM-587	*Shaft Seal	*Hardware kit
	*Check Valve	*Liquifram

Accessories	
Part Number	Description
TNA40100	Degas Solenoid
TNA40200	Flow Verification
TNA40300	Leak Detection
TNP20200	Accessory Cable

*PI 316 SS LE includes bleeder port

TDx4

OUTPUT CODE 4 ————— 0.0 - 10.0 GPH (0.0 - 37.9 LPH); 100 psi (6.9 bar)

Drive End	Note: Cordsets from the accessories table may be required for the customer to connect to desired input/output.							151 SPM Max.
Control	Description							
TD094	Manual Control							
TD104	Advanced Pulse Input, Digital Inputs, Output Relays, Remote Start Stop, Tank Level Full Analog							
TD114	COMMs MODBUS TCP, RTU, Full Advanced							
TD124	COMMs PROFIBUS, Full Advanced							
1	Power Code	Voltage		Frequency		Plug		
	1	Universal		50-60 HZ		110 - 120V US Plug		
	2	Universal		50-60 HZ		220 - 240V US Plug		
	3	Universal		50-60 HZ		220 - 240V DIN Plug		
	5	Universal		50-60 HZ		220 - 240V UK Plug		
	6	Universal		50-60 HZ		220-240V Aus/NZ Plug		
	7	Universal		50-60 HZ		220-240V Swiss Plug		
	Liquid End	Head	Fittings	Balls	Valve	Connections Suction/Discharge	Cartridge Valve or Seal Ring	RPM Kit
	FastPrime™ Machined							
	579SI	Acrylic	PVDF	PTFE	MFV	PE 3/8" O.D.	Polyprel®	RPM-579
	579NI	Acrylic	PVDF	PTFE	-	PE 3/8" OD	Polyprel®	RPM-579
	579AI	Acrylic	PVDF	PTFE	-	PE 3/8" O.D.	Polyprel®	RPM-579
	579HI	Acrylic	PVDF	PTFE	MFV	PE 3/8" OD	Polyprel®	RPM-579
	577NP	316 SS	316 SS	316 SS	-	1/2" NPT	316 SS/PTFE/Polyprel®	RPM-577
	57VNP	316 SS	316 SS	316 SS	-	1/2" NPT	316 SS/PTFE/Viton	RPM-57V
	575SI	PP	PP	Ceramic	MFV	PE 3/8" OD	PTFE	RPM-573
	575NI	PP	PP	Ceramic	-	PE 3/8" O.D.	PTFE	RPM-573
	575AI	PP	PP	Ceramic	-	PE 3/8" OD	PTFE	RPM-573
	575HI	PP	PP	Ceramic	MFV	PE 3/8" O.D.	PTFE	RPM-573
	576VI	PP	PP	316 SS	-	PE .5" Vinyl .938"	PTFE	RPM-576
	576PI*	PP	PP	316 SS	-	PE .5" Vinyl .938"	PTFE	RPM-576
	FastPrime™ Molded							
	572SI	PVDF	PVDF	Ceramic	MFV	PE 3/8" OD	Polyprel®	RPM-572
	572NI	PVDF	PVDF	Ceramic	-	PE 3/8" O.D.	Polyprel®	RPM-572
	572AI	PVDF	PVDF	Ceramic	-	PE 3/8" OD	Polyprel®	RPM-572
	572HI	PVDF	PVDF	Ceramic	MFV	PE 3/8" O.D.	Polyprel®	RPM-572
	574SI	PVDF	PVDF	Ceramic	MFV	PE 3/8" OD	PTFE/Polyprel®	RPM-574
	574NI	PVDF	PVDF	Ceramic	-	PE 3/8" O.D.	PTFE/Polyprel®	RPM-574
	574AI	PVDF	PVDF	Ceramic	-	PE 3/8" OD	PTFE/Polyprel®	RPM-574
	574HI	PVDF	PVDF	Ceramic	MFV	PE 3/8" O.D.	PTFE/Polyprel®	RPM-574
	573SI	PVDF	PVDF	Ceramic	MFV	PE 3/8" OD	PTFE	RPM-573
	573NI	PVDF	PVDF	Ceramic	-	PE 3/8" O.D.	PTFE	RPM-573
	573AI	PVDF	PVDF	Ceramic	-	PE 3/8" OD	PTFE	RPM-573
	573HI	PVDF	PVDF	Ceramic	MFV	PE 3/8" O.D.	PTFE	RPM-573
TD104	1	- 579SI						

RPM Kit	Contents	
FastPrime™		
RPM-579	*O-Rings	*Hardware kit
RPM-572	*Shaft Seal	*Liquifram
RPM-573	*Check Valve Cartridges	*Injection Valve Cartridge
RPM-574		
RPM-57V		
RPM-576	*Shaft Seal	*Hardware kit
	*Seal Ring Seats	*Liquifram
		*Clamp Rings
RPM-577	*Shaft Seal	*Hardware kit
	*Check Valve	*Liquifram

Accessories	
Part Number	Description
TNA40100	Degas Solenoid
TNA40200	Flow Verification
TNA40300	Leak Detection
TNP20200	Accessory Cable

*PI 316 SS LE includes bleeder port

TDx5
OUTPUT CODE 5 _____ 0.0 - 16.0 GPH (0.0 - 60.6 LPH); 75 psi (5.2 bar)

Drive End									
Control	Description								
TD095	Manual Control								
TD105	Advanced Pulse Input, Digital Inputs, Output Relays, Remote Start Stop, Tank Level Full Analog								
TD115	COMMs MODBUS TCP, RTU, Full Advanced								
TD125	COMMs PROFIBUS, Full Advanced								
TD105	Power Code	Voltage	Frequency				Plug		
	1	Universal	50-60 HZ				110 - 120V US Plug		
	2	Universal	50-60 HZ				220 - 240V US Plug		
	3	Universal	50-60 HZ				220 - 240V DIN Plug		
	5	Universal	50-60 HZ				220 - 240V UK Plug		
	6	Universal	50-60 HZ				220-240V Aus/NZ Plug		
	7	Universal	50-60 HZ				220-240V Swiss Plug		
		Liquid End	Head	Fittings	Balls	Valve	Connections Suction/Discharge	Cartridge Valve or Seal Ring	RPM Kit
		FastPrime™ Machined							
	569SI	Acrylic	PVDF	PTFE	MFV		PE 3/8" O.D.	Polyprel®	RPM-569
	569NI	Acrylic	PVDF	PTFE			PE 3/8" OD	Polyprel®	RPM-569
	569AI	Acrylic	PVDF	PTFE	-		PE 3/8" O.D.	Polyprel®	RPM-569
	569HI	Acrylic	PVDF	PTFE	MFV		PE 3/8" OD	Polyprel®	RPM-569
	567NP	316 SS	316 SS	316 SS	-		1/2" NPT	316 SS/PTFE/Polyprel®	RPM-567
	56VNP	316 SS	316 SS	316 SS	-		1/2" NPT	316 SS/PTFE/Viton	RPM-56V
	565SI	PP	PP	Ceramic	MFV		PE 3/8" OD	PTFE	RPM-563
	565NI	PP	PP	Ceramic			PE 3/8" O.D.	PTFE	RPM-563
	565AI	PP	PP	Ceramic			PE 3/8" OD	PTFE	RPM-563
	565HI	PP	PP	Ceramic	MFV		PE 3/8" O.D.	PTFE	RPM-563
	566VI	PP	PP	316 SS			PE .5" Vinyl .938"	PTFE	RPM-566
	566PI*	PP	PP	316 SS			PE .5" Vinyl .938"	PTFE	RPM-566
		FastPrime™ Molded							
	562SI	PVDF	PVDF	Ceramic	MFV		PE 3/8" OD	Polyprel®	RPM-562
	562NI	PVDF	PVDF	Ceramic	-		PE 3/8" O.D.	Polyprel®	RPM-562
	562AI	PVDF	PVDF	Ceramic	-		PE 3/8" OD	Polyprel®	RPM-562
	562HI	PVDF	PVDF	Ceramic	MFV		PE 3/8" O.D.	Polyprel®	RPM-562
	564SI	PVDF	PVDF	Ceramic	MFV		PE 3/8" OD	PTFE/Polyprel®	RPM-564
	564NI	PVDF	PVDF	Ceramic	-		PE 3/8" O.D.	PTFE/Polyprel®	RPM-564
	564AI	PVDF	PVDF	Ceramic	-		PE 3/8" OD	PTFE/Polyprel®	RPM-564
	564HI	PVDF	PVDF	Ceramic	MFV		PE 3/8" O.D.	PTFE/Polyprel®	RPM-564
	563SI	PVDF	PVDF	Ceramic	MFV		PE 3/8" OD	PTFE	RPM-563
	563NI	PVDF	PVDF	Ceramic	-		PE 3/8" O.D.	PTFE	RPM-563
	563AI	PVDF	PVDF	Ceramic			PE 3/8" OD	PTFE	RPM-563
	563HI	PVDF	PVDF	Ceramic	MFV		PE 3/8" O.D.	PTFE	RPM-563
TD105	1	569SI							

RPM Kit	Contents	
FastPrime™		
RPM-569	*O-Rings	*Hardware kit
RPM-562	*Shaft Seal	*Liquifram
RPM-563	*Check Valve Cartridges	*Injection Valve Cartridge
RPM-564		
RPM-56V		
RPM-566	*Shaft Seal	*Hardware kit
	*Seal Ring Seats	*Liquifram
		*Clamp Rings
RPM-567	*Shaft Seal	*Hardware kit
	*Check Valve	*Liquifram

Accessories	
Part Number	Description
TNA40100	Degas Solenoid
TNA40200	Flow Verification
TNA40300	Leak Detection
TNP20200	Accessory Cable

*PI 316 SS LE includes bleeder port

Ingersoll Rand Inc. (NYSE:IR), driven by an entrepreneurial spirit and ownership mindset, is dedicated to helping make life better for our employees, customers and communities. Customers lean on us for our technology-driven excellence in mission-critical flow creation and industrial solutions across 40+ respected brands where our products and services excel in the most complex and harsh conditions. Our employees develop customers for life through their daily commitment to expertise, productivity and efficiency. For more information, visit www.IRCO.com



Contact your local representative to find out more about LMI TD Series
Chemical Injection Pumps

www.lmipumps.com

