

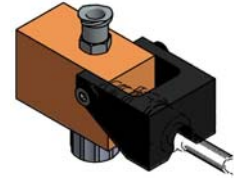
Time Pressure Interface

PN 22893030

User Guide

Overview

The patent pending Time Pressure Interface (PN 22893030) is an off-line fluid feed device with a sensor and fluid reservoir interface. Use the Time Pressure Interface and GPD Global®'s Time Pressure System (PN 22891007) to regulate syringe fluid pressure with timed pressure cycles.



Scope of Supply

The Time Pressure Interface consists of a Time Pressure Interface and user guide.

Theory of Operation

When the Time Pressure Interface is installed on your syringe and connected to a GPD Global Time Pressure System, the Time Pressure Interface will continually monitor and adjust material pressure entering the syringe and automatically compensate for any variations detected by regulating the fluid pressure into the syringe.

Features

The Time Pressure Interface:

- ensures a constant feed of fluid independent of reservoir pressure to a syringe, resulting in uniform and repeatable fluid displacement.
- continually monitors and adjusts the material pressure entering the syringe and automatically compensates for any variations detected.
- sensor and reservoir improves the overall dispense repeatability and quality regardless of reservoir fluid level.

Safety Notices

Appropriate use, warranty

Any of the following that are done without the explicit and written approval of the manufacturer:

- conversions or additions,
- the use of non-original spare parts,
- repairs carried out by companies or persons that have not been authorized by the manufacturer

can lead to the warranty being rendered null and void. The manufacturer shall have no liability whatsoever for damage resulting from failure to follow the operation and maintenance instructions.

Qualifications of the operating and maintenance personnel

The owner bears the responsibility for ensuring that operating and maintenance personnel have the required qualifications. The operation and maintenance instructions must be read and understood. Comply with the relevant applicable technical and safety regulations.

Organizational measures

The owner is to provide any personal protective equipment that is required. All the safety devices are to be checked regularly. Wear protective glasses and a protective suit for operation and cleaning to protect against any chemicals that may be sprayed out.

Installation

1. Screw a syringe onto the Time Pressure Interface adapter.
2. Screw a Luer-lock needle or nozzle onto the Time Pressure Interface.
3. Connect the Time Pressure Interface sensor cable to a GPD Global Time Pressure System. For details, refer to the *Time Pressure System User Guide* (PN 22800100).

CAUTION: Do not grasp, twist, or rotate sensor spring relief or cable, or damage will occur.

NOTE: It is assumed you have performed applications testing to determine a specific fluid feed pressure for the material to be dispensed.

Maintenance

To clean the Time Pressure Interface:

1. Disconnect the Time Pressure Interface sensor cable from the GPD Global Time Pressure System.
2. Unscrew the syringe from the Time Pressure Interface adapter.
3. Gently wipe the sensor clean with a clean, dry cloth.

CAUTION: Do not grasp, twist, or rotate the sensor spring relief or cable, or damage will occur.

4. Clean all parts by gently wiping all surfaces with a clean, dry cloth. As needed, use a solvent recommended by the fluid manufacturer to remove fluid residue.
5. Reassemble the Time Pressure Interface per *Installation* instructions.

Specifications

Size (W x H x D)	25 x 40 x 46 mm (0.98" x 1.57" x 1.81")
Weight*	25.62 g (0.9 oz)
Wetted parts	anodized aluminum, polypropylene
Seal material	Viton
Material connection	standard Luer style syringe
Operating pressure	0-5.17 bar (0-75 psi)
Sensor:	
Temperature range	0-60° C (32-140° F)
Accuracy	±0.5% F.S.
Repeatability	±0.2% F.S.
Tightening Torque	nominal** 1.8 N.m (15 Lbf.in) maximal 3 N.m (25 Lbf.in)

* approximate

** zero and sensitivity shift <1%

Spare Parts

Description	Qty	Part Number
Fitting	1	2650-0224
Fluid pressure sensor	1	Contact GPD*
Luer adapter	2	2650-0218
O-ring, Viton	10	10/4894

* Sensor part number depends on machine model and station position in which the pump is used.

Warranty

General Warranty. Subject to the remedy limitation and procedures set forth in the Section “Warranty Procedures and Remedy Limitations,” GPD Global warrants that the system will conform to the written description and specifications furnished to Buyer in GPD Global’s proposal and specified in the Buyer’s purchase order, and that it will be free from defects in materials and workmanship for a period of one (1) year. GPD Global will repair, or, at its option, replace any part which proves defective in the sole judgment of GPD Global within one (1) year of date of shipment/invoice. Separate manufacturers’ warranties may apply to components or sub-assemblies purchased from others and incorporated into the system. THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Limitations. GPD Global reserves the right to refuse warranty replacement, where, in the sole opinion of GPD Global the defect is due to the use of incompatible materials or other damages from the result of improper use or neglect.

This warranty does not apply if the GPD Global product has been damaged by accident, abuse, or has been modified without the written permission of GPD Global.

Items considered replaceable or rendered unusable under normal wear and tear are not covered under the terms of this warranty. Such items include fuses, lights, filters, belts, etc.

Warranty Procedures and Remedy Limitations. The sole and exclusive remedy of the buyer in the event that the system or any components of the system do not conform to the express warranties stated in the Section “Warranties” shall be the replacement of the component or part. If on-site labor of GPD Global personnel is required to replace the non-warranted defective component, GPD Global reserves the right to invoice the Buyer for component cost, personnel compensation, travel expenses and all subsistence costs. GPD Global’s liability for a software error will be limited to the cost of correcting the software error and the replacement of any system components damaged as a result of the software error. In no event and under no circumstances shall GPD Global be liable for any incidental or consequential damages; its liability is limited to the cost of the defective part or parts, regardless of the legal theory of any such claim. As to any part claimed to be defective within one (1) year of date of shipment/invoice, Buyer will order a replacement part which will be invoiced in ordinary fashion. If the replaced part is returned to GPD Global by Buyer and found by GPD Global in its sole judgment to be defective, GPD Global will issue to Buyer a credit in the amount of the price of the replacement part. GPD Global’s acceptance of any parts so shipped to it shall not be deemed an admission that such parts are defective.

Specifications, descriptions, and all information contained in this manual are subject to change and/or correction without notice.

Although reasonable care has been exercised in the preparation of this manual to make it complete and accurate, this manual does not purport to cover all conceivable problems or applications pertaining to this machine.

Drawing - 22893030

REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
-	-	-	ORIGINAL ISSUE

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	22805038	LATCH_FPC SENSOR_LX VALVE
4	2	2525-0018	BOLT_SHOULDER_3MM X 6MM X M2X0.4
5	1	22805055	MATERIAL FEEDWAY_TIME PRESS FITTINGS
6	1	2650-0218	ADAPTER_THD LUER_FEM_PLASTIC_10-32
7	1	2650-0224	FITTING_10-32 MALE TAPER X MALE LUER

TOLERANCES UNLESS OTHERWISE SPECIFIED			DESCRIPTION
	METRIC		
FRACTIONS	± 1/32		FPC PUMP INTERFACE_TIME PRESSURE ASSEMBLY
X.XX	± 0.015	0 MM ± 1.0 MM	
X.XXX	± 0.005	0.0 MM ± 0.4 MM	
ANGULAR	± 0.5°	0.00 MM ± 0.1 MM	
RUNOUT	± 0.003 T.I.R.		
FINISH			MATERIAL
			DWG NO
			22893030
HEAT TREATMENT		DWG SIZE	DRAWN BY IAH 7/9/2015 SHEET 1 OF 1
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