



 **POLYUREATEC**

POLYUREATEC GMBH
Bruchweg 96 · 41564 Kaarst
Tel. +49/21 31/1 76 88 92 · Fax +49/21 31/1 76 88 93
info@polyureatec.de · www.polyureatec.de

Parts Manual

Vertical Proportioning Pump for Hydraulic & Pneumatic Units



Issue 2.7 26/02/19
Ref. NR-00045-ENG



Before installing the unit and starting it up, carefully read all the technical and safety documentation included in the Manual Service. Pay special attention to the information to know and understand the handling and the conditions of use of the unit. All of the information is aimed at enhancing User Safety and avoiding possible breakdowns derived from the incorrect use of the unit..



Vertical Proportioning Pump for Hydraulic & Pneumatic Units

Parts Manual

WARRANTY

HI-TECH SPRAY EQUIPMENT, S. A. (hereinafter "HI-TECH") provides this **LIMITED WARRANTY** (hereinafter "Warranty") to the original purchaser (hereinafter "Customer") covering this equipment and the original HI-TECH manufactured accessories delivered with the equipment (hereinafter "Product") against defects in material or workmanship of the Product (hereinafter "Defect" or "Defective") for a period of two (2) years from the date of first purchase as shown on the original HI-TECH invoice (hereinafter "Warranty Period").

If during the Warranty Period under normal use, the Product is suspected by Customer to be Defective in material or workmanship, it is Customer's responsibility to contact HI-TECH and return the Product to HI-TECH as directed by HI-TECH, freight prepaid. If HI-TECH determines that the Product is Defective and that such Defect is covered by this Warranty, HI-TECH will credit Customer for the reasonable freight charges incurred by Customer in returning the Defective Product to HI-TECH, and HI-TECH (or its authorized agent) will, at HI-TECH's option, repair or replace the Product, subject to the following:

Original Invoice: The original invoice must be kept as proof of the date of first sale and the Product serial number. The Warranty does not cover any Product if the Original Invoice appears to have been modified or altered, or when the serial number on the Product appears to have been altered or defaced.

Product Maintenance: It is the Customer's responsibility to maintain the Product properly. See your maintenance schedule and owner's manual for details. The Warranty does not cover an improperly maintained Product.

Non-HI-TECH Components and Accessories: Non-HI-TECH manufactured components and accessories that are used in the operation of the Product are not covered by this Warranty. Such components and accessories shall be subject to the warranty offered to the Customer, if any, by the original manufacturer of such component or accessory.

Other Warranty Exclusions: The Warranty does not cover any Product that HI-TECH determines has been damaged or fails to operate properly due to misuse, negligence, abuse, carelessness, neglect, or accident. By way of example only, this includes:

- Normal wear and tear.
- Improper or unauthorized installation, repair, alteration, adjustment or modification of the Product.
- Use of heating devices, pumping equipment, dispensers, or other parts or accessories with the Product that have not been approved or manufactured by HI-TECH.
- Failure to follow the operating instructions and recommendations provided by HI-TECH.
- Cosmetic damage.
- Fire, flood, "acts of God," or other contingencies beyond the control of HI-TECH.

THE WARRANTY DESCRIBED HEREIN IS THE EXCLUSIVE REMEDY FOR THE CUSTOMER AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, AND THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND ALL OTHER WARRANTIES ARE HEREBY DISCLAIMED. TO THE FULLEST EXTENT PERMITTED BY LAW, HI-TECH SHALL NOT BE RESPONSIBLE, WHETHER BASED IN CONTRACT, TORT (INCLUDING, WITHOUT LIMITATION, NEGLIGENCE), WARRANTY OR ANY OTHER LEGAL OR EQUITABLE GROUNDS, FOR ANY CONSEQUENTIAL, INDIRECT, INCIDENTAL, LOST PROFITS, SPECIAL, PUNITIVE OR EXEMPLARY DAMAGES, WHETHER TO PERSON OR PROPERTY, ARISING FROM OR RELATING TO THE PRODUCT, EVEN IF HI-TECH HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH LOSSES OR DAMAGES.

Non-Warranty Service by HI-TECH: If HI-TECH determines that the suspected Defect of the Product is not covered by this Warranty, disposition of the Product will be made pursuant to the terms and conditions of HI-TECH's written estimate on a time and materials basis.

Continuing Warranty for Products Repaired or Replaced under Warranty: Following the repair or replacement of a Product covered by this Warranty, such Product will continue to be subject to the original Warranty for the remainder of original Warranty Period or for three (3) months from the repair or replacement date, whichever is longer.

No Rights Implied: Nothing in the sale, lease or rental of any Product by HI-TECH shall be construed to grant any right, interest or license in or under any patent, trademark, copyright, trade secret or other proprietary right or material owned by anyone; nor does HI-TECH encourage the infringement of same.

Exclusive Warranty: This writing is the final, complete, and exclusive expression of the Warranty covering the Product. Any statements made by HI-TECH, its employees or agents that differ from the terms of this Warranty shall have no effect. It is expressly understood that Customer's acceptance of this Warranty, by performance or otherwise, is upon and subject solely to the terms and conditions hereof, and any additional or different terms and conditions proposed or expressed by Customer or anyone, whether in writing or otherwise, are null and void unless specifically agreed to in writing by an Officer of HI-TECH.



PROPORTIONING PUMP PNEUMATIC & HYDRAULIC UNITS



Figure 1. Proportioning Pump Pneumatic & Hydraulic Units

Table 1. "A" Proportioning Pump Assy Size, Parts List

Pump SIZE	Easy Spray – H ESH150-SP (Hydraulic)	Easy-Spray G-125/200 A ES-125 A (Pneumatic)	Hydraulic & Pneumatic Units
	IN DISUSE		ACTUAL
2.9			PU-02015-ESG
3.2		PU-02011-AES	
4.5 (*)	PU-02001-AESH	PU-02001-AES	PU-02001-ESG
4.7		PU-02009-AES	
5.1		PU-02005-AES	
5.7		PU-02002-AES	
6.3		PU-02003-AES	
6.7		PU-02006-AES	
7.2	PU-02013-AESH	PU-02013-AES	
7.6 (#)	PU-02000-AESH	PU-02000-AES	PU-02000-ESG
9.0	PU-02012-AESH	PU-02012-AES	
13,5			PU-02014-ESG

() #4.5 Standard Pump Size for G-200 A, Easy Spray-H y Easy-Spray.*

(#) #7.6 Standard Pump Size for Compact ES-125 A y G-125 A.

Different sizes are available under order. For delivery time, please consult with Marketing department.

The ISO & POL Pump are equal, and the accessories are not included in the assembly of the Pump because they can be changed depending on the final assembly in the Unit (see specific manual of each Unit).

**HYDRAULIC & PNEUMATIC PROPORTIONING PUMP
(OLD ASSEMBLIES IN DISUSE)**

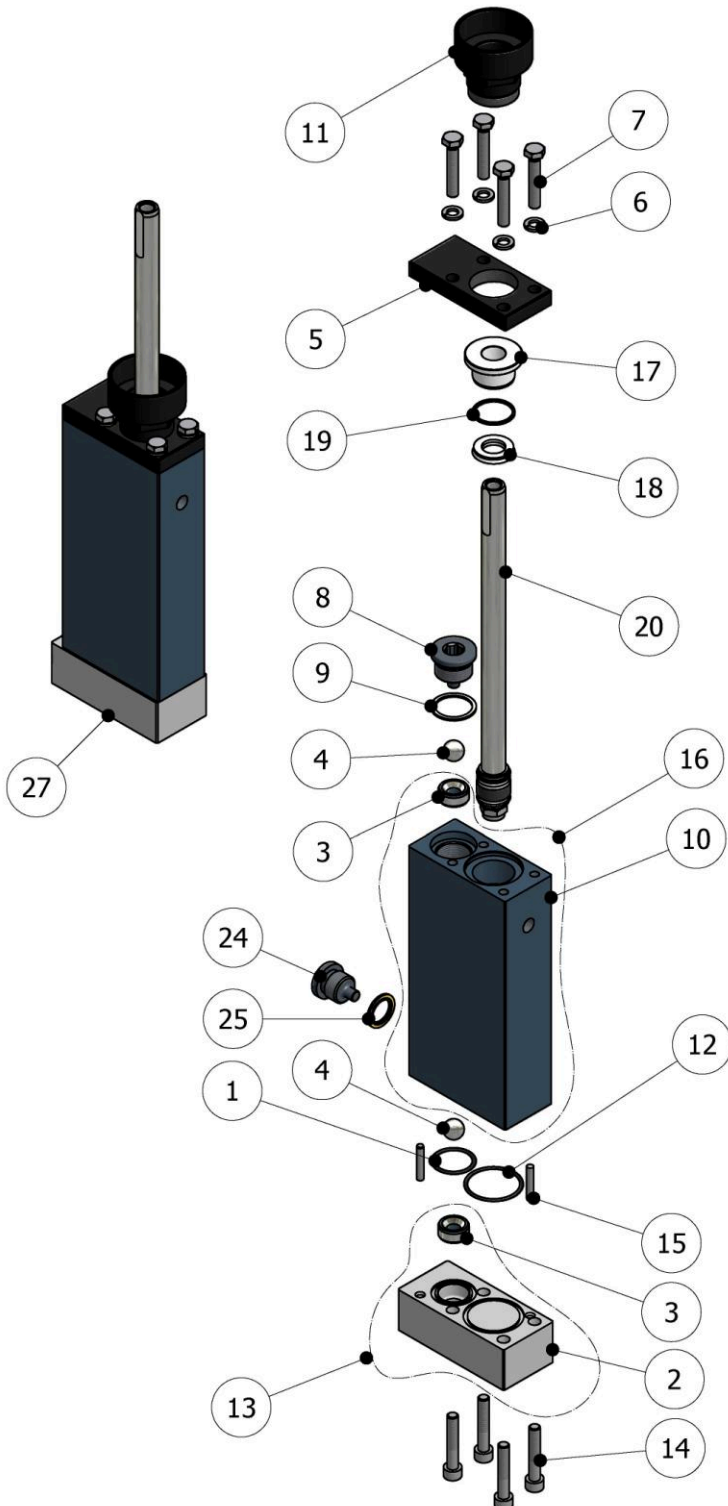


Figure 2. Proportioning Pump (old assemblies in disuse), Exploded View

**Vertical Proportioning Pump
for Hydraulic & Pneumatic Units**



Parts Manual

Table 2. Proportioning Pump (old assemblies in disuse), Parts List

Ref.	Description	Part Number	Qty.
1	O-Ring	OR-00014	1
2	Base Plate	PU-02000-01	1
3	Check Valve Assembly	PU-02000-09	1+1
4	Valve Ball	TN-00012	2
5	Packing Retainer	See Table 3	1
6	Lock Washer	TN-00028	4
7	Socket Head Cap Screw	TN-00051	4
8	Plug	PU-02000-21	1
9	Seal	PU-02000-27	1
10	Pump Body	See Table 3	1
11	Parking Nut W/Lube Cup	See Table 3	1
12	O-Ring	OR-00013	1
13	Pump Base With Check Valve Assembly	PU-02000-01A	1
14	Socket Head Cap Screw	TN-00046	4
15	Dowel Pin	TN-00042	2
16	Pump Body With Check Valve Assembly	See Table 3	1
17	Bearing (#)	See Table 3	1
18	Cylinder Seal (#)	See Table 3	1
19	O-Ring (#)	See Table 3	1
20	Piston Rod Assembly	See Note	1
24	Plug	PU-02000-10	1
25	O-Ring	OR-00023	1
	Dowel Pin (no indicated in Fig,2)	TN-00055	2

Note:

Piston Rod Assy Ref.20 for Pneumatic Units See pg.7

Piston Rod Assy Ref.20 for Hydraulic Units See pg.11

(#) Parts included in the Repair Seal kit that containing the units for 1 pump set (see Table 1 for pneumatic units or Table 9 for hydraulic units).

Quantities for 1 unit Pump.



Vertical Proportioning Pump for Hydraulic & Pneumatic Units

Parts Manual

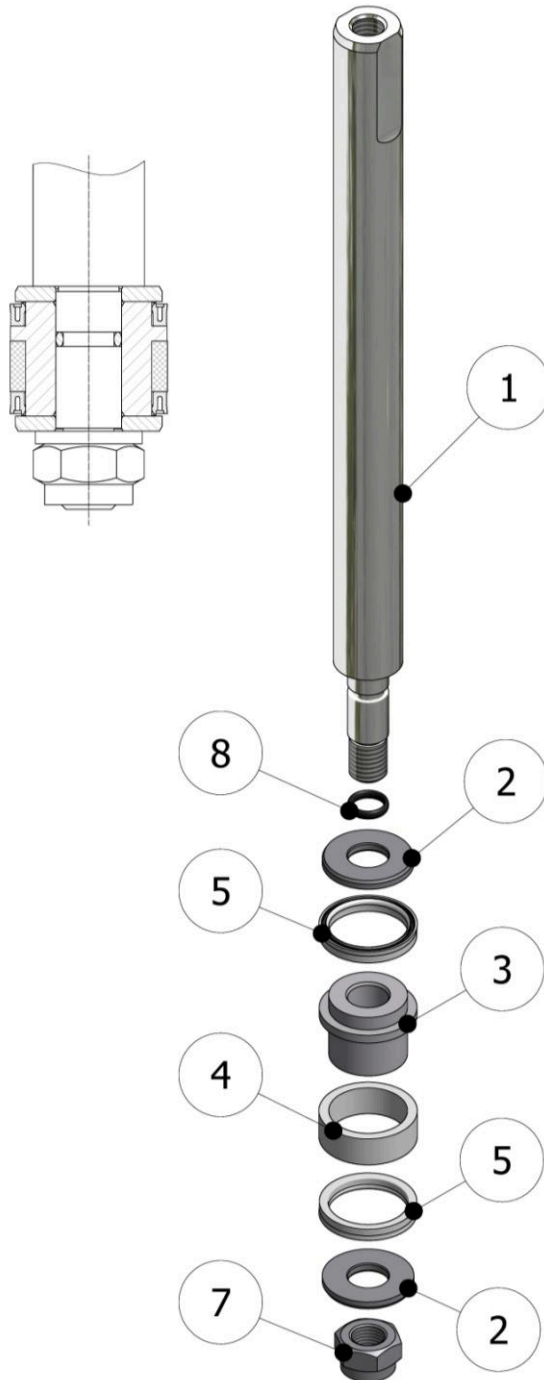
Table 3. Components Variable SIZE, Parts List

Ref.	Size 9.0	(#) Size 7.6	Size 7.2	Size 6.7	Size 6.3
16	PU-02012-02A	PU-02000-02A	PU-02013-02A	PU-02006-02A	PU-02003-02A
10	PU-02012-02	PU-02000-02	PU-02013-02	PU-02006-02	PU-02003-02
5	PU-02012-03	PU-02000-03	PU-02000-03	PU-02000-03	PU-02000-03
11	PU-02012-31	PU-02000-31	PU-02000-31	PU-02000-31	PU-02000-31
17	PU-02012-30	PU-02000-30	PU-02013-30	PU-02006-30	PU-02003-30
19	OR-00032	OR-00021	OR-00021	OR-00021	OR-00021
18	OR-00155	OR-00116	OR-00163	-	-

Ref.	Size 5.7	Size 5.1	Size 4.7	(*) Size 4.5	Size 3.2
16	PU-02002-02A	PU-02005-02A	PU-02009-02A	PU-02001-02A	PU-02011-02A
10	PU-02002-02	PU-02005-02	PU-02009-02	PU-02001-02	PU-02011-02
5	PU-02000-03	PU-02000-03	PU-02000-03	PU-02000-03	PU-02000-03
11	PU-02000-31	PU-02000-31	PU-02001-31	PU-02001-31	PU-02001-31
17	PU-02002-30	PU-02005-30	PU-02009-30	PU-02001-30	PU-02011-30
19	OR-00021	OR-00021	OR-00125	OR-00125	OR-00125
18	-	-	-	OR-00117	OR-00144

N.B.: (#) Standard Pump for G-125 A & Compact ES-125 A #7.6 SIZE, for G-200 A & Easy Spray #4.5 SIZE (*). Different sizes are available under order. For delivery time, please consult with Marketing department.

PNEUMATIC PISTON ROD ASSEMBLY (OLD MODEL DISCONTINUED)



*Figure 3. Pneumatic Piston Rod Assembly (old model discontinued),
Exploded View*



Vertical Proportioning Pump for Hydraulic & Pneumatic Units

Parts Manual

Table 4. Pneumatic Piston Rod Assembly (old model discontinued), Parts List

Ref.	Description	Part Number	Qty.
1	Pump Piston Rod	See Table 5	1
2	Washer	See Table 5	2
3	Piston Seal Support	See Table 5	1
4	Piston Seal (#)	See Table 5	1
5	O-Ring (#)	See Table 5	2
6			
7	Nut	See Table 5	1
8	O-Ring (#)	See Table 5	1

(#) Parts included in the Repair Seal Kit. It includes the parts for 1 pump set.

(see Table 6 for the Repair Seal Kit for pneumatic units).

**Vertical Proportioning Pump
for Hydraulic & Pneumatic Units**



Parts Manual

Table 5. Pneumatic Piston Rod Size (old model discontinued), Parts List

Pump	Ref. 1	Ref. 2	Ref. 3	Ref. 4
9.0	PU-02012-06	PU-02012-08	PU-02012-07	OR-00154
7.6 (#)	PU-02000-06	PU-02000-08	PU-02000-07	OR-00016
6.7	PU-02006-06	PU-02006-08	PU-02006-07	OR-00086
6.3	PU-02003-06	PU-02003-08	PU-02003-07	OR-00078
5.7	PU-02002-06	PU-02002-08	PU-02002-07	OR-00059
5.1	PU-02005-06	PU-02005-08	PU-02005-07	OR-00080
4.7	PU-02009-06	PU-02009-08	PU-02009-07	OR-00105
4.5 (*)	PU-02001-06	PU-02001-08	PU-02001-07	OR-00050
3.2	PU-02011-06	PU-02010-08	PU-02010-07	OR-00145

Pump	Ref. 5	Ref. 6	Ref. 7	Ref. 8
9.0			TN-00030	OR-00015
7.6 (#)	OR-00017		TN-00030	OR-00015
6.7	OR-00085		TN-00165	OR-00049
6.3	OR-00077		TN-00165	OR-00049
5.7	OR-00060		TN-00165	OR-00049
5.1	OR-00081		TN-00165	OR-00049
4.7	OR-00106		TN-00165	OR-00049
4.5 (*)	OR-00051		TN-00165	OR-00049
3.2	OR-00146		TN-00283	OR-00024

N.B.: (#) Standard Pump for G-125 A & Compact ES-125 A #7.6 SIZE, for G-200 A & Easy Spray #4.5 SIZE (*). Different sizes are available under order. For delivery time, please consult with Marketing department.



Vertical Proportioning Pump for Hydraulic & Pneumatic Units

Parts Manual

Table 6. Repair Seal Kit SIZE for Pneumatic Units (old model discontinued), Parts List

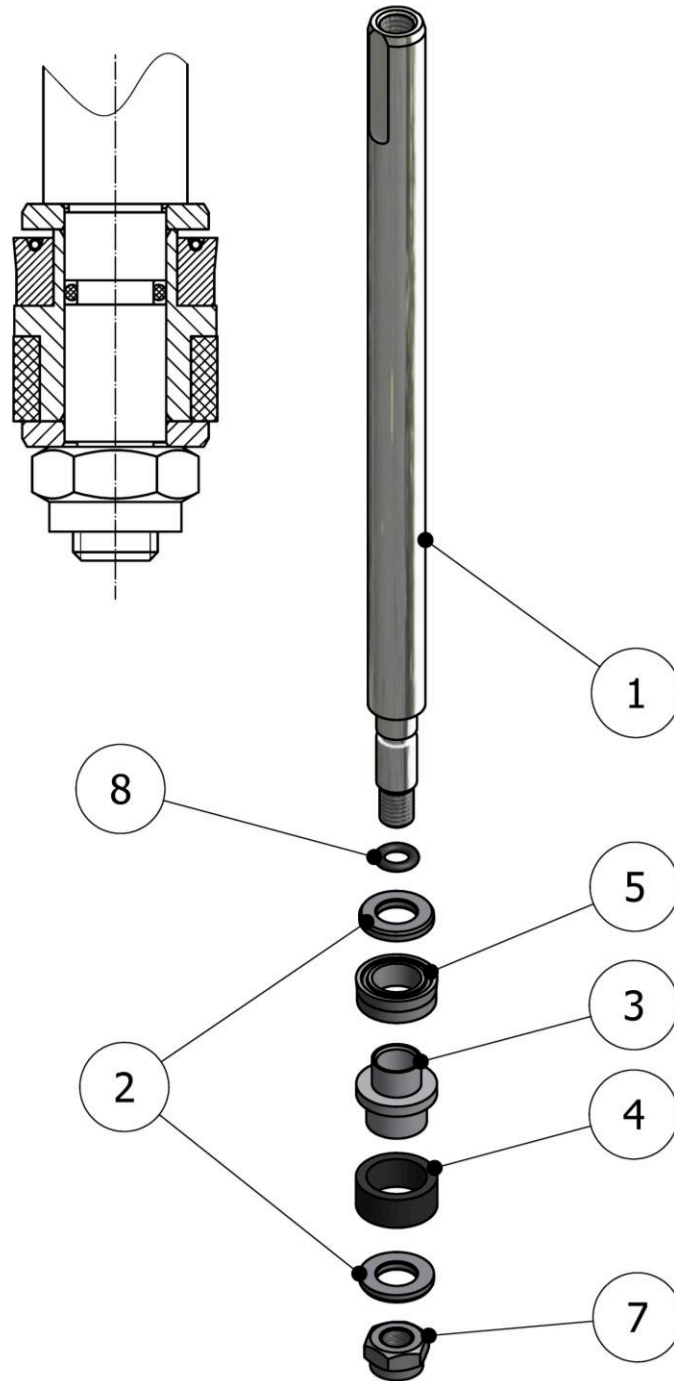
9.0 Optional	(#) 7.6 Standard	6.7 Optional	6.3 Optional	5.7 Optional
	KT-00074-R	KT-00078-R	KT-00075-R	KT-00058-R

5.1 Optional	4.7 Optional	(*) 4.5 Standard	3.2 Optional	
KT-00076-R	KT-00089-R	KT-00032-R	KT-00122	

N.B.: (#) Standard Pump for G-125 A & Compact ES-125 A #7.6 SIZE, for G-200 A & Easy Spray #4.5 SIZE (*). Different sizes are available under order. For delivery time, please consult with Marketing department.

The Repair Seal Kit includes the parts for 1 pump set.

**PNEUMATIC & HYDRAULIC PISTON ROD ASSEMBLY
(CURRENT MODEL)**



*Figure 4. Pneumatic & Hydraulic Piston Rod Assembly (current model),
Exploded View*



Vertical Proportioning Pump for Hydraulic & Pneumatic Units

Parts Manual

Table 7. Hydraulic Piston Rod Assembly (current model), Parts List

Ref.	Description	Part Number	Qty.
1	Pump Piston Rod	See Table 8	1
2	Washer	See Table 8	2
3	Piston Seal Support	See Table 8	1
4	Piston Seal (#)	See Table 8	1
5	O-Ring (#)	See Table 8	1
6			
7	Nut	See Table 8	1
8	O-Ring (#)	See Table 8	1

(#) Parts included in the seal kit, which contains the spare parts for 1 pump, (see Table 9 for the old hydraulic machine seal kit in DISUSE or see Table 12 for the ACTUAL unified seal kit).

**Vertical Proportioning Pump
for Hydraulic & Pneumatic Units**



Parts Manual

Table 8. Pneumatic & Hydraulic Piston Rod Size (current model), Parts List

Pump	Ref. 1	Ref. 2	Ref. 3	Ref. 4
13.5	PU-02014-06	PU-02014-08	PU-02014-07R	OR-00167
9.0	PU-02012-06	PU-02012-08	PU-02012-07R	OR-00154
7.6 (#)	PU-02000-06	PU-02000-08	PU-02000-07R	OR-00016
7.2	PU-02013-06	PU-02013-08	PU-02013-07R	OR-00162
6.7	PU-02006-06	PU-02006-08	PU-02006-07R	OR-00086
6.3	PU-02003-06	PU-02003-08	PU-02003-07R	OR-00078
5.7	PU-02002-06	PU-02002-08	PU-02002-07R	OR-00059
5.1	PU-02005-06	PU-02005-08	PU-02005-07R	OR-00080
4.7	PU-02009-06	PU-02009-08	PU-02009-07R	OR-00105
4.5 (*)	PU-02001-06	PU-02001-08	PU-02001-07R	OR-00050
3.2	PU-02011-06	PU-02010-08	PU-02010-07R	OR-00145
2.9	PU-02015-06	PU-02015-08	PU-02015-07R	OR-00172

Pump	Ref. 5	Ref. 6	Ref. 7	Ref. 8
13.5	OR-00166		TN-00342	OR-00011
9.0	OR-00152		TN-00030	OR-00015
7.6 (#)	OR-00156		TN-00030	OR-00015
7.2	OR-00161		TN-00030	OR-00015
6.7			TN-00165	OR-00049
6.3			TN-00165	OR-00049
5.7			TN-00165	OR-00049
5.1			TN-00165	OR-00049
4.7			TN-00165	OR-00049
4.5 (*)	OR-00151		TN-00165	OR-00049
3.2			TN-00283	OR-00024
2.9	OR-00171		TN-00283	OR-00024

N.B.: (#) Standard Pump for G-125 A & Compact ES-125 A #7.6 SIZE, for G-200 A & Easy Spray #4.5 SIZE (*). Different sizes are available under order. For delivery time, please consult with Marketing department.



Vertical Proportioning Pump for Hydraulic & Pneumatic Units

Parts Manual

**Table 9. Repair Seal Kit SIZE for Pneumatic & Hydraulic Units (in disuse),
Parts List**

9.0 Optional	(#) 7.6 Optional	7.2 Optional	6.7 Optional	6.3 Optional
KT-00126	KT-00129	KT-00146		

5.7 Optional	5.1 Optional	4.7 Optional	(*) 4.5 Standard	3.2 Optional
			KT-00124	

N.B.: (#) Standard Pump for G-125 A & Compact ES-125 A #7.6 SIZE, for G-200 A & Easy Spray #4.5 SIZE (*). Different sizes are available under order. For delivery time, please consult with Marketing department.

The Repair Seal Kit includes the parts for 1 pump set.

For Current Model, see Table 12.

HYDRAULIC & PNEUMATIC PROPORTIONING PUMP (UNIFIED CURRENT MODEL)

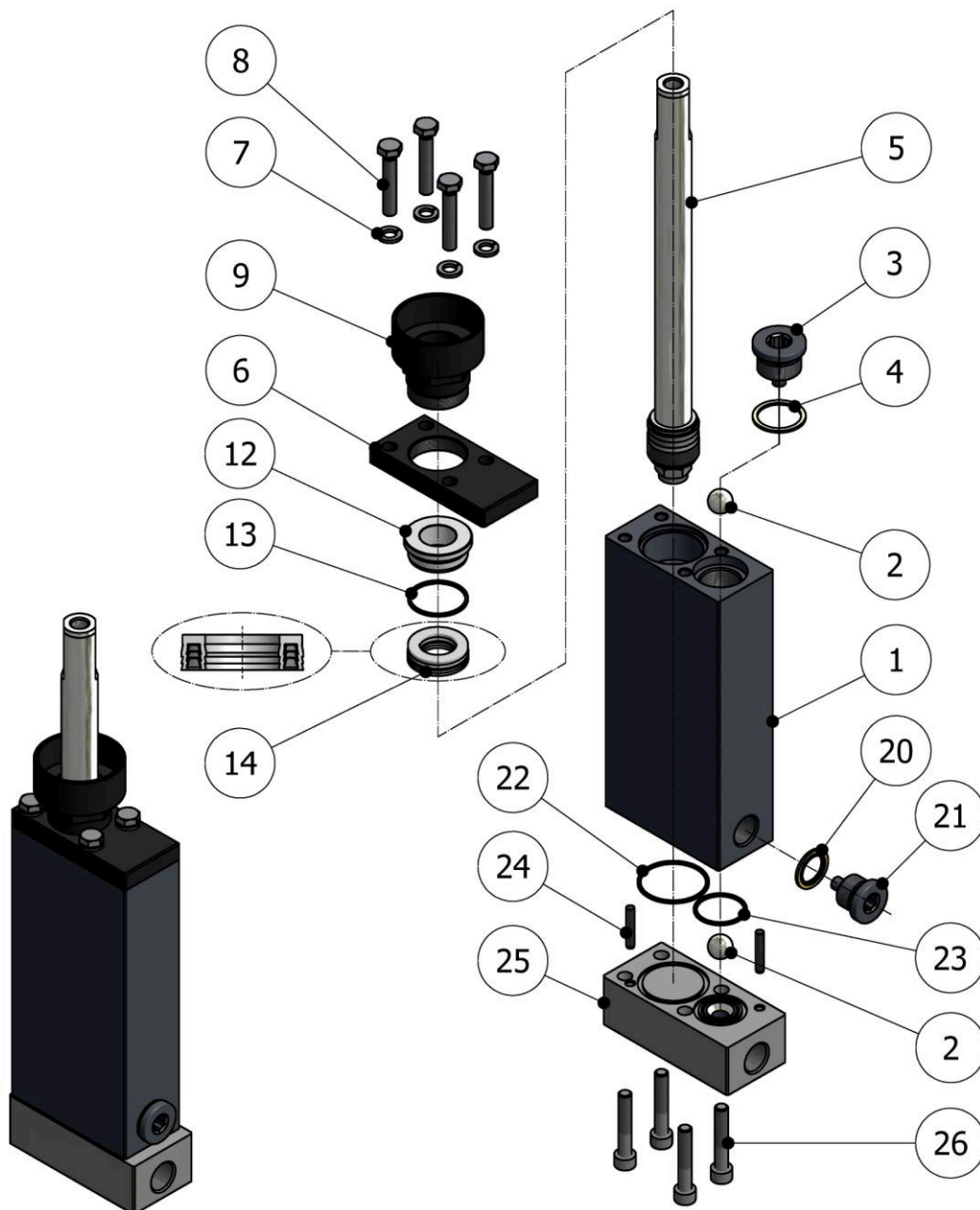


Figure 5. Proportioning Pump (unified current model), Exploded View



Vertical Proportioning Pump for Hydraulic & Pneumatic Units

Parts Manual

Table 10. Pneumatic & Hydraulic Unified Proportioning Pump, Parts List

Ref.	Description	Reference	Qty.
1	Pump Body With Check Valve Assembly	See Table 11	1
1.1	Pump Body	See Table 11	1
1.2	Check Valve Assembly	PU-02000-09	1
2	Valve Ball	TN-00012	2
3	Plug	PU-02000-21	1
4	Seal	PU-02000-27	1
5	Piston Rod Assembly	See pg.11	1
6	Packing Retainer	See Table 11	1
7	Lock Washer	TN-00028	4
8	Socket Head Cap Screw	TN-00051	4
9	Parking Nut W/Lube Cup	See Table 11	1
12	Bearing (#)	See Table 11	1
13	O-Ring (#)	See Table 11	1
14	Cylinder Seal (#)	See Table 11	1
20	O-Ring	OR-00023	1
21	Plug	PU-02000-10	1
22	O-Ring	See Table 11	1
23	O-Ring	OR-00014	1
24	Dowel Pin	TN-00042	2
25	Pump Base With Check Valve Assembly	See Table 11	1
25.1	Check Valve Assembly	PU-02000-09	1
25.2	Base Plate	See Table 11	1
26	Socket Head Cap Screw	TN-00046	4
27	Repair Seal Kit (no indicated in drawing)	See Table 12	1

Notas:

The ISO & POL Pumps are equal.

Quantities for 1 unit Pump.

(#) Parts included in the Repair Seal kit that containing the units for 1 pump set (see

**Vertical Proportioning Pump
for Hydraulic & Pneumatic Units**



Parts Manual

Table 11. Components Variable SIZE, Parts List

Ref.	(#) Size 7.6	(*) Size 4.5
1	PU-02000-02A	PU-02001-02A
1.1	PU-02000-02	PU-02001-02
6	PU-02000-03	PU-02000-03
9	PU-02000-31	PU-02001-31
12	PU-02000-30G	PU-02001-30G
13	OR-00021	OR-00125
14	OR-00116G	OR-00117G
22	OR-00013	OR-00013
25	PU-02000-01A	PU-02000-01A
25.2	PU-02000-01	PU-02000-01

N.B.: (#) Standard Pump for G-125 A & Compact ES-125 A #7.6 SIZE, for G-200 A & Easy Spray #4.5 SIZE (*). Different sizes are available under order. For delivery time, please consult with Marketing department.

Ref.	Size 13.5	Size 9.0	Size 7.2	Size 6.7	Size 6.3
1	PU-02014-02A	PU-02012-02A	PU-02013-02A	PU-02006-02A	PU-02003-02A
1.1	PU-02014-02	PU-02012-02	PU-02013-02	PU-02006-02	PU-02003-02
6	PU-02014-03	PU-02012-03	PU-02000-03	PU-02000-03	PU-02000-03
9	PU-02014-31	PU-02012-31	PU-02000-31	PU-02000-31	PU-02000-31
12	PU-02014-30G				
13	OR-00169				
14	OR-00168G				
22	OR-00170	OR-00013	OR-00013	OR-00013	OR-00013
25	PU-02014-01A	PU-02000-01A	PU-02000-01A	PU-02000-01A	PU-02000-01A
25.2	PU-02014-01	PU-02000-01	PU-02000-01	PU-02000-01	PU-02000-01



Vertical Proportioning Pump for Hydraulic & Pneumatic Units

Parts Manual

Ref.	Size 5.7	Size 5.1	Size 4.7	Size 3.2	Size 2.9
1	PU-02002-02A	PU-02005-02A	PU-02009-02A	PU-02011-02A	PU-02015-02A
1.1	PU-02002-02	PU-02005-02	PU-02009-02	PU-02011-02	PU-02015-02
6	PU-02000-03	PU-02000-03	PU-02000-03	PU-02000-03	PU-02000-03
9	PU-02000-31	PU-02000-31	PU-02001-31	PU-02001-31	PU-02001-31
12					PU-02015-30G
13	OR-00021	OR-00021	OR-00125	OR-00125	OR-00125
14				OR-00144G	OR-00173G
22	OR-00013	OR-00013	OR-00013	OR-00013	OR-00013
25	PU-02000-01A	PU-02000-01A	PU-02000-01A	PU-02000-01A	PU-02000-01A
25.2	PU-02000-01	PU-02000-01	PU-02000-01	PU-02000-01	PU-02000-01

Table 12. Repair Seal Kit (current model)

(#) 7.6 Standard	(*) 4.5 Standard
KT-00129	KT-00153

13.5 Optional	9.0 Optional	7.2 Optional	6.7 Optional	6.3 Optional
KT-00164				

5.7 Optional	5.1 Optional	4.7 Optional	3.2 Optional	2.9 Optional
				KT-00166

N.B.: (#) Standard Pump for G-125 A & Compact ES-125 A #7.6 SIZE, for G-200 A & Easy Spray #4.5 SIZE (*). Different sizes are available under order. For delivery time, please consult with Marketing department.

The Repair Seal Kit includes the parts for 1 pump set.

ASSEMBLY OF SMALLER PUMPS THAN #4.5 SIZE



Figure 6. Assembly of Smaller Pumps than #4.5 Size

Table 13. Assembly of Smaller Pumps than #4.5 Size, Parts List

Ref.	Description	Reference	Qty.
1	Pump Assembly	See Table 1	1
2	Bushing	MQ-18005-01	1
3	Fender Washer	TN-00456	1
4	Lock Washer	TN-00028	1
5	Hex. Screw	TN-00051	1

Note: From size # 4.5 to size # 9.0 (inclusive), corresponds the standard assembly.



SEAL KITS COMPATIBILITY

Table 14. Compatibility List of Seal Kits

Version of Proportioning Pump	Piston Seals	Flange Seal
Model 01 (discontinued)	2 Simple Seals	1 Simple Seal
Model 02 (in disuse)	1 Heavy Seal	1 Simple Seal
Model 03 (current)	1 Heavy Seal	1 Heavy Seal

The current Repair Seal Kits are reflected in **Table 12**, that correspond to the assembly of the **Model 03** pump.

The Repair Seal Kit for the assembly **Model 02** pump (in disuse), are those reflected in **Table 9**.

The Repair Seal Kit for the assembly **Model 01** pump (discontinued), are those reflected in **Table 6**.

The **Model 01** and **Model 02** of dosing pumps are upgradeable to the current **Model 03**, for this you must take into account that:

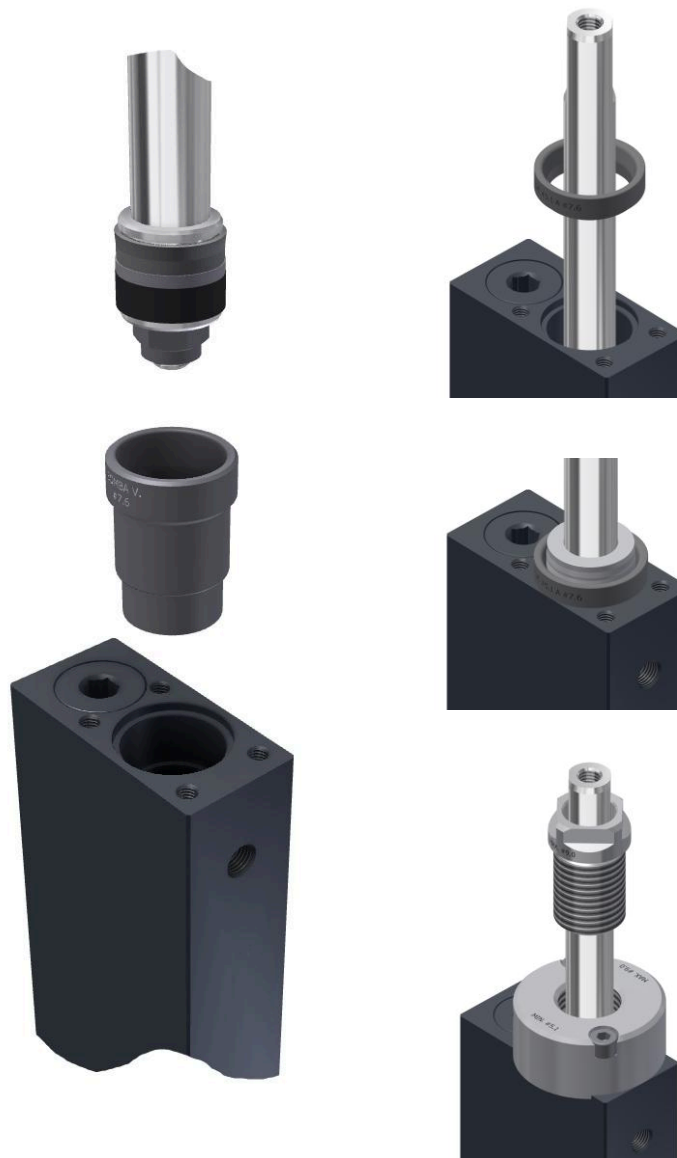
- To upgrade from **Model 01** pump to **Model 03** pump, you must assemble the kit corresponding to the current model (according to **Table 12**), and replace the old piston with the current one according to **POS.3** of the **Table 8**.
- To upgrade from **Model 02** pump to **Model 03** pump, you only have to assemble the kit corresponding to the current model (according to **Table 12**).

ASSEMBLY OF SEALS

For the assembly of the pump, there are specific tools that avoid damaging the lips of the seals of both the piston and the cylinder head.

First, you must assemble the piston rod assembly with the plunger and all components. Make sure that the lips of the piston seal are facing upwards.

Insert the piston assembly mounted inside the sleeve using the specific tool (1).



Once the piston has been inserted into the sleeve, the cylinder head retainer must be mounted. To do this you must first place the funnel tool (2).

Next, place the seal on the cylinder head with the lips facing down.

Subsequently, you must position and fix the tool (3) to the sleeve and insert the pusher (4) into the rod. Screw until it stops.





Remove all the tools and finish the assembly of the pump by placing the guide with seal and fixing the cylinder head and the nut with the bowl .



Vertical Proportioning Pump for Hydraulic & Pneumatic Units

Parts Manual

Table 15. Tools List

	Tool (1)	Tool (2)	Tool (3)	Tool (4)
SIZE				
#2,9	-	HT-00116	HT-00119	HT-00121
#3,2	-			
#4,5	HT-00034			
#4,7	-			
#5,1	-	HT-00117	HT-00120	HT-00122
#5,7	HT-00033			
#6,3	HT-00032			
#6,7	-			
#7,2	-			
#7,6	HT-00031			
#9,0	HT-00130	HT-00118	HT-00128	HT-00129
#13,5	HT-00126	HT-00127		

Note: These tools are not supplied with the machine, they are optional upon request.



CONTENT

Warranty	2
Proportioning Pump Pneumatic & Hydraulic Units	3
Hydraulic & Pneumatic Proportioning Pump (old assemblies in disuse)	4
Pneumatic Piston Rod Assembly (old model Discontinued)	7
Pneumatic & Hydraulic Piston Rod Assembly (Current Model)	11
Hydraulic & Pneumatic Proportioning Pump (Unified Current Model)	15
Assembly of Smaller Pumps than #4.5 Size	19
Seal Kits Compatibility	20
Assembly of Seals	21
Content	23
List of illustrations	23

LIST OF ILLUSTRATIONS

Figure 1. Proportioning Pump Pneumatic & Hydraulic Units	3
Figure 2. Proportioning Pump (old assemblies in disuse), Exploded View	4
Figure 3. Pneumatic Piston Rod Assembly (old model discontinued), Exploded View	7
Figure 4. Pneumatic & Hydraulic Piston Rod Assembly (current model), Exploded View	11
Figure 5. Proportioning Pump (unified current model), Exploded View	15
Figure 6. Assembly of Smaller Pumps than #4.5 Size	19



POLYUREATEC GMBH
Bruchweg 96 · 41564 Kaarst
Tel. +49/21 31/1 76 88 92 · Fax +49/21 31/1 76 88 93
info@polyureatec.de · www.polyureatec.de