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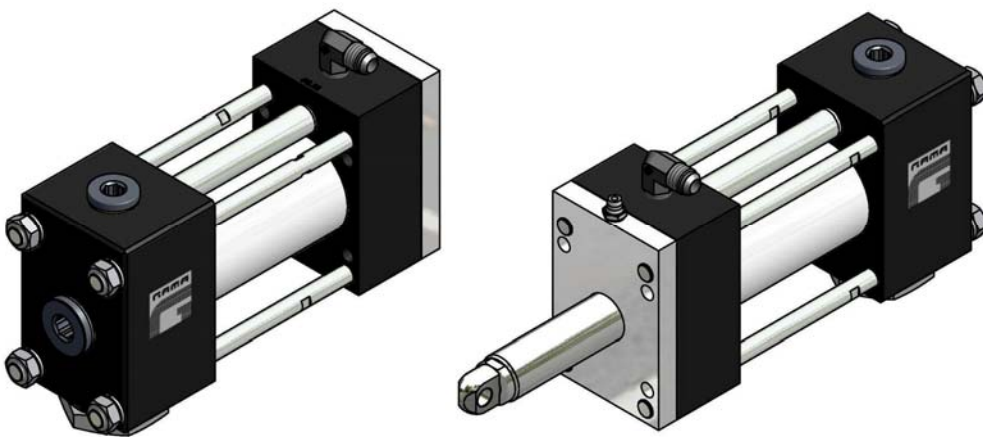
POLYUREATEC GMBH
Bruchweg 96 · 41564 Kaarst
Tel. +49/21 31/1 76 88 92 · Fax +49/21 31/1 76 88 93
info@polyureatec.de · www.polyureatec.de

Parts Manual

Proportioning Pumps

for Hydraulic Units

Issue 1.0 02/12/11
Ref. NR-00058-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..



WARRANTY

GARRAF MAQUINARIA, S. A. (hereinafter "GAMA") provides this **LIMITED WARRANTY** (hereinafter "Warranty") to the original purchaser (hereinafter "Customer") covering this equipment and the original GAMA 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 GAMA 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 GAMA and return the Product to GAMA as directed by GAMA, freight prepaid. If GAMA determines that the Product is Defective and that such Defect is covered by this Warranty, GAMA will credit Customer for the reasonable freight charges incurred by Customer in returning the Defective Product to GAMA, and GAMA (or its authorized agent) will, at GAMA'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-GAMA Components and Accessories: Non-GAMA 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 GAMA 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 GAMA.
- Failure to follow the operating instructions and recommendations provided by GAMA.
- Cosmetic damage.
- Fire, flood, "acts of God," or other contingencies beyond the control of GAMA.

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, GAMA 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 GAMA HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH LOSSES OR DAMAGES.

Non-Warranty Service by GAMA: If GAMA 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 GAMA'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.

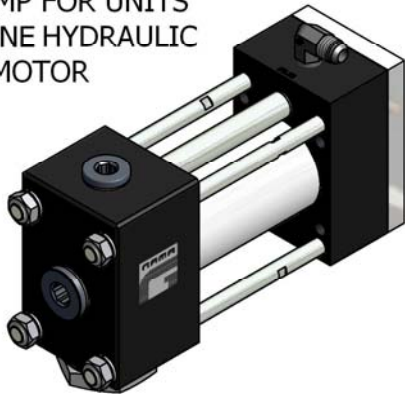
No Rights Implied: Nothing in the sale, lease or rental of any Product by GAMA shall be construed to grant any right, interest or license in or under any patent, trademark, copyright, trade secret or other proprietary right or material owned by anyone; nor does GAMA encourage the infringement of same.

Exclusive Warranty: This writing is the final, complete, and exclusive expression of the Warranty covering the Product. Any statements made by GAMA, 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 GAMA.

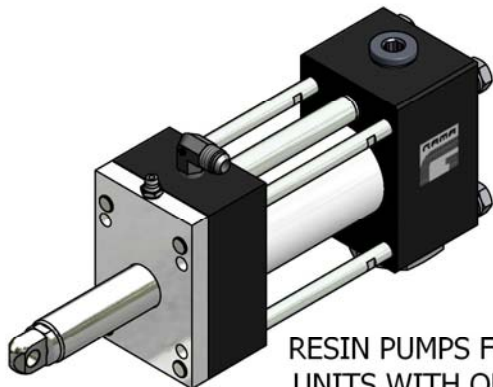
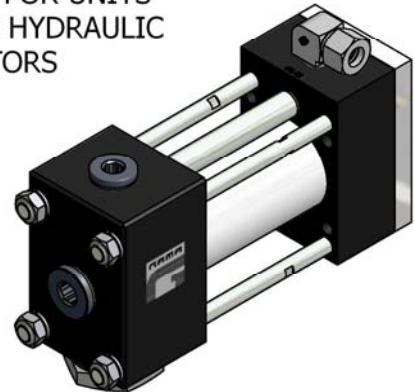


PROPORTIONING PUMPS FOR HYDRAULIC UNITS

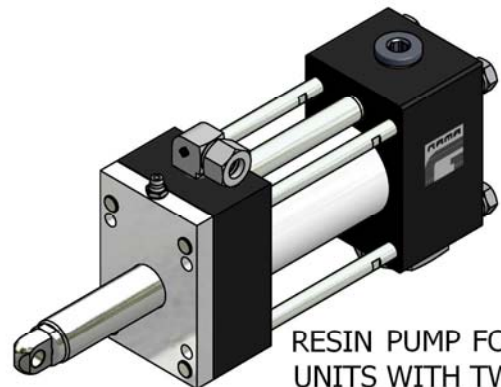
ISO PUMP FOR UNITS
WITH ONE HYDRAULIC
MOTOR



ISO PUMP FOR UNITS
WITH TWO HYDRAULIC
MOTORS



RESIN PUMPS FOR
UNITS WITH ONE
HYDRAULIC MOTOR



RESIN PUMP FOR
UNITS WITH TWO
HYDRAULIC MOTORS

Figure 1. Proportioning Pumps for Hydraulic Units



Table 1. “A” Proportioning Pump Assy Size, Parts List

“A” Pump SIZE	For Units with one Hydraulic Motor	For Units with two Hydraulic Motors
0.60	<i>PU-01001-006 (Old Version)</i>	<i>PU-01001-006V (Old Version)</i>
	PU-01001-006-1	PU-01001-006V-1
0.80 (*)	<i>PU-01001-008 (Old Version)</i>	<i>PU-01001-008V (Old Version)</i>
	PU-01001-008-1	PU-01001-008V-1
0.88	<i>PU-01001-088 (Old Version)</i>	<i>PU-01001-088V (Old Version)</i>
	PU-01001-088-1	PU-01001-088V-1
0.90	<i>PU-01001-009 (Old Version)</i>	<i>PU-01001-009V (Old Version)</i>
	PU-01001-009-1	PU-01001-009V-1
1.0	<i>PU-01001-010 (Old Version)</i>	<i>PU-01001-010V (Old Version)</i>
	PU-01001-010-1	PU-01001-010V-1
1.04	<i>PU-01001-014 (Old Version)</i>	<i>PU-01001-014V (Old Version)</i>
	PU-01001-014-1	PU-01001-014V-1
1.1	<i>PU-01001-011 (Old Version)</i>	<i>PU-01001-011V (Old Version)</i>
	PU-01001-011-1	PU-01001-011V-1
1.2 (*)	<i>PU-01001-012 (Old Version)</i>	<i>PU-01001-012V (Old Version)</i>
	PU-01001-012-1	PU-01001-012V-1

N.B.:

(*) The standard proportioning pump size are # 0.80 & # 1.2 , different sizes are available under order. For delivery time, please consult with Marketing department.

The Codes corrected with horizontal line are only for old versions of pumps.



Table 2. “R” Proportioning Pump Assy Size, Parts List

“R” Pump SIZE	For Units with one Hydraulic Motor	For Units with two Hydraulic Motors
0.60	<i>PU-01002-006 (Old Version)</i>	<i>PU-01002-006V (Old Version)</i>
	PU-01002-006-1	PU-01002-006V-1
0.80 (*)	<i>PU-01002-008 (Old Version)</i>	<i>PU-01002-008V (Old Version)</i>
	PU-01001-008-1	PU-01002-008V-1
0.88	<i>PU-01002-088 (Old Version)</i>	<i>PU-01002-088V (Old Version)</i>
	PU-01002-088-1	PU-01002-088V-1
0.90	<i>PU-01002-009 (Old Version)</i>	<i>PU-01002-009V (Old Version)</i>
	PU-01002-009-1	PU-01002-009V-1
1.0	<i>PU-01002-010 (Old Version)</i>	<i>PU-01002-010V (Old Version)</i>
	PU-01002-010-1	PU-01002-010V-1
1.04	<i>PU-01002-014 (Old Version)</i>	<i>PU-01002-014V (Old Version)</i>
	PU-01002-014-1	PU-01002-014V-1
1.1	<i>PU-01002-011 (Old Version)</i>	<i>PU-01002-011V (Old Version)</i>
	PU-01002-011-1	PU-01002-011V-1
1.2 (*)	<i>PU-01002-012 (Old Version)</i>	<i>PU-01002-012V (Old Version)</i>
	PU-01002-012-1	PU-01002-012V-1

N.B.:

(*) The standard proportioning pump size are # 0.80 & # 1.2 , different sizes are available under order. For delivery time, please consult with Marketing department.

The Codes corrected with horizontal line are only for old versions of pumps.

“A” ISO PROPORTIONING PUMPS

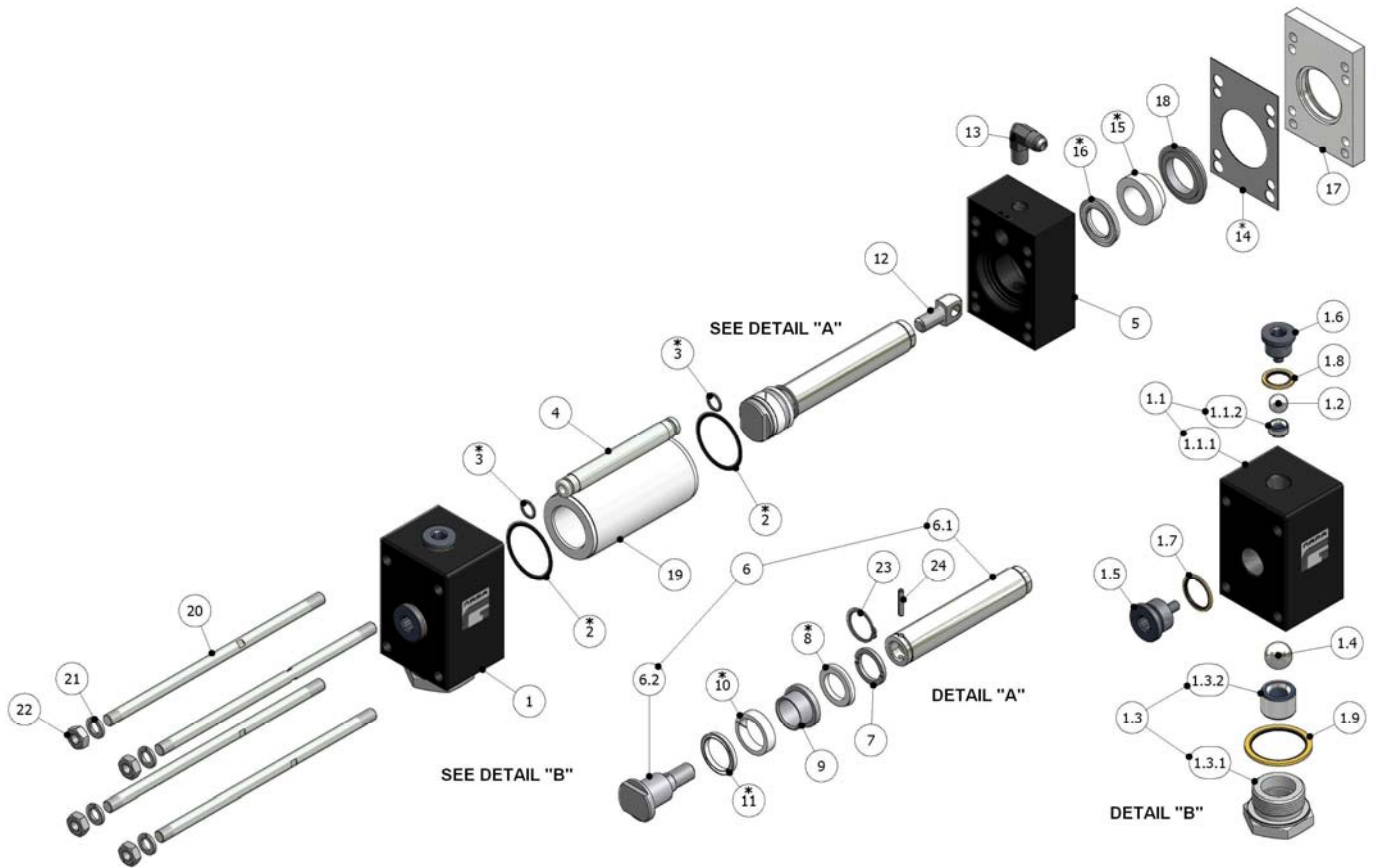


Figure 2. “A” ISO Proportioning Pumps, Exploded View



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Table 3. "A" ISO Proportioning Pumps, Parts List

Ref.	Description	Part Number	Qty.
1	"A"/"R" Pump Base Assembly	PU-01003-00	1
1.1	Pump Base with Check Valve Assembly	PU-01003-0K	1
1.1.1	Pump Base	PU-01003-0A	1
1.1.2	Check Valve Seat	PU-01003-0C	1
1.2	Valve Ball	TN-00012	1
1.3	Inlet Ball Seat Assembly	PU-01003-0J	1
1.3.1	Check Valve Seat	PU-01003-0D	1
1.3.2	Inlet Ball Seat	PU-01003-0B	1
1.4	Valve Ball	TN-00013	1
1.5	Plug	PU-01003-0E	1
1.6	Plug	PU-01003-0F	1
1.7	Seal	OR-00082	1
1.8	Seal	OR-00023	1
1.9	Seal	OR-00088	1
2	O-Ring	OR-00007	2 (*)
3	O-Ring Crossover Tube	OR-00011	2 (*)
4	Crossover Tube	PU-01011	1
5	"A"/"R" Outlet Pump Flange	See Table 4	1
6	Piston Rod Assembly (Only Ref. 6.1 & 6.2)	See Table 4	1
6.1	Piston Rod (Included in Pos. 6) #	See Table 4	1
6.2	Piston Head (Included in Pos. 6) #	See Table 4	1
7	Piston Support Washer	See Table 4	1
8	Piston Seal	See Table 5	1 (*)
9	Piston Seal Support	See Table 5	1
10	Piston Support Washer	See Table 5	1 (*)
11	Piston Seal Wiper Ring	See Table 5	1 (*)
12	Pump Clevis	See Table 4	1
13	Male Elbow	See Table 8	1
14	Gasket	PU-01013	1 (*)
15	Bearing	See Table 6	1 (*)
16	Cylinder Seal	See Table 6	1 (*)

It continues on the next page.



Ref.	Description	Part Number	Qty.
17	Packing Retainer Flange	PU-01001-A00	1
18	Flange Adaptor Ring	See Table 4	1
19	Pump Cylinder	See Table 4	1
20	Tie Rod	PU-01030	4
21	Lock Washer	TN-00087	4
22	Nut	TN-00105	4
23	Retainer Ring	See Table 4	1
24	Dowel Pin	See Table 4	1

N.B.:

The parts marked with (), are included in the repair seal kit of “A” pump (see Table 7).*

The parts marked with (#), are not supplied separately.

Table 4. “A” Proportioning Pump Assembly, Parts List

SIZE	5	6 (6.1 + 6.2)	6.1	6.2	23
0.6	PU-01005-006	PU-01006-006	PU-01007-006	PU-01008-006	TN-00066
0.80 (*)	PU-01005-008	PU-01006-008	PU-01007-008	PU-01008-008	TN-00067
0.88	PU-01005-088	PU-01006-088	PU-01007-088	PU-01008-088	TN-00067
0.9	PU-01005-009	PU-01006-009	PU-01007-009	PU-01008-009	TN-00068
1.0	PU-01005-010	PU-01006-010	PU-01007-010	PU-01008-010	TN-00069
1.04	PU-01005-014	PU-01006-014	PU-01007-014	PU-01008-014	TN-00069
1.1	PU-01005-011	PU-01006-011	PU-01007-011	PU-01008-011	TN-00069
1.20 (*)	PU-01005-012	PU-01006-012	PU-01007-012	PU-01008-012	TN-00070

N.B.: (*) *The standard proportioning pump size are #0.80 & #1.20. Different sizes are available under order. For delivery time, please consult with Marketing department.*

It continues on the next page.



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SIZE	7	12	18	19	24
0.6	PU-01010-006	<i>PU-01012 (Old Versions)</i>	PU-01001-C06	PU-01004-006	TN-00072
		PU-01042			
0.80 (*)	PU-01010-008	<i>PU-01012 (Old Versions)</i>	PU-01001-C08	PU-01004-008	TN-00085
		PU-01042			
0.88	PU-01010-088	<i>PU-01012 (Old Versions)</i>	PU-01001-C88	PU-01004-088	TN-00085
		PU-01042			
0.9	PU-01010-009	<i>PU-01012 (Old Versions)</i>	PU-01001-C09	PU-01004-009	TN-00085
		PU-01042			
1.0	PU-01010-010	<i>PU-01012 (Old Versions)</i>	PU-01001-C10	PU-01004-010	TN-00085
		PU-01042			
1.04	PU-01010-014	<i>PU-01012 (Old Versions)</i>	PU-01001-C14	PU-01004-014	TN-00085
		PU-01042			
1.1	PU-01010-011	<i>PU-01012 (Old Versions)</i>	PU-01001-C11	PU-01004-011	TN-00085
		PU-01042			
1.20 (*)	PU-01010-012	<i>PU-01012 (Old Versions)</i>	<i>NOT MOUNTED (In Old Versions)</i>	PU-01004-012	TN-00086
		PU-01042	PU-01001-E12		

N.B.:

(*) The standard proportioning pump size are #0.80 & #1.20. Different sizes are available under order. For delivery time, please consult with Marketing department.

The Codes corrected with horizontal line are only for old versions of pumps.



Table 5. Piston Seals

SIZE	8	9	10	11
0.6	PU-01016-006	PU-01009-006	PU-01014-006	PU-01015-006
0.80 (*)	PU-01016-008	PU-01009-008	PU-01014-008	PU-01015-008
0.88	PU-01016-088	PU-01009-088	PU-01014-088	PU-01015-088
0.9	PU-01016-009	PU-01009-009	PU-01014-009	PU-01015-009
1.0	PU-01016-010	PU-01009-010	PU-01014-010	PU-01015-010
1.04	PU-01016-014	PU-01009-014	PU-01014-014	PU-01015-010
1.1	PU-01016-011	PU-01009-011	PU-01014-011	PU-01015-011
1.20 (*)	PU-01016-012	PU-01009-012	PU-01014-012	PU-01015-012

N.B.: (*) The standard proportioning pump size are #0.80 & #1.20. Different sizes are available under order. For delivery time, please consult with Marketing department.

Table 6. Pump Retainer Flange Seals

SIZE	15	16
0.6	PU-01001-B06	PU-01017-006
0.80 (*)	PU-01001-B08	PU-01017-008
0.88	PU-01001-B88	PU-01017-088
0.9	PU-01001-B09	PU-01017-009
1.0	PU-01001-B10	PU-01017-010
1.04	PU-01001-B14	PU-01017-014
1.1	PU-01001-B11	PU-01017-011
1.20 (*)	PU-01001-B12 (Old Versions)	PU-01017-012
	PU-01001-D12	

N.B. :

(*) The standard proportioning pump size are #0.80 & #1.20. Different sizes are available under order. For delivery time, please consult with Marketing department.

The Codes corrected with horizontal line are only for old versions of pumps.



Table 7. Repair Seal Kit “A” Pump

SIZE	Ref.
1.20 (#)	KT-00015-012 (Old Versions)
	KT-00093
1.1	KT-
1.04	KT-
1.0	KT-
0.9	KT-
0.88	KT-
0.80 (#)	KT-00017-008
0.6	KT-00015-060

N.B :

(#) The standard proportioning pump size are #0.80 & #1.20. Different sizes are available under order. For delivery time, please consult with Marketing department.

The Codes corrected with horizontal line are only for old versions of pumps.

The Repair seal kit include the parts indicated (*) in the Table 3.

Table 8. Exit Elbow of Product

	Ref.13	Qty.
Units with One Hydraulic Motor	RA-00044	1x Pump
Units with Two Hydraulic Motors	RA-00038	1x Pump

N.B.: These parts are mounted in all Pump Sizes.

“R” RESIN PROPORTIONING PUMPS

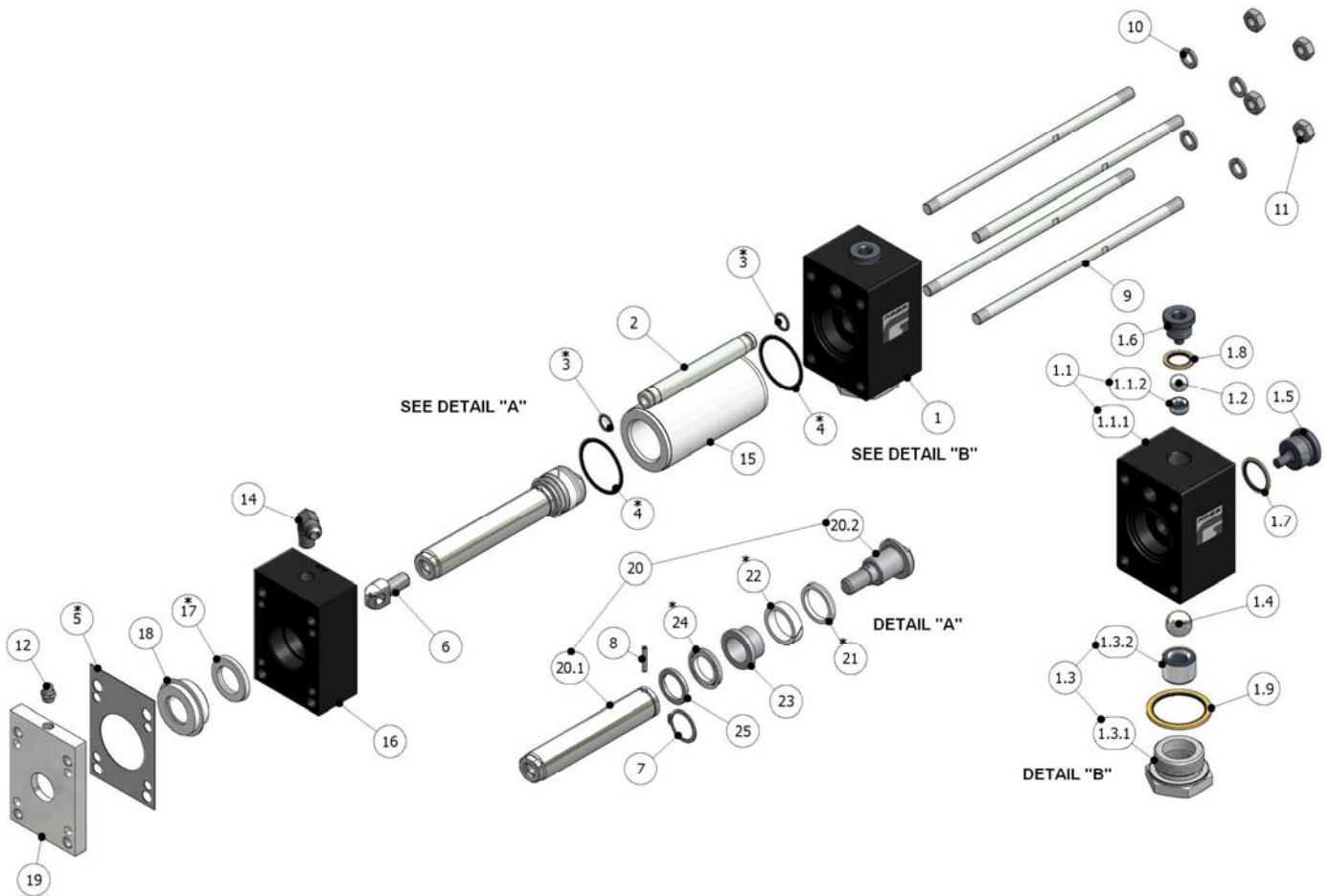


Figure 3. “R” RESIN Proportioning Pump Assembly, Exploded View

N.B.: The parts indicated with () are included in the repair seal kit of “R” pump.*



Table 9. “R” RESIN Proportioning Pump Assembly, Parts List

Ref.	Description	Part Number	Qty.
1	“A”/“R” Pump Base Assembly	PU-01003-00	1
1.1	Pump Base with Check Valve Assembly	PU-01003-0K	1
1.1.1	Pump Base	PU-01003-0A	1
1.1.2	Check Valve Seat	PU-01003-0C	1
1.2	Valve Ball	TN-00012	1
1.3	Inlet Ball Seat Assembly	PU-01003-0J	1
1.3.1	Check Valve Seat	PU-01003-0D	1
1.3.2	Inlet Ball Seat	PU-01003-0B	1
1.4	Valve Ball	TN-00013	1
1.5	Plug	PU-01003-0E	1
1.6	Plug	PU-01003-0F	1
1.7	Seal	OR-00082	1
1.8	Seal	OR-00023	1
1.9	Seal	OR-00088	1
2	Crossover Tube	PU-01011	1
3	O-Ring Crossover Tube	OR-00011	2 (*)
4	O-Ring	OR-00007	2 (*)
5	Gasket	PU-01013	1 (*)
6	Pump Clevis	See Table 10	1
7	Retainer Ring	See Table 10	1
8	Dowel Pin	See Table 10	1
9	Tie Rod	PU-01030	4
10	Lock Washer	TN-00087	4
11	Nut	TN-00105	4
12	Grease FTG	TN-00073	1
14	Male Elbow	See Table 14	1
15	Pump Cylinder	See Table 10	1
16	“A”/“R” Outlet Pump Flange	See Table 10	1
17	Cylinder Seal	See Table 12	1 (*)
18	Grease Bushing	See Table 12	1 (*)
19	Retainer Flange	See Table 10	1



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Ref.	Description	Part Number	Qty.
20	Piston Rod Assembly (Only Ref. 20.1 & 20.2)	See Table 10	1
20.1	Piston Rod (Included in Ref.20) #	See Table 10	1
20.2	Piston Head (Included in Ref. 20) #	See Table 10	1
21	Piston Seal Wiper Ring	See Table 11	1 (*)
22	Piston Seal	See Table 11	1 (*)
23	Piston Seal Support	See Table 11	1
24	Piston Seal	See Table 11	1 (*)
25	Piston Support Washer	See Table 10	1

N.B.:

The parts marked with (), are included in the repair seal kit of "R" pump (see Table 13).*

The parts marked with (#), are not supplied separately.



Table 10. “R” Proportioning Pump Assembly, Parts List

SIZE	6	7	8	15	25
0.6	PU-01012-012 (Old Versions)	TN-00066	TN-00072	PU-01004-006	PU-01010-006
	PU-01042				
0.80 (*)	PU-01012-012 (Old Versions)	TN-00067	TN-00085	PU-01004-008	PU-01010-008
	PU-01042				
0.88	PU-01012-012 (Old Versions)	TN-00067	TN-00085	PU-01004-088	PU-01010-088
	PU-01042				
0.9	PU-01012-012 (Old Versions)	TN-00068	TN-00085	PU-01004-009	PU-01010-009
	PU-01042				
1.0	PU-01012-012 (Old Versions)	TN-00069	TN-00085	PU-01004-010	PU-01010-010
	PU-01042				
1.04	PU-01012-014 (Old Versions)	TN-00069	TN-00085	PU-01004-014	PU-01010-014
	PU-01042				
1.1	PU-01012-012 (Old Versions)	TN-00069	TN-00085	PU-01004-011	PU-01010-011
	PU-01042				
1.20 (*)	PU-01012-012 (Old Versions)	TN-00070	TN-00086	PU-01004-012	PU-01010-012
	PU-01042				

N.B.:

(*) The standard proportioning pump size are #0.80 & #1.20. Different sizes are available under order. For delivery time, please consult with Marketing department.

The Codes corrected with horizontal line are only for old versions of pumps.

It continues on the next pages.



SIZE	16	19	20 (20.1 + 20.2)	20.1	20.2
0.6	PU-01005-006	PU-01002-A06	PU-01006-006	PU-01007-006	PU-01008-006
0.80 (*)	PU-01005-008	PU-01002-A08	PU-01006-008	PU-01007-008	PU-01008-008
0.88	PU-01005-088	PU-01002-A88	PU-01006-088	PU-01007-088	PU-01008-088
0.9	PU-01005-009	PU-01002-A09	PU-01006-009	PU-01007-009	PU-01008-009
1.0	PU-01005-010	PU-01002-A10	PU-01006-010	PU-01007-010	PU-01008-010
1.04	PU-01005-014	PU-01002-A14	PU-01006-014	PU-01007-014	PU-01008-014
1.1	PU-01005-011	PU-01002-A11	PU-01006-011	PU-01007-011	PU-01008-011
1.20 (*)	PU-01005-012	PU-01002-A12	PU-01006-012	PU-01007-012	PU-01008-012

N.B.: (*) The standard proportioning pump size are #0.80 & #1.20. Different sizes are available under order. For delivery time, please consult with Marketing department.

Table 11. Piston Seals

SIZE	21	22	23	24
0.6	PU-01015-006	PU-01014-006	PU-01009-006	PU-01016-006
0.80 (*)	PU-01015-008	PU-01014-008	PU-01009-008	PU-01016-008
0.88	PU-01015-088	PU-01014-088	PU-01009-088	PU-01016-088
0.9	PU-01015-009	PU-01014-009	PU-01009-009	PU-01016-009
1.0	PU-01015-010	PU-01014-010	PU-01009-010	PU-01016-010
1.04	PU-01015-014	PU-01014-014	PU-01009-014	PU-01016-014
1.1	PU-01015-011	PU-01014-011	PU-01009-011	PU-01016-011
1.20 (*)	PU-01015-012	PU-01014-012	PU-01009-012	PU-01016-012

N.B.: (*) The standard proportioning pump size are #0.80 & #1.20. Different sizes are available under order. For delivery time, please consult with Marketing department.



Table 12. Pump Retainer Flange Seals

SIZE	17	18
0.6	PU-01017-006	PU-01002-B06
0.80 (*)	PU-01017-008	PU-01002-B08
0.88	PU-01017-088	PU-01002-B88
0.9	PU-01017-009	PU-01002-B09
1.0	PU-01017-010	PU-01002-B10
1.04	PU-01017-014	PU-01002-B14
1.1	PU-01017-011	PU-01002-B11
1.20 (*)	PU-01017-012	PU-01002-B12

N.B.: (*) The standard proportioning pump size are #0.80 & #1.20. Different sizes are available under order. For delivery time, please consult with Marketing department.

Table 13. Repair Seal Kit “R” Pump

SIZE	Ref.
1.20 (#)	KT-00016-012
1.1	KT-
1.04	KT-
1.0	KT-
0.9	KT-
0.88	KT-00016-088
0.80 (#)	KT-00018-008
0.6	KT-00016-060

N.B.:

(#) The standard proportioning pump size are #0.80 & #1.20. Different sizes are available under order. For delivery time, please consult with Marketing department.

The Repair seal kit include the parts indicated (*) in the Table 9.



Table 14. Exit Elbow of Product

	Ref.14	Qty.
Units with One Hydraulic Motor	RA-00044	1x Pump
Units with Two Hydraulic Motors	RA-00038	1x Pump

N.B.: These parts are mounted in all Pump Sizes.

OPTIONAL DETAIL, OUTPUT CONFIGURATIONS

In some models of the new version of pumps, you can mount de exit elbow of product on upper side or on lower side of pump. If you are interested in this change in the configuration, bear in mind that the hoses are different from those who give themselves in the standard models.

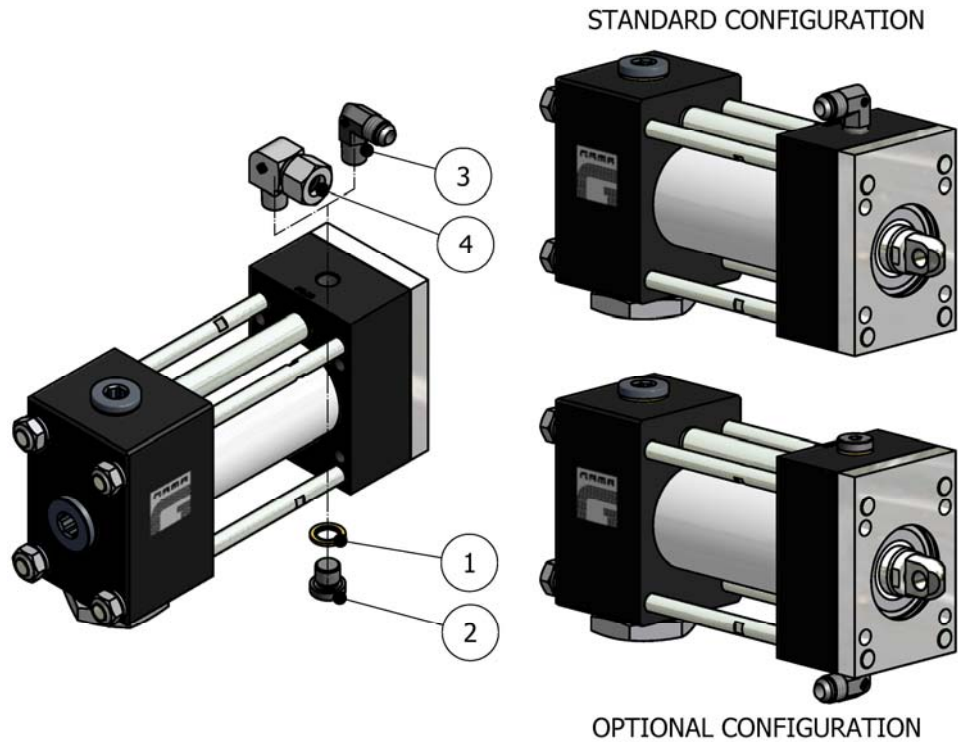


Figure 4. Optional Detail, Output Configurations

Table 15. Output Parts

Ref.	Description	Part Number	Qty.
1	Seal Ring	OR-00054	1
2	Plug with head	RA-00013	1
3	Thread Elbow	RA-00044	1
4	Elbow for Tube	RA-00038	1

N.B.:

() Quantities for one pump.*

Ref. 3 only for units with one hydraulic motor.

Ref. 4 only for units with two hydraulics motors.

Optional Configuration are available under order .For delivery time, please consult with Marketing department.



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