



Parts Manual

"Monobloc" Pumps

for Hydraulic Units

Issue 2.8

13/01/25

Ref. NR-00065-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 the information is aimed at enhancing User Safety and avoiding possible breakdowns derived from the incorrect use of the unit.



WARRANTY

HI-TECH SPRAY EQUIPMENT, S. A. (hereinafter “HI-TECH”) grants this Limited Guarantee to the original buyer (hereinafter the “Client”) for the unit and the original accessories given with the unit (hereinafter the “Product”) against any fault in the design, materials or manufacture of the Product at the time of the first purchase by the user and for a duration of two (2) years thereafter.

If during the guarantee period and under normal conditions of use, the Product should fail to work correctly due to defects of design, material or manufacture, the authorised distributor of the country where the HI-TECH Product or technical assistance service has been purchased shall repair or replace the Product in accordance with what is established in the following:

CONDITIONS

- a) The validity of this guarantee will be subject to the presentation of the original invoice issued by the HI-TECH authorised distributor for the sale of the Product along with the Product handed over for repair or replacement, which must show the date of purchase and the serial number. HI-TECH reserves the right to refuse to give the guarantee service when the indicated data fail to appear on the invoice or have been modified after the purchase of the Product.
- b) The repaired or replaced Product will continue to maintain the original guarantee for the time remaining until the end of the guarantee or for three (3) months from the repair date, if the remaining period of the original guarantee were shorter.
- c) This guarantee will not be applied to the faults in the Product caused by its faulty installation, the natural wear and tear of the components, any use other than that considered normal for this Product or which should fail to strictly comply with the instructions of use provided by HI-TECH; due to accident, carelessness, adjustments, alterations or modifications of the Product not authorised by HI-TECH or due to the use of accessories, heating devices, pumping equipment and/or dispensers that have not been approved or manufactured by HI-TECH.
- d) The guarantee applicable to the components and accessories forming part of the Product and which have not been made by HI-TECH will be limited to the guarantee offered by the original manufacturer thereof.

HI-TECH WILL NOT RECOGNISE ANY EXPRESS ORAL OR WRITTEN GUARANTEES OTHER THAN THIS PRINTED LIMITED GUARANTEE. ALL IMPLICIT GUARANTEES, INCLUDING, WITHOUT LIMIT, ADAPTATION FOR A SPECIFIC USE, ARE SUBJECT TO THE DURATION OF THIS WRITTEN GUARANTEE. HI-TECH DOES NOT ASSUME ANY KIND OF COMMITMENT OR RESPONSIBILITY FOR ALL POSSIBLE DAMAGE OR EXPENSE CAUSED BY FAULTS IN THE OUTPUT OF THE PRODUCT, ITS WORKING OR THE DISPENSING OF MATERIAL THROUGH THE PRODUCT, INCLUDING, WITHOUT LIMITATION, ALL EXPENSES CAUSED BY DAMAGE TO PEOPLE OR PROPERTY. EQUALLY, HI-TECH WILL IN NO CASE ACCEPT LIABILITY FOR THE LOSS OF SPECULATIVE PROFITS OR COMMERCIAL LOSSES. ALL REPAIRS OR REPLACEMENT OF FAULTY PRODUCTS WILL CONSTITUTE THE COMPREHENSIVE FULFILMENT OF HI-TECH'S OBLIGATIONS WITH RESPECT TO THE CLIENT. HI-TECH DOES NOT IN ANY WAY GUARANTEE THE SUITABILITY OR APTITUDE OF ITS PRODUCT FOR ANY PARTICULAR PURPOSE OR APPLICATION.

All of the information provided on components which have not been manufactured by HI-TECH and which is based on reports received from the original manufacturer, though considered precise and reliable, is provided without any guarantee or responsibility of any explicit or implicit kind.

All concession, sale or financial leasing of the Product by HI-TECH in no case explicitly or implicitly constitutes any authorisation, acceptance or concession for the use of any rights or patents, nor does it encourage, nurture or back their infringement.

The restrictions on the guarantee suppose no limitation on the legal rights of the consumer established in applicable national legislation, nor do they affect any rights derived from the bargain and sale agreement between the consumer and supplier.

All of the information provided in this manual has been included in the confidence that it is true, although it does not constitute any responsibility or implicit or explicit guarantee. HI-TECH reserves the right at any time and without prior warning to make all improvements and modifications necessary to this manual, in order to rectify any possible typographical errors, increase the information contained or insert the changes caused to the characteristics and performance of the unit.



SAFETY AND HANDLING

The equipment described in this manual has been designed and manufactured in compliance with the following European Directives, following as application guide the harmonized standards detailed and in conformity with the relevant UK Statutory Instruments (and their amendments):

Directive 2006/42/EC on machinery (UK Supply of Machinery (Safety) Regulations 2008)

UNE EN 12100:2012 (BS EN ISO 12100:2010)

Directive 2014/68/EU on pressure equipment (UK Pressure Equipment (Safety) Regulations 2016)

UNE EN 809:1999 +A1 (BS EN 809:1998 +A1:2009)

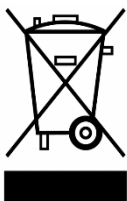
Directive 2003/10/EC on noise level (UK The Control of Noise at Work Regulations 2005)

UNE EN ISO 3740 (BS EN ISO 3740:2019)

UNE EN ISO 3746 (BS EN ISO 3746:2010)

Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment with amendment 2015/863/EU (UK The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012)

Directive 2012/19/EU on waste electrical and electronic equipment (UK The Waste Electrical and Electronic Equipment Regulations 2013)



Electrical products cannot be thrown out with the rubbish. They must be taken to a dedicated collection point for an environmentally sound disposal in accordance with local regulations. You must contact your local collective or retailer for information about recycling. Before leaving WEEE at appropriate collection facilities, batteries must be removed and disposed of separately for proper recycling. The packaging materials are recyclable. Dispose of packaging materials in an environmentally sound manner and place them at the disposal of recycling sectors.

TRANSPORT AND STORAGE

Proper precautions must be taken so that the equipment can withstand the effects of transport and storage temperatures between -25°C and +55°C or up to +70°C for short periods that do not exceed 24 hours. Also, appropriate means to prevent damage from moisture, vibrations or shocks must be foreseen.

PROPORTIONING PUMPS FOR HYDRAULIC UNITS

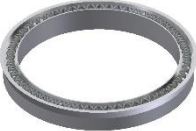



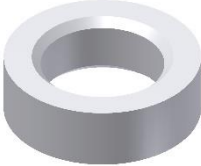
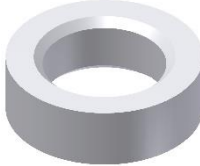
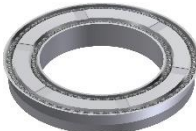





The HI-TECH Hydraulic Units incorporate “monobloc” design Proportioning Pumps of which there are three compatible models. The difference between models are in the design of the piston seals and rod seal.

The original models (model "O"), incorporate two piston seals and one rod seal with two toroidal springs.

In the first evolution (model "A") the two piston seals and the piston guide have been replaced by a single more robust piston seal and a more reinforced guide to achieve more effective guidance.

In the second evolution (model G) the rod seal has been replaced by other one with a new thicker design and with three lips that ensures a better sealing of the shaft, as well as a longer life of the joint.

To identify which pump model incorporates your unit, you must verify the seals described above.

“O” MODEL (2 PISTON SEALS AND ONE ROD SEAL WITH DOUBLE TOROIDAL SPRING)	“A” MODEL (ONE PISTON SEAL AND ONE ROD SEAL WITH DOUBLE TOROIDAL SPRING)	“G” MODEL (ONE PISTON SEAL AND ONE THICK ROD SEAL WITH A TRIPLE SEALING LIP)
		
		
		
		

Refer to the appropriate section according to the pump model that incorporates your unit.



PROPORTIONING PUMPS HYDR. UNITS, MODEL “O”

Table 1. “O” Model Proportioning ISO Pump Assy Size, Parts List

ISO Pump SIZE	For Units with one Hydraulic Motor	For Units with two Hydraulic Motors
0.58	PU-06101-058	-
0.60	PU-06101-006	PU-06201-006
0.69	PU-06101-069	-
0.80 (*)	PU-06101-008	PU-06201-008
0.88	PU-06101-088	PU-06201-088
0.96	PU-06101-096	PU-06201-096
1.14	PU-06101-114	-
1.2 (*)	PU-06101-012	PU-06201-012
1.47	PU-07101-147	-
2.00	PU-07101-020	-

Table 2. “O” Model Proportioning RESIN Pump Assy Size, Parts List

RESIN Pump SIZE	For Units with one Hydraulic Motor	For Units with two Hydraulic Motors
0.58	PU-06102-058	-
0.60	PU-06102-006	PU-06301-006
0.69	PU-06102-069	-
0.80 (*)	PU-06102-008	PU-06301-008
0.88	PU-06102-088	PU-06301-088
0.96	PU-06102-096	PU-06301-096
1.14	PU-06102-114	-
1.2 (*)	PU-06102-012	PU-06301-012
1.47	PU-07102-147	-
2.00	PU-07102-020	-

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.

“O” MODEL ISO PROPORTIONING PUMPS

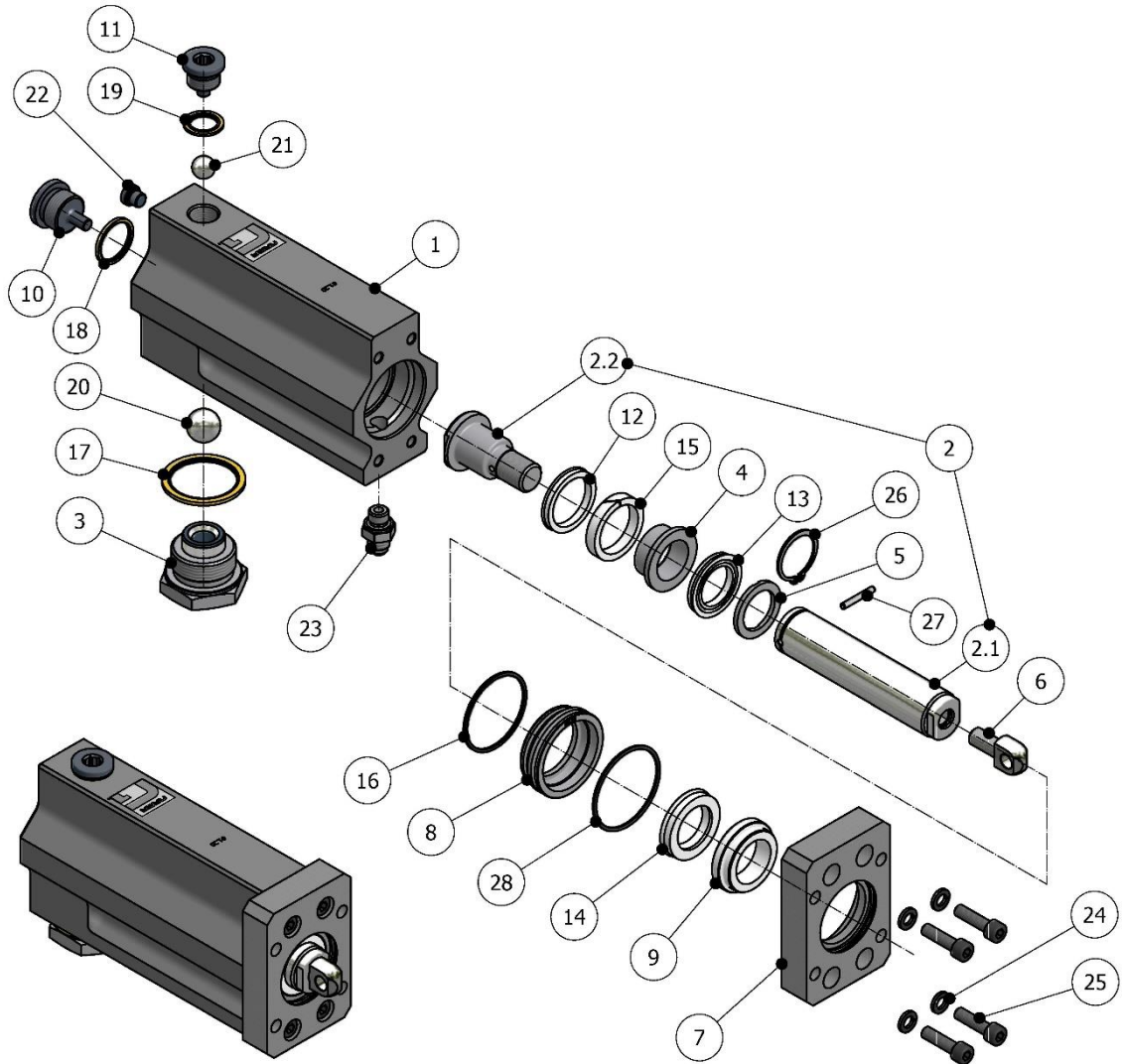


Figure 1. “O” Model ISO Proportioning Pumps, Exploded View

The monobloc pumps model "O" have a different pump casing and flange geometry than the current "G" model, but are interchangeable with each other.

“Monobloc” Pumps

Parts Manual



Table 3. “O” Model ISO Proportioning Pump, Parts List

item.	Description	Part Number	Qty.
1	Body Pump with Check Valve Seat	See Table 4	1
2	Piston Rod Assembly (Only item. 2.1 y 2.2)	See Table 4	1
2.1	Piston Rod (Included in item 2)	See Table 4	1 (#)
2.2	Piston Head (Included in item 2)	See Table 4	1 (#)
3	Inlet Ball Seat Assembly	PU-01003-0J	1
4	Piston Seal Support	See Table 4	1
5	Piston Seal	See Table 4	1
6	Pump Clevis	See Table 4	1
7	“Monobloc” Flange Pump – ISO	See Table 4	1
8	Seat Seal – ISO	See Table 4	1
9	Bearing ISO	See Table 5	1 (*)
10	Plug Side Pump	PU-01003-0E	1
11	Upper Plug Pump	PU-01003-0F	1
12	Piston Seal Wiper Ring	See Table 5	1 (*)
13	Piston Seal	See Table 5	1 (*)
14	Cylinder Seal	See Table 5	1 (*)
15	Piston Guide	See Table 5	1 (*)
16	O-Ring	See Table 5	1 (*)
17	Metallic Ring	OR-00088	1
18	Metallic Ring	OR-00082	1
19	Metallic Ring	OR-00023	1
20	Lower Ball	TN-00013	1
21	Upper Ball	TN-00012	1
22	Plug	See Table 4	1
23	Output Elbow	See Table 7	1
24	Washer	See Table 4	4
25	Allen Screw	See Table 4	4
26	Seeger Ring	See Table 4	1
27	Pin	See Table 4	1
28	O-Ring	See Table 5	1 (*)

N.B.: The parts marked with (*), are included in the repair seal kit of “O” Model ISO pump (see Table 6). The parts marked with (#), are not supplied separately.



Table 4. “O” Model ISO Proportioning Pump Assembly, Parts List

Pump	Item 1	Item 2 (2.1 + 2.2)	Item 2.1	Item 2.2	Item 4
0.58	PU-06001-058	PU-01006-058	PU-01007-058	PU-01008-058	PU-01009-058
0.60	PU-06001-006	PU-01006-006	PU-01007-006	PU-01008-006	PU-01009-006
0.69	PU-06001-069	PU-01006-069	PU-01007-069	PU-01008-069	PU-01009-069
0.80 (*)	PU-06001-008	PU-01006-008	PU-01007-008	PU-01008-008	PU-01009-008
0.88	PU-06001-088	PU-01006-088	PU-01007-088	PU-01008-088	PU-01009-088
0.96	PU-06001-096	PU-01006-096	PU-01007-096	PU-01008-096	PU-01009-096
1.14	PU-06001-114	PU-01006-114	PU-01007-114	PU-01008-114	PU-01009-114
1.20 (*)	PU-06001-012	PU-01006-012	PU-01007-012	PU-01008-012	PU-01009-012
1.47	PU-07001-147	PU-01006-147	PU-01007-147	PU-01008-147	PU-01009-147
2.00	PU-07001-020	PU-01006-020	PU-01007-020	PU-01008-020	PU-01009-020

Pump	Item 5	Item 6	Item 7	Item 8	Item 22
0.58	PU-01010-058	PU-01042	PU-06004	PU-06009-058	RA-00211
0.60	PU-01010-006	PU-01042	PU-06004	PU-06009-006	RA-00211
0.69	PU-01010-069	PU-01042	PU-06004	PU-06009-069	RA-00211
0.80 (*)	PU-01010-008	PU-01042	PU-06004	PU-06009-008	RA-00211
0.88	PU-01010-088	PU-01042	PU-06004	PU-06009-088	RA-00211
0.96	PU-01010-096	PU-01042	PU-06004	PU-06009-096	RA-00211
1.14	PU-01010-114	PU-01042	PU-06004	PU-06009-114	RA-00211
1.20 (*)	PU-01010-012	PU-01042	PU-06004	PU-06009-012	RA-00211
1.47	PU-01010-147	PU-07012	PU-07004	PU-07009-147	RA-00013
2.00	PU-01010-020	PU-07012	PU-07004	PU-07009-020	RA-00013

N.B :

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

“Monobloc” Pumps

Parts Manual



Pump	Item 24	Item 25	Item 26	Item 27
0.58	TN-00028	TN-00062	TN-00066	TN-00072
0.60	TN-00028	TN-00062	TN-00066	TN-00072
0.69	TN-00028	TN-00062	TN-00255	TN-00256
0.80 (*)	TN-00028	TN-00062	TN-00067	TN-00085
0.88	TN-00028	TN-00062	TN-00067	TN-00085
0.96	TN-00028	TN-00062	TN-00068	TN-00085
1.14	TN-00028	TN-00062	TN-00070	TN-00086
1.20 (*)	TN-00028	TN-00062	TN-00070	TN-00086
1.47	TN-00039	TN-00043	TN-00382	TN-00381
2.00	TN-00039	TN-00043	TN-00380	TN-00383

N.B :

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



Table 5. Seals “Monobloc” “O” Model ISO Pump

item	#0.58	#0.6	#0.69	#0.8	#0.88
9	PU-06007-058	PU-06007-006	PU-06007-069	PU-06007-008	PU-06007-088
12	PU-01015-058	PU-01015-006	PU-01015-069	PU-01015-008	PU-01015-088
13	PU-01016-058	PU-01016-006	PU-01016-069	PU-01016-008	PU-01016-088
14	PU-01017-058	PU-01017-006	PU-01017-069	PU-01017-008	PU-01017-088
15	PU-01014-058	PU-01014-006	PU-01014-069	PU-01014-008	PU-01014-088
16	OR-00009	OR-00009	OR-00009	OR-00009	OR-00009
28	OR-00115	OR-00115	OR-00115	OR-00115	OR-00115

item	#0.96	#1.14	#1.2 (*)	#1.47	#2.00
9	PU-06007-096	PU-06007-114	PU-06007-012	PU-07007-147	PU-07007-020
12	PU-01015-096	PU-01015-114	PU-01015-012	PU-01015-147	PU-01015-020
13	PU-01016-096	PU-01016-114	PU-01016-012	PU-01016-147	PU-01016-020
14	PU-01017-096	PU-01017-114	PU-01017-012	PU-01017-147	PU-01017-020
15	PU-01014-096	PU-01014-114	PU-01014-012	PU-01014-147	PU-01014-020
16	OR-00009	OR-00009	OR-00009	OR-00115	OR-00127
28	OR-00115	OR-00115	OR-00115	OR-00128	OR-00128

Table 6. Repair Seal Kit “O” Model ISO Pump

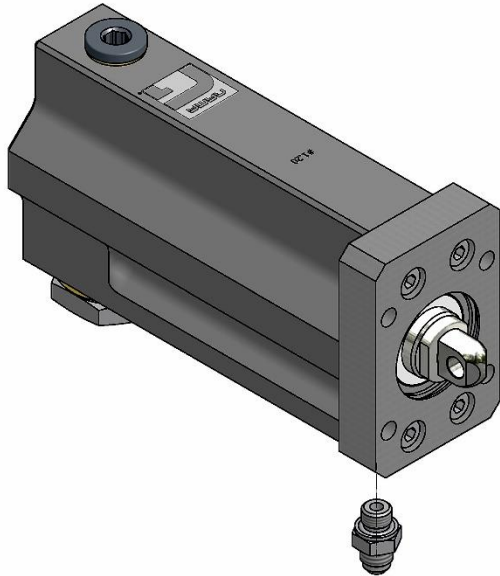
Pump	Item
2.00	KT-00015-020
1.47	
1.20 (*)	KT-00095-012
1.14	KT-00095-114
0.96	
0.88	KT-00095-088
0.80 (*)	KT-00095-008
0.69	KT-00095-069
0.60	KT-00095-006
0.58	KT-00095-058

N.B : (*) The standard proportioning pump sizes 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 3.

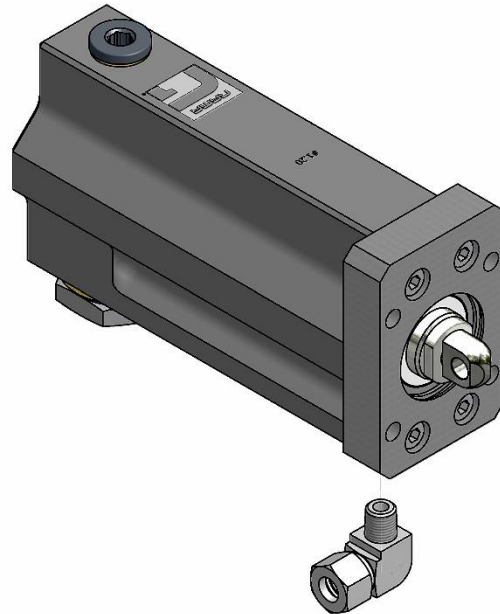


Units with One Hydraulic Motor



RA-00145 / RA-00145 + RA-00373

Units with Two Hydraulic Motors



RA-00038 / RA-00038 + RA-00373

Figure 2. Output Elbows ISO & RESIN Pump

Table 7. Exit Elbow of Product

	Pumps	Item 23	Qty.
Units with One Hydraulic Motor	0.58 / 0.60 / 0.69 / 0.80 / 0.88 / 0.96 / 1.14 / 1.20	RA-00145	1x Pump
	1.47 / 2.00	RA-00145 + RA-00373	1x Pump
Units with Two Hydraulic Motors	0.58 / 0.60 / 0.80 / 0.88 / 0.96 / 1.14 / 1.20	RA-00038	1x Pump
	1.47 / 2.00	RA-00038 + RA-00373	1x Pump

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

“O” MODEL RESIN PROPORTIONING PUMPS

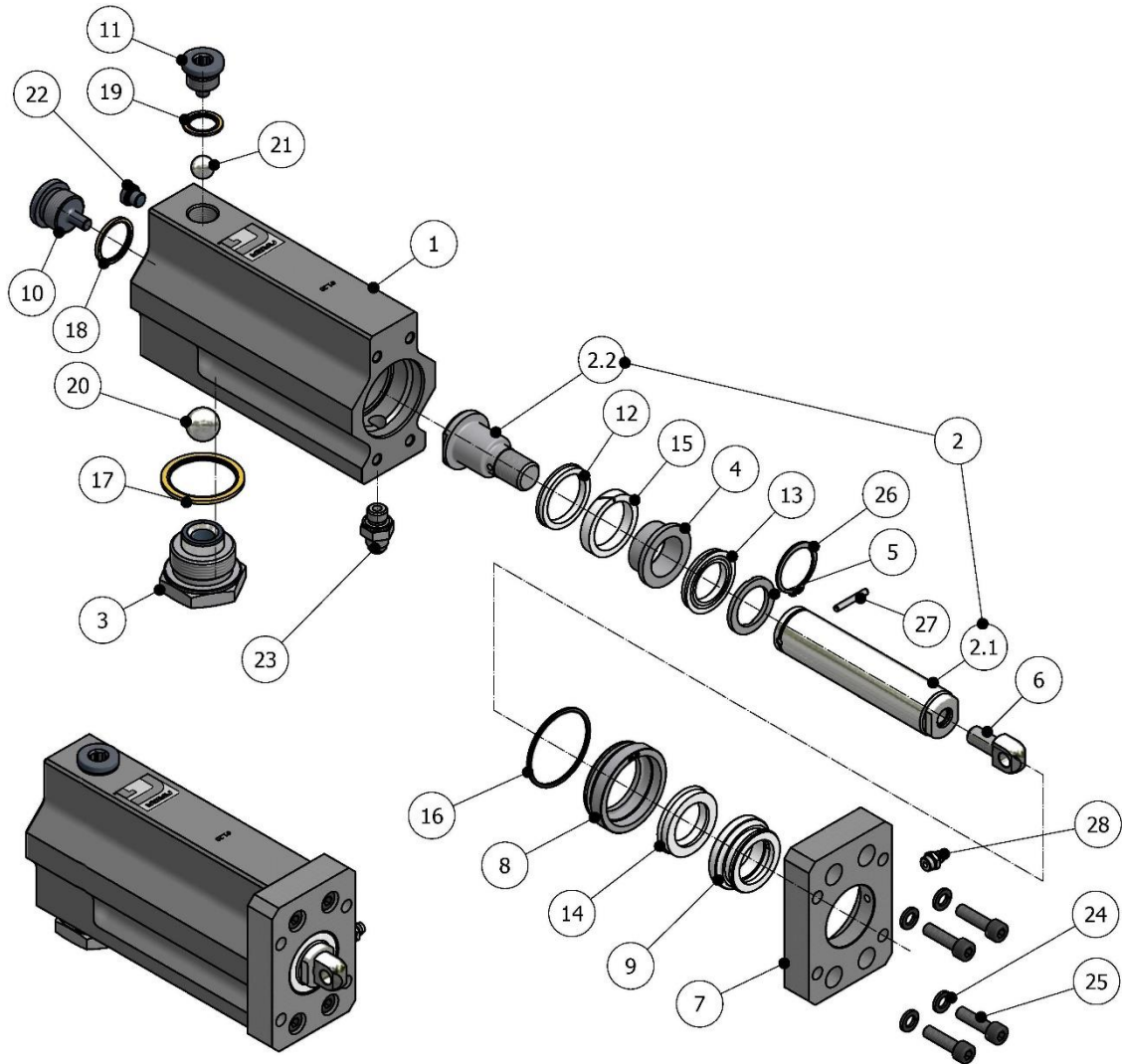


Figure 3. “O” Model RESIN Proportioning Pumps, Exploded View

The monobloc pumps model "O" have a different pump casing and flange geometry than the current "G" model, but are interchangeable with each other.

“Monobloc” Pumps

Parts Manual



Table 8. “O” Model RESIN Proportioning Pump, Parts List

item.	Description	Part Number	Qty.
1	Body Pump with Check Valve Seat	See Table 9	1
2	Piston Rod Assembly (Only item. 2.1 y 2.2)	See Table 9	1
2.1	Piston Rod (Included in item 2)	See Table 9	1 (#)
2.2	Piston Head (Included in item 2)	See Table 9	1 (#)
3	Inlet Ball Seat Assembly	PU-01003-0J	1
4	Piston Seal Support	See Table 9	1
5	Piston Seal	See Table 9	1
6	Pump Clevis	See Table 9	1
7	“Monobloc” Flange Pump – POL	See Table 9	1
8	Seat Seal – POL	See Table 9	1
9	Bearing POL	See Table 10	1 (*)
10	Plug Side Pump	PU-01003-0E	1
11	Upper Plug Pump	PU-01003-0F	1
12	Piston Seal Wiper Ring	See Table 10	1 (*)
13	Piston Seal	See Table 10	1 (*)
14	Cylinder Seal	See Table 10	1 (*)
15	Piston Guide	See Table 10	1 (*)
16	O-Ring	See Table 10	1 (*)
17	Metallic Ring	OR-00088	1
18	Metallic Ring	OR-00082	1
19	Metallic Ring	OR-00023	1
20	Lower Ball	TN-00013	1
21	Upper Ball	TN-00012	1
22	Plug	See Table 9	1
23	Exit Elbow	See Table 7	1
24	Washer	See Table 9	4
25	Allen Screw	See Table 9	4
26	Seeger Ring	See Table 9	1
27	Pin	See Table 9	1
28	Grease Fiting	See Table 9	1

N.B: The parts marked with (*), are included in the repair seal kit of “O” Model RESIN pump (see Table 11). The parts marked with (#), are not supplied separately.



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

Pump	Item 1	Item 2 (2.1 + 2.2)	Item 2.1	Item 2.2	Item 4
0.58	PU-06001-058	PU-01006-058	PU-01007-058	PU-01008-058	PU-01009-058
0.60	PU-06001-006	PU-01006-006	PU-01007-006	PU-01008-006	PU-01009-006
0.69	PU-06001-069	PU-01006-069	PU-01007-069	PU-01008-069	PU-01009-069
0.80 (*)	PU-06001-008	PU-01006-008	PU-01007-008	PU-01008-008	PU-01009-008
0.88	PU-06001-088	PU-01006-088	PU-01007-088	PU-01008-088	PU-01009-088
0.96	PU-06001-096	PU-01006-096	PU-01007-096	PU-01008-096	PU-01009-096
1.14	PU-06001-114	PU-01006-114	PU-01007-114	PU-01008-114	PU-01009-114
1.20 (*)	PU-06001-012	PU-01006-012	PU-01007-012	PU-01008-012	PU-01009-012
1.47	PU-07001-147	PU-01006-147	PU-01007-147	PU-01008-147	PU-01009-147
2.00	PU-07001-020	PU-01006-020	PU-01007-020	PU-01008-020	PU-01009-020

Pump	Item 5	Item 6	Item 7	Item 8	Item 22
0.58	PU-01010-058	PU-01042	PU-06005	PU-06006-058	RA-00211
0.60	PU-01010-006	PU-01042	PU-06005	PU-06006-006	RA-00211
0.69	PU-01010-069	PU-01042	PU-06005	PU-06006-069	RA-00211
0.80 (*)	PU-01010-008	PU-01042	PU-06005	PU-06006-008	RA-00211
0.88	PU-01010-088	PU-01042	PU-06005	PU-06006-088	RA-00211
0.96	PU-01010-096	PU-01042	PU-06005	PU-06006-096	RA-00211
1.14	PU-01010-114	PU-01042	PU-06005	PU-06006-114	RA-00211
1.20 (*)	PU-01010-012	PU-01042	PU-06005	PU-06006-012	RA-00211
1.47	PU-01010-147	PU-07012	PU-07005	PU-07006-147	RA-00013
2.00	PU-01010-020	PU-07012	PU-07005	PU-07006-020	RA-00013

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

“Monobloc” Pumps

Parts Manual



Pump	Item 24	Item 25	Item 26	Item 27	Item 28
0.58	TN-00028	TN-00062	TN-00066	TN-00072	TN-00073
0.60	TN-00028	TN-00062	TN-00066	TN-00072	TN-00073
0.69	TN-00228	TN-00062	TN-00255	TN-00256	TN-00073
0.80 (*)	TN-00028	TN-00062	TN-00067	TN-00085	TN-00073
0.88	TN-00028	TN-00062	TN-00067	TN-00085	TN-00073
0.96	TN-00028	TN-00062	TN-00068	TN-00085	TN-00073
1.14	TN-00028	TN-00062	TN-00070	TN-00086	TN-00073
1.20 (*)	TN-00028	TN-00062	TN-00070	TN-00086	TN-00073
1.47	TN-00039	TN-00043	TN-00382	TN-00381	TN-00384
2.00	TN-00039	TN-00043	TN-00380	TN-00383	TN-00384

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



Table 10. Seals “Monobloc” “O” Model RESIN Pump

item	#0.58	#0.60	#0.69	#0.8 (*)	#0.88
9	PU-06008-058	PU-06008-006	PU-06008-069	PU-06008-008	PU-06008-088
12	PU-01015-058	PU-01015-006	PU-01015-069	PU-01015-008	PU-01015-088
13	PU-01016-058	PU-01016-006	PU-01016-069	PU-01016-008	PU-01016-088
14	PU-01017-058	PU-01017-006	PU-01017-069	PU-01017-008	PU-01017-088
15	PU-01014-058	PU-01014-006	PU-01014-069	PU-01014-008	PU-01014-088
16	OR-00009	OR-00009	OR-00009	OR-00009	OR-00009

item	#0.96	#1.14	#1.2 (*)	#1.47	#2.00
9	PU-06008-096	PU-06008-114	PU-06008-012	PU-07008-147	PU-07008-020
12	PU-01015-096	PU-01015-114	PU-01015-012	PU-01015-147	PU-01015-020
13	PU-01016-096	PU-01016-114	PU-01016-012	PU-01016-147	PU-01016-020
14	PU-01017-096	PU-01017-114	PU-01017-012	PU-01017-147	PU-01017-020
15	PU-01014-096	PU-01014-114	PU-01014-012	PU-01014-147	PU-01014-020
16	OR-00009	OR-00009	OR-00009	OR-00115	OR-00127

Table 11. Repair Seal Kit “O” Model RESIN Pump

Pump	Item
2.00	
1.47	KT-00016-147
1.20 (*)	KT-00096-012
1.14	KT-00096-114
0.96	
0.88	KT-00096-088
0.80 (*)	KT-00096-008
0.69	KT-00096-069
0.60	KT-00096-006
0.58	KT-00096-058

N.B : (*) The standard proportioning pump sizes 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 8



PROPORTIONING PUMPS HYDR. UNITS, MODEL “A”

Table 12. “A” Model Proportioning ISO Pump Assy Size, Parts List

ISO Pump SIZE	For Units with one Hydraulic Motor	For Units with two Hydraulic Motors
0.58	PU-06101-058A	-
0.60	PU-06101-006A	PU-06201-006A
0.69	PU-06101-069A	-
0.80 (*)	PU-06101-008A	PU-06201-008A
0.88	PU-06101-088A	PU-06201-088A
0.96	PU-06101-096A	PU-06201-096A
1.14	PU-06101-114A	-
1.2 (*)	PU-06101-012A	PU-06201-012A
1.47	PU-07101-147A	-
2.00	PU-07101-020A	-

Table 13. “A” Model Proportioning RESIN Pump Assy Size, Parts List

RESIN Pump SIZE	For Units with one Hydraulic Motor	For Units with two Hydraulic Motors
0.58	PU-06102-058A	-
0.60	PU-06102-006A	PU-06301-006A
0.69	PU-06102-069A	-
0.80 (*)	PU-06102-008A	PU-06301-008A
0.88	PU-06102-088A	PU-06301-088A
0.96	PU-06102-096A	PU-06301-096A
1.14	PU-06102-114A	-
1.2 (*)	PU-06102-012A	PU-06301-012A
1.47	PU-07102-147A	-
2.00	PU-07102-020A	-

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.

“A” MODEL ISO PROPORTIONING PUMPS

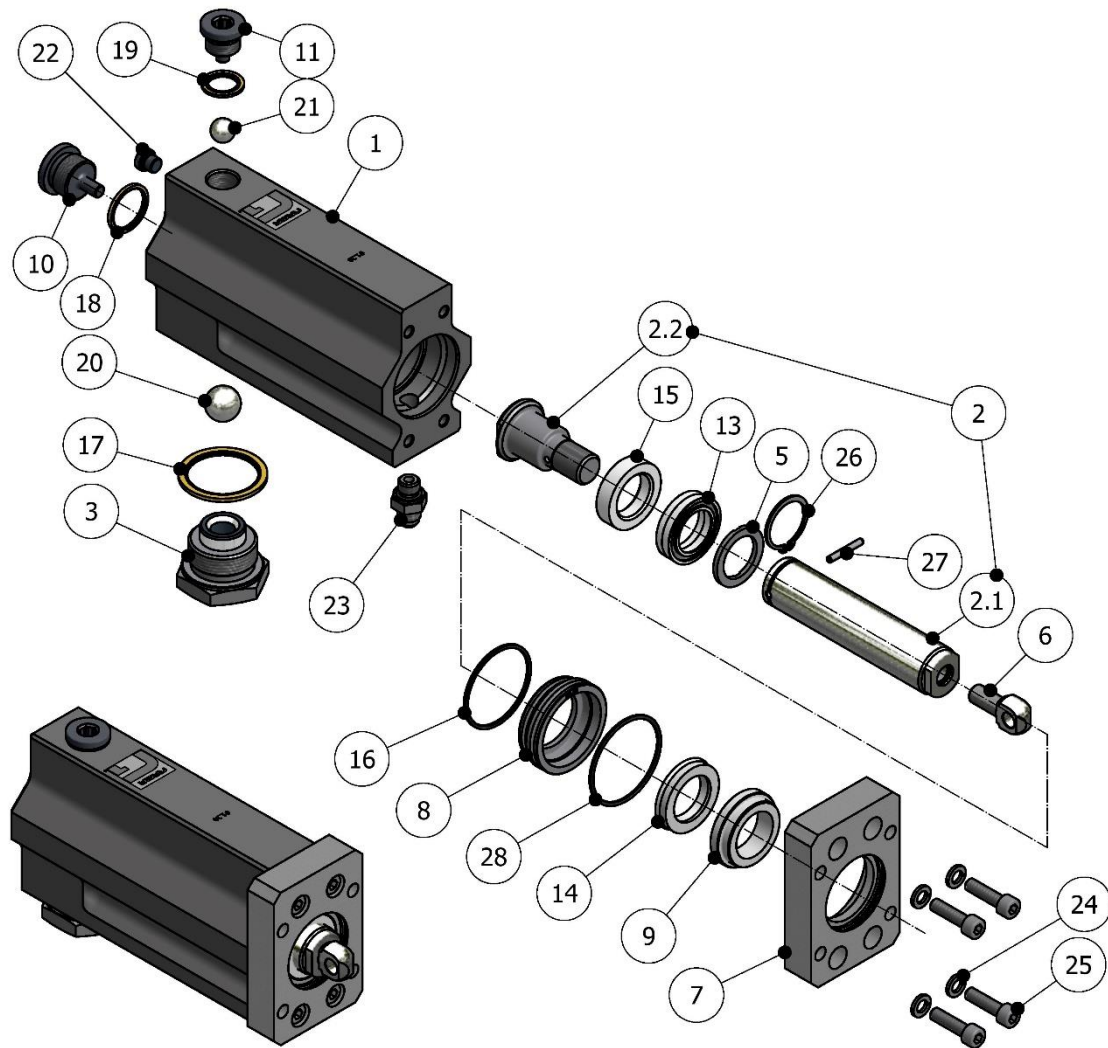


Figure 4. “A” Model ISO Proportioning Pumps, Exploded View

The monobloc pumps model "A" have a different pump casing and flange geometry than the current "G" model, but are interchangeable with each other.

“Monobloc” Pumps

Parts Manual



Table 14. “A” Model ISO Proportioning Pump, Parts List

item.	Description	Part Number	Qty.
1	Body Pump with Check Valve Seat	See Table 15	1
2	Piston Rod Assembly (Only item. 2.1 y 2.2)	See Table 15	1
2.1	Piston Rod (Included in item 2)	See Table 15	1 (#)
2.2	Piston Head (Included in item 2)	See Table 15	1 (#)
3	Inlet Ball Seat Assembly	PU-01003-0J	1
4			
5	Piston Seal	See Table 15	1
6	Pump Clevis	See Table 15	1
7	“Monobloc” Flange Pump – ISO	See Table 15	1
8	Seat Seal – ISO	See Table 15	1
9	Bearing ISO	See Table 16	1 (*)
10	Plug Side Pump	PU-01003-0E	1
11	Upper Plug Pump	PU-01003-0F	1
12			
13	Piston Seal	See Table 16	1 (*)
14	Cylinder Seal	See Table 16	1 (*)
15	Piston Guide	See Table 16	1 (*)
16	O-Ring	See Table 16	1 (*)
17	Metallic Ring	OR-00088	1
18	Metallic Ring	OR-00082	1
19	Metallic Ring	OR-00023	1
20	Lower Ball	TN-00013	1
21	Upper Ball	TN-00012	1
22	Plug	See Table 15	1
23	Output Elbow	See Table 7	1
24	Washer	See Table 15	4
25	Allen Screw	See Table 15	4
26	Seeger Ring	See Table 15	1
27	Pin	See Table 15	1
28	O-Ring	See Table 16	1 (*)

N.B.: The parts marked with (*), are included in the repair seal kit of “A” Model ISO pump (see Table 6). The parts marked with (#), are not supplied separately.



Table 15. “A” Model ISO Proportioning Pump Assembly, Parts List

Pump	Item 1	Item 2 (2.1 + 2.2)	Item 2.1	Item 2.2
0.58	PU-06001-058	PU-01006-058	PU-01007-058	PU-01008-058
0.60	PU-06001-006	PU-01006-006	PU-01007-006	PU-01008-006
0.69	PU-06001-069	PU-01006-069	PU-01007-069	PU-01008-069
0.80 (*)	PU-06001-008	PU-01006-008	PU-01007-008	PU-01008-008
0.88	PU-06001-088	PU-01006-088	PU-01007-088	PU-01008-088
0.96	PU-06001-096	PU-01006-096	PU-01007-096	PU-01008-096
1.14	PU-06001-114	PU-01006-114	PU-01007-114	PU-01008-114
1.20 (*)	PU-06001-012	PU-01006-012	PU-01007-012	PU-01008-012
1.47	PU-07001-147	PU-01006-147	PU-01007-147	PU-01008-147
2.00	PU-07001-020	PU-01006-020	PU-01007-020	PU-01008-020

Pump	Item 5	Item 6	Item 7	Item 8	Item 22
0.58	PU-01010-058	PU-01042	PU-06004	PU-06009-058	RA-00211
0.60	PU-01010-006	PU-01042	PU-06004	PU-06009-006	RA-00211
0.69	PU-01010-069	PU-01042	PU-06004	PU-06009-069	RA-00211
0.80 (*)	PU-01010-008	PU-01042	PU-06004	PU-06009-008	RA-00211
0.88	PU-01010-088	PU-01042	PU-06004	PU-06009-088	RA-00211
0.96	PU-01010-096	PU-01042	PU-06004	PU-06009-096	RA-00211
1.14	PU-01010-114	PU-01042	PU-06004	PU-06009-114	RA-00211
1.20 (*)	PU-01010-012	PU-01042	PU-06004	PU-06009-012	RA-00211
1.47	PU-01010-147	PU-07012	PU-07004	PU-07009-147	RA-00013
2.00	PU-01010-020	PU-07012	PU-07004	PU-07009-020	RA-00013

N.B :

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

“Monobloc” Pumps

Parts Manual



Pump	Item 24	Item 25	Item 26	Item 27
0.58	TN-00028	TN-00062	TN-00066	TN-00072
0.60	TN-00028	TN-00062	TN-00066	TN-00072
0.69	TN-00028	TN-00062	TN-00255	TN-00256
0.80 (*)	TN-00028	TN-00062	TN-00067	TN-00085
0.88	TN-00028	TN-00062	TN-00067	TN-00085
0.96	TN-00028	TN-00062	TN-00068	TN-00085
1.14	TN-00028	TN-00062	TN-00070	TN-00086
1.20 (*)	TN-00028	TN-00062	TN-00070	TN-00086
1.47	TN-00039	TN-00043	TN-00382	TN-00381
2.00	TN-00039	TN-00043	TN-00380	TN-00383

N.B :

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



Table 16. Seals “Monobloc” “A” Model ISO Pump

item	#0.58	#0.6	#0.69	#0.8	#0.88
9	PU-06007-058	PU-06007-006	PU-06007-069	PU-06007-008	PU-06007-088
13	PU-01016-058A	PU-01016-006A	PU-01016-069A	PU-01016-008A	PU-01016-088A
14	PU-01017-058	PU-01017-006	PU-01017-069	PU-01017-008	PU-01017-088
15	PU-01014-058A	PU-01014-006A	PU-01014-069A	PU-01014-008A	PU-01014-088A
16	OR-00009	OR-00009	OR-00009	OR-00009	OR-00009
28	OR-00115	OR-00115	OR-00115	OR-00115	OR-00115

item	#0.96	#1.14	#1.2 (*)	#1.47	#2.00
9	PU-06007-096	PU-06007-114	PU-06007-012	PU-07007-147	PU-07007-020
13	PU-01016-096A	PU-01016-114A	PU-01016-012A	PU-01016-147A	PU-01016-020A
14	PU-01017-096	PU-01017-114	PU-01017-012	PU-01017-147	PU-01017-020
15	PU-01014-096A	PU-01014-114A	PU-01014-012A	PU-01014-147A	PU-01014-020A
16	OR-00009	OR-00009	OR-00009	OR-00115	OR-00127
28	OR-00115	OR-00115	OR-00115	OR-00128	OR-00128

Table 17. Repair Seal Kit “A” Model ISO Pump

Pump	Item
2.00	KT-00015-020A
1.47	
1.20 (*)	KT-00095-012A
1.14	KT-00095-114A
0.96	
0.88	KT-00095-088A
0.80 (*)	KT-00095-008A
0.69	KT-00095-069A
0.60	KT-00095-006A
0.58	KT-00095-058A

N.B : (*) The standard proportioning pump sizes 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 14.

“A” MODEL RESIN PROPORTIONING PUMPS

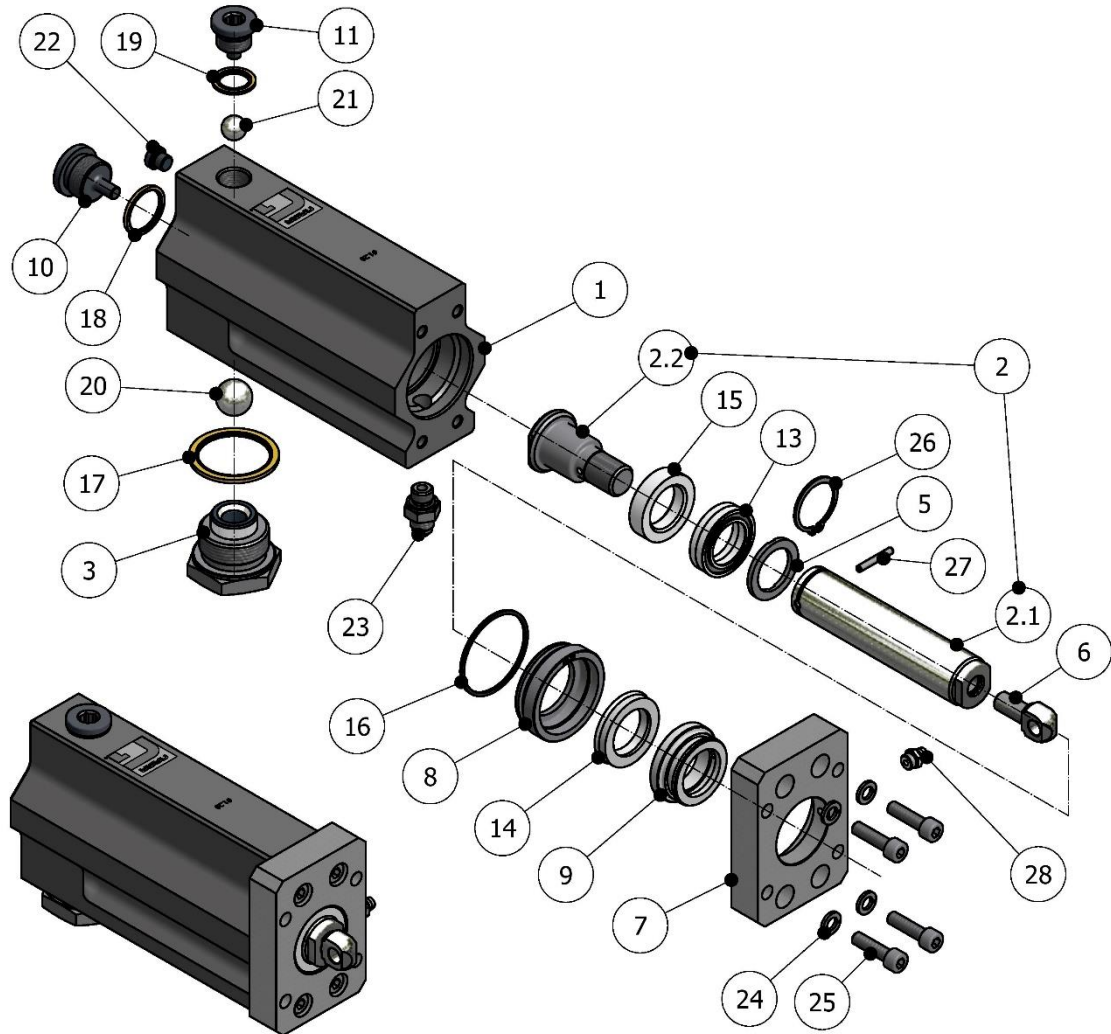


Figure 5. “A” Model RESIN Proportioning Pumps, Exploded View

The monobloc pumps model "A" have a different pump casing and flange geometry than the current "G" model, but are interchangeable with each other.



Table 18. “A” Model RESIN Proportioning Pump, Parts List

item.	Description	Part Number	Qty.
1	Body Pump with Check Valve Seat	See Table 19	1
2	Piston Rod Assembly (Only item. 2.1 y 2.2)	See Table 19	1
2.1	Piston Rod (Included in item 2)	See Table 19	1 (#)
2.2	Piston Head (Included in item 2)	See Table 19	1 (#)
3	Inlet Ball Seat Assembly	PU-01003-0J	1
4			
5	Piston Seal	See Table 19	1
6	Pump Clevis	See Table 19	1
7	“Monobloc” Flange Pump – POL	See Table 19	1
8	Seat Seal – POL	See Table 19	1
9	Bearing POL	See Table 20	1 (*)
10	Plug Side Pump	PU-01003-0E	1
11	Upper Plug Pump	PU-01003-0F	1
12			
13	Piston Seal	See Table 20	1 (*)
14	Cylinder Seal	See Table 20	1 (*)
15	Piston Guide	See Table 20	1 (*)
16	O-Ring	See Table 20	1 (*)
17	Metallic Ring	OR-00088	1
18	Metallic Ring	OR-00082	1
19	Metallic Ring	OR-00023	1
20	Lower Ball	TN-00013	1
21	Upper Ball	TN-00012	1
22	Plug	See Table 19	1
23	Exit Elbow	See Table 7	1
24	Washer	See Table 19	4
25	Allen Screw	See Table 19	4
26	Seeger Ring	See Table 19	1
27	Pin	See Table 19	1
28	Grease Fiting	See Table 19	1

N.B: The parts marked with (*), are included in the repair seal kit of “A” Model RESIN pump (see Table 21). The parts marked with (#), are not supplied separately.



Table 19. “A” Model RESIN Proportioning Pump Assembly, Parts List

Pump	Item 1	Item 2 (2.1 + 2.2)	Item 2.1	Item 2.2
0.58	PU-06001-058	PU-01006-058	PU-01007-058	PU-01008-058
0.60	PU-06001-006	PU-01006-006	PU-01007-006	PU-01008-006
0.69	PU-06001-069	PU-01006-069	PU-01007-069	PU-01008-069
0.80 (*)	PU-06001-008	PU-01006-008	PU-01007-008	PU-01008-008
0.88	PU-06001-088	PU-01006-088	PU-01007-088	PU-01008-088
0.96	PU-06001-096	PU-01006-096	PU-01007-096	PU-01008-096
1.14	PU-06001-114	PU-01006-114	PU-01007-114	PU-01008-114
1.20 (*)	PU-06001-012	PU-01006-012	PU-01007-012	PU-01008-012
1.47	PU-07001-147	PU-01006-147	PU-01007-147	PU-01008-147
2.00	PU-07001-020	PU-01006-020	PU-01007-020	PU-01008-020

Pump	Item 5	Item 6	Item 7	Item 8	Item 22
0.58	PU-01010-058	PU-01042	PU-06005	PU-06006-058	RA-00211
0.60	PU-01010-006	PU-01042	PU-06005	PU-06006-006	RA-00211
0.69	PU-01010-069	PU-01042	PU-06005	PU-06006-069	RA-00211
0.80 (*)	PU-01010-008	PU-01042	PU-06005	PU-06006-008	RA-00211
0.88	PU-01010-088	PU-01042	PU-06005	PU-06006-088	RA-00211
0.96	PU-01010-096	PU-01042	PU-06005	PU-06006-096	RA-00211
1.14	PU-01010-114	PU-01042	PU-06005	PU-06006-114	RA-00211
1.20 (*)	PU-01010-012	PU-01042	PU-06005	PU-06006-012	RA-00211
1.47	PU-01010-147	PU-07012	PU-07005	PU-07006-147	RA-00013
2.00	PU-01010-020	PU-07012	PU-07005	PU-07006-020	RA-00013

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



“Monobloc” Pumps

Parts Manual

Pump	Item 24	Item 25	Item 26	Item 27	Item 28
0.58	TN-00028	TN-00062	TN-00066	TN-00072	TN-00073
0.60	TN-00028	TN-00062	TN-00066	TN-00072	TN-00073
0.69	TN-00228	TN-00062	TN-00255	TN-00256	TN-00073
0.80 (*)	TN-00028	TN-00062	TN-00067	TN-00085	TN-00073
0.88	TN-00028	TN-00062	TN-00067	TN-00085	TN-00073
0.96	TN-00028	TN-00062	TN-00068	TN-00085	TN-00073
1.14	TN-00028	TN-00062	TN-00070	TN-00086	TN-00073
1.20 (*)	TN-00028	TN-00062	TN-00070	TN-00086	TN-00073
1.47	TN-00039	TN-00043	TN-00382	TN-00381	TN-00384
2.00	TN-00039	TN-00043	TN-00380	TN-00383	TN-00384

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



Table 20. Seals “Monobloc” “A” Model RESIN Pump

item	#0.58	#0.60	#0.69	#0.8 (*)	#0.88
9	PU-06008-058	PU-06008-006	PU-06008-069	PU-06008-008	PU-06008-088
13	PU-01016-058A	PU-01016-006A	PU-01016-069A	PU-01016-008A	PU-01016-088A
14	PU-01017-058	PU-01017-006	PU-01017-069	PU-01017-008	PU-01017-088
15	PU-01014-058A	PU-01014-006A	PU-01014-069A	PU-01014-008A	PU-01014-088A
16	OR-00009	OR-00009	OR-00009	OR-00009	OR-00009

item	#0.96	#1.14	#1.2 (*)	#1.47	#2.00
9	PU-06008-096	PU-06008-114	PU-06008-012	PU-07008-147	PU-07008-020
13	PU-01016-096A	PU-01016-114A	PU-01016-012A	PU-01016-147A	PU-01016-020A
14	PU-01017-096	PU-01017-114	PU-01017-012	PU-01017-147	PU-01017-020
15	PU-01014-096A	PU-01014-114A	PU-01014-012A	PU-01014-147A	PU-01014-020A
16	OR-00009	OR-00009	OR-00009	OR-00115	OR-00127

Table 21. Repair Seal Kit “A” Model RESIN Pump

Pump	Item
2.00	
1.47	KT-00016-147A
1.20 (*)	KT-00096-012A
1.14	KT-00096-114A
0.96	
0.88	KT-00096-088A
0.80 (*)	KT-00096-008A
0.69	KT-00096-069A
0.60	KT-00096-006A
0.58	KT-00096-058A

N.B : (*) The standard proportioning pump sizes 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 18.



PROPORTIONING PUMPS HYDR. UNITS, MODEL “G”

Table 22. “G” Model Proportioning ISO Pump Assy Size, Parts List

ISO Pump SIZE	For Units with one Hydraulic Motor	For Units with two Hydraulic Motors
0.40	PU-06101-004G	-
0.58	PU-06101-058G	-
0.60	PU-06101-006G	PU-06201-006G
0.69	PU-06101-069G	-
0.80 (*)	PU-06101-008G	PU-06201-008G
0.88	PU-06101-088G	PU-06201-088G
0.96	PU-06101-096G	PU-06201-096G
1.12	Pu-06101-112G	-
1.14	PU-06101-114G	-
1.2 (*)	PU-06101-012G	PU-06201-012G
1.47	PU-07101-147G	-
2.00	PU-07101-020G	-

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.

“Monobloc” Pumps

Parts Manual



Table 23. “G” Model Proportioning RESIN Pump Assy Size, Parts List

RESIN Pump SIZE	For Units with one Hydraulic Motor	For Units with two Hydraulic Motors
0.58	PU-06102-058G	-
0.60	PU-06102-006G	PU-06301-006G
0.69	PU-06102-069G	-
0.80 (*)	PU-06102-008G	PU-06301-008G
0.88	PU-06102-088G	PU-06301-088G
0.96	PU-06102-096G	PU-06301-096G
1.12	PU-06102-112G	-
1.14	PU-06102-114G	-
1.2 (*)	PU-06102-012G	PU-06301-012G
1.47	PU-07102-147G	-
2.00	PU-07102-020G	-

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.

“G” MODEL ISO PROPORTIONING PUMPS

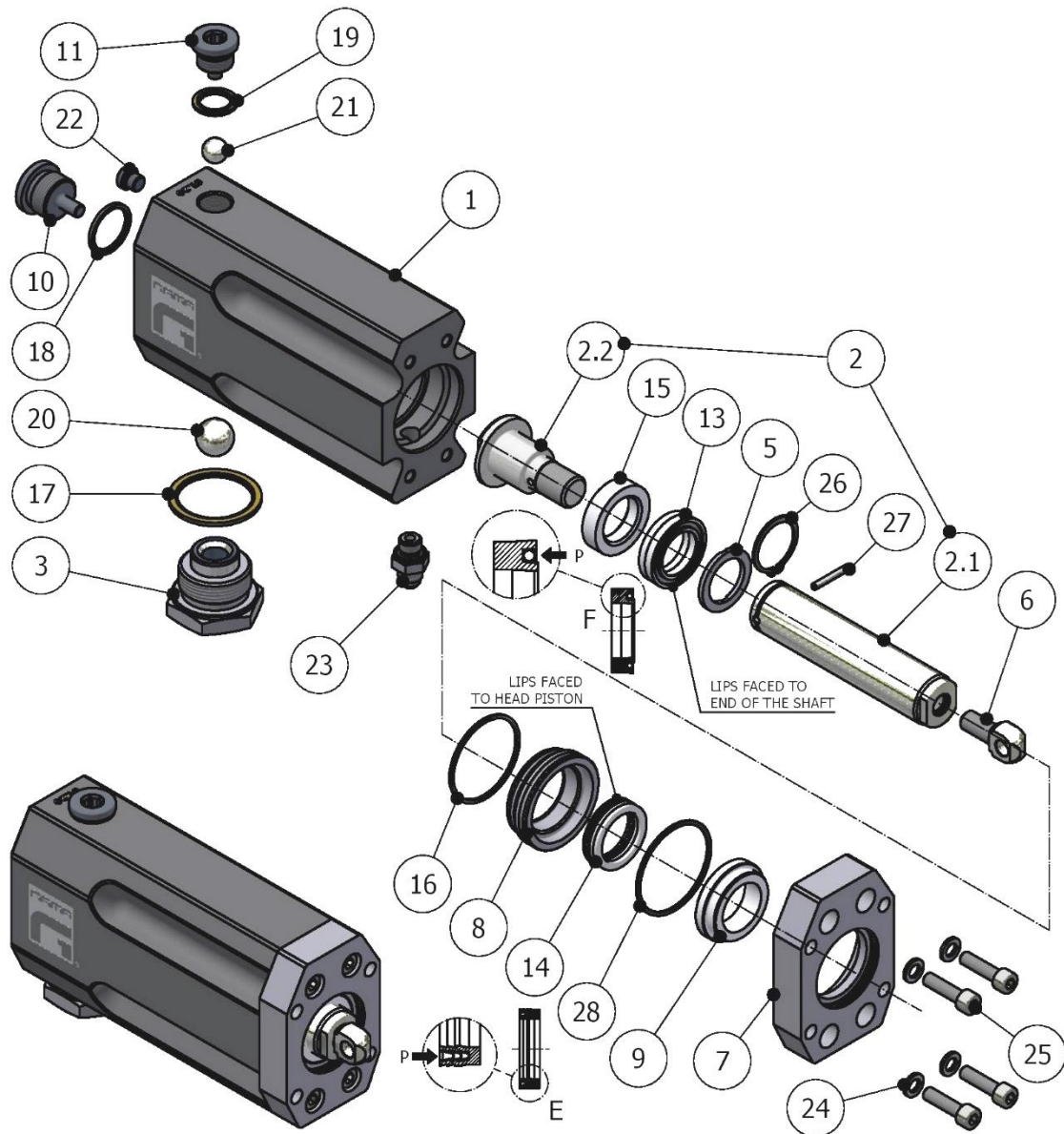


Figure 6. “G” Model ISO Proportioning Pumps, Exploded View

The monobloc pumps type "O" and "A" have a different pump casing and flange geometry than the current "G" model, but are interchangeable with each other.

“Monobloc” Pumps

Parts Manual



Table 24. “G” Model ISO Proportioning Pump, Parts List

item.	Description	Part Number	Qty.
1	Body Pump with Check Valve Seat	See Table 25	1
2	Piston Rod Assembly (Only item. 2.1 y 2.2)	See Table 25	1
2.1	Piston Rod (Included in item 2)	See Table 25	1 (#)
2.2	Piston Head (Included in item 2)	See Table 25	1 (#)
3	Inlet Ball Seat Assembly	PU-01003-0J	1
4			
5	Piston Seal	See Table 25	1
6	Pump Clevis	See Table 25	1
7	“Monobloc” Flange Pump – ISO	See Table 25	1
8	Seat Seal – ISO	See Table 25	1
9	Bearing ISO	See Table 26	1 (*)
10	Plug Side Pump	PU-01003-0E	1
11	Upper Plug Pump	PU-01003-0F	1
12			
13	Piston Seal	See Table 26	1 (*)
14	Cylinder Seal	See Table 26	1 (*)
15	Piston Guide	See Table 26	1 (*)
16	O-Ring	See Table 26	1 (*)
17	Metallic Ring	OR-00088	1
18	Metallic Ring	OR-00082	1
19	Metallic Ring	OR-00023	1
20	Lower Ball	TN-00013	1
21	Upper Ball	TN-00012	1
22	Plug	See Table 25	1
23	Output Elbow	See Table 7	1
24	Washer	See Table 15	4
25	Allen Screw	See Table 25	4
26	Seeger Ring	See Table 25	1
27	Pin	See Table 25	1
28	O-Ring	See Table 26	1 (*)

N.B.: The parts marked with (*), are included in the repair seal kit of “G” Model ISO pump (see Table 27). The parts marked with (#), are not supplied separately.



Table 25. “G” Model ISO Proportioning Pump Assembly, Parts List

Pump	Item 1	Item 2 (2.1 + 2.2)	Item 2.1	Item 2.2
0.40	PU-06001-004	PU-01006-004	PU-01007-004	PU-01008-004
0.58	PU-06001-058	PU-01006-058	PU-01007-058	PU-01008-058
0.60	PU-06001-006	PU-01006-006	PU-01007-006	PU-01008-006
0.69	PU-06001-069	PU-01006-069	PU-01007-069	PU-01008-069
0.80 (*)	PU-06001-008	PU-01006-008	PU-01007-008	PU-01008-008
0.88	PU-06001-088	PU-01006-088	PU-01007-088	PU-01008-088
0.96	PU-06001-096	PU-01006-096	PU-01007-096	PU-01008-096
1.12	PU-06001-112	PU-01006-112	PU-01007-112	PU-01008-112
1.14	PU-06001-114	PU-01006-114	PU-01007-114	PU-01008-114
1.20 (*)	PU-06001-012	PU-01006-012	PU-01007-012	PU-01008-012
1.47	PU-07001-147	PU-01006-147	PU-01007-147	PU-01008-147
2.00	PU-07001-020	PU-01006-020	PU-01007-020	PU-01008-020

Pump	Item 5	Item 6	Item 7	Item 8	Item 22
0.40	PU-01010-004	PU-01042	NPU-06004	PU-06009-004G	RA-00211
0.58	PU-01010-058	PU-01042	NPU-06004	PU-06009-058G	RA-00211
0.60	PU-01010-006	PU-01042	NPU-06004	PU-06009-006G	RA-00211
0.69	PU-01010-069	PU-01042	NPU-06004	PU-06009-069G	RA-00211
0.80 (*)	PU-01010-008	PU-01042	NPU-06004	PU-06009-008G	RA-00211
0.88	PU-01010-088	PU-01042	NPU-06004	PU-06009-088G	RA-00211
0.96	PU-01010-096	PU-01042	NPU-06004	PU-06009-096G	RA-00211
1.12	PU-01010-112	PU-01042	NPU-06004	PU-06009-112G	RA-00211
1.14	PU-01010-114	PU-01042	NPU-06004	PU-06009-114G	RA-00211
1.20 (*)	PU-01010-012	PU-01042	NPU-06004	PU-06009-012G	RA-00211
1.47	PU-01010-147	PU-07012	PU-07004	PU-07009-147G	RA-00013
2.00	PU-01010-020	PU-07012	PU-07004	PU-07009-020G	RA-00013

N.B :

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

Item 1 and 7 have been redesigned, modifying the outside geometry. These parts are interchangeable with previous versions.



Pump	Item 24	Item 25	Item 26	Item 27
0.40	TN-00028	TN-00062	TN-00065	TN-00072
0.58	TN-00028	TN-00062	TN-00066	TN-00072
0.60	TN-00028	TN-00062	TN-00066	TN-00072
0.69	TN-00028	TN-00062	TN-00255	TN-00256
0.80 (*)	TN-00028	TN-00062	TN-00067	TN-00085
0.88	TN-00028	TN-00062	TN-00067	TN-00085
0.96	TN-00028	TN-00062	TN-00068	TN-00085
1.12	TN-00028	TN-00062	TN-00069	TN-00086
1.14	TN-00028	TN-00062	TN-00070	TN-00086
1.20 (*)	TN-00028	TN-00062	TN-00070	TN-00086
1.47	TN-00039	TN-00043	TN-00382	TN-00381
2.00	TN-00039	TN-00043	TN-00380	TN-00383

N.B :

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

Table 26. Seals “Monobloc” “G” Model ISO Pump

item	#0.4			
9	PU-06007-004			
13	PU-01016-004A			
14	PU-01017-004G			
15	PU-01014-004A			
16	OR-00009			
28	OR-00115			

item	#0.58	#0.6	#0.69	#0.8	#0.88
9	PU-06007-058	PU-06007-006	PU-06007-069	PU-06007-008	PU-06007-088
13	PU-01016-058A	PU-01016-006A	PU-01016-069A	PU-01016-008A	PU-01016-088A
14	PU-01017-058G	PU-01017-006G	PU-01017-069G	PU-01017-008G	PU-01017-088G
15	PU-01014-058A	PU-01014-006A	PU-01014-069A	PU-01014-008A	PU-01014-088A
16	OR-00009	OR-00009	OR-00009	OR-00009	OR-00009
28	OR-00115	OR-00115	OR-00115	OR-00115	OR-00115



item	#0.96	#1.12	#1.14	#1.2 (*)	
9	PU-06007-096	PU-06007-112	PU-06007-114	PU-06007-012	
13	PU-01016-096A	PU-01016-112A	PU-01016-114A	PU-01016-012A	
14	PU-01017-096G	PU-01017-112G	PU-01017-114G	PU-01017-012G	
15	PU-01014-096A	PU-01014-112A	PU-01014-114A	PU-01014-012A	
16	OR-00009	OR-00009	OR-00009	OR-00009	
28	OR-00115	OR-00115	OR-00115	OR-00115	

item				#1.47	#2.00
9				PU-07007-147	PU-07007-020G
13				PU-01016-147A	PU-01016-020A
14				PU-01017-147G	PU-01017-020G
15				PU-01014-147A	PU-01014-020A
16				OR-00115	OR-00127
28				OR-00128	OR-00128

Table 27. Repair Seal Kit “G” Model ISO Pump

Pump	Item
2.00	KT-00169
1.47	KT-00171
1.20 (*)	KT-00157
1.14	
1.12	KT-00217
0.96	KT-00182
0.88	KT-00198
0.80 (*)	KT-00159
0.69	
0.60	
0.58	
0.40	KT-00178

N.B : (*) The standard proportioning pump sizes 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 24.

“G” MODEL RESIN PROPORTIONING PUMPS

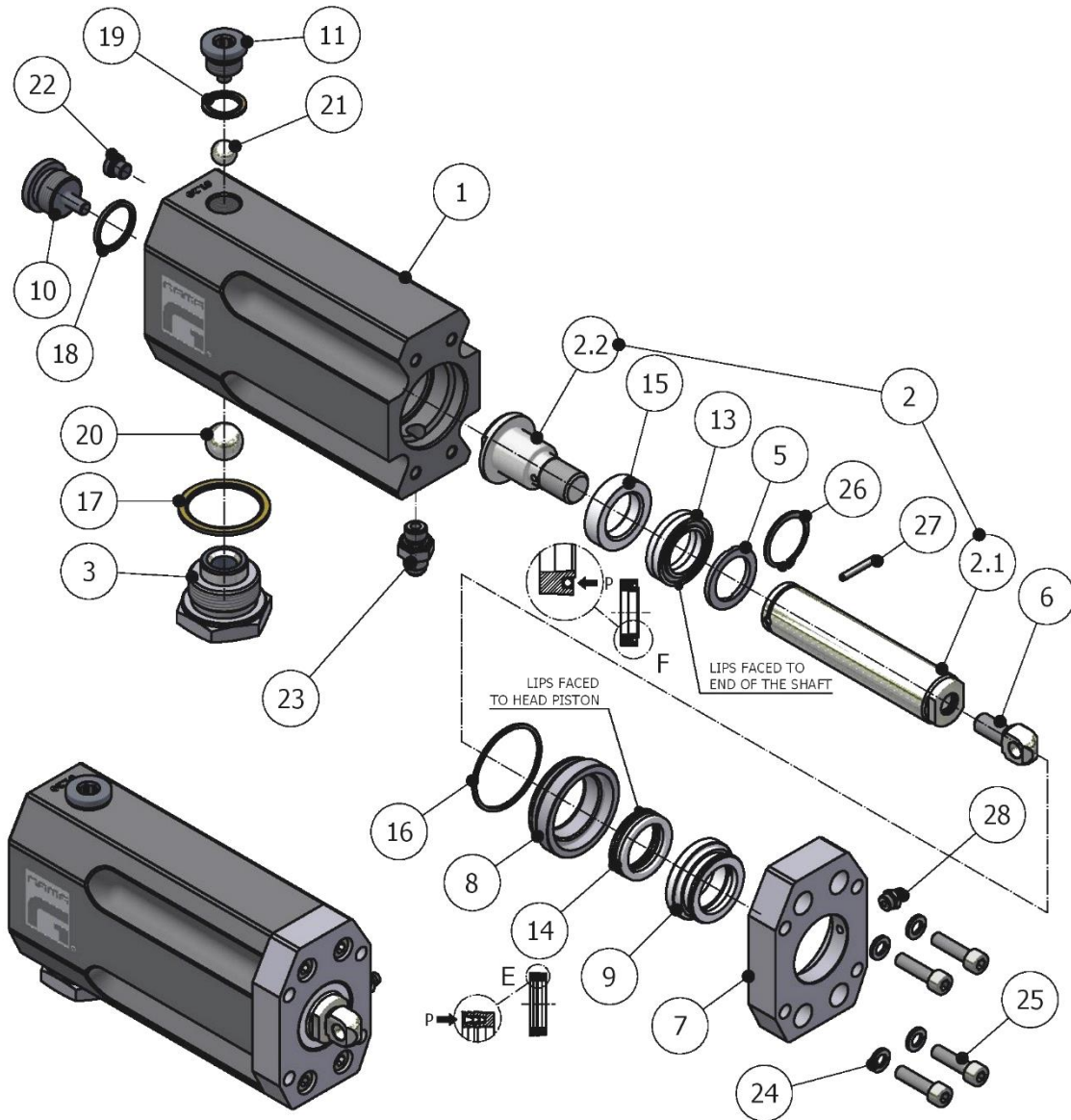


Figure 7. “G” Model RESIN Proportioning Pumps, Exploded View

The monobloc pumps type "O" and "A" have a different pump casing and flange geometry than the current "G" model, but are interchangeable with each other.



“Monobloc” Pumps

Parts Manual

Table 28. “G” Model RESIN Proportioning Pump, Parts List

item.	Description	Part Number	Qty.
1	Body Pump with Check Valve Seat	See Table 29	1
2	Piston Rod Assembly (Only item. 2.1 y 2.2)	See Table 29	1
2.1	Piston Rod (Included in item 2)	See Table 29	1 (#)
2.2	Piston Head (Included in item 2)	See Table 29	1 (#)
3	Inlet Ball Seat Assembly	PU-01003-0J	1
4			
5	Piston Seal	See Table 29	1
6	Pump Clevis	See Table 29	1
7	“Monobloc” Flange Pump – POL	See Table 29	1
8	Seat Seal – POL	See Table 29	1
9	Bearing POL	See Table 30	1 (*)
10	Plug Side Pump	PU-01003-0E	1
11	Upper Plug Pump	PU-01003-0F	1
12			
13	Piston Seal	See Table 30	1 (*)
14	Cylinder Seal	See Table 30	1 (*)
15	Piston Guide	See Table 30	1 (*)
16	O-Ring	See Table 30	1 (*)
17	Metallic Ring	OR-00088	1
18	Metallic Ring	OR-00082	1
19	Metallic Ring	OR-00023	1
20	Lower Ball	TN-00013	1
21	Upper Ball	TN-00012	1
22	Plug	See Table 29	1
23	Exit Elbow	See Table 7	1
24	Washer	See Table 29	4
25	Allen Screw	See Table 29	4
26	Seeger Ring	See Table 29	1
27	Pin	See Table 29	1
28	Grease Fiting	See Table 29	1

N.B: The parts marked with (*), are included in the repair seal kit of “G” Model RESIN pump (see Table 31). The parts marked with (#), are not supplied separately.



Table 29. “G” Model RESIN Proportioning Pump Assembly, Parts List

Pump	Item 1	Item 2 (2.1 + 2.2)	Item 2.1	Item 2.2
0.58	PU-06001-058	PU-01006-058	PU-01007-058	PU-01008-058
0.60	PU-06001-006	PU-01006-006	PU-01007-006	PU-01008-006
0.69	PU-06001-069	PU-01006-069	PU-01007-069	PU-01008-069
0.80 (*)	PU-06001-008	PU-01006-008	PU-01007-008	PU-01008-008
0.88	PU-06001-088	PU-01006-088	PU-01007-088	PU-01008-088
0.96	PU-06001-096	PU-01006-096	PU-01007-096	PU-01008-096
1.12	PU-06001-112	PU-01006-112	PU-01007-112	PU-01008-112
1.14	PU-06001-114	PU-01006-114	PU-01007-114	PU-01008-114
1.20 (*)	PU-06001-012	PU-01006-012	PU-01007-012	PU-01008-012
1.47	PU-07001-147	PU-01006-147	PU-01007-147	PU-01008-147
2.00	PU-07001-020	PU-01006-020	PU-01007-020	PU-01008-020

Pump	Item 5	Item 6	Item 7	Item 8	Item 22
0.58	PU-01010-058	PU-01042	NPU-06005	PU-06006-058G	RA-00211
0.60	PU-01010-006	PU-01042	NPU-06005	PU-06006-006G	RA-00211
0.69	PU-01010-069	PU-01042	NPU-06005	PU-06006-069G	RA-00211
0.80 (*)	PU-01010-008	PU-01042	NPU-06005	PU-06006-008G	RA-00211
0.88	PU-01010-088	PU-01042	NPU-06005	PU-06006-088G	RA-00211
0.96	PU-01010-096	PU-01042	NPU-06005	PU-06006-096G	RA-00211
1.12	PU-01010-112	PU-01042	NPU-06005	PU-06006-112G	RA-00211
1.14	PU-01010-114	PU-01042	NPU-06005	PU-06006-114G	RA-00211
1.20 (*)	PU-01010-012	PU-01042	NPU-06005	PU-06006-012G	RA-00211
1.47	PU-01010-147	PU-07012	PU-07005	PU-07006-147G	RA-00013
2.00	PU-01010-020	PU-07012	PU-07005	PU-07006-020G	RA-00013

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

Item 1 and 7 have been redesigned, modifying the outside geometry. These parts are interchangeable with previous versions.



Pump	Item 24	Item 25	Item 26	Item 27	Item 28
0.58	TN-00028	TN-00062	TN-00066	TN-00072	TN-00073
0.60	TN-00028	TN-00062	TN-00066	TN-00072	TN-00073
0.69	TN-00228	TN-00062	TN-00255	TN-00256	TN-00073
0.80 (*)	TN-00028	TN-00062	TN-00067	TN-00085	TN-00073
0.88	TN-00028	TN-00062	TN-00067	TN-00085	TN-00073
0.96	TN-00028	TN-00062	TN-00068	TN-00085	TN-00073
1.12	TN-00028	TN-00062	TN-00069	TN-00086	TN-00073
1.14	TN-00028	TN-00062	TN-00070	TN-00086	TN-00073
1.20 (*)	TN-00028	TN-00062	TN-00070	TN-00086	TN-00073
1.47	TN-00039	TN-00043	TN-00382	TN-00381	TN-00384
2.00	TN-00039	TN-00043	TN-00380	TN-00383	TN-00384

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

Table 30. Seals “Monobloc” “G” Model RESIN Pump

item	#0.58	#0.60	#0.69	#0.8 (*)	#0.88
9	PU-06008-058	PU-06008-006	PU-06008-069	PU-06008-008	PU-06008-088
13	PU-01016-058A	PU-01016-006A	PU-01016-069A	PU-01016-008A	PU-01016-088A
14	PU-01017-058G	PU-01017-006G	PU-01017-069G	PU-01017-008G	PU-01017-088G
15	PU-01014-058A	PU-01014-006A	PU-01014-069A	PU-01014-008A	PU-01014-088A
16	OR-00009	OR-00009	OR-00009	OR-00009	OR-00009

item	#0.96	#1.12	#1.14	#1.2 (*)	
9	PU-06008-096	PU-06008-112	PU-06008-114	PU-06008-012	
13	PU-01016-096A	PU-01016-112A	PU-01016-114A	PU-01016-012A	
14	PU-01017-096G	PU-01017-112G	PU-01017-114G	PU-01017-012G	
15	PU-01014-096A	PU-01014-112A	PU-01014-114A	PU-01014-012A	
16	OR-00009	OR-00009	OR-00009	OR-00009	



item				#1.47	#2.00
9				PU-07008-147	PU-07008-020G
13				PU-01016-147A	PU-01016-020A
14				PU-01017-147G	PU-01017-020G
15				PU-01014-147A	PU-01014-020A
16				OR-00115	OR-00127

Table 31. Repair Seal Kit “G” Model RESIN Pump

Pump	Item
2.00	KT-00170
1.47	KT-00172
1.20 (*)	KT-00158
1.14	
1.12	KT-00218
0.96	KT-00168
0.88	KT-00197
0.80 (*)	KT-00160
0.69	
0.60	
0.58	


N.B : (*) The standard proportioning pump sizes 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 18.

SEAL ASSEMBLY TOOLS

To assembly the piston in the sleeve it is necessary:

Table 32. Plunger Insertion Tool

	Plunger Insertion Tool in the body of the pump (Only “O” Models)
	
Bomba #0.60	HT-00093
Bomba #0.69	HT-00115
Bomba #0.80	HT-00094
Bomba #0.88	HT-00099
Bomba #0.96	HT-00110
Bomba #1.20	HT-00095

“Monobloc” Pumps

Parts Manual



Three special tools can be used to simplify the seal assembly. Tools A and B to insert the shaft seal into the seal housing and tool C for the packing retainer flange assembly insertion through the shaft.

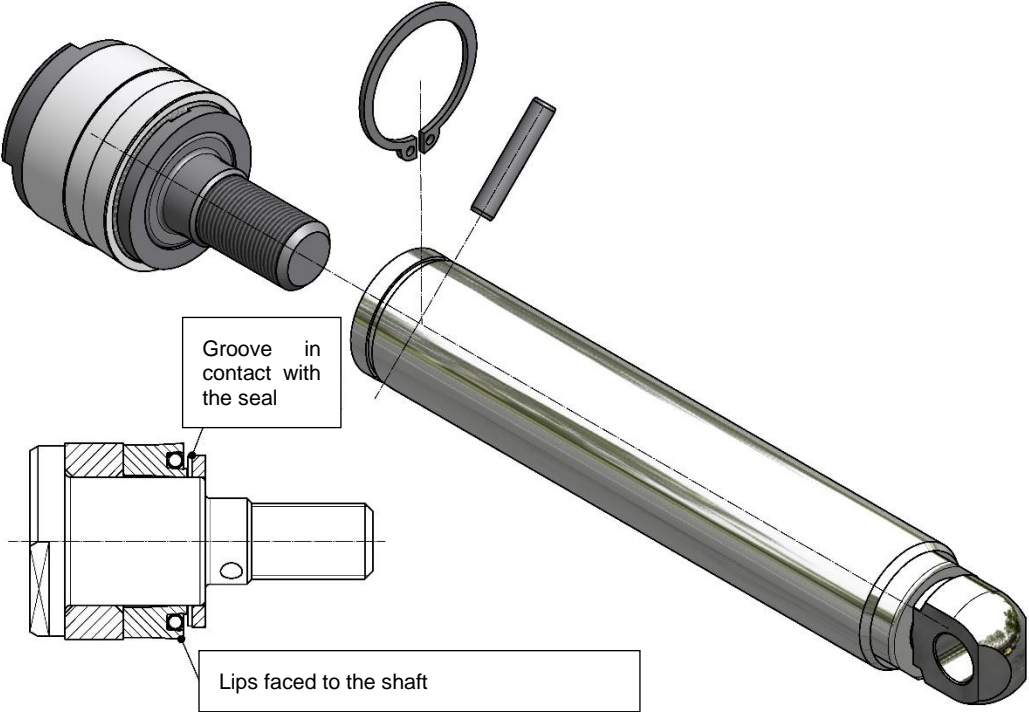
Table 33. Tools for shaft seal assembly

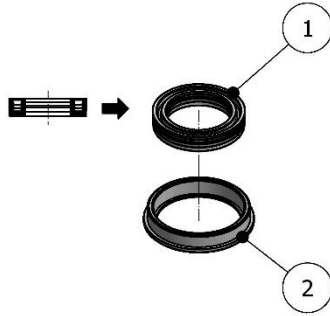
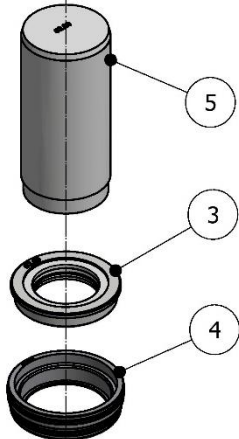
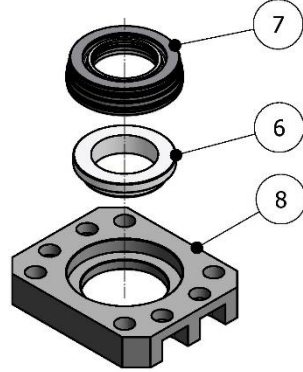
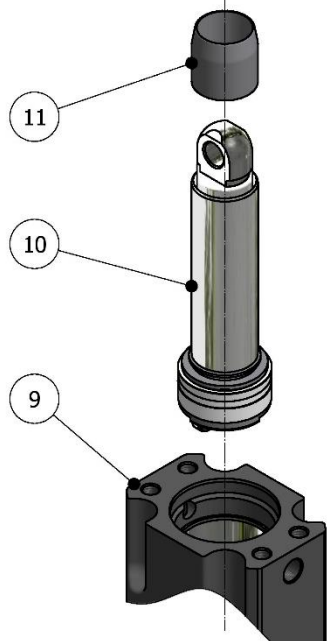
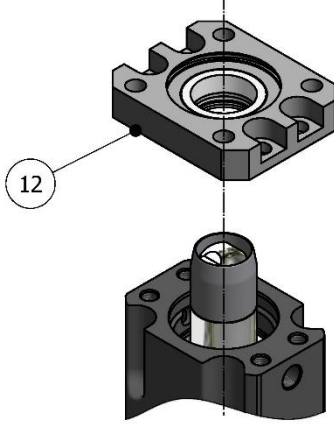
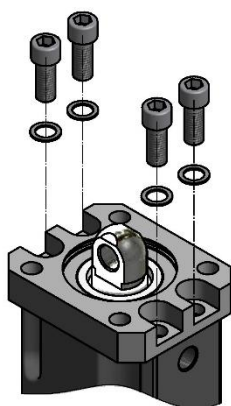
	Centring Tool (A) Pumps, "G" Model	Insertion Tool (B) Pumps, "G" Model	Stem Tip Tool (C) Pumps, all Models
			
#0.40 Pump Size	HT-00135	HT-00136	HT-00137
#0.60 Pump Size			HT-00113
#0.69 Pump Size			HT-00114
#0.80 Pump Size	HT-00124	HT-00125	HT-00036
#0.88 Pump Size	HT-00145	HT-00125	HT-00037
#0.96 Pump Size	HT-00138	HT-00125	HT-00109
#1.12 Pump Size	HT-00148	HT-00125	HT-00149
#1.20 Pump Size	HT-00124	HT-00125	HT-00035
#1.47 Pump Size	HT-00143	HT-00144	NOT USED
#2.00 Pump Size	HT-00140	HT-00141	HT-00142

Pay attention to the orientation of the seals in the assembly (see figures on pg.30, 35, 42 & 43).

For assembly instructions, refer to the Service Manual of the corresponding Unit.

Seals assembly

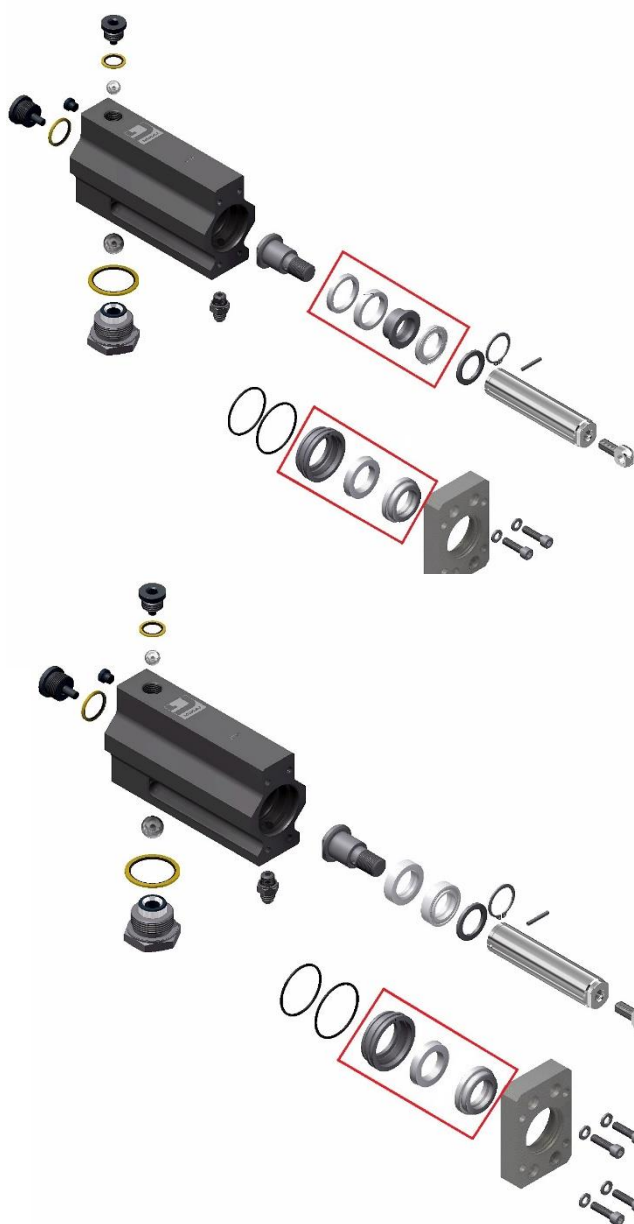
PISTON SEAL		
		
<p>Insert the piston bearing, seal and washer into the piston shaft. Face the lips of the seal towards the end of the shaft. Face the grooves of the washer towards the seal.</p>	<p>Thread the plunger assembly onto the shaft as far as it will go (the pin holes in the shaft and plunger should line up).</p>	<p>Insert the spring pin so that it is recessed in the groove of the shaft. Insert the snap ring into the groove.</p>

SHAFT SEAL		
		
<p>Insert the seal (1) into Tool A (2). Make sure that the lips are facing upwards.</p>	<p>Place tool A with the seal (3) inside the seal housing (4). With tool B (5) push the seal until it stops against the seal housing (4).</p>	<p>Place the shaft bearing (6) and the seal housing along with its corresponding O-rings (7) on the packing retainer flange (8).</p>
		
<p>Insert the shaft assembly (10) into the pump body (9) and place the tool C (11) on the tip of the shaft.</p>	<p>Mount the packing retainer flange assembly with all components assembled (12) on the front face of the pump. The shaft bearing should be visible from the outside.</p>	<p>Remove tool C and fix the packing retainer flange with its corresponding screws.</p>

UPGRADE MODEL PAUMPS

If you have units with “Monobloc” designs Model “O” or Model “A”, you can update them to the current evolved model “G”.

To proceed with the change, you must order the evolved gasket kit (see **Table 27** and **Table 31** of this manual) and the Special Seat Seal Ring POS.8 (see **Table 25** and **Table 29**) as appropriate by size and ISO or POL.



To upgrade from “O” Model to “G” Model :

- Replace the parts indicated in the drawing with the parts included in the “G” model kit, and the corresponding Seat Seal Ring too.

To Upgrade from “A” Model to “G” Model:

- Replace the parts indicated in the drawing with the parts included in the “G” model kit, and the corresponding Seat Seal Ring too.

Use the specific tools for mounting the seals (see Table 32 & Table 33).

Pay attention to the orientation of the seals in the assembly (see figures pg.30, 35, 42 & 43).

In current assemblies, the body pump and the flange pump have been redesigned, modifying the outside geometry. These parts are interchangeable with previous versions.



CONTENT

Warranty	2
Safety and Handling	3
Proportioning Pumps for Hydraulic Units	4
Proportioning Pumps Hydr. Units, Model “O”	5
“O” Model ISO Proportioning Pumps	6
“O” Model RESIN Proportioning Pumps	12
Proportioning Pumps Hydr. Units, Model “A”	17
“A” Model ISO Proportioning Pumps	18
“A” Model RESIN Proportioning Pumps	23
Proportioning Pumps Hydr. Units, Model “G”	28
“G” Model ISO Proportioning Pumps	30
“G” Model RESIN Proportioning Pumps	35
Seal Assembly Tools	40
Seals assembly	42
Upgrade Model Paumps	44
Content	45
List of illustrations	45

LIST OF ILLUSTRATIONS

Figure 1. “O” Model ISO Proportioning Pumps, Exploded View	6
Figure 2. Output Elbows ISO & RESIN Pump	11
Figure 3. “O” Model RESIN Proportioning Pumps, Exploded View	12
Figure 4. “A” Model ISO Proportioning Pumps, Exploded View	18
Figure 5. “A” Model RESIN Proportioning Pumps, Exploded View	23
Figure 6. “G” Model ISO Proportioning Pumps, Exploded View	30
Figure 7. “G” Model RESIN Proportioning Pumps, Exploded View	35