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Specifications, descriptions and illustrative material contained herein were accurate as known at the time this publication was approved for printing.

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SUN FILTER ELEMENTS

Surface Type (Last Chance) Elements

Surface type (Last Chance) elements are 40 µm nominal range with single layer stainless steel mesh supported by a perforated sheet tube. Crush pressure is greater than 3000 psid (210 bar). The flow path is Port 2 to Port 1 only. Do not use in reverse flow mode even with a reverse free flow check valve installed. The stainless steel mesh is not externally supported and will fail through fatigue. The four sizes are rated for 10, 20, 40, and 80 GPM (38, 76, 151, and 303 L/min). with a maximum differential pressure of 35 psi (2.4 bar) in the clean state.

Surface type elements are designed to capture errant particles that may not be trapped in the main system filter or particles resulting from a component failure. The 40 µm surface type element will not provide system filtration but is a “last chance” element. With a correctly assembled system, these elements will be unnoticed during regular operation but will provide protection from sudden component failure. Installation directly above the subplate will protect the entire valve stack from particles.

Depth Style Elements

Depth type elements are available in 3µm, 10µm, and 25µm nominal ranges. The crush pressure is 3000 psid and the flow path is Port 2 to Port 1 only. Do not use in reverse flow mode. Due to their physical size and the requirement for a pleated filtration material, the elements are only available in Series 3 and Series 4 sizes. The flow capacities for cartridges limit their use to flows of 8 and 24 GPM (30 and 90 L/min) respectively at 100 psid (7 bar). They are offered as a means to install a system filter in small manifold packages using your available Sun cavity tooling. These elements provide contamination holding capability that the “last chance” 40µm elements do not. For small manifold packages with expensive proportional or servo valves installed, very fine filtration in an extremely small space is available. Filter life will depend on initial system cleanliness and the amount of dirt ingress to the system when operating.

Sun filter elements are non-cataloged items. See Table A below for filter information. The sandwich bodies in this booklet are also non-catalogued items and body information in Table B has been provided on the following page. For line mounted bodies used with these filters, consult Sun Hydraulics’ catalogues. Replacement element information is located in Table C shown on page 4.

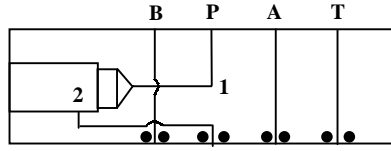
Table A: Filter Cartridges

Sun filter cartridges are pressure rated the same as all other Sun cartridges.

<i>Filter Cartridge Model Code</i>	<i>Series</i>	<i>Micron Rating</i>	<i>Nominal Flow Rating (GPM/L/min)</i>	<i>Cavity</i>	<i>Filter Type</i>	<i>Page</i>
FLDA-XD*	1	40	10/40	T-13A	Surface	6
FLFA-XD*	2	40	20/80	T-5A	Surface	
FLHA-XA*	3	3	8/32	T-16A	Depth	7
FLHA-XB*	3	10	8/32	T-16A	Depth	
FLHA-XC*	3	25	8/32	T-16A	Depth	7
FLHA-XD*	3	40	40/160	T-16A	Surface	
FLJA-XA*	4	3	24/95	T-18A	Depth	8
FLJA-XB*	4	10	24/95	T-18A	Depth	
FLJA-XC*	4	25	24/95	T-18A	Depth	8
FLJA-XD*	4	40	80/320	T-18A	Surface	

Table B: Non-catalogued Sandwich Bodies

<i>Valve Pattern (ISO/CETOP)</i>	<i>Cavity</i>	<i>Sandwich Body Model Code</i>	<i>Gauge Ports*</i>	<i>Page</i>
03/3	T-13A	Z4C	No	10
05/5	T-5A	Z4E	No	10
05 X, Y/5	T-5A	Z4D	No	11
05 X, Y/5	T-16A	Z4A	No	11
07/7	T-16A	Z4F	No	12
08/8	T-18A	Z4B	No	12
05 X, Y/5	T-5A	Z9D	Yes	13
05 X, Y/5	T-16A	Z9A	Yes	13
08/8	T-18A	Z9B	Yes	14

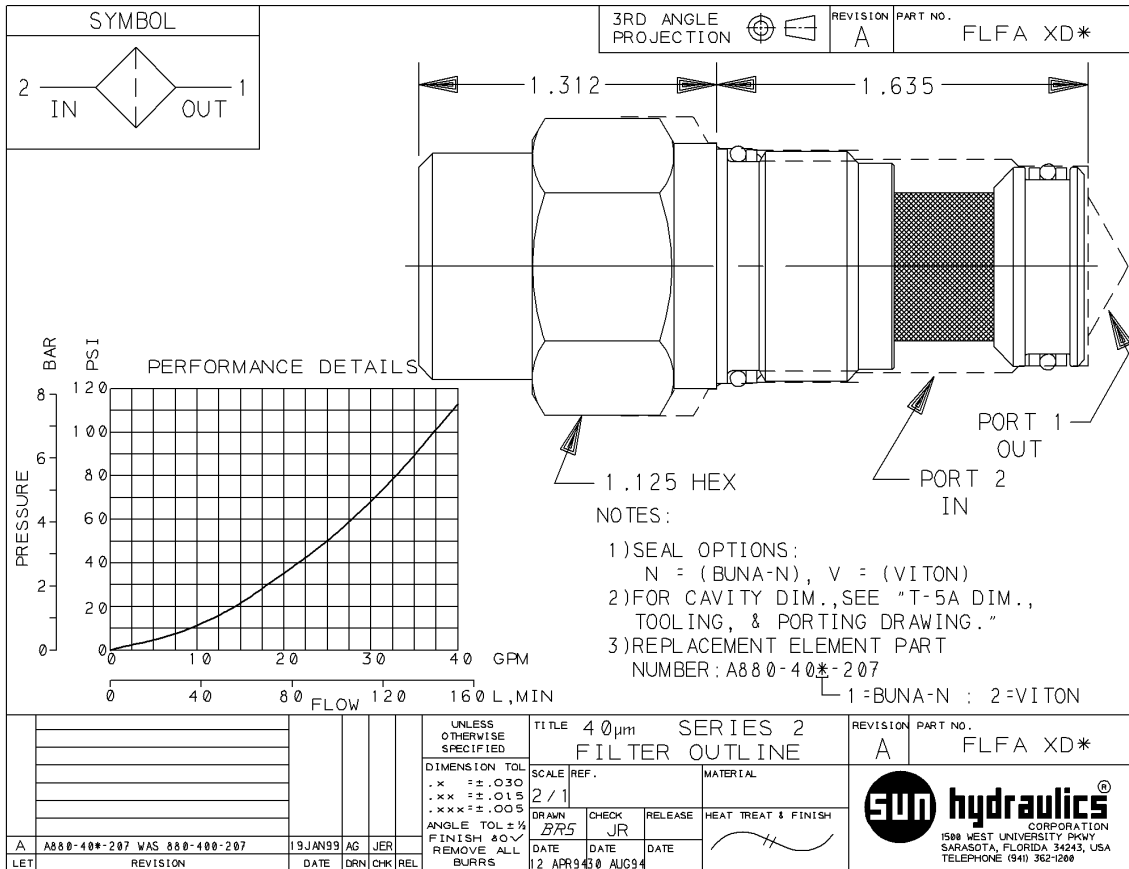
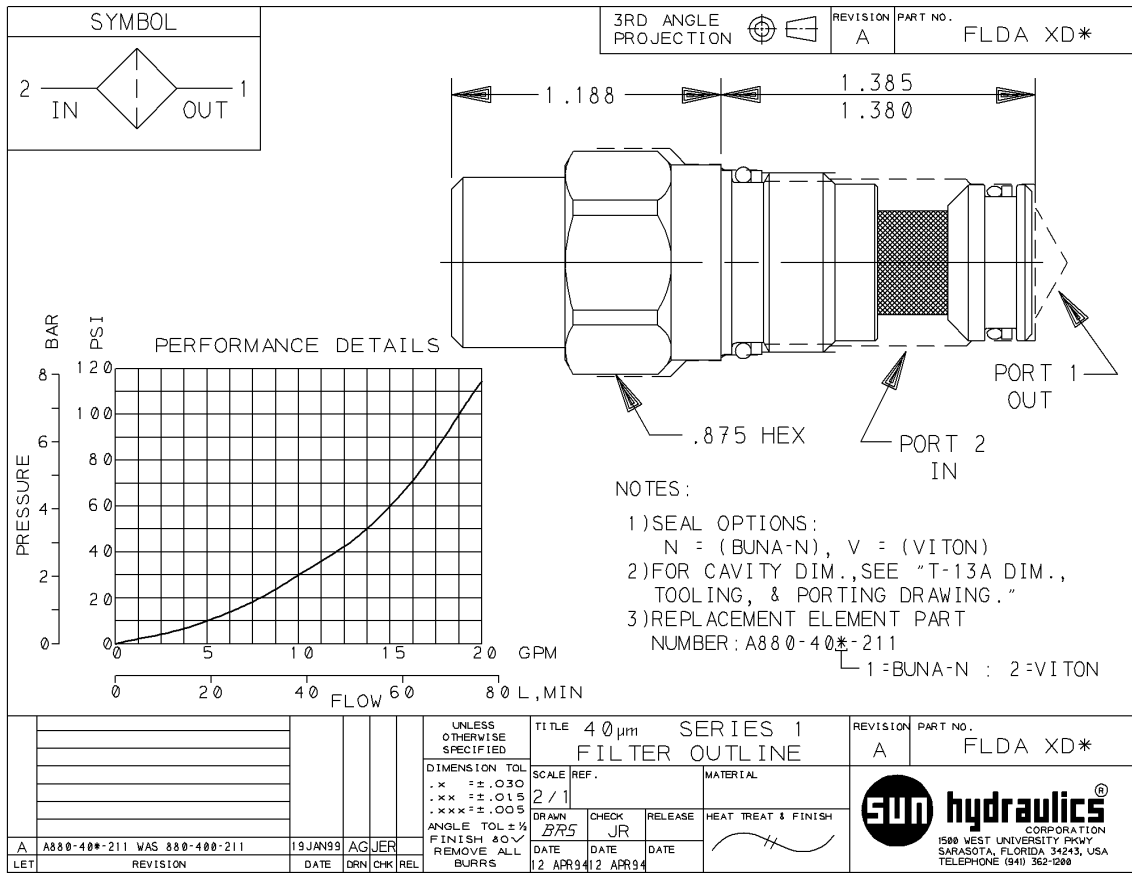


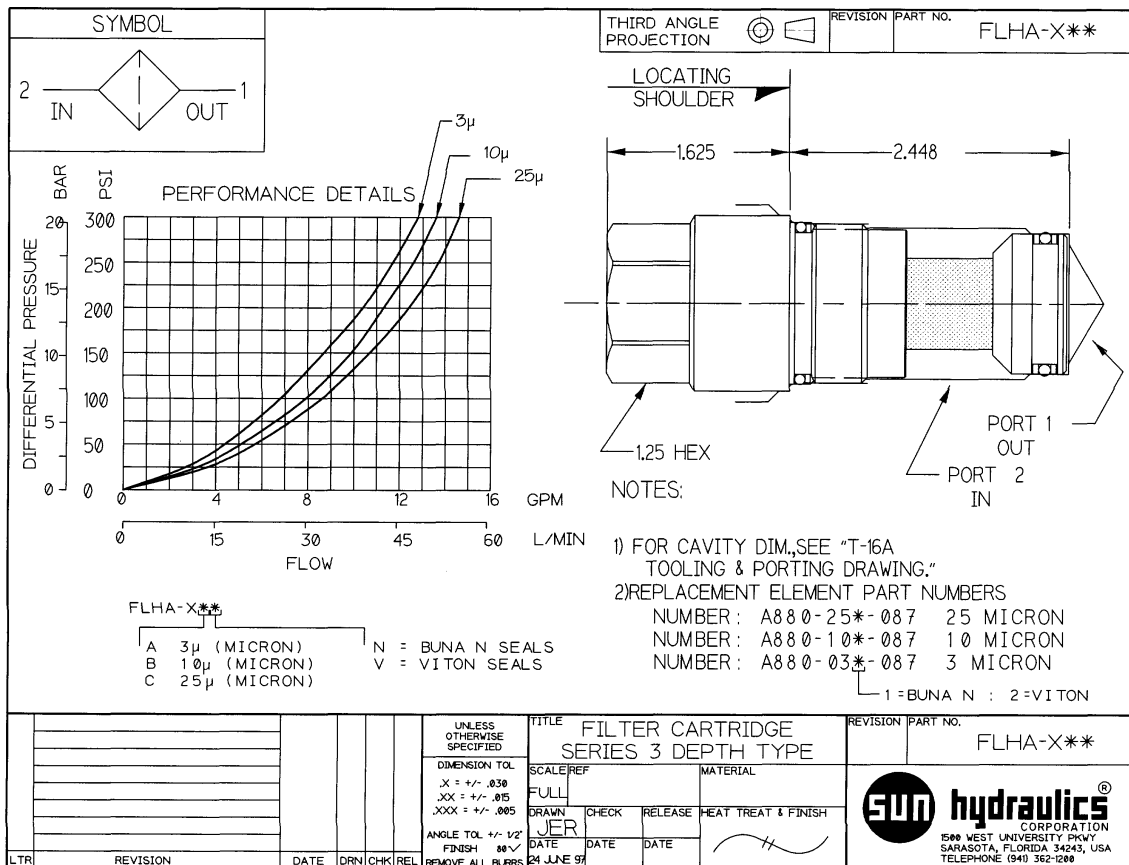
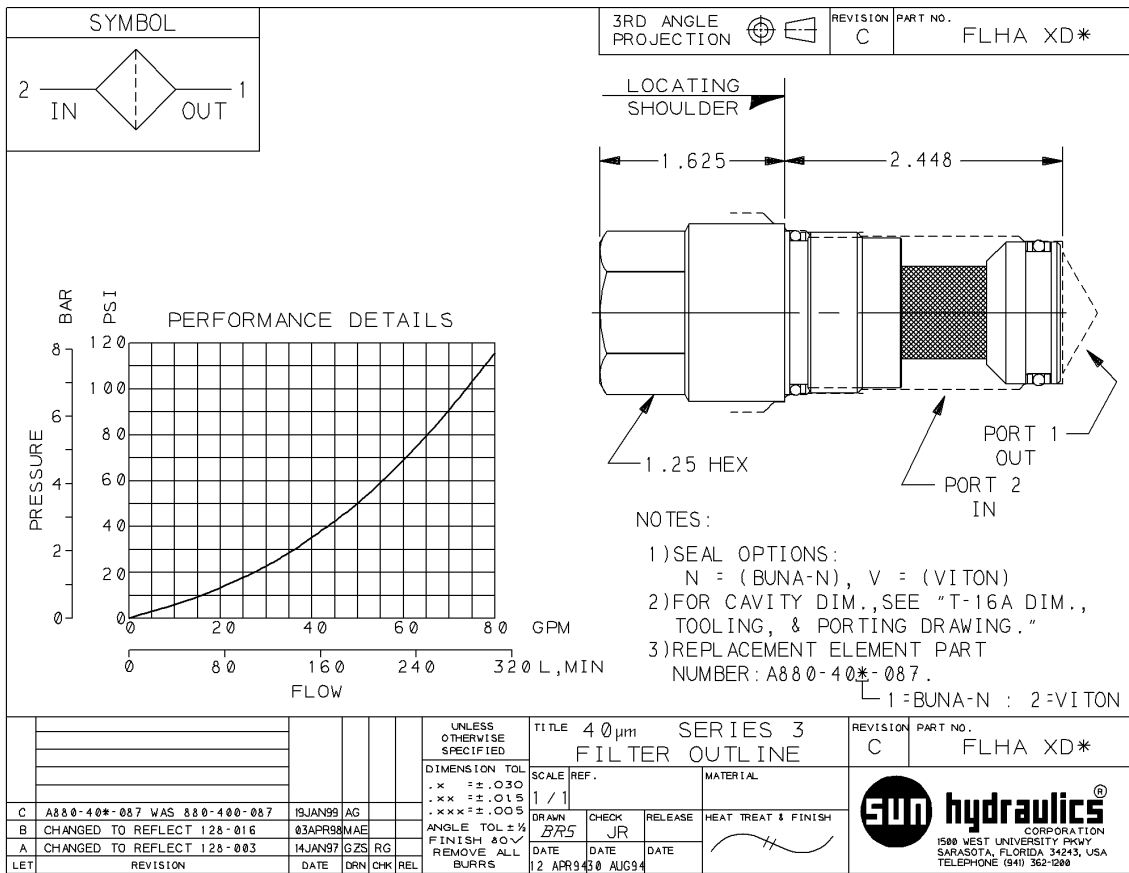
*Sandwich bodies with gauge ports must be used in conjunction with a differential pressure gauge manufactured by Orange Research of Texas, Inc. See page 15 for additional information.

Table C: Replacement Elements

<i>Filter Cartridge Model Code</i>	<i>Series</i>	<i>Replacement Element Part Number</i>	<i>Seals</i>	<i>Microns</i>	<i>Page</i>
FLDA-XD*	1	A880-401-211	Buna-N	40	6
		A880-402-211	Viton		
FLFA-XD*	2	A880-401-207	Buna-N		
		A880-402-207	Viton		
FLHA-XD*	3	A880-401-087	Buna-N		7
		A880-402-087	Viton		
FLHA-XA*	3	A880-031-087	Buna-N	3	7
		A880-032-087	Viton		
FLHA-XB*	3	A880-101-087	Buna-N	10	7
		A880-102-087	Viton		
FLHA-XC*	3	A880-251-087	Buna-N	25	7
		A880-252-087	Viton		
FLJA-XD*	4	A880-401-368	Buna-N	40	8
		A880-402-368	Viton		
FLJA-XA*	4	A880-031-368	Buna-N	3	8
		A880-032-368	Viton		
FLJA-XB*	4	A880-101-368	Buna-N	10	8
		A880-102-368	Viton		
FLJA-XC*	4	A880-251-368	Buna-N	25	8
		A880-252-368	Viton		

Filter Elements





SYMBOL		3RD ANGLE PROJECTION	REVISION PART NO.
		A	FLJA XD*

PERFORMANCE DETAILS

NOTES:

- SEAL OPTIONS:
N = (BUNA-N), V = (VITON)
- FOR CAVITY DIM., SEE "T-18A DIM., TOOLING, & PORTING DRAWING."
- REPLACEMENT ELEMENT PART NUMBER: A880-40*-368
1 = BUNA-N ; 2 = VITON

		UNLESS OTHERWISE SPECIFIED		TITLE 40µm SERIES 4 FILTER OUTLINE		REVISION PART NO.	
		DIMENSION TOL .X = ±.030 .XX = ±.015 .XXX = ±.005		SCALE REF. 1/1		A FLJA XD*	
		ANGLE TOL ± 1/4 FINISH 80° REMOVE ALL BURRS		DRAWN CHECK RELEASE HEAT TREAT & FINISH			
A A880-40*-368 WAS 880-400-368		19JAN99 AG JER		DATE DATE DATE			
LET REVISION		DATE DRN CHK REL		05 APR 94 30 AUG 94		SUN hydraulics CORPORATION 1500 WEST UNIVERSITY PKWY SARASOTA, FLORIDA 34243, USA TELEPHONE (941) 362-1200	

SYMBOL		THIRD ANGLE PROJECTION	REVISION PART NO.
		A	FLJA-X**

PERFORMANCE DETAILS

NOTES:

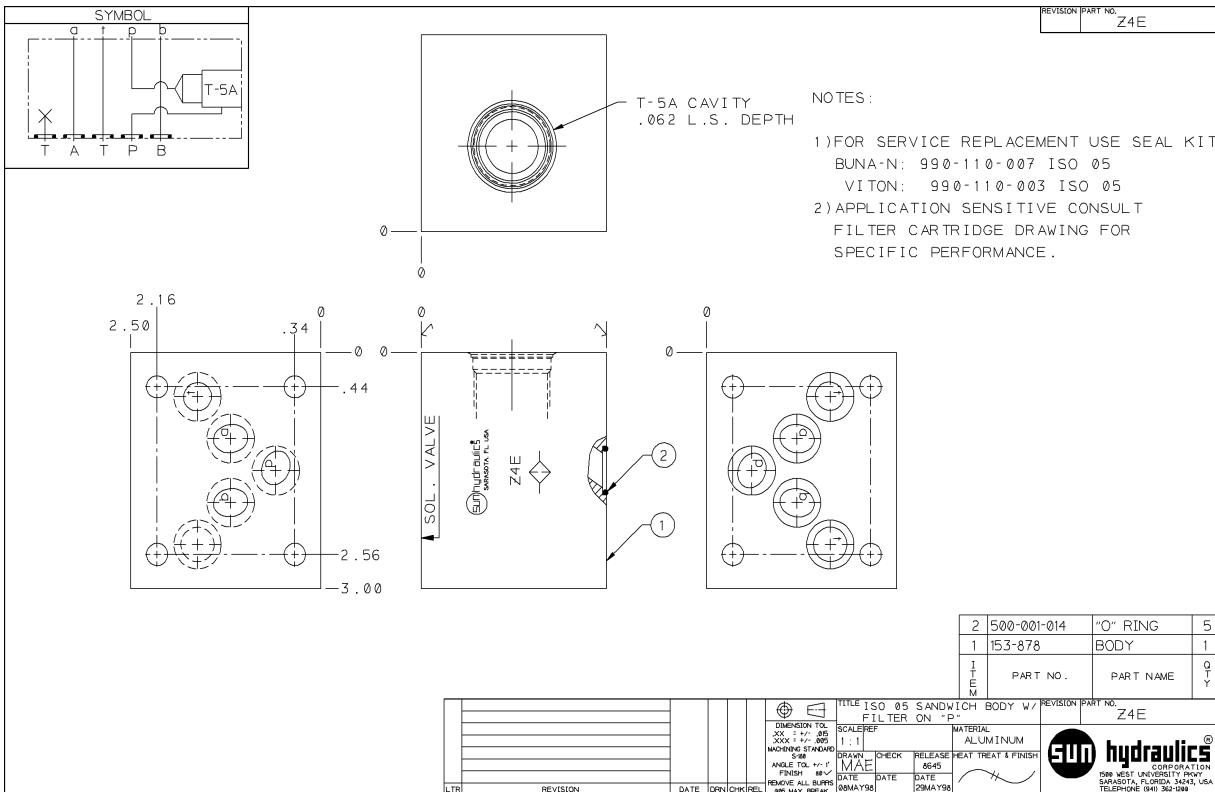
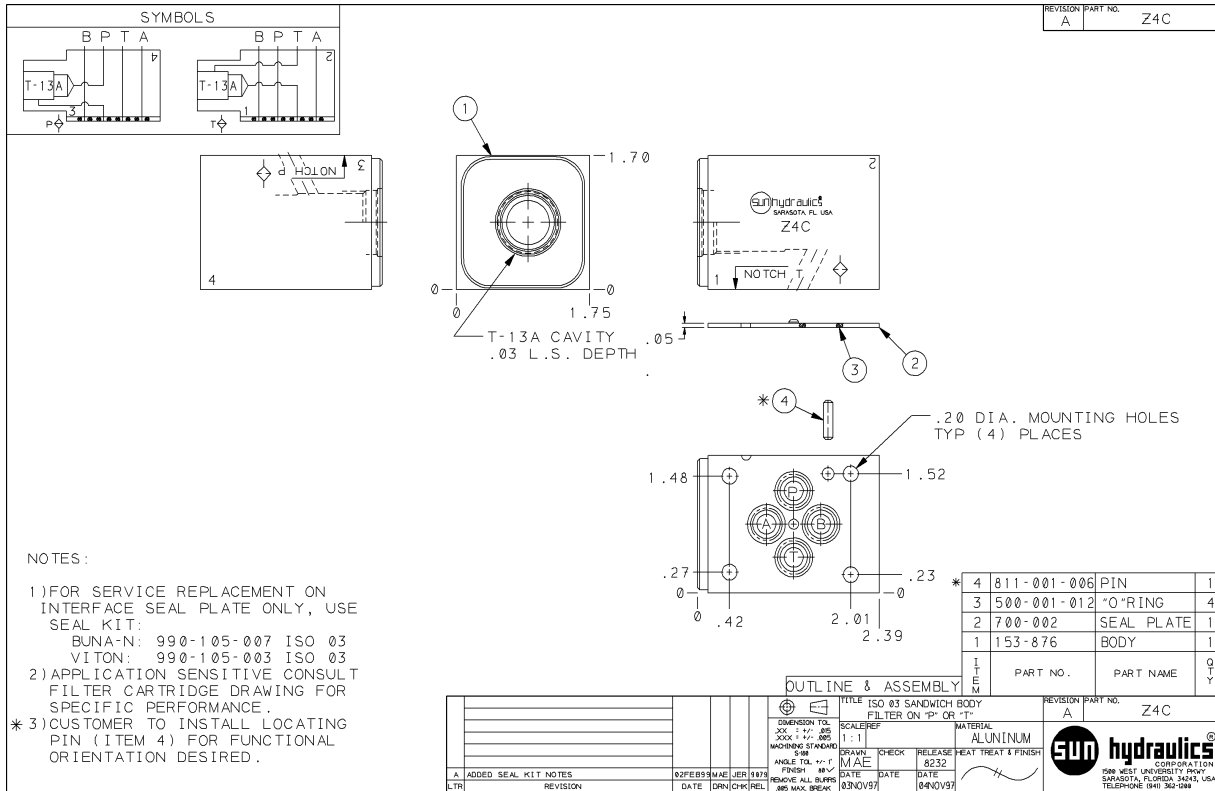
- FOR CAVITY DIM., SEE "T-18A TOOLING & PORTING DRAWING."
- REPLACEMENT ELEMENT PART NUMBERS
NUMBER: A880-25*-368 25 MICRON
NUMBER: A880-10*-368 10 MICRON
NUMBER: A880-03*-368 3 MICRON
1 = BUNA-N ; 2 = VITON

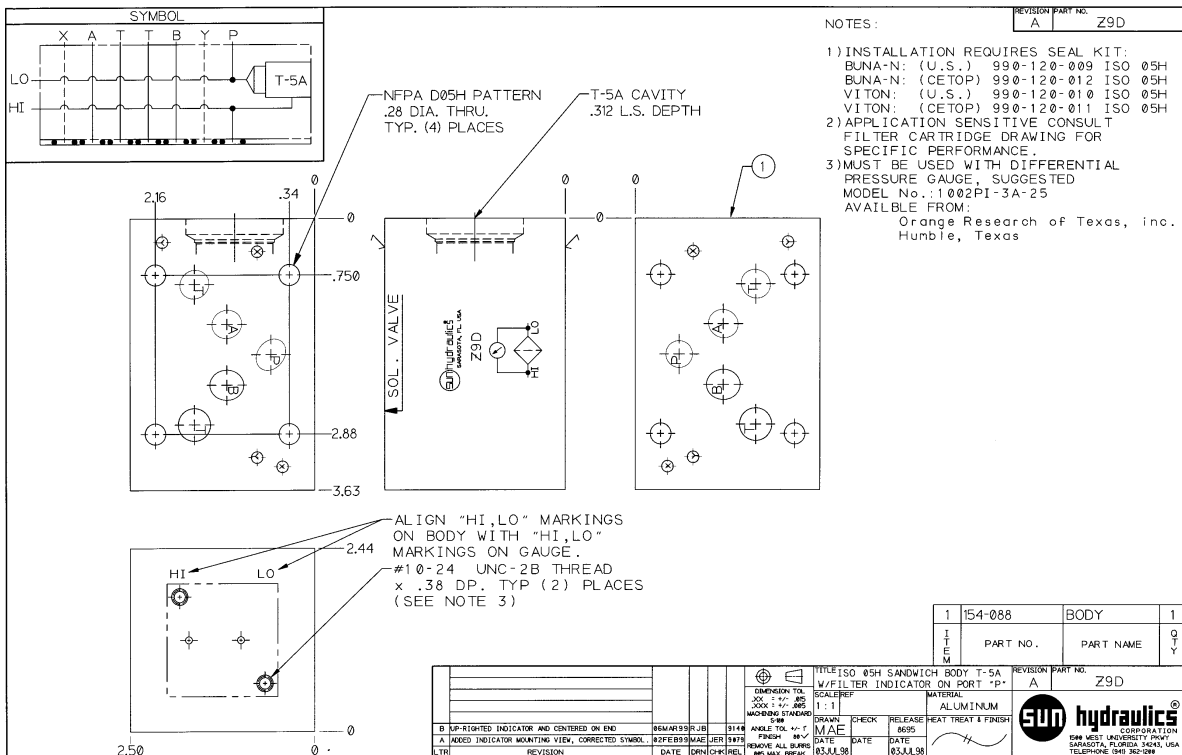
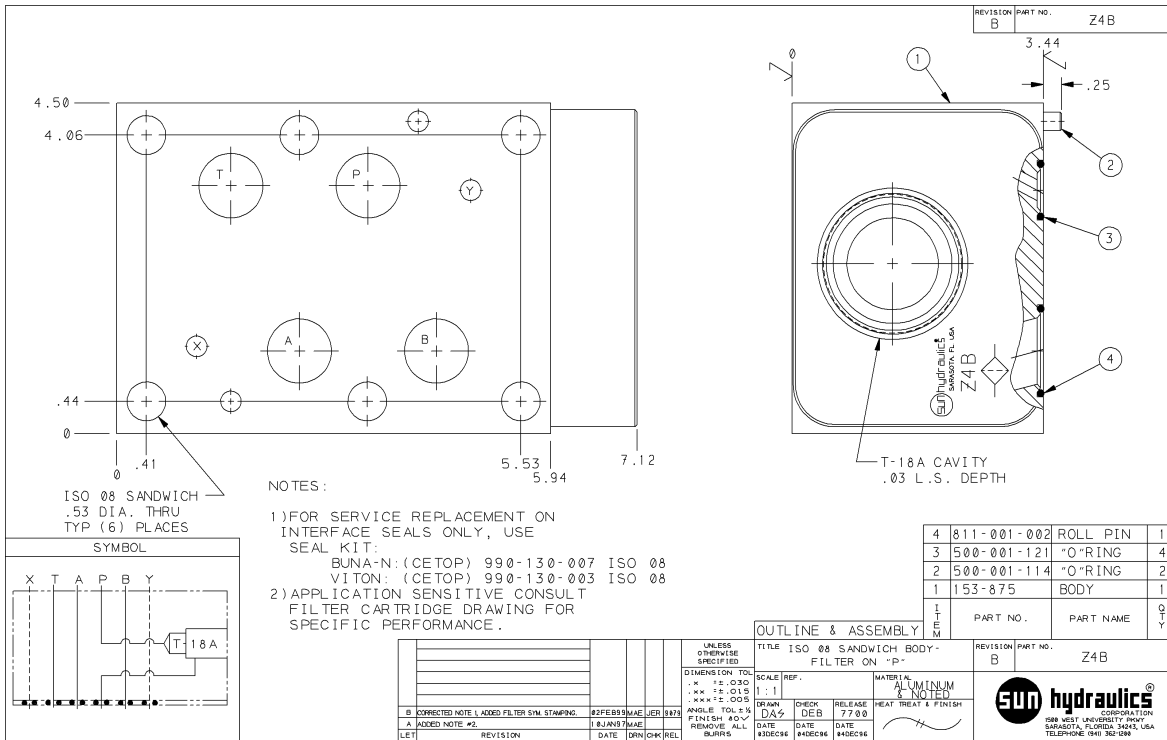
FLJA-X**

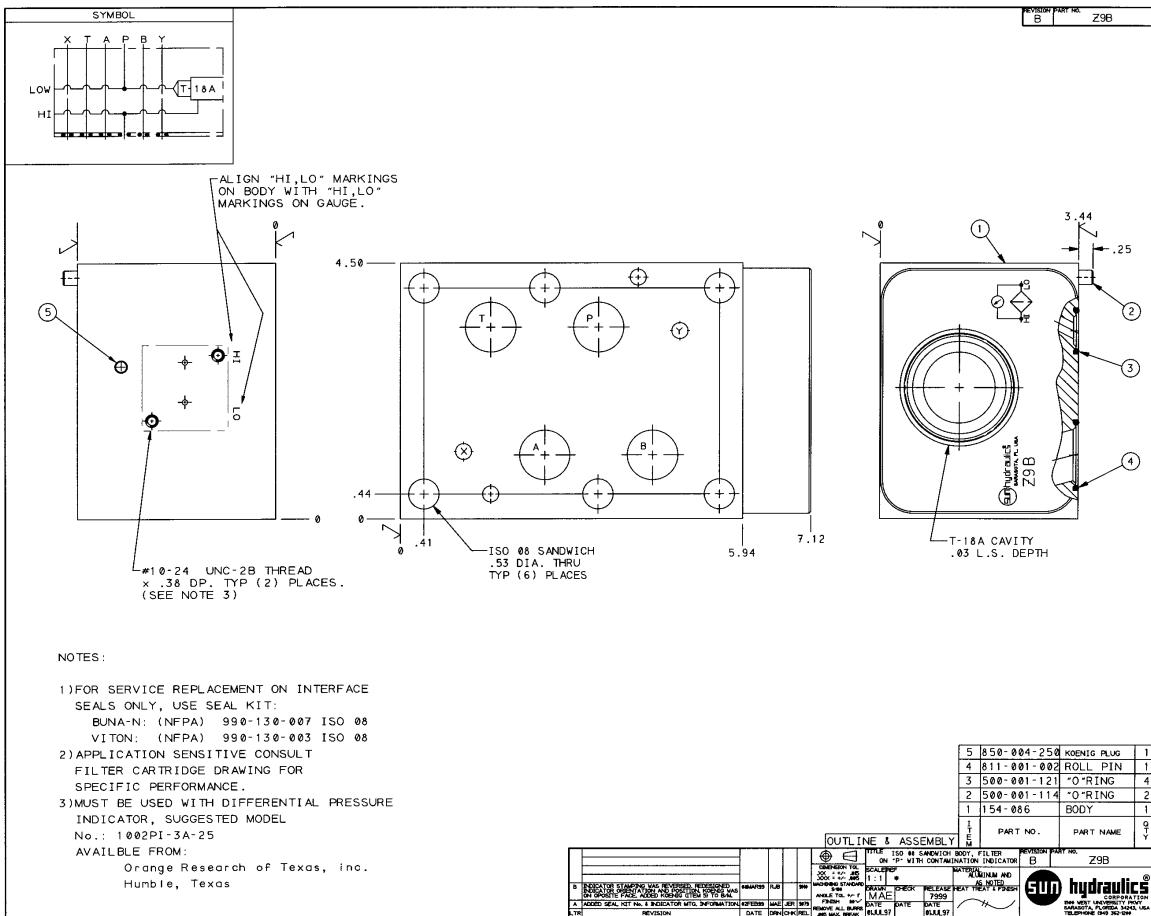
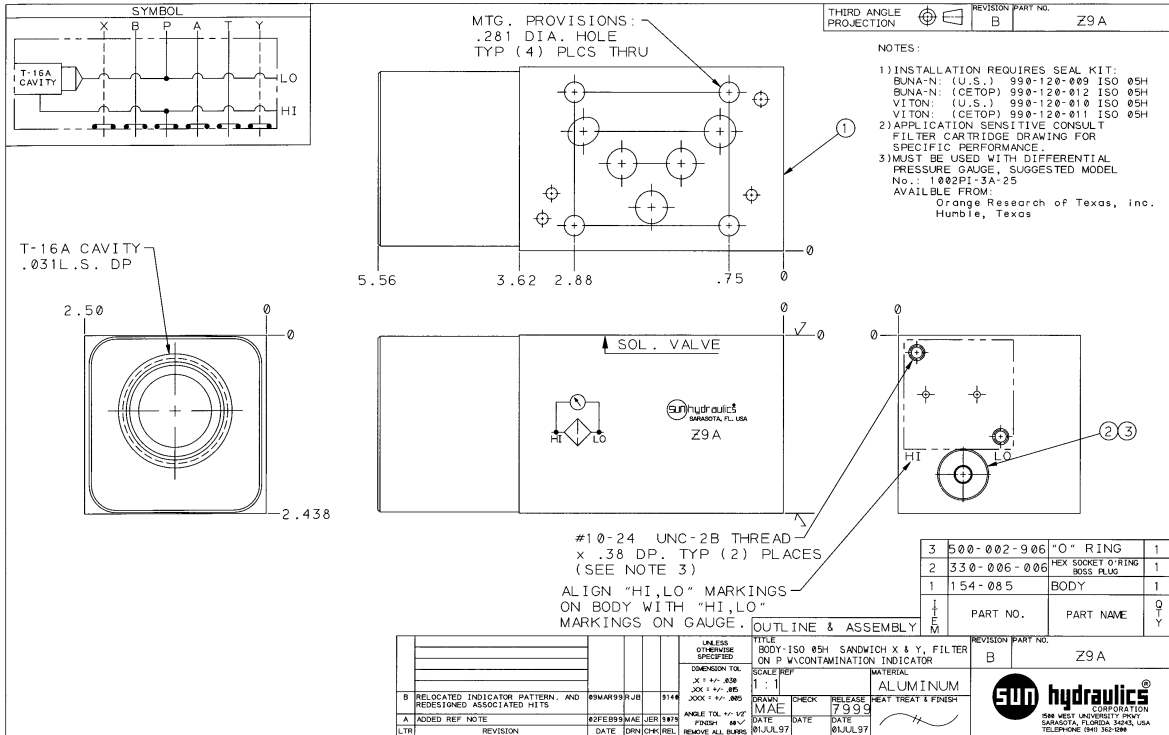
A 3µ (MICRON)	N = BUNA N SEALS
B 10µ (MICRON)	V = VITON SEALS
C 25µ (MICRON)	

		UNLESS OTHERWISE SPECIFIED		TITLE FILTER CARTRIDGE SERIES 4 DEPTH TYPE		REVISION PART NO.	
		DIMENSION TOL .X = ±.030 .XX = ±.015 .XXX = ±.005		SCALE REF. AS NOTED		A FLJA-X**	
		ANGLE TOL ± 1/2 FINISH 80° REMOVE ALL BURRS		DRAWN CHECK RELEASE HEAT TREAT & FINISH			
LET REVISION		DATE DRN CHK REL		DATE DATE DATE			
		24 JUNE 97				SUN hydraulics CORPORATION 1500 WEST UNIVERSITY PKWY SARASOTA, FLORIDA 34243, USA TELEPHONE (941) 362-1200	

Sandwich Bodies







INFORMATION

Information on filter gauges and switches that will fit Sun Z9* sandwich bodies can be obtained from:

Orange Research, Inc.

140 Cascade Blvd.

Milford, CT 06460

Telephone: 203-877-5657

Fax: 203-783-9546

or

Hydra-Power Systems

570 S. E. Johnson Creek Blvd.

Portland, OR 97206

Telephone: 503-777-3361

Fax: 503-777-1049