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All PacSeal Hydraulics' KR Pressure Regulators are designed with ShearFlo® metal-to-metal sealing technology. ShearFlo® sealing technology features:

- High cycle life and anti-wear design is suitable for critical service applications, including contaminated fluids.
- Leak proof, contaminant resistant metal-to-metal seal is accomplished by lapping and polishing hardened stainless steel sealing elements to exacting standards of finish and flatness.
- The sealing elements are spring preloaded and pressure energized, which maintains contact between the two sealing surfaces at all times.

All KR Regulators are tested to PacSeal's strict quality control standards to ensure proper function and reliability. Every ShearFlo® sealing component in a repair kit is inspected to ensure trouble-free performance after field maintenance and repair.

PacSeal Hydraulics' KR Pressure Regulators serve as pressure reducing and regulating valves to maintain system pressure at a desired value (set pressure) which is below that of the supply pressure.

The operator controls the outlet pressure by modulating the compression of springs that act on a pressurized piston. This in turn balances the hydraulic load inside the body. The operator options are as follows:

- Manual
- Failsafe Air Motor with Manual Override
- Failsafe Hydraulic Motor with Manual Override
- Hydraulic Pilot

The internal override bypass operator provides a lean solution for tight space applications by allowing full accumulator pressure to be supplied downstream of the regulator without a dedicated 4-way bypass value in the hydraulic circuit.

General Specifications					
Supply Port Size	1 in. NPT or SAE ORB				
Outlet Port Size	1 in. NPT or SAE ORB				
Vent Port Size	1/2 in. NPT or SAE ORB				
Working Pressure Options (Liquid)	3000, 5000 or 6000 psi				
Options (Liquid) Regulated Outlet Pressure Options	See Product Configurator				
Cv Factor Outlet	9.4				
Cv Factor Vent	1.4				
Rated Flow	75 gpm				
Temperature Rating (Regulators and Failsafe Air Motors)	-40° to 250°F				
	Hydraulic Oil or				
Fluid Media	lubricated water				
Weight	See installation drawings				
Mate	erials				
ShearFlo Sealing	400 series hardened				
Components (i.e. Rotor and Seal Rings)	Stainless Steel				
Body	400 series Stainless Steel				
Flanges and Operators	Carbon Steel				
Hardware	Coated Carbon Steel				
O-rings	Buna-N (N), Viton (V), or EPR (E)				
Backup Rings	Teflon				
¹ Convertor la produce al la calicitada da					

¹For water based media, specail alloy seal rings may be required for optimum performance and durability -Contact PacSeal for details

Connact						
Model	Supply Pressure [psi]	Regulated Outlet Pressure [psi]	Deadband Range [psi]*			
L	3000/5000	200-2000	85-150			
R	3000/5000	550-2500	300-600			
Н	5000/6000	350-3300	85-150			
D	5000/6000	400-4000	150-250			
V	6000	1200-5500	450-800			
W	6000	600-5000	150-250			
Р	3000/5000/ 6000	50-6000	0-100			

*Deadband is the difference between the set pressure and the actual outlet pressure that triggers the KR to open or vent. The deadband will vary depending on factors that influence the friction between the seal rings and flow plates, such as: type of fluid and lubricity properties, temperature, differential pressure between supply and regulated outlet, seal ring and flow plate wear condition, and lastly interpretation influenced by gauge sensitivity.

The Reset Range or Hysteresis is within +/- 150 psi for all models.

Basic Model	Ports	Supply Pressure	Regulated Outlet Pressure		Operator	Internal Override
mouel			<u>Rated Range²</u>	<u>Deadband</u>		Bypass
	N NPT	3 3000 psi	L 200-2000 psi	85-150 psi	M Manual	-IO Direct
	S SAE	5 5000 psi	R 550-2500 psi	300-600 psi	FSA Failsafe Air Motor	-IS with SV-25
	M Subplate Mount (NPT)	5 5000 psi	H 350-3300 psi	85-150 psi	FSH Failsafe Hydraulic Motor	-IX with SVx-25
KR-75	T Subplate Mount (SAE) ¹	6 6000 psi	D 400-4000 psi	150-250 psi		
	C Code-61 ¹	6 6000 psi	W 600-5000 psi	150-250 psi	m	
	D Code-62 ¹	• 0000 psi	V 1200-5500 psi	450-800 psi		Leave blank if _ N/A
		3, 5, or 6	P ³ 50-6000 psi	0-100 psi	H Hydraulic Pilot	

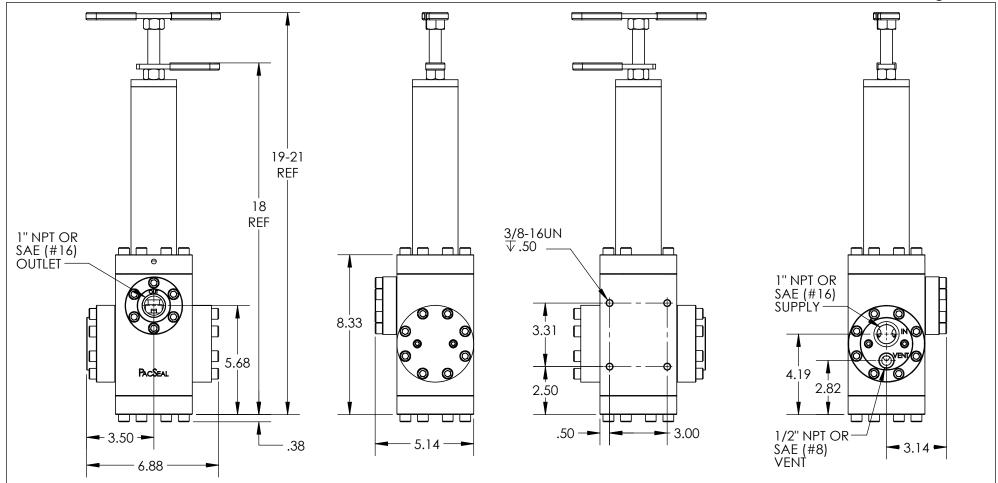
Model Number Configurator

Notes: 1Not a standard option - special order only

²Rated Regulated Outlet Pressure cannot exceed supply pressure.

³Maximum rated regulated outlet pressure matches the supply pressure for a regulator with the Hydraulic Pilot operator



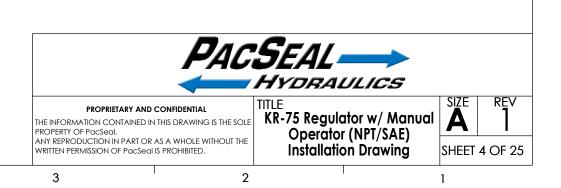


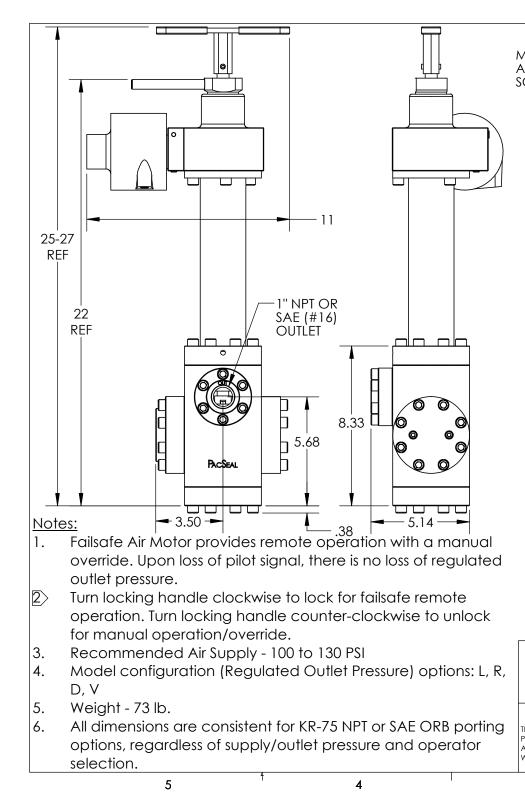
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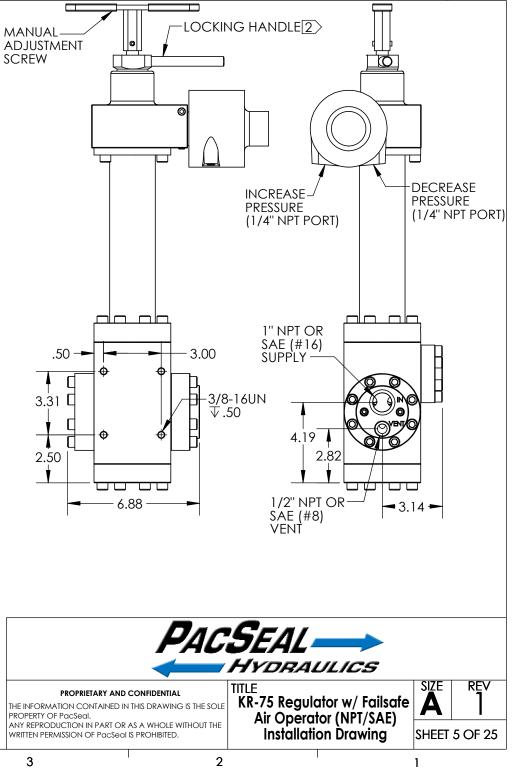
- 1. Adjustment handle can be threaded in or out to increase or decrease compression on the spring and thus on the regulated outlet pressure.
- 2. Model configuration (Regulated Outlet Pressure) options: L, R, D, V
- 3. Weight 48 lb.

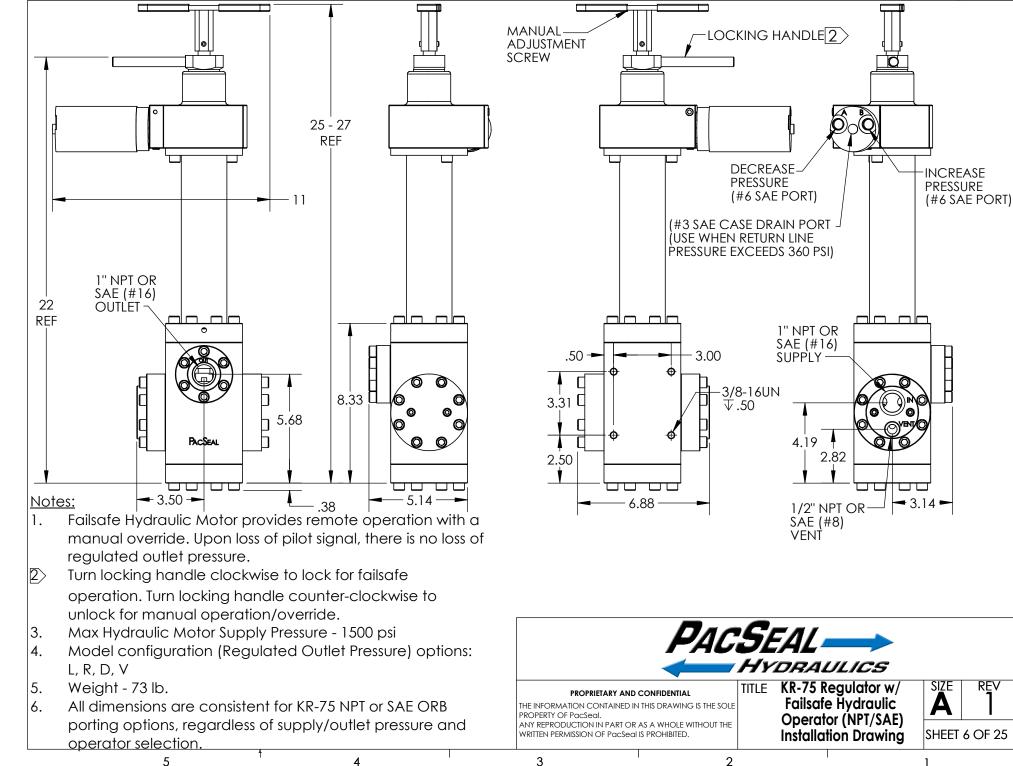
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4. All dimensions are consistent for KR-75 NPT or SAE ORB porting options, regardless of supply/outlet pressure and operator selection.

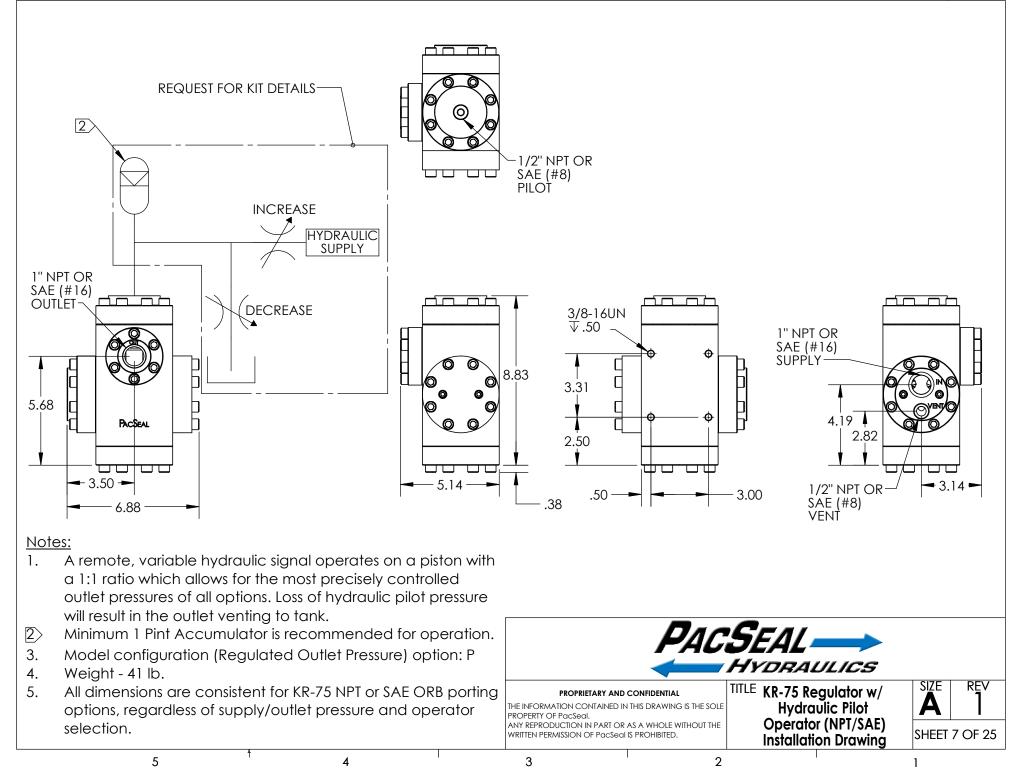


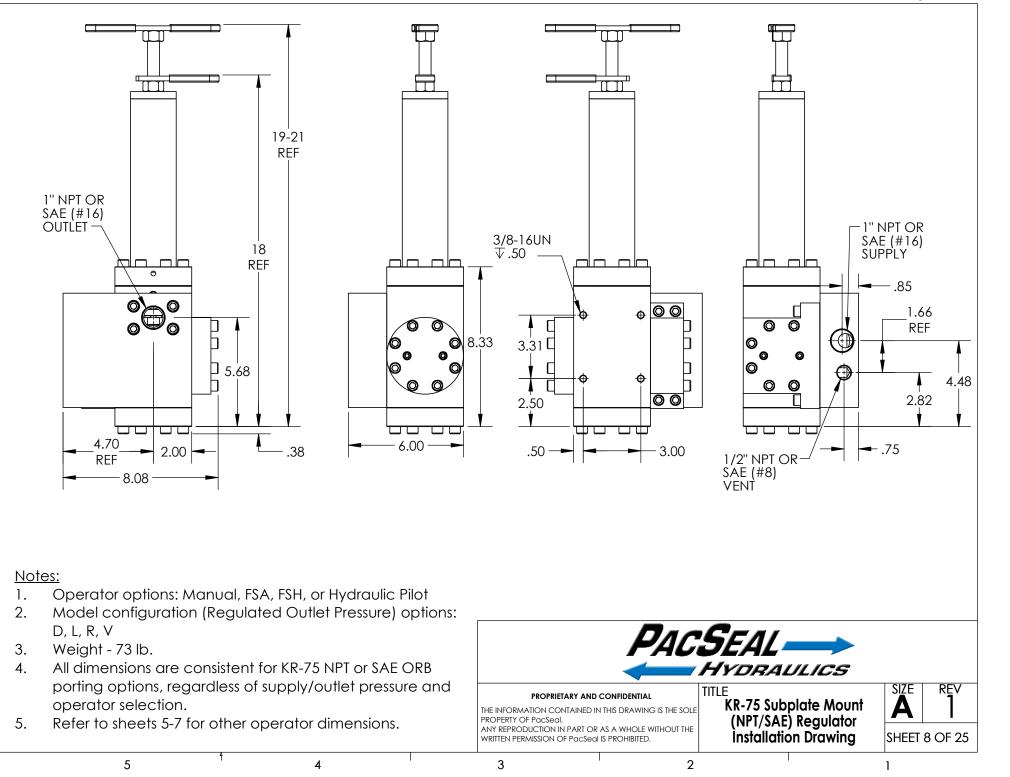


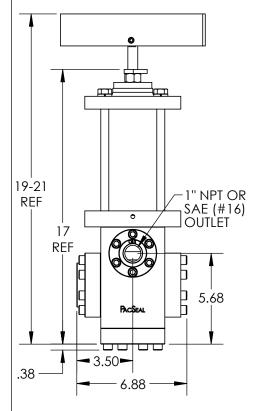


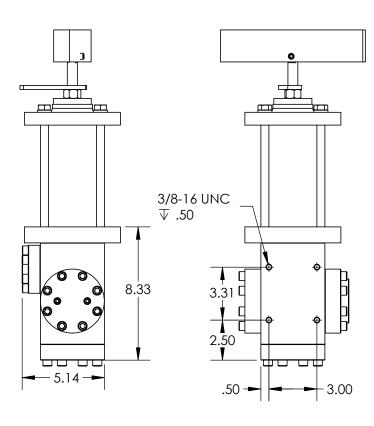


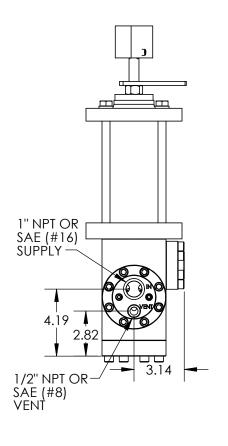
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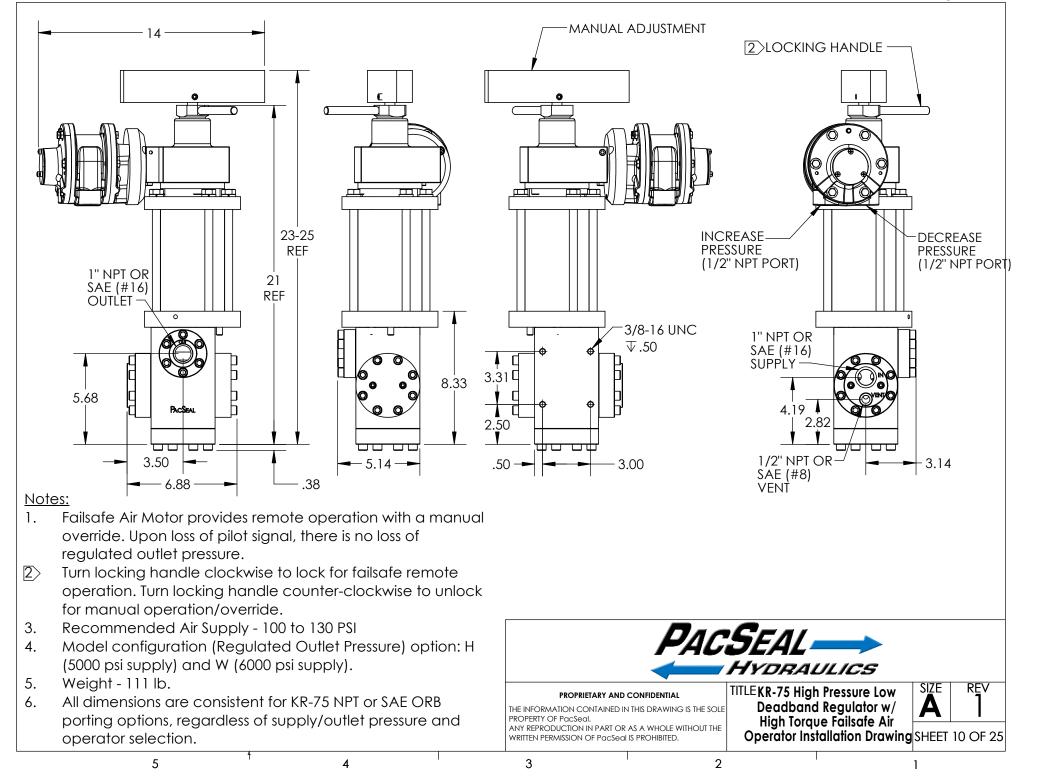
<u>Notes:</u>

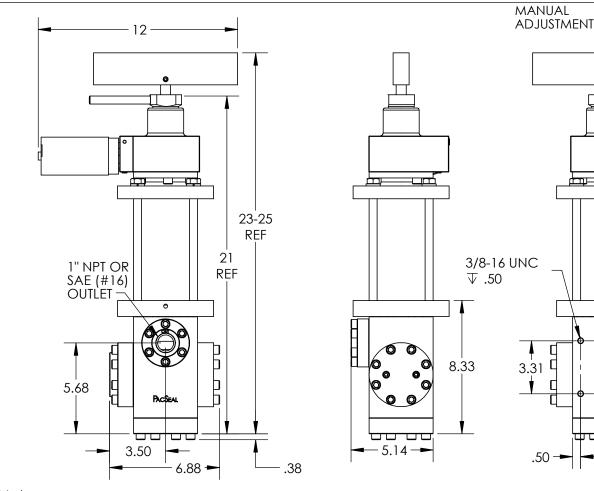
- 1. Adjustment handle can be threaded in or out to increase or decrease compression on the spring and thus on the regulated outlet pressure.
- 2. Model configuration (Regulated Outlet Pressure) options: H (5000/6000 psi supply) and W (6000 psi supply).
- 3. Weight 73 lb.

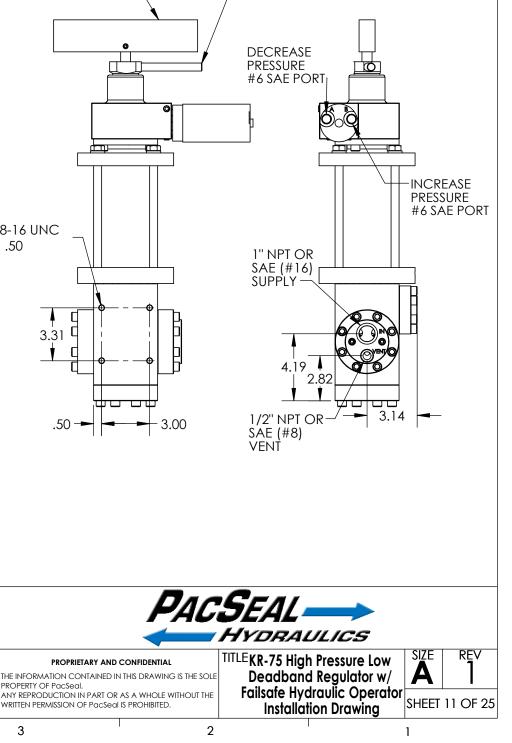
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4. All dimensions are consistent for KR-75 NPT or SAE ORB porting options, regardless of supply/outlet pressure and operator selection.









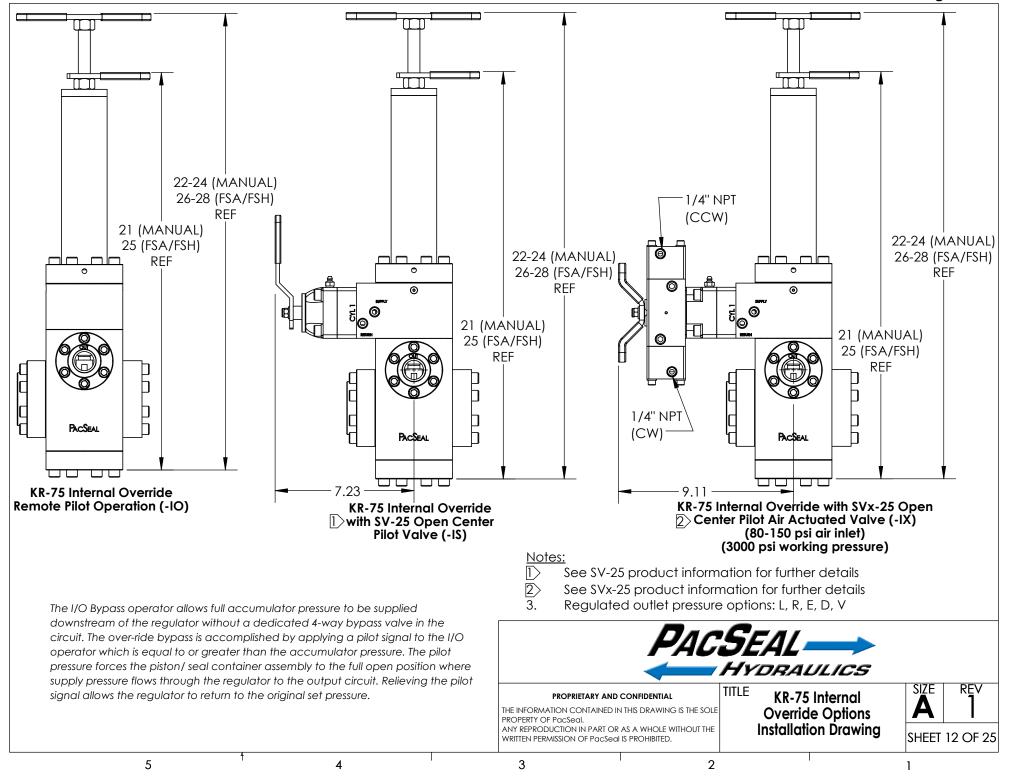
LOCKING HANDLE

Notes:

- Failsafe Hydraulic Motor provides remote operation with a 1. manual override. Upon loss of pilot signal, there is no loss of regulated outlet pressure.
- Turn locking handle clockwise to lock for failsafe remote $|2\rangle$ operation. Turn locking handle counter-clockwise to unlock for manual operation/override.
- Max Hydraulic Motor Supply Pressure 1500 psi 3.
- 4. Model configuration (Regulated Outlet Pressure) option: H (5000 psi supply) and W (6000 psi supply).
- 5. Weight - 94 lb.
- All dimensions are consistent for KR-75 NPT or SAE ORB 6. porting options, regardless of supply/outlet pressure and operator selection.

5

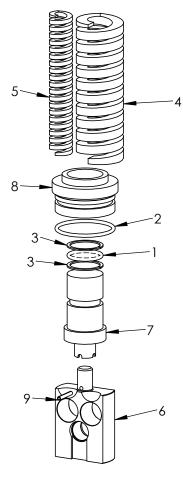
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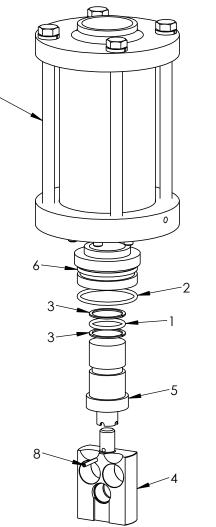
	Nicker		ITEM P NO. 1	ART DESCRIPTION	QTY
$\sqrt{26}$	Notes:	ulator shown for illustration purposes.	1 23	-1263 O-Ring	2
	I. KR-75 "K" Manual Reg 2. All other regulated ou	tlet pressure model configurations		-1293 O-Ring	2
	shown in sheets 14 - 1			-1322 Backup Ring	4
		, gh Pressure Low Deadband operator		-1323 O-Ring	4
	assembly drawings sh			-1324 O-Ring	1
17/		eplacement parts.		-1325 O-Ring	1
	4. Contact PacSeal for r 5. Refer to KR-75 Mainte	nance Instructions for more details.		-1326 O-Ring	1
				-1328 O-king -1329 Backup Ring	
	(O) 33				2
	_15			-0013 Seal Ring, Vent	2
16	/10 /27			-0014 Seal Ring, Supply	4
				-0015 Flow Plate, Blind	1
	/22			-0016 Flow Plate, Supply	1
$\langle \circ \rangle$	/28			-0109 Wave Spring	1
	-29			-0110 Spring	2
21	- 27		15 40	-0134 Spring Plate	1
	20		16 40	-0135 Lock Handle	1
				-0136 Adjusting Screw & Hand	le 1
				-0140 Plug, Adjustment H	
	30			-0195 Flange, Blind	1
				-0197 Flange, Lower	1
				-0300 Spring Guide	1
35~		.2 .			1
	31 12	$ ^{3} ^{4} ^{4} _{4}$		-0383 Ajustment Head	
				-0066 Bolt	4
39				-0068 Bolt	6
				-0069 Bolt	32
25				-0239 Grip, Handle	3
				ote 2 O-Ring	2
That ~	6 / 12			ote 2 Backup Ring	2
			29 No	ote 2 O-Ring	1
		¹² ¹⁸ / ₁₃	30 No	ote 2 Dowel Pin	1
				ote 2 Seal Container	1
		7 - 19		ote 2 Piston	1
		\sim 125		ote 2 Piston Guide	1
					1
				ote 2 Spring, Outer	I
			35 No	ote 2 Spring, Inner	1
	RACSEAL 00		36 No	ote 2 Pin, Retainer	1
			37 No	ote 4 Body	1
				ote 4 Flange, Outlet	1
					1
	24 50 6 6	<u>`19</u>		ote 4 Flange, Main	
	25 20	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF PacSeal. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE	SEAL HYDRAU IILE KR-75 G Assembly	eneral	REV 1 13 OF 2
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Notes: 1. Th

The listed components vary based on Supply and Regulated Outlet Pressures, while all other regulator components (shown in sheet 13 "General Assembly Overview") are shared.



Model		Regulated Outlet Pressure (psi)	Deadband (psi)
L	3000/5000	200-2000	85-150
Н	5000/6000	350-3300	85-150



7

KR-75 L Regulator

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	23-1124	O-Ring	1
2	23-1319	O-Ring	1
3	23-1342	Backup Ring	2
4	40-0143	Spring, Outer	1
5	40-0144	Spring, Inner	1
6	40-0182	Seal Container	1
7	40-0995	Piston, L	1
8	40-0996	Piston Guide, L	1
9	50-0117	Roll Pin	1

KR-75 H Regulator With High Pressure Low Deadband Adjustment Head

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	23-1124	O-Ring	1
2	23-1319	O-Ring	1
3	23-1342	Backup Ring	2
4	40-0182	Seal Container	1
5	40-0995	Piston, L	1
6	40-0996	Piston Guide, L	1
7	40-2927	High Pressure Low Deadband Adj. Head	1
8	50-0117	Roll Pin	1

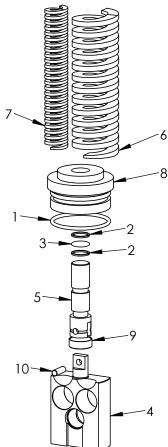


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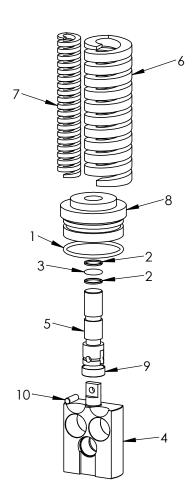
TITLE L and H Model Configurations Assembly Drawing SHEET 14 OF 25



Notes: 1. The listed components vary based on Supply and Regulated Outlet Pressures, while all other regulator components (shown in sheet 13 "General Assembly Overview") are shared.



Model	Supply Pressure (psi)	Regulated Outlet Pressure (psi)	Deadband (psi)
R	3000/5000	550-2500	300-600
V	6000	1200-5500	450-800



KR-75 "R" Regulator

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	23-1319	O-Ring	1
2	23-1320	Backup Ring	2
3	23-1321	O-Ring	1
4	40-0106	Seal Container	1
5	40-0107	Piston, R	1
6	40-0189	Spring, Outer	1
7	40-0190	Spring, Inner	1
8	40-0186	Piston Guide, R	1
9	40-0199	Pin Retainer	1
10	50-0087	Dowel Pin	1

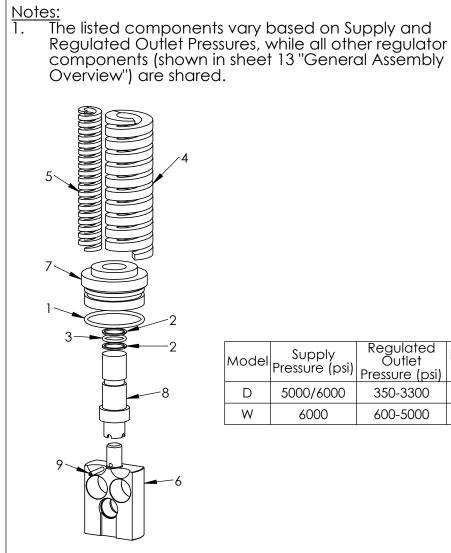
KR-75 "V" Regulator

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	23-1319	O-Ring	1
2	23-1320	Backup Ring	2
3	23-1321	O-Ring	1
4	40-0106	Seal Container	1
5	40-0107	Piston, R	1
6	40-0143	Spring, Outer	1
7	40-0144	Spring, Inner	1
8	40-0186	Piston Guide, R	1
9	40-0199	Pin Retainer	1
10	50-0087	Dowel Pin	1

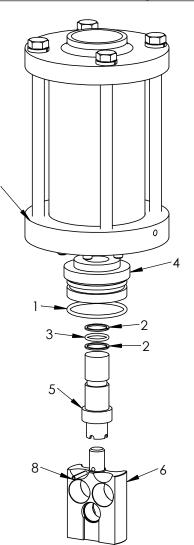


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TITLER and V Model SIZE REV Α Configurations Assembly Drawing SHEET 15 OF 25



Model	Supply Pressure (psi)	Regulated Outlet Pressure (psi)	Deadband (psi)
D	5000/6000	350-3300	150-250
W	6000	600-5000	150-250



7

KR-75 D Regulator

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	23-1319	O-Ring	1
2	23-1331	Backup Ring	2
3	23-1332	O-Ring	1
4	40-0143	Spring, Outer	1
5	40-0144	Spring, Inner	1
6	40-0182	Seal Container	1
7	40-1076	Piston Guide, D	1
8	40-1077	Piston, D	1
9	50-0117	Roll Pin	1

KR-75 W Regulator

		l .	
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	23-1319	O-Ring	1
2	23-1331	Backup Ring	2
3	23-1332	O-Ring	1
4	40-1076	Piston Guide, D	1
5	40-1077	Piston, D	1
6	40-1292	Seal Container	1
7	40-2927	High Pressure Low Deadband Adj. Head	1
8	50-0117	Roll Pin	1

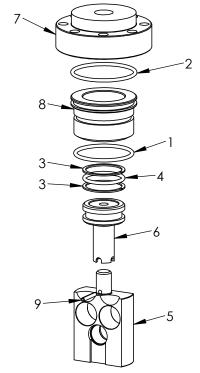


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TITLE D and W Model SIZE REV Α Configurations Assembly Drawing SHEET 16 OF 25



The listed components vary based on Supply and Regulated Outlet Pressures, while all other regulator components (shown in sheet 13 "General Assembly Overview") are shared.



Model	Supply Pressure (psi)	Regulated Outlet Pressure (psi)	Deadband (psi)
Р	3000/5000/6000	50-6000	0-100

KR-75 P Regulator (Hydraulic Pilot)

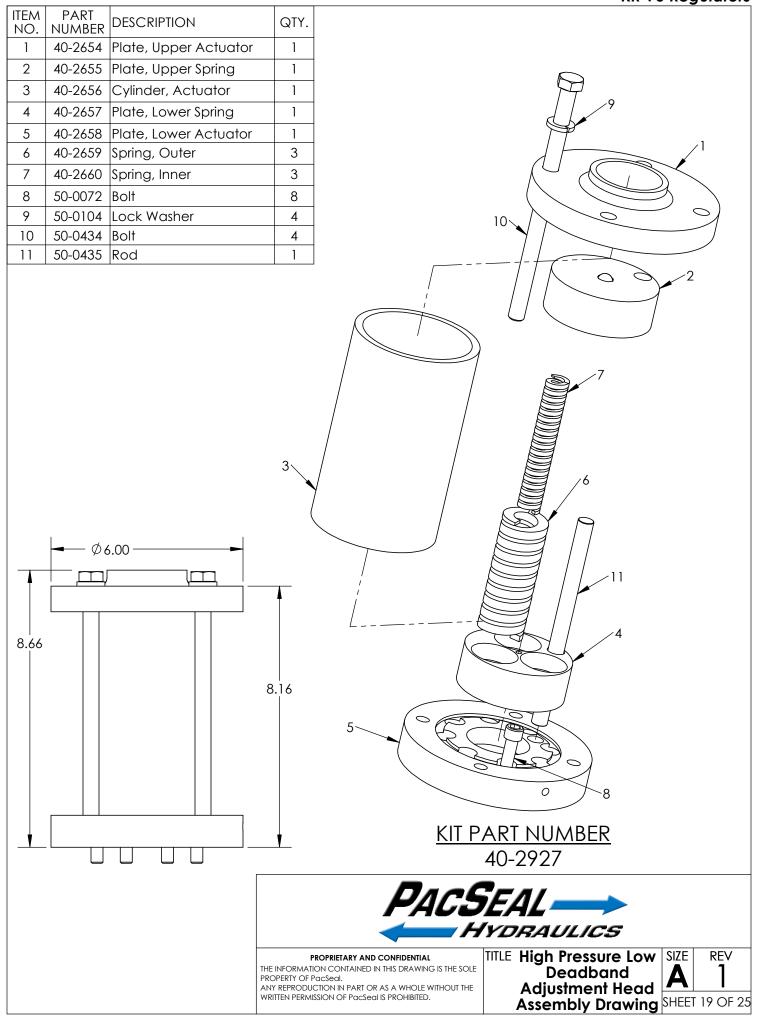
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	23-1319	O-Ring	1
2	23-1327	O-Ring	1
3	23-1328	Backup Ring	2
4	23-1529	O-Ring	1
5	40-0182	Seal Container	1
6	40-0183	Piston	1
7	40-0298	Hydraulic Head	1
8	40-0299	Piston Guide	1
9	50-0117	Roll Pin	1



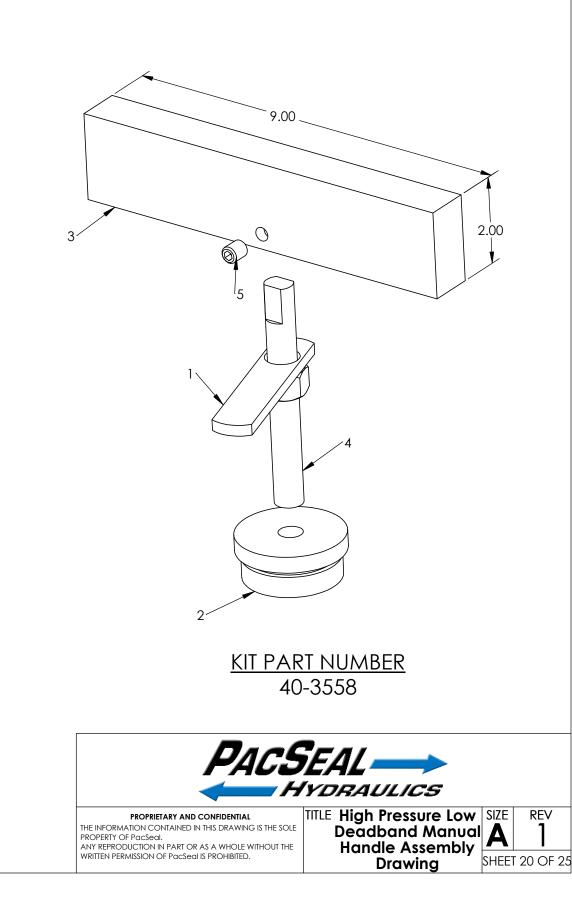
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ITEM NO.	PART NUMBER	DESCRIPTION	QTY		ITEM NO.	PART NUMBER DESCRIPTION	QTY		
1	23-1123	O-Ring	1		1	23-1123 O-Ring	1		
2	23-1385	O-Ring	1		2	23-1385 O-Ring	1		
3	23-1404	O-Ring	1	Failsafe Air Operator	3	23-1404 O-Ring	1	Failsafe	Hydraulic
4	23-1405	O-Ring	1	(40-1564)	4	23-1405 O-Ring	1	Operator	(40-1641)
5	40-0413	Failsafe Body	1		5	40-0413 Failsafe Body	1	•	. ,
6	40-0414	Adapter Plate	1		6	40-0414 Adapter Plate	1		
7	40-0415	Failsafe Shaft	1	10	7	40-0414 Addpter Fidte	1	10	
8	40-0416	Failsafe Collar	1		8	40-0415 Failsafe Collar	1		1
9	40-0417	Failsafe Nut Assy	1		9	40-0417 Failsafe Nut Assy	1	\bigcirc	
10	40-0418	Failsafe Handle	1				1		
10	40-0418	Shaft Extension, Failsafe Air	1		10	40-0418 Failsafe Handle		22/	
12	40-0419	Motor, Failsafe Air Standard	1	$\overline{\square}^{\bullet}$	11	40-0715 Hydraulic Adapter			14
			1		12	40-0716 Shaft Extension, Failsafe Hydraulic	1		
13 14	40-2742 40-2743	Worm Worm Gear	1	7~	13	40-0719 Motor, Failsafe Hydraulic	1	_	h
14	50-0073	Bolt	3		14	40-2742 Worm	1	/-	
16	50-0154	Roll Pin	1		15	40-2743 Worm Gear	1		μЩų
17		Bolt	1		16	50-0073 Bolt	3		
17	50-0157B		2		17	50-0154 Roll Pin	1		
19		Thrust Washer			18	50-0156 Bolt	1		
20	50-01571	Roller Bearing	4	2 /9	19	50-0157B Bearing	2	2-	
		-	1		20	50-0157T Thrust Washer	4	Σ	
21	50-0160	Set Screw	2		21	50-0158 Roller Bearing	1		
22	50-0223	Set Screw	2	4	22	50-0160 Set Screw	2	0	4
23	50-0287	Roll Pin	1		23	50-0215 Bolt	4	/18 3	
24	50-0483	Roller Bearing	1	/17	24	50-0223 Set Screw	2 2	3121	
					25	50-0287 Roll Pin	1		
					26	50-0483 Roller Bearing	1	the most	
			16-0				Mag) FOR EL	
	12~			13 14 22 19 14 18 19			14 17	$\left \begin{array}{c} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 21 \\ \end{array}\right = \left \begin{array}{c} 1 \\ 24 \\ 1 \\ 21 \\ \end{array}\right $	20 20 20 19
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				15		PACSE		ULICS	
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					PROPE ANY R	IFORMATION CONTAINED IN THIS DRAWING IS THE SOLE ERTY OF PacSeal.	y draulio	e Air and C Operators ly Drawing	A 1 SHEET 18 OF 2.
		5		4	3	3 2		-	1



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	40-0135	Lock Handle	1
2	40-0140	Plug, Adjustment Head	1
3	40-3237	Handle, Fail Safe HP	1
4	40-3414	Adjusting Rod	1
5	50-0482	Set Screw	2



ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	23-1123	O-Ring	1
2	23-1385	O-Ring	1
3	23-1404	O-Ring	1
4	23-1405	O-Ring	1
5	40-0413	Failsafe Body	1
6	40-0414	Adapter Plate	1
7	40-0415	Failsafe Shaft	1
8	40-0416	Failsafe Collar	1
9	40-0417	Failsafe Nut Assy	1
10	40-0716	Shaft Extension, Failsafe Hydraulic	1
11	40-2742	Worm	1
12	40-2743	Worm Gear	1
13	40-3237	Handle, Failsafe HP	1
14	40-3757	Adapter Plate, Motor	1
15	40-3761	Motor, Failsafe Air High Torque	1
16	50-0073	Bolt	3
17	50-0154	Roll Pin	1
18	50-0156	Bolt	1
19	50-0157B	Bearing	2
20	50-0157T	Thrust Washer	4
21	50-0158	Roller Bearing	1
22	50-0223	Set Screw	2
23	50-0287	Roll Pin	1
24	50-0319	Bolt	3
25	50-0482	Set Screw	2
26	50-0483	Roller Bearing	1

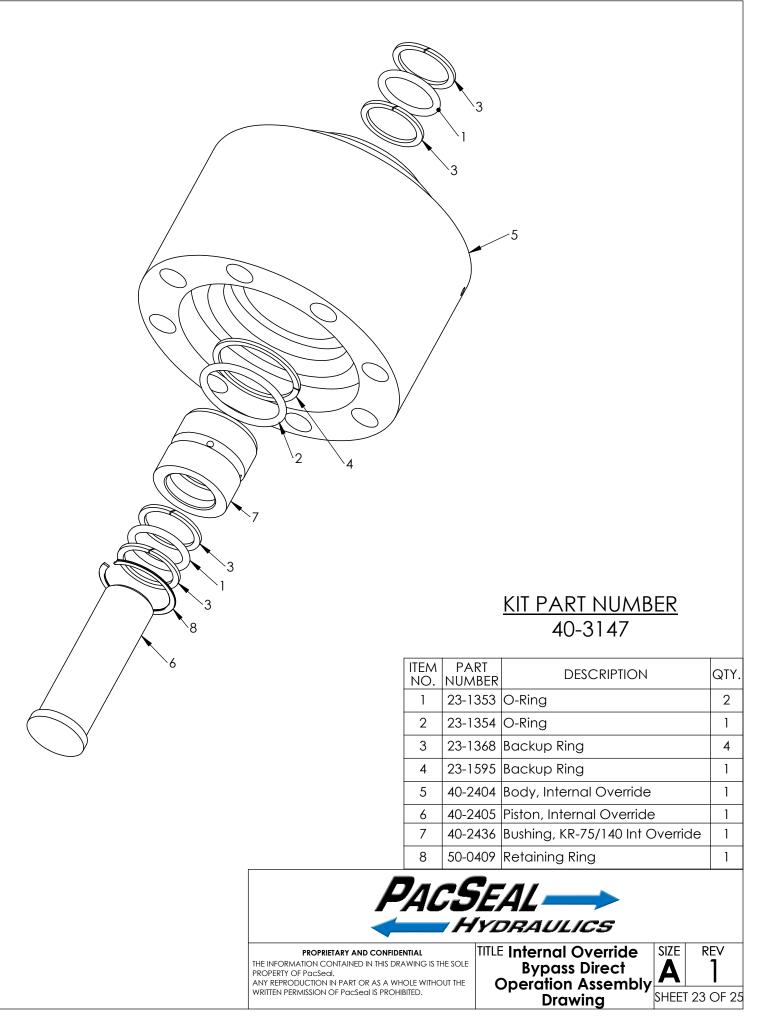
High Pressure Low Deadband Failsofe Air Dused exclusively with "H" and "W" Regulators	
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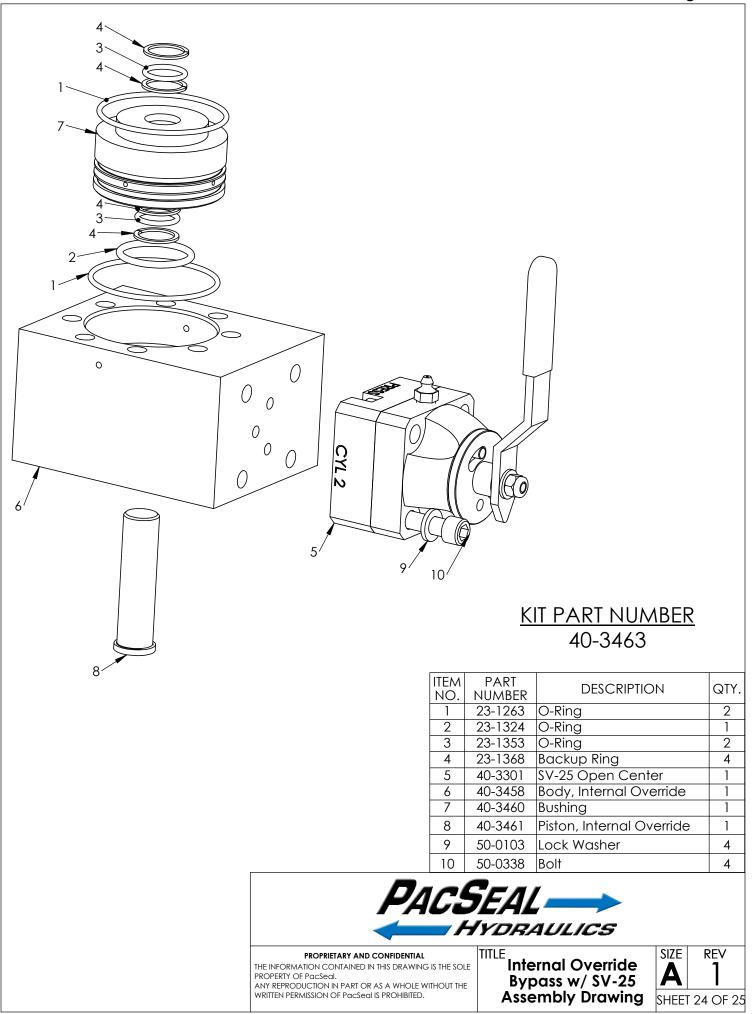
QTY

REV

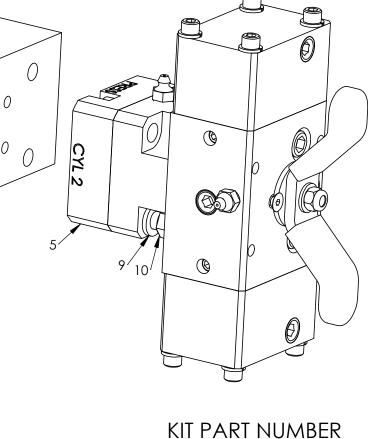
SHEET 22 OF 25

	ITEM	PART NO.	DESCRIPTION	
High Pressure Low Deadband Failsafe Hydraulic Actuator (40-3557) Used exclusively with "H" and "W" Regulators	NO.		O-Ring	
Used exclusively with "H" and "W" Regulators	2		O-Ring	
	3		O-Ring	
	4		O-Ring	
	5	40-0413	Failsafe Body	
	6	40-0414	Adapter Plate	
150	7		Failsafe Shaft	
	8	40-0416	Failsafe Collar	
	9	40-0417	Failsafe Nut Assy	
25	10	40-0715	Hydraulic Adapter	
	11	40-0716	Shaft Extension, Failsafe H	lydraulic
	12	40-0719	Motor, Failsafe Hydraulic	
	13	40-2742	Worm	
	14	40-2743	Worm Gear	
2 /9	15	40-3237	Handle, Failsafe HP	
	16	50-0073	Bolt	
	17	50-0154		
	18		Bolt	
	19	50-0157B		
	20		Thrust Washer	
	21		Roller Bearing	
	22		Bolt	
	23		Set Screw	
	24		Roll Pin	
	25 26		Set Screw Roller Bearing	
	20	30-0483		
	F	'ACS	TEAL>	
			YDRAULICS	
	PROPRIETARY AND CONFIDENTIAL	Llic	E In Pressure Low Deadband	SIZE I
P	HE INFORMATION CONTAINED IN THIS DRAWING ROPERTY OF PacSeal.	FC	ilsafe Hydraulic Operator	A
	NY REPRODUCTION IN PART OR AS A WHOLE V (RITTEN PERMISSION OF PacSeal IS PROHIBITED.			SHEET 22
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ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	23-1263	O-Ring	2
2	23-1324	O-Ring	1
3	23-1353	O-Ring	2
4	23-1368	Backup Ring	4
5	40-3302	SVx-25 Open Center	1
6	40-3458	Body, Internal Override	1
7	40-3460	Bushing	1
8	40-3461	Piston, Internal Override	1
9	50-0103	Lock Washer	4
10	50-0291	Bolt	4



KIT PART NUMBER 40-3561



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TITLE **Internal Override** Bypass w/ SVx-25 Assembly Drawing

