

# Model Number System

## PVQ10 and PVQ13

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
P	V	Q	1	0	A	2	R	S	E	1	S	2	0	C	*	2	1	V	*	1	1	B	D	1	2	S	*

Nos	Feature	Code	Description	Nos	Feature	Code	Description
1,2,3	Series PVQ	P V Q	Inline piston pump Variable volume Quiet series	15,16	Control type	C**V**B	Pressure compensator C**, as above with load-sensing.
4,5	Displacement in cc/rev and pressure ratings	10 13	10,5 cc/rev (0.64 cir), 210 bar (3000 psi) 13,8 cc/rev (0.84 cir), 140 bar (2000 psi)				Standard load-sensing setting is 11 bar (160 psi); range 10-17 bar (150-250 psi); with bleed-down orifice. Example: C21V11B indicates PVQ10 compensator with 210 bar pressure setting and 11 bar load-sense differential.
6,7	Mounting flange specifications	A2 MA	Flange SAE J744 82-2 (SAE A) Flange ISO 3019/2-80A2HW (available with "N" drive shaft only)			C**V**P	Pressure compensator with load-sensing as C**V**B above, but with bleed-down orifice plugged.
8	Rotation viewed from shaft end	R L	Right hand (cw), standard Left hand (ccw), optional				
9,10	Ports, type and location	SE SS	SAE O-ring rear port, 1.0625" inlet and outlet (standard) SAE O-ring side port, 1.3125" inlet and outlet (optional)			C**VC**B	Pressure compensator with load-sensing. Compensator same as C** above. Standard load-sensing setting is 24 bar (350 psi), range 17-31 bar (250-450 psi). With bleed-down orifice.
11	Shafts, input	1 3 N	Straight keyed SAE "A" modified, .75" dia. x 1.75" long Splined SAE "A" modified, 9T 16/32 DP major dia. fit Shaft end ISO 3019/2 E20N (available with "MA" mount only)			C**VC**P	Pressure compensator with load-sensing. Same as C**VC**B above, but with bleed-down orifice plugged.
12	Seals	S F	Buna N, standard Fluorocarbon, optional			CG	Pressure compensator modified for hydraulic remote control.
13,14	Pump design number	20	Design number subject to change. Installation dimensions remain unchanged for designs 10-19.			CD**	Electric dual range compensator. PVQ10: CD21 is standard 210 bar setting of high range (24-210 bar). PVQ13: CD14 is standard 140 bar setting of high range (24-140 bar). Both units require low range to be set by customer (20-100 bar).
15,16	Control type	C** CM**	Pressure compensator. PVQ10: Standard model is C21, indicating setting of 210 bar (3000 psi); range is 02-21 in tens of bar (350-3000 psi). PVQ13: Standard model is C14, indicating factory setting of 138 bar (2000 psi); range is 02-14 in tens of bar (350-2000 psi).  Low pressure compensator. Standard model is CM7, indicating factory setting of 69 bar (1000 psi); range is 02-10 in tens of bar (350-1500 psi).			UV	Unloading Valve for accumulator circuits. See installation details.

# Model Number System

## PVQ10 and PVQ13

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
P	V	Q	1	0	A	2	R	S	E	1	S	2	0	C	*	2	1	V	*	1	1	B	D	1	2	S	*

Nos	Feature	Code	Description	Nos	Feature	Code	Description
17,18	Pressure setting	21 14	210 bar (3000 psi) PVQ10 140 bar (2000 psi) PVQ13	25,26	Control design	12	O-ring seal design
19,20	Flow control option	Blank V VC	No flow control	27,28	Special pump option suffixes	S2 S3	Shaft up mounting British Standard Parallel Threads Counterbore Ports (ISO R288 threads). Contact Eaton for available configurations.
21,22	Load sense differential pressure setting	Blank 11 24	No flow control			S9	Special CG compensator for use with electronically modulated relief valves.
23	Flow control option	Blank B P	No flow control				
24	Displacement option	Blank D	Without adjustable maximum displacement stop (standard). Adjustable maximum displacement stop (optional).				

### RATINGS

Model Number System	Maximum Geometric Displacement cm <sup>3</sup> /r (in <sup>3</sup> /r)	Rated Speed r/min	Maximum Pressure bar (psi)	Input Power at Max. Pressure and Rated Speed kW (hp)	Approx. Weight kg (lb)
PVQ10	10,5 (0.643)	1800	210 (3000)	7,4 (10)	7,2 (16)
PVQ13	13,8 (0.843)	1800	140 (2000)	6,5 (8.75)	7,2 (16)

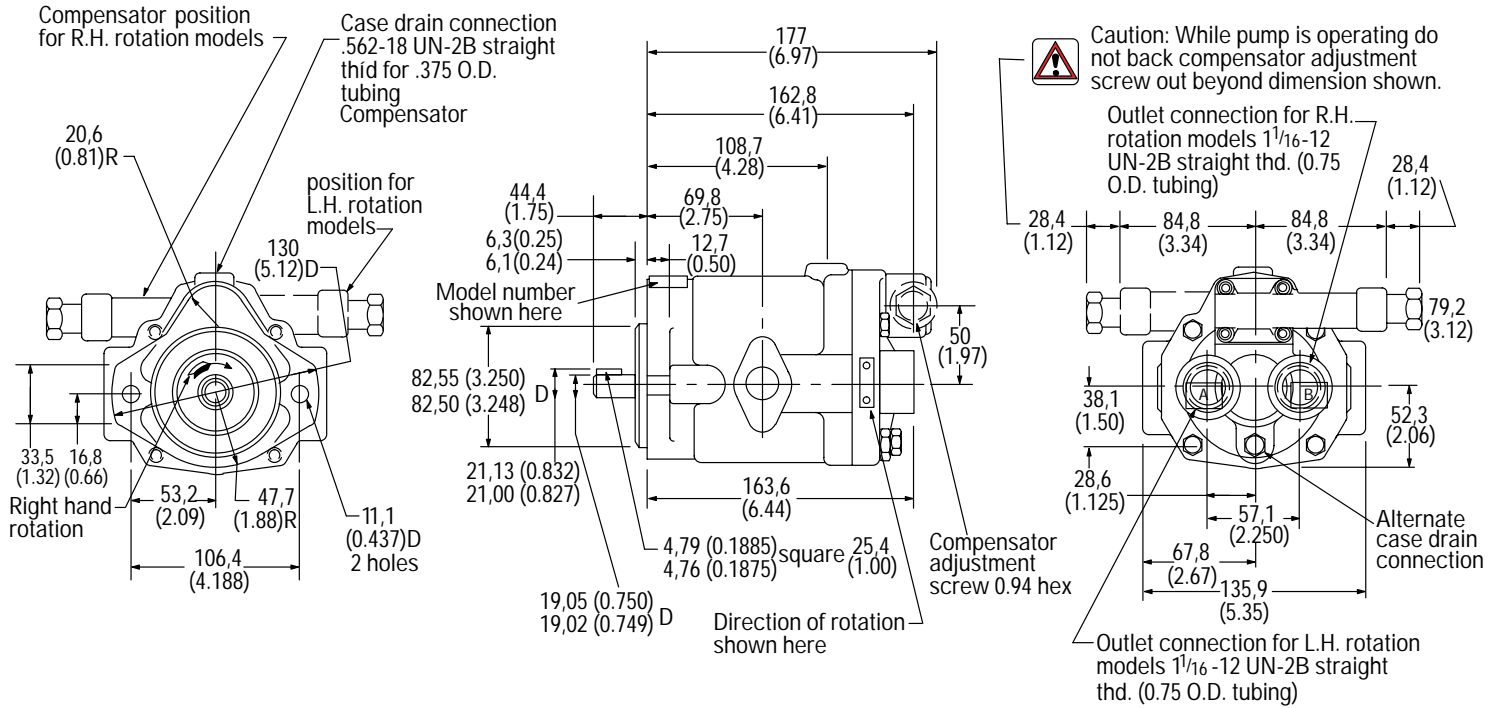
### Pressure Limits:

Case pressure – 0,35 bar (5 psig) maximum  
Inlet pressure – 0,2 bar (5 in. Hg) vacuum to 2 bar (30 psig)

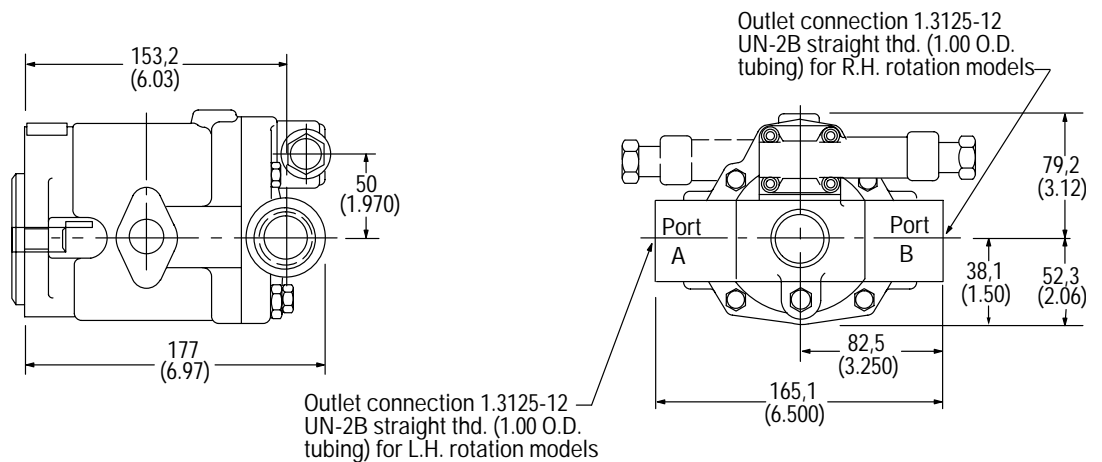
# Installation Dimensions

## PVQ10 and PVQ13 with Rear Ports

Millimeters (Inches)



## PVQ10 and PVQ13 with Side Ports

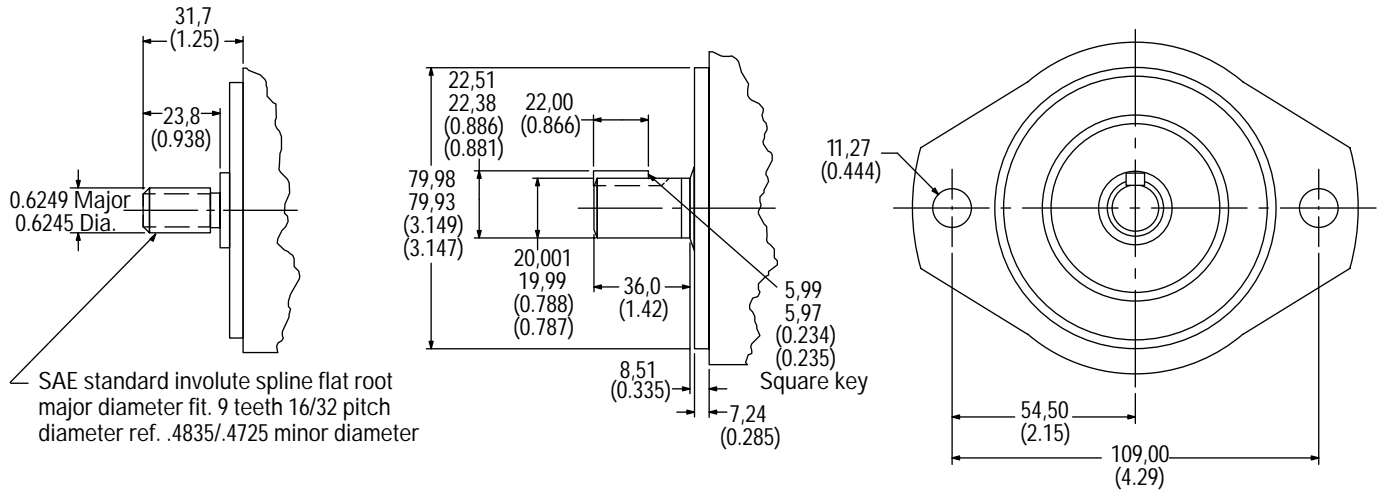


# Shaft Options

## No. 3 Shaft

## "N" Shaft with "MA" Flange

(Flange and shaft end ISO 3019/2-80A2HW-E20N)

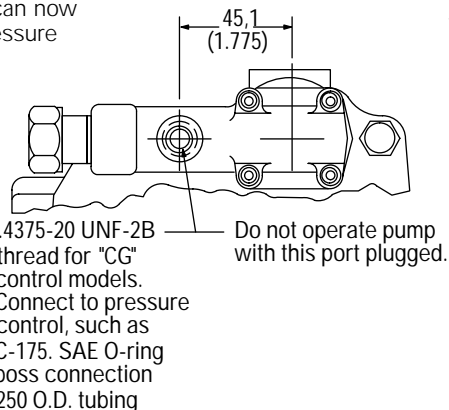


## Controls Remote Compensator

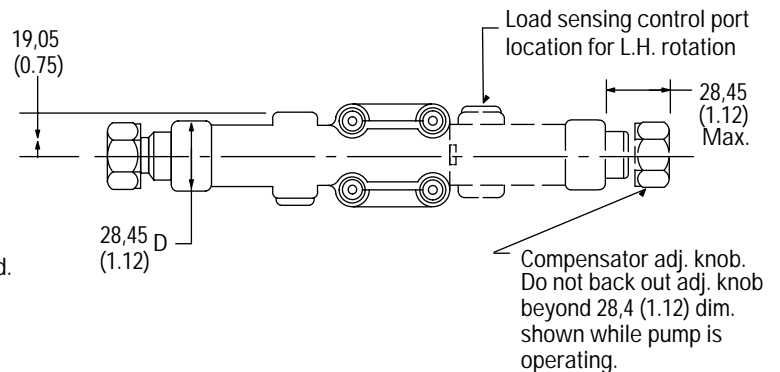
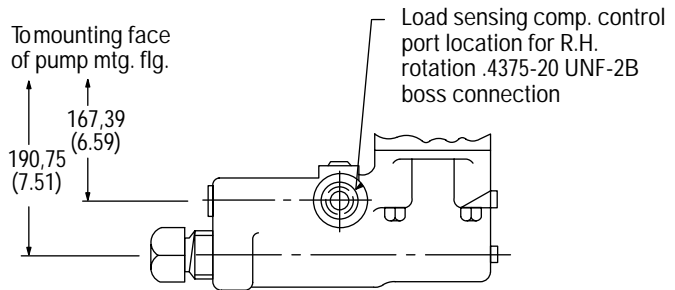
### Adjustment

1. Turn pressure control (such as C-175) CCW to minimum setting.
2. Turn compensator adjustment plug to desired minimum pressure (17 bar, 250 psi or higher).
3. Full pressure range can now be obtained with pressure control.

**Caution:** Effective compensator pressure will be compensator control setting (17-69 bar, 250-1000 psig) plus remote relief valve setting.



## Load-sensing with Pressure Limiting Compensator

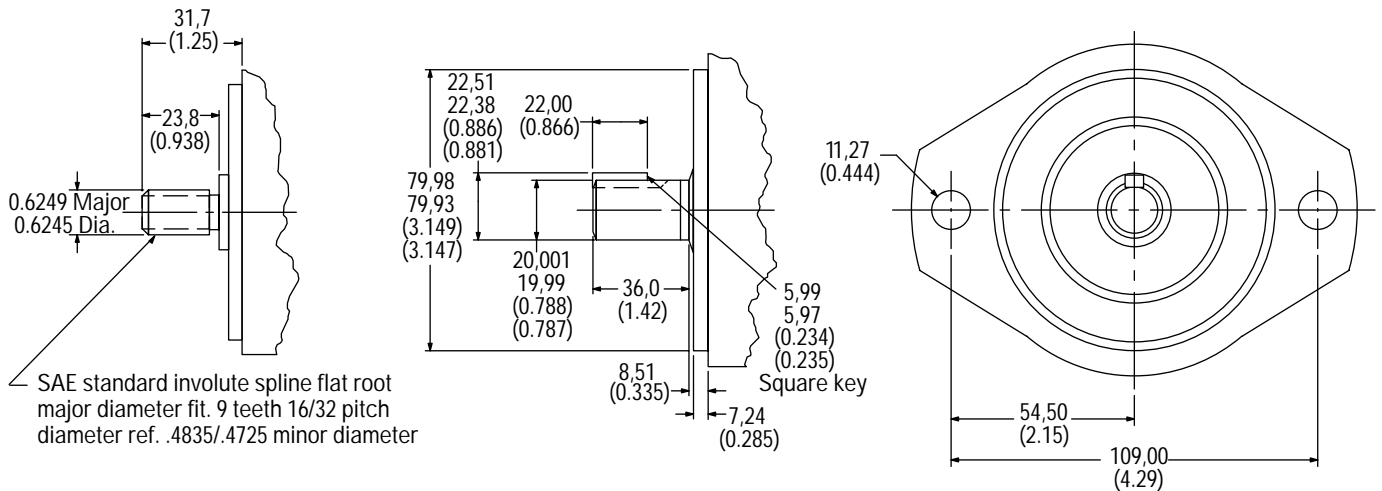


# Shaft Options

## No. 3 Shaft

## "N" Shaft with "MA" Flange

(Flange and shaft end ISO 3019/2-80A2HW-E20N)

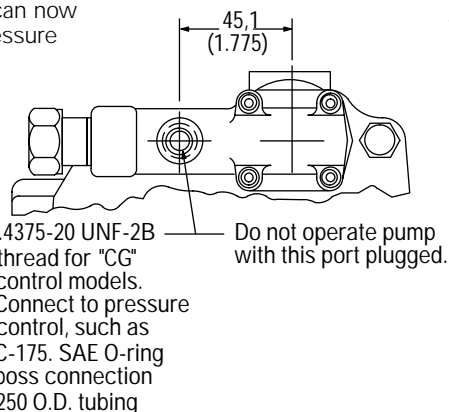


## Controls Remote Compensator

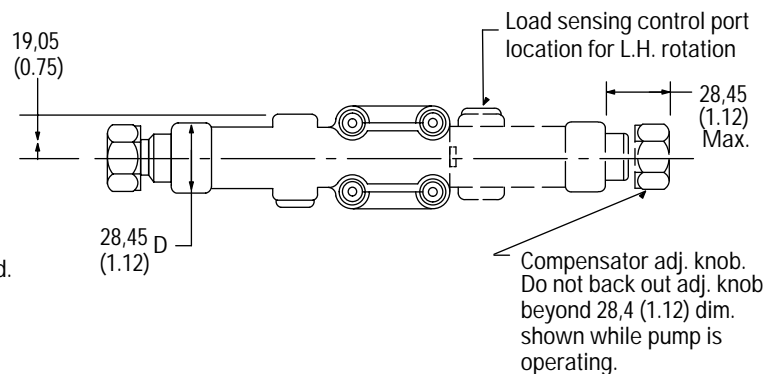
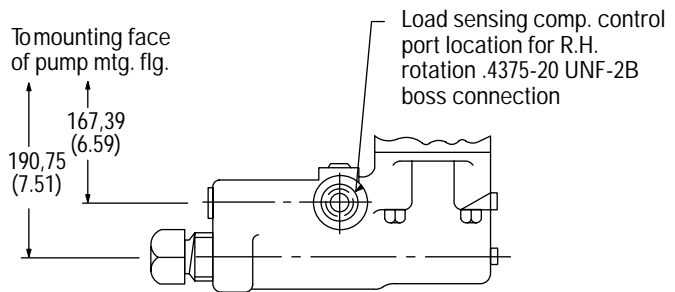
### Adjustment

1. Turn pressure control (such as C-175) CCW to minimum setting.
2. Turn compensator adjustment plug to desired minimum pressure (17 bar, 250 psi or higher).
3. Full pressure range can now be obtained with pressure control.

**Caution:** Effective compensator pressure will be compensator control setting (17-69 bar, 250-1000 psig) plus remote relief valve setting.



## Load-sensing with Pressure Limiting Compensator



# Model Number System

## PVQ20 and PVQ32

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
P	V	Q	2	0	A	2	R	A	9	S	E	1	S	2	1	C	*	2	1	V	*	1	1	B	D	1	2	S	*

Nos	Feature	Code	Description	Nos	Feature	Code	Description
1,2,3	Series PVQ	P V Q	Inline piston pump Variable volume Quiet series			CM**	Low pressure compensator. Standard model is CM7, indicating factory setting of 70 bar (1000 psi); range is 02-10 in tens of bar (350-2000 psi).
4,5	Displacement in cc/rev and pressure ratings	20 32	21,1 cc/rev (1.29 cir), 210 bar (3000 psi) 32,9 cc/rev (2.01 cir), 140 bar (2000 psi)			C**V**B	Pressure compensator C**, as above with load-sensing. Standard load-sensing setting is 11 bar (160 psi); range 10-17 bar (150-250 psi); with bleed-down orifice. Example: C21V11B indicates PVQ20 compensator with 210 bar pressure setting and 11 bar load-sense differential.
6,7	Mounting flange specifications	B2 MB	Flange SAE J744 101-2 (SAE B) Flange ISO 3019/2-100A2HW (available with N" drive shaft only)			C**V**P	Pressure compensator with load-sensing as C**V**B above, but with bleed-down orifice plugged.
8	Rotation viewed from shaft end	R L	Right hand (cw), standard Left hand (ccw), optional			C**VC**B	Pressure compensator with load-sensing. Compensator same as C** above. Standard load-sensing setting is 24 bar (350 psi), range 17-31 bar (250-450 psi). With bleed-down orifice.
9,10	Thru-drive without coupling (available)	Blank A9 A11	No thru-drive SAE J744 82-2 (SAE A) w/9T spline with side ports only SAE J744 82-2 (SAE A) w/11T spline			C**VC**P	Pressure compensator with load-sensing. Same as C**VC**B above, but with bleed-down orifice plugged.
11,12	Ports, type and location	SE SS	SAE O-ring rear port, 1.625" inlet and outlet (standard) SAE O-ring side port, 1.625" inlet and outlet (optional)			CG	Pressure compensator modified for hydraulic remote control.
13	Shafts, input	1 3 N 28	Straight keyed SAE "B" modified, 2.31" long Splined SAE "B" modified, 13T 16/32 DP major dia. fit Shaft end ISO 3019/2 E25N (available with "MB" mount only) 26-tooth splined shaft (Eaton). Used in PVQ20/32 single to mount on PVQ40/45 "B26" thru-drive.			CD**	Electric dual range compensator. PVQ20: CD21 is standard 210 bar setting of high range (24-210 bar). PVQ32: CD14 is standard 140 bar setting of high range (24-140 bar). Both units require low range to be set by customer (20-100 bar).
14	Seals	S F	Buna N, standard Fluorocarbon, optional			UV	Unloading Valve for accumulator circuits. See installation details.
15,16	Pump design number	21	Design number subject to change. Installation dimensions remain unchanged for designs 10-19.				
17,18	Control type	C**	Pressure compensator. PVQ20: Standard model is C21, indicating setting of 210 bar (3000 psi); range is 02-21 in tens of bar (350-3000 psi). PVQ32: Standard model is C14, indicating factory setting of 138 bar (2000 psi); range is 02-14 in tens of bar (350-2000 psi).				

# Model Number System PVQ20 and PVQ32

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
P	V	Q	2	0	A	2	R	A	9	S	E	1	S	2	1	C	*	2	1	V	*	1	1	B	D	1	2	S	*

Nos	Feature	Code	Description	Nos	Feature	Code	Description
19,20	Pressure setting	21 14	210 bar (3000 psi) PVQ20 140 bar (2000 psi) PVQ32	27,28	Control design	12 12 13 21	C** and CM** C**D and CM**D C**V(C)**B and C**V(C)**P UV, CD** CG 30
21,22	Flow control option	Blank V VC	No flow control	29,30	Special pump option suffixes	S2 S3	Shaft up mounting British Standard Parallel Threads Counterbore Ports (ISO R288 threads). Contact Eaton for available configurations.
23,24	Load sense differential pressure setting	Blank	No flow control				Special CG compensator for use with electronically modulated relief valves
25	Flow control optional features	Blank B P	No flow control			S9	
26	Control option	Blank D	Without adjustable maximum displacement stop (standard) Adjustable maximum displacement stop (optional)				

## RATINGS

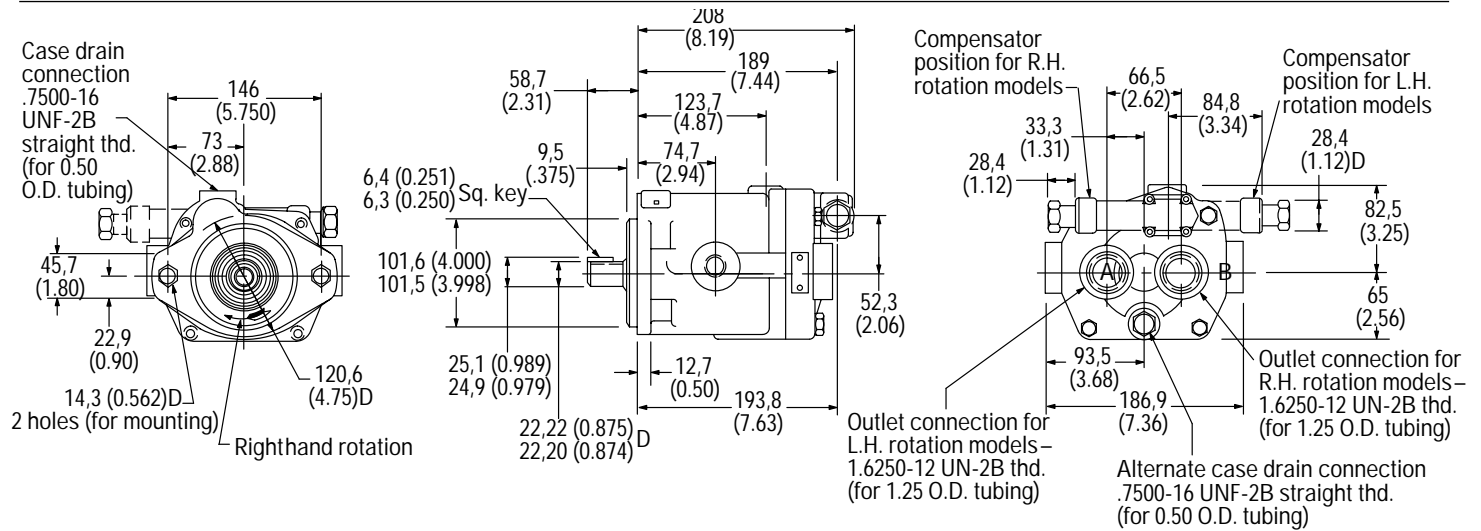
Model Number System	Maximum Geometric Displacement cm <sup>3</sup> /r (in <sup>3</sup> /r)	Rated Speed r/min	Maximum Pressure bar (psi)	Input Power at Max. Pressure and Rated Speed kW (hp)	Approx. Weight kg (lb)
PVQ20	21,1 (1.290)	1800	210 (3000)	14,9 (20)	14 (31)
PVQ32	32,9 (2.010)	1800	140 (2000)	15,6 (21)	14 (31)

### Pressure Limits:

Case pressure – 0,35 bar (5 psig) maximum  
Inlet pressure – 0,2 bar (5 in. Hg) vacuum to 2 bar (30 psig)

# Installation Dimensions

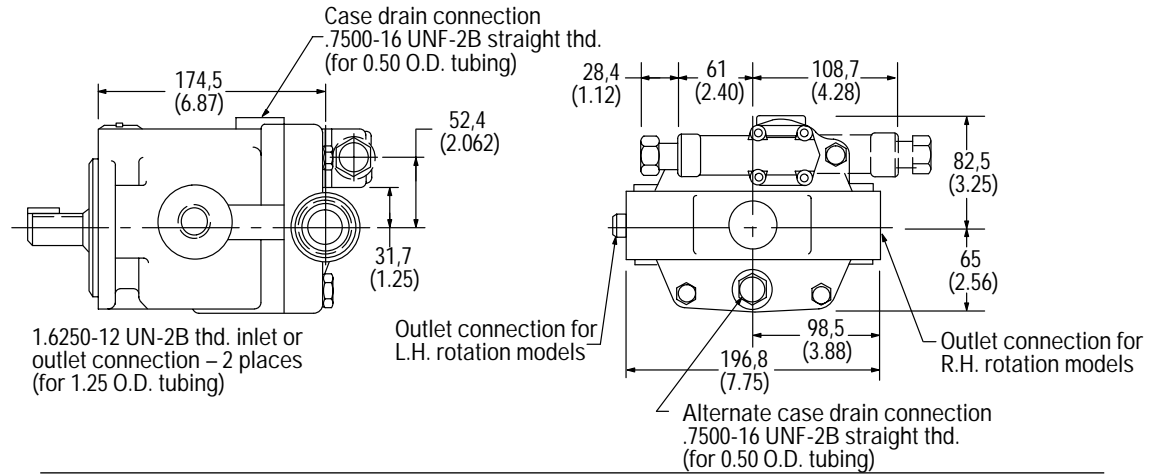
## Rear Ports, "C" and "CM" Controls, No. 1 Shaft



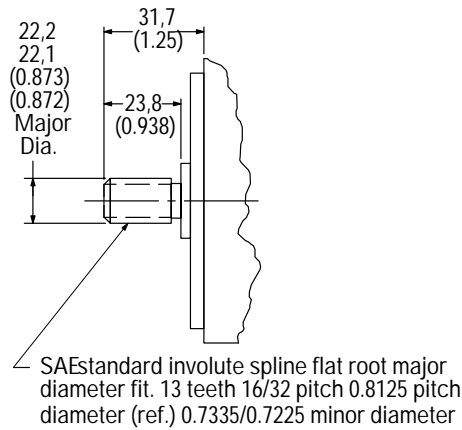


# Installation Dimensions

## Side Ports

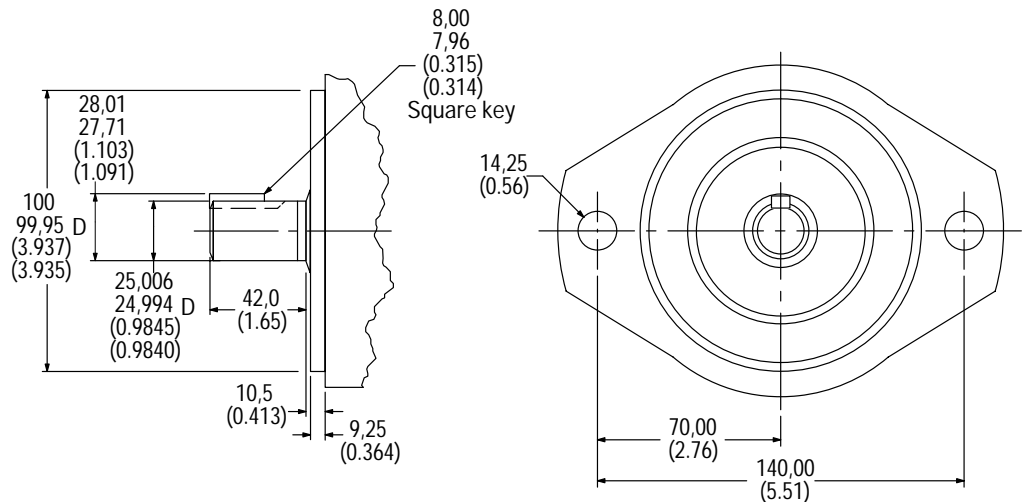


## No. 3 Shaft



## “N” Shaft with “MB” Flange

(Flange and shaft end ISO 3019/21000A2HW-E25N)

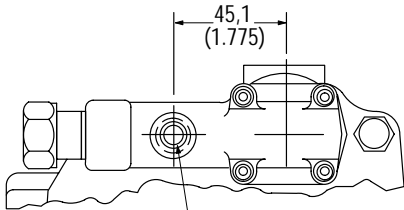


## Remote Compensator

### Adjustment

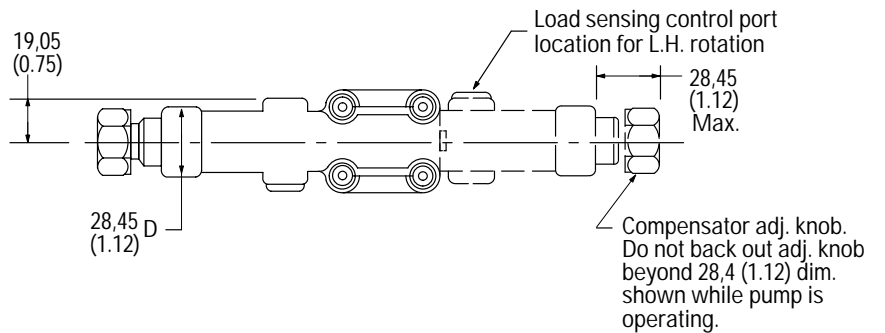
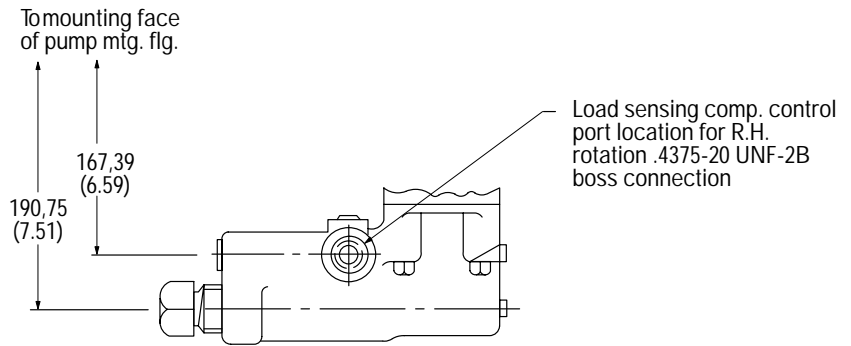
1. Turn pressure control (such as C-175) CCW to minimum setting.
2. Turn compensator adjustment plug to desired minimum pressure (17 bar, 250 psi or higher).
3. Full pressure range can now be obtained with pressure control.

**Caution:** Effective compensator pressure will be compensator control setting (17-69 bar, 250-1000 psig) plus remote relief valve setting.



.4375-20 UNF-2B thread for "CG" control models. Do not operate pump with this port plugged. Connect to pressure control, such as C-175. SAE O-ring boss connection .250 O.D. tubing

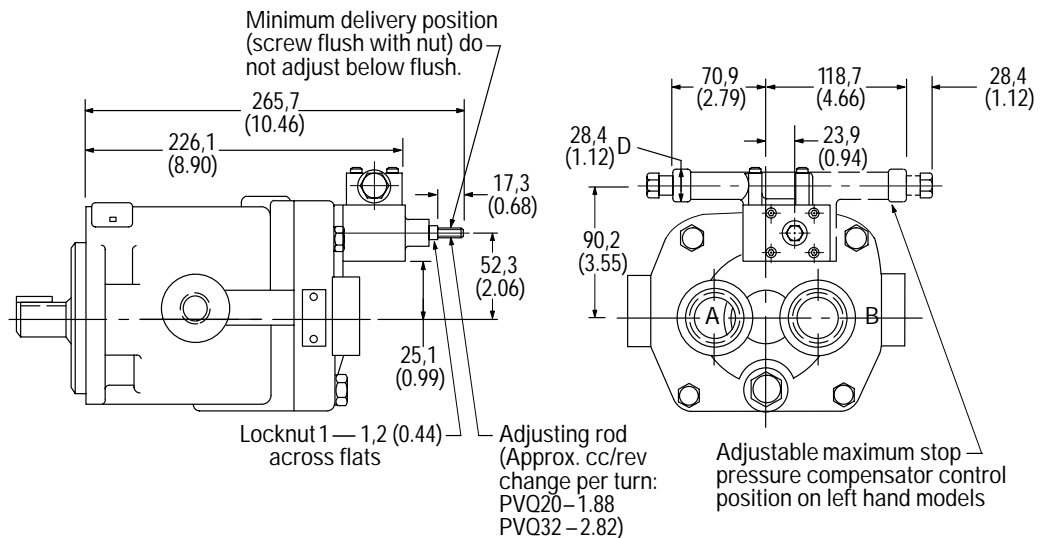
## Load-sensing with Pressure Limiter



## Pressure Compensator Control with Adjustable Max. Displacement Stop

### Adjustment

Loosen locknut on adjusting rod. Turn adjusting rod clockwise (CW) to decrease maximum pump delivery or counter-clockwise (CCW) to increase maximum pump delivery until desired setting is obtained. Secure this setting by tightening locknut.



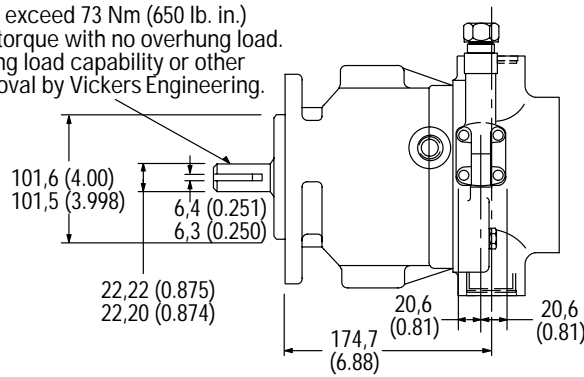
# Thru-drives

## PVQ20/32

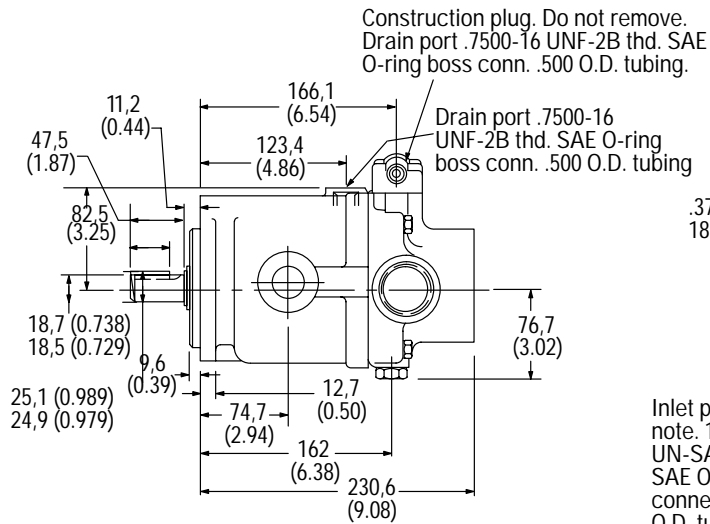
### "A9" and "A11"

### SAE "A"

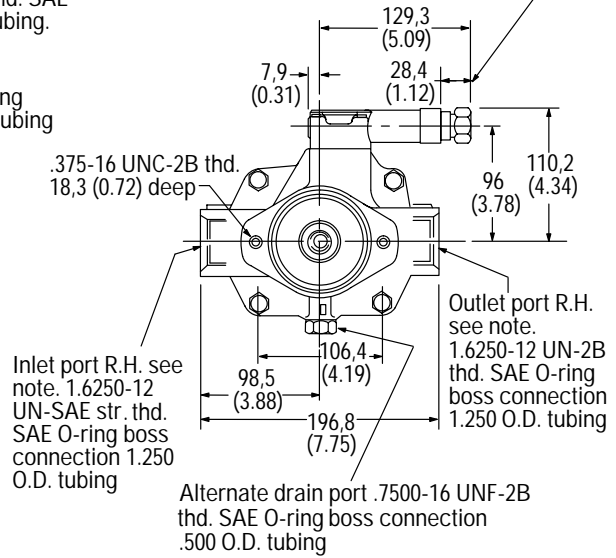
No. 1 shaft. Input torque not to exceed 73 Nm (650 lb. in.) plus tabulated auxiliary pump torque with no overhung load. Applications requiring overhung load capability or other shaft ends are subject to approval by Vickers Engineering.



**Note:** Ports are reversed for L.H. rotation. Control location same for both L.H. and R.H. rotation.



Caution: While pump is operating, do not back compensator adj. out beyond 28,4 (1.12) dim. shown.

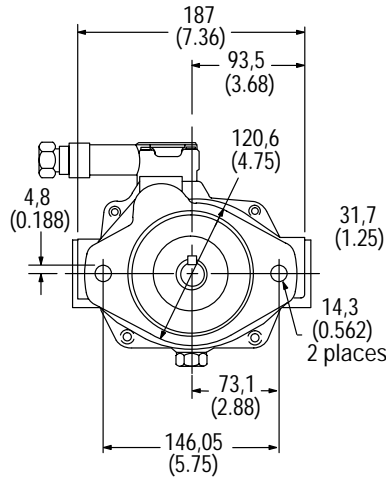


# Thru-drives

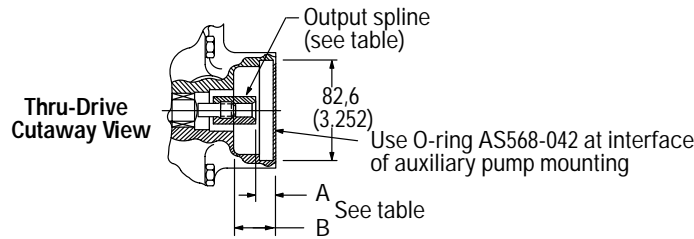
## PVQ20/32

### "A9" and "A11"

### SAE "A"



**Note:** Ports are reversed for L.H. rotation.  
Control location same for both L.H. and R.H. rotation.



PVQ20/32 "A9" AND "A11" SAE "A"

Model Number System	Spline Data	Max. Torque Nm (in. lb.)	Installation Dimensions mm (in)		Coupling Kit
			A	B	
"A9"	ASA B5.15-1960 9 teeth 16/32 DP Flat root side fit	58 (517)	16,7 (0.66)	33,0 (1.30)	02-136810
"A11"	ANS B92.1-1970 11 teeth 16/32 DP Flat root side fit	123 (1100)	18,5 (0.73)	39,1 (1.54)	02-306041

**Note:** O-ring included with pump. Coupling kit, cap screws, and washers must be ordered separately to mount rear pump.

## Typical Rear Pumps (with shaft codes) for PVQ20/32 Thru-drives

TYPICAL REAR PUMPS (WITH SHAFT CODES) FOR PVQ20/32 THRU-DRIVES

Model Series	Typical Rear Pump	Rear Pump Shaft Code	Thru-drive Coupling Kit
"A9"	PVQ10/13	3	02-136810
	PVB5/6	S124 suffix	
	V10	11	
	V20	62	

**Note:** "A11" (not listed above) is intended for special application only.

# Model Number System

## PVQ25

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
P	V	Q	2	5	A	R	1	1	A	A	1	0	B	1	1	2	4	0	0	A	2	0	0	1	A	P	C	9	0	1

Nos	Feature	Code	Description	Nos	Feature	Code	Description
1,2	Code title	PV	Open circuit piston pump	13	Diagnostic pressure point	0	No diagnostic pressure point
3,4,5,6	Displacement	Q25A	25.2cm <sup>3</sup> /r [1.54 in <sup>3</sup> /r]	14	Controller type	C	Electric dual range pressure compensator with directional control valve
7	Input shaft rotation	L	Left-hand rotation (CCW)			E	Unloading valve (accumulator circuits)
		R	Right-hand rotation (CW)			G	Adjustable pressure compensator
8,9	Front mounting and input shaft	01	2 Bolt B (SAE J744-101-2) with 22.2 [.88] DIA straight keyed shaft (SAE J744-22-1), key included			H	Adjustable pressure and flow compensator
		05	2 Bolt B (SAE J744-101-2) with 13T 16/32DP 41.1 [1.62] long splined shaft			J	Adjustable hydraulic remote control pressure compensator
		09	2 Bolt B (SAE J744-101-2) with 26T 32/64DP splined shaft	15,16	Pressure comp./ unloading valve setting	07	65.5-72.4 bar [950-1050 lbf/in <sup>2</sup> ]
		10	Shaft-2 Bolt VDMA A with 25.0 [.984] DIA straight keyed shaft, key included			33	206.8-213.7 bar [3000-3100 lbf/in <sup>2</sup> ]
10,11	Main ports location and size	AU	End ports; tube ports per SAE J514, suction 1.625-12 UN-2B, pressure – 1.0625-12 UN-2B SAE	17,18	Flow comp. setting or unload VLV standby	00	No flow compensator setting
		AV	End ports; tube ports per ISO 6149-1, suction M42 x 2, pressure – M27 x 2			11	9.65-12.41 bar [140-180 lbf/in <sup>2</sup> ]
				19,20	Secondary compensator setting	24	22.75-25.51 bar [330-370 lbf/in <sup>2</sup> ]
						00	No secondary compensator setting
12	Drain port size	6	M18 metric O-ring port – top (D1)			04	186.2-193.1 bar [2700-2800 lbf/in <sup>2</sup> ]
		7	M18 metric O-ring port – bottom (D2)	21	Control special features	0	No special features
		8	M18 metric O-ring port – shaft up			A	Bleed down orifice –
		B	.750-16 UNF-2B SAE O-ring port – top (D1)			B	External manual stroke adjustment
		C	.750-16 UNF-2B SAE O-ring port – bottom (D2)	22	Maximum displacement option	1	Standard displacement
		D	.750-16 UNF-2B SAE O-ring port – shaft up			2	Adjustable maximum displacement (set at maximum)

**Note:** Consult an Eaton representative for additional settings

# Model Number System

## PVQ25

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
P	V	Q	2	5	A	R	1	1	A	A	1	0	B	1	1	2	4	0	0	A	2	0	0	1	A	P	C	9	0	1

Nos	Feature	Code	Description
23,24	Auxiliary mounting and output shaft	00	No auxiliary mounting or output shaft
25	Shaft seals	0	No shaft seal
		1	Standard shaft seal (nitrile) Vitron option
		3	Flurocarbon
		4	HNBR shaft seal luster glycol fluids
26,27	Special features	AP	Cast iron housing and industrial timing
28,29	Paint	00	No paint
		CD	Blue primer
30	Customer and unit identification	0	STD – mark assembly Number and build data Code on plate
31	Design code	A	First

**Note:** Consult an Eaton representative for additional settings

### RATINGS

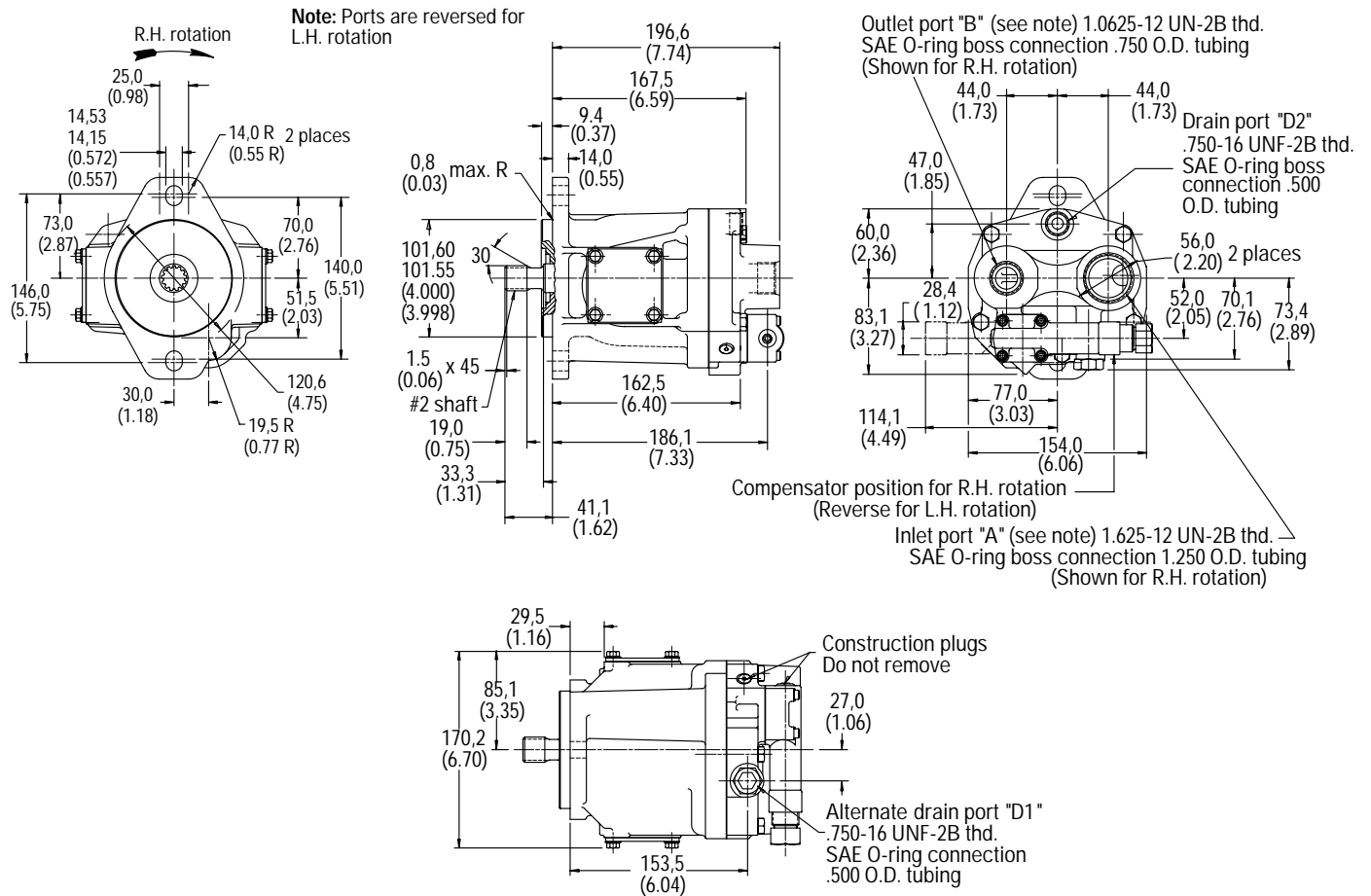
Model Number System	Maximum Geometric Displacement cm <sup>3</sup> /r (in <sup>3</sup> /r)	Rated Speed r/min	Maximum Pressure bar (psi)	Input Power at Max. Pressure and Rated Speed kW (hp)	Approx. Weight kg (lb)
PVQ25	25,2 (1.54)	1800	210 (3000)	16 (24)	14 (31)

### Pressure Limits:

Case pressure – 0,35 bar (5 psig) maximum  
 Inlet pressure – 0,2 bar (5 in. Hg) vacuum to 2 bar (30 psig)

# Installation Drawings

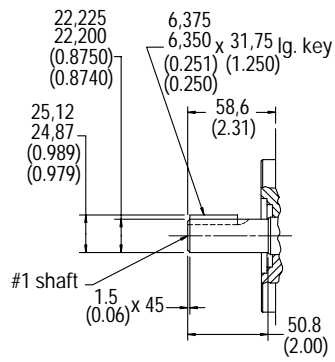
## PVQ25 with Pressure Compensator Control



# Shaft Options

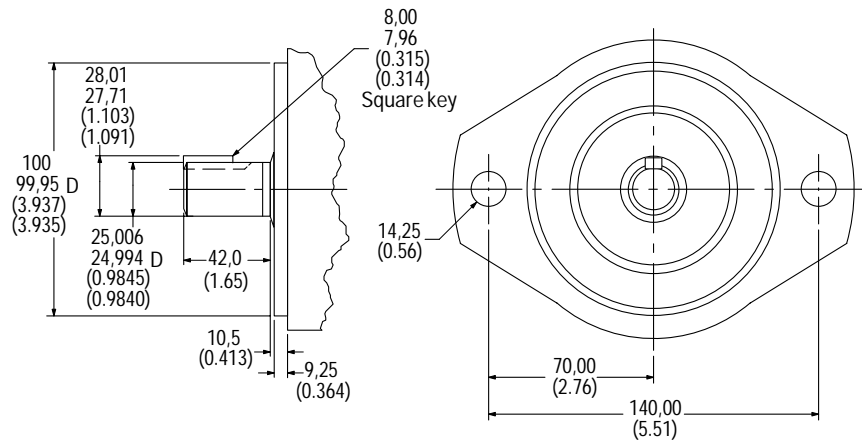
## No. 1 Shaft

SAE "B" Straight keyed



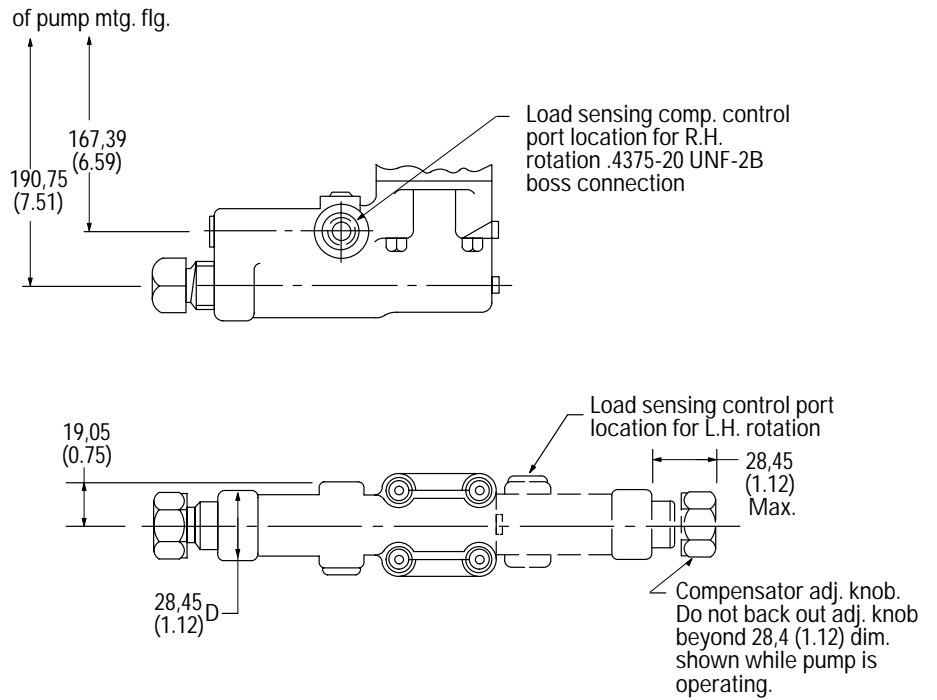
## No. 10 Mounting and Input Shaft

(Flange and shaft end ISO 3019/21000A2HW-E25N)





## Load Sensing with Pressure Limiter

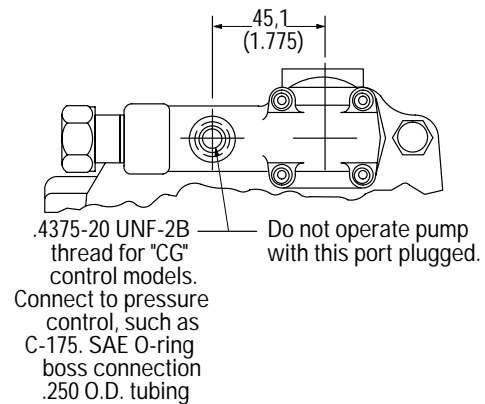


## Remote Compensator

### Adjustment

1. Turn pressure control (such as C-175) CCW to minimum setting.
2. Turn compensator adjustment plug to desired minimum pressure (17 bar, 250 psi or higher).
3. Full pressure range can now be obtained with pressure control.

**Caution:** Effective compensator pressure will be compensator control setting (17-69 bar, 250-1000 psig) plus remote relief valve setting.



# Model Number System PVQ40 and PVQ45

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31																														
P V Q 4 0 A R 1 1 A A 1 0 B 1 1 2 4 0 0 A 1 A A 1 A F C D 0 1																														
Nos	Feature	Code Description	Nos	Feature	Code Description																									
1,2	Code title	PV Open circuit piston pump	12	Drain port size and location	1 .875-14 UNF-2B SAE O-ring port-top (D1) 2 .875-14 UNF-2B SAE O-ring port - bottom (D2) 3 .875-14 UNF-2B SAE O-ring port - shaft up 6 M18 X 1.5 metric O-ring port - top (D1) 7 M18 X 1.5 metric O-ring port - bottom (D2) 8 M18 X 1.5 metric O-ring port - shaft up																									
3,4,5,6	Displacement	Q40A 41.0cm <sup>3</sup> /r [2.50 in <sup>3</sup> /r] Q45A 45.1cm <sup>3</sup> /4 [2.75 in <sup>3</sup> /r]																												
7	Input shaft rotation	L Left-hand rotation (CCW) R Right-hand rotation (CW)																												
8,9	Front mounting and input shaft	01 2 Bolt B (SAE J744-101-2) with 22.2 [.88] DIA straight key shaft (SAE J744-22-1) (key included) 02 2 Bolt B-B (SAE J744-101-2) with 25.4 [1.00] DIA straight key shaft (SAE J744-25-1) (key included) 05 2 Bolt B-B (SAE J744-101-2) with 13T 16/32DP 41.1 [1.62] long splined shaft 08 2 Bolt B-B (SAE J744-101-2) with 15T 16/32DP splined shaft 09 2 Bolt B (SAE J744-101-2) with 26T 32/64DP splined shaft 10 Shaft-2 Bolt VDMA A with 25.0 [.984] DIA straight keyed shaft, key included	13	Diagnostic pressure port	0 No diagnostic pressure port 1 .4375-20 UNF-2B SAE O-ring port - plugged 2 M14 X 1.5 metric O-ring port - plugged																									
10,11	Main ports location and size	AA Side ports; tube ports per SAE J514, suction - 1.875-12 UN-2B, pressure - 1.3125-12 UN-2B AB End ports; tube ports per SAE J514, suction - 1.875-12 UN-2B, pressure - 1.3125-12 UN-2B AC Side ports; SAE J518 flange, suction - 1.500 SAE 4-bolt split flange port (code 61); pressure - 1.000 SAE 4-bolt split flange port (code 61) AD End ports; SAE J518 flange, suction - 1.500 SAE 4-bolt split flange port (code 61); pressure - 1.000 SAE 4-bolt split flange port (code 61) AE Side ports; ISO 6149-1 tube, suction - M48 X 2, pressure - M33 X 2 AF End ports; ISO 6149-1 tube, suction - M48 X 2, pressure - M33 X 2 AS End ports; ISO 6162 flange, suction - 1.500 SAE 4-bolt split flange port with M12 X 1.75 threads; pressure - 1.000 SAE 4-bolt split flange port with M10 X 1.5 threads	15,16	Pressure comp./ unloading valve	07 65.5-72.4 bar [950-1050 lbf/in <sup>2</sup> ] 18 182.7-189.6 bar [2650-2750 lbf/in <sup>2</sup> ] 33 206.8-213.7 bar [3000-3100 lbf/in <sup>2</sup> ]																									
			17,18	Flow comp. setting or unload valve standby	00 No flow compensator setting 11 9.65-12.41 bar [140-180 lbf/in <sup>2</sup> ] 14 12.41-15.17 bar [180-220 lbf/in <sup>2</sup> ] 24 22.75-25.51 bar [330-370 lbf/in <sup>2</sup> ]																									
			19,20	Secondary comp. setting	00 No secondary compensator setting 04 186.2-193.1 bar [2700-2800 lbf/in <sup>2</sup> ]																									
			21	Control special features	0 No special features A Bleed down orifice B External manual stroke adjustment																									
			22	Maximum displacement option	1 Standard displacement 2 Adjustable maximum displacement (set at maximum)																									

**Note:** Consult an Eaton representative for additional settings

# Model Number System PVQ40 and PVQ45

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
P	V	Q	4	0	A	R	1	1	A	A	1	0	B	1	1	2	4	0	0	A	1	A	A	1	A	F	C	D	0	1

Nos	Feature	Code	Description				
23,24	Auxiliary mounting output shaft	00	No auxiliary mounting or output shaft	25	Shaft seals	0	No shaft seal
		AA	2 Bolt A (SAE J744-82-2) w/ 9T 16/32DP external splined shaft			1	Standard shaft seal (fluorocarbon)
		AB	2 Bolt A (SAE J744-82-2) w/ 11T 16/32DP external splined shaft	26,27	Special features	AP	Cast iron housing and industrial timing
		AC	2 Bolt B (SAE J744-101-2) w/ 13T 16/32 DP internal splined coupling	28,29	Paint	00	No paint
		AD	2 Bolt B (SAE J744-101-2) w/ 15T 16/32DP internal splined coupling			CD	Blue primer
		AE	2 Bolt B (SAE J744-101-2) w/ 26T 32/64DP external splined shaft	30	Customer and unit	0	STD – mark assembly number, full model code and build date code on plate
		AH	2 Bolt A (SAE J744-82-2) w/ 9T 16/32DP internal splined coupling	31	Design code	A	First design
		AJ	2 Bolt A (SAE J744-82-2) w/ 11T 16/32DP internal splined coupling				
		AK	2 Bolt B (SAE J744-101-2) w/ 26T 32/64DP internal splined coupling				

**Note:** Consult an Eaton representative for additional settings

## RATINGS

Model Number System	Maximum Geometric Displacement cm <sup>3</sup> /r (in <sup>3</sup> /r)	Rated Speed r/min	Maximum Pressure bar (psi)	Input Power at Max. Pressure and Rated Speed kW (hp)	Approx. Weight kg (lb)
PVQ40	41,5 (2.500)	1800	210 (3000)	27,6 (37)	20,6 (45.4)
PVQ45	45,1 (2.750)	1800	186 (2700)	28,3 (38)	20,6 (45.4)

### Pressure Limits:

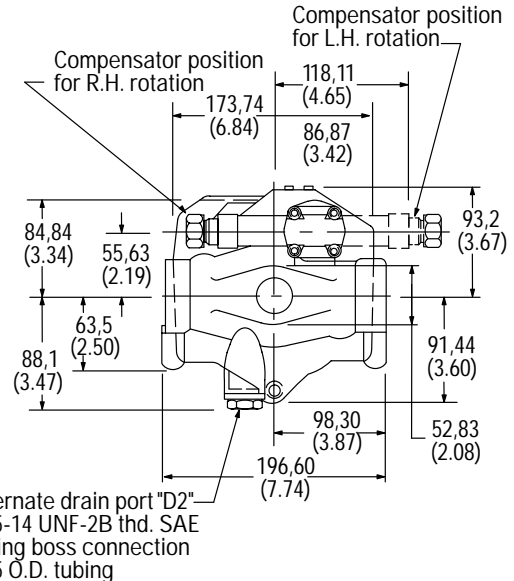
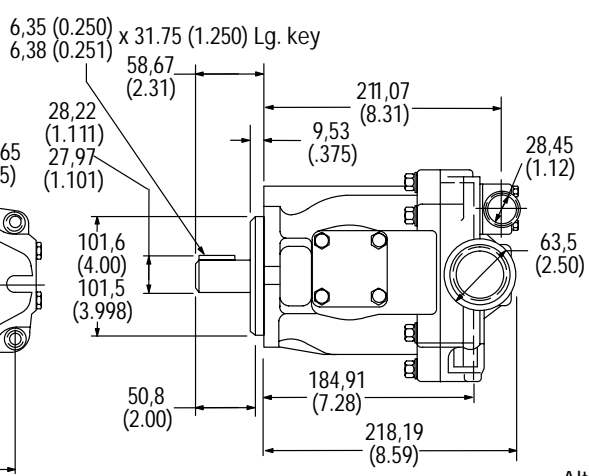
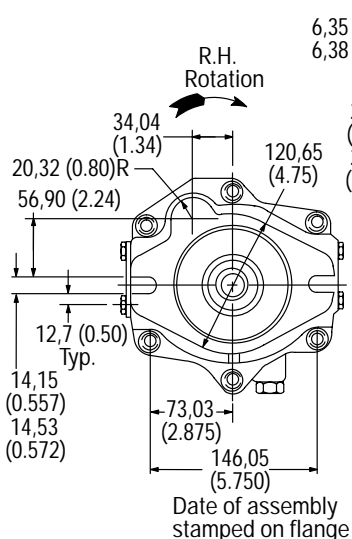
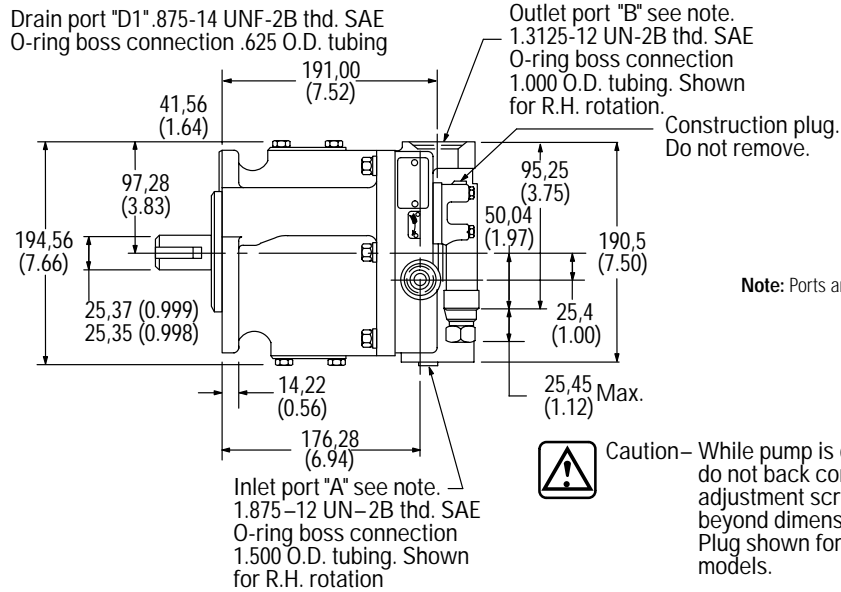
Inlet pressure – 0,2 bar (5 in. Hg) vacuum to 2 bar (30 psig)  
Case pressure – 0,35 bar (5 in. Hg) maximum

**Note:** Integral relief valve limits case pressure peaks to 0,7 bar (10 psi) higher than inlet pressure to protect pump. Flow from valve is returned directly to pump inlet. Use of case drain line required to limit steady-state case pressure.

# Controls

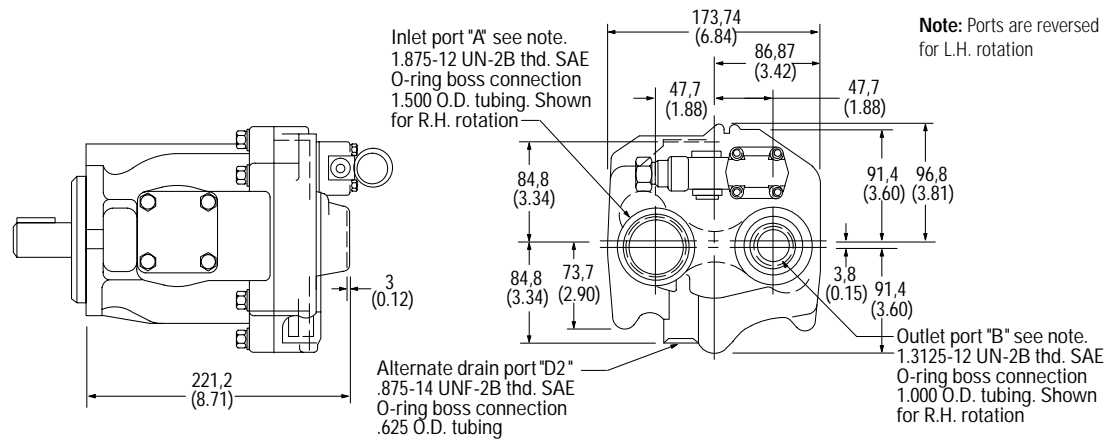
## Side Port Controls, No. 2 Mounting and Input Shaft

Millimeters (inches)



# Controls

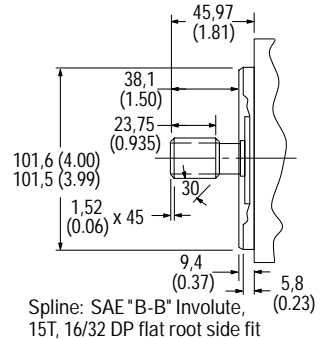
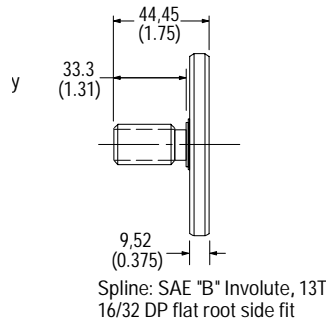
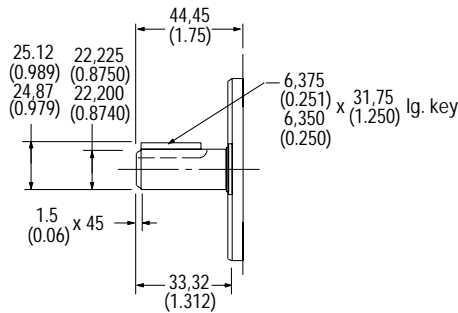
## Rear Ports



### No. 1 Shaft: SAE "B" Straight Keyed

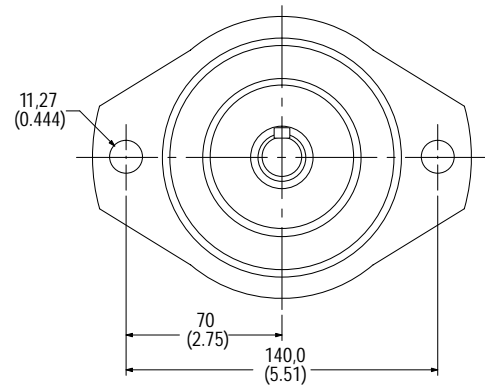
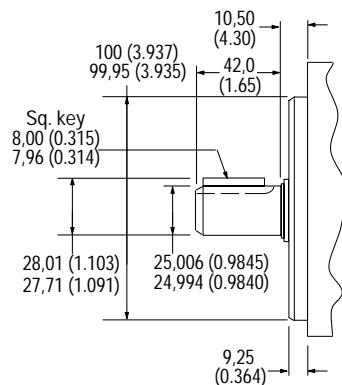
### No. 05 Shaft SAE "B" Splined

### No. 08 Mounting and Input Shaft SAE "B-B" Splined



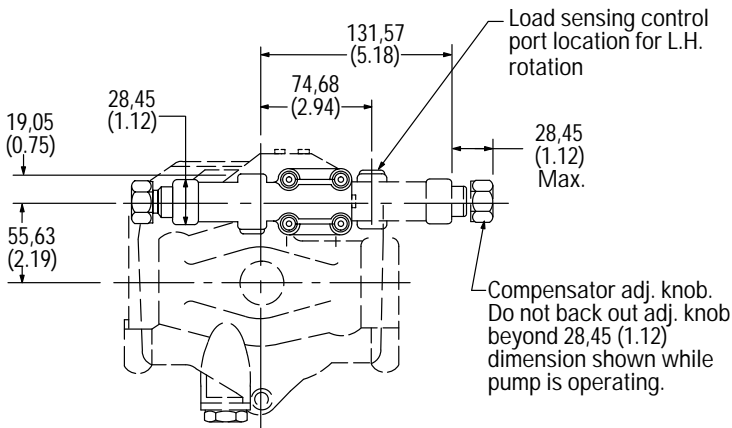
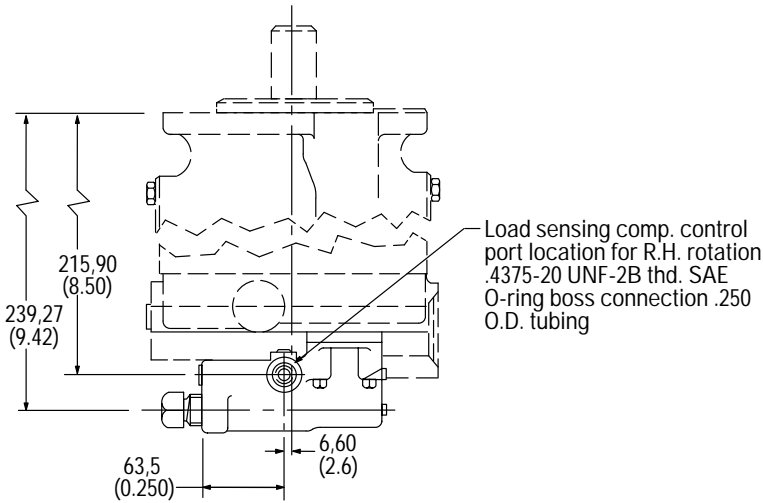
## No. 10 Mounting and Input Shaft with VDMA Flange

(Flange and shaft end ISO  
3019/2-100A2HW-E25N)

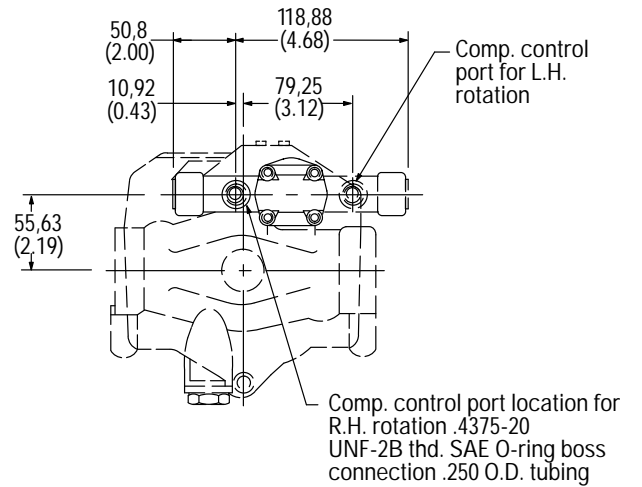
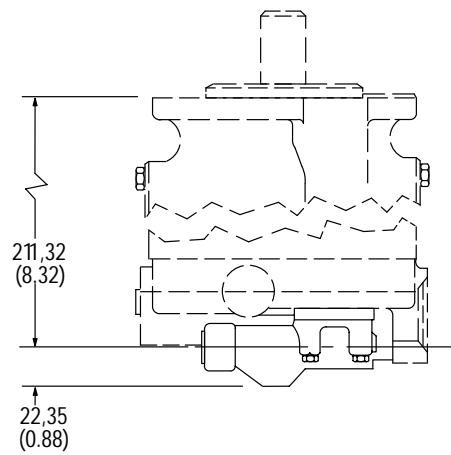


# Controls

## Pressure Compensator with Load Sensing



## Remote Control



# Controls

## Electric Dual Range Pressure Compensator with Maximum Displacement Stop

See preceding page and following page for adjustment procedures.

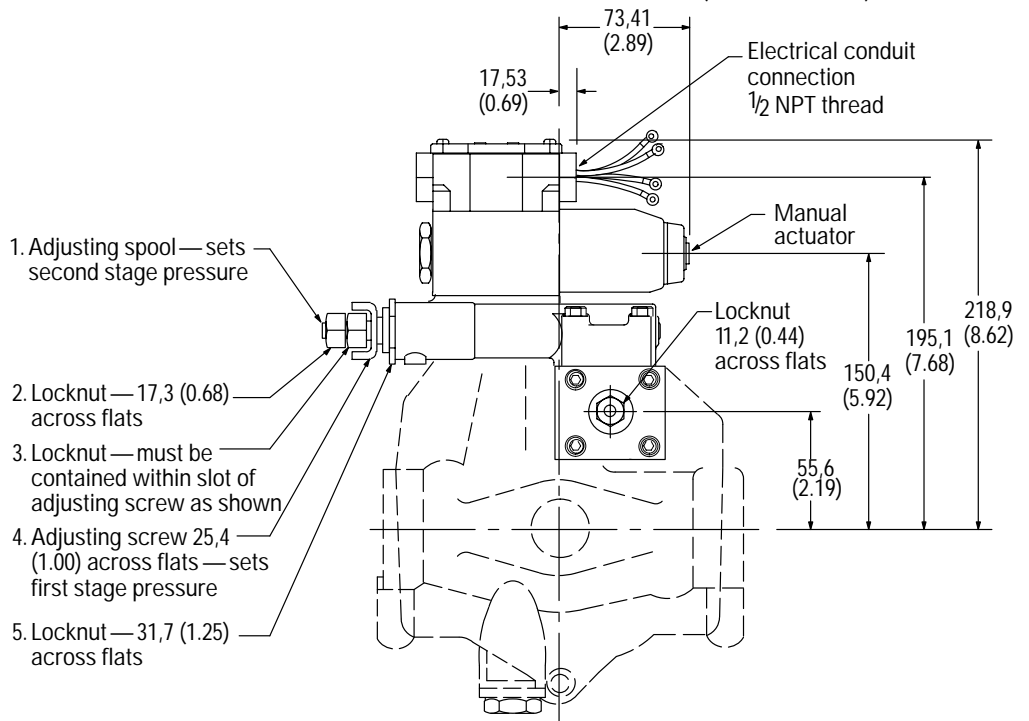
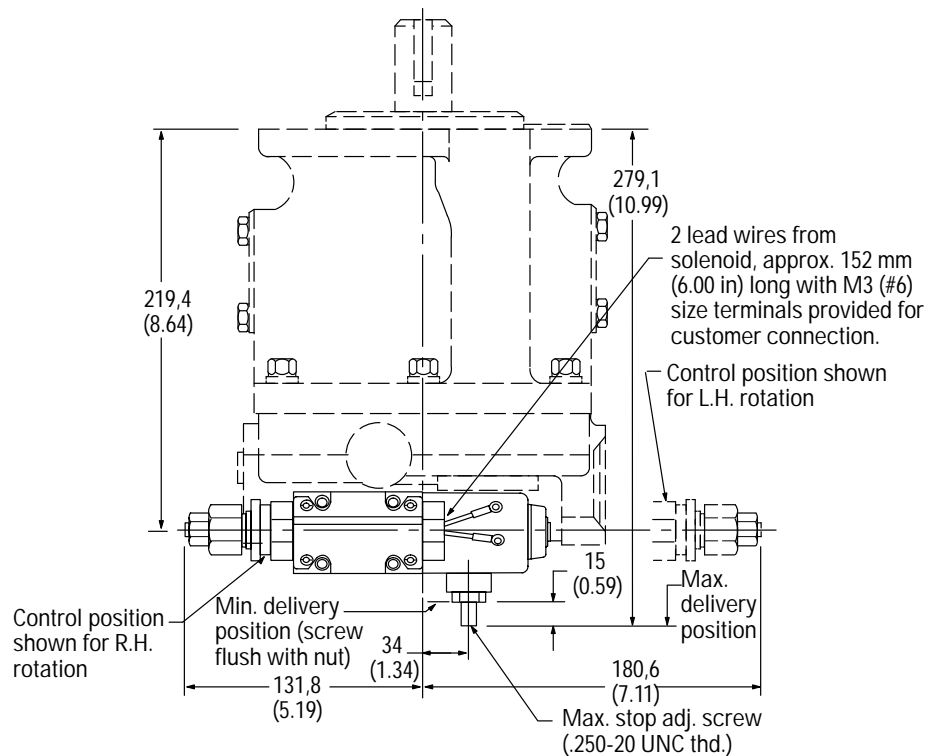
### Solenoid Data<sup>u</sup> (110V AC 50 Hz and 115/120V AC 60 Hz)

Solenoid current	Inrush amps (R.M.S.)	Holding amps
115/120V AC 60 Hz -	2.0	.54
110V AC 50 Hz		.64*

\*Maximum peak inrush amps approximately 1.4 x R.M.S. value shown.

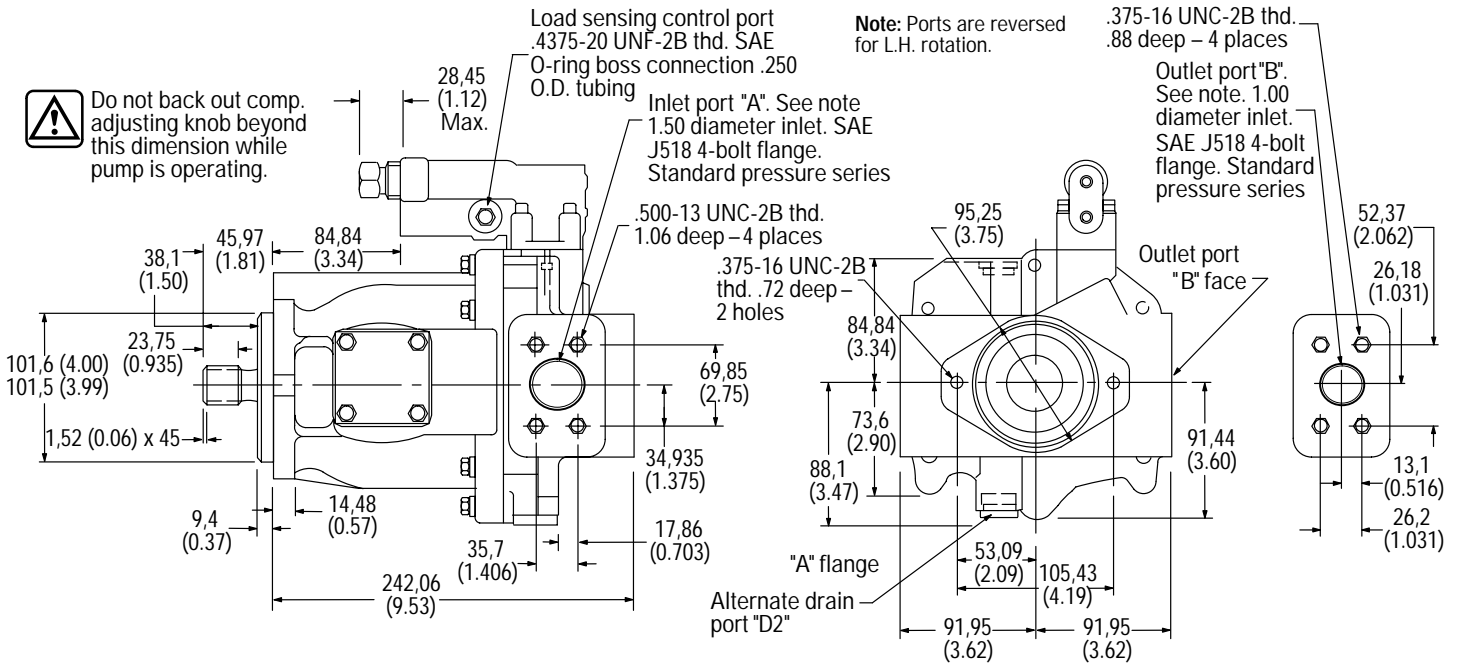
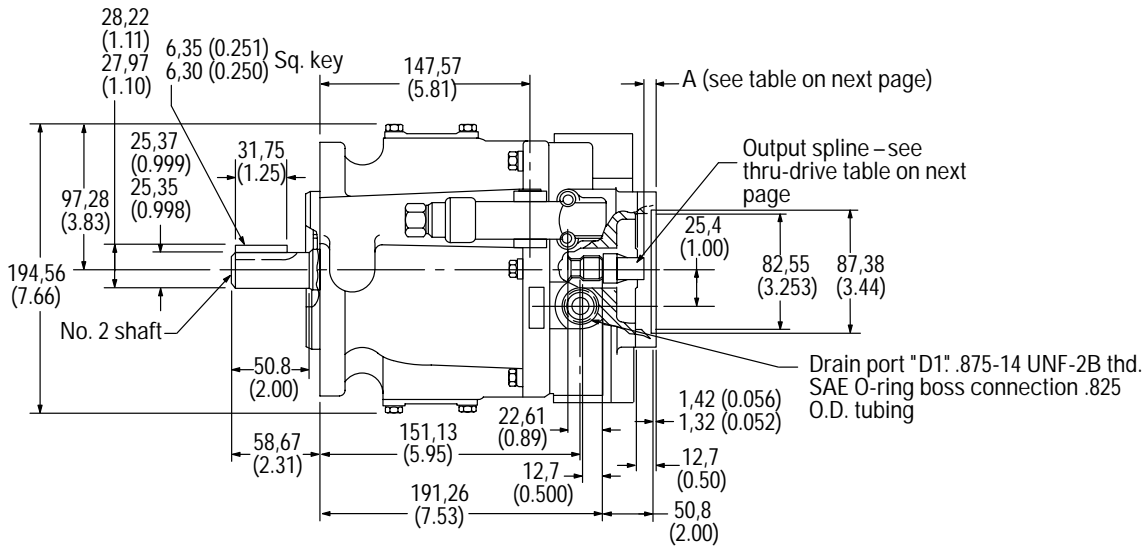
Refer to catalog GB-C-2015B for additional solenoid valve data.

**\*Note:** Any sliding spool valve, if held shifted under pressure for long periods of time, may stick and not spring return due to fluid residue formation and, therefore, should be cycled periodically to prevent this from happening.



# Thru-drives

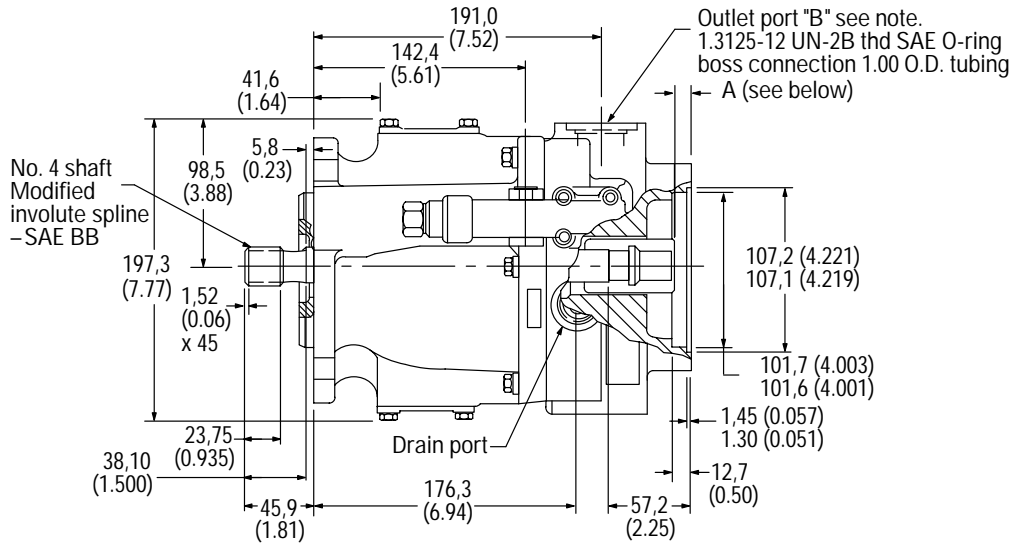
## PVQ40 and PVQ45 SAE "A"



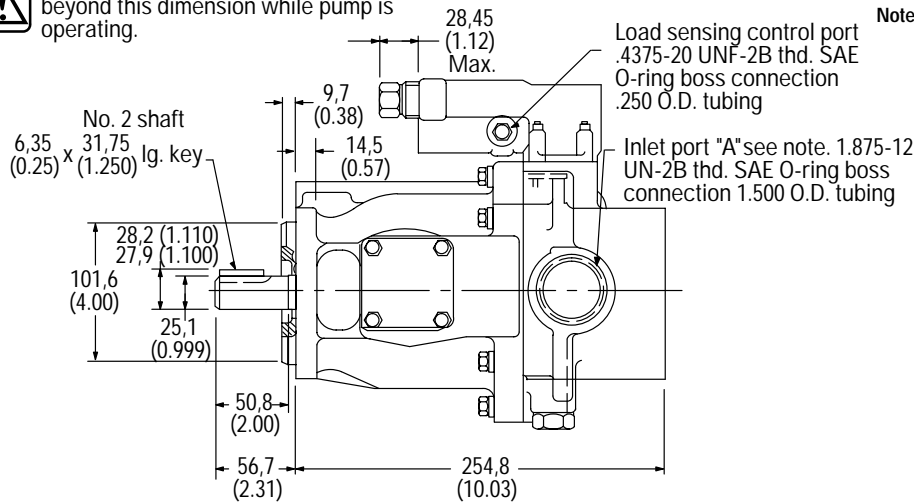


# Thru-drives

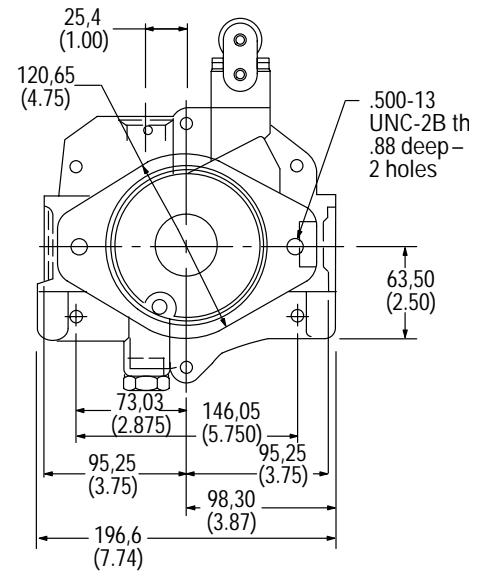
## PVQ40 and PVQ45 SAE "B"



Donot back out comp. adjusting knob beyond this dimension while pump is operating.



Note: Ports are reversed for L.H. rotation.



Thru-drive Shaft	Spline Data	Max. Torque Nm (in. lb.)	Dimension A mm (in.)	Coupling Type	Thru-drive Coupling
AA	ASA B5.15-1960 9 teeth 16/32 DP Flat root side fit	58 (517)	10,92 (0.43)	9T/9T	864224
AB	ANS B92.1-1970 11 teeth 16/32 DP Flat root side fit	118 (1050)	12,57 (0.495)	11T/11T	864325
AE	Special Eaton 26 teeth 32/64 DP Flat root side fit	179 (1587)	24,89 (0.98)	26T/26T	627168
			10,92 (0.43)	26T/13T	864307
			20,56 (0.81)	26T/15T	475134

Note: Coupling, screws, and washers must be ordered separately to mount rear pump. "A" O-ring (AS568-042) and "B" O-ring (AS568-155) are included with each thru-drive pump. Couplings for "B26" are step type for 13 and 15 tooth as shown.