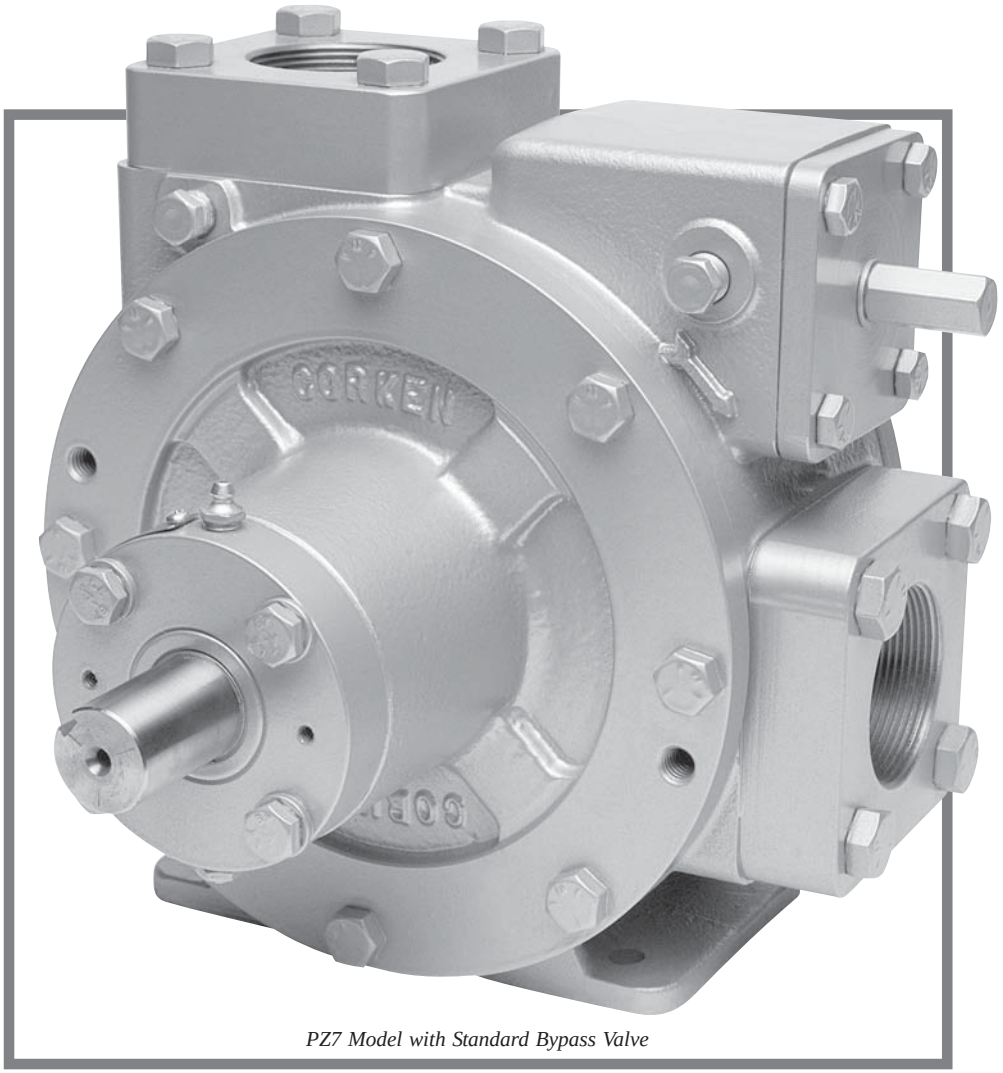
INDPZP100B

PZ-Series Petroleum Pumps

Sales Catalog



PZ7 Model with Standard Bypass Valve

Solutions beyond products...

CORKEN®

IDEX

Equipment Type & Options

Foot mounted, sliding vane, positive displacement petroleum pump.

Applications

Designed for applications that involve refined petroleum products and industrial solvents.

Features & Benefits

Nonmetallic vanes:	New design and advanced material provides longer life than most vanes. Vanes self adjust for wear and maintain internal pump clearances for sustained performance.
Nonmetallic vane drivers:	Corken vane drivers are made of a extremely durable, lightweight, advanced material which is less destructive to the vanes than other conventional steel push rods.
Thrust bearing:	Handles heavy thrust loads from PTO without difficult adjustments.
Sideplates:	Precision machined sideplates are reversible for extended life.
Easy maintenance:	Vanes can be easily replaced without removing the pump from the piping.
Dual ended shaft:	Pump can easily adapt to either right- or left-hand PTO rotation.
Two bypass options:	Manually adjustable internal bypass valve or optional Air Operated Valve (AOV) for high and low flow control.

Operating Specifications

Standard connections:	2" or 2-1/2" NPT
Optional connections:	2" or 2-1/2" Slip-on weld, BSPT
Maximum differential pressure:	125 psid (8.6 bar)
Operating temperature range:	Up to 300°F (149°C)
Maximum working pressure:	200 psi (13.8 bar)
Maximum speed:	800 RPM
Fluids:	For refined petroleum products and industrial solvents

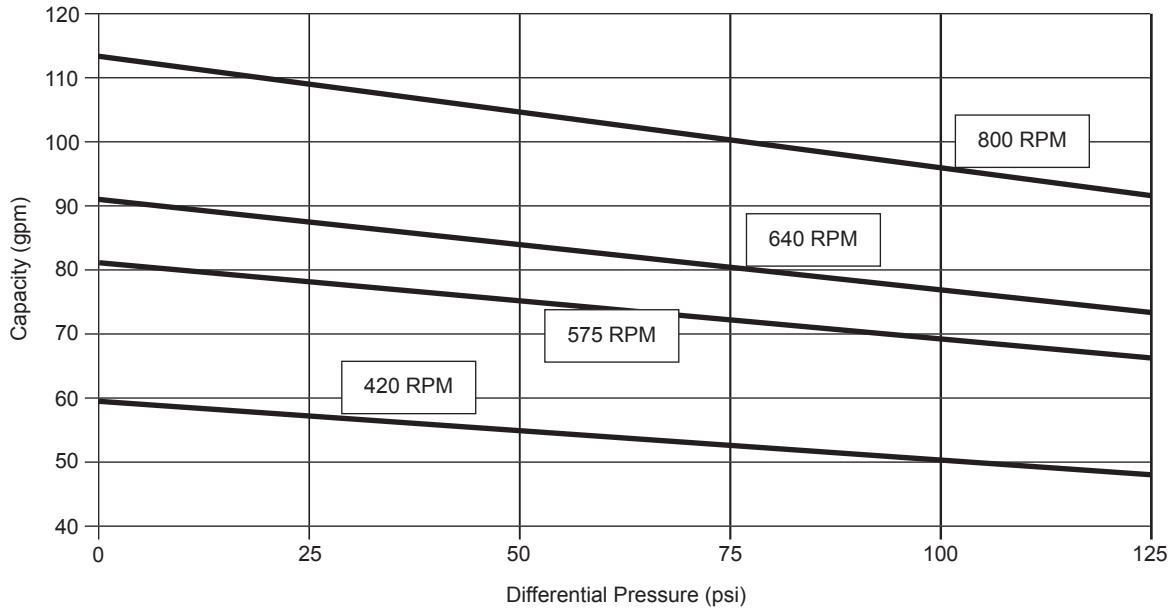
Material Specifications

Part	Model	Material
Case	All	Ductile iron ASTM A536
Head	All	Ductile iron ASTM A536
Flanges	All	Ductile iron ASTM A536
Rotor	All	Ductile iron ASTM A536
Bearing cap	All	Ductile iron ASTM A536
Sideplates	All	Cast iron Class 30
Vanes & vane drivers	All	Advanced polymer
Bypass valve	All	17-4 PH Stainless steel
Bypass spring	All	Steel
Seal seat	All	Cast iron (standard), Stainless steel and Ni-Resist (optional)
Seal metal parts	All	Steel
Shaft	All	8620 steel
Thrust bearing	All	Steel
O-rings	All	Viton®[1] (standard), Buna-N (optional)

[1]*Viton® is a registered trademark of the Dupont Company*

Performance Curves[1]

PZ7 Petroleum Pump

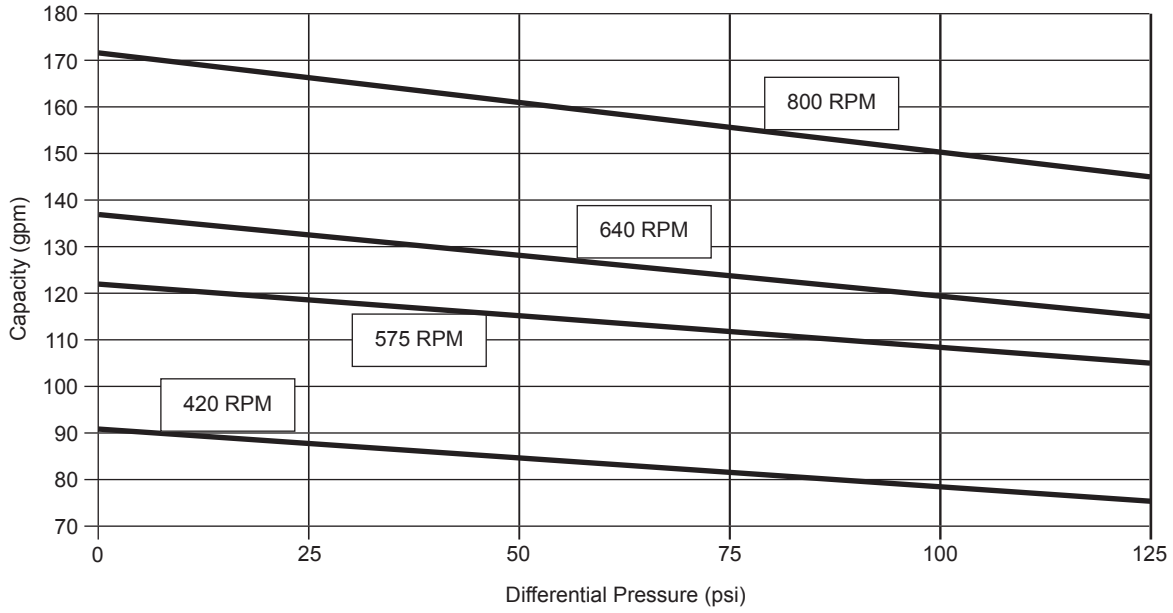


Pump Speed	Differential Pressure		Nominal Flowrate		Brake HP Required		Torque Required	
RPM	psi	bar	gpm	L/min	bhp	kW	in•lbs	N•m
800	90	6.2	98	371	6.8	5.0	536	60.5
800	50	3.4	105	397	3.8	2.2	299	33.8
640	90	6.2	78	295	5.5	4.1	542	61.2
640	50	3.4	84	318	3.1	2.3	305	34.5
575	90	6.2	70	273	4.9	3.7	537	60.7
575	50	3.4	75	284	2.7	2.0	296	33.4
420	90	6.2	51	182	3.6	2.7	540	61.0
420	50	3.4	55	197	2.0	1.5	300	33.9

[1]These curves depict performance of the PUMP ONLY. Performance will vary in applications due to system design and variables. Approximate capacities and horsepowers are based on 38 SSU (3 cP) fluid.

Performance Curves[1]

PZ10 Petroleum Pump



Pump Speed	Differential Pressure		Nominal Flowrate		Brake HP Required		Torque Required	
RPM	psi	bar	gpm	L/min	bhp	kW	in•lbs	N•m
800	90	6.2	152	575	10.3	7.7	811	91.7
800	50	3.4	161	609	5.7	4.3	449	50.7
640	90	6.2	121	458	8.2	6.1	808	91.2
640	50	3.4	128	485	4.6	3.4	453	51.2
575	90	6.2	109	413	7.3	5.4	800	90.4
575	50	3.4	115	435	4.1	3.1	449	50.8
420	90	6.2	80	303	5.4	4.0	810	91.6
420	50	3.4	85	321	3.0	2.2	450	50.9

[1]These curves depict performance of the PUMP ONLY. Performance will vary in applications due to system design and variables. Approximate capacities and horsepowers are based on 38 SSU (3 cP) fluid.

Model Number Identification Code for PZ-Series

Model Number

Base X X X X X X X

Base Model

Basic pump	Model PZ7 or PZ10	Standard	PZ7

Specification Fields

Strainer[1]	No strainer	Standard	N
	Strainer	Optional	S
Internal bypass valve	Standard valve	Standard	S
	Air Operated Valve	Optional	A
Bypass valve spring	Low (50–75 psi)	Optional	1
	Std. (75–100 psi)	Standard	2
	High (100–125 psi)	Optional	3
Seal O-ring material	Viton®[2]	Standard	D
	Buna-N	Optional	A
Seal seat material	Stainless steel	Optional	1
	Cast iron	Standard	2
	Ni-Resist	Optional	3

[1]Strainer is attached to the pump when specified by suffix "S" in the configurated string. When the strainer is required separate from the pump, order using the Part Number found in the Strainer Assembly table on page 7.

[2]Viton® is a registered trademark of the Dupont company.

Inlet Flange Options

Standard	2" NPT	E
	2-1/2" NPT	J
Optional	2" BSPT	M
	2-1/2" BSPT	N
	2" Weld	F
	2-1/2" Weld	K

Outlet Flange Options

Standard	2" NPT	E
	2-1/2" NPT	J
Optional	2" BSPT	M
	2-1/2" BSPT	N
	2" Weld	F
	2-1/2" Weld	K

Model Number Identification Code for Strainer and Air Operated Valve (AOV)

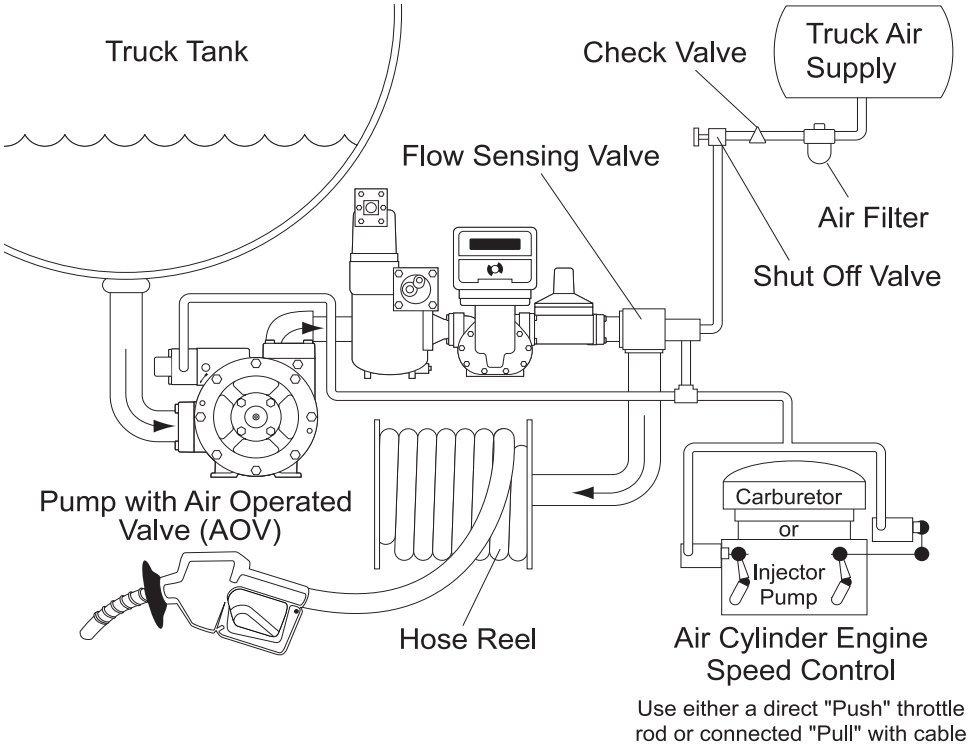
Strainer Assembly[1] for PZ7 and PZ10

	Seal Material	Strainer Assy. Part Number
Strainer Assembly	Viton®[2] (standard)	5422-XD
	Buna-N (optional)	5422-XA

[1]Strainer Assembly ordered by Part Number when not assembled to the pump.
[2]Viton® is a registered trademark of the Dupont company.

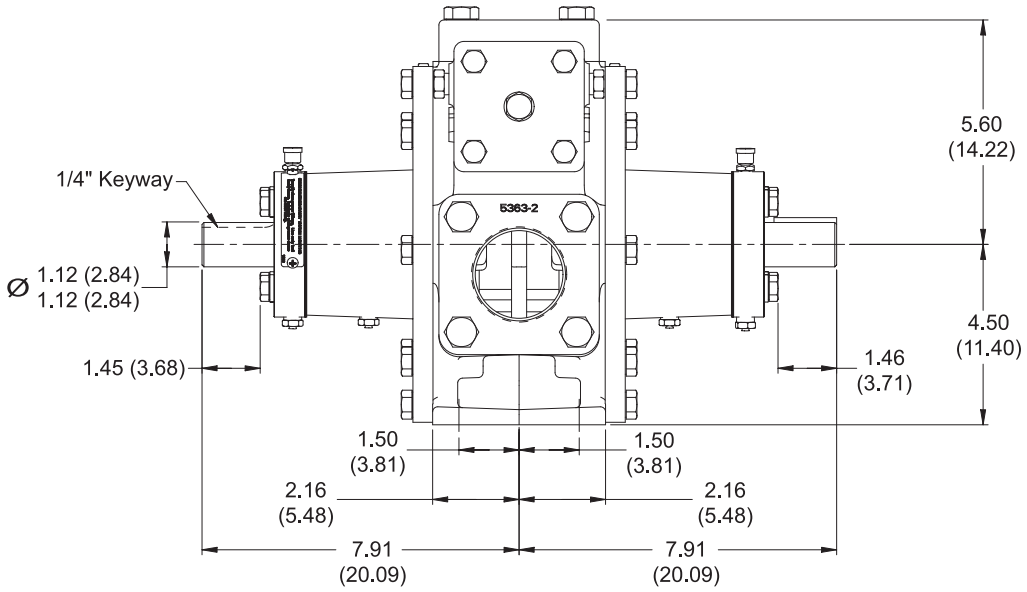
Air Operated Valve Assembly (AOV)

	For Pump Models	AOV Part Number
Air Operated Valve (AOV)	PZ7	5470-X
	PZ10	5462-X



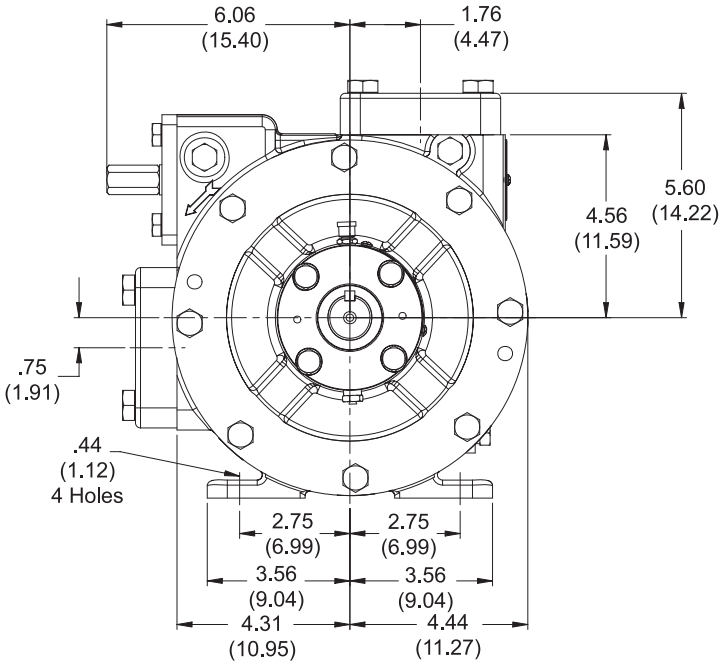
Outline Dimensions for the PZ7

PZ7 with Standard Bypass Valve

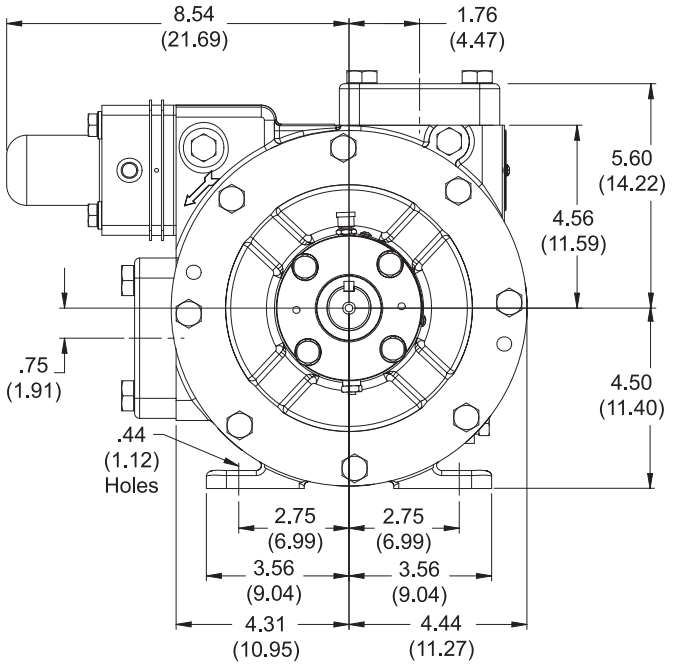


Inches (centimeters)

PZ7 with Standard Bypass Valve



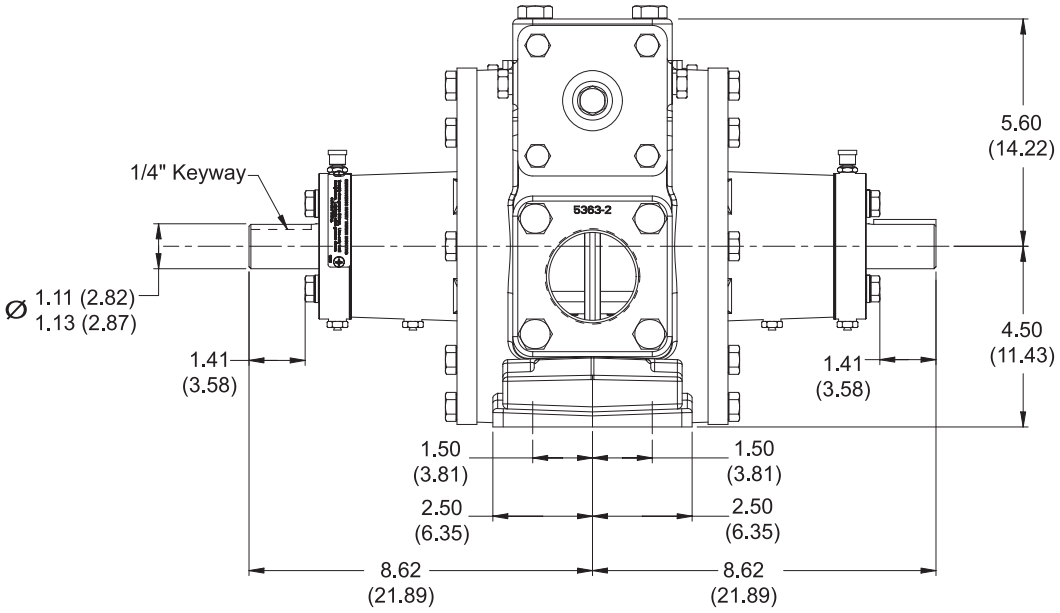
PZ7 with Air Operated Valve (AOV)



Inches (centimeters)

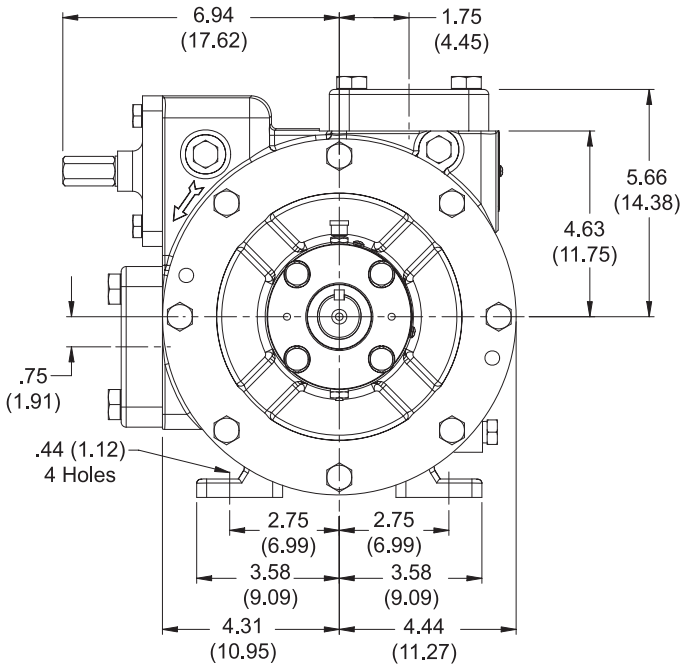
Outline Dimensions for the PZ10

PZ10 with Standard Bypass Valve

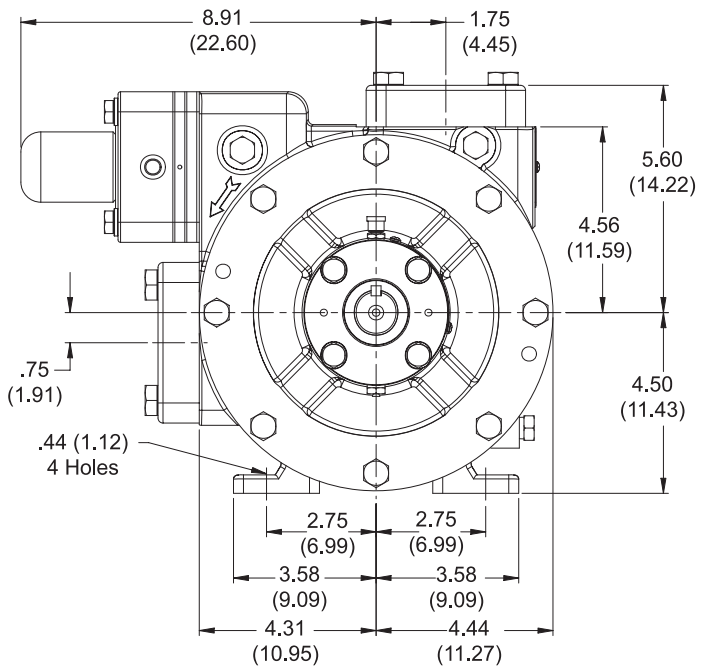


Inches (centimeters)

PZ10 with Standard Bypass Valve



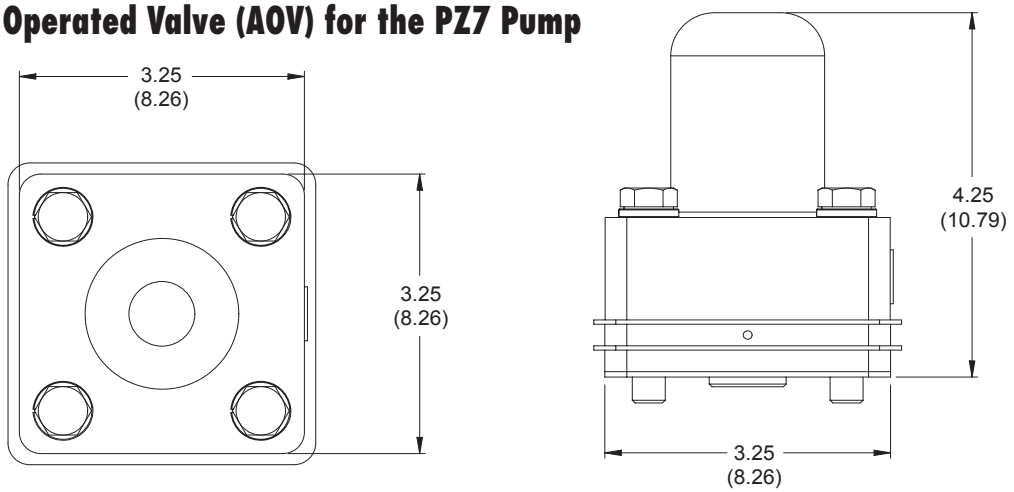
PZ10 with Air Operated Valve (AOV)



Inches (centimeters)

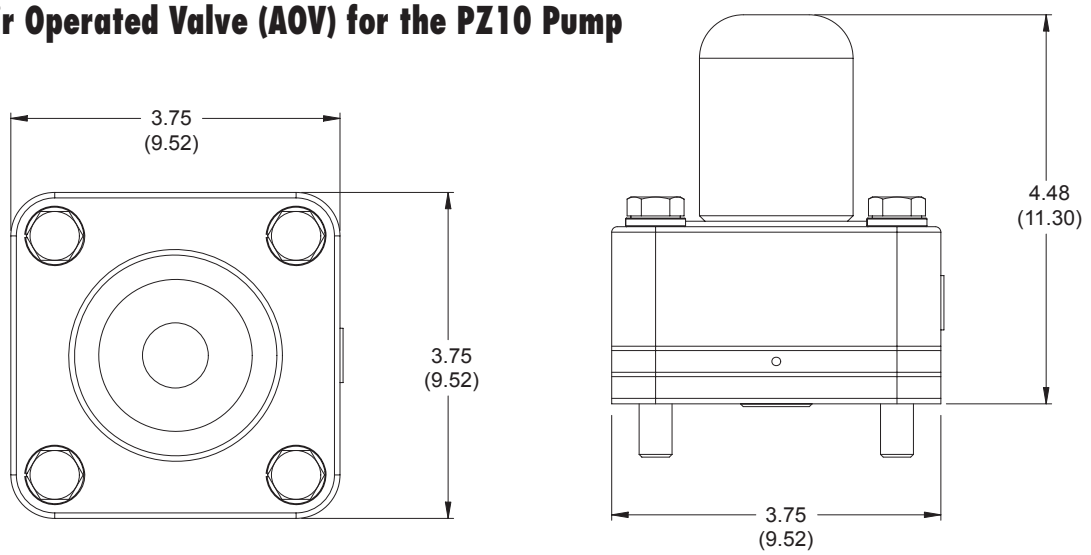
Outline Dimensions for Air Operated Valve and Strainer

5470-X Air Operated Valve (AOV) for the PZ7 Pump



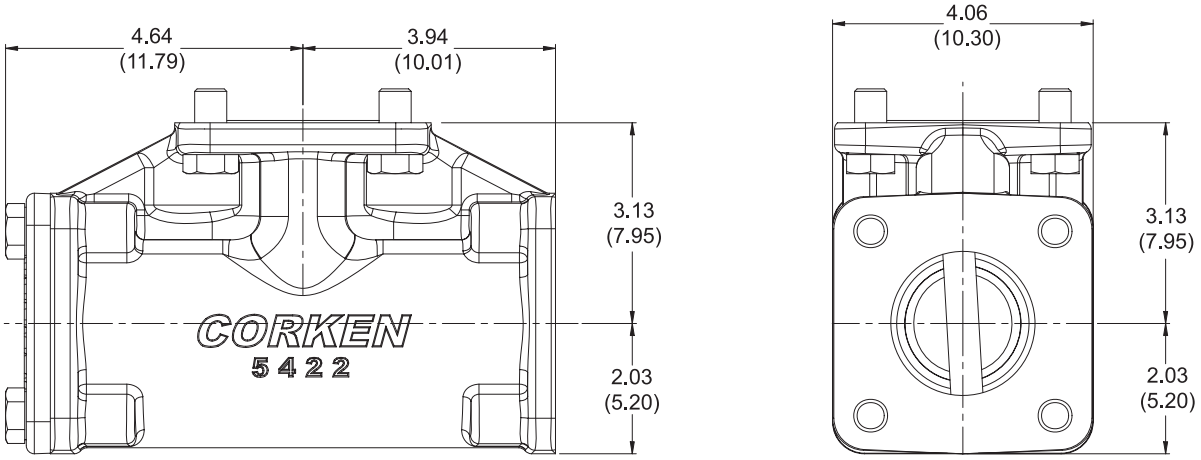
Inches (centimeters)

5462-X Air Operated Valve (AOV) for the PZ10 Pump



Inches (centimeters)

5422-X_ Strainer Assembly for the PZ7 and PZ10 Pump



Inches (centimeters)

Solutions beyond products...

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