

PRESSURE DIFFERENTIAL CONTROLLER

APPLICATION:

The "PDC" Series Pressure Differential Controller connects across the orifice plate of a meter run to maintain a constant stable pressure differential across the meter run. This relates to a constant flow rate when the upstream pressure is constant. This pilot adjusts the flow rate to maintain the pressure differential by positioning a pressure opening motor valve that has characterized equal percentage valve trim for precise flow control.

Precise gas flow rate for gas lift.

Pressure differential control across orifice plates for better charts and measurement of gas flow.

Stabilizes gas flow for better well production.

Pressure differential limiting for reducing "off chart" conditions.

Any applications where a constant pressure differential and flow rate is desired.

FEATURES:

Throttle operation

1 to 260 inches of water differential pressure

Heavier springs available, if specified

May be used with any type of diaphragm motor valve

Main Diaphragm Assembly

3 PTC Pilot Diaphragm Assembly

Upstream Pressure

Downstream Pressure



Order Code	Connection size	Supply Press psig	Output Press psig	Max. W.P. psig [†]	
FAA1	1/4"	5 - 30	Variable, 2 - 30	1000	
FAA2	1"	5 - 30	Variable, 2 - 30	1000	
FAB1	1/4"	5 - 30	Variable, 2 - 30	2000	
FAB2	1"	5 - 30	Variable, 2 - 30	2000	

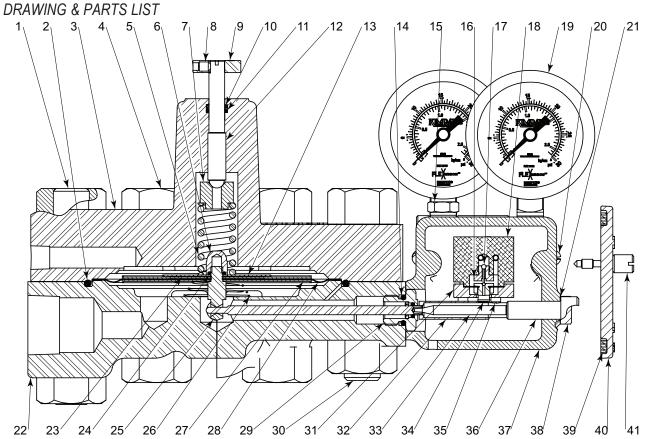
NOTES:

For standard & optional seals, metals, Cf Cv values, material specifications & dimensions see technical data on pages 09:I - 09:IV

† Max W.P. values based on -20°F to 100°F.



PRESSURE DIFFERENTIAL CONTROLLER



ITEM	TEM QTY. DESCRIPTION PART NO								
I I LIVI		Stud 1000 psig			834				
1	2	3/4-10 x 4.5		2000 psig			83A		
2	1	O-Ring *			87				
	'			92					
3	1	Upper F	lange		1000 psig 2000 psig		93		
	2	Nut		1000 psig			2377		
4	16				00 psig	*	82B		
5	1	Spring 2000 psig				1527			
6	1	Nut *					637		
H	1	IVUL	Chaine Blate 1000 psig				1442SS6		
7							4125		
8	3 1 Screw 2000 psig						264		
9	1	Knob		635S6					
10	1	Back-up		148T					
11	1	O-Ring	<u></u>	153					
12	1	Screw		634					
13	1	Spacer Plate *					90		
14	1	O-Ring		530					
15	1	Plug		699					
16	1	Seat		555					
17	1	Pilot Plu	ıa	563					
18	1	Pilot Ho		2401					
19	2	Gauge		7705					
20	2	Screw		752A					
21	Spa	cer (use	to establi	674A					
	1	Lower Flange			1" NDT		96		
			1000 ps	ıg	1/4" NP	Т	7129		
22			2000 ====	:	1" NP	Т	97		
			2000 psig		1/4" NP	Т	7130		
23	2	Diaphragm Seal Ring					673		
		1 -1 -0							

PART NO			ITEM	QTY.	DESCRIPTION		PART NO		
100	00 psig 834			24	1	O-Ring *		*	638
2000 psig		83A		25	1	Diaphragm Bolt *		*	640
*		87	1	26	1	Spring		4078	
100	1000 psig 92		1	27	2	Diaphragm Plate		89	
200	00 psig	93	1	28	1	· · ·		*	641
100	00 psig 👱	2377		29	1	Packing Gland Assembly *		*	646
200	00 psig	82B	1	30	6	Stud	1000 psig		825
		1527	1	30	0	3/4-10 x 4.0	2000 psig		82A
*		637	1	31	1	Pilot Cap		969	
100	00 psig	1442SS6	1	32	1	Magala Arm	1000 psig		943S6
200	00 psig	4125		32	'	Waggle Arm	2000 psig		944S6
· · · · ·		264	1	33	1	Pivot Bar		644	
		635S6	1	34	1	Seat Assembly *		554	
*		148T	1	35	4	Screw		968	
*		153		36	1	Screw		645	
		634	1	37	1	Case		752	
*		90	1	38	1	Screw (Rear Case Mount)		78	
*		530		39	1	Gasket *		775	
		699		40	1	Cover		755	
* 555		555		41	2	Screw		966	
* 563			1	Item Listed Below Are Not Sho					wn
2401		[1	Screw (Front Case Mount)			477	
7705		7705			2	Screw (Pilot Mount)		967	
75		752A			2	O-Ring (Pilot Mount Seal)		569	
ish 1/16" at Ø)		674A			1	Mounting 1000 psig			4428
sig	1" NPT	96			'	Bracket 2000 psig Nipple			6753
	1/4" NPT	7129	[1				648
	1" NPT	97			1	Filter			YAS
sig	1/4" NPT	7130		3 PDC Pilot			YBM		
Ring)	673		Repair Kit			RIJ		
* These parts are recommended spare parts and are stocked as repair kits.									
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