


	Toase-ehe Park Sanati Gohar Ofogh Petrochemical Co.	  	
	CONCEPTUAL, BASIC and DETAIL DESIGN ENGINEERING OF STYRENE PARK OFFSITE		
	Document Title: Instrument Data Sheet for Active Carbon Filter	Document No. : EI027-ENR-VD-IN-DSH-003	Rev.: R0

STYRENE PARK OFFSITE

Document Title:

**Instrument Data Sheet
for
Active Carbon Filter**

R0	17/04/2024	Issued for Comment	A.Mohamadhoseini	E.Malek	H.Keshmiri
Rev.	Issued Date	DESCRIPTION	PREPARED	CHECKED	APPROVED

Page	Revisions							Page	Revisions						
	R0	R1	R2	R3	R4	R5	R6		R0	R1	R2	R3	R4	R5	R6
1	X							41							
2	X							42							
3	X							43							
4	X							44							
5	X							45							
6								46							
7								47							
8								48							
9								49							
10								50							
11								51							
12								52							
13								53							
14								54							
15								55							
16								56							
17								57							
18								58							
19								59							
20								60							
21								61							
22								62							
23								63							
24								64							
25								65							
26								66							
27								67							
28								68							
29								69							
30								70							
31								71							
32								72							
33								73							
34								74							
35								75							
36								76							
37								77							
38								78							
39								79							
40								80							



Toase-e Park Sanati Gohar Ofogh Petrochemical Co.
CONCEPTUAL, BASIC and DETAIL DESIGN ENGINEERING OF STYRENE PARK OFFSITE

Document Title: Instrument Data Sheet for Active Carbon Filter







Document No. : EI027-ENR-VD-IN-DSH-003

Rev.: R0

Page 3 of 5

Datasheet for Pressure Gauges

GENERAL												
1	Item Number	Tag Number	QTY.			1	See Table A				2	
2	Service	See Table A										
3	P&ID No.	EI027-ENR-VD-PR-PID-003-R1										
4	Line/Equipment No.	See table A										
PROCESS CONDITIONS												
5	Fluid	Phase				Air+Styrene (3.5 g/Nm3)			Vapor			
6	Oper. Pressure	Min.	Nor.	Max.	Unit	See table A		See table A		See table A	barg	
7	Oper. Diff. Press.	Min.	Nor.	Max.	Unit	0		0.07		bar		
8	Oper. Temp.	Min.	Nor.	Max.	Unit	31				C		
9	Design Pressure					Unit	0.2				barg	
10	Design Temp.					Unit	85				C	
11	Operating Viscosity					Unit	0.02				cP	
12	Pulsation	No										
13	Corrosive Service	Super Heat				YES			No			
14	Toxic Service	NACE Requirement				YES			No			
GAUGE												
15	Instrument Type	Model				Pressure Gauge			V.T.A			
16	Instrument Range	Unit				(-1) - (0.6)				barg		
17	Zero Adjustment	Required										
18	Mounting	Lower Mounting										
19	Dial Size	Dial Color				150 mm		White Back. (Dual Unit: barg/psig)				
20	Case Material	S.S										
21	Ring Construction	Ring Material				Screwed		S.S 316				
22	Pressure Element Type	Bourdon Tube										
23	Pressure Element Material	S.S 316										
24	Socket Material	S.S 316										
25	Connection Size	Connection Location				1/2" NPTM		Bottom				
26	Movement Material	S.S 316										
27	Nominal Accuracy	±1 % Full Span										
28	Blow-Out Protection	Required/Rear Blow-Out protection										
29	Over range Protection	130% of Full Span										
30	Ingress Protection	IP 65										
31	Standard	EN 837-1										
32	Glass	Safety glass										
DIAPHRAGM SEAL												
33	Model Number	N/A										
34	Type	N/A										
35	Process Connection	N/A										
36	Connection MatL.	Connection Rating				N/A		N/A				
37	Extended Length	N/A										
38	Diaphragm Material	N/A										
39	Bottom Housing Material	N/A										
40	Fill Fluid	N/A										
41	Capillary Length	N/A										
42	Capillary Bleeder	N/A										
43	Capillary Material	N/A										
44	Flushing Connection	N/A										
45	Top Housing Material	N/A										
46	Instrument Connection	N/A										
47	Fill Connection	N/A										
OPTIONS												
48	Siphon	Type / Material				N/A		N/A				
49	Snubber	Material				N/A		N/A				
50	Over range Protector	Material				N/A		N/A				
51	Oil Filled	N/A										
MANIFOLD												
52	Valve Type	Model				2-Way Valve			V.T.A			
53	Body Material	Trim Material				S.S 316		S.S 316				
54	Process Connection	Instrument Connection				1/2" NPTF		1/2" NPTM				
55	Vent/Drain size	Valve Rating				1/4" NPTF		3000#				
56	Packing Material	PTFE										

 	Toase-eh Park Sanati Gohar Ofogh Petrochemical Co. CONCEPTUAL, BASIC and DETAIL DESIGN ENGINEERING OF STYRENE PARK OFFSITE		 
	Document Title: Instrument Data Sheet for Active Carbon Filter		
	Document No. : EI027-ENR-VD-IN-DSH-003		Rev.: R0

PURCHASE	57	Manufacturer	V.T.A
	58	Model	V.T.A
	59		

Notes:

Table A							
item	Tag No.	Service	Line No./Equip. No	Oper. Pressure (Barg)			Remark
				min.	norm.	max.	
1	PI-101	Active Carbon Filter A	PK-0002-A	0	0.03	0.07	
2	PI-102	Active Carbon Filter A	PK-0002-B	0	0.03	0.07	

DATA SHEET FOR DIFFERENTIAL PRESSURE TRANSMITTER										
GENERAL	1	Item Number	Tag Number	QTY.		2	See Table B			2
	2	Service				See Table B				
	3	P&ID No.				EI027-ENR-VD-PR-PID-003-R1				
	4	Line/Equipment No.				See table B				
PROCESS CONDITIONS	5	Fluid	Phase			Air+Styrene (3.5 g/Nm3)			Vapor	
	6	Oper. Pressure	Min.	Nor.	Max.	Unit	0	0.03	0.07	barg
	7	Oper. Diff. Press.	Min.		Max.	Unit	See Table B		See Table B	bar
	8	Oper. Temp.				Unit	31			C
	9	Design Pressure				Unit	0.2			barg
	10	Design Temp.				Unit	85			C
	11	Operating Viscosity				Unit	0.02			cP
	12	Pulsation				No				
	13	Corrosive Service		Super Heat			YES			No
	14	Toxic Service		NACE Requirement			YES			No
	TRANSMITTER	15	Instrument Type		Model		DIFFERENTIAL PRESSURE TRANSMITTER			V.T.A
16		Instrument Range		Calibration Range		Unit	-621.60 to 621.60 mbar (V.T.C)		0 - (0.1) bar	
17		Zero Adjustment		Span Adjustment		Yes			Yes	
18		Integrated Local Indicators				LCD Required				
19		Power Supply		Power Consumption			24 vDC			V.T.A
20		Output Signal		Electrical Connection			4-20 mA			M20*1.5
21		Housing Material				Die-Cast Aluminum				
22		Ex Certificate				Ex'd' IIB T3				
23		Ingress Protection				IP 65				
SENSING & BODY	24	Element Type		Element Material		Diaphragm Type			S.S 316	
	25	Body Material				S.S 316				
	26	Instrument Connection				1/2" NPTM				
	27	Accuracy				±0.15 % of Calibration span				
DIAPHRAGM SEAL	28	Model Number				N/A				
	29	Type				N/A				
	30	Process Connection				N/A				
	31	Connection Material		Connection Rating		N/A				
	32	Extended Length				N/A				
	33	Diaphragm Material				N/A				
	34	Bottom Housing Material				N/A				
	35	Fill Fluid				N/A				
	36	Capillary Length				N/A				
	37	Capillary Bleeder				N/A				
	38	Capillary Material				N/A				
	39	Flushing Connection				N/A				
	40	Top Housing Material				N/A				
OPTIONS	41	Siphon		Type / Material		N/A			N/A	
	42	Snubber		Material		N/A			N/A	
	43	Over range Protector		Material		N/A			N/A	
	44	Oil Filled				N/A			N/A	
MANIFOLD	45	Valve Type		Model		5-Way Valve			V.T.A	
	46	Body Material		Trim Material		S.S 316			S.S 316	
	47	Process Connection/Instrument Connection				1/2" NPTM				
	48	Vent/Drain size/ Valve Rating				1/4" NPTM/3000#				
	49	Packing Material				PTFE				
PURCHASE	51	Manufacturer								
	52	Model								
	53									

Notes:

Table B						
item	Tag No.	Service	Line No./Equip. No	Oper. Diff. (Barg)		Remark
				min.	max.	
1	PDIT-101	Active Carbon Filter	PK-0002-A	0	0.07	
2	PDIT-102	Active Carbon Filter	PK-0002-B	0	0.07	