National Petrochemical Company								Instru									
								Engineer	_								
		Petroc		ch & Technology (mas	s flow con	troller							
Designa	tion								Order No)							
	Υ	1	Tag Numb	er						mfc201-20	06						
	GENERA									H2							
	Ϊ																
	0								4 (4)								
	Й							4/	1/4"	ı		4.05	•				
	PIPE		Line O.D	4-4:	Wall Thic	ckness		15	9.1mm	CC/TD24	C/	1.65	mm				
	\vdash	7 8	Pipe line Material							SS(TP31	0)						
				ection size a	nd rating					1/4"			or VTA		 		
				ection Materi						SS316L/1.4	4404		01 117				
				calibrated R		tory Set	tina			0 to 200g							
			Density rai		g	,	9			`							
	L		meter tube														
Š	Meter	14	Sensor ho	ousing Mater	rial					SS316							
ō	Ие	-	meter tube							SS316							
Ĕ				level						PN100)						
Z			<u> </u>												ļ		
ၓ		_													-		
SS		19 20		Permissbie Gas Volume% ccuracy Mass Flow Rate						0.2%F.S.	M				<u> </u>		
S		21		esr lose in b						0.2701.3.	IVI	1			╂		
PROCESS CONDITIONS				251 1056 111 04	aı			4-20m	A dc passive E	y-i+HΔRT					_		
₽.		23		art/Convention	nal			7 2011	ir do passivo E	SMART	•				┢		
	TRANSMITTER	24	Power Su		Jilai			External 24vdc									
			Local Display														
			Local Display Integral With Meter/separate					 									
								†									
			Enclosure Rating							IP67							
	-			ction regulre	ment			ATEX CAT 3. ZONE1									
			Transmitter Housing						SS316L								
		31	Fluid	<u> </u>	State				H2			ga	as				
	DATA	32		Min	Nor	Max											
	DΑ		Design Pre		Design T		ture		l8bar				C°				
	SS		In let press				1	12bar			8-10	Obar					
	S			Prossure Dr				2-4bar									
	PROCES		Operating VIscosIty (Cp)														
	PR		3 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7														
		38													 		
			Field Junction Box local Indicator												┢		
		41	Cable Glands														
	S	42		ressure tes	t												
	Ö	43	Mateial Certificate														
	OPTIONS	44	Enclosure	Rating Certi	ificate			Included									
	o			tion Certifica	ate			Included									
		46	Model Nur	nber													
No	te:					NOR	RMAL (CLOSE VALVE									
* Vendor to Advise																	
													<u> </u>				
															<u> </u>		
Comple	ted			Prod	cess:		Job o	b or Project No. Job: Line revised und Modified:						r Rev.No.l	: ↑		
Checke	Ч			Docum	nent- No.:						Sheet:	Rev.	Date	Checke	ad.		
CHECKE	u			Docum	iont- INO						Sileet.	Nev.	Date	CHECKE	,u		

SXO.								Instrumentation Engineering Data Sheet									
				chemical Compan				mass flow controller									
			chemical Researc	ch & Technology (Company			max									
Designa	-								Ord	der No							
	GENERA	1	Tag Numbe	er						mfc202-2							
	NE	2	Service							C2H4(ethy	ene)						
	GE	3 4															
			Line Size							1/2"							
	PIPE	6	Line O.D		Wall Thi	ckness			mm			m	m				
	Ь	7	Pipe line M	1aterial						SS(TP31	6)	•					
			meter size										-				
				End connection size and rating						1/2"	1101		or VTA				
				ction Materi		-40				SS316L/1. 0 to 12K							
			Density rar	Mass flow calibrated Range Factory Setting						0 t0 12N	.g/11						
S	ter		meter tube shape Sensor housing Material							SS31	3						
PROCESS CONDITIONS	Metel		meter tube							SS31	3						
Ē	2		pressure							PN100							
N			tube housing Pressure range														
္ပ			turn down ratio Permissbie Gas Volume%											\longrightarrow			
SS				e Gas Volur Mass Flow F													
S				esr lose in b								 					
RO			outlet	551 1056 111 0	aı			4-20mA dc passive Ex-i+HART									
		23		rt/Convention	onal			SMART									
	ER	24	Type Smart/Conventional Power Supply					External 24 v.dc									
	TRANSMITTER	25															
		26	1 /														
	γÑ	27	Cable entry														
	TR/	28	Enclosure Rating							IP67							
	ľ			tion require	ment			ATEX CAT 3. ZONE1									
	30 Transmitter Housing							SS316	_								
	⋖			1	State				C2H4			ga	as				
	DATA			Min	Nor Design 1	Max			18bar)C°				
	S D		Design Pre In let press		Out let p		alure		12bar			8-10					
	PROCESS							2-4bar									
	၁၀	36	Operating VIscoslty (Cp)														
	PR			g/m2)operat		itions											
		_		sibillty Factor													
		39	Field Junc														
		40 41															
	S	42															
	OPTIONS			Hydralic Pressure test Mateial Certificate													
	Ĭ			Rating Certi	ificate			Included									
	OF	45	Ex. Protect	tion Certifica	ate			Included									
		46	Model Nun	nber													
No	te:					NOF	RMAL (CLOSE VALVE									
														<u> </u>			
* Vendor to Advise												— ⊢					
												\vdash					
												├					
Comple	ted			Prod	cess:		Job o	o or Project No. Job: Line revised under Modified:					r Rev.No.t 1				
Checke	d			Docum	nent- No.:						Sheet:	Rev.	Date	Checked			

SXO.								Instrumentation Engineering Data Sheet								
National Petrochemical Company Petrochemical Research & Technology Company								mass flow controller								
			chemical Researc	ch & Technology (Company			1110								
Designa	-								Ord	der No						
	GENERA	1	Tag Numbe	er						mfc203-2						
	NE	2	Service				-			C3H6(prop	ylene)					
	GE	3 4	Line No. P & ID No.													
			Line Size							1/2"						
	PIPE	6	Line O.D		Wall Thi	ickness			19.1mm			1.65	ōmm			
	Ь	7	Pipe line M	1aterial						SS(TP3	16)	•				
			meter size													
				ction size a						1/2"			or VTA			
				ction Materi		-40-4	dia a			SS316L/1 0 to 12k						
				Mass flow calibrated Range Factory Setting						0 10 121	Ng/11					
S	ter		meter tube shape Sensor housing Material							SS31	6					
PROCESS CONDITIONS	Metel		meter tube							SS31	6					
Ē	2		pressure							PN10)					
N			<u> </u>													
္ပ			turn down ratio Permissbie Gas Volume%											\longrightarrow		
SS										F						
끙				Mass Flow F esr lose in ba												
RO			outlet	551 1056 111 0	aı			4-20mA dc passive Ex-i+HART								
		23		rt/Convention	onal			SMART								
	ER	24	Type Smart/Conventional Power Supply					External 24vdc								
	TRANSMITTER	25														
		26	1 1													
	γÑ	27	Cable entry	у												
	TR/	28	Enclosure Rating							IP67						
	ľ		EX .Protection requirement					ATEX CAT 3. ZONE1								
	30 Transmitter Housing							L								
	⋖			1	State				C3H6			ga	as			
	DATA		Flow Design Pre	Min	Nor Design 1	Max			18bar	ı		50)C°			
	SD		In let press		Out let p		luie		12bar				Obar			
	ES:						2-4bar									
	PROCESS	36	Operating VIscoslty (Cp)													
	PR	37	Density (kg/m2)operating Conditions													
				sibillty Factor												
		39	Field Junc													
		40 41														
	S	42	Hydralic P													
	OPTIONS		Mateial Ce													
	Ĭ			Rating Certi	ificate			Included								
	OF	45	Ex. Protect	tion Certifica	ate			Included								
		46	Model Nun	nber												
<u>No</u>	te:					NOR	RMAL C	CLOSE VALVE								
														<u> </u>		
* Vendor to Advise												—				
												\vdash				
												—				
Comple	ted			Prod	cess:		Job o	r Project No.		Job:		Line re Modifi		er Rev.No.t 1		
Checke	d			Docum	nent- No.:	•					Sheet:	Rev.	Date	Checked		

2 <u>8</u> 2°								Instrumentation Engineering Data Sheet								
		Petroc		chemical Compan ch & Technology (_	ss flow co							
Designa	ntion								Orde	er No						
_ 00.g	-	1	Tag Numb	er				l .		mfc204-2	209			-		
	GENERA	2	Service							C4H8(1But						
	Ē	3	Line No.							,	· · ·					
	9	4	P & ID No.													
	Ε	5	Line Size							1/4"						
	PIPE	6	Line O.D Wall Thickness						19.1mm			1.65	imm			
			Pipe line Material							SS(TP31	6)					
			meter size		nd rating					1/4"			or VTA			
				ction size a					S	S316LCompere	ssion fitting		OIVIA			
				calibrated R		ctory S	Setting			0 to 2Kg						
			Density rar		ange i a	iolory C	octurig			0 10 2.19	,					
	_		meter tube													
လ္ခ	tel	14		using Mater	rial					SS31	6					
ō	Meter	15	meter tube							SS31						
Ħ		16	pressure level							PN100						
N		-														
PROCESS CONDITIONS			turn down ratio Permissbie Gas Volume%													
SS				Mass Flow F						0.2%F.S	M					
SC				esr lose in ba				U.270F.J.IVI								
280			outlet			-			4-2	0mA dc passive	Ex-i+HAR	T				
ш.		23		rt/Convention	onal			SMART								
	ER	24						External 24vdc								
	TRANSMITTER	25	Local Display Local Display Integral With Meter/separate													
		26														
		27	,													
	TR	28	Enclosure Rating					IP67								
	ľ		EX .Protection requirement					ATEX CAT 3. ZONE1 SS316L								
	30 Transmitter Housing							_								
	4		Fluid	In a:	State				C4H8			ga	as			
	DATA		Flow Design Pre	Min	Nor Design		ax		18bar	I		50	C°			
	SD		In let press		Out let		rature		12bar			8-10				
	ES			Prossure Dr		proco		2-4bar								
	PROCESS	36	Operating VIscoslty (Cp)													
	PR		Density (kg/m2)operating Conditions													
			Compressibility Factor													
		39	Field June													
		40 41	local Indica Cable Glar													
	,	42		ressure test	oct											
	OPTIONS		Mateial Ce					Included								
	Ĭ			Rating Certi	ificate			Included								
	OF	45	Ex. Protect	tion Certifica												
		46	Model Nun	nber												
<u>No</u>	te:					NO	ORMAL	CLOSE VALVE								
* Vendor to Advise														<u> </u>		
												 				
														<u> </u>		
														<u> </u>		
Comple	ted			Prod	cess:		Job (or Project No.	r Project No. Job: Line revised under Modified:					r Rev.No.t ↑		
Checke	d			Docum	nent- No.	.:					Sheet:	Rev.	Date	Checked		