COMPANY NAME: Golden Triangle Polymers Company LLC

PROJECT NAME : Golden Triangle Polymers Project

PURCHASER: JKJV

PURCHASER JOB CODE : 0-8936-2

PURCHASE ORDER NO.: 0-8936-2-P 215A-201-A

VENDOR NAME : Siemens Energy

EQUIPMENT/MATERIAL NAME: Process Water Clean-up Unit

ITEM NO.: 10-P-2403A/B

DOCUMENT TITLE: INSTRUMENT DATASHEET FOR IGF EFFLUENT PUMP (10-P-2403A/B)

	ISSUE PURF	OSE	:		FC							
	SDR CODE				PURCHASE ORDER NO.	D	OC. TYPE COI	DE	SERIAL NO.	REV.		
PURCHASER DOC.NO.			V		215A-201-A	_	EIC	_	542	4		
COMPANY DOC. NO.	C16		10-JKVN	-	213A-201-A	-	EIC	-	342	4		
VENDOR DOC. No.					SEI-EIC-542							

Contractor Use

Reviewe Result Stamp

JGC Result : A - Approved without comment
Next Issue Purpose : AB
Reviewed by : JGC-PKG Y.YASUE

JGC

		1	Tag Number							PT/PI-240490A / PT/	PI-240490B					
		1								11/11 210 17011 / 11/11 210 1700						
		2	Service							Plan 54 Pressure Indi	cation & Transmissio	n				
CENER		3	P&ID No.							10-PID-2404						
GENER	KAL	4	Design Pressure		Psi G		M	∕lin.	Max.	NA		580.15				
		5	Design Temperat	ure		°F	M	∕lin.	Max.	NA 240 [Rev.4]						
		6	Haz.Area Class.							FM Flame Proof Class I, Division 2, Temperature class T3 [Rev.2]						
		7	Ex-Certification							Flame Proof (Ex'd') Ga	as group B,C,D [Rev.3	]				
		8	Fluid Name		Fluid Sta	ite	F	luid P	hase	LP Boiler feed wat	er L	quid -				
		9								Min.		Nor.	Max.			
PROCE	ESS	10	Pressure				P	si G		62.9 [Rev.2] 62.9 [Rev.2] 62.9 [F						
CONDI	ITIONS	11	Temperature				٥	F		115		115	115			
		12								48.4(Falling) [Rev.2]	•		•			
		13														
		14	Element Type							Diaphragm						
		15	Transmitter Type	e						2 Wire						
		16	Inst./Capsule Rai	nge	Psi G		M	∕lin.	Max.	-14.7		150 [Rev.2]				
		17	Calibration Rang	e	Psi G		M	∕lin.	Max.	0		150 [Rev.3]				
			Meter Range		Psi G		N	∕lin.	Max.	-14.7		150 [Rev.2]				
			Accuracy							+/- 0.04% of span						
			20 Body Material Internal Diaphragm Material						SS316		SS316L					
		21	Enclosure Materi							Polyurethane covered	cast aluminium					
TRANS	SMITTER	22							SS316							
		23	<u> </u>						Weatherproof to NEMA 4X; IP 65							
			Output Signal							4-20mA / HART 7						
			Power Supply							24 VDC 1/2" NPT(F) - 2 No's [Refer Note - 3 & 6]						
		26 27	Electrical Connec								Refer Note - 3 & 6]					
			Process Connecti							1/2" NPT(F)						
		28	Over Pressure Ra	ating			P	si G		1600						
		29														
		30														
			Seal Type	. ,						NA						
			Diaphragm Mate	rial						NA NA						
			Flange Material		lo:		n					Tay a				
		35	Connection		Size		Ratin	_		NA NA		NA				
DIAPH	IRAGM SEAL		Connection		Facing			inish		NA NA		NA NA				
			Capillary		Type		Mater Fill Fl									
			Capillary	C C	Length	Dl	<u> </u>		.1	NA		NA				
		38	Flushing	Conn. S	ize	Plug	IV	/lateria	11	NA	NA		NA			
		40														
<b>-</b>			Integral Indicator	r						Required - LCD Displa	V					
			Remote Indicator		Remoto	Indicator T	ag No			NA	· y	NA				
			Remote Indicator			/cm <sup>2</sup> g			Max.	NA NA		NA NA				
			Manifold	Range	Туре	rtiii g		rial &		2 valve manifold (FSP	I. Scone)		el hydro pneumatic			
OPTIO	ONS	45	Transmitter Mou	nting Rr			1 - 3000			NA	- <= F=)	S & EACC	7 a pa			
		46	Burnout Directio			Surge Pro	tection	n		Required		Required				
		47	NACE		BR			12		NA	NA		NA			
		48	SIL Requirement			1				Not Required [Rev.1]	1					
		49	Line No.			Equipmen	nt No.			N	A		10-P-2403 A/B			
LINE/V	VESSEL		Size	Class			Sch.			1/2"	300#	1	80			
DV	VA 677	51	Manufacturer							EMERSON						
PURCE	HASE	52	Model							3051TG2A2B21AK5D	4M5Q4Q8T1CNP1QT	RKHR7 [Rev.2	]			
4	Comme	ents	updated		09-04-2	24		PI	3	3051TG2A2B21AK5D4M5Q4Q8T1CNP1QTRKHR7 [Rev.2]						
3	Comments updated 22-11-23 SSK			K			FLO	MACEDIVE								
2			updated		11-08-2	23		SV	I	INSTRUMENT D		LLO	WSERVE			
1			updated		09-06-2	23		SV	I	PRESSURE TI	MINOMII I EK					
0	For apporval 11-05-23 SV				FSL DOC NO: 2H-169437:PT											
No.	Des	Description Date Pred					ed	Rev.: 4								



### NOTES:

1. Stainless steel name plate which is engraved with the tag no, model no, size, rating, materials, Area Class, Manufacturer name, calibration range, serial number, year of manufacturing, Ex certification / approval, power supply etc whichever applicable shall be permanently affixed on the case or body.

2. Instrument shall have internal terminal block, anti vibration type for cable termination.

3. Cable entry shall be with dual cable, Unused entry shall be plugged using SS316 plug with flameproof ,Ex-d certificate with PESO approval.

4. Transmitter shall be provided with integral output meter in LCD with Eng Unit.

5. No Asbestos material is used.

6. ½" NPT Double compression type SS316 cable glands with flameproof ,Ex-d certificate with PESO approval suitable for armoured cables with PVC shrouds.

7. Offered transmitter shall be NAMUR NE43 complied. [Rev.1]

## CERTIFICATE:

1. Calibration Certificate.

2. Certificate of Compliance to Flowserve Sanmar IDS Specification.

3. Flame Proof :FM Flame Proof approval

4. Ingress Protection Certificate

5. 3 1 Material Test Certificate.

PMI required.

Pressure test certificate.

## MODEL DECODIFICATION: [Rev.2]

3051T: Rosemount™ 3051 In-Line Pressure Transmitter

G : Gage

2:-14.7 to 150 psi (-1.01 to 10.34 bar)

A: 4-20 mA with Digital Signal Based on HART Protocol

2B: ½-14 NPT female (range 1-5 only)

2: Isolating diaphragm-316L stainless steel

1: Sensor fill fluid-Silicone

A:Housing material-Aluminum

K5; Product certifications- USA Explosion-proof, Dust Ignition-Proof, Intrinsically Safe, and Division 2

D4: Configuration buttons - Analog zero and span

M5 : LCD display

Q4 : Calibration certificate

Q8 : Material traceability certification per EN 10204 3.1.B

T1 : Transient protection terminal block

CN : Alarm levels - Analog output levels compliant with NAMUR recommendation NE 43, alarm low

P1 : Hydrostatic testing with certificate

QT : PMI verification and certificate

RK : Enhanced Software

HR7 : Configured for HART Revision 7

4	Comments updated	09-04-24	PB	
3	Comments updated	22-11-23	SSK	
2	Comments updated	11-08-23	SV	
1	Comments updated	09-06-23	SV	
0	For apporval	11-05-23	SV	
No.	Description	Date	Pred	

INSTRUMENT DATASHEET FOR PRESSURE TRANSMITTER





	1	Tag Number					RO-240490A / RO-240490B							
	2	Service					Restriction Orifice Plate Plan 54 (MOD)							
GENERAL	3	P&ID No.			1		10-PID-24	04		7				
	4	Design Pressure Psi (			Min.	Max.	NA			580.15				
	5	Design Temperature	°F		Min.	Max.	NA			199.4 [Rev.1]				
	6	Fluid Name Fl	luid State		Fluid Phas	e	LP Boiler F	er Feed Water		liquid -				
	7							Min.		lor.	Max.			
	8	Flow			GPM			1.7 [Rev.1]	2.7	[Rev.1]	3.7 [Rev.1]			
	9	Inlet Pressure [Rev.1]			Psi G		(	52.9 [Rev.1]	62.9	[Rev.1]	62.9 [Rev.1]			
	10	Normal Operating Tempera	ature		Deg F			115	1	115	115			
	11	Viscosity			cР		1							
	12	Density (Liq. )			lb/ft <sup>3</sup>		62.43							
PROCESS CONDITIONS	13	Vapor Pressure (Liq.)			Kg/cm <sup>2</sup> a		NA							
CONDITIONS	14	Cp / Cv (Gas)					NA							
	15	Z (Compressibility) (Gas)					NA							
	16	% Solid					NA							
	17	Mol. Wt. (Gas) Z	@ Normal (	Gas)			NA							
	20	Туре					Concentric	Square Edge						
	21	Design Standard					R.W Miller							
	22	Plate Material					SS 316L							
	23	Holder Ring Material					NA							
ORIFICE PLATE	24	Plate Thickness					3.2 mm							
	25	Drain or Vent Hole Size		Diameter (m	m)		NA 1.5							
	26	Centre Distance					N/A							
	27	Number of Stages (For Rest	riction Orifi	ce)			Single Stag	e Restriction						
	28	Connection Si	ize	Rating	Facing	Finish	ł — — —	3/4"	300#	RF	125-250 AARH			
	29	Taps Type		Taps Size			N/A			N/A				
	30	Tapping Orientation		No. of tappin			N/A			N/A				
	-	Pipe Material		Flange Mater	ial		SS 316L			SS 316L				
ORIFICE FLANGE	-	Plug Material		Flange Type			N/A	. 1747 1		N/A				
		Gasket Material		Gasket Thick	ness		SS 316L Spiral Wound 4.5 mm							
	33							ASTM A 193 GR. B CLASS 1 / ASTM A 194 GR.8						
	34	Bolt / Nut Material					ASTM A 19		/ ASTM A 194 GR.8					
	$\vdash$								/ ASTM A 194 GR.8	1.0				
	34 35	Bolt / Nut Material Jackscrew Material					ASTM A 19 N/A		/ ASTM A 194 GR.8	1.0				
	34 35 36	Bolt / Nut Material Jackscrew Material Spool Piece Length	iza	Rating		Finich	ASTM A 19 N/A N/A				N/A			
METER RIIN	34 35 36 37	Bolt / Nut Material Jackscrew Material Spool Piece Length End Connection	ize	Rating	Facing	Finish	ASTM A 19 N/A N/A N/A		/ ASTM A 194 GR.8	N/A	N/A			
METER RUN	34 35 36 37 38	Bolt / Nut Material Jackscrew Material Spool Piece Length End Connection Meter Run Material	l l	Rating		Finish	ASTM A 19 N/A N/A N/A N/A				N/A			
METER RUN	34 35 36 37	Bolt / Nut Material Jackscrew Material Spool Piece Length End Connection	l l	Rating		Finish	ASTM A 19 N/A N/A N/A				N/A			
METER RUN	34 35 36 37 38 39	Bolt / Nut Material Jackscrew Material Spool Piece Length End Connection Meter Run Material Integral orifice block Materi	ial		Facing	Finish	ASTM A 19 N/A N/A N/A N/A	3 GR. B CLASS 1	N/A					
METER RUN	34 35 36 37 38 39	Bolt / Nut Material Jackscrew Material Spool Piece Length End Connection Meter Run Material Integral orifice block Material Bore diameter	ial	Rating Beta Ratio (d	Facing	Finish	N/A N/A N/A N/A N/A N/A		N/A		N/A VTA			
METER RUN	34 35 36 37 38 39 40 41	Bolt / Nut Material Jackscrew Material Spool Piece Length End Connection Meter Run Material Integral orifice block Materi Bore diameter Flow Full Scale (Meter Max)	ial		Facing  / D)		N/A N/A N/A N/A N/A N/A N/A N/A	3 GR. B CLASS 1	N/A	N/A				
CALCULATION	34 35 36 37 38 39 40 41 42	Bolt / Nut Material Jackscrew Material Spool Piece Length End Connection Meter Run Material Integral orifice block Materi Bore diameter Flow Full Scale (Meter Max) Differential Pressure Range	ial		Facing  / D)  Min.	Мах.	N/A  N/A  N/A  N/A  N/A  N/A  N/A  N/A	3 GR. B CLASS 1	N/A	N/A				
	34 35 36 37 38 39 40 41 42 43	Bolt / Nut Material Jackscrew Material Spool Piece Length End Connection Meter Run Material Integral orifice block Materi Bore diameter Flow Full Scale (Meter Max)	ial		Facing  / D)	Max. Max.	ASTM A 19 N/A	3 GR. B CLASS 1	N/A	N/A				
CALCULATION	34 35 36 37 38 39 40 41 42 43 44	Bolt / Nut Material Jackscrew Material Spool Piece Length End Connection Meter Run Material Integral orifice block Materi Bore diameter Flow Full Scale (Meter Max) Differential Pressure Range Flow Range	ial		Facing  / D)  Min.	Мах.	ASTM A 19 N/A	3 GR. B CLASS 1	N/A	N/A				
CALCULATION	34 35 36 37 38 39 40 41 42 43	Bolt / Nut Material Jackscrew Material Jackscrew Material Spool Piece Length End Connection Meter Run Material Integral orifice block Material Bore diameter Flow Full Scale (Meter Max) Differential Pressure Range Flow Range Permanent Pressure Loss @	ial		Facing  / D)  Min.	Max. Max.	ASTM A 19 N/A	3 GR. B CLASS 1	N/A	N/A				
CALCULATION	34 35 36 37 38 39 40 41 42 43 44 45	Bolt / Nut Material Jackscrew Material Jackscrew Material Spool Piece Length End Connection Meter Run Material Integral orifice block Material Bore diameter Flow Full Scale (Meter Max) Differential Pressure Range Flow Range Permanent Pressure Loss @	ial		Facing  / D)  Min.	Max. Max.	ASTM A 19 N/A	3 GR. B CLASS 1	N/A	N/A				
CALCULATION RESULT	34 35 36 37 38 39 40 41 42 43 44	Bolt / Nut Material Jackscrew Material Jackscrew Material Spool Piece Length End Connection Meter Run Material Integral orifice block Materia Bore diameter Flow Full Scale (Meter Max) Differential Pressure Range Flow Range Permanent Pressure Loss @ Noise (dBA)	ial		Facing  / D)  Min.	Max. Max.	ASTM A 19 N/A	3 GR. B CLASS 1	N/A	N/A				
CALCULATION	34 35 36 37 38 39 40 41 42 43 44 45 46 47	Bolt / Nut Material Jackscrew Material Jackscrew Material Spool Piece Length End Connection Meter Run Material Integral orifice block Material Bore diameter Flow Full Scale (Meter Max) Differential Pressure Range Flow Range Permanent Pressure Loss @ Noise (dBA)  IBR Certification NACE Requirement	ial		Facing  / D)  Min.	Max. Max.	ASTM A 19 N/A	3 GR. B CLASS 1	N/A	N/A				
CALCULATION RESULT	34 35 36 37 38 39 40 41 42 43 44 45 46 47	Bolt / Nut Material Jackscrew Material Jackscrew Material Spool Piece Length End Connection Meter Run Material Integral orifice block Material Bore diameter Flow Full Scale (Meter Max) Differential Pressure Range Flow Range Permanent Pressure Loss @ Noise (dBA)  IBR Certification NACE Requirement PWHT Requirement	ial		Facing  / D)  Min.	Max. Max.	ASTM A 19 N/A	3 GR. B CLASS 1	N/A	N/A				
CALCULATION RESULT SPECIAL OPTIONS	34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49	Bolt / Nut Material Jackscrew Material Jackscrew Material Spool Piece Length End Connection Si Meter Run Material Integral orifice block Material Bore diameter Flow Full Scale (Meter Max) Differential Pressure Range Flow Range Permanent Pressure Loss @ Noise (dBA)  IBR Certification NACE Requirement PWHT Requirement Radiography Requirement	ial		Facing  / D)  Min.  Min.	Max. Max.	ASTM A 19 N/A	3 GR. B CLASS 1	N/A	N/A	VTA			
CALCULATION RESULT	34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49	Bolt / Nut Material Jackscrew Material Jackscrew Material Jackscrew Material Spool Piece Length End Connection Si Meter Run Material Integral orifice block Material Bore diameter Flow Full Scale (Meter Max) Differential Pressure Range Flow Range Permanent Pressure Loss @ Noise (dBA)  IBR Certification NACE Requirement PWHT Requirement Radiography Requirement Line No.	ial	Beta Ratio (d	Facing  / D)  Min.  Min.	Max. Max.	ASTM A 19 N/A	18 (rev	N/A	N/A N/A N/A	VTA			
CALCULATION RESULT SPECIAL OPTIONS	34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	Bolt / Nut Material Jackscrew Material Jackscrew Material Jackscrew Material Spool Piece Length End Connection Si Meter Run Material Integral orifice block Material Bore diameter Flow Full Scale (Meter Max) Differential Pressure Range Flow Range Permanent Pressure Loss @ Noise (dBA)  IBR Certification NACE Requirement PWHT Requirement Radiography Requirement Line No.	) ) @ Max. Flow	Beta Ratio (d	Facing  / D)  Min.  Min.	Max. Max.	ASTM A 19 N/A	18 (rev	N/A 7 2)	N/A N/A N/A	VTA			
CALCULATION RESULT SPECIAL OPTIONS	34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	Bolt / Nut Material Jackscrew Material Jackscrew Material Jackscrew Material Spool Piece Length End Connection Si Meter Run Material Integral orifice block Material Bore diameter Flow Full Scale (Meter Max) Differential Pressure Range Flow Range Permanent Pressure Loss @ Noise (dBA)  IBR Certification NACE Requirement PWHT Requirement Radiography Requirement Line No. Size Ci	) ) @ Max. Flow	Beta Ratio (d	Facing  / D)  Min.  Min.	Max. Max.	ASTM A 19 N/A	18(rev 18/7) N/A 3/4"	N/A 7 2)	N/A N/A N/A	VTA			
CALCULATION RESULT  SPECIAL OPTIONS LINE	34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 50 51	Bolt / Nut Material Jackscrew Material Jackscrew Material Jackscrew Material Jackscrew Material End Connection Si Meter Run Material Integral orifice block Material Bore diameter Flow Full Scale (Meter Max) Differential Pressure Range Flow Range Permanent Pressure Loss @ Noise (dBA)  IBR Certification NACE Requirement PWHT Requirement Radiography Requirement Line No. Size Ci Manufacturer	) ) @ Max. Flow	Beta Ratio (d	Facing  / D)  Min.  Min.	Max. Max.	ASTM A 19 N/A	18(rev 18/7) N/A 3/4"	N/A 7 2)	N/A N/A N/A	VTA			
CALCULATION RESULT  SPECIAL OPTIONS LINE	34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 50 51 52	Bolt / Nut Material Jackscrew Material Jackscrew Material Jackscrew Material Jackscrew Material End Connection Si Meter Run Material Integral orifice block Material Bore diameter Flow Full Scale (Meter Max) Differential Pressure Range Flow Range Permanent Pressure Loss @ Noise (dBA)  IBR Certification NACE Requirement PWHT Requirement Radiography Requirement Line No. Size C Manufacturer Model	) ) @ Max. Flow	Beta Ratio (d	Facing  / D)  Min.  Min.	Max. Max.	ASTM A 19 N/A	18(rev 18/7) N/A 3/4"	N/A 7 2)	N/A N/A N/A 10-P-2403A/I	VTA  VTA  3  Sch. 80			
CALCULATION RESULT  SPECIAL OPTIONS LINE	34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 50 51 52	Bolt / Nut Material Jackscrew Material Jackscrew Material Jackscrew Material Jackscrew Material End Connection Si Meter Run Material Integral orifice block Material Bore diameter Flow Full Scale (Meter Max) Differential Pressure Range Flow Range Permanent Pressure Loss @ Noise (dBA)  IBR Certification NACE Requirement PWHT Requirement Radiography Requirement Line No. Size C Manufacturer Model	) ) @ Max. Flow	Beta Ratio (d	Facing  / D)  Min.  Min.	Max. Max.	ASTM A 19 N/A	18 (rev	N/A 72) 300	N/A N/A N/A 10-P-2403A/I	VTA  VTA  8  Sch. 80			
CALCULATION RESULT  SPECIAL OPTIONS LINE	34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 50 51 52	Bolt / Nut Material Jackscrew Material Jackscrew Material Jackscrew Material Jackscrew Material End Connection Si Meter Run Material Integral orifice block Material Bore diameter Flow Full Scale (Meter Max) Differential Pressure Range Flow Range Permanent Pressure Loss @ Noise (dBA)  IBR Certification NACE Requirement PWHT Requirement Radiography Requirement Line No. Size C Manufacturer Model	) ) @ Max. Flow	Beta Ratio (d	Facing  / D)  Min.  Min.	Max. Max.	ASTM A 19 N/A	18(rev 18(rev N/A 3/4" Number	N/A  72)  300	N/A N/A N/A 10-P-2403A/I	VTA  VTA  3  Sch. 80			
CALCULATION RESULT  SPECIAL OPTIONS  LINE  PURCHASE	34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 50 51 52	Bolt / Nut Material Jackscrew Material Jackscrew Material Jackscrew Material Spool Piece Length End Connection Si Meter Run Material Integral orifice block Material Bore diameter Flow Full Scale (Meter Max) Differential Pressure Range Flow Range Permanent Pressure Loss @ Noise (dBA)  IBR Certification NACE Requirement PWHT Requirement Radiography Requirement Line No. Size Ci Manufacturer Model Requisition No.	) ) @ Max. Flow	Beta Ratio (d	Facing  / D)  Min.  Min.  item No  Sch.	Max. Max. Kg/cm2g	ASTM A 19 N/A	18(rev 18(rev N/A 3/4" Number	N/A 72) 300	N/A N/A N/A 10-P-2403A/I	VTA  VTA  8  Sch. 80			
CALCULATION RESULT  SPECIAL OPTIONS  LINE  PURCHASE  2	34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 50 51 52	Bolt / Nut Material Jackscrew Material Jackscrew Material Jackscrew Material Spool Piece Length End Connection Si Meter Run Material Integral orifice block Material Bore diameter Flow Full Scale (Meter Max) Differential Pressure Range Flow Range Permanent Pressure Loss @ Noise (dBA)  IBR Certification NACE Requirement PWHT Requirement Radiography Requirement Line No. Size Ci Manufacturer Model Requisition No.	) ) @ Max. Flow	Beta Ratio (d  Equipment	Facing  / D)  Min.  Min.  item No  Sch.	Max. Max. Kg/cm2g	ASTM A 19 N/A	18(rev 18(rev N/A 3/4" Number	N/A  72)  300	N/A N/A 10-P-2403A/I	VTA  VTA  8  Sch. 80			
ALCULATION LESULT  PECIAL OPTIONS  INE  URCHASE  2 1	34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 50 51 52	Bolt / Nut Material Jackscrew Material Jackscrew Material Jackscrew Material Spool Piece Length End Connection Si Meter Run Material Integral orifice block Material Bore diameter Flow Full Scale (Meter Max) Differential Pressure Range Flow Range Permanent Pressure Loss @ Noise (dBA)  IBR Certification NACE Requirement PWHT Requirement Radiography Requirement Line No. Size C Manufacturer Model Requisition No.  Bore dia revised Comments updated	) ) @ Max. Flow	Equipment 25-01-24 11-08-23	Facing  / D)  Min.  Min.  Sch.  ms131  SV	Max. Max. Kg/cm2g	ASTM A 19 N/A	18(rev 18(rev N/A 3/4" Number	N/A  72)  300	N/A N/A 10-P-2403A/I	VTA  Sch. 80  VSERVE			



NOTES:	
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- 1. The following to be marked on the holder Tag no, Nominal pipe size, Rating, material of Plate & Bore Size, Upstream (or) Up, Orifice diameter.
- No Asbestos material is used.
   Orifice Plate is used for creating back pressure and not for pressure drop / pressure measurement.
   Plate holder shall be Integral Handle- which upon assembly extend to a distance of 50mm length.

- CERTIFICATES: -1. Type, Size, Rating, Material & Dimension test report 2. 3.1 Material Test Certificate 3. PMI Required.

							)
						INCEDIMENT DATACHEET FOR	ELOVACEDVE
2	Bore dia revised	25-01-24	ms131	GR	SDP	INSTRUMENT DATASHEET FOR ORIFICE PLATE	<b>FLOWSERVE</b>
1	Comments updated	11-08-23	SV	GR	SDP	0 102.1 2 12	
0	For approval	09-06-23	SV	GR	SDP		FSPL CODE: 2H-169437:OR
No.	Description	Date	Pred	Chk	App		Rev.:2



2   Service		1	Tag Number	P&IC	) No			PCV-240490 / PC\	/-240	)491		10-PID-2	404				
Second Design Tresport Pris G																	
4   Design   Emperature   F		2	Service	Proc	ess Ca	se		Pressure Control V	alve	(Plan 54)							
## 1. Disagn perspectation	GENERAL	3	Design Pressure Psi.G	•	Min.	1	Мах.	NA				580.15					
Description	OLIVERAL	4	Design Temperature °F		Min.	1	Мах.	NA				199.4 [Re	ev.1]				
0   Hazardous Area Classification   NA		5	Air Supply Pressure Ka/cm	<sup>2</sup> a	Min.	1	Мах.	NA									
B   Plack Name			Hazardous Area Classification	on				NA									
1		7	Ex-Certification					NA									
FOR		8	Fluid Name Fluid S	State	FI	uid Phase		LP Boile	er fee	d water		Liquid		-			
Fig.																	
Table   Pressure   G Pow   Pai		10				GPM		1.7	[Rev	/.1]	2.7	7 [Rev.1]		3.7 [Re	ev.1]		
13   Temperature		_							150					150	)		
PROCESS   CONDITIONS   PROCESS		12	Diff. Pressure @ Flow			Psi					87.1 [R	ev.1]					
To Demark (List, / Steem)		13	Temperature	Oper.	Max.	°F					115	5					
To   To   To   To   To   To   To   To		14	Viscosity			cP					1						
Total Compressibility (GasSteam)		15	Density (Liq. / Steam)			lb/ft <sup>3</sup>					62.4	3					
17   Do   CV (Sass/Steam)   . NA	CONDITIONS	16	Vapour Pressure (Liq.)			â		NA									
18   Z.   Compressibility (Gas-Steam)   NA   NA   NA   NA   NA   NA   NA   N						rtg/oiii u		NA									
19   Sult-off Press, Max, Kg/cm²   % Solid   NA   NA   NA   NA   NA   NA   NA   N				am)		<u> </u>											
20   Critical Press. (Lts.) Krijcm*s   % Flash   NA   NA   NA   NA		_			Solid							NΙΛ					
21   Mol. Wt. (Gas/Steam)		_															
22   Degree of Superheat   Criscal Temperature F   NA		_				- AA-1 \A/r											
CACCULATED   23   X° @ Flow   Min.   Nor.   Max.   0.182   Rev.1   0.289   Rev.1   0.396   Rev.1     24   % Opening @ Flow   Min.   Nor.   Max.   NA   NA   NA   NA   NA   NA   NA   N		_	'				۰=										
CALCULATED   24   % Copening @ Flow   Min.   Nor.   Max.   NA   NA   NA   NA   NA   NA   NA   N																	
RESULTS   24   % Opening @ 1-low   Min.   Nor.   Max.   NA	CALCULATED							0.18		ev.1]	0.28						
25   Noise @ Flow dBA																	
27 Body Size   Body Rating   344   300#   300#   28 BodySize   Body Rating   345 Gr. CFBM   28 BodySize   Body Rating   345 Gr. CFBM   28 BodySize   345 Gr. CFBM   28 BodySize   345 Gr. CFBM   28 BodySize   345 Gr. CFBM   34 Seat Material   58316   31 Bonnet Type   51 Standard   0.631 inch   [Rev.1]   31 Tim   (Ball/PlayDisc) MIX   58316   31 Standard   53316   51 Standard   53 Sta		25	Noise @ Flow dBA	N	Nor.	Max.	<8	35 dE	SA .	<	:85 dBA		<85 c	BA			
28   Sody/Bonnet Material   A35 Gr. CF8M   Salanced		26 Body Type Globe								Quantity			NA				
29   Salanced/Unbalanced   Salanced		27	Body Size Body Rating	3/4"		300#			63	Tag No.			NA				
SOLENOID VALVE   SOLE		28	Body/Bonnet Material	A351 Gr. CF8M				1	64	64 Manufacturer			NA				
SOLENOID VALVE   SOLE		29	Balanced/Unbalanced	Balanced					65	Model			NA	NA			
SoleHold   SoleHold		30						1			Insulation C	lass		NA.			
Second   Standard								SOLENOID VALVE									
Same		_			0.631 Inch	[Dov 1]							147	`			
BODY   AND   SS 16   SS 16   SS 16   Top Guided   SS 16   Top Guided   Top Guided		_			0.031 111011	[IXEV.1]											
S   S   S   S   S   S   S   S   S   S					SS316			1									
SODY AND TRIM   36   Guiding type		٠.						1			Clion						
AND   77   Tag No. Close   78   Tag No. Close   79   Tag No. Close   79   Tag No. Close   70   Tag No. Close   7	BODY							1		Power Supply			NA				
RTM		_															
39   Selected Cv	TRIM																
40   Characteristics								LIMIT SWITCH 7	ŭ					1			
ACTUATOR   ACTUATOR											IVIO	aei		IN F	١		
ACTUATOR   ACTUATOR										Ingress Protection			NA				
A3   Gasket Material		41	•														
44   Conn. In   Size   Rating   3/4"   300#   45   Conn. Un   Facing   Finish   RF   125 AARH   46   Conn. Out   Size   Rating   3/4"   300#   47   Conn. Out   Facing   Finish   RF   125 AARH   82   Air Set   Set Pressure   NA   NA   NA   NA   NA   NA   NA   N		42															
ACTUATOR		43															
46   Conn. Out   Size   Rating   3/4"   300#   47   Conn. Out   Facing   Finish   RF   125 AARH   RF   125 AARH   RF   125 AARH   RF   125 AARH   RF   RT   RF   RT   RF   RT   RF   RF		44	Conn. In Size Rating			300#				Air Reservoir							
ACTUATOR		45	Conn. In Facing Finish	RF		125 AARH			81	Air Set	Set Pr	essure	NA	N/	l.		
ACTUATOR  48 Manufacturer   Model   NA   NA   49 Type		46	Conn. Out Size Rating	3/4"		300#			82	Air Set Connection							
ACTUATOR   49   Type		47	Conn. Out Facing Finish	RF		125 AARH			83	Air Set Material			NA				
ACTUATOR   49 Type		48	Manufacturer Model	NA		NA		40050000150	84	Surge Protection			NA				
So   Travel Stop					1	•		ACCESSORIES		•			NA				
ST   Air Failure Position   NA   St   Hand Wheel   NA   NA   ST   AFR make/model   NA   NA   ST   Fire proofing   NA   S		_						1			n						
S2   Hand Wheel	ACTUATOR							1									
S3   Actuator Housing   NA   NA   NA   NA   NA   NA   NA   N								1									
Standard Connection   NA   NA   NA   NA   NA   NA   NA   N								1		. F9			<del>  </del>				
POSITIONER   Fig.   F	<b>——</b>					NΔ		<del>                                     </del>	80	Inlet Line No			NΔ				
FORTIONER   FORT		_				14/7		ł			Class	Sch		200#	90 Cab		
POSITIONER         57 Increase Signal Valve         NA         92 Size         Class         Sch         3/4"         300#         80 Sch.           58 Ingress Protection         NA         93 Manufacturer         Emerson           59 Electrical Connection         NA         Purchase         94 Model         NPS 3/4 MR95HT [Rev.1]           95 Requisition No.         NA						INIA		LINE			OldSS	SUII		300#	ou Stil.		
58 Ingress Protection NA 59 Electrical Connection NA 60 Pneumatic Connection NA 93 Manufacturer Emerson 94 Model NPS 3/4 MR95HT [Rev.1] 95 Requisition No. NA						INA		ł			101	Io.i		222"	00.0		
59 Electrical Connection NA PURCHASE 94 Model NPS 3/4 MR95HT [Rev.1] 60 Pneumatic Connection NA 95 Requisition No. NA	POSITIONER		•									Sch		300#	80 Sch.		
60 Pneumatic Connection NA 95 Requisition No. NA								1									
			Electrical Connection					PURCHASE					NPS 3/4 M	1R95HT [Rev.1	]		
PROC. NOTE 61 NACE / IBR / SIL NA FAB. NOTE 96 PWHT Requirement INA		60 Pneumatic Connection NA					95 Requisition No.					NA					
· · · · · · · · · · · · · · · · · · ·	PROC. NOTE	61	NACE / IBR / SIL	NA				FAB. NOTE	96	PWHT Requireme	ent						

- Notes:
  1] Stainless steel name plate which is engraved with Make, Model No., Tag No., Operating Range, Set Pressure, Size, Rating, MOC shall be permanently affixed on the case or body.
  2] Single seated valve shall have top guiding.
  3] Direction of flow must be stamped on valve body
  5] Set Pressure: 62.9 Psi.G [Rev.1]
  6] The Valve shall be of downstream control.
  7] Diaphragm shall be of SS316
  8] Flanges shall be as per ASME B16.5

# Certificates:

- Certificates:

  1. Certificate of Compliance to Flowserve Sanmar IDS Specification

  2. Hydro test report (Body)

  3. 3.1 Material Test Certificate.

  4. PMI Required.

  5. Seat Leakage, Pressure Test, Set Pressure Test Report

  6. DP Test Report.

  7. RT Test Report.

						INSTRUMENT DATASHEET	FLOWSERVE
1	Comments updated	11-08-23	SV	GR	SDP	Control Valve - Globe	0
0	For Approval	11-05-23	SV	GR	SDP		FSPL DOC NO : 2H-169437:PCV
No.	Description	Date	Pred	Chk	App	Code: Doc. No.:	Rev.: 1



		1	Tag Nun	nber		Process Ca	ase		PSV-24049	00A / PSV	/-240490B	NA			
		2	Service			1			Pressure S	Safety Va	alve (Plan 54)	1			
		3	Line No.			Equipment	No.		NA		()	10-P-2403 A/B			
		4		Full, Sem	i)	1. 1. 1	-		Full Nozzle	9					
GENE	RAL	5	Design		Relief, Safe	tv-Relief			Safety Rel						
		6	Type			w, Pilot Ope	rated		Convention		g Loaded				
		7	Bonnet 7		, 50110	,эг оро			Closed	opring	J				
		8	P&ID No						10-PID-24	<u>04</u>					
		9			Operating /	Snare)			10-F1D-2404						
<del></del>			Fluid Na		operating /	Fluid State			LP Boiler feed water Liquid						
		11		d Flow Ca	nacity	i iuiu State	GPM		3.7 [Rev.2]		ار	Liquid			
		12	Mol. Wt.		распу		GFIVI		3.7 [Nev.z	J					
		_			Set Pressu	150	Doig		- C2 O [Day	41		70.2 [Dov. 4]			
		13					Psig		62.9 [Rev.	ij		72.3 [Rev.1]			
		14	Oper. Te	emp.	Relieving	ı emp.	°F		115			115			
		15	D		Constant		Psig		NA						
		_	Back Pre	essure	Variable		Psig		NA						
		17			Total		Psig		NA						
PROC			% Overp			% Flash			10%			NA			
COND	DITIONS			ssibility Fa					NA						
		_		eat of Va					NA						
				Ratio of Specific Heats					NA						
		22	Relief D	ensity	Oper. Den	sity	lb/ft <sup>3</sup> [R	ev.1]	62.43			62.43			
		23	Relief Vi	iscosity			cР		1						
		24	Baromet	ric Pressu	ıre		Psia		14.65						
		25	Design F	ressure	Psi	g	Min.	Max.	NA			580.15			
		26	Design 1	Temperatu	ıre <sup>0</sup> F		Min.	Max.	NA			240 [Rev.2]			
		27		vall temp.	1	Surface Are	1		NA						
			Design (			Sullace All	ca (III )		ASME Sec VIII						
			Sizing B						API-RP-520 (Part I & II)						
				scharge to	)				Atmospher	,	/				
		_							0.014 [Rev						
BASIS	S AND	31		ed Area (IN					0.014 [Rev.	_					
SELE	CTION	32	Selected Area (IN2)     Orifice Designation							1]		Doguirod ACME !!	V Codo Cto		
		_				Code Stam			D	) a 43		Required - ASME U	v Code Stamp		
		34		ow capaci	-		GPM		30.732 [R			T			
		_		n force (da	aN)	Special Re	quireme	nt	0.17 [Rev.1]			NA			
		36	Blowdov						Less than 20%						
CONN	NECTIONS	37	Conn. In		Size	Rating		Finish	1" 300			RF	125 - 250 AARH		
001111		38	Conn. O	ut	Size	Rating	Facing	Finish	2"		150	RF	125 - 250 AARH		
		39	Body an	d Bonnet					SS 316						
		40	Seat (No	ozzle) and	Rings				SS 316						
		41		t Seat Sea	al				NA						
	DIALE	42	Guide ar	nd Rings					SS 316						
MAIE	RIALS	43		-					SS 316						
		44							NA						
		45	Disc / Pi	ston					316 SST						
		_	Bolts / N						NA						
		47		ylinder &	Bonnet				NA						
PILOT	MATERIAL	48	Nozzle 8						NA						
				rewed or I	Bolted				Screwed						
				lain or Pa					N/A [Rev.1	1					
		_			uneu										
ODT:	ONE	51		•					N/A [Rev.1	1					
OPTIC	JNS		Bug Scre						NA						
				w prevent					NA						
					ating Factor				NA						
		55		n Allowar	nce				NA						
	·	56		turer							wood Crosby				
PURC	CHASE	57	Model						1D2JLTJO	S-E35S	J [Rev.1]				
		58	Requisit	ion No.					-						
		•													
					İ			INCTDIMENT DATACHEET							
2	Comments upo	dated			09-04-24	PB	JM	JM SDP INSTRUMENT DATASHEET Pressure Safety Valve			SERVE				
1	Comments upo				11-08-23	SV	GR	SDP	1	ressure	e Safety Valve				
0	Preliminary Iss				11-05-23	SV	GR	SDP	İ						
No Description Date Pred				Chkd	App	Code		FSL DOC NO: 2H	H-169437:PSV	Rev.: 2					
		- 50/1									Li		1101 2		



PSV-240490A / PSV-240490B Tag Number :

1. Stainless steel (SS304) name plate which is engraved with the tag no, model no, valve / orifice size, rated capacity, ser pressure, year of manufacture etc. shall be permenantly fixed on the case or body

- 2. Meet the requirements of API-520, for sizing.
- 3. No Asbestos material is used.

### Certificates:

- Certificate of Compliance to Flowserve Sanmar IDS Specification
   Hydro test certificate
- 3. 3.1 Material test certificate (Body or cylinder)
   4. PMI Required.
- Seat Leakage, Pressure Test, Set Pressure Test report.
- 6. Type Test Report.
  7. ASME UV Stamping.

# Decodification:

1D2 - Inlet size 1" x orifice -D x outlet size 2" JLTJOS-E - Conventional with liquid trim

- 5 JLTJOS-E Conventional with liquid trim
- S -SST body and bonnet / 316SS TRIM / 316 spring
  J- Standard threaded cap

2	Comments updated	09-04-24	PB	JM	SDP		STRUMENT DATASHEET Pressure Safety Valve	FLOWSFRV	'F
1	Comments updated	11-08-23	SV	GR	SDP		Flessule Salety Valve		0
0	Preliminary Issue	11-05-23	SV	GR	SDP				
No	Description	Date	Pred	Chkd	Арр	Code	FSL DOC NO: 2H	-169437:PSV	Rev.: 2



GOLDEN TRIANGLE REGULER COMPANY	Golden Tria	ngle Polymers	Project	Document Title: IINSTRUMENT DATASHEET FOR IGF EFFLUENT PUMP (10-P-2403A/B)  Document No.:V-215A-201-A-EIC-542						
GTPP	001115117	DEGG! LITION	011557	Rev. No.: 3		10770 1007 10000				
	COMMENT	RESOLUTION	SHEET	Vendor Name: Sparkle Clean Tech Pvt. Ltd.						
S.No.	Ref Doc No./ Title	Ref. Clause	Discipline	JGC Comments	Vendor Response	Status				
3.NO.	Rei Doc No./ Title	Nei. Ciause	Discipline	Date: 10.05.2024	Date: 14.06.2024	Closed/ Open				
1	V-215A-201-A-EIC-542	Page No - 1	INSTRUMENTATI ON	NA  Max. (NA  NA  NA  2 valve manifold (FSPL Scope)  NA  Rèquired  NA  NA  NA  NA  NA  NA  NA  NA  NA  N	Noted & Updated					
2	V-215A-201-A-EIC-542	Page No - 1	INSTRUMENTATI ON	Instrument datasheet for Pressure transmitter    Variable   Variab	Noted & Updated					

