


GENERAL	1	Tag No.	P&ID No.		154-FV -0028	D-154-1225-0003G					
	2	Service	154P011A/B/C MIN FLOW								
	3	Design Pressure	kPa-g	Min.	Max.	1605					
	4	Design Temperature	°C	Min.	Max.	67					
	5	Air Supply Pressure	kPa-g	Min.	Max.	588	1030				
	6	Elec. Haz. Area Class. STD/Zone/Method/Gr./Temp.			ATEX	Zone 2	EEx d	Group IIB T3			
PROCESS CONDITIONS	7	Fluid Name	Fluid State	Fluid Phase		GASOLINE 92		Liquid	Single phase		
	8			Min.	Nor.	Max.					
	9	Flow		Sm ³ /h	240	260	300				
	10	Inlet Pressure @ Flow		kPa-g	480.8	454.8	397.7				
	11	Diff. Pressure @ Flow		kPa	250.4	189.1	94.3				
	12	Inlet Temperature		°C	42						
	13	Viscosity		cP	0.441						
	14	Density (Liq.)		kg/m ³	738						
	15	Vap. Press. (Liq.)		kPa-a	72.4						
	16	Cp / Cv (Gas/Steam)		-							
	17	Z factor (Gas/Steam)		-							
	18	Shut-off Press. Max.		Solid	1605	kPa-g	%				
	19	Critical Press. (Liq.)		Outlet Flashing	kPa-a		%				
20	MW (Gas/Steam)		Outlet Vap. MW								
CALC. RESULTS	21	Cv @ Flow	Min.	Nor.	Max.	150.6	187.8	306.9			
	22	Lift @ Flow %	Min.	Nor.	Max.	VTA	VTA	VTA			
	23	Noise @ Flow dBA	Min.	Nor.	Max.	<70	<70	<70			
BODY AND TRIM	24	Body Type	V-Notch Ball		SOLENOID VALVE	53	Quantity	N/A			
	25	Size	Rating	4 in		CL 150	54	Tag No.			
	26	Body/Bonnet Material	A216 WCB			55	MFR	Model			
	27	Corrosion Allowance	1.5 mm			56	Type	Coil			
	28	Bonnet Type	Standard			57	When De-Energ. Valve				
	29	Trim Type	Size	Cage 1CC(VTA)		(VTA)	58	Ingress Protection			
	30	Material	410SS Hardened			59	Electrical Connection				
	31	Packing Material	PTFE Chevrons			60	Pneumatic Connection				
	32	Selected Cv	525 (VTA)			61	Manual Reset				
	33	Characteristics	Rotary Motion			LIMIT SWITCH	62	Tag No.	N/A		
34	TSO	Leakage Class	No	ANSI IV	63		O/C Position				
35	Flow Direction	Over			64		MFR	Model			
PROCESS CONNECTION	36	Conn. In Size	Rating	4 in	CL 150	65	Type				
	37	Type	RF ASME B16.5			66	Ingress Protection				
	38	Conn. Out Size	Rating	4 in	CL 150	67	Electrical Connection				
ACTUATOR	39	Type	RF ASME B16.5			ACCESSORIES	68	Air Reservoir	No		
	40	MFR	Savern Glocon				69	Air Set	Set Pressure	Yes	450 kPag
	41	Type	Pneumatic Cylinder (Double)				70	Air Set Connection	1/4" NPTF		
	42	Travel Stop	N/A	@	%		71	Air Set Material	Aluminium		
	43	Air Failure Position	Open				72	Surge Protection	Yes		
POSITIONER	44	Hand Wheel	Yes			73	Air Lock Device	No			
	45	MFR	Model	Metso	ND9200	LINE	74	Inlet Line Number	4"-P-154-0308-A1AP-NI		
	46	Type	E/P - HART				75	Size Class Sch	4 in	A1AP	STD
	47	Signal Type	4-20mA with HART				76	Outlet Line Number	4"-P-154-0308-A1AP-NI		
	48	Increase Signal Valve	Close				77	Size Class Sch	4 in	A1AP	STD
	49	Ingress Protection	IP 65			PURCHASE	78	Manufacturer	VTA		
50	Electrical Connection	Metric 20mm x 1.5 ISO			79		Model	VTA			
51	Pneumatic Connection	1/4" NPTF			80		Requisition No.	VTA			
PROC. NOTE	52	NACE Requirement	No			FAB. NOTE	81	PWHT Requirement	Yes		

Notes: See notes

INSTRUMENT SPECIFICATION
Control Valve



1. This control valve is for pump minimum flow.
2. Actuator model number: **VTA**
3. Density @ standard condition is 763 kg/m3.

				INSTRUMENT SPECIFICATION Control Valve			
6.A	N.T.Q	2/25/2025	Issue for Review				
6	N.T.Q	2/12/2025	As-Built				
5	J.K.S	4/3/2017	Issue for Construction				
No.	By	Date	Revision	Code: 4101	Dwg. No.: 154-FV -0028-SP	Sheet S-9.2 of 63	Rev.: 6.A