
		WEST CLIFF COAL PREPARATION PLANT RAW COAL CIRCUIT AND RELIABILITY IMPROVEMENT PROJECT								LCV 4-30A.1	REVIEW
		ABN 91 760 798 210				Equipment tag:					
		Valve Datasheet MODULATING BUTTERFLY VALVE DN100									
FILE NAME : 333588-0000-60-107-0037 Date Printed: 09-Nov-10		Electronic version current Uncontrolled copy valid only at time of printing				Current Revision no.: 2 Number of pages: 1					
Usage:	LEVEL CONTROL	A	31/03/2010	Internal Review	TD	NM	JW	NM	KW	MR	
Project No.:	333588	B	20/04/2010	Client Review	TD	NM	JW	NM	KW	MR	
Plant Area:	0600	0	05/07/2010	Approved for Enquiry	TD	NM	JW	JH	KW		
Equipment Description:	MODULATING VALVE	1	11/10/2010	Approved for Use	TD	DW	MR	JH	KW		
		2	09/11/2010	Seat material change		DW	MR	JH	KW		
		REV	Date	Description of Issue	Originator	CHKD	INSTR LEAD	AREA PIPE ENG.	AREA PROCESS ENG.	AREA MECH ENG	
IDENTITY	1	Equipment Tag	Old Tag	LCV 4-30A.1							1
	2	P&ID Number	WCP-10046								
	3	Service Description	Modulating Butterfly valve								
	4	Operated Type	Modulating Pneumatic								
	5	Valve Type	VF1								
	6	Valve Code	VF1-41-100								
	7	Area	0600								
	8	Hazardous Area Classification	None								
	9	Installation Detail	#								1
EQUIPMENT / LINE DATA	10	Equipment Number	502-V0583								
	11	Line Number	150-CW-4.30A-XS								
	12	Line Size and Schedule	DN 100								Extra Strong
	13	Pipe Material	Carbon Steel								
	14	Pipe Code	AS 4041								
	15	Jacket Material	N/A								
	16	Flange Rating	1400kPag								
SERVICE CONDITIONS	17	Fluid Medium	Clarified Water								
	18	Fluid State	% Solids (w/w)	Liquid							Zero
	19	Fail Action (Loss of Signal / Loss of Air)	Fail last								Fail Last
	20	Air Supply Pressure (Min / Nominal / Max) (kPag)	420 kPa								690 kPa
	21										850 kPa
	22	Slurry Flow	UNITS								OPERATING
	23	Gas Flow	m³/h								100
	24	Inlet Pressure	kPag								350
	25	Outlet Pressure	kPag								40
	26	Pressure Drop	kPa								40
	27	Inlet Temperature	°C								25
	28	Inlet Specific Gravity									1
	29	Inlet Compressibility Factor									N/A
	30	Inlet Viscosity	cP								
	31	Inlet Critical Pressure	KPag								
	32	Ambient Temperature °C	Max shut-off pressure (kPag)								0 to 50 °C
	33	Inlet Vapour Pressure	kPa (estimated)								500
	34	Flow Coefficient (CV)	#								
	35	Travel	#								
	VALVE BODY	36	Manufacturer	Model No.	Keystone						
37		Body Type	Reference Std	Butterfly (Wafer)							#
38		Body Size	Face to Face Dim.	DN 100							51 mm #
39		Body Material	Flange Material	ASTM A126 Gr B							N/A
40		Steam Jacket Type	Jacket Material	N/A							N/A
41		End Connection Type	Rating	AS 2129 E							1000kPa
42		Selected CV	Flow Characteristic	#							#
43		Bonnet Type	Bonnet Material	N/A							N/A
44		Trim Type / Size	Shaft seal	#							Buna N
45		Seat Material	Stem Material	EPDM							316 S/S
46		Mass	6 kg #								1
47		Plug / Ball / Disc Material	316 S/S								1
48		Break Torque (Nm)	Leakage	#							Tight Shutoff
49		Estimated Sound Pressure Level (@ 1m)	#								
50		NACE Cert. Req'd - Yes or No	No								
VALVE ACTUATOR	51	Manufacturer	Model No.	Keystone							Figure 79U 006 DA (Note 1, 2 & 4)
	52	Type	Action	Double Acting Cylinder							Air to open and close
	53	Mass	End Cap Material	3.2 kg #							Anodised aluminum
	54	Force / Torque	#								
	55	Mounting Orientation	Accessories	Top - parallel to pipe							Safety Lockout (Note 2)
VALVE POSITIONER	56	Manufacturer	Model No.	Keystone							F793 - 6100
	57	Type	Communications	Analogue							N/A
	58	Input Signal	Output Signal	4 - 20mA							0 - 600 kPa
	59	Action	Feedback	Direct							4 - 20mA
	60	Electrical Entry	IP Rating	M20 x 1.5							IP65
	62	Gauges	Bypass	Yes							No
	63	Hazardous Area Certification	None								
ACCESSORIES	69	Filter Regulator	Yes								1
	70	Manufacturer	Model No.	SMC							AC40B-N04DE
	71	Material	Size	Epoxy coated aluminum							1/2 inch NPT
	72	Incoming Air Isolation Valve	Yes								1
	73	Manufacturer	Model No.	SMC							VHS4500-N04-Nil-X116
	74	Connection Size/Type	1/2 inch NPT								Suit SS tube
	75	Material	Lockable	Epoxy coated aluminum							Yes
PURCHASE	77	Vendor									
	78	Purchase Order	PO Item Number								
NOTES	79	Note 1 - To be read in conjunction with Specification H333588-0000-60-123-0011(Specification for Automated Valves)									1
	80	Note 2 - Valve to be lockable									
	81	Note 3 - Testing requirements API 598									
	82	Note 4 - Markings shall be in accordance with MSS SP-25. Equipment tag number shall be stamped on the nameplate for identification.									1
	83	Note 5 -									
	84	# Supplier to complete									# Supplier to confirm