






FOCUS-1 Specification Sheet : DN 50 – PN16 / PN40

PROCESS MEDIA		Single phase liquid with <5% solid content, <2% gas content and max. Viscosity up to 100 cSt					
APPLICATIONS		Direct Flow control applications replacing either just a valve or combination of valve with other equipment (e.g. flowmeter)					
DESCRIPTIONS		CONTROL ELEMENT		MEASUREMENT SENSOR ELEMENTS			
ELEMENT NAME		Valve					
TECHNOLOGY		Valve position % or Flow control					
MEASURED & CALCULATED PARAMETERS		% Opening at real time dynamic flowrate conditions		 <p>Total Weight = 78 Kg</p>			
		Cavitation, Flashing and Estimated Sound Pressure level					
		Kv					
TECHNICAL PARAMETERS		Overall Control Accuracy		Measurement accuracy		Uncertainty, typically better than 0,5% of setpoint value and stability better than + 0,2%.	
		Max flow velocity		Pressure measurement range		N/A	
		Rangeability		Burst pressure		N/A	
		Face to Face		Temperature measurement range		N/A	
MATERIAL OF CONSTRUCTION		Body / Bonnet		Body		N/A	
		Stem		Process Connection		N/A	
		Plug		Housing		N/A	
		Seat		Sensor Diaphragm		N/A	
		Packing Gasket		O-Ring		N/A	
DEVICE PARAMETERS		Seat leakage		ANSI Class IV & ANSI Class V		Electronics Version	
		Size, Seat bore, and Kv		DN 50 with SB 24mm & Kv 10 DN 50 with SB 38mm & Kv 25 DN 50 with SB 48mm & Kv 40		Electrical connection	
		Pressure class		PN16 PN 40		Air Filter Regulator	
		End connection		Flanged connections according B1 EN 1092-1 <Ra 3,212,5µm>		Pneumatic conn.	
		Trim type		Standard V - Port plug with Metal seal		Air supply min/max	
		Flow characteristics		Linear / Eq % as standard Linear when flow used as setpoint		Power supply	
						Power Consumption	
				Cable entry			



FOCUS-1 DEVICE PARAMETERS			PRE-REQUISITES FOR INSTALLATION	
Design pressure (min. / max.)	PN16 0 barg - 15 barg PN40 0 barg - 36 barg		Inlet run	Min. 4 DN (straight inlet)
Design temperature (min. / max.)	-40 °C up to 180 °C		Outlet run	0 DN (straight outlet)
Ambient conditions (min. / max.)	-20 °C up to 55 °C		Face to Face Dimension (As per EN 558-1)	DN 50 PN 16 : 300 mm DN 50 PN 40 : 300 mm
DEVICE MANAGEMENT & VALUE-ADDED FEATURES		APPROVALS & CERTIFICATES		
General	All inputs and outputs are galvanically separated from main power supply and each other. Through a browser user interface all operating settings can be reviewed and adjusted	NAMUR	NE21, 43, 53, 80,107	
Input & Output Signal	Input Signal for Set Point : 4-20 mA Output Signal to DCS/PLC : 4-20 mA (active & passive), HART7® Protocol			
Digital Twin Technology	Sensor redundancy owing to the diagnostic algorithms on-board that use correlation of dynamic process data to generate model values for key process parameters such as flow, pressure, etc.	Low Voltage Directive	Over-voltage category	II
Diagnostics	Product & Process Monitoring & Alarming		Material group (CTI:175..250)	III
			Pollution deg.	3
			Humidity	30%-100%
Altitude	2,000m			
Remote operations	Wi-Fi and wired connection with access control & dual password protection to the internal web server for full functionality & configuration	Hazardous Area Classification	For use in non-hazardous areas	
Remote access & control	Hardware security authorization via single button on device further granting remote access for configuration & verification			
Single button control & Bluetooth	Single button for easy and secure installation & maintenance access via smartphone, tablet or laptop	Ingress Protection (IP) as per IEC 529/EN60529	IP66	
WiFi / Ethernet	Either Wi-Fi or 4 wire ethernet can be used for remote access and configuration			
Communication protocols	4-20mA & HART7® Protocol	Shock Resistance	IEC 65-2-2730g for 18ms	
Health status communication	Communication via LED Ring in colors as per NAMUR NE107 & NE43 standards and via HART			
Languages	English, German, French	Vibration Resistance	IEC 68-2-6; 0,5g 1800Hz up to 1800 Hz IEC 60721; 15g	
On board data storage	Timestamped log of process & diagnostic data with 32 GB capacity sufficient for 18 months of data storage			
Webserver	Integrated for installation, service, and monitoring	IT Security	According to IEC 62443	