

TROVIS 3793 & TROVIS SAFE 3793



TROVIS 3793/TROVIS SAFE 3793

- Higher air capacity which often eliminates need for additional pneumatic accessories like Volume Boosters or Quick Exhaust Valves
- Designed as single acting, double acting or as a special version of single acting with two independent pneumatic output channels
- Modular design allows both pneumatic and functional modules to be replaced or added as required
- Non-contact, protected travel sensor reduces potential mechanical damage due to process pressure surges while maintaining a trusted physical linkage to the control valve
- Plain-text display on the device allows for clearer communication of NAMUR Recommendation (NE 107) states and messages
- HART®7 offered to realize the latest advances in communication protocol technology

TROVIS 3793

- For use on control valves
- Throttling service
- Quick and precise control, even with large actuators

TROVIS SAFE 3793

- For use on on/off valves in safety-instrumented systems
- On/off service (discrete set point analysis)
- Partial and full stroke testing (PST, FST) functions to increase plant availability



DATA

	TROVIS 3793	TROVIS SAFE 3793
Attachment	Linear actuators: SAMSON integral attachment, NAMUR rib, IEC 60534-6-1, VDI/VDE 3847 Rotary actuators: VDI/VDE 3845	
Travel / Opening Angle	Adjustable from 3.6 to 300 mm Adjustable between 24 and 170°	
Set point	4 to 20 mA, two-wire device, reverse polarity protection, split-range operation Minimum current: 3.75 mA for display / operations; 3.90 mA for pneumatic functionality Static Destructive Limit: 40V, internal current limit approx. 40 mA Load Impedance: $\leq 9.9 \text{ V}$ (corresponds to 495Ω at 20 mA)	
Supply pressure	30 to 150 psi	
Signal pressure (output)	0 psi up to supply pressure Air capacity adjustable by software	
Communication	HART® 7 communication or SSP (SAMSON protocol)	
Pneumatic Modules	One standard pneumatic module for either single or double acting actuators (Cv 0.4 filling / Cv 0.5 venting) Two standard pneumatic modules for either single or double acting actuators (Cv 0.8 filling / Cv 1.0 venting) Two specialized pneumatic modules for two independent single-acting modules. (Cv 0.4 filling / Cv 0.5 venting)	
Performance Measures	Characteristics: 3 for globe valves, 2 for rotary valves, 1 user-defined Hysteresis $\leq 0.3 \%$ Sensitivity $\leq 0.1 \%$, adjustable by software	
Explosion protection	Intrinsic safety (e.g. FM Class III, Div. 1, Groups A-G, Type 4X) Non-incendive (e.g. FM Class III, Div. 2, Groups A-G, Type 4X)	
Connections	Electrical: Four, 1/2 NPT or M20x1.5 connections (standard version has 3 connections fitted with blanking plugs) Pneumatic: NPT 1/4 or G 1/4	
Materials	Die-cast aluminum, chromate coating and powder paint coated Stainless steel (on request)	
Optional Functional Modules	2x Software based binary contacts (NAMUR or PLC) + Binary Output 2x Inductive Limit Switch Contacts + Binary Output 2x Mechanical Limit Switch Contacts Forced Venting Function + Binary Input + Binary Output Analog Position Transmitter + Binary Input + Binary Output	
Diagnostics	Integrated control valve diagnostics with pressure sensors capable of logging of 400 records that continuously monitors end positions; calculates valve signatures (drive signal & frictional) and dynamic stress factor; has histogram for travel, set point deviation and load cycles; offers both partial and full stroke testing; and allows for a graphical overlaying of data which all together enables entire service life and specific time span analysis to be performed.	

