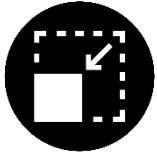




▶ SMART42

8566R1005 12V

8566R1006 24V



COMPACTNESS



ROBUSTNESS



LONG LIFETIME

Force
Stroke
Communication

240 N
25 mm
CAN J1939

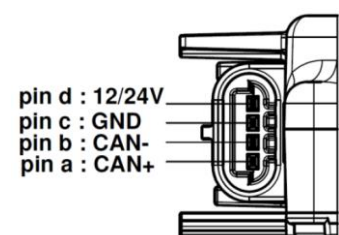
The SMART42 is an electromechanical actuator for spool valves in mobile hydraulics. Direct actuation of the spool valve allows a pressure-independent, accurate and hysteresis-free operation even at very low ambient temperatures. This highly reliable and energy efficient actuator enables moreover an easy electrification of mechanical valves and provides improved driver comfort and productivity.

▶ Features and Benefits

Electromechanical direct actuation of the spool	No need of hydraulic pilot circuit, hysteresis-free
Stall Detection	Detection of valve sticking effects
Dead-Zone Compensation	Compensation of mechanical play and wear during product lifetime for increased precision
Small Size, width < 42 mm	Easy integration for multi-valve assemblies
Integrated CAN electronics	On-Board Diagnostics
Robust	Long lifetime in harsh environments
Linearization	Full customizable linearization of oil flow vs CAN commands

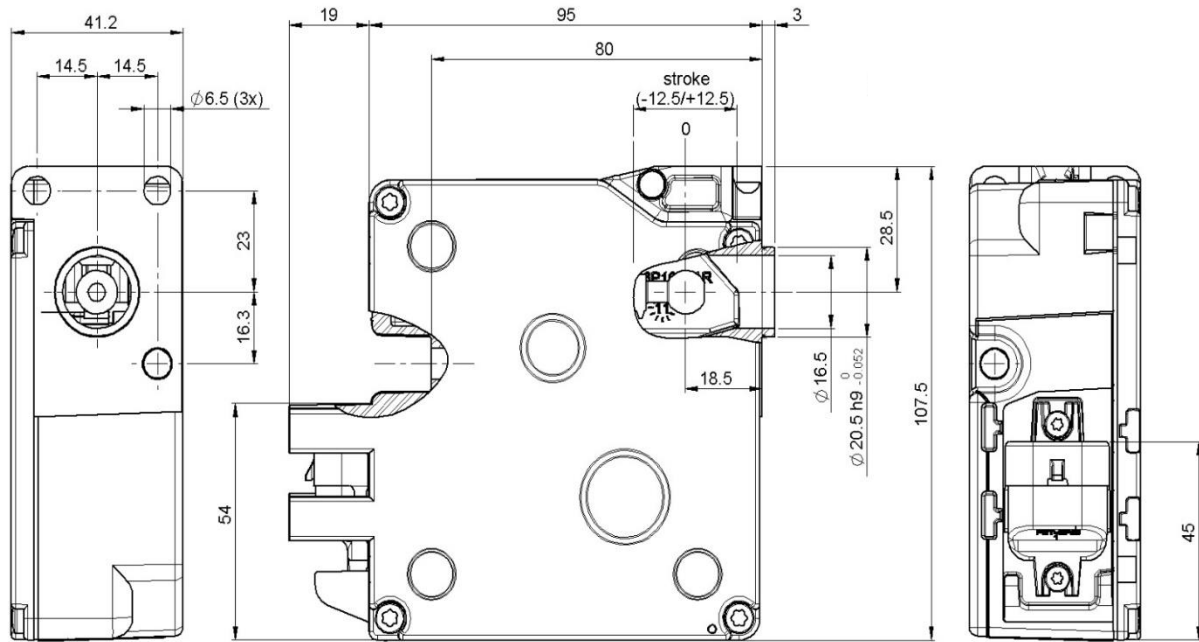
▶ Electrical interface and communication

Operating voltage range	12V version: 10.8 – 16 V 24V version: 20 – 33 V
Operating current	Operation: 2.6 A Safety: 40 mA Neutral: 130 mA
Connector	Delphi Metri Pack 150.2
Communication	CAN J1939



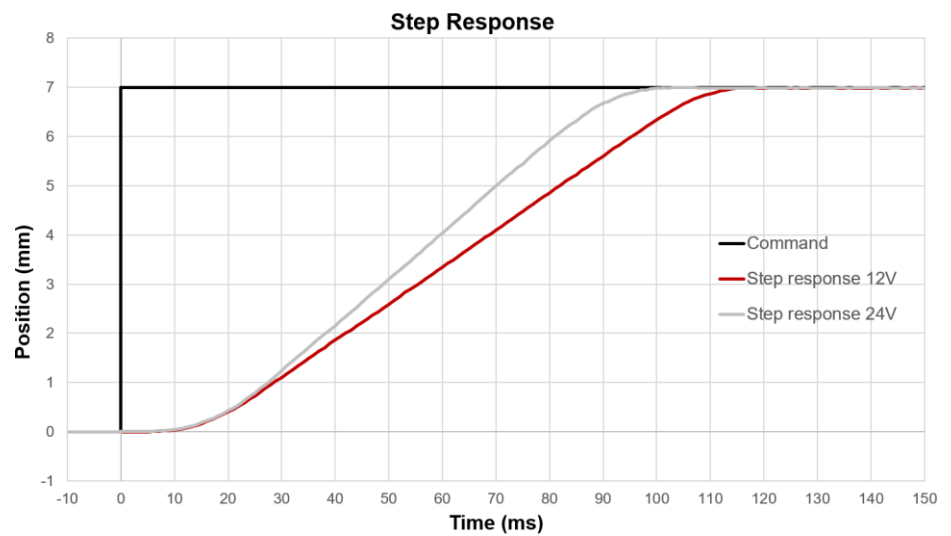
► Dimensions

Drawing not to scale. All dimensions in mm.



► Performance and Endurance

Resolution	0.016 mm
Step Response Time @95% (0 – 7mm)	12V : 105 ms 24V : 90 ms
Lifetime cycles	10'000'000
Max. Residual Force	50 N
Min. Dynamic Force	240 N
Holding Force	250 N



► Operating conditions

Temperature range	-40°C to 92°C
Vibration level	Up to 7.7gRMS
Protection degree	IP6K9K
EMC	Conform to CE/2009/64