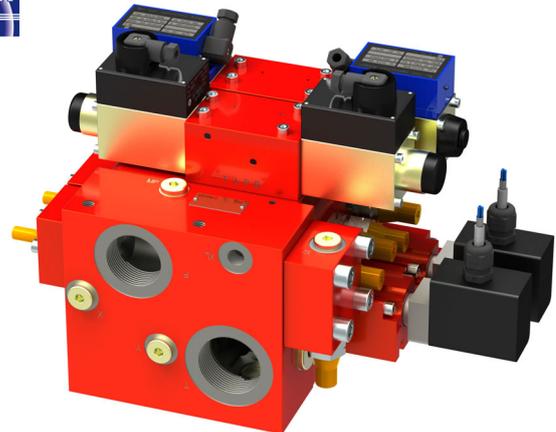
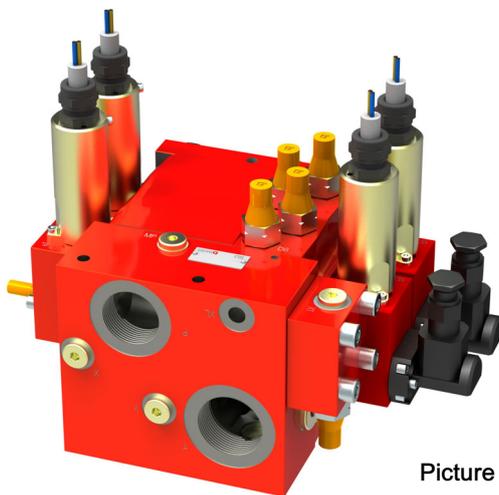


Proportional Valve in Ex-Protected Design

Series SC18



Picture 1

- I M2 c I
- II 2G c I T4
- II 2 c I T4

Picture 2

- I M2 c I

1 Description

1.1 General

Our proportional load-sensing valves of the SC18 series are suitable for applications in hazardous areas. Such as mining, offshore and industrially applications which need such protection measures. Our valves are approved according to ATEX and IECEx for the explosion zones 1 and

21 with the corresponding equipment categories 2G, 20 and M2. The certification of our valves according to MSHA (certification for mining applications in North America) is in progress. All valves are available with an approved position sensor to monitor the spool position.

1.2 Application examples

- Mining
- Tunneling
- Offshore

1.3 Related Documents

Document	Purpose
Technical data sheet: SC18: 100-P-9050089	Technical documentation with all relevant descriptions, data, characteristics and measurements

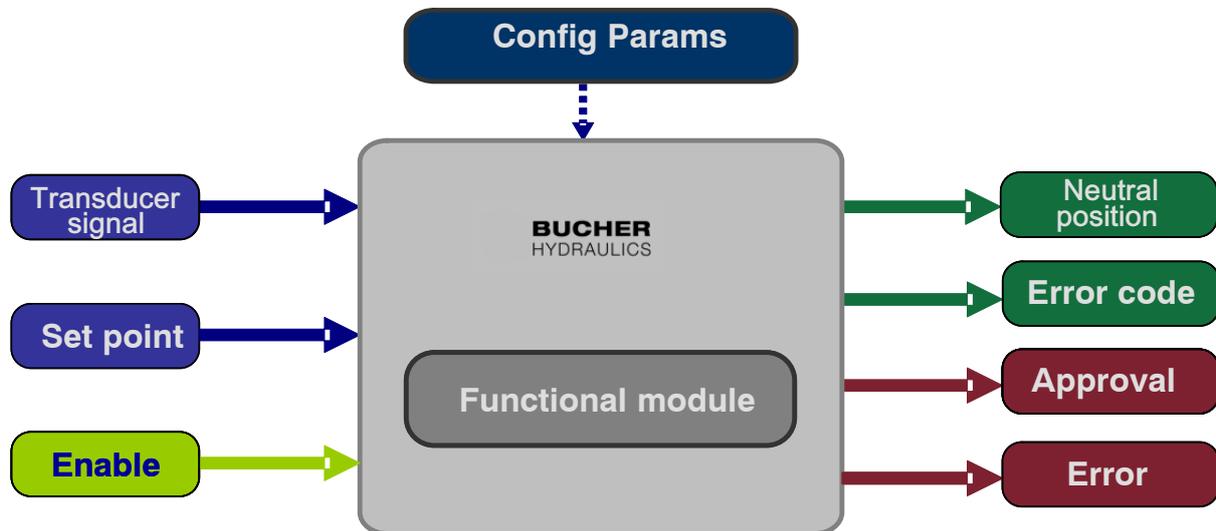
2 Available ATEX - Certificates

Components	Classification Areas	Categories 2014/34/EU	Type of protection	Temperature
Picture 1	Zone 1, Zone 21	2G, 2D, M2	„d“ (EN 60079) „mb“ (EN 60079)	T4 (2G) T130°C (2D)
Picture 2	Mining	M2	„ia“ (EN 60079)	

3 Functional module

We are able to offer software modules for implementation into a paramount controller (SPS or microcontroller). Due to this it is possible to create a position control via the support of the transducer in the higher piloting. Also to adjust it, and control the neutral position of the spool.

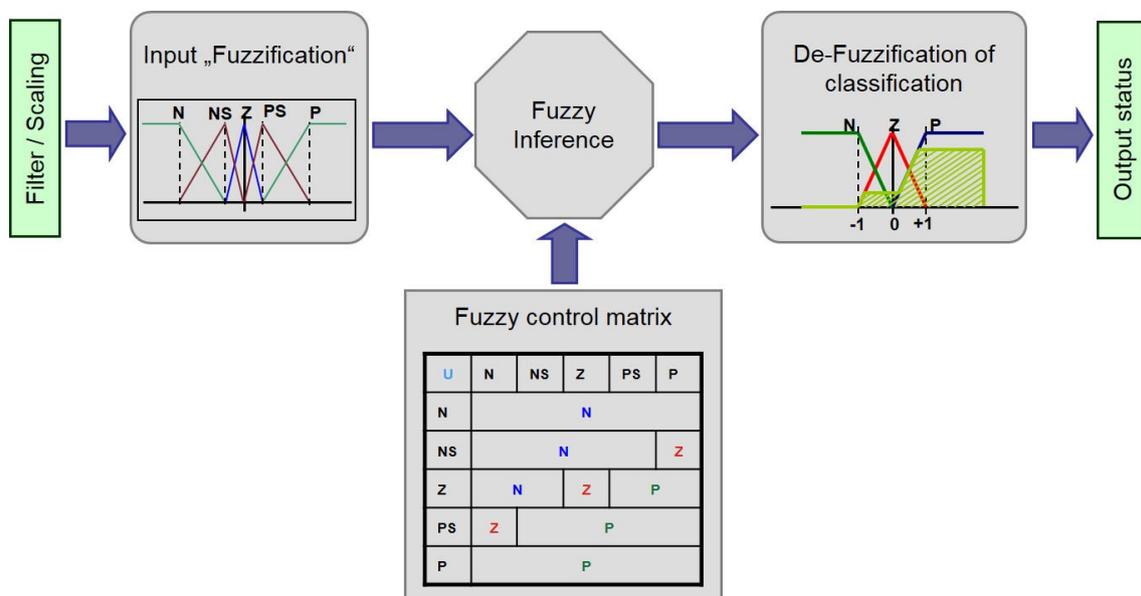
For example, there are modules for a continuous monitoring and evaluation of the main spool position, and the dissemination of error and reset messages to the controller. This module is a purely passive system that exclusively provides information.



4 Fuzzy decision system

The module is based on a fuzzy decision system that uses the fuzzy rule matrix, determines whether the slider is set to

zero or not. If there is a discrepancy between desired and actual position the module produces an error message.



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Classification: 450..