



Made for Robots.

Ferrit-Sensor – FS1

Higher process reliability



Ferrit-Sensor – FS1



Ferrit-Sensor – FS1
including connection cable

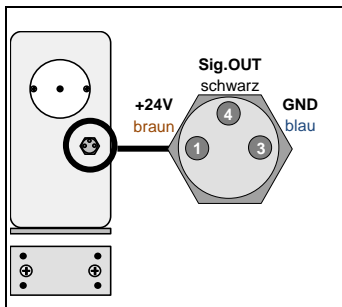
Requirement

In the course of the growing significance of quality assurance, it becomes more and more eminent to eliminate possible failure sources. The choice of a wrong wire material by the operator due to pressure of time or missing labels of basic material, is a source of failure, that has to be minimized just as problems of the process itself.

The unintentional usage of a wrong steel material is more likely than the unintentional choice of a wrong wire diameter. Austenitic and ferritic wires are optically indistinguishable and therefore a potential source of failure.

Solution

The Ferrit Sensor FS1 offers the possibility to safely discern ferritic and non-ferritic (e.g. austenitic) steel wire, because of their different magnetic attributes. The sensor is attached between the wire spool holder and wire feeder and the wire is lead through the hole of the FS1. The sensor gives a signal output of +24V if the wire is ferritic. By assigning a type of wire (ferritic/non-ferritic) to each part in the PLC and connecting the signal output of the FS1 to an input of the PLC, a wrong usage can be prevented. If ferritic wire is to be used, this allows you to check if a wire is inserted in addition.



Wiring diagram
Ferrit-Sensor – FS1

Connection

The Ferrit Sensor FS1 is attached by screws M4. (hole centre distance 25x50mm) and a 3-pin cable with screw-in bushing and open ends.



Mounting bracket
Ferrit-Sensor – FS1

Mounting

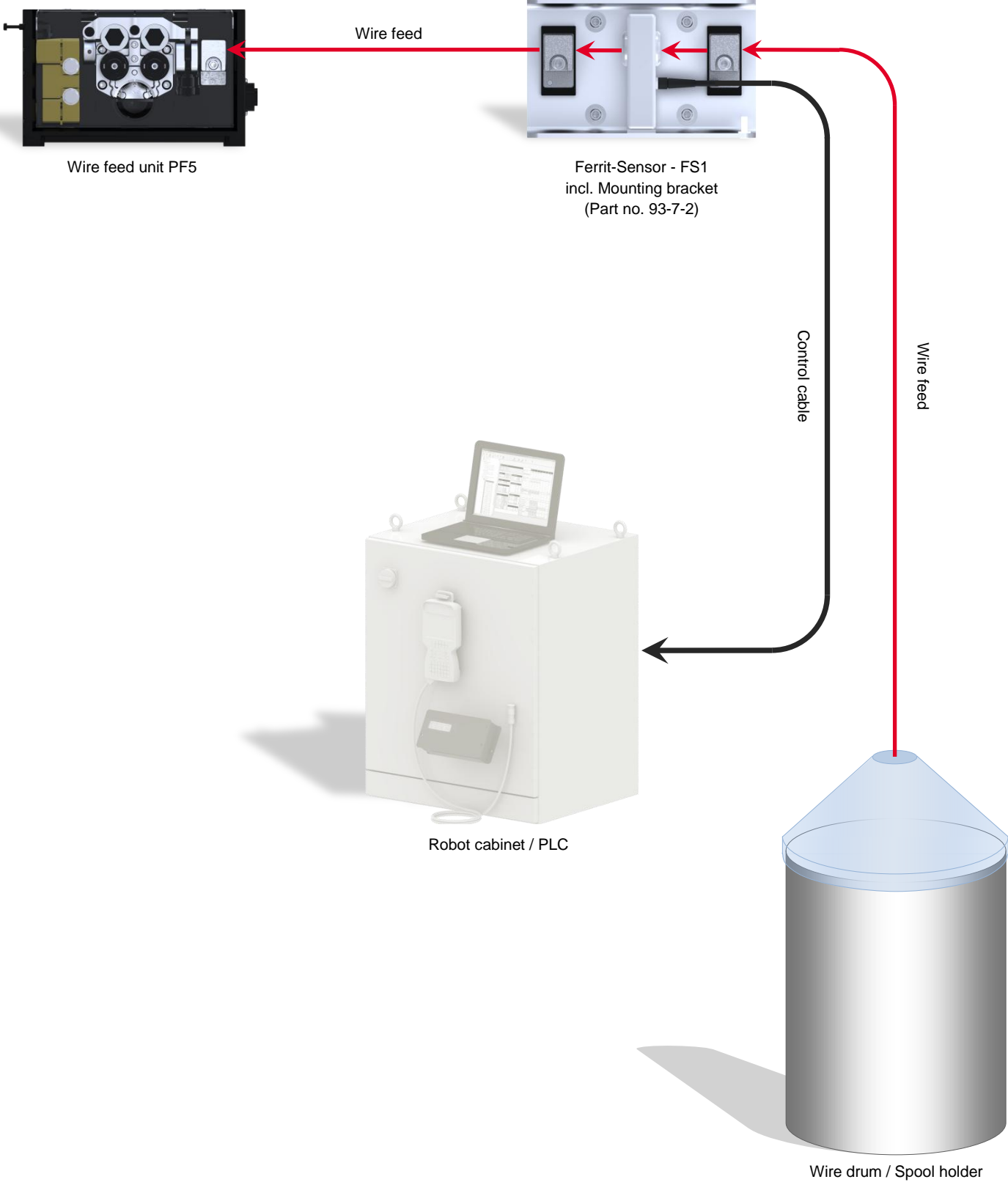
A standard mounting bracket is available and included in the system package

Measurements including mounting bracket:

L x W x H: 200mm x 70mm x 120mm

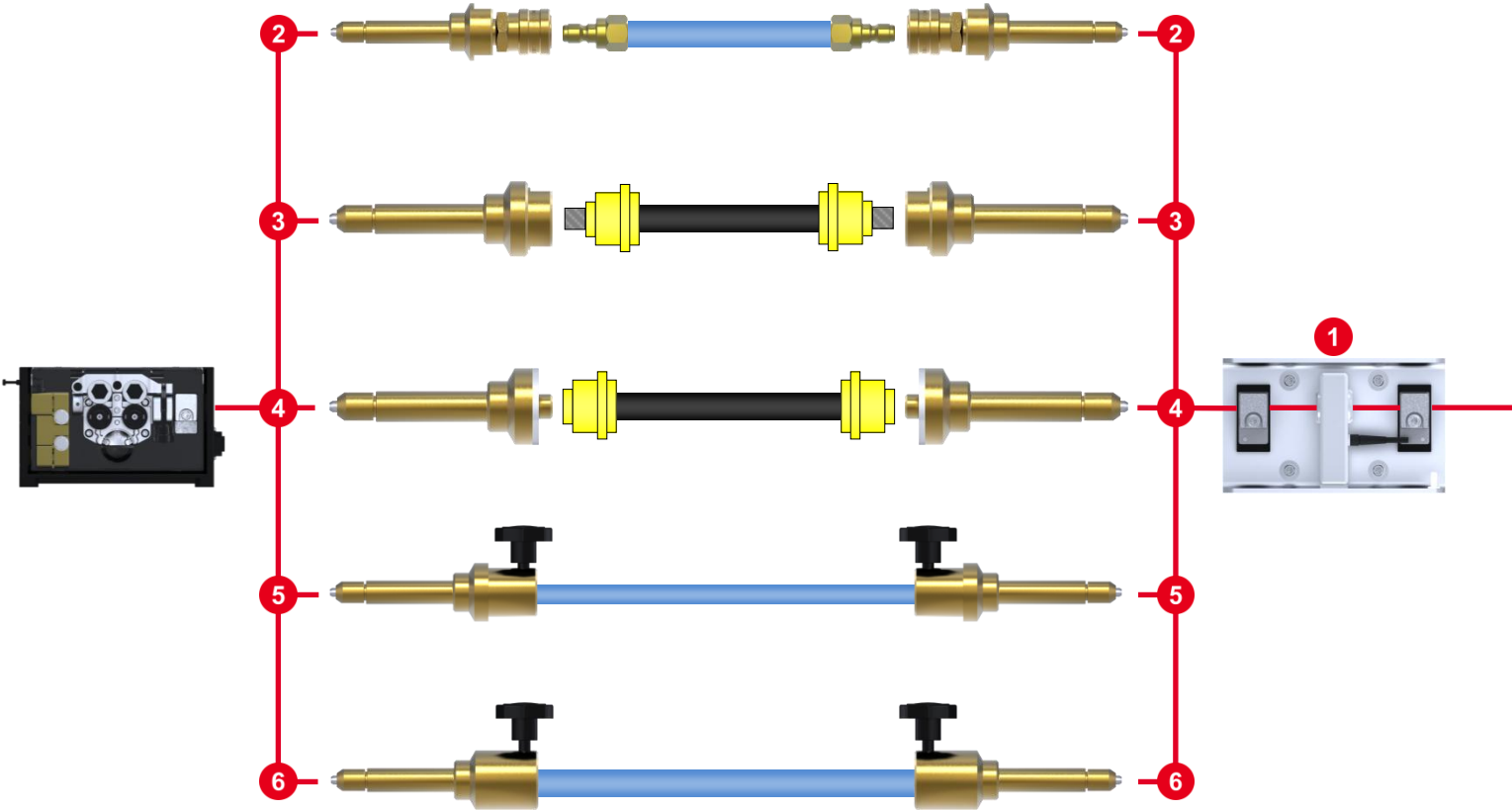
Ferrit-Sensor – FS1

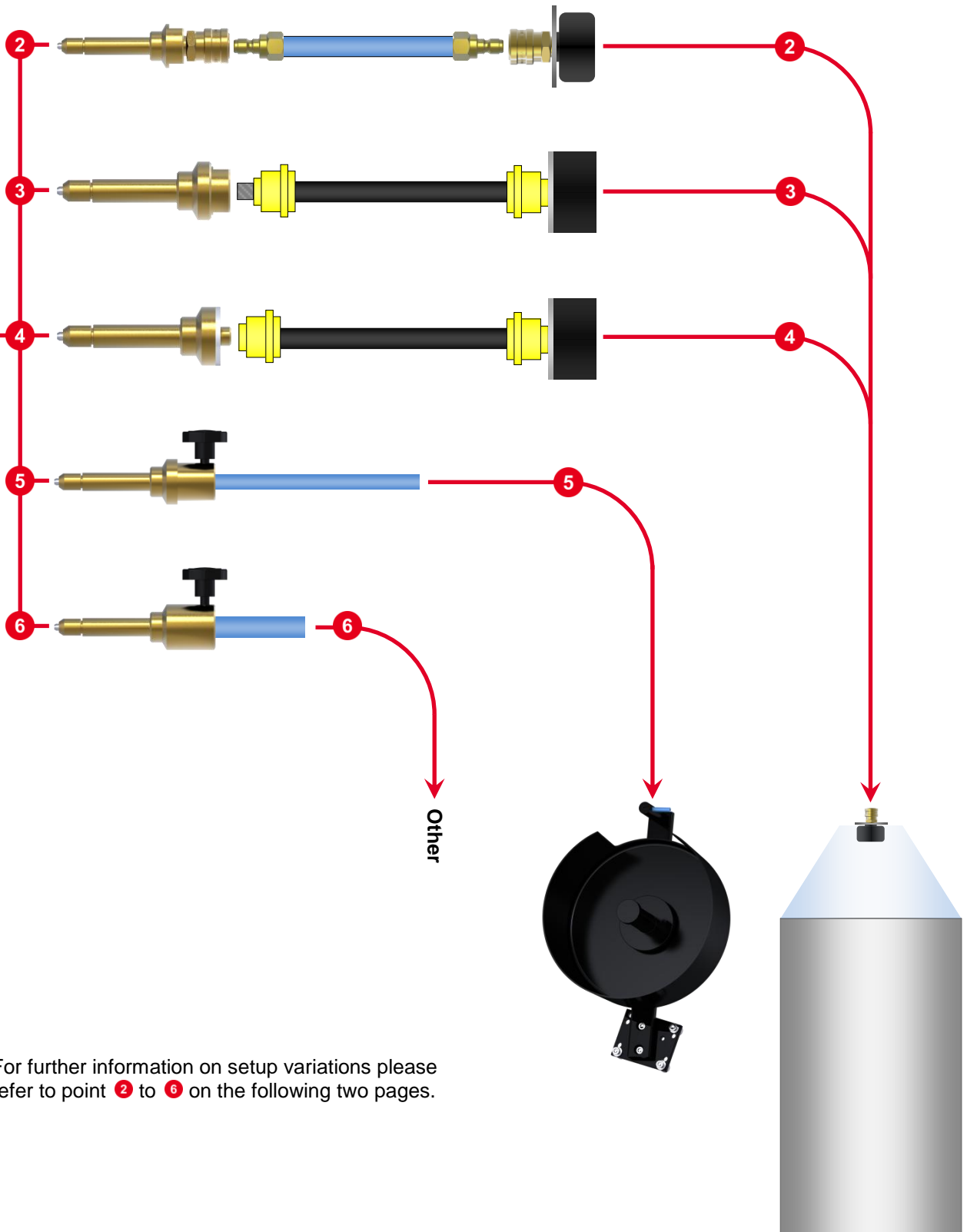
Schematically Setup



Ferrit-Sensor – FS1

Setup Variations of Wire Guidance









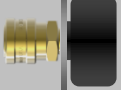





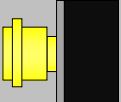
For further information on setup variations please refer to point 2 to 6 on the following two pages.

Ferrit-Sensor – FS1

Setup variations




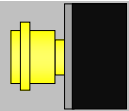
1 Ferrit-Sensor – FS1 system			
Picture	Part number	Quantity	Description
	541029550	1	Ferrit-Sensor – FS1 system consisting of Ferrit-Sensor – FS1 and connection cable 10m 3x0.25mm² with M8 connector and open end (different cable length upon request)
	93-7-2-1	1	Mounting bracket for Ferrit-Sensor – FS1
	93-7-2	1	Ferrit-Sensor – FS1 system consisting of Ferrit-Sensor – FS1, connection cable 10m 3x0.25mm² with M8 connector and open ends, mounting bracket (different cable lengths upon request)


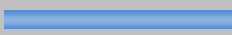
2 SKS wire guidance			
Picture	Part number	Quantity	Description
	10-2-0-61	3	Wire inlet body for PF5 with quick coupling for SKS polymer wire guidance
	44-40-3	4	Connection nipple for polymer wire guidance 7.6x11.6mm
	44-9-1	per meter	Polymer wire guidance per meter, version L, blue
	44-40-1	1	Wire drum connector with ceramic inlet



3 ESAB wire guidance (EU version)			
Picture	Part number	Quantity	Description
	10-2-0-50	3	Wire inlet body for PF5 with M10 inner thread
	---	4	ESAB Quick coupling M10 (no SKS part)
	---	---	ESAB Wire guidance (no SKS part)
	---	1	ESAB Wire drum connector (no SKS part)

Ferrit-Sensor – FS1

Setup variations

4 ESAB wire guidance (US version)			
Picture	Part number	Quantity	Description
	10-2-0-51	3	Wire inlet body with UNF 3/8" x 24 outer thread
	---	4	ESAB quick coupling with UNF 3/8" x 24 inner thread (no SKS part)
	---	---	ESAB wire guidance (no SKS part)
	---	1	ESAB wire drum connector (no SKS part)

5 Wire guidance for systems with 9.6mm adaption			
Picture	Part number	Quantity	Description
	10-2-0-52	3	Wire inlet body for PF5 with 9.6mm drill
	44-8-1	per meter	Polymer wire guidance per meter, version S, blue

6 Wire guidance for systems with 13mm adaption			
Picture	Part number	Quantity	Description
	10-2-0-53	3	Wire inlet body for PF5 with 13mm drill
	44-9-1	per meter	Polymer wire guidance per meter, version L, blue



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Subject to change.