

Product Information FLEXadapt ESF **FOOD**

Build-In System G3/8" FLEXadapt ESF



Application / Specified Usage

- Safe temperature measuring in pipes and vessels without opening the process in connection with temperature sensor TSBF and TSMF with process connection M01 and M02
- Possibility of demounting the temperature sensor without opening the process and without electrical disconnection > avoiding downtime of the equipment at calibration and maintenance!
- Perfectly suitable at small pipe diameters

Application Examples

- Flexible applicable for nearly every temperature measuring task in pipes and vessels
- Safe temperature measuring in hotsteam- and pressure pipes (enclosed process)
- Monitoring of CIP-/SIP-cleaning

Hygienic Design / Process Connection

- Hygienic and easy sterilizable installation by using Negele build-in system ESF
- CIP-/SIP-cleaning up to 140 °C / 284 °F
- Product contacting materials are compliant to FDA

Features

- Short reaction time, very compact measure point
- Threaded thermowells ESF-G1/2" for CLEANadapt can be combined with many other standard adapters. Therefore they are suitable for each application and process connection (e.g. Tri-Clamp, dairy flange (DIN 11851), DRD, Varivent, BioControl...)
- Quick and easy to install with an orbital welding machine
- Temperature sensors and build-in systems with pre-defined, concerted standard lengths, reducing the variety, economize costs for storage and simplify the maintenance.

ESF-G1/2", ESF-EH, ESF-KM



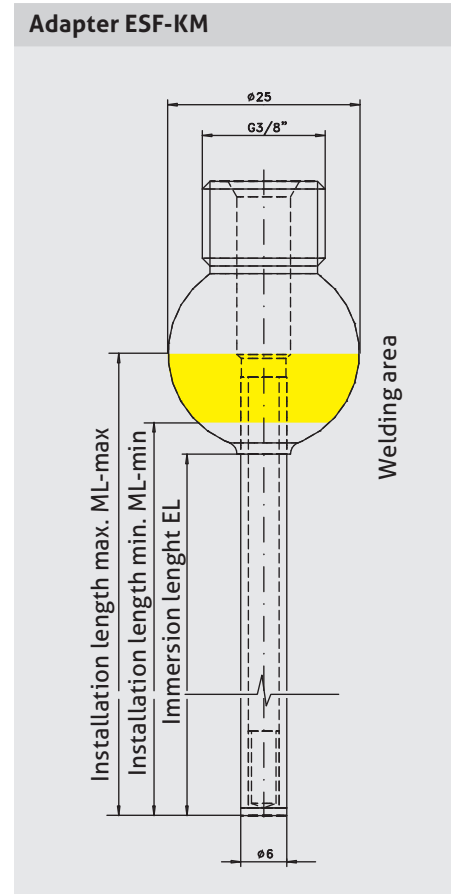
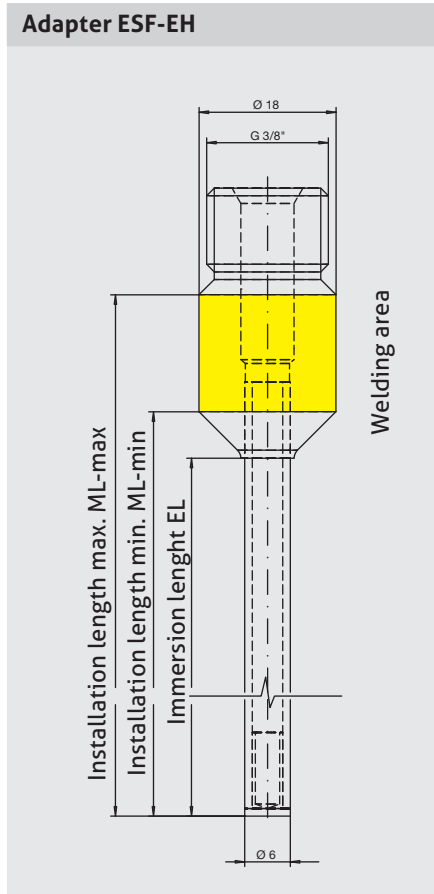
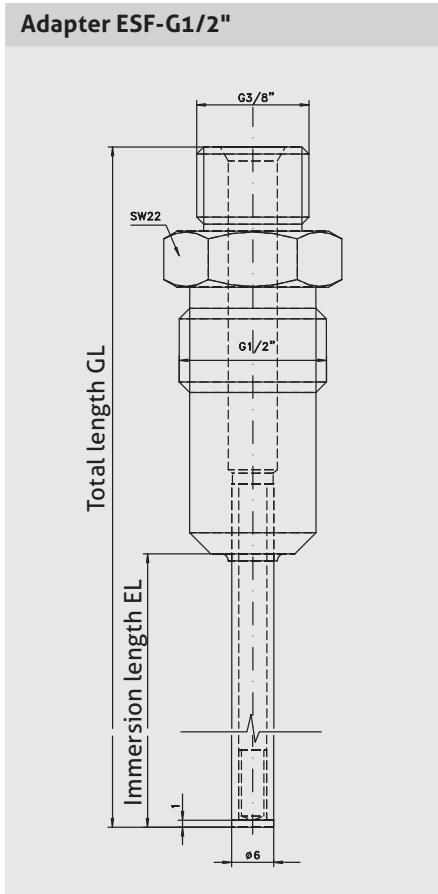
Reaction Time



We recommend the use of heat-conductive paste to reduce the reaction times about 50 % as mentioned!

Specification of Measure Point and Adapter		
Material	thermowell	stainless steel 1.4404 / AISI 316L
Surface	wetted parts	$R_a \leq 0.8 \mu\text{m}$ (not in welded areas) electro polished
	optional	$R_a \leq 0.6 \mu\text{m}$, $R_z \leq 0.4 \mu\text{m}$
Sensor Connection	thread	G3/8"
Sealing Principle		weld-in thermowell
Operating Pressure		50 bar / 725 psi max.

Table Reaction Time for build-in Temperature Sensor	ESF-G1/2"-40	ESF-EH-125	ESF-KM-125
Medium temperature 90 °C / 194 °F			
t ₅₀	7.8 s	8.0 s	8.0 s
t ₉₀	21.1 s	24.0 s	24.0 s



Adapter ESF-G1/2"

Type / Order Code		Immersion length EL	Total length GL	TSxF Process connection	TSxF Probe length
ESF-G1/2"-25	Threaded thermowell for installation into existing G1/2" CLEANadapt measure point	27 mm	85 mm	M01, M02	... / 083 / ...
ESF-G1/2"-40		41 mm	99 mm	M01, M02	... / 097 / ...
ESF-G1/2"-100		104 mm	162 mm	M01, M02	... / 160 / ...

Adapter ESF-EH

Type / Order Code		Immersion length EL	Installation length ML	TSxF Process connection	TSxF Probe length
ESF-EH-50	Weld-in thermowell for retrofit mounting of clamp connection (Type: EMK-25/76 or KEV-25/76) or for mounting into pipes and vessels	50 mm	56...71 mm	M01, M02	... / 083 / ...
ESF-EH-125		127 mm	133...148 mm	M01, M02	... / 160 / ...

Adapter ESF-KM

Type / Order Code		Immersion length EL	Installation length ML	TSxF Process connection	TSxF Probe length
ESF-KM-50	Weld-in thermowell with weld-in ball for mounting into pipe elbows or vessels	50 mm	56...63 mm	M01, M02	... / 083 / ...
ESF-KM-125		127 mm	133...140 mm	M01, M02	... / 160 / ...