TECHNICAL INFORMATION







All brand and product names are trademarks of the company:

EXNER PROCESS EQUIPMENT GmbH

Imprint

Distributed by:

Exner Process Equipment GmbH

Carl-Metz-Str. 26 D-76275 Ettlingen

Date of issue: 2023-06-20

As per: 15.12.2022

File: Technical information EXstatic 221215

© 2020, Dipl.-Ing. [Graduate Engineer] Detlef Exner

All rights reserved, including the translation.

The reproduction of the content in these operating instructions is subject to prior written approval by EXNER PROCESS EQUIPMENT GMBH, ETTLINGEN.

All technical information, drawings, etc. is subject to the protection of copyright law. Technical modifications reserved.

Printed on chlorine-free and acid-free pulp paper.

Table of contents

1	Tec	hnical data	. 4
	1.1	Standards	4
	1.2	Material properties	4
	1.3	Dimensions	5
	1.4	Environmental conditions	7
	1.5	EXstatic 3XX process conditions	8
	1.6	Identification plate	8
2	Pro	duct description	9
	2.1	Static probe housing EXstatic	9
		2.1.1 Components	9
		2.1.2 Versions	9
	2.2	Process integration	10
		, and the second se	
3		dering structure	
3	Orc		.12
3	Orc 3.1	dering structure	. 12 12
3	Orc 3.1 3.2	Jering structure EXstatic 310 probe housing - G 1 1/4" connection	. 12 12 13
3	Orc 3.1 3.2 3.3	EXstatic 310 probe housing - G 1 1/4" connection	. 12 12 13 14
3	Orc 3.1 3.2 3.3 3.4	EXstatic 310 probe housing - G 1 1/4" connection EXstatic 311 probe housing - TriClamp connection EXstatic 312 probe housing - hygienic connection	12 12 13 14 15
	3.1 3.2 3.3 3.4 Spa	EXstatic 310 probe housing - G 1 1/4" connection EXstatic 311 probe housing - TriClamp connection EXstatic 312 probe housing - hygienic connection EXstatic 315 probe housing 15° inclined	12 12 13 14 15
	Orcc 3.1 3.2 3.3 3.4 Spa	EXstatic 310 probe housing - G 1 1/4" connection EXstatic 311 probe housing - TriClamp connection EXstatic 312 probe housing - hygienic connection EXstatic 315 probe housing 15° inclined ire parts and accessories	12 12 13 14 15 16
	Orcc 3.1 3.2 3.3 3.4 Spa 4.1 4.2	EXstatic 310 probe housing - G 1 1/4" connection	12 12 13 14 15 16 16
	Orc 3.1 3.2 3.3 3.4 Spa 4.1 4.2 4.3	EXstatic 310 probe housing - G 1 1/4" connection EXstatic 311 probe housing - TriClamp connection EXstatic 312 probe housing - hygienic connection EXstatic 315 probe housing 15° inclined ire parts and accessories Certificates Weld-in socket G 1 1/4" connection	12 12 13 14 15 16 16 16

1 Technical data

1.1 Standards

4

The following standards were applied when manufacturing the static probe housing:

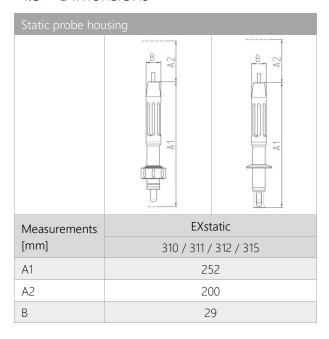
• Pressure Equipment Directive

1.2 Material properties

Wetted components							
Probe housing							
EXstatic Stainless steel Seals							
310	1.4404/316 L	EPDM (FDA, USP VI), FPM					
311	1.4404/316 L	EPDM (FDA, USP VI), FPM					
312	1.4404/316 L	EPDM (FDA, USP VI), FPM					
315	1.4404/316 L	EPDM (FDA, USP VI), FPM					

Not wetted con	Not wetted components				
Protection Cap					
EXstatic Material					
3XX PA 6.6.GF30					

1.3 Dimensions



EXstatic pro	EXstatic process connector								
	Α	В	С	D					
	G 11⁄4″	TriClamp	BioControl D50	Varivent					
	0 0 CZ 1 J J J J J J J J J J J J J J J J J J			D1 02					
Measure	EXstatic	EXstatic	EXstatic	EXstatic					
ments [mm]	310	311	312	312					
E1	70	45/80	40	40					
E2	25		57	52					
D1	25	25	25	25					
D2		50.5/64	90	84					

EXstatic pro	EXstatic process connector								
	А	В	С						
	Varivent	TriClamp	BioControl D50						
	(5°) 121 D2	5° D1 D2	\$ D1 D2						
Mea-	EXstatic	EXstatic	EXstatic						
surements [mm]	315	315	315						
E1	34	34	34						
D1	25	25	25						
D2	84	50.5/64	90						

1.4 Environmental conditions

Ambient temperature -10...70 °C

Transport and storage temperature -20...80 °C

1.5 EXstatic 3XX process conditions

Max. permissible pressure PS: 10 bar

Max. permissible temperature TS: 140 °C

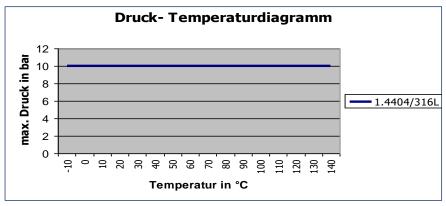


Fig. 1: EXstatic pressure-temperature diagram

1.6 Identification plate



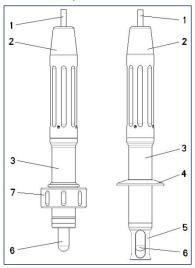
Fig. 2: Identification plate

In case of queries, please contact your dealer directly.

2 Product description

2.1 Static probe housing EXstatic

2.1.1 Components



1	Sensor cable
2	Protection Cap
3	Probe housing
4	Process Connection Tri Clamp
5	Protection cage
6	Sensor
7	Union nut

Fig. 3: EXstatic probe housing

2.1.2 Versions

The static probe housings are attached to tanks or pipes by an applicable process connection. In order to comply with the various process properties, the probe housing EXstatic is manufactured from stainless steel and plastic. Moreover, you can choose between different process connectors, sealing materials and surfaces. Optionally, the probe housing is available with or without a protection cage."

2.2 Process integration

Static probe housing

The EXstatic probe housing can be fixed on a process tank or pipes by the process connection. The protection cage protects the sensor against damage caused by process liquid.

Transmitter

The static probe housing inserts a sensor in the process liquid transmitting its measuring results to a transmitter.

PIS

The transmitter can be connected with a process control system. The measuring is then controlled automatically according to the measuring results.

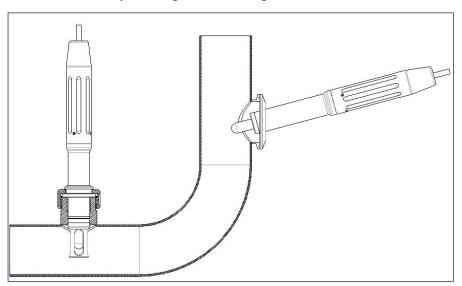


Fig. 4: Process integration

Process connector/Pressure/Temperature

For choosing the appropriate probe housing, process and temperature conditions of the process are applicable. The static probe housing of stainless steel can be used for a pressure of up to 10 bar and temperature between -10 °C and 140 °C.

NOTE

Observe the pressure and temperature diagrams in Chapter 3.6 "EXstatic 3XX process conditions"

Installation position

Basically, the static probe housing can be operated in any position. In order to obtain reliable measurement results, the sensor properties are decisive.

3 Ordering structure

3.1 EXstatic 310 probe housing - G 1 1/4" connection

	Code	Probe h	nousing, r	material (w	etted parts	5)		
	0408	Stainles	s steel, 1.	4404 / 316	L Ra0,8			
	0404	Stainles	Stainless steel, 1.4404 / 316L Ra0,4					
	XXXX	Special	Special version					
		Code	Code Material (wetted parts)					
		EDP	DP EPDM					
		FPM	/ FPM					
		XXX	XX Special version					
			Code Sensor					
			120 120 mm PG 13.5					
			XXX	Special v	ersion			
				Code	Process	connection	1	
				D32	G1 1/4" ur	nion nut Of	P25	
				XXX	Special v	ersion		
					Code	Immersio	on depth	
					070	70 mm ι	under process connection	
					XXX	Special v	version ersion	
						Code	Protection cage	
						0	Without	
				1 With protection cage				
				X Special version				
EXstatic 310							Order code	

3.2 EXstatic 311 probe housing - TriClamp connection

	Code	Probe housing, material (wetted parts)						
	0408	Stainles	Stainless steel, 1.4404 / 316L Ra0,8					
	0404	Stainles	Stainless steel, 1.4404 / 316L Ra0,4					
	XXXX	Special	version					
		Code	de Material (wetted parts)					
		EDP	EPDM					
		FPM	FPM					
		XXX	Special version					
			Code Sensor					
			120 120 mm PG 13.5					
			XXX Special version					
				Code	Process	connection		
				TC15	TriClamp	1-1.5" (OD	50.5mm)	
				TC20	TriClamp	2,0" (OD 6	54 mm)	
				XXXX	Special v	ersion		
					Code	Immersio	on depth	
					040	45 mm u	ınder process connection	
					080	80 mm u	ınder process connection	
					XXX	Special v	ersion	
						Code	Protection cage	
			0 Without		Without			
			1 With protection cage			With protection cage		
						Χ	Special version	
EXstatic 311							Order code	

3.3 EXstatic 312 probe housing - hygienic connection

	Code	Probe h	be housing, material (wetted parts)				
	0408	Stainles	s steel, 1.	4404 / 3161	L Ra0,8		
	0404	Stainles	s steel, 1.	4404 / 3161	L Ra0,4		
	XXXX	Special	version				
		Code	Materia	al (wetted p	arts)		
		EDP	EPDM				
		FPM	FPM				
		XXX	Special version				
			Code Sensor 120 120 mm PG 13.5				
			XXX	Special v	ersion		
				Code	Process of	connection	
				IN25	Varivent	N DN40-12	25
				BCT5	NEUMO	BioControl	D50
				XXXX	Special v	ersion	
					Code	Immersio	on depth
					040	40 mm u	inder process connection
					XXX	Special v	ersion
						Code	Protection cage
						0	Without
						1	With protection cage
				X Special version			Special version
EXstatic 312							Order code

3.4 EXstatic 315 probe housing 15° inclined

	Code	Probe h	ousing, r	material (w	etted parts	;)			
	0408	Stainles	s steel, 1.	4404 / 316	L Ra0,8				
	0404	Stainles	s steel, 1.	4404 / 316	L Ra0,4				
	XXXX	Special	Special version						
		Code	Material (wetted parts)						
		EDP	EPDM	EPDM					
		FPM	FPM	FPM					
		XXX	Special version						
			Code Sensor						
			120 120 mm PG 13.5						
			XXX Special version						
			Code Process connection			1			
				VARN	Varivent	N DN40-1	25		
				TC15	TriClamp	1-1.5" (OE) 50.5mm)		
				TC20	TriClamp	2,0" (OD	64 mm)		
				BCT5	NEUMO	BioContro	l D50		
				XXXX	Special v	ersion			
					Code	Immersion	on depth		
					070	34 mm (under process connection		
					XXX	Special v	ersion		
						Code	Protection cage		
			0 Without			Without			
			X Special version				Special version		
EXstatic 315							Order code		

4 Spare parts and accessories

The probe housing serial number must always be quoted for spare parts and accessories orders.

4.1 Certificates

EXstatic	Certificates	Order code
310 / 311 / 312 / 315	EN10204-2.2 for surface finishing (wetted parts)	2-121-01-001
310 / 311 / 312 / 315	EN10204-3.1 for material (wetted parts)	2-121-01-002

4.2 Weld-in socket G 1 1/4" connection

EXstatic	Description	Order code
310	Safety weld-in socket straight, 40 mm, 1.4435/316L	2-087-33-001
310	Safety weld-in socket 15°, 40 mm, 1.4435/316L	2-087-33-002

4.3 Sealing kits

EXstatic	Spare part	Order code
310	EPDM (FDA, USP VI) sealing set	2-123-20-001
	FPM sealing kit	2-123-20-002
311 / 312 / 315	EPDM (FDA, USP VI) sealing set	2-123-20-003
	FPM sealing kit	2-123-20-004

4.4 Protective caps

EXstatic	Description	Order code
310 / 311 / 312 / 315	Protection cap EXstatic	2-152-26-001

5 Certificates and compliance

Declaration of conformity

Process holder EXstatic type 310/311/312/315

We declare under our sole responsibility that the product, to which this declaration relates, is in conformity with the following standards or the normative documents:

EU-Directive	Harmonised Standards		
Procesurised Equipment Directive DED	EN12266 1, 2012		

Pressurised Equipment Directive PED PED 2014/68/EU Module A

EN12266-1: 2012

This declaration applies to all identical versions of the product, which are manufactured according the development-, design- and manufacturing-drawings and -descriptions, which are part of this declaration.

This declaration is given by the manufacturer.

Exner Process Equipment GmbH Name of company:

Address: Carl-Metz-Straße 26

13.04.2018

D-76275 Ettlingen

Germany

Detlef Exner General Manager

EXNER Process Equipr Carl-Metz-Straße 26 76275 Ettlingen // Germany fon 07243-945429-0 fax-99



Exner Process Equipment GmbH Carl-Metz-Str. 26 D-76275 Ettlingen Germany tel +49 (0)7243-94 54 29-0 fax +49 (0)7243-94 54 29-99

mail info@e-p-e.de

www.e-p-e.com