

**EXNER PROCESS EQUIPMENT**



**EXTRACT**

Process retractable holder

Technical information



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# 1 Product description

## 1.1 EXtract automatic retractable holder

### Components

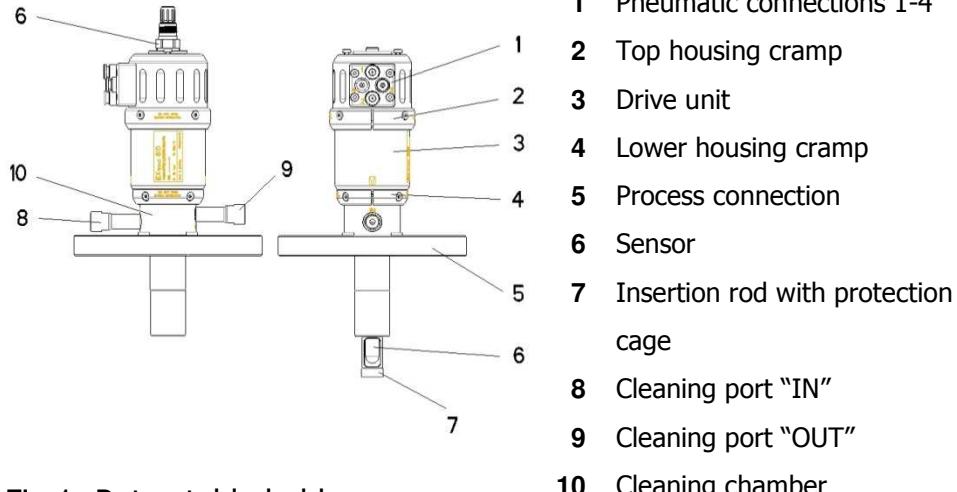


Fig.1: Retractable holder

### Variations

Retractable holders are attached to tanks or tubing by an applicable process connection. In order to comply with the various process properties the EXTRACT retractable holder is fabricated of stainless steel or plastic. You can further choose between different process and cleaning ports, sealing materials, and sensors.

### EXtract 810 / 820

**EXtract 810 / 820** is a retractable holder made of stainless steel (810) or plastic (820) for installation of Ø12mm sensors on tanks or pipelines, with an extended immersion length up to 107mm.

- For all kind of Ø12/225mm or Ø12/280mm sensors with thread PG13.5 (pH-glass- and ISFET sensors, conductivity- or temperature sensors, turbidity and other optical sensors)
- Chemicals
- Water treatment
- Rough processes
- Requirement of automated sensor cleaning or calibration

### EXtract 811 / 821

**EXtract 811 / 821** is a retractable holder made of stainless steel (811) or plastic (821) for installation of Ø12mm sensors on tanks or pipelines, with an extended immersion length up to 207mm.

<b>Extract 815 / 825</b>	The <b>EXtract 815/825</b> process holder is a pneumatically operated retractable holder made of stainless steel (815) or plastic (825) for the installation of Ø12mm sensors at welding sockets DN25 (Ingold-type socket) with an integrated PTFE scraper.
<b>EXtract 830</b>	<b>EXtract 830</b> is a retractable holder made of stainless steel for hygienic installation of Ø12 sensors on tanks or pipelines <ul style="list-style-type: none"><li>• For all kind of Ø12/225mm or Ø12/280mm sensors with thread PG13.5 (pH-glass- and ISFET sensors, conductivity- or temperature sensors, turbidity and other optical sensors)</li><li>• Food</li><li>• Pharmaceuticals</li><li>• Requirement of automated sensor cleaning or calibration</li></ul>
<b>Drive</b>	Compressed air is supplied via the pneumatic connections on the drive unit. The drive unit inserts the insertion rod in the process medium up to the maximal insertion depth. For safety reasons this is only possible with a sensor installed.
<b>Measuring</b>	When reaching the final position of the “measuring” position, the control receives a pneumatic position signal. In this position the sensor head is immersed in the drive unit and cannot be removed. The sensor measures the chemical or physical properties of the process liquid.
<b>Service</b>	Cleaning, rinsing and calibration of the sensor is possible while the process is running. For this purpose the holder must be moved to the “service” position. Another pneumatic position signal is caused when the final position is reached. In the “service” position the insertion rod seals the cleaning chamber against the process to prevent leakage of process liquid. The required liquid is introduced into the cleaning chamber via the cleaning port “IN” and subsequently drained via the cleaning port “OUT”.

## 1.2 Process integration

**Control** The EXTRACT retractable holder can be operated by the automatic control EXMATIC. It optimally matches the functions of the holder.

**Transmitter** The retractable holder inserts a sensor in the process liquid transmitting its measuring results to a transmitter.

**Process Control** The external control and the transmitter can be connected to a process control. The measuring and cleaning intervals are then controlled automatically according to the measuring results.

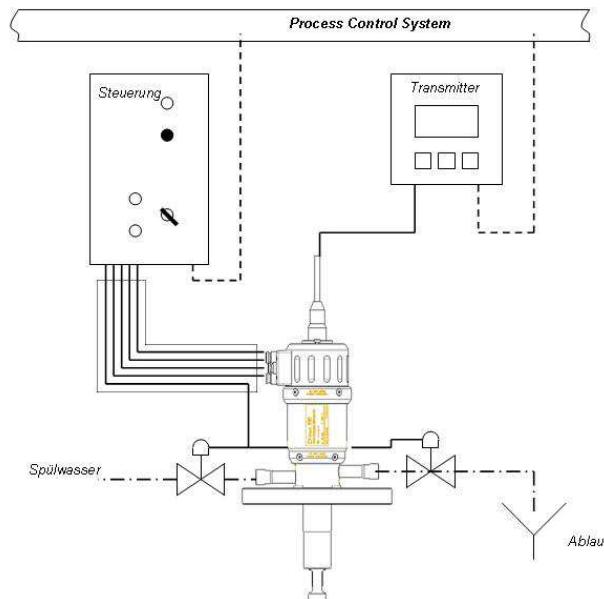


Fig. 2: Process flow

**Pressure** The choice of the applicable holder is subject to the pressure and

**Temperature** temperature conditions of the process. The retractable holder of stainless steel can be used for a pressure of up to 16 bar and the plastic model up to 10 bar according to the temperature. The process temperature should be between -10° and 140°C.

!!!

Observe pressure and temperature charts in chapter 8!

**Installation  
position**

The operation of the holder is generally possible in any position. The reliability of the measuring results depends on the properties of the selected sensor.

## 2 Special functions

### 2.1 Safety equipment

- Position „service“** The retract protection prevents the insertion rod from retracting without sensor in the process as this would cause a leakage of process liquid.
- The sensor can only be installed/removed when the holder is in the “service” position.
- Disabling the retract protection is considered as negligence.
- Position „measuring“** In the “measuring” position the sensor is immersed in the drive unit.
- You cannot remove the sensor.
- Trying to remove the sensor in the “measuring” position is considered as negligence!
- Protection cage** You may adjust the protection cage at the end of the insertion rod in order to protect the sensor from mechanical impacts.

## 2.2 Adjusting the protection cage

A protection cage is fitted to the lower end of the insertion rod and can be adjusted with the flow direction. The symbol on the drive unit cylinder indicates the position of the opening in the insertion rod. If the symbol is parallel to the flow direction the insertion rod is fully flown through. If the symbols are vertical to the flow the sensor is fully protected from direct flow. The insertion rod can be adjusted in any intermediate position.



Figure 1: Protection cage

- A** Sensor maximally streamed
- B** Sensor minimally streamed



Figure 2: Symbol

## 2.3 Installing the pneumatic tubes

The EXTRACT retractable holder is operated with compressed air. The extension of the cylinder of the drive unit is fitted with four compressed air connections.



Figure 3: Pneumatic connections 1-4



### You will need:

2 pneumatic tubes  $\varnothing = 4\text{mm}$

2 pneumatic tubes  $\varnothing = 6\text{mm}$ .

### Observe the functions of the pneumatic connections!

1. Connection 1: Air supply “measuring” position.
2. Connection 2: Reply “measuring” position.
3. Connection 3: Air supply “service” position
4. Connection 4: Reply “service” position

**Use the external control to move the retractable holder from the “service” position to the “measuring” position and vice versa.**

## 2.4 Installation the sensor

Sensors with a diameter of 12mm and a connection thread PG 13.5 must be used in the **Extract** retractable holder.

The length of the sensor depends on the sensor type and the selected holder.

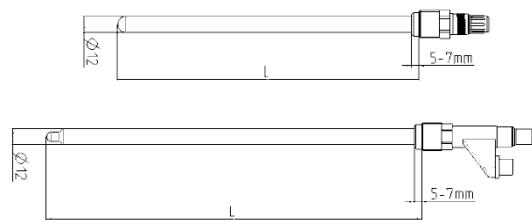


Figure 4: Sensor filled with gel (top), sensor filled with liquid (bottom)

## 2.5 Checking wetted sealing

The retractable holder is fitted with an inspection window situated between the lower housing cramps.

- Check inspection window for leaking process liquid on a regular basis.**



Figure 5: Inspection window on lower housing cramp

### 3 Technical specifications

#### 3.1 Standards

Pressure equipment directive

#### 3.2 Material properties

Wetted components					
Holder					
EXTRACT	stainless steel	plastic	seals		
810	1.4404/316L	Alloy C22, 2.4602	• EPDM • FPM • FFKM		
811	1.4404/316L	Alloy C22, 2.4602			
815	1.4404/316L	Alloy C22, 2.4602			
820		PVDF		PEEK	PP
821		PVDF		PEEK	
825		PVDF		PEEK	PP
830	1.4404/316L				• EPDM FDA • FPM

#### Drive unit

EXTRACT	cylinder	cylinder extension	seals
All types	1.4404/316	PA66 GF30	EPDM

#### 3.3 Rinsing ports

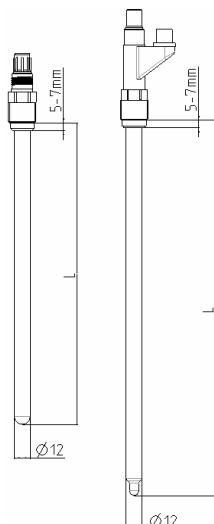
Thread	
without gland	• G $\frac{1}{8}$ " (internal)
with gland	• G $\frac{1}{4}$ " (internal)
with gland	• NPT $\frac{1}{4}$ " (internal)

#### Rinsing pressure

1 - 4 bar

## 3.4 Sensors

Gel filled sensor			
EXTRACT	I [mm]	d [mm]	PG
<b>810 / 820</b>	225	12	13.5
<b>811 / 821</b>	325	12	13.5
<b>815 / 825</b>	225	12	13.5
<b>830</b>	225	12	13,5



Sensor filled with liquid with refill connection			
EXTRACT	I [mm]	d [mm]	PG
<b>810 / 820</b>	280	12	13.5
<b>811 / 821</b>	380	12	13.5
<b>815 / 825</b>	325	12	13,5
<b>830</b>	280	12	13,5

## 3.5 Pneumatic equipment

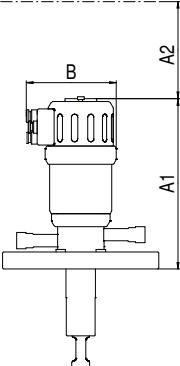
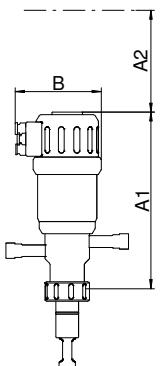
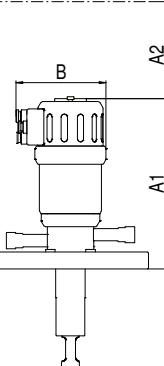
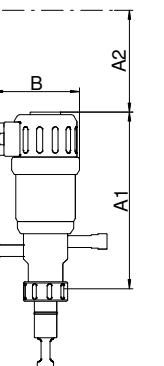
Pneumatic tubes		
	Ø - external	Ø - internal
<b>for control air</b>	6 mm	4 mm
<b>for position reply</b>	4 mm	2 mm

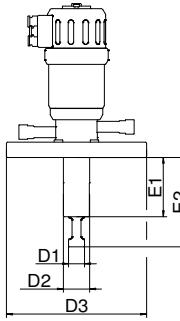
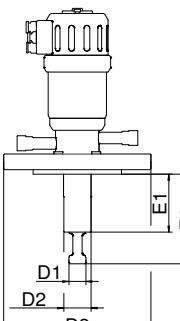
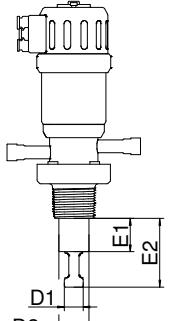
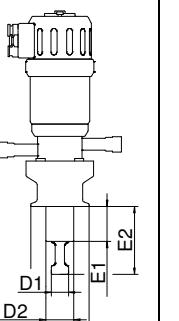
Compressed air	
	<ul style="list-style-type: none"> <li>- Acc. ISO8573-1:2010 [5:4:4]</li> <li>- Filtered 40 µm, water- and oil free</li> <li>- 4 - 6 bar</li> <li>- no continuous air consumption!</li> </ul>

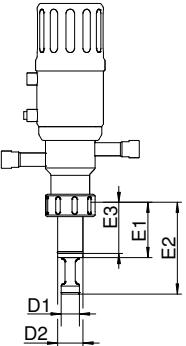
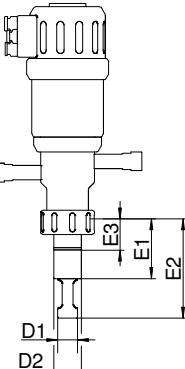
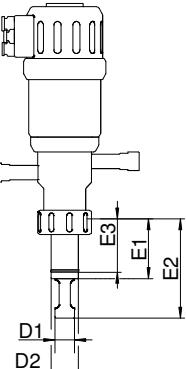
## 3.6 IP Protection

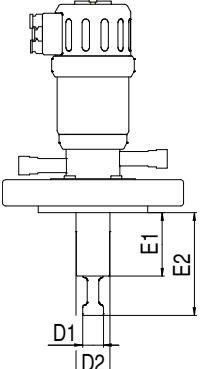
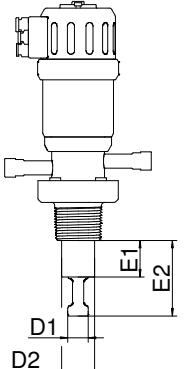
Drive unit	
All types	IP 66

## 3.7 Dimensions

<b>Holder</b>						
						
	<b>EXTRACT</b>		<b>EXTRACT</b>		<b>EXTRACT</b>	
<b>Dimens.</b>	<b>810</b>	<b>811</b>	<b>815</b>	<b>825</b>	<b>820</b>	<b>821</b>
<b>A<sub>1</sub> [mm]</b>	180	180	196	196	180	180
<b>A<sub>2</sub> [mm]</b>	350	480	350	350	350	480
<b>B [mm]</b>	95	95	95	95	95	95

<b>Process connections EXTRACT 810/811</b>						
	<b>Flange 4404</b>	<b>Flange HC22</b>	<b>NPT</b>	<b>TriClamp</b>		
						
	<b>EXTRACT</b>		<b>EXTRACT</b>		<b>EXTRACT</b>	
<b>Dimens.</b>	<b>810</b>	<b>811</b>	<b>810</b>	<b>811</b>	<b>810</b>	<b>810</b>
<b>E<sub>1</sub> [mm]</b>	71	171	66	166	34	39
<b>E<sub>2</sub> [mm]</b>	107	207	102	202	70	75
<b>D<sub>1</sub> [mm]</b>	19	19	19	19	19	19
<b>D<sub>2</sub> [mm]</b>	31	36	31	36	31	31
<b>D<sub>3</sub> [mm]</b>	-	-	-	-	-	64

Process connections EXTRACT 815			EXtract 825
	Ingold DN 25	Ingold DN 25	Ingold DN 25
			
Dimens.	O-RINGPOS. 50MM	O-RINGPOS. 28MM	O-RINGPOS. 25MM
E <sub>1</sub> [mm]	54	54	54
E <sub>2</sub> [mm]	90	90	70
E <sub>3</sub> [mm]	50	28	25
D <sub>1</sub> [mm]	18	18	18
D <sub>2</sub> [mm]	25	25	25

Process connections EXTRACT 820/821		
	Flange	NPT
		
	EXTRACT	EXTRACT
Dimens.	820	821
E <sub>1</sub> [mm]	58	158
E <sub>2</sub> [mm]	94	194
D <sub>1</sub> [mm]	19	19
D <sub>2</sub> [mm]	31	36

**Process connections EXTRACT 830**

	<b>DIN 11851</b>	<b>Varivent N</b>	<b>TriClamp</b>	<b>Neumo BioCon.</b>
<b>Dimens.</b>	<b>DN50</b>	<b>DN40 - 125</b>	<b>1,5"</b>	<b>2"</b>
<b>E<sub>1</sub> [mm]</b>	18	12,3	22	25
<b>E<sub>2</sub> [mm]</b>	54	48,3	58	61
<b>D<sub>1</sub> [mm]</b>	19	19	19	19
<b>D<sub>2</sub> [mm]</b>	30	-	30	30
<b>D<sub>3</sub> [mm]</b>	Rd78 x 1/6"	84	50,5	64
				89,5

**Process connections EXTRACT 830**

	<b>Ingold DN 25</b>	<b>Ingold HyCIP25</b>	<b>Ingold HyCIP50</b>	<b>Ingold HyCIP55</b>
<b>Dimens.</b>	<b>O-RINGPOS. 28MM</b>	<b>O-RINGPOS. 25MM</b>	<b>O-RINGPOS. 50MM</b>	<b>O-RINGPOS. 25MM</b>
<b>E<sub>1</sub> [mm]</b>	34	29	54	59
<b>E<sub>2</sub> [mm]</b>	70	65	90	95
<b>E<sub>3</sub> [mm]</b>	28	25	50	55
<b>D<sub>1</sub> [mm]</b>	19	19	19	19
<b>D<sub>2</sub> [mm]</b>	25	25	25	25
<b>D<sub>3</sub> [mm]</b>	G 1 1/4"	G 1 1/4"	G 1 1/4"	G 1 1/4"

### 3.8 Ambient conditions

Ambient temperature	- 10 - 70 °C
Transport and storage temperature	- 20 - 80 °C

### 3.9 Process conditions EXTRACT 810 / 811 / 815/ 830

**max. allowed pressure PS:** 16 bar

**max. allowed temperature TS:** 140 °C

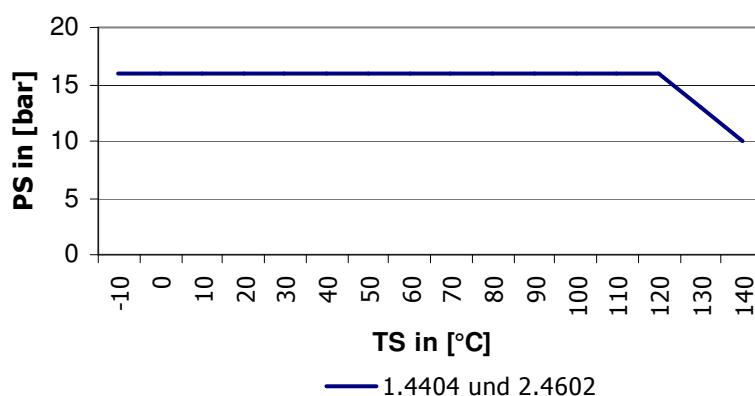


Fig. 1: Pressure temperature diagram EXTRACT 810 / 811 / 815 / 830

### 3.10 Process conditions EXTRACT 820 / 821 / 825

**max. allowed pressure PS** 10 bar

**max. allowed temperature TS** 140 °C

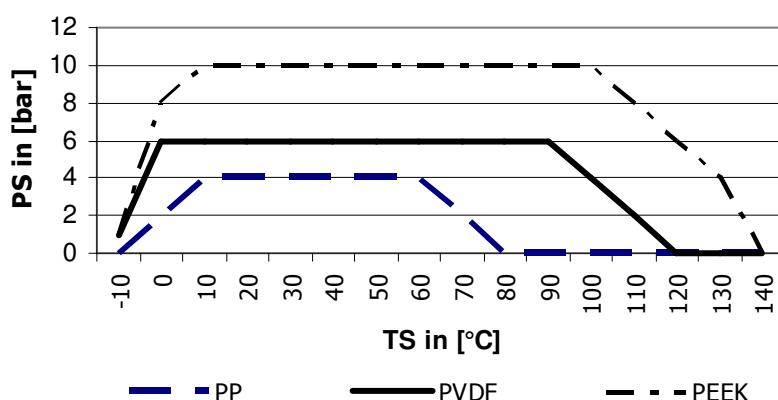


Fig. 2: Pressure temperature diagram EXTRACT 820 / 821 / 825

### 3.11 Order structure EXTRACT 810

<b>EXTRACT 810 retractable holder</b>	
	<b>Descr.</b> <b>Holder, wetted material</b>
4404	stainless steel, 1.4404 / 316L
HC22	Alloy C22, 2.4602
XXXX	special design
	<b>Descr.</b> <b>Seals, wetted material</b>
EPD	EPDM
FPM	FPM
FKM	FFKM
XXX	special design
	<b>Descr.</b> <b>sensor</b>
225	225mm PG 13.5 filled with gel
280	280mm PG 13.5 filled with liquid
XXX	special design
	<b>Descr.</b> <b>Process connection</b>
D32	flange DN32
D40	flange DN40
D50	flange DN50
A14	flange ANSI 1 1/4"
A12	flange ANSI 1 1/2"
A20	flange ANSI 2"
N14	NPT M 1 1/4"
T20	Tri Clamp 2"
XXX	special design
	<b>Descr.</b> <b>Cleaning port</b>
G18	G 1/8" (female)
G14	G 1/4" (female)
N14	1/4" NPT (female)
XXX	special design
	<b>Descr.</b> <b>Position reply</b>
PN	pneumatic
XX	special design
<b>EXTRACT 810</b>	<b>Item number</b>

### 3.12 Order structure EXTRACT 811

<b>Retractable holder EXtract 811</b>	
<b>Descr</b>	<b>Holder, wetted material</b>
4404	stainless steel, 1.4404 / 316L
HC22	Alloy C22, 2.4602
XXXX	special design
<b>Descr</b>	<b>Seals, wetted material</b>
EPD	EPDM
FPM	FPM
FKM	FFKM
XXX	special design
<b>Descr</b>	<b>Sensor</b>
325	325mm PG 13.5 filled with gel
380	380mm PG 13.5 filled with liquid
XXX	special design
<b>Descr</b>	<b>Process connection</b>
D40	flange DN40
D50	flange DN50
A12	flange ANSI 1 1/2"
A20	flange ANSI 2"
XXX	special design
<b>Descr</b>	<b>Cleaning port</b>
G18	G 1/8" (female)
G14	G 1/4" (female)
N14	1/4" NPT (female)
XXX	special design
<b>Descr</b>	<b>Position reply</b>
PN	pneumatic
XX	special design
<b>EXTRACT 811</b>	<b>Item number</b>

### 3.13 Order structure EXTRACT 815

<b>Retractable holder EXtract 815</b>	
<b>Desc.</b>	<b>Holder, wetted material</b>
4404	stainless steel, 1.4404 / 316L
HC22	Alloy C22, 2.4602
XXXX	special design
<b>Descr.</b>	<b>Seals, wetted material</b>
EPD	EPDM
FPM	FPM
FKM	FFKM
XXX	special design
<b>Descr.</b>	<b>Sensor</b>
225	225mm PG 13,5 filled with gel
280	280mm PG 13,5 filled with liquid
XXX	special design
<b>Descr.</b>	<b>Process connection</b>
IN28	Ingold DN25 G1 1/4" O-Ring Pos. 28mm
IN50	Ingold DN25 G1 1/4" O-Ring Pos. 50mm
XXX	special design
<b>Descr.</b>	<b>Cleaning port</b>
G18	G 1/8" (female)
G14	G 1/4" (female)
N14	1/4" NPT (female)
XXX	special design
<b>Descr.</b>	<b>Position reply</b>
PN	pneumatic
XX	special design
<b>EXTRACT 815</b>	<b>Item number</b>

### 3.14 Order structure EXTRACT 820

<b>Retractable holder EXTRACT 820</b>	
<b>Descr.</b>	<b>Holder, wetted material</b>
PP	PP
PVDF	PVDF
PEEK	PEEK
XXXX	special design
<b>Descr.</b>	<b>Seals, wetted material</b>
EPD	EPDM
FPM	FPM
FKM	FFKM
XXX	special design
<b>Descr.</b>	<b>sensor</b>
225	225mm PG 13.5 filled with gel
280	280mm PG 13.5 filled with liquid
XXX	special design
<b>Descr.</b>	<b>process connection</b>
D50	flange DN50
A20	flange ANSI 2"
N14	NPT M 1 1/4"
XXX	special design
<b>Descr.</b>	<b>cleaning port</b>
G18	G 1/8" (female)
G14	G 1/4" (female)
N14	1/4" NPT (female)
XXX	special design
<b>Descr.</b>	<b>position reply</b>
PN	pneumatic
XX	special design
<b>EXTRACT 820</b>	<b>Item number</b>

### 3.15 Order structure EXTRACT 821

<b>Retractable holder EXTRACT 821</b>	
<b>Descr.</b>	<b>Holder, wetted material</b>
PVDF	PVDF
PEEK	PEEK
XXXX	special design
<b>Descr.</b>	<b>Seals, wetted material</b>
EPD	EPDM
FPM	FPM
FKM	FFKM
XXX	special design
<b>Descr.</b>	<b>Sensor</b>
325	325mm PG 13.5 filled with gel
380	380mm PG 13.5 filled with liquid
XXX	special design
<b>Descr.</b>	<b>Process connection</b>
D50	flange DN50
A20	flange ANSI 2"
N14	NPT M 1 1/4"
XXX	special design
<b>Descr.</b>	<b>Cleaning port</b>
G18	G 1/8" (female)
G14	G 1/4" (female)
N14	1/4" NPT (female)
XXX	special design
<b>Descr.</b>	<b>Position reply</b>
PN	pneumatic
XX	special design
<b>EXTRACT 821</b>	<b>Item number</b>

### 3.16 Order structure EXtract 825

<b>Retractable holder EXtract 825</b>	
	<b>Code</b> <b>Material (wetted parts)</b>
	PP PP
	PVDF PVDF
	PEEK PEEK
	XXXX special version
	<b>Code</b> <b>Sealing material (wetted sealings)</b>
	EPD EPDM
	FPM FPM
	FKM FFKM
	XXX special version
	<b>Code</b> <b>Sensor type</b>
	225 225mm PG 13,5 filled with gel
	280 280mm PG 13,5 filled with liquid
	XXX special version
	<b>Code</b> <b>Process connection</b>
	IN25 Ingold DN25 G1 1/4" O-ring Pos. 25mm
	XXX special version
	<b>Code</b> <b>Rinsing connection</b>
	G18 G 1/8" (female)
	G14 G 1/4" (female)
	N14 NPT 1/4" (female)
	XXX special version
	<b>Code</b> <b>Position reply</b>
	00 without
	XX special version
<b>Extract 825</b>	<b>Order number</b>

### 3.17 Order structure EXTRACT 830

#### Retractable holder EXTRACT 830

	<b>Descr.</b>	<b>Holder, wetted material</b>
4404		stainless steel, 1.4404 / 316L
XXXX		special design
	<b>Descr.</b>	<b>Seals, wetted material</b>
EPD		EPDM FDA
FPM		FPM
XXX		special design
	<b>Descr.</b>	<b>sensor</b>
225		225mm PG 13.5 filled with gel
280		280mm PG 13.5 filled with liquid
XXX		special design
	<b>Descr.</b>	<b>Process connection</b>
IN28		Ingold DN25 (G1 1/4") O-RingPos. 28mm
IH25		HyCIP® Ingold (G1 1/4") O-Ring Pos. 25mm
IH50		HyCIP® Ingold (G1 1/4") O-Ring Pos. 50mm
IH55		HyCIP® Ingold (G1 1/4") O-Ring Pos. 55mm
VARN		Varivent N DN40-125
TC15		TriClamp 1,5" (OD Ø50,5mm)
TC20		TriClamp 2" (OD Ø64mm)
BCT5		NEUMO BioControl 50
MV50		DIN 11851 DN50 (milk tube)
XXXX		special
	<b>Descr.</b>	<b>Cleaning port</b>
G18		G 1/8" (female)
G14		G 1/4" (female)
N14		1/4" NPT (female)
XXX		special design
	<b>Descr.</b>	<b>Position reply</b>
PN		pneumatic
XX		special design
<b>EXTRACT 830</b>	-	<b>Item number</b>



## 4 Parts and accessories

### Drive unit with pneumatic position reply

EXTRACT	Part	Item number
810/811 / 815 820/821 / 830	Drive unit for sensor L = 225/325 mm	2-075-03-001
810/811 / 815 820/821 / 830	Drive unit for sensor L = 280/380 mm	2-075-03-002

### Seal kits

EXTRACT	Part	Item number
810 / 820	Seal kit EPDM	2-123-40-001
	Seal kit FPM	2-123-41-001
	Seal kit FFKM	2-123-42-001
811 / 821	Seal kit EPDM	2-123-40-002
	Seal kit FPM	2-123-41-002
	Seal kit FFKM	2-123-42-002
815 / 825	Seal kit EPDM	2-123-40-012
	Seal kit FPM	2-123-41-012
	Seal kit FFKM	2-123-42-012
830 IN28	Seal kit EPDM FDA	2-123-40-003
	Seal kit FPM	2-123-41-003
830 HyCiP®	Seal kit EPDM FDA	2-123-40-004
	Seal kit FPM	2-123-41-004
830 TC15/TC20 + MV50 VARN / BCT5	Seal kit EPDM FDA	2-123-40-005
	Seal kit FPM	2-123-41-005



Please state serial number of your holder when ordering parts and accessories.

<b>Insertion rods</b>		
<b>EXTRACT</b>	<b>Part</b>	<b>Item number</b>
810	Insertion rod 1.4404 / 316L	2-061-33-004
	Insertion rod 2.4602 / Alloy C22	2-061-34-004
811	Insertion rod 1.4404 / 316L	2-061-33-005
	Insertion rod 2.4602 / Alloy C22	2-061-34-005
815	Insertion rod 1.4404 / 316L	2-061-33-006
	Insertion rod 2.4602 / Alloy C22	2-061-34-006
820	Insertion rod PP	2-061-22-004
	Insertion rod PVDF / Alloy C22	2-061-23-004
	Insertion rod PEEK	2-061-29-004
821	Insertion rod PVDF / Alloy C22	2-061-23-005
	Insertion rod PEEK	2-061-29-005
825	Insertion rod PP	2-061-22-011
	Insertion rod PVDF / Alloy C22	2-061-23-011
	Insertion rod PEEK	2-061-29-011
830	Insertion rod 1.4404 / 316L	2-061-33-004



Please state serial number of your holder when ordering parts and accessories.

## 5 Certificates

### 5.1 Atex-certifikate 810/811/815/820/821/825/830



TÜVRheinland®  
Genau. Richtig.

#### Stellungnahme zur Anwendbarkeit der RL 2014/34/EU (ATEX)

Für Geräte und Komponenten  
zur Verwendung in explosionsgefährdeten Bereichen

Statement for application  
of directive 2014/34/EC

for Equipment and Components  
intended for Use in Potentially Explosive Atmospheres

Gegenstand: Gerät/Komponente Typ  
Subject: Equipment/Component type

EXTRACT Typ 810 / 811 / 815 / 820 / 821 / 825 / 830

Hergestellt und zur Prüfung vorgelegt

Exner Process Equipment GmbH

Manufactured and submitted for examination

D-76275 Ettlingen; Carl-Metz-Str. 26

Anschrift  
Address

Prüfgrundlage  
Basis for examination

Richtlinie 2014/34/EU  
Directive 2014/34/EC

Verwendete Normen  
Standard basis

EN 80079-36:2016

Schutzartkennzeichen  
Code for type of protection

Keine

Prüfergebnis:  
Examination result

Das Gerät fällt nicht in den Anwendungsbereich der  
Richtlinie 2014/34/EU. Es hat keine eigenen  
Zündquellen.

Prüfbericht-Nr.:  
Assessment number

-

TÜV Rheinland Industrie Service GmbH

Essen, den 22.08.2018

Manuel Steffen  
Sachverständiger

TÜV Rheinland Industrie Service GmbH  
Zertifizierstelle für explosionsgeschützte Produkte  
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### 1) Gegenstand und Typ

EXTRACT 810 / 811 / 815 / 820 / 821 / 825 / 830 in pneumatischer und manueller Ausführung

### 2) Beschreibung

Die Wechselarmatur EXTRACT wird an Behältern oder Rohrleitungen befestigt. Der pneumatische Antrieb bringt einen Sensor (geprüft nach Richtlinie 2014/34/EU) in die Prozessflüssigkeit ein, um chemische oder physikalische Eigenschaften zu messen. Der pneumatische Antrieb fährt das Tauchrohr bis zur maximalen Eintauchtiefe in das Prozessmedium hinein, zur Sicherheit ist das nur mit eingebautem Sensor möglich. Während der Prozess läuft kann man den Sensor reinigen, spülen oder kalibrieren. Die Einsatzbedienungen müssen innerhalb der technischen Spezifikation der jeweiligen Armatur und des eingebauten Sensors liegen. Die aufgeführten Typen gibt es auch in manueller Ausführung mit Drehgriff und Entriegelungsbolzen.

Es wurde ein Normenupdate durchgeführt. Zusätzlich ist die Serie um die Typen 815 und 825 erweitert worden.

### 3) Technische Daten

#### Typ 815:

Prozessdruck:	max. 16 bar
Prozesstemperatur:	-10 bis 140 °C
Materialien	Edelstahl 1.4404 / 316 L, Alloy C22 (2.4602)
Dichtungen:	EPDM, FPM (Viton), FFKM (Kalrez)

#### Typ 825:

Prozessdruck:	max. 10 bar
Prozesstemperatur:	-10 bis 140 °C
Materialien	PP, PVDF, PEEK
Dichtungen:	EPDM, FPM (Viton), FFKM (Kalrez)

#### Umgebungstemperatur:

-10°C bis 70°C

#### Prozessdruck und Temperatur:

Armatur 810/ 811 / 830

bei 16 bar max. 120°C

bei 10 bar max. 140°C

#### Armatur 820/ 821

PP bei 4 bar max. 60°C

PVDF bei 6 bar max. 90°C

PEEK bei 10 bar max. 100°C

Tabelle in Betriebsanleitung beachten

#### Armatur 810/ 811 /830

1.4404 / 316L

Alloy C22, 2.4602

#### Armatur 820/ 821

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Dichtungen:	PVDF PEEK <b>Armatur 820</b> PP EPDM , FPM , (FFKM nur 810,811,820,821) (FDA nur 830)
Druckluft: Druckluftanschluss:	4 bis 6 bar gefiltert 40µm öl- und kondensatfrei 4 mm ( Positionsrückmeldung) und 6 mm (Steuerluft) 1-4 bar
Spüldruck: Ausführung der Prozessanschlüsse ( <b>Armatur 830</b> )	DIN11851 DN50, TriClamp 2", TriClamp 1,5", SELI G1", BioConnect, Varivent, ING

#### 4) Prüfergebnis

Die im Kapitel 1 aufgeführte Armatur EXTRACT fällt nicht in den Anwendungsbereich der Richtlinie 2014/34/EU, weil sie bei bestimmungsgemäßer Verwendung keine eigenen potentiellen Zündquellen besitzt.

#### 5) ATEX Kennzeichnung

nicht erforderlich

#### 6) Bedingungen für die sichere Verwendung bzw. Verwendungshinweise

1. Auf der Kappe muss ein Aufkleber mit der Beschriftung: „Achtung, Gefahr durch elektrostatische Aufladungen, nur mit antistatischem Tuch abwischen“ angebracht sein.
2. Für die Medium berührten Teile, die aus nicht leitfähigem Material bestehen, ist die elektrostatische Aufladung zu berücksichtigen. Dieses gilt besonders für nicht leitende Flüssigkeiten.
3. Der Sensor muss Konform mit der Richtlinie 2014/34EU sein und es sind die Umgebungstemperaturen zu beachten.
4. Es ist dafür zu sorgen, dass keine explosionsfähige Atmosphäre in der Druckluft enthalten ist.
5. Es ist darauf zu achten, dass die Bewegungen beim Ein-Ausfahren des Sensors nicht den Anschluss beschädigen.
6. Es sind die verschiedenen Temperaturklassen der jeweiligen Materialien zu beachten.
7. Für einen Potenzialausgleich ist zu sorgen.

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TÜV Rheinland Industrie Service GmbH

Zertifizierstelle für Ex-Produkte  
Alfredstraße 81  
D-45130 Essen

Essen, den 22.08.2018

Manuel Steffen  
Sachverständiger



TÜV Rheinland Industrie Service GmbH  
Zertifizierstelle für explosionsgeschützte Produkte  
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