

- Compact version with integrated conductivity electrodes
- Remote version with separated transmitter for short (15 ft.) or long (1500 ft.) distance
- Commissioning is easy due to multi-language, menu-guided operation
- For use in both pipes and tanks using custom fittings or submersion kits
- CE Approval

Compact Conductivity Transmitter Type 8225

The conductivity transmitter compactly combines a conductivity-sensor and a transmitter with display in a splash-proof plastic NEMA 4 enclosure.

The sensor component consists of replaceable sensors. Sensors with cell constants 0.01 and 0.1 are fitted with stainless steel electrodes, and those with cell constants 1.0 and 10 are fitted with graphite electrodes.

The Pt1000 for automatic temperature compensation is a standard feature in the sensor housing.

The transducer component converts the measured signal and displays the actual value.

Compact version for insertion fittings Types S020 and 1500 / 1501

Burkert Contromatic USA

2602 McGaw Avenue
Irvine, CA 92614
Tel. 949.223.3100
Fax 949.223.3198
www.burkert-usa.com

Remote Conductivity Transmitter Type 8225

The conductivity-transmission system combines a conductivity sensor Type 8220 and a separate transmitter Type 8225 with display.

The Type 8225 remote transmitter is available in panel-mounted version and in a wall-mounted plastic NEMA 4 enclosure.

Conductivity Sensor Type 8220

Four conductivity sensors with different cell constants offers a large range of conductivity measurements.

The Pt1000 for automatic temperature compensation is integrated in the sensor housing.

Two different versions for short or long distances between sensor and transmitter are available. The short version sensor directly transmits an analog signal up to 15 feet.

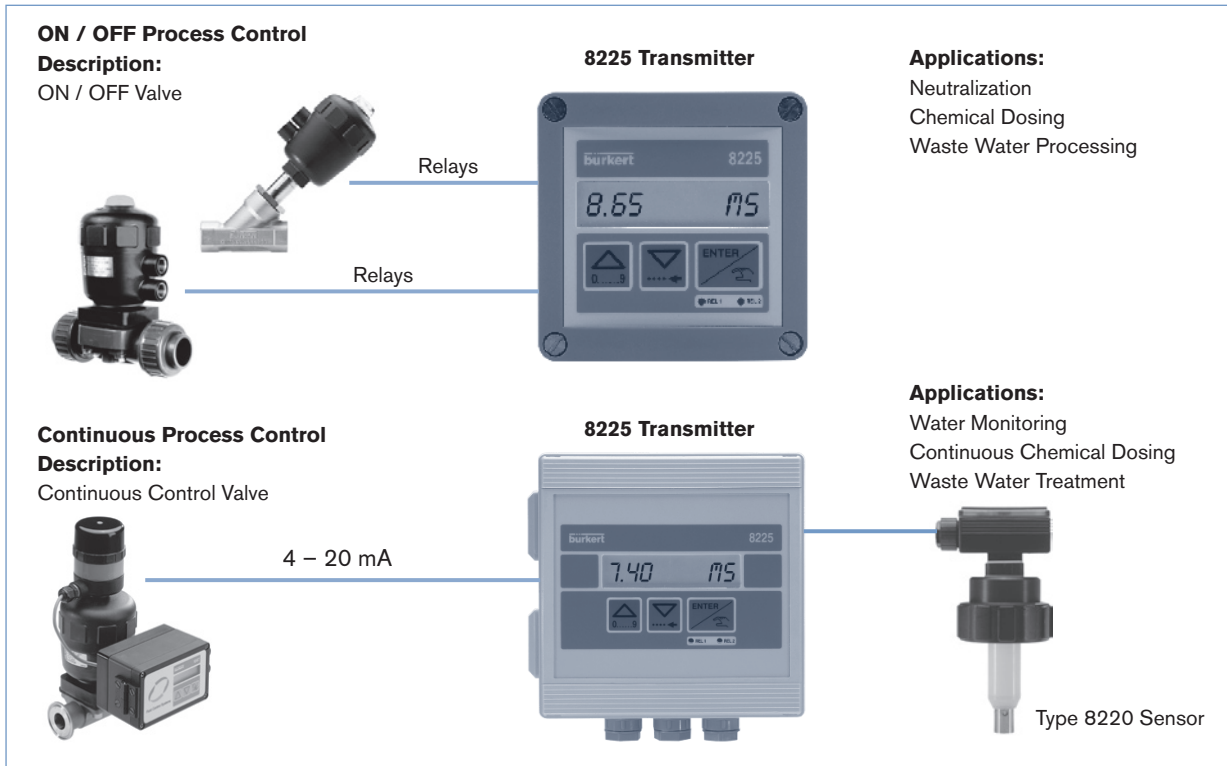
The long version sensor converts the measured signal into a digital signal on the sensor for passing to the transmitter up to a distance of 1500 feet.

Technical data

Conductivity measurements

Waste treatment engineering
Water treatment and process technology
Cooling water monitoring
Chemical dosing
Electroplating

The conductivity – control system

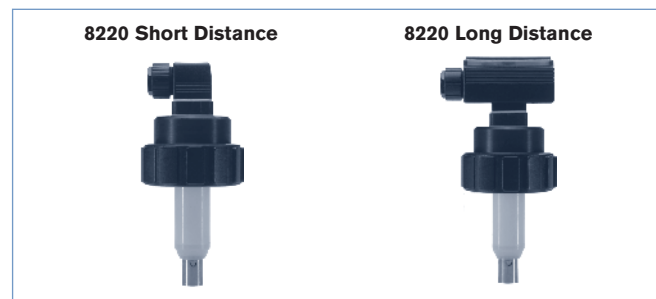


Design

The conductivity measuring system is available as a compact version Type 8225 and as a separate version combining a sensor Type 8220 and the separate transmitter Type 8225 with display. The conductivity transmitter uses different cell constants. Sensors with cell constants 0.01 and 0.1 are fitted with stainless steel electrodes and those with cell constants 1.0 and 10 are fitted with graphite electrodes. The Pt1000 for automatic temperature compensation is a standard feature in the conductivity sensor housing.

The Type 8225 remote transmitter is available in a panel-mounted version and in a wall-mounted plastic NEMA 4 enclosure for both short and long distance connection to the sensor 8220. The Type 8225 conductivity transmitter output signal is a standard 4 – 20 mA signal. Two freely adjustable relay outputs are available as an option.

The Type 8220 conductivity sensor is available in short distance (15 ft.) or long distance feature (1500 ft.). The Type 8220 sensors short distance is provided with a 4 pin connector. The analog output signal can be transmitted up to 15 ft. via a 4 x 1.5 mm² shielded cable. The Type 8220 sensor long distance is provided with a signal converter Type 8221. The Type 8221 signal converter converts the measured signal of the sensor into a digital signal. This signal can be transmitted up to 1500 ft. via a shielded 4-wire transmission line.



Principle of operation

The conductivity is defined as the ability of a solution to conduct electrical current. The load carriers are ions (e.g. dissolved salts or acids). In order to measure conductivity, two electrodes are used at a fixed distance apart and with a specific surface. A voltage source is connected to the electrodes. The measured current is a direct function of the conductivity of the solution.

The transmitter is available without relays or with 2 additional relay functions in a 3-wire circuit. Limit values are freely adjustable.

Installation

The compact conductivity transmitter can easily be installed into any Burkert insertion fitting system, S020 or 1500 / 1501, by connecting the main nut. The remote version requires a separate conductivity transmitter Type 8225 with display. The transmitter Type 8225 is available in a panel-mounted version or in a wall-mounted plastic NEMA 4 enclosure. The conductivity sensor Type 8220 is connected for a short distance (<15 ft.) directly via cable plug connector or for long distance (<1500 ft.) via the digital converter Type 8221 to the separate transmitter Type 8225.

The sensor Type 8220 can be easily installed into pipes using our specially designed fitting system, S020 or 1500 / 1501, by connecting the main nut.

Compact Version Type 8225



Separate Version Type 8225

Conductivity-Sensor Type 8220



Distance Up To 15 ft.

Conductivity Transmitter Type 8225



Conductivity-Sensor Type 8220 with Digital Converter Type 8221

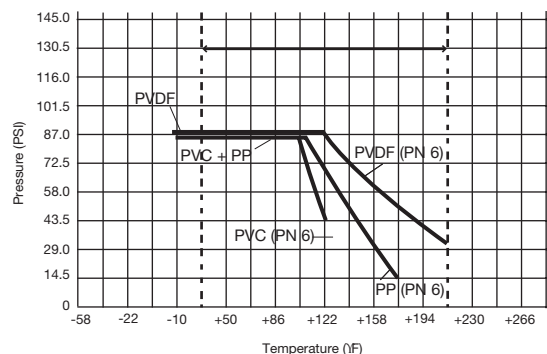


Distance Up To 1500 ft.

Conductivity Transmitter Type 8225

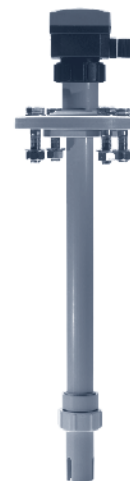


Pressure-Temperature-Diagram



Industrial Submersion Fitting

Allows installation into tanks and containers. The following standard lengths are available:
 20, 40, 60, 80 inches.
 Special lengths on request.



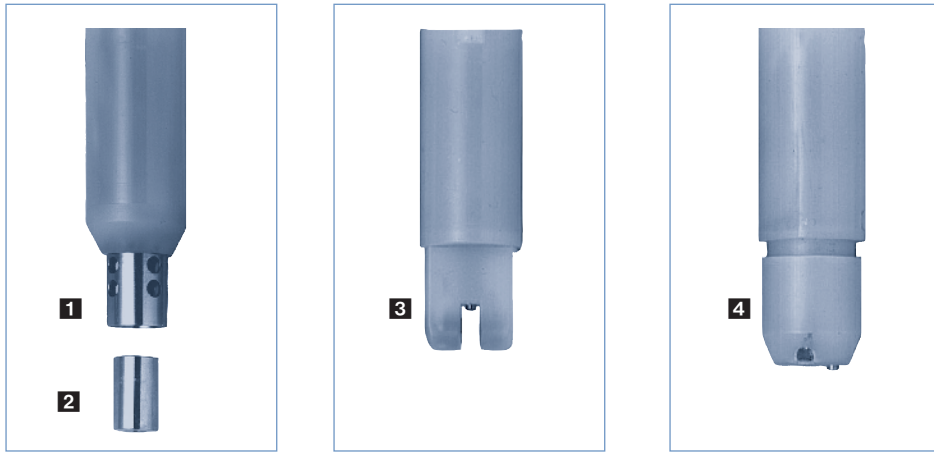
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Operating / Commissioning

Customized adjustments, such as measuring ranges, engineering units and alarm setpoints can be carried out on site via a multi-lingual display. Please consider the respective operating instructions prior to commissioning the devices.

Electrode Types and measuring ranges

Different Electrode Designs Are Required Based On Selected Cell Constant.

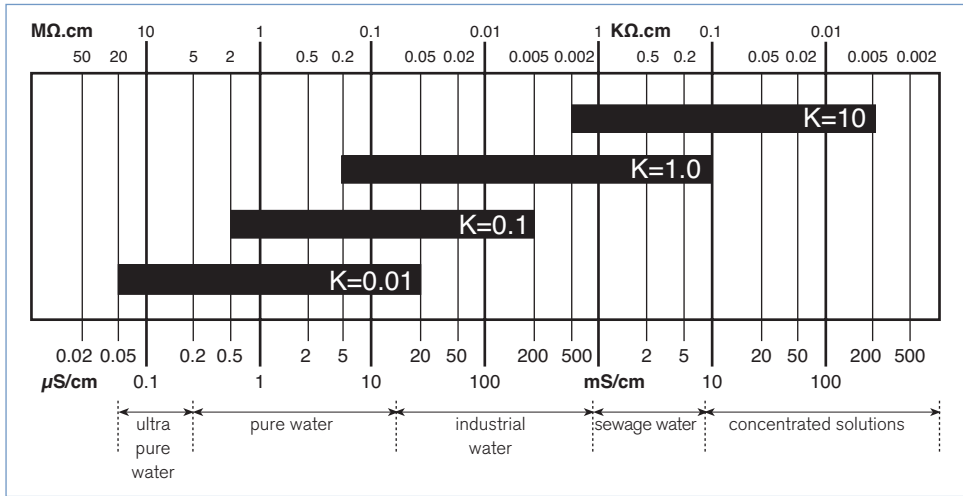


- 1** K = 0.1 and
- 2** K = 0.01

3 K = 1.0

4 K = 10

The conductivity transmitter can be connected to 4 different sensors with cell constants 0.01, 0.1, 1.0 and 10. Select the conductivity sensor according to the measuring range using the table below:



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Installation

The Operation of the Conductivity Transmitter Is Divided in the Following 3 Different Menus:

Main menu

- Conductivity
- Temperature
- Output current
- HOLD function

Calibration menu

- Language
- Engineering units
- Cell constant
- Temperature compensation
- Measuring range 4 – 20 mA
- Relay function
- Filter selection

Test menu

- Offset
- Span
- Conductivity non compensation
- Simulation of conductivity



Display selection and increasing key (numeric values) impulses or automatic.

Direction downwards in menu or sideways for digit selection

Relay 1: contact closed

Relay 2: contact closed

Acceptance of chosen parameter or adjusted value

Technical data

General data	
Pipe diameter	1-1/4" to 2" (DN 32 to DN 50); fitting Type S020 DN 65 to 100 weld-in; Weld-o-Let fitting Type 1500
Stainless Steel	
Brass	1-1/4" to 2" (DN 32 to DN 50); fitting Type S020
PVC, PP, PVDF	1-1/4" to 2" (DN 32 to DN 50); fitting Type S020 2 1/2" - 4" PVC saddle DN 65 to DN 100 PE/PP/PVDF-Weld-o-Let fitting Type 1501
Measuring range	0.05 μ S/cm - 200 mS/cm, depending on cell constant
Measuring error	typical 3% of measured value max. 5% of measured value
Temperature compensation	Automatic with standardized integrated Pt1000 with reference temperature 77°F (25°C)
Fluid temperature	32°F to 212°F (0°C to 100°C)
Ambient temperature	32°F to 140°F (0°C to 60°C)
Storage temperature	32°F to 140°F (0°C to 60°C)

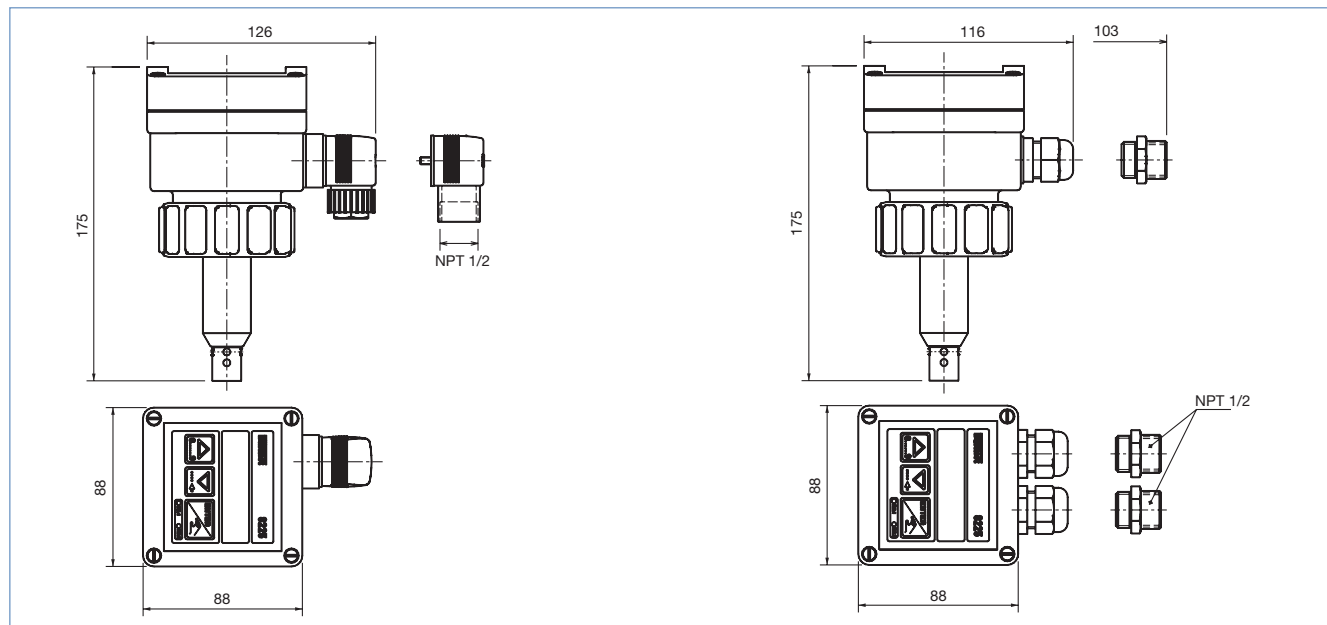
Compact version	
Pressure class	87 PSI (PN 6)
Enclosure	NEMA 4 (IP 65). Relative humidity max. 80%
Electronic housing	PC
Sensor housing	PVDF; O-rings FKM / EPDM
Voltage supply	12-30 VDC
Consumption	80 mA (with relays), 20 mA (without relays)
Display	.6 x 2.4 in. LCD 8 digits, alphanumeric 15 segments, .35 in. high
Analog output signal	4 - 20 mA programmable, proportional to the conductivity
Load	<700 Ω at 30 V; <400 Ω at 24 V; <100 Ω at 15 V
Relay output (optional)	2 relays, 3 A / 230 V; freely adjustable
Measuring electrodes	K = 0.01 stainless steel electrodes K = 0.1 stainless steel electrodes K = 1.0 graphite electrodes K = 10 graphite electrodes

Separate transmitter version	
Enclosure	Wall-mounted version IP65 (NEMA4). Rel. humidity max. 80%; ABS Panel version IP 20 (rear plate); NEMA 4 (IP 65) (front plate); PC
Voltage supply	12 - 30 VDC; (115/230 VAC option wall-mounted version)
Consumption	80 mA (with relays), 20 mA (without relays)
Display	.6 - 2.4" LCD 8 digits, alphanumeric 15 segments; .35 in. high
Analog output signal	4 - 20 mA programmable, proportional to the conductivity
Load	short distance long distance <700 Ω <1100 Ω at 30 V <400 Ω <910 Ω at 24 V <100 Ω <470 Ω at 15 V
Measuring electrodes	K = 0.01 stainless steel electrodes K = 0.1 stainless steel electrodes K = 1.0 graphite electrodes K = 10 graphite electrodes
Relay output	2 relays 3 A / 230 V; freely adjustable

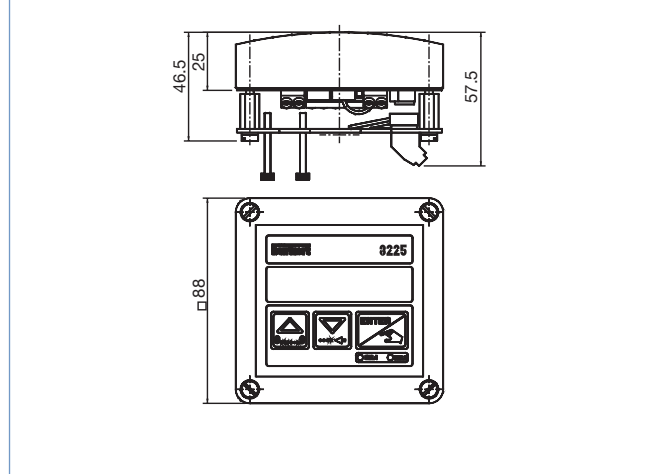
Separate conductivity sensor Type 8220	
Pressure class	87 PSI (PN 6)
Enclosure	NEMA 4 (IP 65)
Electronic housing	PA
Sensor housing	PVDF
O-ring	FKM / EPDM
Temperature compensation	Automatic with standardized integrated Pt1000 with reference temperature 77°F (25°C)
Measuring electrodes	K = 0.01 stainless steel electrodes K = 0.1 stainless steel electrodes K = 1.0 graphite electrodes K = 10 graphite electrodes
Signal cable length between Type 8220 sensor and Type 8225 transmitter	Short distance max. 15 ft. Long distance max. 1500 ft.

Dimensions [mm]

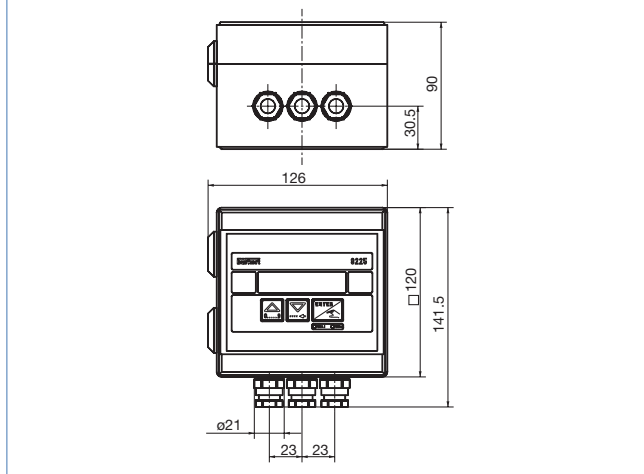
Conductivity Transmitter Type 8225 Compact and Separate Version



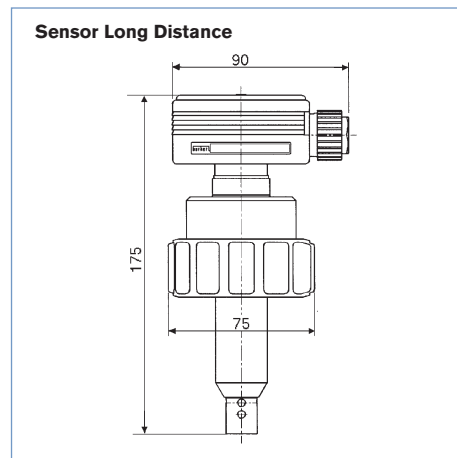
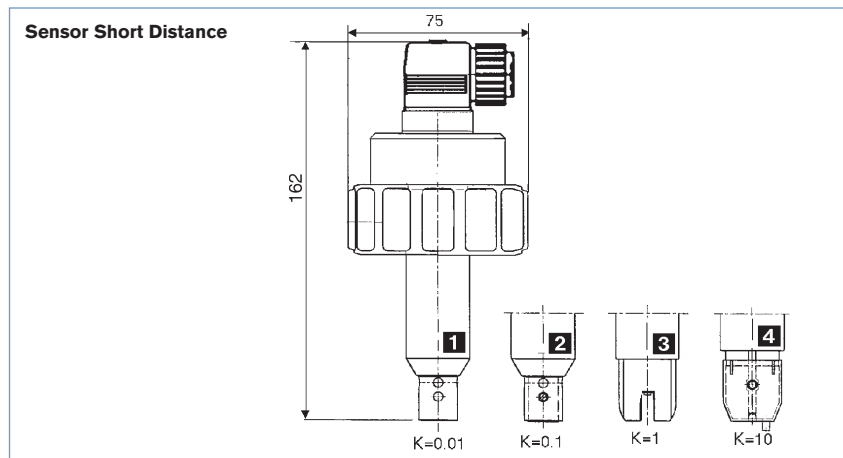
Conductivity Transmitter Type 8225 Panel-Mounted Version



Conductivity Transmitter Type 8225 Wall-Mounted Version

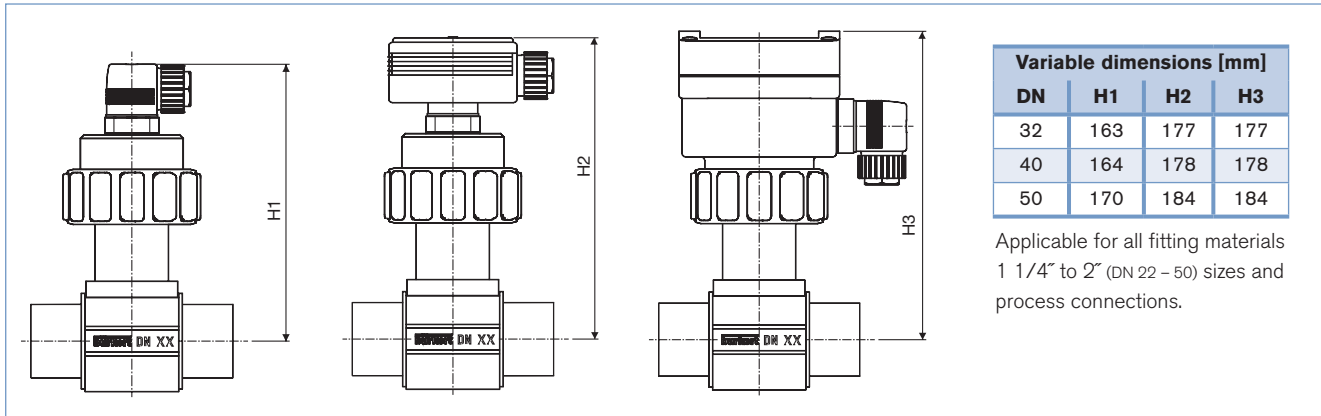


Conductivity-Sensor Type 8200 for Burkert Fitting Type S020; 1500; 1501



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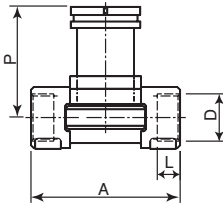
Dimensions [mm] – fittings S020, 1 1/4" – 2" for transmitter Type 8225 or sensor Type 8220



Insertion fitting dimensions

Internal thread
Stainless steel (316L - 1.4404)
or brass (CuZn39Pb2)

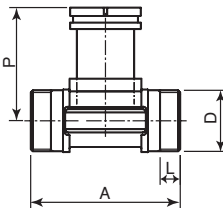
NPT
G
Rc



Orifice [DN]	P [mm]	A [mm]	D	L [mm]
1 1/4" (32)	81.6	120.0	NPT 1 1/4	21.0
			G 1 1/4	23.5
			Rc 1 1/4	21.0
1 1/2" (40)	85.4	130.0	NPT 1 1/2	20.0
			G 1 1/2	23.5
			Rc 1 1/2	19.0
2" (50)	91.5	150.0	NPT 2	24.0
			G 2	27.5
			Rc 2	24.0

External thread
Stainless steel (316L - 1.4404)
or Brass (CuZn39Pb2)
or PVC (only DN 6 and 8)

G

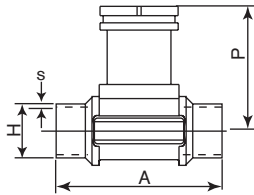


Orifice [DN]	P [mm]	A [mm]	D	L [mm]
1 1/4" (32)	81.6	119.0	G 1 1/2	18.0
1 1/2" (40)	85.4	129.0	M 55 x 2	19.0
2" (50)	91.5	149.0	M 64 x 2	20.0

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Insertion fittings S020 dimensions

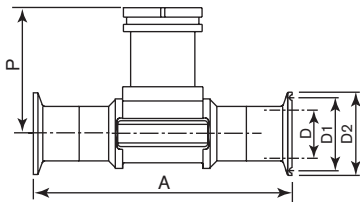
Welding ends **BS 4825/ASME BPE**
Stainless steel (316L - 1.4404) **EN ISO 1127 / ISO 4200**
SMS 3008



Orifice [DN]	P [mm]	A [mm]	Standard	D [mm]	s [mm]
1 1/4" (32)	78.0	104.0	BS4825/ASME BPE	32.00	1.60
	81.6	119.0	ISO 4200	42.40	2.00
	78.0	104.0	SMS 3008	-	-
1 1/2" (40)	81.6	119.0	BS 4825	38.10	1.65
	85.4	129.0	ISO 4200	48.30	2.00
	81.6	119.0	SMS 3008	38.00	1.20
2" (50)	85.4	128.0	BS4825/ASME BPE	50.80	1.65
	91.5	149.0	ISO 4200	60.30	2.00
	85.4	128.0	SMS 3008	51.00	1.20
2 1/2" (65)	91.5	147.0	BS4825/ASME BPE	63.50	1.65
	-	-	ISO 4200	-	-
	91.5	147.0	SMS 3008	63.50	1.60

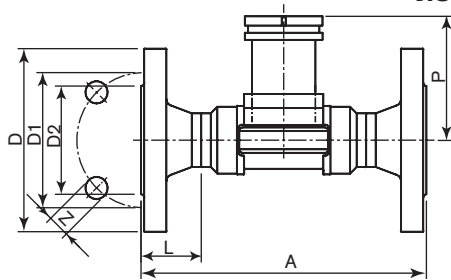
Tri-Clamp® **BS 4825/ASME BPE***
Stainless steel **ISO (for pipe EN ISO 1127 / ISO 4200)**
(316L - 1.4404) **SMS 3017 / ISO 2852***

*Available with internal surface finish Ra=0.8µm



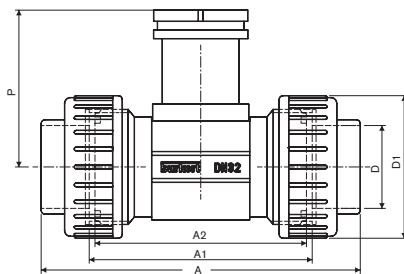
Orifice [DN]	P [mm]	A [mm]	Standard	D2 [mm]	D1 [mm]	D [mm]
1 1/4" (32)	81.6	180	BS 4825/ASME BPE	-	-	-
			ISO (for pipe ISO 4200)	38.4	43.5	50.5
			SMS 3017/ISO 2852	-	-	-
1 1/2" (40)	85.4	200	BS 4825/ASME BPE	34.8	43.5	50.5
			ISO (for pipe ISO 4200)	44.3	56.5	64.0
			SMS 3017/ISO 2852	35.6	43.5	50.5
2" (50)	91.5	230	BS 4825/ASME BPE	47.5	56.5	64.0
			ISO (for pipe ISO 4200)	55.1	70.5	77.5
			SMS 3017/ISO 2852	48.6	56.5	64.0
2 1/2" (65)	91.5	216.0	BS 4825/ASME BPE	60.2	70.5	77.5
			ISO (for pipe ISO 4200)	-	-	-
			SMS 3017/ISO 2852	60.3	70.5	77.5

Flange **DIN 2633**
Stainless steel (316L - 1.4404) **ANSI B16-5-1988**
JIS 10K



Orifice [DN]	P [mm]	A [mm]	DIN/ANSI [mm]	JIS [mm]	NORM	L [mm]	Z [mm]	D2 [mm]	D1 [mm]	D [mm]
1 1/4" (32)	81.6	180.0	229.0	ANSI	JIS	31.0	4x15.8	63.5	88.9	117.0
							4x18.0	78.0	100.0	140.0
							4x19.0	76.0	100.0	135.0
1 1/2" (40)	85.4	200.0	241.0	ANSI	JIS	36.0	4x15.8	73.0	98.4	127.0
							4x18.0	88.0	110.0	150.0
							4x19.0	81.0	105.0	140.0
2" (50)	91.5	230.0	267.0	ANSI	JIS	41.0	4x19.0	92.1	120.6	152.0
							4x18.0	102.0	125.0	165.0
							4x19.0	96.0	120.0	155.0

True union nut with solvent or fusion spigot
PVC, PP, PVDF

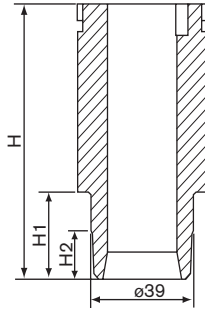


Orifice [DN]	P [mm]	D1 [mm]	DIN [mm]	ANSI [mm]	JIS [mm]	(DIN) [mm]	(ANSI) [mm]	(JIS) [mm]	A2 [mm]	A1 [mm]
1 1/4" (32)	81.4	74	168	170.0	169	40	42.2	38.60	110	116
1 1/2" (40)	85.2	83	188	190.2	190	50	48.3	48.70	120	127
2" (50)	91.5	103	212	213.6	213	63	60.3	60.80	130	136

* Analysis version fitting

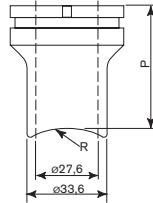
Dimensions [mm] – fittings 2 1/2" – 4" (DN 65 – 100)

Fusion spigot
PE, PP, PVDF



DIA. [DN]	H [mm]	PE		PP		PVDF	
		H1 [mm]	H2 [mm]	H1 [mm]	H2 [mm]	H1 [mm]	H2 [mm]
2 1/2" (65)	72.5	13.0	---	13.0	---	10.4	---
3" (80)	72.5	15.6	---	15.6	---	12.5	---
4" (100)	72.5	19.0	5.0	19.0	5	15.2	6

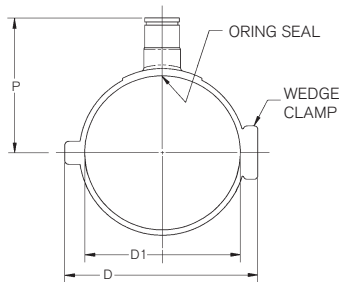
Welding tab with radius
Stainless steel (316L - 1.4404)



Orifice (DN)	P [mm]	R [mm]
2 1/2" (65)	54.52	36.65
3" (80)	53.07	44.45
4" (100)	50.71	57.15

Saddle- PVC

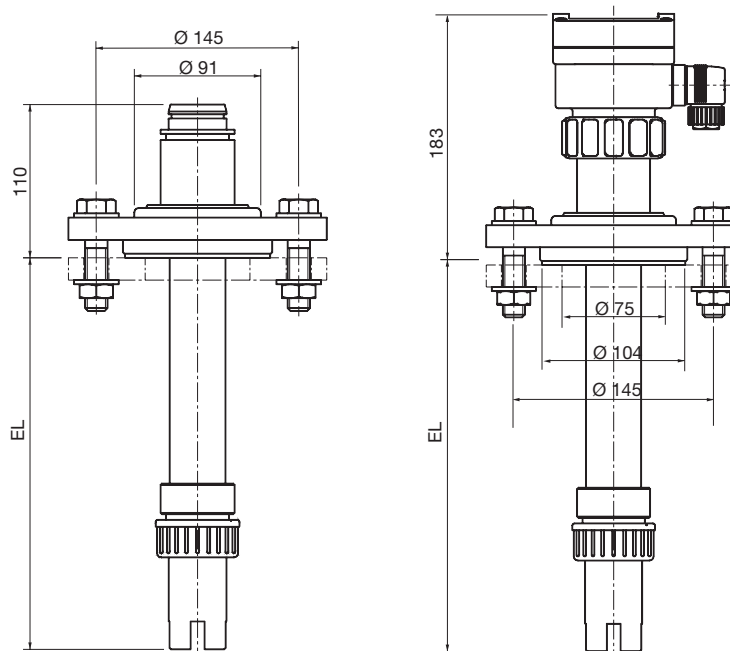
Body material: PVC, Seal material: BUNA



DIA.	D[mm]	P[mm]	D1[mm]
2 1/2" (65)	129	115.0	75.0
3" (80)	144	119.0	90.0
4" (100)	163	107.0	114.0

Submersion Fitting

Lengths L: 20, 40, 60, 80 inches



Ordering data for conductivity transmitter Type 8225

A Compact Version Of Conductivity Transmitter Type 8225 Consists of Two Basic Units as Follows:

- Fitting Type S020, 1 1/4" to 2" (DN32 to DN50), or 1500/1501, 2-1/2" to 4" (DN65 to DN100)
- Compact Conductivity Transmitter Type 8225

Description	Electrode	Gasket	Voltage	North America Standard Item no. Conduit Plug 1/2" NPT	Worldwide Standard Item no. 1 x PG 13.5
Compact Conductivity Transmitter 4–20 mA Output; Without Relay					
Compact Transmitter 8225	C = 0.01	FKM	12 – 30 VDC	418 974 V	418 962 Z
Compact Transmitter 8225	C = 0.1	FKM	12 – 30 VDC	418 975 W	418 963 S
Compact Transmitter 8225	C = 1.0	FKM	12 – 30 VDC	418 976 X	418 964 T
Compact Transmitter 8225	C = 10	FKM	12 – 30 VDC	418 977 Y	418 965 U
Compact Conductivity Compact 4–20 mA Output; Without Relay					
				Cable plug DIN	
Compact Transmitter 8225	C = 0.01	FKM	12 – 30 VDC	--	418 950 H
Compact Transmitter 8225	C = 0.1	FKM	12 – 30 VDC	--	418 951 W
Compact Transmitter 8225	C = 1.0	FKM	12 – 30 VDC	--	418 952 X
Compact Transmitter 8225	C = 10	FKM	12 – 30 VDC	--	418 953 Y
Compact Conductivity Compact 4–20 mA Output; Without Relay					
				2 x 1/2" NPT	2 x PG 13.5
Compact Transmitter 8225	C = 0.01	FKM	115 – 230 VAC	426 951 N	426 935 E
Compact Transmitter 8225	C = 0.1	FKM	115 – 230 VAC	427 864 Q	426 936 F
Compact Transmitter 8225	C = 1.0	FKM	115 – 230 VAC	427 865 R	426 937 G
Compact Transmitter 8225	C = 10	FKM	115 – 230 VAC	427 866 J	426 938 R
Compact Conductivity Compact 4–20 mA Output; 2 x Relay					
				2 x 1/2" NPT	2 x PG 13.5
Compact Transmitter 8225	C = 0.01	FKM	12 – 30 VDC	418 978 H	418 954 Z
Compact Transmitter 8225	C = 0.1	FKM	12 – 30 VDC	418 979 A	418 955 S
Compact Transmitter 8225	C = 1.0	FKM	12 – 30 VDC	418 980 Y	418 956 T
Compact Transmitter 8225	C = 10	FKM	12 – 30 VDC	418 981 M	418 957 U
Compact Conductivity Compact 4–20 mA Output; 2 x Relay					
				2 x 1/2" NPT	2 x PG 13.5
Compact Transmitter 8225	C = 0.01	FKM	115 – 230 VAC	427 871 P	426 943 N
Compact Transmitter 8225	C = 0.1	FKM	115 – 230 VAC	427 872 Q	426 944 P
Compact Transmitter 8225	C = 1.0	FKM	115 – 230 VAC	427 873 R	426 945 Q
Compact Transmitter 8225	C = 10	FKM	115 – 230 VAC	427 874 J	426 946 R

Ordering data for conductivity transmitter Type 8225

A Remote Version of Conductivity Transmitter Type 8225 Consists of Three Basic Units:

- Fitting Type S020, 1/2" to 2" (DN15 to DN50), or 1500/1501, 2-1/2" to 8" (DN65 to DN200)
- Conductivity-sensor Type 8220 short or long version (includes converter Type 8221)
- Conductivity transmitter Type 8225 wall- or panel-mounted version

Description	Relay	Sensor	Voltage	Item no.
Conductivity Transmitter Panel-Mounted Version for Separate Sensor Type 8220; 4-20 mA Output				
Panel-mounted Transmitter 8225	no	no	12 – 30 VDC	426 830 R
Panel-mounted Transmitter 8225	2 x relay	no	12 – 30 VDC	426 831 E
Panel-mounted Transmitter 8225 for > 15 ft. cable length	no	no	12 – 30 VDC	426 832 F
Panel-mounted Transmitter 8205 for > 15 ft. cable length	2 x relay	no	12 – 30 VDC	426 833 G
Conductivity Transmitter Wall-Mounted Version for Separate Sensor Type 8220; 4-20 mA Output				
Wall-mounted Transmitter 8225	no	no	12 – 30 VDC	426 834 H
Wall-mounted Transmitter 8225	2 x relay	no	12 – 30 VDC	426 835 A
Wall-mounted Transmitter 8225	no	no	115 – 230 VAC	426 836 B
Wall-mounted Transmitter 8225	2 x relay	no	115 – 230 VAC	426 837 C
Wall-mounted Transmitter 8225 for > 15 ft. cable length	no	no	12 – 30 VDC	426 838 M
Wall-mounted Transmitter 8225 for > 15 ft. cable length	2 x relay	no	12 – 30 VDC	426 839 N
Wall-mounted Transmitter 8225 for > 15 ft. cable length	no	no	115 – 230 VAC	426 840 T
Wall-mounted Transmitter 8225 for > 15 ft. cable length	2 x relay	no	115 – 230 VAC	426 841 Q

Description	Gasket	Sensor	Material Pt 1000	Item no. *
Conductivity Sensor Type 8220 SHORT VERSION; (<15 ft.); PG 9				
8220 with PVDF finger	FKM	C = 0.01	Stainless Steel	426 872 P
8220 with PVDF finger	FKM	C = 0.1	Stainless Steel	426 873 Q
8220 with PVDF finger	FKM	C = 1.0	Stainless Steel	426 874 R
8220 with PVDF finger	FKM	C = 10	Titanium	426 875 J
Conductivity Sensor Type 8220 LONG VERSION; (<1500 ft.); PG 9				
8220 with PVDF finger	FKM	C = 0.01	Stainless Steel	426 880 L
8220 with PVDF finger	FKM	C = 0.1	Stainless Steel	426 881 H
8220 with PVDF finger	FKM	C = 1.0	Stainless Steel	426 882 A
8220 with PVDF finger	FKM	C = 10	Titanium	426 883 B
8221 Signal converter analog/digital				426 888 Q

* Item no. includes signal analog/digital converter (ID# 426888Q)

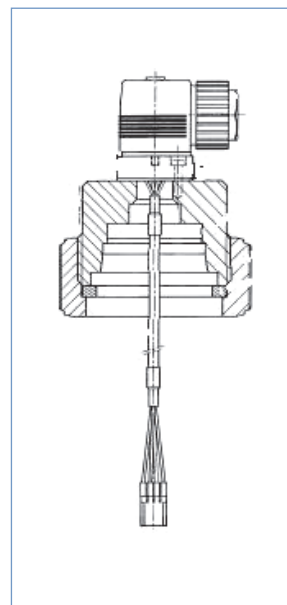
Ordering data for conductivity transmitter Type 8225 (continued)

Description	Material	Cable length	Item no. *
Submersion Kit for Conductivity Transmitter Type 8225 and Sensor Type 8200			
Immersion fitting	PP	1.5 ft.	419 567 W
Immersion fitting	PP	3.0 ft.	419 568 F
Immersion fitting	PP	4.5 ft.	419 569 G
Immersion fitting	PP	6.0 ft.	419 570 D
Extension cable 4-wire	--	1.5 ft.	419 574 V
Extension cable 4-wire	--	3.0 ft.	419 575 W
Extension cable 4-wire	--	4.5 ft.	419 576 X
Extension cable 4-wire	--	6.0 ft.	419 577 Y
Fixing Kit – Flange DN65 with SS-screws	PP		413 615 Q

Kit for immersion fittings (remote display version)

Cable length in feet (meters)	Item no. *
1.5 ft. (0.5 m)	437 615 Q
3.0 ft. (1.0 m)	437 616 R
4.5 ft. (1.5 m)	437 617 J
6.0 ft. (2.0 m)	437 618 T

Probe - Cell Constant	Material	Item no. *
K=0.01	Stainless Steel	633 367 B
K=0.1	Stainless Steel	631 647 A
K=1.0	Graphite	418 217 W
K=10.0	Graphite	634 759 M



Ordering chart for insertion fitting S020

Port connection	Specification		Item no. / Orifice				
	Seal	Standards	1 1/4" (DN 32)	1 1/2" (DN 40)	2" (DN 50)	2 1/2" (DN 65)	
Brass - T-fitting							
Internal thread	FKM	NPT	428 721	428 722	428 723	---	
		G	428 715	428 716	428 717	---	
		Rc (ISO7)	428 727	428 728	428 729	---	
External thread	FKM	G	428 733	428 734	428 735	---	
Stainless steel - T-fitting							
Internal thread	FKM	NPT	428 745	428 746	428 747	---	
		G	428 739	428 740	428 741	---	
		Rc (ISO7)	428 751	428 752	428 753	---	
External thread	FKM	G	428 757	428 758	428 759	---	
		EPDM	SMS 1145	---	443 318	443 319	---
Weld ends	FKM	EN ISO 1127 / ISO 4200	428 762	428 763	428 764	428 765	
		EPDM	BS4825 / ASME BPE	443 736	443 942	443 943	443 944
		SMS 3008	---	443 310	443 311	443 312	
Tri-Clamp®	FKM	EN ISO 1127 / ISO 4200	428 768	428 769	428 770	428 771	
		EPDM	BS4825 / ASME BPE	---	443 967	443 968	443 969
		SMS3017/ISO2852	---	443 314	443 315	443 316	
		BS4825 / ASME BPE*	---	443 972	443 973	443 974	
		SMS3017/ISO2852 *	---	443 958	443 959	443 960	
Flange	FKM	ANSI B16-5-1988	428 781	428 782	428 783	---	
		DIN 2633	428 775	428 776	428 777	---	
		JIS 10K	431 056	431 057	431 058	---	

* internal surface finish Ra = 0.8 µm

Stainless steel – welding tab with radius

Specification	Item no. / Orifice			
	2" (DN 50)	2 1/2" (DN 65)	3" (DN 80)	4" (DN 100)
Welding tabs	418 111	418 112	418 113	418 114

PVC – T-fitting

Port connection	Specification		Item no. / Orifice		
	Seal	Standards	1 1/4" (DN 32)	1 1/2" (DN 40)	2" (DN 50)
True Union- solvent spigot	FKM	ASTM	428 685	428 686	428 687
		ISO	428 673	428 674	428 675
		JIS	429 081	429 082	429 083
Solvent ends	FKM	ISO	428 679	428 680	428 681
For Analysis:					
True Union- solvent spigot	FKM	ISO	428 673	428 674	428 675

Ordering chart for insertion fitting S020

PVC saddle

Specification	Item no. / Orifice		
	2 1/2" (DN 50)	3" (DN 80)	4" (DN 100)
	413469W	413470T	US50B20

PP - T-fitting

Port connection	Specification		Standards	Item no. / Orifice		
	Seal			1 1/4" (DN 32)	1 1/2" (DN 40)	2" (DN 50)
True Union– solvent spigot	FKM		ISO	428 691	428 692	428 693
Solvent ends	FKM		ISO	428 697	428 698	428 699
For Analysis:						
True Union– solvent spigot	FKM		ISO	428 691	428 692	428 693

PP – Fusion spigot or Screw-on fitting

Specification	Item no. / Orifice		
	2 1/2" (DN 65)	3" (DN 80)	4" (DN 100)
Fusion spigot	418 650	418 651	418 652
Screw-on	---	---	436 488

PVDF – T-fitting

Port connection	Specification		Standards	Item no. / Orifice			
	Seal			1 1/4" (DN 32)	1 1/2" (DN 40)	2" (DN 50)	2 1/2" (DN 65)
True Union– solvent spigot	FKM		ISO	428 702	428 703	428 704	428 705
Solvent ends	FKM		ISO	428 708	428 709	428 710	428 711
For Analysis:							
True Union– solvent spigot	FKM		ISO	460 845	428 703	428 704	428 705

PVDF – Fusion spigot

Specification	Item no. / Orifice		
	2 1/2" (DN 65)	3" (DN 80)	4" (DN 100)
Fusion spigot	418 658	418 659	418 660

PE – Fusion spigot or screw-on fitting

Specification	Item no. / Orifice		
	2 1/2" (DN 65)	3" (DN 80)	4" (DN 100)
Fusion spigot	418 642	418 643	418 644
Screw-on	---	---	436 489

Technical data

ON/OFF Control

50% Savings

ON/OFF Control

50% Savings

Continuous Control

60% Savings

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