

JUMO GmbH & Co. KG
 Delivery address: Mackenrodtstraße 14,
 36039 Fulda, Germany
 Postal address: 36035 Fulda, Germany
 Phone: +49 661 6003-0
 Fax: +49 661 6003-607
 e-mail: mail@jumo.net
 Internet: www.jumo.net

JUMO Instrument Co. Ltd.
 JUMO House
 Temple Bank, Riverway
 Harlow, Essex CM 20 2TT, UK
 Phone: +44 1279 635533
 Fax: +44 1279 635262
 e-mail: sales@jumo.co.uk
 Internet: www.jumo.co.uk

JUMO Process Control, Inc.
 8 Technology Boulevard
 Canastota, NY 13032, USA
 Phone: 315-697-JUMO
 1-800-554-JUMO
 Fax: 315-697-5867
 e-mail: info@jumo.us
 Internet: www.jumo.us



Immersion fittings

Series 202820

Brief description

Immersion fittings are used for holding electrochemical sensors (e.g. pH and redox electrodes, glass conductivity cells, compensation thermometers etc.) with a Pg13.5 screw-in thread and a fitting length of 120mm.

Fitting types for up to 3 sensors are available.

The fittings are mounted in open sluices or containers. They protect the installed sensor from breaking and enable measurement in different immersion depths. Thanks to various options and accessories, the fittings can be optimally adjusted to the conditions on site. Two pipe clips for wall mounting are provided for the standard versions, but sliding flanges, which are available as an option, also permit installation in container lids, for example.

The following points have to be taken into account:

- The fittings must be readily accessible, to ensure that the sensor can be cleaned and serviced at regular intervals.
- pH and redox electrodes must not be allowed to remain dry for a prolonged period - this can be prevented by using a wetting cup.
- The suitability of the materials (e.g. chemical compatibility) has to be tested by the system designer.

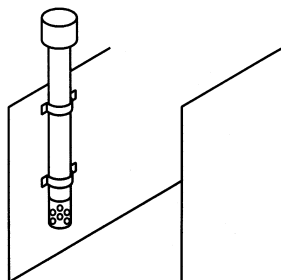


202820/063...

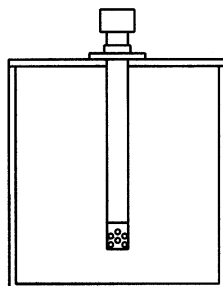
202820/040...

Installation options

Standard

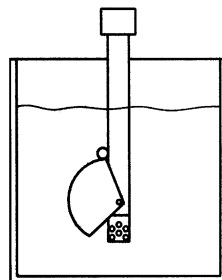


Fixing with pipe clips in the inlet channel

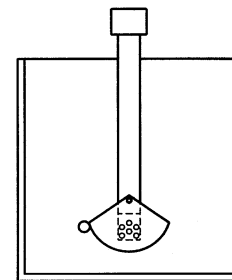


Fixing with a flange on a container

Use of a wetting cup



with the container filled



with empty container (residual liquid in the cup prevents the sensor from running dry)

Type 202820/40-...

For installing one sensor with a Pg13.5 thread. An impedance converter Type 2AMZ-20 (see Data Sheet 202995), or a 2-wire transmitter Type 202701 (see Data Sheet 202701) can be incorporated.

Technical data

Material	polypropylene (PP), seals FPM. Others to special order.
Permissible temperature	0 to +95°C
Safe pressure	1 bar, up to +90°C
Electrode holder	Pg13.5 thread
Immersion tube length	normally 500mm and 1000mm. up to 2000mm can be implemented standard lengths 500, 800, 1000, 1300, 1500 and 2000mm.
Mounting	normally with pipe clips other mounting forms (flange, etc.) are optionally available
Protection	IP65, EN 60 529
Weight	depending on length

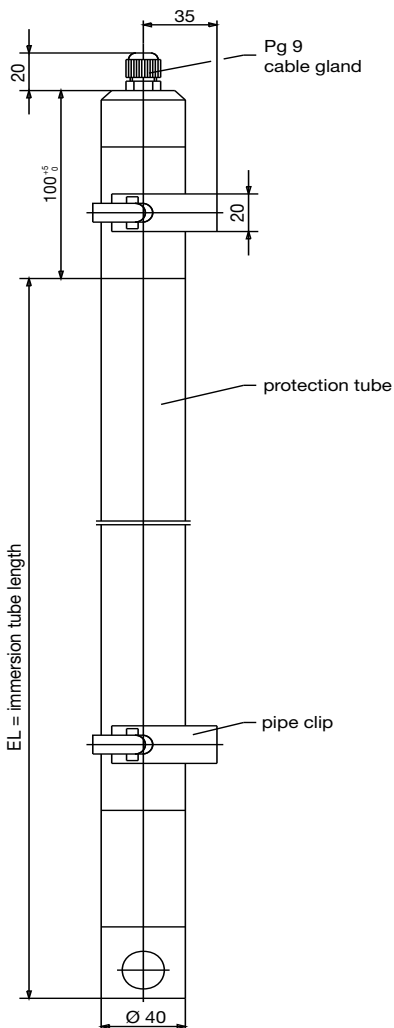


202820/40-0500-87

Note:

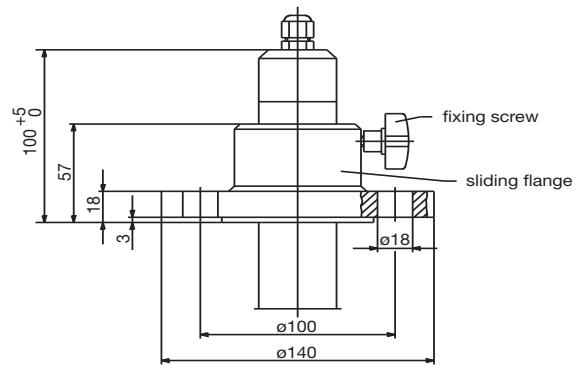
An external KCl reservoir can be used with all immersion fittings.

Dimensions

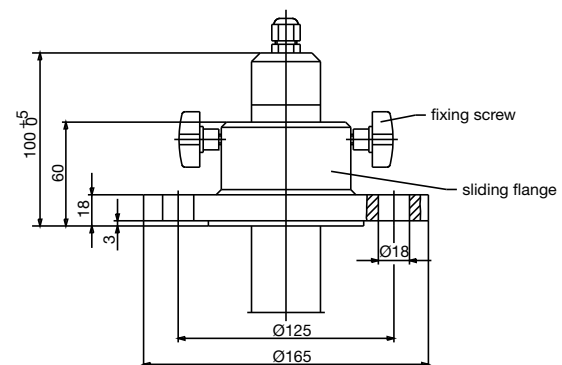


Immersion fitting 202820/40-...

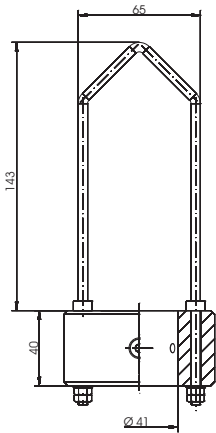
Extra codes / accessories



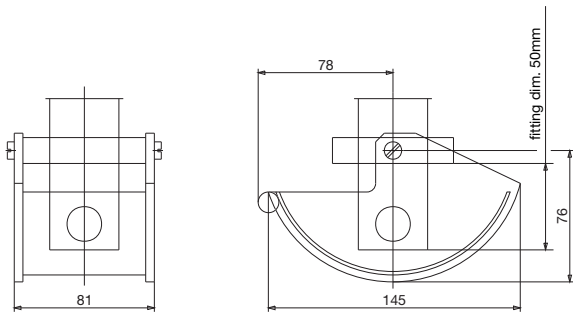
Flange DN32, Sales No. 20/00083375



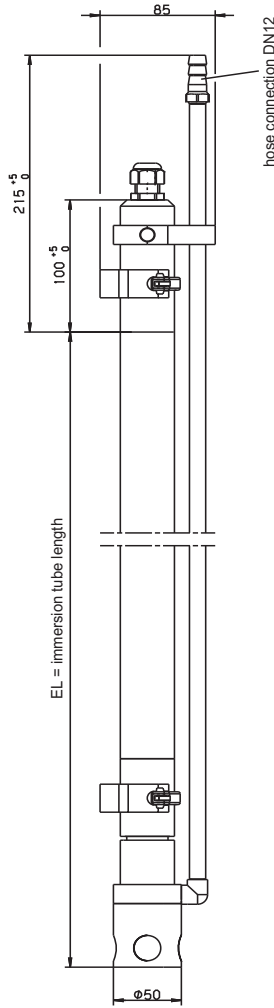
Flange DN50, Sales No. 20/00083376



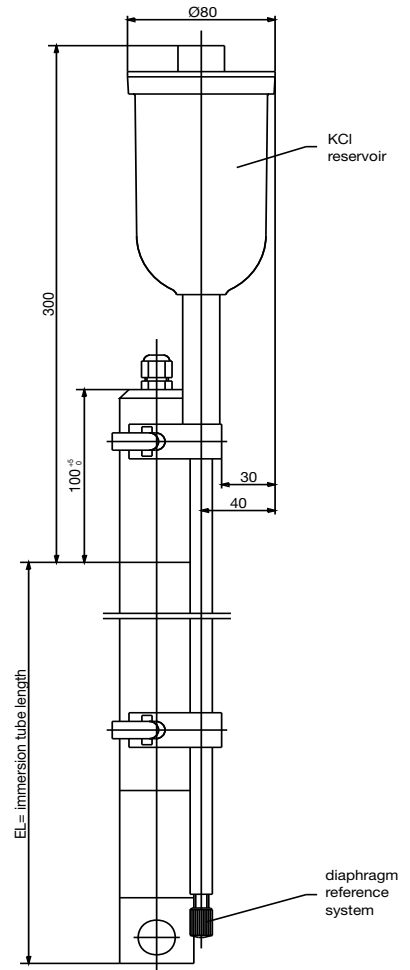
Shackle
Sales No. 20/00453191



Wetting cup, Sales No. 20/00083372



Cleaning nozzle,
code 078



KCI reservoir with diaphragm tube,
code 082

Order details

(1) Basic type

202820 immersion fitting

(2) Tube diameter

40 40 mm

(3) Fitting length

0500 length EL = 500 mm, see dimensions
0800 length EL = 800 mm, see dimensions
1000 length EL = 1000 mm, see dimensions
1300 length EL = 1300 mm, see dimensions
1500 length EL = 1500 mm, see dimensions
2000 length EL = 2000 mm, see dimensions

(4) Material of wetted components

87 polypropylene (PP)

(5) Extra codes

078 cleaning nozzle
082 KCI reservoir with diaphragm tube

Note:

The type code is a type designation, not a modular system.

If at all possible, please choose the items listed under "Available ex-stock" or "Not available ex-stock" when ordering.

Any free combination of individual code features must be technically checked by us and released.

Please ask us in case of doubt !

	(1)	(2)	(3)	(4)	(5)
Order code	202820	/ 40	- ...	- 87	- ...
Order example	202820	/ 40	- 1500	- 87	- 082

Available accessories and spare parts

Sales No.	Designation
20/00083375	flange DN32 ¹ , material PP
20/00083376	flange DN50 ¹ , material PP
20/00083372	wetting cup ¹ , material PP, clamping screws in polyamide
20/00453191	Shackle

¹ not possible together with codes /78 or /82. Please ask if required!

Type 202820/63-...

For installing up to 3 sensors with a Pg13.5 thread.
 An impedance converter Type 2AMZ-20 (see Data Sheet 202995), or a 2-wire transmitter Type 202701 (see Data Sheet 202701) can be incorporated.

Technical data

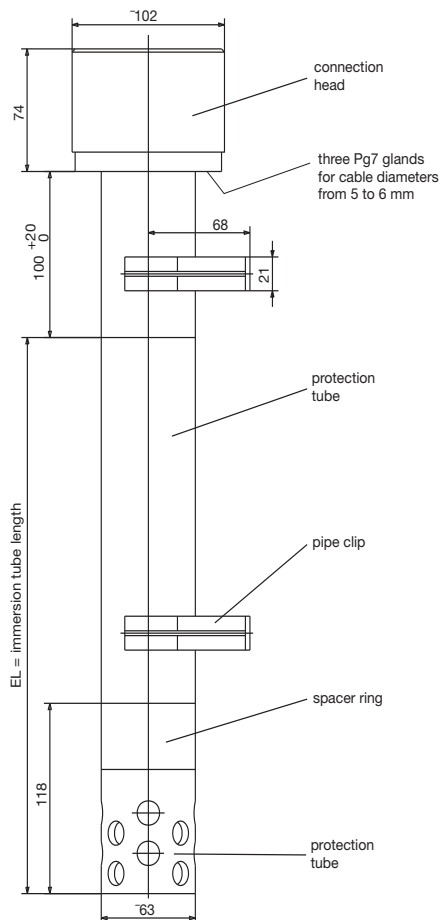
Material	polypropylene (PP), seals FPM.
Permissible temp.	0 to +95°C
Safe pressure	1 bar, up to +90°C
Electrode holder	Pg 13.5 threads for 1 to 3 electrodes (blind grommets are included)
Immersion tube length	ex-stock 500 mm up to 2000 mm can be implemented standard lengths 500, 800, 1000, 1300, 1500 and 2000 mm.
Mounting	normally with pipe clips other mounting forms (flange, etc.) are optionally available
Protection	IP65, EN 60 529
Weight	depending on length



202820/63-0500-87

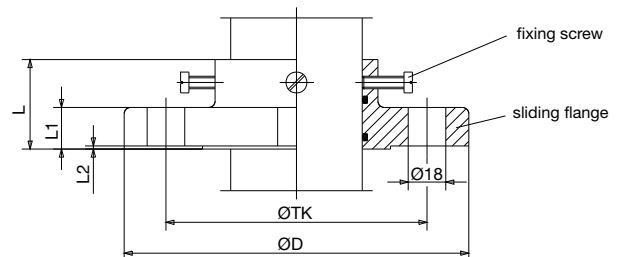
Note:
 An external KCl reservoir can be used for all immersion fittings.

Dimensions



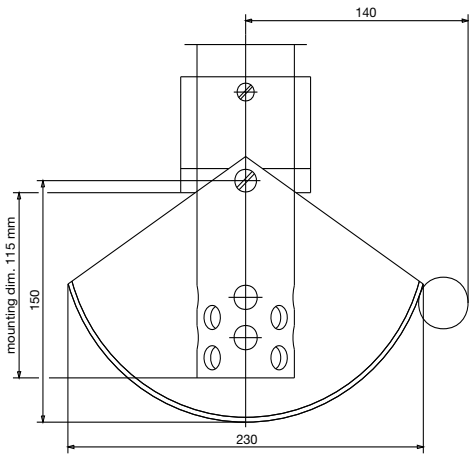
Immersion fitting 202820/63-...

Extra codes / accessories

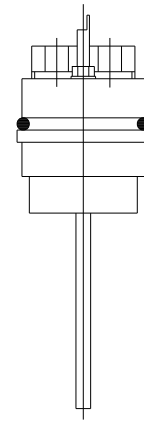
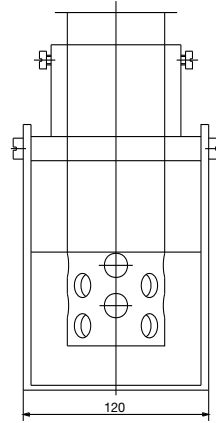


Flange DN50, Sales No. 20/00056544
 Flange DN65, Sales No. 20/00056545

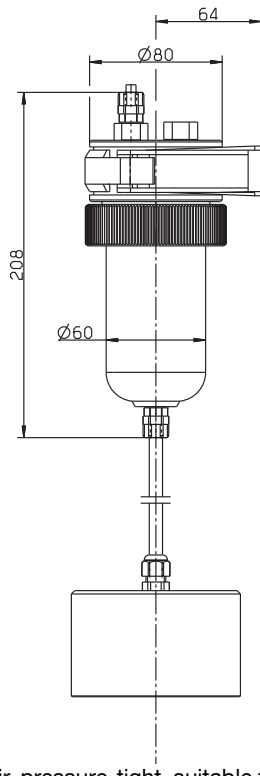
DN	D	TK	L	L ₁	L ₂
50	165	125	43	20	1.5
65	185	145	49	22	2



Wetting cup, Sales No. 20/00057581



Earthing rod, code 055
for equipotential bonding,
e.g. in insulated plastic containers



KCl reservoir, pressure-tight, suitable for wall mounting
Sales No. 20/00060254;
to set up an electrolyte bridge or when using KCl-filled
electrodes

Order details

- (1) Basic type**
202820 immersion fitting
- (2) Tube diameter**
63 63 mm
- (3) Fitting length**
0500 length EL = 500 mm, see dimensions
0800 length EL = 800 mm, see dimensions
1000 length EL = 1000 mm, see dimensions
1300 length EL = 1300 mm, see dimensions
1500 length EL = 1500 mm, see dimensions
2000 length EL = 2000 mm, see dimensions
- (4) Material of wetted components**
87 polypropylene (PP)
- (5) Extra codes**
055 earthing rod

	(1)	(2)	(3)	(4)	(5)
Order code	202820	/ 63	-	- 87	- ...
Order example	202820	/ 63	- 1500	- 87	- 055

Note:

The type code is a type designation, not a modular system.

If at all possible, please choose the items listed under “Available ex-stock” or “Not available ex-stock” when ordering.

Any free combination of individual code features must be technically checked by us and released.

Please ask us in case of doubt !

Available accessories and spare parts

Sales No.	Designation
20/00056544	flange DN50
20/00056545	flange DN65
20/00057581	wetting cup
20/00060254	KCI reservoir, pressure-tight, suitable for wall mounting

Additional fittings

Type of fitting	Data Sheet
Flow-through fittings	T 202810
Immersion fittings	T 202820
Quick-change fittings	T 202822
Process fittings	T 202825