LUDWIG
SCHNEIDER



HYDROMETERS



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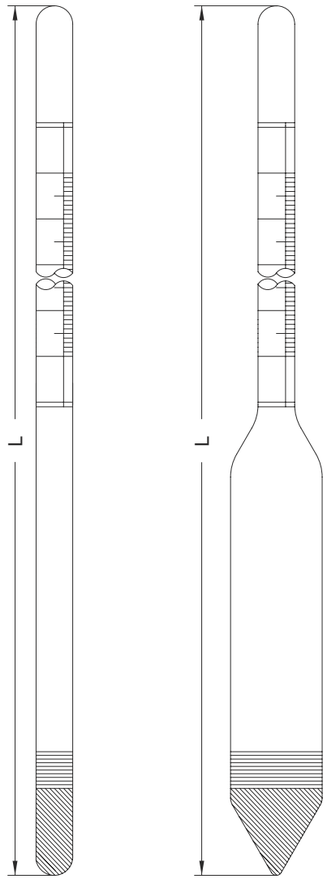
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DENSITY HYDROMETERS

RANGE FINDER HYDROMETERS FOR DETERMINING THE DENSITY RANGE



OF LIQUIDS

TECHNICAL DATA

Glass range finder, reference temperature: +20 °C

FEATURES/OPTIONS

+ individually packed in tubes made of recycled material

Order No.	Measuring Range g/cm³	Division g/cm³	Body Ø mm	Length mm
3091001	0.600–0.850	0.005	16	240
3091002	0.850–1.100	0.005	16	240
3091003	1.100–1.500	0.005	16	240
3091004	1.500–2.000	0.005	16	240

OF HEAVY LIQUIDS

TECHNICAL DATA

Glass range finder, reference temperature: +20 °C,
total length (L): 300 mm

FEATURES/OPTIONS

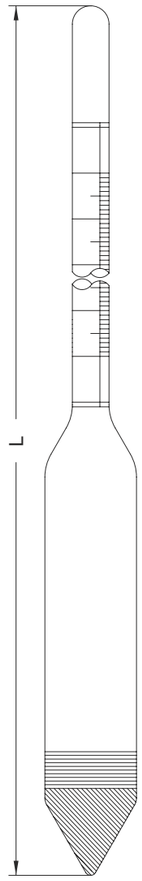
+ individually packed in tubes made of recycled material

Order No.	Measuring Range g/cm³	Division g/cm³	Body Ø mm	Error Limit g/cm³
3071041	0.700–1.000	0.005	14	±0.005
3071043	1.000–1.500	0.005	14	±0.005
3071044	1.500–2.000	0.005	14	±0.005

Order No.	Measuring Range g/cm³	Division g/cm³	Body Ø mm	Error Limit g/cm³
3071045	1.000–2.000	0.01	12	±0.01
3071046	2.000–2.500	0.01	16	N/A
3071047	2.500–3.000	0.01	16	N/A
3071048	3.000–3.500	0.01	16	N/A
3071049	3.500–4.000	0.01	16	N/A

DENSITY HYDROMETERS

UNIVERSAL HYDROMETERS FOR DETERMINING THE DENSITY OF LIQUIDS



TECHNICAL DATA

Glass hydrometer, division: 0.005 g/cm³, accuracy: ±0.005 g/cm³,
reference temperature: +20 °C, total length (L): 180 mm,
body Ø (d): 14 mm

FEATURES/OPTIONS

+ individually packed in tubes made of recycled material

Order No.	Measuring Range g/cm³
3061001	0.700–0.850
3061002	0.850–1.000
3061003	1.000–1.250
3061004	1.250–1.500
3061005	1.500–1.750
3061006	1.750–2.000

TECHNICAL DATA

Glass hydrometer, division: 0.002 g/cm³, accuracy: ±0.002 g/cm³,
reference temperature: +20 °C, total length (L): 280 mm,
body Ø (d): 15 mm

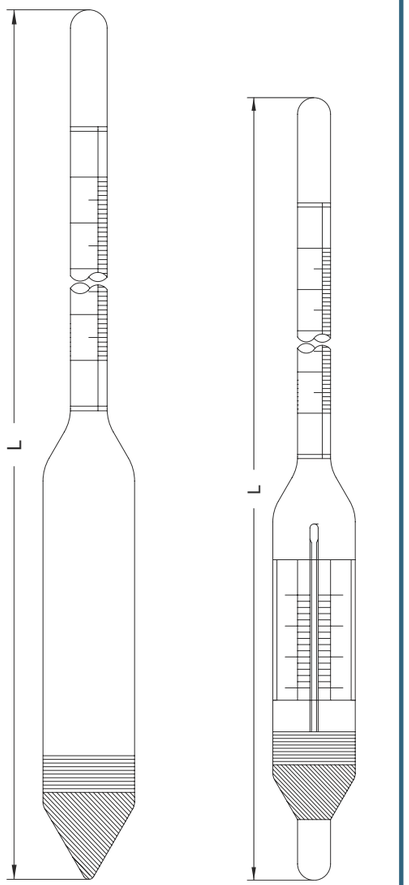
FEATURES/OPTIONS

+ individually packed in tubes made of recycled material

Order No.	Measuring Range g/cm³
3071001	0.600–0.800
3071002	0.800–1.000
3071003*	1.000–1.200
3071004*	1.200–1.400
3071005*	1.400–1.600
3071006	1.600–1.800
3071007	1.800–2.000

* Marked measuring ranges are also available as a plastic version (see page 48).

PRECISION HYDROMETERS FOR DETERMINING THE DENSITY OF LIQUIDS



TECHNICAL DATA

Glass hydrometer, division: 0.001 g/cm³, accuracy: ±0.001 g/cm³, reference temperature: +20 °C, total length (L): 300 mm, body Ø (d): 17 mm

FEATURES/OPTIONS

+ calibratable version
+ individually packed in tubes made of recycled material

Order No.	Measuring Range g/cm³
3031001	0.600–0.700
3031002	0.700–0.800
3031003	0.800–0.900
3031004	0.900–1.000
3031005	1.000–1.100
3031006	1.100–1.200
3031007	1.200–1.300

Order No.	Measuring Range g/cm³
3031008	1.300–1.400
3031009	1.400–1.500
3031010	1.500–1.600
3031011	1.600–1.700
3031012	1.700–1.800
3031013	1.800–1.900
3031014	1.900–2.000

WITH INTEGRATED THERMOMETER

TECHNICAL DATA

Glass hydrometer, division: 0.001 g/cm³, accuracy: ±0.001 g/cm³, reference temperature: +20 °C, total length (L): 350 mm, body Ø (d): 18 mm, thermometer: 0 to +35 °C in 1 °C, blue filling

FEATURES/OPTIONS

+ calibratable version
+ Thermometer with environmentally friendly filling
+ individually packed in tubes made of recycled material

Order No.	Measuring Range g/cm³
3051001S	0.600–0.800
3051002S	0.800–1.000
3051003S	1.000–1.200
3051004S	1.200–1.400
3051005S	1.400–1.600
3051006S	1.600–1.800
3051007S	1.800–2.000

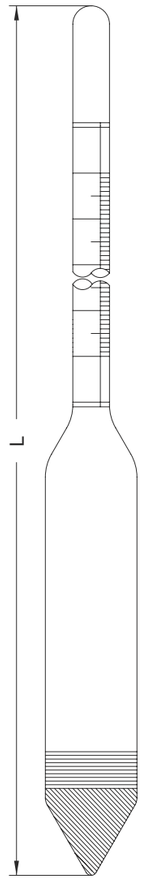
Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3031001/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3031001/04/3P

NOTE

For hydrometers with an integrated thermometer, calibration includes 3 test points for density and 3 test points for temperature.

DENSITY HYDROMETERS

PRECISION HYDROMETERS FOR DETERMINING THE DENSITY OF LIQUIDS



ACC. TO DIN 12791, SERIES S50

TECHNICAL DATA

Glass hydrometer, division: 0.002 g/cm³, accuracy: ±0.002 g/cm³, reference temperature: +20 °C, total length (L): 190 mm, body Ø (d): 19 mm

FEATURES/OPTIONS

+ calibratable version
+ includes certificate of conformity
+ individually packed in tubes made of recycled material

Order No.	Type	Measuring Range g/cm³
3152001	S50-60	0.600–0.650
3152002	S50-65	0.650–0.700
3152003	S50-70	0.700–0.750
3152004	S50-75	0.750–0.800
3152005	S50-80	0.800–0.850
3152006	S50-85	0.850–0.900
3152007	S50-90	0.900–0.950
3152008	S50-95	0.950–1.000
3152009	S50-100	1.000–1.050
3152010	S50-105	1.050–1.100
3152011	S50-110	1.100–1.150
3152012	S50-115	1.150–1.200
3152013	S50-120	1.200–1.250
3152014	S50-125	1.250–1.300
3152015	S50-130	1.300–1.350
3152016	S50-135	1.350–1.400
3152017	S50-140	1.400–1.450
3152018	S50-145	1.450–1.500
3152019	S50-150	1.500–1.550
3152020	S50-155	1.550–1.600
3152021	S50-160	1.600–1.650
3152022	S50-165	1.650–1.700
3152023	S50-170	1.700–1.750
3152024	S50-175	1.750–1.800
3152025	S50-180	1.800–1.850
3152026	S50-185	1.850–1.900
3152027	S50-190	1.900–1.950
3152028	S50-195	1.950–2.000

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3152001/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3152001/04/3P

DENSITY HYDROMETERS

PRECISION HYDROMETERS FOR DETERMINING THE DENSITY OF LIQUIDS



ACC. TO DIN 12791, SERIES M50

TECHNICAL DATA

Glass hydrometer, division: 0.001 g/cm³, accuracy: ±0.001 g/cm³, reference temperature: +20 °C, total length (L): 270 mm, body Ø (d): 21 mm, blue filling

FEATURES/OPTIONS

+ calibratable version
+ includes certificate of conformity
+ individually packed in tubes made of recycled material

Order No.	Type	Measuring Range g/cm³
3172001	M50-60	0.600–0.650
3172002	M50-65	0.650–0.700
3172003	M50-70	0.700–0.750
3172004	M50-75	0.750–0.800
3172005	M50-80	0.800–0.850
3172006	M50-85	0.850–0.900
3172007	M50-90	0.900–0.950
3172008	M50-95	0.950–1.000
3172009	M50-100	1.000–1.050
3172010	M50-105	1.050–1.100
3172011	M50-110	1.100–1.150
3172012	M50-115	1.150–1.200
3172013	M50-120	1.200–1.250
3172014	M50-125	1.250–1.300
3172015	M50-130	1.300–1.350
3172016	M50-135	1.350–1.400
3172017	M50-140	1.400–1.450
3172018	M50-145	1.450–1.500
3172019	M50-150	1.500–1.550
3172020	M50-155	1.550–1.600
3172021	M50-160	1.600–1.650
3172022	M50-165	1.650–1.700
3172023	M50-170	1.700–1.750
3172024	M50-175	1.750–1.800
3172025	M50-180	1.800–1.850
3172026	M50-185	1.850–1.900
3172027	M50-190	1.900–1.950
3172028	M50-195	1.950–2.000

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3172001/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3172001/04/3P

NOTE

For hydrometers with an integrated thermometer, calibration includes 3 test points for density and 3 test points for temperature.

DENSITY HYDROMETERS

PRECISION HYDROMETERS FOR DETERMINING THE DENSITY OF LIQUIDS



ACC. TO DIN 12791, SERIES L50

TECHNICAL DATA

Glass hydrometer, division: 0.0005 g/cm³, accuracy: ±0.0005 g/cm³, reference temperature: +20 °C, total length (L): 335 mm, body Ø (d): 24 mm/Order No. 3132022: 26 mm

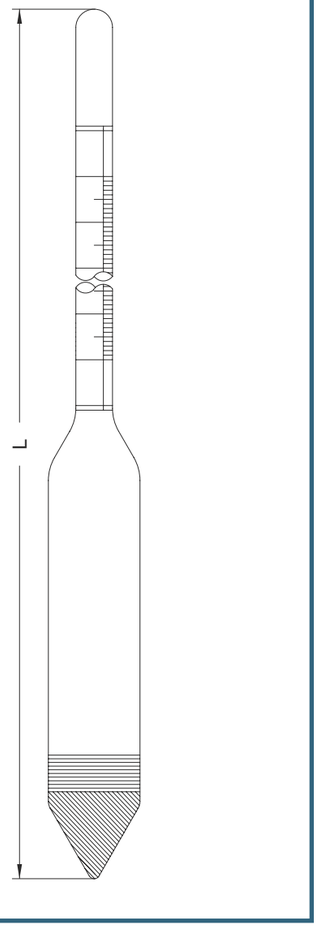
FEATURES/OPTIONS

+ calibratable version
+ includes certificate of conformity
+ individually packed in tubes made of recycled material
+ hydrometer set available on request with transport case

Order No.	Type	Measuring Range g/cm³
3132001	L50-60	0.600–0.650
3132002	L50-65	0.650–0.700
3132003	L50-70	0.700–0.750
3132004	L50-75	0.750–0.800
3132005	L50-80	0.800–0.850
3132006	L50-85	0.850–0.900
3132007	L50-90	0.900–0.950
3132008	L50-95	0.950–1.000
3132009	L50-100	1.000–1.050
3132010	L50-105	1.050–1.100
3132011	L50-110	1.100–1.150
3132012	L50-115	1.150–1.200
3132013	L50-120	1.200–1.250
3132014	L50-125	1.250–1.300
3132015	L50-130	1.300–1.350
3132016	L50-135	1.350–1.400
3132017	L50-140	1.400–1.450
3132018	L50-145	1.450–1.500
3132019	L50-150	1.500–1.550
3132020	L50-155	1.550–1.600
3132021	L50-160	1.600–1.650
3132022	L50-165	1.650–1.700
3132023	L50-170	1.700–1.750
3132024	L50-175	1.750–1.800
3132025	L50-180	1.800–1.850
3132026	L50-185	1.850–1.900
3132027	L50-190	1.900–1.950
3132028	L50-195	1.950–2.000

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3132001/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3132001/04/3P

PRECISION HYDROMETERS FOR DETERMINING THE DENSITY OF LIQUIDS



ACC. TO DIN 12791, SERIES L20

TECHNICAL DATA

Glass hydrometer, division: 0.0002 g/cm³, accuracy: ±0.0002 g/cm³, reference temperature: +20 °C, total length (L): 430 mm, body Ø (d): 26 mm/from Order No. 3112051: 28 mm

FEATURES/OPTIONS

+ calibratable version
+ includes certificate of conformity
+ individually packed in tubes made of recycled material

Order No.	Type	Measuring Range g/cm³
3112001	L20-060	0.600–0.620
3112002	L20-062	0.620–0.640
3112003	L20-064	0.640–0.660
3112004	L20-066	0.660–0.680
3112005	L20-068	0.680–0.700
3112006	L20-070	0.700–0.720
3112007	L20-072	0.720–0.740
3112008	L20-074	0.740–0.760
3112009	L20-076	0.760–0.780
3112010	L20-078	0.780–0.800
3112011	L20-080	0.800–0.820
3112012	L20-082	0.820–0.840
3112013	L20-084	0.840–0.860
3112014	L20-086	0.860–0.880
3112015	L20-088	0.880–0.900
3112016	L20-090	0.900–0.920
3112017	L20-092	0.920–0.940
3112018	L20-094	0.940–0.960

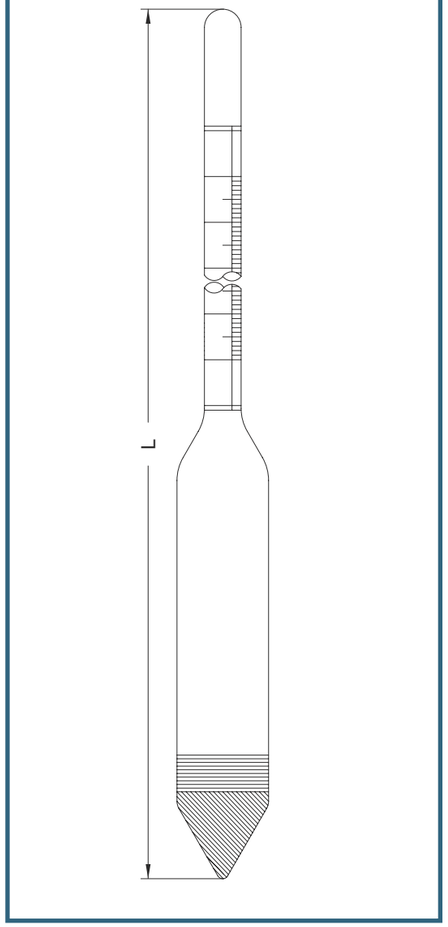
Order No.	Type	Measuring Range g/cm³
3112019	L20-096	0.960–0.980
3112020	L20-098	0.980–1.000
3112021	L20-100	1.000–1.020
3112022	L20-102	1.020–1.040
3112023	L20-104	1.040–1.060
3112024	L20-106	1.060–1.080
3112025	L20-108	1.080–1.100
3112026	L20-110	1.100–1.120
3112027	L20-112	1.120–1.140
3112028	L20-114	1.140–1.160
3112029	L20-116	1.160–1.180
3112030	L20-118	1.180–1.200
3112031	L20-120	1.200–1.220
3112032	L20-122	1.220–1.240
3112033	L20-124	1.240–1.260
3112034	L20-126	1.260–1.280
3112035	L20-128	1.280–1.300
...*	...*	...*

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3112001/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3112001/04/3P

* The article number sequence continues up to 3112070 and covers additional variants as well as the complete set for density ranges up to 2,000 g/cm³.

DENSITY HYDROMETERS

PRECISION HYDROMETERS FOR DETERMINING THE DENSITY OF LIQUIDS



ACC. TO BS 718, SERIES S50 SP

TECHNICAL DATA

Glass hydrometer, division: 0.002 g/cm³, accuracy: ±0.001 g/cm³, reference temperature: +15 °C, total length (L): 190 mm, body Ø (d): 19 mm

FEATURES/OPTIONS

+ calibratable version
+ "SP" series with higher accuracy class
+ includes certificate of conformity
+ individually packed in tubes made of recycled material

Order No.	Type	Measuring Range g/cm³
3071241	S50 SP	0.600–0.650
3071242	S50 SP	0.650–0.700
3071243	S50 SP	0.700–0.750
3071244	S50 SP	0.750–0.800
3071181	S50 SP	0.800–0.850
3071182	S50 SP	0.850–0.900
3071183	S50 SP	0.900–0.950
3071184	S50 SP	0.950–1.000

Order No.	Type	Measuring Range g/cm³
3071185	S50 SP	1.000–1.050
3071186	S50 SP	1.050–1.100
3071187	S50 SP	1.100–1.150
3071188	S50 SP	1.150–1.200
3071189	S50 SP	1.200–1.250
3071190	S50 SP	1.250–1.300
3071191	S50 SP	1.300–1.350

ACC. TO BS 718, SERIES M50 SP

TECHNICAL DATA

Glass hydrometer, division: 0.001 g/cm³, accuracy: ±0.0006 g/cm³, reference temperature: +15 °C, total length (L): 270 mm, body Ø (d): 21 mm

FEATURES/OPTIONS

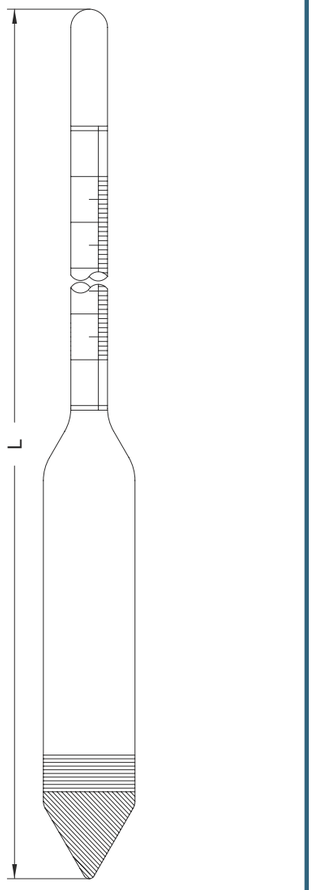
+ calibratable version
+ "SP" series with higher accuracy class
+ includes certificate of conformity
+ individually packed in tubes made of recycled material

Order No.	Type	Measuring Range g/cm³
3071321	M50 SP	0.600–0.650
3071322	M50 SP	0.650–0.700
3071323	M50 SP	0.700–0.750
3071324	M50 SP	0.750–0.800
3071151	M50 SP	0.800–0.850
3071152	M50 SP	0.850–0.900
3071153	M50 SP	0.900–0.950
3071154	M50 SP	0.950–1.000

Order No.	Type	Measuring Range g/cm³
3071155	M50 SP	1.000–1.050
3071156	M50 SP	1.050–1.100
3071157	M50 SP	1.100–1.150
3071158	M50 SP	1.150–1.200
3071159	M50 SP	1.200–1.250
3071160	M50 SP	1.250–1.300
3071161	M50 SP	1.300–1.350

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3071241/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3071241/04/3P

PRECISION HYDROMETERS FOR DETERMINING THE DENSITY OF LIQUIDS



ACC. TO BS 718, SERIES L50 SP

TECHNICAL DATA

Glass hydrometer, division: 0.0005 g/cm³, accuracy: ±0.0003 g/cm³, reference temperature: +15 °C, total length (L): 335 mm, body Ø (d): 24 mm/from Order No. 3071149: 26 mm

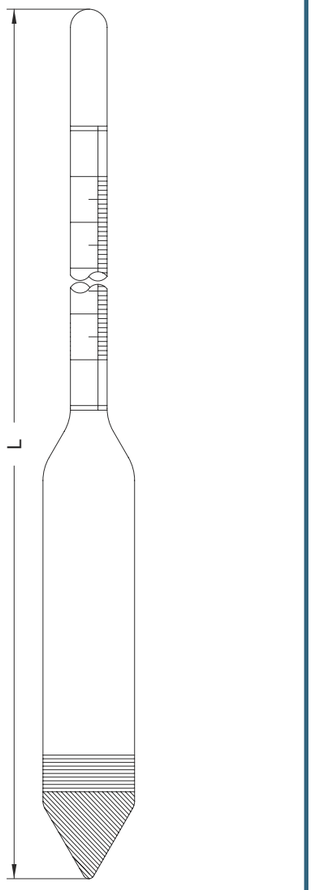
FEATURES/OPTIONS

+ calibratable version
+ "SP" series with higher accuracy class
+ includes certificate of conformity
+ individually packed in tubes made of recycled material

Order No.	Type	Measuring Range g/cm³
3071211	L50 SP	0.600–0.650
3071212	L50 SP	0.650–0.700
3071213	L50 SP	0.700–0.750
3071214	L50 SP	0.750–0.800
3071131	L50 SP	0.800–0.850
3071132	L50 SP	0.850–0.900
3071133	L50 SP	0.900–0.950
3071134	L50 SP	0.950–1.000
3071135	L50 SP	1.000–1.050
3071136	L50 SP	1.050–1.100
3071137	L50 SP	1.100–1.150
3071138	L50 SP	1.150–1.200
3071139	L50 SP	1.200–1.250
3071140	L50 SP	1.250–1.300
3071141	L50 SP	1.300–1.350
3071142	L50 SP	1.350–1.400
3071143	L50 SP	1.400–1.450
3071144	L50 SP	1.450–1.500
3071145	L50 SP	1.500–1.550
3071146	L50 SP	1.550–1.600
3071147	L50 SP	1.600–1.650
3071148	L50 SP	1.650–1.700
3071149	L50 SP	1.700–1.750
3071150	L50 SP	1.750–1.800
3071215	L50 SP	1.800–1.850
3071216	L50 SP	1.850–1.900
3071217	L50 SP	1.900–1.950
3071218	L50 SP	1.950–2.000

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3071211/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3071211/04/3P

PRECISION HYDROMETERS FOR DETERMINING THE DENSITY OF LIQUIDS



ACC. TO BS 718, SERIES L20

TECHNICAL DATA

Glass hydrometer, division: 0.0002 g/cm³, accuracy: ±0.0002 g/cm³, reference temperature: +15 °C, total length (L): 335 mm, body Ø (d): 36 mm

FEATURES/OPTIONS

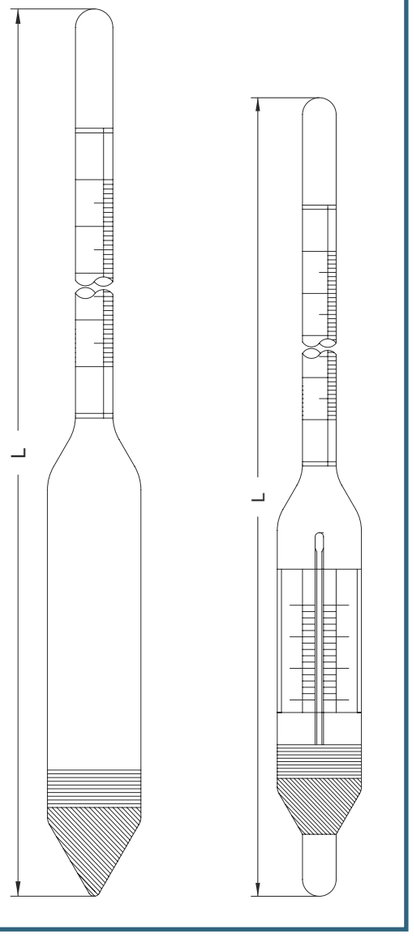
+ calibratable version
+ includes certificate of conformity
+ individually packed in tubes made of recycled material

Order No.	Type	Measuring Range g/cm³
3071201	L20	0.600–0.620
3071202	L20	0.620–0.640
3071203	L20	0.640–0.660
3071204	L20	0.660–0.680
3071205	L20	0.680–0.700
3071206	L20	0.700–0.720
3071207	L20	0.720–0.740
3071208	L20	0.740–0.760
3071209	L20	0.760–0.780
3071210	L20	0.780–0.800
3071101	L20	0.800–0.820
3071102	L20	0.820–0.840
3071103	L20	0.840–0.860
3071104	L20	0.860–0.880
3071105	L20	0.880–0.900
3071106	L20	0.900–0.920
3071107	L20	0.920–0.940
3071108	L20	0.940–0.960
3071109	L20	0.960–0.980
3071110	L20	0.980–1.000
3071111	L20	1.000–1.020
3071112	L20	1.020–1.040
3071113	L20	1.040–1.060
3071114	L20	1.060–1.080
3071115	L20	1.080–1.100
3071116	L20	1.100–1.120
3071117	L20	1.120–1.140
...*	...*	...*

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3071201/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3071201/04/3P

* The article number sequence continues up to 3071126 and covers additional variants as well as the complete set for density ranges up to 1.320 g/cm³.

PRECISION HYDROMETERS FOR DETERMINING THE DENSITY OF LIQUIDS



ACC. TO ASTM E100-19

TECHNICAL DATA

Glass hydrometer, division: 0.5 kg/m³, accuracy: ±0.5 kg/m³,
reference temperature: +15 °C, total length (L): 330 mm, body Ø (d): 24 mm

FEATURES/OPTIONS

+ calibratable version
+ individually packed in tubes made of recycled material

Order No.	Type	Measuring Range kg/m³
3222151	311H-82	600–650
3222152	312H-82	650–700
3222153	313H-82	700–750
3222154	314H-82	750–800
3222155	315H-82	800–850
3222156	316H-82	850–900
3222157	317H-82	900–950
3222158	318H-82	950–1.000
3222159	319H-82	1.000–1.050
3222160	320H-82	1.050–1.100
3222161	321H-03	775–825

ACC. TO ASTM E2995-15A, WITH INTEGRATED THERMOMETER

TECHNICAL DATA

Glass hydrometer, division: 0.5 kg/m³, accuracy: ±0.5 kg/m³,
reference temperature: +15 °C, total length (L): 380 mm, body Ø (d): 22 mm,
thermometer: -20 to +65 °C in 1 °C, accuracy: ±2 °C, blue filling

FEATURES/OPTIONS

+ calibratable version
+ individually packed in tubes made of recycled material

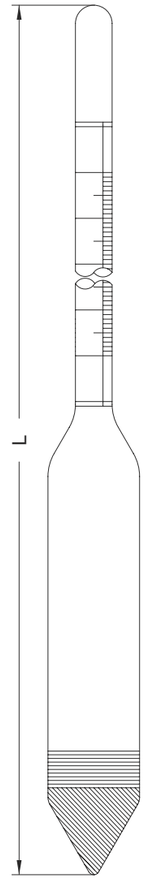
Order No.	Type	Measuring Range kg/m³
3222111S	S500HL-14	600–650
3222112S	S501HL-14	650–700
3222113S	S502HL-14	700–750
3222114S	S503HL-14	750–800
3222115S	S504HL-14	800–850
3222116S	S505HL-14	850–900

Order No.	Type	Measuring Range kg/m³
3222117S	S506HL-14	900–950
3222118S	S507HL-14	950–1.000
3222119S	S508HL-14	1.000–1.050
3222120S	S509HL-14	1.050–1.100
3222345S	S510HL-14	775–825

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3222151/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3222151/04/3P

DENSITY HYDROMETERS

PRECISION HYDROMETERS FOR DETERMINING THE DENSITY OF LIQUIDS



AS REFERENCE STANDARD

TECHNICAL DATA

Glass hydrometer, division: 0.0001 g/cm³, accuracy: ±0.0001 g/cm³,
reference temperature: +20 °C, total length (L): 400 mm, body Ø (d): 28 mm

FEATURES/OPTIONS

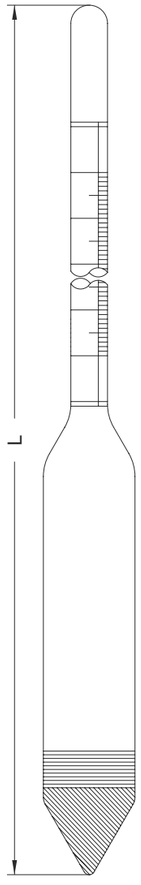
+ calibratable version
+ for highest accuracy requirements
+ individually packed in tubes made of recycled material

Order No.	Measuring Range g/cm³
3412001	0.600–0.610
3412002	0.610–0.620
3412003	0.620–0.630
3412004	0.630–0.640
3412005	0.640–0.650
3412006	0.650–0.660
3412007	0.660–0.670
3412008	0.670–0.680
3412009	0.680–0.690
3412010	0.690–0.700
3412011	0.700–0.710
3412012	0.710–0.720
3412013	0.720–0.730
3412014	0.730–0.740
3412015	0.740–0.750
3412016	0.750–0.760
3412017	0.760–0.770
3412018	0.770–0.780
3412019	0.780–0.790
3412020	0.790–0.800

Order No.	Measuring Range g/cm³
3412021	0.800–0.810
3412022	0.810–0.820
3412023	0.820–0.830
3412024	0.830–0.840
3412025	0.840–0.850
3412026	0.850–0.860
3412027	0.860–0.870
3412028	0.870–0.880
3412029	0.880–0.890
3412030	0.890–0.900
3412031	0.900–0.910
3412032	0.910–0.920
3412033	0.920–0.930
3412034	0.930–0.940
3412035	0.940–0.950
3412036	0.950–0.960
3412037	0.960–0.970
3412038	0.970–0.980
3412039	0.980–0.990
3412040	0.990–1.000
...*	...*

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3412001/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3412001/04/3P

* The article number sequence continues up to 3412070 and covers additional variants as well as the complete set for density ranges up to 1.300 g/cm³.



RANGE FINDER HYDROMETERS FOR DETERMINING THE SPECIFIC GRAVITY OF LIQUIDS

TECHNICAL DATA
Glass range finder, reference temperature: 60/60 °F,
body Ø (d): 12 mm

FEATURES/OPTIONS
+ individually packed in tubes made of recycled material

Order No.	Measuring Range sp/gr	Division sp/gr	Length mm
3311229	0.650–1.000	0.01	150
3311230	0.650–1.000	0.005	300
3311227	1.000–2.000	0.02	150
3311226	1.000–2.000	0.01	300

UNIVERSAL HYDROMETERS FOR DETERMINING THE SPECIFIC GRAVITY OF HEAVY LIQUIDS

TECHNICAL DATA
Glass hydrometer, reference temperature: 60/60 °F,
total length (L): 300 mm, body Ø (d): 14 mm,
from Order No. 3071046SG: 16 mm

FEATURES/OPTIONS
+ individually packed in tubes made of recycled material

Order No.	Measuring Range sp/gr	Division sp/gr	Error Limit sp/gr
3071043SG	1.000–1.600	0.005	±0.005
3071044SG	1.500–2.000	0.005	±0.005
3071046SG	2.000–2.500	0.005	N/A
3071047SG	2.500–3.000	0.005	N/A

HYDROMETERS
FOR SPECIFIC GRAVITY



HYDROMETERS FOR DETERMINING THE SPECIFIC GRAVITY OF LIQUIDS

TECHNICAL DATA
Glass hydrometer, division: 0.002 sp/gr, accuracy: ±0.002 sp/gr,
reference temperature: 60/60 °F, total length (L): 300 mm, body Ø (d): 15 mm

FEATURES/OPTIONS
+ calibratable version
+ individually packed in tubes made of recycled material

Order No.	Measuring Range sp/gr
3071003SG	1.000–1.220
3071004SG	1.200–1.420
3071005SG	1.400–1.620
3071006SG	1.600–1.820
3071007SG	1.800–2.020

PRECISION HYDROMETERS FOR DETERMINING THE SPECIFIC GRAVITY OF LIQUIDS

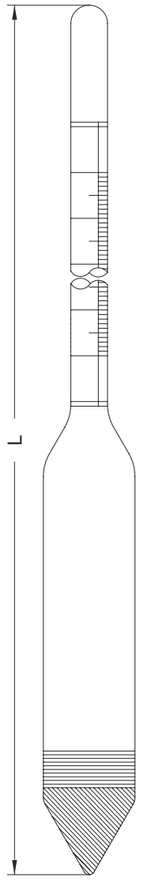
TECHNICAL DATA
Glass hydrometer, division: 0.0005 sp/gr, accuracy: ±0.0005 sp/gr,
reference temperature: 60/60 °F, total length (L): 325 mm, body Ø (d): 21 mm

FEATURES/OPTIONS
+ calibratable version
+ individually packed in tubes made of recycled material

Order No.	Measuring Range sp/gr
3021001SG	0.590–0.660
3021002SG	0.640–0.710
3021003SG	0.700–0.770
3021004SG	0.760–0.830
3021005SG	0.820–0.890
3021006SG	0.880–0.950
3021007SG	0.940–1.010
3021008SG	1.000–1.070
3021009SG	1.060–1.130
3021010SG	1.120–1.190

Order No.	Measuring Range sp/gr
3021011SG	1.180–1.250
3021012SG	1.240–1.310
3021013SG	1.300–1.370
3021014SG	1.360–1.430
3021015SG	1.420–1.490
3021016SG	1.480–1.550
3021017SG	1.540–1.610
3021018SG	1.600–1.670
3021019SG	1.660–1.730
3021020SG	1.720–1.790

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3071003SG/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3071003SG/04/3P



PRECISION HYDROMETERS FOR DETERMINING THE SPECIFIC GRAVITY OF LIQUIDS ACC. TO ASTM E100-19

TECHNICAL DATA

Glass hydrometer, division: 0.001 sp/gr, accuracy: ±0.001 sp/gr, reference temperature: 60/60 °F, total length (L): 260 mm, body Ø (d): 21 mm

FEATURES/OPTIONS

+ calibratable version
+ includes certificate of conformity
+ individually packed in tubes made of recycled material

Order No.	Type	Measuring Range sp/gr
3222001	102H-62	0.650–0.700
3222002	103H-62	0.700–0.750
3222003	104H-62	0.750–0.800
3222004	105H-62	0.800–0.850
3222005	106H-62	0.850–0.900
3222006	107H-62	0.900–0.950
3222007	108H-62	0.950–1.000
3222011	125H-62	1.000–1.050
3222012	126H-62	1.050–1.100
3222013	127H-62	1.100–1.150
3222014	128H-62	1.150–1.200
3222015	129H-62	1.200–1.250
3222016	130H-62	1.250–1.300
3222017	131H-62	1.300–1.350
3222018	132H-62	1.350–1.400
3222019	133H-62	1.400–1.450
3222020	134H-62	1.450–1.500
3222021	135H-62	1.500–1.550
3222022	136H-62	1.550–1.600
3222023	137H-62	1.600–1.650
3222024	138H-62	1.650–1.700
3222025	139H-62	1.700–1.750
3222026	140H-62	1.750–1.800
3222027	141H-62	1.800–1.850

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3222001/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3222001/04/3P

HYDROMETERS
FOR SPECIFIC GRAVITY



PRECISION HYDROMETERS FOR DETERMINING THE SPECIFIC GRAVITY OF LIQUIDS ACC. TO ASTM E100-19

TECHNICAL DATA

Glass hydrometer, division: 0.0005 sp/gr, accuracy: ±0.0005 sp/gr, reference temperature: 60/60 °F, total length (L): 330 mm, body Ø (d): 24 mm

FEATURES/OPTIONS

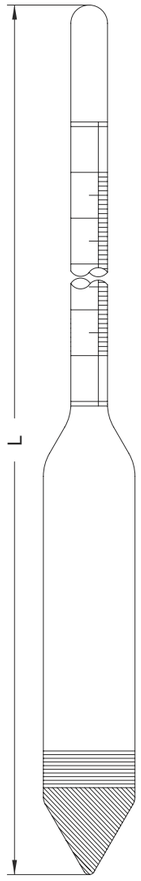
+ calibratable version
+ includes certificate of conformity
+ individually packed in tubes made of recycled material

Order No.	Type	Measuring Range sp/gr
3222051	82H-62	0.650–0.700
3222052	83H-62	0.700–0.750
3222053	84H-62	0.750–0.800
3222054	85H-62	0.800–0.850
3222055	86H-62	0.850–0.900
3222056	87H-62	0.900–0.950
3222057	88H-62	0.950–1.000
3222058	89H-62	1.000–1.050
3222059	90H-62	1.050–1.100
for alcohols		
3222060	98H-62	0.950–1.000
for heavy liquids		
3222061	111H-62	1.000–1.050
3222062	112H-62	1.050–1.100
3222063	113H-62	1.100–1.150
3222064	114H-62	1.150–1.200
3222065	115H-62	1.200–1.250
3222066	116H-62	1.250–1.300
3222067	117H-62	1.300–1.350
3222068	118H-62	1.350–1.400
3222069	119H-62	1.400–1.450
3222070	120H-62	1.450–1.500

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3222051/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3222051/04/3P

API HYDROMETERS

PRECISION HYDROMETERS IN API GRADE ACC. TO ASTM E100-19



TECHNICAL DATA

Glass hydrometer, division: 0.1 °API, accuracy: ±0.1 °API,
reference temperature: 60 °F, total length (L): 330 mm, body Ø (d): 24 mm

FEATURES/OPTIONS

+ calibratable version
+ includes certificate of conformity
+ individually packed in tubes made of recycled material

Order No.	Type	Measuring Range °API
3202001	1H-62	-1 to +11
3202002	2H-62	+9 to +21
3202003	3H-62	+19 to +31
3202004	4H-62	+29 to +41
3202005	5H-62	+39 to +51
3202006	6H-62	+49 to +61
3202007	7H-62	+59 to +71
3202008	8H-62	+69 to +81
3202009	9H-62	+79 to +91
3202010	10H-62	+89 to +101
3202011	11H-03	+37 to +49
3202012	12H-03	+64 to +76

TECHNICAL DATA

Glass hydrometer, division: 0.1 °API, accuracy: ±0.1 °API,
reference temperature: 60 °F, total length (L): 160 mm, body Ø (d): 15 mm

FEATURES/OPTIONS

+ calibratable version
+ individually packed in tubes made of recycled material
+ hydrometer set available on request with transport case

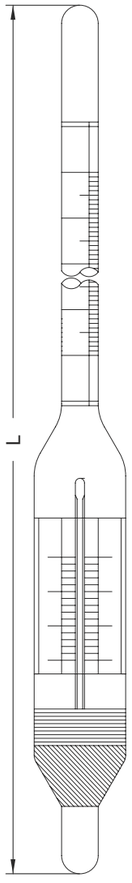
Order No.	Type	Measuring range °API
3202051	21H-62	0 to +6
3202052	22H-62	+5 to +11
3202053	23H-62	+10 to +16
3202054	24H-62	+15 to +21
3202055	25H-62	+20 to +26
3202056	26H-62	+25 to +31
3202057	27H-62	+30 to +36
3202058	28H-62	+35 to +41
3202059	29H-62	+40 to +46
3202060	30H-62	+45 to +51

Order No.	Type	Measuring Range °API
3202061	31H-62	+50 to +56
3202062	32H-62	+55 to +61
3202063	33H-62	+60 to +66
3202064	34H-62	+65 to +71
3202065	35H-62	+70 to +76
3202066	36H-62	+75 to +81
3202067	37H-62	+80 to +86
3202068	38H-62	+85 to +91
3202069	39H-62	+90 to +96
3202070	40H-62	+95 to +101

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3202001/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3202001/04/3P

API GRAVITY HYDROMETERS

PRECISION HYDROMETERS IN API GRADE



WITH INTEGRATED THERMOMETER

TECHNICAL DATA

Glass hydrometer, division: 0.2 °API, accuracy: ±0.2 °API,
reference temperature: 60 °F, total length (L): 200 mm, body Ø (d): 16 mm,
with thermometer: 0 to +150 °F in 2 °F, blue filling

FEATURES/OPTIONS

+ calibratable version
+ individually packed in tubes made of recycled material

Order No.	Measuring Range °API
3212060S	-1 to +11
3212061S	+9 to +21
3212062S	+19 to +31
3212063S	+29 to +41
3212064S	+39 to +51
3212065S	+49 to +61
3212066S	+59 to +71
3212067S	+69 to +81

ACC. TO ASTM E2995-15a, WITH INTEGRATED THERMOMETER

TECHNICAL DATA

Glass hydrometer, division: 0.1 °API, accuracy: ±0.1 °API,
reference temperature: 60 °F, total length (L): 380 mm,
body Ø (d): 17 mm, with thermometer: 0 to +150 °F in 2 °F, blue filling

FEATURES/OPTIONS

+ calibratable version
+ includes certificate of conformity
+ individually packed in tubes made of recycled material

Order No.	Type	Measuring Range °API
3122135S	S550HL-14	-6 to +6
3122036S	S551HL-14	-1 to +11
3122037S	S552HL-14	+9 to +21
3122038S	S553HL-14	+19 to +31
3122039S	S554HL-14	+29 to +41
3122040S	S555HL-14	+39 to +51
3202041S	S556HL-14	+49 to +61

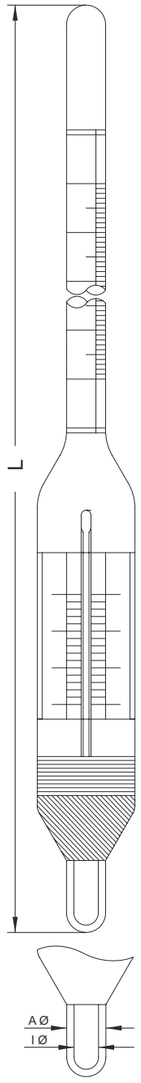
Order No.	Type	Measuring Range °API
3202042S	S557HL-14	+59 to +71
3202043S	S558HL-14	+69 to +81
3202044S	S559HL-14	+79 to +91
3202045S	S560HL-14	+89 to +101
3122136S	S561HL-14	+37 to +49
3122137S	S562HL-14	+64 to +76

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3212060S/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3212060S/04/3P

NOTE

For hydrometers with an integrated thermometer, calibration includes 3 test points for density and 3 test points for temperature.

PRECISION HYDROMETERS
FOR LIQUID GASES



* Additional note on the mercury regulation on page 53.

ACC. TO DIN 12804, WITH INTEGRATED THERMOMETER*

TECHNICAL DATA
Glass hydrometer, division: 0.0005 g/cm³, accuracy: ±0.0005 g/cm³, reference temperature: 15 °C, total length (L): 410 mm, body Ø (d): 18 mm, with thermometer: 0 to +30 °C in 0.5 °C, mercury filling, pressure resistance: up to 1,500 kPa

FEATURES/OPTIONS
+ calibratable version
+ includes certificate of conformity
+ individually packed in tubes made of recycled material
+ double-walled thermometer vessel

Order No.	Type	Measuring Range g/cm³
3242051	GAS 1	0.500–0.550
3242052	GAS 2	0.550–0.600
3242053	GAS 3	0.600–0.650

ACC. TO ASTM E100-19, WITH INTEGRATED THERMOMETER*

TECHNICAL DATA
Glass hydrometer, division: 1 kg/m³, accuracy: ±1 kg/m³, reference temperature: 15 °C, total length (L): 387 mm, body Ø (d): 18-19 mm, with thermometer, 0 to +35 °C in 0.5 °C, accuracy: ±0.5 °C, mercury filling, pressure resistance: to 1.400 kPa

FEATURES/OPTIONS
+ calibratable version
+ individually packed in tubes made of recycled material
+ double-walled thermometer vessel

Order No.	Type	Measuring Range kg/m³
3222180	310H	500–650

TECHNICAL DATA
Glass hydrometer, division: 0.001 sp/gr, accuracy: ±0.001 sp/gr, reference temperature: 60/60 °F, total length (L): 387 mm, body Ø (d): 18-19 mm, with thermometer, +30 to +90 °F in 1 °F, mercury filling, pressure resistance: to 200 Psi

Order No.	Type	Measuring Range sp/gr
3252061	101H-03	0.500–0.650

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3242051/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3242051/04/3P

NOTE
For hydrometers with an integrated thermometer, calibration includes 3 test points for density and 3 test points for temperature.

PRECISION HYDROMETERS
FOR MINERAL OILS



FOR CUSTOMS AUTHORITIES ACC. TO DIN 12791, WITH INTEGRATED THERMOMETER

TECHNICAL DATA
Glass hydrometer, division: 0.0005 g/cm³, accuracy: ±0.0005 g/cm³, reference temperature: 15 °C, total length (L): 425 mm, body Ø (d): 18 mm, with thermometer, -10 to +60 °C in 0.5 °C, accuracy: ±1 °C, blue filling

FEATURES/OPTIONS
+ calibratable version
+ includes certificate of conformity
+ individually packed in tubes made of recycled material

Order No.	Measuring Range g/cm³
3072021S	0.595–0.650
3072022S	0.645–0.705
3072023S	0.695–0.755
3072024S	0.745–0.805
3072025S	0.795–0.855
3072026S	0.845–0.905
3072027S	0.895–0.955
3072028S	0.945–1.005

FOR VARIOUS MINERAL OILS/FUELS

TECHNICAL DATA
Glass hydrometer, division: 0.001 g/cm³, accuracy: ±0.001 g/cm³, reference temperature: 15 °C, total length (L): 250 mm, body Ø (d): 19 mm

FEATURES/OPTIONS
+ calibratable version
+ individually packed in tubes made of recycled material
+ hydrometer set available on request with transport case

Order No.	Type/Fuels	Measuring Range g/cm³
3252040	for light gasoline	0.600–0.650
3252041	for light gasoline	0.650–0.700
3252042	for gasoline	0.700–0.750
3252043	for kerosene	0.750–0.800
3252044	for diesel	0.800–0.850

Order No.	Type/Fuels	Measuring Range g/cm³
3252045	for biodiesel	0.850–0.900
3252046	for biodiesel	0.900–0.950
3252047	for heavy fuel oil	0.950–1.000
3252048	for heavy fuel oil	1.000–1.050

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3072021S/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3072021S/04/3P

NOTE
For hydrometers with an integrated thermometer, calibration includes 3 test points for density and 3 test points for temperature.

PRECISION HYDROMETERS ACC. TO BAUMÉ
FOR DETERMINING THE DENSITY OF LIQUIDS



TECHNICAL DATA
Glass hydrometer, division: 1 Bé, accuracy: ±1 Bé,
reference temperature: +15 °C, total length (L): 250 mm

FEATURES/OPTIONS
+ calibratable version
+ individually packed in tubes made of recycled material
+ optionally available with reference temperature +20 °C as standard version

Order No.	Measuring Range Bé	Body Ø (d) mm
3261041	0–30	14
3261042	30–60	14
3261044	0–35	14
3261051	0–50	14
3261052	0–70	12

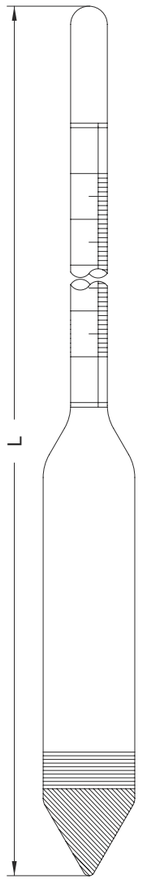
TECHNICAL DATA
Glass hydrometer, division: 0.5 Bé, accuracy: ±0.5 Bé,
reference temperature: +15 °C, total length (L): 220 mm, body Ø (d): 15 mm

FEATURES/OPTIONS
+ calibratable version
+ individually packed in tubes made of recycled material
+ optionally available with reference temperature +20 °C as standard version

Order No.	Measuring Range Bé
3281201	0–10
3281202	10–20
3281203	20–30
3281204	30–40
3281205	40–50
3281206	50–60
3281207	60–70

Order suffix		Example
-20	for reference temperature +20 °C	Order No. 3261041-20
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3261041/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3261041/04/3P

PRECISION HYDROMETERS ACC. TO BAUMÉ
FOR DETERMINING THE DENSITY OF LIQUIDS



TECHNICAL DATA
Glass hydrometer, division: 0.2 Bé, accuracy: ±0.2 Bé,
reference temperature: +15 °C, total length (L): 270 mm, body Ø (d): 14 mm

FEATURES/OPTIONS
+ calibratable version
+ individually packed in tubes made of recycled material
+ optionally available with reference temperature +20 °C as standard version

Order No.	Measuring Range Bé
3261171	0–20
3261172	10–30
3261173	20–40
3261174	30–50
3261175	40–60
3261176	50–70

TECHNICAL DATA
Glass hydrometer, division: 0.1 Bé, accuracy: ±0.1 Bé,
reference temperature: +15 °C, total length (L): 350 mm, body Ø (d): 19 mm

FEATURES/OPTIONS
+ calibratable version
+ individually packed in tubes made of recycled material
+ optionally available with reference temperature +20 °C as standard version

Order No.	Measuring Range Bé
3261031	0–20
3261032	10–30
3261033	20–40
3261034	30–50
3261035	40–60
3261036	50–70

Order suffix		Example
-20	for reference temperature +20 °C	Order No. 3261171-20
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3261171/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3261171/04/3P

PRECISION HYDROMETERS ACC. TO BAUMÉ

HIGH-PRECISION HYDROMETERS FOR DETERMINING THE DENSITY OF LIQUIDS



TECHNICAL DATA

Glass hydrometer, division: 0.1 Bé, accuracy: ±0.1 Bé,
reference temperature: +15 °C, total length (L): 260 mm

FEATURES/OPTIONS

+ calibratable version
+ individually packed in tubes made of recycled material
+ optionally available with reference temperature +20 °C as standard version

Order No.	Measuring Range Bé	Body Ø (d) mm
3271121	0–1	24
3271122	0–2	24
3271123	0–3	21
3271124	0–5	21

TECHNICAL DATA

Glass hydrometer, division: 0.1 Bé, accuracy: ±0.1 Bé,
reference temperature: +15 °C, total length (L): 270 mm, body Ø (d): 19 mm

FEATURES/OPTIONS

+ calibratable version
+ individually packed in tubes made of recycled material
+ optionally available with reference temperature +20 °C as standard version

Order No.	Measuring Range Bé
3211071	0–10
3211072	10–20
3211073	20–30
3211074	30–40
3211075	40–50
3211076	50–60
3211077	60–70

Order suffix		Example
-20	for reference temperature +20 °C	Order No. 3271121-20
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3271121/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3271121/04/3P

PRECISION SACCHARIMETERS ACC. TO BRIX, BALLING

HYDROMETERS FOR DETERMINING THE SUGAR CONTENT



IN °BRIX (BALLING)

TECHNICAL DATA

Glass hydrometer, division: 1 °Brix, accuracy: ±1 °Brix,
reference temperature: +20 °C, total length (L): 250 mm

FEATURES/OPTIONS

+ individually packed in tubes made of recycled material

Order No.	Measuring Range °Brix (Balling)	Body Ø (d) mm
3281121	0 to +30	19
3281122	+30 to +60	15
3281123	60 to +90	15

IN %MAS (BRIX, BALLING) FOR HIGH SERVICE TEMPERATURES FROM +70 °C

TECHNICAL DATA

Glass hydrometer, division: 1 %Brix, accuracy: ±1 %Brix,
total length (L): 220 mm, body Ø (d): 14 mm

FEATURES/OPTIONS

+ individually packed in tubes made of recycled material

Order No.	Measuring Range %Mas (Brix, Balling)	Reference Temperature in °C
3302422	0–30	70
3302423	30–60	70
3302424	60–90	70
3302425	0–30	75
3302426	30–60	75
3302427	60–90	75
3302428	0–30	80
3302429	30–60	80
3302430	60–90	80
3302431	0–30	90
3302432	30–60	90
3302433	60–90	90

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3281121/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3281121/04/3P

PRECISION SACCHARIMETERS ACC. TO BRIX, BALLING
FOR DETERMINING THE SUGAR CONTENT IN %MAS (BRIX, BALLING)



TECHNICAL DATA
Glass hydrometer, division: 0.2 %Mas (Brix, Balling), accuracy: ±0.2 %Mas, reference temperature: +20 °C, total length (L): 280 mm

FEATURES/OPTIONS
+ calibratable version
+ individually packed in tubes made of recycled material

Order No.	Measuring Range %Mas (Brix, Balling)	Body Ø (d) mm
3302410	0–10	24
3302411	10–20	24
3302412	20–30	21
3302413	30–40	21
3302414	40–50	21
3302415	50–60	21
3302416	60–70	21

TECHNICAL DATA
Glass hydrometer, division: 0.1 %Mas (Brix, Balling), accuracy: ±0.1 %Mas, reference temperature: +20 °C, total length (L): 280 mm

FEATURES/OPTIONS
+ calibratable version
+ individually packed in tubes made of recycled material

Order No.	Measuring Range %Mas (Brix, Balling)	Body Ø (d) mm
3281011	0–10	24
3281012	10–20	24
3281013	20–30	21
3281014	30–40	21
3281015	40–50	21
3281016	50–60	21
3281017	60–70	21

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3302410/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3302410/04/3P

PRECISION SACCHARIMETERS ACC. TO BRIX, BALLING
FOR DETERMINING THE SUGAR CONTENT IN %MAS (BRIX, BALLING), WITH INTEGRATED THERMOMETER



TECHNICAL DATA
Glass hydrometer, division: 0.1 %Mas, accuracy: ± 0.1 %Mas, reference temperature: +20 °C, total length (L): 350 mm, body Ø (d): 20 mm, with thermometer: 0 to +35 °C in 1 °C, blue filling

FEATURES/OPTIONS
+ calibratable version
+ with correction scale
+ individually packed in tubes made of recycled material

Order No.	Measuring Range %Mas (Brix, Balling)
3281051S	0–10
3281052S	10–20
3281053S	20–30
3281054S	30–40
3281055S	40–50
3281056S	50–60
3281057S	60–70

TECHNICAL DATA
Glass hydrometer, division: 0.1 °Brix, accuracy: ± 0.1 °Brix, reference temperature: +20 °C, total length (L): 330 mm, body Ø (d): 19 mm, with thermometer: 0 to +50 °C in 1 °C, blue filling

FEATURES/OPTIONS
+ calibratable version
+ individually packed in tubes made of recycled material
+ with correction scale

Order No.	Measuring Range %Brix
3281060S	-5+5
3281061S	0–12
3281062S	9–21
3281063S	19–31
3281064S	29–41
3281065S	39–51
3281066S	49–61
3281067S	59–71

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3281051S/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3281051S/04/3P

NOTE
For hydrometers with an integrated thermometer, calibration includes 3 test points for density and 3 test points for temperature.

PRECISION SACCHARIMETERS
FOR BREWERIES



SACCHARIMETERS FOR DETERMINING THE FINAL DEGREE OF FERMENTATION, WITH INTEGRATED THERMOMETER

TECHNICAL DATA
Glass hydrometer, division: 0.05 %Mas, accuracy: ±0.05 %Mas, reference temperature: +20 °C, total length (L): 290 mm, body Ø (d): 23 mm, with thermometer: +5 to +30 °C in 0.5 °C, blue filling

FEATURES/OPTIONS
+ calibratable version
+ with correction scale
+ individually packed in tubes made of recycled material

Order No.	Measuring Range %Mas
3292061S	0–3
3292062S	3–6
3292063S	6–9
3292064S	9–12
3292065S	12–15
3292066S	15–18
3292067S	18–21

HARTONG MALT SACCHARIMETERS FOR DETERMINING BEER WORT

TECHNICAL DATA
Glass hydrometer, division: 0.01 %Mas, accuracy: ±0.01 %Mas, reference temperature: +20 °C, total length (L): 400 mm, body Ø (d): 29–30 mm, with thermometer: +5 to +30°C in 0.5 °C, blue filling

FEATURES/OPTIONS
+ calibratable version
+ with correction scale
+ individually packed in tubes made of recycled material

Order No.	Measuring Range %Mas
3292041S	1–2
3292042S	2–3
3292043S	3–4
3292044S	4–5
3292045S	5–6

Order No.	Measuring Range %Mas
3292046S	6–7
3292047S	7–8
3292048S	8–9
3292049S	9–10

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3292061S/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3292061S/04/3P

NOTE
For hydrometers with an integrated thermometer, calibration includes 3 test points for density and 3 test points for temperature.

PRÄZISIONS-SACCHARIMETER
FOR BREWERIES



POCKET SACCHARIMETERS FOR THE BREWING INDUSTRY, WITH INTEGRATED THERMOMETER

TECHNICAL DATA
Glass hydrometer, division: 0.1 %Mas, accuracy: ±0.1 %Mas, reference temperature: +20 °C, total length (L): 250 mm, body Ø (d): 19 mm, with thermometer: 0 to +30°C in 1 °C, blue filling

FEATURES/OPTIONS
+ calibratable version
+ with correction scale
+ individually packed in tubes made of recycled material

Order No.	Measuring Range %Mas
3292011S	0–7
3292012S	7–14
3292013S	14–21

SACCHARIMETERS FOR DETERMINING BEER WORT ACC. TO PLATO, WITH INTEGRATED THERMOMETER

TECHNICAL DATA
Glass hydrometer, division: 0.1 °Plato, accuracy: ±0.1 °Plato, reference temperature: +20 °C, with thermometer: 0 to +30 °C in 1 °C, blue filling

FEATURES/OPTIONS
+ calibratable version
+ with correction scale
+ individually packed in tubes made of recycled material

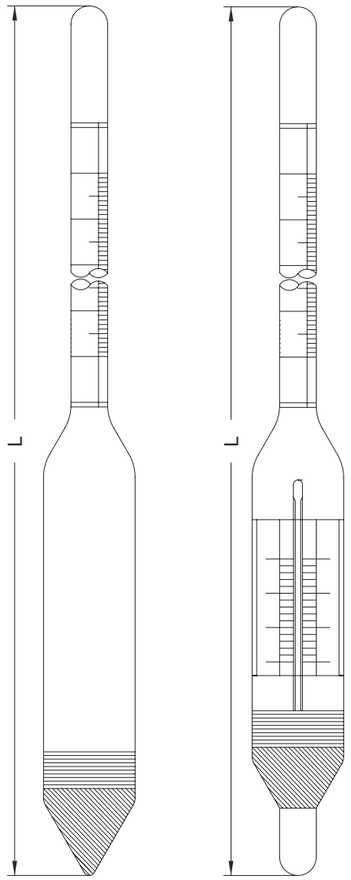
Order No.	Measuring Range °Plato	Total Length (L) mm	Body Ø (d) mm
3292101S	8–16	285	20
3292102S	16–24	285	20
3292103S	0–8	330	26
3292104S	8–16	330	26
3292105S	16–24	330	26
3292106S	0–14	330	32
3292107S	0–10	405	32
3292108S	10–20	430	32
3292109S	0–5	300	26
3292110S	5–10	300	26
3292111S	10–15	300	26
3292112S	15–20	300	26
3292113S	20–25	300	26

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3292011S/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3292011S/04/3P

NOTE
For hydrometers with an integrated thermometer, calibration includes 3 test points for density and 3 test points for temperature.

ALCOHOLOMETERS

UNIVERSAL ALCOHOLOMETERS FOR MEASURING THE ALCOHOL CONTENT



TECHNICAL DATA

Glass hydrometer, division: 1 %Vol, accuracy: ±1 %Vol, reference temperature: +20 °C, total length (L): 250 mm

FEATURES/OPTIONS

+ calibratable version
+ individually packed in tubes made of recycled material

Order No.	Measuring Range %Vol	Body Ø (d) mm
3402908	0–100	16
3302140	50–100	17

WITH INTEGRATED THERMOMETER

TECHNICAL DATA

Glass hydrometer, division: 1 %Vol, accuracy: ±1 %Vol, reference temperature: +20 °C, total length (L): 340 mm, with thermometer: 0 to +30°C in 1 °C, blue filling

FEATURES/OPTIONS

+ calibratable version
+ individually packed in tubes made of recycled material

Order No.	Measuring Range %Vol	Body Ø (d) mm
3402918S	0–100	16

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3402908/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3402908/04/3P

NOTE

For hydrometers with an integrated thermometer, calibration includes 3 test points for density and 3 test points for temperature.

ALCOHOLOMETERS

PRECISION ALCOHOLOMETERS FOR MEASURING THE ALCOHOL CONTENT, WITH INTEGRATED THERMOMETER



TECHNICAL DATA

Glass hydrometer, division: 0.2 %Vol, accuracy: ±0.2 %Vol, reference temperature: +20 °C, total length (L): 360 mm, body Ø (d): 20 mm, with thermometer: -5 to +35°C in 0.5 °C/1 °C, accuracy: ±1 °C/±2 °C, blue filling

FEATURES/OPTIONS

+ calibratable version
+ individually packed in tubes made of recycled material

Order No.	Measuring Range %Vol	Division/Thermometer °C
3302106S	30–50	0.5
3302107S	50–70	0.5
3302108S	30–50	1
3302109S	50–70	1

TECHNICAL DATA

Glass hydrometer, division: 1 to 0.2 %Vol, accuracy: ±1 to 0.2 %Vol, reference temperature: +20 °C, total length (L): 480 mm, body Ø (d): 20 mm, with thermometer: 0 to +30°C in 1 °C, accuracy: ±2 °C, blue filling

FEATURES/OPTIONS

+ calibratable version
+ individually packed in tubes made of recycled material

Order No.	Measuring Range %Vol	Division/Accuracy %Vol
3302171S	65–100	0.2
3302172S	10–67	0.5
3302173S	35–85	0.5
3302175S	0–100	1

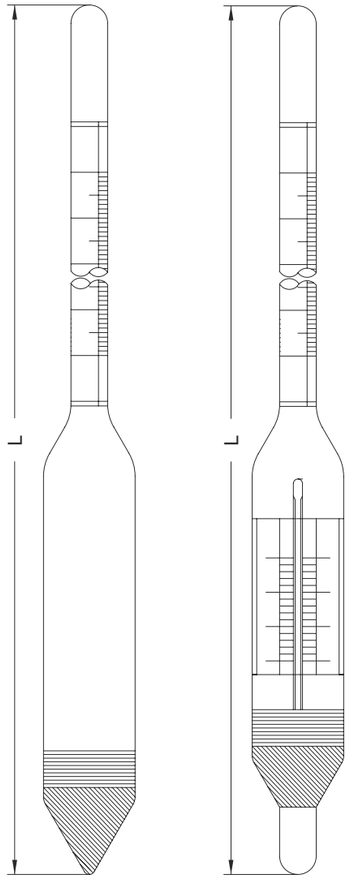
Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3302106S/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3302106S/04/3P

NOTE

For hydrometers with an integrated thermometer, calibration includes 3 test points for density and 3 test points for temperature.

ALCOHOLOMETERS

PRECISION ALCOHOLOMETERS FOR MEASURING THE ALCOHOL RANGE



TECHNICAL DATA

Glass hydrometer, division: 0.1 %Vol, accuracy: ±0.1 %Vol,
reference temperature: +20 °C, total length (L): 320 mm

FEATURES/OPTIONS

+ calibratable version
+ individually packed in tubes made of recycled material

Order No.	Measuring Range %Vol	Body Ø (d) mm
3302165	0–10	26
3302166	10–20	26
3302167	20–30	26
3302168	30–40	26
3302169	40–50	26
3302170	50–60	26
3302271	60–70	24
3302272	70–80	24
3302273	80–90	24
3302274	90–100	24

WITH INTEGRATED THERMOMETER

TECHNICAL DATA

Glass hydrometer, division: 1 %Vol, accuracy: ±1 %Vol,
reference temperature: +20 °C, total length (L): 380 mm, body Ø (d): 23 mm
with thermometer: 0 to +30 °C in 1 °C, blue filling

FEATURES/OPTIONS

+ calibratable version
+ individually packed in tubes made of recycled material

Order No.	Measuring Range %Vol
3302181S	0–10
3302182S	10–20
3302183S	20–30
3302184S	30–40
3302185S	40–50

Order No.	Measuring Range %Vol
3302186S	50–60
3302187S	60–70
3302188S	70–80
3302189S	80–90
3302190S	90–100

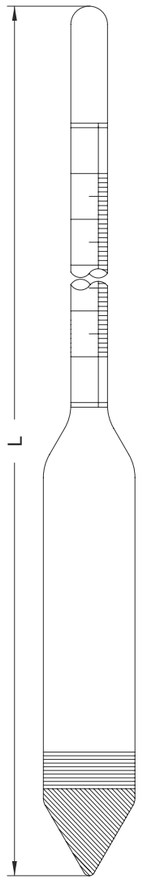
Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3302165/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3302165/04/3P

NOTE

For hydrometers with an integrated thermometer, calibration includes 3 test points for density and 3 test points for temperature.

ALCOHOLOMETERS

PRECISION ALCOHOLOMETERS



BASED ON CLASS I

TECHNICAL DATA

Glass hydrometer, division: 0.1 %Vol, accuracy: ±0.1 %Vol,
reference temperature: +20 °C, total length (L): 480 mm, body Ø (d): 28 mm

FEATURES/OPTIONS

+ calibratable version
+ includes certificate of conformity
+ individually packed in tubes made of recycled material

Order No.	Measuring Range %Vol	Body Ø (d) mm
3302061-R1	0–10	26
3302062-R1	10–20	26
3302063-R1	20–30	26
3302064-R1	30–40	26
3302065-R1	35–45	26
3302066-R1	40–50	26

Order No.	Measuring Range %Vol	Body Ø (d) mm
3302067-R1	50–60	26
3302068-R1	60–70	24
3302069-R1	70–80	24
3302070-R1	80–90	24
3302071-R1	90–100	24
3302072-R1	95–103	24

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3302085-R1/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3302085-R1/04/3P

BASED ON CLASS II

TECHNICAL DATA

Glass hydrometer, division: 0.1 %Vol, accuracy: ±0.1 %Vol,
reference temperature: +20 °C, total length (L): 350 mm,

FEATURES/OPTIONS

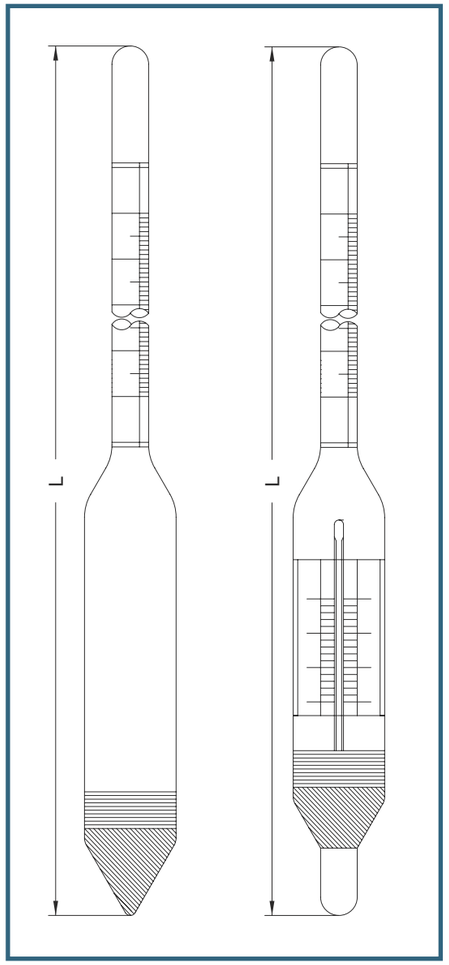
+ calibratable version
+ includes certificate of conformity
+ individually packed in tubes made of recycled material

Order No.	Measuring Range %Vol	Body Ø (d) mm
3302085-R1	0–10	26
3302086-R1	10–20	26
3302087-R1	20–30	26
3302088-R1	30–40	26
3302089-R1	35–45	26
3302090-R1	40–50	26

Order No.	Measuring Range %Vol	Body Ø (d) mm
3302091-R1	50–60	26
3302092-R1	60–70	24
3302093-R1	70–80	24
3302094-R1	80–90	24
3302095-R1	90–100	24
3302096-R1	95–103	24

PRECISION HYDROMETERS FOR MUST PRODUCERS

MUSTIMETERS FOR DETERMINING THE DENSITY OF MUST, WITH DUAL SCALE (%VOL + G/CM³)



TECHNICAL DATA

Glass hydrometer, division 1: 0.5 %Vol, accuracy: ±0.5 %Vol,
division 2: 0.001 g/cm³, accuracy: ±0.001 g/cm³,
reference temperature: +20 °C, total length (L): 270 mm,
body Ø (d): 21 mm

FEATURES/OPTIONS

+ calibratable version
+ individually packed in tubes made of recycled material

Order No.	Measuring Range 1 %Vol	Measuring Range 2 g/cm³
3311080	3–18	0.985-1.130

WITH INTEGRATED THERMOMETER

TECHNICAL DATA

Glass hydrometer, division 1: 0.5 %Vol, accuracy: ±0.5 %Vol,
division 2: 0.001 g/cm³, accuracy: ±0.001 g/cm³,
reference temperature: +20 °C, total length (L): 340 mm, body Ø (d): 16 mm,
with thermometer: -5 to +35 °C in 1 °C, accuracy: ±2 °C, blue filling

FEATURES/OPTIONS

+ calibratable version
+ individually packed in tubes made of recycled material

Order No.	Measuring Range 1 %Vol	Measuring Range 2 g/cm³
3311079S	3–18	0.985-1.130

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3311079S/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3311079S/04/3P

NOTE

For hydrometers with an integrated thermometer, calibration includes 3 test points for density and 3 test points for temperature.

PRECISION HYDROMETERS FOR MUST PRODUCERS

HYDROMETERS FOR DETERMINING THE EXTRACT OF JUICES



WITH INTEGRATED THERMOMETER

TECHNICAL DATA

Glass hydrometer, division: 0.0002 g/cm³, accuracy: ±0.0002 g/cm³,
reference temperature: +20 °C, total length (L): 380 mm,
body Ø (d): 27.5 mm, with thermometer: +10 to +25 °C in 0.2 °C,
accuracy: ±0.4 °C, blue filling

FEATURES/OPTIONS

+ calibratable version
+ individually packed in tubes made of recycled material

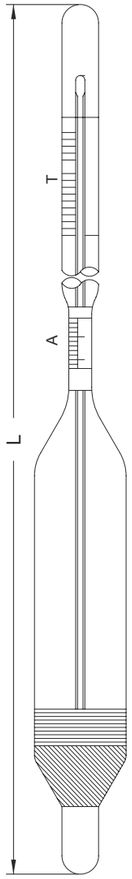
Order No.	Measuring Range g/cm³
3311074S	0.980-1.000
3311075S	1.000-1.020
3311076S	1.020-1.040
3311077S	1.040-1.060
3311078S	1.060-1.080

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3311079S/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3311079S/04/3P

NOTE

For hydrometers with an integrated thermometer, calibration includes 3 test points for density and 3 test points for temperature.

PRECISION HYDROMETERS FOR DAIRIES
WITH INTEGRATED THERMOMETER, READING AT TOP



LACTODENSIMETERS ACC. TO GERBER

TECHNICAL DATA

Glass hydrometer, division: 0.0005 g/cm³, accuracy: ±0.0005 g/cm³, reference temperature: +15 °C, with thermometer: -10 to +30 °C in 0.5 °C, accuracy: ±1 °C, blue filling

FEATURES/OPTIONS

+ calibratable version
+ includes certificate of conformity
+ individually packed in tubes made of recycled material

Order No.	Measuring Range g/cm³	Total Length (L) mm	Body Ø (d) mm
3302320S	1.025–1.036	370	29.5
3302321S	1.020–1.040	320	27.5

LACTODENSIMETERS ACC. TO QUEVENNE

TECHNICAL DATA

Glass hydrometer, division: 1 °Quevenne, accuracy: ±1 °Quevenne, reference temperature: +15 °C, total length (L): 270 mm, body Ø (d): 21 mm, with thermometer: 0 to +40 °C in 1 °C, accuracy: ± 2 °C, 1 °Quevenne = 0.001 sp/gr, blue filling

FEATURES/OPTIONS

+ calibratable version
+ individually packed in tubes made of recycled material

Order No.	Measuring Range °Quevenne
3302341S	15–40

(A: Aräometer – T: Thermometer)

Order suffix		Example
-20	for reference temperature +20 °C	Order No. 3302320S-20
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3031001/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3031001/04/3P

NOTE

For hydrometers with an integrated thermometer, calibration includes 3 test points for density and 3 test points for temperature.

PRECISION HYDROMETERS FOR DAIRIES
WITH INTEGRATED THERMOMETER



LACTODENSIMETERS ACC. TO GERBER

TECHNICAL DATA

Glass hydrometer, division: 0.0005 g/cm³, accuracy: ±0.0005 g/cm³, reference temperature: +15 °C, total length (L): 230 mm, body Ø (d): 22 mm, with thermometer: 0 to +40 °C in 1 °C, accuracy: ±2 °C, blue filling

FEATURES/OPTIONS

+ calibratable version
+ individually packed in tubes made of recycled material
+ also available as standard with reference temperature +20 °C

Order No.	Measuring Range g/cm³
3302323S	1.025–1.036
3302324S	1.020–1.040

LACTODENSIMETERS, STANDARD VERSION

TECHNICAL DATA

Glass hydrometer, division: 0.0005 g/cm³, accuracy: ±0.0005 g/cm³, reference temperature: +20 °C, total length (L): 260 mm, body Ø (d): 22 mm, with thermometer: 0 to +35 °C in 1 °C, accuracy: ±2 °C, blue filling

FEATURES/OPTIONS

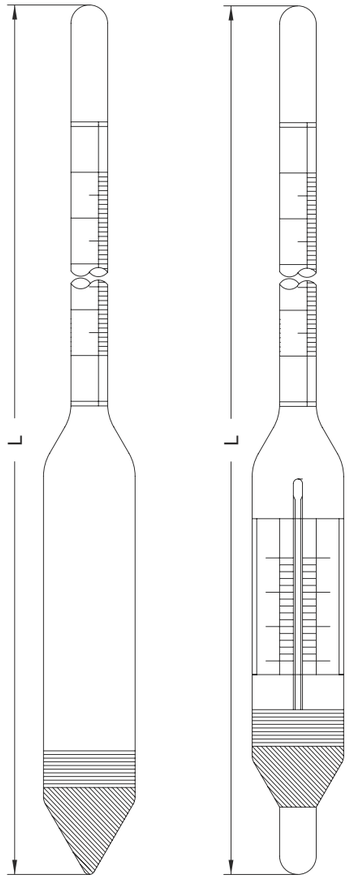
+ calibratable version
+ individually packed in tubes made of recycled material

Order No.	Measuring Range g/cm³
3302311S	1.015–1.040

Order suffix		Example
-20	for reference temperature +20 °C	Order No. 3302323S-20
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3302323S/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3302323S/04/3P

NOTE

For hydrometers with an integrated thermometer, calibration includes 3 test points for density and 3 test points for temperature.



LACTODENSIMETERS FOR YOGURT AND COCOA, WITH INTEGRATED THERMOMETER

TECHNICAL DATA
Glass hydrometer, division: 0.001 g/cm³, accuracy: ±0.001 g/cm³, reference temperature: +20 °C, total length (L): 240 mm, body Ø (d): 18 mm, with thermometer: 0 to +35 °C in 1 °C, accuracy: ±2 °C, blue filling

FEATURES/OPTIONS
+ calibratable version
+ individually packed in tubes made of recycled material

Order No.	Measuring Range g/cm³
3302373S	1.030–1.060

LACTODENSIMETERS FOR CONDENSED MILK

TECHNICAL DATA
Glass hydrometer, reference temperature: +20 °C, total length (L): 280 mm, body Ø (d): 19/21 mm

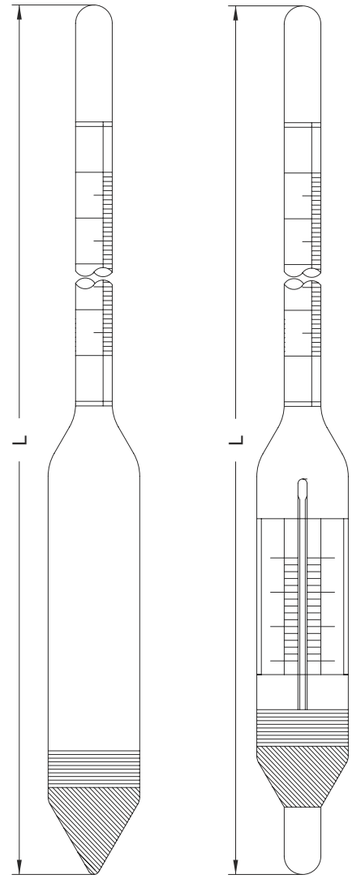
FEATURES/OPTIONS
+ calibratable version
+ reading at top
+ individually packed in tubes made of recycled material

Order No.	Measuring Range g/cm³	Division/Toleranz g/cm³	Body Ø (d) mm
3302382	1.000–1.240	0.002 / ±0.002	19
3302383	1.040–1.080	0.001 / ±0.001	21

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3302373S/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3302373S/04/3P

NOTE
For hydrometers with an integrated thermometer, calibration includes 3 test points for density and 3 test points for temperature.

PRECISION HYDROMETERS FOR DAIRIES



LACTODENSIMETERS ACC. TO QUEVENNE

TECHNICAL DATA
Glass hydrometer, division: 1 °Quevenne, accuracy: ±1 °Quevenne, reference temperature: +15 °C, total length (L): 210 mm, body Ø (d): 21 mm, 1 °Quevenne = 0.001 sp/gr

FEATURES/OPTIONS
+ calibratable version
+ reading at top
+ also available as standard with reference temperature +20 °C
+ individually packed in tubes made of recycled material

Order No.	Measuring Range °Quevenne
3302331	15–40

THERMO-LACTODENSIMETERS, STANDARD VERSION, WITH INTEGRATED THERMOMETER

TECHNICAL DATA
Glass hydrometer, division: 0.0005 g/cm³, accuracy: ±0.0005 g/cm³, reference temperature: +20 °C, total length (L): 260 mm, body Ø (d): 22 mm, with thermometer: 0 to +35 °C in 1 °C, accuracy: ±2 °C, blue filling

FEATURES/OPTIONS
+ calibratable version
+ reading at top
+ individually packed in tubes made of recycled material

Order No.	Measuring Range g/cm³
3302311S	1.015–1.040

Order suffix		Example
-20	for reference temperature +20 °C	Order No. 3302331-20
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3302331/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3302331/04/3P



FOR SEAWATER

TECHNICAL DATA
Glass hydrometer, division: 0.001 g/cm³, accuracy: ±0.001 g/cm³, reference temperature: +20 °C, body Ø (d): 21 mm

FEATURES/OPTIONS
+ calibratable version
+ individually packed in tubes made of recycled material

Order No.	Measuring Range g/cm³	Total Length (L) mm
3311091	1.000–1.035	160
3311092	1.000–1.040	200
3311093	1.000–1.040	250

FOR FRESH WATER/SEAWATER (DRAFT SURVEY)

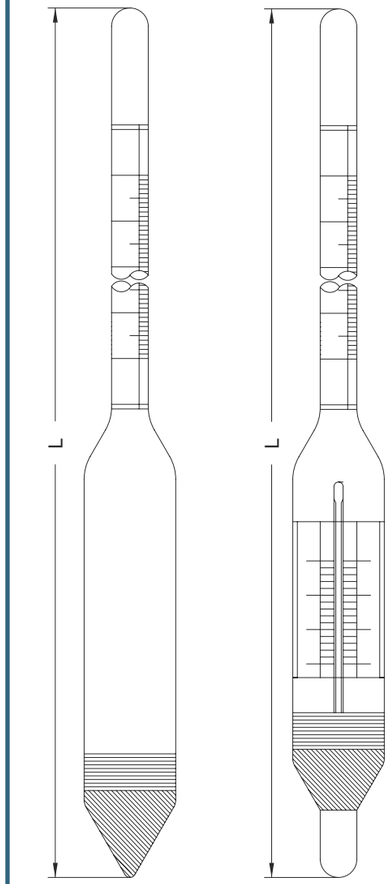
TECHNICAL DATA
Glass hydrometer, division: 0.0005 g/cm³, accuracy: ±0.0005 g/cm³, total length (L): 335 mm, body Ø (d): 21 mm

FEATURES/OPTIONS
+ calibratable version
+ includes certificate of conformity
+ individually packed in tubes made of recycled material

Order No.	Measuring Range g/cm³	Reference Temperature °C
3350000	0.990–1.040	20
3350000-15	0.990–1.040	15

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3311091/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3311091/04/3P

PRECISION HYDROMETERS
FOR SPECIAL APPLICATIONS



FOR SEAWATER WITH INTEGRATED THERMOMETER

TECHNICAL DATA
Glass hydrometer, division: 0.001 g/cm³, accuracy: ±0.001 g/cm³, reference temperature: +20 °C, total length (L): 300 mm, body Ø (d): 21 mm, with thermometer: 0 to +30°C in 1 °C, accuracy: ±2 °C, blue filling

FEATURES/OPTIONS
+ calibratable version
+ individually packed in tubes made of recycled material

Order No.	Measuring Range g/cm³
3311099S	0.990–1.040

FOR SALT WATER/BRINE

TECHNICAL DATA
Glass hydrometer, division: 0.5 Bé, accuracy: ±0.5 Bé, reference temperature: +20 °C, total length (L): 270 mm, body Ø (d): 15 mm

FEATURES/OPTIONS
+ calibratable version
+ individually packed in tubes made of recycled material

Order No.	Measuring Range Bé
3311025	0–26

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3311099S/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3311099S/04/3P

NOTE
For hydrometers with an integrated thermometer, calibration includes 3 test points for density and 3 test points for temperature.



FOR COMMON SALT ACC. TO BISCHOFF

TECHNICAL DATA
Glass hydrometer, division: 0.5 %Mas, accuracy: ±0.5 %Mas,
reference temperature: +20 °C, total length (L): 270 mm,
body Ø (d): 18 mm

FEATURES/OPTIONS
+ calibratable version
+ includes certificate of conformity
+ individually packed in tubes made of recycled material

Order No.	Measuring Range %Mas
3311281	0–27

FOR URINE ACC. TO VOGEL

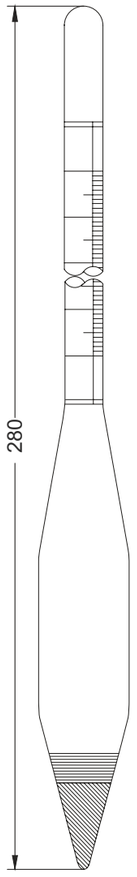
TECHNICAL DATA
Glass hydrometer, division: 0.001 g/cm³, accuracy: ±0.001 g/cm³,
reference temperature: +20 °C, total length (L): 150 mm,
body Ø (d): 14 mm

FEATURES/OPTIONS
+ calibratable version
+ includes certificate of conformity
+ individually packed in tubes made of recycled material

Order No.	Measuring Range g/cm³
3311211	1.000–1.060

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3311281/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3311281/04/3P

PRECISION HYDROMETERS
FOR SPECIAL APPLICATIONS



ACC. TO CASAGRANDE, DIN 18123/BS 1377

TECHNICAL DATA
Glass hydrometer, division: 0.0005 g/cm³, accuracy: ±0.0005 g/cm³,
reference temperature: +20 °C, total length (L): 350 mm,
body Ø (d): 30 mm

FEATURES/OPTIONS
+ calibratable version
+ includes certificate of conformity
+ individually packed in tubes made of recycled material

Order No.	Measuring Range g/cm³
3311121	0.995–1.030

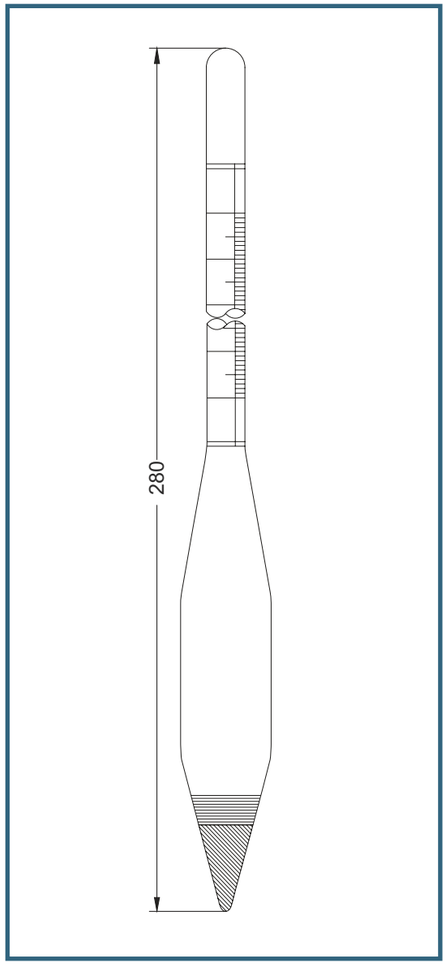
FOR SOIL ANALYSIS ACC. TO ASTM E100-19

TECHNICAL DATA
Glass hydrometer, division: 0.001 sp/gr, accuracy: ±0.001 sp/gr,
reference temperature: 68/68 °F, total length (L): 280 mm,
body Ø (d): 28 mm

FEATURES/OPTIONS
+ calibratable version
+ includes certificate of conformity
+ individually packed in tubes made of recycled material

Order No.	Type	Measuring Range sp/gr
3231031	151H-05	0.995-1.038

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3311121/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3311121/04/3P



FOR SOIL ANALYSIS ACC. TO ASTM E100-19

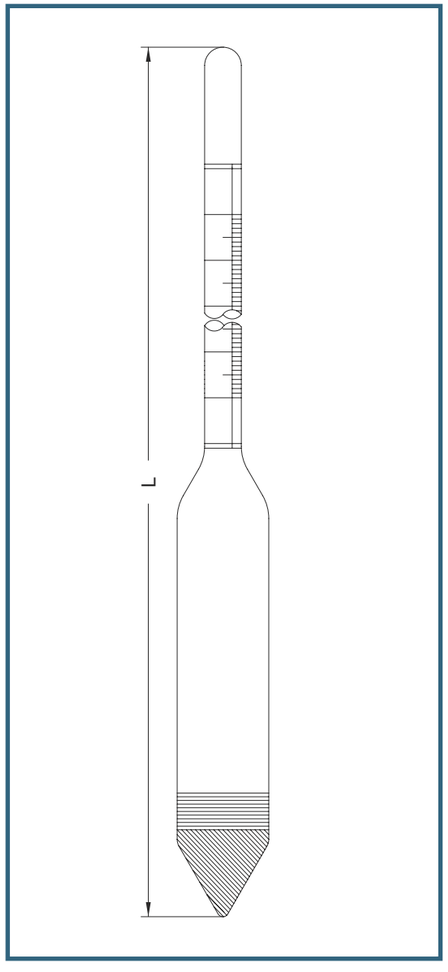
TECHNICAL DATA
Glass hydrometer, division: 1 g/L, accuracy: ±1 g/L,
reference temperature: 68/68 °F, total length (L): 280 mm,
body Ø (d): 28 mm

FEATURES/OPTIONS
+ calibratable version
+ includes certificate of conformity
+ individually packed in tubes made of recycled material

Order No.	Type	Measuring Range g/L
3231032	152H-05	-5 to +60

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3231032/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3231032/04/3P

PRECISION HYDROMETERS
FOR SPECIAL APPLICATIONS



FOR DETERMINING THE MIXING RATIO OF VARIOUS ACIDS, ALKALIS AND SOLUTIONS

TECHNICAL DATA
Glass hydrometer, division: 0.5 %Mas, accuracy: ±0.5 %Mas,
reference temperature: +20 °C, total length (L): 270 mm

FEATURES/OPTIONS
+ calibratable version
+ individually packed in tubes made of recycled material

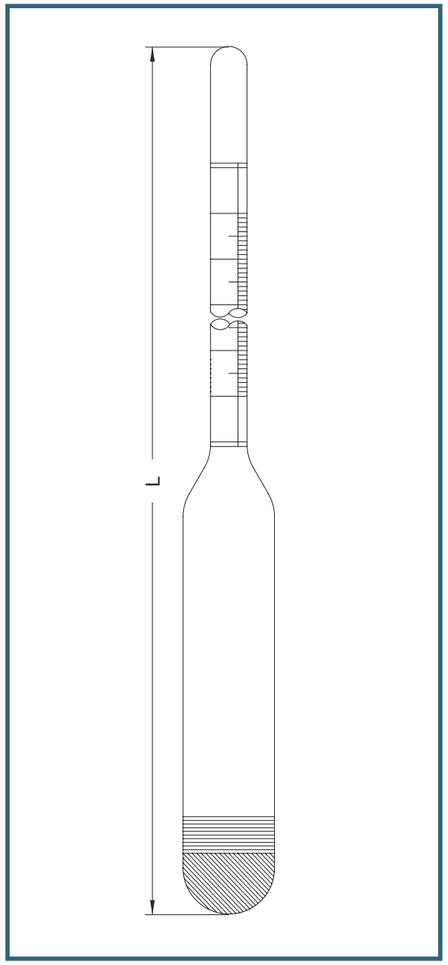
Order No.	Measuring Range %Mas	Body Ø (d) mm	Medium
3311241	0–35	17	ammonia
3311271	0–30	16	potassium hydroxide solution
3311300	0–10	16	sodium hydroxide solution
3311301	0–27	14	sodium hydroxide solution
3311302	25–50	14	sodium hydroxide solution
3311331	0–31	16	nitric acid
3311332	45–96	16	nitric acid
3311341	0–40	16	hydrochloric acid
3311342	0–10	19	hydrochloric acid
3311351	0–45	14	sulfuric acid
3311352	45–94	14	sulfuric acid

TECHNICAL DATA
Glass hydrometer, division: 1 %Mas, accuracy: ±1 %Mas,
reference temperature: +20 °C,

FEATURES/OPTIONS
+ calibratable version
+ individually packed in tubes made of recycled material

Order No.	Measuring Range %Mas	Total Length (L) mm	Body Ø (d) mm	Medium
3311251	0–75	280	21	acetic acid
3311221	0–30	150	19	hydrogen peroxide

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3311241/03/3P
/04/3P	including DAkkS calibration (04) with 3 test points (3P)	Order No. 3311241/04/3P



FOR DETERMINING THE DENSITY

TECHNICAL DATA

Polycarbonate hydrometer, division: 0.002 g/cm³, accuracy: ±0.002 g/cm³, reference temperature: +20 °C, body Ø (d): 20 mm, total length (L): 300 mm,

FEATURES/OPTIONS

+ calibratable version
+ break-proof design
+ individually packed in tubes made of recycled material

Order No.	Measuring Range g/cm³
3001220-R1	1.020–1.220
3001420	1.200–1.420
3001620	1.400–1.620

FOR DETERMINING THE SPECIFIC GRAVITY

TECHNICAL DATA

Polycarbonate hydrometer, division: 0.002 sp/gr, accuracy: ±0.002 sp/gr, reference temperature: +20 °C, body Ø (d): 20 mm, total length (L): 300 mm

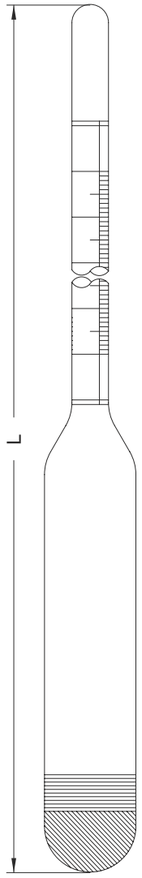
FEATURES/OPTIONS

+ calibratable version
+ break-proof design
+ individually packed in tubes made of recycled material

Order No.	Measuring Range sp/gr
3302540-R1	1.020–1.220
3002541	1.200–1.420
3002542	1.400–1.620

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3001220-R1/03/3P

PRECISION HYDROMETERS
MADE OF PLASTIC (POLYCARBONATE)



ACC. TO BAUMÉ

TECHNICAL DATA

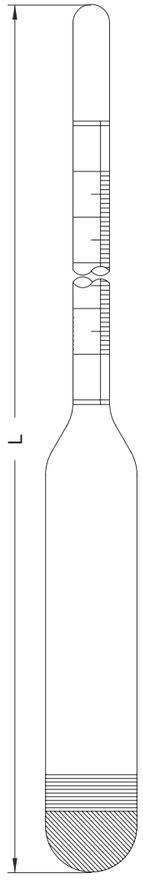
Polycarbonate hydrometer, division: 0.2 Bé, accuracy: ±0.2 Bé, reference temperature: +15 °C, body Ø (d): 20 mm,

FEATURES/OPTIONS

+ calibratable version
+ break-proof design
+ individually packed in tubes made of recycled material

Order No.	Measuring Range Bé	Total Length (L) mm
3002525	0–25	300
3002501	0–12	250
3002502	9–21	250
3002503	19–31	250
3002504	29–41	250
3002505	39–51	250
3002506	49–61	250
3002507	59–71	300

Order suffix		Example
-20	for reference temperature +20 °C	Order No. 3002525-20
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3002525/03/3P



SACCHARIMETERS FOR DETERMINING THE SUGAR CONTENT

TECHNICAL DATA
Polycarbonate hydrometer, division: 0.2 %Mas, accuracy: ±0.2 %Mas,
reference temperature: +20 °C, body Ø (d): 20 mm,
total length (L) 250 mm/from Order No. 3006075: 235 mm

FEATURES/OPTIONS
+ calibratable version
+ break-proof design
+ individually packed in tubes made of recycled material

Order No.	Measuring Range %Mas
3000015	0–15
3001530	15–30
3003045	30–45
3004560	45–60
3006075	60–75
3007590	75–90

TECHNICAL DATA
Polycarbonate hydrometer, division: 0.5 %Mas, accuracy: ±0.5 %Mas,
reference temperature: +20 °C, body Ø (d): 20 mm,
total length (L): 300 mm

Order No.	Measuring Range %Mas
3002523	0–35
3002595	0–50

Order suffix		Example
-20	for reference temperature +20 °C	Order No. 3002525-20
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3002525/03/3P

PRECISION HYDROMETERS
MADE OF PLASTIC (POLYCARBONATE)



FOR DETERMINING THE SALT CONTENT

TECHNICAL DATA
Polycarbonate hydrometer, division: 1 °Brine, accuracy: ±1 °Brine,
reference temperature: +20 °C, body Ø (d): 20 mm

FEATURES/OPTIONS
+ calibratable version
+ break-proof design
+ individually packed in tubes made of recycled material

Order No.	Measuring range °Brine	Total Length (L) mm
3002511	0–100	300

TECHNICAL DATA
Polycarbonate hydrometer, division: 0.2 %Mas, accuracy: ±0.2 %Mas,
reference temperature: +20 °C, body Ø (d): 20 mm

Order No.	Measuring range %mas	Total Length (L) mm
30025112	0–26.4	300

OECHSLE SCALE FOR WINE MEASUREMENTS

TECHNICAL DATA
Polycarbonate hydrometer, division: 1 °Oechsle, accuracy: ±1 °Oechsle,
reference temperature: +20 °C, body Ø (d): 20 mm,
total length (L): 260 mm

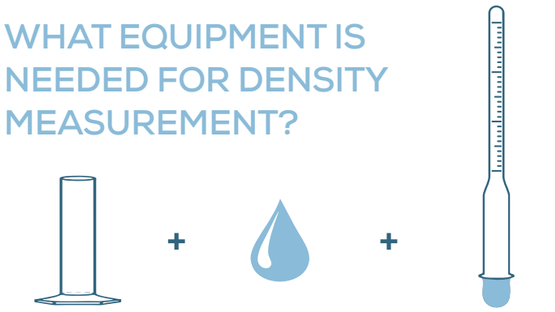
FEATURES/OPTIONS
+ calibratable version
+ break-proof design
+ individually packed in tubes made of recycled material

Order No.	Measuring Range °Oechsle
3002596	0–130

Order suffix		Example
/03/3P	including works calibration (03) with 3 test points (3P)	Order No. 3002525/03/3P

FAQ

WHAT EQUIPMENT IS NEEDED FOR DENSITY MEASUREMENT?



Stand cylinder + Sufficient liquid + Hydrometer

HOW LARGE SHOULD THE STAND CYLINDER BE?

+ **Height:** The height of the stand cylinder should be at least equal to the length of the hydrometer.
+ **Diameter:** As a rule of thumb: hydrometer Ø + 20 mm. In other words, the distance from the centered hydrometer to the cylinder wall should be 10 mm or more.

HOW DO I CARRY OUT THE MEASUREMENT?

+ Place the stand cylinder with sufficient liquid plumb on a firm surface.
+ Check the hydrometer for contamination before use and clean it if necessary.
+ Lower the hydrometer into the liquid with a slight twisting motion and wait until it has settled.
+ Make sure the hydrometer floats freely and does not stick to the bottom or the glass wall.

→ The corresponding value can now be read off the scale.

DOES A HYDROMETER CONTAIN HAZARDOUS MATERIALS?

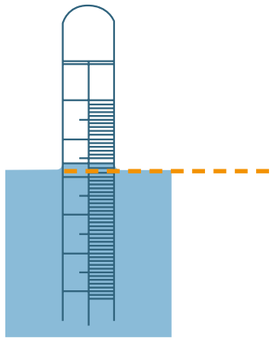
Hydrometers are generally made of environmentally compatible or recyclable materials such as:
+ glass/polycarbonate
+ metal shot
+ sealing wax
+ environmentally friendly filling for integrated thermometers

UP TO WHAT TEMPERATURE CAN I USE A HYDROMETER?

Glass hydrometers: up to +80 °C
Plastic hydrometers: up to +60 °C

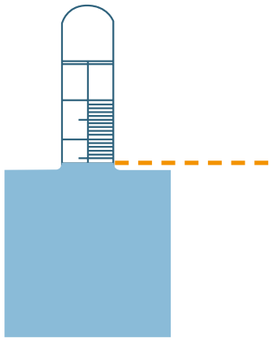
HOW DO I READ THE VALUE FOR TRANSPARENT/OPAQUE LIQUIDS?

Reading for transparent liquids



Reading at bottom
reading level at the lower edge of the liquid meniscus

Reading for opaque liquids



Reading at top
reading level at the upper edge of the liquid meniscus

WHAT DOES THE REFERENCE TEMPERATURE +15 °C/+20 °C MEAN?

Reference temperature = The temperature to which the hydrometer is adjusted during manufacture.
+ Since density changes with temperature, the temperature of the medium should match the reference temperature for a precise measurement.

NOTE: You will always find the reference temperature in the inscription on the instrument or in the article description.

STORAGE TEMPERATURE EXCEEDS THE TEMPERATURE RANGE OF THE INTEGRATED THERMOMETER. WHAT NOW?

Thermometers are fitted with an expansion bulb, regardless of the temperature range. This ensures that both transport and storage of the instruments are safe up to +50 °C.

HOW ARE THE CALIBRATION POINTS SET FOR A HYDROMETER?

+ Standard calibration is carried out at 3 calibration points per parameter.
+ If the user does not provide any specifications, the points are distributed to cover the measuring span of the instrument (**1x** beginning, **1x** middle, **1x** end of the scale).

NOTE: The customer is of course free to define the points themselves.

WHY IS THERE NO CALIBRATION MARK ON THE HYDROMETER?

Since a calibration mark would already alter the weight of the hydrometer, it is always affixed to the packaging tube of the instrument. For calibrated hydrometers, the packaging should therefore never be discarded after unpacking.

WHERE CAN I FIND FURTHER HYDROMETER TYPES?

Our catalogue covers the most common hydrometers, but LUDWIG SCHNEIDER offers a far wider range of special types and custom solutions.

EXPLORE OUR FULL RANGE ON OUR WEBSITE!

Got any question?
We are happy to help!

E-Mail: info@ludwig-schneider.de
Tel.: +49 9342 8560-0

*** NOTE on the mercury regulation as referenced on page 22:**
In accordance with Article 5(2)(b) of Regulation (EU) 2017/852, since 31 December 2020 the delivery of mercury-containing thermometers to non-EU countries has only been permitted if the products are intended for research, for the calibration of instruments or for use as a reference standard. By ordering hydrometers with mercury-containing thermometers, you confirm that the instruments will be used for these purposes.

ACCREDITED DAkkS CALIBRATION LABORATORY

FOR TEMPERATURE & DENSITY

More than ever, today's products must deliver reliably precise results. With our in-house DAkkS calibration laboratory for temperature and density, we give you the assurance you need – today and in the future.

We measure temperatures from -196 °C to 1,850 °C and guarantee the highest precision in accordance with all international standards. We document and certify measuring instruments according to the individual requirements of our customers.



CERTIFIED PRECISION – MADE BY LUDWIG SCHNEIDER MESSTECHNIK

In our modern calibration laboratory, we offer our customers a wide range of measurements, including documentation:

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  resistance thermometers
+ **ADJUSTMENT OF**
  digital and analog data acquisition systems
+ **COMPARISON MEASUREMENTS OF**
  resistance thermometers
  thermocouples
  liquid-in-glass thermometers
  mechanical thermometers
  block calibrators, calibration baths and simulators
  hydrometers and alcoholometers

BEYOND THE STANDARD – OUR SERVICES

From consulting, calibration, documentation and training through to the development and manufacture of customer-specific calibration equipment, we offer you a broad range of services.

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NOTES

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