

# The right electrode for your titration application

The applicable electrode for the titration application is a decisive factor for the accuracy and reproducibility of the results. In order to support you with selecting the appropriate electrode, we have summarized the according electrodes for the most important applications in the following.



| Application                                                                               | Electrode<br>(w.o. temp.-sensor) | Electrode<br>with integrated. temp.-sensor |
|-------------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------|
| <b>Acid-base-titrations</b>                                                               |                                  |                                            |
| Aqueous, general strong acid and bases                                                    | A 7780                           | A 7780 1M-DIN-ID                           |
| Kjeldahl                                                                                  | A 7780                           | A 7780 1M-DIN-ID                           |
| Alkalinity                                                                                | N 62, N 61                       | A 162-2M-DIN-ID                            |
| Aqueous, difficult applications                                                           | IL-pH-A120MF<br>IL-pH-A170MF     | A 162-2M-DIN-ID                            |
| Low ionic liquids                                                                         | IL-pH-A120MF<br>IL-pH-A170MF     | A 162-2M-DIN-ID                            |
| Small sample amounts                                                                      | N 5900 A                         | A 157<br>IL-MICRO-pH-A-DIN-N               |
| Titration with sample changer<br>(100–250 ml vessels)                                     | N 65                             | N 1051 A<br>IL-pH-A170-DIN-N               |
| Titration with sample changer<br>(50 ml vessels, micro)                                   | N 5900 A                         | -                                          |
| <b>Non aqueous acid base-titrations</b>                                                   |                                  |                                            |
| TAN (ASTM 664)                                                                            | N 6480 eth                       | -                                          |
| OH-No, NCO-No, FFA saponification No. ...                                                 | N 6480 eth                       | -                                          |
| TBN (ISO 3771/ASTM 2896)                                                                  | N 6480 eis                       | -                                          |
| Epoxy value                                                                               | N 6480 eis                       | -                                          |
| Titration with perchloric acid/acetic acid                                                | N 6480 eis                       | -                                          |
| <b>Precipitation titrations</b>                                                           |                                  |                                            |
| Halogenides (chloride, "salt")                                                            | AgCl 62, AgCl 62 RG              | -                                          |
| Halogenides, sample changer                                                               | AgCl 65, AgCl 62 RG              | -                                          |
| Pseudo halogenides (cyanide ...)                                                          | Ag 6280                          | -                                          |
| Detergents                                                                                | TEN 1100*                        | -                                          |
| <b>Redox titrations</b>                                                                   |                                  |                                            |
| General, iodometric,<br>permanganometric, cerimetric                                      | Pt 62<br>Pt 6280                 | -                                          |
| Iodine number, peroxid number                                                             | Pt 61                            | -                                          |
| COD                                                                                       | Pt 61                            | -                                          |
| Sample changer, general                                                                   | Pt 6580                          | -                                          |
| Sample changer, COD                                                                       | Pt 5901                          | -                                          |
| Dead stop (SO <sub>2</sub> bromine no. ...) general                                       | Pt 1200                          | -                                          |
| Dead stop (SO <sub>2</sub> bromine no. ...) sample changer, general and titration vessels | Pt 1400                          | -                                          |
| Dead stop (SO <sub>2</sub> bromine no. ...) sample changer micro                          | KF 1100                          | -                                          |
| KF-titrations                                                                             | KF 1100                          | -                                          |
| <b>Complexometric titrations</b>                                                          |                                  |                                            |
| Water hardness (Ca/Mg separated)                                                          | Ca 1100 A*                       | -                                          |
| Water hardness, total                                                                     | Cu 1100 A*                       | -                                          |
| Copper, zinc, nickel, alumina ...                                                         | Cu 1100 A*                       | -                                          |

\* An applicable reference electrode is required: B 2920+ respectively. B 3520+