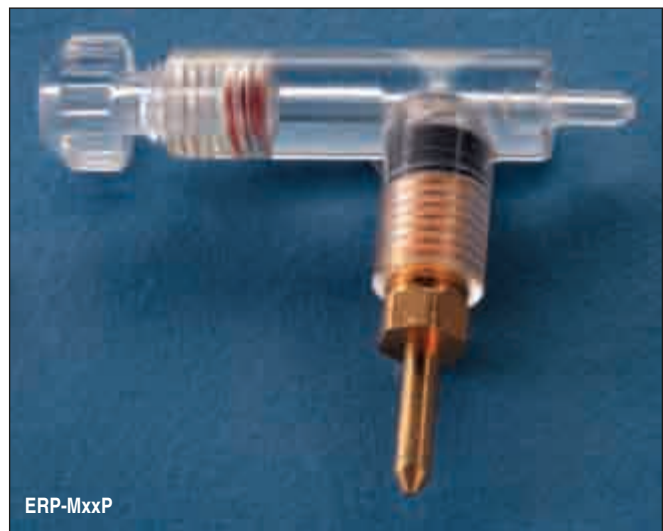


microelectrode holders

E Series

E-Series Electrode Holders

Microelectrode holders for every application and manufacturer



- Intracellular recording
- Extracellular recording
- Iontophoresis
- Ported or vented versions
- Compatible with MHH-25 holder

E Series

Applications include intracellular and extracellular recording, iontophoresis and ion specific measurements. They are available with choice of body style and electrical coupling and may be specified with or without a port or vent (see accompanying chart). The holders are used with microelectrode amplifiers that have either a 2 mm pin or 2 mm jack headstage connector. Amplifier headstages with the BNC connector will use a Q Series holder.

Specifications

| | |
|----------------------|-----------------------------|
| Body Material | Acrylic, 6.3 mm diameter |
| Body Styles | Straight, 45°, and 90° |
| Connectors | 2 mm Pin or 2 mm Jack |
| Coupling | Ag Wire or Ag-AgCl Pellet |
| Port | 2 mm diameter Polycarbonate |
| Vent | 0.8 mm diameter Hole |
| Standard Glass Sizes | 1.0, 1.2, 1.5 and 2.0 mm |

microelectrode holders

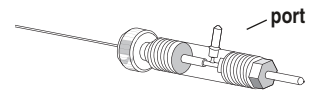
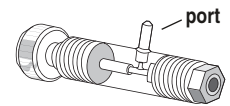
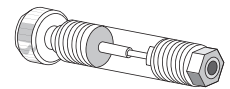
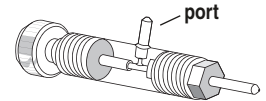
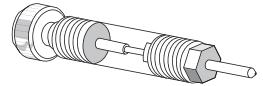
E Series

E Series Straight Body Holders



E-SERIES Straight Body Holders

| Order # | Wire/Pellet | Connector | Port | Glass OD (mm) | Model |
|------------|-------------|-----------|------|---------------|----------|
| W4 64-0992 | Pellet | 2 mm Pin | No | 1.0 | ESP-M10N |
| W4 64-0993 | | | | 1.2 | ESP-M12N |
| W4 64-0994 | | | | 1.5 | ESP-M15N |
| W4 64-1260 | | | | 2.0 | ESP-M20N |
| W4 64-0995 | | | Yes | 1.0 | ESP-M10P |
| W4 64-0996 | | | | 1.2 | ESP-M12P |
| W4 64-0997 | | | | 1.5 | ESP-M15P |
| W4 64-0998 | | | | 2.0 | ESP-M20P |
| W4 64-0980 | | 2 mm Jack | No | 1.0 | ESP-F10N |
| W4 64-0981 | | | | 1.2 | ESP-F12N |
| W4 64-0982 | | | | 1.5 | ESP-F15N |
| W4 64-0983 | | | | 2.0 | ESP-F20N |
| W4 64-0984 | | | Yes | 1.0 | ESP-F10P |
| W4 64-0985 | | | | 1.2 | ESP-F12P |
| W4 64-0986 | | | | 1.5 | ESP-F15P |
| W4 64-0987 | | | | 2.0 | ESP-F20P |
| W4 64-1011 | Wire | 2 mm Pin | No | 1.0 | ESW-M10N |
| W4 64-1012 | | | | 1.2 | ESW-M12N |
| W4 64-1013 | | | | 1.5 | ESW-M15N |
| W4 64-1014 | | | | 2.0 | ESW-M20N |
| W4 64-1015 | | | Yes | 1.0 | ESW-M10P |
| W4 64-1016 | | | | 1.2 | ESW-M12P |
| W4 64-1017 | | | | 1.5 | ESW-M15P |
| W4 64-1018 | | | | 2.0 | ESW-M20P |



microelectrode holders

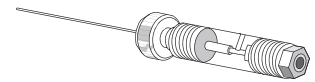
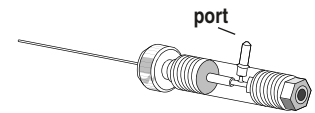
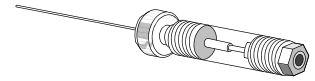
E Series

E Series Straight Body Holders (continued)

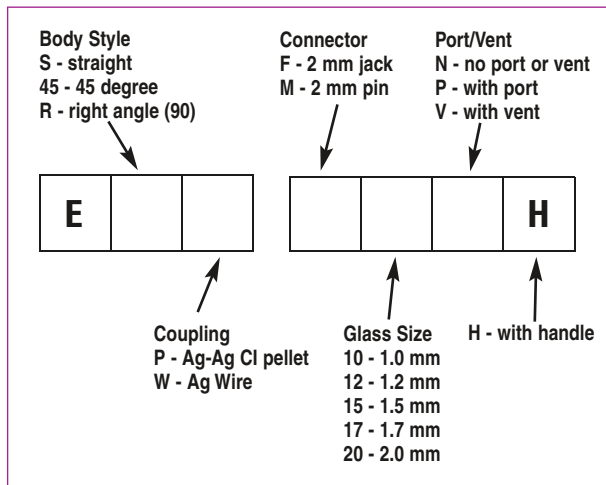
E SERIES-Straight Body Holders (continued)

| Order # | Wire/Pellet | Connector | Port | Glass OD (mm) | Model |
|------------|-------------|-----------|-------|---------------|----------|
| W4 64-0999 | Wire | 2 mm Jack | No | 1.0 | ESW-F10N |
| W4 64-1000 | | | | 1.2 | ESW-F12N |
| W4 64-1001 | | | | 1.5 | ESW-F15N |
| W4 64-1002 | | | | 2.0 | ESW-F20N |
| W4 64-1003 | | | Yes | 1.0 | ESW-F10P |
| W4 64-1004 | | | | 1.2 | ESW-F12P |
| W4 64-1005 | | | | 1.5 | ESW-F15P |
| W4 64-1006 | | | | 2.0 | ESW-F20P |
| W4 64-1007 | | | Vent* | 1.0 | ESW-F10V |
| W4 64-1008 | | | | 1.2 | ESW-F12V |
| W4 64-1009 | | | | 1.5 | ESW-F15V |
| W4 64-1703 | | | | 1.7 | ESW-F17V |
| W4 64-1010 | | | | 2.0 | ESW-F20V |

*Vented models are standard with the Warner OC-725 Oocyte Clamp.



How to Decode E Series Model Numbers



microelectrode holders

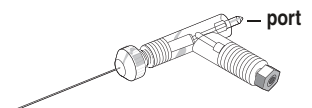
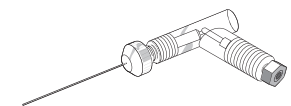
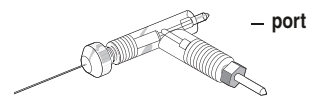
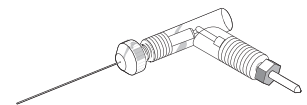
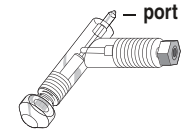
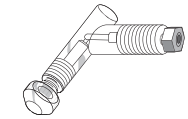
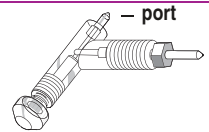
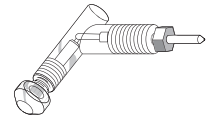
E Series

E Series 45° Body Holders



E SERIES-45° Body Holders

| Order # | Wire/Pellet | Connector | Port | Glass OD (mm) | Model |
|------------|-------------|-----------|------|---------------|-----------|
| W4 64-0908 | Pellet | 2 mm Pin | No | 1.0 | E45P-M10N |
| W4 64-0909 | | | | 1.2 | E45P-M12N |
| W4 64-0910 | | | | 1.5 | E45P-M15N |
| W4 64-0911 | | | | 2.0 | E45P-M20N |
| W4 64-0912 | | | Yes | 1.0 | E45P-M10P |
| W4 64-0913 | | | | 1.2 | E45P-M12P |
| W4 64-0914 | | | | 1.5 | E45P-M15P |
| W4 64-0915 | | | | 2.0 | E45P-M20P |
| W4 64-0900 | | 2 mm Jack | No | 1.0 | E45P-F10N |
| W4 64-0901 | | | | 1.2 | E45P-F12N |
| W4 64-0902 | | | | 1.5 | E45P-F15N |
| W4 64-0903 | | | | 2.0 | E45P-F20N |
| W4 64-0904 | | | Yes | 1.0 | E45P-F10P |
| W4 64-0905 | | | | 1.2 | E45P-F12P |
| W4 64-0906 | | | | 1.5 | E45P-F15P |
| W4 64-0907 | | | | 2.0 | E45P-F20P |
| W4 64-0924 | Wire | 2 mm Pin | No | 1.0 | E45W-M10N |
| W4 64-0925 | | | | 1.2 | E45W-M12N |
| W4 64-0926 | | | | 1.5 | E45W-M15N |
| W4 64-0927 | | | | 2.0 | E45W-M20N |
| W4 64-0928 | | | Yes | 1.0 | E45W-M10P |
| W4 64-0929 | | | | 1.2 | E45W-M12P |
| W4 64-0930 | | | | 1.5 | E45W-M15P |
| W4 64-0931 | | | | 2.0 | E45W-M20P |
| W4 64-0916 | Wire | 2 mm Jack | No | 1.0 | E45W-F10N |
| W4 64-0917 | | | | 1.2 | E45W-F12N |
| W4 64-0918 | | | | 1.5 | E45W-F15N |
| W4 64-0919 | | | | 2.0 | E45W-F20N |
| W4 64-0920 | | | Yes | 1.0 | E45W-F10P |
| W4 64-0921 | | | | 1.2 | E45W-F12P |
| W4 64-0922 | | | | 1.5 | E45W-F15P |
| W4 64-0923 | | | | 2.0 | E45W-F20P |



microelectrode holders

E Series

E Series 45° Body Holders



E SERIES-90° Body Holders

| Order # | Wire/Pellet | Connector | Port | Glass OD (mm) | Model | |
|------------|-------------|-----------|------|---------------|----------|--|
| W4 64-0940 | Pellet | 2 mm Pin | No | 1.0 | ERP-M10N | |
| W4 64-0941 | | | | 1.2 | ERP-M12N | |
| W4 64-0942 | | | | 1.5 | ERP-M15N | |
| W4 64-0943 | | | | 2.0 | ERP-M20N | |
| W4 64-0944 | | | Yes | 1.0 | ERP-M10P | |
| W4 64-0945 | | | | 1.2 | ERP-M12P | |
| W4 64-0946 | | | | 1.5 | ERP-M15P | |
| W4 64-0947 | | | | 2.0 | ERP-M20P | |
| W4 64-0932 | | 2 mm Jack | No | 1.0 | ERP-F10N | |
| W4 64-0933 | | | | 1.2 | ERP-F12N | |
| W4 64-0934 | | | | 1.5 | ERP-F15N | |
| W4 64-0935 | | | | 2.0 | ERP-F20N | |
| W4 64-0936 | | | Yes | 1.0 | ERP-F10P | |
| W4 64-0937 | | | | 1.2 | ERP-F12P | |
| W4 64-0938 | | | | 1.5 | ERP-F15P | |
| W4 64-0939 | | | | 2.0 | ERP-F20P | |
| W4 64-0956 | Wire | 2 mm Pin | No | 1.0 | ERW-M10N | |
| W4 64-0957 | | | | 1.2 | ERW-M12N | |
| W4 64-0958 | | | | 1.5 | ERW-M15N | |
| W4 64-0959 | | | | 2.0 | ERW-M20N | |
| W4 64-0960 | | | Yes | 1.0 | ERW-M10P | |
| W4 64-0961 | | | | 1.2 | ERW-M12P | |
| W4 64-0962 | | | | 1.5 | ERW-M15P | |
| W4 64-0963 | | | | 2.0 | ERW-M20P | |
| W4 64-0948 | | 2 mm Jack | No | 1.0 | ERW-F10N | |
| W4 64-0949 | | | | 1.2 | ERW-F12N | |
| W4 64-0950 | | | | 1.5 | ERW-F15N | |
| W4 64-0951 | | | | 2.0 | ERW-F20N | |
| W4 64-0952 | | | Yes | 1.0 | ERW-F10P | |
| W4 64-0953 | | | | 1.2 | ERW-F12P | |
| W4 64-0954 | | | | 1.5 | ERW-F15P | |
| W4 64-0955 | | | | 2.0 | ERW-F20P | |

*Vented models are standard with the Warner OC-725 Oocyte Clamp.

microelectrode holders

E Series

E Series Holders with Handle

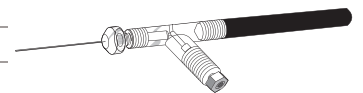
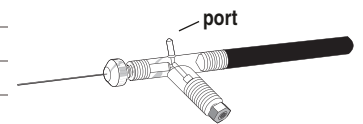
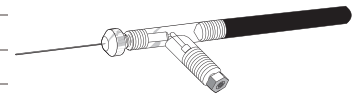
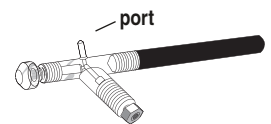
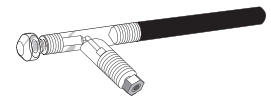
Holders include a 6.3 mm diameter 6.3 cm long handle for mounting in a micropositioner.

Handles are screwed together except for vented models which are joined by a pin and jack for easy removal from the handle.



E-SERIES with Handle

| Order # | Wire/Pellet | Connector | Port | Glass OD (mm) | Model |
|------------|-------------|-----------|-------|---------------|------------|
| W4 64-1023 | Pellet | 2 mm Jack | No | 1.0 | E45P-F10NH |
| W4 64-1024 | | | | 1.2 | E45P-F12NH |
| W4 64-1025 | | | | 1.5 | E45P-F15NH |
| W4 64-1033 | | 2 mm Pin | | 1.5 | E45P-M15NH |
| W4 64-1026 | | | | 2.0 | E45P-F20NH |
| W4 64-1039 | | | Yes | 1.0 | E45P-F10PH |
| W4 64-1040 | | | | 1.2 | E45P-F12PH |
| W4 64-1041 | | | | 1.5 | E45P-F15PH |
| W4 64-1042 | | | | 2.0 | E45P-F20PH |
| W4 64-1019 | Wire | 2 mm Jack | No | 1.0 | E45W-F10NH |
| W4 64-1020 | | | | 1.2 | E45W-F12NH |
| W4 64-1021 | | | | 1.5 | E45W-F15NH |
| W4 64-1022 | | | | 2.0 | E45W-F20NH |
| W4 64-1035 | | | Yes | 1.0 | E45W-F10PH |
| W4 64-1036 | | | | 1.2 | E45W-F12PH |
| W4 64-1037 | | | | 1.5 | E45W-F15PH |
| W4 64-1038 | | | | 2.0 | E45W-F20PH |
| W4 64-1051 | | | Vent* | 1.0 | E45W-F10VH |
| W4 64-1052 | | | | 1.2 | E45W-F12VH |
| W4 64-1053 | | | | 1.5 | E45W-F15VH |
| W4 64-1372 | | | | 1.7 | E45W-F17VH |
| W4 64-1054 | | | | 2.0 | E45W-F20VH |



*Vented models are standard with the Warner OC-725 Oocyte Clamp.