



# FINA WORLD MASTERS TOP 10 - SHORT COURSE METERS - ALL TIME (1986-2019)

## \*\*\*\*\* WOMEN 25-29 \*\*\*\*\*

|                          |     |      |
|--------------------------|-----|------|
| 50 M. FREE               |     |      |
| 24.73 AMY SMITH          | GBR | 2013 |
| 25.09 EMMA GAGE          | GBR | 2015 |
| 25.29 JENNIFER THATER    | GER | 2018 |
| 25.33 M.LETANG           | FRA | 2019 |
| 25.42 SUMIKA KOMATSU     | JPN | 2006 |
| 25.52 L.LOPEZ            | USA | 2017 |
| 25.53 NATHALIE LARSSON   | SWE | 2014 |
| 25.59 YAYOI MATSUMOTO    | JPN | 2019 |
| 25.61 HANNAH KEEN        | GBR | 2012 |
| 25.66 MARINA SPADONI     | USA | 2018 |
| 25.66 GEORGINA HEYN      | GBR | 2011 |
| 100 M. FREE              |     |      |
| 54.16 AMY SMITH          | GBR | 2013 |
| 54.44 YAYOI MATSUMOTO    | JPN | 2019 |
| 54.53 EMMA GAGE          | GBR | 2015 |
| 55.06 L.LOPEZ            | USA | 2017 |
| 55.28 MARIA FUSTER       | ESP | 2012 |
| 55.28 HANNA SHCHERBA     | FRA | 2010 |
| 55.32 NADINE JONES       | AUS | 2014 |
| 56.12 JENNIFER THATER    | GER | 2015 |
| 56.22 REBECCA GUY        | GBR | 2017 |
| 56.26 M.LETANG           | FRA | 2019 |
| 200 M. FREE              |     |      |
| 1:59.39 L.LOPEZ          | USA | 2017 |
| 1:59.61 YAYOI MATSUMOTO  | JPN | 2019 |
| 1:59.78 SHEILA TAORMINA  | USA | 1996 |
| 2:01.89 CAROLINE SAXBY   | GBR | 2011 |
| 2:02.42 CHELSEA COLWILL  | USA | 2016 |
| 2:02.50 TATIANA BARBOSA  | BRA | 2007 |
| 2:02.91 VERONICA BALSANO | BRA | 2014 |
| 2:03.77 ELINORE DE JONG  | NED | 2017 |
| 2:04.10 LAURA FERNANDEZ  | ESP | 2015 |
| 2:04.59 HITOMI MATSUDA   | JPN | 2005 |
| 400 M. FREE              |     |      |
| 4:15.74 SOPHIE CASSON    | GBR | 2013 |
| 4:17.77 FLAVIA RIGAMONTI | USA | 2007 |
| 4:18.20 CAROLINE SAXBY   | GBR | 2011 |
| 4:18.54 MARION VD BERG   | NED | 2014 |
| 4:24.18 SHEILA TAORMINA  | USA | 1996 |
| 4:25.58 PAULINE VANET    | FRA | 2019 |
| 4:25.60 C.OESTRINGER     | SUI | 2017 |
| 4:25.94 LYNN MARSHALL    | CAN | 1990 |
| 4:25.99 ANNA MARKOVA     | RUS | 2014 |
| 4:26.18 DIANE GRANER     | USA | 1989 |
| 800 M. FREE              |     |      |
| 8:51.18 SHEILA TAORMINA  | USA | 1996 |
| 8:53.14 C.OESTRINGER     | SUI | 2017 |
| 8:57.39 HITOMI MATSUDA   | JPN | 2006 |
| 8:57.67 SUSANNE KELLER   | SUI | 2009 |
| 9:00.84 PAULA WOOD       | GBR | 2007 |
| 9:07.19 S. PALMER-WHITE  | AUS | 1991 |
| 9:07.78 ANNA MARKOVA     | RUS | 2014 |
| 9:08.09 MARIE ATKINSON   | GBR | 2001 |
| 9:10.85 LAURA LAJUNEN    | FIN | 2017 |
| 9:11.88 LAURA MCCLEMMONT | CAN | 2011 |
| 1500 M. FREE             |     |      |
| 16:13.66 ISABELLE HARLE  | GER | 2015 |
| 16:36.07 SHEILA TAORMINA | USA | 1996 |
| 16:47.66 SUSANNE KELLER  | SUI | 2009 |
| 17:00.63 HITOMI MATSUDA  | JPN | 2006 |
| 17:16.61 LAURA LAJUNEN   | FIN | 2017 |
| 17:19.93 ALLISON ARNOLD  | USA | 2017 |
| 17:20.28 MELODY REMNANT  | AUS | 2011 |
| 17:24.96 PAULA WOOD      | GBR | 2007 |
| 17:25.08 KATIE KASTES    | USA | 2014 |
| 17:29.81 CHANTAL DUCK    | BEL | 1993 |
| 50 M. BACK               |     |      |
| 27.88 YURIE OGA          | JPN | 2015 |

|                           |     |      |
|---------------------------|-----|------|
| 28.06 MIKA IKEDA          | JPN | 2015 |
| 28.40 MARINA SPADONI      | USA | 2018 |
| 28.53 LAURENCE FEDRIGO    | SUI | 2018 |
| 28.79 OLGA KLYUCHINKOVA   | RUS | 2014 |
| 28.89 NATASHA SUNDIN      | SWE | 2018 |
| 28.92 A.DORODNYKH         | RUS | 2018 |
| 28.92 DIANA MACMANUS      | USA | 2012 |
| 29.00 THERESE SVENDSEN    | SWE | 2016 |
| 29.20 AKIKO MIZUMOTO      | JPN | 2006 |
| 100 M. BACK               |     |      |
| 1:00.63 YURIE OGA         | JPN | 2015 |
| 1:01.65 OLGA KLYUCHINKOVA | RUS | 2014 |
| 1:01.76 MARINA SPADONI    | USA | 2018 |
| 1:01.93 MARIA UGOLKOVA    | SUI | 2018 |
| 1:02.07 MASAKO KUROKI     | JPN | 2018 |
| 1:02.32 AKIKO MIZUMOTO    | JPN | 2007 |
| 1:02.48 KANA OHASHI       | JPN | 2007 |
| 1:02.58 LAUREN LAVIGNA    | CAN | 2014 |
| 1:02.80 THERESE SVENDSEN  | SWE | 2016 |
| 1:02.89 ERIN CAMPBELL     | USA | 2014 |
| 200 M. BACK               |     |      |
| 2:12.84 KANA OHASHI       | JPN | 2005 |
| 2:13.00 K.BARANOWSKA      | GER | 2015 |
| 2:14.77 LIA OBERSTAR      | USA | 2001 |
| 2:15.67 VALENTINA LUCCONI | ITA | 2017 |
| 2:16.29 ERIN CAMPBELL     | USA | 2013 |
| 2:16.35 LAUREN LAVIGNA    | CAN | 2014 |
| 2:16.45 MARION ZOLLER     | GER | 1995 |
| 2:16.59 THERESE SVENDSEN  | SWE | 2016 |
| 2:17.86 JOLANDA DE ROVER  | NED | 1992 |
| 2:18.22 KELLY HARRIGAN    | USA | 2010 |
| 50 M. BRST                |     |      |
| 30.50 PETRA CHOCOVA       | CZE | 2014 |
| 31.01 ANNA KUZMICHEVA     | RUS | 2015 |
| 31.59 NICOLE HEIDEMANN    | GER | 2011 |
| 31.66 KATHRYN JOHNSTONE   | GBR | 2019 |
| 31.85 M.JEAN-LACHAPELLE   | CAN | 2019 |
| 31.87 MEGAN JENDRICK      | USA | 2010 |
| 31.92 SUVI PULKKINEN      | FIN | 2015 |
| 31.95 YOSHIMI MIWA        | JPN | 2012 |
| 32.02 LOUISE DALGAARD     | DEN | 2017 |
| 32.11 RACHAEL WILSON      | GBR | 2016 |
| 100 M. BRST               |     |      |
| 1:06.83 PETRA CHOCOVA     | CZE | 2014 |
| 1:07.42 KATHRYN JOHNSTONE | GBR | 2019 |
| 1:08.67 RACHAEL WILSON    | GBR | 2016 |
| 1:09.38 GEORGINA HEYN     | GBR | 2011 |
| 1:09.40 ANNA KUZMICHEVA   | RUS | 2016 |
| 1:09.80 LINDA LUND        | DEN | 2009 |
| 1:10.04 MEGAN JENDRICK    | USA | 2012 |
| 1:10.17 KATIE HENDERSON   | GBR | 2009 |
| 1:10.55 HITOMI MATSUDA    | JPN | 2005 |
| 1:10.65 NICOLE HEIDEMANN  | GER | 2011 |
| 200 M. BRST               |     |      |
| 2:29.80 MEGAN JENDRICK    | USA | 2012 |
| 2:30.29 KATIE HENDERSON   | GBR | 2009 |
| 2:30.52 PETRA CHOCOVA     | CZE | 2015 |
| 2:31.18 HITOMI MATSUDA    | JPN | 2006 |
| 2:31.30 KATHRYN JOHNSTONE | GBR | 2019 |
| 2:31.44 GEORGINA HEYN     | GBR | 2011 |
| 2:32.73 RILEY WEST        | CAN | 2004 |
| 2:33.67 NICOLE HEIDEMANN  | GER | 2011 |
| 2:34.41 LORELLE MCLEISH   | AUS | 2015 |
| 2:34.61 CAMILLE MARCHAND  | FRA | 2017 |
| 50 M. FLY                 |     |      |
| 26.14 ELINORE DE JONG     | NED | 2018 |
| 26.31 CLAIRE DONAHUE      | USA | 2015 |
| 26.85 MASAKO KUROKI       | JPN | 2018 |
| 27.08 NADINE JONES        | AUS | 2014 |
| 27.14 MOTOMI NAKAMURA     | JPN | 2013 |
| 27.20 AMY SMITH           | GBR | 2013 |
| 27.24 L.LOPEZ             | USA | 2017 |

|                           |     |      |
|---------------------------|-----|------|
| 27.29 YUKO NAKANISHI      | JPN | 2010 |
| 27.35 M.JOHANNESSEN       | NOR | 2019 |
| 27.39 ARMONY DUMUR        | FRA | 2018 |
| 100 M. FLY                |     |      |
| 58.11 CLAIRE DONAHUE      | USA | 2015 |
| 59.65 MARIA UGOLKOVA      | SUI | 2018 |
| 1:00.05 MASAKO KUROKI     | JPN | 2018 |
| 1:00.13 ANNA POLYAKOVA    | RUS | 2015 |
| 1:00.18 YUKO NAKANISHI    | JPN | 2010 |
| 1:00.24 EMMA GAGE         | GBR | 2015 |
| 1:00.80 ELINORE DE JONG   | NED | 2017 |
| 1:00.93 NADINE JONES      | AUS | 2014 |
| 1:01.00 JENNIFER THATER   | GER | 2018 |
| 1:01.33 SHEILA TAORMINA   | USA | 1996 |
| 200 M. FLY                |     |      |
| 2:09.64 YUKO NAKANISHI    | JPN | 2010 |
| 2:16.37 MASAKO KUROKI     | JPN | 2019 |
| 2:17.11 LISA STAMM        | GER | 2017 |
| 2:17.13 S. PALMER-WHITE   | AUS | 1991 |
| 2:17.19 HITOMI MATSUDA    | JPN | 2006 |
| 2:17.26 ANNA MARKOVA      | RUS | 2014 |
| 2:17.30 ANNA POLYAKOVA    | RUS | 2015 |
| 2:17.83 CLAIRE DONAHUE    | USA | 2015 |
| 2:17.87 SABRINA MARZAHN   | GER | 2016 |
| 2:18.16 SITA KUSSEROW     | GER | 2019 |
| 100 M. I.M.               |     |      |
| 1:01.79 MASAKO KUROKI     | JPN | 2019 |
| 1:02.17 MARIA UGOLKOVA    | SUI | 2018 |
| 1:02.29 PETRA CHOCOVA     | CZE | 2014 |
| 1:03.41 MEGAN JENDRICK    | USA | 2011 |
| 1:03.67 HITOMI MATSUDA    | JPN | 2005 |
| 1:03.72 AVA OHLGREN       | ESP | 2016 |
| 1:03.79 ALISA RIEBENSAHM  | GER | 2018 |
| 1:04.01 MARINA SPADONI    | USA | 2018 |
| 1:04.06 ANNA KUZMICHEVA   | RUS | 2015 |
| 1:04.11 KATRINE SORENSEN  | DEN | 2018 |
| 200 M. I.M.               |     |      |
| 2:17.17 HITOMI MATSUDA    | JPN | 2006 |
| 2:17.35 ERIKO KATO        | JPN | 2009 |
| 2:17.51 MASAKO KUROKI     | JPN | 2018 |
| 2:17.54 ANNA MARKOVA      | RUS | 2014 |
| 2:19.33 LISA STAMM        | GER | 2017 |
| 2:19.48 CELINE BAILLOD    | SUI | 2007 |
| 2:19.52 SOFIA STRIPPOLI   | ITA | 2019 |
| 2:19.54 VERONICA BALSANO  | BRA | 2014 |
| 2:20.34 AVA OHLGREN       | ESP | 2016 |
| 2:20.87 PATRICIA GONZALEZ | ESP | 2018 |
| 400 M. I.M.               |     |      |
| 4:44.98 K.BARANOWSKA      | GER | 2015 |
| 4:51.12 LISA STAMM        | GER | 2017 |
| 4:52.13 HITOMI MATSUDA    | JPN | 2006 |
| 4:52.81 ERIKO KATO        | JPN | 2009 |
| 4:55.85 KANA OHASHI       | JPN | 2006 |
| 4:56.01 CELINE BAILLOD    | SUI | 2008 |
| 4:56.98 ALESSANDRA CORTES | BRA | 1999 |
| 4:57.78 VERONICA BALSANO  | BRA | 2016 |
| 4:58.92 LOUISE STEVENSON  | AUS | 2009 |
| 4:59.20 AVA OHLGREN       | ESP | 2016 |
| *****                     |     |      |
| WOMEN 30-34               |     |      |
| *****                     |     |      |
| 50 M. FREE                |     |      |
| 25.17 S.KNYAGINIA         | RUS | 2014 |
| 25.57 SUMIKA KOMATSU      | JPN | 2009 |
| 25.64 METTE JACOBSEN      | DEN | 2006 |
| 25.66 HANNAH KEEN         | GBR | 2019 |
| 25.66 TATIANA BARBOSA     | BRA | 2008 |
| 25.69 ERIKA ERNDL         | USA | 2012 |
| 25.77 HANNAH CALDAS       | USA | 2011 |
| 25.83 HITOMI MATSUDA      | JPN | 2010 |
| 25.84 EIDER FUENTES       | ESP | 2014 |



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|          |                   |     |      |         |                   |     |      |             |                   |     |      |
|----------|-------------------|-----|------|---------|-------------------|-----|------|-------------|-------------------|-----|------|
| 25.98    | MANUELA MORANO    | ARG | 2018 | 1:02.26 | MARIA UGOLKOVA    | SUI | 2019 | 1:02.39     | NADINE ROLLAND    | CAN | 2005 |
| 25.98    | DIANE BUI DUYET   | FRA | 2013 | 1:02.88 | METTE JACOBSEN    | DEN | 2006 | 1:02.65     | BERIT PUGGAARD    | DEN | 2004 |
| 100      | M. FREE           |     |      | 1:03.36 | K.PIPES-NEILSEN   | USA | 1996 | 200         | M. FLY            |     |      |
| 54.75    | ERIKA ERNDL       | USA | 2012 | 1:03.81 | KELLY HARRIGAN    | USA | 2014 | 2:13.09     | HITOMI MATSUDA    | JPN | 2008 |
| 55.03    | MARIA UGOLKOVA    | SUI | 2019 | 1:03.89 | SOPHIE CASSON     | GBR | 2018 | 2:18.41     | VERONICA BALSANO  | BRA | 2018 |
| 55.11    | ALENA POPCHANKA   | FRA | 2009 | 1:04.03 | J HUDGELL         | NZL | 1986 | 2:19.34     | LAURA BIANZANI    | ITA | 2004 |
| 55.59    | TATIANA BARBOSA   | BRA | 2008 | 1:04.14 | C.ROY-L'ECUYE     | CAN | 2017 | 2:19.34     | KATRINA RADKE     | USA | 2003 |
| 56.29    | ARA BERGILLOS     | USA | 2016 | 200     | M. BACK           |     |      | 2:19.64     | K PIPES-NEILSEN   | USA | 1996 |
| 56.32    | HANNAH CALDAS     | USA | 2011 | 2:11.86 | KANA YAMAGUCHI    | JPN | 2012 | 2:20.41     | L. CARVALHO       | AUS | 2011 |
| 56.41    | METTE JACOBSEN    | DEN | 2006 | 2:12.47 | L.OBERSTAR-BROWN  | USA | 2008 | 2:20.53     | T.BENISON         | CAN | 2018 |
| 56.48    | PASCALE VERBAUWEN | BEL | 1993 | 2:13.51 | K.PIPES-NEILSEN   | USA | 1996 | 2:21.21     | FLORENCE CIOTTI   | ITA | 2006 |
| 56.49    | HITOMI MATSUDA    | JPN | 2010 | 2:13.97 | SOPHIE CASSON     | GBR | 2017 | 2:21.70     | EBBA ROSENQUIST   | SWE | 2019 |
| 56.73    | VERONICA BALSANO  | BRA | 2019 | 2:16.61 | C.FERREIRA        | USA | 2017 | 2:21.85     | VIKTORIA FELDOLDI | HUN | 2019 |
| 200      | M. FREE           |     |      | 2:17.04 | CARLA STAMPFLI    | SUI | 2017 | 100         | M. I.M.           |     |      |
| 2:00.73  | VERONICA BALSANO  | BRA | 2018 | 2:17.33 | ROBERTA IOPPI     | ITA | 2016 | 1:01.53     | MARIA UGOLKOVA    | SUI | 2019 |
| 2:02.03  | SOPHIE CASSON     | GBR | 2017 | 2:17.93 | RACHAEL KEIR      | GBR | 2016 | 1:02.07     | MARTINA MORAVCOVA | USA | 2006 |
| 2:02.60  | HITOMI MATSUDA    | JPN | 2010 | 2:18.19 | JOANNA CORBEN     | GBR | 2002 | 1:02.52     | ERIKA ERNDL       | USA | 2012 |
| 2:03.91  | CAROLINE SAXBY    | GBR | 2013 | 2:19.40 | RACHAEL GAULD     | GBR | 2017 | 1:02.55     | HITOMI MATSUDA    | JPN | 2010 |
| 2:04.64  | K PIPES-NEILSEN   | USA | 1996 | 50      | M. BRST           |     |      | 1:03.31     | PETRA CHOCOVA     | CZE | 2016 |
| 2:04.98  | LYNN MARSHALL     | CAN | 1991 | 31.02   | PETRA CHOCOVA     | CZE | 2016 | 1:03.94     | SOPHIE TURBAN     | FRA | 2017 |
| 2:05.19  | RACHAEL KEIR      | GBR | 2016 | 31.12   | BRITTA STEVENS    | GER | 2003 | 1:04.05     | ASAMI KITAGAWA    | JPN | 2018 |
| 2:05.68  | BETTINA MERKLE    | GER | 2019 | 31.35   | NICOLE HEIDEMANN  | GER | 2015 | 1:04.07     | GEORGINA HEYN     | GBR | 2016 |
| 2:05.94  | BARBARA KEHBEIN   | GER | 2000 | 31.71   | HITOMI MATSUDA    | JPN | 2010 | 1:04.30     | ROSER VIVES       | ESP | 2014 |
| 2:06.24  | J.RADECKE-NOBLE   | USA | 2014 | 31.73   | GEORGINA HEYN     | GBR | 2018 | 1:04.44     | NADINE ROLLAND    | CAN | 2005 |
| 400      | M. FREE           |     |      | 32.13   | N.VINOKURENKOVA   | RUS | 2013 | 200         | M. I.M.           |     |      |
| 4:14.56  | SOPHIE CASSON     | GBR | 2017 | 32.17   | HANNAH CALDAS     | USA | 2011 | 2:13.41     | HITOMI MATSUDA    | JPN | 2009 |
| 4:17.82  | DAWN HECKMAN      | USA | 2011 | 32.24   | SUVI PULKKINEN    | FIN | 2018 | 2:16.52     | SOPHIE TURBAN     | FRA | 2016 |
| 4:18.86  | HITOMI MATSUDA    | JPN | 2010 | 32.30   | ASAMI KITAGAWA    | JPN | 2018 | 2:17.01     | N.VINOKURENKOVA   | RUS | 2014 |
| 4:20.26  | BROOKE BENNETT    | USA | 2012 | 32.72   | SOPHIE TURBAN     | FRA | 2018 | 2:18.79     | K.PIPES-NEILSEN   | USA | 1996 |
| 4:21.80  | CAROLINE SAXBY    | GBR | 2013 | 32.72   | YUKO SAKAGUCHI    | JPN | 2010 | 2:18.89     | WENKE HANSEN      | USA | 2000 |
| 4:22.63  | VERONICA BALSANO  | BRA | 2018 | 100     | M. BRST           |     |      | 2:18.99     | VERONICA BALSANO  | BRA | 2019 |
| 4:22.70  | K PIPES-NEILSEN   | USA | 1996 | 1:06.98 | HITOMI MATSUDA    | JPN | 2010 | 2:19.07     | KANA YAMAGUCHI    | JPN | 2010 |
| 4:22.75  | YWETTA HLAVACOVA  | CZE | 2006 | 1:08.46 | PETRA CHOCOVA     | CZE | 2016 | 2:21.23     | MARISSA CLAPP     | USA | 2017 |
| 4:22.77  | ERIKA HANSEN      | USA | 2003 | 1:09.25 | NICOLE HEIDEMANN  | GER | 2016 | 2:21.37     | ASAMI KITAGAWA    | JPN | 2018 |
| 4:25.56  | KIRSTEN CAMERON   | NZL | 2007 | 1:09.30 | GEORGINA HEYN     | GBR | 2017 | 2:22.15     | SOPHIE CASSON     | GBR | 2018 |
| 800      | M. FREE           |     |      | 1:09.58 | N.VINOKURENKOVA   | RUS | 2013 | 400         | M. I.M.           |     |      |
| 8:38.58  | DAWN HECKMAN      | USA | 2011 | 1:10.00 | WENKE HANSEN      | USA | 2000 | 4:45.07     | HITOMI MATSUDA    | JPN | 2010 |
| 8:42.57  | SOPHIE CASSON     | GBR | 2017 | 1:10.75 | SOPHIE TURBAN     | FRA | 2017 | 4:50.66     | N.VINOKURENKOVA   | RUS | 2014 |
| 8:53.61  | BROOKE BENNETT    | USA | 2012 | 1:11.33 | SUSANNE HOCK      | GER | 2015 | 4:51.23     | CHELSEA B NAUTA   | USA | 2019 |
| 8:54.86  | HITOMI MATSUDA    | JPN | 2010 | 1:11.47 | KATHRYN GILL      | GBR | 2019 | 4:51.33     | HIDEKO HIRANAKA   | JPN | 2004 |
| 9:01.21  | KIRSTEN CAMERON   | NZL | 2007 | 1:11.49 | MARIONA COSTA     | ESP | 2010 | 4:53.85     | K PIPES-NEILSEN   | USA | 1996 |
| 9:06.49  | ERIKA HANSEN      | USA | 2003 | 200     | M. BRST           |     |      | 4:54.95     | MARISSA CLAPP     | USA | 2017 |
| 9:08.32  | LYNN MARSHALL     | CAN | 1993 | 2:26.96 | HITOMI MATSUDA    | JPN | 2009 | 4:55.62     | KANA YAMAGUCHI    | JPN | 2010 |
| 9:08.34  | K.PIPES-NEILSEN   | USA | 1996 | 2:30.65 | WENKE HANSEN      | USA | 2000 | 4:58.16     | KANA OHASHI       | JPN | 2009 |
| 9:11.69  | RACHAEL KEIR      | GBR | 2016 | 2:32.71 | GEORGINA HEYN     | GBR | 2018 | 4:58.66     | MAREN SPIETZACK   | GER | 2018 |
| 9:14.03  | ASA NEIJ          | SWE | 2004 | 2:32.78 | NICOLE HEIDEMANN  | GER | 2016 | 5:03.27     | M.HENDRIKSEN      | NED | 2018 |
| 1500     | M. FREE           |     |      | 2:33.57 | N.VINOKURENKOVA   | RUS | 2014 |             |                   |     |      |
| 16:26.93 | DAWN HECKMAN      | USA | 2011 | 2:33.94 | PETRA CHOCOVA     | CZE | 2016 | *****       |                   |     |      |
| 17:01.56 | KIRSTEN CAMERON   | NZL | 2007 | 2:35.00 | KATHRYN GILL      | GBR | 2019 | WOMEN 35-39 |                   |     |      |
| 17:02.39 | SOPHIE CASSON     | GBR | 2018 | 2:35.60 | ULRIKE GERNER     | GER | 2013 | *****       |                   |     |      |
| 17:13.38 | HITOMI MATSUDA    | JPN | 2007 | 2:35.72 | KATIE HENDERSON   | GBR | 2011 | 50          | M. FREE           |     |      |
| 17:21.99 | LYNN MARSHALL     | CAN | 1992 | 2:36.20 | MARISSA CLAPP     | USA | 2017 | 25.10       | DARA TORRES       | USA | 2006 |
| 17:23.60 | KAREN BURTON      | USA | 1994 | 50      | M. FLY            |     |      | 25.82       | SANDRA KAZIKOVA   | CZE | 2011 |
| 17:25.33 | BROOKE BENNETT    | USA | 2011 | 26.70   | MARIA UGOLKOVA    | SUI | 2019 | 25.91       | OLESYA BOUROVA    | ITA | 2015 |
| 17:33.66 | KELLY HIGGINS     | AUS | 2011 | 26.79   | MARTINA MORAVCOVA | USA | 2006 | 25.93       | JOHANNA SJOBERG   | SWE | 2016 |
| 17:44.19 | ALISON ZAMANIAN   | USA | 2004 | 27.08   | YUKA KATO         | JPN | 2016 | 26.05       | M.VALKO           | USA | 2011 |
| 17:46.97 | JACQUI ROBINSON   | AUS | 2005 | 27.08   | S.KNYAGINIA       | RUS | 2014 | 26.09       | IRINA SHLEMOVA    | RUS | 2019 |
| 50       | M. BACK           |     |      | 27.30   | IRINA SHLEMOVA    | RUS | 2016 | 26.11       | CLAIRE VILSHED    | SWE | 2018 |
| 27.43    | MAI NAKAMURA      | JPN | 2009 | 27.81   | METTE JACOBSEN    | DEN | 2006 | 26.13       | S.NEILSON-BELL    | USA | 1995 |
| 27.61    | NORIKO INADA      | USA | 2009 | 27.89   | ANNA POLYAKOVA    | RUS | 2019 | 26.18       | KATJA OTTO        | GER | 2019 |
| 28.95    | CARLA STAMPFLI    | SUI | 2016 | 27.89   | NORIKO INADA      | USA | 2011 | 26.22       | LAURA ROCA        | ESP | 2016 |
| 28.99    | METTE JACOBSEN    | DEN | 2006 | 27.95   | PAULINE GOUWENS   | NED | 2015 | 100         | M. FREE           |     |      |
| 29.28    | ALENA NYVITOVA    | CZE | 2013 | 27.97   | NADINE ROLLAND    | CAN | 2008 | 54.95       | DARA TORRES       | USA | 2006 |
| 29.41    | RYO SAWADA        | JPN | 2019 | 100     | M. FLY            |     |      | 57.12       | LAURA ROCA        | ESP | 2015 |
| 29.44    | NADINE ROLLAND    | CAN | 2005 | 59.08   | MARIA UGOLKOVA    | SUI | 2019 | 57.48       | ZOE CRAY          | GBR | 2010 |
| 29.47    | KATY SEXTON       | GBR | 2016 | 59.11   | MARTINA MORAVCOVA | USA | 2006 | 57.60       | HITOMI MATSUDA    | JPN | 2014 |
| 29.53    | KANA YAMAGUCHI    | JPN | 2012 | 59.82   | ANNA POLYAKOVA    | RUS | 2016 | 57.65       | K PIPES-NEILSEN   | USA | 2000 |
| 29.56    | RENATA MARTINS    | BRA | 2019 | 1:00.11 | METTE JACOBSEN    | DEN | 2006 | 57.79       | KARIN SEICK       | GER | 1996 |
| 100      | M. BACK           |     |      | 1:00.34 | ERIKA ERNDL       | USA | 2012 | 57.80       | ELISABETH PHARR   | FRA | 2019 |
| 59.53    | NORIKO INADA      | USA | 2009 | 1:00.35 | HITOMI MATSUDA    | JPN | 2008 | 57.84       | MARIETTA UHLE     | GER | 2018 |
| 1:00.90  | KANA YAMAGUCHI    | JPN | 2010 | 1:01.19 | CLAUDIA BECK      | GER | 2011 | 57.94       | R.CRESCENTINI     | ITA | 2014 |
| 1:02.23  | CARLA STAMPFLI    | SUI | 2016 | 1:01.83 | S.TURBAN          | FRA | 2017 | 58.09       | SHERI HART        | USA | 2008 |



# FINA WORLD MASTERS TOP 10 - SHORT COURSE METERS - ALL TIME (1986-2019)

|                            |          |             |                   |          |                           |          |
|----------------------------|----------|-------------|-------------------|----------|---------------------------|----------|
| 200 M. FREE                |          | 2:19.82     | JOANNA CORBEN     | GBR 2006 | 100 M. I.M.               |          |
| 2:03.12 HITOMI MATSUDA     | JPN 2012 | 2:19.96     | KANA MORIHISA     | JPN 2017 | 1:03.17 HITOMI MATSUDA    | JPN 2012 |
| 2:03.56 K PIPES-NEILSEN    | USA 1997 | 2:22.03     | HITOMI MATSUDA    | JPN 2012 | 1:04.61 SHERI HART        | USA 2009 |
| 2:04.92 LAURA ROCA         | ESP 2015 | 2:22.08     | CINDY MABEE       | CAN 2008 | 1:05.01 LAURA ROCA        | ESP 2017 |
| 2:05.70 KIRSTEN CAMERON    | NZL 2010 | 2:22.59     | E.CHAMBON-PHARR   | FRA 2018 | 1:05.40 K PIPES-NEILSEN   | USA 2000 |
| 2:06.18 LAUREEN WELTING    | USA 2000 | 50 M. BRST  |                   |          | 1:05.45 GEORGINA HEYN     | GBR 2019 |
| 2:06.68 E.CHAMBON-PHARR    | FRA 2018 | 31.66       | NICOLE HEIDEMANN  | GER 2018 | 1:05.53 ZOE CRAY          | GBR 2009 |
| 2:06.86 JILL HERNANDEZ     | USA 1999 | 31.87       | HITOMI MATSUDA    | JPN 2012 | 1:05.91 LINDA LUND TIETZE | DEN 2019 |
| 2:06.96 D GRANER GALLAS    | USA 1999 | 32.13       | LINLEY FRAME      | AUS 2010 | 1:06.10 R.CRESCENTINI     | ITA 2011 |
| 2:06.99 VALERIA VERGANI    | ITA 2006 | 32.35       | R.CRESCENTINI     | ITA 2012 | 1:06.18 NICOLE HEIDEMANN  | GER 2018 |
| 2:07.02 KELLY M HARRIGAN   | USA 2019 | 32.48       | KATIE GLENN       | USA 2015 | 1:06.34 KATIE GLENN       | USA 2015 |
| 400 M. FREE                |          | 32.65       | N.VINOKURENKOVA   | RUS 2018 | 1:06.34 CYNTHIA LEWIS     | USA 2012 |
| 4:22.56 K PIPES-NEILSEN    | USA 1999 | 32.89       | ANNA-KARIN LUNDIN | SWE 2011 | 200 M. I.M.               |          |
| 4:24.56 LAUREEN WELTING    | USA 2000 | 32.92       | GEORGINA HEYN     | GBR 2019 | 2:17.69 HITOMI MATSUDA    | JPN 2012 |
| 4:25.52 CINDY BERTELINK    | CAN 2013 | 32.94       | LAURA ROCA        | ESP 2016 | 2:19.08 K PIPES-NEILSEN   | USA 2000 |
| 4:26.00 HITOMI MATSUDA     | JPN 2012 | 33.03       | CAROLINE KRATTLI  | USA 2000 | 2:20.63 N.VINOKURENKOVA   | RUS 2018 |
| 4:26.57 JILL HERNANDEZ     | USA 1999 | 100 M. BRST |                   |          | 2:20.99 LAURA ROCA        | ESP 2016 |
| 4:27.62 VALERIA VERGANI    | ITA 2006 | 1:09.07     | NICOLE HEIDEMANN  | GER 2018 | 2:22.19 CYNTHIA LEWIS     | USA 2014 |
| 4:28.14 CYNTHIA LEWIS      | USA 2014 | 1:09.20     | HITOMI MATSUDA    | JPN 2012 | 2:22.54 KANA OHASHI       | JPN 2013 |
| 4:28.23 EMMA WILLS         | GBR 2018 | 1:09.41     | CYNTHIA LEWIS     | USA 2014 | 2:23.47 DEBBIE YOUNGER    | CAN 2005 |
| 4:28.77 ELISABETH PHARR    | FRA 2019 | 1:10.59     | KATIE GLENN       | USA 2015 | 2:24.60 CINDY BERTELINK   | CAN 2013 |
| 4:29.09 PENNY BOND         | AUS 1999 | 1:10.65     | LINLEY FRAME      | AUS 2010 | 2:24.67 C.J-SPONSELLER    | SWE 2012 |
| 800 M. FREE                |          | 1:11.30     | GEORGINA HEYN     | GBR 2019 | 2:24.94 NADINE DAY        | USA 2005 |
| 8:57.30 KIRSTEN CAMERON    | NZL 2010 | 1:11.65     | N.VINOKURENKOVA   | RUS 2018 | 400 M. I.M.               |          |
| 8:57.60 HEIDI GEORGE       | USA 2015 | 1:11.97     | CAROLINE KRATTLI  | USA 2000 | 4:52.83 K PIPES-NEILSEN   | USA 1997 |
| 9:02.52 HITOMI MATSUDA     | JPN 2012 | 1:12.13     | ANNA-KARIN LUNDIN | SWE 2012 | 4:55.84 HITOMI MATSUDA    | JPN 2012 |
| 9:12.97 ALISON ZAMANIAN    | USA 2006 | 1:12.30     | R.CRESCENTINI     | ITA 2011 | 5:00.31 N.VINOKURENKOVA   | RUS 2018 |
| 9:13.05 ASA NEIJ           | SWE 2008 | 200 M. BRST |                   |          | 5:01.26 KANA OHASHI       | JPN 2013 |
| 9:14.27 LAURIE HUG         | USA 2000 | 2:30.63     | HITOMI MATSUDA    | JPN 2012 | 5:02.22 LAUREEN WELTING   | USA 2000 |
| 9:14.70 EMMA WILLS         | GBR 2018 | 2:33.73     | CYNTHIA LEWIS     | USA 2014 | 5:07.20 CAROLINA BENEYTO  | ESP 2015 |
| 9:14.92 KRISTINA ULVELING  | USA 2008 | 2:35.15     | NICOLE HEIDEMANN  | GER 2017 | 5:08.03 CYNTHIA LEWIS     | USA 2011 |
| 9:15.40 K PIPES-NEILSEN    | USA 1998 | 2:36.04     | CAROLINE KRATTLI  | USA 2000 | 5:09.04 CINDY BERTELINK   | CAN 2013 |
| 9:15.77 E.CHAMBON-PHARR    | FRA 2018 | 2:36.27     | GEORGINA HEYN     | GBR 2019 | 5:09.87 NADINE DAY        | USA 2006 |
| 1500 M. FREE               |          | 2:36.84     | YUKO MORITA       | JPN 2012 | 5:10.43 JILL HERNANDEZ    | USA 1999 |
| 16:52.94 HEIDI GEORGE      | USA 2015 | 2:37.09     | KJERSTI HERNAES   | NOR 2018 | *****                     |          |
| 17:07.48 KIRSTEN CAMERON   | NZL 2010 | 2:37.13     | KATIE GLENN       | USA 2015 | WOMEN 40-44               |          |
| 17:26.96 EMMA WILLS        | GBR 2018 | 2:37.21     | CAROLINA BENEYTO  | ESP 2015 | *****                     |          |
| 17:27.84 LAURIE HUG        | USA 2000 | 2:38.04     | SATSUKI HIRUKAWA  | JPN 2017 | 50 M. FREE                |          |
| 17:30.90 HITOMI MATSUDA    | JPN 2014 | 50 M. FLY   |                   |          | 26.02 ERIKA BRAUN         | USA 2014 |
| 17:35.69 PENNY BOND        | AUS 1997 | 27.45       | NORIKO INADA      | USA 2015 | 26.40 MARIKA JOHANSSON    | SWE 2008 |
| 17:36.24 K PIPES-NEILSEN   | USA 1999 | 27.76       | IRINA SHLEMOVA    | RUS 2019 | 26.50 LISA BLACKBURN      | USA 2015 |
| 17:36.58 KRISTINA ULVELING | USA 2008 | 27.83       | JOHANNA SJOBERG   | SWE 2016 | 26.59 OLESSIA BOUROVA     | ITA 2019 |
| 17:42.37 ASA NEIJ          | SWE 2010 | 28.28       | R.CRESCENTINI     | ITA 2013 | 26.60 SANDRA KAZIKOVA     | CZE 2016 |
| 17:43.10 BETH KNIGHT       | USA 1994 | 28.30       | GABRIELA KOSTKOVA | CZE 2014 | 26.66 SOPHIA SKOU         | DEN 2018 |
| 50 M. BACK                 |          | 28.37       | GISELI PEREIRA    | BRA 2009 | 26.66 S.NEILSON-BELL      | USA 1996 |
| 27.63 NORIKO INADA         | USA 2016 | 28.44       | MARIETTA UHLE     | GER 2018 | 26.67 EDITH OTTERMANN     | RSA 2007 |
| 28.68 SHERI HART           | USA 2009 | 28.55       | MALIN BORENSJO    | SWE 2016 | 26.69 EKATERINA YUDINA    | RUS 2017 |
| 29.00 GISELI PEREIRA       | BRA 2009 | 28.56       | MABI TSUKIOKA     | JPN 2017 | 26.70 S. VON DER LIPPE    | USA 2008 |
| 29.34 ZOE CRAY             | GBR 2009 | 28.58       | HITOMI MATSUDA    | JPN 2013 | 26.70 GIOVANNI MORELLI    | SUI 2007 |
| 29.74 ALISON LAMARE        | FRA 2019 | 28.58       | SHERI HART        | USA 2009 | 100 M. FREE               |          |
| 29.84 KANA OHASHI          | JPN 2013 | 100 M. FLY  |                   |          | 57.08 ERIKA BRAUN         | USA 2014 |
| 29.91 CINDY MABEE          | CAN 2008 | 1:01.88     | HITOMI MATSUDA    | JPN 2014 | 57.20 LISA BLACKBURN      | USA 2015 |
| 30.06 KELLY M HARRIGAN     | USA 2019 | 1:01.96     | DIANE BUI DUYET   | FRA 2015 | 57.55 S.VON DER LIPPE     | USA 2008 |
| 30.17 RAQUEL GIL           | ESP 2016 | 1:03.07     | DEBBIE YOUNGER    | CAN 2005 | 57.60 K PIPES-NEILSEN     | USA 2003 |
| 30.24 KATY SEXTON          | GBR 2017 | 1:03.29     | K PIPES-NEILSEN   | USA 1997 | 58.18 RAAKEL LUOTO        | FIN 2017 |
| 100 M. BACK                |          | 1:03.32     | MABI TSUKIOKA     | JPN 2014 | 58.61 F.TRAVAGLINI        | ITA 2016 |
| 1:00.43 NORIKO INADA       | USA 2017 | 1:03.56     | IRINA SHLEMOVA    | RUS 2019 | 58.70 KATIE GRIER         | USA 2019 |
| 1:02.36 SHERI HART         | USA 2009 | 1:03.76     | JUNKO ONISHI      | JPN 2012 | 58.81 JILL HERNANDEZ      | USA 2000 |
| 1:02.81 KANA OHASHI        | JPN 2013 | 1:03.77     | NICOLE HEIDEMANN  | GER 2018 | 59.12 KATIE GLENN         | USA 2017 |
| 1:03.11 GISELI PEREIRA     | BRA 2009 | 1:03.96     | SOPHIA SKOU       | DEN 2011 | 59.14 JENNIE BUCKNELL     | AUS 2010 |
| 1:03.38 ZOE CRAY           | GBR 2009 | 1:04.01     | KYOKO YAMADA      | JPN 2009 | 200 M. FREE               |          |
| 1:03.56 K PIPES-NEILSEN    | USA 1997 | 2:16.67     | HITOMI MATSUDA    | JPN 2012 | 2:05.26 K PIPES-NEILSEN   | USA 2003 |
| 1:04.41 KELLY M HARRIGAN   | USA 2019 | 2:18.41     | K PIPES-NEILSEN   | USA 1997 | 2:05.55 S.VON DER LIPPE   | USA 2008 |
| 1:04.61 CINDY MABEE        | CAN 2008 | 2:21.18     | KYOKO YAMADA      | JPN 2010 | 2:05.90 CINDY BERTELINK   | CAN 2016 |
| 1:04.71 ALISON LAMARE      | FRA 2019 | 2:21.76     | DEBBIE YOUNGER    | CAN 2005 | 2:06.81 JILL HERNANDEZ    | USA 2000 |
| 1:05.03 C.J-SPONSELLER     | SWE 2011 | 2:22.52     | ILDIKO SZEKELY    | USA 2014 | 2:07.37 KATIE GLENN       | USA 2018 |
| 200 M. BACK                |          | 2:22.57     | CARLA BECKMANN    | GER 2019 | 2:07.64 KIRSTEN CAMERON   | GBR 2014 |
| 2:13.37 KANA OHASHI        | JPN 2013 | 2:23.32     | L. CARVALHO       | AUS 2017 | 2:08.30 VALERIA VERGANI   | ITA 2013 |
| 2:14.10 K PIPES-NEILSEN    | USA 1997 | 2:24.80     | KATE VEALE        | GBR 2002 | 2:09.10 BIRGIT LOHBERG    | USA 2009 |
| 2:14.49 GISELI PEREIRA     | BRA 2009 | 2:25.06     | JILL HERNANDEZ    | USA 1997 | 2:09.23 CYNTHIA LEWIS     | USA 2015 |
| 2:15.50 KELLY M HARRIGAN   | USA 2019 | 2:25.52     | NADINE DAY        | USA 2006 | 2:09.32 BARBARA KEHBEIN   | GER 2013 |
| 2:17.61 C.J-SPONSELLER     | SWE 2012 |             |                   |          |                           |          |



# FINA WORLD MASTERS TOP 10 - SHORT COURSE METERS - ALL TIME (1986-2019)

|                            |          |                           |          |                           |          |
|----------------------------|----------|---------------------------|----------|---------------------------|----------|
| 400 M. FREE                |          | 33.40 LISA BLACKBURN      | USA 2015 | 2:19.21 S.VON DER LIPPE   | USA 2007 |
| 4:21.75 K PIPES-NEILSEN    | USA 2003 | 33.67 CAROLINE KRATTLI    | USA 2003 | 2:19.83 LISA BLACKBURN    | USA 2015 |
| 4:22.78 HEIDI GEORGE       | USA 2017 | 33.69 STEFANIA MONTI      | ITA 2010 | 2:20.55 K PIPES-NEILSEN   | USA 2003 |
| 4:24.22 JILL HERNANDEZ     | USA 2000 | 33.81 ANNA HAMMAR         | SWE 2012 | 2:22.51 JILL HERNANDEZ    | USA 2000 |
| 4:24.42 KIRSTEN CAMERON    | GBR 2014 | 33.98 HELEN GORMAN        | GBR 2014 | 2:22.60 HITOMI MATSUDA    | JPN 2017 |
| 4:26.19 CINDY BERTELINK    | CAN 2016 | 100 M. BRST               |          | 2:24.22 WENKE SEIDER      | USA 2013 |
| 4:28.58 VALERIA VERGANI    | ITA 2013 | 1:09.95 CYNTHIA LEWIS     | USA 2015 | 2:25.86 BIRGIT LOHBERG    | USA 2006 |
| 4:28.58 AMANDA PICARD      | SUI 2008 | 1:10.01 KATIE GLENN       | USA 2017 | 2:25.97 KANA MORIHISA     | JPN 2018 |
| 4:30.34 KATIE GLENN        | USA 2017 | 1:10.22 LINLEY FRAME      | AUS 2015 | 2:26.46 DAWN PALMER       | GBR 2016 |
| 4:32.38 ALISON ZAMANIAN    | USA 2011 | 1:10.55 S.VON DER LIPPE   | USA 2007 | 2:26.51 CAROLINE KRATTLI  | USA 2003 |
| 4:32.89 LYNN MARSHALL      | CAN 2001 | 1:11.95 HITOMI MATSUDA    | JPN 2017 | 400 M. I.M.               |          |
| 800 M. FREE                |          | 1:12.08 CAROLINE KRATTLI  | USA 2003 | 5:00.82 K PIPES-NEILSEN   | USA 2002 |
| 8:55.34 KIRSTEN CAMERON    | GBR 2016 | 1:12.32 LISA BLACKBURN    | USA 2013 | 5:00.90 HITOMI MATSUDA    | JPN 2017 |
| 8:55.95 HEIDI GEORGE       | USA 2017 | 1:12.47 HELEN GORMAN      | GBR 2014 | 5:02.17 JILL HERNANDEZ    | USA 2000 |
| 9:09.71 K PIPES-NEILSEN    | USA 2003 | 1:13.16 MARZENA KULIS     | ITA 2007 | 5:03.49 SUSAN VD LIPPE    | USA 2006 |
| 9:16.07 AMANDA PICARD      | SUI 2008 | 1:13.60 ANNA HAMMAR       | SWE 2012 | 5:05.07 CYNTHIA LEWIS     | USA 2015 |
| 9:18.17 ALISON ZAMANIAN    | USA 2011 | 200 M. BRST               |          | 5:08.31 CINDY BERTELINK   | CAN 2017 |
| 9:19.15 VALERIA VERGANI    | ITA 2012 | 2:32.37 S.VON DER LIPPE   | USA 2008 | 5:11.10 VALERIA VERGANI   | ITA 2013 |
| 9:21.44 LYNN MARSHALL      | CAN 2001 | 2:34.92 HITOMI MATSUDA    | JPN 2017 | 5:12.94 DAWN PALMER       | GBR 2016 |
| 9:25.42 REBECA SANTOS      | ESP 2017 | 2:35.79 LINLEY FRAME      | AUS 2011 | 5:13.39 BIRGIT LOHBERG    | USA 2006 |
| 9:26.96 N.MUIR-COCHRANE    | GBR 2004 | 2:36.56 HELEN GORMAN      | GBR 2014 | 5:13.55 KANA MORIHISA     | JPN 2018 |
| 9:29.90 SUZANN HEIM-BOWEN  | USA 1998 | 2:37.59 KATIE GLENN       | USA 2018 | *****                     |          |
| 1500 M. FREE               |          | 2:38.20 CYNTHIA LEWIS     | USA 2015 | WOMEN 45-49               |          |
| 16:50.92 HEIDI GEORGE      | USA 2017 | 2:39.05 LISA BLACKBURN    | CAN 2013 | *****                     |          |
| 17:01.66 KIRSTEN CAMERON   | GBR 2015 | 2:39.10 CAROLINE KRATTLI  | USA 2002 | 50 M. FREE                |          |
| 17:35.49 ALISON ZAMANIAN   | USA 2010 | 2:41.84 KJERSTI HERNAES   | NOR 2019 | 26.29 ERIKA BRAUN         | USA 2018 |
| 17:36.73 VALERIA VERGANI   | ITA 2013 | 2:41.87 H.MORRIS-EYTON    | RSA 2009 | 26.37 MARIE FUZZATI       | FRA 2013 |
| 17:38.37 LYNN MARSHALL     | CAN 2002 | 50 M. FLY                 |          | 26.59 EDITH OTTERMANN     | RSA 2011 |
| 17:45.50 K PIPES-NEILSEN   | USA 2003 | 28.13 GABRIELE BLANK      | GER 2006 | 26.91 ANDREA KUTZ         | GER 2017 |
| 17:52.93 N.MUIR-COCHRANE   | GBR 2004 | 28.19 ERIKA BRAUN         | USA 2013 | 26.94 JENNIE BUCKNELL     | AUS 2015 |
| 17:55.11 AMANDA PICARD     | SUI 2009 | 28.21 SUSAN VD LIPPE      | USA 2005 | 26.96 MARIKA JOHANSSON    | SWE 2011 |
| 18:02.62 SUZANN HEIM-BOWEN | USA 1998 | 28.33 R.CRESCENTINI       | ITA 2015 | 27.02 OLGA BORISOVA       | RUS 2012 |
| 18:03.41 LAURIE HUG        | USA 2008 | 28.80 RAAKEL LUOTO        | FIN 2019 | 27.09 K.PIPES-NEILSEN     | USA 2007 |
| 50 M. BACK                 |          | 28.86 SILVIA PAROCCHI     | ITA 2007 | 27.14 FALL WILLEBOORDSE   | USA 2015 |
| 29.11 RAAKEL LUOTO         | FIN 2018 | 28.91 SOPHIA SKOU         | DEN 2018 | 27.16 AMY MOORHEAD        | USA 2016 |
| 29.84 ZOE CRAY             | GBR 2014 | 28.92 MABI TSUKIOKA       | JPN 2019 | 100 M. FREE               |          |
| 29.96 GISELI PEREIRA       | BRA 2012 | 29.00 GABRIELA KOSTKOVA   | CZE 2019 | 57.89 ERIKA BRAUN         | USA 2018 |
| 30.00 CINDY MABEE          | CAN 2009 | 29.05 EKATERINA YUDINA    | RUS 2015 | 58.24 LISA BLACKBURN      | USA 2017 |
| 30.02 SHERI HART           | USA 2012 | 100 M. FLY                |          | 58.43 MARIE FUZZATI       | FRA 2014 |
| 30.28 KANA MORIHISA        | JPN 2019 | 1:01.70 S.VON DER LIPPE   | USA 2009 | 58.61 K.PIPES-NEILSEN     | USA 2007 |
| 30.42 CRISTINA REY         | ESP 2017 | 1:03.31 K PIPES-NEILSEN   | USA 2003 | 59.30 ANNA HAMMAR         | SWE 2013 |
| 30.55 ANDREA KUTZ          | GER 2013 | 1:03.76 SOPHIA SKOU       | DEN 2015 | 59.58 SARAH MACDONALD     | CAN 2005 |
| 30.72 JODY SMITH           | USA 2009 | 1:04.60 FRAUKE LABARRE    | GER 2018 | 59.64 BARBARA KEHBEIN     | GER 2015 |
| 30.74 KRISTIN GARY         | USA 2008 | 1:04.85 CINDY BERTELINK   | CAN 2019 | 59.93 JENNIE BUCKNELL     | AUS 2015 |
| 100 M. BACK                |          | 1:04.91 YOKO YAMAGUCHI    | JPN 2010 | 59.94 ANDREA KUTZ         | GER 2017 |
| 1:03.22 RAAKEL LUOTO       | FIN 2018 | 1:04.92 GABRIELA KOSTKOVA | CZE 2019 | 1:00.15 MONICA SORO       | ITA 2018 |
| 1:03.48 SHERI HART         | USA 2011 | 1:04.93 SILVIA PAROCCHI   | ITA 2006 | 200 M. FREE               |          |
| 1:04.30 KANA MORIHISA      | JPN 2019 | 1:04.98 WENKE SEIDER      | USA 2013 | 2:05.94 K.PIPES-NEILSEN   | USA 2007 |
| 1:04.63 CINDY MABEE        | CAN 2009 | 1:05.13 ERIKA BRAUN       | USA 2016 | 2:09.96 RAQUEL FERNANDEZ  | ESP 2019 |
| 1:05.43 K PIPES-NEILSEN    | USA 2002 | 200 M. FLY                |          | 2:10.32 ELLEN REYNOLDS    | USA 2012 |
| 1:05.51 KRISTIN GARY       | USA 2011 | 2:20.66 SUSAN VD LIPPE    | USA 2006 | 2:10.47 BARBARA KEHBEIN   | GER 2014 |
| 1:05.52 GISELI PEREIRA     | BRA 2012 | 2:20.71 K PIPES-NEILSEN   | USA 2002 | 2:10.76 ERIKA L BRAUN     | USA 2019 |
| 1:05.91 JODY SMITH         | USA 2009 | 2:24.07 HITOMI MATSUDA    | JPN 2017 | 2:10.91 S HEIM-BOWEN      | USA 2003 |
| 1:06.21 C.J-SPONSELLER     | SWE 2018 | 2:24.13 L. CARVALHO       | AUS 2018 | 2:10.94 MARIE FUZZATI     | FRA 2014 |
| 1:06.61 SILVIA PAROCCHI    | ITA 2008 | 2:24.17 SOPHIA SKOU       | DEN 2018 | 2:11.00 LYNN MARSHALL     | CAN 2006 |
| 200 M. BACK                |          | 2:25.30 JUDY BROWN        | GBR 2005 | 2:11.09 JENNY WHITELEY    | AUS 2003 |
| 2:17.28 KANA MORIHISA      | JPN 2018 | 2:26.01 ILDIKO SZEKELY    | USA 2019 | 2:12.16 VALERIA VERGANI   | ITA 2016 |
| 2:19.06 JODY SMITH         | USA 2009 | 2:26.07 BIRGIT LOHBERG    | USA 2006 | 400 M. FREE               |          |
| 2:19.09 K PIPES-NEILSEN    | USA 2003 | 2:26.15 BETH BAKER        | USA 2001 | 4:25.34 K.PIPES-NEILSEN   | USA 2009 |
| 2:21.95 JOANNA CORBEN      | GBR 2012 | 2:26.31 YOKO YAMAGUCHI    | JPN 2010 | 4:30.98 S HEIM-BOWEN      | USA 2003 |
| 2:22.02 CINDY MABEE        | CAN 2009 | 100 M. I.M.               |          | 4:33.09 LYNN MARSHALL     | CAN 2006 |
| 2:22.14 GISELI PEREIRA     | BRA 2014 | 1:04.19 LISA BLACKBURN    | USA 2015 | 4:34.96 ALISON H ZAMANIAN | USA 2019 |
| 2:22.68 KRISTIN GARY       | USA 2008 | 1:04.25 S.VON DER LIPPE   | USA 2008 | 4:35.44 VALERIA VERGANI   | ITA 2016 |
| 2:23.22 SILVIA PAROCCHI    | ITA 2006 | 1:04.62 RAAKEL LUOTO      | FIN 2017 | 4:38.46 STEPHANIE STONE   | USA 2014 |
| 2:23.57 C.J-SPONSELLER     | SWE 2018 | 1:05.56 K PIPES-NEILSEN   | USA 2003 | 4:38.71 SUSANNA ROSEN     | SWE 2010 |
| 2:25.78 BETH BAKER         | USA 2001 | 1:06.23 CYNTHIA LEWIS     | USA 2018 | 4:40.25 DIANA SZOKOL      | HUN 2016 |
| 50 M. BRST                 |          | 1:06.49 KANA MORIHISA     | JPN 2018 | 4:41.18 TIZIANA PAPANDREA | ITA 2019 |
| 32.16 KATIE GLENN          | USA 2018 | 1:06.90 ERIKA BRAUN       | USA 2016 | 4:41.91 REBECCA PERROTT   | NZL 2009 |
| 32.20 LINLEY FRAME         | AUS 2012 | 1:06.91 SHERI HART        | USA 2011 | 800 M. FREE               |          |
| 32.29 S.VON DER LIPPE      | USA 2009 | 1:06.97 HITOMI MATSUDA    | JPN 2018 | 9:11.37 K.PIPES-NEILSEN   | USA 2009 |
| 33.03 R.CRESCENTINI        | ITA 2015 | 1:07.03 ZOE CRAY          | GBR 2014 | 9:21.65 LYNN MARSHALL     | CAN 2006 |
| 33.16 ISABEL FIGUEIRA      | POR 2019 | 200 M. I.M.               |          |                           |          |

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# FINA WORLD MASTERS TOP 10 - SHORT COURSE METERS - ALL TIME (1986-2019)

|             |                   |     |      |             |                   |     |      |              |                    |     |      |
|-------------|-------------------|-----|------|-------------|-------------------|-----|------|--------------|--------------------|-----|------|
| 18:44.66    | C. PETERSEN       | USA | 2016 | 29.25       | LESLIE LIVINGSTON | USA | 2013 | 27.91        | SARAH MACDONALD    | CAN | 2015 |
| 18:49.27    | ILKA LOWENSTEYN   | CAN | 2015 | 29.34       | ANNA HAMMAR       | SWE | 2018 | 28.33        | HOLLY GREEN BLAIR  | USA | 2019 |
| 18:52.34    | ENEY JONES        | USA | 2011 | 29.42       | SUSAN WILLIAMS    | USA | 2017 | 28.42        | KARLYN PIPES       | USA | 2017 |
| 18:56.50    | K. PALACE         | USA | 2011 | 29.94       | FRANCA BOSISIO    | ITA | 2018 | 28.49        | LAURA VAL          | USA | 2009 |
| 18:56.66    | C. THIELEMAN      | GER | 2019 | 29.94       | DANIELA DE PONTI  | ITA | 2017 | 28.58        | COLLETTE H SAPPEY  | USA | 2019 |
| 50 M. BACK  |                   |     |      | 30.04       | ANETTE PHILIPSSON | SWE | 2017 | 28.58        | JACKI HIRSTY       | USA | 2009 |
| 30.27       | LESLIE LIVINGSTON | USA | 2015 | 30.06       | MARIE FUZZATI     | FRA | 2016 | 28.64        | CHRIS WENZEL       | USA | 2014 |
| 31.15       | MARIE FUZZATI     | FRA | 2015 | 30.33       | MARIA NORBERG     | SWE | 2015 | 28.73        | S. REIBEL-OBERLE   | GER | 2019 |
| 31.30       | MARION WOLTERS    | GER | 2018 | 30.38       | ANGELA ZINGLER    | GER | 2005 | 100 M. FREE  |                    |     |      |
| 31.33       | CINDY MABEE       | CAN | 2019 | 30.40       | ILARIA TOCCHINI   | ITA | 2017 | 1:00.61      | KARLYN PIPES       | USA | 2017 |
| 31.70       | LISE RAVEN LOTHE  | NOR | 2019 | 100 M. FLY  |                   |     |      | 1:01.33      | LAURA VAL          | USA | 2009 |
| 31.82       | ANNA HAMMAR       | SWE | 2018 | 1:06.88     | DANIELA DE PONTI  | ITA | 2016 | 1:01.84      | SARAH MACDONALD    | CAN | 2015 |
| 31.82       | SUSAN WILLIAMS    | USA | 2018 | 1:06.92     | K PIPES-NEILSEN   | FRA | 2012 | 1:02.72      | S. REIBEL-OBERLE   | GER | 2019 |
| 32.02       | FRANCA BOSISIO    | ITA | 2018 | 1:07.62     | BARBARA KEHBEIN   | GER | 2019 | 1:02.75      | HEATHER CAMPBELL   | NZL | 2008 |
| 32.13       | K. ANDRUS-HUGHES  | USA | 2008 | 1:07.73     | SILVIA PAROCCHI   | ITA | 2016 | 1:03.87      | JILL S HERNANDEZ   | USA | 2019 |
| 32.15       | FALL WILLEBOORDSE | USA | 2019 | 1:07.79     | FRANCA BOSISIO    | ITA | 2018 | 1:03.87      | M. NAVARRO         | ESP | 2017 |
| 100 M. BACK |                   |     |      | 1:08.47     | ELIZABETH WOOLNER | GBR | 2018 | 1:03.93      | COLLETTE H SAPPEY  | USA | 2019 |
| 1:05.89     | ELLEN REYNOLDS    | USA | 2014 | 1:08.50     | JUDITH HATTLE     | GBR | 2010 | 1:04.05      | HAYLEY BETTINSON   | GBR | 2018 |
| 1:06.97     | MARIE FUZZATI     | FRA | 2016 | 1:08.62     | ANDREA BLOCK      | USA | 2011 | 1:04.08      | LYNN MARSHALL      | CAN | 2016 |
| 1:07.16     | MARION WOLTERS    | GER | 2018 | 1:08.64     | ANETTE PHILIPSSON | SWE | 2016 | 200 M. FREE  |                    |     |      |
| 1:07.28     | CINDY MABEE       | CAN | 2019 | 1:08.77     | CINDY MABEE       | CAN | 2019 | 2:12.03      | ELLEN M REYNOLDS   | USA | 2019 |
| 1:08.12     | K PIPES-NEILSEN   | FRA | 2012 | 200 M. FLY  |                   |     |      | 2:13.58      | LYNN MARSHALL      | CAN | 2016 |
| 1:08.85     | LESLIE LIVINGSTON | USA | 2012 | 2:28.08     | LYNN MARSHALL     | CAN | 2011 | 2:13.89      | KARLYN PIPES       | USA | 2017 |
| 1:08.91     | SILVIA PAROCCHI   | ITA | 2016 | 2:28.69     | FRANCA BOSISIO    | ITA | 2018 | 2:14.45      | LAURA VAL          | USA | 2009 |
| 1:09.08     | FALL WILLEBOORDSE | USA | 2018 | 2:30.27     | BARBARA KEHBEIN   | GER | 2019 | 2:15.14      | JILL HERNANDEZ     | USA | 2018 |
| 1:09.27     | LISE RAVEN LOTHE  | NOR | 2019 | 2:31.06     | ILKA LOWENSTEYN   | CAN | 2015 | 2:17.77      | S. REIBEL-OBERLE   | GER | 2019 |
| 1:09.29     | KRISTIN J GARY    | USA | 2019 | 2:31.17     | DANIELA DE PONTI  | ITA | 2016 | 2:18.32      | K. PALACE          | USA | 2016 |
| 200 M. BACK |                   |     |      | 2:32.17     | C. THIELEMAN      | GER | 2018 | 2:18.37      | BARBARA GELLRICH   | GER | 2016 |
| 2:22.37     | ELLEN REYNOLDS    | USA | 2014 | 2:32.29     | KARLYN PIPES      | USA | 2012 | 2:19.23      | JENNY WHITELEY     | AUS | 2015 |
| 2:25.94     | LYNN MARSHALL     | CAN | 2011 | 2:33.93     | ANDREA BLOCK      | USA | 2011 | 2:19.45      | MA CARMEN NAVARRO  | ESP | 2018 |
| 2:26.67     | STEPHANIE STONE   | USA | 2017 | 2:34.79     | JUDITH HATTLE     | GBR | 2010 | 400 M. FREE  |                    |     |      |
| 2:26.85     | MARION WOLTERS    | GER | 2019 | 2:35.36     | JILL HERNANDEZ    | USA | 2013 | 4:37.35      | LYNN MARSHALL      | CAN | 2016 |
| 2:26.85     | K PIPES-NEILSEN   | FRA | 2012 | 100 M. I.M. |                   |     |      | 4:42.97      | LAURA VAL          | USA | 2009 |
| 2:27.99     | SILVIA PAROCCHI   | ITA | 2016 | 1:07.85     | ANETTE PHILIPSSON | SWE | 2015 | 4:43.49      | KARLYN PIPES       | USA | 2017 |
| 2:28.99     | MARIE FUZZATI     | FRA | 2016 | 1:07.97     | ANNA HAMMAR       | SWE | 2018 | 4:44.76      | JILL HERNANDEZ     | USA | 2018 |
| 2:29.08     | CINDY MABEE       | CAN | 2019 | 1:08.28     | K PIPES-NEILSEN   | FRA | 2012 | 4:51.43      | S. REIBEL-OBERLE   | GER | 2019 |
| 2:30.78     | HELEN WHITFORD    | AUS | 2017 | 1:08.79     | ELLEN REYNOLDS    | USA | 2018 | 4:53.27      | N. STEADMAN-MARTIN | USA | 2009 |
| 2:30.79     | LISE RAVEN LOTHE  | NOR | 2019 | 1:08.98     | MARIE FUZZATI     | FRA | 2015 | 4:54.19      | ROBYN CROTTY       | NZL | 2018 |
| 50 M. BRST  |                   |     |      | 1:09.06     | MARION WOLTERS    | GER | 2018 | 4:54.25      | C. PETERSEN        | USA | 2019 |
| 33.96       | MONICA CORO       | ITA | 2013 | 1:09.22     | JENNY WHITELEY    | AUS | 2009 | 4:54.30      | JENNY WHITELEY     | AUS | 2016 |
| 34.17       | ANNA HAMMAR       | SWE | 2018 | 1:09.75     | DANIELA DE PONTI  | ITA | 2016 | 4:54.36      | S. PALMER-WHITE    | AUS | 2019 |
| 34.50       | UTE HASSE         | ESP | 2015 | 1:09.97     | SARAH MACDONALD   | CAN | 2011 | 800 M. FREE  |                    |     |      |
| 35.08       | JENNY WHITELEY    | AUS | 2009 | 1:10.32     | SILVIA PAROCCHI   | ITA | 2016 | 9:32.63      | LYNN MARSHALL      | CAN | 2017 |
| 35.15       | JUDY GARAY        | CAN | 2014 | 200 M. I.M. |                   |     |      | 9:46.35      | JILL HERNANDEZ     | USA | 2018 |
| 35.28       | MARZENA KULIS     | ITA | 2016 | 2:27.39     | ELLEN REYNOLDS    | USA | 2018 | 9:51.35      | LAURA VAL          | USA | 2009 |
| 35.55       | M. GOELEMA-KOEK   | NED | 2019 | 2:30.33     | ANNA HAMMAR       | SWE | 2018 | 10:03.33     | K. PALACE          | USA | 2016 |
| 35.81       | V. SCHLESINGER    | GER | 2019 | 2:30.63     | KARLYN PIPES      | USA | 2012 | 10:05.47     | ROBYN CROTTY       | NZL | 2017 |
| 35.88       | SARAH MACDONALD   | CAN | 2011 | 2:30.98     | JENNY WHITELEY    | AUS | 2009 | 10:07.79     | C. PETERSEN        | USA | 2019 |
| 35.89       | MARIOLA KULIS     | POL | 2016 | 2:31.96     | JILL HERNANDEZ    | USA | 2013 | 10:09.29     | BARBARA GELLRICH   | GER | 2016 |
| 100 M. BRST |                   |     |      | 2:32.10     | DANIELA DE PONTI  | ITA | 2016 | 10:12.79     | JEANNE CARLSEN     | CAN | 2013 |
| 1:15.02     | UTE HASSE         | ESP | 2015 | 2:32.32     | CINDY MABEE       | CAN | 2019 | 10:13.86     | S. PALMER-WHITE    | AUS | 2019 |
| 1:15.22     | MONICA CORO       | ITA | 2013 | 2:32.45     | ANETTE PHILIPSSON | SWE | 2016 | 10:14.14     | PATRICIA CAMPBELL  | USA | 2019 |
| 1:15.76     | ANNA HAMMAR       | SWE | 2018 | 2:33.09     | LYNN MARSHALL     | CAN | 2011 | 1500 M. FREE |                    |     |      |
| 1:15.86     | MARZENA KULIS     | ITA | 2016 | 2:33.36     | BARBARA KEHBEIN   | GER | 2019 | 18:01.79     | LYNN MARSHALL      | CAN | 2017 |
| 1:16.49     | JENNY WHITELEY    | AUS | 2009 | 400 M. I.M. |                   |     |      | 18:43.73     | LAURA VAL          | USA | 2010 |
| 1:17.10     | BARBARA KEHBEIN   | GER | 2019 | 5:10.96     | ELLEN REYNOLDS    | USA | 2014 | 19:00.59     | K. PALACE          | USA | 2016 |
| 1:17.72     | LAURA MOLINARI    | ITA | 2018 | 5:14.65     | LYNN MARSHALL     | CAN | 2011 | 19:00.69     | S. PALMER-WHITE    | AUS | 2019 |
| 1:18.13     | KATE SORENSEN     | DEN | 2011 | 5:24.23     | C. THIELEMAN      | GER | 2018 | 19:07.60     | JILL S HERNANDEZ   | USA | 2019 |
| 1:19.23     | T. PROKOFEVA      | RUS | 2019 | 5:24.45     | MARZENA KULIS     | ITA | 2017 | 19:24.70     | BARBARA DUNBAR     | USA | 2004 |
| 1:19.23     | CORRIN POPPS      | USA | 2014 | 5:30.92     | JANE ANN HOAG     | ITA | 2018 | 19:27.93     | JEANNE CARLSEN     | CAN | 2013 |
| 200 M. BRST |                   |     |      | 5:31.20     | NAOKO SHIDE       | JPN | 2010 | 19:29.49     | BETH LUTZ KNIGHT   | USA | 2015 |
| 2:45.70     | MARZENA KULIS     | ITA | 2016 | 5:31.82     | HELEN WHITFORD    | AUS | 2018 | 19:32.76     | KIM O'GRADY        | USA | 2018 |
| 2:48.21     | BARBARA KEHBEIN   | GER | 2019 | 5:31.87     | DANIELA DEPONTI   | ITA | 2018 | 19:34.48     | N. STEADMAN-MARTIN | USA | 2009 |
| 2:48.69     | JENNY WHITELEY    | AUS | 2009 | 5:32.14     | JILL GELLATLY     | USA | 2017 | 50 M. BACK   |                    |     |      |
| 2:49.05     | MONICA CORO       | ITA | 2013 | 5:32.37     | ANGELA DELISSEN   | GER | 2016 | 30.12        | LESLIE LIVINGSTON  | USA | 2016 |
| 2:50.36     | ELLEN REYNOLDS    | USA | 2016 | *****       |                   |     |      | 31.92        | HOLLY GREEN BLAIR  | USA | 2019 |
| 2:50.44     | UTE HASSE         | ESP | 2015 | *****       |                   |     |      | 32.62        | LAURA VAL          | USA | 2009 |
| 2:51.08     | KEIKO OKAMOTO     | JPN | 2019 | *****       |                   |     |      | 32.75        | KARLYN PIPES       | USA | 2019 |
| 2:51.95     | HANA BOHUSLAVKOVA | CZE | 2019 | *****       |                   |     |      | 33.14        | JULIE HOYLE        | GBR | 2017 |
| 2:52.03     | KATE SORENSEN     | DEN | 2011 | *****       |                   |     |      | 33.56        | K. ANDRUS-HUGHES   | USA | 2012 |
| 2:52.57     | CORRIN POPPS      | USA | 2014 | *****       |                   |     |      | 33.85        | BIRGIT REICHEL     | GER | 2018 |
| 50 M. FLY   |                   |     |      | *****       |                   |     |      | 33.95        | S. ZHIGUNOVA       | RUS | 2019 |
|             |                   |     |      | 50 M. FREE  |                   |     |      |              |                    |     |      |
|             |                   |     |      | 27.80       | HAYLEY BETTINSON  | GBR | 2018 |              |                    |     |      |
|             |                   |     |      | 27.81       | LESLIE LIVINGSTON | USA | 2016 |              |                    |     |      |



# FINA WORLD MASTERS TOP 10 - SHORT COURSE METERS - ALL TIME (1986-2019)

|         |                   |     |      |         |                   |     |      |          |                   |     |      |
|---------|-------------------|-----|------|---------|-------------------|-----|------|----------|-------------------|-----|------|
| 33.99   | ANN KOURI         | CAN | 2016 | 1:10.10 | ANDREA BLOCK      | USA | 2016 | 1:07.18  | ALYSON FORDHAM    | GBR | 2019 |
| 33.99   | CATHY SHEEHAN     | CAN | 2015 | 1:10.28 | MA CARMEN NAVARRO | ESP | 2017 | 1:07.34  | A.PIJTAK-RADERSMA | NED | 2016 |
| 100     | M. BACK           |     |      | 1:11.15 | JILL HERNANDEZ    | USA | 2018 | 1:07.56  | JACKI HIRSTY      | USA | 2013 |
| 1:07.17 | ELLEN M REYNOLDS  | USA | 2019 | 1:11.21 | JUDITH HATTLE     | GBR | 2015 | 1:08.13  | DIANE COETZEE     | RSA | 2015 |
| 1:08.33 | KARLYN PIPES      | USA | 2017 | 1:11.65 | TRACI GRANGER     | USA | 2013 | 1:08.19  | LYNN MORRISON     | USA | 2015 |
| 1:09.62 | HOLLY GREEN BLAIR | USA | 2019 | 1:11.67 | JUDITH PEARSON    | GBR | 2019 | 200      | M. FREE           |     |      |
| 1:10.08 | LESLIE LIVINGSTON | USA | 2016 | 1:11.72 | D.PEDACCHIOLA     | ITA | 2018 | 2:15.93  | JENNY WHITELEY    | AUS | 2018 |
| 1:12.23 | LAURA VAL         | USA | 2008 | 200     | M. FLY            |     |      | 2:20.16  | LAURA VAL         | USA | 2011 |
| 1:12.42 | JILL HERNANDEZ    | USA | 2018 | 2:31.13 | LAURA VAL         | USA | 2008 | 2:24.73  | VERONICA HIBBEN   | USA | 2019 |
| 1:12.59 | MARIKA MCCUE      | USA | 2018 | 2:31.97 | KARLYN PIPES      | USA | 2017 | 2:25.52  | SUSAN RITTER      | USA | 2017 |
| 1:12.64 | JULIE HOYLE       | GBR | 2017 | 2:33.91 | S. PALMER-WHITE   | AUS | 2019 | 2:26.94  | DIANE COETZEE     | RSA | 2015 |
| 1:12.87 | LYNN MARSHALL     | CAN | 2016 | 2:33.98 | LYNN MARSHALL     | CAN | 2019 | 2:28.49  | ALYSON FORDHAM    | GBR | 2019 |
| 1:12.89 | CATHY SHEEHAN     | CAN | 2015 | 2:38.82 | D.PEDACCHIOLA     | ITA | 2018 | 2:28.92  | A.PIJTAK-RADERSMA | NED | 2017 |
| 200     | M. BACK           |     |      | 2:39.54 | S.REIBEL-OBERLE   | GER | 2019 | 2:29.23  | COLETTE CRABBE    | USA | 2016 |
| 2:25.27 | ELLEN M REYNOLDS  | USA | 2019 | 2:39.55 | ANDREA BLOCK      | USA | 2016 | 2:29.71  | H.KULA-PRZEWANSK  | GBR | 2019 |
| 2:29.22 | KARLYN PIPES      | USA | 2017 | 2:40.05 | ROBYN CROTTY      | NZL | 2018 | 2:30.15  | JACKI HIRSTY      | USA | 2013 |
| 2:31.71 | LYNN MARSHALL     | CAN | 2016 | 2:41.97 | JUDITH HATTLE     | GBR | 2016 | 400      | M. FREE           |     |      |
| 2:32.58 | JILL HERNANDEZ    | USA | 2018 | 2:42.59 | ARLENE DELMAGE    | USA | 2017 | 4:52.64  | JENNY WHITELEY    | AUS | 2018 |
| 2:36.86 | JUDY BROWN        | GBR | 2019 | 100     | M. I.M.           |     |      | 4:53.24  | LAURA VAL         | USA | 2013 |
| 2:37.84 | NAOKO SHIDE       | JPN | 2016 | 1:09.08 | KARLYN PIPES      | USA | 2017 | 5:04.90  | SUSAN RITTER      | USA | 2017 |
| 2:39.94 | BONNIE BILICH     | USA | 2016 | 1:10.05 | ELLEN M REYNOLDS  | USA | 2019 | 5:09.53  | BONNIE L SPIVEY   | USA | 2019 |
| 2:40.01 | ANN KOURI         | CAN | 2016 | 1:10.66 | JENNY WHITELEY    | AUS | 2013 | 5:10.08  | VERONICA HIBBEN   | USA | 2016 |
| 2:40.05 | LAURA VAL         | USA | 2008 | 1:11.51 | HOLLY GREEN BLAIR | USA | 2019 | 5:12.25  | DIANE COETZEE     | RSA | 2015 |
| 2:40.82 | CATHY SHEEHAN     | CAN | 2015 | 1:11.95 | SARAH MACDONALD   | CAN | 2015 | 5:12.77  | NANCY MARTIN      | USA | 2016 |
| 50      | M. BRST           |     |      | 1:12.90 | LAURA VAL         | USA | 2009 | 5:13.77  | JOAN EDWARDS      | GBR | 2018 |
| 35.15   | MONICA CORO'      | ITA | 2017 | 1:12.94 | S.REIBEL-OBERLE   | GER | 2019 | 5:13.96  | CHRISTIE CIRAULO  | USA | 2015 |
| 35.61   | UTE HASSE         | ESP | 2018 | 1:13.32 | LYNN MARSHALL     | CAN | 2016 | 5:14.09  | SUSANNA SORDELLI  | ITA | 2016 |
| 35.87   | PIA THULSTRUP     | DEN | 2017 | 1:13.77 | JULIE HOYLE       | GBR | 2017 | 800      | M. FREE           |     |      |
| 35.90   | TERRI MACDOUGALL  | CAN | 2019 | 1:13.93 | JUDITH HATTLE     | GBR | 2015 | 10:18.29 | JENNY WHITELEY    | AUS | 2019 |
| 36.29   | JENNY WHITELEY    | AUS | 2013 | 200     | M. I.M.           |     |      | 10:21.68 | LAURA VAL         | USA | 2011 |
| 36.47   | CAROLINE KRATTLI  | USA | 2017 | 2:27.78 | ELLEN M REYNOLDS  | USA | 2019 | 10:24.43 | BONNIE L SPIVEY   | USA | 2019 |
| 36.92   | KARLYN PIPES      | USA | 2017 | 2:31.06 | KARLYN PIPES      | FRA | 2017 | 10:25.71 | SUSAN RITTER      | USA | 2017 |
| 37.08   | SARAH MACDONALD   | CAN | 2017 | 2:33.57 | JILL HERNANDEZ    | USA | 2018 | 10:36.35 | JOAN EDWARDS      | GBR | 2018 |
| 37.14   | SATOKO TOKITA     | JPN | 2018 | 2:34.01 | LYNN MARSHALL     | CAN | 2016 | 10:39.12 | S.LOFTUS-CHARLEY  | USA | 2011 |
| 37.35   | HAYLEY BETTINSON  | GBR | 2018 | 2:36.92 | S.REIBEL-OBERLE   | GER | 2019 | 10:42.74 | C.TARANTINO       | ITA | 2016 |
| 100     | M. BRST           |     |      | 2:36.98 | LAURA VAL         | USA | 2009 | 10:44.11 | CHRISTIE CIRAULO  | USA | 2015 |
| 1:17.36 | MARZENA KULIS     | ITA | 2019 | 2:37.71 | JENNY WHITELEY    | AUS | 2013 | 10:46.91 | KAREN EINSIDLER   | USA | 2018 |
| 1:18.01 | MONICA CORO'      | ITA | 2017 | 2:40.49 | SARAH MACDONALD   | CAN | 2015 | 10:48.05 | DIANE COETZEE     | RSA | 2015 |
| 1:18.45 | JENNY WHITELEY    | AUS | 2013 | 2:41.32 | JUDITH HATTLE     | GBR | 2016 | 1500     | M. FREE           |     |      |
| 1:19.02 | UTE HASSE         | ESP | 2019 | 2:41.49 | AMY JO RIEGER     | PUR | 2019 | 19:38.63 | LAURA VAL         | USA | 2011 |
| 1:19.90 | PIA THULSTRUP     | DEN | 2017 | 400     | M. I.M.           |     |      | 19:59.92 | S.LOFTUS-CHARLEY  | USA | 2011 |
| 1:20.72 | TERRI MACDOUGALL  | CAN | 2019 | 5:15.72 | ELLEN M REYNOLDS  | USA | 2019 | 20:03.30 | SUSAN RITTER      | USA | 2017 |
| 1:21.15 | SARAH MACDONALD   | CAN | 2015 | 5:23.08 | LYNN MARSHALL     | CAN | 2016 | 20:03.58 | BONNIE L SPIVEY   | USA | 2019 |
| 1:21.18 | CAROLINE KRATTLI  | USA | 2017 | 5:25.71 | KARLYN PIPES      | USA | 2017 | 20:15.16 | CHRISTIE CIRAULO  | USA | 2015 |
| 1:21.29 | ALICIA BOSCATTO   | ARG | 2016 | 5:37.15 | ROBYN CROTTY      | NZL | 2018 | 20:21.72 | C.TARANTINO       | ITA | 2016 |
| 1:22.64 | CORRIN C BUCK     | USA | 2019 | 5:39.30 | LAURA VAL         | USA | 2009 | 20:23.21 | KATHERINE BRANCH  | USA | 2017 |
| 200     | M. BRST           |     |      | 5:42.65 | PIERRETTE MICHEL  | BEL | 2017 | 20:38.60 | NANCY MARTIN      | USA | 2016 |
| 2:46.91 | MARZENA KULIS     | ITA | 2019 | 5:45.17 | S. PALMER-WHITE   | AUS | 2019 | 20:39.25 | COLETTE CRABBE    | USA | 2016 |
| 2:53.16 | MONICA CORO       | ITA | 2017 | 5:45.21 | JUDITH HATTLE     | GBR | 2017 | 20:44.63 | AUDREY COOPER     | GBR | 2016 |
| 2:55.48 | JENNY WHITELEY    | AUS | 2013 | 5:45.54 | NAOKO SHIDE       | JPN | 2015 | 50       | M. BACK           |     |      |
| 2:59.03 | TERRI MACDOUGALL  | CAN | 2019 | 5:46.42 | JUDY BROWN        | GBR | 2019 | 33.01    | LAURA VAL         | USA | 2013 |
| 2:59.34 | COLETTE CRABBE    | BEL | 2012 | *****   |                   |     |      | 33.75    | K.ANDRUS-HUGHES   | USA | 2017 |
| 3:00.02 | JUDITH HATTLE     | GBR | 2015 | *****   |                   |     |      | 33.90    | BONNIE BILICH     | USA | 2018 |
| 3:00.46 | ALICIA BOSCATTO   | ARG | 2015 | *****   |                   |     |      | 35.49    | AROMA MARTORELL   | BRA | 2018 |
| 3:00.66 | CORRIN C BUCK     | USA | 2019 | *****   |                   |     |      | 35.56    | PENNY NOYES       | USA | 2017 |
| 3:01.34 | LYNN MARSHALL     | CAN | 2019 | 50      | M. FREE           |     |      | 35.58    | JOAN PFINGSGRAFF  | USA | 2017 |
| 3:01.40 | KIM CROUCH        | USA | 2016 | 28.50   | JENNY WHITELEY    | AUS | 2018 | 35.60    | DIANE COETZEE     | RSA | 2015 |
| 50      | M. FLY            |     |      | 29.23   | TRACI S GRANGER   | USA | 2019 | 35.70    | JENNY WHITELEY    | AUS | 2018 |
| 29.15   | GABRIELE GROMMES  | GER | 2018 | 29.23   | LAURA VAL         | USA | 2013 | 35.73    | LIZ COSGRAVE      | IRL | 2018 |
| 29.39   | LESLIE LIVINGSTON | USA | 2016 | 29.65   | VERONICA HIBBEN   | USA | 2016 | 35.78    | BENEDICTE DUPREZ  | FRA | 2012 |
| 30.73   | KARLYN PIPES      | USA | 2017 | 29.83   | ELIN KNAG         | NOR | 2019 | 100      | M. BACK           |     |      |
| 30.78   | MARIA NORBERG     | SWE | 2018 | 29.88   | K.ANDRUS-HUGHES   | USA | 2017 | 1:12.39  | BONNIE BILICH     | USA | 2018 |
| 30.99   | HAYLEY BETTINSON  | GBR | 2018 | 29.89   | GUNILLA RASMUSON  | SWE | 2017 | 1:12.72  | LAURA VAL         | USA | 2013 |
| 31.13   | TRACI GRANGER     | USA | 2013 | 29.90   | ISABELLA RICCA    | ITA | 2012 | 1:13.53  | K.ANDRUS-HUGHES   | USA | 2018 |
| 31.13   | LAURA VAL         | USA | 2009 | 30.01   | CHARLOTTE DAVIS   | USA | 2010 | 1:15.95  | JOAN PFINGSGRAFF  | USA | 2017 |
| 31.23   | SARAH MACDONALD   | CAN | 2015 | 30.07   | JACKI HIRSTY      | USA | 2013 | 1:16.57  | DIANE COETZEE     | RSA | 2016 |
| 31.44   | M.NAVARRO         | ESP | 2017 | 100     | M. FREE           |     |      | 1:17.49  | JENNY WHITELEY    | AUS | 2019 |
| 31.66   | JUDITH HATTLE     | GBR | 2017 | 1:02.60 | JENNY WHITELEY    | AUS | 2018 | 1:17.95  | LEIGH RODGERS     | AUS | 2015 |
| 100     | M. FLY            |     |      | 1:03.48 | LAURA VAL         | USA | 2014 | 1:18.33  | H.KULA-PRZEWANSK  | GBR | 2019 |
| 1:08.15 | KARLYN PIPES      | USA | 2017 | 1:04.44 | VERONICA HIBBEN   | USA | 2019 | 1:18.51  | MA RAMONA GUILLEN | ESP | 2019 |
| 1:09.23 | LAURA VAL         | USA | 2009 | 1:06.16 | K.ANDRUS-HUGHES   | USA | 2017 | 1:18.60  | BENEDICTE DUPREZ  | FRA | 2013 |
| 1:09.67 | LYNN MARSHALL     | CAN | 2016 | 1:06.58 | CHARLOTTE DAVIS   | USA | 2010 | 200      | M. BACK           |     |      |



# FINA WORLD MASTERS TOP 10 - SHORT COURSE METERS - ALL TIME (1986-2019)

|             |                   |     |      |             |                   |     |      |              |                    |     |      |
|-------------|-------------------|-----|------|-------------|-------------------|-----|------|--------------|--------------------|-----|------|
| 2:35.84     | BONNIE BILICH     | USA | 2018 | 3:00.31     | BARBARA DUNBAR    | USA | 2009 | 2:38.85      | FRAN HARE          | USA | 2017 |
| 2:40.04     | LAURA VAL         | USA | 2015 | 3:00.75     | L.NAGOVITSYNA     | RUS | 2019 | 2:38.98      | CECILIA MCCLOSKEY  | USA | 2017 |
| 2:43.57     | JOAN PFINGSGRAFF  | USA | 2017 | 3:01.42     | MA RAMONA GUILLEN | ESP | 2019 | 400 M. FREE  |                    |     |      |
| 2:45.00     | BONNIE L SPIVEY   | USA | 2019 | 3:01.58     | LAURIE J ALIOTO   | USA | 2019 | 5:02.08      | LAURA VAL          | USA | 2017 |
| 2:45.73     | JENNY WHITELEY    | AUS | 2019 | 100 M. I.M. |                   |     |      | 5:21.37      | NANCY MARTIN       | USA | 2019 |
| 2:46.26     | K.ANDRUS-HUGHES   | USA | 2017 | 1:12.19     | JENNY WHITELEY    | AUS | 2018 | 5:22.78      | S.LOFTUS-CHARLEY   | USA | 2016 |
| 2:46.71     | DIANE COETZEE     | RSA | 2015 | 1:15.07     | LAURA VAL         | USA | 2013 | 5:23.19      | CHARLOTTE DAVIS    | USA | 2015 |
| 2:46.92     | MA RAMONA GUILLEN | ESP | 2019 | 1:16.22     | COLETTE CRABBE    | USA | 2017 | 5:25.90      | CHRISTIE CIRAULO   | USA | 2019 |
| 2:48.22     | LEIGH RODGERS     | AUS | 2015 | 1:16.69     | LEIGH RODGERS     | AUS | 2015 | 5:34.18      | AUDREY COOPER      | GBR | 2019 |
| 2:48.59     | BENEDICTE DUPREZ  | FRA | 2013 | 1:17.48     | CHARLOTTE DAVIS   | USA | 2010 | 5:35.53      | CAROLYN BOAK       | USA | 2010 |
| 50 M. BRST  |                   |     |      | 1:17.57     | K.ANDRUS-HUGHES   | USA | 2017 | 5:39.39      | BARBARA DUNBAR     | USA | 2014 |
| 37.08       | JENNY WHITELEY    | AUS | 2018 | 1:18.51     | CATHY GANZE       | USA | 2017 | 5:39.45      | ANNE BOURNE        | GBR | 2019 |
| 38.12       | DAGMAR FRESE      | GER | 2019 | 1:18.76     | KAREN MAREB       | USA | 2018 | 5:40.12      | SUSAN HAIGH        | GBR | 2017 |
| 38.60       | MONIKA SENFTLEBEN | GER | 2002 | 1:18.98     | TRACI S GRANGER   | USA | 2019 | 800 M. FREE  |                    |     |      |
| 38.63       | AVILA RHODES      | CAN | 2016 | 1:19.05     | A.PIJTAK-RADERSMA | NED | 2016 | 10:34.67     | LAURA VAL          | USA | 2016 |
| 38.73       | ELIN KNAG         | NOR | 2019 | 200 M. I.M. |                   |     |      | 10:54.15     | NANCY MARTIN       | USA | 2019 |
| 38.87       | COLETTE CRABBE    | USA | 2016 | 2:36.81     | JENNY WHITELEY    | AUS | 2018 | 10:55.71     | S.LOFTUS-CHARLEY   | USA | 2016 |
| 38.97       | BETH ESTEL        | USA | 2016 | 2:41.53     | LAURA VAL         | USA | 2013 | 11:09.56     | CHRISTIE CIRAULO   | USA | 2019 |
| 38.97       | BONNIE PRONK      | CAN | 2002 | 2:43.04     | COLETTE CRABBE    | USA | 2017 | 11:09.87     | CHARLOTTE DAVIS    | USA | 2015 |
| 39.00       | LOLI BALBUENA     | ESP | 2019 | 2:46.75     | BONNIE BILICH     | USA | 2018 | 11:23.58     | LAURA VACA         | MEX | 2019 |
| 39.36       | KAREN M MAREB     | USA | 2019 | 2:48.31     | LEIGH RODGERS     | AUS | 2015 | 11:24.13     | JEN THOMASSON      | AUS | 2008 |
| 100 M. BRST |                   |     |      | 2:48.33     | CHARLOTTE DAVIS   | USA | 2010 | 11:24.76     | AUDREY COOPER      | GBR | 2019 |
| 1:20.50     | JENNY WHITELEY    | AUS | 2018 | 2:49.31     | TRACI S GRANGER   | USA | 2019 | 11:32.00     | BARBARA DUNBAR     | USA | 2014 |
| 1:24.39     | COLETTE CRABBE    | USA | 2016 | 2:51.47     | SUSANNA SORDELLI  | ITA | 2017 | 11:33.57     | INEKE WEEKERS      | NED | 2019 |
| 1:25.16     | DAGMAR FRESE      | GER | 2019 | 2:51.87     | BONNIE SPIVEY     | USA | 2018 | 1500 M. FREE |                    |     |      |
| 1:25.52     | KAREN MAREB       | USA | 2018 | 2:52.64     | S.LOFTUS-CHARLEY  | USA | 2011 | 20:21.61     | LAURA VAL          | USA | 2016 |
| 1:26.15     | BETH ESTEL        | USA | 2017 | 400 M. I.M. |                   |     |      | 20:37.63     | S.LOFTUS-CHARLEY   | USA | 2016 |
| 1:26.26     | AVILA RHODES      | CAN | 2016 | 5:50.34     | COLETTE CRABBE    | USA | 2017 | 20:40.41     | NANCY MARTIN       | USA | 2019 |
| 1:26.43     | HANNELORE ROSE    | GER | 2002 | 5:51.11     | BONNIE SPIVEY     | USA | 2018 | 21:01.04     | CHRISTIE CIRAULO   | USA | 2019 |
| 1:26.56     | BONNIE PRONK      | CAN | 2002 | 5:51.81     | LAURA VAL         | USA | 2011 | 21:43.60     | JEN THOMASSON      | AUS | 2008 |
| 1:26.85     | AMANDA HEATH      | GBR | 2019 | 5:57.70     | CHARLOTTE DAVIS   | USA | 2010 | 21:49.37     | BARBARA DUNBAR     | USA | 2014 |
| 1:27.03     | VERA CIVINOVA     | CZE | 2019 | 6:03.26     | S.LOFTUS-CHARLEY  | USA | 2011 | 21:52.87     | FRAN HARE          | USA | 2016 |
| 200 M. BRST |                   |     |      | 6:03.98     | EDIE FISHER       | CAN | 2017 | 22:01.25     | ANNE BOURNE        | GBR | 2019 |
| 2:57.05     | JENNY WHITELEY    | AUS | 2018 | 6:07.12     | SUSANNA SORDELLI  | ITA | 2016 | 22:01.63     | CECILIA MCCLOSKEY  | USA | 2017 |
| 3:04.70     | LO KNAPP          | USA | 2016 | 6:10.75     | JEANNE LAPPIN     | USA | 2015 | 22:09.43     | JACKIE MARR        | USA | 2008 |
| 3:06.25     | AMANDA HEATH      | GBR | 2017 | 6:10.88     | LAURA VACA        | MEX | 2015 | 50 M. BACK   |                    |     |      |
| 3:06.48     | BONNIE PRONK      | CAN | 2002 | 6:12.26     | BETH ESTEL        | USA | 2017 | 33.41        | LAURA B VAL        | USA | 2019 |
| 3:07.25     | COLETTE CRABBE    | USA | 2017 | *****       |                   |     |      | 35.47        | CECILIA MCCLOSKEY  | USA | 2018 |
| 3:07.44     | HANNELORE ROSE    | GER | 2002 | *****       |                   |     |      | 35.58        | DIANN UUSTAL       | USA | 2011 |
| 3:09.37     | KAREN MAREB       | USA | 2018 | *****       |                   |     |      | 36.35        | PENNY P NOYES      | USA | 2019 |
| 3:09.65     | KEIKO UTSUMI      | JPN | 2017 | *****       |                   |     |      | 36.37        | JOAN L PFINGSGRAFF | USA | 2019 |
| 3:10.10     | AVILA RHODES      | CAN | 2016 | 50 M. FREE  |                   |     |      | 36.58        | MARGIT OHLSSON     | SWE | 2010 |
| 3:10.29     | BONNIE BILICH     | USA | 2018 | 29.30       | LAURA VAL         | USA | 2016 | 36.85        | CLARY MUNNS        | AUS | 2009 |
| 50 M. FLY   |                   |     |      | 29.44       | PENNY P NOYES     | USA | 2019 | 37.10        | RACHEL BARTON      | GBR | 2014 |
| 31.24       | TRACI S GRANGER   | USA | 2019 | 30.76       | LYNN MORRISON     | USA | 2019 | 37.12        | BARBARA E CHURCH   | USA | 2019 |
| 31.34       | CAROL BOAGEY      | GBR | 2013 | 30.79       | CHARLOTTE DAVIS   | USA | 2015 | 37.27        | BENEDICTE DUPREZ   | FRA | 2016 |
| 32.42       | LAURA VAL         | USA | 2013 | 31.64       | SANDERINA KRUGER  | RSA | 2014 | 100 M. BACK  |                    |     |      |
| 32.54       | VERONICA HIBBEN   | USA | 2016 | 31.76       | JANETTE JEFFREY   | AUS | 2015 | 1:13.08      | LAURA VAL          | USA | 2018 |
| 32.75       | JENNY WHITELEY    | AUS | 2019 | 31.82       | LYNETTE STEVENSON | AUS | 2011 | 1:16.61      | CECILIA MCCLOSKEY  | USA | 2018 |
| 32.84       | LEIGH RODGERS     | AUS | 2015 | 31.85       | REGULA STEIGER    | SUI | 2017 | 1:17.95      | DIANN UUSTAL       | USA | 2011 |
| 32.93       | CHARLOTTE DAVIS   | USA | 2011 | 31.85       | CONNY BOER-BUYS   | NED | 2016 | 1:17.99      | JOAN L PFINGSGRAFF | USA | 2019 |
| 32.99       | HARUMI SUGINUMA   | JPN | 2018 | 31.91       | HEIDE LORBERG     | GER | 2004 | 1:18.81      | MARGIT OHLSSON     | SWE | 2011 |
| 33.38       | JUDY WILSON       | GBR | 2004 | 100 M. FREE |                   |     |      | 1:19.47      | BARBARA E CHURCH   | USA | 2019 |
| 33.42       | LOLI BALBUENA     | ESP | 2019 | 1:04.40     | LAURA VAL         | USA | 2017 | 1:22.17      | BENEDICTE DUPREZ   | FRA | 2016 |
| 100 M. FLY  |                   |     |      | 1:06.90     | CHARLOTTE DAVIS   | USA | 2015 | 1:22.17      | CLARY MUNNS        | AUS | 2009 |
| 1:11.47     | LAURA VAL         | USA | 2013 | 1:08.25     | SANDERINA KRUGER  | RSA | 2015 | 1:22.70      | DIANA NASH         | GBR | 2019 |
| 1:13.08     | TRACI S GRANGER   | USA | 2019 | 1:09.52     | CATHY MERRITT     | CAN | 2017 | 1:23.02      | ANDRA JAUNZEME     | USA | 2018 |
| 1:13.58     | LEIGH RODGERS     | AUS | 2015 | 1:10.66     | CONNY BOER-BUYS   | NED | 2016 | 200 M. BACK  |                    |     |      |
| 1:14.21     | COLETTE CRABBE    | USA | 2017 | 1:10.76     | DIANN UUSTAL      | USA | 2011 | 2:42.87      | LAURA VAL          | USA | 2017 |
| 1:14.30     | JENNY WHITELEY    | AUS | 2018 | 1:10.97     | CHRISTEL SCHULZ   | GER | 2005 | 2:48.83      | JOAN L PFINGSGRAFF | USA | 2019 |
| 1:15.40     | CHARLOTTE DAVIS   | USA | 2011 | 1:11.05     | CAROLE SMITH      | ITA | 2018 | 2:50.10      | CECILIA MCCLOSKEY  | USA | 2015 |
| 1:16.38     | HARUMI SUGINUMA   | JPN | 2017 | 1:11.41     | CECILIA MCCLOSKEY | USA | 2017 | 2:53.36      | DIANN UUSTAL       | USA | 2011 |
| 1:16.41     | JUDY WILSON       | GBR | 2004 | 1:11.83     | YURI SUETSUGU     | JPN | 2018 | 2:55.02      | MARGIT OHLSSON     | SWE | 2011 |
| 1:17.07     | JEANNE LAPPIN     | USA | 2015 | 200 M. FREE |                   |     |      | 2:58.80      | BENEDICTE DUPREZ   | FRA | 2016 |
| 1:17.50     | CATHY GANZE       | USA | 2018 | 2:23.26     | LAURA VAL         | USA | 2017 | 2:59.08      | MINDY DOUGHERTY    | USA | 2017 |
| 200 M. FLY  |                   |     |      | 2:29.35     | CHARLOTTE DAVIS   | USA | 2015 | 2:59.22      | ANDRA JAUNZEME     | USA | 2018 |
| 2:41.25     | LAURA VAL         | USA | 2011 | 2:33.72     | NANCY MARTIN      | USA | 2019 | 3:00.02      | NANCY MARTIN       | USA | 2019 |
| 2:46.40     | JENNY WHITELEY    | AUS | 2019 | 2:35.21     | S.LOFTUS-CHARLEY  | USA | 2016 | 3:01.41      | DIANA NASH         | GBR | 2019 |
| 2:49.24     | TRACI S GRANGER   | USA | 2019 | 2:37.00     | SANDERINA KRUGER  | RSA | 2014 | 50 M. BRST   |                    |     |      |
| 2:52.43     | JEANNE LAPPIN     | USA | 2015 | 2:37.13     | CONNY BOER-BUYS   | NED | 2016 | 40.66        | SALLY SHIELDS      | GBR | 2019 |
| 2:57.56     | COLETTE CRABBE    | USA | 2017 | 2:37.63     | CATHY MERRITT     | CAN | 2017 | 40.90        | NOBUKO YASUDA      | JPN | 2010 |
| 2:59.39     | HARUMI SUGINUMA   | JPN | 2017 | 2:38.60     | DIANN UUSTAL      | USA | 2012 | 41.07        | CAROLE SMITH       | ITA | 2018 |



# FINA WORLD MASTERS TOP 10 - SHORT COURSE METERS - ALL TIME (1986-2019)

|             |                   |     |      |             |                    |     |      |              |                   |     |      |
|-------------|-------------------|-----|------|-------------|--------------------|-----|------|--------------|-------------------|-----|------|
| 41.26       | REGULA STEIGER    | SUI | 2018 | 1:23.71     | KIRA MAKAROVA      | RUS | 2013 | 12:11.34     | CAROLYN BOAK      | USA | 2016 |
| 41.38       | JANETTE JEFFREY   | AUS | 2016 | 200 M. I.M. |                    |     |      | 12:29.77     | CHRISTIE HAYES    | USA | 2018 |
| 41.40       | BONNIE PRONK      | CAN | 2009 | 2:46.04     | LAURA B VAL        | USA | 2019 | 12:30.00     | JANE ASHER        | GBR | 2004 |
| 41.53       | MONIKA SENFTLEBEN | GER | 2008 | 2:53.33     | CHARLOTTE DAVIS    | USA | 2015 | 12:30.04     | MARGARETA RAINER  | SWE | 2019 |
| 41.55       | LO D KNAPP        | USA | 2019 | 2:55.88     | CECILIA MCCLOSKEY  | USA | 2016 | 12:31.46     | MARCIA BARRY      | USA | 2018 |
| 41.78       | CHARLOTTE DAVIS   | USA | 2018 | 2:57.85     | LO D KNAPP         | USA | 2019 | 12:39.45     | JACKIE MARR       | USA | 2013 |
| 42.02       | DIANN UUSTAL      | USA | 2011 | 2:59.30     | S.LOFTUS-CHARLEY   | USA | 2016 | 12:42.21     | KATHY SLIFER      | USA | 2016 |
| 100 M. BRST |                   |     |      | 3:00.93     | ANDRA JAUNZEME     | USA | 2018 | 12:42.88     | LILIA VACA        | MEX | 2019 |
| 1:28.73     | NOBUKO YASUDA     | JPN | 2010 | 3:01.93     | CATHY MERRITT      | CAN | 2017 | 12:43.75     | RUTH Y SHAPS      | USA | 2019 |
| 1:29.76     | LO D KNAPP        | USA | 2019 | 3:02.58     | BRIGITTE MERTEN    | GER | 2011 | 13:00.04     | BARBARA FENTIMAN  | GBR | 2004 |
| 1:30.22     | JANETTE JEFFREY   | AUS | 2017 | 3:03.19     | AUDREY COOPER      | GBR | 2019 | 1500 M. FREE |                   |     |      |
| 1:30.81     | CHARLOTTE DAVIS   | USA | 2016 | 3:04.22     | CAROLYN BOAK       | USA | 2010 | 23:39.90     | MARCIA BARRY      | USA | 2018 |
| 1:31.53     | SALLY SHIELDS     | GBR | 2019 | 400 M. I.M. |                    |     |      | 23:54.74     | JANE ASHER        | GBR | 2004 |
| 1:31.87     | BONNIE PRONK      | CAN | 2007 | 5:55.00     | LAURA VAL          | USA | 2016 | 23:58.11     | JACKIE MARR       | USA | 2013 |
| 1:32.05     | DIANE FORD        | GBR | 2008 | 6:16.30     | S.LOFTUS-CHARLEY   | USA | 2016 | 24:03.42     | RUTH Y SHAPS      | USA | 2019 |
| 1:32.37     | JOANN LEILICH     | USA | 2004 | 6:22.01     | CECILIA MCCLOSKEY  | USA | 2016 | 24:11.38     | MARGARETA RAINER  | SWE | 2019 |
| 1:32.61     | E.BRUUSGAARD      | NOR | 2019 | 6:23.70     | AUDREY COOPER      | GBR | 2019 | 24:40.11     | ROSA MONTAGUE     | AUS | 2018 |
| 1:32.66     | ULRIKE URBANIAK   | GER | 2019 | 6:24.60     | NANCY MARTIN       | USA | 2019 | 24:51.92     | BARBARA G DUNBAR  | USA | 2019 |
| 200 M. BRST |                   |     |      | 6:26.20     | ANDRA JAUNZEME     | USA | 2018 | 24:56.47     | BARBARA FENTIMAN  | GBR | 2004 |
| 3:10.75     | JANETTE JEFFREY   | AUS | 2015 | 6:28.11     | CHARLOTTE DAVIS    | USA | 2015 | 24:57.45     | M.CHRISTENSEN     | USA | 2015 |
| 3:10.94     | LO D KNAPP        | USA | 2019 | 6:31.71     | CAROLYN BOAK       | USA | 2010 | 24:57.85     | JUNE KRAUSER      | USA | 1996 |
| 3:14.89     | NOBUKO YASUDA     | JPN | 2010 | 6:34.95     | YOSHIKO OSAKI      | JPN | 2003 | 50 M. BACK   |                   |     |      |
| 3:17.44     | JOANN LEILICH     | USA | 2004 | 6:37.52     | JOAN L PFINGSGRAFF | USA | 2019 | 37.50        | MARGIT OHLSSON    | SWE | 2015 |
| 3:20.34     | JENNIFER MERRITT  | GBR | 2016 | *****       |                    |     |      | 37.67        | DIANN UUSTAL      | USA | 2016 |
| 3:20.83     | LUISE KNOPFLE     | GER | 2004 | WOMEN 70-74 |                    |     |      | 37.78        | CLARY MUNNS       | AUS | 2015 |
| 3:21.25     | DIANE FORD        | GBR | 2008 | *****       |                    |     |      | 39.16        | RACHEL BARTON     | GBR | 2018 |
| 3:21.69     | E.BRUUSGAARD      | NOR | 2019 | 50 M. FREE  |                    |     |      | 39.44        | E.KETELSEN        | DEN | 2013 |
| 3:22.25     | AUDREY COOPER     | GBR | 2019 | 32.21       | FRANCES JENKINS    | GBR | 2017 | 39.77        | MARGARET H TOPPEL | USA | 2019 |
| 3:23.23     | INEKE WEEKERS     | NED | 2019 | 32.38       | DIANN UUSTAL       | USA | 2016 | 39.79        | SATOKO TAKEUJI    | JPN | 2013 |
| 50 M. FLY   |                   |     |      | 33.10       | SANDERINA KRUGER   | RSA | 2019 | 40.11        | HIROMI SATO       | JPN | 2013 |
| 32.57       | PENNY P NOYES     | USA | 2019 | 33.34       | CHRISTEL SCHULZ    | GER | 2010 | 40.13        | TAKAKO NAKAMORI   | JPN | 2019 |
| 33.06       | LAURA VAL         | USA | 2017 | 33.36       | YOSHIKO OSAKI      | JPN | 2009 | 40.49        | MARGARET WILDING  | GBR | 2009 |
| 33.56       | CHARLOTTE DAVIS   | USA | 2016 | 33.39       | YOSHIKO KADOSAKA   | JPN | 2019 | 100 M. BACK  |                   |     |      |
| 34.11       | CHRISTIE CIRAULO  | USA | 2019 | 33.40       | BITTE AXLING       | SWE | 2017 | 1:22.15      | MARGIT OHLSSON    | SWE | 2015 |
| 34.53       | DIANN UUSTAL      | USA | 2013 | 33.60       | MARGARET TOPPEL    | USA | 2018 | 1:22.65      | DIANN UUSTAL      | USA | 2016 |
| 35.38       | ANGELA ZINGLER    | GER | 2019 | 33.86       | JANE ASHER         | GBR | 2004 | 1:25.13      | CLARY MUNNS       | AUS | 2014 |
| 35.49       | YOSHIKO KADOSAKA  | JPN | 2014 | 34.19       | BRIGITTE MERTEN    | GER | 2016 | 1:26.25      | SATOKO TAKEUJI    | JPN | 2012 |
| 35.58       | CECILIA MCCLOSKEY | USA | 2016 | 100 M. FREE |                    |     |      | 1:27.10      | JULIE GUNTHERP    | NZL | 2017 |
| 35.88       | SUMIKO KOBAYASHI  | JPN | 2017 | 1:12.04     | SANDERINA KRUGER   | RSA | 2019 | 1:27.45      | E.KETELSEN        | DEN | 2013 |
| 35.97       | C.NIEUWENHUIS     | NED | 2017 | 1:12.58     | DIANN UUSTAL       | USA | 2016 | 1:28.50      | RACHEL BARTON     | GBR | 2018 |
| 100 M. FLY  |                   |     |      | 1:12.97     | YOSHIKO OSAKI      | JPN | 2009 | 1:29.10      | CHRISTEL SCHULZ   | GER | 2011 |
| 1:13.47     | LAURA B VAL       | USA | 2019 | 1:14.69     | CHRISTEL SCHULZ    | GER | 2010 | 1:29.37      | NORIKO YOSHIDA    | JPN | 2015 |
| 1:14.84     | PENNY P NOYES     | USA | 2019 | 1:16.45     | JANE ASHER         | GBR | 2004 | 1:29.64      | JOY WARD          | USA | 2012 |
| 1:18.80     | CHARLOTTE DAVIS   | USA | 2015 | 1:16.52     | CLARY MUNNS        | AUS | 2016 | 200 M. BACK  |                   |     |      |
| 1:21.13     | CECILIA MCCLOSKEY | USA | 2016 | 1:16.54     | JUDY WILSON        | GBR | 2015 | 2:58.64      | MARGIT OHLSSON    | SWE | 2015 |
| 1:22.85     | ANDRA JAUNZEME    | USA | 2018 | 1:16.81     | MARGARET H TOPPEL  | USA | 2019 | 3:04.82      | DIANN UUSTAL      | USA | 2017 |
| 1:23.41     | BRIGITTE MERTEN   | GER | 2011 | 1:17.10     | RACHEL BARTON      | GBR | 2018 | 3:05.23      | CLARY MUNNS       | AUS | 2015 |
| 1:23.61     | JUDY WILSON       | FRA | 2010 | 1:17.24     | AKIKO IWAMIZU      | JPN | 2019 | 3:11.41      | E.KETELSEN        | DEN | 2013 |
| 1:24.98     | KIRA MAKAROVA     | RUS | 2012 | 200 M. FREE |                    |     |      | 3:11.71      | JULIE GUNTHERP    | NZL | 2017 |
| 1:25.28     | YOSHIKO OSAKI     | JPN | 2003 | 2:43.60     | DIANN UUSTAL       | USA | 2016 | 3:12.33      | RACHEL BARTON     | GBR | 2018 |
| 1:25.67     | CAROLYN BOAK      | USA | 2010 | 2:44.70     | YOSHIKO OSAKI      | JPN | 2008 | 3:12.67      | JOY WARD          | USA | 2012 |
| 200 M. FLY  |                   |     |      | 2:47.82     | CHRISTEL SCHULZ    | GER | 2010 | 3:15.04      | NORIKO YOSHIDA    | JPN | 2015 |
| 2:45.20     | LAURA VAL         | USA | 2016 | 2:49.28     | JANE ASHER         | GBR | 2003 | 3:17.71      | BONNIE PRONK      | CAN | 2012 |
| 3:02.57     | NANCY MARTIN      | USA | 2019 | 2:49.70     | JEN THOMASSON      | AUS | 2013 | 3:17.86      | CHRISTEL SCHULZ   | GER | 2011 |
| 3:03.97     | S.LOFTUS-CHARLEY  | USA | 2016 | 2:51.11     | MARGARETA RAINER   | SWE | 2019 | 50 M. BRST   |                   |     |      |
| 3:15.63     | CAROLYN BOAK      | USA | 2012 | 2:51.39     | CHRISTIE HAYES     | USA | 2018 | 42.80        | SHOKO YONEZAWA    | JPN | 2005 |
| 3:15.84     | JUNKO SATO        | JPN | 2019 | 2:52.81     | LILIA VACA         | MEX | 2019 | 42.95        | KAYAKO HIROSE     | JPN | 2017 |
| 3:17.04     | CHRISTIE CIRAULO  | USA | 2019 | 2:53.99     | RACHEL BARTON      | GBR | 2018 | 43.18        | MONIKA SENFTLEBEN | GER | 2012 |
| 3:17.34     | BARBARA DUNBAR    | USA | 2014 | 2:55.09     | E.KETELSEN         | DEN | 2013 | 43.26        | NOBUKO YASUDA     | JPN | 2015 |
| 3:17.36     | YOSHIKO OSAKI     | JPN | 2003 | 400 M. FREE |                    |     |      | 43.95        | CLARY MUNNS       | AUS | 2015 |
| 3:17.85     | YURI SUETSUGU     | JPN | 2018 | 5:50.41     | YOSHIKO OSAKI      | JPN | 2008 | 44.05        | DIANE FORD        | GBR | 2014 |
| 3:17.86     | KIRA MAKAROVA     | RUS | 2012 | 5:56.79     | CAROLYN BOAK       | USA | 2016 | 44.20        | BITTE AXLING      | SWE | 2018 |
| 100 M. I.M. |                   |     |      | 5:59.41     | CHRISTIE HAYES     | USA | 2018 | 44.22        | JOANN LEILICH     | USA | 2011 |
| 1:15.65     | PENNY P NOYES     | USA | 2019 | 6:00.34     | JANE ASHER         | GBR | 2003 | 44.35        | JANET GETTLING    | USA | 2018 |
| 1:16.42     | LAURA B VAL       | USA | 2019 | 6:04.18     | MARGARETA RAINER   | SWE | 2019 | 44.44        | TOTH CSANADINE    | HUN | 2019 |
| 1:19.10     | CHARLOTTE DAVIS   | USA | 2015 | 6:06.19     | KATHY SLIFER       | USA | 2016 | 100 M. BRST  |                   |     |      |
| 1:20.86     | DIANN UUSTAL      | USA | 2011 | 6:10.11     | MARCIA BARRY       | USA | 2018 | 1:33.92      | NOBUKO YASUDA     | JPN | 2015 |
| 1:21.17     | CECILIA MCCLOSKEY | USA | 2017 | 6:11.59     | ROSA SEGARRA       | ESP | 2019 | 1:34.86      | DIANE FORD        | GBR | 2014 |
| 1:21.89     | BRIGITTE MERTEN   | GER | 2011 | 6:14.34     | JACKIE MARR        | USA | 2013 | 1:35.58      | SHOKO YONEZAWA    | JPN | 2005 |
| 1:22.22     | CATHY MERRITT     | CAN | 2017 | 800 M. FREE |                    |     |      | 1:36.63      | YOSHIKO OSAKI     | JPN | 2010 |
| 1:22.53     | CLARY MUNNS       | AUS | 2009 |             |                    |     |      | 1:36.93      | MARGOT PETTIOHNN  | USA | 2016 |
| 1:22.72     | ANDRA JAUNZEME    | USA | 2019 |             |                    |     |      | 1:36.94      | MASAYO AZUMA      | JPN | 2005 |



# FINA WORLD MASTERS TOP 10 - SHORT COURSE METERS - ALL TIME (1986-2019)

|             |                  |     |      |              |                   |     |      |             |                  |     |      |
|-------------|------------------|-----|------|--------------|-------------------|-----|------|-------------|------------------|-----|------|
| 1:37.11     | LUISE KNOPFLE    | GER | 2009 | 6:51.30      | CLARY MUNNS       | AUS | 2015 | 26:37.02    | GAIL ROPER       | USA | 2005 |
| 1:37.20     | JOANN LEILICH    | USA | 2009 | 6:56.79      | YOSHIKO OSAKI     | JPN | 2008 | 26:37.22    | JAN CROFT        | AUS | 2018 |
| 1:37.27     | BRIGITTE MERTEN  | GER | 2016 | 7:09.96      | JANE ASHER        | GBR | 2001 | 26:37.41    | DENISE ROBERTSON | AUS | 2011 |
| 1:37.36     | CLARY MUNNS      | AUS | 2015 | 7:12.34      | KATHY SLIFER      | USA | 2016 | 26:44.97    | HELGA REICH      | GER | 2012 |
| 200 M. BRST |                  |     |      | 7:14.68      | CAROLYN BOAK      | USA | 2019 | 26:45.67    | JOSETTE GROPAIZ  | FRA | 2017 |
| 3:24.57     | NOBUKO YASUDA    | JPN | 2017 | 7:15.08      | CHRISTIE HAYES    | USA | 2018 | 27:06.81    | KATSUE NOMURA    | JPN | 2017 |
| 3:25.76     | JOANN LEILICH    | USA | 2009 | 7:19.12      | JUDIE OLIVER      | CAN | 2002 | 27:13.56    | JILL COMPLIN     | GBR | 2016 |
| 3:28.12     | DIANE FORD       | GBR | 2014 | 7:24.32      | JUNE KRAUSER      | USA | 1996 | 50 M. BACK  |                  |     |      |
| 3:28.98     | MASAYO AZUMA     | JPN | 2005 | 7:26.80      | MARGOT PETTIJOHN  | USA | 2017 | 39.01       | CLARY MUNNS      | AUS | 2019 |
| 3:30.16     | SHOKO YONEZAWA   | JPN | 2005 | *****        |                   |     |      | 40.74       | E.KETELSEN       | DEN | 2018 |
| 3:31.07     | CLARY MUNNS      | AUS | 2015 | *****        | WOMEN 75-79       |     |      | 41.12       | SATOKO TAKEUJI   | JPN | 2017 |
| 3:33.22     | LUISE KNOPFLE    | GER | 2009 | *****        |                   |     |      | 41.75       | HIROMI SATO      | JPN | 2017 |
| 3:34.27     | MARGOT PETTIJOHN | USA | 2016 | 50 M. FREE   |                   |     |      | 43.19       | MARLENE MENDES   | BRA | 2008 |
| 3:35.99     | JEN THOMASSON    | AUS | 2013 | 34.58        | CHRISTEL SCHULZ   | GER | 2015 | 43.23       | LILIA ALMEIDA    | BRA | 2014 |
| 3:36.05     | KAYAKO HIROSE    | JPN | 2018 | 35.39        | IKUKO OKADO       | JPN | 2018 | 43.46       | YOSHIKO OSAKI    | JPN | 2014 |
| 50 M. FLY   |                  |     |      | 35.41        | YOSHIKO OSAKI     | JPN | 2014 | 43.50       | JANE ASHER       | GBR | 2006 |
| 35.12       | DIANN UUSTAL     | USA | 2016 | 35.42        | MADELINE LANTHIER | CAN | 2018 | 43.54       | SHOKO YONEZAWA   | JPN | 2010 |
| 36.10       | JUDY WILSON      | GBR | 2015 | 35.74        | CLARY MUNNS       | AUS | 2019 | 43.64       | CHRISTEL SCHULZ  | GER | 2015 |
| 36.69       | BRIGITTE MERTEN  | GER | 2016 | 35.88        | JANE ASHER        | GBR | 2006 | 100 M. BACK |                  |     |      |
| 36.88       | MARGARET TOPPEL  | USA | 2018 | 36.09        | M.LANTHIER        | CAN | 2019 | 1:27.40     | CLARY MUNNS      | AUS | 2019 |
| 37.71       | YOSHIKO KADOSAKA | JPN | 2019 | 36.18        | GEORGINA LOPEZ    | CAN | 2019 | 1:29.04     | E.KETELSEN       | DEN | 2018 |
| 37.96       | YOSHIKO OSAKI    | JPN | 2009 | 36.59        | JUDY WILSON       | FRA | 2019 | 1:29.73     | SATOKO TAKEUJI   | JPN | 2017 |
| 38.82       | KIRA MAKAROVA    | RUS | 2019 | 36.67        | E.KETELSEN        | DEN | 2018 | 1:33.68     | CHRISTEL SCHULZ  | GER | 2015 |
| 38.95       | BITTE AXLING     | SWE | 2018 | 100 M. FREE  |                   |     |      | 1:34.32     | NORIKO YOSHIDA   | JPN | 2018 |
| 39.02       | CHRISTEL SCHULZ  | GER | 2010 | 1:16.42      | MARIA COSTA       | BRA | 2019 | 1:34.38     | ELIANE PELLIS    | BEL | 2009 |
| 39.21       | YUMIKO YAMAZAKI  | JPN | 2019 | 1:18.59      | JANE ASHER        | GBR | 2006 | 1:35.18     | YOSHIKO OSAKI    | JPN | 2015 |
| 100 M. FLY  |                  |     |      | 1:19.11      | CHRISTEL SCHULZ   | GER | 2015 | 1:36.33     | SHOKO YONEZAWA   | JPN | 2010 |
| 1:24.03     | JUDY WILSON      | GBR | 2016 | 1:19.41      | YOSHIKO OSAKI     | JPN | 2015 | 1:36.90     | NANCY BROWN      | USA | 2011 |
| 1:28.40     | BRIGITTE MERTEN  | GER | 2016 | 1:21.12      | CLARY MUNNS       | AUS | 2019 | 1:37.87     | PAM HUTCHINGS    | AUS | 2012 |
| 1:28.55     | YOSHIKO OSAKI    | JPN | 2009 | 1:21.26      | MADELINE LANTHIER | CAN | 2018 | 1:37.87     | JANE ASHER       | GBR | 2006 |
| 1:29.29     | KIRA MAKAROVA    | RUS | 2018 | 1:22.09      | E.KETELSEN        | DEN | 2018 | 200 M. BACK |                  |     |      |
| 1:33.78     | MARGOT PETTIJOHN | USA | 2017 | 1:22.54      | M.LANTHIER        | CAN | 2019 | 3:12.65     | CLARY MUNNS      | AUS | 2019 |
| 1:34.70     | JANE ASHER       | GBR | 2001 | 1:24.31      | GAIL ROPER        | USA | 2005 | 3:19.37     | NORIKO YOSHIDA   | JPN | 2018 |
| 1:34.86     | HELGA REICH      | GER | 2006 | 1:24.98      | JEN THOMASSON     | AUS | 2018 | 3:20.26     | E.KETELSEN       | DEN | 2018 |
| 1:35.84     | CLARY MUNNS      | AUS | 2015 | 200 M. FREE  |                   |     |      | 3:22.68     | CHRISTEL SCHULZ  | GER | 2015 |
| 1:37.41     | CHRISTEL SCHULZ  | GER | 2010 | 2:51.65      | YOSHIKO OSAKI     | JPN | 2013 | 3:29.45     | KAZUKO ITO       | JPN | 2017 |
| 1:37.56     | GAIL ROPER       | USA | 1999 | 2:57.19      | JANE ASHER        | GBR | 2006 | 3:31.66     | JEN THOMASSON    | AUS | 2019 |
| 200 M. FLY  |                  |     |      | 2:58.33      | JEN THOMASSON     | AUS | 2018 | 3:32.59     | JANE ASHER       | GBR | 2006 |
| 3:26.35     | KIRA MAKAROVA    | RUS | 2018 | 3:00.26      | CHRISTEL SCHULZ   | GER | 2015 | 3:34.09     | NANCY BROWN      | USA | 2011 |
| 3:26.57     | CLARY MUNNS      | AUS | 2016 | 3:04.79      | MADELINE LANTHIER | CAN | 2018 | 3:36.60     | HARUMI SUGIMOTO  | JPN | 2013 |
| 3:26.69     | JUDY WILSON      | GBR | 2016 | 3:07.58      | GAIL ROPER        | USA | 2005 | 3:36.73     | CHRIS GILLIGAN   | USA | 2018 |
| 3:27.16     | CAROLYN BOAK     | USA | 2016 | 3:07.97      | E.KETELSEN        | DEN | 2018 | 50 M. BRST  |                  |     |      |
| 3:30.68     | MARGOT PETTIJOHN | USA | 2016 | 3:08.94      | LINDA MACPHERSON  | CAN | 2014 | 43.79       | SHOKO YONEZAWA   | JPN | 2010 |
| 3:34.59     | YOSHIKO OSAKI    | JPN | 2009 | 3:10.73      | M.LANTHIER        | CAN | 2019 | 45.37       | DIANE FORD       | GBR | 2019 |
| 3:37.23     | HELGA REICH      | GER | 2006 | 3:10.85      | JILL COMPLIN      | GBR | 2016 | 46.20       | JOANN LEILICH    | USA | 2014 |
| 3:38.39     | JUNE KRAUSER     | USA | 1996 | 400 M. FREE  |                   |     |      | 46.24       | CLARY MUNNS      | AUS | 2019 |
| 3:42.68     | DANIELA BARNEA   | USA | 2014 | 6:08.74      | YOSHIKO OSAKI     | JPN | 2015 | 46.86       | ELIANE PELLIS    | BEL | 2008 |
| 3:44.96     | JANE ASHER       | GBR | 2001 | 6:09.40      | JANE ASHER        | GBR | 2006 | 46.94       | A.VAN OBBERGHEN  | BEL | 2008 |
| 100 M. I.M. |                  |     |      | 6:39.88      | DENISE ROBERTSON  | AUS | 2010 | 47.15       | EDITH BOHM       | GER | 2003 |
| 1:23.23     | DIANN UUSTAL     | USA | 2016 | 6:42.00      | LINDA MACPHERSON  | CAN | 2013 | 47.44       | ERIKA MICHLER    | GER | 2017 |
| 1:23.42     | BRIGITTE MERTEN  | GER | 2016 | 6:42.76      | E.KETELSEN        | DEN | 2018 | 47.51       | LUISE KNOPFLE    | GER | 2014 |
| 1:24.41     | CLARY MUNNS      | AUS | 2016 | 6:44.09      | JEAN TROY         | USA | 2002 | 47.66       | MASAYO AZUMA     | JPN | 2010 |
| 1:24.88     | YOSHIKO OSAKI    | JPN | 2009 | 6:49.27      | HELGA REICH       | GER | 2012 | 100 M. BRST |                  |     |      |
| 1:25.13     | MARGIT OHLSSON   | SWE | 2015 | 6:50.22      | MARIA PENNA       | BRA | 2014 | 1:36.48     | SHOKO YONEZAWA   | JPN | 2010 |
| 1:25.89     | MARGARET TOPPEL  | USA | 2018 | 6:54.09      | JILL COMPLIN      | GBR | 2016 | 1:38.81     | LUISE KNOPFLE    | GER | 2015 |
| 1:27.39     | CHRISTEL SCHULZ  | GER | 2010 | 6:54.68      | GAIL ROPER        | USA | 2004 | 1:39.90     | DIANE FORD       | GBR | 2019 |
| 1:27.72     | KIRA MAKAROVA    | RUS | 2019 | 800 M. FREE  |                   |     |      | 1:40.82     | JOANN LEILICH    | USA | 2014 |
| 1:27.80     | SHOKO YONEZAWA   | JPN | 2005 | 12:25.61     | YOSHIKO OSAKI     | JPN | 2013 | 1:41.49     | CLARY MUNNS      | AUS | 2019 |
| 1:30.95     | BITTE AXLING     | SWE | 2016 | 12:42.75     | JANE ASHER        | GBR | 2006 | 1:42.36     | MASAYO AZUMA     | JPN | 2010 |
| 200 M. I.M. |                  |     |      | 13:41.49     | E.KETELSEN        | DEN | 2018 | 1:43.34     | ELIANE PELLIS    | BEL | 2008 |
| 3:09.58     | CLARY MUNNS      | AUS | 2017 | 13:55.30     | HELGA REICH       | GER | 2013 | 1:43.58     | DANIELA BARNEA   | USA | 2019 |
| 3:11.14     | YOSHIKO OSAKI    | JPN | 2009 | 13:58.35     | DENISE ROBERTSON  | AUS | 2014 | 1:44.01     | A.VAN OBBERGHEN  | BEL | 2008 |
| 3:11.17     | BRIGITTE MERTEN  | GER | 2016 | 13:59.01     | JEAN TROY         | USA | 2002 | 1:46.09     | KUMIE TOKUDA     | JPN | 2012 |
| 3:12.16     | CHRISTEL SCHULZ  | GER | 2011 | 14:00.42     | MARIA PENNA       | BRA | 2014 | 200 M. BRST |                  |     |      |
| 3:12.50     | KIRA MAKAROVA    | RUS | 2019 | 14:00.66     | LINDA MACPHERSON  | CAN | 2013 | 3:33.03     | SHOKO YONEZAWA   | JPN | 2010 |
| 3:13.05     | DIANN UUSTAL     | USA | 2017 | 14:03.84     | ANNE WILLIAMS     | USA | 2013 | 3:36.11     | LUISE KNOPFLE    | GER | 2015 |
| 3:15.46     | MARGIT OHLSSON   | SWE | 2015 | 14:11.11     | TAYO FUJIEDA      | JPN | 2013 | 3:36.56     | JOANN LEILICH    | USA | 2014 |
| 3:20.57     | MARGOT PETTIJOHN | USA | 2017 | 1500 M. FREE |                   |     |      | 3:39.58     | DIANE FORD       | GBR | 2019 |
| 3:20.75     | NOBUKO YASUDA    | JPN | 2016 | 24:04.75     | JANE ASHER        | GBR | 2006 | 3:40.80     | MASAYO AZUMA     | JPN | 2010 |
| 3:21.52     | JUDIE OLIVER     | CAN | 2002 | 26:16.54     | E.KETELSEN        | DEN | 2018 | 3:44.13     | CLARY MUNNS      | AUS | 2019 |
| 400 M. I.M. |                  |     |      | 26:20.36     | LINDA MACPHERSON  | CAN | 2013 | 3:45.84     | DANIELA BARNEA   | USA | 2019 |
| 6:47.91     | BRIGITTE MERTEN  | GER | 2016 |              |                   |     |      | 3:47.58     | ELIANE PELLIS    | BEL | 2008 |



# FINA WORLD MASTERS TOP 10 - SHORT COURSE METERS - ALL TIME (1986-2019)

|             |                   |     |      |              |                  |       |                |             |                 |     |      |
|-------------|-------------------|-----|------|--------------|------------------|-------|----------------|-------------|-----------------|-----|------|
| 3:48.93     | TAYO FUJIEDA      | JPN | 2013 | 50 M. FREE   |                  | 48.82 | KERSTIN GJORES | SWE         | 2007            |     |      |
| 3:49.39     | A.VAN OBBERGHEN   | BEL | 2008 | 36.08        | YOSHIKO OSAKI    | JPN   | 2018           | 49.02       | JOAN PARNELL    | CAN | 2008 |
| 50 M. FLY   |                   |     |      | 37.67        | JANE ASHER       | GBR   | 2011           | 49.09       | GRETHE BENDTSEN | DEN | 2010 |
| 38.17       | JUDY WILSON       | FRA | 2019 | 38.03        | GAIL ROPER       | USA   | 2009           | 49.10       | EVA JAROSOVA    | CZE | 2016 |
| 40.14       | CLARY MUNNS       | AUS | 2019 | 39.21        | JOHNNIE DETRICK  | USA   | 2016           | 49.77       | MAE WALDIE      | CAN | 2015 |
| 40.71       | JANE ASHER        | GBR | 2006 | 39.36        | FUSAKO HIROOKA   | JPN   | 2017           | 100 M. BACK |                 |     |      |
| 41.46       | CHRISTEL SCHULZ   | GER | 2018 | 40.24        | MITSUKO KOMURO   | JPN   | 2010           | 1:40.82     | YOSHIKO OSAKI   | JPN | 2019 |
| 42.23       | HISAKO KITAYAMA   | JPN | 2012 | 40.96        | FUMIKO NAKAMURA  | JPN   | 2018           | 1:44.88     | JANE ASHER      | GBR | 2011 |
| 42.44       | HARUMI SUGIMOTO   | JPN | 2013 | 41.10        | JUDIE OLIVER     | CAN   | 2014           | 1:45.08     | SHOKO YONEZAWA  | JPN | 2016 |
| 44.18       | GAIL ROPER        | USA | 2004 | 41.34        | MARGERIE MEYER   | USA   | 2002           | 1:45.29     | JUDIE OLIVER    | CAN | 2014 |
| 44.53       | JUDIE OLIVER      | CAN | 2007 | 41.40        | CHIE TANI        | JPN   | 2007           | 1:45.36     | EVA JAROSOVA    | CZE | 2016 |
| 44.77       | KIYOKO YONEDA     | JPN | 2017 | 100 M. FREE  |                  |       |                | 1:46.03     | HELEN BIRD      | AUS | 2017 |
| 45.00       | MARCELA STASTNA   | CZE | 2013 | 1:21.29      | YOSHIKO OSAKI    | JPN   | 2018           | 1:48.87     | UTE REMENYI     | AUT | 2019 |
| 100 M. FLY  |                   |     |      | 1:23.46      | JANE ASHER       | GBR   | 2011           | 1:49.44     | MARCELA STASTNA | CZE | 2017 |
| 1:30.03     | JUDY WILSON       | FRA | 2019 | 1:26.23      | GAIL ROPER       | USA   | 2009           | 1:49.83     | JOAN PARNELL    | CAN | 2008 |
| 1:40.06     | CLARY MUNNS       | AUS | 2019 | 1:32.76      | JOHNNIE DETRICK  | USA   | 2016           | 1:50.61     | BETTY LORENZI   | USA | 2007 |
| 1:44.35     | JUDIE OLIVER      | CAN | 2007 | 1:33.15      | LINDA MACPHERSON | CAN   | 2018           | 200 M. BACK |                 |     |      |
| 1:44.90     | YOSHIKO OSAKI     | JPN | 2013 | 1:33.19      | DENISE ROBERTSON | AUS   | 2015           | 3:35.28     | YOSHIKO OSAKI   | JPN | 2018 |
| 1:45.10     | JANE ASHER        | GBR | 2006 | 1:33.88      | JEAN TROY        | USA   | 2007           | 3:42.88     | JANE ASHER      | GBR | 2011 |
| 1:46.04     | DANIELA BARNEA    | USA | 2019 | 1:34.45      | MARGERIE MEYER   | USA   | 2002           | 3:48.35     | EVA JAROSOVA    | CZE | 2016 |
| 1:46.98     | HELGA REICH       | GER | 2011 | 1:34.59      | M. CUNNINGHAM    | AUS   | 2005           | 3:49.32     | JUDIE OLIVER    | CAN | 2014 |
| 1:47.96     | DIANE FORD        | GBR | 2019 | 1:35.16      | SANTA JAARSVELD  | RSA   | 2017           | 3:49.97     | UTE REMENYI     | AUT | 2019 |
| 1:49.36     | GAIL ROPER        | USA | 2005 | 200 M. FREE  |                  |       |                | 3:59.15     | NANCY KINNEY    | USA | 2009 |
| 1:49.50     | MARY ANN CASE     | USA | 2015 | 3:00.43      | YOSHIKO OSAKI    | JPN   | 2018           | 4:01.53     | HISAKO KITAYAMA | JPN | 2018 |
| 200 M. FLY  |                   |     |      | 3:01.61      | JANE ASHER       | GBR   | 2011           | 4:02.04     | MARGIT JEBO     | USA | 2018 |
| 3:34.50     | CLARY MUNNS       | AUS | 2019 | 3:18.57      | GAIL ROPER       | USA   | 2009           | 4:02.26     | HARUMI SUGIMOTO | JPN | 2018 |
| 3:57.22     | DANIELA BARNEA    | USA | 2019 | 3:21.74      | DENISE ROBERTSON | AUS   | 2015           | 4:07.13     | BETTY LORENZI   | USA | 2007 |
| 3:57.63     | HELGA REICH       | GER | 2012 | 3:22.05      | LINDA MACPHERSON | CAN   | 2018           | 50 M. BRST  |                 |     |      |
| 3:58.98     | LINDA MACPHERSON  | CAN | 2013 | 3:25.56      | ANNE H WILLIAMS  | USA   | 2019           | 46.48       | SHOKO YONEZAWA  | JPN | 2015 |
| 4:00.46     | JUDIE OLIVER      | CAN | 2007 | 3:26.52      | JEAN TROY        | USA   | 2007           | 48.46       | ELIANE PELLIS   | BEL | 2013 |
| 4:06.06     | JANE ASHER        | GBR | 2006 | 3:27.10      | HELGA REICH      | GER   | 2017           | 49.26       | LUISE KNOPFLE   | GER | 2019 |
| 4:08.39     | LOIS KIVI NOCHMAN | USA | 1999 | 3:27.57      | MARGERIE MEYER   | USA   | 2002           | 49.35       | A.VAN OBBERGHEN | BEL | 2011 |
| 4:08.54     | SEIKO HASEBE      | JPN | 2019 | 3:28.59      | URSULA FROHLICH  | GER   | 2015           | 50.48       | SATOKO SUZUKI   | JPN | 2003 |
| 4:09.28     | GAIL ROPER        | USA | 2004 | 400 M. FREE  |                  |       |                | 50.49       | JOANN LEILICH   | USA | 2019 |
| 4:12.50     | JUNE KRAUSER      | USA | 2001 | 6:23.17      | YOSHIKO OSAKI    | JPN   | 2019           | 50.73       | MASAYO AZUMA    | JPN | 2015 |
| 100 M. I.M. |                   |     |      | 6:34.92      | JANE ASHER       | GBR   | 2011           | 50.81       | TAYO FUJIEDA    | JPN | 2018 |
| 1:27.96     | CLARY MUNNS       | AUS | 2019 | 6:57.02      | DENISE ROBERTSON | AUS   | 2015           | 51.23       | GISELA GRUNER   | GER | 2016 |
| 1:31.38     | YOSHIKO OSAKI     | JPN | 2013 | 7:06.88      | LINDA MACPHERSON | CAN   | 2018           | 51.34       | EDITH BOHM      | GER | 2008 |
| 1:31.62     | SHOKO YONEZAWA    | JPN | 2010 | 7:20.91      | URSULA FROHLICH  | GER   | 2017           | 100 M. BRST |                 |     |      |
| 1:32.92     | JANE ASHER        | GBR | 2006 | 7:20.94      | HELGA REICH      | GER   | 2018           | 1:45.52     | SHOKO YONEZAWA  | JPN | 2015 |
| 1:33.86     | CHRISTEL SCHULZ   | GER | 2015 | 7:20.96      | JEAN TROY        | USA   | 2007           | 1:45.82     | LUISE KNOPFLE   | GER | 2019 |
| 1:38.11     | GAIL ROPER        | USA | 2004 | 7:22.51      | ANNE H WILLIAMS  | USA   | 2019           | 1:49.42     | TAYO FUJIEDA    | JPN | 2018 |
| 1:38.73     | JUDIE OLIVER      | CAN | 2007 | 7:22.68      | TAYO FUJIEDA     | JPN   | 2018           | 1:49.50     | MASAYO AZUMA    | JPN | 2017 |
| 1:38.99     | DANIELA BARNEA    | USA | 2019 | 7:22.84      | MARGERIE MEYER   | USA   | 2002           | 1:49.73     | A.VAN OBBERGHEN | BEL | 2011 |
| 1:39.45     | JEN THOMASSON     | AUS | 2018 | 800 M. FREE  |                  |       |                | 1:50.15     | JOANN LEILICH   | USA | 2019 |
| 1:41.71     | RENATE ZSCHOCKELT | GER | 2018 | 12:49.43     | JANE ASHER       | GBR   | 2011           | 1:53.56     | ANNE WILLIAMS   | USA | 2018 |
| 200 M. I.M. |                   |     |      | 14:12.49     | DENISE ROBERTSON | AUS   | 2015           | 1:54.30     | SATOKO SUZUKI   | JPN | 2003 |
| 3:16.79     | CLARY MUNNS       | AUS | 2019 | 14:39.56     | LINDA MACPHERSON | CAN   | 2018           | 1:55.24     | SANTA JAARSVELD | RSA | 2017 |
| 3:22.23     | YOSHIKO OSAKI     | JPN | 2013 | 14:56.40     | ANNE H WILLIAMS  | USA   | 2019           | 1:57.31     | ANN HIRSCH      | USA | 2011 |
| 3:30.27     | CHRISTEL SCHULZ   | GER | 2015 | 15:12.35     | JEAN TROY        | USA   | 2007           | 200 M. BRST |                 |     |      |
| 3:31.20     | JANE ASHER        | GBR | 2006 | 15:12.42     | URSULA FROHLICH  | GER   | 2016           | 3:54.35     | SHOKO YONEZAWA  | JPN | 2016 |
| 3:34.05     | DANIELA BARNEA    | USA | 2019 | 15:19.18     | TAYO FUJIEDA     | JPN   | 2019           | 3:57.78     | MASAYO AZUMA    | JPN | 2016 |
| 3:35.06     | JUDIE OLIVER      | CAN | 2007 | 15:24.58     | JUDIE OLIVER     | CAN   | 2013           | 4:00.52     | A.VAN OBBERGHEN | BEL | 2011 |
| 3:37.24     | GAIL ROPER        | USA | 2005 | 15:30.51     | MARGERIE MEYER   | USA   | 2005           | 4:01.34     | JOANN LEILICH   | USA | 2019 |
| 3:40.89     | JOANN LEILICH     | USA | 2015 | 15:31.74     | NAN BOHL         | USA   | 2011           | 4:02.76     | ANNE WILLIAMS   | USA | 2018 |
| 3:43.58     | JUNE KRAUSER      | USA | 2001 | 1500 M. FREE |                  |       |                | 4:03.73     | TAYO FUJIEDA    | JPN | 2018 |
| 3:45.86     | MARCELA STASTNA   | CZE | 2012 | 25:45.37     | JANE ASHER       | GBR   | 2011           | 4:06.13     | SANTA JAARSVELD | RSA | 2017 |
| 400 M. I.M. |                   |     |      | 28:05.55     | LINDA MACPHERSON | CAN   | 2019           | 4:10.42     | JUDIE OLIVER    | CAN | 2012 |
| 7:10.09     | CLARY MUNNS       | AUS | 2019 | 28:07.36     | ANNE H WILLIAMS  | USA   | 2019           | 4:12.33     | JANE ASHER      | GBR | 2011 |
| 7:11.33     | YOSHIKO OSAKI     | JPN | 2013 | 28:22.75     | DENISE ROBERTSON | AUS   | 2016           | 4:16.16     | ANN HIRSCH      | USA | 2011 |
| 7:34.39     | JANE ASHER        | GBR | 2006 | 28:55.09     | JEAN TROY        | USA   | 2007           | 50 M. FLY   |                 |     |      |
| 7:39.96     | JUDIE OLIVER      | CAN | 2007 | 28:57.32     | URSULA FROHLICH  | GER   | 2016           | 45.57       | JANE ASHER      | GBR | 2011 |
| 7:42.05     | DANIELA BARNEA    | USA | 2019 | 29:34.22     | DOROTHY DICKEY   | AUS   | 2010           | 46.90       | JUDIE OLIVER    | CAN | 2012 |
| 7:52.71     | JUNE KRAUSER      | USA | 2001 | 29:39.08     | MARGERIE MEYER   | USA   | 2002           | 48.77       | LUISE KNOPFLE   | GER | 2019 |
| 7:59.77     | NANCY BROWN       | USA | 2011 | 29:48.75     | RITA SIMONTON    | USA   | 1998           | 48.79       | FUMIKO NAKAMURA | JPN | 2018 |
| 8:05.23     | GAIL ROPER        | USA | 2006 | 30:15.00     | JUDIE OLIVER     | CAN   | 2013           | 48.85       | GAIL ROPER      | USA | 2009 |
| 8:16.68     | SUE MAYNE         | AUS | 2011 | 50 M. BACK   |                  |       |                | 49.44       | MARCELA STASTNA | CZE | 2017 |
| 8:19.88     | SEIKO HASEBE      | JPN | 2019 | 45.24        | YOSHIKO OSAKI    | JPN   | 2018           | 49.49       | HISAKO KITAYAMA | JPN | 2018 |
|             |                   |     |      | 46.10        | JANE ASHER       | GBR   | 2011           | 49.74       | SHOKO YAMADA    | JPN | 2018 |
|             |                   |     |      | 46.29        | SHOKO YONEZAWA   | JPN   | 2016           | 51.69       | HARUMI SUGIMOTO | JPN | 2018 |
|             |                   |     |      | 46.51        | HELEN BIRD       | AUS   | 2017           | 54.38       | HELI PAALOSALO  | FIN | 2019 |
|             |                   |     |      | 47.63        | JUDIE OLIVER     | CAN   | 2014           | 100 M. FLY  |                 |     |      |
| *****       |                   |     |      |              |                  |       |                |             |                 |     |      |
| WOMEN 80-84 |                   |     |      |              |                  |       |                |             |                 |     |      |
| *****       |                   |     |      |              |                  |       |                |             |                 |     |      |

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WOMEN 80-84  
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# FINA WORLD MASTERS TOP 10 - SHORT COURSE METERS - ALL TIME (1986-2019)

|             |                   |     |      |              |                   |     |      |             |                   |     |      |
|-------------|-------------------|-----|------|--------------|-------------------|-----|------|-------------|-------------------|-----|------|
| 1:50.08     | JUDIE OLIVER      | CAN | 2012 | 1:44.91      | NAN BOHL          | USA | 2014 | 2:10.33     | BUNNY CEDERLUND   | USA | 2006 |
| 1:56.74     | MARCELA STASTNA   | CZE | 2017 | 1:45.51      | JUDIE OLIVER      | CAN | 2017 | 2:11.03     | WILLY VAN RYSEL   | GBR | 2001 |
| 1:58.02     | GAIL ROPER        | USA | 2009 | 1:46.44      | DOROTHY DICKEY    | AUS | 2015 | 200 M. BACK |                   |     |      |
| 1:59.41     | JANE ASHER        | GBR | 2011 | 1:46.95      | MARGERIE MEYER    | USA | 2008 | 3:48.62     | KATHARINA FLORA   | HUN | 2019 |
| 1:59.67     | SHOKO YAMADA      | JPN | 2019 | 1:47.73      | BETTY LORENZI     | USA | 2012 | 3:57.91     | JANE ASHER        | GBR | 2016 |
| 2:02.63     | LOIS KIVI NOCHMAN | USA | 2004 | 1:48.36      | ELIANE PELLIS     | BEL | 2018 | 4:05.00     | BETTY LORENZI     | USA | 2014 |
| 2:09.74     | FUMIKO NAKAMURA   | JPN | 2018 | 1:48.44      | MIEKO KAMOSHITA   | JPN | 2012 | 4:18.50     | EDITH THEIN       | ISR | 2003 |
| 2:13.07     | DENISE ROBERTSON  | AUS | 2015 | 1:48.55      | OLGA JOHNSON      | NZL | 2006 | 4:20.14     | JUDIE OLIVER      | CAN | 2018 |
| 2:14.51     | CHIE TANI         | JPN | 2007 | 200 M. FREE  |                   |     |      | 4:29.09     | NANCY KINNEY      | USA | 2015 |
| 2:14.52     | KYOKO DEJIMA      | JPN | 2017 | 3:12.66      | JANE ASHER        | GBR | 2016 | 4:31.92     | KERSTIN GJORES    | SWE | 2012 |
| 200 M. FLY  |                   |     |      | 3:49.35      | JEAN TROY         | USA | 2012 | 4:34.10     | AIKO GOTO         | JPN | 2016 |
| 4:10.18     | JUDIE OLIVER      | CAN | 2012 | 3:50.49      | DOROTHY DICKEY    | AUS | 2015 | 4:36.48     | BUNNY CEDERLUND   | USA | 2006 |
| 4:31.97     | LOIS KIVI NOCHMAN | USA | 2005 | 3:54.18      | MARGERIE MEYER    | USA | 2007 | 4:38.83     | KIMIKO OOKA       | JPN | 2014 |
| 4:54.54     | BETTY RUSS        | USA | 2008 | 3:57.48      | RITA SIMONTON     | USA | 2003 | 50 M. BRST  |                   |     |      |
| 5:20.76     | Y.KAPLAN-BADER    | FRA | 2010 | 4:01.13      | NAN BOHL          | USA | 2014 | 52.17       | AGNES OBBERGHEN   | BEL | 2016 |
| 5:22.65     | MAXINE O MERLINO  | USA | 1992 | 4:03.08      | ELIANE PELLIS     | BEL | 2018 | 55.33       | ELIANE PELLIS     | BEL | 2018 |
| 5:24.06     | JAE HOWELL        | USA | 2002 | 4:04.35      | BETTY LORENZI     | USA | 2012 | 58.27       | JANE ASHER        | GBR | 2016 |
| 5:27.00     | JEAN DURSTON      | USA | 1997 | 4:04.48      | JUDIE OLIVER      | CAN | 2018 | 59.00       | M.KAPCAROVA       | SVK | 2013 |
| 5:29.14     | THELMA BRYAN      | AUS | 2010 | 4:05.78      | G. MCKENZIE-HICKS | AUS | 2012 | 1:00.27     | SYLVIA EISELE     | CAN | 2014 |
| 5:38.21     | NADIR TAUBERT     | BRA | 2013 | 400 M. FREE  |                   |     |      | 1:00.45     | ETSUKO KIMURA     | JPN | 2014 |
| 5:39.29     | DOROTHY WESTON    | GBR | 1996 | 6:57.06      | JANE ASHER        | GBR | 2016 | 1:00.56     | SATOKO SUZUKI     | JPN | 2008 |
| 100 M. I.M. |                   |     |      | 7:58.41      | MARGERIE MEYER    | USA | 2008 | 1:02.09     | OLGA KOKORINA     | RUS | 2012 |
| 1:36.03     | YOSHIKO OSAKI     | JPN | 2019 | 8:03.09      | JEAN TROY         | USA | 2012 | 1:02.52     | NAN BOHL          | USA | 2014 |
| 1:41.14     | SHOKO YONEZAWA    | JPN | 2015 | 8:03.71      | DOROTHY DICKEY    | AUS | 2015 | 1:02.92     | KIMIE KANAI       | JPN | 2009 |
| 1:42.46     | JANE ASHER        | GBR | 2011 | 8:17.82      | RITA SIMONTON     | USA | 2003 | 100 M. BRST |                   |     |      |
| 1:43.51     | JUDIE OLIVER      | CAN | 2013 | 8:19.75      | NAN BOHL          | USA | 2014 | 1:56.68     | AGNES OBBERGHEN   | BEL | 2016 |
| 1:44.95     | GAIL ROPER        | USA | 2009 | 8:31.16      | AIKO HORII        | JPN | 2015 | 2:03.78     | ELIANE PELLIS     | BEL | 2018 |
| 1:48.18     | TAYO FUJIEDA      | JPN | 2019 | 8:33.51      | ELIANE PELLIS     | BEL | 2018 | 2:08.05     | JANE ASHER        | GBR | 2017 |
| 1:49.26     | ITSUKO KOMURO     | JPN | 2010 | 8:39.86      | BETTY RUSS        | USA | 2012 | 2:11.98     | SATOKO SUZUKI     | JPN | 2009 |
| 1:49.30     | MARCELA STASTNA   | CZE | 2017 | 8:41.32      | JUDIE OLIVER      | CAN | 2018 | 2:15.32     | JUDIE OLIVER      | CAN | 2018 |
| 1:53.11     | HELI PAALOSALO    | FIN | 2018 | 800 M. FREE  |                   |     |      | 2:17.21     | ETSUKO KIMURA     | JPN | 2014 |
| 1:53.69     | ANNE H WILLIAMS   | USA | 2019 | 14:24.83     | JANE ASHER        | GBR | 2016 | 2:18.42     | OLGA KOKORINA     | RUS | 2012 |
| 200 M. I.M. |                   |     |      | 16:23.22     | DOROTHY DICKEY    | AUS | 2015 | 2:21.06     | SYLVIA EISELE     | CAN | 2014 |
| 3:43.73     | JANE ASHER        | GBR | 2011 | 16:25.24     | BETTY LORENZI     | USA | 2012 | 2:21.70     | NADIR TAUBERT     | BRA | 2018 |
| 3:47.29     | JUDIE OLIVER      | CAN | 2012 | 16:37.49     | NAN BOHL          | USA | 2014 | 2:22.83     | NAN BOHL          | USA | 2015 |
| 3:55.51     | GAIL ROPER        | USA | 2009 | 16:49.43     | RITA SIMONTON     | USA | 2003 | 200 M. BRST |                   |     |      |
| 4:06.69     | TAYO FUJIEDA      | JPN | 2019 | 17:36.42     | AIKO HORII        | JPN | 2015 | 4:38.73     | JANE ASHER        | GBR | 2016 |
| 4:07.37     | URSULA FROHLICH   | GER | 2015 | 18:02.38     | MAURINE KORNFIELD | USA | 2007 | 4:55.91     | JUDIE OLIVER      | CAN | 2018 |
| 4:07.66     | JEAN TROY         | USA | 2007 | 18:03.40     | YOSHIKO KINOSHITA | JPN | 2016 | 5:09.65     | DOROTHY WILLIAMS  | GBR | 2008 |
| 4:11.26     | SUE MAYNE         | AUS | 2016 | 18:14.96     | ELSA DE LEEUW     | CAN | 2009 | 5:10.70     | NORIKO KIMURA     | JPN | 2018 |
| 4:11.71     | MARCELA STASTNA   | CZE | 2017 | 18:15.27     | BETTY RUSS        | USA | 2012 | 5:10.89     | ETSUKO KIMURA     | JPN | 2014 |
| 4:15.95     | DENISE ROBERTSON  | AUS | 2015 | 1500 M. FREE |                   |     |      | 5:11.46     | NADIR TAUBERT     | BRA | 2018 |
| 4:16.31     | ITSUKO KOMURO     | JPN | 2010 | 28:02.25     | JANE ASHER        | GBR | 2016 | 5:13.19     | JEAN TROY         | USA | 2012 |
| 400 M. I.M. |                   |     |      | 30:50.51     | BETTY LORENZI     | USA | 2012 | 5:15.45     | OLGA KOKORINA     | RUS | 2012 |
| 8:04.67     | JUDIE OLIVER      | CAN | 2012 | 31:44.50     | RITA SIMONTON     | USA | 2003 | 5:17.95     | SYLVIA EISELE     | CAN | 2014 |
| 8:07.34     | JANE ASHER        | GBR | 2011 | 32:37.40     | DOROTHY DICKEY    | AUS | 2016 | 5:19.81     | NAN BOHL          | USA | 2015 |
| 8:39.68     | GAIL ROPER        | USA | 2009 | 33:03.30     | MARGERIE MEYER    | USA | 2007 | 50 M. FLY   |                   |     |      |
| 8:47.93     | URSULA FROHLICH   | GER | 2015 | 34:37.00     | AIKO HORII        | JPN | 2016 | 51.40       | JUDIE OLIVER      | CAN | 2017 |
| 9:01.89     | DENISE ROBERTSON  | AUS | 2015 | 34:52.73     | YOSHIKO KINOSHITA | JPN | 2016 | 51.60       | JANE ASHER        | GBR | 2017 |
| 9:16.45     | KAZU KOYAMA       | JPN | 2019 | 35:03.42     | BETTY RUSS        | USA | 2012 | 52.13       | K.FLORA-OROSZ     | HUN | 2019 |
| 9:29.36     | SUE MAYNE         | AUS | 2018 | 35:19.16     | EULAH VARTY       | CAN | 2019 | 1:02.04     | LOIS KIVI NOCHMAN | USA | 2009 |
| 9:30.65     | JEAN TROY         | USA | 2007 | 35:27.38     | ELIANE PELLIS     | BEL | 2019 | 1:06.92     | JEAN TROY         | USA | 2012 |
| 9:31.73     | LOIS KIVI NOCHMAN | USA | 2004 | 50 M. BACK   |                   |     |      | 1:07.35     | JEAN DURSTON      | USA | 1999 |
| 9:37.55     | BETTY RUSS        | USA | 2008 | 47.99        | KATHARINA FLORA   | HUN | 2019 | 1:07.98     | E.LOBSIGER        | ESP | 2016 |
| *****       |                   |     |      | 49.07        | JANE ASHER        | GBR | 2016 | 1:09.68     | Y.KAPLAN-BADER    | FRA | 2013 |
| *****       |                   |     |      | 51.75        | BETTY LORENZI     | USA | 2012 | 1:11.38     | MARIA LENK        | BRA | 2000 |
| *****       |                   |     |      | 55.49        | JUDIE OLIVER      | CAN | 2017 | 1:12.24     | EMIKO SEKINO      | JPN | 2015 |
| *****       |                   |     |      | 56.46        | KERSTIN GJORES    | SWE | 2012 | 100 M. FLY  |                   |     |      |
| *****       |                   |     |      | 57.36        | NANCY KINNEY      | USA | 2015 | 2:02.59     | JUDIE OLIVER      | CAN | 2017 |
| *****       |                   |     |      | 57.43        | KIMIKO OOKA       | JPN | 2014 | 2:21.77     | LOIS KIVI NOCHMAN | USA | 2009 |
| *****       |                   |     |      | 57.62        | BUNNY CEDERLUND   | USA | 2006 | 2:27.22     | BETTY RUSS        | USA | 2013 |
| *****       |                   |     |      | 58.02        | NOEL MORROW       | CAN | 2004 | 2:36.50     | JEAN DURSTON      | USA | 1999 |
| *****       |                   |     |      | 58.38        | MASA SHIGEMITSU   | JPN | 2000 | 2:37.57     | Y.KAPLAN-BADER    | FRA | 2013 |
| *****       |                   |     |      | 100 M. BACK  |                   |     |      | 2:51.00     | MAXINE MERLINO    | USA | 1998 |
| *****       |                   |     |      | 1:44.18      | KATHARINA FLORA   | HUN | 2019 | 2:59.36     | NADIR TAUBERT     | BRA | 2018 |
| *****       |                   |     |      | 1:50.18      | JANE ASHER        | GBR | 2016 | 2:59.72     | JUNE REYNOLDS     | USA | 2007 |
| *****       |                   |     |      | 1:52.21      | BETTY LORENZI     | USA | 2012 | 3:00.21     | HARUKO SASAKI     | JPN | 2018 |
| *****       |                   |     |      | 1:55.03      | JUDIE OLIVER      | CAN | 2017 | 3:02.94     | CHIYO FUKUSHIMA   | JPN | 2017 |
| *****       |                   |     |      | 2:05.64      | NANCY KINNEY      | USA | 2015 | 200 M. FLY  |                   |     |      |
| *****       |                   |     |      | 2:05.95      | KERSTIN GJORES    | SWE | 2012 | 4:40.42     | JUDIE OLIVER      | CAN | 2017 |
| *****       |                   |     |      | 2:06.16      | KIMIKO OOKA       | JPN | 2014 | 4:59.50     | LOIS KIVI NOCHMAN | USA | 2009 |
| *****       |                   |     |      | 2:10.25      | AIKO GOTO         | JPN | 2016 | 5:33.79     | BETTY RUSS        | USA | 2012 |



# FINA WORLD MASTERS TOP 10 - SHORT COURSE METERS - ALL TIME (1986-2019)

|             |                   |     |      |              |                   |     |      |             |                   |     |      |
|-------------|-------------------|-----|------|--------------|-------------------|-----|------|-------------|-------------------|-----|------|
| 5:42.80     | JEAN DURSTON      | USA | 1999 | 4:49.36      | HISAKO KOGA       | JPN | 2008 | 1:09.76     | ETSUKO KIMURA     | JPN | 2019 |
| 6:01.46     | MAXINE MERLINO    | USA | 1998 | 4:52.63      | ELSA DE LEEUW     | CAN | 2014 | 1:11.00     | INGEBORG FRITZE   | GER | 2011 |
| 6:04.28     | Y.KAPLAN-BADER    | FRA | 2014 | 4:58.52      | BETTY BRUSSEL     | CAN | 2014 | 1:15.48     | FUSAKO TOMINARI   | JPN | 2007 |
| 6:10.94     | NADIR TAUBERT     | BRA | 2018 | 5:01.10      | NAN BOHL          | USA | 2019 | 1:16.42     | NORA RONAI        | BRA | 2014 |
| 6:26.75     | JAE HOWELL        | USA | 2007 | 5:08.97      | CHIYOKO TAKIZAWA  | JPN | 2012 | 1:17.85     | JEAN TROY         | USA | 2017 |
| 6:41.13     | HARUKO SASAKI     | JPN | 2017 | 400 M. FREE  |                   |     |      | 1:18.38     | KALIS RASMUSSEN   | CAN | 2015 |
| 6:45.75     | JUNE REYNOLDS     | USA | 2007 | 9:01.89      | RITA SIMONTON     | USA | 2008 | 1:18.76     | BETTY BRUSSELS    | CAN | 2014 |
| 100 M. I.M. |                   |     |      | 9:21.61      | MAURINE KORNFELD  | USA | 2013 | 1:19.53     | MASAKO SHOJI      | JPN | 2019 |
| 1:47.02     | JANE ASHER        | GBR | 2016 | 9:36.25      | LIZ WALLIS        | AUS | 2017 | 1:19.92     | NAN BOHL          | USA | 2019 |
| 1:49.10     | KATHARINA FLORA   | HUN | 2019 | 10:01.56     | HISAKO KOGA       | JPN | 2007 | 100 M. BRST |                   |     |      |
| 1:55.76     | JUDIE OLIVER      | CAN | 2017 | 10:06.85     | BETTY BRUSSEL     | CAN | 2015 | 2:25.58     | OLGA KOKORINA     | RUS | 2013 |
| 2:08.06     | JEAN TROY         | USA | 2012 | 10:22.21     | NAN BOHL          | USA | 2019 | 2:35.96     | ETSUKO KIMURA     | JPN | 2019 |
| 2:12.85     | JEWEL COOKE       | USA | 1995 | 10:29.76     | WILLY VAN RYSEL   | GBR | 2006 | 2:46.46     | INGEBORG FRITZE   | GER | 2011 |
| 2:12.90     | AGNES KISS        | HUN | 2013 | 10:33.62     | ELSA DE LEEUW     | CAN | 2014 | 2:51.02     | JEAN TROY         | USA | 2017 |
| 2:13.69     | MARGERIE MEYER    | USA | 2008 | 10:45.34     | MAXINE MERLINO    | USA | 2002 | 3:00.44     | KALIS RASMUSSEN   | CAN | 2015 |
| 2:15.05     | KIMIKO OOKA       | JPN | 2014 | 11:10.67     | MARIA LENK        | BRA | 2005 | 3:01.08     | NAKA FUKUOKA      | JPN | 2014 |
| 2:15.23     | Y.KAPLAN-BADER    | FRA | 2014 | 800 M. FREE  |                   |     |      | 3:04.86     | DOROTHY WESTON    | GBR | 2003 |
| 2:16.95     | KIKUKO YAMADA     | JPN | 2019 | 18:38.69     | MAURINE KORNFELD  | USA | 2011 | 3:05.60     | MARIA LENK        | BRA | 2005 |
| 200 M. I.M. |                   |     |      | 18:38.98     | RITA SIMONTON     | USA | 2008 | 3:09.34     | NAN BOHL          | USA | 2019 |
| 3:57.27     | KATHARINA FLORA   | HUN | 2019 | 20:07.33     | BETTY BRUSSEL     | CAN | 2014 | 3:14.51     | BETTY BRUSSEL     | CAN | 2014 |
| 4:02.82     | JANE ASHER        | GBR | 2016 | 21:16.76     | WILLY VAN RYSEL   | GBR | 2006 | 200 M. BRST |                   |     |      |
| 4:06.22     | JUDIE OLIVER      | CAN | 2017 | 22:18.84     | MAXINE MERLINO    | USA | 2002 | 5:15.24     | OLGA KOKORINA     | RUS | 2013 |
| 4:48.96     | JEAN TROY         | USA | 2012 | 22:40.67     | FUMI MURATA       | JPN | 2014 | 5:42.43     | ETSUKO KIMURA     | JPN | 2019 |
| 4:59.06     | LOIS KIVI NOCHMAN | USA | 2009 | 22:57.60     | VALERIE LINCOLN   | AUS | 2015 | 6:31.21     | INGEBORG FRITZE   | GER | 2011 |
| 5:04.14     | Y.KAPLAN-BADER    | FRA | 2013 | 23:17.55     | KALIS RASMUSSEN   | CAN | 2015 | 6:37.73     | MARIA LENK        | BRA | 2005 |
| 5:09.92     | MARIA LENK        | BRA | 2000 | 25:03.34     | MARIA LENK        | BRA | 2007 | 6:45.18     | KALIS RASMUSSEN   | CAN | 2014 |
| 5:12.01     | JEAN DURSTON      | USA | 1999 | 25:12.44     | KATH JOHNSTONE    | NZL | 2007 | 6:59.08     | BETTY BRUSSEL     | CAN | 2016 |
| 5:12.13     | MAXINE MERLINO    | USA | 1998 | 1500 M. FREE |                   |     |      | 7:06.04     | BARBARA BOHM      | GER | 2010 |
| 5:21.34     | E.LOBSIGER        | ESP | 2016 | 35:40.38     | RITA SIMONTON     | USA | 2008 | 7:18.26     | NAN BOHL          | USA | 2019 |
| 400 M. I.M. |                   |     |      | 41:20.62     | WILLY VAN RYSEL   | GBR | 2006 | 7:20.16     | MIRIAM TUOVILA    | USA | 2015 |
| 8:42.45     | JUDIE OLIVER      | CAN | 2017 | 41:59.32     | FUMI MURATA       | JPN | 2013 | 7:56.76     | CHARLOTTE SANDDAL | USA | 2012 |
| 10:13.73    | JEAN TROY         | USA | 2012 | 44:27.18     | MAXINE MERLINO    | USA | 2002 | 50 M. FLY   |                   |     |      |
| 10:28.05    | LOIS KIVI NOCHMAN | USA | 2009 | 45:12.58     | KALIS RASMUSSEN   | CAN | 2015 | 1:21.95     | CHARLOTTE SANDDAL | USA | 2012 |
| 10:39.21    | Y.KAPLAN-BADER    | FRA | 2014 | 48:36.59     | KATH JOHNSTONE    | NZL | 2007 | 1:25.65     | NORA RONAI        | BRA | 2014 |
| 10:55.73    | JEAN DURSTON      | USA | 1999 | 50:36.15     | LILLIAN WARREN    | CAN | 2010 | 1:25.90     | EMIKO SEKINO      | JPN | 2019 |
| 11:02.02    | MAXINE MERLINO    | USA | 1998 | 53:29.69     | CHARLOTTE SANDDAL | USA | 2015 | 1:30.41     | RITA SIMONTON     | USA | 2008 |
| 11:16.04    | BETTY RUSS        | USA | 2015 | 53:43.25     | GUDRUN KLOOS      | RSA | 2015 | 1:34.61     | DOROTHY WESTON    | GBR | 2003 |
| 11:51.00    | KALIS RASMUSSEN   | CAN | 2009 | 50 M. BACK   |                   |     |      | 1:35.56     | MAXINE MERLINO    | USA | 2002 |
| 12:04.38    | NADIR TAUBERT     | BRA | 2019 | 56.84        | BETTY LORENZI     | USA | 2017 | 1:48.46     | MARIE KELLEHER    | USA | 2006 |
| 12:24.66    | JAE HOWELL        | USA | 2007 | 1:04.17      | KERSTIN GJORES    | SWE | 2017 | 1:49.08     | JEWEL COOKE       | USA | 2000 |
| *****       |                   |     |      | 1:05.45      | LIZ WALLIS        | AUS | 2017 | 1:53.34     | KALIS RASMUSSEN   | CAN | 2014 |
| *****       |                   |     |      | 1:05.70      | WILLY VAN RYSEL   | GBR | 2006 | 1:54.97     | MAURINE KORNFELD  | USA | 2013 |
| *****       |                   |     |      | 1:06.29      | KALIS RASMUSSEN   | CAN | 2014 | 100 M. FLY  |                   |     |      |
| *****       |                   |     |      | 1:06.44      | NANCY KINNEY      | USA | 2019 | 3:21.00     | DOROTHY WESTON    | GBR | 2003 |
| *****       |                   |     |      | 1:08.16      | NOEL MORROW       | CAN | 2009 | 3:45.69     | NORA RONAI        | BRA | 2014 |
| *****       |                   |     |      | 1:09.37      | HANA ENATSU       | JPN | 2013 | 4:06.32     | JEWELL COOK       | USA | 1999 |
| *****       |                   |     |      | 1:11.96      | AGNES KIS         | HUN | 2017 | 5:02.23     | CHARLOTTE SANDDAL | USA | 2016 |
| *****       |                   |     |      | 1:12.15      | MAURINE KORNFELD  | USA | 2011 | 200 M. FLY  |                   |     |      |
| *****       |                   |     |      | 100 M. BACK  |                   |     |      | 9:17.02     | NORA RONAI        | BRA | 2014 |
| *****       |                   |     |      | 2:04.90      | BETTY LORENZI     | USA | 2017 | 100 M. I.M. |                   |     |      |
| *****       |                   |     |      | 2:24.46      | PERSIS RAE        | AUS | 2010 | 2:22.96     | OLGA KOKORINA     | RUS | 2013 |
| *****       |                   |     |      | 2:26.64      | WILLY VAN RYSEL   | GBR | 2006 | 2:34.39     | JEAN TROY         | USA | 2017 |
| *****       |                   |     |      | 2:29.86      | HANA ENATSU       | JPN | 2013 | 2:51.20     | RITA SIMONTON     | USA | 2008 |
| *****       |                   |     |      | 2:30.57      | KALIS RASMUSSEN   | CAN | 2015 | 2:53.56     | NORA RONAI        | BRA | 2014 |
| *****       |                   |     |      | 2:32.24      | RITA SIMONTON     | USA | 2010 | 2:55.03     | AGNES KISS        | HUN | 2018 |
| *****       |                   |     |      | 2:33.82      | NOEL MORROW       | CAN | 2009 | 2:58.00     | NAN BOHL          | USA | 2019 |
| *****       |                   |     |      | 2:34.81      | MAURINE KORNFELD  | USA | 2011 | 3:00.91     | KALIS RASMUSSEN   | CAN | 2014 |
| *****       |                   |     |      | 2:36.08      | HIDEKO HANADA     | JPN | 2009 | 3:06.08     | DOROTHY WESTON    | GBR | 2003 |
| *****       |                   |     |      | 2:39.15      | LIZ WALLIS        | AUS | 2019 | 3:06.87     | MAXINE MERLINO    | USA | 2004 |
| *****       |                   |     |      | 200 M. BACK  |                   |     |      | 3:08.12     | MAURINE KORNFELD  | USA | 2011 |
| *****       |                   |     |      | 4:24.90      | BETTY LORENZI     | USA | 2017 | 200 M. I.M. |                   |     |      |
| *****       |                   |     |      | 4:57.77      | PERSIS RAE        | AUS | 2010 | 5:40.20     | JEAN TROY         | USA | 2017 |
| *****       |                   |     |      | 5:02.82      | WILLY VAN RYSEL   | GBR | 2006 | 5:58.46     | RITA SIMONTON     | USA | 2008 |
| *****       |                   |     |      | 5:23.16      | NANCY KINNEY      | USA | 2019 | 6:25.12     | MAXINE MERLINO    | USA | 2003 |
| *****       |                   |     |      | 5:24.31      | MAURINE KORNFELD  | USA | 2014 | 6:56.70     | JEWEL COOKE       | USA | 1999 |
| *****       |                   |     |      | 5:29.42      | HIDEKO HANADA     | JPN | 2009 | 7:00.01     | KALIS RASMUSSEN   | CAN | 2015 |
| *****       |                   |     |      | 5:29.45      | LIZ WALLIS        | AUS | 2018 | 7:16.26     | CHARLOTTE SANDDAL | USA | 2012 |
| *****       |                   |     |      | 5:30.54      | KIMIKO OOKA       | JPN | 2019 | 7:40.70     | YOSHIE HASEGAWA   | JPN | 2015 |
| *****       |                   |     |      | 5:33.60      | KALIS RASMUSSEN   | CAN | 2014 | 10:46.88    | GERDA VOSS        | CAN | 2009 |
| *****       |                   |     |      | 5:44.73      | TRUDY BULLIVANT   | AUS | 2012 | 11:57.44    | HILDA BUEL        | USA | 2004 |
| *****       |                   |     |      | 50 M. BRST   |                   |     |      | 400 M. I.M. |                   |     |      |
| *****       |                   |     |      | 1:02.33      | OLGA KOKORINA     | RUS | 2013 | 13:55.37    | NORA RONAI        | BRA | 2014 |



# FINA WORLD MASTERS TOP 10 - SHORT COURSE METERS - ALL TIME (1986-2019)

|          |                   |     |      |              |                   |             |      |              |                   |     |      |
|----------|-------------------|-----|------|--------------|-------------------|-------------|------|--------------|-------------------|-----|------|
| 14:55.37 | JEWEL COOKE       | USA | 1999 | 2:55.44      | MIEKO NAGAOKA     | JPN         | 2009 | 22.08        | DARIAN TOWNSEND   | USA | 2013 |
|          |                   |     |      | 2:59.71      | RITA SIMONTON     | USA         | 2014 | 22.14        | RUNAR BORGREN     | USA | 2018 |
| *****    |                   |     |      | 3:25.37      | EDITH HENDRY      | USA         | 2006 | 22.18        | RYO ISHII         | JPN | 2018 |
|          | WOMEN 95-99       |     |      | 3:35.93      | VALERIE LINCOLN   | AUS         | 2019 | 22.25        | SERGEY MUKHIN     | RUS | 2013 |
| *****    |                   |     |      | 3:46.03      | LAURA OLIVEIRA    | BRA         | 2014 | 22.29        | DREW MODROV       | USA | 2018 |
|          | 50 M. FREE        |     |      | 3:54.50      | CHARLOTTE SANDDAL | USA         | 2019 | 22.35        | MARTIN HAMMER     | USA | 2018 |
| 1:04.68  | MAURINE KORNFELD  | USA | 2016 | 200 M. BACK  |                   |             |      | 22.36        | DANIEL BELINI     | BRA | 2009 |
| 1:06.82  | BETTY BRUSSEL     | CAN | 2019 | 5:42.83      | KALLIS RASMUSSEN  | CAN         | 2019 | 22.37        | ALEXANDER SMITH   | GBR | 2017 |
| 1:07.27  | NORA KUTTI        | EST | 2017 | 5:50.15      | MAURINE KORNFELD  | USA         | 2017 | 22.37        | RENATO GUERARDI   | BRA | 2009 |
| 1:13.87  | SHIZUE SHIMIZU    | JPN | 2006 | 6:24.50      | MIEKO NAGAOKA     | JPN         | 2009 | 100 M. FREE  |                   |     |      |
| 1:20.91  | KIKUE ISHII       | JPN | 2017 | 7:36.62      | EDITH HENDRY      | USA         | 2006 | 47.43        | CESAR CIELO       | USA | 2014 |
| 1:21.48  | LAURA OLIVEIRA    | BRA | 2014 | 7:53.59      | VALERIE LINCOLN   | AUS         | 2019 | 48.19        | NIKITA LOBINTSEV  | USA | 2017 |
| 1:21.93  | MIEKO NAGAOKA     | JPN | 2009 | 9:20.51      | BERNARDA ANGULO   | ESP         | 2008 | 48.29        | DARIAN TOWNSEND   | USA | 2013 |
| 1:23.34  | SUGAKO KUWAYAMA   | JPN | 2019 | 9:37.39      | ROSA SELLARES     | ESP         | 2005 | 48.32        | ADAM RITTER       | USA | 2014 |
| 1:24.92  | YOSHIKO WATANABE  | JPN | 2012 | 11:55.69     | MARGO BATES       | AUS         | 2007 | 48.58        | S.KUNZELMANN      | GER | 2005 |
| 1:26.91  | INGEBORG FRITZE   | GER | 2016 | 50 M. BRST   |                   |             |      | 48.93        | DREW MODROV       | USA | 2017 |
|          | 100 M. FREE       |     |      | 1:32.51      | KALLIS RASMUSSEN  | CAN         | 2019 | 49.58        | ANDREW MANLEY     | GBR | 2003 |
| 2:16.63  | MAURINE KORNFELD  | USA | 2017 | 1:36.37      | BETTY BRUSSEL     | CAN         | 2019 | 49.60        | KOSUKE MAEDA      | JPN | 2015 |
| 2:25.65  | BETTY BRUSSEL     | CAN | 2019 | 1:42.55      | NAKA FUKUOKA      | JPN         | 2018 | 49.60        | DANIEL BELINI     | BRA | 2009 |
| 2:59.01  | MIEKO NAGAOKA     | JPN | 2010 | 1:50.07      | LAURA OLIVEIRA    | BRA         | 2014 | 49.65        | SASHA BARTOLO     | ITA | 2019 |
| 3:00.03  | VALERIE LINCOLN   | AUS | 2019 | 2:05.63      | CHARLOTTE SANDDAL | USA         | 2018 | 200 M. FREE  |                   |     |      |
| 3:10.36  | MARIE KELLEHER    | USA | 2008 | 2:25.20      | MIEKO NAGAOKA     | JPN         | 2010 | 1:44.90      | DARIAN TOWNSEND   | USA | 2013 |
| 3:26.81  | LAURA OLIVEIRA    | BRA | 2014 | 2:54.04      | KATH JOHNSTONE    | NZL         | 2014 | 1:46.52      | ADAM RITTER       | USA | 2013 |
| 3:28.31  | CHARLOTTE SANDDAL | USA | 2018 | 3:28.94      | MICHIKO HAMURO    | JPN         | 2014 | 1:48.81      | JOHN KEPPELER     | USA | 1995 |
| 3:43.58  | MICHELE GUILLAIS  | FRA | 2016 | 100 M. BRST  |                   |             |      | 1:49.30      | DREW MODROV       | USA | 2018 |
| 4:04.76  | KATH JOHNSTONE    | NZL | 2013 | 3:42.93      | NAKA FUKUOKA      | JPN         | 2018 | 1:49.51      | DAVID ALCOLADO    | ESP | 2018 |
| 4:25.97  | BERNARDA ANGULO   | ESP | 2008 | 3:52.50      | BETTY BRUSSEL     | CAN         | 2019 | 1:49.59      | MASATAKA MISHIMA  | JPN | 2018 |
|          | 200 M. FREE       |     |      | 4:28.42      | CHARLOTTE SANDDAL | USA         | 2018 | 1:49.94      | ANDREW MANLEY     | GBR | 2003 |
| 4:56.12  | MAURINE KORNFELD  | USA | 2017 | 200 M. BRST  |                   |             |      | 1:50.01      | KOSUKE MAEDA      | JPN | 2014 |
| 5:09.24  | BETTY BRUSSEL     | CAN | 2019 | 7:22.30      | KALLIS RASMUSSEN  | CAN         | 2019 | 1:50.19      | SYLVAIN CROS      | FRA | 2007 |
| 5:25.74  | RITA SIMONTON     | USA | 2013 | 8:27.91      | BETTY BRUSSEL     | CAN         | 2019 | 1:50.33      | SASHA BARTOLO     | ITA | 2019 |
| 6:17.47  | MIEKO NAGAOKA     | JPN | 2009 | 9:20.70      | CHARLOTTE SANDDAL | USA         | 2018 | 400 M. FREE  |                   |     |      |
| 6:18.94  | VALERIE LINCOLN   | AUS | 2019 | 50 M. FLY    |                   |             |      | 3:52.83      | DREW MODROV       | USA | 2018 |
| 6:50.52  | MARIE KELLEHER    | USA | 2008 | 2:12.78      | MAURINE KORNFELD  | USA         | 2017 | 3:53.60      | SYLVAIN CROS      | FRA | 2007 |
| 8:13.16  | LAURA OLIVEIRA    | BRA | 2014 | 2:21.86      | CHARLOTTE SANDDAL | USA         | 2018 | 3:55.84      | LUCA PUCE         | ITA | 2014 |
| 8:43.79  | CHARLOTTE SANDDAL | USA | 2019 | 100 M. I.M.  |                   |             |      | 3:56.53      | A.ANGELOTTI       | BRA | 2001 |
| 9:26.22  | BERNARDA ANGULO   | ESP | 2009 | 3:32.13      | MAURINE KORNFELD  | USA         | 2016 | 3:56.60      | MARTIN HOHL       | SUI | 2009 |
| 9:32.52  | ROSA SELLARES     | ESP | 2006 | 3:40.57      | KALLIS RASMUSSEN  | CAN         | 2019 | 3:56.66      | AURELIEN COQ      | FRA | 2004 |
|          | 400 M. FREE       |     |      | 3:54.89      | MARIE KELLEHER    | USA         | 2008 | 3:57.03      | ERIC NILSSON      | USA | 2013 |
| 10:08.44 | MAURINE KORNFELD  | USA | 2016 | 4:11.22      | CHARLOTTE SANDDAL | USA         | 2018 | 3:57.24      | STEVEN MELLOR     | GBR | 2000 |
| 10:51.23 | BETTY BRUSSEL     | CAN | 2019 | 200 M. I.M.  |                   |             |      | 3:58.12      | SHO SOTODATE      | JPN | 2017 |
| 13:05.10 | MIEKO NAGAOKA     | JPN | 2010 | 9:32.59      | CHARLOTTE SANDDAL | USA         | 2018 | 3:58.23      | ALEX KOSTICH      | USA | 1997 |
| 15:28.76 | MASAKO MATSUNO    | JPN | 2012 | *****        |                   |             |      | 800 M. FREE  |                   |     |      |
| 18:16.17 | CHARLOTTE SANDDAL | USA | 2019 |              | WOMEN 100-104     |             |      | 8:07.91      | A.ANGELOTTI       | BRA | 2001 |
| 19:20.68 | BERNARDA ANGULO   | ESP | 2007 | *****        |                   |             |      | 8:13.81      | G.ORPHANIDES      | GBR | 2003 |
| 19:24.06 | ROSA SELLARES     | ESP | 2006 | *****        |                   |             |      | 8:14.75      | ALEX KOSTICH      | USA | 1997 |
| 21:39.84 | ANNE DUNIVIN      | USA | 2011 |              | 50 M. FREE        |             |      | 8:15.70      | MATTEO MONTANARI  | ITA | 2018 |
|          | 800 M. FREE       |     |      | 1:34.12      | MIEKO NAGAOKA     | JPN         | 2014 | 8:17.22      | DREW MODROV       | USA | 2018 |
| 20:57.02 | MAURINE KORNFELD  | USA | 2016 | 100 M. FREE  |                   |             |      | 8:17.80      | ERIC NILSSON      | USA | 2013 |
| 21:29.69 | BETTY BRUSSEL     | CAN | 2019 | 3:30.49      | MIEKO NAGAOKA     | JPN         | 2014 | 8:18.51      | ALEXANDR SHIMIN   | RUS | 2017 |
| 27:58.70 | MIEKO NAGAOKA     | JPN | 2010 | 200 M. FREE  |                   |             |      | 8:18.68      | RAFAEL CABANILLAS | ESP | 2015 |
| 31:30.34 | CHARLOTTE SANDDAL | USA | 2018 | 7:27.89      | MIEKO NAGAOKA     | JPN         | 2014 | 8:20.78      | TAKUTO KITAYAMA   | JPN | 2019 |
|          | 1500 M. FREE      |     |      | 400 M. FREE  |                   |             |      | 8:21.79      | G.SPLITTGERBER    | GER | 2000 |
| 42:34.14 | RITA SIMONTON     | USA | 2013 | 16:40.10     | MIEKO NAGAOKA     | JPN         | 2014 | 1500 M. FREE |                   |     |      |
| 55:14.66 | MIEKO NAGAOKA     | JPN | 2011 | 800 M. FREE  |                   |             |      | 15:29.68     | G.ORPHANIDES      | GBR | 2003 |
| 62:37.00 | CHARLOTTE SANDDAL | USA | 2018 | 36:51.23     | MIEKO NAGAOKA     | JPN         | 2014 | 15:41.81     | ALEX KOSTICH      | USA | 1997 |
|          | 50 M. BACK        |     |      | 1500 M. FREE |                   |             |      | 15:50.89     | H.ALBERTO RIBEIRO | POR | 2015 |
| 1:12.24  | NORA KUTTI        | EST | 2017 | 75:54.39     | MIEKO NAGAOKA     | JPN         | 2015 | 15:51.03     | AKIRA OTANI       | JPN | 2014 |
| 1:17.82  | KALLIS RASMUSSEN  | CAN | 2019 | 50 M. BACK   |                   |             |      | 15:52.34     | MATTEO MONTANARI  | ITA | 2018 |
| 1:20.28  | MIEKO NAGAOKA     | JPN | 2010 | 1:38.71      | MIEKO NAGAOKA     | JPN         | 2014 | 15:56.29     | MARTIN HOHL       | SUI | 2008 |
| 1:20.79  | MAURINE KORNFELD  | USA | 2018 | 3:53.60      | ROSA SELLARES     | ESP         | 2010 | 15:56.57     | RAFAEL CABANILLAS | ESP | 2014 |
| 1:22.21  | SUGAKO KUWAYAMA   | JPN | 2018 | 100 M. BACK  |                   |             |      | 16:07.48     | FEDERICO FILOSI   | ITA | 2016 |
| 1:25.98  | MICHELE GUILLAIS  | FRA | 2016 | 3:42.81      | MIEKO NAGAOKA     | JPN         | 2014 | 16:08.62     | TAMMO SCHROEDER   | GER | 2009 |
| 1:26.21  | FUMI MURATA       | JPN | 2018 | 200 M. BACK  |                   |             |      | 16:12.04     | CHAD LA TOURETTE  | USA | 2017 |
| 1:27.92  | EDITH HENDRY      | USA | 2006 | 7:40.01      | MIEKO NAGAOKA     | JPN         | 2014 | 50 M. BACK   |                   |     |      |
| 1:40.07  | LAURA OLIVEIRA    | BRA | 2014 | *****        |                   |             |      | 24.13        | OSCAR PEREIRO     | ESP | 2019 |
| 1:46.66  | CHARLOTTE SANDDAL | USA | 2018 |              | M E N 25-29       |             |      | 24.17        | MARCO LOUGHRAN    | GBR | 2014 |
|          | 100 M. BACK       |     |      | *****        |                   |             |      | 24.26        | SHOTA TAKESHITA   | JPN | 2019 |
| 2:42.13  | KALLIS RASMUSSEN  | CAN | 2019 |              | 50 M. FREE        |             |      | 24.55        | DARIAN TOWNSEND   | USA | 2013 |
| 2:42.88  | MAURINE KORNFELD  | USA | 2016 |              | 21.37             | CESAR CIELO | USA  | 24.63        | TONY COX          | USA | 2018 |
| 2:50.50  | BETTY BRUSSEL     | CAN | 2019 |              | 21.59             | A.LIUKKONEN | FIN  | 24.79        | RYOUTA MAEJIMA    | JPN | 2019 |
| 2:53.81  | NORA KUTTI        | EST | 2017 |              |                   |             |      | 24.81        | JUNICHI MORITA    | JPN | 2018 |



# FINA WORLD MASTERS TOP 10 - SHORT COURSE METERS - ALL TIME (1986-2019)

|             |                   |     |      |             |                   |     |      |              |                   |     |      |
|-------------|-------------------|-----|------|-------------|-------------------|-----|------|--------------|-------------------|-----|------|
| 24.87       | ISKENDER BASLAKOV | USA | 2019 | 52.45       | DARIAN TOWNSEND   | USA | 2013 | 49.04        | S.KUNZELMANN      | GER | 2008 |
| 24.98       | DAVID RUSSELL     | USA | 2014 | 52.56       | TONY COX          | USA | 2016 | 49.17        | P.KORZENIOWSKI    | POL | 2018 |
| 25.00       | RYO ISHII         | JPN | 2015 | 52.59       | MARCIN CIESLAK    | USA | 2019 | 49.27        | GREG MALLETT      | USA | 2014 |
| 100 M. BACK |                   |     |      | 52.92       | DANIEL BELINI     | BRA | 2009 | 49.30        | TAMAS KEREKJARTO  | USA | 2009 |
| 52.99       | TONY COX          | USA | 2016 | 53.00       | DAVID RUSSELL     | USA | 2014 | 49.37        | SIMON BURNETT     | USA | 2016 |
| 53.17       | SHOTA TAKESHITA   | JPN | 2019 | 53.04       | KIYOTAKA INOUE    | JPN | 2013 | 49.39        | ADAM RITTER       | USA | 2018 |
| 53.34       | JUNICHI MORITA    | JPN | 2018 | 53.17       | TAKATSUGU OGA     | JPN | 2014 | 49.50        | RYO HIGUCHI       | JPN | 2018 |
| 53.38       | DAVID RUSSELL     | USA | 2014 | 53.46       | IVAN NECHUNAEV    | GBR | 2015 | 200 M. FREE  |                   |     |      |
| 53.85       | RYO ISHII         | JPN | 2015 | 200 M. FLY  |                   |     |      | 1:46.12      | DARIAN TOWNSEND   | USA | 2014 |
| 54.23       | LEONARDO SUMIDA   | BRA | 2011 | 1:55.36     | KO FUKAYA         | JPN | 2019 | 1:46.52      | STEFAN HERBST     | GER | 2011 |
| 54.47       | TAKASHI TAKEMOTO  | JPN | 2012 | 1:58.87     | TAKATSUGU OGA     | JPN | 2016 | 1:48.17      | YURIY UFIMTSEV    | RUS | 2015 |
| 54.58       | ROMAN MIKHAILOV   | RUS | 2015 | 1:59.48     | FREDERICO CASTRO  | BRA | 2017 | 1:48.40      | JACOB CARSTENSEN  | DEN | 2008 |
| 54.67       | ENSGER KOTTERINK  | NED | 2019 | 1:59.74     | MARK LEWIS        | GBR | 2008 | 1:49.00      | CHRISTOPH HILMER  | GER | 2006 |
| 54.69       | KYOHEI TAKADA     | JPN | 2017 | 1:59.80     | MAKSIM GANIKHIN   | RUS | 2012 | 1:49.32      | DREW MODROV       | USA | 2019 |
| 200 M. BACK |                   |     |      | 1:59.92     | SATOSHI TORATANI  | JPN | 2008 | 1:49.58      | TAMAS KEREKJARTO  | USA | 2009 |
| 1:56.22     | STEFAN HERBST     | GER | 2006 | 2:00.88     | KIYOTAKA IDO      | JPN | 2015 | 1:50.00      | GREG MALLETT      | USA | 2014 |
| 1:57.66     | DMITRIY GORBUNOV  | RUS | 2019 | 2:01.42     | SOHEI WASHINO     | JPN | 2018 | 1:50.25      | ADAM RITTER       | USA | 2015 |
| 1:59.37     | JUNICHI MORITA    | JPN | 2018 | 2:01.72     | YOHEI KATO        | JPN | 2007 | 1:50.62      | DENNY FERRONI     | ITA | 2018 |
| 1:59.68     | IAN POWELL        | GBR | 2011 | 2:01.74     | LOIC LEROY        | FRA | 2006 | 400 M. FREE  |                   |     |      |
| 2:00.23     | SHOGO MATSUI      | JPN | 2018 | 100 M. I.M. |                   |     |      | 3:51.97      | YURIY UFIMTSEV    | RUS | 2014 |
| 2:00.59     | TAKASHI TAKEMOTO  | JPN | 2016 | 53.47       | DARIAN TOWNSEND   | USA | 2013 | 3:53.95      | DREW MODROV       | USA | 2019 |
| 2:00.80     | VICTOR MIGEON     | FRA | 2015 | 53.53       | ADAM RITTER       | USA | 2014 | 3:57.47      | TAMAS KEREKJARTO  | USA | 2009 |
| 2:01.14     | DEAN KENT         | NZL | 2005 | 54.80       | RYO ISHII         | JPN | 2015 | 3:57.79      | DENNY FERRONI     | ITA | 2019 |
| 2:01.34     | JAN KONARZEWSKI   | USA | 2016 | 55.13       | MARTIN LIIVAMAGI  | EST | 2017 | 3:58.40      | ALEX KOSTICH      | USA | 2000 |
| 2:01.78     | MARTIN HARRIS     | GBR | 1994 | 55.13       | YUTA SHOJI        | JPN | 2010 | 3:59.83      | BRUCE HAYES       | USA | 1994 |
| 50 M. BRST  |                   |     |      | 55.20       | STEFAN HERBST     | GER | 2004 | 3:59.99      | STEVE BEI         | FRA | 2019 |
| 26.72       | L.CLIFFORD-STEPHE | GBR | 2018 | 55.31       | DMITRIY GORBUNOV  | RUS | 2019 | 4:00.26      | SEBASTIAN WIESE   | GER | 2004 |
| 26.99       | LAWRENCE PALMER   | GBR | 2017 | 55.41       | ENSGER KOTTERINK  | NED | 2019 | 4:00.36      | FABIEN CZACHOR    | FRA | 2009 |
| 27.18       | MARK CAMPBELL     | GBR | 2017 | 55.51       | LUKE PECHMANN     | USA | 2016 | 4:00.84      | MATTEO MONTANARI  | ITA | 2019 |
| 27.19       | ANTON TISCHENKO   | RUS | 2019 | 55.76       | RYOUTA MAEJIMA    | JPN | 2019 | 800 M. FREE  |                   |     |      |
| 27.31       | EETU KARVONEN     | USA | 2013 | 200 M. I.M. |                   |     |      | 8:13.62      | MATTEO MONTANARI  | ITA | 2019 |
| 27.41       | RYO KOBAYASHI     | JPN | 2014 | 1:58.96     | DMITRIY GORBUNOV  | RUS | 2019 | 8:17.06      | ALEX KOSTICH      | USA | 2000 |
| 27.44       | KANAYA YUKI       | JPN | 2018 | 1:59.70     | K.GILCHRIST       | FRA | 2010 | 8:18.56      | RAFAEL CABANILLAS | ESP | 2017 |
| 27.46       | SHIOTUKI TOMOHIRO | JPN | 2018 | 1:59.79     | ADAM RITTER       | USA | 2013 | 8:19.13      | SEBASTIAN WIESE   | GER | 2004 |
| 27.55       | IGOR GOLOVIN      | RUS | 2015 | 2:00.56     | STEFAN HERBST     | GER | 2006 | 8:19.44      | BRUCE HAYES       | USA | 1994 |
| 27.59       | ADAM RITTER       | USA | 2014 | 2:01.58     | DEAN KENT         | NZL | 2005 | 8:22.07      | ALBERT GALLARDO   | ESP | 2014 |
| 100 M. BRST |                   |     |      | 2:02.48     | RYOYA TAGUCHI     | JPN | 2011 | 8:22.07      | DAVID GENET       | FRA | 2013 |
| 58.96       | KANAYA YUKI       | JPN | 2018 | 2:02.90     | VICTOR MIGEON     | FRA | 2015 | 8:22.10      | FABIEN CZACHOR    | FRA | 2009 |
| 59.21       | EETU KARVONEN     | USA | 2013 | 2:02.93     | YUTA SAITO        | JPN | 2016 | 8:25.60      | L.GIOVANNINI      | ITA | 2018 |
| 59.23       | LAWRENCE PALMER   | GBR | 2017 | 2:03.10     | YUKI ISHIKAWA     | JPN | 2019 | 8:28.60      | IGOR PIOVESAN     | ITA | 2008 |
| 59.24       | RYO KOBAYASHI     | JPN | 2014 | 2:03.27     | THOMAS LUCHSINGER | USA | 2019 | 1500 M. FREE |                   |     |      |
| 1:00.14     | SHIOTUKI TOMOHIRO | JPN | 2018 | 2:03.27     | SHOGO MATSUI      | JPN | 2017 | 15:30.92     | CHAD TOURETTE     | USA | 2019 |
| 1:00.28     | EDUARDO FISCHER   | BRA | 2005 | 400 M. I.M. |                   |     |      | 15:51.07     | ALEX KOSTICH      | USA | 2000 |
| 1:00.65     | BRANDON MEIER     | USA | 2017 | 4:14.51     | IKUMI HASEGAWA    | JPN | 2009 | 15:53.48     | RAFAEL CABANILLAS | ESP | 2018 |
| 1:00.67     | L.CLIFFORD-STEPHE | GBR | 2018 | 4:20.94     | DEAN KENT         | NZL | 2005 | 15:54.44     | LUCA PUCE         | ITA | 2015 |
| 1:00.84     | MACIEJ CERTA      | POL | 2016 | 4:26.08     | JULIEN BAILLOD    | SUI | 2009 | 16:06.84     | IGOR PIOVESAN     | ITA | 2008 |
| 1:00.89     | DANIEL PILHATSCH  | AUT | 2016 | 4:26.79     | JOHN KEPPELER     | USA | 1995 | 16:08.19     | L.GIOVANNINI      | ITA | 2019 |
| 200 M. BRST |                   |     |      | 4:26.97     | ALEX KOSTICH      | USA | 1997 | 16:08.42     | DAVID GENET       | FRA | 2014 |
| 2:07.55     | JOSH PRENOT       | USA | 2018 | 4:27.31     | SOHEI WASHINO     | JPN | 2019 | 16:09.53     | JULIEN BAILLOD    | SUI | 2013 |
| 2:08.28     | KANAYA YUKI       | JPN | 2018 | 4:28.12     | GIORGIO PAOLETTI  | ITA | 2012 | 16:09.78     | JOSE HERVAS       | ESP | 2014 |
| 2:10.58     | DMITRIY GORBUNOV  | RUS | 2019 | 4:28.38     | RAYMOND VD MERWE  | NED | 2012 | 16:11.71     | ANDREA MARCATO    | ITA | 2004 |
| 2:10.68     | RYO KOBAYASHI     | JPN | 2013 | 4:29.57     | MORTEN AHME       | GER | 2016 | 50 M. BACK   |                   |     |      |
| 2:11.81     | SEAN MAHONEY      | USA | 2014 | 4:30.04     | YUYA KATAOKA      | JPN | 2018 | 23.86        | NELSON JUNIOR     | BRA | 2017 |
| 2:11.90     | LAWRENCE PALMER   | GBR | 2017 | *****       |                   |     |      | 24.58        | RODRIGO TRIVINO   | BRA | 2016 |
| 2:14.44     | CHRISTOPHER JONES | GBR | 2007 | M E N 30-34 |                   |     |      | 24.68        | SERGEY MAKOV      | RUS | 2019 |
| 2:14.50     | BRANDON MEIER     | USA | 2017 | *****       |                   |     |      | 24.75        | DARIAN TOWNSEND   | USA | 2016 |
| 2:14.80     | ARTEM BABIKHIN    | RUS | 2019 | 50 M. FREE  |                   |     |      | 24.81        | DERYA BUYUKUNCU   | USA | 2009 |
| 2:15.42     | SIMON LEIGHFIELD  | AUS | 2002 | 21.59       | EVGENIY LAGUNOV   | RUS | 2015 | 24.84        | NIKITA KONOVALOV  | RUS | 2018 |
| 50 M. FLY   |                   |     |      | 21.91       | DARIAN TOWNSEND   | USA | 2016 | 24.92        | KEVIN DOAK        | USA | 2012 |
| 23.33       | RYO ISHII         | JPN | 2017 | 21.98       | NICHOLAS BRUNELLI | USA | 2011 | 25.03        | SEIJI TANIGUCHI   | JPN | 2017 |
| 23.53       | RUNAR BORGEN      | USA | 2018 | 22.13       | THOMAS RUPPRATH   | GER | 2009 | 25.09        | NAOYA HIRANO      | JPN | 2019 |
| 23.53       | DARIAN TOWNSEND   | USA | 2013 | 22.23       | P.KORZENIOWSKI    | POL | 2018 | 25.09        | GLAUBER SILVA     | BRA | 2016 |
| 23.60       | YOSHIHIRO ASO     | JPN | 2014 | 22.24       | DAVID MAITRE      | FRA | 2011 | 100 M. BACK  |                   |     |      |
| 23.66       | DAISUKE ABE       | JPN | 2009 | 22.26       | YOSHIHIRO ASO     | JPN | 2019 | 52.68        | DERYA BUYUKUNCU   | USA | 2009 |
| 23.70       | OLIVER WENZEL     | GER | 2009 | 22.33       | NIKITA KONOVALOV  | RUS | 2018 | 53.42        | JUNICHI MORITA    | JPN | 2019 |
| 23.74       | YASUHIRO WADA     | JPN | 2018 | 22.35       | RYO HIGUCHI       | JPN | 2018 | 54.10        | TAKASHI TAKEMOTO  | JPN | 2018 |
| 23.78       | MARCIN CIESLAK    | USA | 2019 | 22.37       | Y.MURAMATSU       | JPN | 2018 | 54.49        | D. BLACKBORROW    | AUS | 2016 |
| 23.88       | TONY COX          | USA | 2016 | 100 M. FREE |                   |     |      | 54.53        | SERGEY MAKOV      | RUS | 2019 |
| 23.95       | DANIEL BELINI     | BRA | 2009 | 47.29       | EVGENIY LAGUNOV   | RUS | 2015 | 54.65        | SIMON BURNETT     | USA | 2014 |
| 100 M. FLY  |                   |     |      | 48.08       | DARIAN TOWNSEND   | USA | 2014 | 54.87        | T.TAKEUCHI        | JPN | 2017 |
| 52.42       | YASUHIRO WADA     | JPN | 2018 | 48.87       | NIKITA KONOVALOV  | RUS | 2018 | 54.90        | ENRICO CATALANO   | ITA | 2015 |
| 52.45       | KO FUKAYA         | JPN | 2016 |             |                   |     |      | 55.07        | MASAYA KANEKO     | JPN | 2017 |



# FINA WORLD MASTERS TOP 10 - SHORT COURSE METERS - ALL TIME (1986-2019)

|                           |     |      |                           |     |      |                           |     |      |
|---------------------------|-----|------|---------------------------|-----|------|---------------------------|-----|------|
| 55.17 KEVIN DOAK          | USA | 2012 | 2:00.21 HIROSHI MIURA     | JPN | 2000 | 1:53.54 M.EROLI           | ITA | 2012 |
| 200 M. BACK               |     |      | 2:00.50 TAMAS KEREKJARTO  | USA | 2009 | 1:53.64 D.STOCKINGER      | AUT | 2017 |
| 1:55.46 DERYA BUYUKUNCU   | USA | 2009 | 2:02.22 LOIC LEROY        | FRA | 2012 | 1:53.66 EDWIN VAN NORDEN  | NED | 1998 |
| 1:56.68 STEFAN HERBST     | GER | 2008 | 2:02.63 DENNY FERRONI     | ITA | 2018 | 1:53.69 CLAUS IVERSEN     | DEN | 2015 |
| 2:00.17 MASAYA KANEKO     | JPN | 2018 | 2:03.33 P.KORZENIOWSKI    | POL | 2016 | 400 M. FREE               |     |      |
| 2:00.43 MARTIN ZUBERO     | USA | 2001 | 2:04.03 JOCHEN HANZ       | GER | 2009 | 3:57.77 ERIK HOCHSTEIN    | USA | 2003 |
| 2:01.89 ADRIANO NIZ       | POR | 2017 | 100 M. I.M.               |     |      | 3:58.46 NICOLA NISATO     | ITA | 2017 |
| 2:02.15 EDUARDO SEVIERI   | BRA | 2015 | 53.28 DARIAN TOWNSEND     | USA | 2016 | 3:58.50 F.SILVESTRI       | ITA | 2002 |
| 2:02.16 ENRICO CATALANO   | ITA | 2016 | 54.41 P.KORZENIOWSKI      | POL | 2018 | 3:59.71 JACOB CARSTENSEN  | DEN | 2013 |
| 2:02.81 MARCO MACCIANTI   | ITA | 2015 | 54.61 ADAM RITTER         | USA | 2015 | 4:00.33 GUY-NOEL SCHMITT  | FRA | 2018 |
| 2:02.84 TAKAFUMI OISHI    | JPN | 2007 | 54.86 YOSHIHIRO ASO       | JPN | 2019 | 4:00.42 YURI GOTTI        | ITA | 2017 |
| 2:02.91 JOHN KEPPELER     | USA | 1999 | 55.00 STEFAN HERBST       | GER | 2008 | 4:01.78 RON KARNAUGH      | USA | 2003 |
| 50 M. BRST                |     |      | 55.10 SIMON BURNETT       | USA | 2016 | 4:02.35 SEBASTIAN WIESE   | GER | 2007 |
| 26.72 FELIPE LIMA         | BRA | 2018 | 55.39 YUTA SHOJI          | JPN | 2015 | 4:02.52 MIKE SHAFFER      | USA | 2000 |
| 26.77 JORGE ALONZO        | ESP | 2009 | 55.77 NICHOLAS BRUNELLI   | USA | 2011 | 4:02.71 ROGER RABASSA     | ESP | 2018 |
| 27.11 MARCELO TOMAZINI    | BRA | 2009 | 55.80 NAOYA HIRANO        | JPN | 2018 | 800 M. FREE               |     |      |
| 27.23 SERGEY GEYBEL       | RUS | 2015 | 55.80 DAISUKE HOSOKAWA    | JPN | 2014 | 8:13.92 ROGER RABASSA     | ESP | 2018 |
| 27.40 RYO KOBAYASHI       | JPN | 2019 | 200 M. I.M.               |     |      | 8:16.19 ALEX KOSTICH      | USA | 2009 |
| 27.64 SHIOTUKI TOMOHIRO   | JPN | 2019 | 1:56.96 DARIAN TOWNSEND   | USA | 2016 | 8:20.40 NICOLA NISATO     | ITA | 2016 |
| 27.73 CARLOS ALENCAR      | BRA | 2009 | 1:57.68 TAMAS KEREKJARTO  | USA | 2009 | 8:21.92 YURI GOTTI        | ITA | 2017 |
| 27.81 THOMAS RUPPRATH     | GER | 2009 | 1:58.13 STEFAN HERBST     | GER | 2008 | 8:23.06 ERIK HOCHSTEIN    | USA | 2003 |
| 27.98 TAKURO OSAKI        | JPN | 2018 | 1:59.60 NIKOLAY SKVORTSOV | RUS | 2017 | 8:25.33 GUY-NOEL SCHMITT  | FRA | 2019 |
| 28.01 JEFF COMMINGS       | USA | 2008 | 2:00.39 P.KORZENIOWSKI    | POL | 2018 | 8:26.43 MIKE SHAFFER      | USA | 2000 |
| 100 M. BRST               |     |      | 2:00.90 ITOU TATSUYA      | JPN | 2019 | 8:27.96 IGOR PIOVESAN     | ITA | 2009 |
| 59.11 RYO KOBAYASHI       | JPN | 2019 | 2:02.09 SIMON BURNETT     | USA | 2017 | 8:28.37 RICHARD STANNARD  | GBR | 2009 |
| 59.85 SERGEY GEYBEL       | RUS | 2015 | 2:02.20 HIROYUKI KOSAKA   | JPN | 2010 | 8:29.31 BOBBY PATTEN      | USA | 1999 |
| 1:00.79 SHIOTUKI TOMOHIRO | JPN | 2019 | 2:03.04 KEITH BEAVERS     | CAN | 2014 | 1500 M. FREE              |     |      |
| 1:00.81 ED MOSES          | USA | 2011 | 2:03.54 DIOGO YABE        | BRA | 2011 | 15:56.57 ALEX KOSTICH     | USA | 2009 |
| 1:00.95 RYOSUKE IMAI      | JPN | 2011 | 400 M. I.M.               |     |      | 15:58.20 BOBBY PATTEN     | USA | 1999 |
| 1:01.07 KYOSUKE YONEHARA  | JPN | 2010 | 4:13.68 DARIAN TOWNSEND   | USA | 2015 | 16:02.32 GUY-NOEL SCHMITT | FRA | 2019 |
| 1:01.15 K.GILCHRIST       | GBR | 2013 | 4:19.69 TAMAS KEREKJARTO  | USA | 2009 | 16:03.47 MIKE SHAFFER     | USA | 2000 |
| 1:01.20 BRANDON J FISCHER | USA | 2019 | 4:22.35 ASUKA KOIZUMI     | JPN | 2009 | 16:05.94 RICHARD STANNARD | GBR | 2009 |
| 1:01.34 MATTHIAS RUMPF    | GER | 2009 | 4:25.00 KEITH BEAVERS     | CAN | 2014 | 16:07.85 FRED CLATWORTHY  | GBR | 2009 |
| 1:01.34 JEFF COMMINGS     | USA | 2008 | 4:26.74 ROQUE SANTOS      | USA | 1999 | 16:11.68 IGOR PIOVESAN    | ITA | 2009 |
| 200 M. BRST               |     |      | 4:27.02 JOCHEN HANZ       | GER | 2008 | 16:12.88 ERIK HOCHSTEIN   | USA | 2003 |
| 2:11.58 RYO KOBAYASHI     | JPN | 2019 | 4:28.79 RYOYA TAGUCHI     | JPN | 2018 | 16:17.38 DANIEL SERRA     | ESP | 2007 |
| 2:12.58 HIROYUKI KOSAKA   | JPN | 2010 | 4:28.83 K.GILCHRIST       | GBR | 2013 | 16:20.54 NICOLAS GRANGER  | FRA | 2006 |
| 2:12.92 BRANDON J FISCHER | USA | 2019 | 4:29.07 ALEX KOSTICH      | USA | 2000 | 50 M. BACK                |     |      |
| 2:12.92 KYOSUKE YONEHARA  | JPN | 2010 | 4:29.29 ALVARO ARROYO     | ESP | 2018 | 25.30 RODRIGO TRIVINO     | BRA | 2019 |
| 2:13.16 K.GILCHRIST       | GBR | 2013 |                           |     |      | 25.43 STEV THELOKE        | GER | 2015 |
| 2:13.60 KAZUYA KOIKE      | JPN | 2009 | *****                     |     |      | 25.57 DARIAN R TOWNSEND   | USA | 2019 |
| 2:15.36 CHRISTOPHER JONES | GBR | 2015 | M E N 35-39               |     |      | 25.70 STEFAN HERBST       | GER | 2017 |
| 2:15.47 MIKE ALEXANDROV   | USA | 2018 | *****                     |     |      | 25.70 PABLO MARTIN ABAL   | ARG | 2016 |
| 2:15.72 TOMASZ DUSZYNSKI  | POL | 2007 | 50 M. FREE                |     |      | 25.72 EDILSON SILVA       | USA | 2009 |
| 2:16.60 NICK GILLINGHAM   | GBR | 2001 | 21.53 MARK FOSTER         | GBR | 2007 | 25.75 JUNICHI FUKUI       | JPN | 2019 |
| 50 M. FLY                 |     |      | 21.81 ROLAND SCHOEMAN     | USA | 2018 | 25.81 MATTHEW CLAY        | GBR | 2019 |
| 22.87 THOMAS RUPPRATH     | GER | 2009 | 22.46 GUILHERME SANTOS    | BRA | 2018 | 25.86 T.MINAMIZATO        | JPN | 2017 |
| 23.59 YOSHIHIRO ASO       | JPN | 2019 | 22.47 JOHN MIRANDA        | SWE | 2000 | 25.86 MICHAEL ROSS        | USA | 2004 |
| 23.66 NIKOLAY SKVORTSOV   | RUS | 2017 | 22.48 RYK NEETHLING       | RSA | 2014 | 100 M. BACK               |     |      |
| 23.67 NIKITA KONOVALOV    | RUS | 2018 | 22.72 EDUARD LORENTE      | ESP | 2014 | 54.66 DARIAN R TOWNSEND   | USA | 2019 |
| 23.96 TAKUYA HASEGAWA     | JPN | 2019 | 22.73 FELIPE DELGADO      | USA | 2009 | 55.31 T.TAKEUCHI          | JPN | 2018 |
| 24.10 FERNANDO ALAEZ      | ESP | 2009 | 22.75 MIKE BILDOSOLA      | ESP | 2018 | 55.32 YUUKI TAKEUCHI      | JPN | 2018 |
| 24.11 GLAUBER SILVA       | BRA | 2019 | 22.82 ALISTAIR CRAWFORD   | GBR | 2019 | 55.89 ENRICO CATALANO     | ITA | 2018 |
| 24.11 LEANDRO OKUDA       | BRA | 2009 | 22.86 JEROME LE COQ       | FRA | 2010 | 55.93 STEFAN HERBST       | GER | 2017 |
| 24.14 DREW MODROV         | USA | 2019 | 100 M. FREE               |     |      | 55.95 MICHAEL ROSS        | USA | 2004 |
| 24.14 TIM JURGENS         | BEL | 2018 | 47.70 ROLAND SCHOEMAN     | USA | 2018 | 56.42 JEFF WELECHUK       | CAN | 2009 |
| 100 M. FLY                |     |      | 49.53 JOHN MIRANDA        | SWE | 2000 | 56.56 MARCO MACCIANTI     | ITA | 2016 |
| 52.44 DARIAN TOWNSEND     | USA | 2016 | 49.61 GUILHERME SANTOS    | BRA | 2018 | 56.93 RON KARNAUGH        | USA | 2002 |
| 52.63 STEFAN HERBST       | GER | 2011 | 50.18 MIKEL BILDOSOLA     | ESP | 2018 | 56.97 KENICHI KANEKO      | JPN | 2017 |
| 52.67 GLAUBER SILVA       | BRA | 2016 | 50.43 JOSE JUNIOR         | BRA | 2018 | 200 M. BACK               |     |      |
| 53.14 YOSHIHIRO ASO       | JPN | 2015 | 50.54 STEPHANE MEYER      | FRA | 2009 | 2:00.34 RON KARNAUGH      | USA | 2002 |
| 53.65 SIMON BURNETT       | USA | 2017 | 50.68 ALISTAIR CRAWFORD   | GBR | 2019 | 2:01.55 STEFAN HERBST     | GER | 2013 |
| 53.83 NAOYA HIRANO        | JPN | 2018 | 50.71 RICARDO SALCEDO     | ESP | 2016 | 2:03.20 DEREK GUFFEY      | USA | 2009 |
| 53.84 UENO TATSUYA        | JPN | 2019 | 50.72 MICHAEL PICOTTE     | USA | 2009 | 2:03.75 MAURIZIO TERSAR   | ITA | 2015 |
| 54.06 SEIJI TANIGUCHI     | JPN | 2018 | 50.82 EIJI NOMURA         | JPN | 2010 | 2:03.85 MARCO MACCIANTI   | ITA | 2017 |
| 54.10 TAMAS KEREKJARTO    | USA | 2009 | 200 M. FREE               |     |      | 2:04.21 CHRIS JONES       | GBR | 2006 |
| 54.20 TAKAHIRO MORI       | JPN | 2011 | 1:51.31 ERIK HOCHSTEIN    | USA | 2003 | 2:04.96 JEFF WELECHUK     | CAN | 2009 |
| 200 M. FLY                |     |      | 1:51.47 JOCHEN BRUHA      | GER | 2004 | 2:05.01 TAKAYUKI MIYASAKA | JPN | 2012 |
| 1:53.56 NIKOLAY SKVORTSOV | RUS | 2017 | 1:51.54 MICHAEL ROSS      | USA | 2004 | 2:05.31 EDUARDO SEVIERI   | BRA | 2019 |
| 1:57.41 DARIAN TOWNSEND   | USA | 2016 | 1:52.90 RON KARNAUGH      | USA | 2002 | 2:06.26 ROMAIN MARTY      | FRA | 2009 |
| 1:59.30 ITOU TATSUYA      | JPN | 2019 | 1:53.37 TYLER BLESSING    | USA | 2009 | 50 M. BRST                |     |      |
| 1:59.51 MARCELO TOMAZINI  | BRA | 2009 | 1:53.39 GUY-NOEL SCHMITT  | FRA | 2018 | 26.66 ROLAND SCHOEMAN     | USA | 2018 |



# FINA WORLD MASTERS TOP 10 - SHORT COURSE METERS - ALL TIME (1986-2019)

|             |                   |     |      |             |                   |     |      |              |                   |     |      |
|-------------|-------------------|-----|------|-------------|-------------------|-----|------|--------------|-------------------|-----|------|
| 27.32       | SERGEY GEYBEL     | RUS | 2016 | 56.73       | IKUMI HASEGAWA    | JPN | 2019 | 4:04.69      | NICOLAS GRANGER   | FRA | 2010 |
| 27.79       | JEFF COMMINGS     | USA | 2009 | 56.80       | STEFAN HERBST     | GER | 2013 | 800 M. FREE  |                   |     |      |
| 28.30       | STEVE WEST        | USA | 2009 | 56.94       | RON KARNAUGH      | USA | 2003 | 8:15.69      | SAMUELE PAMPANA   | ITA | 2017 |
| 28.39       | RYOSUKE IMAI      | JPN | 2016 | 200 M. I.M. |                   |     |      | 8:21.50      | NICOLA NISATO     | ITA | 2018 |
| 28.55       | ALISTAIR CRAWFORD | GBR | 2019 | 1:59.85     | DARIAN R TOWNSEND | USA | 2019 | 8:21.78      | ALEX KOSTICH      | USA | 2011 |
| 28.60       | PAVEL BUYANOV     | USA | 2019 | 2:03.29     | RON KARNAUGH      | USA | 2002 | 8:24.88      | R SEAN JUSTICE    | USA | 2016 |
| 28.63       | PER SVANBERG      | SWE | 2009 | 2:04.89     | DEREK GUFFEY      | USA | 2009 | 8:25.08      | ERIK HOCHSTEIN    | USA | 2009 |
| 28.68       | DAVID EBANKS      | GBR | 2017 | 2:05.03     | TAKEFUMI KAKIZOE  | JPN | 2018 | 8:27.03      | ERIC CHRISTENSEN  | USA | 2014 |
| 28.75       | RON KARNAUGH      | USA | 2002 | 2:05.28     | M.EROLI           | ITA | 2013 | 8:27.25      | JACOB CARSTENSEN  | DEN | 2019 |
| 100 M. BRST |                   |     |      | 2:05.79     | TAMAS KEREKJARTO  | USA | 2018 | 8:28.16      | ALEJANDRO MORENO  | MEX | 2009 |
| 1:00.61     | SERGEY GEYBEL     | RUS | 2016 | 2:06.39     | HIROYUKI KOSAKA   | JPN | 2011 | 8:28.23      | DANIEL SERRA      | ESP | 2009 |
| 1:01.18     | RYOSUKE IMAI      | JPN | 2013 | 2:06.88     | BEN HARKIN        | GBR | 2014 | 8:28.93      | GUSTAVO HELENO    | BRA | 2016 |
| 1:01.47     | JEFF COMMINGS     | USA | 2009 | 2:07.06     | JEFF COMMINGS     | USA | 2009 | 1500 M. FREE |                   |     |      |
| 1:01.63     | STEVE WEST        | USA | 2009 | 2:07.21     | JIM HARVEY        | USA | 2001 | 15:51.60     | SAMUELE PAMPANA   | ITA | 2016 |
| 1:02.57     | RON KARNAUGH      | USA | 2002 | 400 M. I.M. |                   |     |      | 16:02.94     | NICOLA NISATO     | ITA | 2019 |
| 1:02.62     | NICK GILLINGHAM   | GBR | 2004 | 4:19.79     | DARIAN R TOWNSEND | USA | 2019 | 16:07.46     | DANIEL SERRA      | ESP | 2009 |
| 1:02.63     | SERGEY GOGOL      | RUS | 2017 | 4:24.36     | RON KARNAUGH      | USA | 2003 | 16:09.32     | MIKE SHAFFER      | USA | 2009 |
| 1:02.67     | STEPHAN PERROT    | FRA | 2015 | 4:30.09     | CLAUS IVERSEN     | DEN | 2015 | 16:19.00     | ERIC CHRISTENSEN  | USA | 2014 |
| 1:02.73     | TAKAHIRO NETSU    | JPN | 2019 | 4:30.77     | JULIEN BAILLOD    | SUI | 2016 | 16:19.16     | R SEAN JUSTICE    | USA | 2016 |
| 1:02.79     | WALLY DICKS       | USA | 2000 | 4:30.81     | DEREK GUFFEY      | USA | 2009 | 16:22.21     | DINO SCHORN       | ITA | 2009 |
| 200 M. BRST |                   |     |      | 4:32.97     | UWE VOLK          | GER | 2009 | 16:23.60     | IGOR PIOVESAN     | ITA | 2014 |
| 2:15.42     | KAZUYA KOIKE      | JPN | 2014 | 4:33.88     | TAKEFUMI KAKIZOE  | JPN | 2018 | 16:23.95     | F.SILVESTRI       | ITA | 2003 |
| 2:15.64     | STEVE WEST        | USA | 2011 | 4:34.06     | JEROME FRENTSOS   | USA | 2000 | 16:32.10     | ASUKA KOIZUMI     | JPN | 2019 |
| 2:16.49     | NICK GILLINGHAM   | GBR | 2004 | 4:34.46     | ASUKA KOIZUMI     | JPN | 2018 | 50 M. BACK   |                   |     |      |
| 2:16.72     | STEPHAN PERROT    | FRA | 2015 | 4:35.36     | EDUARDO SEVIERI   | BRA | 2019 | 25.53        | MICHAEL ROSS      | USA | 2009 |
| 2:16.78     | SERGEY GOGOL      | RUS | 2017 | *****       |                   |     |      | 25.78        | MARCIN KACZMAREK  | POL | 2018 |
| 2:16.81     | CHRISTOPHER JONES | GBR | 2017 | M E N 40-44 |                   |     |      | 25.94        | EDILSON JUNIOR    | BRA | 2012 |
| 2:17.47     | BLAKE HOLDEN      | USA | 2014 | *****       |                   |     |      | 26.04        | PABLO ABAL        | ARG | 2019 |
| 2:17.96     | RON KARNAUGH      | USA | 2002 | 50 M. FREE  |                   |     |      | 26.17        | ALEXANDR SHILIN   | RUS | 2017 |
| 2:18.62     | HIROYUKI KOSAKA   | JPN | 2011 | 22.75       | HIDEAKI HARA      | JPN | 2016 | 26.33        | DANIEL LONNBERG   | SWE | 2015 |
| 2:18.68     | V.KIRJANOV        | LAT | 2009 | 23.05       | O.PLANES OSORIO   | ESP | 2016 | 26.43        | ALEKSANDR SHILIN  | RUS | 2019 |
| 50 M. FLY   |                   |     |      | 23.06       | M.GIALDI          | ITA | 2010 | 26.45        | T.MINAMIZATO      | JPN | 2019 |
| 22.97       | LIONEL BRAHIM     | FRA | 2010 | 23.13       | BRIAN JACOBSON    | USA | 2013 | 26.56        | CHRIS STEVENSON   | USA | 2008 |
| 23.12       | ROLAND SCHOEMAN   | USA | 2018 | 23.18       | VLADIMIR PREDKIN  | RUS | 2013 | 26.59        | TAKAYUKI MIYASAKA | JPN | 2015 |
| 23.64       | ADAM PINE         | AUS | 2011 | 23.21       | S.KUNZELMANN      | GER | 2018 | 26.59        | GIUSEPPE TIANO    | ITA | 2009 |
| 23.72       | LARS FROLANDER    | SWE | 2011 | 23.25       | ERIK HOCHSTEIN    | USA | 2008 | 100 M. BACK  |                   |     |      |
| 24.03       | EIJI NOMURA       | JPN | 2010 | 23.31       | PAUL CLEMENCE     | GBR | 2014 | 54.85        | MICHAEL ROSS      | USA | 2008 |
| 24.40       | TAKASHI NISHIYAMA | JPN | 2016 | 23.36       | ISAMU TSUZUKI     | JPN | 2015 | 55.90        | CHRIS STEVENSON   | USA | 2008 |
| 24.48       | JAN KARLSSON      | SWE | 2003 | 23.45       | MICHAEL ROSS      | USA | 2009 | 56.89        | TAKUMA YAMAOKA    | JPN | 2018 |
| 24.61       | TAKEFUMI KAKIZOE  | JPN | 2018 | 100 M. FREE |                   |     |      | 57.18        | MAURIZIO TERSAR   | ITA | 2017 |
| 24.63       | MARIO L MARSHALL  | USA | 2019 | 49.64       | HIDEAKI HARA      | JPN | 2017 | 57.36        | DANIEL LONNBERG   | SWE | 2015 |
| 24.71       | BRUNO PAULA       | BRA | 2019 | 50.43       | MICHAEL ROSS      | USA | 2008 | 57.41        | SHINYA HAYASHI    | JPN | 2019 |
| 100 M. FLY  |                   |     |      | 50.45       | ERIK HOCHSTEIN    | USA | 2009 | 57.64        | JEFF COMMINGS     | USA | 2018 |
| 52.24       | ADAM PINE         | AUS | 2011 | 50.58       | LARS FROLANDER    | SWE | 2015 | 57.66        | ERIC ERICSON      | USA | 2002 |
| 54.25       | TAKEFUMI KAKIZOE  | JPN | 2019 | 50.90       | O.PLANES OSORIO   | ESP | 2016 | 57.72        | BEN HARKIN        | GBR | 2019 |
| 54.27       | IGOR MARCHENKO    | USA | 2011 | 51.27       | S.KUNZELMANN      | GER | 2018 | 57.73        | GIUSEPPE TIANO    | ITA | 2009 |
| 54.56       | EIJI NOMURA       | JPN | 2010 | 51.57       | MIKE VAROZZA      | USA | 2009 | 200 M. BACK  |                   |     |      |
| 54.70       | M.EROLI           | ITA | 2012 | 51.76       | EIJI NOMURA       | JPN | 2012 | 2:03.84      | MICHAEL ROSS      | USA | 2008 |
| 54.99       | GLENN COUNTS      | USA | 2014 | 51.79       | CLAUS IVERSEN     | DEN | 2017 | 2:04.29      | MAURIZIO TERSAR   | ITA | 2016 |
| 55.20       | STEFAN HERBST     | GER | 2013 | 51.85       | JUAN BENAVIDES    | ESP | 2017 | 2:04.96      | CHRIS STEVENSON   | USA | 2008 |
| 55.22       | MASATERU IKEDA    | JPN | 2010 | 200 M. FREE |                   |     |      | 2:06.66      | MARK VOGEL        | DEN | 2010 |
| 55.24       | STEPHANE MEYER    | FRA | 2009 | 1:50.08     | MICHAEL ROSS      | USA | 2008 | 2:06.77      | ANTONINO TRIPPEDO | ITA | 2016 |
| 55.45       | BRENT CREAGER     | USA | 2014 | 1:51.91     | CLAUS IVERSEN     | DEN | 2017 | 2:06.78      | TAKAYUKI MIYASAKA | JPN | 2015 |
| 200 M. FLY  |                   |     |      | 1:51.95     | ERIK HOCHSTEIN    | USA | 2009 | 2:07.16      | NICOLAS GRANGER   | FRA | 2010 |
| 2:02.77     | TAKEFUMI KAKIZOE  | JPN | 2018 | 1:53.03     | KAI DITZEL        | GER | 2004 | 2:07.31      | HONZA VITAZKA     | SWE | 2016 |
| 2:02.98     | BRENT CREAGER     | USA | 2014 | 1:54.62     | ALBERTO MONTINI   | ITA | 2010 | 2:07.78      | JEFF WELECHUK     | CAN | 2011 |
| 2:03.05     | M.EROLI           | ITA | 2012 | 1:54.92     | SAMUELE PAMPANA   | ITA | 2017 | 2:07.92      | A.PONTALTI        | ITA | 2016 |
| 2:03.31     | EIJI NOMURA       | JPN | 2009 | 1:55.11     | F.SILVESTRI       | ITA | 2003 | 50 M. BRST   |                   |     |      |
| 2:03.76     | FERNANDO ALAEZ    | ESP | 2011 | 1:55.42     | PATRICK BRUNDAGE  | USA | 2009 | 28.06        | RYOSUKE IMAI      | JPN | 2019 |
| 2:04.06     | ISAMU TSUZUKI     | JPN | 2012 | 1:55.65     | ISAMU TSUZUKI     | JPN | 2013 | 28.21        | JEFF COMMINGS     | USA | 2018 |
| 2:04.50     | BOBBY PATTEN      | USA | 1999 | 1:55.67     | JACOB CARSTENSEN  | DEN | 2019 | 28.52        | STEVE WEST        | USA | 2014 |
| 2:05.84     | MIKE SHAFFER      | USA | 2000 | 400 M. FREE |                   |     |      | 28.76        | ALBERTO MONTINI   | ITA | 2010 |
| 2:06.12     | LOIC LEROY        | FRA | 2015 | 3:59.68     | SAMUELE PAMPANA   | ITA | 2017 | 28.86        | THOMAS NARNHOFER  | AUT | 2017 |
| 2:06.23     | ERIK HOCHSTEIN    | USA | 2003 | 4:00.67     | KAI DITZEL        | GER | 2004 | 28.89        | YOZO FUJII        | JPN | 2009 |
| 100 M. I.M. |                   |     |      | 4:00.80     | ALBERTO MONTINI   | ITA | 2009 | 28.90        | VLADIMIR BRAGIN   | RUS | 2011 |
| 54.91       | DARIAN R TOWNSEND | USA | 2019 | 4:01.32     | ERIK HOCHSTEIN    | USA | 2009 | 28.97        | VLADIMIR BORTSOV  | RUS | 2019 |
| 56.29       | YUTA SHOJI        | JPN | 2019 | 4:02.00     | JACOB CARSTENSEN  | DEN | 2018 | 28.98        | HIDEAKI TOGO      | JPN | 2013 |
| 56.31       | TAKEFUMI KAKIZOE  | JPN | 2018 | 4:02.23     | CLAUS IVERSEN     | DEN | 2017 | 29.02        | ANDREA AGOSTINONE | ITA | 2010 |
| 56.36       | GLENN COUNTS      | USA | 2012 | 4:03.27     | NICOLA NISATO     | ITA | 2018 | 100 M. BRST  |                   |     |      |
| 56.37       | C.SORRENTINO      | ITA | 2010 | 4:04.16     | GUSTAVO HELENO    | BRA | 2016 | 1:01.42      | STEVE WEST        | USA | 2014 |
| 56.63       | TAKASHI NISHIYAMA | JPN | 2017 | 4:04.20     | ERIC CHRISTENSEN  | USA | 2014 | 1:01.75      | JEFF COMMINGS     | USA | 2018 |
| 56.63       | BEN HARKIN        | GBR | 2016 |             |                   |     |      | 1:02.38      | RYOSUKE IMAI      | JPN | 2019 |



# FINA WORLD MASTERS TOP 10 - SHORT COURSE METERS - ALL TIME (1986-2019)

|             |                    |     |      |             |                   |     |      |              |                   |     |      |
|-------------|--------------------|-----|------|-------------|-------------------|-----|------|--------------|-------------------|-----|------|
| 1:02.42     | ALBERTO MONTINI    | ITA | 2009 | 2:08.13     | ALBERTO MONTINI   | ITA | 2009 | 1500 M. FREE |                   |     |      |
| 1:02.86     | BEN HARKIN         | GBR | 2018 | 2:08.37     | ERIC CHRISTENSEN  | USA | 2014 | 16:13.34     | FABIO CALMASINI   | ITA | 2015 |
| 1:03.08     | VLADISLAV BRAGIN   | RUS | 2011 | 400 M. I.M. |                   |     |      | 16:28.63     | MICHAEL KLEIBER   | GER | 2008 |
| 1:03.11     | VAL BAGRI          | USA | 2015 | 4:30.68     | ERIC CHRISTENSEN  | USA | 2014 | 16:37.25     | KEITH SWITZER     | USA | 2011 |
| 1:03.26     | STEPHAN PERROT     | FRA | 2017 | 4:31.92     | UWE VOLK          | GER | 2011 | 16:38.92     | NICOLAS GRANGER   | FRA | 2015 |
| 1:03.33     | ROQUE SANTOS       | USA | 2009 | 4:31.96     | ASUKA KOIZUMI     | JPN | 2019 | 16:39.68     | IGOR PIOVESAN     | ITA | 2019 |
| 1:03.36     | YOZO FUJII         | JPN | 2010 | 4:32.05     | ROQUE SANTOS      | USA | 2008 | 16:43.02     | MARCUS MATTIOLI   | BRA | 2006 |
| 200 M. BRST |                    |     |      | 4:33.90     | ALBERTO MONTINI   | ITA | 2009 | 16:51.21     | JIM MCCONICA      | USA | 1999 |
| 2:13.72     | STEVE WEST         | USA | 2014 | 4:34.67     | JACOB CARSTENSEN  | DEN | 2018 | 16:52.13     | B.BORDONALI       | ITA | 2007 |
| 2:15.95     | ALBERTO MONTINI    | ITA | 2009 | 4:35.15     | ERIK HOCHSTEIN    | USA | 2008 | 16:52.24     | MIKE SHAFFER      | USA | 2010 |
| 2:16.03     | ROQUE SANTOS       | USA | 2009 | 4:35.52     | HONZA VITAZKA     | SWE | 2016 | 16:54.69     | GERRY RODRIGUES   | USA | 2008 |
| 2:17.50     | STEPHAN PERROT     | FRA | 2017 | 4:35.57     | NICOLAS GRANGER   | FRA | 2007 | 50 M. BACK   |                   |     |      |
| 2:19.31     | BEN HARKIN         | GBR | 2018 | 4:36.91     | ANTONINO TRIPPODO | ITA | 2016 | 26.44        | LUIS LAERA        | ARG | 2018 |
| 2:19.91     | RYOSUKE IMAI       | JPN | 2019 |             |                   |     |      | 26.60        | DANIEL LONNBERG   | SWE | 2017 |
| 2:20.19     | HAJIME MORIMOTO    | JPN | 2010 | *****       |                   |     |      | 26.62        | EDILSON JUNIOR    | BRA | 2015 |
| 2:20.51     | BLAKE A HOLDEN     | USA | 2019 | M E N 45-49 |                   |     |      | 27.01        | IVAN SOSTARIC     | AUT | 2019 |
| 2:20.63     | VAL BAGRI          | USA | 2015 | *****       |                   |     |      | 27.02        | CHRIS STEVENSON   | USA | 2009 |
| 2:21.12     | VLADISLAV BRAGIN   | RUS | 2011 | 50 M. FREE  |                   |     |      | 27.03        | MICHAEL ROSS      | USA | 2014 |
| 50 M. FLY   |                    |     |      | 22.85       | HIDEAKI HARA      | JPN | 2019 | 27.08        | NICOLAS GRANGER   | FRA | 2016 |
| 24.14       | LARS FROLANDER     | SWE | 2014 | 23.29       | JOAKIM HOLMQUIST  | SWE | 2016 | 27.08        | HIROYOSHI MAETOGE | JPN | 2010 |
| 24.33       | TAKASHI NISHIYAMA  | JPN | 2019 | 23.54       | RAVIL NAGAEV      | RUS | 2019 | 27.12        | MIKHAIL GROMOV    | RUS | 2018 |
| 24.72       | EIJI NOMURA        | JPN | 2013 | 23.54       | ISAMU TSUZUKI     | JPN | 2018 | 27.20        | ANDERS RASMUSSEN  | USA | 2008 |
| 24.91       | MICHAEL ROSS       | USA | 2008 | 23.54       | VLADIMIR PREDKIN  | RUS | 2014 | 100 M. BACK  |                   |     |      |
| 24.99       | MASATERU IKEDA     | JPN | 2012 | 23.58       | SIPHIWE BALEKA    | USA | 2016 | 57.00        | CHRIS STEVENSON   | USA | 2009 |
| 25.03       | ISAMU TSUZUKI      | JPN | 2015 | 23.65       | MATTHEW BIONDI    | USA | 2012 | 57.52        | LUIS LAERA        | ARG | 2018 |
| 25.13       | HARTMUT BERNER     | GER | 2005 | 23.69       | M.GIALDI          | ITA | 2014 | 57.96        | DANIEL LONNBERG   | SWE | 2017 |
| 25.29       | JAN KARLSSON       | SWE | 2009 | 23.70       | PAUL CLEMENCE     | GBR | 2016 | 58.20        | HIROYOSHI MAETOGE | JPN | 2010 |
| 25.31       | OLA FAGERSTRAND    | SWE | 2018 | 23.80       | FRITZ BEDFORD     | USA | 2009 | 58.33        | JEFF P COMMINGS   | USA | 2019 |
| 25.32       | TAKEFUMI KOGA      | JPN | 2016 | 100 M. FREE |                   |     |      | 58.45        | NICOLAS GRANGER   | FRA | 2013 |
| 100 M. FLY  |                    |     |      | 49.99       | HIDEAKI HARA      | JPN | 2019 | 58.48        | J CLAY BRITT      | USA | 2006 |
| 53.81       | LARS FROLANDER     | SWE | 2014 | 51.30       | NICOLAS GRANGER   | FRA | 2012 | 58.72        | IVAN SOSTARIC     | AUT | 2019 |
| 54.98       | EIJI NOMURA        | JPN | 2014 | 52.22       | ISAMU TSUZUKI     | JPN | 2019 | 58.75        | FELIPE BARRETO    | MEX | 2009 |
| 55.82       | MICHAEL ROSS       | USA | 2008 | 52.53       | MARK THOMPSON     | AUS | 2015 | 58.89        | ANDERS RASMUSSEN  | USA | 2008 |
| 55.97       | ISAMU TSUZUKI      | JPN | 2013 | 52.54       | PAUL SMITH        | USA | 2007 | 200 M. BACK  |                   |     |      |
| 56.18       | WILLIAM SPECHT     | USA | 1998 | 52.55       | VLADIMIR PREDKIN  | RUS | 2014 | 2:05.54      | CHRIS STEVENSON   | USA | 2009 |
| 56.31       | MASATERU IKEDA     | JPN | 2016 | 52.65       | SIPHIWE BALEKA    | USA | 2016 | 2:06.66      | NICOLAS GRANGER   | FRA | 2012 |
| 56.36       | M.EROLI            | ITA | 2018 | 52.80       | MIKE VAN THIELEN  | USA | 2018 | 2:09.99      | ATASAY SERKAN     | TUR | 2017 |
| 56.48       | FERNANDO ALAEZ     | ESP | 2017 | 52.81       | PAUL CLEMENCE     | GBR | 2016 | 2:10.28      | Y.NAKAHARA        | JPN | 2015 |
| 56.50       | JIM HARVEY         | USA | 2007 | 52.90       | MARK REYNOLDS     | GBR | 2009 | 2:10.43      | JAY YARID         | USA | 2008 |
| 56.62       | MIKE VAROZZA       | USA | 2009 | 200 M. FREE |                   |     |      | 2:10.84      | JEFF WELECHUK     | CAN | 2016 |
| 56.62       | HARTMUT BERNER     | GER | 2005 | 1:52.87     | NICOLAS GRANGER   | FRA | 2012 | 2:10.85      | DANIEL COTTON     | GBR | 2019 |
| 200 M. FLY  |                    |     |      | 1:54.73     | KAI DITZEL        | GER | 2008 | 2:11.22      | TAIHEI SAKA       | JPN | 2009 |
| 2:02.97     | WILLIAM SPECHT     | USA | 1998 | 1:55.88     | FABIO CALMASINI   | ITA | 2013 | 2:11.58      | LARS KALENKA      | GER | 2018 |
| 2:04.42     | FERNANDO ALAEZ     | ESP | 2016 | 1:55.91     | MARK THOMPSON     | AUS | 2015 | 2:12.10      | WIESLAW MUSIAL    | CAN | 2003 |
| 2:04.42     | EIJI NOMURA        | JPN | 2012 | 1:56.00     | PAUL SMITH        | USA | 2007 | 50 M. BRST   |                   |     |      |
| 2:05.72     | TOSHIYUKI IBE      | JPN | 2010 | 1:56.26     | MARCUS MATTIOLI   | BRA | 2009 | 28.65        | JEFF P COMMINGS   | USA | 2019 |
| 2:05.96     | ISAMU TSUZUKI      | JPN | 2014 | 1:56.62     | ISAMU TSUZUKI     | JPN | 2018 | 28.83        | HIDEAKI TOGO      | JPN | 2018 |
| 2:06.06     | UWE VOLK           | GER | 2010 | 1:56.62     | KEITH SWITZER     | USA | 2009 | 28.87        | RICO ROLLI        | ITA | 2010 |
| 2:06.16     | M.EROLI            | ITA | 2017 | 1:56.93     | MARCO COLOMBO     | ITA | 2008 | 28.88        | TODD TORRES       | USA | 2013 |
| 2:06.48     | DENNIS BAKER       | USA | 2005 | 1:57.28     | ALBERTO MONTINI   | ITA | 2013 | 28.94        | STEVE WEST        | USA | 2018 |
| 2:06.68     | DAVID WARREN       | GBR | 2014 | 400 M. FREE |                   |     |      | 29.11        | NICOLAS GRANGER   | FRA | 2015 |
| 2:07.03     | MIKE SHAFFER       | USA | 2008 | 4:03.10     | FABIO CALMASINI   | ITA | 2015 | 29.18        | YOZO FUJII        | JPN | 2014 |
| 100 M. I.M. |                    |     |      | 4:03.81     | NICOLAS GRANGER   | FRA | 2015 | 29.21        | ATASAY SERKAN     | TUR | 2017 |
| 56.91       | TAKASHI NICHIIYAMA | JPN | 2019 | 4:05.90     | KAI DITZEL        | GER | 2008 | 29.22        | JOAKIM HOLMQUIST  | SWE | 2016 |
| 57.07       | HIDEAKI HARA       | JPN | 2016 | 4:08.87     | MARK THOMPSON     | AUS | 2015 | 29.44        | STEFAN SCHERLING  | SWE | 2018 |
| 57.19       | JEFF COMMINGS      | USA | 2014 | 4:08.93     | MARCUS MATTIOLI   | BRA | 2005 | 100 M. BRST  |                   |     |      |
| 57.34       | BEN HARKIN         | GBR | 2018 | 4:09.19     | KEITH SWITZER     | USA | 2009 | 1:02.22      | STEVE WEST        | USA | 2018 |
| 57.39       | ALBERTO MONTINI    | ITA | 2010 | 4:09.99     | IGOR PIOVESAN     | ITA | 2019 | 1:02.70      | JEFF P COMMINGS   | USA | 2019 |
| 57.71       | MICHAEL ROSS       | USA | 2008 | 4:11.02     | MARCO COLOMBO     | ITA | 2007 | 1:03.23      | NICOLAS GRANGER   | FRA | 2015 |
| 58.26       | PETR GREGOR        | CZE | 2015 | 4:11.35     | GREG STREPPPEL    | CAN | 2015 | 1:04.39      | TODD TORRES       | USA | 2013 |
| 58.30       | ISAMU TSUZUKI      | JPN | 2013 | 4:12.75     | ALBERTO MONTINI   | ITA | 2014 | 1:04.41      | VLADISLAV BRAGIN  | RUS | 2016 |
| 58.50       | MARTIN SNAPE       | GBR | 2019 | 800 M. FREE |                   |     |      | 1:04.62      | RICO ROLLI        | ITA | 2011 |
| 58.64       | M.EROLI            | ITA | 2018 | 8:28.53     | FABIO CALMASINI   | ITA | 2016 | 1:04.69      | CHRIS WEISSMAN    | USA | 2009 |
| 200 M. I.M. |                    |     |      | 8:35.48     | MARK THOMPSON     | AUS | 2015 | 1:04.76      | HAJIME MORIMOTO   | JPN | 2014 |
| 2:05.46     | ROQUE SANTOS       | USA | 2009 | 8:38.56     | GREG STREPPPEL    | CAN | 2015 | 1:04.80      | YOZO FUJII        | JPN | 2013 |
| 2:06.71     | JEFF COMMINGS      | USA | 2016 | 8:39.84     | MICHAEL PRUFERT   | GER | 2009 | 1:04.91      | HIDEAKI TOGO      | JPN | 2017 |
| 2:06.97     | NICOLAS GRANGER    | FRA | 2010 | 8:41.60     | RICARDO VALDIVIA  | USA | 2013 | 200 M. BRST  |                   |     |      |
| 2:07.20     | HIROYUKI KOSAKA    | JPN | 2017 | 8:41.87     | IGOR PIOVESAN     | ITA | 2019 | 2:15.45      | STEVE WEST        | USA | 2018 |
| 2:07.53     | ASUKA KOIZUMI      | JPN | 2019 | 8:42.76     | KAI DITZEL        | GER | 2008 | 2:18.91      | NICOLAS GRANGER   | FRA | 2015 |
| 2:07.71     | ERIK HOCHSTEIN     | USA | 2008 | 8:42.85     | KEITH SWITZER     | USA | 2010 | 2:20.41      | ALBERTO MONTINI   | ITA | 2013 |
| 2:07.88     | UWE VOLK           | GER | 2010 | 8:43.10     | DINO SCHORN       | ITA | 2015 | 2:21.39      | KURT GROTE        | USA | 2019 |
| 2:07.96     | PETER BERMEI       | GER | 2007 | 8:45.09     | NICOLAS GRANGER   | FRA | 2015 | 2:21.56      | BYRON SHEFCHIK    | USA | 2019 |



# FINA WORLD MASTERS TOP 10 - SHORT COURSE METERS - ALL TIME (1986-2019)

|         |                  |     |      |          |                   |       |                   |         |                   |     |      |
|---------|------------------|-----|------|----------|-------------------|-------|-------------------|---------|-------------------|-----|------|
| 2:21.92 | HAJIME MORIMOTO  | JPN | 2013 |          |                   | 26.69 | FRITZ BEDFORD     | USA     | 2015              |     |      |
| 2:22.68 | GLENN MILLS      | USA | 2008 | *****    |                   | 27.43 | NICOLAS GRANGER   | FRA     | 2017              |     |      |
| 2:23.30 | VLADISLAV BRAGIN | RUS | 2016 |          | M E N 50-54       | 27.66 | CRAIG NORREY      | SUI     | 2011              |     |      |
| 2:23.74 | DAVID GUTHRIE    | USA | 2009 | *****    |                   | 27.71 | STEVE WOOD        | USA     | 2011              |     |      |
| 2:25.62 | RICO ROLLI       | ITA | 2011 | 50       | M. FREE           | 27.73 | HIROYOSHI MAETOGE | JPN     | 2015              |     |      |
| 50      | M. FLY           |     |      | 23.38    | ROWDY GAINES      | USA   | 2009              | 27.94   | VLADIMIR PREDKIN  | RUS | 2019 |
| 24.38   | EIJI NOMURA      | JPN | 2017 | 23.80    | JOAKIM HOLMQUIST  | SWE   | 2019              | 28.27   | SHUJI AZUMA       | JPN | 2018 |
| 24.93   | MASATERU IKEDA   | JPN | 2017 | 23.96    | BRENT BARNES      | JPN   | 2010              | 28.37   | JAMIE FOWLER      | USA | 2009 |
| 25.08   | FREDERIC TONUS   | BEL | 2019 | 24.02    | NICOLAS GRANGER   | FRA   | 2017              | 28.40   | MARCO COLOMBO     | ITA | 2010 |
| 25.40   | RAVIL NAGAEV     | RUS | 2019 | 24.07    | VLADIMIR PREDKIN  | RUS   | 2019              | 100     | M. BACK           |     |      |
| 25.54   | MIKHAIL GROMOV   | RUS | 2018 | 24.14    | M.GIALDI          | ITA   | 2018              | 57.95   | NICOLAS GRANGER   | FRA | 2017 |
| 25.58   | JAN KARLSSON     | SWE | 2013 | 24.23    | STEVE HILTABIDDLE | USA   | 2018              | 58.47   | FRITZ BEDFORD     | USA | 2015 |
| 25.61   | ISAMU TSUZUKI    | JPN | 2019 | 24.26    | PAUL TREVISAN     | USA   | 2003              | 59.79   | HIROYOSHI MAETOGE | JPN | 2015 |
| 25.68   | MARKUS BIERIG    | GER | 2019 | 24.34    | MICHAEL HODGSON   | GBR   | 2017              | 59.92   | STEVE WOOD        | USA | 2011 |
| 25.68   | TOMOHIRO NAKANO  | JPN | 2019 | 24.40    | CALVIN MAUGHAN    | RSA   | 2018              | 1:00.38 | JAMIE FOWLER      | USA | 2009 |
| 25.74   | FRITZ BEDFORD    | USA | 2009 | 100      | M. FREE           |       |                   | 1:01.47 | EDWIN VAN NORDEN  | NED | 2014 |
| 100     | M. FLY           |     |      | 51.49    | NICOLAS GRANGER   | FRA   | 2017              | 1:01.48 | TOM WOLF          | USA | 2004 |
| 55.07   | EIJI NOMURA      | JPN | 2018 | 51.61    | ROWDY GAINES      | USA   | 2009              | 1:01.86 | WIESLAW MUSIAL    | CAN | 2009 |
| 55.78   | ISAMU TSUZUKI    | JPN | 2019 | 53.87    | BOB BUGG          | USA   | 2009              | 1:01.89 | MARIO LLORET      | ESP | 2009 |
| 56.37   | NICOLAS GRANGER  | FRA | 2016 | 53.92    | STEVE HILTABIDDLE | USA   | 2018              | 1:01.90 | CRAIG NORREY      | SUI | 2011 |
| 56.60   | MASATERU IKEDA   | JPN | 2017 | 54.09    | HASSE NILSSON     | SWE   | 2019              | 200     | M. BACK           |     |      |
| 56.65   | TOMOHIRO NAKANO  | JPN | 2019 | 54.29    | BRENT BARNES      | JPN   | 2009              | 2:07.13 | NICOLAS GRANGER   | FRA | 2017 |
| 56.78   | DEKE BOTSFORD    | CAN | 2012 | 54.40    | RICHARD KAMMERER  | USA   | 2009              | 2:11.84 | JAMIE FOWLER      | USA | 2009 |
| 57.17   | PAUL CARTER      | USA | 2003 | 54.46    | M.GIALDI          | ITA   | 2018              | 2:13.02 | LUCA VIGNERI      | ITA | 2017 |
| 57.25   | MIKHAIL GROMOV   | RUS | 2018 | 54.54    | MARK THOMPSON     | AUS   | 2019              | 2:13.05 | WIESLAW MUSIAL    | CAN | 2009 |
| 57.37   | CHRIS STEVENSON  | USA | 2010 | 54.55    | FRITZ BEDFORD     | USA   | 2014              | 2:14.03 | TOM WOLF          | USA | 2004 |
| 57.48   | FREDERIC TONUS   | BEL | 2018 | 200      | M. FREE           |       |                   | 2:14.34 | LEN GUSHE         | CAN | 2013 |
| 200     | M. FLY           |     |      | 1:53.78  | NICOLAS GRANGER   | FRA   | 2017              | 2:14.50 | KURT DICKSON      | USA | 2018 |
| 2:05.01 | EIJI NOMURA      | JPN | 2018 | 1:54.61  | ROWDY GAINES      | USA   | 2011              | 2:15.10 | SCOTT SHAKE       | USA | 2008 |
| 2:06.40 | DENNIS BAKER     | USA | 2006 | 1:56.75  | BOB BUGG          | USA   | 2009              | 2:15.14 | JEROME FRENTSOS   | USA | 2015 |
| 2:08.17 | NICOLAS GRANGER  | FRA | 2016 | 1:57.37  | DAVID SIMS        | USA   | 2014              | 2:15.53 | HIROYOSHI MAETOGE | JPN | 2015 |
| 2:09.06 | WILLIAM SPECHT   | USA | 2003 | 1:58.37  | JIM MCCONICA      | USA   | 2000              | 50      | M. BRST           |     |      |
| 2:09.58 | MARCUS MATTIOLI  | BRA | 2006 | 1:59.54  | DINO SCHORN       | ITA   | 2019              | 29.71   | CARLO TRAVAINI    | ITA | 2017 |
| 2:09.65 | CHRIS STEVENSON  | USA | 2009 | 1:59.97  | MARK THOMPSON     | AUS   | 2019              | 29.79   | JOAKIM HOLMQUIST  | SWE | 2019 |
| 2:09.92 | ALBERTO MONTINI  | ITA | 2013 | 2:00.19  | FABIO CALMASINI   | ITA   | 2018              | 29.82   | NICOLAS GRANGER   | FRA | 2018 |
| 2:09.98 | TOSHIYUKI IBE    | JPN | 2015 | 2:00.31  | PAUL SMITH        | USA   | 2009              | 29.84   | DAVID GUTHRIE     | USA | 2013 |
| 2:10.12 | MIKE SHAFFER     | USA | 2012 | 2:00.77  | GREG STREPPPEL    | CAN   | 2019              | 29.95   | MICHAEL HODGSON   | GBR | 2017 |
| 2:10.72 | DEKE BOTSFORD    | CAN | 2012 | 400      | M. FREE           |       |                   | 30.08   | MAKOTO ONODERA    | JPN | 2017 |
| 100     | M. I.M.          |     |      | 4:04.48  | NICOLAS GRANGER   | FRA   | 2017              | 30.10   | SCOTT HEBER       | USA | 2016 |
| 57.68   | NICOLAS GRANGER  | FRA | 2012 | 4:07.99  | JIM MCCONICA      | USA   | 2000              | 30.23   | ROBERTO DOBIE     | ARG | 2019 |
| 57.83   | ISAMU TSUZUKI    | JPN | 2018 | 4:12.12  | BOB BUGG          | USA   | 2009              | 30.33   | TOMAS VAVERKA     | CZE | 2016 |
| 59.71   | VLADIMIR PREDKIN | RUS | 2014 | 4:12.33  | FABIO CALMASINI   | ITA   | 2018              | 30.44   | TOR PEDERSEN      | NOR | 2018 |
| 59.98   | FRANK GRUNER     | GER | 2019 | 4:13.01  | MARCUS MATTIOLI   | BRA   | 2011              | 100     | M. BRST           |     |      |
| 1:00.07 | HARALD MAISCH    | GER | 2016 | 4:14.65  | GREG STREPPPEL    | CAN   | 2019              | 1:04.28 | NICOLAS GRANGER   | FRA | 2017 |
| 1:00.09 | SIPHIWE BALEKA   | USA | 2016 | 4:16.37  | BARTON WELLS      | USA   | 2017              | 1:04.54 | DAVID GUTHRIE     | USA | 2013 |
| 1:00.13 | EDWIN VAN NORDEN | NED | 2009 | 4:17.25  | ANDREW BRAY       | USA   | 2011              | 1:05.56 | CARLO TRAVAINI    | ITA | 2017 |
| 1:00.14 | ANDERS RASMUSSEN | USA | 2009 | 4:17.83  | LUCA DI IACOVO    | ITA   | 2017              | 1:06.25 | MAKOTO ONODERA    | JPN | 2017 |
| 1:00.21 | ALBERTO MONTINI  | ITA | 2013 | 4:18.40  | GIAN LUCA SONDALI | ITA   | 2019              | 1:06.63 | HAJIME MORIMOTO   | JPN | 2019 |
| 1:00.29 | MARCO COLOMBO    | ITA | 2006 | 800      | M. FREE           |       |                   | 1:06.89 | ROBERTO DOBIE     | ARG | 2019 |
| 200     | M. I.M.          |     |      | 8:36.30  | FABIO CALMASINI   | ITA   | 2018              | 1:07.08 | MICHAEL HODGSON   | GBR | 2018 |
| 2:04.64 | NICOLAS GRANGER  | FRA | 2012 | 8:44.00  | DINO SCHORN       | ITA   | 2018              | 1:07.33 | ALEXEY PLEKCHANOV | RUS | 2018 |
| 2:09.71 | JEROME FRENTSOS  | USA | 2010 | 8:44.51  | JIM MCCONICA      | USA   | 2000              | 1:07.69 | SHUJI AZUMA       | JPN | 2017 |
| 2:10.47 | KURT GROTE       | USA | 2019 | 8:46.78  | BRENT FOSTER      | NZL   | 2018              | 1:08.10 | FABIO CAVALLI     | ITA | 2018 |
| 2:10.49 | TAIHEI SAKA      | JPN | 2009 | 8:49.96  | ANDREW BRAY       | USA   | 2011              | 200     | M. BRST           |     |      |
| 2:11.28 | ANDERS RASMUSSEN | USA | 2009 | 8:53.48  | MARK DRENNEN      | USA   | 2006              | 2:19.36 | NICOLAS GRANGER   | FRA | 2018 |
| 2:11.43 | BYRON SHEFCHIK   | USA | 2019 | 8:54.48  | GREG STREPPPEL    | CAN   | 2019              | 2:21.65 | DAVID GUTHRIE     | USA | 2013 |
| 2:11.84 | ALBERTO MONTINI  | ITA | 2013 | 8:54.56  | BARTON WELLS      | USA   | 2017              | 2:27.13 | HAJIME MORIMOTO   | JPN | 2018 |
| 2:11.92 | EDWIN VAN NORDEN | NED | 2009 | 8:54.84  | NICOLAS GRANGER   | FRA   | 2017              | 2:27.28 | CARLO TRAVAINI    | ITA | 2017 |
| 2:12.01 | ALEX BAUMANN     | CAN | 2009 | 8:55.43  | KURT DICKSON      | USA   | 2017              | 2:28.02 | ALBERTO MONTINI   | ITA | 2018 |
| 2:12.20 | ISAMU TSUZUKI    | JPN | 2019 | 1500     | M. FREE           |       |                   | 2:28.94 | SHUJI AZUMA       | JPN | 2017 |
| 400     | M. I.M.          |     |      | 16:25.96 | FABIO CALMASINI   | ITA   | 2018              | 2:29.00 | ALEXEY PLEKCHANOV | RUS | 2018 |
| 4:31.36 | NICOLAS GRANGER  | FRA | 2012 | 16:33.02 | JIM MCCONICA      | USA   | 2000              | 2:29.48 | ABRAHAM E SOLANO  | USA | 2019 |
| 4:39.19 | ALBERTO MONTINI  | ITA | 2013 | 16:52.78 | ANDREW BRAY       | USA   | 2011              | 2:29.79 | ROBERTO DOBIE     | ARG | 2019 |
| 4:42.15 | TAIHEI SAKA      | JPN | 2009 | 16:53.04 | JEFF ERWIN        | USA   | 2016              | 2:30.69 | MAKOTO ONODERA    | JPN | 2017 |
| 4:43.36 | GREG STREPPPEL   | CAN | 2015 | 16:57.60 | MICHAEL KLEIBER   | GER   | 2013              | 50      | M. FLY            |     |      |
| 4:43.58 | FABIO CALMASINI  | ITA | 2013 | 16:58.99 | BRENT FOSTER      | NZL   | 2017              | 25.49   | DAN THOMPSON      | CAN | 2009 |
| 4:43.64 | JEROME FRENTSOS  | USA | 2010 | 17:03.45 | MARCUS MATTIOLI   | BRA   | 2011              | 25.74   | STEVE HILTABIDDLE | USA | 2018 |
| 4:44.04 | DANIEL COTTON    | GBR | 2019 | 17:07.36 | GREG STREPPPEL    | CAN   | 2019              | 25.94   | NICOLAS GRANGER   | FRA | 2018 |
| 4:44.28 | MARCUS MATTIOLI  | BRA | 2009 | 17:11.44 | BARTON WELLS      | USA   | 2017              | 26.00   | SCOTT HEBER       | USA | 2016 |
| 4:44.70 | KEVIN J DOHERTY  | USA | 2019 | 17:13.75 | MIKE SHAFFER      | USA   | 2016              | 26.04   | FRITZ BEDFORD     | USA | 2014 |
| 4:46.48 | PATRICK BRUNDAGE | USA | 2013 | 50       | M. BACK           |       |                   | 26.12   | PAUL CARTER       | USA | 2007 |
| 4:46.48 | MARCO TENDERINI  | ITA | 2012 | 25.30    | ROBERTO ESTESO    | ESP   | 2019              | 26.15   | KAZUHIKO YAMAKAWA | JPN | 2018 |



# FINA WORLD MASTERS TOP 10 - SHORT COURSE METERS - ALL TIME (1986-2019)

|             |                   |     |      |              |                   |     |      |             |                   |     |      |
|-------------|-------------------|-----|------|--------------|-------------------|-----|------|-------------|-------------------|-----|------|
| 26.20       | PAUL SMITH        | USA | 2009 | 25.25        | MARCO COLOMBO     | ITA | 2016 | 1:02.38     | JAMIE FOWLER      | USA | 2014 |
| 26.28       | NICHOLAS DECKER   | USA | 2017 | 25.25        | DAN THOMPSON      | CAN | 2013 | 1:02.63     | HIROSHI SHIBUYA   | JPN | 2016 |
| 26.43       | HIROSHI MIURA     | JPN | 2018 | 100 M. FREE  |                   |     |      | 1:03.29     | TOM BARTON        | USA | 2011 |
| 100 M. FLY  |                   |     |      | 54.32        | CALVIN MAUGHAN    | SWE | 2019 | 1:03.68     | EDWIN VAN NORDEN  | NED | 2018 |
| 56.78       | NICOLAS GRANGER   | FRA | 2018 | 54.50        | JACK GROSELLE     | USA | 2009 | 1:03.74     | LEN GUSHE         | CAN | 2018 |
| 57.29       | PAUL CARTER       | USA | 2007 | 54.86        | NAKKAS AHMET      | TUR | 2017 | 1:03.75     | PHILIPP DJANG     | USA | 2009 |
| 58.30       | DAVID SIMS        | USA | 2012 | 55.12        | PAUL TREVISAN     | USA | 2006 | 1:03.86     | CLAY BRITT        | USA | 2018 |
| 58.76       | MARIO LLORET      | ESP | 2009 | 55.14        | STEVE WOOD        | USA | 2017 | 200 M. BACK |                   |     |      |
| 58.86       | JAN BIDRMAN       | CAN | 2016 | 55.40        | MICHAEL SODERLUND | USA | 2018 | 2:15.37     | LEN GUSHE         | CAN | 2018 |
| 59.18       | STEVE HILTABIDDLE | USA | 2018 | 55.78        | GREGORY HARRIS    | USA | 2018 | 2:15.79     | JAMIE FOWLER      | USA | 2014 |
| 59.25       | WILLIAM SPECHT    | USA | 2009 | 55.88        | CARLO TRAVAINI    | ITA | 2019 | 2:17.04     | TOM BARTON        | USA | 2011 |
| 59.26       | ANDREA TOJA       | ITA | 2016 | 55.92        | MARK REYNOLDS     | GBR | 2018 | 2:18.37     | MICHAEL SODERLUND | USA | 2018 |
| 59.39       | DAN THOMPSON      | CAN | 2009 | 56.18        | BRENT BARNES      | JPN | 2014 | 2:19.42     | PHILIPP DJANG     | USA | 2009 |
| 59.52       | MIKE SHAFFER      | USA | 2016 | 200 M. FREE  |                   |     |      | 2:19.61     | PETER MCKINNON    | CAN | 2019 |
| 200 M. FLY  |                   |     |      | 1:59.08      | MICHAEL MANN      | USA | 2009 | 2:19.63     | Z.JANUSZKIEWICZ   | POL | 2018 |
| 2:08.05     | NICOLAS GRANGER   | FRA | 2017 | 2:03.40      | S.D'ALESSANDRO    | ITA | 1995 | 2:19.63     | STEVE WOOD        | USA | 2015 |
| 2:10.52     | MIKE SHAFFER      | USA | 2016 | 2:03.47      | CARLO TRAVAINI    | ITA | 2019 | 2:20.05     | FRANCESCO PETTINI | ITA | 2019 |
| 2:11.15     | MARCUS MATTIOLI   | BRA | 2014 | 2:03.56      | JACK GROSELLE     | USA | 2009 | 2:20.59     | JAMES MCCONICA    | USA | 2005 |
| 2:11.70     | DAVID SIMS        | USA | 2012 | 2:03.64      | JAMES MCCONICA    | USA | 2005 | 50 M. BRST  |                   |     |      |
| 2:12.41     | DENNIS BAKER      | USA | 2011 | 2:03.98      | MARK REYNOLDS     | GBR | 2018 | 29.26       | CARLO TRAVAINI    | ITA | 2019 |
| 2:12.54     | WILLIAM SPECHT    | USA | 2009 | 2:04.49      | MARCO COLOMBO     | ITA | 2017 | 30.37       | DAVID GUTHRIE     | USA | 2016 |
| 2:12.90     | HUGO BREGMAN      | NED | 2010 | 2:04.97      | JAMES RITTER      | USA | 2013 | 30.50       | WALTER KUSCH      | GER | 2009 |
| 2:13.06     | MAURO CAPPELLETTI | ITA | 2015 | 2:05.07      | MARTEN DE GROOT   | NED | 2014 | 31.45       | JENS LUTSCHIN     | GER | 2019 |
| 2:17.44     | GREG STREPPPEL    | CAN | 2019 | 2:05.09      | PETER MCKINNON    | CAN | 2019 | 31.60       | MASAAKI OTSUKI    | JPN | 2016 |
| 2:17.82     | ANDREA TOJA       | ITA | 2016 | 400 M. FREE  |                   |     |      | 31.65       | OLIVIER BORIOS    | FRA | 2014 |
| 100 M. I.M. |                   |     |      | 4:16.03      | MICHAEL MANN      | USA | 2009 | 31.82       | TIMOTHY SHEAD     | USA | 2009 |
| 57.69       | NICOLAS GRANGER   | FRA | 2017 | 4:24.92      | JIM MCCONICA      | USA | 2006 | 31.84       | PATRICIO GOMEZ    | ESP | 2013 |
| 1:00.57     | SCOTT HEBER       | USA | 2016 | 4:25.54      | ARNALDO PEREZ     | PUR | 2017 | 31.86       | TADASHI FUJIMOTO  | JPN | 2017 |
| 1:00.76     | MICHAEL HODGSON   | GBR | 2019 | 4:25.70      | JOSE FREITAS      | POR | 2019 | 31.92       | HAKAN PERSSON     | SWE | 2018 |
| 1:00.96     | DAVID SIMS        | USA | 2012 | 4:26.81      | LEN GUSHE         | CAN | 2018 | 100 M. BRST |                   |     |      |
| 1:01.20     | SHUJI AZUMA       | JPN | 2017 | 4:27.22      | MARK REYNOLDS     | GBR | 2018 | 1:04.26     | CARLO TRAVAINI    | ITA | 2019 |
| 1:01.21     | JEROME FRENTSOS   | USA | 2015 | 4:28.73      | TOD SPIEKER       | USA | 2003 | 1:06.80     | DAVID GUTHRIE     | USA | 2016 |
| 1:01.21     | EDWIN VAN NORDEN  | NED | 2014 | 4:28.97      | J.CHATARD         | FRA | 2006 | 1:08.13     | WALTER KUSCH      | GER | 2009 |
| 1:01.29     | JAMIE FOWLER      | USA | 2009 | 4:29.77      | MICHAEL PRUFERT   | GER | 2019 | 1:09.68     | C.COVENY          | USA | 2017 |
| 1:01.50     | HAJIME MORIMOTO   | JPN | 2019 | 4:30.73      | MARTEN DE GROOT   | NED | 2014 | 1:09.87     | GREGORY HARRIS    | USA | 2019 |
| 1:01.54     | PAUL SMITH        | USA | 2009 | 800 M. FREE  |                   |     |      | 1:09.93     | TIMOTHY SHEAD     | USA | 2009 |
| 200 M. I.M. |                   |     |      | 8:51.34      | MICHAEL MANN      | USA | 2009 | 1:10.17     | ANDREY KOMISSAROV | USA | 2015 |
| 2:06.38     | NICOLAS GRANGER   | FRA | 2018 | 9:03.00      | JIM MCCONICA      | USA | 2006 | 1:10.45     | DAVE TOWN         | CAN | 2016 |
| 2:12.85     | JEROME FRENTSOS   | USA | 2015 | 9:07.40      | G.SCARAMEL        | ITA | 2008 | 1:10.56     | G.HOFFMANN        | USA | 2011 |
| 2:13.40     | JAMIE FOWLER      | USA | 2009 | 9:13.15      | TOD SPIEKER       | USA | 2003 | 1:11.26     | OLIVIER BORIOS    | FRA | 2014 |
| 2:13.50     | DAVID SIMS        | USA | 2014 | 9:19.85      | K.DELLBRUGGE      | GER | 2017 | 200 M. BRST |                   |     |      |
| 2:14.50     | SCOTT HEBER       | USA | 2016 | 9:20.54      | LEN GUSHE         | CAN | 2018 | 2:22.91     | CARLO TRAVAINI    | ITA | 2018 |
| 2:14.53     | KEN SHILLING      | USA | 2008 | 9:23.27      | MARTEN DE GROOT   | NED | 2014 | 2:27.00     | DAVID GUTHRIE     | USA | 2015 |
| 2:15.16     | HAJIME MORIMOTO   | JPN | 2019 | 9:25.08      | MARK REYNOLDS     | GBR | 2019 | 2:33.79     | TIMOTHY SHEAD     | USA | 2009 |
| 2:15.16     | TAIHEI SAKA       | JPN | 2014 | 9:25.93      | JIM CLEMMONS      | USA | 2008 | 2:35.30     | DAVE TOWN         | CAN | 2016 |
| 2:16.09     | DAVE TOWN         | CAN | 2012 | 9:26.04      | R SCOTT TOWNSEND  | USA | 2009 | 2:35.73     | G.HOFFMANN        | USA | 2012 |
| 2:16.73     | MARCUS MATTIOLI   | BRA | 2011 | 1500 M. FREE |                   |     |      | 2:35.92     | GREGORY HARRIS    | USA | 2018 |
| 400 M. I.M. |                   |     |      | 17:14.15     | JAMES MCCONICA    | USA | 2005 | 2:36.10     | TIMUR PODMARYOV   | RUS | 2012 |
| 4:29.33     | NICOLAS GRANGER   | FRA | 2017 | 17:35.21     | TOD SPIEKER       | USA | 2003 | 2:36.49     | ANDREY KOMISSAROV | USA | 2015 |
| 4:45.15     | JEROME FRENTSOS   | USA | 2015 | 17:35.99     | MICHAEL KLEIBER   | GER | 2018 | 2:36.61     | SERGE SCORE       | CAN | 2019 |
| 4:48.02     | MARCUS MATTIOLI   | BRA | 2011 | 17:46.30     | ARNALDO PEREZ     | PUR | 2018 | 2:36.70     | J.MELLADO         | FRA | 2019 |
| 4:48.84     | GREG STREPPPEL    | CAN | 2019 | 17:48.17     | K.DELLBRUGGE      | GER | 2018 | 50 M. FLY   |                   |     |      |
| 4:49.34     | TAIHEI SAKA       | JPN | 2014 | 17:56.15     | J.CHATARD         | FRA | 2006 | 26.45       | DAN THOMPSON      | CAN | 2013 |
| 4:49.49     | DAVID SIMS        | USA | 2014 | 17:58.95     | STEVEN PRESCOTT   | NZL | 2009 | 26.55       | FRITZ BEDFORD     | USA | 2018 |
| 4:51.57     | JAMIE FOWLER      | USA | 2009 | 18:02.40     | JIM CLEMMONS      | USA | 2005 | 26.67       | STEVE WOOD        | USA | 2015 |
| 4:51.98     | RICARDO VALDIVIA  | USA | 2015 | 18:03.28     | JOSE FREITAS      | POR | 2018 | 26.80       | BRUCE KONE        | USA | 2015 |
| 4:52.28     | MARCO TENDERINI   | ITA | 2019 | 18:04.07     | MARC JOUANDON     | FRA | 2012 | 26.85       | DAVID EMERSON     | GBR | 2019 |
| 4:53.73     | RAFAEL SEGARRA    | PUR | 2014 | 50 M. BACK   |                   |     |      | 26.87       | MARCEL EKKELBOOM  | GER | 2019 |
| *****       |                   |     |      | 27.62        | STEVE WOOD        | USA | 2015 | 26.93       | GREG SHAW         | USA | 2009 |
| M E N 55-59 |                   |     |      | 27.86        | FRITZ BEDFORD     | USA | 2018 | 27.02       | TAIHEI SAKA       | JPN | 2019 |
| *****       |                   |     |      | 27.96        | CRAIG NORREY      | SUI | 2016 | 27.16       | PAUL CARTER       | USA | 2014 |
| 50 M. FREE  |                   |     |      | 29.01        | TOM BARTON        | USA | 2012 | 27.18       | BRYAN TATTERSON   | RSA | 2019 |
| 24.37       | CALVIN MAUGHAN    | SWE | 2019 | 29.02        | HIROSHI SHIBUYA   | JPN | 2015 | 100 M. FLY  |                   |     |      |
| 24.51       | BRENT BARNES      | JPN | 2015 | 29.07        | PHILIPP DJANG     | USA | 2009 | 59.80       | DAN THOMPSON      | CAN | 2013 |
| 24.66       | STEVE WOOD        | USA | 2015 | 29.09        | JAMIE FOWLER      | USA | 2014 | 1:00.10     | DAVID SIMS        | USA | 2017 |
| 24.70       | PAUL TREVISAN     | USA | 2006 | 29.16        | CLAY BRITT        | USA | 2018 | 1:00.13     | BRYAN TATTERSON   | RSA | 2019 |
| 24.91       | JACK GROSELLE     | USA | 2009 | 29.21        | MARCO COLOMBO     | ITA | 2017 | 1:00.35     | GREG SHAW         | USA | 2006 |
| 24.98       | JERRY KOLLROSS    | USA | 2017 | 29.35        | UDO CHRISTIANSEN  | GER | 2016 | 1:00.58     | HUGO BREGMAN      | NED | 2013 |
| 25.00       | RICH ABRAHAMS     | USA | 2001 | 100 M. BACK  |                   |     |      | 1:00.71     | TAIHEI SAKA       | JPN | 2019 |
| 25.05       | BRYAN TATTERSON   | RSA | 2019 | 1:00.78      | FRITZ BEDFORD     | USA | 2018 | 1:00.86     | STEVE WOOD        | USA | 2015 |
| 25.21       | DAVID EMERSON     | GBR | 2018 | 1:00.84      | STEVE WOOD        | USA | 2015 | 1:00.98     | PAUL CARTER       | USA | 2014 |
|             |                   |     |      | 1:02.26      | MARCO COLOMBO     | ITA | 2015 | 1:01.41     | JORGE FARIA       | POR | 2019 |



# FINA WORLD MASTERS TOP 10 - SHORT COURSE METERS - ALL TIME (1986-2019)

|            |                   |     |      |              |                  |     |      |             |                  |     |      |
|------------|-------------------|-----|------|--------------|------------------|-----|------|-------------|------------------|-----|------|
| 1:01.49    | MARCEL EKKELBOOM  | GER | 2019 | 58.72        | EDGARS OZOLINS   | LAT | 2019 | 2:25.89     | DJAN MADRUGA     | BRA | 2018 |
| 1:01.49    | MARCUS MATTIOLI   | BRA | 2017 | 200 M. FREE  |                  |     |      | 2:26.30     | PHILIPP DJANG    | USA | 2014 |
|            | 200 M. FLY        |     |      | 2:01.65      | RICK COLELLA     | USA | 2015 | 2:26.38     | VLADIMIR GORKOV  | RUS | 2017 |
| 2:15.97    | HUGO BREGMAN      | NED | 2013 | 2:05.07      | JACK GROSELLE    | USA | 2014 | 2:27.61     | JONATHAN KLEIN   | USA | 2017 |
| 2:16.86    | DAVID SIMS        | USA | 2017 | 2:06.50      | DAN STEPHENSON   | USA | 2017 | 2:27.91     | JOE DUNN         | USA | 2018 |
| 2:18.62    | MARCUS MATTIOLI   | BRA | 2017 | 2:07.22      | JAMES RITTER     | USA | 2016 | 2:27.99     | TIMOTHY SHEAD    | USA | 2012 |
| 2:19.02    | MARC GEORG VAUPEL | GER | 2018 | 2:07.96      | LARRY KRAUSER    | USA | 2013 | 2:28.90     | WES EDWARDS      | USA | 2013 |
| 2:19.72    | JOHN CRAIG        | USA | 2009 | 2:08.60      | DAVID A BISHOP   | USA | 2019 | 50 M. BRST  |                  |     |      |
| 2:19.88    | LEN GUSHE         | CAN | 2018 | 2:09.50      | JIM MC CONICA    | USA | 2010 | 31.51       | RICK COLELLA     | USA | 2015 |
| 2:21.90    | GREG SHAW         | USA | 2007 | 2:10.04      | FRED SCHLICHER   | USA | 2008 | 32.16       | STUART ELLICOTT  | AUS | 2012 |
| 2:22.05    | CARLO TRAVAINI    | ITA | 2019 | 2:10.67      | A.MARCO          | ITA | 2017 | 32.31       | ROBERT STRAND    | USA | 2009 |
| 2:22.13    | JAMES MCCONICA    | USA | 2005 | 2:11.04      | TITO MORALES     | USA | 2019 | 32.44       | OLIVIER BORIOS   | FRA | 2019 |
| 2:22.22    | DANIEL LIPINE     | CAN | 2018 | 400 M. FREE  |                  |     |      | 32.45       | TIMOTHY SHEAD    | USA | 2012 |
|            | 100 M. I.M.       |     |      | 4:29.92      | DAN STEPHENSON   | USA | 2017 | 32.74       | WALTER KUSCH     | GER | 2015 |
| 1:01.31    | CARLO TRAVAINI    | ITA | 2019 | 4:31.91      | JAMES RITTER     | USA | 2017 | 32.75       | GREGORY OXLEY    | USA | 2018 |
| 1:01.76    | STEVE WOOD        | USA | 2015 | 4:35.15      | JACK GROSELLE    | USA | 2014 | 32.95       | RICHARD NEVILLE  | USA | 2018 |
| 1:03.13    | MARCO COLOMBO     | ITA | 2015 | 4:35.39      | JIM MC CONICA    | USA | 2012 | 32.98       | BRUCE C KONE     | USA | 2019 |
| 1:03.14    | JAMIE FOWLER      | USA | 2014 | 4:35.79      | A.MARCO          | ITA | 2017 | 33.20       | ANDY DYER        | USA | 2018 |
| 1:03.48    | TIMOTHY SHEAD     | USA | 2009 | 4:39.07      | MARCO BRAVI      | ITA | 2016 | 100 M. BRST |                  |     |      |
| 1:03.58    | DAVE TOWN         | CAN | 2016 | 4:39.51      | SERGE GUERIN     | FRA | 2018 | 1:09.92     | RICK COLELLA     | USA | 2015 |
| 1:03.69    | GREG SHAW         | USA | 2008 | 4:39.58      | ANDY KNOWLES     | BAH | 2015 | 1:11.08     | TIMOTHY SHEAD    | USA | 2012 |
| 1:03.91    | DAVID SIMS        | USA | 2017 | 4:39.99      | BRUCE THOMAS     | USA | 2017 | 1:12.09     | ROBERT STRAND    | USA | 2009 |
| 1:04.09    | GREGORY HARRIS    | USA | 2018 | 4:40.45      | MARTEN DE GROOT  | NED | 2019 | 1:12.38     | JACK GROSELLE    | USA | 2014 |
| 1:04.10    | SHINJI ITOU       | JPN | 2019 | 4:40.45      | DUNCAN MCCREADIE | GBR | 2006 | 1:13.05     | OLIVIER BORIOS   | FRA | 2019 |
|            | 200 M. I.M.       |     |      | 800 M. FREE  |                  |     |      | 1:13.12     | GREGORY OXLEY    | USA | 2018 |
| 2:15.99    | CARLO TRAVAINI    | ITA | 2019 | 9:14.50      | ANDREW BRAY      | USA | 2018 | 1:13.55     | TOSHIHARU FUJII  | JPN | 2010 |
| 2:16.44    | MICHAEL MANN      | USA | 2009 | 9:25.24      | PAUL BLACKBEARD  | AUS | 2019 | 1:13.76     | SERGEY MOLODIN   | RUS | 2019 |
| 2:16.98    | DAVE TOWN         | CAN | 2016 | 9:28.01      | DAN STEPHENSON   | USA | 2017 | 1:13.87     | WALTER KUSCH     | GER | 2015 |
| 2:18.37    | DAVID SIMS        | USA | 2017 | 9:28.32      | JIM MC CONICA    | USA | 2012 | 1:14.07     | TIMUR PODMARYOV  | RUS | 2018 |
| 2:18.69    | JAMIE FOWLER      | USA | 2014 | 9:34.74      | ALESSANDRO BRAVI | ITA | 2017 | 200 M. BRST |                  |     |      |
| 2:19.01    | SAKKAY AHMET      | TUR | 2017 | 9:36.98      | BRUCE THOMAS     | USA | 2017 | 2:37.61     | RICK COLELLA     | USA | 2011 |
| 2:20.33    | TAIHEI SAKA       | JPN | 2019 | 9:37.50      | JAMES RITTER     | USA | 2016 | 2:37.87     | TIMOTHY SHEAD    | USA | 2012 |
| 2:20.58    | ANDREY KOMISSAROV | USA | 2015 | 9:40.73      | DJAN MADRUGA     | BRA | 2018 | 2:40.76     | ROBERT STRAND    | USA | 2009 |
| 2:21.00    | JIM SAUER         | USA | 2012 | 9:43.24      | JIM CLEMMONS     | USA | 2010 | 2:42.27     | SERGEY MOLODIN   | RUS | 2019 |
| 2:21.05    | GREG SHAW         | USA | 2006 | 9:43.56      | DOUG KAJIWARA    | USA | 2018 | 2:43.53     | LORENZO MARUGO   | ITA | 2012 |
|            | 400 M. I.M.       |     |      | 1500 M. FREE |                  |     |      | 2:44.71     | GREGORY OXLEY    | USA | 2018 |
| 4:51.97    | MICHAEL MANN      | USA | 2009 | 17:53.29     | ANDREW BRAY      | USA | 2018 | 2:45.43     | TIMUR PODMARYOV  | RUS | 2018 |
| 4:58.95    | CARLO TRAVAINI    | ITA | 2018 | 18:07.65     | BRUCE THOMAS     | USA | 2017 | 2:45.93     | PETER KAUCH      | GER | 2016 |
| 5:00.54    | JIM SAUER         | USA | 2012 | 18:24.21     | JIM MC CONICA    | USA | 2010 | 2:46.14     | ERIC SJOSTROM    | SWE | 2019 |
| 5:03.37    | LEN GUSHE         | CAN | 2018 | 18:28.64     | JIM CLEMMONS     | USA | 2010 | 2:46.21     | G.HOFFMANN       | USA | 2016 |
| 5:03.66    | ARNALDO PEREZ     | PUR | 2017 | 18:35.51     | GLENN CARLSEN    | CAN | 2017 | 2:46.21     | TOSHIHARU FUJII  | JPN | 2010 |
| 5:03.99    | MARC GEORG VAUPEL | GER | 2018 | 18:44.50     | MARCO BRAVI      | ITA | 2018 | 50 M. FLY   |                  |     |      |
| 5:05.40    | LORENZO MARUGO    | ITA | 2007 | 18:47.47     | MARTEN DE GROOT  | NED | 2018 | 26.78       | DAN THOMPSON     | CAN | 2017 |
| 5:07.68    | DAVE TOWN         | CAN | 2016 | 18:48.44     | BILL BRACKETT    | USA | 2018 | 27.40       | BRUCE C KONE     | USA | 2019 |
| 5:07.81    | MARK REYNOLDS     | GBR | 2019 | 18:48.79     | MARC JOUANDON    | FRA | 2018 | 27.53       | DONALD GRAHAM    | USA | 2014 |
| 5:07.99    | HUGO BREGMAN      | NED | 2013 | 18:50.59     | JAMES MCCLEERY   | USA | 2007 | 27.82       | HUGO BREGMAN     | NED | 2019 |
|            |                   |     |      | 50 M. BACK   |                  |     |      | 27.87       | RICHARD ABRAHAMS | USA | 2008 |
| *****      |                   |     |      | 29.44        | JAMIE FOWLER     | USA | 2019 | 28.22       | DOUG MARTIN      | USA | 2013 |
|            | M E N 60-64       |     |      | 29.64        | PHILIPP DJANG    | USA | 2014 | 28.26       | MARC MIDDLETON   | USA | 2013 |
| *****      |                   |     |      | 29.86        | TOM BARTON       | USA | 2016 | 28.30       | TAKEO HIRAMOTO   | JPN | 2010 |
|            |                   |     |      | 29.89        | BRUCE KONE       | USA | 2018 | 28.41       | A.MARKOVSKIY     | RUS | 2019 |
| 50 M. FREE |                   |     |      | 30.05        | FRANCISCO AMOROS | ESP | 2019 | 28.43       | ISAMU SHIBAZAKI  | JPN | 2018 |
| 24.90      | RICH ABRAHAMS     | USA | 2006 | 30.27        | JONATHAN KLEIN   | USA | 2017 | 100 M. FLY  |                  |     |      |
| 25.26      | BRENT BARNES      | JPN | 2018 | 30.42        | MARTTI LAAJUS    | ESP | 2014 | 1:00.20     | DAN THOMPSON     | CAN | 2016 |
| 25.39      | DAN THOMPSON      | CAN | 2017 | 30.50        | TAKEO HIRAMOTO   | JPN | 2010 | 1:01.38     | HUGO BREGMAN     | NED | 2018 |
| 25.40      | PAUL TREVISAN     | USA | 2012 | 30.55        | ANDRE STEYNBERG  | USA | 2017 | 1:03.67     | TAKEO HIRAMOTO   | JPN | 2010 |
| 25.58      | DOUG MARTIN       | USA | 2013 | 30.69        | VLADIMIR GORKOV  | RUS | 2017 | 1:03.76     | RICH ABRAHAMS    | USA | 2006 |
| 25.59      | JACK GROSELLE     | USA | 2014 | 100 M. BACK  |                  |     |      | 1:04.05     | JACK GROSELLE    | USA | 2014 |
| 25.87      | MARC MIDDLETON    | USA | 2012 | 1:03.15      | JAMIE FOWLER     | USA | 2019 | 1:04.27     | DONALD GRAHAM    | USA | 2015 |
| 25.93      | BRUCE C KONE      | USA | 2019 | 1:04.13      | TOM BARTON       | USA | 2016 | 1:04.47     | GREG SHAW        | USA | 2011 |
| 26.01      | A.MARKOVSKIY      | RUS | 2019 | 1:05.62      | PHILIPP DJANG    | USA | 2014 | 1:04.99     | BRIAN PATNO      | USA | 2016 |
| 26.18      | BRUCE WILLIAMS    | USA | 2014 | 1:06.27      | TIMOTHY SHEAD    | USA | 2012 | 1:05.56     | JAMES RITTER     | USA | 2017 |
| 26.18      | RAGNAR JENSEN     | NOR | 2008 | 1:06.30      | JONATHAN KLEIN   | USA | 2017 | 1:05.57     | FRED SCHLICHER   | USA | 2008 |
|            | 100 M. FREE       |     |      | 1:06.85      | BRUCE WILLIAMS   | USA | 2014 | 200 M. FLY  |                  |     |      |
| 55.87      | JACK GROSELLE     | USA | 2014 | 1:06.99      | WES EDWARDS      | USA | 2013 | 2:20.27     | HUGO BREGMAN     | NED | 2018 |
| 56.63      | RICH ABRAHAMS     | USA | 2008 | 1:07.10      | VLADIMIR GORKOV  | RUS | 2017 | 2:23.29     | RICK COLELLA     | USA | 2015 |
| 56.90      | JAMES RITTER      | USA | 2016 | 1:07.31      | HUGH WILDER      | USA | 2009 | 2:27.42     | GREG SANCHEZ     | USA | 2019 |
| 57.23      | DAN STEPHENSON    | USA | 2017 | 1:07.48      | J.DELAPORTE      | FRA | 2019 | 2:29.40     | SCOTT LAUTMAN    | USA | 2012 |
| 57.61      | PAUL TREVISAN     | USA | 2012 | 200 M. BACK  |                  |     |      | 2:30.18     | FRED SCHLICHER   | USA | 2008 |
| 57.67      | DAN THOMPSON      | CAN | 2017 | 2:17.15      | JAMIE FOWLER     | USA | 2019 | 2:30.59     | TITO MORALES     | USA | 2019 |
| 57.77      | BRUCE WILLIAMS    | USA | 2014 | 2:20.38      | TOM BARTON       | USA | 2016 | 2:30.77     | SEIICHI YARITA   | JPN | 2017 |
| 58.11      | DAVID A BISHOP    | USA | 2019 | 2:23.90      | DAN STEPHENSON   | USA | 2017 | 2:31.32     | RINAT GILYAZOV   | RUS | 2019 |
| 58.43      | MICHAEL BLATT     | USA | 2015 |              |                  |     |      |             |                  |     |      |



# FINA WORLD MASTERS TOP 10 - SHORT COURSE METERS - ALL TIME (1986-2019)

|             |                  |     |      |                           |       |              |             |                  |     |      |
|-------------|------------------|-----|------|---------------------------|-------|--------------|-------------|------------------|-----|------|
| 2:31.39     | JAMES RITTER     | USA | 2017 | 400 M. FREE               | 33.96 | WALTER KUSCH | GER         | 2019             |     |      |
| 2:31.52     | JOHN CRAIG       | USA | 2014 | 4:27.91 RICK COLELLA      | USA   | 2017         | 33.96       | NEAL L VESTAL    | USA | 2019 |
| 100 M. I.M. |                  |     |      | 4:45.88 JIM MC CONICA     | USA   | 2015         | 33.97       | C.STARZEC        | FRA | 2015 |
| 1:04.23     | RICK COLELLA     | USA | 2015 | 4:48.79 JEFFREY BOATRIGHT | USA   | 2018         | 34.15       | TIMOTHY SHEAD    | RSA | 2017 |
| 1:05.53     | TIMOTHY SHEAD    | USA | 2012 | 4:51.48 AKIRA IIDA        | JPN   | 2019         | 34.19       | ROBERT STRAND    | USA | 2012 |
| 1:06.10     | JACK GROSELLE    | USA | 2014 | 4:51.84 JACK R GROSELLE   | USA   | 2019         | 100 M. BRST |                  |     |      |
| 1:06.42     | GREGORY OXLEY    | USA | 2018 | 4:52.89 RICK WALKER       | USA   | 2015         | 1:11.82     | RICK COLELLA     | USA | 2019 |
| 1:06.53     | TAKEO HIRAMOTO   | JPN | 2010 | 4:53.03 DAN KIRKLAND      | USA   | 2015         | 1:14.03     | TIMOTHY SHEAD    | RSA | 2017 |
| 1:07.21     | SERGEY MOLODIN   | RUS | 2019 | 4:53.13 PATRICK MOREAU    | FRA   | 2019         | 1:15.67     | RANDY J PARKER   | USA | 2019 |
| 1:07.56     | DONALD GRAHAM    | USA | 2015 | 4:53.91 JAMES THORNTON    | USA   | 2018         | 1:15.69     | STUART ELLICOTT  | AUS | 2017 |
| 1:07.77     | ROBERT WEYHENKE  | NED | 2012 | 4:54.45 GLENN GRUBER      | USA   | 2014         | 1:15.84     | ROBERT STRAND    | USA | 2012 |
| 1:07.80     | GEORGE SCHMIDT   | USA | 2010 | 800 M. FREE               |       |              | 1:16.34     | C.STARZEC        | FRA | 2015 |
| 1:07.87     | BRUNO SOULAS     | FRA | 2019 | 9:26.94 RICK COLELLA      | USA   | 2019         | 1:16.64     | OSAMU MAEDA      | JPN | 2010 |
| 200 M. I.M. |                  |     |      | 9:53.06 JIM MC CONICA     | USA   | 2015         | 1:16.93     | PERE BALCELLS    | ESP | 2019 |
| 2:19.96     | RICK COLELLA     | USA | 2015 | 10:04.77 PATRICK MOREAU   | FRA   | 2017         | 1:16.94     | WALTER KUSCH     | GER | 2019 |
| 2:23.30     | JAMIE FOWLER     | USA | 2019 | 10:05.03 DAN KIRKLAND     | USA   | 2014         | 1:17.01     | DAVID GILDEA     | USA | 2008 |
| 2:24.75     | JACK GROSELLE    | USA | 2014 | 10:06.58 RICK WALKER      | USA   | 2015         | 200 M. BRST |                  |     |      |
| 2:25.98     | TIMOTHY SHEAD    | USA | 2012 | 10:09.84 J.CHATARD        | FRA   | 2016         | 2:36.85     | RICK COLELLA     | USA | 2017 |
| 2:26.43     | HUGO BREGMAN     | NED | 2019 | 10:16.06 VITTORIO ERMIRIO | ITA   | 2007         | 2:48.26     | TIMOTHY SHEAD    | RSA | 2017 |
| 2:27.66     | TITO MORALES     | USA | 2019 | 10:20.61 LARRY KRAUSER    | USA   | 2018         | 2:49.05     | ROBERT STRAND    | USA | 2012 |
| 2:28.47     | TIM BRODERICK    | USA | 2011 | 10:20.63 JIM CLEMMONS     | USA   | 2015         | 2:53.44     | ALLEN STARK      | USA | 2014 |
| 2:29.11     | GREG SHAW        | USA | 2011 | 10:21.01 HUBIE KERNS      | USA   | 2014         | 2:53.55     | C.STARZEC        | FRA | 2016 |
| 2:29.30     | DAN STEPHENSON   | USA | 2018 | 1500 M. FREE              |       |              | 2:54.15     | JIM CLEMMONS     | USA | 2015 |
| 2:29.73     | BRUCE YOUNG      | USA | 2018 | 18:53.75 JIM MC CONICA    | USA   | 2015         | 2:54.56     | GERSHON SHEFA    | ISR | 2008 |
| 400 M. I.M. |                  |     |      | 19:17.63 PATRICK MOREAU   | FRA   | 2017         | 2:54.65     | STUART ELLICOTT  | AUS | 2017 |
| 5:04.54     | RICK COLELLA     | USA | 2011 | 19:19.65 LARRY KRAUSER    | USA   | 2018         | 2:55.41     | HUBIE KERNS      | USA | 2014 |
| 5:15.31     | HUGO BREGMAN     | NED | 2018 | 19:23.83 RICK WALKER      | USA   | 2015         | 2:55.69     | RICK WALKER      | USA | 2016 |
| 5:17.31     | JACK GROSELLE    | USA | 2014 | 19:31.11 JIM CLEMMONS     | USA   | 2015         | 50 M. FLY   |                  |     |      |
| 5:20.37     | TITO MORALES     | USA | 2019 | 19:32.78 TOM LANDIS       | USA   | 2007         | 28.65       | DOUG MARTIN      | USA | 2018 |
| 5:20.60     | LORENZO MARUGO   | ITA | 2012 | 19:39.12 DAN KIRKLAND     | USA   | 2016         | 28.91       | JOSEF CLARET     | ESP | 2009 |
| 5:22.27     | DAN STEPHENSON   | USA | 2018 | 19:41.85 VITTORIO ERMIRIO | ITA   | 2007         | 28.99       | RICHARD ABRAHAMS | USA | 2010 |
| 5:22.86     | JIM CLEMMONS     | USA | 2010 | 19:47.48 JAMES MCCLEERY   | USA   | 2011         | 29.05       | MARC MIDDLETON   | USA | 2016 |
| 5:24.98     | JAMES RITTER     | USA | 2018 | 19:47.71 J.CHATARD        | FRA   | 2016         | 29.18       | JIM DRAGON       | USA | 2009 |
| 5:25.65     | NICK LECLERCQ    | USA | 2006 | 50 M. BACK                |       |              | 29.38       | LEONARD BIELICZ  | SWE | 2017 |
| 5:25.74     | MARC JOUANDON    | FRA | 2017 | 30.34 HUGH WILDER         | USA   | 2012         | 29.46       | DONALD GRAHAM    | USA | 2019 |
| *****       |                  |     |      | 31.61 PHILIPP DJANG       | USA   | 2019         | 29.55       | KEVIN MCCORMACK  | USA | 2017 |
| M E N 65-69 |                  |     |      | 31.64 RICHARD BURNS       | USA   | 2008         | 29.68       | JACK R GROSELLE  | USA | 2019 |
| *****       |                  |     |      | 31.77 TAKEO HIRAMOTO      | JPN   | 2016         | 29.78       | DAVID QUIGGIN    | USA | 2009 |
| 50 M. FREE  |                  |     |      | 31.91 PIERRE BAEHR        | FRA   | 2019         | 100 M. FLY  |                  |     |      |
| 25.42       | DOUG MARTIN      | USA | 2018 | 32.32 VINUS VAN BAALEN    | USA   | 2008         | 1:05.37     | LAWRENCE DAY     | USA | 2016 |
| 25.62       | RICHARD ABRAHAMS | USA | 2012 | 32.35 LUIZ FIGUEIREDO     | BRA   | 2006         | 1:05.84     | RICK COLELLA     | USA | 2019 |
| 26.41       | MARC MIDDLETON   | USA | 2016 | 32.43 JIMMY ROGERS        | GBR   | 2014         | 1:05.90     | JOSEF CLARET     | ESP | 2009 |
| 26.65       | JACK R GROSELLE  | USA | 2019 | 32.45 BOB THOMAS          | USA   | 2018         | 1:06.57     | JACK R GROSELLE  | USA | 2019 |
| 26.67       | LEONARD BIELICZ  | SWE | 2016 | 32.58 TOM WOLF            | USA   | 2019         | 1:06.60     | RICHARD ABRAHAMS | USA | 2010 |
| 26.68       | PAUL TREVISAN    | USA | 2016 | 100 M. BACK               |       |              | 1:07.61     | KEVIN MCCORMACK  | USA | 2017 |
| 26.68       | KEEFE LODWIG     | USA | 2008 | 1:07.69 HUGH WILDER       | USA   | 2012         | 1:07.79     | LEONARD BIELICZ  | SWE | 2016 |
| 26.73       | VINUS VAN BAALEN | CAN | 2007 | 1:08.55 PHILIPP DJANG     | USA   | 2019         | 1:07.83     | TAKEO HIRAMOTO   | JPN | 2015 |
| 26.85       | TATE HOLT        | USA | 2016 | 1:10.16 RICHARD BURNS     | USA   | 2009         | 1:08.35     | JOHN M CRAIG     | USA | 2019 |
| 26.87       | DAVID QUIGGIN    | USA | 2009 | 1:10.24 TOM WOLF          | USA   | 2019         | 1:08.36     | DAVID QUIGGIN    | USA | 2009 |
| 100 M. FREE |                  |     |      | 1:10.95 BOB THOMAS        | USA   | 2018         | 200 M. FLY  |                  |     |      |
| 57.78       | JACK R GROSELLE  | USA | 2019 | 1:11.45 TIMOTHY SHEAD     | RSA   | 2017         | 2:25.35     | RICK COLELLA     | USA | 2017 |
| 58.19       | RICK COLELLA     | USA | 2016 | 1:11.54 PIERRE BAEHR      | FRA   | 2019         | 2:27.35     | LAWRENCE DAY     | USA | 2016 |
| 58.58       | RICHARD ABRAHAMS | USA | 2012 | 1:12.20 BERND HORSTMANN   | GER   | 2009         | 2:33.77     | TAKEO HIRAMOTO   | JPN | 2015 |
| 59.40       | DAVID QUIGGIN    | USA | 2009 | 1:12.28 TAKEO HIRAMOTO    | JPN   | 2017         | 2:38.71     | ROBERT POILETMAN | USA | 2008 |
| 59.60       | KEEFE LODWIG     | USA | 2008 | 1:12.36 JIMMY ROGERS      | GBR   | 2014         | 2:41.64     | DEREK PARR       | GBR | 2009 |
| 59.94       | JAMES THORNTON   | USA | 2018 | 200 M. BACK               |       |              | 2:44.91     | MARK MODJESKA    | USA | 2018 |
| 1:00.10     | PAUL TREVISAN    | USA | 2016 | 2:30.92 TOM WOLF          | USA   | 2019         | 2:45.27     | J.LESTIDEAU      | FRA | 2011 |
| 1:00.37     | LEONARD BIELICZ  | SWE | 2016 | 2:31.16 LAWRENCE DAY      | USA   | 2018         | 2:46.70     | HUBIE KERNS      | USA | 2014 |
| 1:00.70     | AKIRA IIDA       | JPN | 2019 | 2:33.95 BOB THOMAS        | USA   | 2018         | 2:47.38     | HORST LEHMANN    | GER | 2012 |
| 1:01.00     | GLENN GRUBER     | USA | 2014 | 2:34.93 ALEK SHESTAKOV    | USA   | 2014         | 2:48.56     | PHIL L DODSON    | USA | 2019 |
| 200 M. FREE |                  |     |      | 2:34.97 RICHARD BURNS     | USA   | 2009         | 100 M. I.M. |                  |     |      |
| 2:07.56     | RICK COLELLA     | USA | 2016 | 2:35.04 JIM MC CONICA     | USA   | 2015         | 1:05.43     | RICK COLELLA     | USA | 2016 |
| 2:11.82     | JACK R GROSELLE  | USA | 2019 | 2:35.36 ROBERT WEYHENKE   | NED   | 2017         | 1:09.09     | JACK R GROSELLE  | USA | 2019 |
| 2:13.84     | JAMES THORNTON   | USA | 2017 | 2:36.26 HUGH WILDER       | USA   | 2012         | 1:09.38     | TIMOTHY SHEAD    | RSA | 2017 |
| 2:14.82     | TIM BRODERICK    | USA | 2016 | 2:37.65 BERND HORSTMANN   | GER   | 2008         | 1:09.90     | HUBIE KERNS      | USA | 2014 |
| 2:15.39     | DAVID QUIGGIN    | USA | 2009 | 2:37.90 PHILIPP DJANG     | USA   | 2019         | 1:10.26     | ROBERT STRAND    | USA | 2012 |
| 2:16.03     | GLENN GRUBER     | USA | 2014 | 50 M. BRST                |       |              | 1:10.42     | RICHARD ABRAHAMS | USA | 2010 |
| 2:16.27     | KEEFE LODWIG     | USA | 2008 | 32.50 RICK COLELLA        | USA   | 2016         | 1:10.47     | AKIRA IIDA       | JPN | 2019 |
| 2:16.28     | J.CHATARD        | FRA | 2016 | 33.31 RANDY J PARKER      | USA   | 2019         | 1:10.56     | TAKEO HIRAMOTO   | JPN | 2015 |
| 2:16.68     | CARL WATERER     | CAN | 2016 | 33.72 STUART ELLICOTT     | AUS   | 2017         | 1:10.67     | RICHARD BURNS    | USA | 2008 |
| 2:17.04     | RICHARD ABRAHAMS | USA | 2012 | 33.86 OSAMU MAEDA         | JPN   | 2010         | 1:10.83     | KAZUYA IRIE      | JPN | 2018 |
|             |                  |     |      | 33.88 PERE BALCELLS       | ESP   | 2019         | 200 M. I.M. |                  |     |      |



# FINA WORLD MASTERS TOP 10 - SHORT COURSE METERS - ALL TIME (1986-2019)

|             |                   |     |      |          |                   |     |      |         |                   |     |      |
|-------------|-------------------|-----|------|----------|-------------------|-----|------|---------|-------------------|-----|------|
| 2:20.35     | RICK COLELLA      | USA | 2018 | 10:56.19 | HUBIE KERNS       | USA | 2019 | 1:23.14 | CARLOS AGUIRRE    | ARG | 2019 |
| 2:30.80     | TIMOTHY SHEAD     | RSA | 2017 | 10:58.56 | FRANK MCELROY     | USA | 2018 | 1:23.34 | NORIAKI TSUJI     | JPN | 2016 |
| 2:30.96     | LAWRENCE DAY      | USA | 2016 | 11:01.38 | DAVID RADCLIFF    | USA | 2007 | 200 M.  | BRST              |     |      |
| 2:33.30     | JACK R GROSELLE   | USA | 2019 | 11:01.83 | FERNANDO CANEPA   | PER | 2018 | 2:55.87 | ROBERT STRAND     | USA | 2016 |
| 2:34.15     | HUBIE KERNS       | USA | 2014 | 11:04.40 | DAVID QUIGGIN     | USA | 2014 | 2:59.41 | DOUGLAS SPRINGER  | USA | 2016 |
| 2:34.64     | ALEK SHESTAKOV    | USA | 2014 | 11:16.51 | YASUSHI YAMAGUCHI | JPN | 2009 | 3:01.22 | BARRY YOUNG       | NZL | 2009 |
| 2:36.37     | PATRICK MOREAU    | FRA | 2019 | 11:17.52 | TOM LANDIS        | USA | 2012 | 3:01.92 | NORIAKI TSUJI     | JPN | 2016 |
| 2:37.43     | JAMES THORNTON    | USA | 2017 | 11:19.87 | J-C LESTIDEAU     | ESP | 2016 | 3:03.44 | HUBIE KERNS       | USA | 2019 |
| 2:38.42     | RICHARD BURNS     | USA | 2009 | 1500 M.  | FREE              |     |      | 3:04.51 | DAVID GILDEA      | USA | 2013 |
| 2:38.96     | ROBERT STRAND     | USA | 2012 | 19:46.94 | DAN L KIRKLAND    | USA | 2019 | 3:05.27 | HANS REICHELT     | GER | 2007 |
| 400 M.      | I.M.              |     |      | 20:42.57 | HUBIE KERNS       | USA | 2019 | 3:05.42 | MICHAEL MOLONEY   | AUS | 2009 |
| 5:03.34     | RICK COLELLA      | USA | 2017 | 20:54.56 | GRAHAM JOHNSTON   | USA | 2001 | 3:05.93 | PAUL WYATT        | AUS | 2016 |
| 5:32.88     | PATRICK MOREAU    | FRA | 2017 | 21:07.23 | TOM LANDIS        | USA | 2012 | 3:06.16 | TONY GOODWIN      | AUS | 2007 |
| 5:34.07     | JACK R GROSELLE   | USA | 2019 | 21:07.65 | DAVID QUIGGIN     | USA | 2015 | 50 M.   | FLY               |     |      |
| 5:34.78     | HUBIE KERNS       | USA | 2014 | 21:17.81 | JOHN CRISP        | AUS | 2005 | 29.52   | RICHARD ABRAHAMS  | USA | 2015 |
| 5:34.91     | ALEK SHESTAKOV    | USA | 2014 | 21:24.18 | DAVID RADCLIFF    | USA | 2007 | 30.95   | LEE CHILDS        | USA | 2018 |
| 5:37.22     | J.LESTIDEAU       | FRA | 2011 | 21:39.85 | FRANK MCELROY     | USA | 2018 | 30.96   | JIM DRAGON        | USA | 2014 |
| 5:37.74     | AKIRA IIDA        | JPN | 2019 | 21:40.00 | DAVID HEMBROW     | GBR | 2017 | 31.13   | ANDREW MCPHERSON  | USA | 2017 |
| 5:42.13     | JIM CLEMMONS      | USA | 2015 | 21:44.13 | JEAN-C.LESTIDEAU  | FRA | 2018 | 31.35   | KENJI NAKAMATSU   | JPN | 2019 |
| 5:43.90     | DOV NISMAN        | ISR | 2019 | 50 M.    | BACK              |     |      | 31.47   | HANNU KUOKKANEN   | FIN | 2018 |
| 5:44.08     | SCOTT J COLLIER   | USA | 2019 | 32.77    | TONY GAYFORD      | NZL | 2017 | 31.55   | BERT PETERSEN     | USA | 2008 |
| *****       |                   |     |      | 33.09    | HUGH WILDER       | USA | 2017 | 31.56   | JOSEF CLARET      | ESP | 2014 |
| M E N 70-74 |                   |     |      | 33.51    | RICHARD BURNS     | USA | 2013 | 31.66   | STEVEN V HECK     | USA | 2019 |
| *****       |                   |     |      | 33.53    | J-C LESTIDEAU     | ESP | 2016 | 31.71   | HIROSHI MATSUMOTO | JPN | 2009 |
| *****       |                   |     |      | 33.90    | YOSHI OYAKAWA     | USA | 2003 | 100 M.  | FLY               |     |      |
| 50 M.       | FREE              |     |      | 34.15    | VINUS VAN BAALEN  | CAN | 2012 | 1:07.56 | RICHARD ABRAHAMS  | USA | 2015 |
| 26.88       | RICHARD ABRAHAMS  | USA | 2015 | 34.57    | STEVEN V HECK     | USA | 2019 | 1:12.02 | JOSEF CLARET      | ESP | 2014 |
| 27.70       | JEFF FARRELL      | USA | 2008 | 34.66    | BERND HORSTMANN   | GER | 2012 | 1:12.64 | J.LESTIDEAU       | FRA | 2016 |
| 28.08       | FUMIO SHIGENO     | JPN | 2019 | 34.88    | JOSE LORO         | BRA | 2019 | 1:12.64 | ROBERT POILETMAN  | USA | 2014 |
| 28.23       | VINUS VAN BAALEN  | CAN | 2012 | 35.09    | ROBERT A HEACOCK  | USA | 2019 | 1:13.49 | ANDREW MCPHERSON  | USA | 2017 |
| 28.25       | GLENN A GRUBER    | USA | 2019 | 100 M.   | BACK              |     |      | 1:13.68 | KOJI IWAMOTO      | JPN | 2013 |
| 28.28       | PETER BERGENGREN  | SWE | 2008 | 1:12.09  | RICHARD BURNS     | USA | 2013 | 1:15.04 | KIERAN KELLEHER   | IRL | 2018 |
| 28.31       | IAN SMITH         | CAN | 2011 | 1:12.23  | HUGH WILDER       | USA | 2017 | 1:15.57 | HORST LEHMANN     | GER | 2017 |
| 28.36       | CHRIS DUNN        | GBR | 2017 | 1:13.32  | J-C LESTIDEAU     | ESP | 2016 | 1:15.62 | HUBIE KERNS       | USA | 2019 |
| 28.40       | GERHARD SCHILLER  | GER | 2019 | 1:14.31  | BARRY YOUNG       | NZL | 2009 | 1:15.96 | T.TAKESHITA       | JPN | 2012 |
| 28.54       | ANDREW MCPHERSON  | USA | 2017 | 1:15.08  | BERND HORSTMANN   | GER | 2012 | 200 M.  | FLY               |     |      |
| 100 M.      | FREE              |     |      | 1:15.34  | DAN KIRKLAND      | USA | 2018 | 2:51.32 | BARRY YOUNG       | NZL | 2009 |
| 1:01.70     | RICHARD ABRAHAMS  | USA | 2015 | 1:15.68  | STEVEN V HECK     | USA | 2019 | 2:52.80 | DOUGLAS SPRINGER  | USA | 2016 |
| 1:02.87     | DAVID QUIGGIN     | USA | 2014 | 1:15.85  | YOSHI OYAKAWA     | USA | 2003 | 2:53.96 | J.LESTIDEAU       | FRA | 2017 |
| 1:03.25     | GLENN A GRUBER    | USA | 2019 | 1:16.22  | JOZSEF CSIKANY    | HUN | 2015 | 2:54.08 | HUBIE KERNS       | USA | 2019 |
| 1:03.33     | JEFF FARRELL      | USA | 2007 | 1:16.73  | BURWELL JONES     | USA | 2003 | 2:55.66 | ROBERT POILETMAN  | USA | 2013 |
| 1:04.17     | LEE CHILDS        | USA | 2018 | 200 M.   | BACK              |     |      | 2:57.84 | HORST LEHMANN     | GER | 2017 |
| 1:04.17     | ANDREW MCPHERSON  | USA | 2017 | 2:38.01  | RICHARD BURNS     | USA | 2013 | 2:58.89 | KOJI IWAMOTO      | JPN | 2013 |
| 1:04.57     | RICHARD BURNS     | USA | 2013 | 2:40.17  | BARRY YOUNG       | NZL | 2009 | 3:00.00 | PAUL WYATT        | AUS | 2016 |
| 1:04.58     | CAV CAVANAUGH     | USA | 2005 | 2:41.22  | DAN KIRKLAND      | USA | 2018 | 3:01.11 | YASUTAKA KOIKE    | JPN | 2013 |
| 1:04.62     | GERHARD SCHILLER  | GER | 2019 | 2:41.35  | ALEK I SHESTAKOV  | USA | 2019 | 3:02.81 | RUDOLF SMERDA     | CZE | 2016 |
| 1:04.66     | PETER BERGENGREN  | SWE | 2008 | 2:45.25  | J.LESTIDEAU       | FRA | 2017 | 100 M.  | I.M.              |     |      |
| 200 M.      | FREE              |     |      | 2:47.36  | HUGH WILDER       | USA | 2017 | 1:12.74 | STEVEN V HECK     | USA | 2019 |
| 2:19.63     | DAN KIRKLAND      | USA | 2018 | 2:48.91  | JOZSEF CSIKANY    | HUN | 2013 | 1:12.94 | HUBIE KERNS       | USA | 2019 |
| 2:22.60     | DAVID QUIGGIN     | USA | 2014 | 2:50.80  | TOSHIAKI MIYATA   | JPN | 2018 | 1:13.09 | RICHARD ABRAHAMS  | USA | 2015 |
| 2:23.30     | RICHARD ABRAHAMS  | USA | 2015 | 2:51.24  | BURWELL JONES     | USA | 2003 | 1:14.40 | RICHARD BURNS     | USA | 2013 |
| 2:24.08     | GLENN A GRUBER    | USA | 2019 | 2:51.65  | LASZLO CSABA      | HUN | 2019 | 1:14.53 | ANDREW MCPHERSON  | USA | 2017 |
| 2:24.31     | GRAHAM JOHNSTON   | USA | 2001 | 50 M.    | BRST              |     |      | 1:14.73 | JACK KELSO        | CAN | 2009 |
| 2:25.01     | RICHARD BURNS     | USA | 2013 | 35.53    | DIETER HOFEL      | GER | 2016 | 1:15.10 | LEE CHILDS        | USA | 2018 |
| 2:26.18     | ALAN D BERNARD    | USA | 2019 | 35.85    | YOSHIHIKO OSAKI   | JPN | 2009 | 1:15.54 | BARRY YOUNG       | NZL | 2009 |
| 2:26.61     | TOM LANDIS        | USA | 2013 | 35.97    | ROBERT STRAND     | USA | 2016 | 1:15.56 | GLENN A GRUBER    | USA | 2019 |
| 2:27.01     | J-C LESTIDEAU     | ESP | 2016 | 36.15    | DOUGLAS SPRINGER  | USA | 2016 | 1:15.60 | KOJI IWAMOTO      | JPN | 2013 |
| 2:27.78     | LEE CHILDS        | USA | 2018 | 36.16    | DAVID GILDEA      | USA | 2013 | 200 M.  | I.M.              |     |      |
| 400 M.      | FREE              |     |      | 36.58    | HISASHI DOI       | JPN | 2018 | 2:40.45 | HUBIE KERNS       | USA | 2019 |
| 4:56.95     | DAN KIRKLAND      | USA | 2018 | 37.03    | ANTONIO ORSELLI   | BRA | 2014 | 2:41.76 | ALEK I SHESTAKOV  | USA | 2019 |
| 5:05.47     | DAVID QUIGGIN     | USA | 2014 | 37.20    | JOHN LIRON        | GBR | 2018 | 2:42.00 | STEVEN V HECK     | USA | 2019 |
| 5:09.75     | GRAHAM JOHNSTON   | USA | 2002 | 37.26    | JEFF FARRELL      | USA | 2007 | 2:42.44 | BARRY YOUNG       | NZL | 2009 |
| 5:10.68     | HUBIE KERNS       | USA | 2019 | 37.34    | CARLOS AGUIRRE    | ARG | 2019 | 2:44.81 | RICHARD BURNS     | USA | 2013 |
| 5:12.57     | TOM LANDIS        | USA | 2012 | 100 M.   | BRST              |     |      | 2:44.94 | LEE CHILDS        | USA | 2018 |
| 5:14.70     | J-C LESTIDEAU     | ESP | 2016 | 1:19.04  | DOUGLAS SPRINGER  | USA | 2016 | 2:46.61 | DOUGLAS SPRINGER  | USA | 2016 |
| 5:15.88     | BURWELL JONES     | USA | 2003 | 1:20.76  | ROBERT STRAND     | USA | 2016 | 2:46.98 | J.LESTIDEAU       | FRA | 2016 |
| 5:18.28     | DAVID RADCLIFF    | USA | 2007 | 1:21.41  | DAVID GILDEA      | USA | 2013 | 2:49.43 | JACK KELSO        | CAN | 2009 |
| 5:20.11     | FRANK MCELROY     | USA | 2018 | 1:21.70  | HISASHI DOI       | JPN | 2018 | 2:51.73 | BURWELL JONES     | USA | 2003 |
| 5:22.81     | DUNCAN MC CREADIE | GBR | 2015 | 1:22.17  | ALLEN L STARK     | USA | 2019 | 400 M.  | I.M.              |     |      |
| 800 M.      | FREE              |     |      | 1:22.28  | HUBIE KERNS       | USA | 2019 | 5:48.15 | ALEK I SHESTAKOV  | USA | 2019 |
| 10:17.73    | DAN KIRKLAND      | USA | 2018 | 1:22.45  | DIETER HOFEL      | GER | 2015 | 5:48.67 | BARRY YOUNG       | NZL | 2009 |
| 10:52.68    | GRAHAM JOHNSTON   | USA | 2001 | 1:23.07  | SEIKO OKAZAKI     | JPN | 2016 | 5:57.68 | J.LESTIDEAU       | FRA | 2016 |



# FINA WORLD MASTERS TOP 10 - SHORT COURSE METERS - ALL TIME (1986-2019)

|              |                   |     |      |             |                   |     |      |             |                   |     |      |
|--------------|-------------------|-----|------|-------------|-------------------|-----|------|-------------|-------------------|-----|------|
| 5:59.34      | HUBIE KERNS       | USA | 2019 | 22:28.06    | BURWELL JONES     | USA | 2008 | 32.41       | RICHARD BURNS     | USA | 2018 |
| 6:03.92      | STEVEN V HECK     | USA | 2019 | 22:52.00    | HIROSHI YOSHIMURA | JPN | 2003 | 32.41       | MIKE FRESHLEY     | USA | 2016 |
| 6:04.55      | DOUGLAS SPRINGER  | USA | 2016 | 23:18.51    | JOAQUIN CANALES   | ESP | 2015 | 32.93       | HIROSHI MATSUMOTO | JPN | 2012 |
| 6:07.39      | PAUL WYATT        | AUS | 2016 | 23:21.52    | JOHN RICHARDS     | AUS | 2017 | 33.18       | Y.FUNAHASHI       | JPN | 2015 |
| 6:08.83      | LEE CHILDS        | USA | 2018 | 23:22.66    | TOSABURO HOSOKAWA | JPN | 2010 | 33.27       | ARAM BOGHOSSIAN   | BRA | 2004 |
| 6:16.26      | DOUGLAS MILLER    | USA | 2016 | 50 M. BACK  |                   |     |      | 33.32       | JOSEF CLARET      | ESP | 2019 |
| 6:17.67      | TOM LANDIS        | USA | 2013 | 33.87       | RICHARD BURNS     | USA | 2018 | 33.99       | BERND SCHRODER    | GER | 2018 |
| *****        |                   |     |      | 35.51       | YOSHI OYAKAWA     | USA | 2008 | 34.00       | TSUTOMU EBIHARA   | JPN | 2015 |
| M E N 75-79  |                   |     |      | 35.93       | BURWELL JONES     | USA | 2009 | 34.34       | NEIL MACKINNON    | GBR | 2016 |
| *****        |                   |     |      | 36.41       | BERND HORSTMANN   | GER | 2018 | 34.53       | JEAN LE DALL      | FRA | 2008 |
| 50 M. FREE   |                   |     |      | 36.52       | JOZSEF CSIKANY    | HUN | 2018 | 100 M. FLY  |                   |     |      |
| 28.93        | DAVID QUIGGIN     | USA | 2019 | 36.58       | S.SEKIKAWA        | JPN | 2008 | 1:17.59     | RICHARD BURNS     | USA | 2019 |
| 29.47        | GERHARD WIELAND   | AUT | 2019 | 36.68       | CLARKE MITCHELL   | USA | 2007 | 1:19.63     | DEREK PARR        | GBR | 2019 |
| 29.90        | MIKE FRESHLEY     | USA | 2016 | 36.85       | GERHARD WIELAND   | AUT | 2019 | 1:20.59     | RUDOLF SMERDA     | CZE | 2018 |
| 30.13        | IAN SMITH         | CAN | 2016 | 36.94       | JOAQUIN CANALES   | ESP | 2015 | 1:20.59     | KOJI IWAMOTO      | JPN | 2017 |
| 30.15        | DAVID RADCLIFF    | USA | 2009 | 36.97       | JOZSEG CSIKANY    | HUN | 2019 | 1:21.12     | TATSUKE MIYAZAKI  | JPN | 2014 |
| 30.21        | AKIRA FUJIMAKI    | JPN | 2018 | 100 M. BACK |                   |     |      | 1:23.68     | JOAQUIN CANALES   | ESP | 2016 |
| 30.29        | NEIL MACKINNON    | GBR | 2016 | 1:14.03     | RICHARD BURNS     | USA | 2019 | 1:24.03     | CHITOSHI KONISHI  | JPN | 2015 |
| 30.48        | HIROSHI MARUYAMA  | JPN | 2017 | 1:18.29     | JOZSEF CSIKANY    | HUN | 2018 | 1:24.10     | YASUTAKA KOIKE    | JPN | 2018 |
| 30.53        | RICHARD BURNS     | USA | 2018 | 1:18.47     | BURWELL JONES     | USA | 2009 | 1:24.36     | T.TAKESHITA       | JPN | 2017 |
| 30.77        | DAVID PAINTER     | USA | 2015 | 1:20.16     | YOSHI OYAKAWA     | USA | 2008 | 1:24.38     | TAKASHI HAYASHI   | JPN | 2009 |
| 100 M. FREE  |                   |     |      | 1:20.66     | S.SEKIKAWA        | JPN | 2009 | 200 M. FLY  |                   |     |      |
| 1:04.80      | DAVID QUIGGIN     | USA | 2019 | 1:21.65     | BERND HORSTMANN   | GER | 2018 | 3:10.12     | RUDOLF SMERDA     | CZE | 2019 |
| 1:05.13      | DAVID RADCLIFF    | USA | 2009 | 1:22.02     | JOAQUIN CANALES   | ESP | 2016 | 3:13.52     | YASUTAKA KOIKE    | JPN | 2018 |
| 1:06.36      | AKIRA FUJIMAKI    | JPN | 2018 | 1:23.39     | HELMUT RICHTER    | GER | 2014 | 3:13.98     | DEREK PARR        | GBR | 2019 |
| 1:07.34      | MIKE FRESHLEY     | USA | 2016 | 1:23.51     | MIKE FRESHLEY     | USA | 2016 | 3:15.78     | KOJI IWAMOTO      | JPN | 2017 |
| 1:07.75      | RICHARD BURNS     | USA | 2019 | 1:23.55     | T.HASHIMOTO       | JPN | 2015 | 3:16.99     | TAKASHI HAYASHI   | JPN | 2009 |
| 1:08.90      | BURWELL JONES     | USA | 2009 | 200 M. BACK |                   |     |      | 3:20.21     | KARL DONOGHUE     | CAN | 2019 |
| 1:08.97      | HIROSHI MARUYAMA  | JPN | 2017 | 2:44.04     | RICHARD BURNS     | USA | 2018 | 3:25.16     | ALFRED SEEGER     | GER | 2015 |
| 1:09.15      | JACK KELSO        | CAN | 2014 | 2:49.20     | BURWELL JONES     | USA | 2009 | 3:26.72     | ROBERT PFERSDORFF | GER | 1999 |
| 1:09.16      | GERHARD WIELAND   | AUT | 2019 | 2:56.25     | JOZSEF CSIKANY    | HUN | 2019 | 3:27.58     | KARL HAUTER       | GER | 2001 |
| 1:09.53      | RUDOLF SMERDA     | CZE | 2018 | 2:58.21     | ROGER FRANKS      | USA | 2002 | 3:28.32     | OLEG TKACHENKO    | RUS | 2016 |
| 200 M. FREE  |                   |     |      | 3:00.13     | BERND HORSTMANN   | GER | 2019 | 100 M. I.M. |                   |     |      |
| 2:26.94      | DAVID QUIGGIN     | USA | 2019 | 3:00.49     | T.HASHIMOTO       | JPN | 2016 | 1:17.55     | MIKE FRESHLEY     | USA | 2016 |
| 2:27.53      | DAVID RADCLIFF    | USA | 2009 | 3:00.92     | S.SEKIKAWA        | JPN | 2008 | 1:17.89     | RICHARD BURNS     | USA | 2018 |
| 2:32.00      | AKIRA FUJIMAKI    | JPN | 2018 | 3:03.13     | FRANS VAN ENST    | NED | 2015 | 1:18.80     | BURWELL JONES     | USA | 2009 |
| 2:35.60      | MIKE FRESHLEY     | USA | 2016 | 3:04.84     | KARL DONOGHUE     | CAN | 2015 | 1:20.43     | JACK KELSO        | CAN | 2015 |
| 2:35.71      | TADANOBU YAMADA   | JPN | 2018 | 3:06.60     | ERIK LOKENSGARD   | USA | 2019 | 1:21.25     | KOJI IWAMOTO      | JPN | 2017 |
| 2:36.94      | RUDOLF SMERDA     | CZE | 2018 | 50 M. BRST  |                   |     |      | 1:21.42     | DAVID COSTILL     | USA | 2011 |
| 2:37.71      | GRAHAM JOHNSTON   | USA | 2006 | 38.35       | MIKE FRESHLEY     | USA | 2016 | 1:22.11     | JOAQUIN CANALES   | ESP | 2015 |
| 2:38.07      | IKURO SHIMONO     | JPN | 2013 | 38.59       | PETER ANDERSEN    | USA | 2018 | 1:22.63     | RUDOLF SMERDA     | CZE | 2018 |
| 2:38.23      | SEKIO MARUYAMA    | JPN | 2017 | 39.04       | TETSUO NAKAMARU   | JPN | 2010 | 1:22.82     | IKURO SHIMONO     | JPN | 2012 |
| 2:38.97      | WERNER SCHNABEL   | GER | 2012 | 39.20       | HANS REICHELT     | GER | 2011 | 1:23.00     | NEIL MACKINNON    | GBR | 2016 |
| 400 M. FREE  |                   |     |      | 39.35       | TATSUO ASAI       | JPN | 2016 | 200 M. I.M. |                   |     |      |
| 5:15.10      | DAVID RADCLIFF    | USA | 2009 | 39.36       | TONY GOODWIN      | AUS | 2012 | 2:50.79     | RICHARD BURNS     | USA | 2018 |
| 5:30.95      | GERHARD HOLE      | GER | 2012 | 39.84       | JACK KELSO        | CAN | 2015 | 2:55.45     | MIKE FRESHLEY     | USA | 2016 |
| 5:32.91      | TADANOBU YAMADA   | JPN | 2018 | 39.85       | YOSHIKI AOKI      | JPN | 2014 | 2:59.26     | BURWELL JONES     | USA | 2009 |
| 5:34.10      | DAVID QUIGGIN     | USA | 2019 | 39.90       | LOUIS KRONFELD    | USA | 2018 | 3:00.10     | KOJI IWAMOTO      | JPN | 2017 |
| 5:36.32      | IKURO SHIMONO     | JPN | 2012 | 39.94       | ANTONIO ORSELLI   | BRA | 2017 | 3:01.83     | GERSHON SHEFA     | ISR | 2019 |
| 5:40.14      | GRAHAM JOHNSTON   | USA | 2006 | 100 M. BRST |                   |     |      | 3:03.21     | JACK KELSO        | CAN | 2015 |
| 5:40.66      | MIKE FRESHLEY     | USA | 2016 | 1:25.38     | MIKE FRESHLEY     | USA | 2016 | 3:04.87     | IKURO SHIMONO     | JPN | 2013 |
| 5:44.36      | JOAQUIN CANALES   | ESP | 2016 | 1:26.76     | HANS REICHELT     | GER | 2011 | 3:06.89     | RUDOLF SMERDA     | CZE | 2019 |
| 5:45.47      | HIROSHI YOSHIMURA | JPN | 2004 | 1:26.84     | TONY GOODWIN      | AUS | 2012 | 3:07.80     | JOAQUIN CANALES   | ESP | 2015 |
| 5:45.92      | TONY RALPHS       | USA | 2018 | 1:26.87     | MASARU SHINKAI    | JPN | 2016 | 3:10.06     | KARL HAUTER       | GER | 2000 |
| 800 M. FREE  |                   |     |      | 1:27.76     | TETSUO NAKAMARU   | JPN | 2010 | 400 M. I.M. |                   |     |      |
| 10:59.10     | DAVID RADCLIFF    | USA | 2009 | 1:27.76     | TETSUO NAKAMARU   | JPN | 2010 | 6:26.09     | RICHARD BURNS     | USA | 2019 |
| 11:07.83     | GERHARD HOLE      | GER | 2012 | 1:28.40     | BELA FABIAN       | HUN | 2013 | 6:29.29     | MIKE FRESHLEY     | USA | 2016 |
| 11:28.93     | TADANOBU YAMADA   | JPN | 2018 | 1:28.61     | ROBERT PFERSDORFF | GER | 1999 | 6:33.87     | BURWELL JONES     | USA | 2009 |
| 11:38.56     | BURWELL JONES     | USA | 2008 | 1:28.72     | SHUNSAKU TAKAHIRA | JPN | 2007 | 6:51.13     | MASARU SHINKAI    | JPN | 2017 |
| 11:46.12     | TONY RALPHS       | USA | 2018 | 1:29.31     | YOSHIKI AOKI      | JPN | 2014 | 6:52.62     | KARL HAUTER       | GER | 2001 |
| 11:47.67     | YASUSHI YAMAGUCHI | JPN | 2014 | 1:29.66     | JACK KELSO        | CAN | 2014 | 6:54.31     | JOAQUIN CANALES   | ESP | 2015 |
| 11:56.90     | DAVID QUIGGIN     | USA | 2019 | 200 M. BRST |                   |     |      | 6:56.28     | ARTIE WOLFE       | USA | 2015 |
| 12:00.94     | GRAHAM JOHNSTON   | USA | 2006 | 3:06.82     | MIKE FRESHLEY     | USA | 2016 | 6:58.18     | ISAO TAKEBAYASHI  | JPN | 2016 |
| 12:02.87     | HIROSHI YOSHIMURA | JPN | 2004 | 3:09.09     | TONY GOODWIN      | AUS | 2012 | 6:59.38     | IKURO SHIMONO     | JPN | 2015 |
| 12:03.35     | B.CAMMELLI        | ITA | 2018 | 3:12.80     | MASARU SHINKAI    | JPN | 2015 | 6:59.68     | FRANK PIEMME      | USA | 2000 |
| 1500 M. FREE |                   |     |      | 3:15.57     | HANS REICHELT     | GER | 2011 | *****       |                   |     |      |
| 20:39.50     | DAVID RADCLIFF    | USA | 2009 | 3:19.96     | YOSHIKI AOKI      | JPN | 2014 | M E N 80-84 |                   |     |      |
| 21:55.35     | TADANOBU YAMADA   | JPN | 2018 | 3:20.93     | TSUTOMU KAJIHARA  | JPN | 2008 | *****       |                   |     |      |
| 22:15.88     | TONY RALPHS       | USA | 2018 | 3:21.50     | KARL HAUTER       | GER | 2000 | 50 M. FREE  |                   |     |      |
| 22:25.81     | DAVID QUIGGIN     | USA | 2019 | 3:21.53     | DAVE NOBLE        | USA | 2018 | 31.25       | JEFF FARRELL      | USA | 2017 |
| 22:27.75     | GRAHAM JOHNSTON   | USA | 2006 | 3:24.84     | ROBERT PFERSDORFF | GER | 1999 | 31.74       | HIROSHI MATSUMOTO | JPN | 2016 |
|              |                   |     |      | 3:25.59     | CHRISTIAN THIESS  | AUS | 2013 |             |                   |     |      |
|              |                   |     |      | 50 M. FLY   |                   |     |      |             |                   |     |      |



# FINA WORLD MASTERS TOP 10 - SHORT COURSE METERS - ALL TIME (1986-2019)

|              |                   |     |      |             |                   |     |      |             |                   |     |      |
|--------------|-------------------|-----|------|-------------|-------------------|-----|------|-------------|-------------------|-----|------|
| 32.07        | HELMUT RICHTER    | GER | 2019 | 40.46       | DAVID COSTILL     | USA | 2017 | 1:32.28     | LAURI MALK        | FIN | 2017 |
| 32.14        | ROBERTO ALBERICHE | ESP | 2013 | 40.50       | PETER BERGENGREN  | SWE | 2018 | 1:35.12     | HIROSHI MATSUMOTO | JPN | 2016 |
| 32.61        | KEIJIRO NAKAMURA  | JPN | 2004 | 100 M. BACK |                   |     |      | 1:35.58     | DAVID COSTILL     | USA | 2016 |
| 32.80        | FRANK PIEMME      | USA | 2005 | 1:23.24     | DAVID COSTILL     | USA | 2017 | 1:36.53     | KARL HAUTER       | GER | 2005 |
| 32.84        | TSUTOMU HAYASHI   | JPN | 2017 | 1:25.07     | S.SEKIKAWA        | JPN | 2013 | 1:41.82     | JAN ZIEGLER       | CZE | 2005 |
| 32.90        | CAV CAVANAUGH     | USA | 2015 | 1:25.77     | KEIJIRO NAKAMURA  | JPN | 2003 | 1:42.71     | TONY GOODWIN      | AUS | 2018 |
| 32.94        | TORU FURUKAWA     | JPN | 2018 | 1:28.01     | MARTY MENNEN      | USA | 2016 | 1:42.85     | WILLIAM LAUER     | USA | 2014 |
| 33.23        | B.SCHLURIKE       | GER | 2001 | 1:28.01     | YOSHI OYAKAWA     | USA | 2014 | 1:43.20     | MAX VAN GELDER    | NED | 2004 |
| 100 M. FREE  |                   |     |      | 1:28.47     | CLARKE MITCHELL   | USA | 2013 | 200 M. FLY  |                   |     |      |
| 1:11.26      | DAVID RADCLIFF    | USA | 2014 | 1:30.53     | TAISUKE MIYAZAKI  | JPN | 2019 | 3:30.11     | GIULIO DIVANO     | ITA | 2011 |
| 1:12.38      | JEFF FARRELL      | USA | 2017 | 1:30.61     | BURWELL JONES     | USA | 2013 | 3:33.24     | TAKASHI HAYASHI   | JPN | 2013 |
| 1:12.84      | ROBERTO ALBERICHE | ESP | 2012 | 1:31.52     | TOM VERTH         | CAN | 2019 | 3:51.87     | DAVID MCLACHLAN   | RSA | 2017 |
| 1:13.32      | HIROSHI MATSUMOTO | JPN | 2016 | 1:31.94     | GERHARD HOLE      | GER | 2015 | 3:52.41     | THOMAS MAINE      | USA | 2007 |
| 1:13.71      | HELMUT RICHTER    | GER | 2019 | 200 M. BACK |                   |     |      | 3:57.85     | JOHN COCKS        | AUS | 2018 |
| 1:13.91      | MASATO YOSHINO    | JPN | 2018 | 3:07.44     | DAVID COSTILL     | USA | 2017 | 4:00.64     | ANTON CERER       | USA | 1997 |
| 1:14.48      | JOHN KELSO        | CAN | 2019 | 3:10.06     | KEIJIRO NAKAMURA  | JPN | 2003 | 4:01.08     | WILLIAM LAUER     | USA | 2016 |
| 1:15.16      | CAV CAVANAUGH     | USA | 2015 | 3:11.45     | S.SEKIKAWA        | JPN | 2013 | 4:04.12     | LAURI MALK        | FIN | 2018 |
| 1:16.09      | KEIJIRO NAKAMURA  | JPN | 2003 | 3:12.01     | MARTY MENNEN      | USA | 2016 | 4:10.30     | DEZSO MELKUHN     | HUN | 2019 |
| 1:16.30      | SHOICHI SHIDA     | JPN | 2006 | 3:15.61     | GERHARD HOLE      | GER | 2015 | 4:15.95     | ANRI VERESHCHAGIN | RUS | 2015 |
| 200 M. FREE  |                   |     |      | 3:19.77     | BURWELL JONES     | USA | 2013 | 100 M. I.M. |                   |     |      |
| 2:38.25      | DAVID RADCLIFF    | USA | 2014 | 3:23.73     | RAY TAFT          | USA | 1999 | 1:24.69     | DAVID COSTILL     | USA | 2017 |
| 2:44.88      | MASATO YOSHINO    | JPN | 2018 | 3:24.71     | BOB MILLER        | USA | 2010 | 1:26.73     | JOHN KELSO        | CAN | 2019 |
| 2:45.24      | ROBERTO ALBERICHE | ESP | 2012 | 3:25.32     | E.NODENSCHNEIDER  | FRA | 2016 | 1:28.38     | JEFF FARRELL      | USA | 2017 |
| 2:46.58      | IKURO SHIMONO     | JPN | 2017 | 3:25.46     | ROGER FRANKS      | USA | 2007 | 1:28.42     | BELA FABIAN       | HUN | 2017 |
| 2:46.61      | WERNER SCHNABEL   | GER | 2016 | 50 M. BRST  |                   |     |      | 1:28.47     | GERHARD HOLE      | GER | 2015 |
| 2:49.39      | HIROSHI MATSUMOTO | JPN | 2016 | 41.42       | TOSHIO TAJIMA     | JPN | 2005 | 1:28.76     | ROBERTO ALBERICHE | ESP | 2012 |
| 2:52.14      | CAV CAVANAUGH     | USA | 2015 | 41.65       | TONY GOODWIN      | AUS | 2017 | 1:29.29     | JAMES ZURCHER     | USA | 2014 |
| 2:52.72      | GERHARD HOLE      | GER | 2015 | 41.71       | BELA FABIAN       | HUN | 2017 | 1:29.78     | IKURO SHIMONO     | JPN | 2019 |
| 2:55.46      | SHINGO YAMAMOTO   | JPN | 2011 | 42.41       | JOHN KELSO        | CAN | 2019 | 1:30.18     | ZENJI NAKAHARI    | JPN | 2008 |
| 2:56.86      | H.TAKAHASHI       | JPN | 2018 | 42.41       | DAVID COSTILL     | USA | 2017 | 1:31.23     | GIULIO DIVANO     | ITA | 2011 |
| 400 M. FREE  |                   |     |      | 42.99       | HANS REICHELT     | GER | 2017 | 200 M. I.M. |                   |     |      |
| 5:39.27      | DAVID RADCLIFF    | USA | 2014 | 43.27       | IWAMI IKEDA       | JPN | 2014 | 3:16.26     | IKURO SHIMONO     | JPN | 2017 |
| 5:51.05      | MASATO YOSHINO    | JPN | 2018 | 43.42       | BOB BEST          | USA | 2012 | 3:16.32     | JOHN KELSO        | CAN | 2019 |
| 5:56.77      | ROBERTO ALBERICHE | ESP | 2012 | 43.44       | HIROFUMI HOSOTANI | JPN | 2015 | 3:17.29     | DAVID COSTILL     | USA | 2016 |
| 5:59.22      | GIULIO DIVANO     | ITA | 2011 | 43.64       | TETSUO NAKAMARU   | JPN | 2016 | 3:18.55     | GIULIO DIVANO     | ITA | 2011 |
| 6:00.25      | WERNER SCHNABEL   | GER | 2016 | 43.64       | ZENJI NAKAHARI    | JPN | 2008 | 3:22.25     | JAMES ZURCHER     | USA | 2014 |
| 6:03.16      | TOSABURO HOSOKAWA | JPN | 2015 | 100 M. BRST |                   |     |      | 3:25.47     | ROBERTO ALBERICHE | ESP | 2013 |
| 6:04.46      | LAURI MALK        | FIN | 2017 | 1:31.80     | TONY GOODWIN      | AUS | 2017 | 3:26.48     | KARL HAUTER       | GER | 2006 |
| 6:12.87      | BURWELL JONES     | USA | 2013 | 1:31.84     | BELA FABIAN       | HUN | 2017 | 3:26.78     | JOHN COCKS        | AUS | 2016 |
| 6:20.10      | HIROSHI YOSHIMURA | JPN | 2008 | 1:35.96     | ZENJI NAKAHARI    | JPN | 2008 | 3:27.53     | WILLIAM LAUER     | USA | 2014 |
| 6:23.47      | GRAHAM JOHNSTON   | USA | 2012 | 1:36.60     | TETSUO NAKAMARU   | JPN | 2015 | 3:27.64     | BRIAN CURTIS      | CAN | 2016 |
| 800 M. FREE  |                   |     |      | 1:36.79     | DAVID COSTILL     | USA | 2016 | 400 M. I.M. |                   |     |      |
| 11:35.71     | DAVID RADCLIFF    | USA | 2014 | 1:36.91     | KARL HAUTER       | GER | 2005 | 6:58.11     | GIULIO DIVANO     | ITA | 2011 |
| 12:43.58     | BURWELL JONES     | USA | 2013 | 1:37.10     | HANS REICHELT     | GER | 2017 | 7:09.74     | IKURO SHIMONO     | JPN | 2017 |
| 12:50.74     | WERNER SCHNABEL   | GER | 2016 | 1:38.11     | TSUTOMU KAJIHARA  | JPN | 2013 | 7:14.71     | DAVID COSTILL     | USA | 2016 |
| 12:50.97     | HIROSHI YOSHIMURA | JPN | 2008 | 1:38.22     | PETER BELL        | CAN | 2015 | 7:26.06     | KARL HAUTER       | GER | 2005 |
| 12:59.22     | ROBERTO ALBERICHE | ESP | 2013 | 1:38.36     | JOHN KELSO        | CAN | 2019 | 7:31.47     | JOHN COCKS        | AUS | 2016 |
| 13:01.70     | GRAHAM JOHNSTON   | USA | 2012 | 200 M. BRST |                   |     |      | 7:33.77     | WILLIAM LAUER     | USA | 2014 |
| 13:02.25     | GIULIO DIVANO     | ITA | 2012 | 3:23.69     | TONY GOODWIN      | AUS | 2017 | 7:37.58     | RAY TAFT          | USA | 1999 |
| 13:04.89     | FRED DE BRUIJN    | ESP | 2019 | 3:34.21     | ZENJI NAKAHARI    | JPN | 2008 | 7:38.90     | E.NODENSCHNEIDER  | FRA | 2016 |
| 13:29.27     | RAYMOND TAFT      | USA | 1999 | 3:36.54     | DAVID COSTILL     | USA | 2017 | 7:46.85     | ANRI VERESHCHAGIN | RUS | 2014 |
| 13:34.55     | KARL HAUTER       | GER | 2007 | 3:36.62     | MASAMI SHIGETA    | JPN | 2016 | 7:49.23     | FRANK PIEMME      | USA | 2005 |
| 1500 M. FREE |                   |     |      | 3:38.59     | KAIZO YAMAMOTO    | JPN | 2018 | *****       |                   |     |      |
| 21:59.53     | DAVID RADCLIFF    | USA | 2014 | 3:39.28     | HANS REICHELT     | GER | 2018 | M E N 85-89 |                   |     |      |
| 24:23.01     | TOSABURO HOSOKAWA | JPN | 2016 | 3:40.58     | DICK PETERSON     | USA | 2017 | *****       |                   |     |      |
| 24:36.35     | BURWELL JONES     | USA | 2013 | 3:40.73     | KARL HAUTER       | GER | 2005 | 50 M. FREE  |                   |     |      |
| 24:36.75     | GERHARD HOLE      | GER | 2015 | 3:40.74     | PATRICK GALVIN    | AUS | 2013 | 32.23       | ROBERTO ALBERICHE | ESP | 2016 |
| 25:07.03     | FRED DE BRUIJN    | ESP | 2018 | 3:42.06     | JOHN COCKS        | AUS | 2017 | 34.54       | KEIJIRO NAKAMURA  | JPN | 2008 |
| 25:18.69     | HIROSHI YOSHIMURA | JPN | 2009 | 50 M. FLY   |                   |     |      | 36.26       | FRANK PIEMME      | USA | 2010 |
| 25:25.94     | GRAHAM JOHNSTON   | USA | 2012 | 35.06       | HIROSHI MATSUMOTO | JPN | 2016 | 36.31       | TOSHIMI INATOMI   | JPN | 2011 |
| 25:35.01     | RAY TAFT          | USA | 1999 | 36.11       | HELMUT RICHTER    | GER | 2019 | 36.51       | WILLARD LAMB      | USA | 2007 |
| 25:35.82     | GIULIO DIVANO     | ITA | 2012 | 37.77       | TAKASHI HAYASHI   | JPN | 2013 | 36.56       | YOSHINAO KAMEI    | JPN | 2018 |
| 26:24.53     | WILL RAUCH        | USA | 2014 | 38.44       | LAURI MALK        | FIN | 2017 | 36.61       | TAKAHIKO NOMA     | JPN | 2013 |
| 50 M. BACK   |                   |     |      | 38.92       | CLARKE MITCHELL   | USA | 2013 | 36.61       | JIM EUBANK        | USA | 2000 |
| 37.82        | YOSHI OYAKAWA     | USA | 2014 | 39.11       | TAISUKE MIYAZAKI  | JPN | 2019 | 37.08       | SHOICHI SAKAMOTO  | JPN | 2003 |
| 37.92        | AKIHIKO YABE      | JPN | 2019 | 39.62       | GENICHI IGARASHI  | JPN | 2016 | 37.16       | WOODROW BOWERSOCK | USA | 1998 |
| 38.15        | S.SEKIKAWA        | JPN | 2013 | 39.66       | YOSHIO ISHIGURO   | JPN | 2011 | 100 M. FREE |                   |     |      |
| 38.26        | KEIJIRO NAKAMURA  | JPN | 2003 | 39.77       | KATSUMI YAMADA    | JPN | 2016 | 1:14.68     | ROBERTO ALBERICHE | ESP | 2016 |
| 38.62        | CLARKE MITCHELL   | USA | 2013 | 40.04       | MAMORU HIRATA     | JPN | 2019 | 1:19.42     | KEIJIRO NAKAMURA  | JPN | 2008 |
| 38.67        | HELMUT RICHTER    | GER | 2019 | 100 M. FLY  |                   |     |      | 1:22.97     | DAVID A RADCLIFF  | USA | 2019 |
| 39.51        | BURWELL JONES     | USA | 2013 | 1:30.15     | GIULIO DIVANO     | ITA | 2012 | 1:23.20     | JIM EUBANK        | USA | 2000 |
| 39.78        | MARTY MENNEN      | USA | 2016 | 1:30.69     | TAKASHI HAYASHI   | JPN | 2013 |             |                   |     |      |



# FINA WORLD MASTERS TOP 10 - SHORT COURSE METERS - ALL TIME (1986-2019)

|              |                   |     |      |             |                   |         |                 |             |                   |     |      |
|--------------|-------------------|-----|------|-------------|-------------------|---------|-----------------|-------------|-------------------|-----|------|
| 1:24.32      | ROD BAKER         | AUS | 2013 | 200 M. BACK |                   | 5:07.49 | TAKASHI HAYASHI | JPN         | 2019              |     |      |
| 1:25.28      | FRANK PIEMME      | USA | 2010 | 3:18.29     | KEIJIRO NAKAMURA  | JPN     | 2008            | 5:15.25     | PAUL HUTINGER     | USA | 2009 |
| 1:25.28      | WILLARD LAMB      | USA | 2007 | 3:37.45     | GORO KOBAYASHI    | JPN     | 2002            | 5:22.73     | SAUL BIRMAN       | BRA | 2019 |
| 1:25.94      | CLARKE MITCHELL   | USA | 2019 | 3:48.13     | MAMPEI SEINO      | JPN     | 2018            | 5:29.72     | DON LEADER        | GBR | 2009 |
| 1:27.00      | HIKOJI UEKI       | JPN | 2000 | 3:49.41     | CLARKE MITCHELL   | USA     | 2019            | 5:33.83     | HIRONARI UEDA     | JPN | 2006 |
| 1:27.11      | KARL HAUTER       | GER | 2012 | 3:55.12     | WILLARD LAMB      | USA     | 2008            | 100 M. I.M. |                   |     |      |
| 200 M. FREE  |                   |     |      | 3:55.84     | V.MESHCHERYAKOV   | RUS     | 2019            | 1:32.47     | HEINZ SIEGEL      | GER | 2003 |
| 2:53.91      | ROBERTO ALBERICHE | ESP | 2017 | 3:57.07     | TAKASHI HAYASHI   | JPN     | 2018            | 1:34.39     | ROBERTO ALBERICHE | ESP | 2016 |
| 3:03.23      | DAVID A RADCLIFF  | USA | 2019 | 3:58.20     | SKIP MONSEIN      | USA     | 2019            | 1:40.50     | YOSHINAO KAMEI    | JPN | 2018 |
| 3:11.42      | WALLIE JEFFRIES   | USA | 2016 | 3:59.37     | MASAYASU KAMIYA   | JPN     | 2017            | 1:40.78     | KARL HAUTER       | GER | 2010 |
| 3:12.85      | WILLARD LAMB      | USA | 2007 | 4:00.80     | ALDO DA ROSA      | USA     | 2002            | 1:41.31     | CLARKE MITCHELL   | USA | 2018 |
| 3:13.45      | JIM EUBANK        | USA | 2000 | 50 M. BRST  |                   |         |                 | 1:42.41     | FRANK PIEMME      | USA | 2010 |
| 3:14.70      | KARL HAUTER       | GER | 2010 | 44.47       | TOSHIO TAJIMA     | JPN     | 2010            | 1:47.12     | HIROSHI IMAIZUMI  | JPN | 2010 |
| 3:14.99      | TAKASHI IMASAKA   | JPN | 2019 | 47.12       | SHUNZO YAMANAKA   | JPN     | 2017            | 1:47.63     | BOB BEST          | USA | 2018 |
| 3:15.87      | HIKOJI UEKI       | JPN | 2000 | 47.24       | FRANK PIEMME      | USA     | 2010            | 1:48.15     | TAKASHI SATO      | JPN | 2018 |
| 3:16.52      | GRAHAM JOHNSTON   | USA | 2016 | 47.53       | KARL HAUTER       | GER     | 2012            | 1:48.23     | ANDREW HOLDEN     | USA | 2004 |
| 3:17.42      | KATSURA SUZUKI    | JPN | 2016 | 47.66       | Y.KAWABATA        | JPN     | 2010            | 200 M. I.M. |                   |     |      |
| 400 M. FREE  |                   |     |      | 47.70       | Y.MIYAMOTO        | JPN     | 2002            | 3:41.83     | JAMES B ZURCHER   | USA | 2019 |
| 6:27.44      | DAVID A RADCLIFF  | USA | 2019 | 48.36       | PATRICK GALVIN    | AUS     | 2018            | 3:48.20     | YOSHINAO KAMEI    | JPN | 2018 |
| 6:30.16      | ROBERTO ALBERICHE | ESP | 2016 | 48.42       | SAKAE OMORI       | JPN     | 2018            | 3:48.34     | KARL HAUTER       | GER | 2010 |
| 6:53.90      | WALLIE JEFFRIES   | USA | 2016 | 48.51       | JOHN KORTHEUER    | USA     | 2016            | 3:50.46     | FRANK PIEMME      | USA | 2010 |
| 6:56.12      | ROD BAKER         | AUS | 2013 | 48.66       | TAKAO TSUCHIYA    | JPN     | 2017            | 3:54.61     | THOMAS MAINE      | USA | 2010 |
| 6:58.70      | KATSURA SUZUKI    | JPN | 2016 | 100 M. BRST |                   |         |                 | 3:56.64     | BOB BEST          | USA | 2017 |
| 7:00.77      | GRAHAM JOHNSTON   | USA | 2016 | 1:43.72     | KARL HAUTER       | GER     | 2010            | 4:02.22     | HIROSHI IMAIZUMI  | JPN | 2010 |
| 7:10.66      | JOEL LOCKWOOD     | USA | 2019 | 1:46.07     | IWAO NARUSE       | JPN     | 2017            | 4:05.18     | FRANK TANNER      | USA | 2016 |
| 7:13.19      | WILLARD LAMB      | USA | 2009 | 1:47.12     | PATRICK GALVIN    | AUS     | 2018            | 4:07.59     | ALDO DA ROSA      | USA | 2002 |
| 7:14.98      | FRANK PIEMME      | USA | 2010 | 1:47.97     | TOSHIO TAJIMA     | JPN     | 2010            | 4:19.20     | ANDREW HOLDEN     | USA | 2004 |
| 7:19.56      | THOMAS MAINE      | USA | 2010 | 1:48.57     | SHUNSAKU TAKAHIRA | JPN     | 2019            | 400 M. I.M. |                   |     |      |
| 800 M. FREE  |                   |     |      | 1:49.77     | Y.KASHIKAWA       | JPN     | 2019            | 8:12.94     | THOMAS MAINE      | USA | 2010 |
| 13:20.46     | DAVID A RADCLIFF  | USA | 2019 | 1:50.32     | HIROMU YOSHIMOTO  | JPN     | 2000            | 8:32.50     | FRANK PIEMME      | USA | 2010 |
| 14:04.48     | WILLARD LAMB      | USA | 2008 | 1:50.63     | YASUO ASAKURA     | JPN     | 2019            | 8:46.73     | YOSHINAO KAMEI    | JPN | 2018 |
| 14:28.42     | JOEL LOCKWOOD     | USA | 2019 | 1:53.02     | FRANK PIEMME      | USA     | 2010            | 9:01.55     | FRANK TANNER      | USA | 2016 |
| 14:31.82     | KATSURA SUZUKI    | JPN | 2016 | 1:53.13     | TAKAO TSUCHIYA    | JPN     | 2016            | 9:32.65     | WALT PFEIFFER     | USA | 1998 |
| 14:42.22     | GRAHAM JOHNSTON   | USA | 2016 | 200 M. BRST |                   |         |                 | 9:36.09     | ANDREW HOLDEN     | USA | 2004 |
| 15:01.45     | ROD BAKER         | AUS | 2013 | 3:59.91     | SHUNSAKU TAKAHIRA | JPN     | 2017            | 9:48.58     | JURGEN SCHMIDT    | USA | 2008 |
| 15:03.26     | JURGEN SCHMIDT    | USA | 2008 | 4:04.89     | PATRICK GALVIN    | AUS     | 2018            | 9:52.69     | CHRISTOPHER SMITH | CAN | 2017 |
| 15:05.68     | HIROSHI IMAIZUMI  | JPN | 2010 | 4:05.91     | FRANK PIEMME      | USA     | 2010            | 10:07.99    | MASAYASU KAMIYA   | JPN | 2017 |
| 15:15.07     | FRANK PIEMME      | USA | 2010 | 4:10.04     | IWAO NARUSE       | JPN     | 2018            | 10:13.47    | DON LEADER        | GBR | 2009 |
| 15:15.68     | JIM EUBANK        | USA | 2000 | 4:13.03     | THOMAS MAINE      | USA     | 2010            | *****       |                   |     |      |
| 1500 M. FREE |                   |     |      | 4:15.02     | KARL HAUTER       | GER     | 2014            | M E N 90-94 |                   |     |      |
| 25:18.19     | DAVID A RADCLIFF  | USA | 2019 | 4:16.20     | ALDO DA ROSA      | USA     | 2002            | *****       |                   |     |      |
| 27:28.24     | KATSURA SUZUKI    | JPN | 2016 | 4:20.43     | HIROMU YOSHIMOTO  | JPN     | 2001            | 50 M. FREE  |                   |     |      |
| 28:07.33     | JOEL LOCKWOOD     | USA | 2019 | 4:24.31     | TSUTOMU MORIHIRO  | JPN     | 2018            | 40.93       | TOSHIMI INATOMI   | JPN | 2016 |
| 28:07.95     | GRAHAM JOHNSTON   | USA | 2016 | 4:25.55     | BOB BEST          | USA     | 2017            | 41.07       | WOODY BOWERSOCK   | USA | 2003 |
| 28:17.36     | WILLARD LAMB      | USA | 2008 | 50 M. FLY   |                   |         |                 | 42.60       | GORO KOBAYASHI    | JPN | 2006 |
| 29:16.62     | JURGEN SCHMIDT    | USA | 2008 | 41.08       | ROBERTO ALBERICHE | ESP     | 2016            | 42.69       | WILLARD LAMB      | USA | 2013 |
| 29:55.69     | JIM EUBANK        | USA | 2000 | 43.35       | MAX VON ISSER     | USA     | 2004            | 42.76       | GEORGE CORONES    | AUS | 2009 |
| 30:17.44     | ROBERT BEACH      | USA | 2015 | 44.10       | TOSHIO TAJIMA     | JPN     | 2010            | 42.93       | TOKUSHI KOMEDA    | JPN | 2004 |
| 30:31.85     | TOKUSHI KOMEDA    | JPN | 1999 | 44.69       | TAMON YOSHIDA     | JPN     | 2011            | 43.18       | KARL HAUTER       | GER | 2015 |
| 30:40.23     | CHRISTOPHER SMITH | CAN | 2017 | 44.93       | TAKASHI HAYASHI   | JPN     | 2018            | 43.89       | KAZUNAGA AKUTSU   | JPN | 2002 |
| 50 M. BACK   |                   |     |      | 45.36       | CLARKE MITCHELL   | USA     | 2017            | 43.91       | ISAMU TAMURA      | JPN | 2009 |
| 40.59        | KEIJIRO NAKAMURA  | JPN | 2009 | 45.50       | FRANK PIEMME      | USA     | 2010            | 44.48       | KLAUS BECK        | GER | 2017 |
| 41.75        | CLARKE MITCHELL   | USA | 2017 | 47.01       | CURT ZEISS        | GER     | 2016            | 100 M. FREE |                   |     |      |
| 43.30        | YOSHI OYAKAWA     | USA | 2018 | 47.89       | ANDREW HOLDEN     | USA     | 2004            | 1:35.17     | KARL HAUTER       | GER | 2015 |
| 43.80        | GORO KOBAYASHI    | JPN | 2001 | 47.92       | PATRICK GALVIN    | AUS     | 2019            | 1:39.26     | WOODY BOWERSOCK   | USA | 2003 |
| 43.83        | ROBERTO ALBERICHE | ESP | 2016 | 100 M. FLY  |                   |         |                 | 1:39.27     | WILLARD LAMB      | USA | 2014 |
| 45.53        | SHOICHI SHIDA     | JPN | 2012 | 1:52.03     | TAKASHI HAYASHI   | JPN     | 2018            | 1:41.47     | TOKUSHI KOMEDA    | JPN | 2004 |
| 45.82        | YOSHIAKI ISHIZU   | JPN | 2019 | 1:53.78     | THOMAS MAINE      | USA     | 2010            | 1:45.28     | GORO KOBAYASHI    | JPN | 2007 |
| 46.08        | TOSHIJI SATO      | JPN | 2000 | 1:54.07     | FRANK PIEMME      | USA     | 2010            | 1:45.44     | GEORGE CORONES    | AUS | 2009 |
| 46.19        | MAMPEI SEINO      | JPN | 2018 | 2:01.65     | ANDREW HOLDEN     | USA     | 2004            | 1:47.51     | MASAHISA KANEKO   | JPN | 2002 |
| 46.35        | SHOICHI SAKAMOTO  | JPN | 2003 | 2:04.50     | WALT PFEIFFER     | USA     | 1998            | 1:47.70     | STEVE CARLSON     | USA | 2009 |
| 100 M. BACK  |                   |     |      | 2:06.70     | FRANK TANNER      | USA     | 2016            | 1:48.20     | TOSHIMI INATOMI   | JPN | 2016 |
| 1:28.98      | KEIJIRO NAKAMURA  | JPN | 2008 | 2:11.49     | KARL HAUTER       | GER     | 2012            | 1:48.31     | JURGEN SCHMIDT    | USA | 2013 |
| 1:32.98      | CLARKE MITCHELL   | USA | 2017 | 2:13.39     | ALDO DA ROSA      | USA     | 2002            | 200 M. FREE |                   |     |      |
| 1:39.08      | GORO KOBAYASHI    | JPN | 2002 | 2:14.35     | SERHII SIMANKOV   | UKR     | 2018            | 3:27.14     | KARL HAUTER       | GER | 2016 |
| 1:40.25      | TOSHIJI SATO      | JPN | 2000 | 2:15.51     | LUDWIG GEBURZI    | GER     | 2007            | 3:39.65     | TOKUSHI KOMEDA    | JPN | 2004 |
| 1:41.93      | ROBERTO ALBERICHE | ESP | 2016 | 200 M. FLY  |                   |         |                 | 3:46.17     | WILLARD LAMB      | USA | 2014 |
| 1:42.84      | KARL HAUTER       | GER | 2010 | 4:12.21     | THOMAS MAINE      | USA     | 2010            | 3:48.53     | GORO KOBAYASHI    | JPN | 2007 |
| 1:43.44      | MAMPEI SEINO      | JPN | 2018 | 4:49.10     | WALT PFEIFFER     | USA     | 1998            | 3:59.28     | WOODY BOWERSOCK   | USA | 2003 |
| 1:44.91      | ROGER BURRELL     | GBR | 2016 | 4:57.51     | SERHII SIMANKOV   | UKR     | 2019            | 4:01.58     | JURGEN SCHMIDT    | USA | 2013 |
| 1:46.16      | MASAYASU KAMIYA   | JPN | 2017 | 5:01.50     | PAUL KRUP         | USA     | 2002            | 4:03.31     | STEVE CARLSON     | USA | 2009 |
| 1:47.93      | WILLARD LAMB      | USA | 2009 | 5:05.95     | FRANK TANNER      | USA     | 2016            |             |                   |     |      |



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# FINA WORLD MASTERS TOP 10 - SHORT COURSE METERS - ALL TIME (1986-2019)

|          |                  |          |               |                           |
|----------|------------------|----------|---------------|---------------------------|
| 1:13.45  | JOHN HARRISON    | GBR 2009 | M E N 100-104 |                           |
| 1:17.47  | JURGEN SCHMIDT   | USA 2018 | *****         |                           |
| 100 M.   | BACK             |          | 50 M.         | FREE                      |
| 2:04.72  | WILLARD LAMB     | USA 2017 | 55.75         | GEORGE CORONES AUS 2018   |
| 2:21.73  | TOSHIJI SATO     | JPN 2010 | 1:16.92       | JARING TIMMERMAN CAN 2009 |
| 2:23.12  | KAZUNAGA AKUTSU  | JPN 2007 | 1:27.67       | JOHN HARRISON GBR 2014    |
| 2:25.92  | GORO KOBAYASHI   | JPN 2012 | 1:32.43       | JEAN LEEMPUT FRA 2014     |
| 2:29.49  | HORVATH BANKI    | HUN 2015 | 2:06.66       | TOM LANE USA 1995         |
| 2:33.97  | ALFRED SCHULHOF  | CAN 2014 | 2:07.41       | HANS HAHN GER 2008        |
| 2:43.41  | JEAN LEEMPUT     | FRA 2010 | 100 M.        | FREE                      |
| 2:46.68  | JOHN HARRISON    | GBR 2009 | 2:19.02       | GEORGE CORONES AUS 2018   |
| 2:56.67  | RUSS WITTE       | USA 2011 | 3:02.22       | JARING TIMMERMAN CAN 2009 |
| 3:05.23  | NORI YAMAMOTO    | JPN 2005 | 3:27.79       | JOHN HARRISON GBR 2014    |
| 200 M.   | BACK             |          | 4:32.29       | TOM LANE USA 1995         |
| 4:24.83  | WILLARD LAMB     | USA 2017 | 50 M.         | BACK                      |
| 5:29.49  | ALFRED SCHULHOF  | CAN 2014 | 1:26.68       | JEAN LEEMPUT FRA 2014     |
| 6:18.51  | JOHN HARRISON    | GBR 2009 | 1:45.59       | JARING TIMMERMAN CAN 2009 |
| 6:37.28  | B.BANKI-HORVATH  | HUN 2017 | 2:02.52       | TOM LANE USA 1995         |
| 7:01.87  | ALFREDO CHERCHI  | AUS 2002 | 2:09.37       | HANS HAHN GER 2008        |
| 8:32.34  | GUS LANGNER      | USA 1998 | 4:17.99       | NOBUO OTSUKI JPN 2007     |
| 9:31.21  | BILL REEDER      | USA 2005 | 100 M.        | BACK                      |
| 9:50.56  | WERNER KELLER    | SUI 2019 | 3:26.09       | JEAN LEEMPUT FRA 2014     |
| 50 M.    | BRST             |          | 3:39.53       | JOHN HARRISON GBR 2014    |
| 1:07.12  | HIROMU YOSHIMOTO | JPN 2010 | 3:51.54       | JARING TIMMERMAN CAN 2009 |
| 1:09.34  | GEORGE CORONES   | AUS 2013 | 5:01.82       | HANS HAHN GER 2008        |
| 1:11.36  | ALFRED SCHULHOF  | CAN 2014 | 50 M.         | BRST                      |
| 1:13.72  | RUSS WITTE       | USA 2011 | 1:20.78       | GEORGE CORONES AUS 2018   |
| 1:16.93  | JAN HOEG         | NOR 2018 |               |                           |
| 1:17.30  | K.MROWCZYNSKI    | POL 2017 |               |                           |
| 1:22.80  | KAZUNAGA AKUTSU  | JPN 2007 |               |                           |
| 1:28.78  | HORVATH BANKI    | HUN 2015 |               |                           |
| 1:31.50  | ROMAN JEZEK      | CAN 2009 |               |                           |
| 1:31.60  | GUS LANGNER      | USA 1998 |               |                           |
| 100 M.   | BRST             |          |               |                           |
| 2:31.77  | HIROMU YOSHIMOTO | JPN 2010 |               |                           |
| 2:43.30  | GEORGE CORONES   | AUS 2013 |               |                           |
| 3:01.83  | ALFRED SCHULHOF  | CAN 2014 |               |                           |
| 3:03.57  | RUSS WITTE       | USA 2011 |               |                           |
| 3:24.92  | ROMAN JEZEK      | CAN 2009 |               |                           |
| 3:35.33  | GUS LANGNER      | USA 1998 |               |                           |
| 3:37.75  | B.BANKI-HORVATH  | HUN 2016 |               |                           |
| 4:07.54  | JACK MATHESON    | AUS 2013 |               |                           |
| 4:29.87  | WERNER KELLER    | SUI 2019 |               |                           |
| 5:03.09  | ROBERT DOUD      | USA 2018 |               |                           |
| 200 M.   | BRST             |          |               |                           |
| 5:45.70  | HIROMU YOSHIMOTO | JPN 2010 |               |                           |
| 6:05.88  | GEORGE CORONES   | AUS 2013 |               |                           |
| 6:14.84  | RUSS WITTE       | USA 2011 |               |                           |
| 7:29.31  | GUS LANGNER      | USA 1998 |               |                           |
| 8:00.06  | ROMAN JEZEK      | CAN 2009 |               |                           |
| 8:27.21  | B.BANKI-HORVATH  | HUN 2016 |               |                           |
| 9:39.67  | WERNER KELLER    | SUI 2019 |               |                           |
| 50 M.    | FLY              |          |               |                           |
| 1:35.76  | ALDO CAPUTI      | ITA 2010 |               |                           |
| 2:02.24  | ROBERT DOUD      | USA 2018 |               |                           |
| 3:02.06  | EUGENE LEHMAN    | CAN 2008 |               |                           |
| 100 M.   | FLY              |          |               |                           |
| 5:36.78  | ROBERT DOUD      | USA 2018 |               |                           |
| 6:04.41  | WALTER PFEIFFER  | USA 2008 |               |                           |
| 200 M.   | FLY              |          |               |                           |
| 11:08.68 | ROBERT DOUD      | USA 2018 |               |                           |
| 100 M.   | I.M.             |          |               |                           |
| 2:39.39  | WILLARD LAMB     | USA 2017 |               |                           |
| 3:33.98  | GUS LANGNER      | USA 1998 |               |                           |
| 5:45.94  | BILL REEDER      | USA 2005 |               |                           |
| 200 M.   | I.M.             |          |               |                           |
| 9:50.55  | WALTER PFEIFFER  | USA 2008 |               |                           |
| 10:39.89 | ROBERT DOUD      | USA 2018 |               |                           |
| 400 M.   | I.M.             |          |               |                           |
| 21:03.17 | WALTER PFEIFFER  | USA 2008 |               |                           |

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