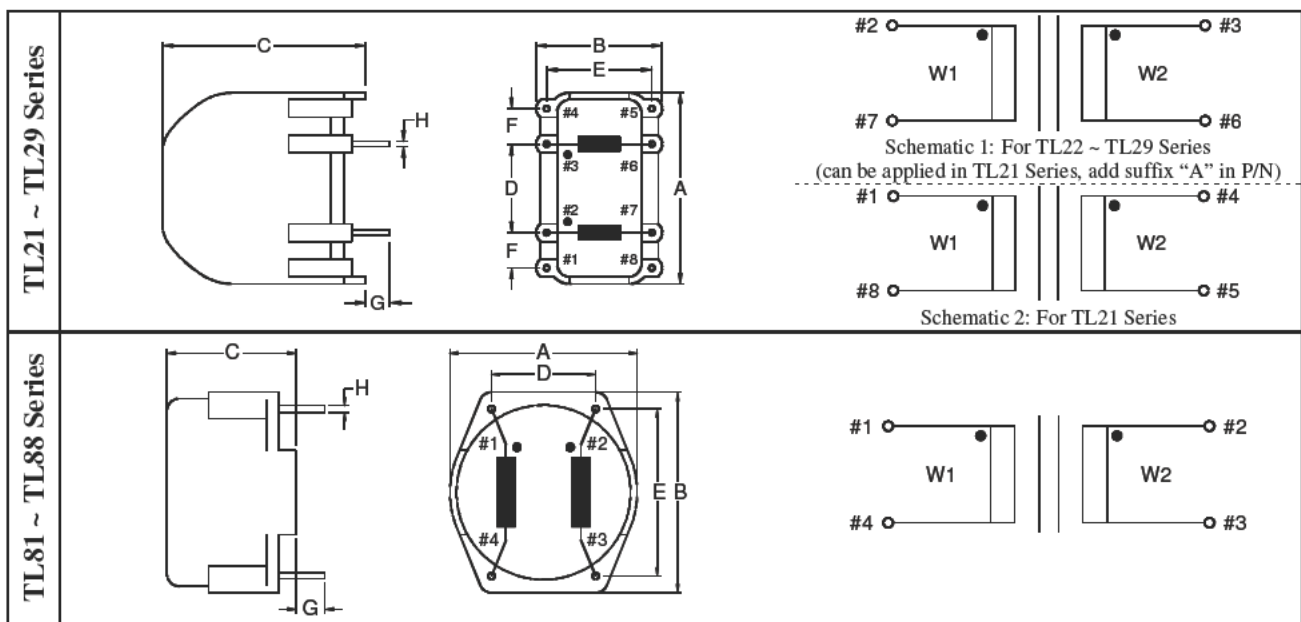


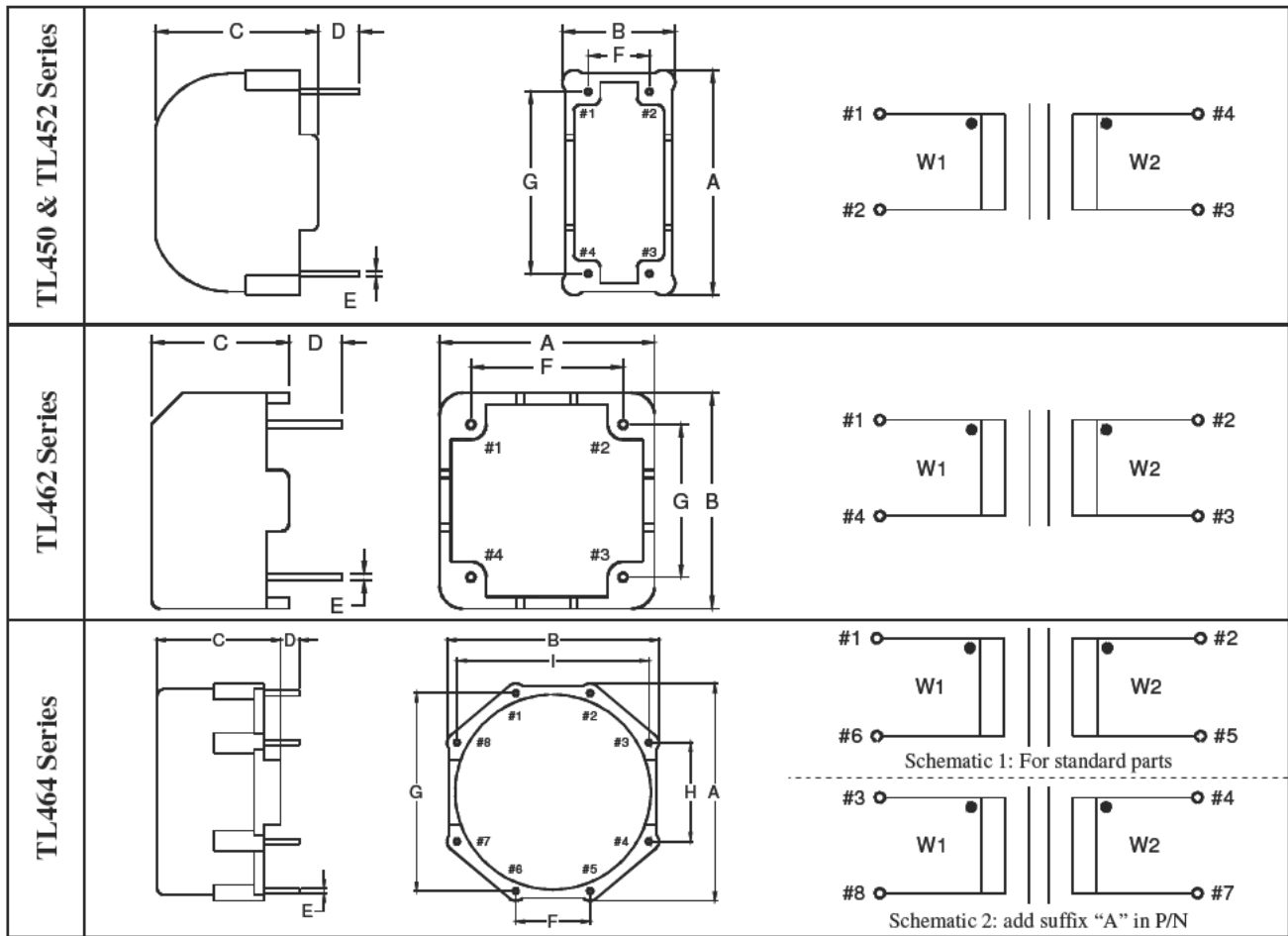


- Horizontal & Vertical Series
- Inductance range : 0.2 ~ 82mH
- Current range : 0.3 ~ 12A
- Dielectric strength : 2000Vrms
- Rated voltage : 250Vac
- Agency approval – VDE: EN 60938-2 (VDE 0565 Teil 2-1)



| Product Series | Dimension (mm) | | | | | | | | Weight (g) |
|----------------|----------------|-------|-------|-------|-------|-------|-------|-------|------------|
| | A | B | C | D | E | F | G | H | |
| TL21 | 18.0 | 12.4 | 20.0 | 5.0 | 10.0 | 5.0 | 3.5 | Ø0.8 | 5 |
| TL22 | 23.0 | 15.2 | 25.0 | 10.0 | 12.5 | 5.0 | 3.5 | Ø0.8 | 13 |
| TL23 | 27.0 | 18.0 | 29.0 | 12.5 | 15.0 | 5.0 | 3.5 | Ø0.8 | 20 |
| TL24 | 32.0 | 18.0 | 33.5 | 12.5 | 15.0 | 7.5 | 3.5 | Ø0.8 | 27 |
| TL25 | 32.0 | 20.6 | 36.0 | 12.5 | 17.5 | 7.5 | 3.5 | Ø0.8 | 32 |
| TL26 | 37.0 | 25.5 | 40.0 | 15.0 | 22.5 | 7.5 | 3.5 | Ø0.8 | 37 |
| TL27 | 43.0 | 28.2 | 45.0 | 25.0 | 25.0 | 7.5 | 3.5 | Ø0.8 | 62 |
| TL28 | 49.0 | 33.7 | 52.0 | 25.0 | 30.0 | 10.0 | 3.5 | Ø1.0 | 110 |
| TL29 | 63.6 | 44.0 | 59.0 | 25.0 | 40.0 | 10.0 | 3.5 | Ø1.0 | 142 |
| TL81 | 17.0 | 18.0 | 12.5 | 10.0 | 15.0 | -- | 3.5 | Ø0.8 | 5 |
| TL82 | 22.5 | 24.0 | 15.5 | 12.5 | 20.0 | -- | 3.5 | Ø0.8 | 10 |
| TL83 | 27.0 | 28.3 | 17.5 | 15.0 | 25.0 | -- | 3.5 | Ø0.8 | 17 |
| TL84 | 32.0 | 33.2 | 19.5 | 20.0 | 30.0 | -- | 3.5 | Ø0.8 | 26 |
| TL84A | 32.0 | 33.2 | 25.0 | 20.0 | 30.0 | -- | 3.5 | Ø0.8 | 34 |
| TL85 | 37.0 | 41.5 | 20.5 | 20.0 | 35.0 | -- | 3.5 | Ø0.8 | 40 |
| TL86 | 42.0 | 42.0 | 28.0 | 25.0 | 35.0 | -- | 3.5 | Ø0.8 | 58 |
| TL87 | 47.0 | 47.0 | 30.0 | 30.0 | 40.0 | -- | 3.5 | Ø1.0 | 87 |
| TL88 | 52.0 | 52.0 | 40.0 | 35.0 | 45.0 | -- | 3.5 | Ø1.0 | 133 |
| Tolerance | ± 1.0 | ± 1.0 | ± 1.0 | ± 0.5 | ± 0.5 | ± 0.5 | ± 0.5 | ± 0.1 | approx. |

Note: Unused pins are omitted for standard parts. Unused pins can be provided on request.



| Product Series | Dimension (mm) | | | | | | | | | | Weight (g) |
|----------------|----------------|------|------|------|-------|------|------|------|-------|---------|------------|
| | A | B | C | D | E | F | G | H | I | | |
| TL450 | 11.0 | 8.0 | 9.8 | 3.5 | SQ0.5 | 5.0 | 8.75 | -- | -- | 1.2 | |
| TL452 | 18.8 | 9.4 | 13.5 | 3.5 | SQ0.5 | 5.1 | 15.2 | -- | -- | 3.4 | |
| TL462 | 14.2 | 14.2 | 9.0 | 3.5 | SQ0.5 | 10.0 | 10.0 | -- | -- | 3.2 | |
| TL464 | 44.0 | 42.7 | 25.0 | 3.5 | SQ1.0 | 15.0 | 40.0 | 20.0 | 38.75 | 53 | |
| Tolerance | ±1.0 | ±1.0 | ±1.0 | ±1.0 | ±0.1 | ±0.5 | ±0.5 | ±0.5 | ±0.5 | approx. | |

Note: Unused pins are omitted for standard parts. Unused pins can be provided on request.

| Part Number | Inductance (mH) | Current (A) | Part Number | Inductance (mH) | Current (A) |
|---------------|-----------------|-------------|--------------|-----------------|-------------|
| TL450-005-402 | 2 x 4 | 0.5 | TL81-003-473 | 2 x 47 | 0.3 |
| TL450-009-202 | 2 x 2 | 0.9 | TL81-003-393 | 2 x 39 | 0.3 |
| TL450-020-501 | 2 x 0.5 | 2.0 | TL81-004-393 | 2 x 39 | 0.4 |
| TL452-003-123 | 2 x 12 | 0.3 | TL81-004-273 | 2 x 27 | 0.4 |
| TL452-006-442 | 2 x 4.4 | 0.6 | TL81-004-203 | 2 x 20 | 0.4 |
| TL452-010-302 | 2 x 3 | 1.0 | TL81-005-273 | 2 x 27 | 0.5 |
| TL452-015-162 | 2 x 1.6 | 1.5 | TL81-005-153 | 2 x 15 | 0.5 |
| TL452-020-112 | 2 x 1.1 | 2.0 | TL81-006-153 | 2 x 15 | 0.6 |
| TL462-003-123 | 2 x 12 | 0.3 | TL81-006-332 | 2 x 3.3 | 0.6 |
| TL462-006-442 | 2 x 4.4 | 0.6 | TL81-006-102 | 2 x 1.0 | 0.6 |
| TL462-010-302 | 2 x 3 | 1.0 | TL81-007-103 | 2 x 10 | 0.7 |
| TL462-015-162 | 2 x 1.6 | 1.5 | TL81-008-103 | 2 x 10 | 0.8 |
| TL462-020-112 | 2 x 1.1 | 2.0 | TL81-012-682 | 2 x 6.8 | 1.2 |
| | | | TL81-015-432 | 2 x 4.3 | 1.5 |
| | | | TL81-015-332 | 2 x 3.3 | 1.5 |



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| Part Number | Inductance (mH) | Current (A) | Part Number | Inductance (mH) | Current (A) |
|------------------|-----------------|-------------|--------------|-----------------|-------------|
| TL21-003-473 (#) | 2 x 47 | 0.3 | TL81-015-152 | 2 x 1.5 | 1.5 |
| TL21-004-393 (#) | 2 x 39 | 0.4 | TL81-020-182 | 2 x 1.8 | 2.0 |
| TL21-004-273 (#) | 2 x 27 | 0.4 | TL81-020-122 | 2 x 1.2 | 2.0 |
| TL21-005-273 (#) | 2 x 27 | 0.5 | TL81-020-501 | 2 x 0.5 | 2.0 |
| TL21-005-153 (#) | 2 x 15 | 0.5 | TL81-026-401 | 2 x 0.4 | 2.6 |
| TL21-006-153 (#) | 2 x 15 | 0.6 | TL81-040-701 | 2 x 0.7 | 4.0 |
| TL21-006-152 (#) | 2 x 1.5 | 0.6 | | | |
| TL21-007-103 (#) | 2 x 10 | 0.7 | TL82-003-473 | 2 x 47 | 0.3 |
| TL21-008-103 (#) | 2 x 10 | 0.8 | TL82-005-473 | 2 x 47 | 0.5 |
| TL21-012-682 (#) | 2 x 6.8 | 1.2 | TL82-005-393 | 2 x 39 | 0.5 |
| TL21-012-301 (#) | 2 x 0.3 | 1.2 | TL82-008-273 | 2 x 27 | 0.8 |
| TL21-015-432 (#) | 2 x 4.3 | 1.5 | TL82-008-153 | 2 x 15 | 0.8 |
| TL21-015-332 (#) | 2 x 3.3 | 1.5 | TL82-010-153 | 2 x 15 | 1.0 |
| TL21-015-201 (#) | 2 x 0.2 | 1.5 | TL82-012-103 | 2 x 10 | 1.2 |
| TL21-020-182 (#) | 2 x 1.8 | 2.0 | TL82-015-682 | 2 x 6.8 | 1.5 |
| TL21-020-122 (#) | 2 x 1.2 | 2.0 | TL82-020-103 | 2 x 10 | 2.0 |
| TL21-026-401 (#) | 2 x 0.4 | 2.6 | TL82-020-422 | 2 x 4.2 | 2.0 |
| TL21-040-701 (#) | 2 x 0.7 | 4.0 | TL82-025-332 | 2 x 3.3 | 2.5 |
| | | | TL82-028-122 | 2 x 1.2 | 2.8 |
| TL22-003-473 | 2 x 47 | 0.3 | TL82-030-202 | 2 x 2 | 3.0 |
| TL22-005-563 | 2 x 56 | 0.5 | TL82-030-401 | 2 x 0.4 | 3.0 |
| TL22-005-473 | 2 x 47 | 0.5 | TL82-040-152 | 2 x 1.5 | 4.0 |
| TL22-005-393 | 2 x 39 | 0.5 | | | |
| TL22-008-273 | 2 x 27 | 0.8 | TL83-005-503 | 2 x 50 | 0.5 |
| TL22-008-153 | 2 x 15 | 0.8 | TL83-006-473 | 2 x 47 | 0.6 |
| TL22-010-153 | 2 x 15 | 1.0 | TL83-006-403 | 2 x 40 | 0.6 |
| TL22-010-103 | 2 x 10 | 1.0 | TL83-006-393 | 2 x 39 | 0.6 |
| TL22-010-902 | 2 x 9 | 1.0 | TL83-006-103 | 2 x 10 | 0.6 |
| TL22-012-103 | 2 x 10 | 1.2 | TL83-006-102 | 2 x 1.0 | 0.6 |
| TL22-015-682 | 2 x 6.8 | 1.5 | TL83-008-473 | 2 x 47 | 0.8 |
| TL22-015-362 | 2 x 3.6 | 1.5 | TL83-008-393 | 2 x 39 | 0.8 |
| TL22-020-422 | 2 x 4.2 | 2.0 | TL83-009-393 | 2 x 39 | 0.9 |
| TL22-025-332 | 2 x 3.3 | 2.5 | TL83-010-503 | 2 x 50 | 1.0 |
| TL22-028-122 | 2 x 1.2 | 2.8 | TL83-010-473 | 2 x 47 | 1.0 |
| TL22-030-362 | 2 x 3.6 | 3.0 | TL83-010-393 | 2 x 39 | 1.0 |
| TL22-030-202 | 2 x 2 | 3.0 | TL83-010-303 | 2 x 30 | 1.0 |
| TL22-030-401 | 2 x 0.4 | 3.0 | TL83-010-273 | 2 x 27 | 1.0 |
| TL22-040-152 | 2 x 1.5 | 4.0 | TL83-010-183 | 2 x 18 | 1.0 |
| | | | TL83-012-503 | 2 x 50 | 1.2 |
| TL23-005-273 | 2 x 27 | 0.5 | TL83-012-303 | 2 x 30 | 1.2 |
| TL23-005-123 | 2 x 12 | 0.5 | TL83-012-153 | 2 x 15 | 1.2 |
| TL23-006-473 | 2 x 47 | 0.6 | TL83-015-103 | 2 x 10 | 1.5 |
| TL23-006-393 | 2 x 39 | 0.6 | TL83-016-103 | 2 x 10 | 1.6 |
| TL23-006-422 | 2 x 4.2 | 0.6 | TL83-020-682 | 2 x 6.8 | 2.0 |
| TL23-008-473 | 2 x 47 | 0.8 | TL83-025-562 | 2 x 5.6 | 2.5 |
| TL23-008-393 | 2 x 39 | 0.8 | TL83-028-332 | 2 x 3.3 | 2.8 |
| TL23-009-393 | 2 x 39 | 0.9 | TL83-030-452 | 2 x 4.5 | 3.0 |
| TL23-010-393 | 2 x 39 | 1.0 | TL83-032-122 | 2 x 1.2 | 3.2 |
| TL23-010-303 | 2 x 30 | 1.0 | TL83-038-401 | 2 x 0.4 | 3.8 |
| TL23-010-273 | 2 x 27 | 1.0 | TL83-040-472 | 2 x 4.7 | 4.0 |
| TL23-010-203 | 2 x 20 | 1.0 | TL83-040-332 | 2 x 3.3 | 4.0 |
| TL23-010-183 | 2 x 18 | 1.0 | | | |
| TL23-010-103 | 2 x 10 | 1.0 | TL84-005-823 | 2 x 82 | 0.5 |
| TL23-012-503 | 2 x 50 | 1.2 | TL84-008-493 | 2 x 49 | 0.8 |
| TL23-012-393 | 2 x 39 | 1.2 | TL84-010-393 | 2 x 39 | 1.0 |
| TL23-012-153 | 2 x 15 | 1.2 | TL84-010-333 | 2 x 33 | 1.0 |
| TL23-015-183 | 2 x 18 | 1.5 | TL84-012-503 | 2 x 50 | 1.2 |
| TL23-015-103 | 2 x 10 | 1.5 | TL84-013-493 | 2 x 49 | 1.3 |
| TL23-016-103 | 2 x 10 | 1.6 | TL84-013-473 | 2 x 47 | 1.3 |
| TL23-020-682 | 2 x 6.8 | 2.0 | TL84-014-393 | 2 x 39 | 1.4 |



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| Part Number | Inductance (mH) | Current (A) | Part Number | Inductance (mH) | Current (A) |
|--------------|-----------------|-------------|-------------------|-----------------|-------------|
| TL23-025-562 | 2 x 5.6 | 2.5 | TL84-014-273 | 2 x 27 | 1.4 |
| TL23-028-332 | 2 x 3.3 | 2.8 | TL84-015-473 | 2 x 47 | 1.5 |
| TL23-030-452 | 2 x 4.5 | 3.0 | TL84-015-273 | 2 x 27 | 1.5 |
| TL23-032-122 | 2 x 1.2 | 3.2 | TL84-016-183 | 2 x 18 | 1.6 |
| TL23-038-401 | 2 x 0.4 | 3.8 | TL84-018-333 | 2 x 33 | 1.8 |
| TL23-040-332 | 2 x 3.3 | 4.0 | TL84-018-183 | 2 x 18 | 1.8 |
| | | | TL84-018-153 | 2 x 15 | 1.8 |
| TL24-005-823 | 2 x 82 | 0.5 | TL84-020-183 | 2 x 18 | 2.0 |
| TL24-008-493 | 2 x 49 | 0.8 | TL84-020-153 | 2 x 15 | 2.0 |
| TL24-010-393 | 2 x 39 | 1.0 | TL84-020-103 | 2 x 10 | 2.0 |
| TL24-010-333 | 2 x 33 | 1.0 | TL84-020-682 | 2 x 6.8 | 2.0 |
| TL24-012-503 | 2 x 50 | 1.2 | TL84-025-103 | 2 x 10 | 2.5 |
| TL24-012-393 | 2 x 39 | 1.2 | TL84-025-682 | 2 x 6.8 | 2.5 |
| TL24-013-493 | 2 x 49 | 1.3 | TL84-030-682 | 2 x 6.8 | 3.0 |
| TL24-013-473 | 2 x 47 | 1.3 | TL84-030-332 | 2 x 3.3 | 3.0 |
| TL24-014-393 | 2 x 39 | 1.4 | TL84-035-392 | 2 x 3.9 | 3.5 |
| TL24-014-273 | 2 x 27 | 1.4 | TL84-040-332 | 2 x 3.3 | 4.0 |
| TL24-015-273 | 2 x 27 | 1.5 | TL84-040-122 | 2 x 1.2 | 4.0 |
| TL24-016-183 | 2 x 18 | 1.6 | TL84-045-401 | 2 x 0.4 | 4.5 |
| TL24-018-153 | 2 x 15 | 1.8 | TL84-050-182 | 2 x 1.8 | 5.0 |
| TL24-020-253 | 2 x 25 | 2.0 | TL84-060-202 | 2 x 2 | 6.0 |
| TL24-020-103 | 2 x 10 | 2.0 | TL84-060-122 | 2 x 1.2 | 6.0 |
| TL24-020-682 | 2 x 6.8 | 2.0 | TL84-070-401 | 2 x 0.4 | 7.0 |
| TL24-025-233 | 2 x 23 | 2.5 | | | |
| TL24-025-682 | 2 x 6.8 | 2.5 | TL84A-016-473 | 2 x 47 | 1.6 |
| TL24-030-332 | 2 x 3.3 | 3.0 | TL84A-018-393 | 2 x 39 | 1.8 |
| TL24-040-332 | 2 x 3.3 | 4.0 | TL84A-020-273 | 2 x 27 | 2.0 |
| TL24-040-122 | 2 x 1.2 | 4.0 | TL84A-025-153 | 2 x 15 | 2.5 |
| TL24-045-401 | 2 x 0.4 | 4.5 | TL84A-025-103 | 2 x 10 | 2.5 |
| TL24-060-202 | 2 x 2 | 6.0 | TL84A-035-682 | 2 x 6.8 | 3.5 |
| TL24-060-122 | 2 x 1.2 | 6.0 | TL84A-040-702 | 2 x 7 | 4.0 |
| | | | TL84A-040-392 | 2 x 3.9 | 4.0 |
| TL25-015-473 | 2 x 47 | 1.5 | TL84A-060-332 | 2 x 3.3 | 6.0 |
| TL25-018-183 | 2 x 18 | 1.8 | TL84A-060-182 | 2 x 1.8 | 6.0 |
| TL25-020-153 | 2 x 15 | 2.0 | | | |
| TL25-025-103 | 2 x 10 | 2.5 | TL85-017-393 | 2 x 39 | 1.7 |
| TL25-030-682 | 2 x 6.8 | 3.0 | TL85-018-273 | 2 x 27 | 1.8 |
| TL25-035-392 | 2 x 3.9 | 3.5 | TL85-020-273 | 2 x 27 | 2.0 |
| TL25-040-802 | 2 x 8.0 | 4.0 | TL85-020-183 | 2 x 18 | 2.0 |
| TL25-040-332 | 2 x 3.3 | 4.0 | TL85-030-103 | 2 x 10 | 3.0 |
| TL25-050-802 | 2 x 8.0 | 5.0 | TL85-040-682 | 2 x 6.8 | 4.0 |
| TL25-050-682 | 2 x 6.8 | 5.0 | TL85-060-392 | 2 x 3.9 | 6.0 |
| TL25-050-182 | 2 x 1.8 | 5.0 | TL85-080-272 | 2 x 2.7 | 8.0 |
| TL25-060-122 | 2 x 1.2 | 6.0 | TL85-080-132 | 2 x 1.3 | 8.0 |
| TL25-070-401 | 2 x 0.4 | 7.0 | TL85-100-182 | 2 x 1.8 | 10.0 |
| | | | | | |
| TL26-060-272 | 2 x 2.7 | 6.0 | TL86-080-182 | 2 x 1.8 | 8 |
| | | | | | |
| TL27-080-182 | 2 x 1.8 | 8.0 | TL87-100-122 | 2 x 1.2 | 10 |
| | | | | | |
| TL28-100-122 | 2 x 1.2 | 10 | TL88-120-102 | 2 x 1.0 | 12 |
| | | | | | |
| TL29-120-102 | 2 x 1.0 | 12 | TL464-010-683 (#) | 2 x 68 | 1 |
| | | | TL464-020-183 (#) | 2 x 18 | 2 |
| | | | TL464-040-682 (#) | 2 x 6.8 | 4 |
| | | | TL464-060-392 (#) | 2 x 3.9 | 6 |
| | | | TL464-080-272 (#) | 2 x 2.7 | 8 |
| | | | TL464-100-182 (#) | 2 x 1.8 | 10 |

Note: (#) Items with suffix "A" are available (e.g. TL21-003-473A)