

# Molded-glass Collimating & Coupling Lens Catalog

| No. | P/N                   | Type        | Material   | OD (mm) | EFL (mm) | WD (mm)     | CT (mm) | NA         | λd (nm) | LW (mm)      | BBAR R<1%    | NBAR R0.5%    | NBAR R0.5%  | NBAR R0.5%  | V-coat 0.25% | LD Options                                                                                        |
|-----|-----------------------|-------------|------------|---------|----------|-------------|---------|------------|---------|--------------|--------------|---------------|-------------|-------------|--------------|---------------------------------------------------------------------------------------------------|
| 1   | AL-D0240-F0114-W1300  | Coupling    | D-ZLAF52LA | 2.40    | 1.14     | 1.129/4.826 | 1.239   | 0.43/0.124 | 1300    | BK7, t=0.30  | 1050-1620 nm | 1430 ± 140 nm | -           | -           | 1300 nm      | Wavespectrum WSLD-1300/1310 (TO-can); Accelink 1310 nm FP/DFB (TO-can)                            |
| 2   | AL-D0240-F0114-W1310  | Collimating | D-ZLaF52LA | 2.40    | 1.14     | 0.720       | 1.24    | 0.55       | 1310    | -            | 1050-1620 nm | 1430 ± 140 nm | -           | -           | 1310 nm      | Wavespectrum WSLD-1310 (1310 nm, COS/butterfly); Accelink 1310 nm FP/DFB (chip/COS)               |
| 3   | AL-D0240-F0145-W780   | Collimating | D-ZK3      | 2.40    | 1.45     | 0.88        | 1.00    | 0.560      | 780     | -            | 650-1050 nm  | 805 ± 45 nm   | 945 ± 45 nm | -           | 780 nm       | Wavespectrum WSLD-780 (780 nm, C-mount/COS); Ushio HL78-series (780 nm, TO-18/Ø5.6)               |
| 4   | AL-D0150-F0185-W515   | Collimating | D-K9       | 1.50    | 1.85     | 1.39        | 1.10    | 0.320      | 515     | BK7, t=0.4   | 400-700 nm   | 435 ± 35 nm   | 527 ± 17 nm | 645 ± 25 nm | 515 nm       | Wavespectrum WSLD-515 (515 nm, TO-38); ams-Osram PL 520 (515 nm bin, TO-38)                       |
| 5   | AL-D0300-F0200-W780   | Collimating | D-ZK3      | 3.00    | 2.00     | 1.09        | 2.00    | 0.50       | 780     | BK7, t=0.25  | 650-1050 nm  | 805 ± 45 nm   | 945 ± 45 nm | -           | 780 nm       | Wavespectrum WSLD-780 (780 nm, TO-18/TO-5); Ushio HL78-series (780 nm, TO-18/Ø5.6)                |
| 6   | AL-D0300-F0220-W520   | Collimating | D-LAK6     | 3.00    | 2.20     | 1.292       | 1.685   | 0.55       | 520     | BK7, t=0.25  | 400-700 nm   | 435 ± 35 nm   | 527 ± 17 nm | 645 ± 25 nm | 520 nm       | Wavespectrum WSLD-520 (520 nm, TO-38/TO-56); ams-Osram PLT5 520B (520 nm, TO-56)                  |
| 7   | AL-D0300-F0240-W520   | Collimating | D-LAK6     | 3.00    | 2.40     | 1.513       | 1.65    | 0.50       | 520     | BK7, t=0.25  | 400-700 nm   | 435 ± 35 nm   | 527 ± 17 nm | 645 ± 25 nm | 520 nm       | Wavespectrum WSLD-520 (520 nm, TO-38/TO-56); ams-Osram PLT5 520B (520 nm, TO-56)                  |
| 8   | AL-D0400-F0273-W780   | Collimating | D-ZLaF52LA | 4.00    | 2.73     | 2.370       | 1.426   | 0.55       | 780     | PC, t=1.20   | 650-1050 nm  | 805 ± 45 nm   | 945 ± 45 nm | -           | 780 nm       | ams-Osram molded 780 nm (plastic window); Wavespectrum WSLD-780 (780 nm, TO-18/TO-5)              |
| 9   | AL-D0450-F0275-W830   | Collimating | D-ZLaF52LA | 4.50    | 2.75     | 1.50        | 2.24    | 0.64       | 830     | -            | 650-1050 nm  | 805 ± 45 nm   | 945 ± 45 nm | -           | 830 nm       | BWT 830 nm fiber-coupled (830 nm); Wavespectrum WSLD-830 (830 nm, TO-18/TO-5)                     |
| 10  | AL-D06325-F0310-W830  | Collimating | D-ZK3      | 6.325   | 3.10     | 1.76        | 3.214   | 0.670      | 830     | -            | 650-1050 nm  | 805 ± 45 nm   | 945 ± 45 nm | -           | 830 nm       | BWT 830 nm fiber-coupled (830 nm); Wavespectrum WSLD-830 (830 nm, TO-18/TO-5)                     |
| 11  | AL-D0300-F0320-W633   | Collimating | D-ZLaF52LA | 3.00    | 3.20     | 2.09        | 2.00    | 0.37       | 633     | -            | 400-700 nm   | 435 ± 35 nm   | 527 ± 17 nm | 645 ± 25 nm | 633 nm       | Wavespectrum WSLD-633/635 (633/635 nm, TO-18); Ushio HL6320G (635 nm, TO-5/Ø9)                    |
| 12  | AL-D0500-F0337-W808   | Coupling    | D-ZK2      | 5.00    | 3.37     | 5.0 / 6.91  | 2.50    | 0.31/0.23  | 808     | -            | 650-1050 nm  | 805 ± 45 nm   | 945 ± 45 nm | -           | 808 nm       | BWT K808-series (808 nm, fiber-coupled); Focuslight 808 nm module (fiber-coupled)                 |
| 13  | AL-D0300-F0376-W635   | Collimating | D-ZK3      | 3.00    | 3.76     | 2.98        | 1.50    | 0.33       | 635     | BK7, t=0.25  | 400-700 nm   | 435 ± 35 nm   | 527 ± 17 nm | 645 ± 25 nm | 635 nm       | Wavespectrum WSLD-635 (635 nm, TO-18/TO-5); Ushio HL6335G (635 nm, TO-5/Ø9)                       |
| 14  | AL-D06325-F0390-W780  | Collimating | D-ZK3      | 6.325   | 3.90     | 2.70        | 3.05    | 0.50       | 780     | PC, t=1.20   | 650-1050 nm  | 805 ± 45 nm   | 945 ± 45 nm | -           | 780 nm       | Wavespectrum WSLD-780 (780 nm, TO-18/TO-5); Ushio HL78-series (780 nm, TO-18/Ø5.6)                |
| 15  | AL-D0400-F0400-W405   | Collimating | D-ZK3      | 4.00    | 4.00     | 2.91        | 2.00    | 0.40       | 405     | BK7, t=0.25  | 400-700 nm   | 435 ± 35 nm   | 527 ± 17 nm | 645 ± 25 nm | 405 nm       | Wavespectrum WSLD-405 (405 nm, TO-18/TO-5); ams-Osram PLT5 405 / Nichia NDV4316E (405 nm, TO-5.6) |
| 16  | AL-D0633-F0405-W445   | Collimating | D-ZK3      | 6.33    | 4.05     | 2.80        | 3.10    | 0.63       | 445     | PC, t=1.20   | 400-700 nm   | 435 ± 35 nm   | 527 ± 17 nm | 645 ± 25 nm | 445 nm       | ams-Osram PLPT5 447KA (447 nm, molded); Nichia NDB4116 (445 nm, TO-38)                            |
| 17  | AL-D06325-F0402-W408  | Collimating | D-LAK6     | 6.325   | 4.02     | 2.41        | 2.90    | 0.60       | 408     | BK7, t=0.25  | 400-700 nm   | 435 ± 35 nm   | 527 ± 17 nm | 645 ± 25 nm | 408 nm       | Wavespectrum WSLD-405/410 (405/408 nm, TO-18); Nichia NDV4B16 (405/408 nm, TO-5.6)                |
| 18  | AL-D0542-F0447-W780   | Collimating | D-ZK3      | 5.42    | 4.47     | 3.08        | 3.45    | 0.47       | 780     | PC, t=1.20   | 650-1050 nm  | 805 ± 45 nm   | 945 ± 45 nm | -           | 780 nm       | ams-Osram molded 780 nm (plastic window); Wavespectrum WSLD-780 (780 nm, TO-18/TO-5)              |
| 19  | AL-D06325-F0450-W1550 | Collimating | D-ZLaF52LA | 6.325   | 4.50     | 2.82        | 2.747   | 0.60       | 1550    | -            | 1050-1620 nm | 1430 ± 140 nm | -           | -           | 1550 nm      | Wavespectrum WSLD-1550 (1550 nm, COS/butterfly); Accelink 1550 nm FP/DFB (chip/COS)               |
| 20  | AL-D0300-F0450-W633   | Collimating | D-ZK3      | 3.00    | 4.50     | 3.46        | 1.78    | 0.30       | 633     | BK7, t=0.25  | 400-700 nm   | 435 ± 35 nm   | 527 ± 17 nm | 645 ± 25 nm | 633 nm       | Wavespectrum WSLD-633/635 (633/635 nm, TO-18); Ushio HL6320G (635 nm, TO-5/Ø9)                    |
| 21  | AL-D0300-F0470-W633   | Collimating | D-ZK3      | 3.00    | 4.70     | 3.50        | 1.90    | 0.25       | 633     | -            | 400-700 nm   | 435 ± 35 nm   | 527 ± 17 nm | 645 ± 25 nm | 633 nm       | Wavespectrum WSLD-633/635 (633/635 nm, TO-18); Ushio HL6320G (635 nm, TO-5/Ø9)                    |
| 22  | AL-D0200-F0500-W1550  | Collimating | D-ZK3      | 2.00    | 5.00     | 4.37        | 0.99    | 0.15       | 1550    | -            | 1050-1620 nm | 1430 ± 140 nm | -           | -           | 1550 nm      | Wavespectrum WSLD-1550 (1550 nm, COS/butterfly); Accelink 1550 nm FP/DFB (chip/COS)               |
| 23  | AL-D0300-F0500-W915   | Collimating | D-ZK3      | 3.00    | 5.00     | 4.03        | 1.53    | 0.26       | 915     | -            | 650-1050 nm  | 805 ± 45 nm   | 945 ± 45 nm | -           | 915 nm       | BWT K915FA2RN / K91SA3F (915 nm, fiber-coupled); Focuslight 915 nm module (fiber-coupled)         |
| 24  | AL-D0300-F0600-W635   | Collimating | D-ZK3      | 3.00    | 6.00     | 5.20        | 1.50    | 0.21       | 635     | BK7, t=0.25  | 400-700 nm   | 435 ± 35 nm   | 527 ± 17 nm | 645 ± 25 nm | 635 nm       | Wavespectrum WSLD-635 (635 nm, TO-18/TO-5); Ushio HL6335G (635 nm, TO-5/Ø9)                       |
| 25  | AL-D0279-F0613-W1550  | Collimating | D-ZK3      | 2.79    | 6.13     | 4.90        | 1.93    | 0.18       | 1550    | -            | 1050-1620 nm | 1430 ± 140 nm | -           | -           | 1550 nm      | Wavespectrum WSLD-1550 (1550 nm, COS/butterfly); Accelink 1550 nm FP/DFB (chip/COS)               |
| 26  | AL-D0470-F0616-W780   | Collimating | D-ZK3      | 4.700   | 6.16     | 4.37        | 3.48    | 0.30       | 780     | BK7, t=0.275 | 650-1050 nm  | 805 ± 45 nm   | 945 ± 45 nm | -           | 780 nm       | Wavespectrum WSLD-780 (780 nm, TO-18/TO-5); Ushio HL78-series (780 nm, TO-18/Ø5.6)                |
| 27  | AL-D0720-F0624-W780   | Collimating | D-ZK3      | 7.20    | 6.24     | 3.43        | 5.36    | 0.40       | 780     | BK7, t=0.275 | 650-1050 nm  | 805 ± 45 nm   | 945 ± 45 nm | -           | 780 nm       | Wavespectrum WSLD-780 (780 nm, TO-18/TO-5); Ushio HL78-series (780 nm, TO-18/Ø5.6)                |
| 28  | AL-D0635-F0643-W830   | Collimating | D-ZK2N     | 6.35    | 6.43     | 4.70        | 3.11    | 0.43       | 830     | BK7, t=0.25  | 650-1050 nm  | 805 ± 45 nm   | 945 ± 45 nm | -           | 830 nm       | Wavespectrum WSLD-830 (830 nm, TO-18/TO-5); Ushio HL83-series (830 nm, TO-18)                     |
| 29  | AL-D0650-F0750-W830   | Collimating | D-ZK3      | 6.50    | 7.50     | 5.96        | 2.75    | 0.36       | 830     | BK7, t=0.275 | 650-1050 nm  | 805 ± 45 nm   | 945 ± 45 nm | -           | 830 nm       | Wavespectrum WSLD-830 (830 nm, TO-18/TO-5); Ushio HL83-series (830 nm, TO-18)                     |

|    |                      |             |         |       |       |       |       |       |     |             |             |             |             |             |        |                                                                                           |
|----|----------------------|-------------|---------|-------|-------|-------|-------|-------|-----|-------------|-------------|-------------|-------------|-------------|--------|-------------------------------------------------------------------------------------------|
| 30 | AL-D0450-F0800-W915  | Collimating | L-BAL42 | 4.50  | 8.00  | 6.73  | 2.00  | 0.22  | 915 | -           | 650-1050 nm | 805 ± 45 nm | 945 ± 45 nm | -           | 915 nm | BWT K915FA2RN / K91SA3F (915 nm, fiber-coupled); Focuslight 915 nm module (fiber-coupled) |
| 31 | AL-D09936-F0800-W780 | Collimating | D-ZK3   | 9.936 | 8.00  | 5.90  | 3.43  | 0.50  | 780 | BK7, t=0.25 | 650-1050 nm | 805 ± 45 nm | 945 ± 45 nm | -           | 780 nm | Wavespectrum WSLD-780 (780 nm, TO-18/TO-5); Ushio HL78-series (780 nm, TO-18/Ø5.6)        |
| 32 | AL-D0800-F0842-W635  | Collimating | D-ZK3   | 8.00  | 8.42  | 7.05  | 2.30  | 0.37  | 635 | BK7, t=0.25 | 400-700 nm  | 435 ± 35 nm | 527 ± 17 nm | 645 ± 25 nm | 635 nm | Wavespectrum WSLD-635 (635 nm, TO-18/TO-5); Ushio HL6335G (635 nm, TO-5/Ø9)               |
| 33 | AL-D0550-F0880-W635  | Collimating | L-BAL42 | 5.50  | 8.80  | 7.35  | 2.40  | 0.26  | 635 | -           | 400-700 nm  | 435 ± 35 nm | 527 ± 17 nm | 645 ± 25 nm | 635 nm | Wavespectrum WSLD-635 (635 nm, TO-18/TO-5); Ushio HL6335G (635 nm, TO-5/Ø9)               |
| 34 | AL-D0650-F0895-W635  | Collimating | L-BAL42 | 6.50  | 8.95  | 7.60  | 2.36  | 0.30  | 635 | BK7, t=0.25 | 400-700 nm  | 435 ± 35 nm | 527 ± 17 nm | 645 ± 25 nm | 635 nm | Wavespectrum WSLD-635 (635 nm, TO-18/TO-5); Ushio HL6335G (635 nm, TO-5/Ø9)               |
| 35 | AL-D0635-F1000-W635  | Collimating | D-ZK2N  | 6.35  | 10.00 | 8.29  | 3.00  | 0.28  | 635 | BK7, t=0.25 | 400-700 nm  | 435 ± 35 nm | 527 ± 17 nm | 645 ± 25 nm | 635 nm | Wavespectrum WSLD-635 (635 nm, TO-18/TO-5); Ushio HL6335G (635 nm, TO-5/Ø9)               |
| 36 | AL-D0720-F1099-W633  | Collimating | D-ZK3   | 7.20  | 10.99 | 7.90  | 5.032 | 0.28  | 633 | BK7, t=0.25 | 400-700 nm  | 435 ± 35 nm | 527 ± 17 nm | 645 ± 25 nm | 633 nm | Wavespectrum WSLD-633/635 (633/635 nm, TO-18); Ushio HL6320G (635 nm, TO-5/Ø9)            |
| 37 | AL-D0800-F1118-W635  | Collimating | D-ZK2N  | 8.00  | 11.18 | 9.69  | 2.66  | 0.31  | 635 | BK7, t=0.25 | 400-700 nm  | 435 ± 35 nm | 527 ± 17 nm | 645 ± 25 nm | 635 nm | Wavespectrum WSLD-635 (635 nm, TO-18/TO-5); Ushio HL6335G (635 nm, TO-5/Ø9)               |
| 38 | AL-D1500-F1124-W587  | Collimating | D-ZK3   | 15.00 | 11.24 | 6.83  | 7.00  | 0.62  | 587 | -           | 400-700 nm  | 435 ± 35 nm | 527 ± 17 nm | 645 ± 25 nm | 587 nm | CNI MGL-III-589 (589 nm, DPSS/OPSL module)                                                |
| 39 | AL-D0650-F1206-W635  | Collimating | L-BAL42 | 6.50  | 12.06 | 10.61 | 2.36  | 0.22  | 635 | BK7, t=0.25 | 400-700 nm  | 435 ± 35 nm | 527 ± 17 nm | 645 ± 25 nm | 635 nm | Wavespectrum WSLD-635 (635 nm, TO-18/TO-5); Ushio HL6335G (635 nm, TO-5/Ø9)               |
| 40 | AL-D0700-F1270-W915  | Collimating | D-ZK2   | 12.7  | 12.70 | 11.24 | 2.3   | 0.27  | 915 | -           | 650-1050 nm | 805 ± 45 nm | 945 ± 45 nm | -           | 915 nm | BWT K915FA2RN / K91SA3F (915 nm, fiber-coupled); Focuslight 915 nm module (fiber-coupled) |
| 41 | AL-D06325-F1385-W650 | Collimating | D-ZK3   | 6.325 | 13.85 | 12.10 | 2.773 | 0.180 | 650 | -           | 650-1050 nm | 435 ± 35 nm | 527 ± 17 nm | 645 ± 25 nm | 650 nm | Wavespectrum WSLD-650 (650 nm, TO-18/C-mount); Ushio HL65014DG (650 nm, TO-18/Ø5.6)       |
| 42 | AL-D0800-F1500-W915  | Collimating | D-ZK2   | 8.00  | 15.00 | 13.47 | 2.400 | 0.230 | 915 | -           | 650-1050 nm | 805 ± 45 nm | 945 ± 45 nm | -           | 915 nm | BWT K915FA2RN / K91SA3F (915 nm, fiber-coupled); Focuslight 915 nm module (fiber-coupled) |
| 43 | AL-D1000-F1500-W915  | Collimating | D-ZK2   | 10.00 | 15.00 | 12.90 | 3.300 | 0.300 | 915 | -           | 650-1050 nm | 805 ± 45 nm | 945 ± 45 nm | -           | 915 nm | BWT K915FA2RN / K91SA3F (915 nm, fiber-coupled); Focuslight 915 nm module (fiber-coupled) |
| 44 | AL-D0650-F1529-W780  | Collimating | D-ZK3   | 6.50  | 15.29 | 13.89 | 2.209 | 0.16  | 780 | -           | 650-1050 nm | 805 ± 45 nm | 945 ± 45 nm | -           | 780 nm | Wavespectrum WSLD-780 (780 nm, C-mount/COS); Ushio HL78-series (780 nm, TO-18/Ø5.6)       |
| 45 | AL-D1050-F1526-W639  | Collimating | L-BAL42 | 10.50 | 15.26 | 13.58 | 3.00  | 0.30  | 639 | BK7, t=0.30 | 400-700 nm  | 435 ± 35 nm | 527 ± 17 nm | 645 ± 25 nm | 639 nm | Wavespectrum WSLD-638/640 (638/640 nm, TO-18); Ushio HL63193MG (638 nm, TO-18/Ø5.6)       |
| 46 | AL-D1000-F1670-W976  | Collimating | L-BAL42 | 10.00 | 16.70 | 14.65 | 3.225 | 0.265 | 976 | -           | 650-1050 nm | 805 ± 45 nm | 945 ± 45 nm | -           | 976 nm | BWT K976AAHRN (976 nm, fiber-coupled); Focuslight 976 nm module (fiber-coupled)           |
| 47 | AL-D0650-F1839-W780  | Collimating | D-ZK3   | 6.50  | 18.39 | 17.09 | 2.18  | 0.15  | 780 | BK7, t=0.25 | 650-1050 nm | 805 ± 45 nm | 945 ± 45 nm | -           | 780 nm | Wavespectrum WSLD-780 (780 nm, TO-18/TO-5); Ushio HL78-series (780 nm, TO-18/Ø5.6)        |
| 48 | AL-D1000-F1900-W915  | Collimating | L-BAL42 | 10.00 | 19.00 | 17.00 | 3.14  | 0.23  | 915 | -           | 650-1050 nm | 805 ± 45 nm | 945 ± 45 nm | -           | 915 nm | BWT K915FA2RN / K91SA3F (915 nm, fiber-coupled); Focuslight 915 nm module (fiber-coupled) |
| 49 | AL-D0800-F2258-W532  | Collimating | D-ZK2N  | 8.00  | 22.58 | 21.25 | 2.35  | 0.15  | 532 | BK7, t=0.25 | 400-700 nm  | 435 ± 35 nm | 527 ± 17 nm | 645 ± 25 nm | 532 nm | CNI MGL-III-532 (532 nm, DPSS module); Cobolt 06-01 Samba 532 (532 nm, DPSS)              |
| 50 | AL-D0950-F2406-W785  | Collimating | D-ZK2   | 9.50  | 24.06 | 22.76 | 2.35  | 0.16  | 785 | BK7, t=0.25 | 650-1050 nm | 805 ± 45 nm | 945 ± 45 nm | -           | 785 nm | Wavespectrum WSLD-785 (785 nm, TO-18/TO-5); Ushio HL785-series (785 nm, TO-18)            |
| 51 | AL-D1200-F2400-W915  | Collimating | D-ZK2   | 12.00 | 24.00 | 22.09 | 3.00  | 0.23  | 915 | -           | 650-1050 nm | 805 ± 45 nm | 945 ± 45 nm | -           | 915 nm | BWT K915FA2RN / K91SA3F (915 nm, fiber-coupled); Focuslight 915 nm module (fiber-coupled) |
| 52 | AL-D1600-F3000-W915  | Collimating | D-ZK3   | 16.00 | 30.00 | 28.10 | 3.00  | 0.24  | 915 | -           | 650-1050 nm | 805 ± 45 nm | 945 ± 45 nm | -           | 915 nm | BWT K915FA2RN / K91SA3F (915 nm, fiber-coupled); Focuslight 915 nm module (fiber-coupled) |
| 53 | AL-D0930-F3199-W785  | Collimating | L-BSL7  | 9.3   | 31.99 | 30.73 | 2.3   | 0.122 | 785 | BK7, t=0.30 | 650-1050 nm | 805 ± 45 nm | 945 ± 45 nm | -           | 785 nm | Wavespectrum WSLD-785 (785 nm, TO-18/TO-5); Ushio HL785-series (785 nm, TO-18)            |
| 54 | AL-D1250-F3199-W785  | Collimating | D-K9    | 12.5  | 31.99 | 30.73 | 2.3   | 0.17  | 785 | BK7, t=0.30 | 650-1050 nm | 805 ± 45 nm | 945 ± 45 nm | -           | 785 nm | Wavespectrum WSLD-785 (785 nm, TO-18/TO-5); Ushio HL785-series (785 nm, TO-18)            |
| 55 | AL-D0635-F1000-W520  | Collimating | D-ZK2N  | 6.4   | 10.00 | 8.19  | 3.0   | 0.275 | 520 | BK7, t=0.25 | 400-700 nm  | 435 ± 35 nm | 527 ± 17 nm | 645 ± 25 nm | 520 nm | Wavespectrum WSLD-520 (520 nm, TO-38/TO-56); ams-Osram PLT5 520B (520 nm, TO-56)          |

LD Options are representative volume/OEM-compatible laser diodes matched by wavelength and window/package type (TO-can ≈ glass window, C-mount/COS/fiber-coupled ≈ windowless, molded ≈ polycarbonate); confirm emitter-to-window setback vs WD, cap-window thickness, and beam divergence vs lens NA against each diode datasheet. Series names (e.g. WSLD-λ, BWT K-series) denote a family; final SKU depends on power/bin.

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